



Route 20 Transportation & Land Use Study Windsor Locks, CT

Final Report – Technical Appendices

Capitol Region Council of Governments (CRCOG) & Town of Windsor Locks

May 2024







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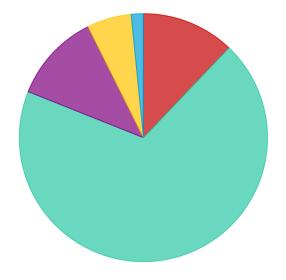
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APPENDIX DPublic Survey Results

1. Where do you live? *



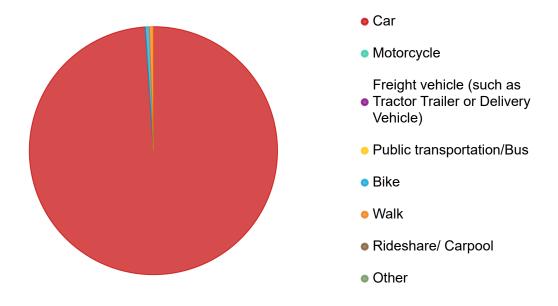
- Within the Study Area
- In Windsor Locks

A community adjacent to Windsor Locks

- (Suffield, Enfield, East Windsor, Windsor, East Granby)
- Another community in Connecticut
- Outside of Connecticut

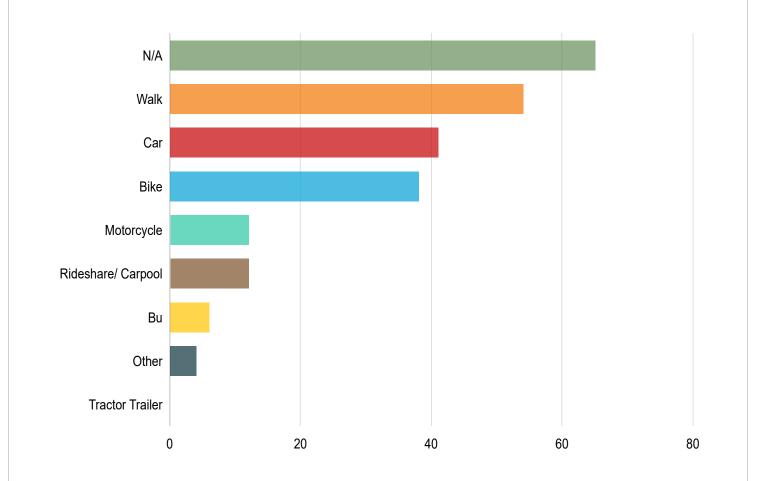
Answers	Count	Percentage
Within the Study Area	23	12.11%
In Windsor Locks	131	68.95%
A community adjacent to Windsor Locks (Suffield, Enfield, Eas t Windsor, Windsor, East Granby)	22	11.58%
Another community in Connecticut	11	5.79%
Outside of Connecticut	3	1.58%

3. How do you typically travel within the Study Area? *



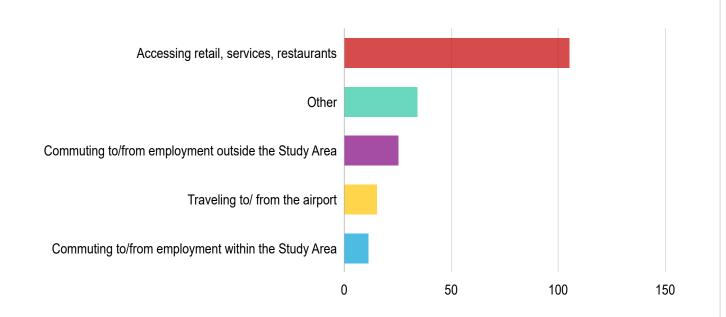
Answers	Count	Percentage
Car	188	98.95%
Motorcycle	0	0%
Freight vehicle (such as Tractor Trailer or Delivery Vehicle)	0	0%
Public transportation/Bus	0	0%
Bike	1	0.53%
Walk	1	0.53%
Rideshare/ Carpool	0	0%
Other	0	0%

4. What other types of transportation do you sometimes use within the Study Area? *



Answers	Count	Percentage
N/A	65	34.21%
Walk	54	28.42%
Car	41	21.58%
Bike	38	20%
Motorcycle	12	6.32%
Rideshare/ Carpool	12	6.32%
Bus	6	3.16%
Other	4	2.11%
Tractor Trailer	0	0%

5. What is your typical purpose for traveling within the Study Area? *

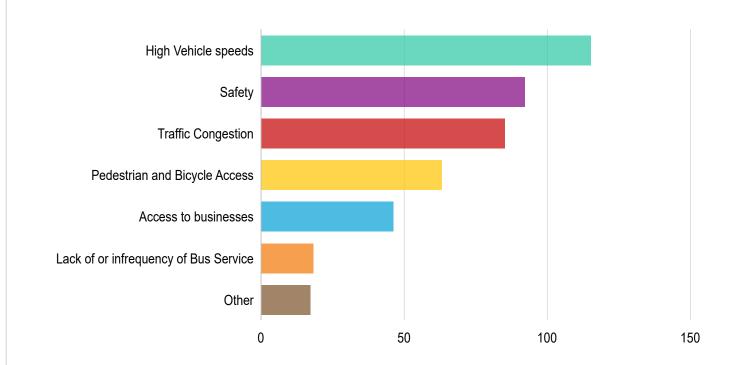


Answers	Count	Percentage
Accessing retail, services, restaurants	105	55.26%
Other	34	17.89%
Commuting to/from employment outside the Study Area	25	13.16%
Traveling to/ from the airport	15	7.89%
Commuting to/from employment within the Study Area	11	5.79%

5. What is your typical purpose for traveling within the Study Area? *

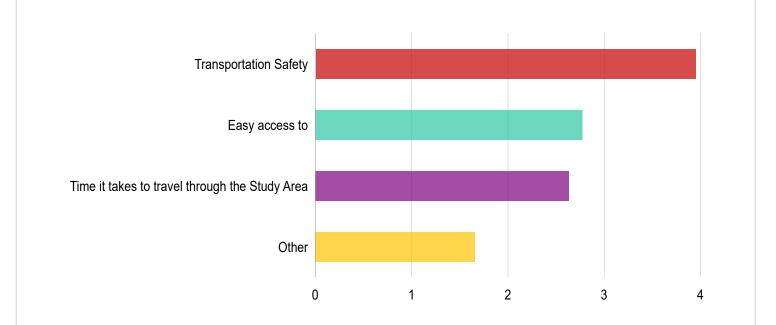
Other Response	Count
Visiting friends	2
Visiting	1
Visit Family in town, retail & banking	1
Use 75/Old County for retail etc, Rte 20 to travel to points west	1
Traveling to/from E. Granby, Granby etc	1
Traveling to a family members house.	1
to and from work to home	1
To and from home and enjoying the neighborhood.	1
recreation	1
Personal travel	1
Nature trail along the old CT Water Park off South Center St.	1
My house, it is my start and end point for every day travel to work and errands.	1
Living my life.	1
I live in the area	1
I have work in Suffield at times - And travel to and from airport	1
Going to Stop n Shop, Target and Anytime Fitness in Windsor because WL doesn't have Anything. Ad ult rec I need to go to surrounding towns to exercise. Zumba, yoga, pilates	1
Going to see family in East Granby. Travelling to part-time work in Simsbury. Using rideshare apps to go to the airport.	1
General travel; access granby area and beyond	1
General travel	1
Doctor appointments, pleasure, restaurants and other stores.	1
Commuting plus using services within and surrounding the study area, including post office and UPS	1
Basic traveling for non work to get to Granby more quickly	1
Appointments and errands	1
Accessing bus by bike	1

6. Do you have any transportation concerns about the Study Area? (Select all that apply) *



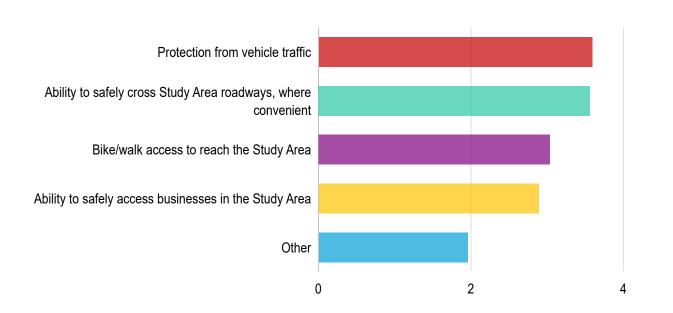
Answers	Count	Percentage
High Vehicle speeds	115	60.53%
Safety Issues	92	48.42%
Traffic Congestion	85	44.74%
Pedestrian and Bicycle Access	63	33.16%
Access to businesses	46	24.21%
Lack of or infrequency of Bus Service	18	9.47%
Other	17	8.95%

7. If you travel the Study Area by car, please rank the importance of the following.



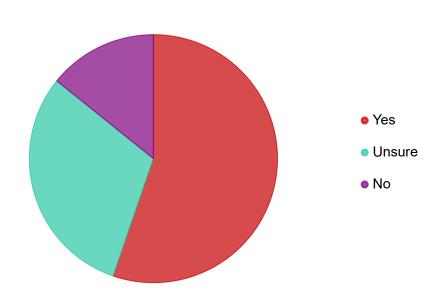
Rank	Answers	1	2	3	Average score
1	Transportation Safety	60.87% 112	19.02% 35	13.04% 24	7.07% 3.95
2	Easy access to businesses	20.65% 38	33.7% 62	27.17% 50	2.77
3	Time it takes to travel through the Study Area	15.76% 29	32.07% 59	35.87% 66	2.63 16.3% 30
4	Other	2.72% 5	15.22% 28	23.91% 44	1.65

8. If you travel the Study Area by walking or biking, please rank the importance of the following.



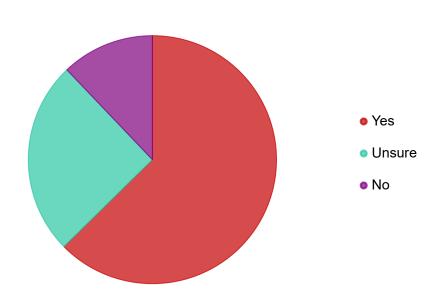
Rank	Answers	1	2	3	4	Average score
1	Protection from vehicle traffic	38.61% 39	18.81% 19	14.85% 15	17.82% 18	9.9% 3.58 10
2	Ability to safely cross Study Area roadways, where convenient	32.67% 33	23.76% 24	19.8% 20	13.86% 14	3.55
3	Bike/walk access to reach the Study Area	14.85% 15	23.76% 24	23.76% 24	24.75% 25	12.87% 3.03 13
4	Ability to safely access businesses in the Study Area	10.89% 11	20.79% 21	25.74% 26	30.69% 31	2.88
5	Other	2.97%	12.87% 13	15.84% 16	12.87% 13	55.45% 1.95 56

9. Would you like to see improved bicycle accommodations within the Study Area? *



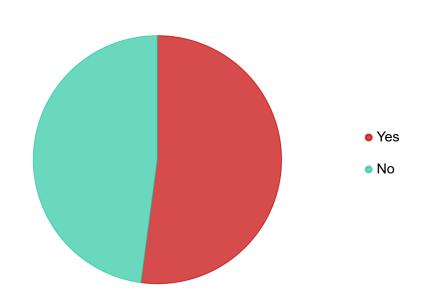
Answers	Count	Percentage
Yes	105	55.26%
Unsure	58	30.53%
No	27	14.21%

10. Would you like to see a shared pedestrian-bicycle path connecting the Study Area to points east, such as local parking, Town Center, and/ or the new train station?



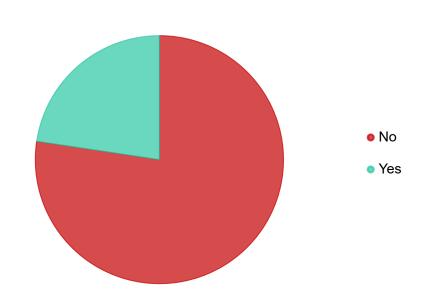
Answers	Count	Percentage
Yes	119	62.63%
Unsure	48	25.26%
No	23	12.11%

11. Would you ride a bicycle more if there were more and safer ways to do so? *



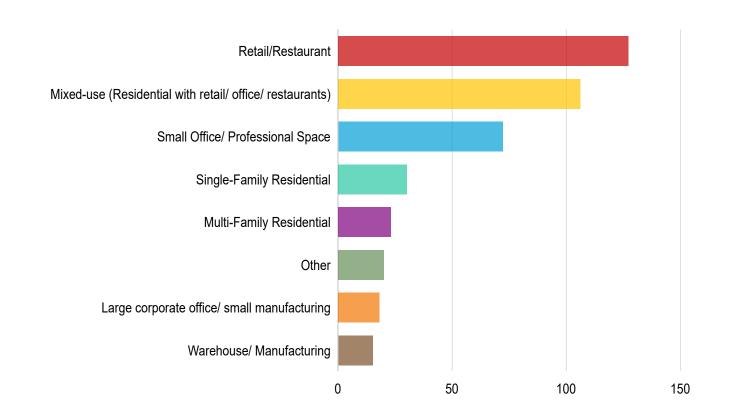
Answers	Count	Percentage
Yes	99	52.11%
No	91	47.89%

12. Would you ride the bus service more if there were expanded routes, more frequent routes/ stops, and/ or improved bus stop amenities? *



Answers	Count	Percentage
No	147	77.37%
Yes	43	22.63%

13. What type of development would you like to see within the Study Area? (Select all that apply) *

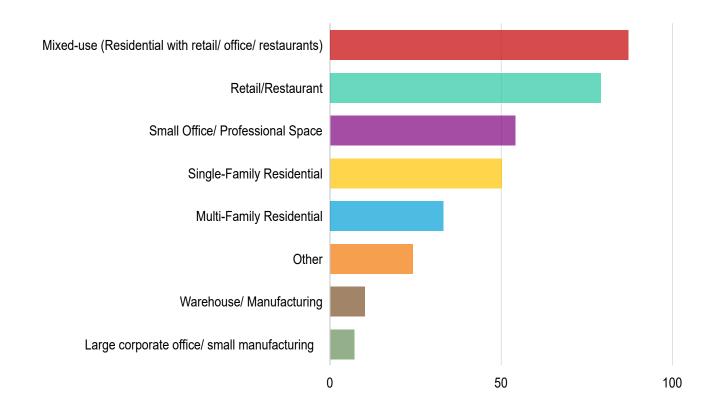


Answers	Count	Percentage
Retail/Restaurants	127	66.84%
Mixed-use (Residential with retail/ office/ restaurants)	106	55.79%
Small Office/ Professional Space	72	37.89%
Single-Family Residential	30	15.79%
Multi-Family Residential	23	12.11%
Other	20	10.53%
Large corporate office/ small manufacturing	18	9.47%
Warehouse/ Manufacturing	15	7.89%

13. What type of development would you like to see within the Study Area? (Select all that apply) *

Other Response	Count
Recreational uses, microbrewwery, uses that cater to travelers.	1
Nothing more. It's too congested as it is. Also people not from the area traveling to & from airport get c onfused and are always using the wrong lanes causing unsafe conditions.	1
Nothing	1
None. Focus on a natural area. It is built up enough. Maybe improve\repurpose older businesses.	1
Nomads / Outdoor Adventures	1
More protected land and hiking areas.	1
Medical look at South Windsor. They are flourishing.	1
Medical	1
Leave it alone	1
Land preservation, green space	1
Family type destintion	1
Buffer to wildlife conservation Water Works. Nontoxic, natural greenway	1
Bj's or a Costco	1
Bike/Walking paths. More recreational choices.	1

14. In the "transition" areas between commercial development within the Study Area and the residential areas east of Old County Road, which type(s) of land uses would you like to see? *



Answers	Count	Percentage
Mixed-use (Residential with retail/ office/ restaurants)	87	45.79%
Retail/Restaurants	79	41.58%
Small Office/ Professional Space	54	28.42%
Single-Family Residential	50	26.32%
Multi-Family Residential	33	17.37%
Other	24	12.63%
Warehouse/ Manufacturing	10	5.26%
Large corporate office/ small manufacturing	7	3.68%

14. In the "transition" areas between commercial development within the Study Area and the residential areas east of Old County Road, which type(s) of land uses would you like to see? *

Other Response	Count
Woods, protected space for nature preserve	1
Woodlands and parks	1
Something that ties in with the Water Works trail(s). Some area towns are using grant money to purch ase open spaces and protect it from development.	n 1
Recreational uses, microbrewwery, uses that cater to travelers.	1
recreation	1
Parks, natural buffer zone to help reduce noise and pollution	1
Parks	1
Open space. No need for more buildings.	1
nothing same as above	1
Nothing added to that area.	1
Not sure.	1
Nice restaurants with outdoor seating. There are already a lot of fast foods. are too mant	1
Leave it alone	1
I don't think development is needed there.	1
Grocery store, medical buildings, restaurants etc. make me want to live in this town and come visit this town.	i 1
Green SpacePark/Land Preserve	1
Green space	1
Buffers with parks and green space	1

15. Do you have any other comments on the Study that the Study Team should consider?



Response	Count
You already had he perfect opportunityAll Sports Village	1
Would like you to implement measures to: - Reduce noise - Improve air quality - Improve local propert y value	1
Why was Concorde Landing Condominiums carved out of the study area? We live there and will be i mpacted in our daily lives.	1
When change comes there is always resistance, and they almost always tell you the change is for the "better" for the people and the town. The last several proposals made for development didn't benefit t he many, only made the few involved very prosperous. They sugar coat it so it looks looks great, but o nce you move past the frosting you find that the cake isn't what was advertised.	1

We should be looking to attract more retail/restaurants on 75; and small offices/professional space, mi xed use, and/or single-family or multifamily housing on Old County Road. Throughout the area, I'd like there to be more businesses/services that can be used by the residents; no big warehouses or corpor ate offices that don't interact with the local community (aside from taking up space). Additionally, the old/abandoned rental car lots on Schoephoester Road are now an eyesore. Redevelopment of those parcels would be a benefit to overall transformation of the area. It would make sense to me that they eith er be transformed into other types of airport-related businesses or considered for retail/restaurant opportunities.	1
We need more trees to beautify the area. Especially needed along rte 75 in front of Bradley parking lo ts . We don't need to see all those parked cars. There are more spaces along 75 for trees as well.	1
We need more trees along rte 75, especially in front of Bradley parking lots.	1
we have very few medical officies in town, Most must travel out of town except for one physical therap y office and quest diagnostic for lab work. with an aging population a one stop medical office would be helpful.	1
Trucking companies not compatible adjacent to wildlife conservation area that could expand to green way	1
Tractor trailers need to only travel on the freeways unless they are delivering product in the area. Ther e should be substantial penalties for non compliance.	1
There needs to be a balance in the space connecting people to businesses that can be accessed easi ly.	1
The proposed zone change will guarantee an increased amount of truck traffic. I believe that will be a detriment to the quality of life for residents on, and around, Old County Road. That road, presently, is very busy and speeding is chronic.	1
Thank you for your hard work.	1
Speed and the intersection of old count and elm st near Dunkin' Donuts sucks. That really needs to be redone somehow.	1
Smart planning for the future of Windsor Locks. Many of the building and development in Windsor Locks are unmaintained, aesthetically unpleasing, etc. Need to hold property owners accountable for blight and requirements in building plans for greenery, walking paths, bike lanes, etc. We can do better in landscaping requirements, planting trees, etc.	1

Safety!!! Old county road is known for the accidents that occur at the 4 way intersection of halfway ho use and old county. It is scary crossing the road!	1
Route 75 is a wasteland. It is underutilized and the town is missing valuable opportunities for revenue and quality of life. I support transit in pretty much all forms. I really want to see light rail around our to wn and also increased bike-ability.	1
Ranking feature on question no. 7 is not working. Wanted to add as Other and rank #2 control of tract or trailer truck traffic in the transitional residential areas. I'm not even sure if this is a problem at this ti me but there is a potential for it with increased development. #3 would be travel time through the are a.	1
Protection of the Waterworks Brook Conservation Area needs to be a high priority. The WWBCA need s to be protected from Light, Noise, Vehicle Exhaust & Particulate and Run-Off Pollution.	1
Please make sure there are sidewalks.	1
Please bring a Panera's Bread to the area.	1
Old county road needs new pacementits bumpy, very pot holed and high traffic. Needs new pavin g!!!!!!!!!	1
Not yet	1
Not at this time.	1
No police to regulate speed, old county/halfway house road intersection is dangerous, numerous accidents, needs speed bumps to regulate traffic, overall dangerous road, doesn't need to be expanded, shouldn't be truck traffic	1
no	1
Main concern is truck traffic using town roads, at high speeds, and all vehicles ignoring stop signs. Sp ecifically the route 20west exit to Rt 75 north - vehicles fly through the stop light, taking right turn on re d without slowing down, never mind stopping. And the intersection of Old County Road and Halfway H ouse Rd, there have been accidents due to people not stopping, or trying to go thru 2 at a time. And ig noring pedestrians trying to cross.	1
Long overdue. I'm glad the current BOS is taking action on this.	1
Keep warehouses out.	1
It would be great if there could be bus service into adjacent towns, as well as within the study area.	1

Intersection at Halfway House Road and Old County Road is very dangerous. People think the stops signs are by invitation only!	1
Implement Back Access Roadways if possible	1
I'd rather the town opt to not build up and instead leave the property alone to nature	1
I would rather not see commercial development in areas that are already residential. Rt. 75 is where I would rather see commercial development within this study area. In my opinion, Windsor Locks does not need residential areas encroached upon by commercial business. We know what happens when c ommercial enterprises slowly move into neighborhoods. People sell their homes and move elsewhere.	1
I do not want to see truck traffic increase in the area. I also would not like to see any more though traff ic down Old County Rd. I would like to see somthing done to mainstream traffic coming from the Wind sor side up onto RT. 20. Such as a rotary or round about at The Honda plant, with an access rd for trucks to get to the bussinesses in the industrial park.	1
High traffic speeds are a big voncern in that area	1
Expand existing opportunities for manufacturing so close to the airport, create jobs, stimulate the town ships economy. Not prudent to build more residential so close to the airport.	1
Ensure it is safe so people will want to visit. Make it inviting. There is no place to ride a bike to in WL. We have nothing. Make a walking trail. South Windsor had several	1
Congestion at Old County Road and Elm Street due to Dunkin donuts should be looked into. The driv e thru is the cause of traffic congestion especially in the mornings.	1
Bud stops on 75 should be covered and have a place to stand. They should not have to stand on the r oad or in the grass/snow.	1
Bike paths and entertainment/restaurants are huge. If we made Windsor Locks a bike-friendly town th at connects all of its neighborhoods and businesses, I would love to ride my bike from my house to a place like Doro Marketplace. We need more cool and classy places like Doro and it would be great to have a walkable strip of outdoor dining. Walkability is super important for me.	1
As long as the town does not take space from existing parks and trails.	1
As I only use this area as passing through to other areas not sure I am a relevant. But I do stop for fo od once and awhile and would like to see it more green. I have been traveling through here for 35 years- and it just looks more and. more like florida	1

A park or open land would be nice to keep. Reduce impact to the environment and nature.

1

1.) PLEASE consider noise and pollution abatement! The airport and truck noises disrupt the commun ity throughout the day and night. Truck engine and backup warning signals disturb sleep. Pollution ca uses a black/spotty film to build up on windows. 2.) What can be done to improve real estate values? Area real estate appreciation severely lags other areas. The outside perception of this area is quite ne gative. 3.) Thank you for making the effort to conduct a survey. Please make sure that all the local peo ple and businesses have reasonable opportunity to participate.Do you have a way of preventing the same person from taking the survey many times? Please insure unbiased analysis and interpretation of the results. Thanks!

Answered: 45 Skipped: 145

APPENDIX E

Bradley Area Transportation Study Executive Summary Crcog

Rradley Area

" Bradley Area
Transportation Study



Bradley International Airport is a major economic resource for the Capitol Region and the State of Connecticut and is expected to be the focus of the Region's future economic growth. The Capitol Region Council of Governments (CRCOG), the State, and the towns of Suffield, East Granby, Windsor, and Windsor Locks all share a common interest in assuring that we realize the full benefit of this growth. The Bradley Area Transportation Study includes a comprehensive analysis of current and future traffic conditions and land use in the airport area. The study identifies transportation improvements that are needed to accommodate growth and to develop a strategic plan for maintaining safe and efficient access to the airport area. The project team includes staff from CRCOG, Connecticut Department of Transportation, the four towns surrounding the airport, and the technical consulting firm, URS Corporation. The project team operates under the direction of a project Steering Committee as well as four Local Advisory Committees.

Improvements identified in the study are categorized as "regional" or "local" based on the nature of their impacts and/ or benefits. Most are classified as local improvements, indicating they are primarily of local neighborhood or town concern. However, the following four (4) improvements are identified as being of regional significance:

- Northern Bradley Connector Roadway
- Route 75 Bradley Airport Gateway

CAPITOL

- Bradley Park Road
- Improved Transit Service to the Bradley Area

Regional Improvements Northern Bradley Connector Roadway

 ${\mathcal A}$ new Northern Bradley Connector Roadway is recommended to connect Route 75 near Bradley Airport to Route 190 over the Connecticut River. Its purpose is to provide a direct connection between the cargo and industrial land uses on the northern side of the airport and the Route 190 bridge. This route is currently served by traveling along Route 75, Bridge Street, Thrall Avenue, and Route 159. A portion of this route, Route 75 from South Main Street to Bridge Street, lies within a significant Historic District and is designated a Scenic Roadway. Bridge Street and Thrall Avenue are residential roadways inappropriately serving significant regional traffic volumes. The new connector will provide much-needed direct access for industrial/commercial parcels on and adjacent to Bradley Airport. It will also distribute traffic and help preserve residential and historic areas from increased congestion as the airport

RECOMMENDED NEW HOADWAY

IF FIRESTONE DAINY

ASSTRAIN SOCIOLOMSTRUCTED

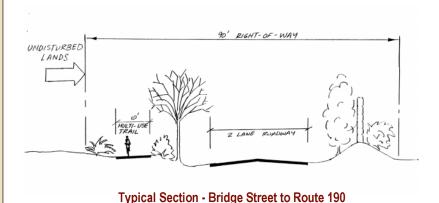
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Northern Bradley Connector Roadway Alignment

The recommended Connector is a 4.3 mile long, two lane (one lane in each direction) rural roadway with a

area develops.

design speed of 35 to 40 miles per hour, and a roadway width limited to 32 feet (12' lanes with 4 foot shoulders). A linear park with a multi-use trail would run along its north side within a wide right-of-way from Bridge Street to Route 190. It is recommended that a multi-use trail meander through the park, connecting to a recommended sidewalk on the north side of Bridge Street leading to Suffield Center, and to the canal bank trail at the northeast end of the connector.

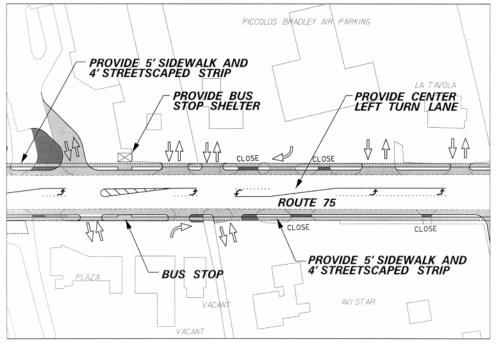


Between Route 159 (at Route 190) and Route 75, the Connector will cross Bridge Street, Kent Avenue/Boston Neck Road, Suffield Street, and Austin Street. All intersections are to be at-grade, and all are envisioned as Stop Sign controlled (pending further design phase analysis) with the exception of Bridge Street at which a new signal is recommended. South of Austin Street the Connector would utilize Firestone Drive's current alignment, then connect to and continue along the existing right-of-way designated for Firestone Drive south (a paper road), and end at a signalized intersection with Route 75.

Estimated Cost: \$15.5 million

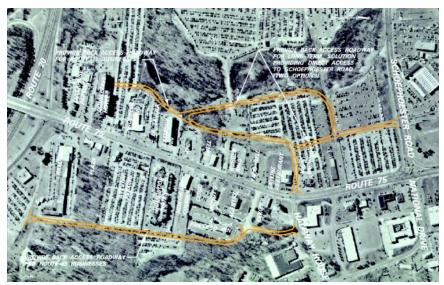
Regional Improvements Route 75 - Bradley Airport Gateway

The 0.8 mile segment of Route 75 from High Street in Windsor to Schoephoester Road in Windsor Locks is consistent in both land use and its commercial look. Therefore, this segment was treated with a common theme irrespective of the town line that divides it. To improve access, safety, and aesthetics, center left-turn bays are recommended on Route 75 from the Route 20 westbound ramps to Halfway House Road, together with landscaped medians to both the north and south. To achieve this, it is necessary to relocate and consolidate driveways as needed to align them properly with left-turn bays. Intersection improvements at High Street, the Route 20 ramps, Halfway House Road, and Schoephoester Road are also proposed to alleviate congestion under existing and expected future conditions. Sidewalks, streetscaping, and bus stops (including bus stop shelters at selected locations) are included along both sides of the road, with crosswalks provided at signalized intersections.



Route 75 Center Left-Turn Bays

To help reduce traffic and unsignalized left-turns on Route 75, back access roadways are recommended on either side of Route 75. These roadways would provide access from the rear of businesses to Route 75 and Schoephoester Road at existing signalized intersections. Portions of these roadways could be exclusive to airport shuttles from hotels, car rental agencies, and park and ride lots. Where appropriate, the roadways could also serve the general public in providing a signalized location for traffic to enter Route 75 from restaurants, gas stations, and park and rides.



Back Access Roadways along Route 75

Estimated Costs: \$5.4 million for Route 75 Improvements / \$2.5 million for Back Access Roadways*

*Includes less expensive option for providing direct access to Schoephoester Road

Regional Improvements Bradley Park Road

Improvements to Bradley Park Road in East Granby include the addition of center left turn lanes, a landscaped median, and a sidewalk, along with intersection improvements. These improvements are recommended to improve access, safety, and aesthetics, and provide Bradley Park Road with a similar industrial park look of adjacent International Drive. Bradley Park road intersection improvements at Route 20 and Nicholson Road include provisions for safety and operational improvements and design measures to better accommodate truck traffic.



Bradley Park Road



Bradley Park Road Segment

dditionally, the extension of Bradley Park Road to the north, from Nicholson Road to Russell Road, is recommended. The extension would improve access to existing cargo and industrial land uses along the Perimeter Road, help improve security for the Air National Guard complex, and unlock the potential for new cargo and industrial development on land north of and on Russell Road. There is also the potential for future roadways that reach north of Russell Road to additional developable lands.



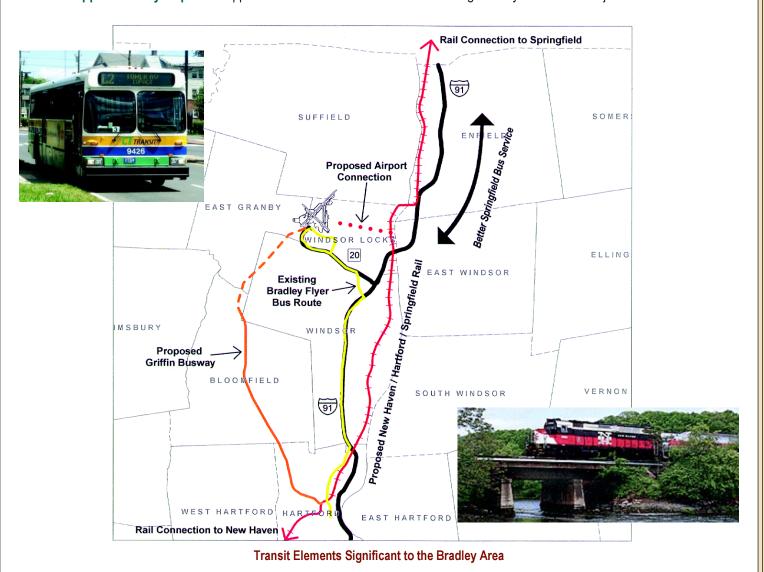
Bradley Park Road Extension from Nicholson Road to Russell Road

Estimated Costs: \$1.6 million for Bradley Park Road Improvements / \$1.9 million for Bradley Park Road Ext.

Regional Improvement Improved Transit Service to the Bradley Area

An element of growing importance in the Bradley Area is transit. Coinciding with the time frame of this study was the development and adoption of a Regional Transit Strategy by CRCOG's policy board. Subsequently, the Regional Transit Strategy received Committee endorsement for adoption in this study. Endorsed transit elements, including elements of the Regional Transit Strategy significant to the Bradley Area are as follows:

- **Griffin Busway** Proposed development of a Busway in the Griffin rail corridor running from Union Station in Hartford to the Griffin Office Park near the Bloomfield/East Granby Town Line. Bus routes would leave the busway to service the surrounding area (including Bradley Airport and adjacent industry/retail).
- New Haven-Hartford-Springfield Commuter Rail Enhanced service located in the existing Amtrak corridor with bus rapid transit connection to Bradley Airport.
- Additional Bradley Local Bus Service New Bradley Airport route proposed from Bloomfield, originating at Copaco Center (running on existing streets and/or the proposed Griffin Busway). Copaco Center is recommended to be a transfer center where various other routes interconnect, including a proposed circumferential route around Hartford.
- Support Bus Connection to Hartford and Springfield Public/private providers.
- **Support Bradley Airport** Support transit elements that facilitate achieving Bradley Master Plan objectives.



Local Improvements



Elm Street at Route 75



Route 75 at Route 20 Westbound



Route 75 at Schoephoester Road



Route 75 at Route 20 Eastbound



Route 75 at Rainbow Road



Day Hill Road Interchange Area

Windsor Locks

Route 75 at Elm Street (Route 140)

Implement access management plan to consolidate and better align driveways along Elm Street's (Route 140) approach to Route 75.

Intersection of Route 75 and Schoephoester Road

- Provide a second northbound left turn lane from Route 75 to Schoephoester Road.
- Restrict traffic movements at southern bowling alley access to right in only, and provide a parking lot connection to National Drive, which has signalized access to Route 75.
- Recommend change of ownership of National Drive from a private road to town road.

Route 75 at Route 20 Westbound Ramps

- Provide a right turn on red restriction for Route 20 westbound off-ramp.
- Improve Route 75 southbound right-turn bay to Route 20 westbound.
- Provide service signs informing Route 20 motorists of services offered along Route 75.

Elm Street and North Street between Route 75 and Route 159

- Recommend that the Town Planning and Zoning Commission promote exploration of direct access to Route 75 for nearby potential development on the north side of North Street.
- Extend existing Elm Street and North Street sidewalks west to Route 75 and east to Route 159.
- Implement the North Street Traffic Speed and Safety Study (CRCOG 2001) recommendations.

Windsor

Intersection of Route 75 with Route 20 Eastbound Ramps

- Signalize Dale Drug driveway approach to the intersection.
- Provide southbound exclusive left-turn lane and modify signal phasing as necessary.
- Eliminate the Route 75 southbound transition from two lanes to one by providing one through lane and one right-turn lane on the southbound approach to the intersection

Route 75 and High Street Intersection

- Align High Street with Webster Bank's driveway to create a single four-leg intersection with Route 75.
- Provide new receiving access driveway from High Street to the rear of Rice Hardware Store.

Route 75 and Rainbow Road Intersection

Reconfigure intersection and convenience store driveways to provide signalized driveway access.

I-91 Interchange with Route 75 and Day Hill Road

- Provide a clearance phase for Route 75 northbound traffic between its intersections with I-91 southbound and Day Hill Road eastbound.
- Provide advance-warning measures for eastbound Day Hill Road motorists approaching the Route 75 and Day Hill Road intersection.
- Provide a right-turn lane from Route 75 northbound to the I-91 northbound on-ramp and a second left-turn lane from the I-91 northbound off-ramp to Route 75 southbound, along with associated traffic signal timing modifications.
- Recommend additional study of a long-term traffic congestion solution involving direct (or more direct) connection for movements from Day Hill Road to I-91 northbound.

I-91 Signage to Kennedy Road

Provide improved I-91 signage directing I-91 southbound motorists to Kennedy Road via Route 20.

Local Improvements



Route 159 and Mapleton Avenue



Route 159 and Thompsonville Road



Route 159 and Route 190



Suffield Town Center



Mountain Road



Mapleton Ave. & Thompsonville Rd.

Suffield

Route 159 - State Line to Route 190

- Provide traffic signal for Route 159/Mapleton Avenue intersection creating necessary gaps in Route 159 traffic during peak Six Flags Park travel times.
- Construct northbound left turn lane at Route 159/Hickory Road intersection to improve safety.

Route 159 and Thompsonville Road

- Provide northbound and southbound left turn lanes to improve operations and safety.
- Improve intersection turning radii.
- Pursue alternative access for Fleming Transportation Inc. including limited direct access to Route 159.

Route 159 and Route 190 (over the Connecticut River)

- Provide a second southbound left turn lane and a fully protected left turn signal phase.
- Provide additional advance warning devices ("signal ahead" signage with flashing beacon) for Route 190 westbound motorists approaching Route 159 traffic signal.

Route 159 from Harvey Lane to Boston Neck Road

- Provide consistent 6 foot shoulders.
- Provide northbound left turn lane from Route 159 to Boston Neck Road.
- Improve the alignment of the Boston Neck Road approach to Route 159.

Route 75 and Route 190

Provide traffic signal when warrants are met.

Town Center: Route 75, Bridge Street, and Mountain Road

- Replace existing sidewalks within the town green with walkways, landscaping, and lighting similar to those provided west of High Street adjacent to Suffield Academy.
- Install pedestrian signals for existing crosswalks across Route 75 and Bridge Street.
- Upgrade traffic signals to current far side standards.

Route 75 and Remington Street

Add left turn lane from Route 75 to Remington Street.

Mountain Road (Route 168) West of Route 75

- CVS commercial center Provide driveway consolidation, parking lot reconfiguration, and conceptual landscaping improvements consistent with the TCSP project. Align the primary driveway across from Ffyler Place and install new traffic signal when warrants are met.
- Consolidate the east High School driveway and the west Middle School driveway. Align school access with New England Bank driveway to reduce driver confusion and improve sight distance.

Mapleton Avenue and Thompsonville Road

Reconfigure intersection to a more standard configuration.

Local Improvements



Route 187 and School Street

Afficial Control of the Control of t

Route 20 and School Street



Route 20 and East Street



East Granby Town Center



Route 20



Route 20 and Bradley Park Road

East Granby

Route 187 and School Street Intersection

- Realign School Street and Memorial Drive to a more conventional intersection configuration.
- Design improvements to accommodate anticipated school bus traffic.
- Install traffic signal when warrants are met.
- Provide sidewalk on the north side of School Street and Memorial Drive.

Route 20 and School Street Intersection

- Provide sidewalks on north side of School Street and south side of Route 20 from School Street to East Street.
- Relocate School Street stop bar and stop sign and trim vegetation to improve sight distance to west.
- Provide westbound left turn lane from Route 20 to School Street (contingent on Route 187/ School Street intersection improvements).

Route 20 and East Street Intersection

- Provide exclusive southbound left turn lane and advance signal phasing.
- Realign Nicholson Road approach to East Street to further separate it from Route 20.
- Provide sidewalk on west side on East Street.

Route 20 and Bradley Park Road/International Drive Intersection

- Improve radius at northeast corner of intersection to accommodate right turns for trucks.
- Add a second westbound left turn lane from Route 20 to International Drive and modify signal phasing and timing to eliminate permissive left turns (provide protected lefts only).
- Provide direct right turn access from Route 20 to Rockbestos-Surprenant Corporation.

Route 20 and East Granby Town Center

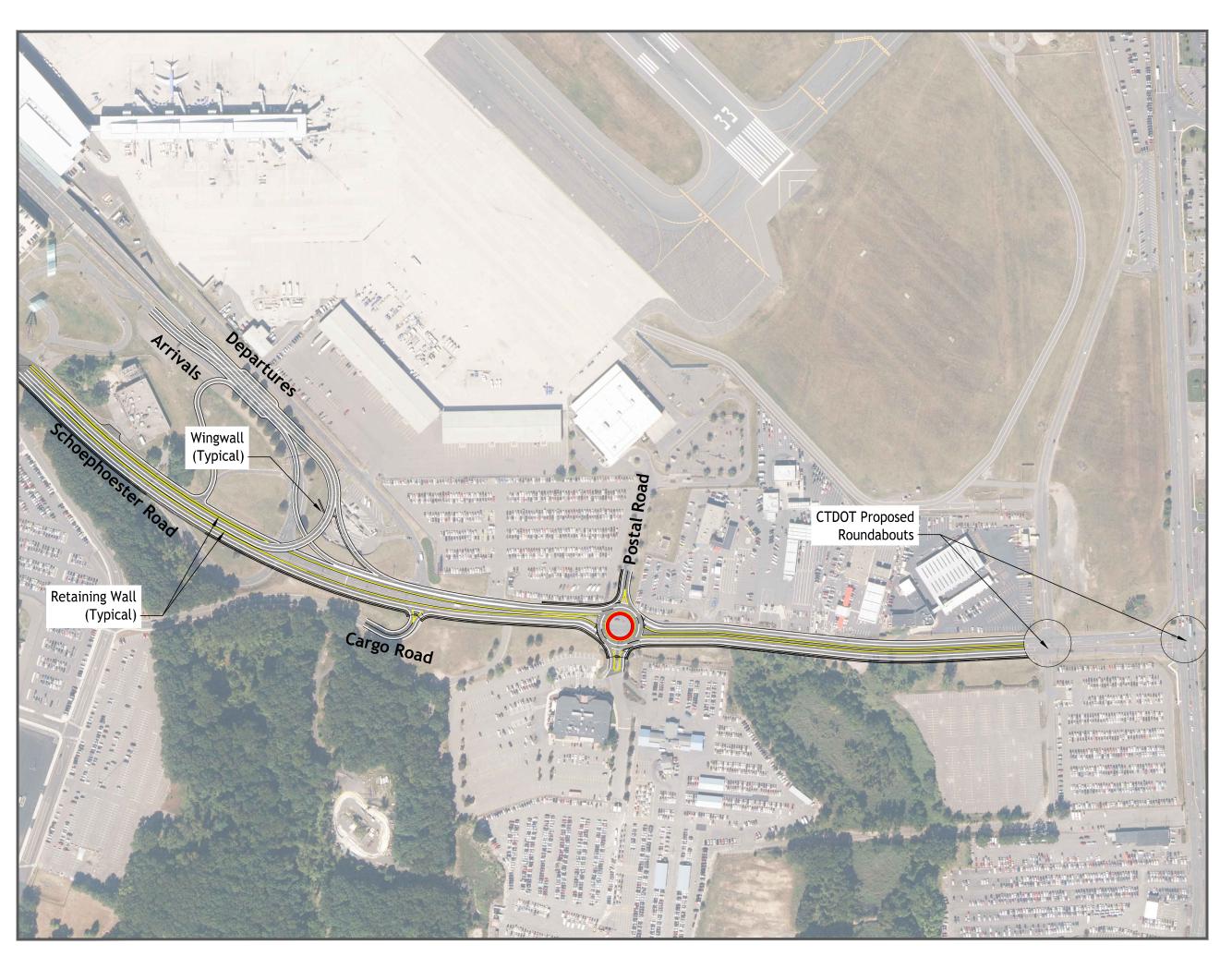
- Provide bicycle accommodations along Route 20 from the center of town west to the Rails to Trails bikeway.
- Extend the existing landscaped median on Route 20 east to Bradley Park Road.
- Provide Town Center Concept Plan incorporating streetscaping, landscaping, and pedestrian improvements.
- Monitoring of accident data verified the effectiveness of recent Route 20/Route 187 intersection improvements.

Study-Wide Recommendations

- Provide the Towns with Traffic Calming Strategies for possible implementation. Comments indicated that citizens perceived speeds were too high on Route 75 in Windsor, Seymour Road and Spoonville Road in East Granby, North Street, Spring Street, Elm Street, and Old County Road in Windsor Locks, and Route 75 in Suffield.
- Recommend all new construction and major reconstruction projects include standard shoulder widths whenever possible.
- Recommend the installation of pedestrian facilities with all new construction, reconstruction, and major maintenance projects whenever possible.
- Review municipal regulations relative to access management and provide recommended regulatory changes.

APPENDIX F

Bradley Airport Master Plan Improvements





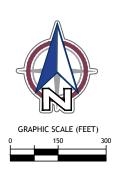
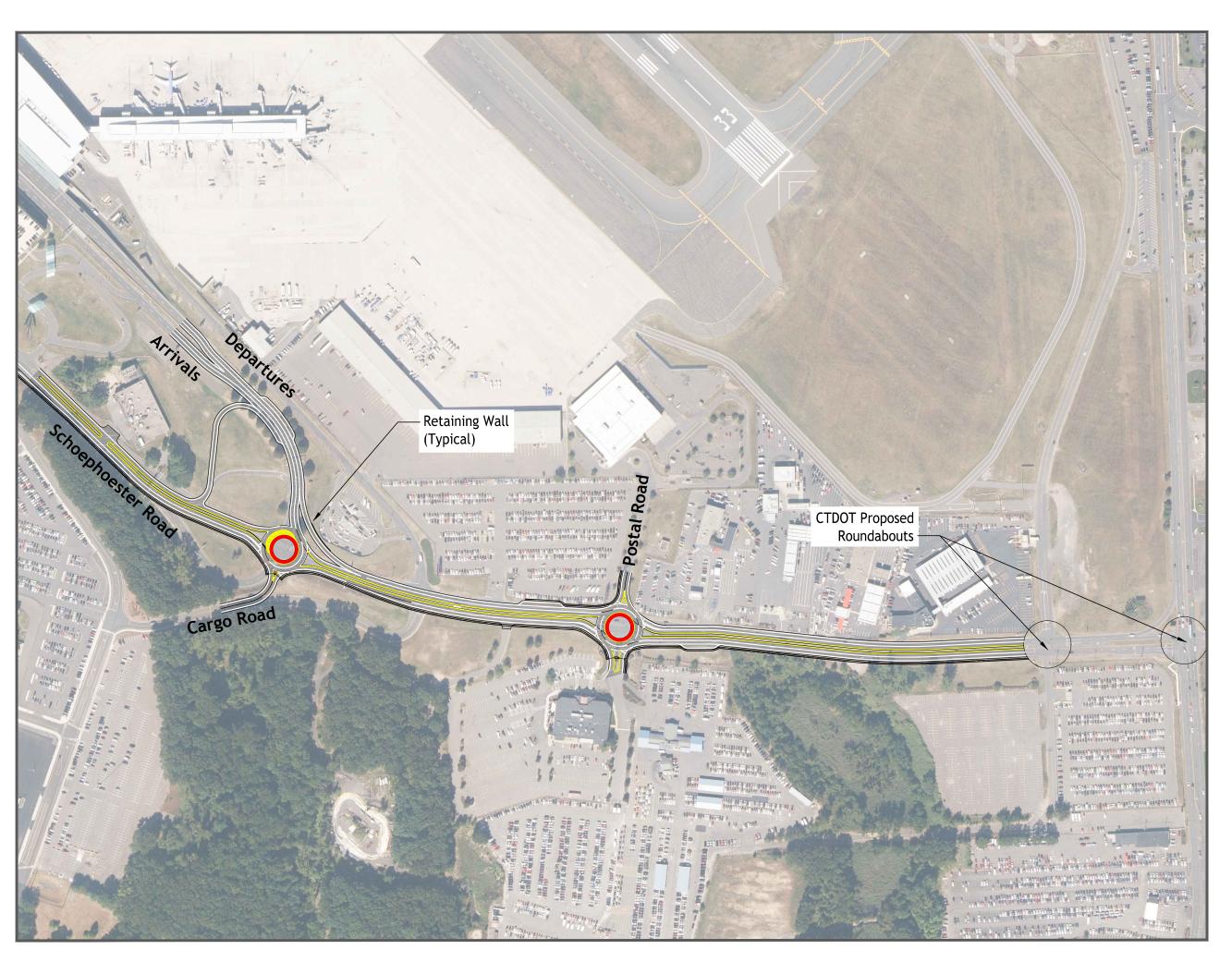


Figure 5-29Roadway Alternative A





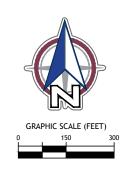
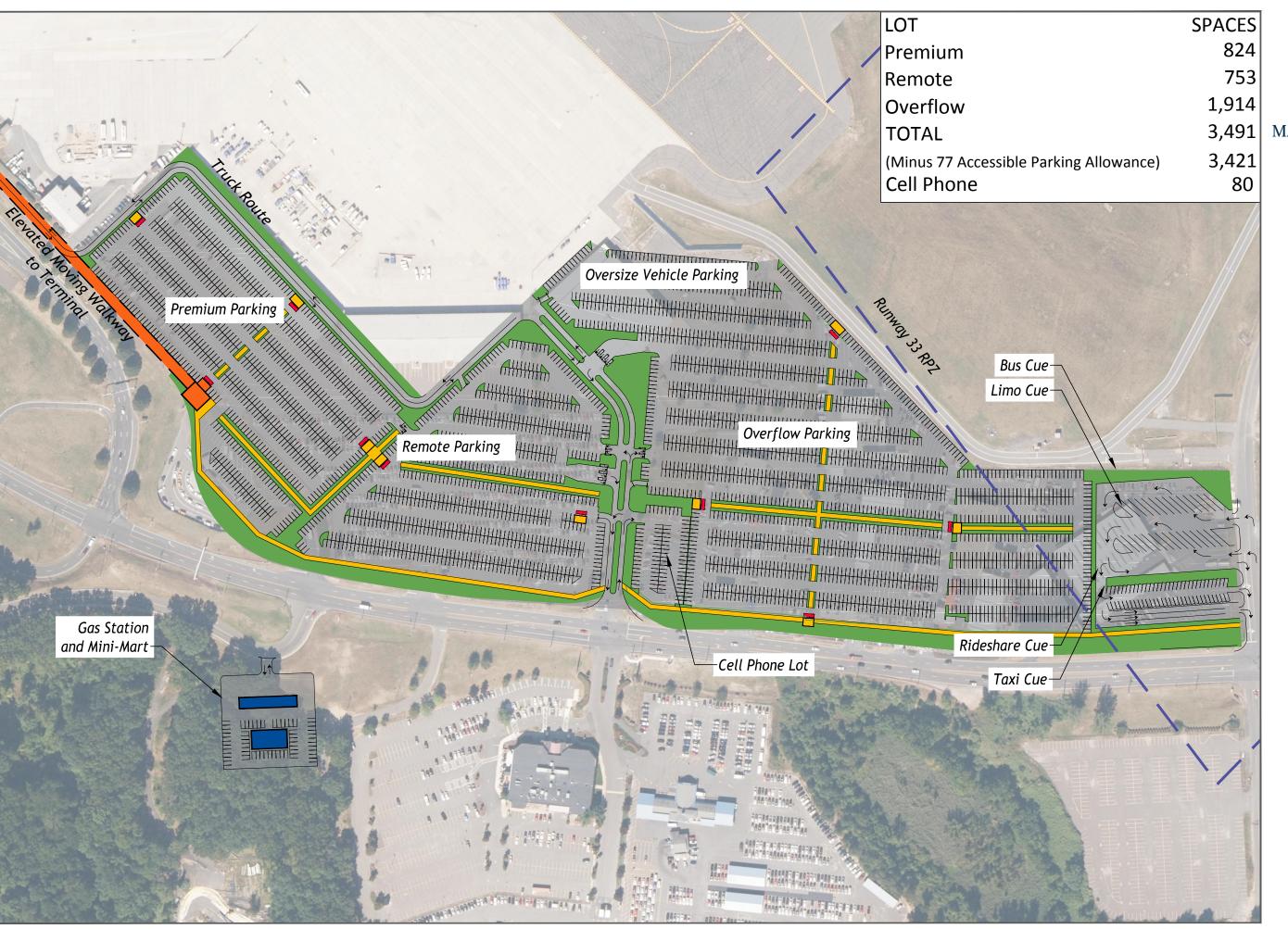


Figure 5-30Roadway Alternative B





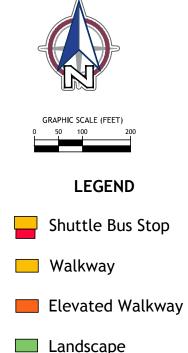
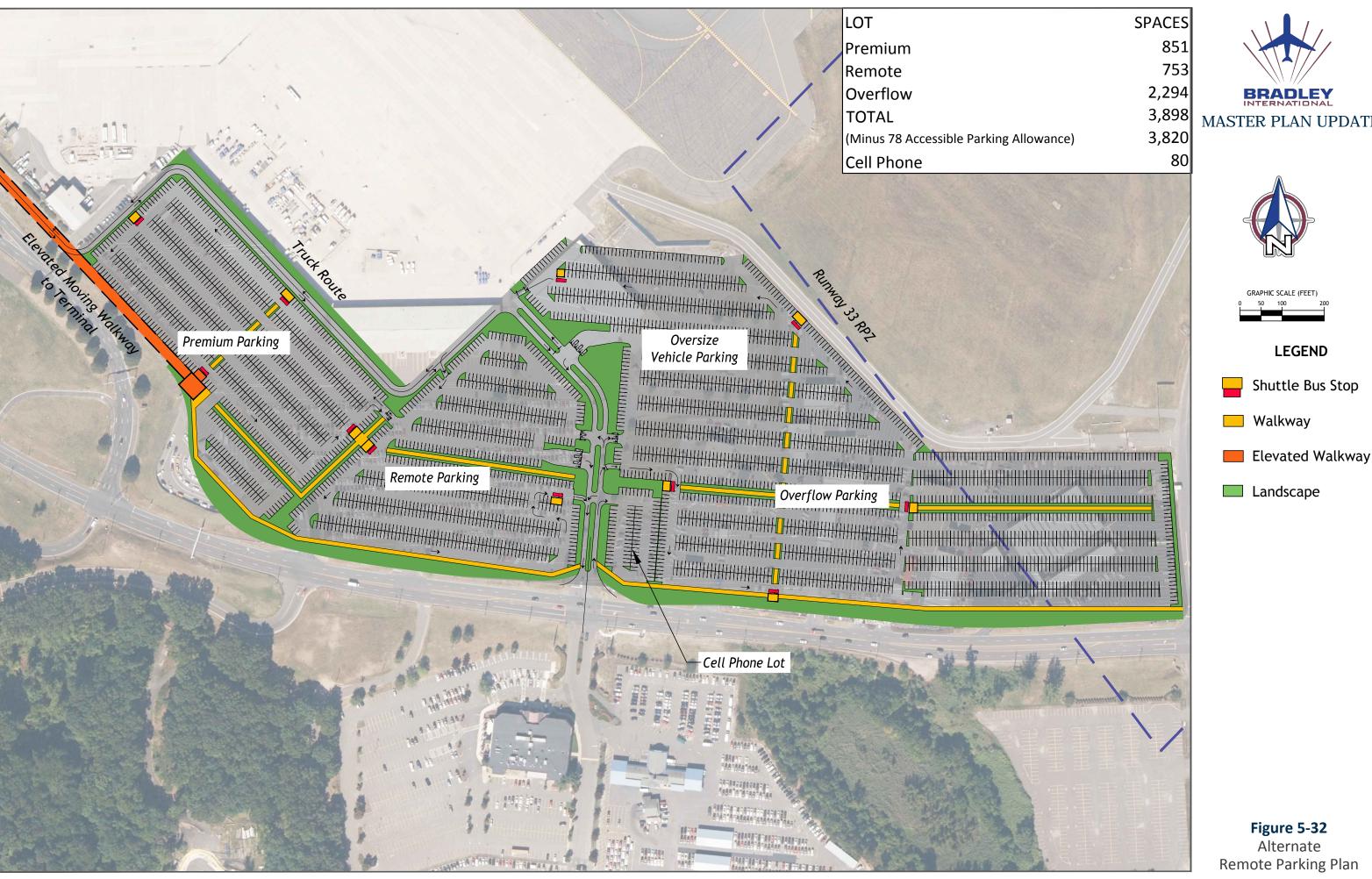


Figure 5-31Remote Parking Plan





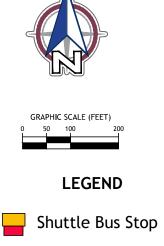
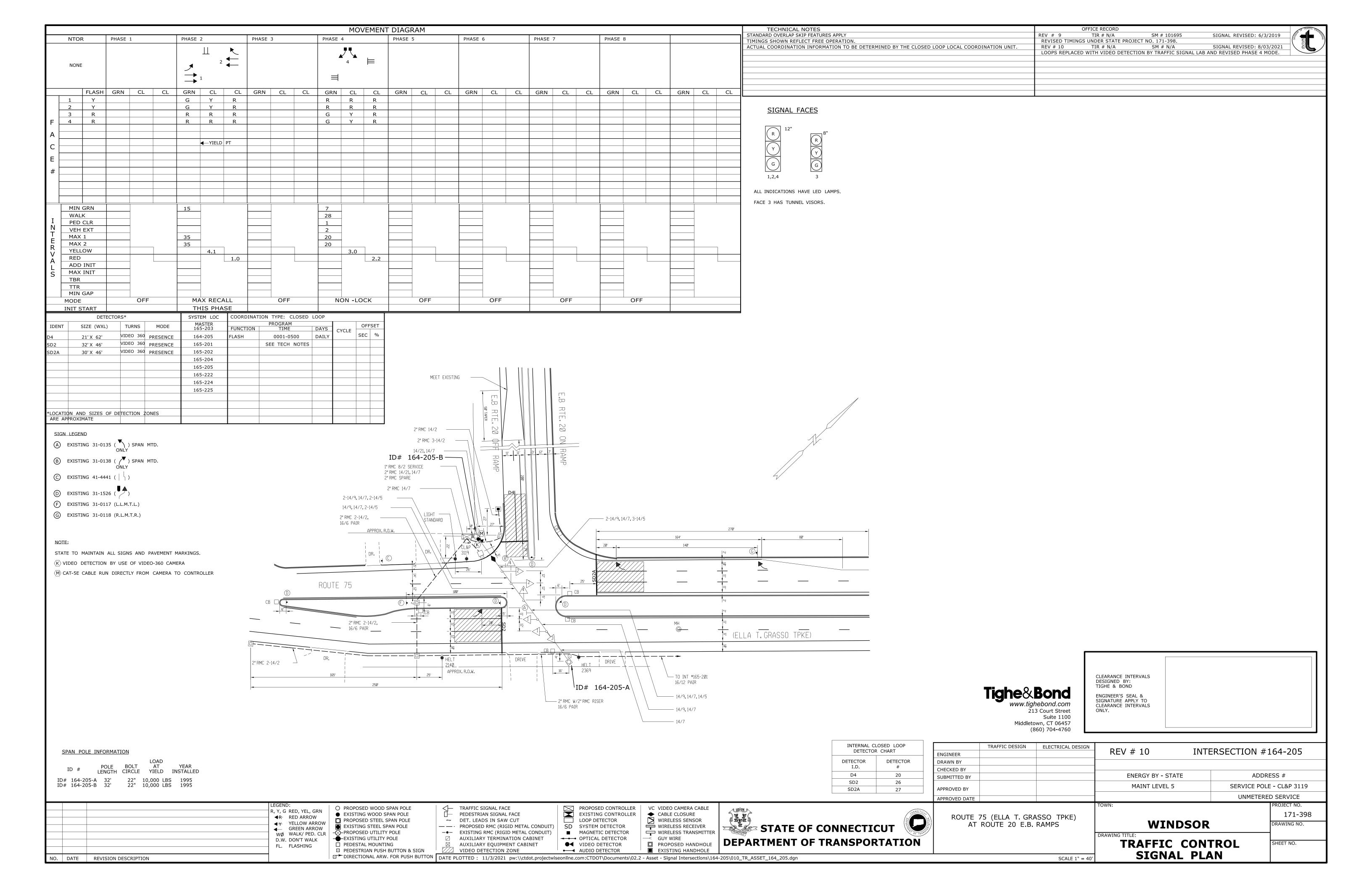
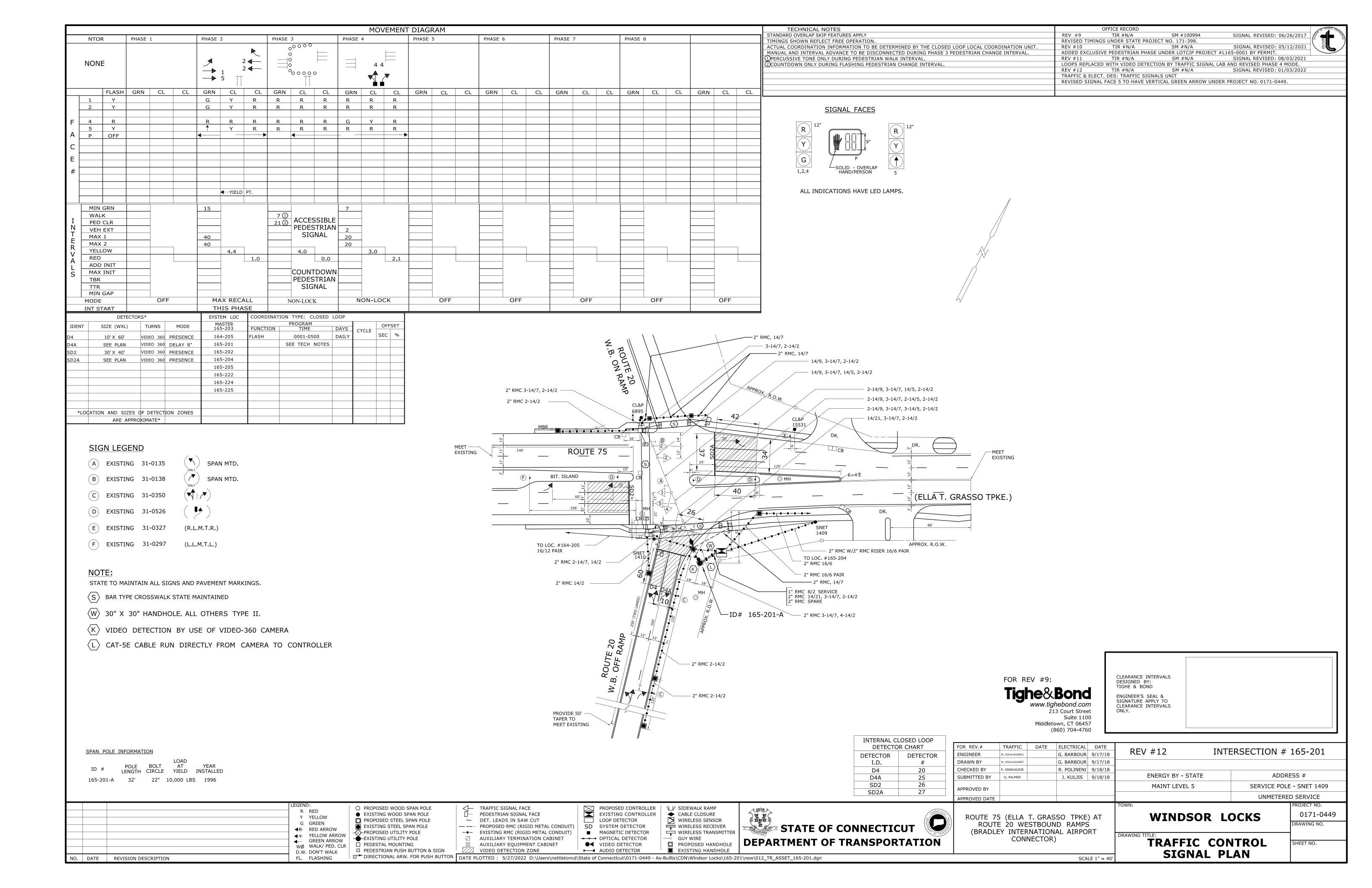
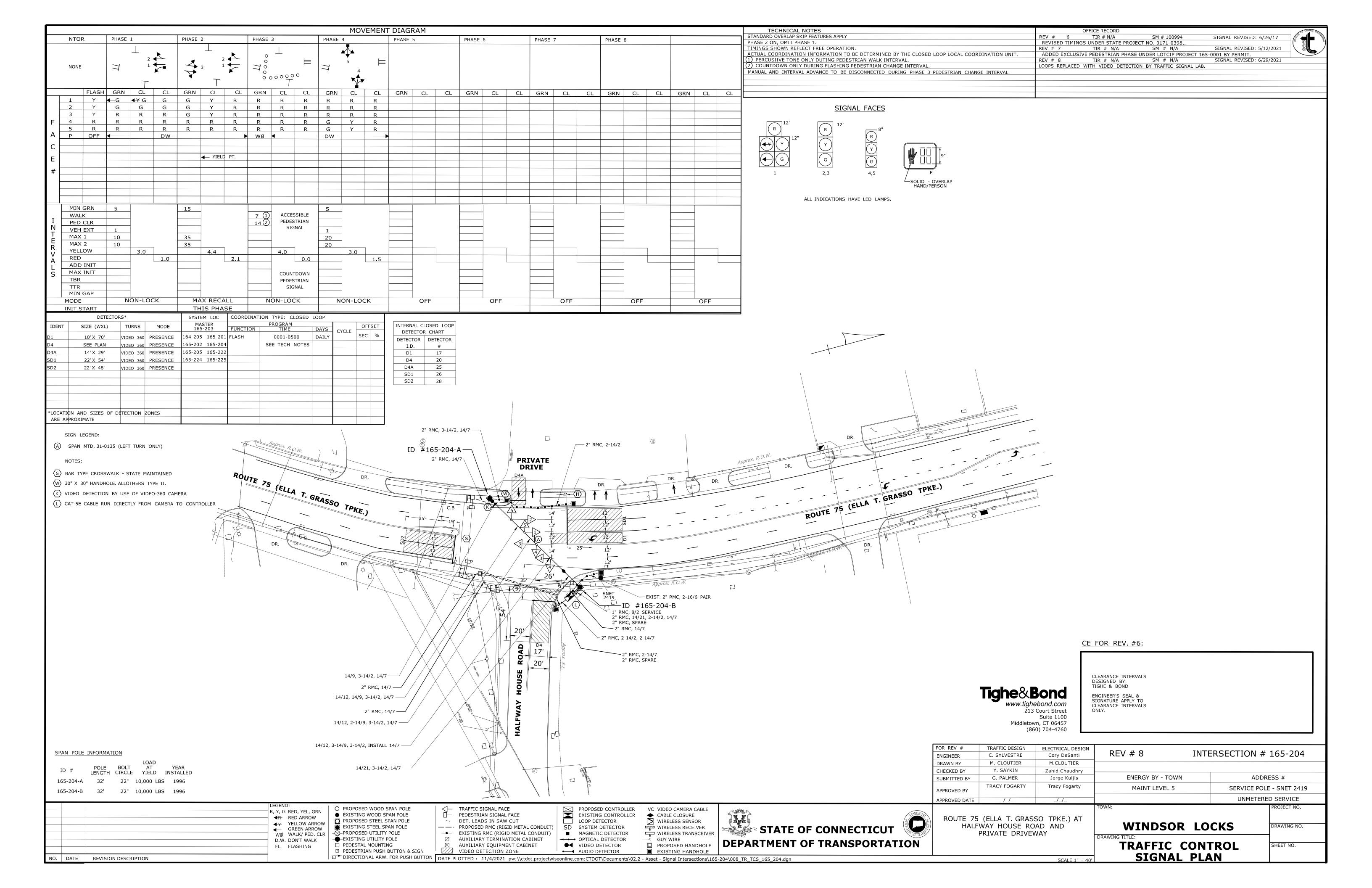


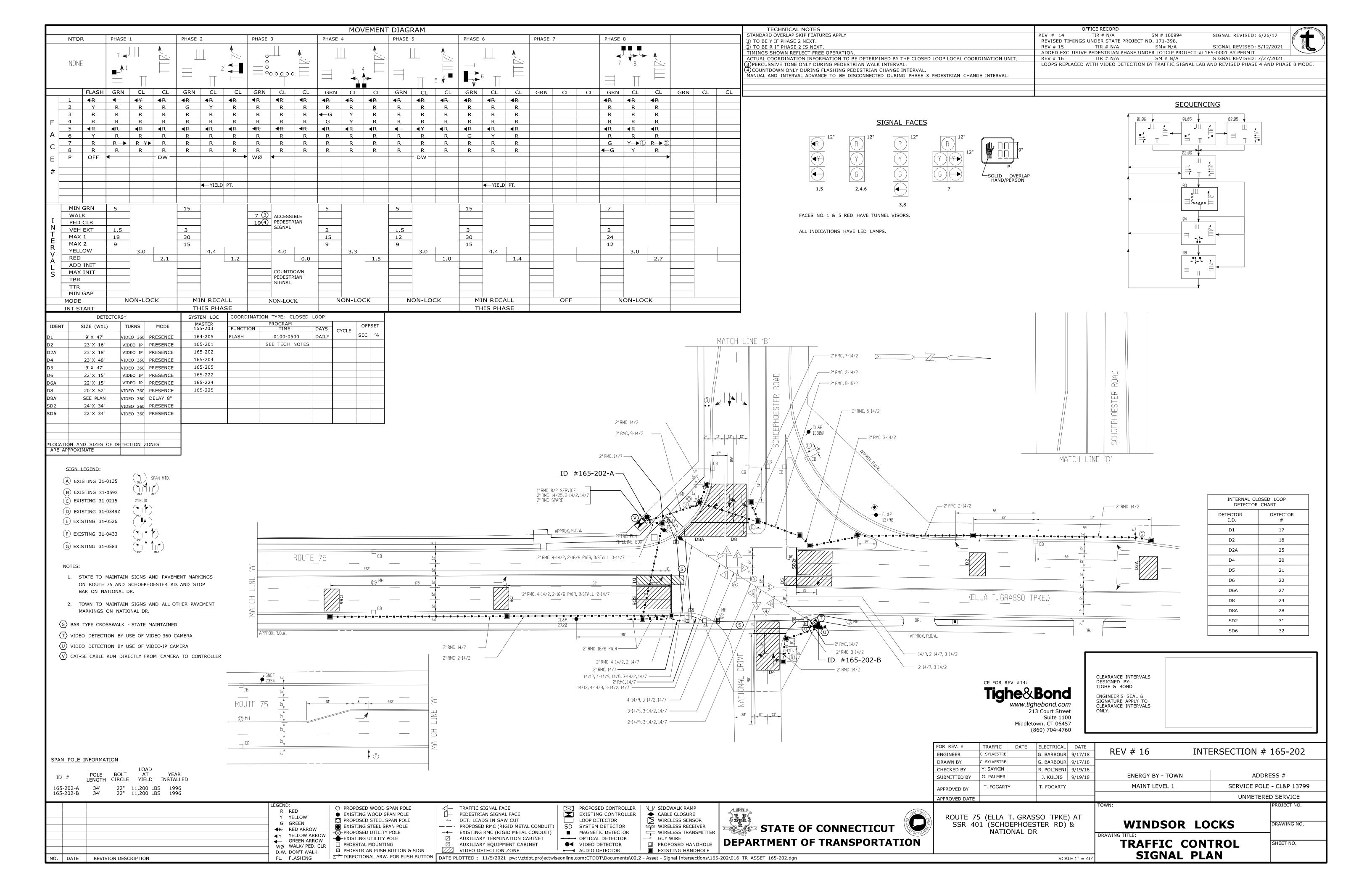
Figure 5-32 Alternate Remote Parking Plan

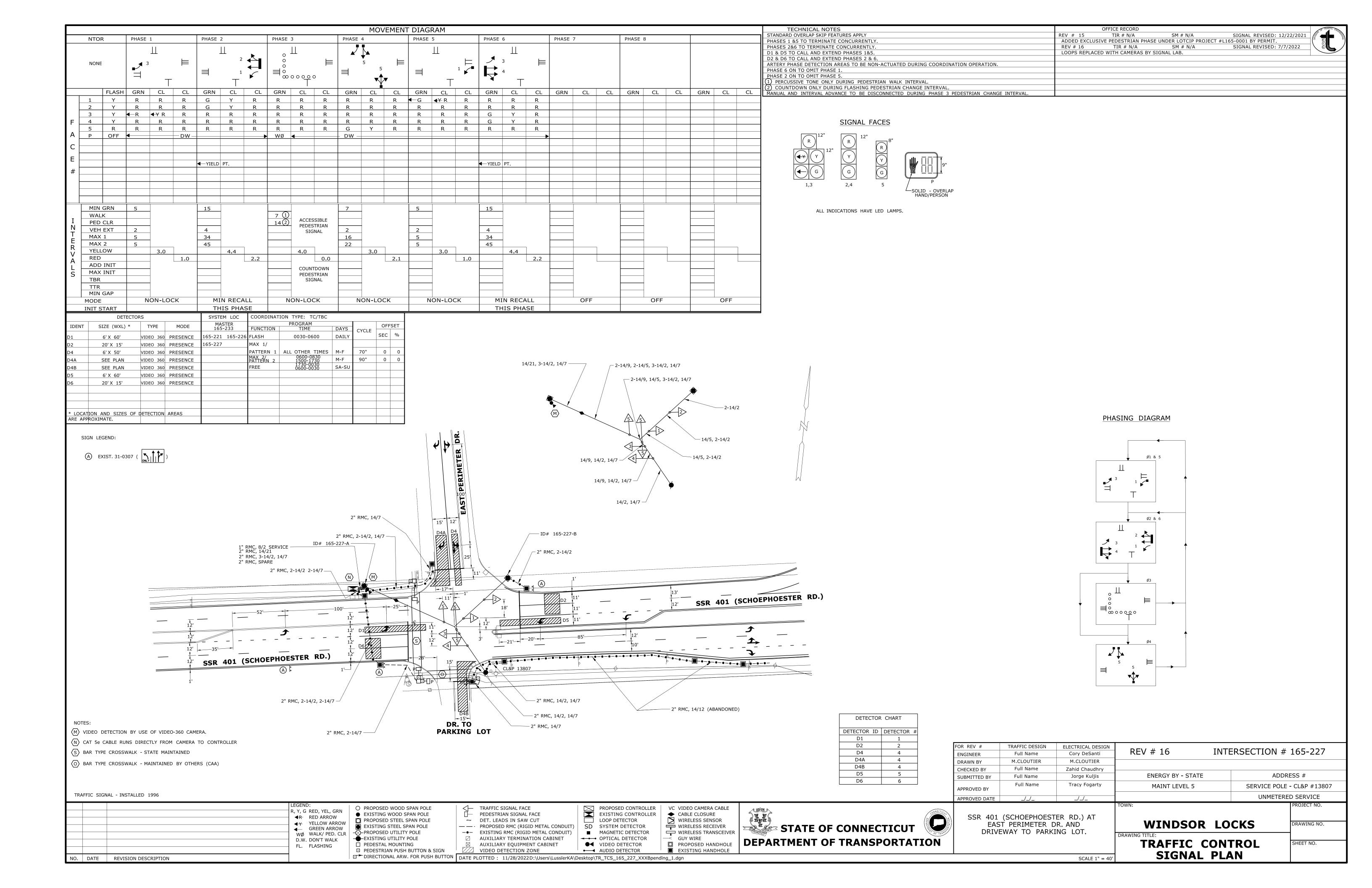
APPENDIX GTraffic Control Signal Plans

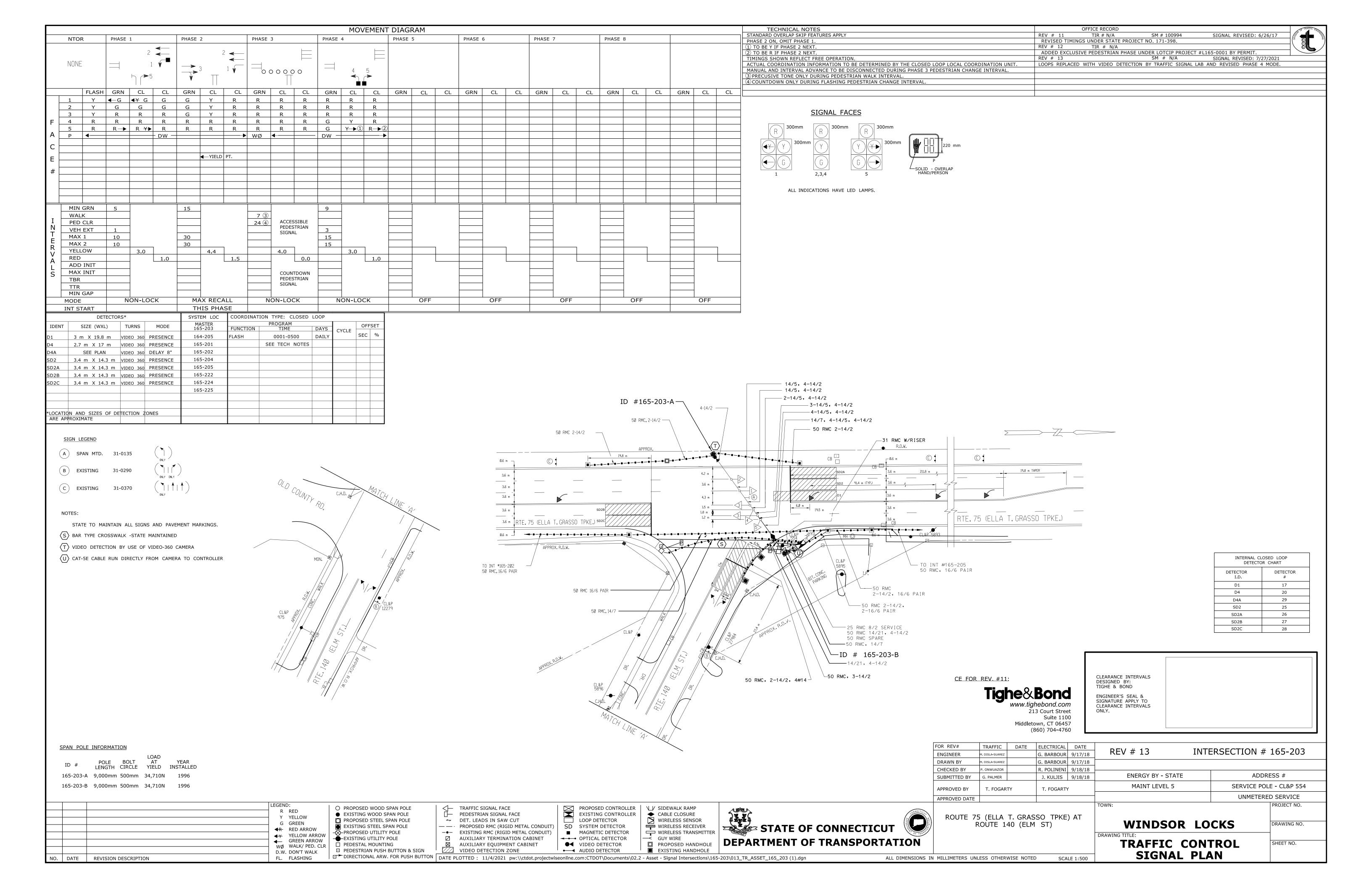












APPENDIX HRaw Traffic Counts

Route 75 South of High Street Windsor Locks, Connecticut

Site Code: Station ID: 5750

Northbound															Lalliuue.	0.0000	Undenned
Start	1	16	21	26	31	36	41	46	51	56	61	66	71	76		Pace	Number
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	Speed	in Pace
10/26/22	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
03:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
04:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
05:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
06:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
07:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
08:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
09:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
12 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
14:00	0	1	2	1	14	16	18	6	4	0	0	0	1	0	63	36-45	34
15:00	0	0	0	3	5	61	85	60	28	8	1	1	0	0	252	36-45	146
16:00	0	0	0	1	14	62	103	112	44	8	1	1	1	0	347	41-50	215
17:00	0	0	0	3	15	38	93	102	54	10	2	0	0	0	317	41-50	195
18:00	0	1	0	1	14	53	128	62	19	0	2	0	0	0	280	41-50	190
19:00	2	0	0	1	6	38	58	36	20	0	1	1	0	0	163	36-45	96
20:00	0	1	1	3	6	28	37	35	17	0	0	1	0	0	129	41-50	72
21:00	0	0	0	1	2	16	25	20	14	5	1	0	0	0	84	41-50	45
22:00	0	0	0	2	3	12	24	8	4	2	1	1	0	0	57	36-45	36
23:00	0	0	0	0	1	5	5	11	4	3	0	1	1	0	31	41-50	16
Total	2	3	3	16	80	329	576	452	208	36	9	6	3	0	1723		
Percent	0.1%	0.2%	0.2%	0.9%	4.6%	19.1%	33.4%	26.2%	12.1%	2.1%	0.5%	0.3%	0.2%	0.0%			
AM Peak																	
Vol.																	
PM Peak	19:00	14:00	14:00	15:00	17:00	16:00	18:00	16:00	17:00	17:00	17:00	15:00	14:00		16:00		
Vol.	2	1	2	3	15	62	128	112	54	10	2	1	1		347		

Route 75 South of High Street Windsor Locks, Connecticut

Site Code: Station ID: 5750

Northbound															Latitudo.	0.0000	Ondonnoa
Start	1	16	21	26	31	36	41	46	51	56	61	66	71	76		Pace	Number
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	Speed	in Pace
10/27/22	0	0	0	1	1	2	10	8	4	1	1	0	0	0	28	41-50	18
01:00	0	0	0	0	0	1	4	5	5	0	0	0	0	0	15	44-53	10
02:00	0	0	1	0	1	1	3	5	3	0	0	0	0	0	14	41-50	8
03:00	0	0	0	0	1	2	3	3	3	1	0	0	0	0	13	39-48	6
04:00	0	0	0	0	1	4	11	14	1	2	0	0	0	0	33	41-50	25
05:00	0	0	0	3	1	5	18	10	7	1	0	0	0	0	45	41-50	28
06:00	0	0	1	0	3	13	23	26	6	4	1	0	0	0	77	41-50	49
07:00	0	1	2	2	8	16	52	38	17	4	3	0	0	0	143	41-50	90
08:00	0	0	1	0	6	34	60	55	24	8	5	1	1	0	195	41-50	115
09:00	0	0	0	1	3	23	72	37	31	8	2	0	0	0	177	41-50	109
10:00	0	0	0	4	3	29	45	40	15	9	0	3	0	0	148	41-50	85
11:00	0	1	0	2	13	37	78	43	21	5	3	0	0	0	203	41-50	121
12 PM	0	0	1	2	15	39	92	65	24	8	1	1	0	0	248	41-50	157
13:00	0	2	1	0	5	35	68	61	29	2	2	0	0	0	205	41-50	129
14:00	0	0	0	0	11	33	57	72	41	7	3	1	0	0	225	41-50	129
15:00	0	1	0	1	18	51	70	58	39	2	0	1	1	0	242	41-50	128
16:00	0	0	1	0	9	50	121	86	51	12	3	0	0	0	333	41-50	207
17:00	0	0	0	2	14	55	99	89	55	10	1	0	0	0	325	41-50	188
18:00	0	0	0	6	25	53	102	54	25	7	1	1	0	0	274	39-48	156
19:00	0	0	0	1	8	47	64	21	13	1	1	0	0	0	156	36-45	111
20:00	0	0	0	5	14	49	44	19	4	6	0	0	0	0	141	36-45	93
21:00	0	0	0	0	3	16	31	16	3	0	1	0	0	0	70	41-50	47
22:00	0	0	0	0	2	9	29	17	8	2	0	1	0	0	68	41-50	46
23:00	0	11	1	1	4	3	16	8	7	2	1	0	1	0	45	41-50	24
Total	0	6	9	31	169	607	1172	850	436	102	29	9	3	0	3423		
Percent	0.0%	0.2%	0.3%	0.9%	4.9%	17.7%	34.2%	24.8%	12.7%	3.0%	0.8%	0.3%	0.1%	0.0%			
AM Peak		07:00	07:00	10:00	11:00	11:00	11:00	08:00	09:00	10:00	08:00	10:00	08:00		11:00		
Vol.		1_	2_	4	13	37	78	55	31	9	5	3	1		203		
PM Peak		13:00	12:00	18:00	18:00	17:00	16:00	17:00	17:00	16:00	14:00	12:00	15:00		16:00		
Vol.		2	1	6	25	55	121	89	55	12	3	1	1		333		

Route 75 South of High Street Windsor Locks, Connecticut

Site Code: Station ID: 5750

Northbound															Lantado.	0.0000	Ondomioa
Start	1	16	21	26	31	36	41	46	51	56	61	66	71	76		Pace	Number
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	Speed	in Pace
10/28/22	0	0	0	0	1	8	9	9	2	2	0	1	1	0	33	39-48	18
01:00	0	0	0	0	0	2	6	6	2	0	0	0	0	0	16	41-50	12
02:00	0	0	0	1	0	3	2	0	3	0	0	0	0	0	9	35-44	5
03:00	0	0	0	0	1	5	4	5	2	0	1	0	0	0	18	36-45	9
04:00	0	0	0	0	2	6	19	9	0	1	0	0	0	0	37	41-50	28
05:00	0	0	0	0	3	6	14	11	7	5	1	0	0	0	47	41-50	25
06:00	0	0	0	1	2	7	26	23	11	3	2	0	0	0	75	41-50	49
07:00	0	0	1	1	7	14	57	36	20	9	1	1	0	0	147	41-50	93
08:00	0	1	0	0	2	20	70	54	25	7	5	3	0	0	187	41-50	124
09:00	0	0	0	1	4	35	47	57	34	3	3	1	0	0	185	41-50	104
10:00	0	0	0	6	13	35	63	42	21	5	1	0	0	0	186	41-50	105
11:00	0	1	0	4	12	34	60	45	20	9	2	0	0	0	187	41-50	105
12 PM	0	0	0	5	16	43	99	72	30	6	1	0	0	0	272	41-50	171
13:00	2	1	2	7	17	49	79	68	14	10	1	0	0	0	250	41-50	147
14:00	0	0	1	1	4	31	78	70	21	6	1	0	0	0	213	41-50	148
15:00	0	0	0	4	16	33	94	77	24	16	1	0	0	0	265	41-50	171
16:00	0	0	0	3	11	75	144	101	35	10	2	0	0	0	381	41-50	245
17:00	0	0	0	2	21	55	120	86	36	16	2	1	0	0	339	41-50	206
18:00	0	0	0	4	8	42	102	73	31	6	2	0	0	0	268	41-50	175
19:00	0	0	0	0	16	59	70	37	11	2	0	0	0	0	195	36-45	129
20:00	0	0	0	4	11	48	67	28	9	0	0	0	0	0	167	36-45	115
21:00	0	0	0	1	5	24	48	24	8	1	1	1	0	0	113	41-50	72
22:00	0	0	0	0	3	13	24	14	9	3	1	0	0	0	67	41-50	38
23:00	0	0	0	2	4	14	11	11	4	3	1	1	0	0	51	36-45	25
Total	2	3	4	47	179	661	1313	958	379	123	29	9	1	0	3708		
Percent	0.1%	0.1%	0.1%	1.3%	4.8%	17.8%	35.4%	25.8%	10.2%	3.3%	0.8%	0.2%	0.0%	0.0%			
AM Peak		08:00	07:00	10:00	10:00	09:00	08:00	09:00	09:00	07:00	08:00	08:00	00:00		08:00		
Vol.	10.00	1_	1	6	13	35	70	57	34	9	5	3	1		187		
PM Peak	13:00	13:00	13:00	13:00	17:00	16:00	16:00	16:00	17:00	15:00	16:00	17:00			16:00		
Vol.	2	1	2	7	21	75	144	101	36	16	2	1			381		

Route 75 South of High Street Windsor Locks, Connecticut

Site Code: Station ID: 5750

Northbound																	
Start	1	16	21	26	31	36	41	46	51	56	61	66	71	76		Pace	Number
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	Speed	in Pace
10/29/22	0	0	0	1	0	9	7	8	7	3	1	0	0	0	36	36-45	16
01:00	0	0	0	0	1	3	4	4	1	0	1	0	0	0	14	41-50	8
02:00	0	0	0	0	1	1	4	2	1	0	0	0	0	0	9	41-50	6
03:00	0	0	0	0	0	2	2	6	2	2	0	0	0	0	14	46-55	8
04:00	0	0	0	0	1	7	6	5	5	0	0	0	0	0	24	36-45	13
05:00	0	0	0	0	0	2	4	4	4	1	0	0	0	0	15	40-49	8
06:00	0	0	0	0	1	2	11	13	7	0	0	0	0	0	34	41-50	24
07:00	0	0	0	1	0	4	23	19	8	4	2	1	0	0	62	41-50	42
08:00	0	0	0	1	2	12	17	35	14	9	1	0	2	0	93	41-50	52
09:00	0	1	0	1	6	14	40	53	29	6	3	0	0	0	153	41-50	93
10:00	0	0	1	1	6	26	89	59	29	10	2	0	0	0	223	41-50	148
11:00	0	0	0	0	2	20	59	84	36	8	2	0	0	0	211	41-50	143
12 PM	0	0	0	3	6	29	75	68	32	5	1	0	0	0	219	41-50	143
13:00	0	0	0	3	5	42	64	81	21	9	1	0	0	0	226	41-50	145
14:00	0	0	1	1	13	30	65	55	25	10	1	0	1	0	202	41-50	120
15:00	0	0	1	2	10	17	77	67	48	7	1	0	0	0	230	41-50	144
16:00	0	0	2	3	4	32	94	67	28	5	2	1	0	0	238	41-50	161
17:00	0	0	0	1	5	25	66	67	32	5	2	0	0	0	203	41-50	133
18:00	0	1	0	2	6	47	103	42	21	5	0	1	0	0	228	36-45	150
19:00	0	0	1	0	15	24	58	44	12	4	1	0	0	0	159	41-50	102
20:00	0	0	0	0	7	33	45	38	14	1	1	0	0	0	139	41-50	83
21:00	0	0	0	0	11	25	50	19	8	10	0	0	2	0	125	36-45	75
22:00	0	0	0	0	5	9	31	20	10	2	2	0	0	0	79	41-50	51
23:00	0	0	0	1	2	10	5	14	6	2	0	1	0	0	41	44-53	20
Total	0	2	6	21	109	425	999	874	400	108	24	4	5	0	2977		
Percent	0.0%	0.1%	0.2%	0.7%	3.7%	14.3%	33.6%	29.4%	13.4%	3.6%	0.8%	0.1%	0.2%	0.0%			
AM Peak		09:00	10:00	00:00	09:00	10:00	10:00	11:00	11:00	10:00	09:00	07:00	08:00		10:00		
Vol.		11	11	1_	6	26	89	84	36	10	3	1_	2		223		
PM Peak		18:00	16:00	12:00	19:00	18:00	18:00	13:00	15:00	14:00	16:00	16:00	21:00		16:00		
Vol.		1	2	3	15	47	103	81	48	10	2	1	2		238		

Route 75 South of High Street Windsor Locks, Connecticut

Site Code: Station ID: 5750

Northbound																	
Start	1	16	21	26	31	36	41	46	51	56	61	66	71	76		Pace	Number
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	Speed	in Pace
10/30/22	0	0	0	0	1	6	9	7	7	2	0	1	0	0	33	39-48	16
01:00	0	0	0	0	0	1	5	5	1	2	0	0	0	0	14	41-50	10
02:00	0	0	0	0	0	1	4	2	1	1	2	0	0	0	11	41-50	6
03:00	0	0	0	0	1	2	2	4	1	2	0	1	0	0	13	41-50	6
04:00	0	0	0	1	0	4	6	5	3	1	1	0	0	0	21	39-48	11
05:00	0	0	0	0	1	4	11	5	3	2	0	0	1	0	27	39-48	16
06:00	0	0	1	0	0	9	10	4	5	5	0	0	0	0	34	36-45	19
07:00	0	0	0	2	1	2	14	11	7	2	0	0	0	0	39	41-50	25
08:00	0	0	0	1	3	6	21	19	14	8	2	1	0	0	75	41-50	40
09:00	0	0	2	3	0	14	27	35	21	3	2	0	0	0	107	41-50	62
10:00	0	0	0	2	6	20	44	52	35	9	0	0	0	0	168	41-50	96
11:00	1	0	0	2	8	19	41	45	23	9	4	1	1	0	154	41-50	86
12 PM	0	0	0	0	6	42	50	58	21	8	1	0	1	0	187	41-50	108
13:00	0	1	1	2	3	32	71	57	29	7	2	1	0	0	206	41-50	128
14:00	0	0	0	2	6	35	67	53	34	15	2	1	0	0	215	41-50	120
15:00	0	0	0	0	4	14	51	59	63	17	0	2	0	0	210	46-55	122
16:00	0	0	0	1	4	26	77	69	33	11	3	0	0	0	224	41-50	146
17:00	0	0	0	1	17	35	79	55	26	10	1	0	0	0	224	41-50	134
18:00	1	0	0	0	1	30	63	51	24	7	2	0	2	0	181	41-50	114
19:00	0	0	1	1	7	30	31	35	11	3	1	1	0	0	121	41-50	66
20:00	0	0	0	1	2	14	29	23	9	3	1	0	0	0	82	41-50	52
21:00	0	0	0	0	1	16	17	22	15	3	2	0	0	0	76	41-50	39
22:00	0	0	0	1	3	5	17	13	6	2	1	1	0	0	49	41-50	30
23:00	0	0	0	0	0	8	8	7	6	0	0	1	0	0	30	36-45	16
Total	2	1	5	20	75	375	754	696	398	132	27	11	5	0	2501		
Percent	0.1%	0.0%	0.2%	0.8%	3.0%	15.0%	30.1%	27.8%	15.9%	5.3%	1.1%	0.4%	0.2%	0.0%			
AM Peak	11:00		09:00	09:00	11:00	10:00	10:00	10:00	10:00	10:00	11:00	00:00	05:00		10:00		
Vol.	1		2	3	8	20	44	52	35	9	4	1	1		168		
PM Peak	18:00	13:00	13:00	13:00	17:00	12:00	17:00	16:00	15:00	15:00	16:00	15:00	18:00		16:00		
Vol.	1	1	1	2	17	42	79	69	63	17	3	2	2		224		

Route 75 South of High Street Windsor Locks, Connecticut

Site Code: Station ID: 5750

Latitude: 0' 0.0000 Undefined

Northbound																	
Start	1	16	21	26	31	36	41	46	51	56	61	66	71	76		Pace	Number
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	Speed	in Pace
10/31/22	0	0	0	1	2	1	9	4	2	5	0	0	0	0	24	41-50	13
01:00	0	0	0	1	1	0	3	2	1	0	0	0	0	0	8	41-50	5
02:00	0	0	0	0	0	0	2	2	1	1	0	0	0	0	6	41-50	4
03:00	0	0	0	1	0	2	5	2	1	0	1	0	0	0	12	41-50	7
04:00	0	0	0	0	0	5	7	8	3	0	1	0	0	0	24	41-50	15
05:00	0	0	0	0	2	5	8	9	10	3	1	2	0	0	40	45-54	19
06:00	0	0	0	1	0	12	23	23	10	4	0	2	0	0	75	41-50	46
07:00	2	6	3	2	7	24	40	29	24	8	3	0	0	0	148	41-50	69
08:00	0	0	0	0	13	20	42	36	19	10	2	5	1	0	148	41-50	78
09:00	0	0	0	0	7	18	50	46	22	13	3	1	1	0	161	41-50	96
10:00	1	0	0	2	2	24	68	55	23	2	0	0	0	0	177	41-50	123
11:00	0	0	1	0	8	9	22	22	9	3	0	0	0	0	74	41-50	44
12 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
14:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
15:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
16:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
17:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
18:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
21:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
22:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
23:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total	3	6	4	8	42	120	279	238	125	49	11	10	2	0	897		
Percent	0.3%	0.7%	0.4%	0.9%	4.7%	13.4%	31.1%	26.5%	13.9%	5.5%	1.2%	1.1%	0.2%	0.0%			
AM Peak	07:00	07:00	07:00	07:00	08:00	07:00	10:00	10:00	07:00	09:00	07:00	08:00	08:00		10:00		
Vol.	2	6	3	2	13	24	68	55	24	13	3	5	1		177		
PM Peak Vol.		-	-									-					
Total	9	21	31	143	654	2517	5093	4068	1946	550	129	49	19	0	15229		
Percent	0.1%	0.1%	0.2%	0.9%	4.3%	16.5%	33.4%	26.7%	12.8%	3.6%	0.8%	0.3%	0.1%	0.0%			
			Ttle Danasa		27 MDII								2,	2.2.3			

15th Percentile: 37 MPH 50th Percentile: 44 MPH 85th Percentile: 51 MPH 95th Percentile: 54 MPH

Stats 10 MPH Pace Speed: 41-50 MPH Number in Pace: 9161

Percent in Pace : 60.2%

Number of Vehicles > 45 MPH : 6761

Percent of Vehicles > 45 MPH : 44.4%

Mean Speed(Average) : 45 MPH

Route 75 South of High Street Windsor Locks, Connecticut

Site Code: Station ID: 5750

Southbound															Latitude.	0.0000	Oridellilled
Start	1	16	21	26	31	36	41	46	51	56	61	66	71	76		Pace	Number
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	Speed	in Pace
10/26/22	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
03:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
04:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
05:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
06:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
07:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
08:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
09:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
12 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
14:00	0	0	0	2	10	24	17	3	0	0	0	0	0	0	56	36-45	41
15:00	0	1	1	1	20	96	61	17	2	0	0	0	0	0	199	36-45	157
16:00	1	1	0	10	32	78	92	22	3	0	0	0	0	0	239	36-45	170
17:00	0	2	0	4	42	105	89	20	3	0	0	0	0	0	265	36-45	194
18:00	0	0	2	4	32	91	94	13	3	0	0	0	0	0	239	36-45	185
19:00	0	0	0	3	30	64	50	12	3	0	0	0	0	0	162	36-45	114
20:00	0	0	0	1	16	60	46	17	1	1	0	0	0	0	142	36-45	106
21:00	0	0	1	4	8	38	32	12	3	1	0	0	0	0	99	36-45	70
22:00	0	0	0	1	9	26	22	10	1	0	0	0	0	0	69	36-45	48
23:00	0	0	0	1	6	13	17	1	3	0	0	0	0	0	41	36-45	30
Total	1	4	4	31	205	595	520	127	22	2	0	0	0	0	1511		
Percent	0.1%	0.3%	0.3%	2.1%	13.6%	39.4%	34.4%	8.4%	1.5%	0.1%	0.0%	0.0%	0.0%	0.0%			
AM Peak																	
Vol.																	
PM Peak	16:00	17:00	18:00	16:00	17:00	17:00	18:00	16:00	16:00	20:00					17:00		
Vol.	1	2	2	10	42	105	94	22	3	1					265		

Route 75 South of High Street Windsor Locks, Connecticut

Site Code: Station ID: 5750

Southbound															Lantado.	0.0000	Ondomio
Start	1	16	21	26	31	36	41	46	51	56	61	66	71	76		Pace	Number
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	Speed	in Pace
10/27/22	0	0	0	0	2	9	11	1	0	0	0	0	0	0	23	36-45	20
01:00	0	0	0	1	2	11	5	5	2	0	0	0	0	0	26	36-45	16
02:00	0	0	0	0	2	5	5	1	0	0	0	0	0	0	13	36-45	10
03:00	0	0	0	0	0	4	8	4	0	0	0	0	0	0	16	36-45	12
04:00	0	0	0	0	3	4	7	1	1	0	0	0	0	0	16	36-45	11
05:00	0	0	0	0	1	19	13	8	0	0	0	0	0	0	41	36-45	32
06:00	0	0	0	1	8	40	31	11	1	0	0	0	0	0	92	36-45	71
07:00	0	0	3	4	19	68	73	14	2	2	1	0	0	0	186	36-45	141
08:00	0	0	9	5	18	69	93	39	8	0	0	0	0	0	241	36-45	162
09:00	0	0	0	3	11	43	55	26	4	0	0	0	0	0	142	36-45	98
10:00	0	1	1	8	20	54	55	12	3	0	0	0	0	0	154	36-45	109
11:00	0	0	1	0	23	76	66	23	2	0	0	0	0	0	191	36-45	142
12 PM	0	0	0	4	22	88	79	22	2	1	0	0	0	0	218	36-45	167
13:00	0	2	0	1	17	83	85	30	5	1	2	0	0	0	226	36-45	168
14:00	0	0	0	6	31	70	86	13	3	2	0	0	0	0	211	36-45	156
15:00	1	0	0	3	24	71	74	23	7	0	0	0	0	0	203	36-45	145
16:00	1	0	2	2	29	79	93	41	5	1	1	1	0	0	255	36-45	172
17:00	0	3	5	9	34	95	93	26	2	1	0	0	0	0	268	36-45	188
18:00	0	0	1	0	34	115	87	16	3	0	0	0	0	0	256	36-45	202
19:00	0	0	0	4	22	65	59	8	4	0	0	0	0	0	162	36-45	124
20:00	0	0	0	2	20	65	33	8	2	0	0	0	0	0	130	36-45	98
21:00	0	0	0	1	14	34	37	6	2	0	0	0	0	0	94	36-45	71
22:00	0	0	1	1	14	21	23	10	0	0	0	0	0	0	70	36-45	44
23:00	0	0	0	1	5	12	16	5	2	0	0	0	0	0	41	36-45	28
Total	2	6	23	56	375	1200	1187	353	60	8	4	11	0	0	3275		
Percent	0.1%	0.2%	0.7%	1.7%	11.5%	36.6%	36.2%	10.8%	1.8%	0.2%	0.1%	0.0%	0.0%	0.0%			
AM Peak		10:00	08:00	10:00	11:00	11:00	08:00	08:00	08:00	07:00	07:00				08:00		
Vol.		1	9	8	23	76	93	39	8	2	1				241		
PM Peak	15:00	17:00	17:00	17:00	17:00	18:00	16:00	16:00	15:00	14:00	13:00	16:00			17:00		
Vol.	1	3	5	9	34	115	93	41	7	2	2	1			268		

Route 75 South of High Street Windsor Locks, Connecticut

Site Code: Station ID: 5750

Southbound															Lantado.	0.0000	Ondomio
Start	1	16	21	26	31	36	41	46	51	56	61	66	71	76		Pace	Number
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	Speed	in Pace
10/28/22	0	0	0	0	2	16	11	7	0	0	0	0	0	0	36	36-45	27
01:00	0	0	0	0	2	10	8	6	0	0	1	0	0	0	27	36-45	18
02:00	0	0	0	0	2	5	5	1	1	0	0	0	0	0	14	36-45	10
03:00	0	0	0	0	1	6	3	0	1	0	0	0	0	0	11	35-44	9
04:00	0	0	0	2	1	4	7	2	1	1	0	0	0	0	18	36-45	11
05:00	0	0	1	0	3	8	25	7	1	0	0	0	0	0	45	36-45	33
06:00	0	0	0	0	6	31	39	11	3	1	0	0	0	0	91	36-45	70
07:00	0	0	0	4	17	54	76	43	6	1	1	0	0	0	202	36-45	130
08:00	0	0	1	1	15	72	93	24	6	1	0	1	0	0	214	36-45	165
09:00	0	0	0	3	12	48	69	24	8	0	0	0	0	0	164	36-45	117
10:00	0	0	0	4	18	49	54	23	4	0	0	0	0	0	152	36-45	103
11:00	0	1	0	2	12	63	69	21	4	0	0	0	0	0	172	36-45	132
12 PM	0	0	0	5	24	89	93	29	4	1	0	0	0	0	245	36-45	182
13:00	0	1	0	2	26	102	86	22	4	1	0	0	0	0	244	36-45	188
14:00	0	0	0	8	39	94	69	19	4	1	0	0	0	0	234	36-45	163
15:00	0	1	2	7	24	96	79	29	6	0	0	0	0	0	244	36-45	175
16:00	0	0	0	3	25	105	117	17	2	0	0	0	0	0	269	36-45	222
17:00	0	0	2	6	33	109	95	27	3	2	0	0	0	0	277	36-45	204
18:00	0	0	0	5	34	106	76	22	3	0	0	0	0	0	246	36-45	182
19:00	0	0	2	3	42	91	47	10	2	0	0	0	0	0	197	36-45	138
20:00	0	1	0	4	27	63	45	11	2	0	0	0	0	0	153	36-45	108
21:00	0	0	0	2	11	29	36	11	4	0	0	0	0	0	93	36-45	65
22:00	0	0	0	1	10	18	27	7	0	0	0	0	0	0	63	36-45	45
23:00	0	11	1	0	3	27	30	5	2	1	1	0	0	0	71	36-45	57
Total	0	5	9	62	389	1295	1259	378	71	10	3	1_	0	0	3482		
Percent	0.0%	0.1%	0.3%	1.8%	11.2%	37.2%	36.2%	10.9%	2.0%	0.3%	0.1%	0.0%	0.0%	0.0%			
AM Peak		11:00	05:00	07:00	10:00	08:00	08:00	07:00	09:00	04:00	01:00	08:00			08:00		
Vol.		1_	1_	4	18	72	93	43	88	1_	11	1_			214		
PM Peak		13:00	15:00	14:00	19:00	17:00	16:00	12:00	15:00	17:00	23:00				17:00		
Vol.		1	2	8	42	109	117	29	6	2	1				277		

Route 75 South of High Street Windsor Locks, Connecticut

Site Code: Station ID: 5750

Southbound															Latitado.	0.0000	Ondomiou
Start	1	16	21	26	31	36	41	46	51	56	61	66	71	76		Pace	Number
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	Speed	in Pace
10/29/22	0	0	0	2	7	12	13	7	0	0	0	0	0	0	41	36-45	25
01:00	0	0	0	0	3	7	10	8	2	0	0	0	0	0	30	41-50	18
02:00	0	0	0	0	1	6	8	9	1	0	0	0	0	0	25	41-50	17
03:00	0	0	0	0	1	5	3	1	0	0	0	0	0	0	10	35-44	8
04:00	0	0	0	0	1	3	6	1	2	1	0	0	0	0	14	36-45	9
05:00	0	0	0	0	1	7	5	6	1	0	0	0	0	0	20	36-45	12
06:00	0	0	0	0	4	11	10	2	1	0	0	0	0	0	28	36-45	21
07:00	0	0	0	2	4	21	35	22	6	0	0	0	0	0	90	41-50	57
08:00	0	0	1	0	3	24	31	13	4	0	0	0	0	0	76	36-45	55
09:00	0	2	1	1	7	40	57	23	10	1	0	0	0	0	142	36-45	97
10:00	0	0	1	2	20	56	76	22	1	0	0	0	0	0	178	36-45	132
11:00	0	0	1	3	18	72	76	30	5	1	0	0	0	0	206	36-45	148
12 PM	0	1	0	3	12	47	81	27	5	0	0	0	0	0	176	36-45	128
13:00	0	0	0	1	14	85	106	35	1	1	0	0	0	0	243	36-45	191
14:00	0	0	0	3	18	69	81	45	8	2	0	0	0	0	226	36-45	150
15:00	0	1	1	3	21	75	65	21	7	1	0	0	0	0	195	36-45	140
16:00	0	0	0	3	22	83	79	27	6	1	0	0	0	0	221	36-45	162
17:00	0	0	0	0	14	80	88	22	3	1	0	0	0	0	208	36-45	168
18:00	1	0	0	4	20	91	75	9	2	0	0	0	0	0	202	36-45	166
19:00	0	0	0	4	21	62	59	8	2	0	0	0	0	0	156	36-45	121
20:00	0	0	1	1	18	57	38	8	3	0	1	0	0	0	127	36-45	95
21:00	0	0	0	1	13	33	24	9	2	0	0	0	0	0	82	36-45	57
22:00	0	0	0	0	8	18	26	13	5	0	0	0	0	0	70	36-45	44
23:00	0	0	0	1	9	15	23	10	2	1	0	0	0	0	61	36-45	38
Total	1	4	6	34	260	979	1075	378	79	10	1	0	0	0	2827		
Percent	0.0%	0.1%	0.2%	1.2%	9.2%	34.6%	38.0%	13.4%	2.8%	0.4%	0.0%	0.0%	0.0%	0.0%			
AM Peak		09:00	08:00	11:00	10:00	11:00	10:00	11:00	09:00	04:00					11:00		
Vol.		2	1	3	20	72	76	30	10	1					206		
PM Peak	18:00	12:00	15:00	18:00	16:00	18:00	13:00	14:00	14:00	14:00	20:00				13:00		
Vol.	1	1	1	4	22	91	106	45	8	2	1				243		

Route 75 South of High Street Windsor Locks, Connecticut

Site Code: Station ID: 5750

Southbound															Lamado.	0.0000	Onaomioa
Start	1	16	21	26	31	36	41	46	51	56	61	66	71	76		Pace	Number
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	Speed	in Pace
10/30/22	0	0	0	0	4	16	21	3	1	1	0	0	0	0	46	36-45	37
01:00	0	0	0	0	3	6	10	3	3	0	1	0	0	0	26	36-45	16
02:00	0	0	0	1	0	5	5	2	0	0	0	0	0	0	13	36-45	10
03:00	0	0	0	0	0	4	7	0	2	1	0	0	0	0	14	36-45	11
04:00	0	0	0	0	0	1	4	2	0	0	0	0	0	0	7	39-48	6
05:00	0	0	0	0	0	5	7	4	0	0	0	0	0	0	16	36-45	12
06:00	0	0	1	0	1	6	7	3	1	0	0	1	0	0	20	36-45	13
07:00	0	0	0	0	5	29	33	8	4	1	0	0	0	0	80	36-45	62
08:00	0	0	0	2	7	23	41	11	5	1	0	0	0	0	90	36-45	64
09:00	0	0	0	2	9	56	51	27	3	0	0	0	0	0	148	36-45	107
10:00	0	0	0	1	10	32	44	20	5	0	0	0	0	0	112	36-45	76
11:00	0	0	2	3	11	38	59	20	4	0	0	0	0	0	137	36-45	97
12 PM	0	0	0	2	25	64	82	28	3	2	0	0	0	0	206	36-45	146
13:00	0	0	1	0	19	86	99	39	2	0	1	0	0	0	247	36-45	185
14:00	0	0	0	5	24	55	75	30	7	1	0	0	0	0	197	36-45	130
15:00	0	0	0	0	21	73	78	38	4	1	0	0	0	0	215	36-45	151
16:00	0	0	0	1	16	62	84	23	9	1	0	0	0	0	196	36-45	146
17:00	1	1	2	3	19	67	60	17	3	0	0	0	0	0	173	36-45	127
18:00	0	0	1	2	18	74	55	24	4	2	0	0	0	0	180	36-45	129
19:00	0	0	1	3	14	52	40	9	1	1	0	0	0	0	121	36-45	92
20:00	0	0	1	0	7	38	32	13	5	0	0	0	0	0	96	36-45	70
21:00	0	0	0	0	7	23	19	8	4	1	0	1	0	0	63	36-45	42
22:00	0	0	0	1	1	14	11	9	3	0	1	0	0	0	40	36-45	25
23:00	0	0	0	1	5	12	10	8	2	0	0	0	0	0	38	36-45	22
Total	1	1	9	27	226	841	934	349	75	13	3	2	0	0	2481		
Percent	0.0%	0.0%	0.4%	1.1%	9.1%	33.9%	37.6%	14.1%	3.0%	0.5%	0.1%	0.1%	0.0%	0.0%			
AM Peak			11:00	11:00	11:00	09:00	11:00	09:00	08:00	00:00	01:00	06:00			09:00		
Vol			2	3	11	56	59	27	5	1_	1	1_			148		
PM Peak	17:00	17:00	17:00	14:00	12:00	13:00	13:00	13:00	16:00	12:00	13:00	21:00			13:00		
Vol.	1	1	2	5	25	86	99	39	9	2	1	1			247		

Route 75 South of High Street Windsor Locks, Connecticut

Site Code: Station ID: 5750

Latitude: 0' 0.0000 Undefined

Southbound															Lantado.	. 0 0.0000	Chachinea
Start	1	16	21	26	31	36	41	46	51	56	61	66	71	76		Pace	Number
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	Speed	in Pace
10/31/22	0	0	0	0	3	9	12	2	0	0	0	0	0	0	26	36-45	21
01:00	0	0	0	1	1	6	6	2	0	0	0	1	0	0	17	36-45	12
02:00	0	0	0	0	1	3	3	1	0	0	0	0	0	0	8	36-45	6
03:00	0	0	0	0	0	3	3	3	0	0	0	0	0	0	9	36-45	6
04:00	0	0	0	0	0	11	13	1	0	0	0	0	0	0	25	36-45	24
05:00	0	0	0	0	1	12	20	6	0	0	0	0	0	0	39	36-45	32
06:00	0	0	0	2	10	41	22	11	1	0	0	0	0	0	87	36-45	63
07:00	0	1	2	3	14	61	70	23	6	0	1	0	0	0	181	36-45	131
08:00	0	0	0	1	9	53	75	30	9	2	0	0	0	0	179	36-45	128
09:00	0	0	1	3	13	50	56	18	11	0	0	0	0	0	152	36-45	106
10:00	0	0	2	7	11	47	39	11	3	0	0	0	0	0	120	36-45	86
11:00	0	0	0	0	7	38	27	9	0	0	0	0	0	0	81	36-45	65
12 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
14:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
15:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
16:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
17:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
18:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
21:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
22:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
23:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total	0	1	5	17	70	334	346	117	30	2	1	11	0	0	924		
Percent	0.0%	0.1%	0.5%	1.8%	7.6%	36.1%	37.4%	12.7%	3.2%	0.2%	0.1%	0.1%	0.0%	0.0%			
AM Peak		07:00	07:00	10:00	07:00	07:00	08:00	08:00	09:00	08:00	07:00	01:00			07:00		
Vol.		1	2	7	14	61	75	30	11	2	1	11			181		
PM Peak Vol.																	
Total	5	21	56	227	1525	5244	5321	1702	337	45	12	5	0	0	14500		
Percent	0.0%	0.1%	0.4%	1.6%	10.5%	36.2%	36.7%	11.7%	2.3%	0.3%	0.1%	0.0%	0.0%	0.0%			
																	

15th Percentile: 35 MPH 50th Percentile: 40 MPH 85th Percentile: 44 MPH 95th Percentile: 49 MPH

Stats 10 MPH Pace Speed: 36-45 MPH Number in Pace: 10565

Percent in Pace: 72.9%

Number of Vehicles > 45 MPH: 2101

Percent of Vehicles > 45 MPH: 14.5%

Mean Speed(Average): 41 MPH

Route 75 South of High Street Windsor Locks, Connecticut

Site Code: Station ID: 5750

Start	24-Oc	:t-22	Tu	re	We	ed	TI	าน	F	ri	Weekday	Average	S	at	Su	ın
Time	Northboun	Southbo	Northbou	Southbo												
rime	d	und	nd	und												
12:00 AM	*	*	*	*	*	*	28	23	33	36	30	30	36	41	33	46
01:00	*	*	*	*	*	*	15	26	16	27	16	26	14	30	14	26
02:00	*	*	*	*	*	*	14	13	9	14	12	14	9	25	11	13
03:00	*	*	*	*	*	*	13	16	18	11	16	14	14	10	13	14
04:00	*	*	*	*	*	*	33	16	37	18	35	17	24	14	21	7
05:00	*	*	*	*	*	*	45	41	47	45	46	43	15	20	27	16
06:00	*	*	*	*	*	*	77	92	75	91	76	92	34	28	34	20
07:00	*	*	*	*	*	*	143	186	147	202	145	194	62	90	39	80
08:00	*	*	*	*	*	*	195	241	187	214	191	228	93	76	75	90
09:00	*	*	*	*	*	*	177	142	185	164	181	153	153	142	107	148
10:00	*	*	*	*	*	*	148	154	186	152	167	153	223	178	168	112
11:00	*	*	*	*	*	*	203	191	187	172	195	182	211	206	154	137
12:00 PM	*	*	*	*	*	*	248	218	272	245	260	232	219	176	187	206
01:00	*	*	*	*	*	*	205	226	250	244	228	235	226	243	206	247
02:00	*	*	*	*	63	56	225	211	213	234	167	167	202	226	215	197
03:00	*	*	*	*	252	199	242	203	265	244	253	215	230	195	210	215
04:00	*	*	*	*	347	239	333	255	381	269	354	254	238	221	224	196
05:00	*	*	*	*	317	265	325	268	339	277	327	270	203	208	224	173
06:00	*	*	*	*	280	239	274	256	268	246	274	247	228	202	181	180
07:00	*	*	*	*	163	162	156	162	195	197	171	174	159	156	121	121
08:00	*	*	*	*	129	142	141	130	167	153	146	142	139	127	82	96
09:00	*	*	*	*	84	99	70	94	113	93	89	95	125	82	76	63
10:00	*	*	*	*	57	69	68	70	67	63	64	67	79	70	49	40
11:00	*	*	*	*	31	41	45	41	51	71	42	51	41	61	30	38
Total	0	0	0	0	1723	1511	3423	3275	3708	3482	3485	3295	2977	2827	2501	2481
Day	0		0		323	4	669	98	719	90	678	80	580)4	4982	2
AM Peak	-	-	-	-	-	-	11:00	08:00	08:00	08:00	11:00	08:00	10:00	11:00	10:00	09:00
Vol.	_		-	-	-	-	203	241	187	214	195	228	223	206	168	148
PM Peak	-	-	-	-	16:00	17:00	16:00	17:00	16:00	17:00	16:00	17:00	16:00	13:00	16:00	13:00
Vol.	-	-	-	-	347	265	333	268	381	277	354	270	238	243	224	247

Route 75 South of High Street Windsor Locks, Connecticut

Site Code: Station ID: 5750

Start	31-Oc		Tu	ue	W		TI		F		Weekday			at	Sı	un
Time	Northboun	Southbo	Northbou	Southbo	Northbou	Southbo	Northbou	Southbo	Northbou	Southbo	Northbou	Southbo	Northbou	Southbo	Northbou	Southbo
rime	d	und	nd	und	nd	und	nd	und	nd	und	nd	und	nd	und	nd	und
12:00 AM	24	26	*	*	*	*	*	*	*	*	24	26	*	*	*	*
01:00	8	17	*	*	*	*	*	*	*	*	8	17	*	*	*	*
02:00	6	8	*	*	*	*	*	*	*	*	6	8	*	*	*	*
03:00	12	9	*	*	*	*	*	*	*	*	12	9	*	*	*	*
04:00	24	25	*	*	*	*	*	*	*	*	24	25	*	*	*	*
05:00	40	39	*	*	*	*	*	*	*	*	40	39	*	*	*	*
06:00	75	87	*	*	*	*	*	*	*	*	75	87	*	*	*	*
07:00	148	181	*	*	*	*	*	*	*	*	148	181	*	*	*	*
08:00	148	179	*	*	*	*	*	*	*	*	148	179	*	*	*	*
09:00	161	152	*	*	*	*	*	*	*	*	161	152	*	*	*	*
10:00	177	120	*	*	*	*	*	*	*	*	177	120	*	*	*	*
11:00	74	81	*	*	*	*	*	*	*	*	74	81	*	*	*	*
12:00 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
03:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
04:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
05:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
06:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
07:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
08:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
09:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total	897	924	0	0	0	0	0	0	0	0	897	924	0	0	0	0
Day	182		0		0		0		0		182		0		0	
AM Peak	10:00	07:00	-	_	-	_	-	_	-	-	10:00	07:00	-	-	-	_
Vol.	177	181	-	_	-	-	-	_	-	-	177	181	-	-	-	-
PM Peak	-	-	-	_	_	-	-	-	-	-	-	-	-	-	-	-
Vol.	_	-	_	_	-	_	_	_	-	-	_	-	-	_	_	-
Comb. Total	18	21		0	3	3234	6	6698	7	190	8	3601	5	5804	4	1982
ADT	ΔΙ	DT 6,106	ΔΔ	DT 6,106												

Route 75 North of Route 20 NB Ramps (NB) Windsor Locks, Connecticut

Site Code: Station ID: 5808

Northbound															Lantude.	0.0000	Ondenned
Start	1	16	21	26	31	36	41	46	51	56	61	66	71	76		Pace	Number
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	Speed	in Pace
02/08/23	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
03:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
04:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
05:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
06:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
07:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
08:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
09:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10:00	3	2	9	32	85	111	38	4	0	0	0	0	0	0	284	31-40	196
11:00	7	3	16	80	227	232	68	7	1	1	0	0	0	0	642	31-40	459
12 PM	2	6	17	71	245	264	71	13	1	1	0	0	0	0	691	31-40	509
13:00	2	2	25	72	188	203	82	14	5	0	0	0	0	0	593	31-40	391
14:00	3	6	17	68	242	235	76	9	0	0	0	0	0	0	656	31-40	477
15:00	5	14	22	80	246	230	74	10	3	0	0	0	0	0	684	31-40	476
16:00	7	3	18	78	223	258	98	17	3	0	0	0	0	0	705	31-40	481
17:00	4	6	33	125	319	203	51	9	2	1	0	0	0	0	753	31-40	522
18:00	5	2	23	128	242	164	41	1	3	0	0	0	0	0	609	31-40	406
19:00	2	3	4	56	160	128	39	10	0	0	0	0	0	0	402	31-40	288
20:00	2	1	11	61	162	95	24	7	2	0	0	0	0	0	365	31-40	257
21:00	2	2	19	48	96	84	30	7	1	0	0	0	0	0	289	31-40	180
22:00	1	1	7	38	86	89	31	8	1	0	0	0	0	0	262	31-40	175
23:00	0	1	7	27	71	70	40	10	1	0	0	0	0	0	227	31-40	141
Total	45	52	228	964	2592	2366	763	126	23	3	0	0	0	0	7162		
Percent	0.6%	0.7%	3.2%	13.5%	36.2%	33.0%	10.7%	1.8%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	11:00	11:00	11:00	11:00	11:00	11:00	11:00	11:00	11:00	11:00					11:00		
Vol.	7	3	16	80	227	232	68	7	11	1					642		
PM Peak	16:00	15:00	17:00	18:00	17:00	12:00	16:00	16:00	13:00	12:00					17:00		
Vol.	7	14	33	128	319	264	98	17	5	1					753		

Route 75 North of Route 20 NB Ramps (NB) Windsor Locks, Connecticut

Site Code: Station ID: 5808

Northbound															Latitude.	0.0000	Ondenned
Start	1	16	21	26	31	36	41	46	51	56	61	66	71	76		Pace	Number
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	Speed	in Pace
02/09/23	0	0	4	16	46	46	21	4	1	0	0	0	0	0	138	31-40	92
01:00	0	0	0	6	23	21	8	0	0	0	1	0	0	0	59	31-40	44
02:00	0	2	3	14	34	39	9	4	0	0	0	0	0	0	105	31-40	73
03:00	7	4	1	30	64	76	38	11	0	0	0	0	0	0	231	31-40	140
04:00	5	5	16	42	113	104	49	8	0	0	0	0	0	0	342	31-40	217
05:00	5	2	9	55	112	108	34	1	3	0	0	0	0	0	329	31-40	220
06:00	1	4	8	32	108	126	54	16	1	0	0	0	0	0	350	31-40	234
07:00	2	1	13	44	141	197	102	23	4	0	0	0	0	0	527	31-40	338
08:00	5	7	13	63	173	197	83	14	2	0	0	0	0	0	557	31-40	370
09:00	6	5	11	71	157	196	63	13	2	0	0	0	0	0	524	31-40	353
10:00	2	5	11	63	162	183	61	9	1	0	0	0	0	0	497	31-40	345
11:00	2	1	12	106	260	203	43	8	0	0	0	0	0	0	635	31-40	463
12 PM	3	6	34	146	285	202	46	3	0	0	0	0	0	0	725	31-40	487
13:00	5	5	12	117	336	114	21	1	1	0	0	0	0	0	612	26-35	453
14:00	4	3	13	117	343	126	22	1	0	0	0	0	0	0	629	31-40	469
15:00	6	5	27	131	456	85	8	1	1	0	0	0	0	0	720	26-35	587
16:00	4	1	13	288	352	40	3	0	0	0	0	0	0	0	701	26-35	640
17:00	1	2	18	309	328	16	3	0	0	0	0	0	0	0	677	26-35	637
18:00	1	3	24	213	410	33	2	0	0	0	0	0	0	0	686	26-35	623
19:00	0	1	9	145	400	22	3	0	0	0	0	0	0	0	580	26-35	545
20:00	0	1	5	257	62	1	0	0	0	0	0	0	0	0	326	26-35	319
21:00	0	1	5	251	18	1	0	0	0	0	0	0	0	0	276	26-35	269
22:00	0	2	9	212	44	1	0	0	0	0	0	0	0	0	268	26-35	256
23:00	0	1	1	89	159	2	0	0	0	0	0	0	0	0	252	26-35	248
Total	59	67	271	2817	4586	2139	673	117	16	0	11	0	0	0	10746		
Percent	0.5%	0.6%	2.5%	26.2%	42.7%	19.9%	6.3%	1.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	03:00	08:00	04:00	11:00	11:00	11:00	07:00	07:00	07:00		01:00				11:00		
Vol.	7	7	16	106	260	203	102	23	44		1				635		
PM Peak	15:00	12:00	12:00	17:00	15:00	12:00	12:00	12:00	13:00						12:00		
Vol.	6	6	34	309	456	202	46	3	1						725		

Route 75 North of Route 20 NB Ramps (NB) Windsor Locks, Connecticut

Site Code: Station ID: 5808

Northbound															Latitude.	0.0000	Ondenned
Start	1	16	21	26	31	36	41	46	51	56	61	66	71	76		Pace	Number
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	Speed	in Pace
02/10/23	0	0	1	142	19	2	0	0	0	0	0	0	0	0	164	26-35	161
01:00	0	0	0	0	68	0	0	0	0	0	0	0	0	0	68	26-35	68
02:00	0	1	2	40	63	1	0	0	0	0	0	0	0	0	107	26-35	103
03:00	4	0	1	139	86	4	0	0	0	0	0	0	0	0	234	26-35	225
04:00	5	3	1	242	117	5	2	0	0	0	0	0	0	0	375	26-35	359
05:00	5	2	38	193	70	6	0	0	0	0	0	0	0	0	314	26-35	263
06:00	1	3	2	167	153	15	0	0	0	0	0	0	0	0	341	26-35	320
07:00	3	2	4	114	273	70	2	0	0	0	0	0	0	0	468	26-35	387
08:00	2	5	5	228	253	12	2	0	0	0	0	0	0	0	507	26-35	481
09:00	6	2	15	159	334	17	5	0	0	0	0	0	0	0	538	26-35	493
10:00	4	0	4	140	390	24	2	0	0	0	0	0	0	0	564	26-35	530
11:00	2	3	3	153	448	24	1	0	0	0	0	0	0	0	634	26-35	601
12 PM	1	7	22	362	281	18	2	0	0	0	0	0	0	0	693	26-35	643
13:00	4	4	18	246	371	19	2	0	0	0	0	0	0	0	664	26-35	617
14:00	5	2	11	310	318	11	2	1	0	0	0	0	0	0	660	26-35	628
15:00	3	5	62	265	368	24	0	0	0	0	0	0	0	0	727	26-35	633
16:00	3	4	13	191	437	28	5	0	0	0	0	0	0	0	681	26-35	628
17:00	6	3	42	330	269	15	1	0	0	0	0	0	0	0	666	26-35	599
18:00	3	3	63	438	54	4	0	0	0	0	0	0	0	0	565	21-30	501
19:00	2	0	21	419	17	2	0	0	0	0	0	0	0	0	461	21-30	440
20:00	0	0	5	377	12	2	0	0	0	0	0	0	0	0	396	26-35	389
21:00	0	1	1	281	13	0	0	0	0	0	0	0	0	0	296	26-35	294
22:00	0	1	2	291	26	0	0	0	0	0	0	0	0	0	320	26-35	317
23:00	0	0	0	252	3	0	0	0	0	0	0	0	0	0	255	26-35	255
Total	59	51	336	5479	4443	303	26	1	0	0	0	0	0	0	10698		
Percent	0.6%	0.5%	3.1%	51.2%	41.5%	2.8%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	09:00	08:00	05:00	04:00	11:00	07:00	09:00								11:00		
Vol.	6	5	38	242	448	70	5								634		
PM Peak	17:00	12:00	18:00	18:00	16:00	16:00	16:00	14:00							15:00		
Vol.	6	7	63	438	437	28	5	1							727		

Route 75 North of Route 20 NB Ramps (NB) Windsor Locks, Connecticut

Site Code: Station ID: 5808

Northbound															Lamado.	0.0000	Ondomiou
Start	1	16	21	26	31	36	41	46	51	56	61	66	71	76		Pace	Number
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	Speed	in Pace
02/11/23	1	1	2	143	2	0	0	0	0	0	0	0	0	0	149	26-35	145
01:00	0	0	0	73	0	0	0	0	0	0	0	0	0	0	73	21-30	73
02:00	1	0	5	88	0	0	0	0	0	0	0	0	0	0	94	21-30	93
03:00	1	0	169	14	1	0	0	0	0	0	0	0	0	0	185	21-30	183
04:00	1	1	97	200	3	0	0	0	0	0	0	0	0	0	302	21-30	297
05:00	0	2	49	181	10	1	0	0	0	0	0	0	0	0	243	21-30	230
06:00	2	0	10	199	8	2	0	0	0	0	0	0	0	0	221	21-30	209
07:00	1	1	4	156	81	5	0	0	0	0	0	0	0	0	248	26-35	237
08:00	3	0	2	82	236	7	0	0	0	0	0	0	0	0	330	26-35	318
09:00	2	1	7	159	244	19	1	0	0	0	0	0	0	0	433	26-35	403
10:00	1	0	7	112	385	10	3	0	0	0	0	0	0	0	518	26-35	497
11:00	2	0	5	83	449	29	3	0	0	0	0	0	0	0	571	26-35	532
12 PM	3	0	12	229	350	16	0	1	0	0	0	0	0	0	611	26-35	579
13:00	4	2	8	291	251	9	3	1	0	0	0	0	0	0	569	26-35	542
14:00	3	1	7	135	371	19	0	0	0	0	0	0	0	0	536	26-35	506
15:00	1	0	8	280	208	6	0	0	0	0	0	0	0	0	503	26-35	488
16:00	3	1	12	144	324	24	0	0	0	0	0	0	0	0	508	26-35	468
17:00	4	3	14	219	236	13	0	0	0	0	0	0	0	0	489	26-35	455
18:00	0	0	13	263	176	7	0	0	0	0	0	0	0	0	459	26-35	439
19:00	1	3	16	164	157	7	0	0	0	0	0	0	0	0	348	26-35	321
20:00	1	1	5	257	71	5	0	0	0	0	0	0	0	0	340	26-35	328
21:00	0	0	1	62	208	3	0	0	0	0	0	0	0	0	274	26-35	270
22:00	0	0	0	60	189	2	0	0	0	0	0	0	0	0	251	26-35	249
23:00	1	0	1	103	107	2	0	0	0	0	0	0	0	0	214	26-35	210
Total	36	17	454	3697	4067	186	10	2	0	0	0	0	0	0	8469		
Percent	0.4%	0.2%	5.4%	43.7%	48.0%	2.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	08:00	05:00	03:00	04:00	11:00	11:00	10:00								11:00		
Vol.	3	2	169	200	449	29	3								571		
PM Peak	13:00	17:00	19:00	13:00	14:00	16:00	13:00	12:00							12:00		
Vol.	4	3	16	291	371	24	3	1							611		

Route 75 North of Route 20 NB Ramps (NB) Windsor Locks, Connecticut

Site Code: Station ID: 5808

Northbound															Lantado.	0.0000	Ondomica
Start	1	16	21	26	31	36	41	46	51	56	61	66	71	76		Pace	Number
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	Speed	in Pace
02/12/23	0	0	0	89	1	0	0	0	0	0	0	0	0	0	90	24-33	90
01:00	0	1	1	41	16	7	3	0	1	0	0	0	0	0	70	26-35	57
02:00	0	1	0	2	66	3	0	0	0	0	0	0	0	0	72	29-38	69
03:00	1	0	3	83	63	4	0	0	0	0	0	0	0	0	154	26-35	146
04:00	3	0	3	31	173	23	4	0	0	0	0	0	0	0	237	26-35	204
05:00	7	5	8	28	95	54	12	4	0	0	0	0	0	0	213	31-40	149
06:00	2	1	5	14	91	72	11	4	2	0	0	0	0	0	202	31-40	163
07:00	1	1	3	24	107	41	8	3	0	0	0	0	0	0	188	31-40	148
08:00	1	0	1	30	223	6	0	0	0	0	0	0	0	0	261	26-35	253
09:00	0	1	2	53	289	7	0	0	0	0	0	0	0	0	352	26-35	342
10:00	1	1	4	80	334	13	2	0	0	0	0	0	0	0	435	26-35	414
11:00	2	2	3	108	321	9	0	1	0	0	0	0	0	0	446	26-35	429
12 PM	1	3	7	178	292	8	0	0	0	0	0	0	0	0	489	26-35	470
13:00	2	0	5	354	118	6	2	0	0	0	0	0	0	0	487	26-35	472
14:00	0	2	3	143	332	16	0	0	0	0	0	0	0	0	496	26-35	475
15:00	1	2	4	134	342	11	0	0	0	0	0	0	0	0	494	26-35	476
16:00	1	1	11	203	249	7	0	0	0	0	0	0	0	0	472	26-35	452
17:00	0	1	5	305	143	6	2	0	0	0	0	0	0	0	462	26-35	448
18:00	1	3	7	307	44	3	0	0	0	0	0	0	0	0	365	26-35	351
19:00	0	0	1	207	13	1	0	0	0	0	0	0	0	0	222	26-35	220
20:00	1	0	2	187	4	0	0	0	0	0	0	0	0	0	194	25-34	191
21:00	0	0	0	138	22	1	0	0	0	0	0	0	0	0	161	26-35	160
22:00	0	1	0	87	134	0	0	0	0	0	0	0	0	0	222	26-35	221
23:00	0	0	11	261	2	0	0	0	0	0	0	0	0	0	264	24-33	263
Total	25	26	79	3087	3474	298	44	12	3	0	0	0	0	0	7048		
Percent	0.4%	0.4%	1.1%	43.8%	49.3%	4.2%	0.6%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	05:00	05:00	05:00	11:00	10:00	06:00	05:00	05:00	06:00						11:00		
Vol.	7	5_	8	108	334	72	12	4	2						446		
PM Peak	13:00	12:00	16:00	13:00	15:00	14:00	13:00								14:00		
Vol.	2	3	11	354	342	16	2								496		

Route 75 North of Route 20 NB Ramps (NB) Windsor Locks, Connecticut

Site Code: Station ID: 5808

Northbound															Latitude.	0.0000	Ondenned
Start	1	16	21	26	31	36	41	46	51	56	61	66	71	76		Pace	Number
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	Speed	in Pace
02/13/23	0	0	0	21	85	1	0	0	0	0	0	0	0	0	107	26-35	106
01:00	0	0	1	4	47	0	0	0	0	0	0	0	0	0	52	26-35	51
02:00	0	1	0	12	54	0	0	0	0	0	0	0	0	0	67	26-35	66
03:00	0	0	1	173	1	0	0	0	0	0	0	0	0	0	175	25-34	174
04:00	1	2	0	270	72	2	0	0	0	0	0	0	0	0	347	26-35	342
05:00	1	1	3	249	37	2	0	0	0	0	0	0	0	0	293	26-35	286
06:00	1	3	13	216	54	1	1	0	0	0	0	0	0	0	289	26-35	270
07:00	1	2	4	180	210	5	2	0	0	0	0	0	0	0	404	26-35	390
08:00	2	1	14	262	195	8	2	0	0	0	0	0	0	0	484	26-35	457
09:00	4	0	7	335	170	12	0	0	0	0	0	0	0	0	528	26-35	505
10:00	2	2	8	121	329	19	2	0	0	0	0	0	0	0	483	26-35	450
11:00	2	2	8	106	423	27	2	0	0	0	0	0	0	0	570	26-35	529
12 PM	2	2	6	277	299	21	0	0	0	0	0	0	0	0	607	26-35	576
13:00	0	1	10	258	272	12	2	0	0	0	0	0	0	0	555	26-35	530
14:00	2	0	6	170	375	12	1	0	0	0	0	0	0	0	566	26-35	545
15:00	3	0	9	122	438	23	3	0	0	0	0	0	0	0	598	26-35	560
16:00	2	3	6	121	467	31	3	2	0	1	0	0	0	0	636	26-35	588
17:00	0	0	8	153	370	29	1	2	0	0	0	0	0	0	563	26-35	523
18:00	1	1	6	235	213	8	1	0	0	0	0	0	0	0	465	26-35	448
19:00	0	1	3	190	171	5	0	0	0	0	0	0	0	0	370	26-35	361
20:00	0	3	6	277	30	3	0	0	0	0	0	0	0	0	319	26-35	307
21:00	1	1	2	152	66	4	1	0	0	0	0	0	0	0	227	26-35	218
22:00	1	0	3	59	176	3	4	0	0	0	0	0	0	0	246	26-35	235
23:00	0	0	1	55	189	6	2	0	0	0	0	0	0	0	253	26-35	244
Total	26	26	125	4018	4743	234	27	4	0	1	0	00	0	0	9204		
Percent	0.3%	0.3%	1.4%	43.7%	51.5%	2.5%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	09:00	06:00	08:00	09:00	11:00	11:00	07:00								11:00		
Vol.	44	3	14	335	423	27	2								570		
PM Peak	15:00	16:00	13:00	12:00	16:00	16:00	22:00	16:00		16:00					16:00		
Vol.	3	3	10	277	467	31	4	2		1					636		

Route 75 North of Route 20 NB Ramps (NB) Windsor Locks, Connecticut

Site Code: Station ID: 5808

Latitude: 0' 0.0000 Undefined

Northbound															Lamado.	0.0000	Ondomio
Start	1	16	21	26	31	36	41	46	51	56	61	66	71	76		Pace	Number
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	Speed	in Pace
02/14/23	0	1	2	59	74	3	0	0	0	0	0	0	0	0	139	26-35	133
01:00	0	0	1	1	88	3	1	0	0	0	0	0	0	0	94	31-40	91
02:00	0	0	1	2	82	1	0	0	0	0	0	0	0	0	86	26-35	84
03:00	2	1	0	163	37	0	0	0	0	0	0	0	0	0	203	26-35	200
04:00	4	5	7	155	90	13	2	0	0	0	0	0	0	0	276	26-35	245
05:00	3	0	2	107	166	21	1	0	0	0	0	0	0	0	300	26-35	273
06:00	3	2	10	50	198	49	6	0	0	0	0	0	0	0	318	26-35	248
07:00	1	2	7	36	317	81	11	2	0	0	0	0	0	0	457	31-40	398
08:00	3	2	8	38	419	29	7	1	0	0	0	0	0	0	507	26-35	457
09:00	0	3	9	64	295	77	12	0	0	0	0	0	0	0	460	31-40	372
10:00	4	0	4	42	298	104	9	1	1	0	0	0	0	0	463	31-40	402
11:00	2	1	12	106	399	76	6	0	0	0	0	0	0	0	602	26-35	505
12 PM	4	1	16	165	357	61	5	1	0	0	0	0	0	0	610	26-35	522
13:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
14:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
15:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
16:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
17:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
18:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
21:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
22:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
23:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total	26	18	79	988	2820	518	60	5	1	0	0	0	0	0	4515		
Percent	0.6%	0.4%	1.7%	21.9%	62.5%	11.5%	1.3%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	04:00	04:00	11:00	03:00	08:00	10:00	09:00	07:00	10:00						11:00		
Vol.	4	5	12	163	419	104	12	2	1						602		
PM Peak	12:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00							12:00		
Vol.	4	1	16	165	357	61	5	1							610		
Total	276	257	1572	21050	26725	6044	1603	267	43	4	1	0	0	0	57842		
Percent	0.5%	0.4%	2.7%	36.4%	46.2%	10.4%	2.8%	0.5%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%			

15th Percentile: 26 MPH 50th Percentile: 31 MPH 85th Percentile: 34 MPH 95th Percentile: 39 MPH

Stats 10 MPH Pace Speed: 26-35 MPH Number in Pace: 47775

Route 75 North of Route 20 WB Ramps Windsor Locks, Connecticut

Site Code: Station ID: 5745

Southbound															Lantado.	0.0000	Ondomioa
Start	1	16	21	26	31	36	41	46	51	56	61	66	71	76		Pace	Number
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	Speed	in Pace
10/26/22	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
03:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
04:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
05:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
06:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
07:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
08:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
09:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
12 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
14:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
15:00	0	2	10	62	61	41	64	45	23	5	1	0	0	0	314	26-35	123
16:00	0	2	18	90	86	57	93	69	32	10	0	2	0	0	459	26-35	176
17:00	0	1	17	104	83	62	93	74	29	8	1	0	0	0	472	26-35	187
18:00	0	1	17	84	94	68	58	42	17	4	0	0	0	0	385	26-35	178
19:00	0	3	20	51	72	51	63	30	12	4	0	0	0	0	306	31-40	123
20:00	0	2	7	42	40	30	31	28	14	0	1	0	0	0	195	26-35	82
21:00	0	2	9	32	32	40	40	28	9	1	0	0	0	0	193	36-45	80
22:00	0	1	9	20	21	23	26	10	5	6	1	0	0	0	122	36-45	49
23:00	0	1	8	22	33	23	25	8	3	0	1	0	0	0	124	31-40	56
Total	0	15	115	507	522	395	493	334	144	38	5	2	0	0	2570		
Percent	0.0%	0.6%	4.5%	19.7%	20.3%	15.4%	19.2%	13.0%	5.6%	1.5%	0.2%	0.1%	0.0%	0.0%			
AM Peak																	
Vol.																	
PM Peak		19:00	19:00	17:00	18:00	18:00	16:00	17:00	16:00	16:00	15:00	16:00			17:00		
Vol.		3	20	104	94	68	93	74	32	10	1	2			472		

Route 75 North of Route 20 WB Ramps Windsor Locks, Connecticut

Site Code: Station ID: 5745

Southbound															Lantado.	0.0000	Ondomioa
Start	1	16	21	26	31	36	41	46	51	56	61	66	71	76		Pace	Number
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	Speed	in Pace
10/27/22	0	0	2	10	10	15	24	9	3	1	0	0	0	0	74	36-45	39
01:00	0	0	6	8	16	14	21	14	7	2	1	0	0	0	89	36-45	35
02:00	0	0	3	7	10	12	16	13	4	1	0	0	0	0	66	41-50	29
03:00	0	0	1	14	11	19	28	17	5	2	0	0	0	0	97	36-45	47
04:00	0	0	3	21	18	30	46	18	8	0	0	0	0	0	144	36-45	76
05:00	0	0	18	27	29	34	40	29	6	3	1	0	0	0	187	36-45	74
06:00	0	0	9	45	38	45	57	34	24	5	4	0	0	0	261	36-45	102
07:00	0	0	9	75	76	71	94	61	46	15	8	3	0	0	458	36-45	165
08:00	0	1	14	66	65	61	82	78	18	10	1	3	0	0	399	41-50	160
09:00	0	2	16	59	51	58	69	62	26	5	0	1	0	0	349	41-50	131
10:00	1	2	22	57	53	40	72	64	24	2	1	0	0	0	338	41-50	136
11:00	0	1	19	87	76	68	94	99	33	12	2	1	0	0	492	41-50	193
12 PM	0	2	32	116	92	85	106	77	24	5	1	0	0	0	540	26-35	208
13:00	1	4	25	76	107	61	78	65	33	7	3	0	0	0	460	26-35	183
14:00	1	2	26	100	63	66	86	59	31	5	6	0	0	0	445	26-35	163
15:00	0	0	13	92	88	62	86	83	37	14	0	0	1	0	476	26-35	180
16:00	0	1	18	74	89	71	107	71	35	13	2	0	0	0	481	36-45	178
17:00	0	2	18	91	73	75	106	90	33	8	2	0	0	0	498	41-50	196
18:00	1	1	22	99	81	67	56	29	8	0	1	0	1	0	366	26-35	180
19:00	0	0	15	53	62	44	63	36	9	3	1	0	0	0	286	26-35	115
20:00	1	1	16	47	41	35	47	27	8	4	2	0	0	0	229	26-35	88
21:00	0	0	10	27	37	21	39	17	13	2	1	0	0	0	167	26-35	64
22:00	0	0	23	24	23	42	31	19	5	5	0	0	0	0	172	36-45	73
23:00	0	0	8	19	24	23	20	16	5	2	1	0	0	0	118	31-40	47
Total	5	19	348	1294	1233	1119	1468	1087	445	126	38	8	2	0	7192		
Percent	0.1%	0.3%	4.8%	18.0%	17.1%	15.6%	20.4%	15.1%	6.2%	1.8%	0.5%	0.1%	0.0%	0.0%			
AM Peak	10:00	09:00	10:00	11:00	07:00	07:00	07:00	11:00	07:00	07:00	07:00	07:00			11:00		
Vol.	11	2	22	87	76	71	94	99	46	15	8	3			492		
PM Peak	13:00	13:00	12:00	12:00	13:00	12:00	16:00	17:00	15:00	15:00	14:00		15:00		12:00		
Vol.	1	4	32	116	107	85	107	90	37	14	6		1		540		

Route 75 North of Route 20 WB Ramps Windsor Locks, Connecticut

Site Code: Station ID: 5745

Southbound															Lantado.	. 0 0.0000	Ondomioa
Start	1	16	21	26	31	36	41	46	51	56	61	66	71	76		Pace	Number
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	Speed	in Pace
10/28/22	0	4	3	12	12	16	24	25	11	2	0	0	0	0	109	41-50	49
01:00	0	1	1	5	12	9	22	17	3	5	0	0	1	0	76	41-50	39
02:00	0	0	2	6	10	16	19	10	5	0	0	0	0	0	68	36-45	35
03:00	0	0	3	11	16	19	22	9	4	1	0	0	0	0	85	36-45	41
04:00	0	0	5	14	27	46	38	22	5	1	0	0	0	0	158	36-45	84
05:00	0	0	6	31	20	47	33	19	12	2	1	0	0	0	171	36-45	80
06:00	0	1	18	52	41	33	44	50	24	3	0	0	0	0	266	41-50	94
07:00	0	2	15	81	53	59	88	75	42	16	3	2	0	0	436	41-50	163
08:00	0	2	25	65	61	48	72	71	29	10	2	1	0	0	386	41-50	143
09:00	0	4	30	82	53	62	74	54	21	4	1	0	0	0	385	36-45	136
10:00	0	0	23	68	62	55	83	59	16	13	1	0	0	0	380	41-50	142
11:00	0	2	37	107	56	82	102	69	25	7	1	0	0	0	488	36-45	184
12 PM	0	4	34	112	88	83	113	60	18	2	2	0	0	0	516	26-35	200
13:00	0	2	28	119	68	92	98	62	20	4	0	0	0	0	493	36-45	190
14:00	0	2	25	116	82	75	92	57	27	10	2	1	0	0	489	26-35	198
15:00	1	1	17	92	68	76	110	93	33	11	4	0	2	0	508	41-50	203
16:00	0	1	23	89	72	88	112	72	22	6	1	0	1	0	487	36-45	200
17:00	0	5	35	114	53	81	98	65	21	13	2	0	0	0	487	36-45	179
18:00	0	1	21	97	70	55	74	31	10	3	1	1	0	0	364	26-35	167
19:00	0	2	24	72	58	63	51	32	9	3	0	0	0	0	314	26-35	130
20:00	0	0	21	60	41	41	45	26	12	2	1	0	0	0	249	26-35	101
21:00	0	0	15	40	30	34	41	26	8	1	0	0	0	0	195	36-45	75
22:00	0	1	10	20	30	26	24	22	7	0	0	0	0	0	140	31-40	56
23:00	0	11	10	25	17	28	25	20	4	1	0	0	0	0	131	36-45	53
Total	1	36	431	1490	1100	1234	1504	1046	388	120	22	5	4	0	7381		
Percent	0.0%	0.5%	5.8%	20.2%	14.9%	16.7%	20.4%	14.2%	5.3%	1.6%	0.3%	0.1%	0.1%	0.0%			
AM Peak		00:00	11:00	11:00	10:00	11:00	11:00	07:00	07:00	07:00	07:00	07:00	01:00		11:00		
Vol.		4	37	107	62	82	102	75	42	16	3	2	1		488		
PM Peak	15:00	17:00	17:00	13:00	12:00	13:00	12:00	15:00	15:00	17:00	15:00	14:00	15:00		12:00		
Vol.	1	5	35	119	88	92	113	93	33	13	4	1	2		516		

Route 75 North of Route 20 WB Ramps Windsor Locks, Connecticut

Site Code: Station ID: 5745

Southbound															Lamado.	0.0000	Ondomioa
Start	1	16	21	26	31	36	41	46	51	56	61	66	71	76		Pace	Number
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	Speed	in Pace
10/29/22	0	0	5	9	13	19	30	9	6	2	1	0	0	0	94	36-45	49
01:00	0	0	3	7	7	12	24	9	1	0	0	1	1	0	65	36-45	36
02:00	0	0	5	8	6	11	13	6	2	0	0	0	0	0	51	36-45	24
03:00	0	0	3	10	13	10	12	8	5	1	1	0	0	0	63	26-35	23
04:00	0	0	4	10	15	16	20	13	8	0	0	0	0	0	86	36-45	36
05:00	0	1	4	10	13	9	21	15	4	2	0	0	0	0	79	41-50	36
06:00	0	1	6	23	14	15	21	12	2	1	0	0	0	0	95	26-35	37
07:00	0	0	13	25	17	34	40	33	14	3	0	1	0	0	180	36-45	74
08:00	0	0	12	64	37	26	31	58	20	7	2	1	0	0	258	26-35	101
09:00	0	1	24	61	52	40	72	42	25	6	2	0	0	0	325	41-50	114
10:00	0	0	13	57	52	51	80	56	21	9	3	0	0	0	342	41-50	136
11:00	0	1	25	65	55	72	113	71	21	9	4	0	0	0	436	36-45	185
12 PM	0	2	20	78	56	46	79	70	26	6	0	0	0	0	383	41-50	149
13:00	0	3	14	74	60	56	74	73	34	5	0	0	1	0	394	41-50	147
14:00	1	0	24	84	53	41	84	59	29	7	5	0	0	0	387	41-50	143
15:00	0	0	29	71	46	49	70	53	26	9	3	0	0	0	356	41-50	123
16:00	0	0	11	87	59	45	91	55	27	8	0	0	0	0	383	26-35	146
17:00	0	0	23	84	62	57	52	26	17	7	1	0	0	0	329	26-35	146
18:00	0	1	30	89	61	49	53	28	14	2	0	0	0	0	327	26-35	150
19:00	1	1	12	72	46	37	32	31	12	4	0	0	0	0	248	26-35	118
20:00	1	2	13	47	37	24	31	18	3	1	1	0	0	0	178	26-35	84
21:00	1	2	12	32	22	21	26	14	9	1	0	1	0	0	141	26-35	54
22:00	0	1	10	36	27	19	26	10	6	1	1	0	0	0	137	26-35	63
23:00	0	0	13	27	17	20	25	19	3	0	0	0	0	0	124	36-45	45
Total	4	16	328	1130	840	779	1120	788	335	91	24	4	2	0	5461		
Percent	0.1%	0.3%	6.0%	20.7%	15.4%	14.3%	20.5%	14.4%	6.1%	1.7%	0.4%	0.1%	0.0%	0.0%			
AM Peak		05:00	11:00	11:00	11:00	11:00	11:00	11:00	09:00	10:00	11:00	01:00	01:00		11:00		
Vol.		1_	25	65	55	72	113	71	25	9	4	1_	1		436		
PM Peak	14:00	13:00	18:00	18:00	17:00	17:00	16:00	13:00	13:00	15:00	14:00	21:00	13:00		13:00		
Vol.	1	3	30	89	62	57	91	73	34	9	5	1	1		394		

Route 75 North of Route 20 WB Ramps Windsor Locks, Connecticut

Site Code: Station ID: 5745

Southbound															Lantado.	0.0000	Chachinea
Start	1	16	21	26	31	36	41	46	51	56	61	66	71	76		Pace	Number
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	Speed	in Pace
10/30/22	0	0	5	7	14	20	20	21	4	2	0	0	0	0	93	39-48	41
01:00	0	0	5	5	8	14	11	13	6	2	0	0	0	0	64	36-45	25
02:00	0	0	2	13	3	9	7	4	2	0	0	0	0	0	40	24-33	16
03:00	0	0	4	11	7	7	3	6	4	0	0	0	0	0	42	26-35	18
04:00	0	1	4	10	9	19	17	14	3	2	0	0	0	0	79	36-45	36
05:00	1	0	6	17	13	2	21	8	2	0	0	0	0	0	70	26-35	30
06:00	0	1	9	19	13	9	14	12	5	0	0	0	0	0	82	26-35	32
07:00	0	1	18	24	19	16	23	24	11	3	1	0	0	0	140	41-50	47
08:00	0	0	12	36	26	17	30	19	11	1	1	0	0	0	153	26-35	62
09:00	0	2	9	53	19	23	44	38	10	6	0	0	0	0	204	41-50	82
10:00	0	1	19	61	33	27	63	38	19	4	0	0	0	0	265	41-50	101
11:00	0	1	24	75	57	44	69	52	28	6	2	0	0	0	358	26-35	132
12 PM	0	0	27	78	54	60	93	64	26	5	0	0	0	0	407	41-50	157
13:00	0	6	26	61	56	20	68	49	28	4	0	0	1	0	319	41-50	117
14:00	0	0	9	77	47	47	61	45	29	5	0	0	1	0	321	26-35	124
15:00	0	2	8	64	37	51	71	37	20	8	1	0	0	0	299	36-45	122
16:00	0	0	16	70	54	43	58	59	19	3	2	3	0	0	327	26-35	124
17:00	0	2	15	47	58	32	43	40	17	3	1	0	0	0	258	26-35	105
18:00	0	2	16	46	54	44	46	26	10	2	0	1	1	0	248	26-35	100
19:00	0	1	13	60	36	30	35	19	6	1	0	0	0	0	201	26-35	96
20:00	0	0	12	39	35	32	28	21	9	1	0	0	0	0	177	26-35	74
21:00	0	2	10	27	13	25	14	12	6	2	0	1	0	0	112	26-35	40
22:00	0	0	12	18	23	27	25	10	3	4	0	0	0	0	122	35-44	52
23:00	0	2	8	13	15	24	13	9	2	11	0	0	0	0	87	31-40	39
Total	1	24	289	931	703	642	877	640	280	65	8	5	3	0	4468		
Percent	0.0%	0.5%	6.5%	20.8%	15.7%	14.4%	19.6%	14.3%	6.3%	1.5%	0.2%	0.1%	0.1%	0.0%			
AM Peak	05:00	09:00	11:00	11:00	11:00	11:00	11:00	11:00	11:00	09:00	11:00				11:00		
Vol	11	2	24	75	57	44	69	52	28	6	2				358		
PM Peak		13:00	12:00	12:00	17:00	12:00	12:00	12:00	14:00	15:00	16:00	16:00	13:00		12:00		
Vol.		6	27	78	58	60	93	64	29	8	2	3	1		407		

Route 75 North of Route 20 WB Ramps Windsor Locks, Connecticut

Site Code: Station ID: 5745

Latitude: 0' 0.0000 Undefined

C																	
Southbound Start	1	16	21	26	31	36	41	46	51	56	61	66	71	76		Pace	Number
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	Speed	in Pace
10/31/22	0	1	4	10	7	21	16	12	4	3	0	0	0	0	78	36-45	37
01:00	0	0	1	11	7	11	21	10	4	4	1	0	0	0	70	36-45	32
02:00	0	1	2	5	5	15	8	4	2	0	0	Ö	0	0	42	36-45	23
03:00	0	0	2	7	18	14	20	10	7	0	1	0	0	0	79	36-45	34
04:00	0	0	7	15	23	39	20	27	6	1	0	0	0	0	138	31-40	62
05:00	0	1	7	38	21	33	26	19	6	2	1	0	0	0	154	36-45	59
06:00	0	0	14	67	45	38	51	45	14	7	1	0	0	0	282	26-35	112
07:00	1	2	15	78	45	57	87	73	35	12	3	1	0	0	409	41-50	160
08:00	0	3	17	64	49	63	63	62	28	5	1	0	0	0	355	36-45	126
09:00	0	6	32	75	55	64	83	39	19	2	1	0	0	0	376	36-45	147
10:00	0	3	30	63	52	76	68	46	12	6	1	1	0	0	358	36-45	144
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
12 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
14:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
15:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
16:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
17:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
18:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
21:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
22:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
23:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total	1	17	131	433	327	431	463	347	137	42	10	2	0	0	2341		
Percent	0.0%	0.7%	5.6%	18.5%	14.0%	18.4%	19.8%	14.8%	5.9%	1.8%	0.4%	0.1%	0.0%	0.0%			
AM Peak	07:00	09:00	09:00	07:00	09:00	10:00	07:00	07:00	07:00	07:00	07:00	07:00			07:00		
Vol.	1	6	32	78	55	76	87	73	35	12	3	1			409		
PM Peak Vol.																	
Total	12	127	1642	5785	4725	4600	5925	4242	1729	482	107	26	11	0	29413	,	
Percent	0.0%	0.4%	5.6%	19.7%	16.1%	15.6%	20.1%	14.4%	5.9%	1.6%	0.4%	0.1%	0.0%	0.0%			
				- - -													

15th Percentile: 27 MPH 50th Percentile: 37 MPH 85th Percentile: 47 MPH 95th Percentile: 52 MPH

Stats 10 MPH Pace Speed: 36-45 MPH Number in Pace: 10525

Percent in Pace : 35.8%

Number of Vehicles > 45 MPH : 6597

Percent of Vehicles > 45 MPH : 22.4%

Mean Speed(Average) : 38 MPH

Route 75 North of Route 20 NB Ramps (NB) Windsor Locks, Connecticut

Site Code: Station ID: 5808

Latitude: 0' 0.0000 Undefined

Start Time	Mon 06-Feb-23	Tue 07-Feb-23	Wed 08-Feb-23	Thu 09-Feb-23	Fri 10-Feb-23	Week Day Average	Sat 11-Feb-23	Sun 12-Feb-23	Week Average
12:00 AM	*	*	*	138	164	151	149	90	135
01:00	*	*	*	59	68	64	73	70	68
02:00	*	*	*	105	107	106	94	72	94
03:00	*	*	*	231	234	232	185	154	201
04:00	*	*	*	342	375	358	302	237	314
05:00	*	*	*	329	314	322	243	213	275
06:00	*	*	*	350	341	346	221	202	278
07:00	*	*	*	527	468	498	248	188	358
08:00	*	*	*	557	507	532	330	261	414
09:00	*	*	*	524	538	531	433	352	462
10:00	*	*	284	497	564	448	518	435	460
11:00	*	*	642	635	634	637	571	446	586
12:00 PM	*	*	691	725	693	703	611	489	642
01:00	*	*	593	612	664	623	569	487	585
02:00	*	*	656	629	660	648	536	496	595
03:00	*	*	684	720	727	710	503	494	626
04:00	*	*	705	701	681	696	508	472	613
05:00	*	*	753	677	666	699	489	462	609
06:00	*	*	609	686	565	620	459	365	537
07:00	*	*	402	580	461	481	348	222	403
08:00	*	*	365	326	396	362	340	194	324
09:00	*	*	289	276	296	287	274	161	259
10:00	*	*	202	268	320	283	251	222	265
11:00	*	*		252	255	245	214	264	242
Total	0	0	7162	10746	10698	10582	8469	7048	9345

Daily
Date Total
09-Feb-23 10746
10-Feb-23 10698
Average 10722

Route 75 North of Route 20 NB Ramps (NB) Windsor Locks, Connecticut

Site Code: Station ID: 5808

Start Time	Mon 13-Feb-23	Tue 14-Feb-23	Wed 15-Feb-23	Thu 16-Feb-23	Fri 17-Feb-23	Week Day Average	Sat 18-Feb-23	Sun 19-Feb-23	Week Average
12:00 AM	107	139	*	*	*	123	*	*	123
01:00	52	94	*	*	*	73	*	*	73
02:00	67	86	*	*	*	75 76	*	*	76
03:00	175	203	*	*	*	189	*	*	189
03:00	347	276	*	*	*	312	*	*	312
05:00	293	300	*	*	*	296	*	*	296
06:00	289	318	*	*	*	304	*	*	304
07:00	404	457	*	*	*	430	*	*	430
08:00	484	507	*	*	*	430	*	*	496
08:00	528	460	*	*	*	490 494	*	*	496
			*	*	*		*	*	473
10:00 11:00	483 570	463 602	*	*	*	473 586	*	*	586
			*	*	*		*	*	
12:00 PM	607	610	*	*	*	608	*	*	608
01:00	555	*	*	*	*	555	*	*	555
02:00	566	*	*	*	*	566	*	*	566
03:00	598	*	*	*	*	598	*	*	598
04:00	636	*	*	*	*	636	*	*	636
05:00	563	*	*	*	*	563	*	*	563
06:00	465	*	*	*	*	465	*	*	465
07:00	370	*	*	*	*	370	*	*	370
08:00	319	*		*	*	319	*		319
09:00	227		*	*	*	227	*	*	227
10:00	246	*				246			246
11:00	253	*	*	*	*	253	*	*	253
Total	9204	4515	0	0	0	9258	0	0	9258
Date	Daily Total								
13-Feb-23	9204								
Grand Total	9204	4515	7162	10746	10698	19840	8469	7048	18603

Route 75 North of Route 20 WB Ramps (SB) Windsor Locks, Connecticut

Site Code: Station ID: 5745

Latitude: 0' 0.0000 Undefined

Start Time	Mon 24-Oct-22	Tue 25-Oct-22	Wed 26-Oct-22	Thu 27-Oct-22	Fri 28-Oct-22	Week Day Average	Sat 29-Oct-22	Sun 30-Oct-22	Week Average
12:00 AM	*	*	*	74	109	92	94	93	92
01:00	*	*	*	89	76	82	65	64	74
02:00	*	*	*	66	68	67	51	40	56
03:00	*	*	*	97	85	91	63	42	72
04:00	*	*	*	144	158	151	86	79	117
05:00	*	*	*	187	171	179	79	70	127
06:00	*	*	*	261	266	264	95	82	176
07:00	*	*	*	458	436	447	180	140	304
08:00	*	*	*	399	386	392	258	153	299
09:00	*	*	*	349	385	367	325	204	316
10:00	*	*	*	338	380	359	342	265	331
11:00	*	*	*	492	488	490	436	358	444
12:00 PM	*	*	*	540	516	528	383	407	462
01:00	*	*	*	460	493	476	394	319	416
02:00	*	*	*	445	489	467	387	321	410
03:00	*	*	314	476	508	433	356	299	391
04:00	*	*	459	481	487	476	383	327	427
05:00	*	*	472	498	487	486	329	258	409
06:00	*	*	385	366	364	372	327	248	338
07:00	*	*	306	286	314	302	248	201	271
08:00	*	*	195	229	249	224	178	177	206
09:00	*	*	193	167	195	185	141	112	162
10:00	*	*	122	172	140	145	137	122	139
11:00	*	*	124	118	131	124	124	87	117
Total	0	0	2570	7192	7381	7199	5461	4468	6156

Daily
Date Total
27-Oct-22 7192
28-Oct-22 7381
Average 7286

Route 75 North of Route 20 WB Ramps (SB) Windsor Locks, Connecticut

Site Code: Station ID: 5745

Start Time	Mon 31-Oct-22	Tue 01-Nov-22	Wed 02-Nov-22	Thu 03-Nov-22	Fri 04-Nov-22	Week Day Average	Sat	Sun 06-Nov-22	Week Average
12:00 AM	78	* *	*	*	V4-INUV-ZZ *		<u> </u>	*	78
01:00	70	*	*	*	*	70	*	*	70
02:00	42	*	*	*	*	42	*	*	42
03:00	79	*	*	*	*	79	*	*	79
03.00	138	*	*	*	*	138	*	*	138
05:00	154	*	*	*	*	154	*	*	154
06:00	282	*	*	*	*	282	*	*	282
		*	*	*	*		*	*	
07:00	409	*	*	*	*	409	*	*	409
08:00	355	*	*	*	*	355	*		355 376
09:00	376	*	*	*	*	376	*	*	
10:00	358	*	*	*	*	358	*		358
11:00	*	*	*	*	*	*	*	*	*
12:00 PM	*	*	*	*	*	*	*		*
01:00	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*		 *
03:00	*	*	*	*	*	*	*	*	•
04:00	*			*	*	*	*		*
05:00	*	*	*	*	*	*	*	*	•
06:00			*	*	*	*	*		*
07:00	*	*	*	*	*		*		*
08:00	*	*				*		*	*
09:00	*		*	*	*	*	*		*
10:00	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*		*
Total	2341	0	0	0	0	2341	0	0	2341
Grand Total	2341	0	2570	7192	7381	9540	5461	4468	8497

Route 75 at South of Elm Street (NB) Windsor Locks, Connecticut

Site Code: Station ID: 5807

Northbound															Lantado.	0.0000	Ondomioa
Start	1	16	21	26	31	36	41	46	51	56	61	66	71	76		Pace	Number
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	Speed	in Pace
02/08/23	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
03:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
04:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
05:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
06:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
07:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
08:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
09:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
12 PM	0	0	5	21	90	122	69	12	2	0	0	0	0	0	321	31-40	212
13:00	0	0	8	45	173	184	85	9	11	1	0	0	0	0	516	31-40	357
14:00	1	0	11	38	166	189	70	17	4	2	0	0	0	0	498	31-40	355
15:00	0	0	9	53	131	140	84	28	13	2	0	0	0	0	460	31-40	271
16:00	0	1	5	39	140	172	100	32	7	1	0	0	0	0	497	31-40	312
17:00	0	1	2	38	124	204	139	29	13	2	0	0	0	0	552	36-45	343
18:00	0	1	6	39	158	224	108	20	14	1	0	0	0	0	571	31-40	382
19:00	0	0	15	44	150	173	105	29	5	3	0	1	0	0	525	31-40	323
20:00	1	1	1	17	83	137	64	14	7	1	1	0	0	0	327	31-40	220
21:00	1	2	2	15	64	104	66	13	4	2	0	0	0	0	273	36-45	170
22:00	1	0	6	9	64	98	61	14	9	1	0	0	0	0	263	31-40	162
23:00	0	2	0	17	50	60	44	15	3	1	1	0	0	0	193	31-40	110
Total	4	8	70	375	1393	1807	995	232	92	17	2	1	0	0	4996		
Percent	0.1%	0.2%	1.4%	7.5%	27.9%	36.2%	19.9%	4.6%	1.8%	0.3%	0.0%	0.0%	0.0%	0.0%			
AM Peak																	
Vol.																	
PM Peak	14:00	21:00	19:00	15:00	13:00	18:00	17:00	16:00	18:00	19:00	20:00	19:00			18:00		
Vol.	1	2	15	53	173	224	139	32	14	3	1	1			571		

Route 75 at South of Elm Street (NB) Windsor Locks, Connecticut

Site Code: Station ID: 5807

Northbound															Lantado.	0.0000	Ondomioa
Start	1	16	21	26	31	36	41	46	51	56	61	66	71	76		Pace	Number
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	Speed	in Pace
02/09/23	1	0	4	10	65	50	35	3	4	2	0	0	0	0	174	31-40	115
01:00	0	0	0	10	51	52	29	9	2	2	0	0	0	0	155	31-40	103
02:00	0	0	0	8	30	28	17	4	0	1	0	0	0	0	88	31-40	58
03:00	0	0	0	3	11	25	16	2	4	0	0	0	0	0	61	36-45	41
04:00	0	0	1	5	9	24	28	25	11	2	1	0	0	0	106	41-50	53
05:00	0	0	0	5	20	38	39	23	13	7	1	2	0	0	148	36-45	77
06:00	0	0	1	11	33	38	31	6	6	1	0	0	0	0	127	31-40	71
07:00	0	0	0	14	34	67	65	29	21	3	0	0	0	0	233	36-45	132
08:00	0	1	2	8	60	74	81	34	24	4	2	0	0	0	290	36-45	155
09:00	0	0	4	30	93	135	118	42	23	3	1	0	0	0	449	36-45	253
10:00	0	0	7	24	94	124	72	31	21	1	2	0	0	0	376	31-40	218
11:00	0	0	3	21	77	129	77	18	10	2	2	0	0	0	339	33-42	206
12 PM	0	0	4	38	123	103	74	29	8	2	0	0	0	0	381	31-40	226
13:00	1	0	1	52	184	166	72	9	6	0	0	0	0	0	491	31-40	350
14:00	0	0	9	39	185	153	80	17	5	1	1	0	0	0	490	31-40	338
15:00	0	6	12	42	154	187	71	10	5	0	0	0	0	0	487	31-40	341
16:00	0	0	9	32	159	179	82	25	11	3	0	0	0	0	500	31-40	338
17:00	0	0	0	42	213	232	117	28	9	2	0	0	0	0	643	31-40	445
18:00	1	1	7	58	161	174	109	22	17	1	0	0	0	0	551	31-40	335
19:00	0	2	5	28	180	182	101	21	4	1	0	0	0	0	524	31-40	362
20:00	0	0	8	31	116	173	125	25	7	3	0	0	0	0	488	36-45	298
21:00	0	2	2	19	81	111	78	20	5	0	1	0	0	0	319	31-40	192
22:00	0	0	3	15	62	86	45	16	5	1	0	0	0	0	233	31-40	148
23:00	11	0	3	19	65	73	35	12	3	0	1	0	0	0	212	31-40	138
Total	4	12	85	564	2260	2603	1597	460	224	42	12	2	0	0	7865		
Percent	0.1%	0.2%	1.1%	7.2%	28.7%	33.1%	20.3%	5.8%	2.8%	0.5%	0.2%	0.0%	0.0%	0.0%			
AM Peak	00:00	08:00	10:00	09:00	10:00	09:00	09:00	09:00	08:00	05:00	08:00	05:00			09:00		
Vol.	1	1_	7	30	94	135	118	42	24	7	2	2			449		
PM Peak	13:00	15:00	15:00	18:00	17:00	17:00	20:00	12:00	18:00	16:00	14:00				17:00		
Vol.	1	6	12	58	213	232	125	29	17	3	1				643		

Route 75 at South of Elm Street (NB) Windsor Locks, Connecticut

Site Code: Station ID: 5807

Northbound															Latitude.	0.0000	Ondenned
Start	1	16	21	26	31	36	41	46	51	56	61	66	71	76		Pace	Number
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	Speed	in Pace
02/10/23	0	2	2	20	61	53	39	13	0	0	0	0	0	0	190	31-40	114
01:00	0	2	0	12	51	55	44	4	4	2	0	0	0	0	174	31-40	106
02:00	0	1	1	7	27	31	22	5	5	0	0	0	0	0	99	31-40	58
03:00	0	0	1	2	10	25	11	9	2	0	0	0	0	0	60	34-43	36
04:00	0	0	0	4	14	21	45	23	17	4	0	0	0	0	128	40-49	68
05:00	0	0	0	2	18	29	44	21	18	6	2	0	0	0	140	36-45	73
06:00	0	1	0	9	26	36	38	11	6	3	0	0	0	0	130	36-45	74
07:00	0	0	1	17	34	59	56	25	8	4	0	0	0	0	204	36-45	115
08:00	0	0	6	25	58	89	96	30	27	5	0	1	0	0	337	36-45	185
09:00	0	0	0	22	66	119	101	48	22	6	3	0	0	0	387	36-45	220
10:00	0	0	1	17	74	142	72	30	18	0	1	0	0	0	355	31-40	216
11:00	0	0	5	27	122	144	94	27	8	2	1	0	0	0	430	31-40	266
12 PM	1	0	3	20	113	174	78	36	10	1	0	0	0	0	436	31-40	287
13:00	1	0	6	29	181	176	100	17	4	2	0	0	0	0	516	31-40	357
14:00	0	1	1	59	185	197	100	21	5	0	0	0	0	0	569	31-40	382
15:00	0	0	4	38	156	205	95	30	8	1	0	0	0	0	537	31-40	361
16:00	1	1	5	48	177	191	114	27	13	1	1	0	0	0	579	31-40	368
17:00	0	0	8	53	214	222	108	23	9	2	1	0	0	0	640	31-40	436
18:00	0	0	4	24	158	208	126	22	8	1	0	0	0	0	551	31-40	366
19:00	0	1	2	37	152	177	86	12	5	0	0	0	0	0	472	31-40	329
20:00	0	2	9	19	100	133	72	12	10	2	0	0	0	0	359	31-40	233
21:00	1	0	3	22	97	112	56	16	7	2	0	0	0	0	316	31-40	209
22:00	0	0	1	19	87	114	56	14	4	0	0	0	0	0	295	31-40	201
23:00	2	2	6	16	55	74	47	10	5	1	0	0	0	0	218	31-40	129
Total	6	13	69	548	2236	2786	1700	486	223	45	9	1	0	0	8122		
Percent	0.1%	0.2%	0.8%	6.7%	27.5%	34.3%	20.9%	6.0%	2.7%	0.6%	0.1%	0.0%	0.0%	0.0%			
AM Peak		00:00	08:00	11:00	11:00	11:00	09:00	09:00	08:00	05:00	09:00	08:00			11:00		
Vol.		2	6_	27	122	144	101	48	27	6_	3	1			430		
PM Peak	23:00	20:00	20:00	14:00	17:00	17:00	18:00	12:00	16:00	13:00	16:00				17:00		
Vol.	2	2	9	59	214	222	126	36	13	2	1				640		

Route 75 at South of Elm Street (NB) Windsor Locks, Connecticut

Site Code: Station ID: 5807

Northbound															Lalliuue.	0.0000	Ondenned
Start	1	16	21	26	31	36	41	46	51	56	61	66	71	76		Pace	Number
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	Speed	in Pace
02/11/23	0	1	5	13	58	70	31	10	3	0	0	0	0	0	191	31-40	128
01:00	1	1	1	18	60	65	27	3	1	0	1	0	0	0	178	31-40	125
02:00	0	0	6	13	36	31	11	5	0	0	0	0	0	0	102	31-40	67
03:00	0	0	1	3	15	25	16	1	1	0	0	0	0	0	62	34-43	41
04:00	0	0	3	2	16	23	23	14	15	1	1	0	0	0	98	36-45	46
05:00	0	0	0	2	15	37	36	19	10	3	1	1	0	0	124	36-45	73
06:00	1	1	1	4	18	22	33	12	6	2	0	0	0	0	100	36-45	55
07:00	0	0	0	5	23	33	35	8	5	1	0	0	0	0	110	36-45	68
08:00	0	1	1	9	25	34	41	19	9	3	0	0	0	0	142	36-45	75
09:00	0	0	5	13	36	62	61	18	9	2	0	0	0	0	206	36-45	123
10:00	0	0	3	12	54	87	71	23	8	2	1	0	0	0	261	36-45	158
11:00	0	0	2	16	109	142	73	22	6	2	1	0	0	0	373	31-40	251
12 PM	0	1	3	31	99	135	73	15	7	1	0	0	0	0	365	31-40	234
13:00	0	1	3	40	143	181	72	13	7	1	0	0	0	0	461	31-40	324
14:00	0	0	1	41	146	175	66	23	3	0	1	0	0	0	456	31-40	321
15:00	0	1	3	19	131	159	72	16	4	0	0	0	0	0	405	31-40	290
16:00	0	0	4	37	115	123	76	19	4	2	0	0	0	0	380	31-40	238
17:00	1	3	9	38	107	138	73	26	5	2	1	0	0	0	403	31-40	245
18:00	0	0	2	24	93	122	72	24	11	1	0	0	0	0	349	31-40	215
19:00	0	1	8	48	115	120	59	14	2	1	0	0	0	0	368	31-40	235
20:00	1	1	9	31	104	113	50	7	2	1	0	0	0	0	319	31-40	217
21:00	0	1	6	21	68	82	38	7	4	2	0	0	0	0	229	31-40	150
22:00	2	0	4	16	50	75	35	10	5	2	0	0	0	0	199	31-40	125
23:00	0	2	2	20	47	80	40	8	5	1	0	0	0	0	205	31-40	127
Total	6	15	82	476	1683	2134	1184	336	132	30	7	1	0	0	6086		
Percent	0.1%	0.2%	1.3%	7.8%	27.7%	35.1%	19.5%	5.5%	2.2%	0.5%	0.1%	0.0%	0.0%	0.0%			
AM Peak	01:00	00:00	02:00	01:00	11:00	11:00	11:00	10:00	04:00	05:00	01:00	05:00			11:00		
Vol.	1	1_	6	18	109	142	73	23	15	3_	1_	1			373		
PM Peak	22:00	17:00	17:00	19:00	14:00	13:00	16:00	17:00	18:00	16:00	14:00				13:00		
Vol.	2	3	9	48	146	181	76	26	11	2	1				461		

Route 75 at South of Elm Street (NB) Windsor Locks, Connecticut

Site Code: Station ID: 5807

Northbound															Lantado.	0.0000	Ondomiou
Start	1	16	21	26	31	36	41	46	51	56	61	66	71	76		Pace	Number
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	Speed	in Pace
02/12/23	0	1	4	17	57	67	30	8	1	0	0	0	0	0	185	31-40	124
01:00	0	0	2	18	38	33	19	3	0	0	0	0	0	0	113	31-40	71
02:00	1	0	2	4	20	29	13	1	0	0	0	0	0	0	70	31-40	49
03:00	0	0	0	5	20	16	14	2	5	0	0	0	0	0	62	31-40	36
04:00	0	1	0	2	5	18	23	16	7	2	0	0	1	0	75	36-45	41
05:00	0	0	0	4	14	20	18	18	9	1	2	0	0	0	86	36-45	38
06:00	0	0	1	6	23	24	19	3	2	0	1	0	0	0	79	31-40	47
07:00	0	0	2	5	23	22	24	8	3	2	0	0	0	0	89	34-43	46
08:00	0	0	2	6	19	30	25	14	7	4	2	0	0	0	109	36-45	55
09:00	0	0	1	11	36	47	34	16	8	1	0	0	0	0	154	31-40	83
10:00	0	0	1	8	42	55	45	25	8	2	0	1	0	0	187	36-45	100
11:00	0	0	2	9	60	85	64	13	7	2	1	0	0	0	243	36-45	149
12 PM	1	1	3	16	82	113	73	17	3	2	0	0	0	0	311	31-40	195
13:00	0	0	0	22	82	112	58	18	8	1	0	0	0	0	301	31-40	194
14:00	0	1	2	30	121	138	75	16	9	2	0	0	0	0	394	31-40	259
15:00	0	1	0	25	123	116	61	24	2	0	0	0	0	0	352	31-40	239
16:00	0	2	3	14	97	132	63	16	6	3	2	0	0	0	338	31-40	229
17:00	0	1	6	18	83	122	80	16	10	0	0	0	0	0	336	31-40	205
18:00	1	1	3	20	85	103	66	25	5	1	0	0	0	0	310	31-40	188
19:00	0	0	4	15	72	85	61	21	4	2	1	0	0	0	265	31-40	157
20:00	0	0	1	8	46	77	44	13	3	2	0	0	0	0	194	31-40	123
21:00	0	1	1	15	34	51	26	10	7	0	0	0	0	0	145	31-40	85
22:00	0	0	1	12	27	51	29	13	6	1	1	0	0	0	141	36-45	80
23:00	0	0	2	8	26	32	25	7	5	1_	0	0	0	0	106	31-40	58
Total	3	10	43	298	1235	1578	989	323	125	29	10	1	1	0	4645		
Percent	0.1%	0.2%	0.9%	6.4%	26.6%	34.0%	21.3%	7.0%	2.7%	0.6%	0.2%	0.0%	0.0%	0.0%			
AM Peak	02:00	00:00	00:00	01:00	11:00	11:00	11:00	10:00	05:00	08:00	05:00	10:00	04:00		11:00		
Vol.	1	1_	44	18	60	85	64	25	9	4	2	1	1		243		
PM Peak	12:00	16:00	17:00	14:00	15:00	14:00	17:00	18:00	17:00	16:00	16:00				14:00		
Vol.	1	2	6	30	123	138	80	25	10	3	2				394		

Route 75 at South of Elm Street (NB) Windsor Locks, Connecticut

Site Code: Station ID: 5807

Northbound															Lantado.	0.0000	Ondomioa
Start	1	16	21	26	31	36	41	46	51	56	61	66	71	76		Pace	Number
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	Speed	in Pace
02/13/23	1	0	2	16	44	67	37	10	1	1	0	0	0	0	179	31-40	111
01:00	0	0	2	12	51	38	9	5	3	0	1	0	0	0	121	31-40	89
02:00	0	0	1	5	19	20	9	2	0	1	0	0	0	0	57	31-40	39
03:00	0	0	1	4	12	17	13	4	0	0	0	0	0	0	51	36-45	30
04:00	0	0	0	1	10	18	25	18	14	4	0	0	0	0	90	36-45	43
05:00	0	0	0	3	17	20	30	9	10	1	0	0	0	0	90	36-45	50
06:00	0	0	1	10	25	32	26	14	4	0	0	0	0	0	112	34-43	58
07:00	0	0	2	8	22	40	66	19	9	3	0	0	0	0	169	36-45	106
08:00	0	0	2	17	44	77	76	33	10	0	1	0	0	0	260	36-45	153
09:00	0	3	5	13	76	106	105	34	18	6	1	0	0	0	367	36-45	211
10:00	0	1	6	46	92	127	80	20	21	3	0	0	0	0	396	31-40	219
11:00	0	0	4	13	107	136	65	23	10	1	0	0	0	0	359	31-40	243
12 PM	0	0	1	26	107	145	72	19	8	0	0	0	0	0	378	31-40	252
13:00	0	1	2	25	154	176	106	27	11	1	0	0	0	0	503	31-40	330
14:00	0	0	1	33	159	179	76	13	7	0	0	0	0	0	468	31-40	338
15:00	0	0	10	23	99	152	89	21	13	0	0	0	0	0	407	31-40	251
16:00	0	0	1	31	114	167	105	22	11	0	0	1	0	0	452	31-40	281
17:00	0	0	8	22	175	213	108	34	18	1	1	0	0	0	580	31-40	388
18:00	0	0	8	23	131	210	108	19	12	0	0	0	0	0	511	31-40	341
19:00	0	0	2	22	106	160	92	27	5	0	1	0	0	0	415	31-40	266
20:00	0	0	3	20	87	128	63	17	1	0	0	0	0	0	319	31-40	215
21:00	0	1	6	28	61	95	55	11	4	1	0	0	0	0	262	31-40	156
22:00	0	0	4	22	66	70	57	15	2	0	1	0	0	0	237	31-40	136
23:00	0	0	5	9	47	69	29	12	4	0	0	0	0	0	175	31-40	116
Total	1	6	77	432	1825	2462	1501	428	196	23	6	1	0	0	6958		
Percent	0.0%	0.1%	1.1%	6.2%	26.2%	35.4%	21.6%	6.2%	2.8%	0.3%	0.1%	0.0%	0.0%	0.0%			
AM Peak	00:00	09:00	10:00	10:00	11:00	11:00	09:00	09:00	10:00	09:00	01:00				10:00		
Vol.	1	3	6	46	107	136	105	34	21	6_	1_				396		
PM Peak		13:00	15:00	14:00	17:00	17:00	17:00	17:00	17:00	13:00	17:00	16:00			17:00		
Vol.		1	10	33	175	213	108	34	18	1	1	1			580		

Route 75 at South of Elm Street (NB) Windsor Locks, Connecticut

Site Code: Station ID: 5807

Latitude: 0' 0.0000 Undefined

Northbound	1																
Start		16	21	26	31	36	41	46	51	56	61	66	71	76		Pace	Number
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	Speed	in Pace
02/14/23	0	1	3	14	43	65	28	8	1	1	0	0	0	0	164	31-40	108
01:00	1	0	1	8	34	57	24	9	2	0	0	0	0	0	136	31-40	91
02:00	0	0	2	14	32	33	7	5	1	3	0	0	0	0	97	31-40	65
03:00	0	0	0	8	25	25	19	3	1	1	0	0	0	0	82	31-40	50
04:00	0	0	2	3	14	21	46	20	9	4	2	0	0	0	121	36-45	67
05:00	0	0	0	3	17	36	30	27	15	3	5	0	0	0	136	36-45	66
06:00	0	1	2	3	30	36	29	15	6	1	1	0	0	0	124	31-40	66
07:00	0	0	3	12	33	67	77	38	10	0	0	0	0	0	240	36-45	144
08:00	1	1	4	9	53	95	82	36	21	4	2	0	0	0	308	36-45	177
09:00	1	1	9	36	83	142	94	30	15	1	3	0	0	0	415	36-45	236
10:00	0	1	4	23	83	119	96	35	9	5	0	0	0	0	375	36-45	215
11:00	0	0	7	28	115	121	76	17	9	2	0	0	0	0	375	31-40	236
12 PM	1	1	4	35	104	123	88	23	11	1	0	0	0	0	391	31-40	227
13:00	0	1	0	32	142	174	89	23	10	2	0	0	0	0	473	31-40	316
14:00	1	3	10	38	108	182	71	36	6	2	0	0	0	0	457	31-40	290
15:00	0	0	1	23	68	89	37	12	2	0	1	0	0	0	233	31-40	157
16:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
17:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
18:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
21:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
22:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
23:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total	5	10	52	289	984	1385	893	337	128	30	14	0	0	0	4127		
Percent	0.1%	0.2%	1.3%	7.0%	23.8%	33.6%	21.6%	8.2%	3.1%	0.7%	0.3%	0.0%	0.0%	0.0%			
AM Peak	01:00	00:00	09:00	09:00	11:00	09:00	10:00	07:00	08:00	10:00	05:00				09:00		
Vol	1	1	9	36	115	142	96	38	21	5	5				415		
PM Peak	12:00	14:00	14:00	14:00	13:00	14:00	13:00	14:00	12:00	13:00	15:00				13:00		
Vol.	11	3	10	38	142	182	89	36	11	2	1				473		
Total	29	74	478	2982	11616	14755	8859	2602	1120	216	60	7	1	0	42799		
Percent	0.1%	0.2%	1.1%	7.0%	27.1%	34.5%	20.7%	6.1%	2.6%	0.5%	0.1%	0.0%	0.0%	0.0%			

15th Percentile: 31 MPH 50th Percentile: 37 MPH 85th Percentile: 43 MPH 95th Percentile: 48 MPH

Stats 10 MPH Pace Speed: 31-40 MPH Number in Pace: 26371

Percent in Pace : 61.6%

Number of Vehicles > 40 MPH : 12865

Percent of Vehicles > 40 MPH : 30.1%

Mean Speed(Average) : 38 MPH

Route 75 South of Elm Street Windsor Locks, Connecticut

Site Code: Station ID: 5748

Southbound															Latitado.	0 0.0000	Ondonned
Start	1	16	21	26	31	36	41	46	51	56	61	66	71	76		Pace	Number
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	Speed	in Pace
10/26/22	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
03:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
04:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
05:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
06:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
07:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
08:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
09:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
12 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
14:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
19:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
20:00	0	2	0	1	2	0	1	0	0	0	0	0	0	0	6	26-35	3
21:00	6	7	11	37	76	102	68	33	7	3	0	0	0	0	350	31-40	178
22:00	3	7	8	22	52	60	52	23	5	2	0	0	0	0	234	36-45	112
23:00	3	2	5	26	51	60	51	34	2	5	0	0	0	0	239	31-40	111
Total	12	18	24	86	181	222	172	90	14	10	0	0	0	0	829		
Percent	1.4%	2.2%	2.9%	10.4%	21.8%	26.8%	20.7%	10.9%	1.7%	1.2%	0.0%	0.0%	0.0%	0.0%			
AM Peak																	
Vol.																	
PM Peak	21:00	21:00	21:00	21:00	21:00	21:00	21:00	23:00	21:00	23:00					21:00		
Vol.	6	7	11	37	76	102	68	34	7	5					350		

Route 75 South of Elm Street Windsor Locks, Connecticut

Site Code: Station ID: 5748

Southbound																	
Start	1	16	21	26	31	36	41	46	51	56	61	66	71	76		Pace	Number
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	Speed	in Pace
10/27/22	2	1	3	16	32	44	46	20	3	1	0	1	0	0	169	36-45	90
01:00	1	0	1	1	12	36	32	22	9	3	2	0	0	0	119	36-45	68
02:00	0	0	0	2	11	18	25	15	8	1	1	0	0	0	81	36-45	43
03:00	0	0	1	1	5	25	21	15	2	1	0	0	0	0	71	36-45	46
04:00	1	1	0	7	14	37	32	14	4	2	2	0	0	0	114	36-45	69
05:00	2	2	3	10	42	57	49	33	8	9	0	0	1	0	216	36-45	106
06:00	2	2	11	24	39	79	56	46	12	6	1	0	0	0	278	36-45	135
07:00	5	8	21	32	67	123	107	60	38	18	3	3	0	0	485	36-45	230
08:00	4	12	12	25	56	129	94	72	18	7	3	0	0	0	432	36-45	223
09:00	9	11	28	40	71	100	102	39	16	5	0	0	0	0	421	36-45	202
10:00	5	8	18	40	73	107	68	29	13	3	2	0	0	0	366	31-40	180
11:00	6	22	17	55	92	149	127	38	20	3	0	0	0	0	529	36-45	276
12 PM	6	8	21	66	131	173	109	57	15	2	0	0	0	0	588	31-40	304
13:00	7	11	40	62	137	142	91	44	13	1	1	0	0	0	549	31-40	279
14:00	9	13	32	80	121	143	100	56	11	6	1	0	0	0	572	31-40	264
15:00	8	18	34	78	133	155	112	55	18	2	0	0	0	0	613	31-40	288
16:00	8	29	47	60	145	131	117	59	20	6	1	0	0	0	623	31-40	276
17:00	14	21	21	66	144	188	114	46	10	6	1	0	0	0	631	31-40	332
18:00	4	5	29	106	172	141	82	27	7	2	0	0	0	0	575	31-40	313
19:00	0	6	20	55	111	134	79	29	11	2	0	0	0	0	447	31-40	245
20:00	1	10	22	34	99	99	64	31	14	2	0	0	0	0	376	31-40	198
21:00	0	0	14	31	62	110	68	38	12	4	1	1	0	0	341	36-45	178
22:00	0	4	8	29	57	72	66	29	9	2	2	0	0	0	278	36-45	138
23:00	1	1	4	18	47	78	65	32	13	3	2	0	0	0	264	36-45	143
Total	95	193	407	938	1873	2470	1826	906	304	97	23	5	1_	0	9138		
Percent	1.0%	2.1%	4.5%	10.3%	20.5%	27.0%	20.0%	9.9%	3.3%	1.1%	0.3%	0.1%	0.0%	0.0%			
AM Peak	09:00	11:00	09:00	11:00	11:00	11:00	11:00	08:00	07:00	07:00	07:00	07:00	05:00		11:00		
Vol.	9	22	28	55	92	149	127	72	38	18	3	3	1		529		
PM Peak	17:00	16:00	16:00	18:00	18:00	17:00	16:00	16:00	16:00	14:00	22:00	21:00			17:00		
Vol.	14	29	47	106	172	188	117	59	20	6	2	1			631		

Route 75 South of Elm Street Windsor Locks, Connecticut

Site Code: Station ID: 5748

Southbound																	
Start	1	16	21	26	31	36	41	46	51	56	61	66	71	76		Pace	Number
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	Speed	in Pace
10/28/22	1	1	0	3	37	59	57	29	20	2	1	0	0	0	210	36-45	116
01:00	1	0	2	5	6	23	26	18	12	3	2	0	0	0	98	36-45	49
02:00	1	3	1	4	11	17	23	10	2	0	0	0	0	0	72	36-45	40
03:00	1	0	0	2	9	22	18	10	2	2	1	1	0	0	68	36-45	40
04:00	0	1	1	6	21	32	32	14	5	1	1	1	0	0	115	36-45	64
05:00	2	3	7	18	31	48	51	25	14	4	0	0	0	0	203	36-45	99
06:00	3	3	7	15	58	72	68	61	18	2	3	0	0	0	310	36-45	140
07:00	6	6	12	24	61	132	104	63	37	17	1	1	0	0	464	36-45	236
08:00	8	3	12	27	73	115	78	50	28	3	2	0	0	0	399	36-45	193
09:00	6	5	20	34	72	120	94	59	18	5	1	0	0	0	434	36-45	214
10:00	9	6	9	24	67	144	90	46	10	3	0	0	0	0	408	36-45	234
11:00	6	13	25	61	120	151	99	43	12	3	1	0	0	0	534	31-40	271
12 PM	3	19	33	63	147	188	125	44	18	3	1	0	0	0	644	31-40	335
13:00	13	17	34	81	143	183	97	35	9	1	0	0	0	0	613	31-40	326
14:00	12	18	24	88	127	164	90	32	21	1	0	0	0	0	577	31-40	291
15:00	5	20	36	76	143	165	109	69	14	6	0	0	0	0	643	31-40	308
16:00	8	24	39	78	147	172	111	49	21	1	1	0	0	0	651	31-40	319
17:00	5	15	27	92	139	174	109	38	11	6	0	0	0	0	616	31-40	313
18:00	14	24	41	103	183	136	56	26	9	0	1	0	0	0	593	31-40	319
19:00	5	11	26	74	133	121	67	49	5	1	1	1	0	0	494	31-40	254
20:00	2	12	17	44	111	126	70	31	9	1	0	0	0	0	423	31-40	237
21:00	1	9	19	22	78	104	77	24	8	2	1	0	0	0	345	31-40	182
22:00	3	10	15	31	82	89	53	24	6	2	0	1	1	0	317	31-40	171
23:00	2	1	6	31	55	68	64	37	10	3	0	0	0	0	277	36-45	132
Total	117	224	413	1006	2054	2625	1768	886	319	72	18	5	1_	0	9508		
Percent	1.2%	2.4%	4.3%	10.6%	21.6%	27.6%	18.6%	9.3%	3.4%	0.8%	0.2%	0.1%	0.0%	0.0%			
AM Peak	10:00	11:00	11:00	11:00	11:00	11:00	07:00	07:00	07:00	07:00	06:00	03:00			11:00		
Vol.	9	13	25	61	120	151	104	63	37	17	3	1			534		
PM Peak	18:00	16:00	18:00	18:00	18:00	12:00	12:00	15:00	14:00	15:00	12:00	19:00	22:00		16:00		
Vol.	14	24	41	103	183	188	125	69	21	6	1	1	1		651		

Route 75 South of Elm Street Windsor Locks, Connecticut

Site Code: Station ID: 5748

Southbound															Lantado.	0.0000	Ondomica
Start	1	16	21	26	31	36	41	46	51	56	61	66	71	76		Pace	Number
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	Speed	in Pace
10/29/22	1	2	3	3	33	78	51	37	11	2	2	0	0	0	223	36-45	129
01:00	1	0	0	2	8	26	24	18	10	3	0	0	0	0	92	36-45	50
02:00	0	0	0	2	9	17	19	12	6	1	0	0	0	0	66	36-45	36
03:00	1	2	0	4	10	18	19	7	4	2	0	1	0	0	68	36-45	37
04:00	0	1	1	2	17	26	16	11	5	4	0	0	0	0	83	31-40	43
05:00	0	0	2	5	21	23	22	7	5	0	0	1	0	0	86	36-45	45
06:00	1	1	4	6	17	39	38	19	7	0	0	0	1	0	133	36-45	77
07:00	1	3	2	9	37	54	53	40	16	7	3	0	0	0	225	36-45	107
08:00	6	1	7	11	52	87	78	34	14	8	3	0	0	0	301	36-45	165
09:00	0	0	7	25	56	101	109	59	17	6	1	0	0	0	381	36-45	210
10:00	3	4	8	28	62	120	111	61	20	8	1	0	0	0	426	36-45	231
11:00	4	7	18	45	83	110	87	69	18	6	1	0	1	0	449	36-45	197
12 PM	7	11	16	31	81	127	100	53	28	8	0	0	0	0	462	36-45	227
13:00	1	5	13	47	106	142	131	55	13	6	0	0	0	0	519	36-45	273
14:00	4	11	19	45	104	116	110	46	20	3	2	0	0	0	480	36-45	226
15:00	1	12	26	40	99	150	92	41	17	6	3	2	0	0	489	31-40	249
16:00	3	14	21	40	98	157	110	65	11	5	1	0	0	0	525	36-45	267
17:00	4	12	21	53	116	147	110	36	11	5	2	0	0	0	517	31-40	263
18:00	1	7	28	65	112	131	95	31	3	3	1	0	0	0	477	31-40	243
19:00	2	9	23	36	82	119	59	31	5	1	1	0	0	0	368	31-40	201
20:00	4	6	17	39	78	92	47	26	6	4	1	0	0	0	320	31-40	170
21:00	7	11	8	33	54	82	54	29	6	5	3	0	0	0	292	31-40	136
22:00	6	2	8	23	55	68	58	20	12	6	0	0	1	0	259	36-45	126
23:00	5	2	7	21	54	79	55	40	12	2	0	11	0	0	278	34-43	134
Total	63	123	259	615	1444	2109	1648	847	277	101	25	5	3	0	7519		
Percent	0.8%	1.6%	3.4%	8.2%	19.2%	28.0%	21.9%	11.3%	3.7%	1.3%	0.3%	0.1%	0.0%	0.0%			
AM Peak	08:00	11:00	11:00	11:00	11:00	10:00	10:00	11:00	10:00	08:00	07:00	03:00	06:00		11:00		
Vol.	6_	7	18	45	83	120	111	69	20	8	3	1	1		449		
PM Peak	12:00	16:00	18:00	18:00	17:00	16:00	13:00	16:00	12:00	12:00	15:00	15:00	22:00		16:00		
Vol.	7	14	28	65	116	157	131	65	28	8	3	2	1		525		

Route 75 South of Elm Street Windsor Locks, Connecticut

Site Code: Station ID: 5748

Southbound															Latitudo.	0.0000	Ondonnoa
Start	1	16	21	26	31	36	41	46	51	56	61	66	71	76		Pace	Number
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	Speed	in Pace
10/30/22	0	1	2	8	16	54	50	23	11	7	0	0	0	0	172	36-45	104
01:00	0	0	1	5	16	14	29	12	12	1	1	0	0	0	91	36-45	43
02:00	1	0	1	2	7	8	19	5	1	1	1	0	0	0	46	36-45	27
03:00	0	0	1	3	8	10	11	5	2	3	0	0	0	0	43	36-45	21
04:00	1	0	0	5	7	14	17	7	1	2	1	0	0	0	55	36-45	31
05:00	0	0	0	8	18	18	17	8	2	0	0	0	0	0	71	31-40	36
06:00	0	0	2	1	12	20	34	13	7	3	0	0	0	0	92	36-45	54
07:00	8	4	1	6	20	42	56	44	13	7	3	0	0	0	204	40-49	100
08:00	0	2	3	9	28	56	52	43	20	4	2	0	0	0	219	36-45	108
09:00	3	4	7	16	40	57	79	46	28	5	0	0	0	0	285	36-45	136
10:00	0	1	3	14	40	99	81	46	12	6	0	0	0	0	302	36-45	180
11:00	5	4	6	20	62	120	119	50	19	3	1	0	0	0	409	36-45	239
12 PM	4	11	25	48	104	151	110	60	23	6	0	0	0	0	542	36-45	261
13:00	1	2	8	37	96	136	103	43	20	4	0	0	0	0	450	36-45	239
14:00	4	3	12	42	85	123	79	47	20	5	0	0	0	0	420	31-40	208
15:00	3	8	8	38	81	124	107	39	17	4	2	0	0	0	431	36-45	231
16:00	4	9	20	49	114	148	127	43	14	4	5	0	0	0	537	36-45	275
17:00	8	4	14	39	104	121	82	41	16	4	0	0	0	0	433	31-40	225
18:00	2	6	14	34	84	108	68	23	4	3	0	0	0	0	346	31-40	192
19:00	1	5	8	21	74	96	72	31	2	0	1	0	0	0	311	31-40	170
20:00	1	5	5	18	63	84	74	31	14	4	3	1	0	0	303	36-45	158
21:00	2	0	4	17	45	65	59	19	9	2	1	1	0	0	224	36-45	124
22:00	1	2	10	12	53	74	61	16	9	2	0	1	0	0	241	36-45	135
23:00	3	2	1	14	43	64	45	17	7	3	1	0	0	0	200	36-45	109
Total	52	73	156	466	1220	1806	1551	712	283	83	22	3	0	0	6427		
Percent	0.8%	1.1%	2.4%	7.3%	19.0%	28.1%	24.1%	11.1%	4.4%	1.3%	0.3%	0.0%	0.0%	0.0%			
AM Peak	07:00	07:00	09:00	11:00	11:00	11:00	11:00	11:00	09:00	00:00	07:00				11:00		
Vol.	8	4	7	20	62	120	119	50	28	7	3				409		
PM Peak	17:00	12:00	12:00	16:00	16:00	12:00	16:00	12:00	12:00	12:00	16:00	20:00			12:00		
Vol.	8	11	25	49	114	151	127	60	23	6	5	1			542		

Route 75 South of Elm Street Windsor Locks, Connecticut

Site Code: Station ID: 5748

Latitude: 0' 0.0000 Undefined

Southbound																	
Start	1	16	21	26	31	36	41	46	51	56	61	66	71	76		Pace	Number
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	Speed	in Pace
10/31/22	0	1	3	8	33	45	51	25	13	5	0	0	0	0	184	36-45	96
01:00	0	0	0	6	16	27	24	17	8	3	2	0	0	0	103	36-45	51
02:00	0	0	2	4	11	13	17	11	2	2	0	0	0	0	62	36-45	30
03:00	0	0	1	3	14	17	19	11	8	2	1	0	0	0	76	36-45	36
04:00	1	0	0	5	20	42	24	21	3	2	0	0	0	0	118	36-45	66
05:00	1	1	3	12	36	48	45	21	12	3	0	0	0	0	182	36-45	93
06:00	0	4	7	19	49	76	73	44	16	3	3	0	0	0	294	36-45	149
07:00	2	3	15	33	75	94	90	70	32	10	6	0	0	0	430	36-45	184
08:00	1	0	12	26	47	92	87	48	15	9	2	2	1	0	342	36-45	179
09:00	4	8	22	40	66	98	87	35	12	5	2	0	0	0	379	36-45	185
10:00	3	7	15	41	84	110	73	45	6	3	3	0	0	0	390	31-40	194
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
12 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
14:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
15:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
16:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
17:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
18:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
21:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
22:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
23:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total	12	24	80	197	451	662	590	348	127	47	19	2	1	0	2560		
Percent	0.5%	0.9%	3.1%	7.7%	17.6%	25.9%	23.0%	13.6%	5.0%	1.8%	0.7%	0.1%	0.0%	0.0%			
AM Peak	09:00	09:00	09:00	10:00	10:00	10:00	07:00	07:00	07:00	07:00	07:00	08:00	08:00		07:00		
Vol.	4	8	22	41	84	110	90	70	32	10	6	2	11		430		
PM Peak Vol.											·						
Total	351	655	1339	3308	7223	9894	7555	3789	1324	410	107	20	6	0	35981		
Percent	1.0%	1.8%	3.7%	9.2%	20.1%	27.5%	21.0%	10.5%	3.7%	1.1%	0.3%	0.1%	0.0%	0.0%			
. 0.00	,		C41- Danasa		20.170	,	, 0	. 0.0 , 3	J ,J	,5	0.0,0	0,5	0.0,0	0.073			

15th Percentile: 29 MPH 50th Percentile: 37 MPH 85th Percentile: 45 MPH 95th Percentile: 50 MPH

Stats 10 MPH Pace Speed: 36-45 MPH Number in Pace: 17449

Percent in Pace : 17449

Percent in Pace : 48.5%

Number of Vehicles > 45 MPH : 5656

Percent of Vehicles > 45 MPH : 15.7%

Mean Speed(Average) : 38 MPH

Route 75 at South of Elm Street (NB) Windsor Locks, Connecticut

Site Code: Station ID: 5807

Latitude: 0' 0.0000 Undefined

Start Time	Mon 06-Feb-23	Tue 07-Feb-23	Wed 08-Feb-23	Thu 09-Feb-23	Fri 10-Feb-23	Week Day Average	Sat 11-Feb-23	Sun 12-Feb-23	Week Average
12:00 AM	*	*	*	174	190	182	191	185	185
01:00	*	*	*	155	174	164	178	113	155
02:00	*	*	*	88	99	94	102	70	90
03:00	*	*	*	61	60	60	62	62	61
04:00	*	*	*	106	128	117	98	75	102
05:00	*	*	*	148	140	144	124	86	124
06:00	*	*	*	127	130	128	100	79	109
07:00	*	*	*	233	204	218	110	89	159
08:00	*	*	*	290	337	314	142	109	220
09:00	*	*	*	449	387	418	206	154	299
10:00	*	*	*	376	355	366	261	187	295
11:00	*	*	*	339	430	384	373	243	346
12:00 PM	*	*	321	381	436	379	365	311	363
01:00	*	*	516	491	516	508	461	301	457
02:00	*	*	498	490	569	519	456	394	481
03:00	*	*	460	487	537	495	405	352	448
04:00	*	*	497	500	579	525	380	338	459
05:00	*	*	552	643	640	612	403	336	515
06:00	*	*	571	551	551	558	349	310	466
07:00	*	*	525	524	472	507	368	265	431
08:00	*	*	327	488	359	391	319	194	337
09:00	*	*	273	319	316	303	229	145	256
10:00	*	*	263	233	295	264	199	141	226
11:00	*	*	193	212	218	208	205	106	187
Total	0	0	4996	7865	8122	7858	6086	4645	6771

Daily
Date Total
09-Feb-23 7865
10-Feb-23 8122
Average 7994

Route 75 at South of Elm Street (NB) Windsor Locks, Connecticut

Site Code: Station ID: 5807

Start	Mon	Tue	Wed	Thu	Fri	Week Day	Sat	Sun	Week
Time	13-Feb-23	14-Feb-23	15-Feb-23	16-Feb-23	17-Feb-23	Average	18-Feb-23	19-Feb-23	Average
12:00 AM	179	164	*	*	*	172	*	*	172
01:00	121	136	*	*	*	128	*	*	128
02:00	57	97	*	*	*	77	*	*	77 🔃
03:00	51	82	*	*	*	66	*	*	66
04:00	90	121	*	*	*	106	*	*	106
05:00	90	136	*	*	*	113	*	*	113
06:00	112	124	*	*	*	118	*	*	118
07:00	169	240	*	*	*	204	*	*	204
08:00	260	308	*	*	*	284	*	*	284
09:00	367	415	*	*	*	391	*	*	391
10:00	396	375	*	*	*	386	*	*	386
11:00	359	375	*	*	*	367	*	*	367
12:00 PM	378	391	*	*	*	384	*	*	384
01:00	503	473	*	*	*	488	*	*	488
02:00	468	457	*	*	*	462	*	*	462
03:00	407	233	*	*	*	320	*	*	320
04:00	452	*	*	*	*	452	*	*	452
05:00	580	*	*	*	*	580	*	*	580
06:00	511	*	*	*	*	511	*	*	511
07:00	415	*	*	*	*	415	*	*	415
08:00	319	*	*	*	*	319	*	*	319
09:00	262	*	*	*	*	262	*	*	262
10:00	237	*	*	*	*	237	*	*	237
11:00	175	*	*	*	*	175	*	*	175
Total	6958	4127	0	0	0	7017	0	0	7017
Date 13-Feb-23	Daily Total 6958								
Grand Total	6958	4127	4996	7865	8122	14875	6086	4645	13788

Route 75 South of Elm Street (Southbound Only) Windsor Locks, Connecticut

Site Code: Station ID: 5748

Start	24-Oc	t-22	Tu	ie	W	ed	TI	าน	F	ri	Weekday	Average	S	at	Su	n
Time	Northboud	Southbo	Northbou	Southbo	Northbou	Southbo	Northbou	Southbo	Northbou	Southbo	Northbou	Southbo	Northbou	Southbo	Northbou	Southbo
Tille	Northboud	und	d	und	d	und	d	und	d	und	d	und	d	und	d	und
12:00 AM	*	*	*	*	*	*	113	169	0	210	56	190	2	223	1	172
01:00	*	*	*	*	*	*	78	119	0	98	39	108	0	92	2	91
02:00	*	*	*	*	*	*	100	81	1	72	50	76	0	66	0	46
03:00	*	*	*	*	*	*	128	71	0	68	64	70	0	68	0	43
04:00	*	*	*	*	*	*	139	114	1	115	70	114	0	83	1	55
05:00	*	*	*	*	*	*	216	216	0	203	108	210	0	86	0	71
06:00	*	*	*	*	*	*	282	278	2	310	142	294	3	133	0	92
07:00	*	*	*	*	*	*	405	485	0	464	202	474	0	225	0	204
08:00	*	*	*	*	*	*	441	432	4	399	222	416	0	301	1	219
09:00	*	*	*	*	*	*	281	421	3	434	142	428	1	381	0	285
10:00	*	*	*	*	*	*	6	366	4	408	5	387	1	426	1	302
11:00	*	*	*	*	*	*	1	529	1	534	1	532	3	449	3	409
12:00 PM	*	*	*	*	*	*	1	588	4	644	2	616	3	462	3	542
01:00	*	*	*	*	*	*	3	549	2	613	2	581	0	519	0	450
02:00	*	*	*	*	*	*	4	572	2	577	3	574	5	480	2	420
03:00	*	*	*	*	570	0	1	613	1	643	191	419	5	489	1	431
04:00	*	*	*	*	586	0	4	623	4	651	198	425	3	525	0	537
05:00	*	*	*	*	554	0	4	631	3	616	187	416	3	517	4	433
06:00	*	*	*	*	407	0	3	575	1	593	137	389	1	477	2	346
07:00	*	*	*	*	302	0	1	447	2	494	102	314	1	368	1	311
08:00	*	*	*	*	270	6	2	376	1	423	91	268	6	320	0	303
09:00	*	*	*	*	195	350	1	341	0	345	65	345	1	292	1	224
10:00	*	*	*	*	171	234	1	278	5	317	59	276	0	259	0	241
11:00	*	*	*	*	146	239	2	264	1	277	50	260	0	278	0	200
Total	0	0	0	0	3201	829	2217	9138	42	9508	2188	8182	38	7519	23	6427
Day	0		0		403	80	113	55	955	50	103	70	755	57	6450)
AM Peak	-	-	-	-	-	-	08:00	11:00	08:00	11:00	08:00	11:00	06:00	11:00	11:00	11:00
Vol.			-		<u>-</u>		441	529	4	534	222	532	3	449	3	409
PM Peak	-	-	-	-	16:00	21:00	14:00	17:00	22:00	16:00	16:00	12:00	20:00	16:00	17:00	12:00
Vol.	-	-	-	-	586	350	4	631	5	651	198	616	6	525	4	542

Route 75 South of Elm Street (Southbound Only) Windsor Locks, Connecticut

Site Code: Station ID: 5748

Start	31-Oc	t-22	Τι		W		Th		F		Weekday		S		Sı	
Time	Northboud	Southbo	Northbou	Southbo	Northbou	Southbo	Northbou	Southbo	Northbou	Southbo	Northbou	Southbo	Northbou	Southbo	Northbou	Southbo
	Northboud	und	d	und	d	und	d	und	d	und	d	und	d	und	d	und
12:00 AM	2	184	*	*	*	*	*	*	*	*	2	184	*	*	*	*
01:00	0	103	*	*	*	*	*	*	*	*	0	103	*	*	*	*
02:00	0	62	*	*	*	*	*	*	*	*	0	62	*	*	*	*
03:00	0	76	*	*	*	*	*	*	*	*	0	76	*	*	*	*
04:00	2	118	*	*	*	*	*	*	*	*	2	118	*	*	*	*
05:00	0	182	*	*	*	*	*	*	*	*	0	182	*	*	*	*
06:00	2	294	*	*	*	*	*	*	*	*	2	294	*	*	*	*
07:00	2	430	*	*	*	*	*	*	*	*	2	430	*	*	*	*
08:00	1	342	*	*	*	*	*	*	*	*	1	342	*	*	*	*
09:00	3	379	*	*	*	*	*	*	*	*	3	379	*	*	*	*
10:00	0	390	*	*	*	*	*	*	*	*	0	390	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
12:00 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
03:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
04:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
05:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
06:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
07:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
08:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
09:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total	12	2560	0	0	0	0	0	0	0	0	12	2560	0	0	0	0
Day	257		0		0		0		0		257		0		0	
AM Peak	09:00	07:00	-	_	-	-	-	_	-	-	09:00	07:00	-	-	-	_
Vol.	3	430	-	_	-	-	-	_	-	-	3	430	-	-	-	-
PM Peak	-	-	-	_	-	_	_	-	-	-	_	-	-	-	-	-
Vol.	_	-	-	_	-	-	-	_	-	-	_	-	-	-	_	-
Comb.	25	72		0	4	1030	1	1355	c	9550	1	2942	7	' 557	G	6450
Total	23	12		J	7		'	1000	-	,,,,,,	1.	LU-12	•	001		7-100
ADT	۸ D	T 10,452	V V D.	T 10,452												

Elm Street East of County Road Windsor Locks, Connecticut

Site Code: Station ID: 5749

Eastbound															Latitude.	0.0000	Ondenned
Start	1	16	21	26	31	36	41	46	51	56	61	66	71	76		Pace	Number
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	Speed	in Pace
10/26/22	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
03:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
04:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
05:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
06:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
07:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
08:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
09:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
12 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
14:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
15:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
16:00	1	1	2	25	82	67	7	1	0	0	0	0	0	0	186	31-40	149
17:00	1	5	6	31	73	46	11	0	1	0	0	0	0	0	174	31-40	119
18:00	0	5	6	28	67	30	8	1	0	0	0	0	0	0	145	30-39	97
19:00	0	1	1	25	48	25	7	2	0	0	0	0	0	0	109	26-35	73
20:00	1	1	1	8	35	21	5	2	0	0	0	0	0	0	74	31-40	56
21:00	0	1	1	10	16	11	6	1	0	0	0	0	0	0	46	29-38	27
22:00	0	0	1	11	15	13	6	2	1	0	0	0	0	0	49	30-39	28
23:00	0	0	3	1	9	14	1	0	0	0	0	0	0	0	28	31-40	23
Total	3	14	21	139	345	227	51	9	2	0	0	0	0	0	811		
Percent	0.4%	1.7%	2.6%	17.1%	42.5%	28.0%	6.3%	1.1%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak																	
Vol.																	
PM Peak	16:00	17:00	17:00	17:00	16:00	16:00	17:00	19:00	17:00						16:00		
Vol.	1	5	6	31	82	67	11	2	1						186		

Elm Street East of County Road Windsor Locks, Connecticut

Site Code: Station ID: 5749

Eastbound																	
Start	1	16	21	26	31	36	41	46	51	56	61	66	71	76		Pace	Number
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	Speed	in Pace
10/27/22	0	0	2	1	10	7	5	1	0	0	0	0	0	0	26	31-40	17
01:00	0	0	0	3	8	5	2	0	0	0	0	0	0	0	18	31-40	13
02:00	0	0	0	0	9	5	3	0	0	0	0	0	0	0	17	31-40	14
03:00	0	0	0	6	6	3	0	0	0	0	0	0	0	0	15	26-35	12
04:00	0	0	1	5	9	4	3	0	0	0	0	0	0	0	22	26-35	14
05:00	0	0	2	9	19	16	1	1	0	0	0	0	0	0	48	31-40	35
06:00	0	0	3	21	45	20	4	0	0	0	0	0	0	0	93	26-35	66
07:00	0	1	5	32	48	28	5	0	1	0	0	0	0	0	120	26-35	80
08:00	1	2	3	25	33	35	5	0	0	0	0	0	0	0	104	31-40	68
09:00	2	3	4	26	46	28	7	1	0	1	0	0	0	0	118	31-40	74
10:00	0	2	5	27	41	27	3	0	0	0	0	0	0	0	105	31-40	68
11:00	1	2	4	34	87	46	11	1	0	0	0	0	0	0	186	31-40	133
12 PM	1	2	10	26	67	45	15	0	1	0	0	0	0	0	167	31-40	112
13:00	0	4	6	28	61	45	10	3	1	0	0	0	0	0	158	31-40	106
14:00	0	4	8	33	74	51	18	0	1	0	0	0	0	0	189	31-40	125
15:00	0	1	2	34	84	71	17	1	0	0	0	0	0	0	210	31-40	155
16:00	1	1	1	32	84	81	20	1	1	1	0	0	0	0	223	31-40	165
17:00	1	4	9	24	81	56	15	1	0	0	0	0	0	0	191	31-40	137
18:00	1	1	4	23	66	42	14	1	0	0	0	0	0	0	152	31-40	108
19:00	0	4	2	21	32	33	10	1	0	0	0	0	0	0	103	31-40	65
20:00	1	0	1	10	33	26	5	0	0	0	0	0	0	0	76	31-40	59
21:00	0	1	2	12	29	20	3	0	0	0	0	0	0	0	67	31-40	49
22:00	0	0	2	5	11	11	7	1	1	0	0	0	0	0	38	31-40	22
23:00	0	1	1	5	19	16	3	3	0	0	0	0	0	0	48	31-40	35
Total	9	33	77	442	1002	721	186	16	6	2	0	0	0	0	2494		
Percent	0.4%	1.3%	3.1%	17.7%	40.2%	28.9%	7.5%	0.6%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%			
AM Peak	09:00	09:00	07:00	11:00	11:00	11:00	11:00	00:00	07:00	09:00					11:00		
Vol.	2	33	5_	34	87	46	11	1	11	1					186		
PM Peak	12:00	13:00	12:00	15:00	15:00	16:00	16:00	13:00	12:00	16:00					16:00		
Vol.	1	4	10	34	84	81	20	3	1	1					223		

Elm Street East of County Road Windsor Locks, Connecticut

Site Code: Station ID: 5749

Eastbound																	
Start	1	16	21	26	31	36	41	46	51	56	61	66	71	76		Pace	Number
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	Speed	in Pace
10/28/22	0	0	1	4	3	6	1	0	0	0	0	0	0	0	15	31-40	9
01:00	0	0	0	2	6	1	3	0	0	0	0	0	0	0	12	26-35	8
02:00	0	0	1	1	3	3	3	0	0	0	0	0	0	0	11	30-39	6
03:00	0	0	1	1	7	2	1	0	0	0	0	0	0	0	12	31-40	9
04:00	0	0	0	2	9	4	0	0	0	0	0	0	0	0	15	30-39	13
05:00	0	2	4	16	26	11	3	1	0	0	0	0	0	0	63	26-35	42
06:00	0	0	2	13	36	18	7	0	0	0	0	0	0	0	76	31-40	54
07:00	0	1	5	22	47	32	2	0	0	0	0	0	0	0	109	31-40	79
08:00	1	3	4	22	55	35	6	1	0	0	0	0	0	0	127	31-40	90
09:00	0	0	8	16	51	28	8	0	0	0	0	1	0	0	112	31-40	79
10:00	1	4	4	23	61	46	4	1	0	0	0	0	0	0	144	31-40	107
11:00	0	3	9	36	59	50	8	2	0	0	0	0	0	0	167	31-40	109
12 PM	0	3	4	28	87	67	13	2	1	0	0	0	0	0	205	31-40	154
13:00	0	0	6	34	77	41	12	1	1	0	0	0	0	0	172	31-40	118
14:00	0	1	11	28	80	67	16	2	0	0	0	0	0	0	205	31-40	147
15:00	0	3	1	28	100	86	22	1	0	0	0	0	0	0	241	31-40	186
16:00	0	6	7	33	73	71	18	1	0	0	0	0	0	0	209	31-40	144
17:00	0	1	5	23	68	61	8	2	0	0	0	0	0	0	168	31-40	129
18:00	0	2	2	24	49	26	7	1	0	0	0	0	0	0	111	31-40	75
19:00	0	2	5	24	53	35	7	0	0	0	0	0	0	0	126	31-40	88
20:00	0	1	3	16	43	21	4	1	0	0	0	0	0	0	89	31-40	64
21:00	1	0	0	12	27	26	5	0	0	0	0	0	0	0	71	31-40	53
22:00	0	1	2	9	17	22	3	0	0	0	0	0	0	0	54	31-40	39
23:00	0	0	0	5	18	14	2	0	0	0	0	0	0	0	39	31-40	32
Total	3	33	85	422	1055	773	163	16	2	0	0	1	0	0	2553		
Percent	0.1%	1.3%	3.3%	16.5%	41.3%	30.3%	6.4%	0.6%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	08:00	10:00	11:00	11:00	10:00	11:00	09:00	11:00				09:00			11:00		
Vol.	11	4	9	36	61	50	8	2				11			167		
PM Peak	21:00	16:00	14:00	13:00	15:00	15:00	15:00	12:00	12:00						15:00		
Vol.	1	6	11	34	100	86	22	2	1						241		

Elm Street East of County Road Windsor Locks, Connecticut

Site Code: Station ID: 5749

Eastbound															Lamado.	0.0000	Ondomioa
Start	1	16	21	26	31	36	41	46	51	56	61	66	71	76		Pace	Number
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	Speed	in Pace
10/29/22	0	0	0	6	7	8	3	0	0	0	0	0	0	0	24	30-39	15
01:00	0	0	2	2	8	3	2	0	0	0	0	0	0	0	17	31-40	11
02:00	0	0	0	1	9	2	0	0	0	0	0	0	0	0	12	29-38	11
03:00	0	0	1	1	6	5	0	0	0	0	0	0	0	0	13	31-40	11
04:00	0	0	0	1	4	4	1	0	0	0	0	0	0	0	10	31-40	8
05:00	0	0	0	6	9	7	0	1	0	0	0	0	0	0	23	29-38	16
06:00	0	0	1	11	16	12	4	1	0	0	0	0	0	0	45	29-38	28
07:00	1	0	2	9	22	18	4	0	0	0	0	0	0	0	56	31-40	40
08:00	0	0	1	26	46	38	10	2	0	0	0	0	0	0	123	31-40	84
09:00	0	1	7	21	42	47	8	1	0	0	0	0	0	0	127	31-40	89
10:00	0	3	7	28	70	42	11	2	1	0	0	0	0	0	164	31-40	112
11:00	1	0	7	15	62	65	9	3	0	0	0	0	0	0	162	31-40	127
12 PM	0	2	2	23	61	68	12	5	0	0	0	0	0	0	173	31-40	129
13:00	0	0	6	15	73	53	11	2	0	0	0	0	0	0	160	31-40	126
14:00	0	4	10	23	66	46	11	1	1	2	0	0	0	0	164	31-40	112
15:00	0	2	4	12	63	44	17	0	1	0	0	0	0	0	143	31-40	107
16:00	0	2	5	20	57	47	9	3	0	0	0	0	0	0	143	31-40	104
17:00	0	4	5	25	70	41	13	2	0	0	0	0	0	0	160	31-40	111
18:00	0	4	2	25	50	39	2	3	0	0	0	0	0	0	125	31-40	89
19:00	0	1	4	15	39	37	7	2	0	0	0	0	0	0	105	31-40	76
20:00	0	2	4	15	32	23	3	1	0	0	0	0	0	0	80	31-40	55
21:00	0	0	1	10	29	25	5	2	1	0	0	0	0	0	73	31-40	54
22:00	0	0	2	10	12	15	7	1	0	0	0	0	0	0	47	31-40	27
23:00	0	0	1	9	14	9	3	0	0	0	0	0	0	0	36	31-40	23
Total	2	25	74	329	867	698	152	32	4	2	0	0	0	0	2185		
Percent	0.1%	1.1%	3.4%	15.1%	39.7%	31.9%	7.0%	1.5%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%			
AM Peak	07:00	10:00	09:00	10:00	10:00	11:00	10:00	11:00	10:00						10:00		
Vol.	1	3	7	28	70	65	11	3	1 1	44.00					164		
PM Peak		14:00	14:00	17:00	13:00	12:00	15:00	12:00	14:00	14:00					12:00		
Vol.		4	10	25	73	68	17	5	1	2					173		

Elm Street East of County Road Windsor Locks, Connecticut

Site Code: Station ID: 5749

Eastbound															Lamado.	0.0000	Onaomioa
Start	1	16	21	26	31	36	41	46	51	56	61	66	71	76		Pace	Number
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	Speed	in Pace
10/30/22	0	0	0	3	13	9	5	1	0	0	0	0	0	0	31	31-40	22
01:00	0	0	0	4	10	1	0	0	0	0	0	0	0	0	15	26-35	14
02:00	0	0	0	1	1	4	0	1	0	0	0	0	0	0	7	31-40	5
03:00	0	0	0	2	4	0	0	0	0	0	0	0	0	0	6	26-35	6
04:00	0	0	0	2	5	3	0	0	0	0	0	0	0	0	10	29-38	8
05:00	0	0	0	4	6	2	2	1	0	0	0	0	0	0	15	26-35	10
06:00	0	1	0	9	11	9	5	1	0	0	0	0	0	0	36	26-35	20
07:00	0	0	2	10	19	9	1	0	0	0	0	0	0	0	41	26-35	29
08:00	0	1	3	19	25	28	7	0	0	0	0	0	0	0	83	31-40	53
09:00	0	2	3	24	37	24	8	2	0	0	0	0	0	0	100	26-35	61
10:00	1	4	0	30	41	42	12	1	0	0	0	0	0	0	131	31-40	83
11:00	1	1	4	15	65	35	15	2	0	0	0	0	0	0	138	31-40	100
12 PM	0	2	4	34	55	63	10	2	0	1	0	0	0	0	171	31-40	118
13:00	1	0	3	14	50	46	9	0	1	0	0	0	0	0	124	31-40	96
14:00	1	1	1	23	49	47	13	2	0	1	0	0	0	0	138	31-40	96
15:00	0	5	5	32	48	40	20	1	1	0	0	0	0	0	152	31-40	88
16:00	0	0	1	19	24	49	8	0	0	0	0	0	0	0	101	31-40	73
17:00	0	0	1	14	57	27	8	3	0	0	1	0	0	0	111	31-40	84
18:00	0	0	2	15	26	20	7	0	1	0	1	0	0	0	72	31-40	46
19:00	0	0	4	12	41	24	4	1	0	0	0	0	0	0	86	31-40	65
20:00	0	0	2	11	17	22	4	0	0	0	0	0	0	0	56	31-40	39
21:00	0	0	1	9	16	10	2	2	0	0	0	0	0	0	40	29-38	26
22:00	0	0	0	8	9	11	5	0	0	0	0	0	0	0	33	31-40	20
23:00	0	0	0	4	8	11	5	11	0	0	0	0	0	0	29	31-40	19
Total	4	17	36	318	637	536	150	21	3	2	2	0	0	0	1726		
Percent	0.2%	1.0%	2.1%	18.4%	36.9%	31.1%	8.7%	1.2%	0.2%	0.1%	0.1%	0.0%	0.0%	0.0%			
AM Peak	10:00	10:00	11:00	10:00	11:00	10:00	11:00	09:00							11:00		
Vol.	1	4	4	30	65	42	15	2							138		
PM Peak	13:00	15:00	15:00	12:00	17:00	12:00	15:00	17:00	13:00	12:00	17:00				12:00		
Vol.	1	5	5	34	57	63	20	3	1	1	1				171		

Elm Street East of County Road Windsor Locks, Connecticut

Site Code: Station ID: 5749

Latitude: 0' 0.0000 Undefined

Eastbound																	
Start	1	16	21	26	31	36	41	46	51	56	61	66	71	76		Pace	Number
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	Speed	in Pace
10/31/22	0	0	0	3	4	3	3	0	0	0	0	0	0	0	13	26-35	7
01:00	0	0	0	1	1	3	0	0	0	0	0	0	0	0	5	30-39	4
02:00	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	30-39	2
03:00	0	0	3	2	5	2	1	0	0	0	0	0	0	0	13	31-40	7
04:00	0	0	0	4	9	3	0	1	0	0	0	0	0	0	17	26-35	13
05:00	0	0	3	9	14	7	2	0	0	0	0	0	0	0	35	26-35	23
06:00	0	1	3	15	41	24	10	0	0	0	0	0	0	0	94	31-40	65
07:00	3	2	5	18	52	27	2	1	1	0	0	0	0	0	111	31-40	79
08:00	0	4	10	20	54	14	2	1	0	0	0	0	0	0	105	26-35	74
09:00	0	4	12	27	39	10	0	1	0	0	0	0	0	0	93	26-35	66
10:00	1	7	9	21	45	17	0	1	0	0	0	0	0	0	101	26-35	66
11:00	0	4	13	38	75	31	5	3	0	0	0	0	0	0	169	26-35	113
12 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
14:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
15:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
16:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
17:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
18:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
21:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
22:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
23:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total	4	22	58	158	339	143	25	8	1	0	0	0	0	0	758		
Percent	0.5%	2.9%	7.7%	20.8%	44.7%	18.9%	3.3%	1.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	07:00	10:00	11:00	11:00	11:00	11:00	06:00	11:00	07:00						11:00		
Vol.	3	7	13	38	75	31	10	3	1						169		
PM Peak																	
Vol.																	
Total	25	144	351	1808	4245	3098	727	102	18	6	2	1	0	0	10527		
Percent	0.2%	1.4%	3.3%	17.2%	40.3%	29.4%	6.9%	1.0%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%			
		- 4	Cth Danasa	411-	07 MDLL												

15th Percentile: 27 MPH 50th Percentile: 33 MPH 85th Percentile: 38 MPH 95th Percentile: 42 MPH

Stats 10 MPH Pace Speed: 31-40 MPH

 Number in Pace :
 7343

 Percent in Pace :
 69.8%

 Number of Vehicles > 35 MPH :
 3954

 Percent of Vehicles > 35 MPH :
 37.6%

 Mean Speed(Average) :
 34 MPH

Elm Street East of County Road Windsor Locks, Connecticut

Site Code: Station ID: 5749

Westbound															Lantado.	0.0000	Ondomio
Start	1	16	21	26	31	36	41	46	51	56	61	66	71	76		Pace	Number
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	Speed	in Pace
10/26/22	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
03:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
04:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
05:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
06:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
07:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
08:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
09:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
12 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
14:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
15:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
16:00	0	2	1	3	25	54	38	15	4	0	0	0	0	0	142	36-45	92
17:00	1	1	1	9	38	55	46	9	3	1	0	0	0	0	164	36-45	101
18:00	0	1	4	12	38	42	15	5	0	0	0	0	0	0	117	31-40	80
19:00	0	0	0	16	32	35	10	2	0	0	0	0	0	0	95	31-40	67
20:00	0	0	1	5	13	26	6	2	2	0	0	0	0	0	55	31-40	39
21:00	0	0	2	2	11	16	6	3	1	0	1	0	0	0	42	31-40	27
22:00	0	0	0	3	8	17	10	4	1	0	0	0	0	0	43	35-44	27
23:00	0	2	0	1	8	11	7	1	1	0	2	0	0	0	33	31-40	19
Total	1	6	9	51	173	256	138	41	12	1	3	0	0	0	691		
Percent	0.1%	0.9%	1.3%	7.4%	25.0%	37.0%	20.0%	5.9%	1.7%	0.1%	0.4%	0.0%	0.0%	0.0%			
AM Peak																	
Vol.																	
PM Peak	17:00	16:00	18:00	19:00	17:00	17:00	17:00	16:00	16:00	17:00	23:00				17:00		
Vol.	1	2	4	16	38	55	46	15	4	1	2				164		

Elm Street East of County Road Windsor Locks, Connecticut

Site Code: Station ID: 5749

Westbound																	
Start	1	16	21	26	31	36	41	46	51	56	61	66	71	76		Pace	Number
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	Speed	in Pace
10/27/22	0	0	0	2	3	5	2	1	0	0	0	0	0	0	13	31-40	8
01:00	0	0	0	0	3	3	5	1	0	0	0	0	0	0	12	36-45	8
02:00	0	0	0	1	1	8	8	2	0	0	0	0	0	0	20	36-45	16
03:00	0	0	1	3	6	9	6	5	1	1	0	0	0	0	32	31-40	15
04:00	0	0	0	2	7	11	9	3	1	0	0	0	0	0	33	35-44	20
05:00	0	0	2	4	16	33	15	3	0	0	0	0	0	0	73	31-40	49
06:00	0	1	2	14	38	61	15	7	0	0	0	0	0	0	138	31-40	99
07:00	1	1	7	10	33	78	36	4	2	0	0	0	0	0	172	36-45	114
08:00	0	0	3	12	21	57	26	7	1	0	0	0	0	0	127	36-45	83
09:00	2	1	0	15	44	59	21	4	2	0	0	0	0	0	148	31-40	103
10:00	0	0	2	13	37	55	26	7	2	0	0	0	0	0	142	31-40	92
11:00	0	4	6	13	46	70	21	7	0	0	0	0	0	0	167	31-40	116
12 PM	0	1	2	10	48	61	26	5	1	0	0	0	0	0	154	31-40	109
13:00	1	1	1	5	39	68	37	11	3	0	0	0	0	0	166	31-40	107
14:00	1	2	1	5	35	66	50	11	3	1	0	0	0	0	175	36-45	116
15:00	0	1	3	5	52	48	40	8	2	0	0	0	0	0	159	31-40	100
16:00	1	1	2	4	37	73	49	11	2	0	0	0	0	0	180	36-45	122
17:00	1	2	3	15	34	62	34	9	2	0	0	0	0	0	162	36-45	96
18:00	0	4	3	9	33	39	21	5	0	0	0	0	0	0	114	31-40	72
19:00	1	0	1	9	27	31	16	5	1	0	0	0	0	0	91	31-40	58
20:00	1	1	4	3	16	22	8	3	0	0	0	0	0	0	58	31-40	38
21:00	0	0	0	6	11	17	8	1	0	0	0	0	0	0	43	31-40	28
22:00	0	0	1	2	9	9	7	5	1	1	1	0	0	0	36	31-40	18
23:00	0	0	2	1	7	11	11	11	2	0	0	0	0	0	35	36-45	22
Total	9	20	46	163	603	956	497	126	26	3	1	0	0	0	2450		
Percent	0.4%	0.8%	1.9%	6.7%	24.6%	39.0%	20.3%	5.1%	1.1%	0.1%	0.0%	0.0%	0.0%	0.0%			
AM Peak	09:00	11:00	07:00	09:00	11:00	07:00	07:00	06:00	07:00	03:00					07:00		
Vol.	2	4	7	15	46	78	36	7	2	1_					172		
PM Peak	13:00	18:00	20:00	17:00	15:00	16:00	14:00	13:00	13:00	14:00	22:00				16:00		
Vol.	1	4	4	15	52	73	50	11	3	1	1				180		

Elm Street East of County Road Windsor Locks, Connecticut

Site Code: Station ID: 5749

Westbound																	
Start	1	16	21	26	31	36	41	46	51	56	61	66	71	76		Pace	Number
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	Speed	in Pace
10/28/22	0	0	0	2	3	6	2	1	0	0	0	0	0	0	14	31-40	9
01:00	0	0	0	2	2	2	4	0	1	1	0	0	0	0	12	36-45	6
02:00	0	0	0	1	6	4	2	1	1	1	0	0	0	0	16	31-40	10
03:00	0	0	0	1	11	14	8	3	1	0	0	0	0	0	38	31-40	25
04:00	0	0	0	2	7	16	7	3	0	0	0	0	0	0	35	36-45	23
05:00	0	1	0	6	22	26	12	5	1	1	0	0	0	0	74	31-40	48
06:00	0	0	1	13	38	60	25	5	4	0	0	0	0	0	146	31-40	98
07:00	3	1	0	14	40	54	39	4	1	0	0	0	0	0	156	31-40	94
08:00	0	2	5	20	26	57	22	8	0	0	0	0	0	0	140	31-40	83
09:00	0	1	1	13	53	59	26	6	0	0	0	0	0	0	159	31-40	112
10:00	0	0	8	13	42	48	26	2	0	0	0	0	0	0	139	31-40	90
11:00	0	1	2	13	47	70	33	10	1	0	0	0	0	0	177	31-40	117
12 PM	0	0	2	10	45	67	39	5	1	0	0	0	0	0	169	31-40	112
13:00	2	1	4	23	69	69	31	8	1	0	0	0	0	0	208	31-40	138
14:00	0	2	2	6	47	86	45	9	2	1	0	0	0	0	200	31-40	133
15:00	1	3	2	9	46	68	40	8	4	1	0	0	0	0	182	31-40	114
16:00	0	0	2	15	48	46	34	8	3	1	0	0	0	0	157	31-40	94
17:00	0	1	4	10	43	62	39	6	1	0	0	0	0	0	166	31-40	105
18:00	0	4	2	13	26	32	19	3	0	0	0	0	0	0	99	31-40	58
19:00	2	1	1	5	36	38	9	3	2	0	0	0	0	0	97	31-40	74
20:00	0	0	1	7	20	24	10	2	1	0	0	0	0	0	65	31-40	44
21:00	0	1	0	8	9	16	15	4	1	0	0	0	0	0	54	36-45	31
22:00	0	0	0	5	8	14	7	4	0	1	0	0	0	0	39	31-40	22
23:00	0	1	0	2	10	14	6	1	0	0	0	0	0	0	34	31-40	24
Total	8	20	37	213	704	952	500	109	26	7	0	0	0	0	2576		
Percent	0.3%	0.8%	1.4%	8.3%	27.3%	37.0%	19.4%	4.2%	1.0%	0.3%	0.0%	0.0%	0.0%	0.0%			
AM Peak	07:00	08:00	10:00	08:00	09:00	11:00	07:00	11:00	06:00	01:00					11:00		
Vol.	3	2	8	20	53	70	39	10	4	1					177		
PM Peak	13:00	18:00	13:00	13:00	13:00	14:00	14:00	14:00	15:00	14:00					13:00		
Vol.	2	4	4	23	69	86	45	9	4	1					208		

Elm Street East of County Road Windsor Locks, Connecticut

Site Code: Station ID: 5749

Westbound															Latitado.	0.0000	Ondomioa
Start	1	16	21	26	31	36	41	46	51	56	61	66	71	76		Pace	Number
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	Speed	in Pace
10/29/22	0	0	0	3	2	4	2	2	0	0	0	0	0	0	13	36-45	6
01:00	0	0	0	0	3	5	3	1	0	0	0	0	0	0	12	31-40	8
02:00	0	0	0	0	3	9	3	1	0	0	0	0	0	0	16	31-40	12
03:00	0	0	0	0	4	3	8	1	0	0	0	1	0	0	17	36-45	11
04:00	0	0	2	2	7	10	5	1	0	0	0	0	0	0	27	31-40	17
05:00	0	0	0	2	9	15	7	1	1	1	1	0	0	0	37	31-40	24
06:00	0	1	0	7	16	27	8	4	0	1	0	0	0	0	64	31-40	43
07:00	0	0	0	9	22	26	34	1	1	0	0	0	0	0	93	36-45	60
08:00	0	3	1	6	30	65	22	8	1	0	0	0	0	0	136	31-40	95
09:00	0	0	0	8	46	64	44	9	0	0	0	0	0	0	171	31-40	110
10:00	0	0	6	10	63	65	23	8	1	0	0	0	0	0	176	31-40	128
11:00	0	0	2	8	29	74	39	7	1	0	0	0	0	0	160	36-45	113
12 PM	1	1	0	6	25	66	47	19	0	0	0	0	0	0	165	36-45	113
13:00	0	3	3	12	32	73	48	8	1	0	0	0	0	0	180	36-45	121
14:00	0	0	0	10	32	64	41	17	2	0	0	0	0	0	166	36-45	105
15:00	0	0	1	5	26	68	30	11	1	2	0	0	0	0	144	36-45	98
16:00	0	1	2	4	41	62	36	7	1	0	0	0	0	0	154	31-40	103
17:00	0	0	1	9	48	58	34	5	3	0	0	0	0	0	158	31-40	106
18:00	0	0	3	14	37	37	21	4	0	0	0	0	0	0	116	31-40	74
19:00	0	1	1	15	23	32	17	5	2	0	1	0	0	0	97	31-40	55
20:00	0	0	0	6	16	32	11	4	0	0	0	0	0	0	69	31-40	48
21:00	0	0	2	4	16	19	16	3	1	0	0	0	0	0	61	36-45	35
22:00	0	0	1	5	7	18	3	2	0	0	0	0	0	0	36	31-40	25
23:00	0	0	0	2	9	11	2	3	0	0	0	0	0	0	27	31-40	20
Total	1	10	25	147	546	907	504	132	16	4	2	1	0	0	2295		
Percent	0.0%	0.4%	1.1%	6.4%	23.8%	39.5%	22.0%	5.8%	0.7%	0.2%	0.1%	0.0%	0.0%	0.0%			
AM Peak		08:00	10:00	10:00	10:00	11:00	09:00	09:00	05:00	05:00	05:00	03:00			10:00		
Vol.		3	6	10	63	74	44	9	1_	1_	1	1			176		
PM Peak	12:00	13:00	13:00	19:00	17:00	13:00	13:00	12:00	17:00	15:00	19:00				13:00		
Vol.	1	3	3	15	48	73	48	19	3	2	1				180		

Elm Street East of County Road Windsor Locks, Connecticut

Site Code: Station ID: 5749

Westbound																	
Start	1	16	21	26	31	36	41	46	51	56	61	66	71	76		Pace	Number
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	Speed	in Pace
10/30/22	0	0	0	2	1	5	0	1	0	1	0	0	0	0	10	31-40	6
01:00	0	0	0	2	4	4	2	1	0	0	0	0	0	0	13	31-40	8
02:00	0	0	0	0	5	5	4	1	1	0	0	0	0	0	16	31-40	10
03:00	0	0	0	1	1	8	6	1	0	0	0	0	0	0	17	36-45	14
04:00	0	0	0	0	6	14	5	1	0	0	0	0	0	0	26	31-40	20
05:00	0	0	1	0	9	8	8	1	0	0	0	0	0	0	27	31-40	17
06:00	0	0	1	5	12	14	10	2	0	0	0	0	0	0	44	31-40	26
07:00	0	0	0	3	26	36	11	8	2	1	0	0	0	0	87	31-40	62
08:00	1	0	2	1	18	41	30	2	2	0	0	0	0	0	97	36-45	71
09:00	0	1	0	8	38	60	31	4	2	0	0	0	0	0	144	31-40	98
10:00	0	0	1	9	31	61	38	8	2	0	0	0	0	0	150	36-45	99
11:00	0	4	4	6	35	73	33	14	2	0	0	0	0	0	171	31-40	108
12 PM	0	3	2	4	31	62	40	7	3	1	0	0	0	0	153	36-45	102
13:00	1	1	0	3	24	58	39	13	3	0	0	0	0	0	142	36-45	97
14:00	0	1	1	5	19	62	35	12	1	1	0	0	1	0	138	36-45	97
15:00	1	1	0	11	25	43	45	8	1	0	0	0	0	0	135	36-45	88
16:00	0	0	3	2	15	31	38	9	0	0	1	0	0	0	99	36-45	69
17:00	0	0	0	7	35	37	20	3	1	1	0	0	0	0	104	31-40	72
18:00	0	1	1	6	21	37	13	3	2	0	0	0	0	0	84	31-40	58
19:00	0	0	0	8	31	28	9	4	2	0	0	0	0	0	82	31-40	59
20:00	0	0	0	5	10	24	8	0	1	0	0	0	0	0	48	31-40	34
21:00	0	0	1	1	8	11	11	1	1	0	0	0	0	0	34	36-45	22
22:00	0	0	2	1	7	10	5	4	0	0	0	0	0	0	29	31-40	17
23:00	0	0	0	1	3	12	4	1	1	0	0	0	0	0	22	34-43	16
Total	3	12	19	91	415	744	445	109	27	5	1_	0	1	0	1872		
Percent	0.2%	0.6%	1.0%	4.9%	22.2%	39.7%	23.8%	5.8%	1.4%	0.3%	0.1%	0.0%	0.1%	0.0%			
AM Peak	08:00	11:00	11:00	10:00	09:00	11:00	10:00	11:00	07:00	00:00					11:00		
Vol.	1	4	4	9	38	73	38	14	2	1					171		
PM Peak	13:00	12:00	16:00	15:00	17:00	12:00	15:00	13:00	12:00	12:00	16:00		14:00		12:00		
Vol.	1	3	3	11	35	62	45	13	3	1	1		1		153		

Elm Street East of County Road Windsor Locks, Connecticut

Site Code: Station ID: 5749

Latitude: 0' 0.0000 Undefined

Westbound																	
Start	1	16	21	26	31	36	41	46	51	56	61	66	71	76		Pace	Number
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	Speed	in Pace
10/31/22	0	0	0	0	2	4	3	0	0	0	0	0	0	0	9	34-43	7
01:00	0	0	0	0	0	3	1	0	0	1	0	0	0	0	5	36-45	4
02:00	0	0	0	0	0	8	2	1	1	0	0	0	0	0	12	36-45	10
03:00	0	0	0	3	5	11	6	5	0	0	0	0	0	0	30	34-43	17
04:00	0	0	1	6	7	16	9	1	1	0	0	0	0	0	41	35-44	25
05:00	0	0	0	3	22	22	13	4	2	0	0	0	0	0	66	31-40	44
06:00	0	0	2	15	36	64	34	8	1	0	0	0	0	0	160	31-40	100
07:00	2	3	5	13	52	57	30	2	0	0	0	0	0	0	164	31-40	109
08:00	0	0	10	21	45	39	13	2	0	0	0	0	0	0	130	31-40	84
09:00	1	8	18	25	35	28	10	2	0	0	0	0	0	0	127	31-40	63
10:00	3	12	20	10	39	33	18	5	0	0	0	0	0	0	140	31-40	72
11:00	0	2	7	19	50	60	19	6	0	0	0	0	0	0	163	31-40	110
12 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
14:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
15:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
16:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
17:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
18:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
21:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
22:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
23:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total	6	25	63	115	293	345	158	36	5	1	0	0	0	0	1047		
Percent	0.6%	2.4%	6.0%	11.0%	28.0%	33.0%	15.1%	3.4%	0.5%	0.1%	0.0%	0.0%	0.0%	0.0%			-
AM Peak	10:00	10:00	10:00	09:00	07:00	06:00	06:00	06:00	05:00	01:00					07:00		
Vol.	3	12	20	25	52	64	34	8	2	1					164		
PM Peak																	
Vol.																	
Total	28	93	199	780	2734	4160	2242	553	112	21	7	1	1	0	10931		
Percent	0.3%	0.9%	1.8%	7.1%	25.0%	38.1%	20.5%	5.1%	1.0%	0.2%	0.1%	0.0%	0.0%	0.0%			
			D		00 MDII	_											

15th Percentile: 30 MPH 36 MPH 50th Percentile: 42 MPH 85th Percentile: 95th Percentile: 46 MPH

10 MPH Pace Speed: 31-40 MPH Stats Number in Pace : 6894

63.1% Percent in Pace: 7097 Number of Vehicles > 35 MPH: Percent of Vehicles > 35 MPH: 64.9% 37 MPH

Mean Speed(Average):

Elm Street East of County Road Windsor Locks, Connecticut

Site Code: Station ID: 5749

Start	24-Oc	t-22	Tı	ue	W	ed	Т	hu	F	ri	Weekday	Average	S	at	Su	n
Time	Coathound	Westbou	Eastboun		Eastboun	Westbou	Eastboun	Westbou								
Time	Eastbound	nd	d	nd												
12:00 AM	*	*	*	*	*	*	26	13	15	14	20	14	24	13	31	10
01:00	*	*	*	*	*	*	18	12	12	12	15	12	17	12	15	13
02:00	*	*	*	*	*	*	17	20	11	16	14	18	12	16	7	16
03:00	*	*	*	*	*	*	15	32	12	38	14	35	13	17	6	17
04:00	*	*	*	*	*	*	22	33	15	35	18	34	10	27	10	26
05:00	*	*	*	*	*	*	48	73	63	74	56	74	23	37	15	27
06:00	*	*	*	*	*	*	93	138	76	146	84	142	45	64	36	44
07:00	*	*	*	*	*	*	120	172	109	156	114	164	56	93	41	87
08:00	*	*	*	*	*	*	104	127	127	140	116	134	123	136	83	97
09:00	*	*	*	*	*	*	118	148	112	159	115	154	127	171	100	144
10:00	*	*	*	*	*	*	105	142	144	139	124	140	164	176	131	150
11:00	*	*	*	*	*	*	186	167	167	177	176	172	162	160	138	171
12:00 PM	*	*	*	*	*	*	167	154	205	169	186	162	173	165	171	153
01:00	*	*	*	*	*	*	158	166	172	208	165	187	160	180	124	142
02:00	*	*	*	*	*	*	189	175	205	200	197	188	164	166	138	138
03:00	*	*	*	*	*	*	210	159	241	182	226	170	143	144	152	135
04:00	*	*	*	*	186	142	223	180	209	157	206	160	143	154	101	99
05:00	*	*	*	*	174	164	191	162	168	166	178	164	160	158	111	104
06:00	*	*	*	*	145	117	152	114	111	99	136	110	125	116	72	84
07:00	*	*	*	*	109	95	103	91	126	97	113	94	105	97	86	82
08:00	*	*	*	*	74	55	76	58	89	65	80	59	80	69	56	48
09:00	*	*	*	*	46	42	67	43	71	54	61	46	73	61	40	34
10:00	*	*	*	*	49	43	38	36	54	39	47	39	47	36	33	29
11:00	*	*	*	*	28	33	48	35	39	34	38	34	36	27	29	22
Total	0	0	0	0	811	691	2494	2450	2553	2576	2499	2506	2185	2295	1726	1872
Day	0		0)	150)2	494	14	512	29	500)5	448		3598	3
AM Peak	-	-	-	-	-	-	11:00	07:00	11:00	11:00	11:00	11:00	10:00	10:00	11:00	11:00
Vol.		-	-		-	-	186	172	167	177	176	172	164	176	138	171
PM Peak	-	-	-	-	16:00	17:00	16:00	16:00	15:00	13:00	15:00	14:00	12:00	13:00	12:00	12:00
Vol.	-	-	-	-	186	164	223	180	241	208	226	188	173	180	171	153

Elm Street East of County Road Windsor Locks, Connecticut

Site Code: Station ID: 5749

Start	31-00	t-22	Tu	ue	W	ed		hu	F		Weekday	Average		at	Sı	ın
Time	Eastbound	Westbou	Eastboun	Westbou	Eastboun	Westbou	Eastboun	Westbou	Eastboun	Westbou	Eastboun	Westbou	Eastboun	Westbou	Eastboun	Westbou
	Easibouriu	nd	d	nd	d	nd	d	nd	d	nd	d	nd	d	nd	d	nd
12:00 AM	13	9	*	*	*	*	*	*	*	*	13	9	*	*	*	*
01:00	5	5	*	*	*	*	*	*	*	*	5	5	*	*	*	*
02:00	2	12	*	*	*	*	*	*	*	*	2	12	*	*	*	*
03:00	13	30	*	*	*	*	*	*	*	*	13	30	*	*	*	*
04:00	17	41	*	*	*	*	*	*	*	*	17	41	*	*	*	*
05:00	35	66	*	*	*	*	*	*	*	*	35	66	*	*	*	*
06:00	94	160	*	*	*	*	*	*	*	*	94	160	*	*	*	*
07:00	111	164	*	*	*	*	*	*	*	*	111	164	*	*	*	*
08:00	105	130	*	*	*	*	*	*	*	*	105	130	*	*	*	*
09:00	93	127	*	*	*	*	*	*	*	*	93	127	*	*	*	*
10:00	101	140	*	*	*	*	*	*	*	*	101	140	*	*	*	*
11:00	169	163	*	*	*	*	*	*	*	*	169	163	*	*	*	*
12:00 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
03:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
04:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
05:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
06:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
07:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
08:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
09:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total	758	1047	0	0	0	0	0	0	0	0	758	1047	0	0	0	0
Day	180)5	0		0		0	1	0		180)5	0		0	
AM Peak	11:00	07:00	-	-	-	-	-	-	-	-	11:00	07:00	-	-	-	-
Vol.	169	164	-	-	-	-	-	-	-	-	169	164	-	-	-	-
PM Peak	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vol.	-	-	-	-	-	-	-	-	=	-	-	-	=	=	-	
Comb.	10	05		0	,	1502		1944	E	5129	c	810	,	1480	-	3598
Total	10	00		U		1002	2	+344	ξ) 1 2 3	C	0010	2	14 0U	`	0550
ADT	A	DT 5,036	AA	DT 5,036												

Kensington, Connecticut 06037 (860) 828-1693

Route 75 at Route 20 EB Ramps Windsor Locks, Connecticut File Name: 23660 Site Code: 23660

Start Date : 10/27/2022

Page No : 1

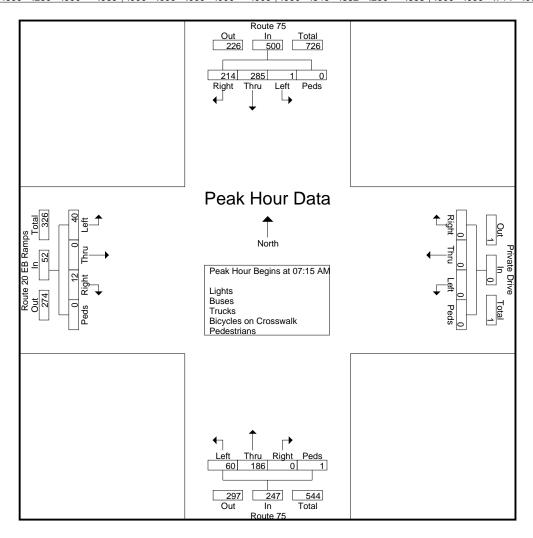
Groups Printed- Lights - Buses - Trucks - Bicycles on Crosswalk - Pedestrians

		F	Route	75	. осро.		Pri	vate E	Drive	TTGGRO	,	<u> </u>	Route	75		F	Route	20 EB	Ram	os	
		Fı	om No	orth			F	rom E	ast			Fr	om So	outh				rom W			
Start Time	Right	Thru	Left		App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left		App. Total	Int. Total
07:00 AM	53	50	0	0	103	0	0	0	0	0	0	33	7	0	40	4	0	5	0	9	152
07:15 AM	57	60	0	0	117	0	0	0	0	0	0	49	11	0	60	5	0	6	0	11	188
07:30 AM	54	71	0	0	125	0	0	0	0	0	0	46	17	1	64	1	0	10	0	11	200
07:45 AM	46	82	1	0	129	0	0	0	0	0	0	36	15	0	51	3	0	10	0	13	193
Total	210	263	1	0	474	0	0	0	0	0	0	164	50	1	215	13	0	31	0	44	733
MA 00:80	57	72	0	0	129	0	0	0	0	0	0	55	17	0	72	3	0	14	0	17	218
08:15 AM	44	55	2	0	101	0	0	0	0	0	0	53	10	0	63	1	0	17	0	18	182
08:30 AM	46	56	1	0	103	0	0	0	0	0	0	44	17	0	61	6	0	16	0	22	186
08:45 AM	53	41_	5	0	99	0	0	0	0	0	0	50	10	0	60	3	0	13	0	16	175
Total	200	224	8	0	432	0	0	0	0	0	0	202	54	0	256	13	0	60	0	73	761
Grand Total	410	487	9	0	906	0	0	0	0	0	0	366	104	1	471	26	0	91	0	117	1494
Apprch %	45.3	53.8	1	0		0	0	0	0		0	77.7	22.1	0.2		22.2	0	77.8	0		
Total %	27.4	32.6	0.6	0	60.6	0	0	0	0	0	0	24.5	7	0.1	31.5	1.7	0	6.1	0	7.8	
Lights	346	457	7	0	810	0	0	0	0	0	0	348	99	0	447	26	0	83	0	109	1366
<u>% Lights</u>	84.4	93.8	77.8	0	89.4	0	0	0	0	0	0	<u>95.1</u>	95.2	0_	94.9	100	0	91.2	0	93.2	91.4
Buses	2	8	0	0	10	0	0	0	0	0	0	5	2	0	7	0	0	4	0	4	21
<u>% Buses</u>	0.5	1.6 22	0	0 0	1.1	0	0	0 0	0	0	0	1.4	1.9	<u>0</u>	1.5 16	0	0 0	4.4	<u>0</u>	3.4	1.4
Trucks % Trucks	62 15.1	4.5	2 22.2	0	86 9.5	0	0	0	0	0	0	13 3.6	3 2.9	0	3.4	0	0	4 4.4	0	4 3.4	106 7.1
	15.1	4.5	22.2		9.5	U		- 0		0	0	3.0	2.9		3.4	U		4.4		3.4	7.1
Bicycles on Crosswalk % Bicycles on		_	_	_	_		_	_	_	_		_	_	_	_		_	_	_	_	
% Bicycles on Crosswalk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1
% Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	100	0.2	0	0	0	0	0	0.1

Kensington, Connecticut 06037 (860) 828-1693

File Name : 23660 Site Code : 23660 Start Date : 10/27/2022

		F	Route	75			Pri	vate D	rive			F	Route	75		I	Route	20 EE	Ram	os	
		Fr	om No	orth			F	rom E	ast			Fr	om So	outh			Fı	rom W	est		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour A	nalysi	s From	า 07:00	O AM to	o 08:45	AM - I	Peak 1	of 1													
Peak Hour fo	or Entii	re Inte	rsection	n Begi	ins at 0	7:15 A	.M														
07:15 AM	57	60	0	0	117	0	0	0	0	0	0	49	11	0	60	5	0	6	0	11	188
07:30 AM	54	71	0	0	125	0	0	0	0	0	0	46	17	1	64	1	0	10	0	11	200
07:45 AM	46	82	1	0	129	0	0	0	0	0	0	36	15	0	51	3	0	10	0	13	193
08:00 AM	57	72	0	0	129	0	0	0	0	0	0	55	17	0	72	3	0	14	0	17	218
Total Volume	214	285	1	0	500	0	0	0	0	0	0	186	60	1	247	12	0	40	0	52	799
% App. Total	42.8	57	0.2	0		0	0	0	0		0	75.3	24.3	0.4		23.1	0	76.9	0		
PHF	.939	.869	.250	.000	.969	.000	.000	.000	.000	.000	.000	.845	.882	.250	.858	.600	.000	.714	.000	.765	.916



Kensington, Connecticut 06037 (860) 828-1693

> File Name: 23660 Site Code : 23660 Start Date : 10/27/2022

.830

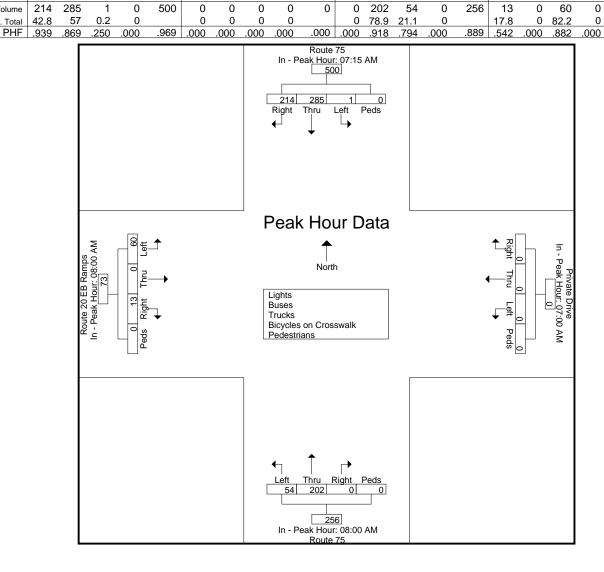
Page No : 3

		R	oute 7	5			Pri	vate D	Drive			F	Route	75		F	Route	20 EE	Ram	os	
		Fro	om Noi	rth			F	rom E	ast			Fr	om Sc	outh			Fr	rom W	/est		
Start Time	Right	Thru	Left	Peds	App. Total	Right -	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour A	Analysis	From	07:00	AM to	08:45	AM - Pe	eak 1	of 1													
Peak Hour f	or Each	Appro	oach B	egins	at:																
	07:15 AM					07:00 AM					08:00 AN					08:00 AM					
+0 mins.	57	60	0	0	117	0	0	0	0	0	0	55	17	0	72	3	0	14	0	17	
+15 mins.	54	71	0	0	125	0	0	0	0	0	0	53	10	0	63	1	0	17	0	18	
+30 mins.	46	82	1	0	129	0	0	0	0	0	0	44	17	0	61	6	0	16	0	22	

 +45 mins.

Total Volume

% App. Total



Kensington, Connecticut 06037 (860) 828-1693

Route 75 at Route 20 EB Ramps Windsor Locks, Connecticut

File Name: 23661 Site Code: 23661

Start Date : 10/27/2022

Page No : 1

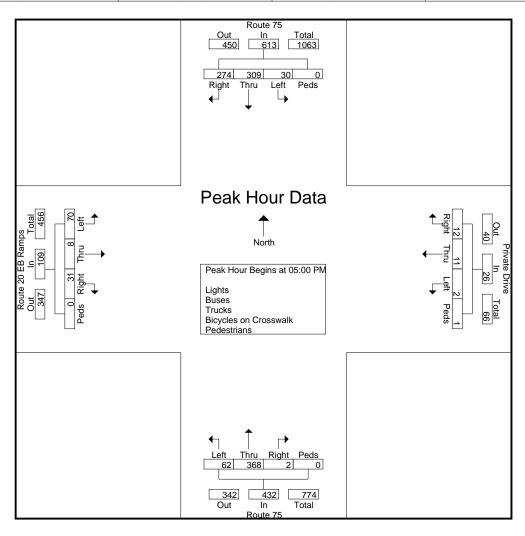
Groups Printed- Lights - Buses - Trucks - Bicycles on Crosswalk - Pedestrians

		F	Route	75			Pri	vate D	rive			F	Route	75		F	Route	20 EE	Ram	os	
		Fı	rom No	orth			F	rom E	ast			Fr	om So	outh				rom W			
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	66	76	8	0	150	2	1	0	0	3	1	90	18	0	109	7	1	14	0	22	284
04:15 PM	76	76	6	0	158	4	3	1	0	8	1	90	20	0	111	7	1	16	0	24	301
04:30 PM	79	75	11	0	165	1	0	0	0	1	2	81	23	0	106	4	0	19	0	23	295
04:45 PM	60	63	4	0	127	4	1_	0	0	5	1	88	10	0	99	8	1	22	0	31	262
Total	281	290	29	0	600	11	5	1	0	17	5	349	71	0	425	26	3	71	0	100	1142
05:00 PM	67	86	5	0	158	1	3	2	1	7	2	88	19	0	109	6	2	22	0	30	304
05:15 PM	45	76	6	0	127	4	1	0	0	5	0	96	16	0	112	8	0	14	0	22	266
05:30 PM	92	74	12	0	178	6	2	0	0	8	0	90	11	0	101	10	3	16	0	29	316
05:45 PM	70	73	7	0	150	1	5_	0	0	6	0	94	16	0	110	7	3	18	0	28	294
Total	274	309	30	0	613	12	11	2	1	26	2	368	62	0	432	31	8	70	0	109	1180
Grand Total	555	599	59	0	1213	23	16	3	1	43	7	717	133	0	857	57	11	141	0	209	2322
Apprch %	45.8	49.4	4.9	0		53.5	37.2	7	2.3		0.8	83.7	15.5	0		27.3	5.3	67.5	0		
Total %	23.9	25.8	2.5	0	52.2	1	0.7	0.1	0	1.9	0.3	30.9	5.7	0	36.9	2.5	0.5	6.1	0	9	
Lights	524	587	57	0	1168	23	16	3	0	42	7	699	129	0	835	57	11	136	0	204	2249
% Lights	94.4	98	96.6	0	96.3	100	100	100	0	97.7	100	97.5	97	0	97.4	100	100	96.5	0_	97.6	96.9
Buses	5	3	. 1	0	9	0	0	0	0	0	0	3	0	0	3	0	0	3	0	3	15
% Buses	0.9	0.5	1.7_	0	0.7	0	0	0	0	0	0	0.4	0	0	0.4	0	0	2.1	0	1.4	0.6
Trucks	26	9	1	0	36	0	0	0	0	0	0	15	4	0	19	0	0	2	0	2	57
% Trucks	4.7	1.5	1.7	0	3_	0	0	0_	0	0	0	2.1	3	0	2.2	0	0	1.4	0	1_	2.5
Bicycles on Crosswalk																					
% Bicycles on Crosswalk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrians	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1
% Pedestrians	Ö	Õ	Õ	Ö	Ö	Ö	Ö	Ö	100	2.3	Ö	Õ	Õ	Ö	Ö	Ö	Ö	Õ	Ö	Ö	0

Kensington, Connecticut 06037 (860) 828-1693

File Name : 23661 Site Code : 23661 Start Date : 10/27/2022

		F	Route	75			Pri	vate D	Prive			F	Route	75		ı	Route	20 EE	Ramp	os	
		Fr	om No	orth			F	rom E	ast			Fr	om So	outh			Fı	rom W	est		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour A	nalysi	s From	04:00	PM to	05:45	PM - I	Peak 1	of 1													
Peak Hour fo	or Enti	re Inte	rsectio	n Begi	ins at 0	5:00 P	M														
05:00 PM	67	86	5	0	158	1	3	2	1	7	2	88	19	0	109	6	2	22	0	30	304
05:15 PM	45	76	6	0	127	4	1	0	0	5	0	96	16	0	112	8	0	14	0	22	266
05:30 PM	92	74	12	0	178	6	2	0	0	8	0	90	11	0	101	10	3	16	0	29	316
05:45 PM	70	73	7	0	150	1	5	0	0	6	0	94	16	0	110	7	3	18	0	28	294
Total Volume	274	309	30	0	613	12	11	2	1	26	2	368	62	0	432	31	8	70	0	109	1180
% App. Total	44.7	50.4	4.9	0		46.2	42.3	7.7	3.8		0.5	85.2	14.4	0		28.4	7.3	64.2	0		
PHF	.745	.898	.625	.000	.861	.500	.550	.250	.250	.813	.250	.958	.816	.000	.964	.775	.667	.795	.000	.908	.934



Kensington, Connecticut 06037 (860) 828-1693

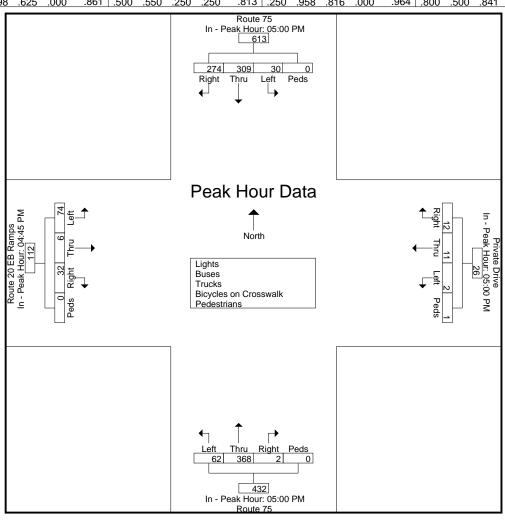
> File Name: 23661 Site Code: 23661 Start Date : 10/27/2022

Page No : 3

		F	Route	75			Pri	vate [Drive			F	Route	75			Route	20 EB	Ramp	วร	
		Fr	om No	orth			F	rom E	ast			Fr	om So	outh			Fı	rom W	est		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour A	Analysi	s From	า 04:00	OPM t	o 05:45	PM - F	Peak 1	of 1													

Peak Hour for Each Approach Begins at:

I Cak Hour I	oi Luo	11 / (PPI	ouon i	Joginio	uı.															
	05:00 PM	1		_		05:00 PM	1				05:00 PN	4				04:45 PM				
+0 mins.	67	86	5	0	158	1	3	2	1	7	2	88	19	0	109	8	1	22	0	31
+15 mins.	45	76	6	0	127	4	1	0	0	5	0	96	16	0	112	6	2	22	0	30
+30 mins.	92	74	12	0	178	6	2	0	0	8	0	90	11	0	101	8	0	14	0	22
+45 mins.	70	73	7	0	150	1	5	0	0	6	0	94	16	0	110	10	3	16	0	29
Total Volume	274	309	30	0	613	12	11	2	1	26	2	368	62	0	432	32	6	74	0	112
% App. Total	44.7	50.4	4.9	0		46.2	42.3	7.7	3.8		0.5	85.2	14.4	0		28.6	5.4	66.1	0	
PHF	.745	.898	.625	.000	.861	.500	.550	.250	.250	.813	.250	.958	.816	.000	.964	.800	.500	.841	.000	.903



Kensington, Connecticut 06037 (860) 828-1693

Route 75 at Route 20 WB Ramps Windsor Locks, Connecticut

File Name: 23662 Site Code: 23662

Start Date : 10/27/2022

Page No : 1

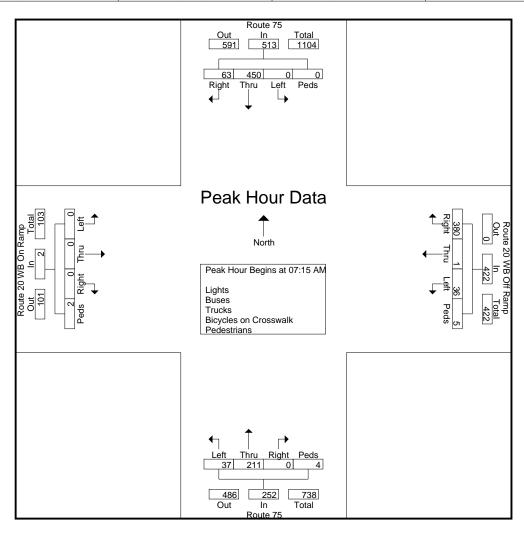
Groups Printed- Lights - Buses - Trucks - Bicycles on Crosswalk - Pedestrians

		F	Route		roupo i				Off Ra	mp	,	<u> </u>	Route	75	1 000		oute 20) WB	On Ra	ımp	
		Fr	om N	orth			F	rom E	ast	•		Fr	om So	outh			Fr	om W	est	•	
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	10	95	0	0	105	67	0	6	0	73	0	35	8	0	43	0	0	0	2	2	223
07:15 AM	15	105	0	0	120	84	0	4	3	91	0	49	10	2	61	0	0	0	0	0	272
07:30 AM	19	116	0	0	135	107	0	8	2	117	0	53	11	2	66	0	0	0	2	2	320
07:45 AM	12	110	0	0	122	88	1	12	0	101	0	41	11_	0	52	0	0	0	0	0	275
Total	56	426	0	0	482	346	1	30	5	382	0	178	40	4	222	0	0	0	4	4	1090
08:00 AM	17	119	0	0	136	101	0	12	0	113	0	68	5	0	73	0	0	0	0	0	322
08:15 AM	14	91	0	0	105	78	0	9	1	88	0	67	8	0	75	0	0	0	0	0	268
08:30 AM	9	94	0	0	103	107	0	15	0	122	0	58	1	0	59	0	0	0	0	0	284
08:45 AM	14	94	0	0	108	94	0	2	0	96	0	64	5	0	69	0	0	0	0	0	273
Total	54	398	0	0	452	380	0	38	1	419	0	257	19	0	276	0	0	0	0	0	1147
Grand Total	110	824	0	0	934	726	1	68	6	801	0	435	59	4	498	0	0	0	4	4	2237
Apprch %	11.8	88.2	0	0		90.6	0.1	8.5	0.7		0	87.3	11.8	8.0		0	0	0	100		
Total %	4.9	36.8	0	0	41.8	32.5	0	3	0.3	35.8	0	19.4	2.6	0.2	22.3	0	0	0	0.2	0.2	
Lights	96	732	0	0	828	651	1	59	0	711	0	410	56	0	466	0	0	0	0	0	2005
% Lights	87.3	88.8	0	0	88.7	89.7	100	86.8	0	88.8	0	94.3	94.9	0	93.6	0	0	0	0	0	89.6
Buses	5	10	0	0	15	5	0	5	0	10	0	8	1	0	9	0	0	0	0	0	34
<u>% Buses</u>	4.5	1.2	0	0	1.6	0.7	0	7.4	0_	1.2	0	1.8	1.7_	0_	1.8	0	0	0	0	0	1.5
Trucks	9	82	0	0	91	70	0	_ 4	0	74	0	17	2	0	19	0	0	0	0	0	184
% Trucks	8.2	10_	0	0	9.7	9.6	0	5.9	0	9.2	0	3.9	3.4	0	3.8	0	0_	0_	0	0	8.2
Bicycles on Crosswalk																					
% Bicycles on	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrians	0	0	0	0	0	0	0	0	6	6	0	0	0	4	4	0	0	0	4	4	14
% Pedestrians	0	0	0	0	0	0	0	0	100	0.7	0	0	0	100	0.8	0	0	0	100	100	0.6
% redestrians	1 0	U	U	U	U	, 0	U	U	100	0.7	ı U	U	U	100	0.0	ı U	U	U	100	100	0.0

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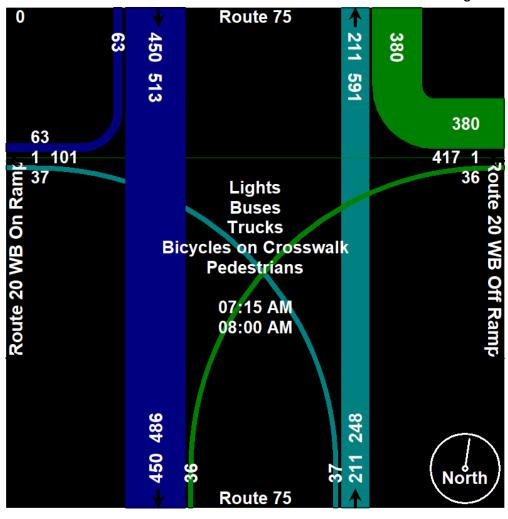
File Name : 23662 Site Code : 23662 Start Date : 10/27/2022

		F	Route	75		R	oute 2	0 WB	Off Ra	mp		ı	Route	75		R	oute 2	0 WB	On Ra	ımp	
		Fr	om No	orth			F	rom E	ast			Fı	rom So	outh			Fı	rom W	est est		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour A	nalysi	s Fron	n 07:00	O AM to	o 08:45	AM - I	Peak 1	of 1													
Peak Hour fo	or Enti	re Inte	rsectio	n Begi	ins at 0	7:15 A	.M														
07:15 AM	15	105	0	0	120	84	0	4	3	91	0	49	10	2	61	0	0	0	0	0	272
07:30 AM	19	116	0	0	135	107	0	8	2	117	0	53	11	2	66	0	0	0	2	2	320
07:45 AM	12	110	0	0	122	88	1	12	0	101	0	41	11	0	52	0	0	0	0	0	275
08:00 AM	17	119	0	0	136	101	0	12	0	113	0	68	5	0	73	0	0	0	0	0	322
Total Volume	63	450	0	0	513	380	1	36	5	422	0	211	37	4	252	0	0	0	2	2	1189
% App. Total	12.3	87.7	0	0		90	0.2	8.5	1.2		0	83.7	14.7	1.6		0	0	0	100		
PHF	.829	.945	.000	.000	.943	.888	.250	.750	.417	.902	.000	.776	.841	.500	.863	.000	.000	.000	.250	.250	.923



Kensington, Connecticut 06037 (860) 828-1693

File Name : 23662 Site Code : 23662 Start Date : 10/27/2022

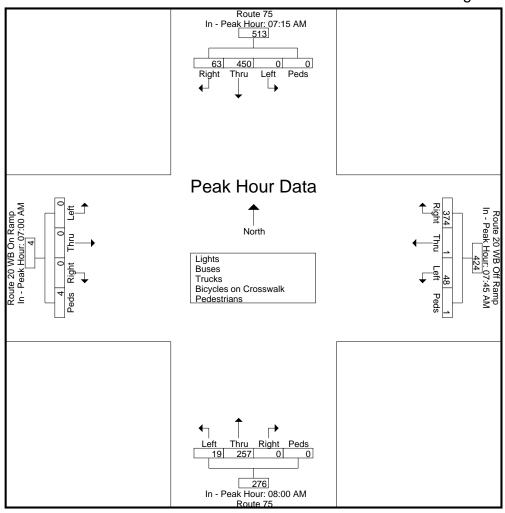


Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour f	or Ead	ch App	roach	Begin	s at:															
	07:15 AN	1				07:45 AN	1				08:00 AM	1				07:00 AM	1			
+0 mins.	15	105	0	0	120	88	1	12	0	101	0	68	5	0	73	0	0	0	2	2
+15 mins.	19	116	0	0	135	101	0	12	0	113	0	67	8	0	75	0	0	0	0	0
+30 mins.	12	110	0	0	122	78	0	9	1	88	0	58	1	0	59	0	0	0	2	2
+45 mins.	17	119	0	0	136	107	0	15	0	122	0	64	5	0	69	0	0	0	0	0
Total Volume	63	450	0	0	513	374	1	48	1	424	0	257	19	0	276	0	0	0	4	4
% App. Total	12.3	87.7	0	0		88.2	0.2	11.3	0.2		0	93.1	6.9	0		0	0	0	100	
PHF	.829	.945	.000	.000	.943	.874	.250	.800	.250	.869	.000	.945	.594	.000	.920	.000	.000	.000	.500	.500

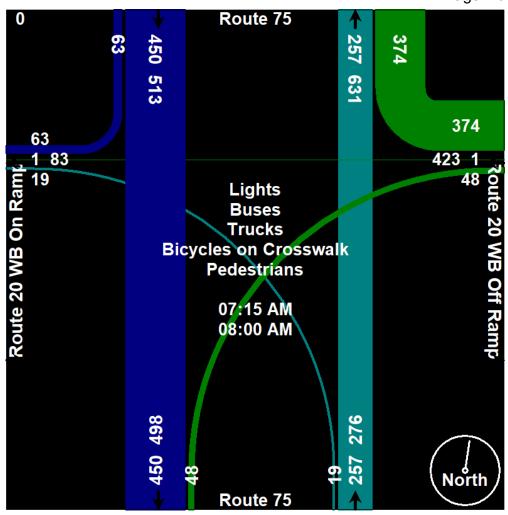
Kensington, Connecticut 06037 (860) 828-1693

> File Name : 23662 Site Code : 23662 Start Date : 10/27/2022



Kensington, Connecticut 06037 (860) 828-1693

File Name : 23662 Site Code : 23662 Start Date : 10/27/2022



Kensington, Connecticut 06037 (860) 828-1693

Route 75 at Route 20 WB Ramps Windsor Locks, Connecticut

File Name: 23663 Site Code: 23663

Start Date : 10/27/2022

Page No : 1

Groups Printed- Lights - Buses - Trucks - Bicycles on Crosswalk - Pedestrians

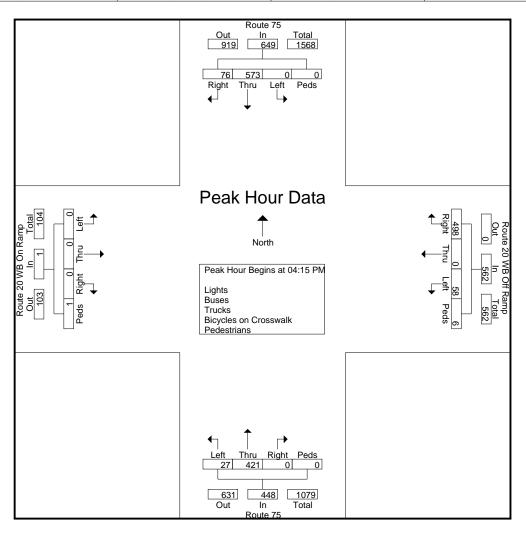
ſ			F	Route	75	•	Ro	oute 2	0 WB	Off Ra	ımp		F	Route	75		Ro	oute 20) WB	On Ra	ımp	1
			Fr	om N	orth			F	rom E	ast			Fr	om So	outh			Fr	om W	est		
l	Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
	04:00 PM	10	146	0	0	156	122	1	13	3	139	0	97	5	1	103	0	0	0	1	1	399
	04:15 PM	13	147	0	0	160	130	0	15	3	148	0	101	8	0	109	0	0	0	0	0	417
	04:30 PM	23	149	0	0	172	128	0	19	1	148	0	101	5	0	106	0	0	0	0	0	426
	04:45 PM	12	127	0	0	139	131	0	12	1_	144	0	110	8	0	118	0	0	0	0	0	401
	Total	58	569	0	0	627	511	1	59	8	579	0	409	26	1	436	0	0	0	1	1	1643
	05:00 PM	28	150	0	0	178	109	0	12	1	122	0	109	6	0	115	0	0	0	1	1	416
	05:15 PM	21	115	0	0	136	107	1	14	4	126	0	105	5	0	110	0	0	0	0	0	372
	05:30 PM	23	158	0	0	181	100	0	21	0	121	0	114	6	0	120	0	0	0	0	0	422
	05:45 PM	20	125	0	0	145	113	0	22	0	135	0	104	6	0	110	0	0	0	0	0	390
	Total	92	548	0	0	640	429	1	69	5	504	0	432	23	0	455	0	0	0	1	1	1600
	Grand Total	150	1117	0	0	1267	940	2	128	13	1083	0	841	49	1	891	0	0	0	2	2	3243
	Apprch %	11.8	88.2	0	0		86.8	0.2	11.8	1.2		0	94.4	5.5	0.1		0	0	0	100		
	Total %	4.6	34.4	0	0	39.1	29	0.1	3.9	0.4	33.4	0	25.9	1.5	0	27.5	0	0	0	0.1	0.1	
	Lights	142	1070																			
	% Lights	94.7	95.8	0	0	95.7	92.9	100	96.9	0	92.2	0	96.9	98	0	96.9	0	0	0	0	0	94.8
	Buses	4	8	0	0	12	6	0	1	0	7	0	5	0	0	5	0	0	0	0	0	24
	% Buses	2.7	0.7	0	0	0.9	0.6	0	0.8	0	0.6	0	0.6 21	0 1	0	0.6	0	0	0	0	0	0.7
	Trucks	4	39	0	0	43	61	0	3	0	64	0		2	0	22	0	0	0	0	0	129
	% Trucks	2.7	3.5	0	0	3.4	6.5	0	2.3	0	5.9	0	2.5		0	2.5	0	0	0	0	0	4
	Bicycles on Crosswalk	_	_		_				_	_			_		_		_	_	_	_		
	% Bicycles on Crosswalk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
•	Pedestrians	0	0	0	0	0	0	0	0	13	13	0	0	0	1	1	0	0	0	2	2	16
	% Pedestrians	0	0	0	0	0	0	0	0	100	1.2	0	0	0	100	0.1	0	0	0	100	100	0.5

Kensington, Connecticut 06037 (860) 828-1693

File Name : 23663 Site Code : 23663

Start Date : 10/27/2022

		F	Route	75		Ro	oute 2	0 WB	Off Ra	ımp		F	Route	75		Ro	oute 2	0 WB	On Ra	amp	
		Fr	om No	orth			F	rom E	ast			Fr	om So	outh			Fr	rom W	est		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour A	nalysi	s From	04:00	PM to	05:45	PM - I	Peak 1	of 1													
Peak Hour fo	or Enti	re Inte	rsectio	n Begi	ins at 0	4:15 P	M														
04:15 PM	13	147	0	0	160	130	0	15	3	148	0	101	8	0	109	0	0	0	0	0	417
04:30 PM	23	149	0	0	172	128	0	19	1	148	0	101	5	0	106	0	0	0	0	0	426
04:45 PM	12	127	0	0	139	131	0	12	1	144	0	110	8	0	118	0	0	0	0	0	401
05:00 PM	28	150	0	0	178	109	0	12	1	122	0	109	6	0	115	0	0	0	1	1	416
Total Volume	76	573	0	0	649	498	0	58	6	562	0	421	27	0	448	0	0	0	1	1	1660
% App. Total	11.7	88.3	0	0		88.6	0	10.3	1.1		0	94	6	0		0	0	0	100		
PHF	.679	.955	.000	.000	.912	.950	.000	.763	.500	.949	.000	.957	.844	.000	.949	.000	.000	.000	.250	.250	.974



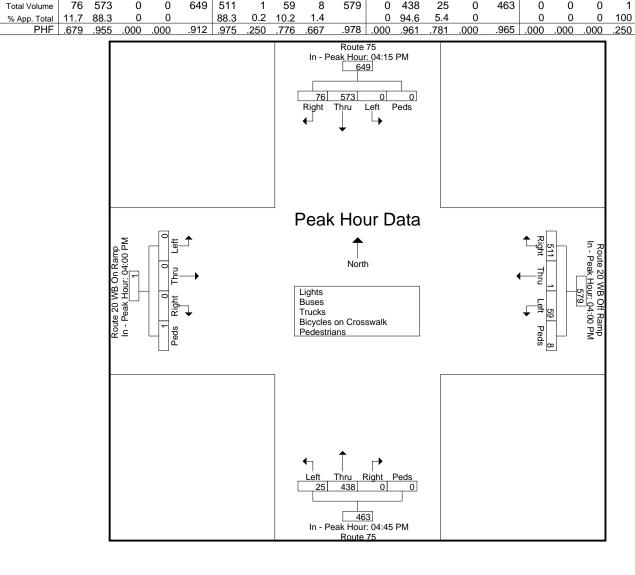
Kensington, Connecticut 06037 (860) 828-1693

File Name : 23663 Site Code : 23663

Start Date : 10/27/2022

.250

		R	Route	75		Ro	oute 20) WB	Off Ra	mp		F	Route	75		Ro	oute 2	0 WB	On Ra	ımp	
		Fr	om No	orth			F	rom E	ast			Fr	om So	outh			Fr	om W	/est		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour A	Analysi	s From	04:00	PM to	05:45	PM - F	Peak 1	of 1													
Peak Hour fo	or Eacl	h Appr	oach l	Begins	at:																_
	04:15 PM	1				04:00 PM	ı				04:45 PM					04:00 PM	1				
+0 mins.	13	147	0	0	160	122	1	13	3	139	0	110	8	0	118	0	0	0	1	1	
+15 mins.	23	149	0	0	172	130	0	15	3	148	0	109	6	0	115	0	0	0	0	0	
+30 mins.	12	127	0	0	139	128	0	19	1	148	0	105	5	0	110	0	0	0	0	0	
+45 mins.	28	150	0	0	178	131	0	12	1	144	0	114	6	0	120	0	0	0	0	0	
Total Volume	76	573	0	0	649	511	1	59	8	579	0	438	25	0	463	0	0	0	1	1	



Kensington, Connecticut 06037 (860) 828-1693

Route 73 at Halfway House Road Windsor Locks, Connecticut

File Name: 23664 Site Code: 23664

Start Date : 10/27/2022

Page No : 1

Groups Printed- Lights - Buses - Trucks

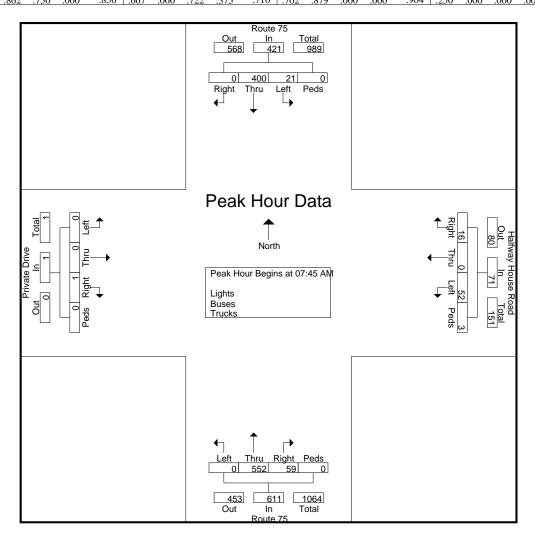
		F	Route 7	15		I	Halfwa	y Hous	se Road	l		I	Route 7	5			Pri	vate D	rive		
		Fr	om No	rth			F	rom Ea	ıst			Fr	om So	uth			Fr	om W	est		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	0	97	4	0	101	2	0	9	0	11	10	107	0	0	117	0	0	0	0	0	229
07:15 AM	0	95	5	0	100	1	0	15	0	16	13	128	0	0	141	0	0	0	0	0	257
07:30 AM	1	69	4	0	74	4	0	13	0	17	6	114	0	0	120	0	0	0	0	0	211
07:45 AM	0	111	2	0	113	5	0	18	2	25	21	133	0	0	154	1	0	0	0	1	293
Total	1	372	15	0	388	12	0	55	2	69	50	482	0	0	532	1	0	0	0	1	990
08:00 AM	0	116	7	0	123	2	0	11	0	13	14	133	0	0	147	0	0	0	0	0	283
08:15 AM	0	90	5	0	95	3	0	12	1	16	12	129	0	0	141	0	0	0	0	0	252
08:30 AM	0	83	7	0	90	6	0	11	0	17	12	157	0	0	169	0	0	0	0	0	276
08:45 AM	0	84	4	0	88	8	0	12	0	20	13	146	0	0	159	0	0	0	0	0	267
Total	0	373	23	0	396	19	0	46	1	66	51	565	0	0	616	0	0	0	0	0	1078
Grand Total	1	745	38	0	784	31	0	101	3	135	101	1047	0	0	1148	1	0	0	0	1	2068
Apprch %	0.1	95	4.8	0		23	0	74.8	2.2		8.8	91.2	0	0		100	0	0	0		
Total %	0	36	1.8	0	37.9	1.5	0	4.9	0.1	6.5	4.9	50.6	0	0	55.5	0	0	0	0	0	
Lights	1	670	33	0	704	30	0	99	3	132	95	967	0	0	1062	1	0	0	0	1	1899
% Lights	100	89.9	86.8	0	89.8	96.8	0	98	100	97.8	94.1	92.4	0	0	92.5	100	0	0	0	100	91.8
Buses	0	69	3	0	72	0	0	0	0	0	4	74	0	0	78	0	0	0	0	0	150
% Buses	0	9.3	7.9	0	9.2	0	0	0	0	0	4	7.1	0	0	6.8	0	0	0	0	0	7.3
Trucks	0	6	2	0	8	1	0	2	0	3	2	6	0	0	8	0	0	0	0	0	19
% Trucks	0	0.8	5.3	0	1	3.2	0	2	0	2.2	2	0.6	0	0	0.7	0	0	0	0	0	0.9

Kensington, Connecticut 06037 (860) 828-1693

File Name : 23664 Site Code : 23664

Start Date : 10/27/2022

			Route 7			ŀ	Ialfwa	y Hous		d			Route 7					vate D			
		ΓI	OIII INC	1111	1		Г.	IOIII E	ısı	1		FI.	0111 30	um			FI	OIII W	est		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Ar	nalysis	From (7:00 A	M to 0	8:45 AM	1 - Peal	k 1 of 1														
Peak Hour for	Entire	Inters	ection l	Begins	at 07:45	AM															
07:45 AM	0	111	2	0	113	5	0	18	2	25	21	133	0	0	154	1	0	0	0	1	293
08:00 AM	0	116	7	0	123	2	0	11	0	13	14	133	0	0	147	0	0	0	0	0	283
08:15 AM	0	90	5	0	95	3	0	12	1	16	12	129	0	0	141	0	0	0	0	0	252
08:30 AM	0	83	7	0	90	6	0	11	0	17	12	157	0	0	169	0	0	0	0	0	276
Total Volume	0	400	21	0	421	16	0	52	3	71	59	552	0	0	611	1	0	0	0	1	1104
% App. Total	0	95	5_	0		22.5	0	73.2	4.2		9.7	90.3	0	0		100	0	0	0		
PHF	000	862	750	000	856	667	000	722	375	710	702	879	000	000	904	250	000	000	000	250	942



Kensington, Connecticut 06037 (860) 828-1693

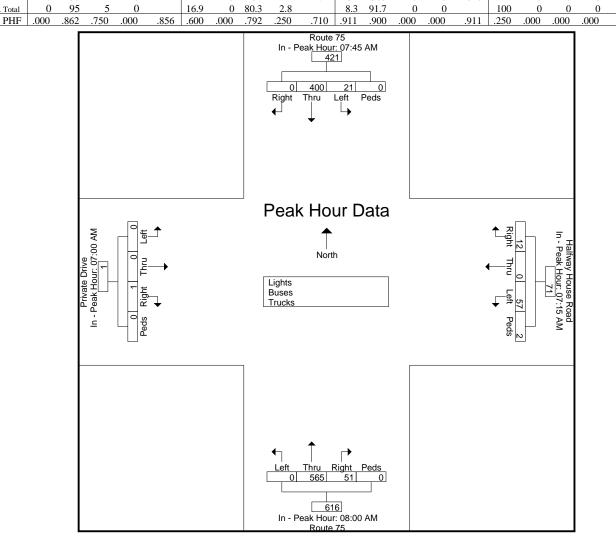
File Name : 23664 Site Code : 23664 Start Date : 10/27/2022

Dana Maria

Page No : 3

			Route 7			I		y Hous	se Road	d			Route 7					vate D			
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. T
Peak Hour And Peak Hour for	•					I - Pea	k 1 of 1														
	07:45 AN	1		_		07:15 AN	1				08:00 AM	I				07:00 AM]
+0 mins.	0	111	2	0	113	1	0	15	0	16	14	133	0	0	147	0	0	0	0	0	
+15 mins.	0	116	7	0	123	4	0	13	0	17	12	129	0	0	141	0	0	0	0	0	
+30 mins.	0	90	5	0	95	5	0	18	2	25	12	157	0	0	169	0	0	0	0	0	
+45 mins.	0	83	7	0	90	2	0	11	0	13	13	146	0	0	159	1	0	0	0	1	
Total Volume	0	400	21	0	421	12	0	57	2	71	51	565	0	0	616	1	0	0	0	1	

% App. Total



Kensington, Connecticut 06037 (860) 828-1693

Route 75 at Halfway House Road Windsor Locks, Connecticut

File Name : 23665 Site Code : 23665

Start Date : 10/27/2022

Page No : 1

Groups Printed- Lights - Buses - Trucks

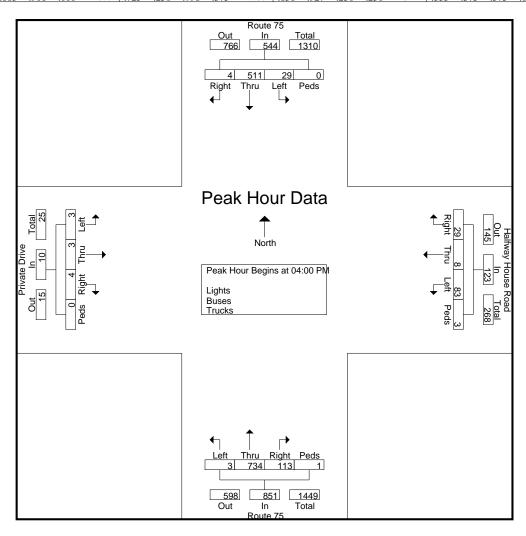
]	Route 7	75		I	Halfwa	y Hou	se Road	d		I	Route 7	15			Pri	vate D	rive		
		Fı	om No	orth			F	rom E	ast			Fr	om So	uth			Fı	om W	est		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	120	7	0	127	10	0	26	1	37	25	172	0	1	198	0	0	1	0	1	363
04:15 PM	2	115	8	0	125	5	0	16	2	23	31	176	3	0	210	0	1	0	0	1	359
04:30 PM	1	128	8	0	137	7	8	24	0	39	24	188	0	0	212	3	2	0	0	5	393
04:45 PM	1	148	6	0	155	7	0	17	0	24	33	198	0	0	231	1	0	2	0	3	413
Total	4	511	29	0	544	29	8	83	3	123	113	734	3	1	851	4	3	3	0	10	1528
05:00 PM	0	120	14	0	134	4	3	22	0	29	19	143	0	0	162	0	0	0	0	0	325
05:15 PM	0	79	10	0	89	2	0	16	1	19	21	138	0	1	160	1	0	0	0	1	269
05:30 PM	1	150	9	0	160	8	0	20	1	29	32	179	0	0	211	1	0	0	0	1	401
_05:45 PM	1	77	4	0	82	8	0	16	2	26	12	129	1	0	142	0	0	0	0	0	250
Total	2	426	37	0	465	22	3	74	4	103	84	589	1	1	675	2	0	0	0	2	1245
Grand Total	6	937	66	0	1009	51	11	157	7	226	197	1323	4	2	1526	6	3	3	0	12	2773
Apprch %	0.6	92.9	6.5	0		22.6	4.9	69.5	3.1		12.9	86.7	0.3	0.1		50	25	25	0		
Total %	0.2	33.8	2.4	0	36.4	1.8	0.4	5.7	0.3	8.2	7.1	47.7	0.1	0.1	55	0.2	0.1	0.1	0	0.4	
Lights	5	897	64	0	966	51	11	150	7	219	192	1251									
% Lights	83.3	95.7	97	0	95.7	100	100	95.5	100	96.9	97.5	94.6	100	100	95	100	100	100	0	100	95.4
Buses	1	33	1	0	35	0	0	1	0	1	1	63	0	0	64	0	0	0	0	0	100
% Buses	16.7	3.5	1.5	0	3.5	0	0	0.6	0	0.4	0.5	4.8	0	0	4.2	0	0	0	0	0	3.6
Trucks	0	7	1	0	8	0	0	6	0	6	4	9	0	0	13	0	0	0	0	0	27
% Trucks	0	0.7	1.5	0	0.8	0	0	3.8	0	2.7	2	0.7	0	0	0.9	0	0	0	0	0	1 1

Kensington, Connecticut 06037 (860) 828-1693

File Name : 23665 Site Code : 23665

Start Date : 10/27/2022

		F	Route 7	75		I	Ialfwa	y Hous	se Roa	d		I	Route 7	75			Pri	vate D	rive		
		Fr	om No	orth			F	rom Ea	ast			Fr	om So	uth			Fı	om W	est		
Start	D: 1.	ть	Loft	ъ.		D: L	T1	I of	ъ.		D. L.	ть	Loft	ъ.		D. I.	T1	Laft	ъ .		
Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Ar	nalysis	From (04:00 P	M to 0	5:45 PM	- Peak	1 of 1														
Peak Hour for	r Entire	Inters	ection 1	Begins	at 04:00	PM															
04:00 PM	0	120	7	0	127	10	0	26	1	37	25	172	0	1	198	0	0	1	0	1	363
04:15 PM	2	115	8	0	125	5	0	16	2	23	31	176	3	0	210	0	1	0	0	1	359
04:30 PM	1	128	8	0	137	7	8	24	0	39	24	188	0	0	212	3	2	0	0	5	393
04:45 PM	1	148	6	0	155	7	0	17	0	24	33	198	0	0	231	1	0	2	0	3	413
Total Volume	4	511	29	0	544	29	8	83	3	123	113	734	3	1	851	4	3	3	0	10	1528
% App. Total	0.7	93.9	5.3	0		23.6	6.5	67.5	2.4		13.3	86.3	0.4	0.1		40	30	30	0		
PHF	.500	.863	.906	.000	.877	.725	.250	.798	.375	.788	.856	.927	.250	.250	.921	.333	.375	.375	.000	.500	.925



Kensington, Connecticut 06037 (860) 828-1693

File Name: 23665 Site Code: 23665

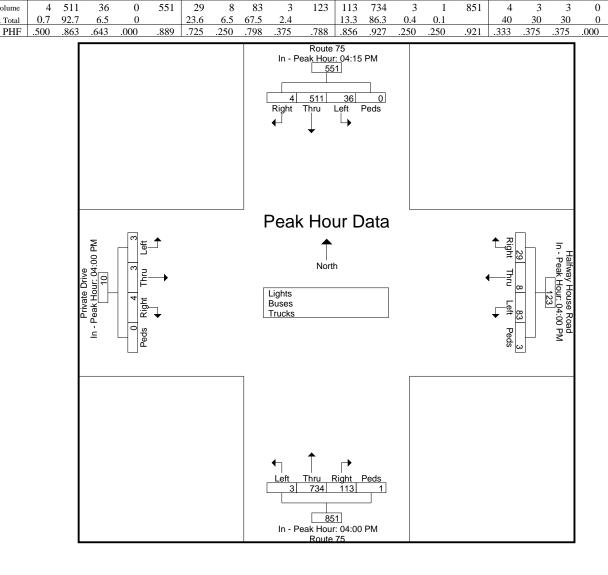
Start Date : 10/27/2022

.500

Page No : 3

			Route 7			I		y Hous rom Ea	se Road	d			Route 7					vate D			
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour An Peak Hour for	•					- Peak	1 of 1														
	04:15 PM					04:00 PM					04:00 PM					04:00 PM					
+0 mins.	2	115	8	0	125	10	0	26	1	37	25	172	0	1	198	0	0	1	0	1	
+15 mins.	1	128	8	0	137	5	0	16	2	23	31	176	3	0	210	0	1	0	0	1	
+30 mins.	1	148	6	0	155	7	8	24	0	39	24	188	0	0	212	3	2	0	0	5	
+45 mins.	0	120	14	0	134	7	0	17	0	24	33	198	0	0	231	1	0	2	0	3	
Total Volume	4	511	36	0	551	29	8	83	3	123	113	734	3	1	851	4	3	3	0	10	

% App. Total



Kensington, Connecticut 06037 (860) 828-1693

Route 75 at Schoephoester/National Dr Windsor Locks, Ct

Site Code : 23666 Start Date : 10/27/2022

File Name: 23666

Page No : 1

Groups Printed- Lights - Buses - Trucks - Bicycles on Crosswalk - Pedestrians

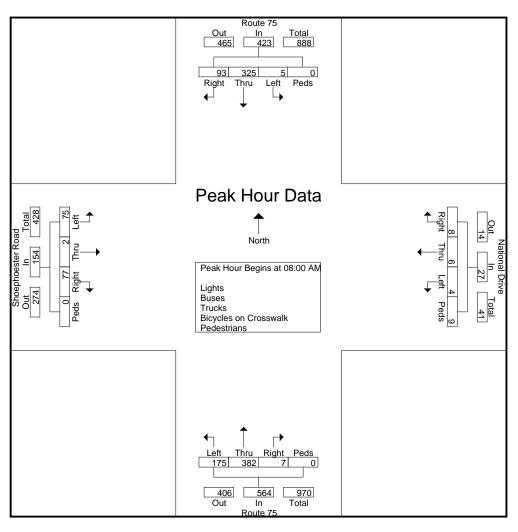
					iloups r	THILEC	ı- ∟ıgıı	19 - DI	<u> 2000 - </u>	HUCKS	- DICY	CIES U		<u>sswain</u>	- reue	Sulalis	•				
		F	Route	75				ional					Route	-		;	Shoep	hoest	er Roa	nd	
		Fr	om No	orth			F	rom E	ast			Fr	om So	outh			<u>F</u> r	om W	est		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	30	80	3	0	113	1	1	1	0	3	1	72	14	0	87	14	0	10	0	24	227
07:15 AM	31	83	1	0	115	3	1	2	0	6	1	92	38	0	131	16	1	14	0	31	283
07:30 AM	26	89	1	0	116	3	1	0	1	5	1	93	38	0	132	11	0	9	0	20	273
07:45 AM	32	106	1_	0	139	1	0	0	0	1	0	81	34	2	117	18	0	12	0	30	287
Total	119	358	6	0	483	8	3	3	1	15	3	338	124	2	467	59	1	45	0	105	1070
MA 00:80	20	97	0	0	117	4	2	1	0	7	4	84	35	0	123	28	0	17	0	45	292
08:15 AM	24	85	0	0	109	2	1	2	5	10	2	101	38	0	141	16	1	24	0	41	301
08:30 AM	24	69	4	0	97	2	2	0	0	4	0	98	56	0	154	15	0	14	0	29	284
08:45 AM	25	74	1	0	100	0	1	1	4	6	1_	99	46	0	146	18	1_	20	0	39	291
Total	93	325	5	0	423	8	6	4	9	27	7	382	175	0	564	77	2	75	0	154	1168
Grand Total	212	683	11	0	906	16	9	7	10	42	10	720	299	2	1031	136	3	120	0	259	2238
Apprch %	23.4	75.4	1.2	0		38.1	21.4	16.7	23.8		1	69.8	29	0.2		52.5	1.2	46.3	0		
Total %	9.5	30.5	0.5	0	40.5	0.7	0.4	0.3	0.4	1.9	0.4	32.2	13.4	0.1	46.1	6.1	0.1	5.4	0	11.6	
Lights	205	599	9	0	813	14	8	5	0	27	10	633	274	0	917	116	3	100	0	219	1976
% Lights	96.7	87.7	81.8	0	89.7	87.5	88.9	71.4	0	64.3	100	87.9	91.6	0	88.9	85.3	100	83.3	0	84.6	88.3
Buses	2	4	0	0	6	1	0	1	0	2	0	5	18	0	23	16	0	12	0	28	59
% Buses	0.9	0.6	0	0_	0.7	6.2	0	14.3	0_	4.8	0	0.7	6_	0_	2.2	11.8	0	10_	0_	10.8	2.6
Trucks	5	80	2	0	87	1	1	1	0	3	0	82	7	0	89	4	0	8	0	12	191
% Trucks	2.4	11.7	18.2	0	9.6	6.2	11.1	14.3	0	7.1	0	11.4	2.3	0_	8.6	2.9	0	6.7	0	4.6	8.5
Bicycles on Crosswalk																					
% Bicycles on	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrians	0	0	0	0	0	0	0		10	10	0	0	0	2	2	0	0	0	0	0	12
% Pedestrians	0	0	0	0	0	0	0	0	100	23.8	0	0	0	100	0.2	0	0	0	0	0	0.5

Kensington, Connecticut 06037 (860) 828-1693

File Name : 23666 Site Code : 23666 Start Date : 10/27/2022

Dian Dale . 10/2//2

		F	Route	75			Nat	ional	Drive			F	Route	75		,	Shoep	hoest	er Roa	ad	
		Fr	om No	orth			F	rom E	ast			Fr	om So	outh			Fı	rom W	/est		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour A	nalysi	s Fron	n 07:00	O AM to	0 08:45	AM - I	Peak 1	of 1													
Peak Hour fo	or Enti	re Inte	rsection	n Beg	ins at 0	8:00 A	.M														
08:00 AM	20	97	0	0	117	4	2	1	0	7	4	84	35	0	123	28	0	17	0	45	292
08:15 AM	24	85	0	0	109	2	1	2	5	10	2	101	38	0	141	16	1	24	0	41	301
08:30 AM	24	69	4	0	97	2	2	0	0	4	0	98	56	0	154	15	0	14	0	29	284
08:45 AM	25	74	1	0	100	0	1	1	4	6	1	99	46	0	146	18	1	20	0	39	291
Total Volume	93	325	5	0	423	8	6	4	9	27	7	382	175	0	564	77	2	75	0	154	1168
% App. Total	22	76.8	1.2	0		29.6	22.2	14.8	33.3		1.2	67.7	31	0		50	1.3	48.7	0		
PHF	.930	.838	.313	.000	.904	.500	.750	.500	.450	.675	.438	.946	.781	.000	.916	.688	.500	.781	.000	.856	.970



Kensington, Connecticut 06037 (860) 828-1693

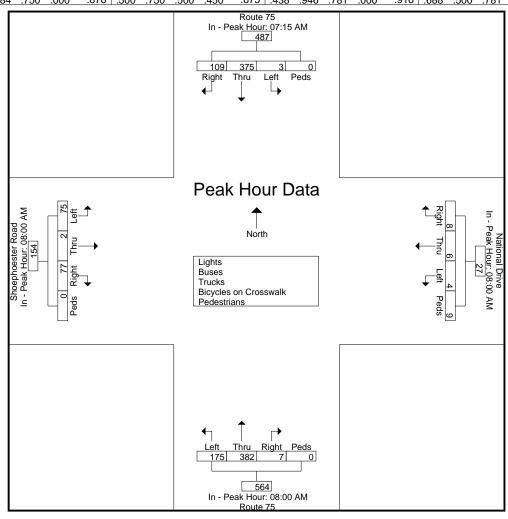
File Name : 23666 Site Code : 23666 Start Date : 10/27/2022

Page No : 3

		F	Route	75			Nat	ional	Drive			F	Route	75		,	Shoep	hoest	er Roa	ad	
		Fr	om N	orth			F	rom E	ast			Fr	om So	outh			F	rom W	est /	l	
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour A	nalvei	s Fron	07:0	Λ ΔΝ/Ι +	o 08·45	ΔΜ - Ι	Paak 1	of 1													

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour to	or ⊨ac	n Appi	oacn i	<u>segins</u>	at:															
	07:15 AN	1				08:00 AN	И				08:00 AN	1				08:00 AM				
+0 mins.	31	83	1	0	115	4	2	1	0	7	4	84	35	0	123	28	0	17	0	45
+15 mins.	26	89	1	0	116	2	1	2	5	10	2	101	38	0	141	16	1	24	0	41
+30 mins.	32	106	1	0	139	2	2	0	0	4	0	98	56	0	154	15	0	14	0	29
+45 mins.	20	97	0	0	117	0	1	1	4	6	1	99	46	0	146	18	1	20	0	39
Total Volume	109	375	3	0	487	8	6	4	9	27	7	382	175	0	564	77	2	75	0	154
% App. Total	22.4	77	0.6	0		29.6	22.2	14.8	33.3		1.2	67.7	31	0		50	1.3	48.7	0	
PHF	.852	.884	.750	.000	.876	.500	.750	.500	.450	.675	.438	.946	.781	.000	.916	.688	.500	.781	.000	.856



Kensington, Connecticut 06037 (860) 828-1693

Route 75 at Schoephoester/National Dr Windsor Locks, Connecticut

Site Code: 23667

File Name: 23667

Start Date : 10/27/2022

Page No : 1

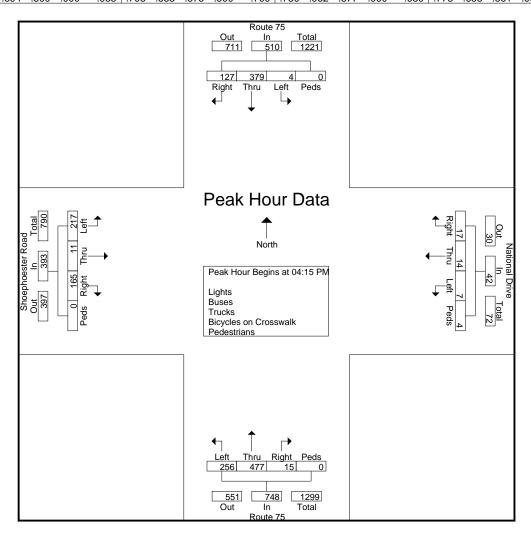
Groups Printed- Lights - Buses - Trucks - Bicycles on Crosswalk - Pedestrians

			Route		'			ional I					Route			;			er Roa	ıd	
		<u> </u>	om No	orth			<u> </u>	rom E	ast			<u> Fr</u>	om So	<u>puth</u>			<u>F</u> ı	rom W	est		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	42	90	1	0	133	5	4	2	3	14	5	95	63	0	163	29	3	55	0	87	397
04:15 PM	43	93	0	0	136	3	3	1	0	7	5	119	61	0	185	53	4	54	0	111	439
04:30 PM	25	86	1	0	112	5	6	2	2	15	5	114	56	0	175	39	4	63	0	106	408
04:45 PM	32	94	2	0	128	3	3	2	1	9	1	120	66	0	187	40	3	56	0	99	423
Total	142	363	4	0	509	16	16	7	6	45	16	448	246	0	710	161	14	228	0	403	1667
05:00 PM	27	106	1	0	134	6	2	2	1	11	4	124	73	0	201	33	0	44	0	77	423
05:15 PM	29	89	2	0	120	6	4	1	0	11	3	107	52	0	162	32	0	32	0	64	357
05:30 PM	30	113	2	0	145	7	4	0	6	17	1	92	54	0	147	40	2	37	0	79	388
05:45 PM	33	92	3	0	128	2	3	0	1	6	3	119	67	0	189	35	1	31	0	67	390
Total	119	400	8	0	527	21	13	3	8	45	11	442	246	0	699	140	3	144	0	287	1558
Grand Total	261	763	12	0	1036	37	29	10	14	90	27	890	492	0	1409	301	17	372	0	690	3225
Apprch %	25.2	73.6	1.2	0		41.1	32.2	11.1	15.6		1.9	63.2	34.9	0		43.6	2.5	53.9	0		
Total %	8.1	23.7	0.4	0	32.1	1.1	0.9	0.3	0.4	2.8	0.8	27.6	15.3	0	43.7	9.3	0.5	11.5	0	21.4	
Lights	253	724	12	0	989	37	29	9	0	75	26	821	462	0	1309	281	17	360	0	658	3031
% Lights	96.9	94.9	100	0	95.5	100	100	90	0	83.3	96.3	92.2	93.9	0	92.9	93.4	100	96.8	0	95.4	94
Buses	1	5	0	0	6	0	0	1	0	1	0	4	19	0	23	13	0	3	0	16	46
% Buses	0.4	0.7	0	0	0.6	0	0	10	0	1.1	0	0.4	3.9	0	1.6	4.3	0	0.8	0	2.3	1.4
Trucks	7	34	0	0	41	0	0	0	0	0	1	65	11	0	77	7	0	9	0	16	134
% Trucks	2.7	4.5	0	0	4	0	0	0	0	0	3.7	7.3	2.2	0	5.5	2.3	0	2.4	0	2.3	4.2
Bicycles on Crosswalk																					
% Bicycles on	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Crosswalk	-					-					-										
Pedestrians	0	0	0	0	0	0	0	0	14	14	0	0	0	0	0	0	0	0	0	0	14
% Pedestrians	1 0	0	0	0	0	. 0	0	0	100	15.6	0	0	0	0	0	0	0	0	0	0	0.4

Kensington, Connecticut 06037 (860) 828-1693

> File Name : 23667 Site Code : 23667 Start Date : 10/27/2022

		F	Route	75			Nat	tional	Drive			ı	Route	75		;	Shoep	hoest	er Roa	ad	
		Fr	om No	orth			F	rom E	ast			Fı	om So	outh			F	rom W	/est		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour A	nalysi	s From	04:00	O PM to	o 05:45	PM - I	Peak 1	of 1													
Peak Hour fo	or Enti	re Inte	rsectio	n Beg	ins at 0	4:15 P	M														
04:15 PM	43	93	0	0	136	3	3	1	0	7	5	119	61	0	185	53	4	54	0	111	439
04:30 PM	25	86	1	0	112	5	6	2	2	15	5	114	56	0	175	39	4	63	0	106	408
04:45 PM	32	94	2	0	128	3	3	2	1	9	1	120	66	0	187	40	3	56	0	99	423
05:00 PM	27	106	1	0	134	6	2	2	1	11	4	124	73	0	201	33	0	44	0	77	423
Total Volume	127	379	4	0	510	17	14	7	4	42	15	477	256	0	748	165	11	217	0	393	1693
% App. Total	24.9	74.3	8.0	0		40.5	33.3	16.7	9.5		2	63.8	34.2	0		42	2.8	55.2	0		
PHF	.738	.894	.500	.000	.938	.708	.583	.875	.500	.700	.750	.962	.877	.000	.930	.778	.688	.861	.000	.885	.964



Kensington, Connecticut 06037 (860) 828-1693

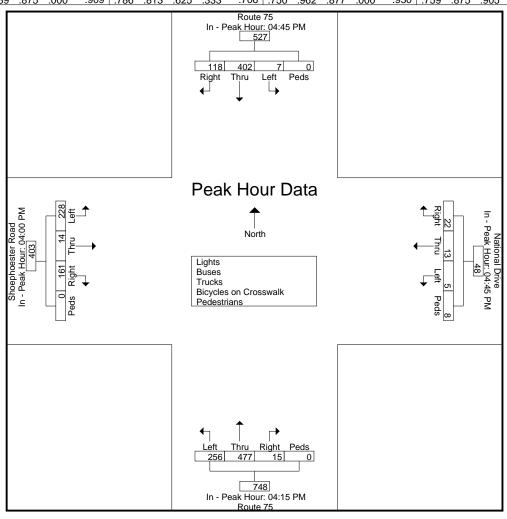
File Name : 23667 Site Code : 23667 Start Date : 10/27/2022

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		R	oute	75			Nat	ional	Drive			F	Route	75		;	Shoep	hoest	er Roa	ad	
		Fre	om No	orth			F	rom E	ast			Fr	om So	outh			Fı	rom W	est /		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
D I - I I 4	V	E	040	2 014 4	- 05 45	D14 F	S 1 - 4	- (4													

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour to	or ⊨ac	n Appi	oacn	<u>Begins</u>	at:															
	04:45 PM	1				04:45 PN	И				04:15 PN	1				04:00 PM	1			
+0 mins.	32	94	2	0	128	3	3	2	1	9	5	119	61	0	185	29	3	55	0	87
+15 mins.	27	106	1	0	134	6	2	2	1	11	5	114	56	0	175	53	4	54	0	111
+30 mins.	29	89	2	0	120	6	4	1	0	11	1	120	66	0	187	39	4	63	0	106
+45 mins.	30	113	2	0	145	7	4	0	6	17	4	124	73	0	201	40	3	56	0	99
Total Volume	118	402	7	0	527	22	13	5	8	48	15	477	256	0	748	161	14	228	0	403
% App. Total	22.4	76.3	1.3	0		45.8	27.1	10.4	16.7		2	63.8	34.2	0		40	3.5	56.6	0	
PHF	.922	.889	.875	.000	.909	.786	.813	.625	.333	.706	.750	.962	.877	.000	.930	.759	.875	.905	.000	.908



Kensington, Connecticut 06037 (860) 828-1693

Schoephoester Road at Light/Airport Srvc Windsor Locks, Connecticut

File Name: 23674 Site Code: 23674

Start Date : 10/27/2022

Page No : 1

Groups Printed- Lights - Buses - Trucks

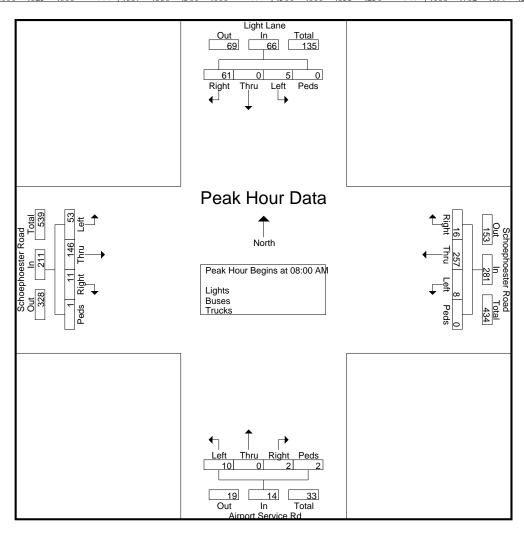
		L	ight La	ane		5	Schoep	hoeste	r Road			Airpo	rt Serv	ice Rd		5	Schoep	hoeste	Road		
		Fı	rom No	orth			F	rom Ea	ast			Fr	om So	uth			Fı	om W	est		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	22	0	1	0	23	0	49	0	0	49	0	0	0	0	0	0	27	12	0	39	111
07:15 AM	13	0	1	0	14	3	57	3	0	63	0	0	2	0	2	4	28	6	0	38	117
07:30 AM	14	0	2	1	17	6	57	1	0	64	0	0	3	0	3	2	22	12	0	36	120
07:45 AM	16	0	0	0	16	8	53	3	0	64	1	1	1	1	4	3	29	10	1	43	127
Total	65	0	4	1	70	17	216	7	0	240	1	1	6	1	9	9	106	40	1	156	475
08:00 AM	9	0	1	0	10	3	59	2	0	64	1	0	3	2	6	3	52	9	1	65	145
08:15 AM	6	0	1	0	7	6	57	0	0	63	0	0	1	0	1	2	34	11	0	47	118
08:30 AM	23	0	1	0	24	5	73	4	0	82	0	0	3	0	3	2	26	14	0	42	151
08:45 AM	23	0	2	0	25	2	68	2	0	72	1	0	3	0	4	4	34	19	0	57	158
Total	61	0	5	0	66	16	257	8	0	281	2	0	10	2	14	11	146	53	1	211	572
Grand Total	126	0	9	1	136	33	473	15	0	521	3	1	16	3	23	20	252	93	2	367	1047
Apprch %	92.6	0	6.6	0.7		6.3	90.8	2.9	0		13	4.3	69.6	13		5.4	68.7	25.3	0.5		
Total %	12	0	0.9	0.1	13	3.2	45.2	1.4	0	49.8	0.3	0.1	1.5	0.3	2.2	1.9	24.1	8.9	0.2	35.1	
Lights	125	0	8	1	134	32	461	14	0	507	2	0	16	3	21	20	245	93	2	360	1022
% Lights	99.2	0	88.9	100	98.5	97	97.5	93.3	0	97.3	66.7	0	100	100	91.3	100	97.2	100	100	98.1	97.6
Buses	0	0	0	0	0	0	7	0	0	7	1	0	0	0	1	0	3	0	0	3	11
% Buses	0	0	0	0	0	0	1.5	0	0	1.3	33.3	0	0	0	4.3	0	1.2	0	0	0.8	1.1
Trucks	1	0	1	0	2	1	5	1	0	7	0	1	0	0	1	0	4	0	0	4	14
% Trucks	0.8	0	11.1	0	1.5	3	1.1	6.7	0	1.3	0	100	0	0	4.3	0	1.6	0	0	1.1	1.3

Kensington, Connecticut 06037 (860) 828-1693

File Name : 23674 Site Code : 23674

Start Date : 10/27/2022

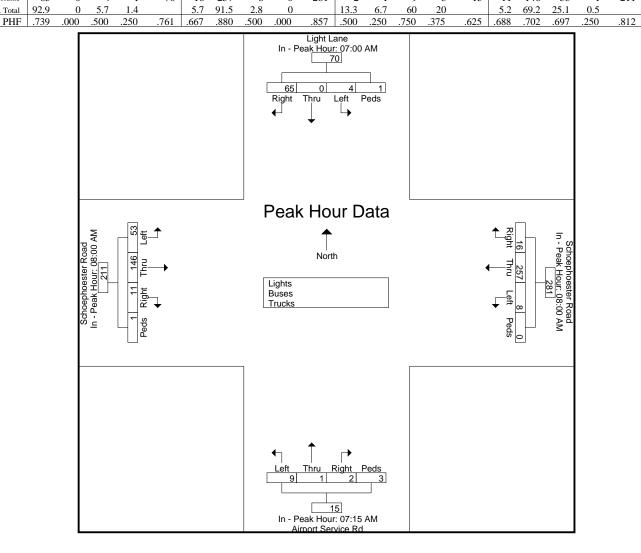
		L	ight La	ne		S	Schoep	hoeste	r Road			Airpo	rt Serv	ice Rd		5	Schoep	hoeste	r Road		
		Fr	om No	orth			F	rom Ea	ast			Fr	om So	uth			Fı	om W	est		
Start	D. I.	T1	Left	, , l		D. L.	T1	Left	, ,		D: 1.	T1	Left	D .		D. I.	T1	I of	D .		
Time	Right	Thru	Leit	Peds	App. Total	Right	Thru	Len	Peds	App. Total	Right	Thru	Len	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour A	nalysis	From (7:00 A	M to 0	8:45 AN	1 - Peal	k 1 of 1	l													
Peak Hour fo	r Entire	Inters	ection 1	Begins	at 08:00	AM															
08:00 AM	9	0	1	0	10	3	59	2	0	64	1	0	3	2	6	3	52	9	1	65	145
08:15 AM	6	0	1	0	7	6	57	0	0	63	0	0	1	0	1	2	34	11	0	47	118
08:30 AM	23	0	1	0	24	5	73	4	0	82	0	0	3	0	3	2	26	14	0	42	151
08:45 AM	23	0	2	0	25	2	68	2	0	72	1	0	3	0	4	4	34	19	0	57	158
Total Volume	61	0	5	0	66	16	257	8	0	281	2	0	10	2	14	11	146	53	1	211	572
% App. Total	92.4	0	7.6	0		5.7	91.5	2.8	0		14.3	0	71.4	14.3		5.2	69.2	25.1	0.5		
PHF	.663	.000	.625	.000	.660	.667	.880	.500	.000	.857	.500	.000	.833	.250	.583	.688	.702	.697	.250	.812	.905



Kensington, Connecticut 06037 (860) 828-1693

File Name : 23674 Site Code : 23674 Start Date : 10/27/2022

			ight La			S		hoester rom Ea	r Road ast				rt Serv om So	ice Rd uth		S		hoester	Road		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. T
Peak Hour Ar	nalysis	From 0	7:00 A	M to 0	8:45 AN	1 - Peal	k 1 of 1	l													
Peak Hour for	Each	Approa	ch Beg	gins at:																	_
	07:00 AM					08:00 AM	ı				07:15 AM					08:00 AM	I				
+0 mins.	22	0	1	0	23	3	59	2	0	64	0	0	2	0	2	3	52	9	1	65	
+15 mins.	13	0	1	0	14	6	57	0	0	63	0	0	3	0	3	2	34	11	0	47	
+30 mins.	14	0	2	1	17	5	73	4	0	82	1	1	1	1	4	2	26	14	0	42	
+45 mins.	16	0	0	0	16	2	68	2	0	72	1	0	3	2	6	4	34	19	0	57	
Total Volume	65	0	4	1	70	16	257	8	0	281	2	1	9	3	15	11	146	53	1	211	
% App. Total	92.9	0	5.7	1.4		5.7	91.5	2.8	0		13.3	6.7	60	20		5.2	69.2	25.1	0.5		



Kensington, Connecticut 06037 (860) 828-1693

Schoephoester Road at Light/Airport Srvc Windsor Locks, Connecticut

Site Code : 23675

File Name: 23675

Start Date : 10/27/2022

Page No : 1

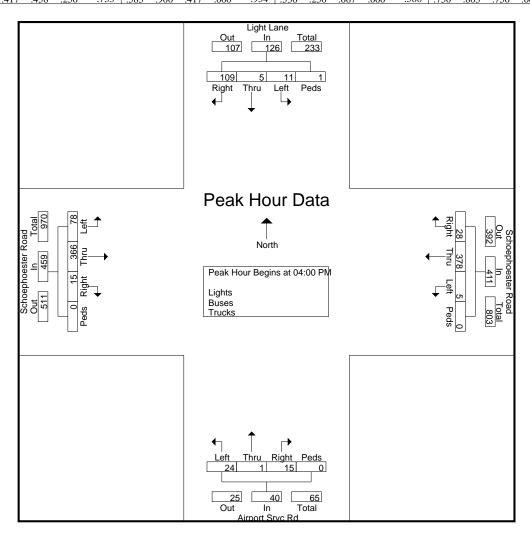
Groups Printed- Lights - Buses - Trucks

		L	ight La	ine		5	Schoep	hoeste	r Road			Airp	ort Srv	c Rd		S	Schoep	hoester	Road		
		Fr	om No	rth			F	rom Ea	ast			Fr	om So	uth			Fı	rom W	est		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	33	3	1	1	38	5	105	0	0	110	3	0	8	0	11	5	95	23	0	123	282
04:15 PM	39	2	2	0	43	12	93	3	0	108	7	1	9	0	17	5	114	26	0	145	313
04:30 PM	21	0	2	0	23	9	80	1	0	90	2	0	5	0	7	4	88	15	0	107	227
04:45 PM	16	0	6	0	22	2	100	1	0	103	3	0	2	0	5	1	69	14	0	84	214
Total	109	5	11	1	126	28	378	5	0	411	15	1	24	0	40	15	366	78	0	459	1036
05:00 PM	13	0	5	0	18	7	97	2	0	106	1	0	0	0	1	2	75	17	0	94	219
05:15 PM	25	0	3	0	28	5	78	0	0	83	0	0	1	1	2	1	64	14	1	80	193
05:30 PM	29	0	0	0	29	13	83	1	0	97	5	2	3	0	10	3	78	17	0	98	234
05:45 PM	24	0	4	0	28	4	83	1	0	88	3	1	0	0	4	2	64	10	0	76	196
Total	91	0	12	0	103	29	341	4	0	374	9	3	4	1	17	8	281	58	1	348	842
Grand Total	200	5	23	1	229	57	719	9	0	785	24	4	28	1	57	23	647	136	1	807	1878
Apprch %	87.3	2.2	10	0.4		7.3	91.6	1.1	0		42.1	7	49.1	1.8		2.9	80.2	16.9	0.1		
Total %	10.6	0.3	1.2	0.1	12.2	3	38.3	0.5	0	41.8	1.3	0.2	1.5	0.1	3	1.2	34.5	7.2	0.1	43	
Lights	200	5	23	1	229	57	698	9	0	764	24	4	28	1	57	23	639	135	1	798	1848
% Lights	100	100	100	100	100	100	97.1	100	0	97.3	100	100	100	100	100	100	98.8	99.3	100	98.9	98.4
Buses	0	0	0	0	0	0	10	0	0	10	0	0	0	0	0	0	2	0	0	2	12
% Buses	0	0	0	0_	0	0	1.4	0	0_	1.3	0	0	0	0	0	0	0.3	0_	0	0.2	0.6
Trucks	0	0	0	0	0	0	11	0	0	11	0	0	0	0	0	0	6	1	0	7	18
% Trucks	0	0	0	0	0	0	1.5	0	0	1.4	0	0	0	0	0	0	0.9	0.7	0	0.9	1

Kensington, Connecticut 06037 (860) 828-1693

File Name: 23675 Site Code: 23675 Start Date : 10/27/2022

			ight La			5	Schoep	hoestei rom Ea					ort Srv			S		hoester	r Road est		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Aı	nalysis	From (4:00 P	M to 0	5:45 PM	- Peak	1 of 1														
Peak Hour for	r Entire	llysis From 04:00 PM to 05:45 PM - Peak 1 of 1 Entire Intersection Begins at 04:00 PM 33																			
04:00 PM	33	3	1	1	38	5	105	0	0	110	3	0	8	0	11	5	95	23	0	123	282
04:15 PM	39	2	2	0	43	12	93	3	0	108	7	1	9	0	17	5	114	26	0	145	313
04:30 PM	21	0	2	0	23	9	80	1	0	90	2	0	5	0	7	4	88	15	0	107	227
04:45 PM	16	0	6	0	22	2	100	1	0	103	3	0	2	0	5	1	69	14	0	84	214
Total Volume	109	5	11	1	126	28	378	5	0	411	15	1	24	0	40	15	366	78	0	459	1036
% App. Total	86.5	4	8.7	0.8		6.8	92	1.2	0		37.5	2.5	60	0		3.3	79.7	17	0		
PHF	699	417	458	250	.733	583	900	417	000	.934	536	.250	.667	000	.588	.750	803	750	000	.791	.827



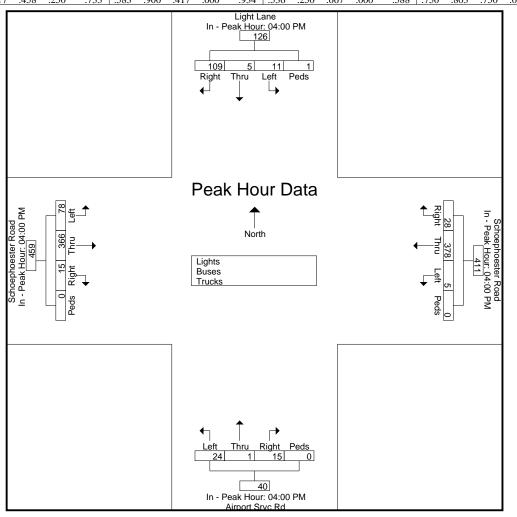
Kensington, Connecticut 06037 (860) 828-1693

File Name : 23675 Site Code : 23675 Start Date : 10/27/2022

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		L	ight La	ane		S	Schoep	hoeste	r Road			Airp	ort Srv	vc Rd		S	Schoep	hoester	r Road		1
		Fr	om No	orth			F	rom Ea	ıst			Fr	om So	uth			Fı	rom W	est		
Start	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Time	Kigit	Tinu	Leit	1 cus	App. rotai	Kigitt	Tinu	Leit	1 cus	App. Total	Kight	Tinu	Leit	1 cus	App. rotai	Kigitt	Imu	Leit	1 cus	App. Total	Int. Total
Peak Hour A	nalysis	From (04:00 P	M to 0	5:45 PM	- Peak	1 of 1														
Peak Hour fo	r Each	Approa	ich Beg	gins at:																	_
	04:00 PM	1				04:00 PM					04:00 PM					04:00 PM					

+0 mins. +15 mins. +30 mins. +45 mins. Total Volume % App. Total 86.5 8.7 6.8 37.5 3.3 79.7 PHF | .699 .417 .458 .250 .733 .583 .900 .417 .000 .934 | .536 .250 .667 .000 .588 .750 .803 .750 .000 .791



Kensington, Connecticut 06037 (860) 828-1693

Route 75 at Elm Street Windsor Locks, Connecticut File Name: 23668 Site Code: 23668

Start Date : 10/27/2022

Page No : 1

Groups Printed- Lights - Buses - Trucks

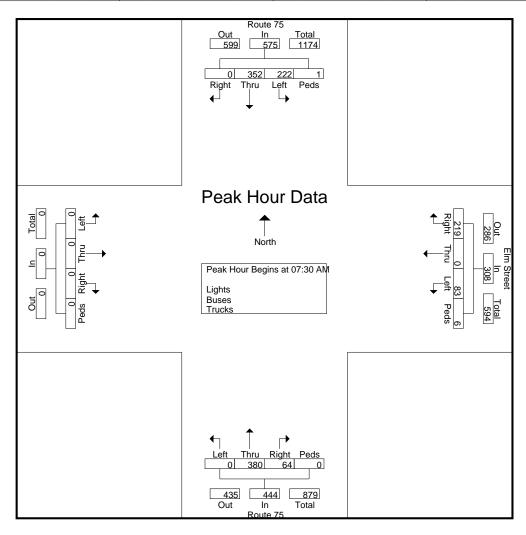
								10 aps .				,,,									1
]	Route 7	75			E	lm Stre	eet			I	Route 7	'5							
		Fı	rom No	orth			F	rom Ea	ıst			Fr	om So	uth			Fı	om W	est		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	0	85	70	0	155	50	0	16	1	67	21	76	0	0	97	0	0	0	0	0	319
07:15 AM	0	88	57	0	145	43	3	22	0	68	23	67	0	0	90	0	0	3	0	3	306
07:30 AM	0	85	54	0	139	56	0	26	1	83	13	96	0	0	109	0	0	0	0	0	331
07:45 AM	0	98	55	0	153	62	0	16	0	78	18	90	0	0	108	0	0	0	0	0	339
Total	0	356	236	0	592	211	3	80	2	296	75	329	0	0	404	0	0	3	0	3	1295
08:00 AM	0	70	59	0	129	63	0	25	0	88	19	85	0	0	104	0	0	0	0	0	321
08:15 AM	0	99	54	1	154	38	0	16	5	59	14	109	0	0	123	0	0	0	0	0	336
08:30 AM	0	91	54	0	145	43	0	14	0	57	15	93	0	0	108	0	0	0	0	0	310
08:45 AM	0	66	55	0	121	41	0	23	0	64	22	97	0	0	119	0	0	0	0	0	304
Total	0	326	222	1	549	185	0	78	5	268	70	384	0	0	454	0	0	0	0	0	1271
Grand Total	0	682	458	1	1141	396	3	158	7	564	145	713	0	0	858	0	0	3	0	3	2566
Apprch %	0	59.8	40.1	0.1		70.2	0.5	28	1.2		16.9	83.1	0	0		0	0	100	0		
Total %	0	26.6	17.8	0	44.5	15.4	0.1	6.2	0.3	22	5.7	27.8	0	0	33.4	0	0	0.1	0	0.1	
Lights	0	618	429	1	1048	369	0	155	7	531	141	642	0	0	783	0	0	0	0	0	2362
% Lights	0	90.6	93.7	100	91.8	93.2	0	98.1	100	94.1	97.2	90	0	0	91.3	0	0	0	0	0	92
Buses	0	61	26	0	87	27	3	2	0	32	3	68	0	0	71	0	0	2	0	2	192
% Buses	0	8.9	5.7	0	7.6	6.8	100	1.3	0	5.7	2.1	9.5	0	0	8.3	0	0	66.7	0	66.7	7.5
Trucks	0	3	3	0	6	0	0	1	0	1	1	3	0	0	4	0	0	1	0	1	12
% Trucks	0	0.4	0.7	0	0.5	0	0	0.6	0	0.2	0.7	0.4	0	0	0.5	0	0	33.3	0	33.3	0.5

Kensington, Connecticut 06037 (860) 828-1693

File Name: 23668 Site Code: 23668

Start Date : 10/27/2022

		F	Route 7	75			Е	lm Str	eet			I	Route 7	75							
		Fr	om No	orth			F	rom Ea	ast			Fr	om So	uth			Fı	om W	est		
Start	Dista	Thru	Left	Peds		Dista	Thru	Left	D- J-		Distr	Thru	Left	D- J-		Dista	Thru	Left	D- J-		
Time	Right	HIII	Leit	Peas	App. Total	Right	Tillu	Len	Peds	App. Total	Right	Tillu	Leit	Peds	App. Total	Right	Iniu	Len	Peds	App. Total	Int. Total
Peak Hour Ar	nalysis	From ()7:00 A	M to 0	8:45 AN	1 - Peal	k 1 of 1	l													
Peak Hour for	r Entire	Inters	ection :	Begins	at 07:30	AM															
07:30 AM	0	85	54	0	139	56	0	26	1	83	13	96	0	0	109	0	0	0	0	0	331
07:45 AM	0	98	55	0	153	62	0	16	0	78	18	90	0	0	108	0	0	0	0	0	339
08:00 AM	0	70	59	0	129	63	0	25	0	88	19	85	0	0	104	0	0	0	0	0	321
08:15 AM	0	99	54	1	154	38	0	16	5	59	14	109	0	0	123	0	0	0	0	0	336
Total Volume	0	352	222	1	575	219	0	83	6	308	64	380	0	0	444	0	0	0	0	0	1327
% App. Total	0	61.2	38.6	0.2		71.1	0	26.9	1.9		14.4	85.6	0	0		0	0	0	0		
PHF	.000	.889	.941	.250	.933	.869	.000	.798	.300	.875	.842	.872	.000	.000	.902	.000	.000	.000	.000	.000	.979



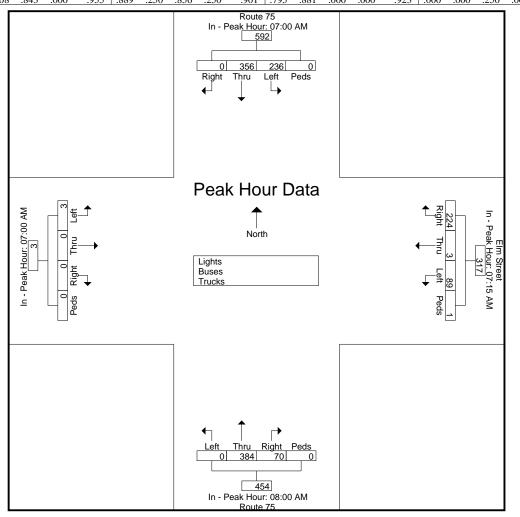
Kensington, Connecticut 06037 (860) 828-1693

File Name : 23668 Site Code : 23668 Start Date : 10/27/2022

Page No : 3

			F	Route 7	75			Е	lm Stre	eet			I	Route 7	15							
			Fr	om No	orth			F	rom Ea	ıst			Fr	om So	uth			Fı	om W	est		
	Start Time	Start Bight Thru Left Pods						Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
]	Peak Hour Ar	nalysis	From (07:00 A	M to (08:45 AM	1 - Peal	k 1 of 1														
]	Peak Hour for	Each	Approa	ach Beg	gins at:																	1

+0 mins. +15 mins. +30 mins. +45 mins. Total Volume 39.9 70.7 0.9 % App. Total 60.1 28.1 15.4 84.6 PHF | .000 .908 .843 .000 .955 .889 .250 .856 .250 .901 | .795 .881 .000 .000 .923 .000 .000 .250 .000 .250



Kensington, Connecticut 06037 (860) 828-1693

Route 75 at Elm Street Windsor Locks, Connecticut File Name: 23669 Site Code: 23669

Start Date : 10/27/2022

Page No : 1

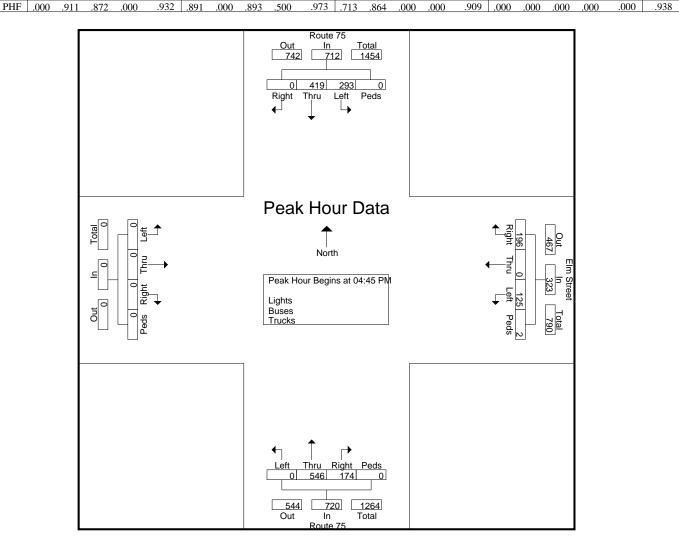
Groups Printed- Lights - Buses - Trucks

- 1																					1	
		Route 75				Elm Street From East					Route 75 From South											
		From North														From West						
Į	Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
	04:00 PM	0	112	58	0	170	46	0	30	1	77	36	135	0	0	171	0	0	0	0	0	418
	04:15 PM	0	102	74	0	176	60	0	26	0	86	45	136	0	0	181	0	0	0	0	0	443
	04:30 PM	0	79	62	0	141	44	0	24	2	70	31	120	0	0	151	0	0	0	0	0	362
	04:45 PM	0	106	84	0	190	55	0	27	0	82	38	158	0	0	196	0	0	0	0	0	468
	Total	0	399	278	0	677	205	0	107	3	315	150	549	0	0	699	0	0	0	0	0	1691
	05:00 PM	0	115	76	0	191	46	0	30	1	77	61	137	0	0	198	0	0	0	0	0	466
	05:15 PM	0	101	67	0	168	46	0	35	0	81	45	116	0	0	161	0	0	0	0	0	410
	05:30 PM	0	97	66	0	163	49	0	33	1	83	30	135	0	0	165	0	0	0	0	0	411
	05:45 PM	0	69	37	0	106	43	0	22	0	65	32	95	0	0	127	0	0	0	0	0	298
	Total	0	382	246	0	628	184	0	120	2	306	168	483	0	0	651	0	0	0	0	0	1585
	Grand Total	0	781	524	0	1305	389	0	227	5	621	318	1032	0	0	1350	0	0	0	0	0	3276
	Apprch %	0	59.8	40.2	0		62.6	0	36.6	0.8		23.6	76.4	0	0		0	0	0	0		
	Total %	0	23.8	16	0	39.8	11.9	0	6.9	0.2	19	9.7	31.5	0	0	41.2	0	0	0	0	0	
	Lights	0	751	504	0	1255	366	0	227	5	598	318	986	0	0	1304	0	0	0	0	0	3157
	% Lights	0	96.2	96.2	0	96.2	94.1	0	100	100	96.3	100	95.5	0	0	96.6	0	0	0	0	0	96.4
	Buses	0	25	20	0	45	21	0	0	0	21	0	44	0	0	44	0	0	0	0	0	110
	% Buses	0	3.2	3.8	0	3.4	5.4	0	0	0	3.4	0	4.3	0	0	3.3	0	0	0	0	0	3.4
	Trucks	0	5	0	0	5	2	0	0	0	2	0	2	0	0	2	0	0	0	0	0	9
	% Trucks	0	0.6	0	0	0.4	0.5	0	0	0	0.3	0	0.2	0	0	0.1	0	0	0	0	0	0.3

Kensington, Connecticut 06037 (860) 828-1693

File Name : 23669 Site Code : 23669 Start Date : 10/27/2022

		I	Route 7	15			Е	lm Stre	eet			F	Route 7	5							
		Fı	om No	orth			F	rom Ea	ast			Fr	om So	uth			Fı	om W	est		
Start		TC1	Left	ъ.		n	TD1	T - C4	L			TO	T - C4	ъ.			TEI	T - C4	ъ.		
Time	Right	Thru	Len	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Tot
Peak Hour A	nalysis	From ()4:00 P	M to 0	5:45 PM	- Peak	1 of 1														
Peak Hour for	Entire	e Inters	ection l	Begins	at 04:45	PM															
04:45 PM	0	106	84	0	190	55	0	27	0	82	38	158	0	0	196	0	0	0	0	0	46
05:00 PM	0	115	76	0	191	46	0	30	1	77	61	137	0	0	198	0	0	0	0	0	46
05:15 PM	0	101	67	0	168	46	0	35	0	81	45	116	0	0	161	0	0	0	0	0	410
05:30 PM	0	97	66	0	163	49	0	33	1	83	30	135	0	0	165	0	0	0	0	0	411
Total Volume	0	419	293	0	712	196	0	125	2	323	174	546	0	0	720	0	0	0	0	0	1755
% App. Total	0	58.8	41.2	0		60.7	0	38.7	0.6		24.2	75.8	0	0		0	0	0	0		
DITE	000	011	070	000	022	001	000	002	500	072	710	0.64	000	000	000	000	000	000	000	000	0.2



Kensington, Connecticut 06037 (860) 828-1693

File Name: 23669 Site Code: 23669

Start Date : 10/27/2022

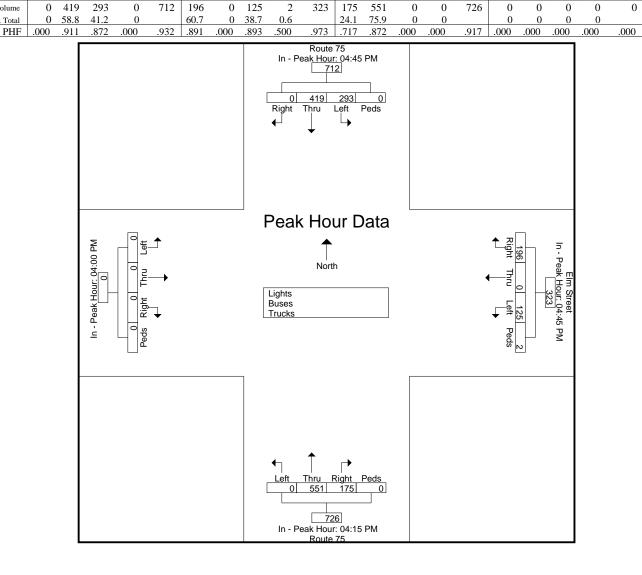
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Page No : 3

			Route 7					lm Stro rom Ea					Route 7				E.	om W	aat		
		ГІ	OIII INC	nuı			Г.	TOIL E	ası			ГІ	<u>om 30</u>	um			FI	OIII W	est		
Start	Right	Thru	Left	Peds		Right	Thru	Left	Peds		Right	Thru	Left	Peds		Right	Thru	Left	Peds	l	Int. Total
Time	Kigiii	Tillu	Lett	reus	App. Total	Kigiii	Tillu	Leit	reus	App. Total	Kigiii	Tillu	Leit	reus	App. Total	Kigiii	Tillu	Leit	reus	App. Total	Int. I otai
Peak Hour A	nalysis	From (04:00 P	M to 0	5:45 PM	- Peak	1 of 1														
Peak Hour for	r Each	Approa	ich Beg	gins at:																	-
	04:45 PM					04:45 PM					04:15 PM					04:00 PM					
+0 mins.	0	106	84	0	190	55	0	27	0	82	45	136	0	0	181	0	0	0	0	0	
+15 mins.	0	115	76	0	191	46	0	30	1	77	31	120	0	0	151	0	0	0	0	0	
+30 mins.	0	101	67	0	168	46	0	35	0	81	38	158	0	0	196	0	0	0	0	0	
+45 mins.	0	97	66	0	163	49	0	33	1	83	61	137	0	0	198	0	0	0	0	0	

Total Volume

% App. Total



Kensington, Connecticut 06037 (860) 828-1693

Elm Street at Old County Road Windsor Locks, Connecticut

File Name: 23670 Site Code: 23670

Start Date : 10/27/2022

Page No : 1

Groups Printed- Lights - Buses - Trucks

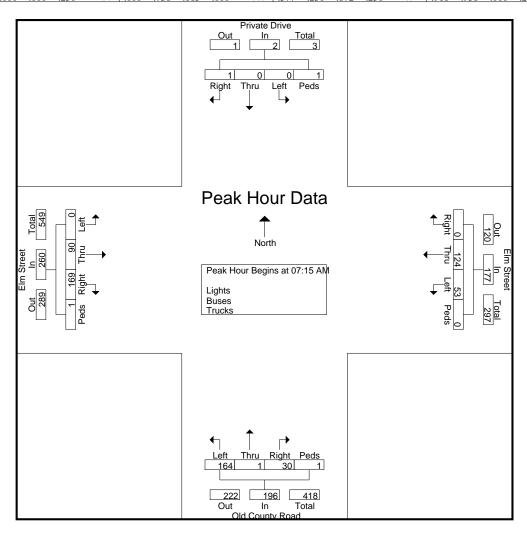
								1000					- CILD								
		Pri	vate D	rive			E	lm Str	eet	_		Old (County	Road			Е	lm Stre	eet		
		Fr	om No	rth			F	rom Ea	ast			Fr	om So	uth			Fı	om W	est		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	26	6	0	32	11	0	36	1	48	64	26	0	2	92	172
07:15 AM	0	0	0	0	0	0	30	11	0	41	1	0	32	1	34	43	23	0	1	67	142
07:30 AM	0	0	0	0	0	0	42	13	0	55	7	0	40	0	47	40	22	0	0	62	164
07:45 AM	1	0	0	1	2	0	25	9	0	34	13	1	45	0	59	40	21	0	0	61	156
Total	1	0	0	1	2	0	123	39	0	162	32	1	153	2	188	187	92	0	3	282	634
08:00 AM	0	0	0	0	0	0	27	20	0	47	9	0	47	0	56	46	24	0	0	70	173
08:15 AM	0	1	0	0	1	0	21	8	0	29	9	0	33	0	42	50	19	0	1	70	142
08:30 AM	1	0	0	0	1	1	23	8	0	32	2	0	31	0	33	46	21	1	1	69	135
08:45 AM	0	0	0	1_	1	0	28	6	0	34	4	0	35	0	39	43	24	0	2	69	143
Total	1	1	0	1	3	1	99	42	0	142	24	0	146	0	170	185	88	1	4	278	593
Grand Total	2	1	0	2	5	1	222	81	0	304	56	1	299	2	358	372	180	1	7	560	1227
Apprch %	40	20	0	40		0.3	73	26.6	0		15.6	0.3	83.5	0.6		66.4	32.1	0.2	1.2		
Total %	0.2	0.1	0	0.2	0.4	0.1	18.1	6.6	0	24.8	4.6	0.1	24.4	0.2	29.2	30.3	14.7	0.1	0.6	45.6	
Lights	2	1	0	2	5	1	215	79	0	295	52	1	290	2	345	365	162	1	7	535	1180
% Lights	100	100	0	100	100	100	96.8	97.5	0	97	92.9	100	97	100	96.4	98.1	90	100	100	95.5	96.2
Buses	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	1	3	0	0	4	7
% Buses	0	0_	0_	0_	0	0	0	0	0	0	5.4	0	0	0	0.8	0.3	1.7	0	0	0.7	0.6
Trucks	0	0	0	0	0	0	7	2	0	9	1	0	9	0	10	6	15	0	0	21	40
% Trucks	0	0	0	0	0	0	3.2	2.5	0	3	1.8	0	3	0	2.8	1.6	8.3	0	0	3.8	3.3

Kensington, Connecticut 06037 (860) 828-1693

File Name: 23670 Site Code: 23670

Start Date : 10/27/2022

		Pri	vate D	rive			Е	lm Str	eet			Old (County	Road			Е	lm Stre	eet		
		Fr	om No	orth			F	rom Ea	ast			Fr	om So	uth			Fı	om W	est		
Start		TEI	T - £4	ъ.		D	TD1	T - C4	,			TCI	T - C4	ъ.			771	T - C4	ъ.		
Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour A	nalysis	From ()7:00 A	M to 0	8:45 AN	1 - Peal	k 1 of 1	l													
Peak Hour for	r Entire	Inters	ection :	Begins	at 07:15	AM															
07:15 AM	0	0	0	0	0	0	30	11	0	41	1	0	32	1	34	43	23	0	1	67	142
07:30 AM	0	0	0	0	0	0	42	13	0	55	7	0	40	0	47	40	22	0	0	62	164
07:45 AM	1	0	0	1	2	0	25	9	0	34	13	1	45	0	59	40	21	0	0	61	156
08:00 AM	0	0	0	0	0	0	27	20	0	47	9	0	47	0	56	46	24	0	0	70	173
Total Volume	1	0	0	1	2	0	124	53	0	177	30	1	164	1	196	169	90	0	1	260	635
% App. Total	50	0	0	50		0	70.1	29.9	0		15.3	0.5	83.7	0.5		65	34.6	0	0.4		
PHF	.250	.000	.000	.250	.250	.000	.738	.663	.000	.805	.577	.250	.872	.250	.831	.918	.938	.000	.250	.929	.918



Kensington, Connecticut 06037 (860) 828-1693

File Name : 23670 Site Code : 23670 Start Date : 10/27/2022

282

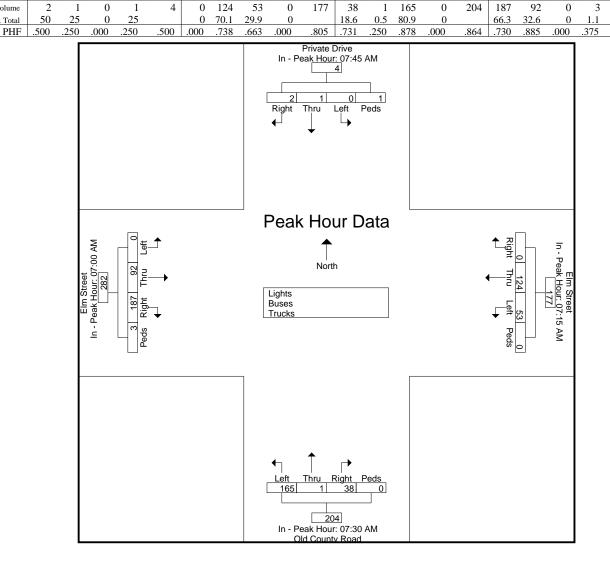
.766

Page No : 3

			vate D					lm Stro rom Ea					County om So					lm Stre			
		FI	OIII INC	nui			Г	TOIII E	ast			ΓI	0111 30	uui			FI	OIII W	est		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Tot
Peak Hour Ar	alysis	From (7:00 A	M to 0	08:45 AM	1 - Peal	k 1 of 1	l													
Peak Hour for	Each	Approa	ch Be	gins at:																	_
	07:45 AM					07:15 AM	ı				07:30 AM	I				07:00 AM	I				
+0 mins.	1	0	0	1	2	0	30	11	0	41	7	0	40	0	47	64	26	0	2	92	
+15 mins.	0	0	0	0	0	0	42	13	0	55	13	1	45	0	59	43	23	0	1	67	
+30 mins.	0	1	0	0	1	0	25	9	0	34	9	0	47	0	56	40	22	0	0	62	
+45 mins.	1	0	0	0	1	0	27	20	0	47	9	0	33	0	42	40	21	0	0	61	

Total Volume

% App. Total



Kensington, Connecticut 06037 (860) 828-1693

Elm Street at Old County Road Windsor Locks, Connecticut

File Name: 23671 Site Code: 23671

Start Date : 10/27/2022

Page No : 1

Groups Printed- Lights - Buses - Trucks

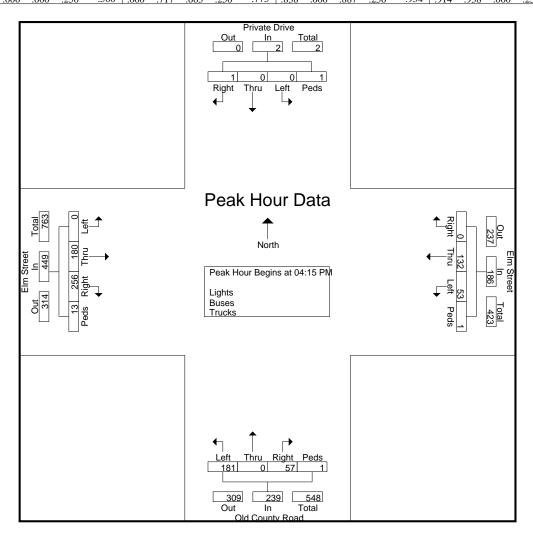
																					1
		Pri	vate D	rive			Е	lm Str	eet			Old (County	Road			Е	lm Stre	eet		
		Fr	om No	orth			F	rom Ea	ast			Fr	om So	uth			Fı	rom W	est		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	1	0	0	0	1	0	28	9	0	37	25	0	49	0	74	41	37	0	0	78	190
04:15 PM	0	0	0	0	0	0	28	9	0	37	13	0	51	0	64	51	46	0	0	97	198
04:30 PM	0	0	0	1	1	0	46	13	1	60	17	0	44	0	61	67	48	0	0	115	237
04:45 PM	0	0	0	0	0	0	40	11	0	51	13	0	46	1	60	68	45	0	13	126	237_
Total	1	0	0	1	2	0	142	42	1	185	68	0	190	1	259	227	176	0	13	416	862
05:00 PM	1	0	0	0	1	0	18	20	0	38	14	0	40	0	54	70	41	0	0	111	204
05:15 PM	0	0	0	2	2	0	26	12	0	38	12	0	47	0	59	47	39	0	0	86	185
05:30 PM	0	0	0	3	3	0	41	11	1	53	16	0	65	0	81	47	38	0	0	85	222
05:45 PM	0	0	0	0	0	0	32	17	0	49	14	0	43	0	57	33	40	0	0	73	179
Total	1	0	0	5	6	0	117	60	1	178	56	0	195	0	251	197	158	0	0	355	790
Grand Total	2	0	0	6	8	0	259	102	2	363	124	0	385	1	510	424	334	0	13	771	1652
Apprch %	25	0	0	75		0	71.3	28.1	0.6		24.3	0	75.5	0.2		55	43.3	0	1.7		
Total %	0.1	0	0	0.4	0.5	0	15.7	6.2	0.1	22	7.5	0	23.3	0.1	30.9	25.7	20.2	0	0.8	46.7	
Lights	2	0	0	6	8	0	245	102	2	349	124	0	378	1	503	414	327	0	12	753	1613
% Lights	100	0	0	100	100	0	94.6	100	100	96.1	100	0	98.2	100	98.6	97.6	97.9	0	92.3	97.7	97.6
Buses	0	0	0	0	0	0	1	0	0	1	0	0	1	0	1	0	0	0	0	0	2
% Buses	0	0	0	0	0	0	0.4	0	0	0.3	0	0	0.3	0	0.2	0	0	0	0	0	0.1
Trucks	0	0	0	0	0	0	13	0	0	13	0	0	6	0	6	10	7	0	1	18	37
% Trucks	0	0	0	0	0	0	5	0	0	3.6	0	0	1.6	0	1.2	2.4	2.1	0	7.7	2.3	2.2

Kensington, Connecticut 06037 (860) 828-1693

File Name: 23671 Site Code: 23671

Start Date : 10/27/2022

			vate D					lm Stre					County					lm Stre			
		Fr	om No	rth			F	rom Ea	ıst			Fr	om So	uth			F1	om W	est		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Ar	nalysis	From 0	4:00 P	M to 0	5:45 PM	- Peak	1 of 1														
Peak Hour for	r Entire	Interse	ection l	Begins	at 04:15	PM					_										
04:15 PM	0	0	0	0	0	0	28	9	0	37	13	0	51	0	64	51	46	0	0	97	198
04:30 PM	0	0	0	1	1	0	46	13	1	60	17	0	44	0	61	67	48	0	0	115	237
04:45 PM	0	0	0	0	0	0	40	11	0	51	13	0	46	1	60	68	45	0	13	126	237
05:00 PM	1	0	0	0	1	0	18	20	0	38	14	0	40	0	54	70	41	0	0	111	204
Total Volume	1	0	0	1	2	0	132	53	1	186	57	0	181	1	239	256	180	0	13	449	876
% App. Total	50	0	0	50		0	71	28.5	0.5		23.8	0	75.7	0.4		57	40.1	0	2.9		
PHF	250	000	000	250	500	000	717	663	250	775	838	000	887	250	934	914	938	000	250	891	924



Kensington, Connecticut 06037 (860) 828-1693

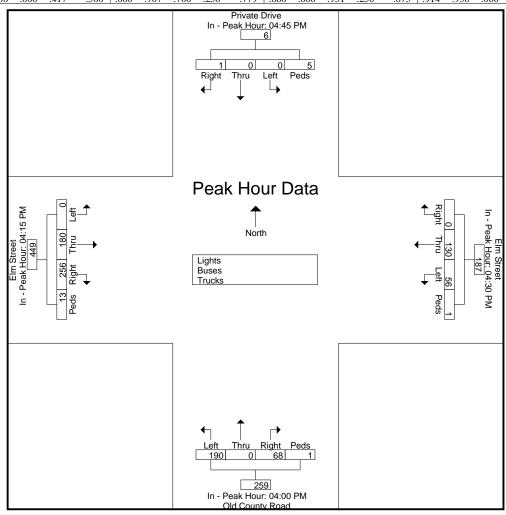
File Name : 23671 Site Code : 23671 Start Date : 10/27/2022

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		Pri	vate D	rive			Е	lm Str	eet			Old (County	Road			Е	lm Str	eet		
		Fr	om No	orth			F	rom Ea	ast			Fr	om So	uth			Fı	om W	est		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
D 1 II A		-	4 00 B	3 f . O	- 45 D3 6	- D 1	1 6 1														

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at: 04:00 PM 04:15 PM +0 mins. +15 mins. +30 mins. +45 mins. Total Volume 29.9 2.9 % App. Total 69.5 26.3 73.4 40.1 PHF | .250 .000 .000 .417 .500 .000 .707 .700 .779 .680 .000 .931 .250 .875 .914 .938 .000 .250 .891



Kensington, Connecticut 06037 (860) 828-1693

Old County Road at Halfway House Road Windsor Locks, Connecticut

File Name: 23672 Site Code: 23672

Start Date : 10/27/2022

Page No : 1

Groups Printed- Lights - Buses - Trucks

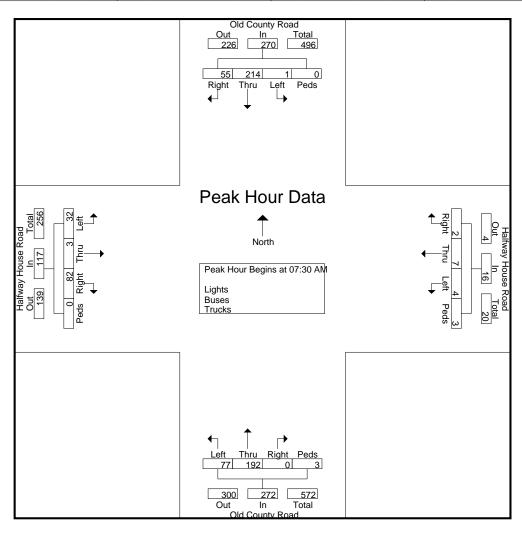
		Old C	County	Road		I	Halfwa	y Hous	se Road	1		Old (County	Road		I	Halfwa	y Hous	e Road	i	
		Fr	om No	rth			F	rom Ea	ıst			Fr	om So	uth			Fr	om W	est		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	13	66	0	0	79	1	8	4	1	14	0	44	10	0	54	10	2	7	0	19	166
07:15 AM	9	56	0	0	65	0	2	2	1	5	0	37	11	1	49	18	0	3	0	21	140
07:30 AM	13	55	0	0	68	0	2	1	1	4	0	50	26	1	77	21	0	6	0	27	176
07:45 AM	15	41	0	0	56	2	3	1	1	7	0	56	25	1	82	21	3	13	0	37	182
Total	50	218	0	0	268	3	15	8	4	30	0	187	72	3	262	70	5	29	0	104	664
08:00 AM	11	54	1	0	66	0	1	2	1	4	0	47	14	0	61	14	0	7	0	21	152
08:15 AM	16	64	0	0	80	0	1	0	0	1	0	39	12	1	52	26	0	6	0	32	165
08:30 AM	10	42	0	0	52	0	1	0	0	1	1	36	19	0	56	16	0	7	0	23	132
08:45 AM	12	58	0	0	70	0	0	1	2	3	1	45	22	2	70	18	0	9	0	27	170
Total	49	218	1	0	268	0	3	3	3	9	2	167	67	3	239	74	0	29	0	103	619
Grand Total	99	436	1	0	536	3	18	11	7	39	2	354	139	6	501	144	5	58	0	207	1283
Apprch %	18.5	81.3	0.2	0		7.7	46.2	28.2	17.9		0.4	70.7	27.7	1.2		69.6	2.4	28	0		
Total %	7.7	34	0.1	0	41.8	0.2	1.4	0.9	0.5	3	0.2	27.6	10.8	0.5	39	11.2	0.4	4.5	0	16.1	
Lights	96	426	1	0	523	3	16	10	7	36	1	342	135	6	484	136	5	55	0	196	1239
% Lights	97	97.7	100	0	97.6	100	88.9	90.9	100	92.3	50	96.6	97.1	100	96.6	94.4	100	94.8	0	94.7	96.6
Buses	2	2	0	0	4	0	2	0	0	2	0	1	2	0	3	7	0	1	0	8	17
% Buses	2	0.5	0	0	0.7	0	11.1	0	0	5.1	0	0.3	1.4	0	0.6	4.9	0	1.7	0	3.9	1.3
Trucks	1	8	0	0	9	0	0	1	0	1	1	11	2	0	14	1	0	2	0	3	27
% Trucks	1	1.8	0	0	17	0	0	9.1	0	2.6	50	3.1	1.4	0	2.8	0.7	0	3.4	0	1 4	2.1

Kensington, Connecticut 06037 (860) 828-1693

File Name: 23672 Site Code: 23672

Start Date : 10/27/2022

			County			I		,	se Road	1			County			I	Halfwa	-		d	
		Fr	om No	rth			F	rom Ea	ıst			Fr	om So	uth			F1	rom W	est		
Start	Right	Thru	Left	Peds	Ann Total	Right	Thru	Left	Peds	A T	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	A T-t-l	Int. Total
Time	Right	Tinu	Leit	1 cus	App. Total	Kigitt	Tinu	Leit	1 cus	App. Total	Kigiit	Tillu	Leit	1 cus	App. Total	Kigiit	Tinu	Leit	1 cus	App. Total	Int. 10tai
Peak Hour Ar	nalysis	From ()7:00 A	M to 0	8:45 AM	1 - Peal	k 1 of 1														
Peak Hour for	Entire	Inters	ection 1	Begins	at 07:30	AM															
07:30 AM	13	55	0	0	68	0	2	1	1	4	0	50	26	1	77	21	0	6	0	27	176
07:45 AM	15	41	0	0	56	2	3	1	1	7	0	56	25	1	82	21	3	13	0	37	182
08:00 AM	11	54	1	0	66	0	1	2	1	4	0	47	14	0	61	14	0	7	0	21	152
08:15 AM	16	64	0	0	80	0	1	0	0	1	0	39	12	1	52	26	0	6	0	32	165
Total Volume	55	214	1	0	270	2	7	4	3	16	0	192	77	3	272	82	3	32	0	117	675
% App. Total	20.4	79.3	0.4	0		12.5	43.8	25	18.8		0	70.6	28.3	1.1		70.1	2.6	27.4	0		
PHF	.859	.836	.250	.000	.844	.250	.583	.500	.750	.571	.000	.857	.740	.750	.829	.788	.250	.615	.000	.791	.927

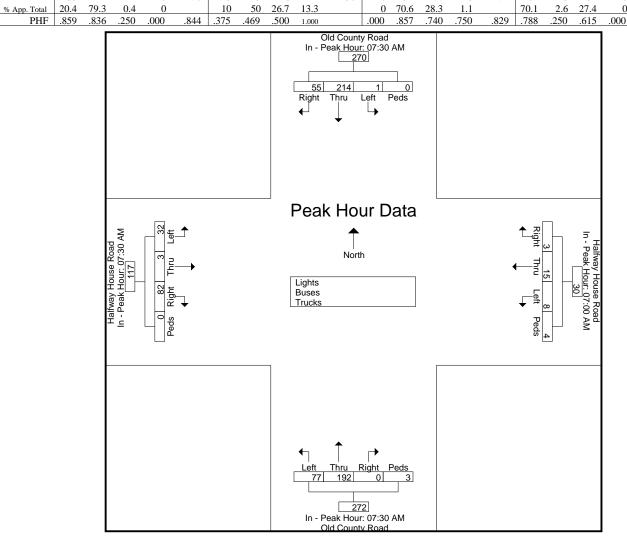


Kensington, Connecticut 06037 (860) 828-1693

File Name : 23672 Site Code : 23672 Start Date : 10/27/2022

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			County om No			I	Talfwa F	y Hous rom Ea		d			County om So			ŀ		y Hous	se Road	i	
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. To
Peak Hour Ar Peak Hour for	-					1 - Peal	k 1 of 1	l													_
	07:30 AM	I				07:00 AM					07:30 AM	I				07:30 AM					
+0 mins.	13	55	0	0	68	1	8	4	1	14	0	50	26	1	77	21	0	6	0	27	
+15 mins.	15	41	0	0	56	0	2	2	1	5	0	56	25	1	82	21	3	13	0	37	
+30 mins.	11	54	1	0	66	0	2	1	1	4	0	47	14	0	61	14	0	7	0	21	
+45 mins.	16	64	0	0	80	2	3	1	1	7	0	39	12	1	52	26	0	6	0	32	
Total Volume	55	214	1	0	270	3	15	8	4	30	0	192	77	3	272	82	3	32	0	117	1



Kensington, Connecticut 06037 (860) 828-1693

Old County Road at Halfway House Road Windsor Locks, Connecticut

File Name: 23673 Site Code: 23673

Start Date : 10/27/2022

Page No : 1

Groups Printed- Lights - Buses - Trucks

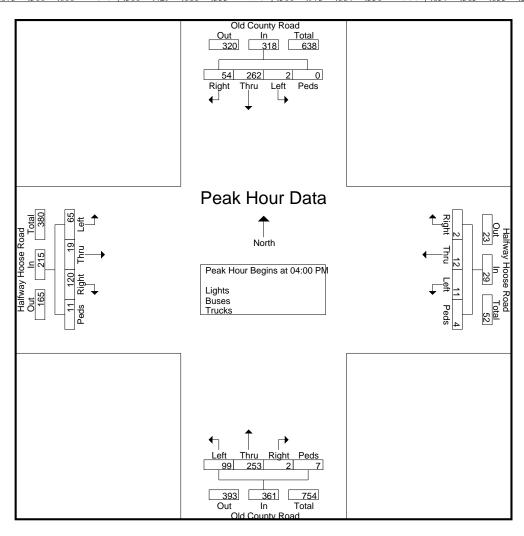
		Old C	County	Road		I	Halfwa	y Hoos	se Road	i		Old (County	Road		I	Halfwa	y Hoos	se Road	i	
		Fr	om No	rth			F	rom Ea	ast			Fr	om So	uth			Fr	om W	est		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	19	63	0	0	82	0	7	3	0	10	0	65	25	5	95	27	13	13	10	63	250
04:15 PM	7	67	1	0	75	1	0	4	1	6	0	65	20	2	87	31	2	19	1	53	221
04:30 PM	21	75	0	0	96	0	5	2	0	7	1	61	26	0	88	35	0	18	0	53	244
04:45 PM	7	57	1	0	65	1	0	2	3_	6	1	62	28	0	91	27	4	15	0	46	208
Total	54	262	2	0	318	2	12	11	4	29	2	253	99	7	361	120	19	65	11	215	923
						ı										ı					
05:00 PM	14	66	0	0	80	1	6	0	0	7	2	56	22	0	80	39	0	9	0	48	215
05:15 PM	17	72	0	0	89	1	3	1	0	5	1	58	21	2	82	33	5	15	0	53	229
05:30 PM	14	44	0	1	59	0	1	5	0	6	2	74	22	1	99	31	2	16	1	50	214
05:45 PM	18	48	2	1_	69	1	6	2	1_	10	2	62	19	1_	84	30	0	14	0	44	207_
Total	63	230	2	2	297	3	16	8	1	28	7	250	84	4	345	133	7	54	1	195	865
Grand Total	117	492	4	2	615	5	28	19	5	57	9	503	183	11	706	253	26	119	12	410	1788
Apprch %	19	80	0.7	0.3		8.8	49.1	33.3	8.8		1.3	71.2	25.9	1.6		61.7	6.3	29	2.9		
Total %	6.5	27.5	0.2	0.1	34.4	0.3	1.6	1.1	0.3	3.2	0.5	28.1	10.2	0.6	39.5	14.1	1.5	6.7	0.7	22.9	
Lights	116	483	4	2	605	5	28	19	5	57	9	497	178	11	695	249	25	119	12	405	1762
<u>% Lights</u>	99.1	98.2	100	100	98.4	100	100	100	100	100	100	98.8	97.3	100	98.4	98.4	96.2	100	100	98.8	98.5
Buses	0	0	0	0	0	0	0	0	0	0	0	1	3	0	4	4	1	0	0	5	9
% Buses	0	0	0	0	0	0	0	0	0	0	0	0.2	1.6	0	0.6	1.6	3.8	0	0	1.2	0.5
Trucks		9	0	0	10	0	0	0	0	0	0	5	2	0	1	0	0	0	0	0	17
% Trucks	0.9	1.8	0	0	1.6	1 0	U	U	U	0	1 0	1	1.1	0	1	0	0	0	0	0	ı 1

Kensington, Connecticut 06037 (860) 828-1693

File Name: 23673 Site Code: 23673

Start Date : 10/27/2022

		Old C	County	Road		I	Halfwa	y Hoo	se Road	d		Old (County	Road		I	Halfwa	y Hoos	se Road	1	
		Fr	om No	rth			F	rom E	ast			Fr	om So	uth			Fı	om W	est		
Start	D. I.	T1	I of	n ,		D. L.	T1	Left	, ,		D: 1.	T1	Loft	D .		D. I.	T1	I of	D .		
Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Len	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Ar	nalysis	From (04:00 P	M to 0	5:45 PM	- Peak	1 of 1														
Peak Hour for	r Entire	Inters	ection :	Begins	at 04:00	PM															
04:00 PM	19	63	0	0	82	0	7	3	0	10	0	65	25	5	95	27	13	13	10	63	250
04:15 PM	7	67	1	0	75	1	0	4	1	6	0	65	20	2	87	31	2	19	1	53	221
04:30 PM	21	75	0	0	96	0	5	2	0	7	1	61	26	0	88	35	0	18	0	53	244
04:45 PM	7	57	1	0	65	1	0	2	3	6	1	62	28	0	91	27	4	15	0	46	208
Total Volume	54	262	2	0	318	2	12	11	4	29	2	253	99	7	361	120	19	65	11	215	923
% App. Total	17	82.4	0.6	0		6.9	41.4	37.9	13.8		0.6	70.1	27.4	1.9		55.8	8.8	30.2	5.1		
PHF	.643	.873	.500	.000	.828	.500	.429	.688	.333	.725	.500	.973	.884	.350	.950	.857	.365	.855	.275	.853	.923



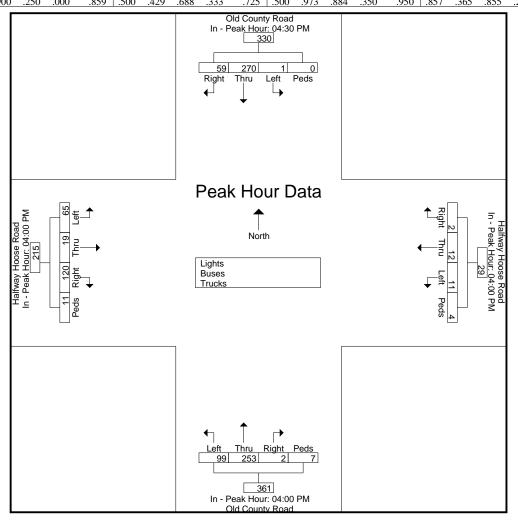
Kensington, Connecticut 06037 (860) 828-1693

File Name : 23673 Site Code : 23673 Start Date : 10/27/2022

Page No : 3

		Old (County	Road		I	Halfwa	y Hoos	se Road	d		Old (County	Road		I	Halfwa	y Hoos	se Roac	1	1
		Fr	om No	orth			F	rom Ea	ıst			Fr	om So	uth			Fı	om W	est		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Ar	ne 5																				
Peak Hour for	Each	Approa	ch Be	gins at:																	

04:00 PM +0 mins. 2 +15 mins. +30 mins. +45 mins. Total Volume 1.9 % App. Total 17.9 81.8 0.3 6.9 41.4 37.9 13.8 0.6 70.1 27.4 55.8 8.8 30.2 PHF | .702 .900 .250 .000 .859 .500 .429 .688 .333 .725 | .500 .973 .884 .350 .950 .857 .365 .855 .853



APPENDIX I

2023 Existing Conditions Capacity Analysis Results Worksheets

	•	→	•	•	+	•	•	†	~	/	+	-√
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4					ሻ	^			414	7
Traffic Volume (vph)	40	0	12	0	0	0	60	186	0	0	286	214
Future Volume (vph)	40	0	12	0	0	0	60	186	0	0	286	214
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	12	12	16	12	11	12	12	11	11	11
Storage Length (ft)	0		0	0		0	70		0	80		300
Storage Lanes	0		0	0		0	1		0	1		1
Taper Length (ft)	25			25			45			55		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.91	0.91	1.00
Frt	1.00	0.964	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.01	0.01	0.850
Flt Protected		0.964					0.950					0.000
Satd. Flow (prot)	0	1877	0	0	0	0	1662	3438	0	0	4730	1346
Flt Permitted		0.964			· ·	· ·	0.545	0100		•	1100	1010
Satd. Flow (perm)	0	1877	0	0	0	0	953	3438	0	0	4730	1346
Right Turn on Red	· ·	1077	Yes	v	•	Yes	000	0 100	Yes	•	1700	Yes
Satd. Flow (RTOR)		33	100			100			100			228
Link Speed (mph)		35			25			35			35	220
Link Distance (ft)		394			120			257			652	
Travel Time (s)		7.7			3.3			5.0			12.7	
Peak Hour Factor	0.71	0.92	0.60	0.92	0.92	0.92	0.88	0.85	0.92	0.92	0.87	0.94
Heavy Vehicles (%)	9%	7%	0%	7%	7%	7%	5%	5%	7%	7%	6%	16%
Adj. Flow (vph)	56	0	20	0	0	0	68	219	0	0	329	228
Shared Lane Traffic (%)	00	· ·	20	· ·	U	U	00	210	· ·	U	023	220
Lane Group Flow (vph)	0	76	0	0	0	0	68	219	0	0	329	228
Turn Type	Split	NA	v	v	•	· ·	Perm	NA	•	•	NA	Perm
Protected Phases	4	4					. 0	2			2	
Permitted Phases	•	•					2	_		2	_	2
Detector Phase	4	4					2	2		2	2	2
Switch Phase												_
Minimum Initial (s)	7.0	7.0					15.0	15.0		15.0	15.0	15.0
Minimum Split (s)	24.2	24.2					20.4	20.4		20.4	20.4	20.4
Total Split (s)	25.0	25.0					45.0	45.0		45.0	45.0	45.0
Total Split (%)	35.7%	35.7%					64.3%	64.3%		64.3%	64.3%	64.3%
Yellow Time (s)	3.0	3.0					4.1	4.1		4.1	4.1	4.1
All-Red Time (s)	2.2	2.2					1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)		0.0					0.0	0.0			0.0	0.0
Total Lost Time (s)		5.2					5.1	5.1			5.1	5.1
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None					C-Max	C-Max		C-Max	C-Max	C-Max
Act Effct Green (s)		9.5					53.7	53.7			53.7	53.7
Actuated g/C Ratio		0.14					0.77	0.77			0.77	0.77
v/c Ratio		0.27					0.09	0.08			0.09	0.21
Control Delay		18.4					4.6	3.7			2.7	0.8
Queue Delay		0.0					0.0	0.0			0.0	0.0
Total Delay		18.4					4.6	3.7			2.7	0.8
LOS		В					A	A			Α	A
Approach Delay		18.4					, ,	3.9			1.9	
Approach LOS		В						A			A	
NA								,,			, ,	

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)		17					6	9			9	0
Queue Length 95th (ft)		43					28	31			21	6
Internal Link Dist (ft)		314			40			177			572	
Turn Bay Length (ft)							70					300
Base Capacity (vph)		554					730	2635			3626	1085
Starvation Cap Reductn		0					0	0			0	0
Spillback Cap Reductn		0					0	0			0	0
Storage Cap Reductn		0					0	0			0	0
Reduced v/c Ratio		0.14					0.09	0.08			0.09	0.21
Intersection Summary												
Area Type:	Other											
Cycle Length: 70												
Actuated Cycle Length: 70)											
Offset: 0 (0%), Reference	d to phase 2:	NBSB, St	art of Yell	ow								
Natural Cycle: 45	·											

Natural Cycle: 45

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.27

Intersection Signal Delay: 3.9 Intersection LOS: A Intersection Capacity Utilization 43.7% ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 101: Route 75 & Route 20 EB Ramps/Private Driveway



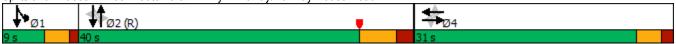
	۶	→	*	•	+	•	•	†	/	/	+	-√
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					ર્ન	7	ሻ	^			^	7
Traffic Volume (vph)	0	0	0	37	1	380	37	211	0	0	463	63
Future Volume (vph)	0	0	0	37	1	380	37	211	0	0	463	63
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	14	12	12	11	12	11	12	12	11	11	11
Storage Length (ft)	0		0	0		190	75		0	0		90
Storage Lanes	0		0	0		1	1		0	0		1
Taper Length (ft)	25			25			40			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	1.00	1.00	1.00	0.850	1.00	0.50	1.00	1.00	0.50	0.850
Flt Protected					0.956	0.000	0.950					0.000
Satd. Flow (prot)	0	0	0	0	1567	1468	1662	3406	0	0	3144	1382
Flt Permitted	U	U	0	0	0.956	1400	0.472	0400	U	U	0144	1002
Satd. Flow (perm)	0	0	0	0	1567	1468	826	3406	0	0	3144	1382
Right Turn on Red	U	U	Yes	U	1001	Yes	020	0400	Yes	U	דדוט	Yes
Satd. Flow (RTOR)			163			427			163			76
Link Speed (mph)		30			30	721		35			35	70
Link Distance (ft)		591			524			652			2293	
Travel Time (s)		13.4			11.9			12.7			44.7	
Peak Hour Factor	0.92	0.92	0.92	0.75	0.25	0.89	0.84	0.78	0.92	0.92	0.94	0.83
Heavy Vehicles (%)	7%	7%	7%	13%	0.23	10%	5%	6%	7%	7%	11%	13%
Adj. Flow (vph)	0	0	0	49	4	427	44	271	0	0	493	76
Shared Lane Traffic (%)	U	U	U	43	7	421	44	211	U	U	433	70
Lane Group Flow (vph)	0	0	0	0	53	427	44	271	0	0	493	76
Turn Type	U	U	U	Split	NA	Prot	Perm	NA	U	U	NA	Perm
Protected Phases				4	4	4	I GIIII	2			2	I GIIII
Permitted Phases				7	7	7	2	L			2	2
Detector Phase				4	4	4	2	2			2	2
Switch Phase				7	7	7	2	L			2	2
Minimum Initial (s)				7.0	7.0	7.0	15.0	15.0			15.0	15.0
Minimum Split (s)				12.1	12.1	12.1	20.4	20.4			20.4	20.4
Total Split (s)				25.0	25.0	25.0	45.0	45.0			45.0	45.0
Total Split (%)				35.7%	35.7%	35.7%	64.3%	64.3%			64.3%	64.3%
Yellow Time (s)				3.0	3.0	3.0	4.4	4.4			4.4	4.4
All-Red Time (s)				2.1	2.1	2.1	1.0	1.0			1.0	1.0
Lost Time Adjust (s)				۷.۱	0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)					5.1	5.1	5.4	5.4			5.4	5.4
Lead/Lag					J. 1	J. I	J. 4	J. T			J. T	J. T
Lead-Lag Optimize?												
Recall Mode				None	None	None	C-Max	C-Max			C-Max	C-Max
Act Effct Green (s)				NOTIC	9.8	9.8	49.7	49.7			49.7	49.7
Actuated g/C Ratio					0.14	0.14	0.71	0.71			0.71	0.71
v/c Ratio					0.24	0.75	0.08	0.11			0.22	0.08
Control Delay					27.7	11.7	3.9	3.3			4.4	1.7
Queue Delay					0.0	0.0	0.0	0.0			0.0	0.0
Total Delay					27.7	11.7	3.9	3.3			4.4	1.7
LOS					21.1 C	11.7 B	3.9 A	3.3 A			4.4 A	1.7 A
Approach Delay					13.5	ט		3.4			4.0	^
Approach LOS					13.5 B			3.4 A			4.0 A	
Apploacii LOS					D			٨			А	

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBF
Queue Length 50th (ft)					22	0	3	10			24	(
Queue Length 95th (ft)					11	62	15	27			71	12
Internal Link Dist (ft)		511			444			572			2213	
Turn Bay Length (ft)						190	75					90
Base Capacity (vph)					445	722	586	2419			2233	1003
Starvation Cap Reductn					0	0	0	0			0	(
Spillback Cap Reductn					0	0	0	0			0	(
Storage Cap Reductn					0	0	0	0			0	(
Reduced v/c Ratio					0.12	0.59	0.08	0.11			0.22	0.08
Intersection Summary												
Area Type:	Other											
Cycle Length: 70												
Actuated Cycle Length: 70												
Offset: 1 (1%), Referenced t	o phase 2:ľ	NBSB, Sta	art of Yell	OW								
Natural Cycle: 40												
Control Type: Actuated-Coo	rdinated											
Maximum v/c Ratio: 0.75												
Intersection Signal Delay: 7.	2			Ir	ntersection	LOS: A						
Intersection Capacity Utilizat	tion 44.8%			IC	CU Level of	of Service	Α					
Analysis Period (min) 15												
Splits and Phases: 102: R	Route 75 & I	Route 20	WB On R	amp/Roi	ıte 20 WR	Off Ram	n					
-d. ↑	10 a to ta 1	10010 20		iip/i tot	2.0 20 110		49	-				
♥¶ Ø2 (R)						•	25.0	Ø4				

	•	→	•	•	+	•	•	†	~	\		4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			414		*	ħβ	<u> </u>
Traffic Volume (vph)	0	0	1	52	0	16	0	552	59	21	400	0
Future Volume (vph)	0	0	1	52	0	16	0	552	59	21	400	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	15	12	12	16	12	12	12	12	12	12	12
Storage Length (ft)	0	10	0	0	10	0	0	12	0	415	12	0
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (ft)	25		U	25		U	25		U	50		U
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	1.00	0.95	0.95
Frt	1.00	0.865	1.00	1.00	0.966	1.00	0.33	0.982	0.33	1.00	0.55	0.55
Flt Protected		0.003			0.964			0.902		0.950		
Satd. Flow (prot)	0	1808	0	0	1961	0	0	3290	0	1597	3282	0
Flt Permitted	U	1000	U	U	0.778	U	U	3230	U	0.381	3202	U
Satd. Flow (perm)	0	1808	0	0	1583	0	0	3290	0	641	3282	0
Right Turn on Red	U	1000	Yes	U	1000	Yes	U	3290	Yes	041	3202	Yes
		375	168		102	165		22	165			168
Satd. Flow (RTOR)		25			30			35			25	
Link Speed (mph)					258			2293			35	
Link Distance (ft)		250									1019	
Travel Time (s)	0.00	6.8	0.05	0.70	5.9	0.07	0.00	44.7	0.70	0.75	19.9	0.00
Peak Hour Factor	0.92	0.92	0.25	0.72	0.92	0.67	0.92	0.88	0.70	0.75	0.86	0.92
Heavy Vehicles (%)	7%	7%	0%	2%	7%	3%	7%	8%	6%	13%	10%	0%
Adj. Flow (vph)	0	0	4	72	0	24	0	627	84	28	465	0
Shared Lane Traffic (%)	0		0	0	00	^	0	744	^	00	405	0
Lane Group Flow (vph)	0	4	0	0	96	0	0	711	0	28	465	0
Turn Type		NA		Perm	NA			NA		D.P+P	NA	
Protected Phases		4			4			2		1	12	
Permitted Phases	4			4			2			2		
Detector Phase	4	4		4	4					1		
Switch Phase		- 0		- 0	- 0		45.0	45.0				
Minimum Initial (s)	5.0	5.0		5.0	5.0		15.0	15.0		5.0		
Minimum Split (s)	9.5	9.5		9.5	9.5		21.5	21.5		9.0		
Total Split (s)	31.0	31.0		31.0	31.0		40.0	40.0		9.0		
Total Split (%)	38.8%	38.8%		38.8%	38.8%		50.0%	50.0%		11.3%		
Yellow Time (s)	3.0	3.0		3.0	3.0		4.4	4.4		3.0		
All-Red Time (s)	1.5	1.5		1.5	1.5		2.1	2.1		1.0		
Lost Time Adjust (s)		0.0			0.0			0.0		0.0		
Total Lost Time (s)		4.5			4.5			6.5		4.0		
Lead/Lag							Lag	Lag		Lead		
Lead-Lag Optimize?							Yes	Yes		Yes		
Recall Mode	None	None		None	None		C-Max	C-Max		None		
Act Effct Green (s)		5.6			5.6			63.0		66.2	68.6	
Actuated g/C Ratio		0.07			0.07			0.79		0.83	0.86	
v/c Ratio		0.01			0.47			0.27		0.05	0.17	
Control Delay		0.0			15.3			3.8		1.7	2.7	
Queue Delay		0.0			0.0			0.0		0.0	0.0	
Total Delay		0.0			15.3			3.8		1.7	2.7	
LOS		Α			В			Α		Α	Α	
Approach Delay					15.3			3.8			2.6	
Approach LOS					В			Α			Α	

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBI
Queue Length 50th (ft)		0			0			32		6	81	
Queue Length 95th (ft)		0			40			93		1	5	
Internal Link Dist (ft)		170			178			2213			939	
Turn Bay Length (ft)										415		
Base Capacity (vph)		849			592			2597		590	2816	
Starvation Cap Reductn		0			0			0		0	0	
Spillback Cap Reductn		0			0			0		0	0	
Storage Cap Reductn		0			0			0		0	0	
Reduced v/c Ratio		0.00			0.16			0.27		0.05	0.17	
Intersection Summary												
Area Type:	Other											
Cycle Length: 80												
Actuated Cycle Length: 80												
Offset: 57 (71%), Reference	ed to phase 2	2:NBSB,	Start of Y	'ellow								
Natural Cycle: 40												
Control Type: Actuated-Co	ordinated											
Maximum v/c Ratio: 0.47												
Intersection Signal Delay: 4					tersection							
Intersection Capacity Utiliza	ation 36.8%			IC	CU Level o	of Service	Α					
Analysis Period (min) 15												
Solits and Phases: 103:	Route 75 & L	47EU D	ivovov/L	lalfway L	ouco Doo	d						

Splits and Phases: 103: Route 75 & LAZFly Driveway/Halfway House Road



Traffic Volume (vph)		•	→	•	•	+	•	•	†	~	/	ţ	-√
Traffic Volume (vph) 75 2 77 4 6 8 180 382 7 5 325 95 Idual Flow (vphpl) 1900 <td< th=""><th>Lane Group</th><th>EBL</th><th>EBT</th><th>EBR</th><th>WBL</th><th>WBT</th><th>WBR</th><th>NBL</th><th>NBT</th><th>NBR</th><th>SBL</th><th>SBT</th><th>SBR</th></td<>	Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph) 75 2 77 4 6 8 180 382 7 5 325 95 Idual Flow (vphpl) 1900 <td< td=""><td>Lane Configurations</td><td>*</td><td>4</td><td>7</td><td>*</td><td>î,</td><td></td><td>*</td><td>∳ሴ</td><td></td><td>*</td><td>44</td><td>7</td></td<>	Lane Configurations	*	4	7	*	î,		*	∳ ሴ		*	44	7
Future Volume (vph)							8			7			95
Ideal Flow (rphpt)			2		4					7			95
Lane Width (ft)	· · · /												
Storage Length (ft)													
Storage Lanes									· <u>-</u>				
Taper Length (ft)													1
Lane Utill. Factor				•			•				25		
Fit			0.95	1 00		1 00	1 00		0.95	0.95		0.95	1 00
Fit Protected		0.00	0.00		1.00		1.00	1.00		0.00	1.00	0.00	
Satid. Flow (prot)		0.950	0.956	0.000	0.950	0.000		0.950	0.001		0.950		0.000
Fit Permitted				1311		1429	0		3217	0		3223	1568
Satd. Flow (perm)				1011		1120	J		0211	v		OLLO	1000
Right Turn on Red				1311		1429	0		3217	0		3223	1568
Satid Flow (RTOR)		1111	1112		1000	1120		1071	0211		1000	OLLO	
Link Speed (mph) 35 25 35 35 Link Distance (ft) 466 418 1019 1839 Travel Time (s) 9.1 11.4 19.9 35.8 Peak Hour Factor 0.78 0.50 0.69 0.50 0.75 0.50 0.78 0.95 0.44 0.31 0.84 0.93 Heavy Vehicles (%) 17% 0% 15% 29% 11% 12% 8% 12% 0% 18% 12% 3% Adj. Flow (vph) 96 4 112 8 8 16 231 402 16 16 387 102 Shared Lane Traffic (%) 48% 12 0 231 418 0 16 387 102 Turn Type Split NA pt+ov Split NA pt-ov NA Prot						16	100		5	100			
Link Distance (ift)			35	112								35	201
Travel Time (s)													
Peak Hour Factor 0.78 0.50 0.69 0.50 0.75 0.50 0.78 0.95 0.44 0.31 0.84 0.93 Heavy Vehicles (%) 17% 0% 15% 29% 11% 12% 8% 12% 0% 18% 12% 3% Adj. Flow (vph) 96 4 112 8 8 16 231 402 16 16 387 102 Shared Lane Traffic (%) 48% Lane Group Flow (vph) 50 50 112 8 24 0 231 418 0 16 387 102 Turn Type Split NA pt+ov Split NA Prot NA Pr													
Heavy Vehicles (%)		0.78		0.69	0.50		0.50	0.78		0 44	0.31		0.93
Adj. Flow (vph) 96 4 112 8 8 8 16 231 402 16 16 387 102 Shared Lane Traffic (%) 48% Lane Group Flow (vph) 50 50 112 8 24 0 231 418 0 16 387 102 Turn Type Split NA pt+ov Split NA Prot NA Prot NA Prot NA Prot Protected Phases 8 8 18 4 4 1 6 5 2 Free Detector Phase 8 8 18 4 4 1 6 5 2 Switch Phase Minimum Initial (s) 7.0 7.0 5.0 5.0 5.0 15.0 15.0 5.0 15.0 Minimum Split (s) 12.7 12.7 9.8 9.8 9.8 10.1 20.8 9.0 20.6 Total Split (%) 27.5% 27.5% 12.5% 12.5% 12.5% 22.5% 37.5% 22.5% 37.5% Yellow Time (s) 3.0 3.0 3.0 3.3 3.3 3.0 4.4 3.0 4.4 All-Red Time (s) 2.7 2.7 1.5 1.5 1.5 2.1 1.4 1.0 1.2 Lost Time Adjust (s) 5.7 5.7 4.8 4.8 4.8 5.1 5.8 4.0 5.6 Lead/Lag Lead-Lag Optimize? Recall Mode None None None None None None C-Min None C-Min Act Effet Green (s) 8.2 8.2 27.4 5.8 5.8 16.1 57.2 5.5 37.2 80.0 v. Reliable Total Control Delay 39.6 39.3 3.9 36.0 24.6 36.3 6.6 34.6 23.0 0.1													
Shared Lane Traffic (%)													
Lane Group Flow (vph) 50 50 112 8 24 0 231 418 0 16 387 102 107 107 107 108 10			-	112	U	U	10	201	702	10	10	001	102
Turn Type			50	112	8	24	0	231	418	0	16	387	102
Protected Phases 8 8 8 18 4 4 1 6 5 2 Permitted Phases Detector Phase 8 8 8 18 4 4 4 1 6 5 2 Switch Phase Minimum Initial (s) 7.0 7.0 5.0 5.0 5.0 15.0 5.0 15.0 5.0 15.0 Minimum Split (s) 12.7 12.7 9.8 9.8 9.8 10.1 20.8 9.0 20.6 Total Split (s) 22.0 22.0 10.0 10.0 18.0 30.0 18.0 30.0 Total Split (%) 27.5% 27.5% 12.5% 12.5% 22.5% 37.5% 22.5% 37.5% Yellow Time (s) 3.0 3.0 3.3 3.3 3.0 4.4 3.0 4.4 All-Red Time (s) 2.7 2.7 1.5 1.5 2.1 1.4 1.0 1.2 Lost Time Adjust (s) 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 Total Lost Time (s) 5.7 5.7 4.8 4.8 5.1 5.8 4.0 5.6 Lead/Lag Lead-Lag Optimize? Recall Mode None None None None None C-Min None C-Min Act Effct Green (s) 8.2 8.2 27.4 5.8 5.8 16.1 57.2 5.5 37.2 80.0 Actuated g/C Ratio 0.10 0.10 0.34 0.07 0.07 0.20 0.72 0.07 0.46 1.00 V/c Ratio 0.34 0.34 0.34 0.21 0.09 0.21 0.69 0.18 0.15 0.26 0.07 Control Delay 39.6 39.3 3.9 36.0 24.6 36.3 6.6 34.6 23.0 0.1							•			•			
Permitted Phases 8 8 8 18 4 4 4 1 6 5 5 2													1100
Detector Phase 8 8 18 4 4 1 6 5 2		•		. •	•	•		•				-	Free
Switch Phase Minimum Initial (s) 7.0 7.0 5.0 5.0 5.0 15.0 5.0 15.0 Minimum Split (s) 12.7 12.7 9.8 9.8 10.1 20.8 9.0 20.6 Total Split (s) 22.0 22.0 10.0 10.0 18.0 30.0 18.0 30.0 Total Split (%) 27.5% 27.5% 12.5% 12.5% 22.5% 37.5% 22.5% 37.5% Yellow Time (s) 3.0 3.0 3.3 3.3 3.0 4.4 3.0 4.4 All-Red Time (s) 2.7 2.7 1.5 1.5 2.1 1.4 1.0 1.2 Lost Time Adjust (s) 0.0		8	8	18	4	4		1	6		5	2	
Minimum Initial (s) 7.0 7.0 5.0 5.0 5.0 15.0 5.0 15.0 Minimum Split (s) 12.7 12.7 9.8 9.8 10.1 20.8 9.0 20.6 Total Split (s) 22.0 22.0 10.0 10.0 18.0 30.0 18.0 30.0 Total Split (%) 27.5% 27.5% 12.5% 12.5% 22.5% 37.5% 22.5% 37.5% Yellow Time (s) 3.0 3.0 3.3 3.3 3.0 4.4 3.0 4.4 All-Red Time (s) 2.7 2.7 1.5 1.5 2.1 1.4 1.0 1.2 Lost Time Adjust (s) 0.0 <									-		-		
Minimum Split (s) 12.7 12.7 9.8 9.8 10.1 20.8 9.0 20.6 Total Split (s) 22.0 22.0 10.0 10.0 18.0 30.0 18.0 30.0 Total Split (%) 27.5% 27.5% 12.5% 12.5% 22.5% 37.5% 22.5% 37.5% Yellow Time (s) 3.0 3.0 3.3 3.3 3.0 4.4 3.0 4.4 All-Red Time (s) 2.7 2.7 1.5 1.5 2.1 1.4 1.0 1.2 Lost Time Adjust (s) 0.0		7.0	7.0		5.0	5.0		5.0	15.0		5.0	15.0	
Total Split (s) 22.0 22.0 10.0 10.0 18.0 30.0 18.0 30.0 Total Split (%) 27.5% 27.5% 12.5% 12.5% 22.5% 37.5% 22.5% 37.5% Yellow Time (s) 3.0 3.0 3.3 3.3 3.0 4.4 3.0 4.4 All-Red Time (s) 2.7 2.7 1.5 1.5 2.1 1.4 1.0 1.2 Lost Time Adjust (s) 0.0	` ,												
Total Split (%) 27.5% 27.5% 12.5% 12.5% 22.5% 37.5% 22.5% 37.5% Yellow Time (s) 3.0 3.0 3.3 3.3 3.0 4.4 3.0 4.4 All-Red Time (s) 2.7 2.7 1.5 1.5 2.1 1.4 1.0 1.2 Lost Time Adjust (s) 0.0 <td></td>													
Yellow Time (s) 3.0 3.0 3.3 3.3 3.0 4.4 3.0 4.4 All-Red Time (s) 2.7 2.7 1.5 1.5 2.1 1.4 1.0 1.2 Lost Time Adjust (s) 0.0													
All-Red Time (s) 2.7 2.7 1.5 1.5 2.1 1.4 1.0 1.2 Lost Time Adjust (s) 0.0													
Lost Time Adjust (s) 0.0													
Total Lost Time (s) 5.7 5.7 4.8 4.8 5.1 5.8 4.0 5.6 Lead/Lag Lead Lag Lead Lag Lead-Lag Optimize? Yes Yes Yes Recall Mode None None None None C-Min Act Effct Green (s) 8.2 8.2 27.4 5.8 5.8 16.1 57.2 5.5 37.2 80.0 Actuated g/C Ratio 0.10 0.10 0.34 0.07 0.07 0.20 0.72 0.07 0.46 1.00 v/c Ratio 0.34 0.34 0.21 0.09 0.21 0.69 0.18 0.15 0.26 0.07 Control Delay 39.6 39.3 3.9 36.0 24.6 36.3 6.6 34.6 23.0 0.1													
Lead/Lag Lead Lag Lead Lag Lead-Lag Optimize? Yes Yes Yes Yes Recall Mode None None None None C-Min None C-Min Act Effct Green (s) 8.2 8.2 27.4 5.8 5.8 16.1 57.2 5.5 37.2 80.0 Actuated g/C Ratio 0.10 0.10 0.34 0.07 0.07 0.20 0.72 0.07 0.46 1.00 v/c Ratio 0.34 0.34 0.21 0.09 0.21 0.69 0.18 0.15 0.26 0.07 Control Delay 39.6 39.3 3.9 36.0 24.6 36.3 6.6 34.6 23.0 0.1													
Lead-Lag Optimize? Yes 16.0 Yes 16.1 5.5	. ,												
Recall Mode None None None None C-Min None C-Min Act Effct Green (s) 8.2 8.2 27.4 5.8 5.8 16.1 57.2 5.5 37.2 80.0 Actuated g/C Ratio 0.10 0.10 0.34 0.07 0.07 0.20 0.72 0.07 0.46 1.00 v/c Ratio 0.34 0.34 0.21 0.09 0.21 0.69 0.18 0.15 0.26 0.07 Control Delay 39.6 39.3 3.9 36.0 24.6 36.3 6.6 34.6 23.0 0.1													
Act Effct Green (s) 8.2 8.2 27.4 5.8 5.8 16.1 57.2 5.5 37.2 80.0 Actuated g/C Ratio 0.10 0.10 0.34 0.07 0.07 0.20 0.72 0.07 0.46 1.00 v/c Ratio 0.34 0.34 0.21 0.09 0.21 0.69 0.18 0.15 0.26 0.07 Control Delay 39.6 39.3 3.9 36.0 24.6 36.3 6.6 34.6 23.0 0.1		None	None		None	None							
Actuated g/C Ratio 0.10 0.10 0.34 0.07 0.07 0.20 0.72 0.07 0.46 1.00 v/c Ratio 0.34 0.34 0.21 0.09 0.21 0.69 0.18 0.15 0.26 0.07 Control Delay 39.6 39.3 3.9 36.0 24.6 36.3 6.6 34.6 23.0 0.1				27.4									80.0
v/c Ratio 0.34 0.34 0.21 0.09 0.21 0.69 0.18 0.15 0.26 0.07 Control Delay 39.6 39.3 3.9 36.0 24.6 36.3 6.6 34.6 23.0 0.1													1.00
Control Delay 39.6 39.3 3.9 36.0 24.6 36.3 6.6 34.6 23.0 0.1													0.07
													0.1
Queue Delay 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.		0.0		0.0	0.0	0.0			0.0				0.0
· · · · · · · · · · · · · · · · · · ·	•												0.1
, and the same of													Α
Approach Delay 20.7 27.4 17.2 18.7													
Approach LOS C C B B	• •												

104: Route 75 & Route 401 (Schoephoester Road)/National Road 2022 Existing Conditions Weekday AM Peak

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	25	25	0	4	4		107	31		7	71	0
Queue Length 95th (ft)	49	30	12	9	21		143	121		9	130	0
Internal Link Dist (ft)		386			338			939			1759	
Turn Bay Length (ft)			220	200			450					400
Base Capacity (vph)	288	293	542	95	118		345	2302		267	1535	1568
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	0
Reduced v/c Ratio	0.17	0.17	0.21	0.08	0.20		0.67	0.18		0.06	0.25	0.07

Intersection Summary

Area Type: Other

Cycle Length: 80

Actuated Cycle Length: 80

Offset: 12 (15%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.69

Intersection Signal Delay: 18.5 Intersection LOS: B
Intersection Capacity Utilization 44.9% ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 104: Route 75 & Route 401 (Schoephoester Road)/National Road



Lane Group EBL EBT EBR WBL WBT WBR NBL NBT NBR SBL SBT Lane Configurations 1 1 8 257 16 10 0 2 5 0 Future Volume (vph) 53 147 11 8 257 16 10 0 2 5 0 Ideal Flow (vphpl) 1900 <t< th=""><th>SBR 61 61 1900 14 200 1 1.00 0.850 1706 4706 Yes</th></t<>	SBR 61 61 1900 14 200 1 1.00 0.850 1706 4706 Yes
Traffic Volume (vph) 53 147 11 8 257 16 10 0 2 5 0 Future Volume (vph) 53 147 11 8 257 16 10 0 2 5 0 Ideal Flow (vphpl) 1900	61 61 1900 14 200 1 1.00 0.850 1706 Yes
Traffic Volume (vph) 53 147 11 8 257 16 10 0 2 5 0 Future Volume (vph) 53 147 11 8 257 16 10 0 2 5 0 Ideal Flow (vphpl) 1900	61 61 1900 14 200 1 1.00 0.850 1706 Yes
Future Volume (vph) 53 147 11 8 257 16 10 0 2 5 0 Ideal Flow (vphpl) 1900 <t< td=""><td>61 1900 14 200 1 1.00 0.850 1706 1706 Yes</td></t<>	61 1900 14 200 1 1.00 0.850 1706 1706 Yes
Ideal Flow (vphpl) 1900 <td>1900 14 200 1 1.00 0.850 1706 1706 Yes</td>	1900 14 200 1 1.00 0.850 1706 1706 Yes
Lane Width (ft) 12 12 12 11 11 11 12 15 12 12 14 Storage Length (ft) 170 0 120 0	14 200 1 1.00 0.850 1706 1706 Yes
Storage Length (ft) 170 0 120 0	1.00 0.850 1706 1706 Yes
Storage Lanes 1 0 1 0 0 0 0 Taper Length (ft) 40 25 25 25 25 Lane Util. Factor 1.00 0.95 0.95 1.00 0.95 1.00 1	1 1.00 0.850 1706 1706 Yes
Taper Length (ft) 40 25 25 25 Lane Util. Factor 1.00 0.95 0.95 1.00 0.95 1.00 </td <td>0.850 1706 1706 Yes</td>	0.850 1706 1706 Yes
Lane Util. Factor 1.00 0.95 0.95 1.00 0.95 0.95 1.00 <td>0.850 1706 1706 Yes</td>	0.850 1706 1706 Yes
Frt 0.989 0.989 0.966 Flt Protected 0.950 0.950 0.964 0.950 Satd. Flow (prot) 1805 3473 0 1631 3351 0 0 1798 0 0 1735 Flt Permitted 0.560 0.611 0.775 0.747 Satd. Flow (perm) 1064 3473 0 1049 3351 0 0 1445 0 0 1364 Right Turn on Red Yes Yes Yes Yes Yes Yes Yes Satd. Flow (RTOR) 13 14 92 13 14 92 13 14	0.850 1706 1706 Yes
Fit Protected 0.950 0.950 0.964 0.950 Satd. Flow (prot) 1805 3473 0 1631 3351 0 0 1798 0 0 1735 Flt Permitted 0.560 0.611 0.775 0.747 Satd. Flow (perm) 1064 3473 0 1049 3351 0 0 1445 0 0 1364 Right Turn on Red Yes Yes Yes Yes Yes Yes Yes Satd. Flow (RTOR) 13 14 92 13 14 92 13 14	1706 1706 Yes
Satd. Flow (prot) 1805 3473 0 1631 3351 0 0 1798 0 0 1735 Flt Permitted 0.560 0.611 0.775 0.747 Satd. Flow (perm) 1064 3473 0 1049 3351 0 0 1445 0 0 1364 Right Turn on Red Yes Yes Yes Yes Yes Yes Yes Satd. Flow (RTOR) 13 14 92 14	1706 Yes
Fit Permitted 0.560 0.611 0.775 0.747 Satd. Flow (perm) 1064 3473 0 1049 3351 0 0 1445 0 0 1364 Right Turn on Red Yes Yes Yes Yes Yes Yes Yes Satd. Flow (RTOR) 13 14 92 Yes	1706 Yes
Satd. Flow (perm) 1064 3473 0 1049 3351 0 0 1445 0 0 1364 Right Turn on Red Yes Yes Satd. Flow (RTOR) 13 14 92 Link Speed (mph) 35 35 25 30 Link Distance (ft) 624 466 420 346	Yes
Right Turn on Red Yes Yes Yes Satd. Flow (RTOR) 13 14 92 Link Speed (mph) 35 35 25 30 Link Distance (ft) 624 466 420 346	Yes
Satd. Flow (RTOR) 13 14 92 Link Speed (mph) 35 35 25 30 Link Distance (ft) 624 466 420 346	
Link Speed (mph) 35 35 25 30 Link Distance (ft) 624 466 420 346	92
Link Distance (ft) 624 466 420 346	52
11975-1107-131	
Peak Hour Factor 0.70 0.70 0.69 0.50 0.88 0.67 0.83 0.92 0.50 0.63 0.92	0.66
Heavy Vehicles (%) 0% 3% 0% 7% 3% 3% 0% 100% 33% 11% 7%	1%
Adj. Flow (vph) 76 210 16 16 292 24 12 0 4 8 0	92
Shared Lane Traffic (%)	52
Lane Group Flow (vph) 76 226 0 16 316 0 0 16 0 0 8	92
Turn Type pm+pt NA pm+pt NA Perm NA Perm NA	Perm
Protected Phases 1 6 5 2 4 4	. 0
Permitted Phases 6 2 4 4	4
Detector Phase 1 6 5 2 4 4 4 4	4
Switch Phase	
Minimum Initial (s) 5.0 15.0 5.0 15.0 7.0 7.0 7.0 7.0	7.0
Minimum Split (s) 9.0 21.6 9.0 21.6 12.1 12.1 12.1	12.1
Total Split (s) 9.0 53.9 9.0 53.9 27.1 27.1 27.1 27.1	27.1
Total Split (%) 10.0% 59.9% 10.0% 59.9% 30.1% 30.1% 30.1% 30.1%	30.1%
Yellow Time (s) 3.0 4.4 3.0 3.0 3.0 3.0	3.0
All-Red Time (s) 1.0 2.2 1.0 2.2 2.1 2.1 2.1	2.1
Lost Time Adjust (s) 0.0 0.0 0.0 0.0 0.0 0.0	0.0
Total Lost Time (s) 4.0 6.6 4.0 6.6 5.1 5.1	5.1
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode None C-Min None C-Min None None None None	None
Act Effct Green (s) 72.7 67.0 72.6 67.0 7.4 7.4	7.4
Actuated g/C Ratio 0.81 0.74 0.81 0.74 0.08 0.08	0.08
v/c Ratio 0.08 0.09 0.02 0.13 0.08 0.07	0.41
Control Delay 1.9 4.5 1.8 4.6 0.8 39.2	14.7
Queue Delay 0.0 0.0 0.0 0.0 0.0 0.0	0.0
Total Delay 1.9 4.5 1.8 4.6 0.8 39.2	14.7
LOS A A A A D	В
Approach Delay 3.8 4.5 0.8 16.6	
Approach LOS A A B	

105: Airport Servuce Road/Light Lane & Route 401 (Schoephoester Road) 2022 Existing Conditions Weekday AM Peak

	•	-	•	•	•	•	1	†	~	\	ļ	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	6	18		1	26			0			4	0
Queue Length 95th (ft)	11	25		3	44			0			18	19
Internal Link Dist (ft)		544			386			340			266	
Turn Bay Length (ft)	170			120								200
Base Capacity (vph)	904	2587		881	2496			422			333	486
Starvation Cap Reductn	0	0		0	0			0			0	0
Spillback Cap Reductn	0	0		0	0			0			0	0
Storage Cap Reductn	0	0		0	0			0			0	0
Reduced v/c Ratio	0.08	0.09		0.02	0.13			0.04			0.02	0.19
Intersection Summary												
Aron Tuno:	Other											

Area Type: Othe

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow

Natural Cycle: 45

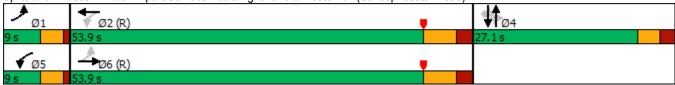
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.41

Intersection Signal Delay: 5.8 Intersection LOS: A Intersection Capacity Utilization 38.2% ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 105: Airport Servuce Road/Light Lane & Route 401 (Schoephoester Road)



	•	4	†	~	\	
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	**************************************	₩DIX	†	HUIT	JDL T	† †
Traffic Volume (vph)	83	219	380	64	222	352
Future Volume (vph)	83	219	380	64	222	352
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	1300	1300	1300	1900	1300
Storage Length (ft)	0	400	12	0	675	11
Storage Lanes	1	400		0	1	
Taper Length (ft)	25	U		U	35	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	0.95
Frt	1.00	0.850	0.95	0.95	1.00	0.90
FIt Protected	0.950	0.000	0.970		0.950	
		1/50	2040	0		2202
Satd. Flow (prot)	1711	1459	3240	0	1589	3202
Flt Permitted	0.950	4450	0040	^	0.463	2022
Satd. Flow (perm)	1711	1459	3240	0	775	3202
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		252	30			
Link Speed (mph)	40		35			35
Link Distance (ft)	300		1839			990
Travel Time (s)	5.1		35.8			19.3
Peak Hour Factor	0.80	0.87	0.87	0.84	0.94	0.89
Heavy Vehicles (%)	2%	7%	10%	3%	6%	9%
Adj. Flow (vph)	104	252	437	76	236	396
Shared Lane Traffic (%)						
Lane Group Flow (vph)	104	252	513	0	236	396
Turn Type	Prot	pt+ov	NA		D.P+P	NA
Protected Phases	4	14	2		1	12
Permitted Phases	4	14	Z		2	1 2
	4	4			1	
Detector Phase	4	4			I	
Switch Phase	^ ^		45.0		.	
Minimum Initial (s)	9.0		15.0		5.0	
Minimum Split (s)	13.0		20.9		9.0	
Total Split (s)	25.0		39.0		16.0	
Total Split (%)	31.3%		48.8%		20.0%	
Yellow Time (s)	3.0		4.4		3.0	
All-Red Time (s)	1.0		1.5		1.0	
Lost Time Adjust (s)	0.0		0.0		0.0	
Total Lost Time (s)	4.0		5.9		4.0	
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None		C-Max		None	
Act Effct Green (s)	10.9	22.1	48.0		57.1	61.1
Actuated g/C Ratio	0.14	0.28	0.60		0.71	0.76
v/c Ratio	0.14	0.43	0.26		0.71	0.76
Control Delay	37.6	5.2	8.6		4.9	2.9
	0.0		0.0		0.0	0.0
Queue Delay		0.0				
Total Delay	37.6	5.2	8.6		4.9	2.9
LOS	D	Α	A		Α	A
Approach Delay	14.7		8.6			3.6
Approach LOS	В		Α			Α

	•	•	†	<i>></i>	\	↓
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Queue Length 50th (ft)	49	0	89		24	20
Queue Length 95th (ft)	80	41	38		54	39
Internal Link Dist (ft)	220		1759			910
Turn Bay Length (ft)		400			675	
Base Capacity (vph)	449	601	1955		709	2445
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.23	0.42	0.26		0.33	0.16
Intersection Summary						
Area Type:	Other					
Cycle Length: 80						
Actuated Cycle Length: 80						
Offset: 43 (54%), Reference	ed to phase	2:NBSB,	Start of Y	ellow		
Natural Cycle: 45						
Control Type: Actuated-Coo	ordinated					
Maximum v/c Ratio: 0.45						
Intersection Signal Delay: 7.					tersection	
Intersection Capacity Utiliza	tion 43.9%			IC	U Level c	of Service
Analysis Period (min) 15						

Splits and Phases: 106: Route 75 & Route 140 (Elm Street)

№ _{Ø1}	↓ ↑ Ø2 (R)	,
16 s	39 s	25 s

Route 20 Corridor Study Tighe & Bond

Intersection						
Int Delay, s/veh	5.3					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	<u>₽</u>	בטול	11DL	414	ሻ	7
Traffic Vol, veh/h	90	169	53	124	164	30
Future Vol, veh/h	90	169	53	124	164	30
Conflicting Peds, #/hr	0	0	0	0	0	0
_	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-		_	None
Storage Length	-	-	-	-	0	50
Veh in Median Storage, #	# 0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	92	66	74	87	58
Heavy Vehicles, %	10	2	3	3	3	7
Mvmt Flow	96	184	80	168	189	52
Major/Minor Ma	ajor1	ı	Major2	N	/linor1	
			280	0	432	188
Conflicting Flow All Stage 1	0	0	280		188	
	-	-	-	-	244	- -
Stage 2 Critical Hdwy	-	-	4.145	-		6.305
Critical Hdwy Stg 1	_	-	4.143		5.445	0.303
Critical Hdwy Stg 2	-	-	-		5.845	-
Follow-up Hdwy	-		2.2285		3.645 3.5285 (3 3665
Pot Cap-1 Maneuver		- 2	1275		564	839
Stage 1	_	_	1213	_	841	-
Stage 2		_	-	-	772	_
Platoon blocked, %	_	_		_	112	
Mov Cap-1 Maneuver	_	_	1275		525	839
Mov Cap-1 Maneuver	_	_	1213	_	525	-
Stage 1	_	_	-	_	841	-
Stage 1 Stage 2	-	-	-	-	719	-
Slaye Z	_	<u>-</u>	_	<u>-</u>	119	_
Approach	EB		WB		NB	
HCM Control Delay, s	0		2.7		14.3	
HCM LOS					В	
Minor Lane/Major Mvmt	1	NBLn11	NBLn2	EBT	EBR	WBL
Capacity (veh/h)		525	839			1275
HCM Lane V/C Ratio			0.062	_		0.063
HCM Control Delay (s)		15.6	9.6	_	-	8
HCM Lane LOS		С	A	-	-	A
HCM 95th %tile Q(veh)		1.6	0.2	-	-	0.2

Route 20 Corridor Study
Tighe & Bond
Synchro 11 Report
HCM 6th TWSC

Intersection												
Intersection Delay, s/veh	11.1											
Intersection LOS	В											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			4	
Traffic Vol. veh/h	32	3	82	4	7	2	77	192	0	1	214	55

Traine voi, voii/ii	02	•	02	•		_		102	U	•	211	00
Future Vol, veh/h	32	3	82	4	7	2	77	192	0	1	214	55
Peak Hour Factor	0.62	0.25	0.79	0.50	0.58	0.25	0.74	0.86	0.92	0.25	0.84	0.86
Heavy Vehicles, %	5	0	6	9	11	0	3	3	50	0	2	3
Mvmt Flow	52	12	104	8	12	8	104	223	0	4	255	64
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Approach	EB			WB			NB			SB		
Opposing Approach	WB			EB			SB			NB		
Opposing Lanes	1			1			1			1		
Conflicting Approach Left	SB			NB			EB			WB		
Conflicting Lanes Left	1			1			1			1		
Conflicting Approach Right	NB			SB			WB			EB		
Conflicting Lanes Right	1			1			1			1		
HCM Control Delay	9.9			9.2			11.9			11.2		
HCM LOS	Α			Α			В			В		

Lane	NBLn1	EBLn1	WBLn1	SBLn1	
Vol Left, %	29%	27%	31%	0%	
Vol Thru, %	71%	3%	54%	79%	
Vol Right, %	0%	70%	15%	20%	
Sign Control	Stop	Stop	Stop	Stop	
Traffic Vol by Lane	269	117	13	270	
LT Vol	77	32	4	1	
Through Vol	192	3	7	214	
RT Vol	0	82	2	55	
Lane Flow Rate	327	167	28	323	
Geometry Grp	1	1	1	1	
Degree of Util (X)	0.445	0.239	0.046	0.42	
Departure Headway (Hd)	4.89	5.148	5.923	4.683	
Convergence, Y/N	Yes	Yes	Yes	Yes	
Cap	730	688	608	762	
Service Time	2.967	3.245	3.923	2.759	
HCM Lane V/C Ratio	0.448	0.243	0.046	0.424	
HCM Control Delay	11.9	9.9	9.2	11.2	
HCM Lane LOS	В	Α	Α	В	
HCM 95th-tile Q	2.3	0.9	0.1	2.1	

Route 20 Corridor Study
Tighe & Bond
Synchro 11 Report
HCM 6th AWSC

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4					ሻ	^			ተተቡ	7
Traffic Volume (vph)	78	0	31	0	0	0	62	370	0	0	349	282
Future Volume (vph)	78	0	31	0	0	0	62	370	0	0	349	282
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	12	12	16	12	11	12	12	11	11	11
Storage Length (ft)	0		0	0		0	70		0	80		300
Storage Lanes	0		0	0		0	1		0	1		1
Taper Length (ft)	25			25			45			55		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.91	0.91	1.00
Frt	1.00	0.961	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.01	0.01	0.850
Flt Protected		0.966					0.950					0.000
Satd. Flow (prot)	0	1944	0	0	0	0	1694	3505	0	0	4916	1473
Flt Permitted	•	0.966			· ·		0.514	0000		•	1010	1110
Satd. Flow (perm)	0	1944	0	0	0	0	917	3505	0	0	4916	1473
Right Turn on Red	•	1011	Yes	v	•	Yes	017	0000	Yes	•	1010	Yes
Satd. Flow (RTOR)		33	100			100			100			381
Link Speed (mph)		35			25			35			35	001
Link Distance (ft)		394			120			257			652	
Travel Time (s)		7.7			3.3			5.0			12.7	
Peak Hour Factor	0.80	0.92	0.78	0.92	0.92	0.92	0.82	0.96	0.92	0.92	0.90	0.74
Heavy Vehicles (%)	4%	0%	0%	7%	7%	7%	3%	3%	7%	7%	2%	6%
Adj. Flow (vph)	98	0	40	0	0	0	76	385	0	0	388	381
Shared Lane Traffic (%)	30	· ·	40	· ·	U	0	10	000	· ·	U	000	001
Lane Group Flow (vph)	0	138	0	0	0	0	76	385	0	0	388	381
Turn Type	Split	NA	v	v	•	J	Perm	NA	•		NA	Perm
Protected Phases	4	4					. 0	2			2	. 0
Permitted Phases	•	•					2	_		2	-	2
Detector Phase	4	4					2	2		2	2	2
Switch Phase												_
Minimum Initial (s)	7.0	7.0					15.0	15.0		15.0	15.0	15.0
Minimum Split (s)	24.2	24.2					20.4	20.4		20.4	20.4	20.4
Total Split (s)	25.0	25.0					45.0	45.0		45.0	45.0	45.0
Total Split (%)	35.7%	35.7%					64.3%	64.3%		64.3%	64.3%	64.3%
Yellow Time (s)	3.0	3.0					4.1	4.1		4.1	4.1	4.1
All-Red Time (s)	2.2	2.2					1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)		0.0					0.0	0.0			0.0	0.0
Total Lost Time (s)		5.2					5.1	5.1			5.1	5.1
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None					C-Max	C-Max		C-Max	C-Max	C-Max
Act Effct Green (s)		8.9					54.2	54.2			54.2	54.2
Actuated g/C Ratio		0.13					0.77	0.77			0.77	0.77
v/c Ratio		0.50					0.11	0.14			0.10	0.31
Control Delay		27.5					3.8	3.1			2.4	1.1
Queue Delay		0.0					0.0	0.0			0.0	0.0
Total Delay		27.5					3.8	3.1			2.4	1.1
LOS		С					А	Α			Α	Α
Approach Delay		27.5						3.2			1.8	
Approach LOS		С						Α			A	
Approach Loo		0						п			М	

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)		43					7	20			12	0
Queue Length 95th (ft)		87					20	40			18	2
Internal Link Dist (ft)		314			40			177			572	
Turn Bay Length (ft)							70					300
Base Capacity (vph)		573					710	2714			3807	1227
Starvation Cap Reductn		0					0	0			0	0
Spillback Cap Reductn		0					0	0			0	0
Storage Cap Reductn		0					0	0			0	0
Reduced v/c Ratio		0.24					0.11	0.14			0.10	0.31
Intersection Summary												
Area Type:	Other											
Cycle Length: 70												
Actuated Cycle Length: 70												
Offset: 0 (0%), Referenced	d to phase 2:	NBSB, St	art of Yell	OW								
Natural Cycle: 45												
Control Type: Actuated-Co	ordinated											
Maximum v/c Ratio: 0.50												

Intersection Capacity Utilization 44.0% Analysis Period (min) 15

Intersection Signal Delay: 4.9

Splits and Phases: 101: Route 75 & Route 20 EB Ramps/Private Driveway



Intersection LOS: A

ICU Level of Service A

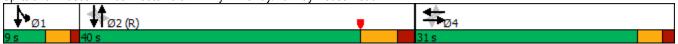
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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					4	7	ሻ	^			^	7
Traffic Volume (vph)	0	0	0	58	0	498	27	421	0	0	573	76
Future Volume (vph)	0	0	0	58	0	498	27	421	0	0	573	76
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	14	12	12	11	12	11	12	12	11	11	11
Storage Length (ft)	0		0	0		190	75		0	0		90
Storage Lanes	0		0	0		1	1		0	0		1
Taper Length (ft)	25			25		•	40			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt						0.850		0.00			0.00	0.850
Flt Protected					0.950		0.950					
Satd. Flow (prot)	0	0	0	0	1694	1509	1711	3505	0	0	3355	1487
Flt Permitted	-	•		•	0.950		0.426			-		
Satd. Flow (perm)	0	0	0	0	1694	1509	767	3505	0	0	3355	1487
Right Turn on Red	•		Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						401						112
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		591			524			652			2293	
Travel Time (s)		13.4			11.9			12.7			44.7	
Peak Hour Factor	0.92	0.92	0.92	0.76	0.92	0.95	0.84	0.96	0.92	0.92	0.96	0.68
Heavy Vehicles (%)	7%	7%	7%	3%	0%	7%	2%	3%	7%	7%	4%	5%
Adj. Flow (vph)	0	0	0	76	0	524	32	439	0	0	597	112
Shared Lane Traffic (%)	•			, •	•	V		100				
Lane Group Flow (vph)	0	0	0	0	76	524	32	439	0	0	597	112
Turn Type	-	•	•	Split	NA	Prot	Perm	NA	-	•	NA	Perm
Protected Phases				4	4	4		2			2	
Permitted Phases							2					2
Detector Phase				4	4	4	2	2			2	2
Switch Phase												
Minimum Initial (s)				7.0	7.0	7.0	15.0	15.0			15.0	15.0
Minimum Split (s)				12.1	12.1	12.1	20.4	20.4			20.4	20.4
Total Split (s)				25.0	25.0	25.0	45.0	45.0			45.0	45.0
Total Split (%)				35.7%	35.7%	35.7%	64.3%	64.3%			64.3%	64.3%
Yellow Time (s)				3.0	3.0	3.0	4.4	4.4			4.4	4.4
All-Red Time (s)				2.1	2.1	2.1	1.0	1.0			1.0	1.0
Lost Time Adjust (s)					0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)					5.1	5.1	5.4	5.4			5.4	5.4
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode				None	None	None	C-Max	C-Max			C-Max	C-Max
Act Effct Green (s)					13.0	13.0	46.5	46.5			46.5	46.5
Actuated g/C Ratio					0.19	0.19	0.66	0.66			0.66	0.66
v/c Ratio					0.24	0.86	0.06	0.19			0.27	0.11
Control Delay					23.8	22.2	5.0	4.4			6.1	1.9
Queue Delay					0.0	0.0	0.0	0.0			0.0	0.0
Total Delay					23.8	22.2	5.0	4.4			6.1	1.9
LOS					C	C	A	A			A	A
Approach Delay					22.4		, ,	4.4			5.4	, ,
Approach LOS					C			A			A	
								,,			, ,	

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBF
Queue Length 50th (ft)					28	48	3	28			45	(
Queue Length 95th (ft)					55	152	13	50			93	(
Internal Link Dist (ft)		511			444			572			2213	
Turn Bay Length (ft)						190	75					90
Base Capacity (vph)					481	715	509	2329			2229	1025
Starvation Cap Reductn					0	0	0	0			0	(
Spillback Cap Reductn					0	0	0	0			0	(
Storage Cap Reductn					0	0	0	0			0	(
Reduced v/c Ratio					0.16	0.73	0.06	0.19			0.27	0.11
Intersection Summary												
Area Type:	Other											
Cycle Length: 70												
Actuated Cycle Length: 70												
Offset: 1 (1%), Referenced	to phase 2:N	NBSB, Sta	art of Yell	OW								
Natural Cycle: 40												
Control Type: Actuated-Coo	ordinated											
Maximum v/c Ratio: 0.86												
Intersection Signal Delay: 1					ntersection							
Intersection Capacity Utiliza	tion 52.1%			IC	CU Level of	of Service	· A					
Analysis Period (min) 15												
Splits and Phases: 102: F	Route 75 & F	Route 20	WB On R	amp/Roi	ute 20 WB	Off Ram	p					
₩ ø _{2 (R)}				ļ		•		Ø4				

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			414		ሻ	ħβ	
Traffic Volume (vph)	3	3	4	83	8	29	3	734	113	29	511	4
Future Volume (vph)	3	3	4	83	8	29	3	734	113	29	511	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	15	12	12	16	12	12	12	12	12	12	12
Storage Length (ft)	0	10	0	0	10	0	0		0	415	- '-	0
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (ft)	25			25			25			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	1.00	0.95	0.95
Frt	1.00	0.942	1.00	1.00	0.969	1.00	0.50	0.979	0.00	1.00	0.998	0.50
Flt Protected		0.986			0.971			0.999		0.950	0.550	
Satd. Flow (prot)	0	1941	0	0	1979	0	0	3351	0	1752	3458	0
Flt Permitted	U	0.919	U	U	0.802	U	0	0.946	U	0.282	0-100	U
Satd. Flow (perm)	0	1809	0	0	1635	0	0	3173	0	520	3458	0
Right Turn on Red	U	1003	Yes	U	1000	Yes	U	0170	Yes	020	0400	Yes
Satd. Flow (RTOR)		12	163		20	163		28	163		3	163
Link Speed (mph)		25			30			35			35	
Link Distance (ft)		250			258			2293			1019	
Travel Time (s)		6.8			5.9			44.7			19.9	
Peak Hour Factor	0.38	0.38	0.33	0.80	0.25	0.73	0.25	0.93	0.86	0.91	0.86	0.50
	0.36	0.36	0.33	4%	0.23	0.73	0.23	6%	2%	3%	4%	17%
Heavy Vehicles (%)	8	8	12	104	32	40	12	789	131	32	594	8
Adj. Flow (vph)	0	0	12	104	32	40	12	709	131	32	594	0
Shared Lane Traffic (%)	0	28	0	0	176	0	0	932	0	32	602	0
Lane Group Flow (vph)	Perm	NA	U	Perm	NA	U	Perm	NA	U	D.P+P	NA	U
Turn Type Protected Phases	reiiii	4		reiiii	4		reiiii	2		D.F+F	12	
Permitted Phases	1	4		1	4		2	2		2	1 2	
	4	4		4	4		2			1		
Detector Phase Switch Phase	4	4		4	4							
	5.0	5.0		5.0	5.0		15.0	15.0		5.0		
Minimum Initial (s)										9.0		
Minimum Split (s)	9.5	9.5		9.5	9.5		21.5	21.5				
Total Split (s)	31.0	31.0		31.0	31.0 38.8%		40.0	40.0		9.0		
Total Split (%)	38.8%	38.8%		38.8%			50.0%	50.0%		11.3%		
Yellow Time (s)	3.0	3.0		3.0	3.0		4.4	4.4		3.0		
All-Red Time (s)	1.5	1.5		1.5	1.5		2.1	2.1		1.0		
Lost Time Adjust (s)		0.0			0.0			0.0		0.0		
Total Lost Time (s)		4.5			4.5		1	6.5		4.0		
Lead/Lag							Lag	Lag		Lead		
Lead-Lag Optimize?	Nissa	Mana		Mana	NI		Yes	Yes		Yes		
Recall Mode	None	None		None	None		C-Max	C-Max		None	00.0	
Act Effct Green (s)		11.3			11.3			54.1		58.6	60.2	
Actuated g/C Ratio		0.14			0.14			0.68		0.73	0.75	
v/c Ratio		0.11			0.71			0.43		0.07	0.23	
Control Delay		20.1			43.7			8.0		2.2	2.2	
Queue Delay		0.0			0.0			0.0		0.0	0.0	
Total Delay		20.1			43.7			8.0		2.2	2.2	
LOS		C			D			A		Α	A	
Approach Delay		20.1			43.7			8.0			2.2	
Approach LOS		С			D			Α			Α	

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)		7			75			75		1	10	
Queue Length 95th (ft)		8			25			196		4	18	
Internal Link Dist (ft)		170			178			2213			939	
Turn Bay Length (ft)										415		
Base Capacity (vph)		607			554			2153		457	2601	
Starvation Cap Reductn		0			0			0		0	0	
Spillback Cap Reductn		0			0			0		0	0	
Storage Cap Reductn		0			0			0		0	0	
Reduced v/c Ratio		0.05			0.32			0.43		0.07	0.23	
Intersection Summary												
Area Type:	Other											
Cycle Length: 80												
Actuated Cycle Length: 80												
Offset: 57 (71%), Reference	ed to phase 2:	:NBSB,	Start of Y	ellow								
Natural Cycle: 50												
Control Type: Actuated-Co	ordinated											
Maximum v/c Ratio: 0.71												
Intersection Signal Delay: 9.7			In	Intersection LOS: A								
Intersection Capacity Utilization 48.6%			IC	U Level o	of Service	Α						
Analysis Period (min) 15												

Splits and Phases: 103: Route 75 & LAZFly Driveway/Halfway House Road



Lane Group		•	→	•	•	+	•	•	†	/	/		-√
Traffic Volume (vph)	Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	Lane Configurations	*	4	7	*	î,		*	∳ ሴ		*	44	7
Fulture Volume (vph) 217							17			15			
Ideal Flow (ryphpi)					7								
Lane Width (ft)	· · · /				1900								
Storage Length (ft)													
Storage Lanes									· <u>-</u>				
Taper Length (ft)													1
Lane Util. Factor				•			•				25		
Fith			0.95	1 00		1 00	1 00		0.95	0.95		0.95	1 00
Fit Protected		0.00	0.00		1.00		1.00	1.00		0.00	1.00	0.00	
Satd. Flow (prot) 1609 1629 1409 1532 1640 0 1703 3327 0 1805 3438 1568 Fit Permitted 0.950 0.		0.950	0.958	0.000	0.950	0.020		0.950	0.001		0.950		0.000
Fit Permitted				1409		1640	0		3327	0		3438	1568
Satd. Flow (perm) 1609 1629 1409 1532 1640 0 1703 3327 0 1805 3438 1568 Right Turn on Red				1 100		1010	· ·		0021			0100	1000
Right Turn on Red				1409		1640	0		3327	0		3438	1568
Satd. Flow (RTOR)		1000	1020		1002	1010		1700	0021		1000	0100	
Link Speed (mph)						24	100		5	100			
Link Distance (ft)			35	212								35	201
Travel Time (s)													
Peak Hour Factor													
Heavy Vehicles (%)		0.86		0.78	0.88		0.71	0.88		0.75	0.50		0 74
Adj. Flow (vph) 252 16 212 8 24 24 302 497 20 8 426 177 Shared Lane Traffic (%) 47% 47% 47% 47% 47% 47% 47% 426 177 48 48 0 302 517 0 8 426 177 170													
Shared Lane Traffic (%)													
Lane Group Flow (vph)			10	212	•	- '		002	107	20		120	
Tum Type			134	212	8	48	0	302	517	0	8	426	177
Protected Phases 8							•						
Permitted Phases 8													1100
Detector Phase 8					•	•		•	•			_	Free
Switch Phase Minimum Initial (s) 7.0 7.0 5.0 5.0 5.0 15.0 5.0 15.0 Minimum Split (s) 12.7 12.7 9.8 9.8 10.1 20.8 9.0 20.6 Total Split (s) 22.0 22.0 10.0 10.0 18.0 30.0 18.0 30.0 Total Split (%) 27.5% 27.5% 12.5% 12.5% 22.5% 37.5% 22.5% 37.5% Yellow Time (s) 3.0 3.0 3.3 3.3 3.0 4.4 3.0 4.4 All-Red Time (s) 2.7 2.7 1.5 1.5 2.1 1.4 1.0 1.2 Lost Time Adjust (s) 0.0		8	8	18	4	4		1	6		5	2	
Minimum Initial (s) 7.0 7.0 5.0 5.0 5.0 15.0 5.0 15.0 Minimum Split (s) 12.7 12.7 9.8 9.8 10.1 20.8 9.0 20.6 Total Split (s) 22.0 22.0 10.0 10.0 18.0 30.0 18.0 30.0 Total Split (%) 27.5% 27.5% 12.5% 12.5% 22.5% 37.5% 22.5% 37.5% Yellow Time (s) 3.0 3.0 3.3 3.3 3.0 4.4 3.0 4.4 All-Red Time (s) 2.7 2.7 1.5 1.5 2.1 1.4 1.0 1.2 Lost Time Adjust (s) 0.0 <				. •	•	•		•				-	
Minimum Split (s) 12.7 12.7 9.8 9.8 10.1 20.8 9.0 20.6 Total Split (s) 22.0 22.0 10.0 10.0 18.0 30.0 18.0 30.0 Total Split (%) 27.5% 27.5% 12.5% 12.5% 22.5% 37.5% 22.5% 37.5% Yellow Time (s) 3.0 3.0 3.3 3.3 3.0 4.4 3.0 4.4 All-Red Time (s) 2.7 2.7 1.5 1.5 2.1 1.4 1.0 1.2 Lost Time Adjust (s) 0.0		7.0	7.0		5.0	5.0		5.0	15.0		5.0	15.0	
Total Split (s) 22.0 22.0 10.0 10.0 18.0 30.0 18.0 30.0 Total Split (%) 27.5% 27.5% 12.5% 12.5% 22.5% 37.5% 22.5% 37.5% Yellow Time (s) 3.0 3.0 3.3 3.3 3.0 4.4 3.0 4.4 All-Red Time (s) 2.7 2.7 1.5 1.5 2.1 1.4 1.0 1.2 Lost Time Adjust (s) 0.0	()												
Total Split (%) 27.5% 27.5% 12.5% 12.5% 22.5% 37.5% 22.5% 37.5% Yellow Time (s) 3.0 3.0 3.0 3.3 3.3 3.0 4.4 3.0 4.4 All-Red Time (s) 2.7 2.7 1.5 1.5 2.1 1.4 1.0 1.2 Lost Time Adjust (s) 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 Total Lost Time (s) 5.7 5.7 4.8 4.8 4.8 5.1 5.8 4.0 5.6 Lead/Lag													
Yellow Time (s) 3.0 3.0 3.3 3.3 3.0 4.4 3.0 4.4 All-Red Time (s) 2.7 2.7 1.5 1.5 2.1 1.4 1.0 1.2 Lost Time Adjust (s) 0.0													
All-Red Time (s) 2.7 2.7 1.5 1.5 2.1 1.4 1.0 1.2 Lost Time Adjust (s) 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 Total Lost Time (s) 5.7 5.7 4.8 4.8 5.1 5.8 4.0 5.6 Lead/Lag Lead-Lag Optimize? Recall Mode None None None None None C-Min None C-Min Act Effct Green (s) 11.3 11.3 37.7 6.4 6.4 20.7 48.0 5.1 24.3 80.0 Actuated g/C Ratio 0.14 0.14 0.47 0.08 0.08 0.26 0.60 0.06 0.30 1.00 v/c Ratio 0.59 0.58 0.27 0.07 0.31 0.69 0.26 0.07 0.41 0.11 Control Delay 42.2 41.7 3.0 34.0 26.3 32.4 8.7 34.8 31.8 0.1 Queue Delay 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.													
Lost Time Adjust (s) 0.0													
Total Lost Time (s) 5.7 5.7 4.8 4.8 5.1 5.8 4.0 5.6 Lead/Lag Lead Lag Lead Lag Lead-Lag Optimize? Yes Yes Yes Recall Mode None None None None C-Min Act Effct Green (s) 11.3 11.3 37.7 6.4 6.4 20.7 48.0 5.1 24.3 80.0 Actuated g/C Ratio 0.14 0.14 0.47 0.08 0.08 0.26 0.60 0.06 0.30 1.00 v/c Ratio 0.59 0.58 0.27 0.07 0.31 0.69 0.26 0.07 0.41 0.11 Control Delay 42.2 41.7 3.0 34.0 26.3 32.4 8.7 34.8 31.8 0.1 Queue Delay 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0													
Lead/Lag Lead Lag Lead Lag Lead-Lag Optimize? Yes Yes Yes Yes Recall Mode None None None None C-Min None C-Min Act Effct Green (s) 11.3 11.3 37.7 6.4 6.4 20.7 48.0 5.1 24.3 80.0 Actuated g/C Ratio 0.14 0.14 0.47 0.08 0.08 0.26 0.60 0.06 0.30 1.00 v/c Ratio 0.59 0.58 0.27 0.07 0.31 0.69 0.26 0.07 0.41 0.11 Control Delay 42.2 41.7 3.0 34.0 26.3 32.4 8.7 34.8 31.8 0.1 Queue Delay 0.0 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>													
Lead-Lag Optimize? Yes Path Yes Yes													
Recall Mode None None None None None C-Min None C-Min Act Effct Green (s) 11.3 11.3 37.7 6.4 6.4 20.7 48.0 5.1 24.3 80.0 Actuated g/C Ratio 0.14 0.14 0.47 0.08 0.08 0.26 0.60 0.06 0.30 1.00 v/c Ratio 0.59 0.58 0.27 0.07 0.31 0.69 0.26 0.07 0.41 0.11 Control Delay 42.2 41.7 3.0 34.0 26.3 32.4 8.7 34.8 31.8 0.1 Queue Delay 0.0													
Act Effct Green (s) 11.3 11.3 37.7 6.4 6.4 20.7 48.0 5.1 24.3 80.0 Actuated g/C Ratio 0.14 0.14 0.47 0.08 0.08 0.26 0.60 0.06 0.30 1.00 v/c Ratio 0.59 0.58 0.27 0.07 0.31 0.69 0.26 0.07 0.41 0.11 Control Delay 42.2 41.7 3.0 34.0 26.3 32.4 8.7 34.8 31.8 0.1 Queue Delay 0.0 <td></td> <td>None</td> <td>None</td> <td></td> <td>None</td> <td>None</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>		None	None		None	None							
Actuated g/C Ratio 0.14 0.14 0.47 0.08 0.08 0.26 0.60 0.06 0.30 1.00 v/c Ratio 0.59 0.58 0.27 0.07 0.31 0.69 0.26 0.07 0.41 0.11 Control Delay 42.2 41.7 3.0 34.0 26.3 32.4 8.7 34.8 31.8 0.1 Queue Delay 0.0				37.7									80.0
v/c Ratio 0.59 0.58 0.27 0.07 0.31 0.69 0.26 0.07 0.41 0.11 Control Delay 42.2 41.7 3.0 34.0 26.3 32.4 8.7 34.8 31.8 0.1 Queue Delay 0.0													
Control Delay 42.2 41.7 3.0 34.0 26.3 32.4 8.7 34.8 31.8 0.1 Queue Delay 0.0 </td <td></td>													
Queue Delay 0.0 <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>													
Total Delay 42.2 41.7 3.0 34.0 26.3 32.4 8.7 34.8 31.8 0.1 LOS D D A C C A C C A Approach Delay 24.7 27.4 17.4 22.7													
LOS D D A C C C A C C A Approach Delay 24.7 27.4 17.4 22.7	•												
Approach Delay 24.7 27.4 17.4 22.7													
	Approach LOS		С			С			В			C	

Route 20 Corridor Study Tighe & Bond

104: Route 75 & Route 401 (Schoephoester Road)/National Road 2022 Existing Conditions Weekday PM Peak

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	67	67	0	4	12		135	76		4	106	0
Queue Length 95th (ft)	110	86	23	16	22		#313	173		10	144	0
Internal Link Dist (ft)		386			338			939			1759	
Turn Bay Length (ft)			220	200			450					400
Base Capacity (vph)	327	331	756	123	154		440	1999		315	1194	1568
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	0
Reduced v/c Ratio	0.41	0.40	0.28	0.07	0.31		0.69	0.26		0.03	0.36	0.11

Intersection Summary

Area Type: Other

Cycle Length: 80

Actuated Cycle Length: 80

Offset: 12 (15%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.69

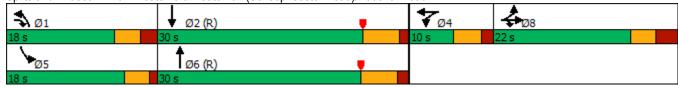
Intersection Signal Delay: 21.1 Intersection Capacity Utilization 53.9% Intersection LOS: C
ICU Level of Service A

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 104: Route 75 & Route 401 (Schoephoester Road)/National Road



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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ	∱ }		ሻ	↑ ↑			4			ર્ન	7
Traffic Volume (vph)	78	367	15	5	378	28	24	1	15	11	5	109
Future Volume (vph)	78	367	15	5	378	28	24	1	15	11	5	109
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	11	11	12	15	12	12	14	14
Storage Length (ft)	170		0	120		0	0		0	0		200
Storage Lanes	1		0	1		0	0		0	0		1
Taper Length (ft)	40			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.994			0.985			0.944				0.850
Flt Protected	0.950			0.950				0.974			0.968	
Satd. Flow (prot)	1787	3554	0	1745	3347	0	0	1922	0	0	1962	1723
Flt Permitted	0.483			0.478				0.815			0.828	
Satd. Flow (perm)	909	3554	0	878	3347	0	0	1608	0	0	1678	1723
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			20			28				156
Link Speed (mph)		35			35			25			30	
Link Distance (ft)		624			466			420			346	
Travel Time (s)		12.2			9.1			11.5			7.9	
Peak Hour Factor	0.75	0.80	0.75	0.42	0.90	0.58	0.67	0.25	0.54	0.46	0.42	0.70
Heavy Vehicles (%)	1%	1%	0%	0%	3%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	104	459	20	12	420	48	36	4	28	24	12	156
Shared Lane Traffic (%)												
Lane Group Flow (vph)	104	479	0	12	468	0	0	68	0	0	36	156
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	Perm
Protected Phases	1	6		5	2			4			4	
Permitted Phases	6			2			4			4		4
Detector Phase	1	6		5	2		4	4		4	4	4
Switch Phase												
Minimum Initial (s)	5.0	15.0		5.0	15.0		7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	9.0	21.6		9.0	21.6		12.1	12.1		12.1	12.1	12.1
Total Split (s)	9.0	53.9		9.0	53.9		27.1	27.1		27.1	27.1	27.1
Total Split (%)	10.0%	59.9%		10.0%	59.9%		30.1%	30.1%		30.1%	30.1%	30.1%
Yellow Time (s)	3.0	4.4		3.0	4.4		3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	1.0	2.2		1.0	2.2		2.1	2.1		2.1	2.1	2.1
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	0.0
Total Lost Time (s)	4.0	6.6		4.0	6.6			5.1			5.1	5.1
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	None
Act Effct Green (s)	69.7	62.4		69.3	62.4			8.0			8.0	8.0
Actuated g/C Ratio	0.77	0.69		0.77	0.69			0.09			0.09	0.09
v/c Ratio	0.14	0.19		0.02	0.20			0.41			0.24	0.53
Control Delay	2.4	5.6		2.0	5.5			32.8			41.8	13.6
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	0.0
Total Delay	2.4	5.6		2.0	5.5			32.8			41.8	13.6
LOS	Α	Α		Α	Α			С			D	В
Approach Delay		5.0			5.4			32.8			18.9	
Approach LOS		Α			Α			С			В	

105: Airport Servuce Road/Light Lane & Route 401 (Schoephoester Road) 2022 Existing Conditions Weekday PM Peak

	•	→	\rightarrow	•	•	•	4	†	/	\	ļ	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	8	44		1	42			22			20	0
Queue Length 95th (ft)	16	65		2	73			6			22	23
Internal Link Dist (ft)		544			386			340			266	
Turn Bay Length (ft)	170			120								200
Base Capacity (vph)	760	2464		728	2325			414			410	539
Starvation Cap Reductn	0	0		0	0			0			0	0
Spillback Cap Reductn	0	0		0	0			0			0	0
Storage Cap Reductn	0	0		0	0			0			0	0
Reduced v/c Ratio	0.14	0.19		0.02	0.20			0.16			0.09	0.29
Intersection Summary												

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow

Natural Cycle: 45

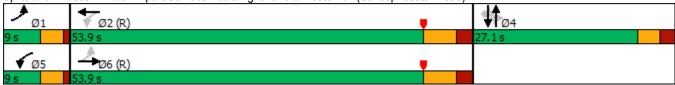
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.53

Intersection Signal Delay: 8.6 Intersection LOS: A Intersection Capacity Utilization 39.1% ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 105: Airport Servuce Road/Light Lane & Route 401 (Schoephoester Road)



	•	4	<u>†</u>	~	\	
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	**************************************	VVDI\	† ‡	NOIL	JDL	† †
Traffic Volume (vph)	125	196	T ₱ 546	174	293	419
Future Volume (vph)	125	196	546	174	293	419
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	1300	1300	1300	1300	1900	1300
Storage Length (ft)	0	400	12	0	675	11
Storage Lanes	1	0		0	1	
Taper Length (ft)	25	U		U	35	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	0.95
Frt	1.00	0.850	0.958	0.95	1.00	0.95
FIt Protected	0.950	0.000	0.900		0.950	
		1/172	2220	0		2255
Satd. Flow (prot)	1745	1473	3338	0	1620	3355
FIt Permitted	0.950	4 470	0000		0.265	2055
Satd. Flow (perm)	1745	1473	3338	0	452	3355
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		145	86			
Link Speed (mph)	40		35			35
Link Distance (ft)	300		1839			990
Travel Time (s)	5.1		35.8			19.3
Peak Hour Factor	0.89	0.89	0.86	0.71	0.87	0.91
Heavy Vehicles (%)	0%	6%	5%	0%	4%	4%
Adj. Flow (vph)	140	220	635	245	337	460
Shared Lane Traffic (%)						
Lane Group Flow (vph)	140	220	880	0	337	460
Turn Type	Prot	pt+ov	NA	- 0	D.P+P	NA
Protected Phases	4	14	2		1	12
Permitted Phases	4	14	Z		2	1 2
	4	4			1	
Detector Phase	4	4				
Switch Phase	0.0		45.0			
Minimum Initial (s)	9.0		15.0		5.0	
Minimum Split (s)	13.0		20.9		9.0	
Total Split (s)	25.0		39.0		16.0	
Total Split (%)	31.3%		48.8%		20.0%	
Yellow Time (s)	3.0		4.4		3.0	
All-Red Time (s)	1.0		1.5		1.0	
Lost Time Adjust (s)	0.0		0.0		0.0	
Total Lost Time (s)	4.0		5.9		4.0	
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None		C-Max		None	
Act Effct Green (s)	12.1	28.7	41.4		55.9	59.9
Actuated g/C Ratio	0.15	0.36	0.52		0.70	0.75
v/c Ratio	0.13	0.35	0.52		0.70	0.73
Control Delay	38.2	7.4	16.3		12.9	3.4
	0.0				0.0	0.0
Queue Delay		0.0	0.0			
Total Delay	38.2	7.4	16.3		12.9	3.4
LOS	D	Α	В		В	A
Approach Delay	19.4		16.3			7.5
Approach LOS	В		В			Α

	•	•	†	~	\	ļ
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Queue Length 50th (ft)	66	25	194		41	26
Queue Length 95th (ft)	112	59	103		109	51
Internal Link Dist (ft)	220		1759			910
Turn Bay Length (ft)		400			675	
Base Capacity (vph)	458	623	1768		524	2510
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.31	0.35	0.50		0.64	0.18
Intersection Summary						
Area Type:	Other					
Cycle Length: 80						
Actuated Cycle Length: 80)					
Offset: 43 (54%), Referen	ced to phase	2:NBSB,	Start of Y	ellow		
Natural Cycle: 60						
Control Type: Actuated-Co	oordinated					
Maximum v/c Ratio: 0.68						
Intersection Signal Delay:					tersection	
Intersection Capacity Utiliz	zation 56.0%			IC	CU Level o	of Service E

Splits and Phases: 106: Route 75 & Route 140 (Elm Street)

Analysis Period (min) 15



Route 20 Corridor Study Tighe & Bond

Intersection							
Int Delay, s/veh	5.7						
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	1>	בטול	TTDL	41	NDL	TVDIX	
Traffic Vol, veh/h	180	256	53	132	181	57	
Future Vol, veh/h	180	256	53	132	181	57	
Conflicting Peds, #/hr	0	0	0	0	0	0	
Sign Control	Free	Free	Free	Free	Stop	Stop	
RT Channelized	-	None	-	None	-	None	
Storage Length	-	-	-	-	0	50	
Veh in Median Storage,		-	-	0	0	-	
Grade, %	0	-	-	0	0	-	
Peak Hour Factor	94	91	66	72	89	84	
Heavy Vehicles, %	2	2	0	5	2	0	
Mvmt Flow	191	281	80	183	203	68	
Major/Minor N	1ajor1	1	Major2		Minor1		
Conflicting Flow All	0	0	472	0	584	332	
Stage 1	-	-	-	-	332	-	
Stage 2	-	-	-	-	252	-	
Critical Hdwy	-	-	4.1	-	6.63	6.2	
Critical Hdwy Stg 1	-	-	-	-	5.43	-	
Critical Hdwy Stg 2	-	-	-	-	5.83	-	
Follow-up Hdwy	-	-	2.2	-	3.519	3.3	
Pot Cap-1 Maneuver	-	-	1100	-	458	714	
Stage 1	-	-	-	-	726	-	
Stage 2	-	-	-	-	767	-	
Platoon blocked, %	-	-	1100	-	401		
Mov Cap-1 Maneuver	-	-	1100	-	421	714	
Mov Cap-2 Maneuver	-	-	-	-	421	-	
Stage 1	-	-	-	-	726	-	
Stage 2	-	-	-	-	705	-	
Approach	EB		WB		NB		
HCM Control Delay, s	0		2.7		18.6		
HCM LOS					С		
Minor Lane/Major Mvmt	ı	NBLn11	VRI n2	EBT	EBR	WBL	WBT
Capacity (veh/h)		421	714			1100	-
HCM Lane V/C Ratio		0.483		<u> </u>		0.073	-
HCM Control Delay (s)		21.3	10.6	_	_	8.5	0.2
HCM Lane LOS		C C	В	_	_	Α	Α
HCM 95th %tile Q(veh)		2.6	0.3	-	-	0.2	-
		0	3.0			J.L	

Route 20 Corridor Study
Tighe & Bond
Synchro 11 Report
HCM 6th TWSC

HCM 95th-tile Q

Intersection												
	14.9											
Intersection Delay, s/veh Intersection LOS	14.9 B											
Intersection LOS	Ь											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			4	
Traffic Vol, veh/h	65	19	120	11	12	2	99	253	2	2	262	54
Future Vol, veh/h	65	19	120	11	12	2	99	253	2	2	262	54
Peak Hour Factor	0.86	0.37	0.86	0.69	0.43	0.50	0.88	0.97	0.50	0.50	0.87	0.64
Heavy Vehicles, %	0	4	2	0	0	0	3	1	0	0	2	1
Mvmt Flow	76	51	140	16	28	4	113	261	4	4	301	84
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Approach	EB			WB			NB			SB		
Opposing Approach	WB			EB			SB			NB		
Opposing Lanes	1			1			1			1		
Conflicting Approach Left	SB			NB			EB			WB		
Conflicting Lanes Left	1			1			1			1		
Conflicting Approach Right	NB			SB			WB			EB		
Conflicting Lanes Right	1			1			1			1		
HCM Control Delay	13			10.3			16.1			15.6		
HCM LOS	В			В			С			С		
Lane		NBLn1	EBLn1	WBLn1	SBLn1							
Vol Left, %		28%	32%	44%	1%							
Vol Thru, %		71%	9%	48%	82%							
Vol Right, %		1%	59%	8%	17%							
Sign Control		Stop	Stop	Stop	Stop							
Traffic Vol by Lane		354	204	25	318							
LT Vol		99	65	11	2							
Through Vol		253	19	12	262							
RT Vol		2	120	2	54							
Lane Flow Rate		377	266	48	390							
Geometry Grp		1	1	1	1							
Degree of Util (X)		0.582	0.424	0.088	0.579							
Departure Headway (Hd)		5.553	5.725	6.589	5.349							
Convergence, Y/N		Yes	Yes	Yes	Yes							
Сар		645	626	539	670							
Service Time		3.615	3.794	4.689	3.411							
HCM Lane V/C Ratio		0.584	0.425	0.089	0.582							
HCM Control Delay		16.1	13	10.3	15.6							
HCM Lane LOS		С	В	В	С							
LIOM OF P TILE O		2.0	0.4	0.0	2.7							

Route 20 Corridor Study
Tighe & Bond
Synchro 11 Report
HCM 6th AWSC

3.7

3.8

2.1

0.3

APPENDIX JStudy Area Collision Summary

	Intersection:	KU	ice /5 (Line	T. Grasso Route 20 I	EB Ramps/	at Private Dr	iveway	
COLLISION TYPE				Noute 20	LD Rumps,	i iivate Di	iveway	
		2018	2019	2020	2021	2022	Total	Percent
Angle		2	3	0	3	2	10	71.4%
Rear-End		0	1	0	0	1	2	14.3%
Fixed Object		0	1	0	0	0	1	7.1%
Sideswipe, Same Direction		1	0	0	0	0	1	7.1%
	TOTAL	3	5	0	3	3	14	100%
CONTRIBUTING FACTOR								
		2018	2019	2020	2021	2022	Total	Percen
None		2	5	0	3	3	13	92.9%
Other/Unknown		1	0	0	0	0	1	7.1%
	TOTAL	3	5	0	3	3	14	100%
COLLISION EVENT								
		2018	2019	2020	2021	2022	Total	Percen
Motor Vehicle		3	5	0	3	3	14	100.0%
	TOTAL	3	5	0	3	3	14	100%
SEVERITY								
		2018	2019	2020	2021	2022	Total	Percen
Minor Injury / Property Damage Only (PDO)		3	5	0	3	3	14	100.0%
	TOTAL	3	5	0	3	3	14	100%
DAY & TIME								
		2018	2019	2020	2021	2022	Total	Percen
Weekday 3-6 P.M.		1	1	0	0	0	2	14.3%
Weekday Off-Peak		1	2	0	1	1	5	35.7%
Saturday 11 A.M 2 P.M.		0	1	0	0	0	1	7.1%
Weekend Off-Peak		1	1	0	2	2	6	42.9%
	TOTAL	3	5	0	3	3	14	100%
WEATHER		2018	2019	2020	2021	2022	Total	Percen
Clear		3	3	0	2	3	11	78.6%
Clear Snow		3	3	0	1	0	2	14.3%
Clear Snow		3 0 0	3 1 1	0 0	1 0	0 0	2 1	14.3% 7.1%
Clear Snow	TOTAL	3	3	0	1	0	2	14.3%
Clear Snow Rain	TOTAL	3 0 0 3	3 1 1 5	0 0 0	1 0 3	0 0 3	2 1 14	14.3% 7.1% 100%
Clear Snow Rain	TOTAL	3 0 0 3	3 1 1 5	0 0 0	1 0 3	0 0 3	2 1 14	14.3% 7.1% 100% Percen
Clear Snow Rain ROAD SURFACE CONDITION Dry	TOTAL	3 0 0 3 3	3 1 1 5 5	0 0 0	1 0 3 2021	0 0 3 2022	2 1 14 Total 11	14.3% 7.1% 100% Percen 78.6%
Clear Snow Rain ROAD SURFACE CONDITION Dry Snow Wet	TOTAL	3 0 0 3	3 1 1 5	0 0 0	1 0 3	0 0 3	2 1 14	14.3% 7.1% 100% Percen

TOTAL

 Percent 50.0% 50.0% 100%

LIGHT CONDITIONS

Light Dark

Intersection Collision History Summary Interse	ection:	Roi	ute 75 (Ella	T. Grasso	Turnpike)	at	Route 20	WB Ramps
COLLISION TYPE								
		2018	2019	2020	2021	2022	Total	Percent
Rear-End		5	12	2	3	1	23	74.2%
Angle		2	0	1	1	0	4	12.9%
Sideswipe, Same Direction		0	1	0	1	0	2	6.5%
Fixed Object		0	0	0	1	0	1	3.2%
Sideswipe, Opposite Direction		0	1	0	0	0	1	3.2%
	TOTAL	7	14	3	6	1	31	100%
CONTRIBUTING FACTOR								
		2018	2019	2020	2021	2022	Total	Percent
None		7	13	3	6	1	30	96.8%
Road Surface Condition (wet, icy, snow, slush, etc.)		0	1	0	0	0	1	3.2%
	TOTAL	7	14	3	6	1	31	100%
COLLISION EVENT								
		2018	2019	2020	2021	2022	Total	Percent
Motor Vehicle		7	14	3	6	1	31	100.0%
	TOTAL	7	14	3	6	1	31	100%
SEVERITY								
-		2018	2019	2020	2021	2022	Total	Percent
Minor Injury / Property Damage Only (PDO)		7	14	3	6	1	31	100.0%
	TOTAL	7	14	3	6	1	31	100%
DAY & TIME								
DAT & TIME		2018	2019	2020	2021	2022	Total	Percent
Weekday 6-9 A.M.		0	0	0	2	0	2	6.5%
Weekday 3-6 P.M.		3	2	1	0	0	6	19.4%
, Weekday Off-Peak		2	11	1	4	0	18	58.1%
Saturday 11 A.M 2 P.M.		0	0	0	0	1	1	3.2%
Weekend Off-Peak		2	1	1	0	0	4	12.9%
	TOTAL	7	14	3	6	1	31	100%
WEATHER								
WEATHER		2018	2019	2020	2021	2022	Total	Percent
Clear		5	11	3	6	1	26	83.9%
Rain		2	2	0	0	0	4	12.9%
Snow		0	1	0	0	0	1	3.2%
	TOTAL	7	14	3	6	1	31	100%
ROAD SURFACE CONDITION								
		2018	2019	2020	2021	2022	Total	Percent
Dry		5	9	2	6	1	23	74.2%
Wet		2	4	1	0	0	7	22.6%
Snow		0	1	0	0	0	1	3.2%
	TOTAL	7	14	3	6	1	31	100%
LIGHT CONDITIONS								
		2018	2019	2020	2021	2022	Total	Percent
Light		5	7	2	4	1	19	61.3%
					_	_	1	
Dark	J	2	7	1	2	0	12	38.7%

Intersection	on:	Route	75 (Ella		Turnpike) Iouse Road		riveway	
COLLISION TYPE				anway i	iouse Noau	, _n_	veway	
	20	18	2019	2020	2021	2022	Total	Percent
Rear-End	1.1	3	5	0	3	7	18	54.5%
Fixed Object	(0	0	0	0	1	1	3.0%
Angle	1	1	1	0	2	4	8	24.2%
Sideswipe, Same Direction	(0	2	2	1	1	6	18.2%
тот	ΓAL 4	4	8	2	6	13	33	100%
CONTRIBUTING FACTOR								
	20	18	2019	2020	2021	2022	Total	Percent
None		4	8	2	5	12	31	93.9%
Road Surface Condition (wet, icy, snow, slush, etc.)	(0	0	0	1	1	2	6.1%
тот	ΓAL 4	4	8	2	6	13	33	100%
COLLISION EVENT								
	20	18	2019	2020	2021	2022	Total	Percent
Motor Vehicle	4	4	8	2	6	13	33	100.0%
ТО1	ΓAL 4	4	8	2	6	13	33	100%
SEVERITY								
SEVERITT	20	18	2019	2020	2021	2022	Total	Percent
Minor Injury / Property Damage Only (PDO)		4	8	2	6	13	33	100.0%
TO1		4	8	2	6	13	33	100%
DAY 6 TIME								
DAY & TIME	20	18	2019	2020	2021	2022	Total	Percent
Weekday 6-9 A.M.	(0	0	0	1	4	5	15.2%
Weekday 3-6 P.M.	l d	0	1	0	0	1	2	6.1%
Weekday Off-Peak		2	4	2	5	5	18	54.5%
Saturday 11 A.M 2 P.M.		1	1	0	0	0	2	6.1%
Weekend Off-Peak		- 1	2	Ö	Ö	3	6	18.2%
TO1		4	8	2	6	13	33	100%
WEATHER								
WEATHER	20	18	2019	2020	2021	2022	Total	Percent
Clear	4	4	5	2	4	10	25	75.8%
Ice	(0	1	0	0	2	3	9.1%
Rain	(0	1	0	1	1	3	9.1%
Snow	(0	1	0	1	0	2	6.1%
тот	ΓAL 4	4	8	2	6	13	33	100%
ROAD SURFACE CONDITION								
John not comparable	20	18	2019	2020	2021	2022	Total	Percent
Dry		4	3	2	4	10	23	69.7%
Wet		0	3	0	1	1	5	15.2%
Snow		0	2	0	1	2	5	15.2%

Percent 54.5% 45.5% 100%

TOTAL

3 **4**

5 **8**

0 **2**

3 **6**

4 **13**

Total

15 33

Light Dark

LIGHT CONDITIONS

Intersection Collision History Summary Intersect	ion:	Rou	ite 75 (Ella	T. Grasso	Turnpike)	at		
			•				d)/Nation	al Drive
COLLISION TYPE		2010	2010	2020	2024	2022	T = T	
Rear-End		2018	2019 4	2020	2021 4	2022	Total 20	Percent 45.5%
				0				
Angle		6	2		4	3	15	34.1%
Sideswipe, Same Direction		4	2	0	0	0	6	13.6%
Head-On		1	0	0	0	1	2	4.5%
Fixed Object		0	0	0	1	0	1	2.3%
то	TAL	19	8	1	9	7	44	100%
CONTRIBUTING FACTOR								
		2018	2019	2020	2021	2022	Total	Percent
Vone		18	7	1	8	7	41	93.2%
Other/Unknown		1	0	0	1	0	2	4.5%
Road Surface Condition (wet, icy, snow, slush, etc.)		0	1	0	0	0	1	2.3%
то	TAL	19	8	1	9	7	44	100%
COLLISION EVENT								
COLLISION EVENT		2018	2019	2020	2021	2022	Total	Percent
Motor Vehicle		19	8	1	9	7	44	100.0%
	TAL	19	8	1	9	7	44	100%
SEVERITY								
		2018	2019	2020	2021	2022	Total	Percent
Minor Injury / Property Damage Only (PDO)		19	8	1	9	7	44	100.0%
то	TAL	19	8	1	9	7	44	100%
DAY & TIME								
		2018	2019	2020	2021	2022	Total	Percent
Weekday 3-6 P.M.		2	3	0	2	0	7	15.9%
Weekday Off-Peak		13	1	1	6	6	27	61.4%
Saturday 11 A.M 2 P.M.		1	1	0	0	Ō	2	4.5%
Weekend Off-Peak		3	3	Ö	1	1	8	18.2%
	TAL	19	8	1	9	7	44	100%
WEATHER		2018	2019	2020	2021	2022	Total	Percent
Clear		17	6	1	7	6	37	84.1%
Rain		2	2	0	2	1	7	15.9%
	TAL	19	<u>2</u> 	1	9	7	44	100%
10	IAL	19	o	-	,	,	1 1	100 70
ROAD SURFACE CONDITION								
		2018	2019	2020	2021	2022	Total	Percent
Dry		14	6	1	5	6	32	72.7%
		4	2	0	4	1	11	25.0%
Wet		4	2	U	4	1	11 1	25.0%
Wet Snow		1	0	0	0	0	1	23.0%

TOTAL

2018 7 12

19

2020

1 0

3 6 9

3 4 7

Light Dark

LIGHT CONDITIONS

Percent 50.0% 50.0% 100%

	Intersection:	Re	oute 401 (S	Schoephoe	ster Road)			
COLLISION TYPE						Light Lan	e/Airport S	Service Road
COLLISION TIPE		2018	2019	2020	2021	2022	Total	Percent
Angle		0	6	1	0	0	7	63.6%
Sideswipe, Same Direction		0	3	0	0	0	3	27.3%
Fixed Object		0	0	0	1	0	1	9.1%
Tixed Object	TOTAL	0	9	1	1	0	11	100%
	IOIAL	·	,	-	-	Ū	1 1	100 /0
CONTRIBUTING FACTOR								
		2018	2019	2020	2021	2022	Total	Percent
None		0	9	1	1	0	11	100.0%
	TOTAL	0	9	1	1	0	11	100%
COLLISION EVENT								
		2018	2019	2020	2021	2022	Total	Percent
Motor Vehicle		0	9	1	1	0	11	100.0%
	TOTAL	0	9	1	1	0	11	100%
SEVERITY		2018	2019	2020	2021	2022	Total	Percent
Minor Injury / Property Damage Only (PDO)		0	9	1	1	0	11	100.0%
fillor frigury / Froperty Damage Only (FDO)	TOTAL	0	9	1	1	0	11	100.0%
	IOIAL	U	9	-	_	U	1 1	10070
DAY & TIME								
-		2018	2019	2020	2021	2022	Total	Percent
Weekday 3-6 P.M.		0	3	1	0	0	4	36.4%
Weekday Off-Peak		0	5	0	1	0	6	54.5%
Weekend Off-Peak		0	1	0	0	0	1	9.1%
	TOTAL	0	9	1	1	0	11	100%
WEATHER		2018	2019	2020	2021	2022	Total	Percent
Clear		0	6	1	1	0	8	72.7%
Rain		0	3	0	0	0	3	27.3%
Nam.	TOTAL	0	9	1	1	0	11	100%
		•	-	=	=	•		20070
ROAD SURFACE CONDITION								
		2018	2019	2020	2021	2022	Total	Percent
Dry		0	6	1	1	0	8	72.7%
Wet		0	3	0	0	0	3	27.3%
	TOTAL	0	9	1	1	0	11	100%
LIGHT CONDITIONS								
LIGHT CONDITIONS		2018	2019	2020	2021	2022	Total	Percent
Light	+	0	5	0	0	0	5	45.5%
Dark		0	4	1	1	0	6	54.5%
	TOTAL	0	9	1	1	0	11	100%

Intersection Collision History Summary		Davida 75 /	/FII- T. C	T		Doute 14	O (Elm Street)
Intersection	•	Route /5 ((Ella I. Gras	so Turnpike)	at	Route 14	0 (Elm Street)
COLLISION TYPE							
	2018	2019	2020	2021	2022	Total	Percent
Rear-End	4	4	3	5	2	18	58.1%
Angle	2	3	0	2	1	8	25.8%
Sideswipe, Same Direction	1	2	0	0	0	3	9.7%
Fixed Object	0	1	0	11	0	2	6.5%
TOTA	- 7	10	3	8	3	31	100%
CONTRIBUTING FACTOR							
	2018	2019	2020	2021	2022	Total	Percent
None	7	9	3	8	3	30	96.8%
Road Surface Condition (wet, icy, snow, slush, etc.)	0	1	0	0	0	1	3.2%
TOTAL	. 7	10	3	8	3	31	100%
COLLISION EVENT							
	2018	2019	2020	2021	2022	Total	Percent
Motor Vehicle	7	10	3	8	3	31	100.0%
TOTAL	. 7	10	3	8	3	31	100%
SEVERITY							
<u></u>	2018	2019	2020	2021	2022	Total	Percent
Minor Injury / Property Damage Only (PDO)	7	10	3	8	3	31	100.0%
TOTA		10	3	8	3	31	100%
	•						
DAY & TIME							
	2018	2019	2020	2021	2022	Total	Percent
Weekday 6-9 A.M.	2	2	2	1	1	8	25.8%
Weekday 3-6 P.M.	1	3	1	2	0	7	22.6%
Weekday Off-Peak	4	3	0	2	2	11	35.5%
Weekend Off-Peak	0	2	0	3	0	5	16.1%
TOTAL	. 7	10	3	8	3	31	100%
WEATHER							
	2018	2019	2020	2021	2022	Total	Percent
Clear	7	7	3	8	2	27	87.1%
Rain	0	2	0	0	0	2	6.5%
Snow	0	1	0	0	0	1	3.2%
Ice	0	0	0	0	1	1	3.2%
TOTA	. 7	10	3	8	3	31	100%
ROAD SURFACE CONDITION							
	2018	2019	2020	2021	2022	Total	Percent
Dry	7	7	3	8	2	27	87.1%
Wet	0	2	0	0	1	3	9.7%
Snow	0	1	0	0	0	1	3.2%
TOTAL	. 7	10	3	8	3	31	100%
LIGHT CONDITIONS							
	2018	2019	2020	2021	2022	Total	Percent
Light	6	7	3	6	2	24	77.4%
Dark	1	3	0	2	1	7	22.6%
TOTAL	. 7	10	3	8	3	31	100%

Intersection Collision History Summary Inte	section Collision History Summary Intersection:		ute 140 (E	lm Street)	at	Old County Road			
COLLISION TYPE									
		2018	2019	2020	2021	2022	Total	Percent	
Sideswipe, Opposite Direction		1	1	3	2	1	8	57.1%	
Rear-End		0	0	1	1	1	3	21.4%	
Angle		1	1	0	0	0	2	14.3%	
Sideswipe, Same Direction		1	0	0	0	0	1	7.1%	
, -,	TOTAL	3	2	4	3	2	14	100%	
CONTRIBUTING FACTOR									
		2018	2019	2020	2021	2022	Total	Percent	
None		3	2	4	2	2	13	92.9%	
Road Surface Condition (wet, icy, snow, slush, etc.)		0	0	0	1	0	1	7.1%	
	TOTAL	3	2	4	3	2	14	100%	
COLLISION EVENT									
		2018	2019	2020	2021	2022	Total	Percent	
Motor Vehicle	İ	3	2	4	3	2	14	100.0%	
	TOTAL	3	2	4	3	2	14	100%	
SEVERITY									
		2018	2019	2020	2021	2022	Total	Percent	
Minor Injury / Property Damage Only (PDO)		3	2	4	3	2	14	100.0%	
······································	TOTAL	3	2	4	3	2	14	100%	
DAY & TIME									
		2018	2019	2020	2021	2022	Total	Percent	
Weekday 6-9 A.M.		0	0	1	1	0	2	14.3%	
Weekday 3-6 P.M.		0	0	1	1	2	4	28.6%	
Weekday Off-Peak		1	0	2	1	0	4	28.6%	
Weekend Off-Peak		2	2	0	0	0	4	28.6%	
	TOTAL	3	2	4	3	2	14	100%	
WEATHER									
		2018	2019	2020	2021	2022	Total	Percent	
Clear		3	2	4	2	2	13	92.9%	
Rain		0	0	0	1	0	1	7.1%	
	TOTAL	3	2	4	3	2	14	100%	
ROAD SURFACE CONDITION									
		2018	2019	2020	2021	2022	Total	Percent	
Dry		3	2	4	2	2	13	92.9%	
Wet		0	0	0	1	0	1	7.1%	
	TOTAL	3	2	4	3	2	14	100%	
LIGHT CONDITIONS									
		2018	2019	2020	2021	2022	Total	Percent	
Light		0	1	4	2	2	9	64.3%	
Dark		3	1	0	1	0	5	35.7%	
	TOTAL	3	2	4	3	2	14	100%	

Intersection Collision History Summary Intersecti	on:	Old Co	unty Road	at	Halfway H	ouse Road		
COLLISION TYPE								
	2	018	2019	2020	2021	2022	Total	Percent
Angle		3	2	4	5	4	18	56.3%
Rear-End		3	1	2	2	0	8	25.0%
Sideswipe, Opposite Direction		2	0	1	0	1	4	12.5%
Pedestrian		1	0	0	0	0	1	3.1%
Sideswipe, Same Direction		1	0	0	0	0	1	3.1%
	ΓAL	10	3	7	7	5	32	100%
CONTRIBUTING FACTOR								
	2	018	2019	2020	2021	2022	Total	Percent
None		10	3	6	7	5	31	96.9%
Road Surface Condition (wet, icy, snow, slush, etc.)		0	0	1	0	0	1	3.1%
тот	ΓAL	10	3	7	7	5	32	100%
COLLISION EVENT								
	2	018	2019	2020	2021	2022	Total	Percent
Motor Vehicle		9	3	7	7	5	31	96.9%
Pedestrian / Cyclist		1	0	0	0	0	1	3.1%
	ΓAL	10	3	7	7	5	32	100%
SEVERITY								
	2	018	2019	2020	2021	2022	Total	Percent
Fatal		1	0	0	0	0	1	3.1%
Minor Injury / Property Damage Only (PDO)		9	3	7	7	5	31	96.9%
топ	ΓAL	10	3	7	7	5	32	100%
DAY & TIME								
	2	018	2019	2020	2021	2022	Total	Percent
Weekday 3-6 P.M.		3	1	2	1	0	7	21.9%
Weekday Off-Peak		4	1	5	2	5	17	53.1%
Saturday 11 A.M 2 P.M.		1	0	0	0	0	1	3.1%
Weekend Off-Peak		2	1	0	4	0	7	21.9%
тот	ΓAL	10	3	7	7	5	32	100%
WEATHER								
	2	018	2019	2020	2021	2022	Total	Percent
Clear		9	3	5	5	5	27	84.4%
Rain		1	0	2	2	0	5	15.6%
тот	ΓAL	10	3	7	7	5	32	100%
ROAD SURFACE CONDITION								
	2	018	2019	2020	2021	2022	Total	Percent
Dry		8	3	5	5	5	26	81.3%
Wet		2	0	2	2	0	6	18.8%
тот	ΓAL	10	3	7	7	5	32	100%
LIGHT CONDITIONS								
LIGHT CONDITIONS	2	018	2019	2020	2021	2022	Total	Percent
								71 00/
		7	3	4	6	3	23	71.9%
ight		7 2	3 0	4 3	6 1	3 2	8	71.9% 25.0%
Light Dark Other/Unknown								

Intersection Collision History Summary Intersection:		Old Co	unty Road	at	Route 20 W	/R Ramns		
COLLISION TYPE		Old Co	unty Rodu		Route 20 V	rb Kamps		
COLLISION TIPE	2017	2018	2019	2020	2021	2022	Total	Percent
Rear-End	0	6	2	1	2	1	12	66.7%
Angle	0	1	0	2	1	1	5	27.8%
Sideswipe, Opposite Direction	0	0	1	0	0	0	1	5.6%
TOTAL	0	7	3	3	3	2	18	100%
CONTRIBUTING FACTOR	2017	2018	2019	2020	2021	2022	Total	Percent
None	0	7	3	3	3	2	18	100.0%
TOTAL	0	7	3	3	3	2	18	100%
COLLISION EVENT							•	
COLLISION EVENT	2017	2018	2019	2020	2021	2022	Total	Percent
Motor Vehicle	0	7	3	3	3	2	18	100.0%
TOTAL	0	7	3	3	3	2	18	100%
CEVEDITY								
SEVERITY	2017	2018	2019	2020	2021	2022	Total	Percent
Minor Injury / Property Damage Only (PDO)	0	7	3	3	3	2	18	100.0%
TOTAL	0	7	3	3	3	2	18	100%
'								
DAY & TIME	2017	2010	2010		2024	2022		
W 11 26 BM	2017	2018	2019	2020	2021	2022	Total	Percent
Weekday 3-6 P.M.	0	3	2	1	2	1	9	50.0%
Weekday Off-Peak	0	3	1	2	1	1	8	44.4%
Weekend Off-Peak TOTAL	0 0	1 	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	18	5.6% 100%
IOTAL	U	,	3	3	3	2	10	100%
WEATHER								
	2017	2018	2019	2020	2021	2022	Total	Percent
Clear	0	6	2	3	3	2	16	88.9%
Rain	0	1	1	0	0	0	2	11.1%
TOTAL	0	7	3	3	3	2	18	100%
ROAD SURFACE CONDITION								
	2017	2018	2019	2020	2021	2022	Total	Percent
Dry	0	6	2	3	3	2	16	88.9%
Wet	0	1	1	0	0	0	2	11.1%
TOTAL	0	7	3	3	3	2	18	100%
LIGHT CONDITIONS								
	2017	2018	2019	2020	2021	2022	Total	Percent
Light	0	6	1	3	3	1	14	77.8%
Dark	0	1	2	0	0	1	4	22.2%
TOTAL	0	7	3	3	3	2	18	100%

Intersection Collision History Summary Intersection:		Old Co	unty Road	at	Route 20 El	3 Ramps		
COLLISION TYPE								
	2017	2018	2019	2020	2021	2022	Total	Percent
Fixed Object	0	0	0	2	2	1	5	33.3%
Angle	0	0	1	0	2	1	4	26.7%
Rear-End	0	1	2	0	0	0	3	20.0%
Head-On	0	0	0	0	1	0	1	6.7%
Sideswipe, Opposite Direction	0	0	0	0	0	1	1	6.7%
Sideswipe, Same Direction	0	0	0	0	1	0	1	6.7%
TOTAL	0	1	3	2	6	3	15	100%
CONTRIBUTING FACTOR								
	2017	2018	2019	2020	2021	2022	Total	Percent
None	0	1	3	2	5	3	14	93.3%
Road Surface Condition (wet, icy, snow, slush, etc.)	0	0	0	0	1	0	1	6.7%
TOTAL	0	1	3	2	6	3	15	100%
COLLISION EVENT								
	2017	2018	2019	2020	2021	2022	Total	Percent
Motor Vehicle	0	1	3	2	6	3	15	100.0%
TOTAL	0	1	3	2	6	3	15	100%
SEVERITY								
	2017	2018	2019	2020	2021	2022	Total	Percent
Minor Injury / Property Damage Only (PDO)	0	1	3	2	6	3	15	100.0%
TOTAL	0	1	3	2	6	3	15	100%
DAY & TIME								
	2017	2018	2019	2020	2021	2022	Total	Percent
Weekday 3-6 P.M.	0	0	1	0	1	0	2	13.3%
Weekday Off-Peak	0	0	2	1	4	3	10	66.7%
Saturday 11 A.M 2 P.M.	0	1	0	0	0	0	1	6.7%
Weekend Off-Peak	0	0	0	1	1	0	2	13.3%
TOTAL	0	1	3	2	6	3	15	100%
WEATHER								
	2017	2018	2019	2020	2021	2022	Total	Percent
Clear	0	1	3	2	3	2	11	73.3%
Rain	0	0	0	0	2	1	3	20.0%
Snow	0	0	0	0	1	0	1	6.7%
TOTAL	0	1	3	2	6	3	15	100%
ROAD SURFACE CONDITION								
	2017	2018	2019	2020	2021	2022	Total	Percent
Dry	0	1	3	2	3	1	10	66.7%
Wet	0	0	0	0	2	2	4	26.7%
Snow	0	0	0	0	1	0	1	6.7%
TOTAL	0	1	3	2	6	3	15	100%
LIGHT CONDITIONS								
	2017	2018	2019	2020	2021	2022	Total	Percent
Light	0	1	2	1	3	0	7	46.7%
	0	0	1	1	2	2	8	53.3%
Dark		0			3	3	0	53.3%

Light

Dark

Segment: Route 75 (Route 20 WB Ramps to Halfway House Road)

		2018	2019	2020	2021	2022	Total	Percen
Rear-End		11	6	2	2	2	23	31.9%
Angle		5	7	3	3	7	25	34.7%
Sideswipe, Same Direction		3	2	2	1	4	12	16.7%
Sideswipe, Opposite Direction		4	3	1	0	0	8	11.1%
Pedestrian		3	0	0	0	0	3	4.2%
Head-On		0	1	0	0	0	1	1.4%
	TOTAL	26	19	8	6	13	72	100%
CONTRIBUTING FACTOR								
		2018	2019	2020	2021	2022	Total	Percen
lone		25	19	8	6	12	70	97.2%
Other/Unknown		1	0	0	0	1	2	2.8%
	TOTAL	26	19	8	6	13	72	100%
COLLISION EVENT								
		2018	2019	2020	2021	2022	Total	Percen
Notor Vehicle		23	19	8	6	13	69	95.8%
Pedestrian / Cyclist		3	0	0	0	0	3	4.2%
	TOTAL	26	19	8	6	13	72	100%
SEVERITY								
		2018	2019	2020	2021	2022	Total	Percen
Serious Injury		1	0	0	0	3	4	5.6%
linor Injury / Property Damage Only (PDO)		25	19	8	6	10	68	94.4%
	TOTAL	26	19	8	6	13	72	100%
DAY & TIME								
		2018	2019	2020	2021	2022	Total	Percen
Veekday 6-9 A.M.		5	0	0	0	3	8	11.1%
Veekday 3-6 P.M.		6	2	1	2	2	13	18.1%
Veekday Off-Peak		11	12	5	2	7	37	51.4%
Saturday 11 A.M 2 P.M.		0	2	1	0	0	3	4.2%
Veekend Off-Peak		4	3	1	2	1	11	15.3%
	TOTAL	26	19	8	6	13	72	100%
WEATHER								
		2018	2019	2020	2021	2022	Total	Percen
Clear		22	13	8	5	13	61	84.7%
Rain		4	5	0	1	0	10	13.9%
ce		0	1	0	0	0	1	1.4%
	TOTAL	26	19	8	6	13	72	100%
ROAD SURFACE CONDITION								
		2018	2019	2020	2021	2022	Total	Percen
ry		21	13	7	5	13	59	81.9%
/1 y		5	5	1	1	0	12	16.7%
•	1							
Net Snow		0	1	0	0	0	1	1.4%

TOTAL

Total

 Percent

63.9% 36.1% 100%

Segment: Route 75 (Halfway House Road to Route 401)

		2018	2019	2020	2021	2022	Total	Percent
Rear-End		2	0	0	0	0	2	50.0%
Head-On		0	0	0	1	0	1	25.0%
Pedestrian		1	0	0	0	0	1	25.0%
- Cucountain	TOTAL	3	0	0	1	0	4	100%
CONTRIBUTING FACTOR								
CONTRIBUTING FACTOR		2018	2019	2020	2021	2022	Total	Percen
None		2	0	0	1	0	3	75.0%
Other/Unknown		1	0	0	0	0	1	25.0%
	TOTAL	3	0	0	1	0	4	100%
COLLISION EVENT								
		2018	2019	2020	2021	2022	Total	Percen
Motor Vehicle		2	0	0	1	0	3	75.0%
Pedestrian / Cyclist		1	0	0	0	0	1	25.0%
	TOTAL	3	0	0	1	0	4	100%
SEVERITY								
		2018	2019	2020	2021	2022	Total	Percen
atal		1	0	0	0	0	1	25.0%
Minor Injury / Property Damage Only (PDO)		2	0	0	1	0	3	75.0%
	TOTAL	3	0	0	1	0	4	100%
DAY & TIME								
		2018	2019	2020	2021	2022	Total	Percen
Weekday 3-6 P.M.		0	0	0	1	0	1	25.0%
Weekday Off-Peak		3	0	0	0	0	3	75.0%
	TOTAL	3	0	0	1	0	4	100%
WEATHER								
		2018	2019	2020	2021	2022	Total	Percen
Clear		2	0	0	1	0	3	75.0%
Rain		1	0	0	0	0	1	25.0%
	TOTAL	3	0	0	1	0	4	100%
ROAD SURFACE CONDITION								
		2018	2019	2020	2021	2022	Total	Percen
Ory		2	0	0	1	0	3	75.0%
Wet		1	0	0	0	0	1	25.0%
	TOTAL	3	0	0	1	0	4	100%
LIGHT CONDITIONS								
		2018	2019	2020	2021	2022	Total	Percen
_ight		2	0	0	1	0	3	75.0%
Dark		1	0	0	0	0	1	25.0%

Segment: Route 75 (Route 401 to Route 140)

COLLISION TYPE		2018	2019	2020	2021	2022	Total	Percent
Sideswipe, Same Direction		1	1	0	1	0	3	50.0%
Angle		1	0	0	0	1	2	33.3%
Sideswipe, Opposite Direction		0	0	0	1	0	1	16.7%
Sideswipe, Opposite Direction	TOTAL	2	1	0	2	1	6	100%
		_	_	•	_	_		20070
CONTRIBUTING FACTOR								
		2018	2019	2020	2021	2022	Total	Percent
None		2	1	0	2	0	5	83.3%
Backup Due to Regular Congestion		0	0	0	0	1	1	16.7%
	TOTAL	2	1	0	2	1	6	100%
COLLISION EVENT								
COLLISION EVENT	1	2018	2019	2020	2021	2022	Total	Percent
Motor Vehicle	+	2	1	0	2	1	6	100.0%
TOCOL VEHICLE	TOTAL	2	1	0	2	1	6	100.0%
	.0.72	-	-	•	_	-	. • 1	100 /0
SEVERITY								
		2018	2019	2020	2021	2022	Total	Percent
Minor Injury / Property Damage Only (PDO)		2	1	0	2	1	6	100.0%
	TOTAL	2	1	0	2	1	6	100%
DAY O TIME								
DAY & TIME		2018	2019	2020	2021	2022	Total	Percent
Weekday 6-9 A.M.	+	1	0	0	1	0	2	33.3%
Weekday 3-6 P.M.		0	0	0	0	1	1	16.7%
Weekday Off-Peak		1	0	0	1	0	2	33.3%
Weekend Off-Peak		0	1	0	0	0	1	16.7%
Weekeild Oil-reak	TOTAL	2	1	0	2	1	6	100%
	IOIAL	-	-	J	-	-		100 /0
WEATHER								
		2018	2019	2020	2021	2022	Total	Percent
Clear		1	1	0	1	0	3	50.0%
Rain		1	0	0	1	1	3	50.0%
	TOTAL	2	1	0	2	1	6	100%
ROAD SURFACE CONDITION								
NOND COMPLIANT		2018	2019	2020	2021	2022	Total	Percent
Dry		1	1	0	1	0	3	50.0%
Wet		1	0	0	1	1	3	50.0%
	TOTAL	2	1	0	2	1	6	100%
LIGHT CONDITIONS	Г	2018	2019	2020	2021	2022	Total	Percent
	-	1	0	0	2021	1	4	66.7%
				U	/	- 1	4	00.7%
Light Dark		1	1	0	0	0	2	33.3%

Segment: Halfway House Road Segment

COL	LISION	TYPE
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COLLISION TYPE								
		2018	2019	2020	2021	2022	Total	Percent
Angle		1	2	0	0	2	5	45.5%
Sideswipe, Opposite Direction		2	0	0	0	0	2	18.2%
Fixed Object		0	0	1	0	0	1	9.1%
Head-On		0	0	0	0	1	1	9.1%
Pedestrian		0	0	1	0	0	1	9.1%
Rear-End		0	1	0	0	0	1	9.1%
	TOTAL	3	3	2	0	3	11	100%
CONTRIBUTING FACTOR								
		2018	2019	2020	2021	2022	Total	Percent
Vone		3	3	1	0	3	10	90.9%
Obstruction in Roadway		0	0	1	0	0	1	9.1%
,	TOTAL	3	3	2	0	3	11	100%
COLLISION EVENT								
		2018	2019	2020	2021	2022	Total	Percent
Notor Vehicle		3	3	1	0	3	10	90.9%
Pedestrian / Cyclist		0	0	1	0	0	1	9.1%
	TOTAL	3	3	2	0	3	11	100%
SEVERITY								
		2018	2019	2020	2021	2022	Total	Percent
linor Injury / Property Damage Only (PDO)		3	3	2	0	3	11	100.0%
	TOTAL	3	3	2	0	3	11	100%
DAY & TIME								
		2018	2019	2020	2021	2022	Total	Percent
Veekday 6-9 A.M.		1	1	0	0	1	3	27.3%
Veekday 3-6 P.M.		1	0	0	0	1	2	18.2%
Veekday Off-Peak		1	1	2	0	1	5	45.5%
Veekend Off-Peak		0	1	0	0	0	1	9.1%
	TOTAL	3	3	2	0	3	11	100%
WEATHER								
		2018	2019	2020	2021	2022	Total	Percent
Clear		3	3	2	0	3	11	100.0%
	TOTAL	3	3	2	0	3	11	100%
ROAD SURFACE CONDITION								
		2018	2019	2020	2021	2022	Total	Percent
Ory		3	3	2	0	3	11	100.0%
	TOTAL	3	3	2	0	3	11	100%
IGHT CONDITIONS								
		2018	2019	2020	2021	2022	Total	Percent
ight		2	3	1	0	3	9	81.8%
Dark		1	0	1	0	0	2	18.2%
	TOTAL	3	3	2	0	3	11	100%

Segment: Old County Road North Segment

COL	LISION	TYPE
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COLLISION TYPE								
		2018	2019	2020	2021	2022	Total	Percent
Angle		0	3	0	0	0	3	33.3%
Rear-End		0	0	0	2	0	2	22.2%
Sideswipe, Same Direction		0	1	1	0	0	2	22.2%
Fixed Object		0	0	0	0	1	1	11.1%
Head-On		0	0	0	1	0	1	11.1%
	TOTAL	0	4	1	3	1	9	100%
	•							
CONTRIBUTING FACTOR	1	2018	2019	2020	2021	2022	Total	Percent
Nama								
None		0	4	1	3	0	8	88.9%
Road Surface Condition (wet, icy, snow, slush, etc.)	TOTAL	0 0	0 4	0 1	<u>0</u>	1 1	9	11.1% 100%
	IOIAL	U	4	1	3	1	ן פּ	100%
COLLISION EVENT								
		2018	2019	2020	2021	2022	Total	Percent
Motor Vehicle		0	4	1	3	1	9	100.0%
	TOTAL	0	4	1	3	1	9	100%
SEVERITY								
		2018	2019	2020	2021	2022	Total	Percent
Minor Injury / Property Damage Only (PDO)		0	4	1	3	1	9	100.0%
	TOTAL	0	4	1	3	1	9	100%
DAY & TIME								
		2018	2019	2020	2021	2022	Total	Percent
Weekday 6-9 A.M.		0	0	0	1	0	1	11.1%
Weekday 3-6 P.M.		0	1	0	1	0	2	22.2%
Weekday Off-Peak		0	0	1	1	1	3	33.3%
Saturday 11 A.M 2 P.M.		Ö	1	Ō	Ō	Ō	1 1	11.1%
Weekend Off-Peak		0	2	Ö	Ö	Ö	2	22.2%
Weekend on Feak	TOTAL	0	4	1	3	1	9	100%
WEATUED	·							
WEATHER	1	2018	2019	2020	2021	2022	Total	Percent
Clear		0	3	1	1	0	5	55.6%
Rain		0	1	0	1	0	2	22.2%
Snow		0	0	0	1	1	2	22.2%
511011	TOTAL	0	4	1	3	1	9	100%
	•							
ROAD SURFACE CONDITION	1	2018	2019	2020	2021	2022	Total	Percent
Dry		0	3	1	1	0	5	55.6%
Wet		0	1	0	1	1	3	33.3%
		0	0	0	1	0	1	11.1%
Snow	TOTAL	0	<u> </u>	<u> </u>	3	1	9	100%
	IOIAL	Ū	-	-	•	-	1 7 1	100 70
LIGHT CONDITIONS								
		2018	2019	2020	2021	2022	Total	Percent
Light		0	3	1	2	1	7	77.8%
Dark		0	1	0	1	0	2	22.2%
	TOTAL	0	4	1	7	1	Q	100%

Segment: Old County Road South Segment

COLLISIO	ON.	TΥ	PE
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Dark

COLLISION TYPE								
		2018	2019	2020	2021	2022	Total	Percent
Angle		1	2	1	1	0	5	25.0%
Rear-End		1	0	2	1	1	5	25.0%
Fixed Object		2	0	1	0	1	4	20.0%
Head-On		1	0	0	1	0	2	10.0%
Sideswipe, Same Direction		0	0	0	1	1	2	10.0%
Backing		0	0	0	0	1	1	5.0%
Sideswipe, Opposite Direction		1	0	0	0	0	1	5.0%
Sideswipe, Opposite Direction	TOTAL	6	2	4	4	4	20	100%
	IOIAL	•	-	-	•	-	1 20 1	100 /0
CONTRIBUTING FACTOR								
		2018	2019	2020	2021	2022	Total	Percent
None		5	2	3	2	4	16	80.0%
Obstruction in Roadway		1	0	0	0	0	1	5.0%
Other/Unknown		0	0	1	0	0	1	5.0%
Road Surface Condition (wet, icy, snow, slush, etc.)		0	0	0	2	0	2	10.0%
	TOTAL	6	2	4	4	4	20	100%
COLLISION EVENT								
		2018	2019	2020	2021	2022	Total	Percent
Motor Vehicle		6	2	4	4	4	20	100.0%
	TOTAL	6	2	4	4	4	20	100%
	IOIAL	Ū	-	•	•	-	1 -0 1	200 /0
SEVERITY								
		2018	2019	2020	2021	2022	Total	Percent
Serious Injury		0	0	0	0	1	1	5.0%
Minor Injury / Property Damage Only (PDO)		6	2	4	4	3	19	95.0%
	TOTAL	6	2	4	4	4	20	100%
DAY & TIME								
		2018	2019	2020	2021	2022	Total	Percent
Weekday 6-9 A.M.		1	1	0	1	1	4	20.0%
Weekday 3-6 P.M.		0	1	0	1	0	2	10.0%
Weekday Off-Peak		4	0	3	1	0	8	40.0%
Saturday 11 A.M 2 P.M.		0	Ō	Ō	0	1	1	5.0%
Weekend Off-Peak		1	Ö	1	1	2	5	25.0%
Weekellu Oli-Feak	TOTAL	6	2	4	4	4	20	100%
	•							
WEATHER		2018	2019	2020	2021	2022	Total	Percent
Clear		3	2	4	2	4	15	75.0%
Rain		2	0	0	1	0	3	15.0%
			0	0		0	2	10.0%
Snow	TOTAL	1 6	2	<u> </u>	1 4	<u> </u>	20	10.0%
		•	=	•	•	-	!	200 70
ROAD SURFACE CONDITION	1	2010	2010	2022	2024	2022	T-4-1	D
		2018	2019	2020	2021	2022	Total	Percent
Dry		1	0	4	1	4	10	50.0%
Wet		3	2	0	2	0	7	35.0%
Snow		2	0	0	1	0	3	15.0%
	TOTAL	6	2	4	4	4	20	100%
LIGHT CONDITIONS								
		2018	2019	2020	2021	2022	Total	Percent
Light		3	2	2	1	3	11	55.0%
Dark		3	Λ	2	3	1	٥	45 00%

APPENDIX KCrash Rate Worksheets

CITY/TOWN : Windsor L	ocks			COUNT DA	TE:	10/27/2022
DISTRICT: 1	UNSIGN	ALIZED :		SIGNA	LIZED :	Х
	111111111111111111111111111111111111111	~ IN7	TERSECTION	I DATA ~		
MAJOR STREET:	Ella T. Grass	o Turnpike (R	Route 75)			
MINOR STREET(S):	Route 20 EB	Ramps				
	Private Drive	way (Bears R	esturant)			
INTERSECTION DIAGRAM	North		Route 75			
(Label Approaches)	!	Route 20 E	B Ramps		Private Dr	
				Route 75		
		Т	PEAK HOUF	R VOLUMES	Т	Total Dook
APPROACH:	1	2	3	4	5	Total Peak Hourly
DIRECTION:	NB	SB	EB	WB		Approach Volume
PEAK HOURLY VOLUMES (PM) :	432	613	109	25		1,179
"K" FACTOR:	0.09	INTERS	ECTION ADT APPROACH		AL DAILY	13,100
TOTAL # OF CRASHES :		# OF YEARS :	5	CRASHES A	GE#OF PERYEAR(.):	2.80
CRASH RATE CALCU		0.59	Ī	(A * 1,0		
Comments : Project Title: Route 20 (Corridor Study	,			Date:	1/13/2023
i roject ritie. Noute 20 t	Joinadi Stady				Dale.	1/13/2023

CITY/TOWN : Windsor Lo	ocks			COUNT DAT	ΓE:	10/27/2022	
DISTRICT: 1	UNSIGN	NALIZED :		SIGNA	LIZED :	Х	
		~ INT	ERSECTION	I DATA ~			
MAJOR STREET :	Ella T. Gras	so Turnpike (R	oute 75)				
MINOR STREET(S):	Route 20 WB Ramps						
INTERSECTION DIAGRAM (Label Approaches)	North	ute 20 WB C	Route 75 On Ramp	Route 75	20 WB Of	f Ramp	
			PEAK HOUR	R VOLUMES			
APPROACH:	1	2	3	4	5	Total Peak Hourly	
DIRECTION:	NB	SB	EB	WB		Approach Volume	
PEAK HOURLY VOLUMES (PM) :	448	649	0	556		1,653	
"K" FACTOR:	0.09	INTERSE	ECTION ADT APPROACH	(V)=TOTA IVOLUME:	L DAILY	18,367	
FOTAL # OF CRASHES :	31	# OF YEARS :	5	CRASHES	GE # OF PER YEAR () :	6.20	
CRASH RATE CALCU	ILATION :	0.92	RATE =	(A*1,0	000,000) 365)		
Comments :							

CITY/TOWN : Windsor Lo	ocks			COUNT DA	TE:	10/27/2022	
DISTRICT: 1	UNSIGN	IALIZED :		SIGNA	ALIZED :	Х	
		~ INT	ERSECTION	I DATA ~			
MAJOR STREET :	Ella T. Grass	so Turnpike (R	oute 75)				
MINOR STREET(S):	Halfway Hou	ise Road					
	Private Drive	e (LAZ Parking)				
	†		Route				
INTERSECTION DIAGRAM	North	<u>]</u>	e 75				
(Label Approaches)	Priv	ate Dr		ŀ	Halfway Ho	use Rd	
				Route 75			
	PEAK HOUR VOLUMES						
APPROACH:	1	2	3	4	5	Total Peak Hourly	
DIRECTION:	NB	SB	EB	WB		Approach Volume	
PEAK HOURLY VOLUMES (PM) :	850	544	10	120		1,524	
"K" FACTOR:	0.09	INTERSE	ECTION ADT APPROACH		AL DAILY	16,933	
ΓΟΤΑL # OF CRASHES :	33	# OF YEARS :	5	CRASHES	GE # OF PER YEAR (A):	6.60	
CRASH RATE CALCU		1.07	RATE =	(A*1,	000,000) * 365)		

CITY/TOWN : Windsor Lo	ocks			COUNT DA	TE:	10/27/2022
DISTRICT: 1	UNSIGN	IALIZED :		SIGNA	ALIZED :	Х
		~ INT	ERSECTION	I DATA ~		
MAJOR STREET :	Ella T. Grass	so Turnpike (R	toute 75)			
MINOR STREET(S):	Schoephoes	ter Road (Rou	ite 401)			
	National Driv	/e				
INTERSECTION	↑ North		Route			
DIAGRAM	_		75			
(Label Approaches)	Rou	ite 401	1	<u> </u>	Natio	onal Dr
				Route 75		
			PEAK HOUR	R VOLUMES		
APPROACH:	1	2	3	4	5	Total Peak Hourly
DIRECTION:	NB	SB	EB	WB		Approach Volume
PEAK HOURLY VOLUMES (PM) :	748	510	393	38		1,689
"K" FACTOR:	0.09	INTERSE	ECTION ADT APPROACH		AL DAILY	18,767
FOTAL # OF CRASHES :	44	# OF YEARS :	5	CRASHES	GE#OF PERYEAR(A):	8.80
CRASH RATE CALCU		1.28	RATE =	<u>(A * 1,</u> (V	000,000) * 365)	
Comments :	Samidan Chid				Date:	1/13/2023

CITY/TOWN : Windsor Lo	ocks			COUNT DA	TE:	10/27/2022
DISTRICT: 1	UNSIGN	IALIZED :		SIGNA	LIZED :	Х
		~ INT	ERSECTION	I DATA ~		
MAJOR STREET :	Schoephoes	ter Road (Rou	te 401)			
MINOR STREET(S):	Light Lane					
	Airport Servi	ce Road				
				_		
INTERSECTION DIAGRAM	North		Light Ln			
(Label Approaches)	Rou	te 401			Rou	te 401
				Airport Service Rd		
			PEAK HOU	R VOLUMES		
APPROACH:	1	2	3	4	5	Total Peak Hourly
DIRECTION:	NB	SB	EB	WB		Approach Volume
PEAK HOURLY VOLUMES (PM) :	40	125	459	411		1,035
"K" FACTOR:	0.09	INTERSE	ECTION ADT APPROACH		AL DAILY	11,500
FOTAL # OF CRASHES :	12	# OF YEARS :	5	CRASHES	GE#OF PERYEAR(.):	2.40
CRASH RATE CALCU		0.57	RATE =	(A * 1,0	000,000 <u>)</u> * 365)	
Comments :	Corridor Study	,			Date:	1/13/2023

CITY/TOWN : Windsor Lo	ocks			COUNT DA	TE:	10/27/2022
DISTRICT: 1	UNSIGN	IALIZED :		SIGNA	LIZED :	Х
		~ INT	ERSECTION	I DATA ~		
MAJOR STREET :	Ella T. Grass	so Turnpike (R	oute 75)			
MINOR STREET(S):	Elm Street (Route 140)					
INTERSECTION DIAGRAM (Label Approaches)	North		Route 75	Route 75	Rou	te 140
			PEAK HOUF	R VOLUMES		
APPROACH:	1	2	3	4	5	Total Peak Hourly
DIRECTION:	NB	SB	EB	WB		Approach Volume
PEAK HOURLY VOLUMES (PM) :	720	712	0	321		1,753
"K" FACTOR:	0.09	INTERSE	ECTION ADT APPROACH		AL DAILY	19,478
TOTAL # OF CRASHES :	31	# OF YEARS :	5	CRASHES	GE#OF PERYEAR(.):	6.20
CRASH RATE CALCU	ILATION :	0.87	RATE =	(A*1,(000,000) * 365)	
Comments : Project Title: Route 20 0	Corridor Study	,			Date:	1/13/2023

CITY/TOWN: Windsor Locks				COUNT DATE :10/27/2022			
DISTRICT: 1	UNSIGN	ALIZED :	Х	SIGNA	LIZED :		
		~ IN7	TERSECTION	I DATA ~			
MAJOR STREET :	Elm Street (F	Route 140)					
MINOR STREET(S):	Old County F	Road					
INTERSECTION DIAGRAM (Label Approaches)	North Rou	te 140		Old County Rd	Rou	ite 140	
		T	PEAK HOU	R VOLUMES			
APPROACH:	1	2	3	4	5	Total Peak Hourly	
DIRECTION:	NB	SB	EB	WB		Approach Volume	
PEAK HOURLY VOLUMES (PM) :	238	0	436	185		859	
"K" FACTOR:	0.09	INTERS	ECTION ADT APPROACH		AL DAILY	9,544	
TOTAL # OF CRASHES :	14	# OF YEARS :	5	CRASHES	GE # OF PER YEAR (.):	2.80	
CRASH RATE CALCU	JLATION :	0.80	RATE =	(A*1,0	000,000) * 365)		
Comments :	Parridar Study	,			Doto	1/12/2022	
Project Title: Route 20 C	Corridor Study				Date:	1/13/2023	

CITY/TOWN : Windsor Lo	ocks			COUNT DA	TE:	10/27/2022	
DISTRICT: 1	UNSIGN	IALIZED :	Х	SIGNA	LIZED :		
		~ IN7	ERSECTION	I DATA ~			
MAJOR STREET :	Old County I	Road					
MINOR STREET(S):	Halfway House Road						
INTERSECTION DIAGRAM (Label Approaches)	North Hal	fway House	Rd Rd	Old County	lalfway Ho	use Rd	
			PEAK HOUR	R VOLUMES			
APPROACH:	1	2	3	4	5	Total Peak Hourly	
DIRECTION:	NB	SB	EB	WB		Approach Volume	
PEAK HOURLY VOLUMES (PM) :	354	318	204	13		889	
"K" FACTOR:	0.09	INTERSE	ECTION ADT APPROACH		AL DAILY	9,878	
FOTAL # OF CRASHES :	32	# OF YEARS :	5	CRASHES	GE#OF PERYEAR(\(\)):	6.40	
CRASH RATE CALCU	JLATION :	1.78	RATE =	<u>(A*1,</u>	000,000 <u>)</u> * 365)		
	Corridor Study	· · · · · · · · · · · · · · · · · · ·			Date:	1/13/2023	

CITY/TOWN : Windsor Lo	ocks			COUNT DA	TE:	6/12/2019
DISTRICT: 1	UNSIGN	ALIZED :		SIGNA	LIZED :	Х
		~ INT	ERSECTION	I DATA ~		
MAJOR STREET :	Old County F	Road				
MINOR STREET(S):	Route 20 WE	Ramps				
INTERSECTION DIAGRAM (Label Approaches)	North Route 2	20 WB On F	Old County Rd	Route Old County Rd	20 WB Of	f Ramp
			PEAK HOUF	R VOLUMES		
APPROACH:	1	2	3	4	5	Total Peak Hourly
DIRECTION:	NB	SB	EB	WB		Approach Volume
PEAK HOURLY VOLUMES (PM) :	563	533	0	339		1,435
"K" FACTOR:	0.09	INTERSE	ECTION ADT APPROACH		AL DAILY	15,944
TOTAL # OF CRASHES :	18	# OF YEARS :	5	CRASHES A	GE#OF PERYEAR(.):	3.60
CRASH RATE CALCU		0.62		(A*1,((V		1/13/2023

CITY/TOWN : Windsor Lo	ocks			COUNT DA	ΓE:	6/12/2019
DISTRICT: 1	UNSIGN	ALIZED :		SIGNA	LIZED :	Х
		~ INT	ERSECTION	I DATA ~		
MAJOR STREET :	Old County F	Road/Kennedy	/ Road			
MINOR STREET(S):	Route 20 WE	3 Ramps				
INTERSECTION DIAGRAM (Label Approaches)	North Route 2	20 EB Off R	Old County Rd	Rout Kennedy Rd	e 20 EB On	ı Ramp
			PEAK HOUF	R VOLUMES		
APPROACH:	1	2	3	4	5	Total Peak Hourly
DIRECTION:	NB	SB	EB	WB		Approach Volume
PEAK HOURLY VOLUMES (AM) :	613	545	179	0		1,337
"K" FACTOR:	0.09	INTERSE	ECTION ADT APPROACH		AL DAILY	14,856
TOTAL # OF CRASHES :	15	# OF YEARS :	5	CRASHES A	GE # OF PER YEAR ():	3.00
CRASH RATE CALCU		0.55		(A * 1,(1/13/2023

SEGMENT CRASH RATE WORKSHEET

CITY/TOWN : Windsor	Locks	COUNT DATE	E: <u>2/9/2023</u>
DISTRICT: 1			
~ SEGMENT DATA ~			
ROADWAY NAME:	Ella T. Grasso Turnpike (Route 75)	
START POINT: Route 20 WB Ramps			
END POINT: Halfway House Road			
FUNCTIONAL CLASSIFICATION OF ROADWAY: Principle Arterial			
ROADWAY DIAGRAM (LABEL ROADWAY AND CROSS STREETS)			
Route WB R		LAZ Dr	
North North		Parking	
nps		(ing	Route 75
			E H
		nouse	Halfwa
		nouse Rd	Halfway
	AVERAGE D	AILY TRAFFIC	Halfway
	AVERAGE DO	AILY TRAFFIC	Halfway
AV		AILY TRAFFIC N MILES (L): 0.34	Halfway
AV	SEGMENT LENGTH II	AILY TRAFFIC N MILES (L): 0.34	
AV TOTAL # OF CRASHES	SEGMENT LENGTH II	AILY TRAFFIC N MILES (L): 0.34 OLUME (V): 17,940 AVERAG CRASHES PI	E # OF ER YEAR (14.40
TOTAL # OF CRASHES	SEGMENT LENGTH II FERAGE DAILY TRAFFIC V # OF YEARS:	AILY TRAFFIC N MILES (L): 0.34 OLUME (V): 17,940 AVERAG	E # OF ER YEAR (14.40 :
TOTAL # OF CRASHES	SEGMENT LENGTH II FERAGE DAILY TRAFFIC V # OF YEARS:	AILY TRAFFIC N MILES (L): 0.34 OLUME (V): 17,940 AVERAG CRASHES PI A)	E # OF ER YEAR (14.40 :
TOTAL # OF CRASHES CRASH RATE	SEGMENT LENGTH II FERAGE DAILY TRAFFIC V # OF YEARS:	AILY TRAFFIC N MILES (L): 0.34 OLUME (V): 17,940 AVERAG CRASHES PI A)	E # OF ER YEAR (14.40 :

CITY/TOWN:	Windsor L	ocks			COUNT DA	TE:	2/9/2023
DISTRICT:	1						
			~ SEGMEN	T DATA ~			
ROADWAY NA	ME:	Ella T. Grasso	Turnpike (R	oute 75)			
START POINT	:Halfway H	ouse Road					
END POINT:	Schoepho	ester Road (Ro	oute 401)/Nat	tional Drive			
FUNCTIONAL	CLASSIFIC	CATION OF RO	ADWAY:	Principle Arte	erial		
	ROADWA	Y DIAGRAM (I	LABEL ROA	DWAY AND	CROSS STE	REETS)	
→	LAZ				Route		
North	Parking				te 401		
	(ing				1	R	oute 75
		На Ноц				Nati	
		Halfwa House R				National	
		Halfway House Rd				National Dr	
			/ERAGE DA	ILY TRAFFIC		National Dr	
		AV		ILY TRAFFIC MILES (L):		National Dr	
	AVE	AV	LENGTH IN	MILES (L):	0.1	National Dr	
		SEGMENT ERAGE DAILY	LENGTH IN TRAFFIC VO	MILES (L): DLUME (V):	0.1 17940 AVERA	GE#OF	
TOTAL # OF C		AV SEGMENT	LENGTH IN	MILES (L):	0.1 17940 AVERA CRASHES	<u> </u>	0.80
TOTAL # OF C	CRASHES:	SEGMENT ERAGE DAILY	LENGTH IN TRAFFIC VO # OF YEARS:	MILES (L): DLUME (V):	0.1 17940 AVERA CRASHES A	GE # OF PER YEAR (
	CRASHES:	SEGMENT ERAGE DAILY	LENGTH IN TRAFFIC VO # OF YEARS :	MILES (L): DLUME (V):	0.1 17940 AVERA CRASHES A	GE#OF PERYEAR(
CRASH I	CRASHES:	SEGMENT ERAGE DAILY	LENGTH IN TRAFFIC VO # OF YEARS:	MILES (L): DLUME (V):	0.1 17940 AVERA CRASHES A	GE # OF PER YEAR (

CITY/TOWN : Windso	or Locks	COUNT DATE :	2/9/2023
DISTRICT: 1			
	~ SEGMENT	DATA ~	
ROADWAY NAME:	Ella T. Grasso Turnpike (Ro	ute 75)	
START POINT: Schoe	ohoester Road (Route 401)/Natio	onal Drive	
END POINT: Elm St	reet (Route 140)		
FUNCTIONAL CLASS	IFICATION OF ROADWAY: <u>F</u>	Principle Arterial	
	WAY DIAGRAM (LABEL ROAD	OWAY AND CROSS STREETS)	
North	Route 401		Route 75
	National Dr	Route 140	_
	National Dr	<u> </u>	
		_Y TRAFFIC	
	AVERAGE DAII	LY TRAFFIC MILES (L): 0.25	
TOTAL # OF CRASHE	AVERAGE DAIL SEGMENT LENGTH IN N AVERAGE DAILY TRAFFIC VOI	LY TRAFFIC MILES (L): 0.25 LUME (V): 17005 AVERAGE # OF CRASHES PER YEAR A):	
TOTAL # OF CRASHE	AVERAGE DAIL SEGMENT LENGTH IN N AVERAGE DAILY TRAFFIC VOI	LY TRAFFIC MILES (L): 0.25 LUME (V): 17005 AVERAGE # OF CRASHES PER YEAR	
TOTAL # OF CRASHE	AVERAGE DAIL SEGMENT LENGTH IN MAVERAGE DAILY TRAFFIC VOI	Y TRAFFIC MILES (L): 0.25 LUME (V): 17005 AVERAGE # OF CRASHES PER YEAR A):	

CITY/TOWN:	Windsor L	ocks			COUNT DA	TE:	9/20/2016
DISTRICT:	1				•		
			~ SEGMEN	IT DATA ~			
ROADWAY NA	AME:	Halfway Hous	se Road				
START POINT	: <u>Ella T. Gra</u>	asso Turnpike	(Route 75)				
END POINT:	Old Count	y Road					
FUNCTIONAL	CLASSIFIC	CATION OF RO	DADWAY:	Major Collect	tor		
	ROADWA	Y DIAGRAM	(LABEL ROA	ADWAY AND	CROSS STE	REETS)	
†	Route		`		Pic Pic	,	
■ North	te 75				County		
	⊒		Halfway I	House Rd	ηty		
		A	VERAGE DA	ILY TRAFFIC	;		
				MILES (L):			
	AVE	ERAGE DAILY	TRAFFIC V	OLUME (V):	3400		
					Δ\/ERΔ	GE#OF [
TOTAL # OF C	CRASHES:	11	# OF YEARS :	5	CRASHES	PER YEAR (2.20
						\):	
CRASH I CALCULA		9.33	RATE =		(A * 1,I	000,000)	
CALCULA	ATION .				(<u> </u>	000 /	
Comments : _	Doute 20 (Carridae Ctude	,			Data	1/12/2022
Project Title:	Route 20 (Corridor Study				Date:	1/13/2023

CITY/TOWN : Wii	ndsor Locks			COUNT DA	TE:	8/6/2019
DISTRICT :	1					
		~ SEGMENT	DATA ~			
ROADWAY NAME	: Old Cou	nty Road				
START POINT: Eln	n Street (Route 1	40)				
END POINT: Ha	lfway House Roa	nd				
FUNCTIONAL CLA	SSIFICATION C	F ROADWAY: <u>M</u>	lajor Collect	or		
RO	ADWAY DIAGR	AM (LABEL ROAD	WAY AND	CROSS STE	REETS)	
←	Route			Halfway House R		
North	te 140			Halfway House Rd		
	ō			<u> </u>	Old Co	unty Road
		AVERAGE DAIL	Y TRAFFIC	;		
	SEGN	MENT LENGTH IN N	ЛILES (L):	0.44		
	AVERAGE D	AILY TRAFFIC VOL	LUME (V):	6500		
				AVERA	GE#OF	
TOTAL # OF CRA	SHES: 9	# OF YEARS :	5	CRASHES	PER YEAR (1.80
					· / ·	
CRASH RAT	1 172	RATE =		(A * 1,0 (L * V	000,000) * * 365)	
Comments						
Comments : Project Title: Ro	ute 20 Corridor S	Study			Date:	1/13/2023

CITY/TOWN : Windsor L	.ocks			COUNT DA	TE:	8/5/2019
DISTRICT: 1						
		~ SEGMENT	DATA ~			
ROADWAY NAME:	Old County R	oad				
START POINT: Halfway H	louse Road					
END POINT: Route 20	WB Ramps					
FUNCTIONAL CLASSIFIC	CATION OF RO	DADWAY: N	lajor Collect	or		
ROADWA	Y DIAGRAM (LABEL ROAD	WAY AND	CROSS STF	REETS)	
→ Half				Route WB Ra		
Halfway House Rd				loute 20 VB Ramps		
a				ps	Old Cou	ınty Road
	A'	VERAGE DAIL	Y TRAFFIC	;		
	SEGMENT	LENGTH IN N	ЛILES (L):	1.18		
AVI	ERAGE DAILY	TRAFFIC VOI	LUME (V):	10300		
		" of [AVERA	GE#OF	
TOTAL # OF CRASHES:	20	# OF YEARS :	5	CRASHES	PER YEAR (4.00
				!	· —	
CRASH RATE CALCULATION :	0.90	RATE =		(A * 1,0 (L * V	000,000) * * 365)	
Comments:						
Comments : Route 20	Corridor Study				Date:	1/13/2023

APPENDIX L

Connecticut Roadway Safety Management System (CRSMS) Analysis Summary

Connecticut Roadway Safety Management System Analysis Route 20 Transportation and Land Use Study January 1, 2018 through December 31, 2021

Site Name	Facility Type	Category	Over- Represented	Site Observations	Total Crashes	Site Proportion	Threshold Proportion	p-Value
	9	Study Area Intersections						
-> CT-75 and CT-140 in Windsor Locks								
CT-75 and CT-140 in Windsor Locks	IN-SFUML3LSG	Aggressive Driving	Y	10	14	0.71	0.35	0.01
-> CT-75 and SSR-401 in Window Locks	TNI CELIMI 41 CC	A	V	22	24	0.60	0.25	0.00
CT-75 and SSR-401 in Windsor Locks CT-75 and SSR-401 in Windsor Locks	IN-SFUML4LSG IN-SFUML4LSG	Aggressive Driving Wet Pavement Surface	Y Y	23 9	34 34	0.68 0.26	0.35 0.12	0.00 0.02
C1-73 and 33K-401 iii Willusor Locks	114-31 0141230	Wet Faveillent Surface		9	34	0.20	0.12	0.02
-> CT-75 and HALFWAY HOUSE RD in Windsor Locks								
CT-75 and HALFWAY HOUSE RD in Windsor Locks	IN-SFUML4LSG	Aggressive Driving	Y	10	13	0.77	0.35	0.00
CT-75 and HALFWAY HOUSE RD in Windsor Locks	IN-SFUML4LSG	Commercial Vehicle	Y	3	13	0.23	0.04	0.02
CT-75 and HALFWAY HOUSE RD in Windsor Locks	IN-SFUML4LSG	Adverse Weather	Y	4	13	0.31	0.11	0.05
-> CT-75 and LOTEN DR in Windsor Locks CT-75 and LOTEN DR in Windsor Locks	IN-SPUML3LSN	Cidequine Opposite Direction	Y	1	2	0.50	0.02	0.04
CI-75 and LOTEN DR IN WINDSOF LOCKS	IN-SPUML3LSN	Sideswipe - Opposite Direction	Y	1	2	0.50	0.02	0.04
-> CT-140 and OLD COUNTY RD in Windsor Locks								
CT-140 and OLD COUNTY RD in Windsor Locks	IN-SFUML3LSN	Sideswipe - Opposite Direction	Υ	6	18	0.33	0.01	0.00
CT-140 and OLD COUNTY RD in Windsor Locks	IN-SFUML3LSN	Commercial Vehicle	Y	4	18	0.22	0.04	0.00
CT 75 habitana 4 000 and 5 000		Route 75 Segments						
-> CT-75 between 4.890 and 5.060 CT-75 between 4.890 and 5.060	SR-UBNFDVNA47	Angle	Y	2	3	0.67	0.11	0.03
C1-73 Detween 4.830 and 3.000	3K-OBNI DVINA47	Aligie		2	3	0.07	0.11	0.03
-> CT-75 between 5.060 and 5.420								
CT-75 between 5.060 and 5.420	SR-UBNFUDNA46	Sideswipe - Opposite Direction	Υ	5	52	0.10	0.01	0.00
CT-75 between 5.060 and 5.420	SR-UBNFUDNA46	Aggressive Driving	Y	25	52	0.48	0.31	0.01
CT-75 between 5.060 and 5.420	SR-UBNFUDNA46	Commercial Vehicle	Y	5	52	0.10	0.03	0.02
CT-75 between 5.060 and 5.420	SR-UBNFUDNA46	Pedestrian	Y	3	52	0.06	0.01	0.01
CT 75 h-h 5 420 and 5 600								
-> CT-75 between 5.420 and 5.680 CT-75 between 5.420 and 5.680	SR-UBNFUDNA46	K	Y	1	20	0.05	0.00	0.04
CT-75 between 5.420 and 5.680	SR-UBNFUDNA46	Aggressive Driving	Y	13	20	0.65	0.31	0.00
CT-75 between 5.420 and 5.680	SR-UBNFUDNA46		Y	3	20	0.15	0.03	0.02
-> CT-75 between 5.860 and 6.020								
CT-75 between 5.860 and 6.020	SR-UBNFUDNA46	DUI	Y	1	4	0.25	0.01	0.05
-> CT-75 between 6.020 and 6.210								
-> C1-75 between 6.020 and 6.210 CT-75 between 6.020 and 6.210	SR-UBNFUDNA46	Non-Collision Other	Y	1	10	0.10	0.00	0.02
CT-75 between 6.020 and 6.210	SR-UBNFUDNA46	Commercial Vehicle	Y	4	10	0.40	0.03	0.00
or 75 Secretar Group and Great	511 05111 05111110	Commercial Verneie	·	·	10	0.10	0.05	0.00
	0	ld County Road Segments						
-> OLD COUNTY RD between 0.0 and 0.33 in Windsor Locks								
OLD COUNTY RD between 0.0 and 0.33 in Windsor Locks	TR-UBCLNANA22	Adverse Weather	Υ	4	8	0.50	0.15	0.02
-> OLD COUNTY RD between 0.52 and 0.61 in Windsor Locks								
OLD COUNTY RD between 0.52 and 0.61 in Windsor Locks	TR-UBCLNANA22	KA	Υ	1	3	0.33	0.02	0.05
OLD COUNTY RD between 0.52 and 0.61 in Windsor Locks	TR-UBCLNANA22	K	Y	1	3	0.33	0.00	0.01
OLD COUNTY RD between 0.52 and 0.61 in Windsor Locks	TR-UBCLNANA22	Pedestrian	Y	1	3	0.33	0.01	0.04
			_					
-> OLD COUNTY RD between 0.61 and 0.78 in Windsor Locks								
OLD COUNTY RD between 0.61 and 0.78 in Windsor Locks	TR-UBCLNANA22	Front to Front	Υ	1	2	0.50	0.02	0.04
	µ _a ,	fway House Road Segments						
-> HALFWAY HOUSE RD between 0.48 and 0.71 in Windsor Locks	Пан	way nouse Road Segments						
HALFWAY HOUSE RD between 0.48 and 0.71 in Windsor Locks	TR-UBCLNANA22	Multiple-Other	Υ	2	4	0.50	0.08	0.04
			_					

Category Color Legend:

Collision Type
Severity
Vehicle
Environment
Driver Behavior

APPENDIX M

2050 Future Conditions Capacity Analysis Results Worksheets

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4					ň	^		ř	^	7
Traffic Volume (vph)	70	0	20	0	0	0	70	240	0	0	360	300
Future Volume (vph)	70	0	20	0	0	0	70	240	0	0	360	300
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	12	12	16	12	11	12	12	11	11	11
Storage Length (ft)	0		0	0		0	70		0	80		300
Storage Lanes	0		0	0		0	1		0	1		1
Taper Length (ft)	25			25			45			55		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt		0.966										0.850
Flt Protected		0.964					0.950					
Satd. Flow (prot)	0	1878	0	0	0	0	1662	3438	0	1717	3292	1346
Flt Permitted		0.964					0.509					
Satd. Flow (perm)	0	1878	0	0	0	0	890	3438	0	1717	3292	1346
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		33										319
Link Speed (mph)		35			25			35			35	
Link Distance (ft)		394			120			257			652	
Travel Time (s)		7.7			3.3			5.0			12.7	
Peak Hour Factor	0.71	0.92	0.60	0.92	0.92	0.92	0.88	0.85	0.92	0.92	0.87	0.94
Heavy Vehicles (%)	9%	7%	0%	7%	7%	7%	5%	5%	7%	7%	6%	16%
Adj. Flow (vph)	99	0	33	0	0	0	80	282	0	0	414	319
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	132	0	0	0	0	80	282	0	0	414	319
Turn Type	Split	NA					Perm	NA		Perm	NA	Perm
Protected Phases	4	4						2			2	
Permitted Phases							2			2		2
Detector Phase	4	4					2	2		2	2	2
Switch Phase												
Minimum Initial (s)	7.0	7.0					15.0	15.0		15.0	15.0	15.0
Minimum Split (s)	24.2	24.2					20.4	20.4		20.4	20.4	20.4
Total Split (s)	25.0	25.0					45.0	45.0		45.0	45.0	45.0
Total Split (%)	35.7%	35.7%					64.3%	64.3%		64.3%	64.3%	64.3%
Yellow Time (s)	3.0	3.0					4.1	4.1		4.1	4.1	4.1
All-Red Time (s)	2.2	2.2					1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)		0.0					0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)		5.2					5.1	5.1		5.1	5.1	5.1
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None					C-Max	C-Max		C-Max	C-Max	C-Max
Act Effct Green (s)		10.2					52.9	52.9			52.9	52.9
Actuated g/C Ratio		0.15					0.76	0.76			0.76	0.76
v/c Ratio		0.44					0.12	0.11			0.17	0.29
Control Delay		23.8					5.1	3.9			3.0	1.1
Queue Delay		0.0					0.0	0.0			0.0	0.0
Total Delay		23.8					5.1	3.9			3.0	1.1
LOS		С					Α	Α			Α	Α
Approach Delay		23.8						4.2			2.2	
Approach LOS		С						Α			Α	

Route 20 Corridor Study Tighe & Bond

	•	→	*	•	+	•	•	†	<i>></i>	/		4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)		40					8	14			19	0
Queue Length 95th (ft)		73					33	39			35	9
Internal Link Dist (ft)		314			40			177			572	
Turn Bay Length (ft)							70					300
Base Capacity (vph)		554					673	2599			2489	1095
Starvation Cap Reductn		0					0	0			0	0
Spillback Cap Reductn		0					0	0			0	0
Storage Cap Reductn		0					0	0			0	0
Reduced v/c Ratio		0.24					0.12	0.11			0.17	0.29
Intersection Summary												
Area Type:	Other											
Cycle Length: 70												
Actuated Cycle Length: 70)											

Offset: 0 (0%), Referenced to phase 2:NBSB, Start of Yellow

Natural Cycle: 45

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.44

Intersection Signal Delay: 5.1 Intersection Capacity Utilization 43.7%

Intersection LOS: A ICU Level of Service A

Analysis Period (min) 15

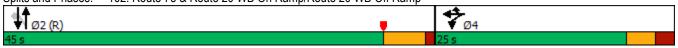
Splits and Phases: 101: Route 75 & Route 20 EB Ramps/Private Driveway



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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					ર્ન	7	ሻ	^			^	7
Traffic Volume (vph)	0	0	0	40	10	480	40	280	0	0	620	100
Future Volume (vph)	0	0	0	40	10	480	40	280	0	0	620	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	14	12	12	11	12	11	12	12	11	11	11
Storage Length (ft)	0		0	0		190	75		0	0		90
Storage Lanes	0		0	0		1	1		0	0		1
Taper Length (ft)	25			25		•	40			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	1.00	1.00	1.00	0.850	1.00	0.00	1.00	1.00	0.00	0.850
Flt Protected					0.972	0.000	0.950					0.000
Satd. Flow (prot)	0	0	0	0	1662	1468	1662	3406	0	0	3144	1382
Flt Permitted	V	•	J	V	0.972	1100	0.401	0100	J	· ·	OTT	1002
Satd. Flow (perm)	0	0	0	0	1662	1468	701	3406	0	0	3144	1382
Right Turn on Red	U	U	Yes	U	1002	Yes	701	0400	Yes	0	0177	Yes
Satd. Flow (RTOR)			100			482			100			120
Link Speed (mph)		30			30	702		35			35	120
Link Distance (ft)		591			524			652			2293	
Travel Time (s)		13.4			11.9			12.7			44.7	
Peak Hour Factor	0.92	0.92	0.92	0.75	0.25	0.89	0.84	0.78	0.92	0.92	0.94	0.83
Heavy Vehicles (%)	7%	7%	7%	13%	0.23	10%	5%	6%	7%	7%	11%	13%
Adj. Flow (vph)	0	0	0	53	40	539	48	359	0	0	660	120
Shared Lane Traffic (%)	U	U	U	55	40	303	70	000	U	U	000	120
Lane Group Flow (vph)	0	0	0	0	93	539	48	359	0	0	660	120
Turn Type	U	U	U	Split	NA	Prot	Perm	NA	U	U	NA	Perm
Protected Phases				4	4	4	1 01111	2			2	1 01111
Permitted Phases				•	•	•	2	_			_	2
Detector Phase				4	4	4	2	2			2	2
Switch Phase				•	•	•	_	_			_	_
Minimum Initial (s)				7.0	7.0	7.0	15.0	15.0			15.0	15.0
Minimum Split (s)				12.1	12.1	12.1	20.4	20.4			20.4	20.4
Total Split (s)				25.0	25.0	25.0	45.0	45.0			45.0	45.0
Total Split (%)				35.7%	35.7%	35.7%	64.3%	64.3%			64.3%	64.3%
Yellow Time (s)				3.0	3.0	3.0	4.4	4.4			4.4	4.4
All-Red Time (s)				2.1	2.1	2.1	1.0	1.0			1.0	1.0
Lost Time Adjust (s)				۲.۱	0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)					5.1	5.1	5.4	5.4			5.4	5.4
Lead/Lag					0.1	0.1	0.7	0.4			0.4	0.4
Lead-Lag Optimize?												
Recall Mode				None	None	None	C-Max	C-Max			C-Max	C-Max
Act Effct Green (s)				NONE	11.7	11.7	47.8	47.8			47.8	47.8
Actuated g/C Ratio					0.17	0.17	0.68	0.68			0.68	0.68
v/c Ratio					0.17	0.83	0.10	0.15			0.31	0.12
Control Delay					27.0	16.5	5.0	4.1			5.8	1.8
Queue Delay					0.0	0.0	0.0	0.0			0.0	0.0
Total Delay					27.0	16.5	5.0	4.1			5.8	1.8
LOS					27.0 C	10.5 B	3.0 A	4.1 A			3.6 A	1.0 A
Approach Delay					18.0	ט	^	4.2			5.2	^
Approach LOS					16.0 B			4.2 A			3.2 A	
Approach LOG					D			٨			٨	

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)					38	23	3	13			40	0
Queue Length 95th (ft)					17	107	18	39			106	16
Internal Link Dist (ft)		511			444			572			2213	
Turn Bay Length (ft)						190	75					90
Base Capacity (vph)					472	762	478	2327			2148	982
Starvation Cap Reductn					0	0	0	0			0	0
Spillback Cap Reductn					0	0	0	0			0	0
Storage Cap Reductn					0	0	0	0			0	0
Reduced v/c Ratio					0.20	0.71	0.10	0.15			0.31	0.12
Intersection Summary												
Area Type:	Other											
Cycle Length: 70												
Actuated Cycle Length: 70												
Offset: 1 (1%), Reference	d to phase 2:N	NBSB, Sta	art of Yell	OW								
Natural Cycle: 40												
Control Type: Actuated-Co	oordinated											
Maximum v/c Ratio: 0.83												
Intersection Signal Delay:					tersection							
Intersection Capacity Utiliz	zation 51.0%			IC	CU Level o	of Service	Α					
Analysis Period (min) 15												

Splits and Phases: 102: Route 75 & Route 20 WB On Ramp/Route 20 WB Off Ramp



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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4Te		ሻ	↑ ↑	
Traffic Volume (vph)	0	0	10	60	0	20	0	680	70	30	490	0
Future Volume (vph)	0	0	10	60	0	20	0	680	70	30	490	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	15	12	12	16	12	12	12	12	12	12	12
Storage Length (ft)	0		0	0		0	0		0	415		0
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (ft)	25			25			25			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	1.00	0.95	0.95
Frt	1.00	0.865	1.00	1.00	0.964	1.00	0.50	0.983	0.00	1.00	0.50	0.50
Flt Protected		0.000			0.965			0.500		0.950		
Satd. Flow (prot)	0	1808	0	0	1959	0	0	3293	0	1597	3282	0
Flt Permitted	0	1000	U	U	0.758	0	0	0230	U	0.317	0202	U
Satd. Flow (perm)	0	1808	0	0	1539	0	0	3293	0	533	3282	0
Right Turn on Red	U	1000	Yes	U	1000	Yes	U	3233	Yes	555	3202	Yes
Satd. Flow (RTOR)		293	163		102	163		22	163			163
Link Speed (mph)		25			30			35			35	
		250			258			2293			1019	
Link Distance (ft)		6.8			5.9			44.7			19.9	
Travel Time (s)	0.00		0.25	0.70		0.67	0.00		0.70	0.75		0.00
Peak Hour Factor	0.92	0.92		0.72	0.92	0.67	0.92	0.88	0.70	0.75	0.86	0.92
Heavy Vehicles (%)	7%	7%	0%	2%	7%	3%	7%	8%	6%	13%	10%	0%
Adj. Flow (vph)	0	0	40	83	0	30	0	773	100	40	570	0
Shared Lane Traffic (%)	0	40	0	0	440	0	^	070	0	40	F70	0
Lane Group Flow (vph)	0	40	0	0	113	0	0	873	0	40	570	0
Turn Type		NA		Perm	NA			NA		D.P+P	NA	
Protected Phases		4		4	4			2		1	12	
Permitted Phases	4	4		4			2			2		
Detector Phase	4	4		4	4					1		
Switch Phase	5 0	5 0		5 0	5 0		45.0	45.0		5 0		
Minimum Initial (s)	5.0	5.0		5.0	5.0		15.0	15.0		5.0		
Minimum Split (s)	9.5	9.5		9.5	9.5		21.5	21.5		9.0		
Total Split (s)	31.0	31.0		31.0	31.0		40.0	40.0		9.0		
Total Split (%)	38.8%	38.8%		38.8%	38.8%		50.0%	50.0%		11.3%		
Yellow Time (s)	3.0	3.0		3.0	3.0		4.4	4.4		3.0		
All-Red Time (s)	1.5	1.5		1.5	1.5		2.1	2.1		1.0		
Lost Time Adjust (s)		0.0			0.0			0.0		0.0		
Total Lost Time (s)		4.5			4.5			6.5		4.0		
Lead/Lag							Lag	Lag		Lead		
Lead-Lag Optimize?							Yes	Yes		Yes		
Recall Mode	None	None		None	None		C-Max	C-Max		None		
Act Effct Green (s)		6.1			6.1			60.7		64.9	68.1	
Actuated g/C Ratio		0.08			0.08			0.76		0.81	0.85	
v/c Ratio		0.10			0.54			0.35		0.08	0.20	
Control Delay		0.5			19.3			5.1		1.0	1.2	
Queue Delay		0.0			0.0			0.0		0.0	0.0	
Total Delay		0.5			19.3			5.1		1.0	1.2	
LOS		Α			В			Α		Α	Α	
Approach Delay		0.5			19.3			5.1			1.2	
Approach LOS		Α			В			Α			Α	

	•	→	•	•	+	•	•	†	/	/	+	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)		0			5			80		1	3	
Queue Length 95th (ft)		0			51			127		1	6	
Internal Link Dist (ft)		170			178			2213			939	
Turn Bay Length (ft)										415		
Base Capacity (vph)		794			578			2505		498	2795	
Starvation Cap Reductn		0			0			0		0	0	
Spillback Cap Reductn		0			0			0		0	0	
Storage Cap Reductn		0			0			0		0	0	
Reduced v/c Ratio		0.05			0.20			0.35		0.08	0.20	
Intersection Summary												
Area Type:	Other											
Cycle Length: 80												
Actuated Cycle Length: 80												
Offset: 57 (71%), Reference	ed to phase	2:NBSB,	Start of Y	ellow								
Natural Cycle: 40												
Control Type: Actuated-Co	ordinated											
Maximum v/c Ratio: 0.54												
Intersection Signal Delay: 4					tersection							
Intersection Capacity Utiliz	ation 43.2%			IC	CU Level o	of Service.	A					
Analysis Period (min) 15												

Splits and Phases: 103: Route 75 & LAZFly Driveway/Halfway House Road



Route 20 Corridor Study Tighe & Bond

Lane Configurations		۶	→	•	€	+	•	•	†	/	/	ţ	-√
Traffic Volume (vph)	Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	Lane Configurations	ř	ર્ના	7	ř	ĵ,		¥	↑ Ъ		ř	^	7
Future Volume (vph)				90	10		10			10			
Ideal Flow (ryphpl)													
Lane Wright (ft)	(, ,												
Storage Length (ft)													
Storage Lanes													
Taper Length (ft)													1
Lane Util. Factor 0.95											25		
Fith			0.95	1.00		1.00	1.00		0.95	0.95		0.95	1.00
Fit Protected													
Satd. Flow (prot)		0.950	0.966	0.000	0.950	0.000		0.950	0.000		0.950		0.000
Fit Permitted				1311		1444	0		3216	0		3223	1568
Satd. Flow (perm)							•		02.0			0220	
Right Turn on Red				1311		1444	0		3216	0		3223	1568
Satd. Flow (RTOR)			1000		1000			1071	0210		1000	0220	
Link Speed (mph) 35 25 35 35 Link Distance (ft) 466 418 1019 1839 Travel Time (s) 9.1 11.4 19.9 35.8 Peak Hour Factor 0.78 0.50 0.69 0.50 0.75 0.50 0.78 0.95 0.44 0.31 0.84 0.93 Heavy Vehicles (%) 17% 0% 15% 29% 11% 12% 8% 12% 0% 18% 12% 3% Adj. Flow (vph) 115 20 130 20 13 20 269 505 23 32 488 118 Shared Lane Traffic (%) 42% 42% 42% 42% 42% 42% 4 1 6 5 2 58 8 118 4 4 1 6 5 2 2 Permitted Phases 8 8 18 4 4 1 6 5 2 2 Permitted Ph						20	. 00		6				
Link Distance (ft)			35	100								35	201
Travel Time (s)													
Peak Hour Factor	()												
Heavy Vehicles (%)		0.78		0.69	0.50		0.50	0.78		0 44	0.31		0.93
Adj. Flow (vph) 115 20 130 20 13 20 269 505 23 32 488 118 Shared Lane Traffic (%) 42% Lane Group Flow (vph) 67 68 130 20 33 0 269 528 0 32 488 118 Turn Type Split NA pt-v Split NA Prot NA NO 15.0 5.0 5.0 15.0 5.0 15.0 5.0 15.0 5.0 15.0 5.0 15.0 5.0 15.0 15.0 15.0 15.0 15.0 1													
Shared Lane Traffic (%)													
Lane Group Flow (vph)			20	100	20	10	20	200	000	20	02	400	110
Tum Type			68	130	20	33	0	269	528	0	32	488	118
Protected Phases 8 8 8 18 4 4 4 1 6 5 2 Permitted Phases Detector Phase 8 8 8 18 4 4 4 1 6 5 5 2 Switch Phase Minimum Initial (s) 7.0 7.0 5.0 5.0 5.0 15.0 15.0 5.0 15.0 Minimum Split (s) 12.7 12.7 9.8 9.8 10.1 20.8 9.0 20.6 Total Split (s) 22.0 22.0 10.0 10.0 18.0 30.0 18.0 30.0 Total Split (%) 27.5% 27.5% 12.5% 12.5% 22.5% 37.5% 22.5% 37.5% Yellow Time (s) 3.0 3.0 3.3 3.3 3.3 3.0 4.4 3.0 4.4 All-Red Time (s) 2.7 2.7 1.5 1.5 2.1 1.4 1.0 1.2 Lost Time Adjust (s) 5.7 5.7 4.8 4.8 5.1 5.8 4.0 5.6 Lead/Lag Lead-Lag Optimize? Recall Mode None None None None None None C-Min None C-Min Act Effct Green (s) 8.9 8.9 30.7 6.2 6.2 18.6 51.6 6.2 31.5 80.0 Actuated g/C Ratio 0.11 0.11 0.38 0.08 0.08 0.23 0.64 0.08 0.39 1.00 v/c Ratio 0.43 0.41 0.22 0.20 0.25 0.69 0.25 0.27 0.38 0.08 Control Delay 40.9 39.8 3.7 38.4 24.9 34.3 10.9 36.7 26.8 0.1 COS D D D A D C C B D D C A Approach Delay 40.9 39.8 3.7 38.4 24.9 34.3 10.9 36.7 26.8 0.1 LOS D D D A D C C B D D C A Approach Delay 40.9 39.8 3.7 38.4 24.9 34.3 10.9 36.7 26.8 0.1 LOS D D D A D C C B D D C A Approach Delay 40.9 39.8 3.7 38.4 24.9 34.3 10.9 36.7 26.8 0.1 LOS D D D A D C C B D D C A							•						
Permitted Phases 8													1100
Detector Phase 8					•	•		•	•			-	Free
Switch Phase Minimum Initial (s) 7.0 7.0 5.0 5.0 5.0 15.0 5.0 15.0 Minimum Split (s) 12.7 12.7 9.8 9.8 10.1 20.8 9.0 20.6 Total Split (s) 22.0 22.0 10.0 10.0 18.0 30.0 18.0 30.0 Total Split (%) 27.5% 27.5% 12.5% 12.5% 22.5% 37.5% 22.5% 37.5% Yellow Time (s) 3.0 3.0 3.3 3.3 3.0 4.4 3.0 4.4 All-Red Time (s) 2.7 2.7 1.5 1.5 2.1 1.4 1.0 1.2 Lost Time Adjust (s) 0.0		8	8	18	4	4		1	6		5	2	
Minimum Initial (s) 7.0 7.0 5.0 5.0 5.0 15.0 5.0 15.0 Minimum Split (s) 12.7 12.7 9.8 9.8 10.1 20.8 9.0 20.6 Total Split (s) 22.0 22.0 10.0 10.0 18.0 30.0 18.0 30.0 Total Split (%) 27.5% 27.5% 12.5% 12.5% 22.5% 37.5% 22.5% 37.5% Yellow Time (s) 3.0 3.0 3.3 3.3 3.0 4.4 3.0 4.4 All-Red Time (s) 2.7 2.7 1.5 1.5 2.1 1.4 1.0 1.2 Lost Time Adjust (s) 0.0 <		•	•						-		-		
Minimum Split (s) 12.7 12.7 9.8 9.8 10.1 20.8 9.0 20.6 Total Split (s) 22.0 22.0 10.0 10.0 18.0 30.0 18.0 30.0 Total Split (%) 27.5% 27.5% 12.5% 12.5% 22.5% 37.5% 22.5% 37.5% Yellow Time (s) 3.0 3.0 3.3 3.3 3.0 4.4 3.0 4.4 All-Red Time (s) 2.7 2.7 1.5 1.5 2.1 1.4 1.0 1.2 Lost Time Adjust (s) 0.0		7.0	7.0		5.0	5.0		5.0	15.0		5.0	15.0	
Total Split (s) 22.0 22.0 10.0 10.0 18.0 30.0 18.0 30.0 Total Split (%) 27.5% 27.5% 12.5% 12.5% 22.5% 37.5% 22.5% 37.5% Yellow Time (s) 3.0 3.0 3.3 3.3 3.0 4.4 3.0 4.4 All-Red Time (s) 2.7 2.7 1.5 1.5 2.1 1.4 1.0 1.2 Lost Time Adjust (s) 0.0	` ,												
Total Split (%) 27.5% 27.5% 12.5% 12.5% 22.5% 37.5% 22.5% 37.5% Yellow Time (s) 3.0 3.0 3.0 3.3 3.3 3.0 4.4 3.0 4.4 All-Red Time (s) 2.7 2.7 1.5 1.5 2.1 1.4 1.0 1.2 Lost Time Adjust (s) 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 Total Lost Time (s) 5.7 5.7 4.8 4.8 5.1 5.8 4.0 5.6 Lead/Lag													
Yellow Time (s) 3.0 3.0 3.3 3.3 3.0 4.4 3.0 4.4 All-Red Time (s) 2.7 2.7 1.5 1.5 2.1 1.4 1.0 1.2 Lost Time Adjust (s) 0.0													
All-Red Time (s) 2.7 2.7 1.5 1.5 2.1 1.4 1.0 1.2 Lost Time Adjust (s) 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 Total Lost Time (s) 5.7 5.7 4.8 4.8 5.1 5.8 4.0 5.6 Lead/Lag Lead-Lag Optimize? Recall Mode None None None None None None C-Min None C-Min Act Effet Green (s) 8.9 8.9 30.7 6.2 6.2 18.6 51.6 6.2 31.5 80.0 Actuated g/C Ratio 0.11 0.11 0.38 0.08 0.08 0.23 0.64 0.08 0.39 1.00 v/c Ratio 0.43 0.41 0.22 0.20 0.25 0.69 0.25 0.27 0.38 0.08 Control Delay 40.9 39.8 3.7 38.4 24.9 34.3 10.9 36.7 26.8 0.1 Queue Delay 40.9 39.8 3.7 38.4 24.9 34.3 10.9 36.7 26.8 0.1 LOS D D D A D C C B D C A Approach Delay 22.4 30.0 18.8 22.4													
Lost Time Adjust (s) 0.0													
Total Lost Time (s) 5.7 5.7 4.8 4.8 5.1 5.8 4.0 5.6 Lead/Lag Lead Lag Lead Lag Lead-Lag Optimize? Yes Yes Yes Recall Mode None None None None C-Min Act Effct Green (s) 8.9 8.9 30.7 6.2 6.2 18.6 51.6 6.2 31.5 80.0 Actuated g/C Ratio 0.11 0.11 0.38 0.08 0.08 0.23 0.64 0.08 0.39 1.00 v/c Ratio 0.43 0.41 0.22 0.20 0.25 0.69 0.25 0.27 0.38 0.08 Control Delay 40.9 39.8 3.7 38.4 24.9 34.3 10.9 36.7 26.8 0.1 Queue Delay 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0													
Lead/Lag Lead Lag Lead Lag Lead-Lag Optimize? Yes Yes Yes Yes Recall Mode None None None None C-Min None C-Min Act Effct Green (s) 8.9 8.9 30.7 6.2 6.2 18.6 51.6 6.2 31.5 80.0 Actuated g/C Ratio 0.11 0.11 0.38 0.08 0.08 0.23 0.64 0.08 0.39 1.00 v/c Ratio 0.43 0.41 0.22 0.20 0.25 0.69 0.25 0.27 0.38 0.08 Control Delay 40.9 39.8 3.7 38.4 24.9 34.3 10.9 36.7 26.8 0.1 Queue Delay 0.0 <td< td=""><td>• • • •</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	• • • •												
Lead-Lag Optimize? Yes Path Yes Yes													
Recall Mode None None None None C-Min None C-Min Act Effct Green (s) 8.9 8.9 30.7 6.2 6.2 18.6 51.6 6.2 31.5 80.0 Actuated g/C Ratio 0.11 0.11 0.38 0.08 0.08 0.23 0.64 0.08 0.39 1.00 v/c Ratio 0.43 0.41 0.22 0.20 0.25 0.69 0.25 0.27 0.38 0.08 Control Delay 40.9 39.8 3.7 38.4 24.9 34.3 10.9 36.7 26.8 0.1 Queue Delay 0.0													
Act Effct Green (s) 8.9 8.9 30.7 6.2 6.2 18.6 51.6 6.2 31.5 80.0 Actuated g/C Ratio 0.11 0.11 0.38 0.08 0.08 0.23 0.64 0.08 0.39 1.00 v/c Ratio 0.43 0.41 0.22 0.20 0.25 0.69 0.25 0.27 0.38 0.08 Control Delay 40.9 39.8 3.7 38.4 24.9 34.3 10.9 36.7 26.8 0.1 Queue Delay 0.0		None	None		None	None							
Actuated g/C Ratio 0.11 0.11 0.38 0.08 0.08 0.23 0.64 0.08 0.39 1.00 v/c Ratio 0.43 0.41 0.22 0.20 0.25 0.69 0.25 0.27 0.38 0.08 Control Delay 40.9 39.8 3.7 38.4 24.9 34.3 10.9 36.7 26.8 0.1 Queue Delay 0.0				30.7									80.0
v/c Ratio 0.43 0.41 0.22 0.20 0.25 0.69 0.25 0.27 0.38 0.08 Control Delay 40.9 39.8 3.7 38.4 24.9 34.3 10.9 36.7 26.8 0.1 Queue Delay 0.0													
Control Delay 40.9 39.8 3.7 38.4 24.9 34.3 10.9 36.7 26.8 0.1 Queue Delay 0.0<													
Queue Delay 0.0 <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>													
Total Delay 40.9 39.8 3.7 38.4 24.9 34.3 10.9 36.7 26.8 0.1 LOS D D A D C C B D C A Approach Delay 22.4 30.0 18.8 22.4													
LOS D D A D C C B D C A Approach Delay 22.4 30.0 18.8 22.4	•												
Approach Delay 22.4 30.0 18.8 22.4													
Approach LOS G G B G	Approach LOS		С			C			В			С	

104: Route 75 & Route 401 (Schoephoester Road)/National Road 2050 Future Conditions - Optimized Weekday AM Peak - Without Ped

	۶	-	\rightarrow	•	←	*	•	†	~	-	ļ	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	33	33	0	10	6		121	68		16	116	0
Queue Length 95th (ft)	60	37	13	16	25		176	174		14	154	0
Internal Link Dist (ft)		386			338			939			1759	
Turn Bay Length (ft)			220	200			450					400
Base Capacity (vph)	288	306	580	102	132		389	2074		267	1320	1568
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	0
Reduced v/c Ratio	0.23	0.22	0.22	0.20	0.25		0.69	0.25		0.12	0.37	0.08

Intersection Summary

Area Type: Other

Cycle Length: 80

Actuated Cycle Length: 80

Offset: 12 (15%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.69

Intersection Signal Delay: 21.0

Intersection LOS: C
ICU Level of Service A

Intersection Capacity Utilization 47.2% Analysis Period (min) 15

Splits and Phases: 104: Route 75 & Route 401 (Schoephoester Road)/National Road



Lane Corough EBL EBR WBL WBT WBR NBL NBT NBR SBL SBR SBR Lane Configurations The State The State		۶	→	•	•	+	•	•	†	~	/	+	-√
Traffic Volume (vph) 60 170 20 10 300 20 20 0 10 10 10 0 70 Future Volume (vph) 60 170 20 10 300 20 20 0 10 10 10 0 70 Future Volume (vph) 1900 1900 1900 1900 1900 1900 1900 190	Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	Lane Configurations	ሻ	∳ ሴ		*	∳ ሴ			43-			4	7
Future Volume (viph)				20			20	20		10	10		
Ideal Flow (ryphpi)													
Lane Width (ft)	· · · /												
Storage Langth (ft)													
Storage Lanes													
Taper Length (ft)													1
Lane Util. Factor					-								
Fith			0.95	0.95		0.95	0.95		1 00	1 00		1 00	1 00
Fit Protected		1.00		0.00	1.00		0.00	1.00		1.00	1.00	1.00	
Satd. Flow (prot) 1805 3460 0 1831 3347 0 0 1660 0 0 1735 1706		0.950	0.001		0.950	0.000						0.950	0.000
Fit Permitted			3460	0		3347	0	0		0	0		1706
Satd. Flow (perm) 1009 3460 0 1002 3347 0 0 1401 0 0 1329 1706 Right Turn on Red Yes Yes			0.00	Ū		00 11				· ·	, and the second		1100
Right Turn on Red Yes Ye			3460	0		3347	0	0		0	0		1706
Satid. Flow (RTOR)		1003	0400		1002	00+1		U	1401		0	1023	
Link Speed (mph) 35 35 25 30 Link Distance (ft) 624 466 420 346 Travel Time (s) 122 9.1 11.5 7.9 Peak Hour Factor 0.70 0.70 0.69 0.50 0.88 0.67 0.83 0.92 0.60 0.60 Heavy Vehicles (%) 0% 3% 0% 7% 3% 3% 0% 100% 33% 11% 7% 1% Adj. Flow (vph) 86 243 29 20 371 0 0 44 0 0 16 106 Shared Lane Traffic (%) 1 6 5 2 0 20 371 0 0 4 0 0 16 106 Tum Type pmpt pt NA pmpt pt NA pmpt pt NA perm NA perm NA perm Perm NA perm NA Perm NA perm A <td></td> <td></td> <td>21</td> <td>103</td> <td></td> <td>15</td> <td>103</td> <td></td> <td>92</td> <td>103</td> <td></td> <td></td> <td></td>			21	103		15	103		92	103			
Link Distance (ft) 624 466 420 346 Travel Time (s) 12.2 9.1 11.5 7.9 Peak Hour Factor 0.70 0.70 0.69 0.50 0.88 0.67 0.83 0.92 0.50 0.63 0.92 0.66 Heavy Vehicles (%) 0% 3% 0% 7% 3% 3% 0% 100% 33% 11% 7% 11% Adj. Flow (vph) 86 243 29 20 341 30 24 0 20 16 0 106 Shared Lane Traffic (%) 8 272 0 20 371 0 0 44 0 0 16 106 Turn Type pm+pt NA pm+pt NA pm+pt NA Perm NA 4 4 4												30	100
Travel Time (s)	,												
Peak Hour Factor													
Heavy Vehicles (%)		0.70		N 69	0.50		0.67	0.83		0.50	0.63		0.66
Adj. Flow (vph) 86 243 29 20 341 30 24 0 20 16 0 106 Shared Lane Traffic (%) Lane Group Flow (vph) 86 272 0 20 371 0 0 44 0 0 16 106 Turn Type pm+pt NA pm+pt NA Perm NA A 4 4 4 <td></td>													
Shared Lane Traffic (%) Lane Group Flow (vph) 86 272 0 20 371 0 0 44 0 0 0 16 106 Turn Type													
Lane Group Flow (vph) 86 272 0 20 371 0 0 44 0 0 16 106 Turn Type pm+pt NA pm+pt NA pm+pt NA Perm NA Perm NA Perm Perm NA Perm NA Perm NA Perm NA Perm NA Perm Perm NA 4		00	240	23	20	J + 1	50	24	U	20	10	U	100
Tum Type pm+pt NA pm+pt NA Perm NA Perm NA Perm Protected Phases 1 6 5 2 4 4 4 4 Permitted Phases 6 2 4 4 4 4 4 Detector Phase 1 6 5 2 4 4 4 4 Switch Phase 4 1 6 5 2 4 4 4 4 Minimum Initial (s) 5.0 15.0 5.0 15.0 7.0 7.0 7.0 7.0 7.0 Minimum Split (s) 9.0 21.6 9.0 21.6 12.1		86	272	n	20	371	0	0	11	0	Λ	16	106
Protected Phases 6 5 2 4 4 4 4 4 14 14 14 15 16 15 15 16 15 15 16 16 16 16 16 16 16 16 16 16 16 16 16				U			U			U			
Permitted Phases 6								1 01111			1 01111		1 01111
Detector Phase 1 6 5 2 4 4 4 4 4 4 4 4 4			•			_		4			4	•	4
Switch Phase Minimum Initial (s) 5.0 15.0 5.0 15.0 7.1 2.1 2.1 2.1 2.1 2.1 2.1 2.1 2.1 2.1 2.1 2.1 2.1 2			6			2			4			4	
Minimum Initial (s) 5.0 15.0 5.0 15.0 7.0 7.0 7.0 7.0 7.0 Minimum Split (s) 9.0 21.6 9.0 21.6 12.1 27.1<		•	•			_		•	•		•	•	•
Minimum Split (s) 9.0 21.6 9.0 21.6 12.1 12.1 12.1 12.1 12.1 Total Split (s) 9.0 53.9 9.0 53.9 27.1		5.0	15.0		5.0	15.0		7.0	7.0		7.0	7.0	7.0
Total Split (s) 9.0 53.9 9.0 53.9 27.1 27.1 27.1 27.1 27.1 27.1 Total Split (%) 10.0% 59.9% 10.0% 59.9% 30.1% 30.1% 30.1% 30.1% 30.1% 30.1% 30.1% 30.1% Yellow Time (s) 3.0 4.4 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 All-Red Time (s) 1.0 2.2 1.0 2.2 2.1 2.1 2.1 2.1 2.1 2.1 2.1 2.1 2.1													
Total Split (%) 10.0% 59.9% 10.0% 59.9% 30.1% 30.1% 30.1% 30.1% 30.1% Yellow Time (s) 3.0 4.4 3.0 4.4 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 All-Red Time (s) 1.0 2.2 1.0 2.2 2.1 2.1 2.1 2.1 2.1 2.1 2.1 Lost Time Adjust (s) 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.													
Yellow Time (s) 3.0 4.4 3.0 4.4 3.0													
All-Red Time (s) 1.0 2.2 1.0 2.2 2.1 2.1 2.1 2.1 2.1 2.1 Lost Time Adjust (s) 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.													
Lost Time Adjust (s) 0.0													
Total Lost Time (s) 4.0 6.6 4.0 6.6 5.1 5.1 5.1 Lead/Lag Lead-Lag Optimize? Recall Mode None C-Min None													
Lead/Lag Lead-Lag Optimize? Recall Mode None C-Min None C-Min None	, ,												
Lead-Lag Optimize? Recall Mode None C-Min None C-Min None 0.08 0.08 0.08 0.08 0.08 0.08 0.08 0.08 0.08 0.08 0.08 <t< td=""><td></td><td></td><td>0.0</td><td></td><td></td><td>0.0</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>			0.0			0.0							
Recall Mode None C-Min None C-Min None 10 None 10 2 2 2 2 2 2 2 2 2 2 3 3 41.0 14.4 4 3 3 41.0 14.4 4 3 4 1 4 4 4 8 3.5 41.0 14.4 4 4													
Act Effct Green (s) 72.7 66.8 72.5 66.8 7.5 7.5 7.5 Actuated g/C Ratio 0.81 0.74 0.81 0.74 0.08 0.08 0.08 v/c Ratio 0.10 0.11 0.02 0.15 0.22 0.15 0.45 Control Delay 2.0 4.5 1.8 4.8 3.5 41.0 14.4 Queue Delay 0.0 0.0 0.0 0.0 0.0 0.0 0.0 Total Delay 2.0 4.5 1.8 4.8 3.5 41.0 14.4 LOS A A A A A D B Approach Delay 3.9 4.6 3.5 17.9		None	C-Min		None	C-Min		None	None		None	None	None
Actuated g/C Ratio 0.81 0.74 0.81 0.74 0.08 0.08 0.08 v/c Ratio 0.10 0.11 0.02 0.15 0.22 0.15 0.45 Control Delay 2.0 4.5 1.8 4.8 3.5 41.0 14.4 Queue Delay 0.0 0.0 0.0 0.0 0.0 0.0 0.0 Total Delay 2.0 4.5 1.8 4.8 3.5 41.0 14.4 LOS A A A A A D B Approach Delay 3.9 4.6 3.5 17.9													
v/c Ratio 0.10 0.11 0.02 0.15 0.22 0.15 0.45 Control Delay 2.0 4.5 1.8 4.8 3.5 41.0 14.4 Queue Delay 0.0 0.0 0.0 0.0 0.0 0.0 0.0 Total Delay 2.0 4.5 1.8 4.8 3.5 41.0 14.4 LOS A A A A A D B Approach Delay 3.9 4.6 3.5 17.9	. ,												
Control Delay 2.0 4.5 1.8 4.8 3.5 41.0 14.4 Queue Delay 0.0													
Queue Delay 0.0													
Total Delay 2.0 4.5 1.8 4.8 3.5 41.0 14.4 LOS A A A A A D B Approach Delay 3.9 4.6 3.5 17.9													
LOS A A A A D B Approach Delay 3.9 4.6 3.5 17.9													
Approach Delay 3.9 4.6 3.5 17.9													
	Approach LOS		A			A			A			В	

105: Airport Servuce Road/Light Lane & Route 401 (Schoephoester Road) 2050 Future Conditions - Optimized Weekday AM Peak - Without Ped

	•	-	•	•	•	•	•	†	~	-	↓	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	6	22		1	32			0			9	0
Queue Length 95th (ft)	12	29		3	53			5			28	19
Internal Link Dist (ft)		544			386			340			266	
Turn Bay Length (ft)	170			120								200
Base Capacity (vph)	864	2572		845	2487			411			324	497
Starvation Cap Reductn	0	0		0	0			0			0	0
Spillback Cap Reductn	0	0		0	0			0			0	0
Storage Cap Reductn	0	0		0	0			0			0	0
Reduced v/c Ratio	0.10	0.11		0.02	0.15			0.11			0.05	0.21
Intersection Summary												

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow

Natural Cycle: 45

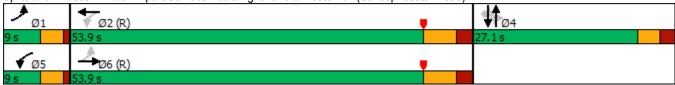
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.45

Intersection Signal Delay: 6.1 Intersection LOS: A Intersection Capacity Utilization 38.2% ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 105: Airport Servuce Road/Light Lane & Route 401 (Schoephoester Road)



	•	4	†	~	/	ţ
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	77	77	†	HOR	N N	↑ ↑
Traffic Volume (vph)	100	250	480	70	260	440
Future Volume (vph)	100	250	480	70	260	440
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	1900	1900	1900	1900	1900	1900
. ,	0	400	12		675	11
Storage Length (ft)				0		
Storage Lanes	1	0		0	1	
Taper Length (ft)	25			0.05	35	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	0.95
Frt		0.850	0.980			
FIt Protected	0.950				0.950	
Satd. Flow (prot)	1711	1459	3243	0	1589	3202
Flt Permitted	0.950				0.394	
Satd. Flow (perm)	1711	1459	3243	0	659	3202
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		190	25			
Link Speed (mph)	40		35			35
Link Distance (ft)	300		1839			990
Travel Time (s)	5.1		35.8			19.3
Peak Hour Factor	0.80	0.87	0.87	0.84	0.94	0.89
Heavy Vehicles (%)	2%	7%	10%	3%	6%	9%
	125	287	552	83	277	494
Adj. Flow (vph)	120	201	332	03	211	494
Shared Lane Traffic (%)	405	007	COF		077	404
Lane Group Flow (vph)	125	287	635	0	277	494
Turn Type	Prot	pt+ov	NA		D.P+P	NA
Protected Phases	4	14	2		1	12
Permitted Phases					2	
Detector Phase	4	4			1	
Switch Phase						
Minimum Initial (s)	9.0		15.0		5.0	
Minimum Split (s)	13.0		20.9		9.0	
Total Split (s)	25.0		39.0		16.0	
Total Split (%)	31.3%		48.8%		20.0%	
Yellow Time (s)	3.0		4.4		3.0	
All-Red Time (s)	1.0		1.5		1.0	
Lost Time Adjust (s)	0.0		0.0		0.0	
Total Lost Time (s)	4.0		5.9		4.0	
Lead/Lag	4.0		Lag		Lead	
Lead-Lag Optimize?					Yes	
	Nana		Yes			
Recall Mode	None	04.4	C-Max		None	F0.0
Act Effct Green (s)	12.1	24.4	45.7		55.9	59.9
Actuated g/C Ratio	0.15	0.30	0.57		0.70	0.75
v/c Ratio	0.48	0.50	0.34		0.50	0.21
Control Delay	36.7	10.1	7.1		7.0	3.6
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	36.7	10.1	7.1		7.0	3.6
LOS	D	В	Α		Α	Α
Approach Delay	18.2		7.1			4.8
Approach LOS	В		Α			Α
			,,			/ \

106: Route 75 & Route 140 (Elm Street) 2050 Future Conditions - Optimized Weekday AM Peak - Without Ped

	•	•	†	<i>></i>	\	↓
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Queue Length 50th (ft)	59	37	120		31	28
Queue Length 95th (ft)	88	74	45		77	59
Internal Link Dist (ft)	220		1759			910
Turn Bay Length (ft)		400			675	
Base Capacity (vph)	449	588	1863		625	2397
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.28	0.49	0.34		0.44	0.21
Intersection Summary						
Area Type:	Other					
Cycle Length: 80						
Actuated Cycle Length: 80)					
Offset: 43 (54%), Reference	ced to phase	2:NBSB,	Start of Y	'ellow		
Natural Cycle: 45						
Control Type: Actuated-Co	oordinated					
Maximum v/c Ratio: 0.50						
Intersection Signal Delay:					tersection	
Intersection Capacity Utiliz	zation 49.0%			IC	U Level c	f Service /
Analysis Period (min) 15						

Splits and Phases: 106: Route 75 & Route 140 (Elm Street)

№ _{Ø1}	↓ ↑ Ø2 (R)	,
16 s	39 s	25 s

Route 20 Corridor Study Tighe & Bond

Intersection							
Int Delay, s/veh	6.3						
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	1	LDIT		41	ሻ	7	
Traffic Vol, veh/h	110	200	60	140	190	40	
Future Vol, veh/h	110	200	60	140	190	40	
	0	200	0	0	190	0	
Conflicting Peds, #/hr							
Sign Control	Free	Free	Free	Free	Stop	Stop	
RT Channelized	-	None	-	None	-	None	
Storage Length	-	-	-	-	0	50	
Veh in Median Storage,		-	-	0	0	-	
Grade, %	0	-	-	0	0	-	
Peak Hour Factor	94	92	66	74	87	58	
Heavy Vehicles, %	10	2	3	3	3	7	
Mvmt Flow	117	217	91	189	218	69	
Major/Minor M	lajor1	1	Major2	<u> </u>	Minor1		
Conflicting Flow All	0	0	334	0	503	226	
Stage 1	-	-	-	-	226	_	
Stage 2	-	-	-	-	277	-	
Critical Hdwy	_	_	4.145	_	6.645	6.305	
Critical Hdwy Stg 1	_	_	-		5.445	-	
Critical Hdwy Stg 2	_	_	_		5.845	_	
Follow-up Hdwy	<u>-</u>		2.2285		3.5285		
Pot Cap-1 Maneuver		- 2		- , -		799	
•	-		1217				
Stage 1	-	-	-	-	808	-	
Stage 2	-	-	-	-	743	-	
Platoon blocked, %	-	-		-			
Mov Cap-1 Maneuver	-	-	1217	-	468	799	
Mov Cap-2 Maneuver	-	-	-	-	468	-	
Stage 1	-	-	-	-	808	-	
Stage 2	-	-	-	-	681	-	
			14/5				
Approach	EB		WB		NB		
HCM Control Delay, s	0		2.8		17		
HCM LOS					С		
N.C 1 /N.Ai N.A 1		UDL 4 N	UDLO	ГОТ	EDD	MDI	
Minor Lane/Major Mvmt	Γ	VBLn11		EBT	EBR	WBL	
Capacity (veh/h)		468	799	-		1217	
HCM Lane V/C Ratio		0.467		-	-	0.075	
HCM Control Delay (s)		19.2	9.9	-	-	8.2	
HCM Lane LOS		С	Α	-	-	Α	
HCM 95th %tile Q(veh)		2.4	0.3	-	-	0.2	

Route 20 Corridor Study
Tighe & Bond
Synchro 11 Report
HCM 6th TWSC

Departure Headway (Hd) Convergence, Y/N

HCM Lane V/C Ratio

HCM Control Delay

HCM Lane LOS

HCM 95th-tile Q

Cap

Service Time

Yes

642

3.668

0.587

16.4

С

3.8

Yes

608

3.968

0.38

12.5

В

1.8

Yes

542

4.653

0.142

10.8

В

0.5

Yes

668

3.429

0.609

16.4

С

4.1

Intersection												
Intersection Delay, s/veh	15.2											
Intersection LOS	С											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			- ↔	
Traffic Vol, veh/h	40	10	100	10	10	10	90	220	0	10	250	60
Future Vol, veh/h	40	10	100	10	10	10	90	220	0	10	250	60
Peak Hour Factor	0.62	0.25	0.79	0.50	0.58	0.25	0.74	0.86	0.92	0.25	0.84	0.86
Heavy Vehicles, %	5	0	6	9	11	0	3	3	50	0	2	3
Mvmt Flow	65	40	127	20	17	40	122	256	0	40	298	70
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Approach	EB			WB			NB			SB		
Opposing Approach	WB			EB			SB			NB		
Opposing Lanes	1			1			1			1		
Conflicting Approach Left	SB			NB			EB			WB		
Conflicting Lanes Left	1			1			1			1		
Conflicting Approach Right	NB			SB			WB			EB		
Conflicting Lanes Right	1			1			1			1		
HCM Control Delay	12.5			10.8			16.4			16.4		
HCM LOS	В			В			С			С		
Lane		NBLn1	EBLn1	WBLn1	SBLn1							
Vol Left, %		29%	27%	33%	3%							
Vol Thru, %		71%	7%	33%	78%							
Vol Right, %		0%	67%	33%	19%							
Sign Control		Stop	Stop	Stop	Stop							
Traffic Vol by Lane		310	150	30	320							
LT Vol		90	40	10	10							
Through Vol		220	10	10	250							
RT Vol		0	100	10	60							
Lane Flow Rate		377	231	77	407							
Geometry Grp		1	1	1	1							
Degree of Util (X)		0.587	0.378	0.143	0.606							
Departure Headway (Hd)		5.595	5.882	6.653	5.355							
0 1/01												

Route 20 Corridor Study
Tighe & Bond
Synchro 11 Report
HCM 6th AWSC

	٠	→	•	•	←	•	4	†	<i>></i>	/	ļ	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4					ሻ	^		ሻ	^	7
Traffic Volume (vph)	130	0	40	0	0	0	70	470	0	0	420	380
Future Volume (vph)	130	0	40	0	0	0	70	470	0	0	420	380
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	12	12	16	12	11	12	12	11	11	11
Storage Length (ft)	0		0	0		0	70		0	80		300
Storage Lanes	0		0	0		0	1		0	1		1
Taper Length (ft)	25			25			45			55		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	0.968	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.850
Flt Protected		0.963					0.950					0.000
Satd. Flow (prot)	0	1948	0	0	0	0	1694	3505	0	1717	3421	1473
Flt Permitted	•	0.963	•	•	· ·	· ·	0.484	0000	•	.,,,,	0121	1110
Satd. Flow (perm)	0	1948	0	0	0	0	863	3505	0	1717	3421	1473
Right Turn on Red	U	10-10	Yes	U	U	Yes	000	0000	Yes	17.17	0121	Yes
Satd. Flow (RTOR)		33	100			100			100			514
Link Speed (mph)		35			25			35			35	014
Link Distance (ft)		394			120			257			652	
Travel Time (s)		7.7			3.3			5.0			12.7	
Peak Hour Factor	0.80	0.92	0.78	0.92	0.92	0.92	0.82	0.96	0.92	0.92	0.90	0.74
Heavy Vehicles (%)	4%	0%	0%	7%	7%	7%	3%	3%	7%	7%	2%	6%
Adj. Flow (vph)	163	0	51	0	0	0	85	490	0	0	467	514
Shared Lane Traffic (%)	100	U	Ji	U	U	U	00	730	U	U	407	514
Lane Group Flow (vph)	0	214	0	0	0	0	85	490	0	0	467	514
Turn Type	Split	NA	U	U	U	U	Perm	NA	U	Perm	NA	Perm
Protected Phases	4	4					1 Ollin	2		1 01111	2	1 01111
Permitted Phases	т.	7					2			2	_	2
Detector Phase	4	4					2	2		2	2	2
Switch Phase	т.	7								_	_	_
Minimum Initial (s)	7.0	7.0					15.0	15.0		15.0	15.0	15.0
Minimum Split (s)	24.2	24.2					20.4	20.4		20.4	20.4	20.4
Total Split (s)	25.0	25.0					45.0	45.0		45.0	45.0	45.0
Total Split (%)	35.7%	35.7%					64.3%	64.3%		64.3%	64.3%	64.3%
Yellow Time (s)	3.0	3.0					4.1	4.1		4.1	4.1	4.1
All-Red Time (s)	2.2	2.2					1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	۷.۷	0.0					0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)		5.2					5.1	5.1		5.1	5.1	5.1
Lead/Lag		0.2					0.1	0.1		0.1	0.1	0.1
Lead-Lag Optimize?												
Recall Mode	None	None					C-Max	C-Max		C-Max	C-Max	C-Max
Act Effct Green (s)	140110	11.3					48.4	48.4		O Max	48.4	48.4
Actuated g/C Ratio		0.16					0.69	0.69			0.69	0.69
v/c Ratio		0.63					0.14	0.20			0.20	0.44
Control Delay		30.8					5.3	4.6			6.0	6.3
Queue Delay		0.0					0.0	0.0			0.0	0.0
Total Delay		30.8					5.3	4.6			6.0	6.3
LOS		00.0 C					3.5 A	4.0 A			Α	0.5 A
Approach Delay		30.8					Α	4.7			6.1	^
Approach LOS		30.6 C						4.7 A			Α	
Approach LOO		U						^			^	

Route 20 Corridor Study Tighe & Bond

		_										
	۶	→	•	•	+	4	4	†	/	/	↓	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)		73					10	32			28	24
Queue Length 95th (ft)		126					28	62			74	64
Internal Link Dist (ft)		314			40			177			572	
Turn Bay Length (ft)							70					300
Base Capacity (vph)		574					596	2423			2365	1176
Starvation Cap Reductn		0					0	0			0	0
Spillback Cap Reductn		0					0	0			0	0
Storage Cap Reductn		0					0	0			0	0
Reduced v/c Ratio		0.37					0.14	0.20			0.20	0.44
Intersection Summary												
Area Type:	Other											
Cycle Length: 70												
Actuated Cycle Length: 70)											
Offset: 0 (0%), Reference	d to phase 2:	NBSB, St	art of Yell	ow								
Natural Cycle: 50												

Intersection Capacity Utilization 48.0% Analysis Period (min) 15

Maximum v/c Ratio: 0.63 Intersection Signal Delay: 8.6

Control Type: Actuated-Coordinated

Splits and Phases: 101: Route 75 & Route 20 EB Ramps/Private Driveway

₩ Ø2 (R)
45 s
25 s

Intersection LOS: A

ICU Level of Service A

	۶	→	•	€	+	•	•	†	~	/	+	-√
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					ર્ન	7	ሻ	^			^	7
Traffic Volume (vph)	0	0	0	60	0	650	30	560	0	0	740	120
Future Volume (vph)	0	0	0	60	0	650	30	560	0	0	740	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	14	12	12	11	12	11	12	12	11	11	11
Storage Length (ft)	0		0	0		190	75		0	0		90
Storage Lanes	0		0	0		1	1		0	0		1
Taper Length (ft)	25			25			40		•	25		•
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	1.00	1.00	1.00	0.850	1.00	0.00	1.00	1.00	0.00	0.850
Flt Protected					0.950	0.000	0.950					0.000
Satd. Flow (prot)	0	0	0	0	1694	1509	1711	3505	0	0	3355	1487
Flt Permitted	V	•	· ·	J	0.950	1000	0.276	0000	J	J	0000	1101
Satd. Flow (perm)	0	0	0	0	1694	1509	497	3505	0	0	3355	1487
Right Turn on Red	U	U	Yes	0	1004	Yes	401	0000	Yes	0	0000	Yes
Satd. Flow (RTOR)			100			133			100			162
Link Speed (mph)		30			30	100		35			35	102
Link Distance (ft)		591			524			652			2293	
Travel Time (s)		13.4			11.9			12.7			44.7	
Peak Hour Factor	0.92	0.92	0.92	0.76	0.92	0.95	0.84	0.96	0.92	0.92	0.96	0.68
Heavy Vehicles (%)	7%	7%	7%	3%	0.32	7%	2%	3%	7%	7%	4%	5%
Adj. Flow (vph)	0	0	0	79	0 70	684	36	583	0	0	771	176
Shared Lane Traffic (%)	U	U	U	13	U	004	30	303	U	U	111	170
Lane Group Flow (vph)	0	0	0	0	79	684	36	583	0	0	771	176
Turn Type	U	U	U	Split	NA	Prot	Perm	NA	U	U	NA	Perm
Protected Phases				4	4	4	1 01111	2			2	1 01111
Permitted Phases				• • • • • • • • • • • • • • • • • • •		•	2	_			_	2
Detector Phase				4	4	4	2	2			2	2
Switch Phase				• • • • • • • • • • • • • • • • • • •		•	_	_			_	_
Minimum Initial (s)				7.0	7.0	7.0	15.0	15.0			15.0	15.0
Minimum Split (s)				12.1	12.1	12.1	20.4	20.4			20.4	20.4
Total Split (s)				39.0	39.0	39.0	31.0	31.0			31.0	31.0
Total Split (%)				55.7%	55.7%	55.7%	44.3%	44.3%			44.3%	44.3%
Yellow Time (s)				3.0	3.0	3.0	4.4	4.4			4.4	4.4
All-Red Time (s)				2.1	2.1	2.1	1.0	1.0			1.0	1.0
Lost Time Adjust (s)				<u></u>	0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)					5.1	5.1	5.4	5.4			5.4	5.4
Lead/Lag					0.1	0.1	0.1	0.1			0.1	0.1
Lead-Lag Optimize?												
Recall Mode				None	None	None	C-Max	C-Max			C-Max	C-Max
Act Effct Green (s)				110110	30.9	30.9	28.6	28.6			28.6	28.6
Actuated g/C Ratio					0.44	0.44	0.41	0.41			0.41	0.41
v/c Ratio					0.11	0.92	0.18	0.41			0.56	0.25
Control Delay					10.5	34.6	16.7	15.9			18.8	4.6
Queue Delay					0.0	0.0	0.0	0.0			0.0	0.0
Total Delay					10.5	34.6	16.7	15.9			18.8	4.6
LOS					10.5 B	34.0 C	В	13.3 B			10.0 B	4.0 A
Approach Delay					32.1	U	D	15.9			16.2	^
Approach LOS					32.1 C			15.9 B			10.2 B	
Approach LOS					U			D			D	

102: Route 75 & Route 20 WB On Ramp/Route 20 WB Off Ramp 2050 Future Conditions - Optimized Weekday PM peak - Without Ped

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)					17	201	12	110			140	4
Queue Length 95th (ft)					39	#423	34	157			196	18
Internal Link Dist (ft)		511			444			572			2213	
Turn Bay Length (ft)						190	75					90
Base Capacity (vph)					820	799	202	1429			1368	702
Starvation Cap Reductn					0	0	0	0			0	0
Spillback Cap Reductn					0	0	0	0			0	0
Storage Cap Reductn					0	0	0	0			0	0
Reduced v/c Ratio					0.10	0.86	0.18	0.41			0.56	0.25
Intersection Summary												

Area Type: Other

Cycle Length: 70

Actuated Cycle Length: 70

Offset: 1 (1%), Referenced to phase 2:NBSB, Start of Yellow

Natural Cycle: 55

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.92

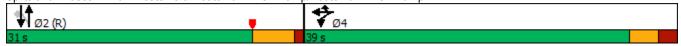
Intersection Signal Delay: 21.3 Intersection LOS: C Intersection Capacity Utilization 64.5% ICU Level of Service C

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 102: Route 75 & Route 20 WB On Ramp/Route 20 WB Off Ramp



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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4T>		ሻ	† }	
Traffic Volume (vph)	10	10	10	100	10	30	10	890	130	30	650	10
Future Volume (vph)	10	10	10	100	10	30	10	890	130	30	650	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	15	12	12	16	12	12	12	12	12	12	12
Storage Length (ft)	0		0	0		0	0		0	415	· <u>-</u>	0
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (ft)	25			25			25			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	1.00	0.95	0.95
Frt	1.00	0.951	1.00	1.00	0.973	1.00	0.00	0.980	0.00	1.00	0.996	0.00
Flt Protected		0.984			0.971			0.998		0.950	0.000	
Satd. Flow (prot)	0	1956	0	0	1986	0	0	3354	0	1752	3446	0
Flt Permitted	•	0.871	•		0.803			0.899	•	0.200	0110	
Satd. Flow (perm)	0	1731	0	0	1643	0	0	3021	0	369	3446	0
Right Turn on Red	U	1701	Yes	U	10-10	Yes	0	0021	Yes	000	0110	Yes
Satd. Flow (RTOR)		30	103		17	103		26	103		5	103
Link Speed (mph)		25			30			35			35	
Link Distance (ft)		250			258			2293			1019	
Travel Time (s)		6.8			5.9			44.7			19.9	
Peak Hour Factor	0.38	0.38	0.33	0.80	0.25	0.73	0.25	0.93	0.86	0.91	0.86	0.50
Heavy Vehicles (%)	0.30	0.30	0.33	4%	0.23	0.73	0.23	6%	2%	3%	4%	17%
Adj. Flow (vph)	26	26	30	125	40	41	40	957	151	33	756	20
Shared Lane Traffic (%)	20	20	30	120	40	41	40	931	101	JJ	750	20
Lane Group Flow (vph)	0	82	0	0	206	0	0	1148	0	33	776	0
Turn Type	Perm	NA	U	Perm	NA	U	Perm	NA	U	D.P+P	NA	U
Protected Phases	r emi	4		r C illi	4		r eiiii	2		1	12	
Permitted Phases	4	4		4	4		2	2		2	1 2	
Detector Phase	4	4		4	4					1		
Switch Phase	4	4		7	4					!		
Minimum Initial (s)	5.0	5.0		5.0	5.0		15.0	15.0		5.0		
Minimum Split (s)	9.5	9.5		9.5	9.5		21.5	21.5		9.0		
Total Split (s)	31.0	31.0		31.0	31.0		40.0	40.0		9.0		
Total Split (%)	38.8%	38.8%		38.8%	38.8%		50.0%	50.0%		11.3%		
Yellow Time (s)	3.0	3.0		3.0	3.0		4.4	4.4		3.0		
All-Red Time (s)	1.5	1.5		1.5	1.5		2.1	2.1		1.0		
Lost Time Adjust (s)	1.0	0.0		1.5	0.0		۷.۱	0.0		0.0		
Total Lost Time (s)		4.5			4.5			6.5		4.0		
Lead/Lag		4.5			4.5		Lag	Lag		Lead		
Lead-Lag Optimize?							Yes	Yes		Yes		
Recall Mode	None	None		None	None		C-Max	C-Max		None		
Act Effct Green (s)	NOHE	13.4		NOHE	13.4		U-IVIAX	50.2		55.7	58.1	
Actuated g/C Ratio		0.17			0.17			0.63		0.70	0.73	
v/c Ratio		0.17			0.17			0.60		0.70	0.73	
		20.4			41.7			12.4		2.6	1.8	
Control Delay												
Queue Delay		0.0			0.0			0.0		0.0	0.0	
Total Delay		20.4 C			41.7			12.4		2.6	1.8	
LOS Approach Delay					D			B		Α	A	
Approach LOC		20.4			41.7			12.4			1.8	
Approach LOS		С			D			В			Α	

Route 20 Corridor Study Tighe & Bond

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)		23			90			181		1	14	
Queue Length 95th (ft)		15			29			302		m4	24	
Internal Link Dist (ft)		170			178			2213			939	
Turn Bay Length (ft)										415		
Base Capacity (vph)		593			555			1904		343	2503	
Starvation Cap Reductn		0			0			0		0	0	
Spillback Cap Reductn		0			0			0		0	0	
Storage Cap Reductn		0			0			0		0	0	
Reduced v/c Ratio		0.14			0.37			0.60		0.10	0.31	
Intersection Summary												
Area Type:	Other											

Cycle Length: 80

Actuated Cycle Length: 80

Offset: 57 (71%), Referenced to phase 2:NBSB, Start of Yellow

Natural Cycle: 60

Control Type: Actuated-Coordinated

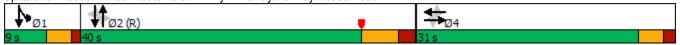
Maximum v/c Ratio: 0.71

Intersection Signal Delay: 11.6 Intersection LOS: B Intersection Capacity Utilization 59.6% ICU Level of Service B

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 103: Route 75 & LAZFly Driveway/Halfway House Road



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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ	ર્ન	7	ሻ	ĵ»		ሻ	∱ }		ሻ	^	7
Traffic Volume (vph)	250	20	200	10	20	20	310	590	20	10	500	150
Future Volume (vph)	250	20	200	10	20	20	310	590	20	10	500	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	10	10	10	12	12	12	12	12	12	12
Storage Length (ft)	0		220	200		150	450	. =	0	0		400
Storage Lanes	1		1	0		1	1		0	1		1
Taper Length (ft)	25		•	25		•	50			25		
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Frt	0.00	0.00	0.850	1.00	0.932	1.00	1.00	0.994	0.00	1.00	0.00	0.850
Flt Protected	0.950	0.961	0.000	0.950	0.002		0.950	0.001		0.950		0.000
Satd. Flow (prot)	1609	1637	1409	1532	1653	0	1703	3328	0	1805	3438	1568
Flt Permitted	0.950	0.961	1 100	0.950	1000	J	0.950	0020	J	0.950	0100	1000
Satd. Flow (perm)	1609	1637	1409	1532	1653	0	1703	3328	0	1805	3438	1568
Right Turn on Red	1000	1007	Yes	1002	1000	Yes	1700	0020	Yes	1000	0100	Yes
Satd. Flow (RTOR)			233		28	100		6	100			251
Link Speed (mph)		35	200		25			35			35	201
Link Distance (ft)		466			418			1019			1839	
Travel Time (s)		9.1			11.4			19.9			35.8	
Peak Hour Factor	0.86	0.69	0.78	0.88	0.58	0.71	0.88	0.96	0.75	0.50	0.89	0.74
Heavy Vehicles (%)	3%	0%	7%	10%	0%	0%	6%	8%	4%	0%	5%	3%
Adj. Flow (vph)	291	29	256	11	34	28	352	615	27	20	562	203
Shared Lane Traffic (%)	45%	20	200		0-1	20	002	010	LI	20	002	200
Lane Group Flow (vph)	160	160	256	11	62	0	352	642	0	20	562	203
Turn Type	Split	NA	pt+ov	Split	NA	•	Prot	NA		Prot	NA	Free
Protected Phases	8	8	18	4	4		1	6		5	2	1100
Permitted Phases			. •	•	•		•	•			-	Free
Detector Phase	8	8	18	4	4		1	6		5	2	
Switch Phase			. •	•	•		•	•			-	
Minimum Initial (s)	7.0	7.0		5.0	5.0		5.0	15.0		5.0	15.0	
Minimum Split (s)	12.7	12.7		9.8	9.8		10.1	20.8		9.0	20.6	
Total Split (s)	22.0	22.0		10.0	10.0		18.0	30.0		18.0	30.0	
Total Split (%)	27.5%	27.5%		12.5%	12.5%		22.5%	37.5%		22.5%	37.5%	
Yellow Time (s)	3.0	3.0		3.3	3.3		3.0	4.4		3.0	4.4	
All-Red Time (s)	2.7	2.7		1.5	1.5		2.1	1.4		1.0	1.2	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.7	5.7		4.8	4.8		5.1	5.8		4.0	5.6	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Act Effct Green (s)	12.1	12.1	41.1	5.9	5.9		23.3	43.6		5.5	19.5	80.0
Actuated g/C Ratio	0.15	0.15	0.51	0.07	0.07		0.29	0.54		0.07	0.24	1.00
v/c Ratio	0.66	0.65	0.31	0.10	0.42		0.71	0.35		0.16	0.67	0.13
Control Delay	44.3	43.5	3.7	36.5	31.7		32.3	10.0		35.0	37.7	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	44.3	43.5	3.7	36.5	31.7		32.3	10.0		35.0	37.7	0.2
LOS	D	D	A	D	C		C	В		C	D	A
Approach Delay		26.1			32.4			17.9			27.9	
Approach LOS		С			С			В			C	

104: Route 75 & Route 401 (Schoephoester Road)/National Road 2050 Future Conditions - Optimized Weekday PM peak - Without Ped

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	80	80	5	5	16		132	53		10	154	0
Queue Length 95th (ft)	129	100	31	21	29		#367	218		18	176	0
Internal Link Dist (ft)		386			338			939			1759	
Turn Bay Length (ft)			220	200			450					400
Base Capacity (vph)	327	333	823	114	149		495	1814		315	1048	1568
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	0
Reduced v/c Ratio	0.49	0.48	0.31	0.10	0.42		0.71	0.35		0.06	0.54	0.13

Intersection Summary

Area Type: Other

Cycle Length: 80

Actuated Cycle Length: 80

Offset: 12 (15%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow

Natural Cycle: 65

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.71

Intersection Signal Delay: 23.5

Intersection LOS: C
ICU Level of Service B

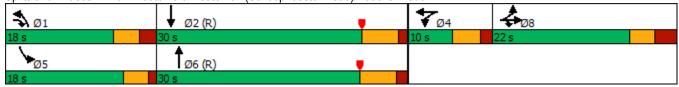
Intersection Capacity Utilization 58.8%

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 104: Route 75 & Route 401 (Schoephoester Road)/National Road



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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	*	↑ ↑		ሻ	∱ }			4			ર્ન	7
Traffic Volume (vph)	90	430	20	10	440	30	30	10	20	20	10	130
Future Volume (vph)	90	430	20	10	440	30	30	10	20	20	10	130
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	11	11	12	15	12	12	14	14
Storage Length (ft)	170		0	120		0	0		0	0		200
Storage Lanes	1		0	1		0	0		0	0		1
Taper Length (ft)	40			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.993			0.986			0.959				0.850
Flt Protected	0.950			0.950				0.982			0.969	
Satd. Flow (prot)	1787	3551	0	1745	3350	0	0	1968	0	0	1964	1723
Flt Permitted	0.450			0.440				0.850			0.688	
Satd. Flow (perm)	847	3551	0	808	3350	0	0	1704	0	0	1394	1723
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8			19			23				186
Link Speed (mph)		35			35			25			30	
Link Distance (ft)		624			466			420			346	
Travel Time (s)		12.2			9.1			11.5			7.9	
Peak Hour Factor	0.75	0.80	0.75	0.42	0.90	0.58	0.67	0.25	0.54	0.46	0.42	0.70
Heavy Vehicles (%)	1%	1%	0%	0%	3%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	120	538	27	24	489	52	45	40	37	43	24	186
Shared Lane Traffic (%)												
Lane Group Flow (vph)	120	565	0	24	541	0	0	122	0	0	67	186
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	Perm
Protected Phases	1	6		5	2			4			4	
Permitted Phases	6			2			4			4		4
Detector Phase	1	6		5	2		4	4		4	4	4
Switch Phase												
Minimum Initial (s)	5.0	15.0		5.0	15.0		7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	9.0	21.6		9.0	21.6		12.1	12.1		12.1	12.1	12.1
Total Split (s)	9.0	53.9		9.0	53.9		27.1	27.1		27.1	27.1	27.1
Total Split (%)	10.0%	59.9%		10.0%	59.9%		30.1%	30.1%		30.1%	30.1%	30.1%
Yellow Time (s)	3.0	4.4		3.0	4.4		3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	1.0	2.2		1.0	2.2		2.1	2.1		2.1	2.1	2.1
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	0.0
Total Lost Time (s)	4.0	6.6		4.0	6.6			5.1			5.1	5.1
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	None
Act Effct Green (s)	66.7	58.0		66.4	58.0			10.2			10.2	10.2
Actuated g/C Ratio	0.74	0.64		0.74	0.64			0.11			0.11	0.11
v/c Ratio	0.17	0.25		0.04	0.25			0.58			0.43	0.52
Control Delay	3.3	7.5		2.9	7.4			40.9			44.7	11.0
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	0.0
Total Delay	3.3	7.5		2.9	7.4			40.9			44.7	11.0
LOS	A	A		A	Α			D			D	В
Approach Delay	, ,	6.8		, ,	7.2			40.9			19.9	
Approach LOS		A			Α			D			В	
		, ,			, \							

105: Airport Servuce Road/Light Lane & Route 401 (Schoephoester Road) 2050 Future Conditions - Optimized Weekday PM peak - Without Ped

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	12	61		2	57			54			36	0
Queue Length 95th (ft)	24	91		4	101			18			32	22
Internal Link Dist (ft)		544			386			340			266	
Turn Bay Length (ft)	170			120								200
Base Capacity (vph)	692	2289		657	2164			433			340	561
Starvation Cap Reductn	0	0		0	0			0			0	0
Spillback Cap Reductn	0	0		0	0			0			0	0
Storage Cap Reductn	0	0		0	0			0			0	0
Reduced v/c Ratio	0.17	0.25		0.04	0.25			0.28			0.20	0.33
Intersection Summary												
Area Type:	Other											

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow

Natural Cycle: 45

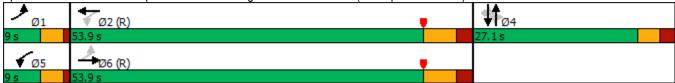
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.58

Intersection Signal Delay: 11.5 Intersection LOS: B Intersection Capacity Utilization 41.3% ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 105: Airport Servuce Road/Light Lane & Route 401 (Schoephoester Road)



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Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	*	7	†		ኝ	^
Traffic Volume (vph)	150	230	670	200	340	550
Future Volume (vph)	150	230	670	200	340	550
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
	1900	1900	1900	1900		
Lane Width (ft)			IZ		10	11
Storage Length (ft)	0	400		0	675	
Storage Lanes	1	0		0	1	
Taper Length (ft)	25				35	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	0.95
Frt		0.850	0.960			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1745	1473	3343	0	1620	3355
Flt Permitted	0.950				0.146	
Satd. Flow (perm)	1745	1473	3343	0	249	3355
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		89	78	. 50		
Link Speed (mph)	40	30	35			35
Link Distance (ft)	300		1839			990
	5.1		35.8			19.3
Travel Time (s)		0.00		0.74	0.07	
Peak Hour Factor	0.89	0.89	0.86	0.71	0.87	0.91
Heavy Vehicles (%)	0%	6%	5%	0%	4%	4%
Adj. Flow (vph)	169	258	779	282	391	604
Shared Lane Traffic (%)						
Lane Group Flow (vph)	169	258	1061	0	391	604
Turn Type	Prot	pt+ov	NA		D.P+P	NA
Protected Phases	4	14	2		1	12
Permitted Phases					2	
Detector Phase	4	4			1	
Switch Phase						
Minimum Initial (s)	9.0		15.0		5.0	
Minimum Split (s)	13.0		20.9		9.0	
Total Split (s)	25.0		39.0		16.0	
,						
Total Split (%)	31.3%		48.8%		20.0%	
Yellow Time (s)	3.0		4.4		3.0	
All-Red Time (s)	1.0		1.5		1.0	
Lost Time Adjust (s)	0.0		0.0		0.0	
Total Lost Time (s)	4.0		5.9		4.0	
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None		C-Max		None	
Act Effct Green (s)	13.4	37.0	33.1		54.6	58.6
Actuated g/C Ratio	0.17	0.46	0.41		0.68	0.73
v/c Ratio	0.58	0.35	0.74		0.77	0.75
Control Delay	38.1	10.4	22.4		29.3	4.2
Queue Delay	0.0					
,		0.0	0.0		0.0	0.0
Total Delay	38.1	10.4	22.4		29.3	4.2
LOS	D	В	С		С	A
Approach Delay	21.4		22.4 C			14.1
Approach LOS	С					В

2050 Future Conditions - Optimized Weekday PM peak - Without Ped

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Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Queue Length 50th (ft)	79	49	272		114	40
Queue Length 95th (ft)	127	99	125		#294	78
Internal Link Dist (ft)	220		1759			910
Turn Bay Length (ft)		400			675	
Base Capacity (vph)	458	723	1428		505	2457
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.37	0.36	0.74		0.77	0.25
Intersection Summary						

Area Type: Other

Cycle Length: 80 Actuated Cycle Length: 80

Offset: 43 (54%), Referenced to phase 2:NBSB, Start of Yellow

Natural Cycle: 55

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.77 Intersection Signal Delay: 18.9

Intersection LOS: B ICU Level of Service B

Intersection Capacity Utilization 63.6%

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 106: Route 75 & Route 140 (Elm Street)



Intersection							
Int Delay, s/veh	7.8						
Movement	EBT	EBR	WBL	WBT	NBL	NBR	ľ
Lane Configurations	\$			414	ሻ	7	
Traffic Vol, veh/h	210	300	60	150	210	60	
Future Vol, veh/h	210	300	60	150	210	60	
Conflicting Peds, #/hr	0	0	0	0	0	0	
Sign Control	Free	Free	Free	Free	Stop	Stop	
RT Channelized	_	None	-		-	None	
Storage Length	-	-	-	-	0	50	
Veh in Median Storage	e, # 0	-	-	0	0	-	
Grade, %	0	-	_	0	0	-	
Peak Hour Factor	94	91	66	72	89	84	
Heavy Vehicles, %	2	2	0	5	2	0	
Mvmt Flow	223	330	91	208	236	71	
WWW.CT IOW			•	200	200		
		_					
	Major1		Major2		Minor1		
Conflicting Flow All	0	0	553	0	674	388	
Stage 1	-	-	-	-	388	-	
Stage 2	-	-	-	-	286	-	
Critical Hdwy	-	-	4.1	-	6.63	6.2	
Critical Hdwy Stg 1	-	-	-	-	5.43	-	
Critical Hdwy Stg 2	-	-	-	-	5.83	-	
Follow-up Hdwy	-	-	2.2	-	3.519	3.3	
Pot Cap-1 Maneuver	-	-	1027	-	404	665	
Stage 1	-	-	-	-	685	-	
Stage 2	-	-	-	-	738	-	
Platoon blocked, %	-	-		-			
Mov Cap-1 Maneuver	-	-	1027	-	364	665	
Mov Cap-2 Maneuver	_	_	_	_	364	-	
Stage 1	_	_	_	_	685	_	
Stage 2	_	_	_	_	664	_	
2.0.30 2					301		
Approach	EB		WB		NB		
HCM Control Delay, s	0		2.8		26.7		
HCM LOS					D		
Minor Lane/Major Mvm	nt !	NBLn11	NBL n2	EBT	EBR	WBL	
Capacity (veh/h)		364	665			1027	
HCM Lane V/C Ratio		0.648		_		0.089	
HCM Control Delay (s)		31.4		_	_	8.8	
HCM Lane LOS		D D	В	_	_	Α	
HCM 95th %tile Q(veh)	4.3	0.4	_	_	0.3	
TOW JOHN JOHN GUVEN	J	7.0	0.7			0.0	

Route 20 Corridor Study
Tighe & Bond
Synchro 11 Report
HCM 6th TWSC

Intersection												
Intersection Delay, s/veh	24.9											
Intersection LOS	С											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			4	
Traffic Vol, veh/h	80	20	140	20	20	10	110	290	10	10	300	60
Future Vol, veh/h	80	20	140	20	20	10	110	290	10	10	300	60
Peak Hour Factor	0.86	0.37	0.86	0.69	0.43	0.50	0.88	0.97	0.50	0.50	0.87	0.64
Heavy Vehicles, %	0	4	2	0	0	0	3	1	0	0	2	1
Mvmt Flow	93	54	163	29	47	20	125	299	20	20	345	94
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Approach	EB			WB			NB			SB		
Opposing Approach	WB			EB			SB			NB		
Opposing Lanes	1			1			1			1		
Conflicting Approach Left	SB			NB			EB			WB		
Conflicting Lanes Left	1			1			1			1		
Conflicting Approach Right	NB			SB			WB			EB		
Conflicting Lanes Right	1			1			1			1		
HCM Control Delay	18.1			12.7			28.8			28.3		
HCM LOS	С			В			D			D		
Lane		NBLn1	EBLn1	WBLn1	SBLn1							
Lane Vol Left, %		NBLn1 27%	EBLn1 33%	WBLn1 40%	SBLn1 3%							
Vol Left, %		27%	33%	40%	3%							
Vol Left, % Vol Thru, %		27% 71%	33% 8%	40% 40%	3% 81% 16% Stop							
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane		27% 71% 2% Stop 410	33% 8% 58% Stop 240	40% 40% 20% Stop 50	3% 81% 16% Stop 370							
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol		27% 71% 2% Stop 410 110	33% 8% 58% Stop 240 80	40% 40% 20% Stop 50 20	3% 81% 16% Stop 370							
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol		27% 71% 2% Stop 410 110 290	33% 8% 58% Stop 240 80 20	40% 40% 20% Stop 50 20	3% 81% 16% Stop 370 10							
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol		27% 71% 2% Stop 410 110 290 10	33% 8% 58% Stop 240 80 20 140	40% 40% 20% Stop 50 20 20	3% 81% 16% Stop 370 10 300 60							
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate		27% 71% 2% Stop 410 110 290 10 444	33% 8% 58% Stop 240 80 20 140 310	40% 40% 20% Stop 50 20 20 10	3% 81% 16% Stop 370 10 300 60 459							
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp		27% 71% 2% Stop 410 110 290 10 444	33% 8% 58% Stop 240 80 20 140 310	40% 40% 20% Stop 50 20 20 10 95	3% 81% 16% Stop 370 10 300 60 459							
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X)		27% 71% 2% Stop 410 110 290 10 444 1 0.783	33% 8% 58% Stop 240 80 20 140 310 1	40% 40% 20% Stop 50 20 20 10 95 1	3% 81% 16% Stop 370 10 300 60 459 1							
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd)		27% 71% 2% Stop 410 110 290 10 444 1 0.783 6.35	33% 8% 58% Stop 240 80 20 140 310 1 0.568 6.604	40% 40% 20% Stop 50 20 20 10 95 1 0.204 7.703	3% 81% 16% Stop 370 10 300 60 459 1 0.785 6.162							
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd) Convergence, Y/N		27% 71% 2% Stop 410 110 290 10 444 1 0.783 6.35 Yes	33% 8% 58% Stop 240 80 20 140 310 1 0.568 6.604 Yes	40% 40% 20% Stop 50 20 20 10 95 1 0.204 7.703 Yes	3% 81% 16% Stop 370 10 300 60 459 1 0.785 6.162 Yes							
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd) Convergence, Y/N Cap		27% 71% 2% Stop 410 110 290 10 444 1 0.783 6.35 Yes 568	33% 8% 58% Stop 240 80 20 140 310 1 0.568 6.604 Yes 542	40% 40% 20% Stop 50 20 20 10 95 1 0.204 7.703 Yes 469	3% 81% 16% Stop 370 10 300 60 459 1 0.785 6.162 Yes 582							
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd) Convergence, Y/N Cap Service Time		27% 71% 2% Stop 410 110 290 10 444 1 0.783 6.35 Yes 568 4.431	33% 8% 58% Stop 240 80 20 140 310 1 0.568 6.604 Yes 542 4.687	40% 40% 20% Stop 50 20 20 10 95 1 0.204 7.703 Yes 469 5.703	3% 81% 16% Stop 370 10 300 60 459 1 0.785 6.162 Yes 582 4.242							
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd) Convergence, Y/N Cap Service Time HCM Lane V/C Ratio		27% 71% 2% Stop 410 110 290 10 444 1 0.783 6.35 Yes 568 4.431 0.782	33% 8% 58% Stop 240 80 20 140 310 1 0.568 6.604 Yes 542 4.687 0.572	40% 40% 20% Stop 50 20 20 10 95 1 0.204 7.703 Yes 469 5.703 0.203	3% 81% 16% Stop 370 10 300 60 459 1 0.785 6.162 Yes 582 4.242 0.789							
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd) Convergence, Y/N Cap Service Time HCM Lane V/C Ratio HCM Control Delay		27% 71% 2% Stop 410 110 290 10 444 1 0.783 6.35 Yes 568 4.431 0.782 28.8	33% 8% 58% Stop 240 80 20 140 310 1 0.568 6.604 Yes 542 4.687 0.572	40% 40% 20% Stop 50 20 20 10 95 1 0.204 7.703 Yes 469 5.703 0.203 12.7	3% 81% 16% Stop 370 10 300 60 459 1 0.785 6.162 Yes 582 4.242 0.789 28.3							
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd) Convergence, Y/N Cap Service Time HCM Lane V/C Ratio		27% 71% 2% Stop 410 110 290 10 444 1 0.783 6.35 Yes 568 4.431 0.782	33% 8% 58% Stop 240 80 20 140 310 1 0.568 6.604 Yes 542 4.687 0.572	40% 40% 20% Stop 50 20 20 10 95 1 0.204 7.703 Yes 469 5.703 0.203	3% 81% 16% Stop 370 10 300 60 459 1 0.785 6.162 Yes 582 4.242 0.789							

Route 20 Corridor Study
Tighe & Bond
Synchro 11 Report
HCM 6th AWSC

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4					ሻ	^		ች	^	7
Traffic Volume (vph)	83	0	20	0	0	0	70	243	0	0	363	338
Future Volume (vph)	83	0	20	0	0	0	70	243	0	0	363	338
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	12	12	16	12	11	12	12	11	11	11
Storage Length (ft)	0		0	0		0	70		0	80		300
Storage Lanes	0		0	0		0	1		0	1		1
Taper Length (ft)	25			25			45			55		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt		0.970										0.850
Flt Protected		0.962					0.950					
Satd. Flow (prot)	0	1878	0	0	0	0	1662	3438	0	1717	3292	1346
FIt Permitted		0.962					0.508					
Satd. Flow (perm)	0	1878	0	0	0	0	889	3438	0	1717	3292	1346
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		33										360
Link Speed (mph)		35			25			35			35	
Link Distance (ft)		394			120			257			652	
Travel Time (s)		7.7			3.3			5.0			12.7	
Peak Hour Factor	0.71	0.92	0.60	0.92	0.92	0.92	0.88	0.85	0.92	0.92	0.87	0.94
Heavy Vehicles (%)	9%	7%	0%	7%	7%	7%	5%	5%	7%	7%	6%	16%
Adj. Flow (vph)	117	0	33	0	0	0	80	286	0	0	417	360
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	150	0	0	0	0	80	286	0	0	417	360
Turn Type	Split	NA					Perm	NA		Perm	NA	Perm
Protected Phases	4	4						2			2	
Permitted Phases							2			2		2
Detector Phase	4	4					2	2		2	2	2
Switch Phase												
Minimum Initial (s)	7.0	7.0					15.0	15.0		15.0	15.0	15.0
Minimum Split (s)	24.2	24.2					20.4	20.4		20.4	20.4	20.4
Total Split (s)	25.0	25.0					45.0	45.0		45.0	45.0	45.0
Total Split (%)	35.7%	35.7%					64.3%	64.3%		64.3%	64.3%	64.3%
Yellow Time (s)	3.0	3.0					4.1	4.1		4.1	4.1	4.1
All-Red Time (s)	2.2	2.2					1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)		0.0					0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)		5.2					5.1	5.1		5.1	5.1	5.1
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None					C-Max	C-Max		C-Max	C-Max	C-Max
Act Effct Green (s)		10.6					52.6	52.6			52.6	52.6
Actuated g/C Ratio		0.15					0.75	0.75			0.75	0.75
v/c Ratio		0.48					0.12	0.11			0.17	0.33
Control Delay		25.0					5.3	4.1			3.1	1.3
Queue Delay		0.0					0.0	0.0			0.0	0.0
Total Delay		25.0					5.3	4.1			3.1	1.3
LOS		С					Α	Α			Α	A
Approach Delay		25.0						4.3			2.3	
Approach LOS		С						Α			Α	

	٠	→	•	•	+	•	•	†	<i>></i>	/	+	✓
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)		48					8	15			19	2
Queue Length 95th (ft)		83					33	40			35	15
Internal Link Dist (ft)		314			40			177			572	
Turn Bay Length (ft)							70					300
Base Capacity (vph)		554					667	2581			2472	1100
Starvation Cap Reductn		0					0	0			0	0
Spillback Cap Reductn		0					0	0			0	0
Storage Cap Reductn		0					0	0			0	0
Reduced v/c Ratio		0.27					0.12	0.11			0.17	0.33
Intersection Summary												
Area Type:	Other											
Cycle Length: 70												
Actuated Cycle Length: 70												

Natural Cycle: 45

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.48

Intersection Signal Delay: 5.5 Intersection LOS: A Intersection Capacity Utilization 43.7% ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 101: Route 75 & Route 20 EB Ramps/Private Driveway

Offset: 0 (0%), Referenced to phase 2:NBSB, Start of Yellow



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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					ર્ન	7	ሻ	^			^	7
Traffic Volume (vph)	0	0	0	40	10	545	40	296	0	0	661	110
Future Volume (vph)	0	0	0	40	10	545	40	296	0	0	661	110
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	14	12	12	11	12	11	12	12	11	11	11
Storage Length (ft)	0		0	0		190	75		0	0		90
Storage Lanes	0		0	0		1	1		0	0		1
Taper Length (ft)	25			25		•	40			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	1.00	1.00	1.00	0.850	1.00	0.00	1.00	1.00	0.00	0.850
Flt Protected					0.972	0.000	0.950					0.000
Satd. Flow (prot)	0	0	0	0	1662	1468	1662	3406	0	0	3144	1382
Flt Permitted	· ·	v	J	V	0.972	1100	0.374	0100	J	· ·	VIII	1002
Satd. Flow (perm)	0	0	0	0	1662	1468	654	3406	0	0	3144	1382
Right Turn on Red	U	· ·	Yes	U	1002	Yes	004	0400	Yes	U	0177	Yes
Satd. Flow (RTOR)			100			460			100			133
Link Speed (mph)		30			30	700		35			35	100
Link Distance (ft)		591			524			652			2293	
Travel Time (s)		13.4			11.9			12.7			44.7	
Peak Hour Factor	0.92	0.92	0.92	0.75	0.25	0.89	0.84	0.78	0.92	0.92	0.94	0.83
Heavy Vehicles (%)	7%	7%	7%	13%	0.23	10%	5%	6%	7%	7%	11%	13%
Adj. Flow (vph)	0	0	0	53	40	612	48	379	0	0	703	133
Shared Lane Traffic (%)	U	U	U	55	40	012	+0	313	U	U	700	100
Lane Group Flow (vph)	0	0	0	0	93	612	48	379	0	0	703	133
Turn Type	U	U	U	Split	NA	Prot	Perm	NA	U	U	NA	Perm
Protected Phases				4	4	4	1 01111	2			2	1 01111
Permitted Phases				•	•	•	2	_			_	2
Detector Phase				4	4	4	2	2			2	2
Switch Phase				•	•	•	_	_			_	_
Minimum Initial (s)				7.0	7.0	7.0	15.0	15.0			15.0	15.0
Minimum Split (s)				12.1	12.1	12.1	20.4	20.4			20.4	20.4
Total Split (s)				25.0	25.0	25.0	45.0	45.0			45.0	45.0
Total Split (%)				35.7%	35.7%	35.7%	64.3%	64.3%			64.3%	64.3%
Yellow Time (s)				3.0	3.0	3.0	4.4	4.4			4.4	4.4
All-Red Time (s)				2.1	2.1	2.1	1.0	1.0			1.0	1.0
Lost Time Adjust (s)					0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)					5.1	5.1	5.4	5.4			5.4	5.4
Lead/Lag					0.1	0.1	0.1	0.1			0.1	0.1
Lead-Lag Optimize?												
Recall Mode				None	None	None	C-Max	C-Max			C-Max	C-Max
Act Effct Green (s)				110110	14.8	14.8	44.7	44.7			44.7	44.7
Actuated g/C Ratio					0.21	0.21	0.64	0.64			0.64	0.64
v/c Ratio					0.27	0.91	0.12	0.17			0.35	0.14
Control Delay					22.9	26.4	6.4	5.4			7.4	1.9
Queue Delay					0.0	0.0	0.0	0.0			0.0	0.0
Total Delay					22.9	26.4	6.4	5.4			7.4	1.9
LOS					C	20.4 C	Α	A			Α.Τ	1.5 A
Approach Delay					25.9	<u> </u>		5.5			6.5	^
Approach LOS					23.9 C			3.5 A			0.5 A	
Approach Loo					U			^			Λ.	

102: Route 75 & Route 20 WB On Ramp/Route 20 WB Off Ramp 2050 Future with Development Weekday AM Peak

2000 i diaio milii	Dovolopi	110116 1	TOOKG	ay / ((V)	1 Oak							
	۶	→	•	•	←	4	4	†	/	/	ţ	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)					32	56	8	35			70	0
Queue Length 95th (ft)					17	#238	19	43			115	16
Internal Link Dist (ft)		511			444			572			2213	
Turn Bay Length (ft)						190	75					90
Base Capacity (vph)					472	746	417	2175			2008	930
Starvation Cap Reductn					0	0	0	0			0	0
Spillback Cap Reductn					0	0	0	0			0	0
Storage Cap Reductn					0	0	0	0			0	0
Reduced v/c Ratio					0.20	0.82	0.12	0.17			0.35	0.14
Intersection Summary												
Area Type:	Other											
Cycle Length: 70												
Actuated Cycle Length: 7	0											
Offcot: 1 (1%) Poforonco	d to phace 2	NIDOD CH	art of Vall	014/								

Offset: 1 (1%), Referenced to phase 2:NBSB, Start of Yellow

Natural Cycle: 40

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.91

Intersection Signal Delay: 13.3 Intersection LOS: B Intersection Capacity Utilization 55.0% ICU Level of Service A

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

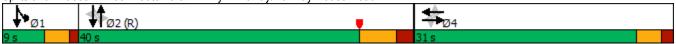
Splits and Phases: 102: Route 75 & Route 20 WB On Ramp/Route 20 WB Off Ramp



2000 Future With De	٠	→	•	*	←	•	•	†	~	\		4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			414		*	↑ ↑	
Traffic Volume (vph)	1	1	14	75	2	20	15	740	76	31	522	4
Future Volume (vph)	1	1	14	75	2	20	15	740	76	31	522	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	15	12	12	16	12	12	12	12	12	12	12
Storage Length (ft)	0	10	0	0	10	0	0	12	0	415	12	0
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (ft)	25		U	25			25			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	1.00	0.95	0.95
Frt	1.00	0.870	1.00	1.00	0.970	1.00	0.55	0.983	0.55	1.00	0.999	0.55
Flt Protected		0.999			0.963			0.999		0.950	0.555	
Satd. Flow (prot)	0	1812	0	0	1966	0	0	3290	0	1597	3280	0
Flt Permitted	U	0.996	U	U	0.827	U	U	0.941	U	0.271	3200	U
Satd. Flow (perm)	0	1807	0	0	1689	0	0	3099	0	456	3280	0
Right Turn on Red	U	1001	Yes	U	1003	Yes	U	3033	Yes	450	3200	Yes
Satd. Flow (RTOR)		56	163		19	163		21	163		1	163
Link Speed (mph)		25			30			35			35	
Link Distance (ft)		250			258			2293			1019	
Travel Time (s)		6.8			5.9			44.7			19.9	
Peak Hour Factor	0.92	0.92	0.25	0.72	0.92	0.67	0.92	0.88	0.70	0.75	0.86	0.92
		7%						8%	0.70	0.75		
Heavy Vehicles (%)	7%		0%	2%	7%	3%	7%		6%	13%	10%	0%
Adj. Flow (vph)	1	1	56	104	2	30	16	841	109	41	607	4
Shared Lane Traffic (%)	0		0	0	400	^	^	000	0	44	C4.4	0
Lane Group Flow (vph)	0	58	0	0	136	0	0	966	0	41	611	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		D.P+P	NA	
Protected Phases	4	4		4	4			2		1	12	
Permitted Phases	4			4	4		2			2		
Detector Phase	4	4		4	4					1		
Switch Phase	. .	5 0		. .	5 0		45.0	45.0		5 0		
Minimum Initial (s)	5.0	5.0		5.0	5.0		15.0	15.0		5.0		
Minimum Split (s)	9.5	9.5		9.5	9.5		21.5	21.5		9.0		
Total Split (s)	31.0	31.0		31.0	31.0		40.0	40.0		9.0		
Total Split (%)	38.8%	38.8%		38.8%	38.8%		50.0%	50.0%		11.3%		
Yellow Time (s)	3.0	3.0		3.0	3.0		4.4	4.4		3.0		
All-Red Time (s)	1.5	1.5		1.5	1.5		2.1	2.1		1.0		
Lost Time Adjust (s)		0.0			0.0			0.0		0.0		
Total Lost Time (s)		4.5			4.5			6.5		4.0		
Lead/Lag							Lag	Lag		Lead		
Lead-Lag Optimize?	Missis	Minim		Maria	Minim		Yes	Yes		Yes		
Recall Mode	None	None		None	None		C-Max	C-Max		None	04.0	
Act Effct Green (s)		9.9			9.9			53.6		59.2	61.6	
Actuated g/C Ratio		0.12			0.12			0.67		0.74	0.77	
v/c Ratio		0.21			0.60			0.46		0.10	0.24	
Control Delay		11.0			38.8			8.5		2.2	1.9	
Queue Delay		0.0			0.0			0.0		0.0	0.0	
Total Delay		11.0			38.8			8.5		2.2	1.9	
LOS		В			D			A		Α	A	
Approach Delay		11.0			38.8			8.5			1.9	
Approach LOS		В			D			Α			Α	

	•	→	•	•	←	•	4	†	/	\	ļ	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)		1			56			118		1	5	
Queue Length 95th (ft)		31			104			192		2	10	
Internal Link Dist (ft)		170			178			2213			939	
Turn Bay Length (ft)										415		
Base Capacity (vph)		636			572			2084		409	2524	
Starvation Cap Reductn		0			0			0		0	0	
Spillback Cap Reductn		0			0			0		0	0	
Storage Cap Reductn		0			0			0		0	0	
Reduced v/c Ratio		0.09			0.24			0.46		0.10	0.24	
Intersection Summary												
Area Type:	Other											
Cycle Length: 80												
Actuated Cycle Length: 80)											
Offset: 57 (71%), Referen	ced to phase	2:NBSB,	Start of Y	ellow								
Natural Cycle: 55												
Control Type: Actuated-Co	oordinated											
Maximum v/c Ratio: 0.60												
Intersection Signal Delay:					tersection							
Intersection Capacity Utiliz	zation 55.0%			IC	U Level o	of Service A	A					
Analysis Period (min) 15												

Splits and Phases: 103: Route 75 & LAZFly Driveway/Halfway House Road



Lane Group EBL EBT EBR WBL WBT WBR NBL NBT NBR SBL SBT Lane Configurations 1 20 447 1 1 1 1 1 20 447 1 20 447 1	\$BR 115 115 1900 12 400 1 1.00 0.850 1568 Yes 251
Traffic Volume (vph) 93 12 90 10 11 14 210 540 10 20 447 Future Volume (vph) 93 12 90 10 11 14 210 540 10 20 447 Ideal Flow (vphpl) 1900 <t< th=""><th>115 115 1900 12 400 1 1.00 0.850 1568 Yes</th></t<>	115 115 1900 12 400 1 1.00 0.850 1568 Yes
Traffic Volume (vph) 93 12 90 10 11 14 210 540 10 20 447 Future Volume (vph) 93 12 90 10 11 14 210 540 10 20 447 Ideal Flow (vphpl) 1900 <t< td=""><td>115 115 1900 12 400 1 1.00 0.850 1568 Yes</td></t<>	115 115 1900 12 400 1 1.00 0.850 1568 Yes
Future Volume (vph) 93 12 90 10 11 14 210 540 10 20 447 Ideal Flow (vphpl) 1900	115 1900 12 400 1 1.00 0.850 1568 Yes
Ideal Flow (vphpl) 1900 <td>1900 12 400 1 1.00 0.850 1568 Yes</td>	1900 12 400 1 1.00 0.850 1568 Yes
Lane Width (ft) 11 11 10 10 10 12	12 400 1 1.00 0.850 1568 Yes
Storage Length (ft) 0 220 200 150 450 0 0 Storage Lanes 1 1 0 1 1 0 1 Taper Length (ft) 25 25 50 25 Lane Util. Factor 0.95 0.95 1.00 1.00 1.00 1.00 0.95 0.95 1.00 0.95 Frt 0.850 0.950 0.902 0.994 0.950	1.00 0.850 1568 1568 Yes
Storage Lanes 1 1 0 1 1 0 1 Taper Length (ft) 25 25 50 25 Lane Util. Factor 0.95 0.95 1.00 1.00 1.00 1.00 0.95 0.95 1.00 0.95 Frt 0.850 0.902 0.994 0.950 <td>1 1.00 0.850 1568 1568 Yes</td>	1 1.00 0.850 1568 1568 Yes
Taper Length (ft) 25 25 50 25 Lane Util. Factor 0.95 0.95 1.00 1.00 1.00 1.00 0.95 0.95 1.00 0.95 Frt 0.850 0.950 0.902 0.994 0.950 </td <td>0.850 1568 1568 Yes</td>	0.850 1568 1568 Yes
Lane Util. Factor 0.95 0.95 1.00 1.00 1.00 1.00 1.00 0.95 0.95 1.00 0.95 Frt 0.850 0.850 0.902 0.994 0.994 0.950 0.95	0.850 1568 1568 Yes
Frt 0.850 0.902 0.994 Flt Protected 0.950 0.968 0.950 0.950 0.950 Satd. Flow (prot) 1417 1517 1311 1306 1433 0 1671 3217 0 1530 3223 Flt Permitted 0.950 0.968 0.950 0.950 0.950 0.950 Satd. Flow (perm) 1417 1517 1311 1306 1433 0 1671 3217 0 1530 3223 Right Turn on Red Yes Yes Yes Yes Yes Satd. Flow (RTOR) 130 28 5 5 Link Speed (mph) 35 25 35 35 Link Distance (ft) 466 418 1019 1839	0.850 1568 1568 Yes
Fit Protected 0.950 0.968 0.950 0.950 0.950 Satd. Flow (prot) 1417 1517 1311 1306 1433 0 1671 3217 0 1530 3223 Flt Permitted 0.950 0.968 0.950 0.950 0.950 0.950 Satd. Flow (perm) 1417 1517 1311 1306 1433 0 1671 3217 0 1530 3223 Right Turn on Red Yes Yes Yes Yes Yes Satd. Flow (RTOR) 130 28 5 5 Link Speed (mph) 35 25 35 35 Link Distance (ft) 466 418 1019 1839	1568 1568 Yes
Satd. Flow (prot) 1417 1517 1311 1306 1433 0 1671 3217 0 1530 3223 Flt Permitted 0.950	1568 Yes
Fit Permitted 0.950 0.968 0.950 0.950 0.950 Satd. Flow (perm) 1417 1517 1311 1306 1433 0 1671 3217 0 1530 3223 Right Turn on Red Yes Yes Yes Yes Yes Satd. Flow (RTOR) 130 28 5 5 Link Speed (mph) 35 25 35 35 Link Distance (ft) 466 418 1019 1839	1568 Yes
Satd. Flow (perm) 1417 1517 1311 1306 1433 0 1671 3217 0 1530 3223 Right Turn on Red Yes Yes Yes Yes Satd. Flow (RTOR) 130 28 5 Link Speed (mph) 35 25 35 35 Link Distance (ft) 466 418 1019 1839	Yes
Right Turn on Red Yes Yes Yes Satd. Flow (RTOR) 130 28 5 Link Speed (mph) 35 25 35 35 Link Distance (ft) 466 418 1019 1839	Yes
Satd. Flow (RTOR) 130 28 5 Link Speed (mph) 35 25 35 35 Link Distance (ft) 466 418 1019 1839	
Link Speed (mph) 35 25 35 Link Distance (ft) 466 418 1019 1839	201
Link Distance (ft) 466 418 1019 1839	
114701 11110 (0)	
Peak Hour Factor 0.78 0.50 0.69 0.50 0.75 0.50 0.78 0.95 0.44 0.31 0.84	0.93
Heavy Vehicles (%) 17% 0% 15% 29% 11% 12% 8% 12% 0% 18% 12%	3%
Adj. Flow (vph) 119 24 130 20 15 28 269 568 23 65 532	124
Shared Lane Traffic (%) 40%	127
Lane Group Flow (vph) 71 72 130 20 43 0 269 591 0 65 532	124
Turn Type Split NA pt+ov Split NA Prot NA Prot NA	Free
Protected Phases 8 8 18 4 4 1 6 5 2	1100
Permitted Phases	Free
Detector Phase 8 8 18 4 4 1 6 5 2	
Switch Phase	
Minimum Initial (s) 7.0 7.0 5.0 5.0 5.0 15.0 5.0 15.0	
Minimum Split (s) 12.7 12.7 9.8 9.8 10.1 20.8 9.0 20.6	
Total Split (s) 22.0 22.0 10.0 10.0 18.0 30.0 18.0 30.0	
Total Split (%) 27.5% 27.5% 12.5% 12.5% 22.5% 37.5% 22.5% 37.5%	
Yellow Time (s) 3.0 3.0 3.3 3.3 3.0 4.4 3.0 4.4	
All-Red Time (s) 2.7 2.7 1.5 1.5 2.1 1.4 1.0 1.2	
Lost Time Adjust (s) 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	
Total Lost Time (s) 5.7 5.7 4.8 4.8 5.1 5.8 4.0 5.6	
Lead/Lag Lead Lag Lead Lag	
Lead-Lag Optimize? Yes Yes Yes Yes	
Recall Mode None None None None C-Min None C-Min	
Act Effct Green (s) 9.1 9.1 30.9 5.6 5.6 18.6 46.7 7.7 31.9	80.0
Actuated g/C Ratio 0.11 0.11 0.39 0.07 0.07 0.23 0.58 0.10 0.40	1.00
v/c Ratio 0.44 0.42 0.22 0.22 0.34 0.69 0.31 0.44 0.41	0.08
Control Delay 41.2 39.9 3.7 41.0 26.6 31.4 12.9 39.5 25.3	0.1
Queue Delay 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	0.0
Total Delay 41.2 39.9 3.7 41.0 26.6 31.4 12.9 39.5 25.3	0.1
LOS D D A D C C B D C	Α
Approach Delay 23.0 31.2 18.7 22.3	
Approach LOS C C B C	

104: Route 75 & Route 401 (Schoephoester Road)/National Road 2050 Future with Development Weekday AM Peak

	•	→	\rightarrow	•	←	•	4	†	~	>	ļ	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	35	35	0	10	7		115	114		32	128	0
Queue Length 95th (ft)	63	40	13	17	29		#181	206		23	155	0
Internal Link Dist (ft)		386			338			939			1759	
Turn Bay Length (ft)			220	200			450					400
Base Capacity (vph)	288	309	581	92	128		388	1880		267	1319	1568
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	0
Reduced v/c Ratio	0.25	0.23	0.22	0.22	0.34		0.69	0.31		0.24	0.40	0.08

Intersection Summary

Area Type: Other

Cycle Length: 80

Actuated Cycle Length: 80

Offset: 12 (15%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.69

Intersection Signal Delay: 21.1
Intersection Capacity Utilization 47.4%

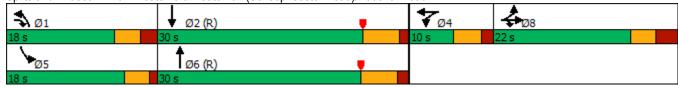
Intersection LOS: C
ICU Level of Service A

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 104: Route 75 & Route 401 (Schoephoester Road)/National Road



Tarefic Volume (vph)		۶	→	•	•	+	•	•	†	~	/	+	-√
Traffic Volume (uph)	Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	Lane Configurations	*	ት ጌ		*	∳ Љ			43-			4	7
Future Volume (vph)				20			20	20		10	10		70
													70
Lane Width (ft)	· · · /												
Storage Length (ft) 170													
Storage Lanes			· <u>-</u>										
Taper Length (ft)													1
Lane Util. Factor					-								
Fit			0.95	0.95		0.95	0.95		1 00	1 00		1 00	1 00
Fit Protected		1.00		0.00	1.00		0.00	1.00		1.00	1.00	1.00	
Satd. Flow (prot) 1805 3459 0 1631 3347 0 0 1660 0 0 1735 1706 Fit Permitted 0.528 0.580 0.821 0.728 Satd. Flow (perm) 1003 3459 0 996 3347 0 0 1401 0 0 0 1329 1706 Right Turn on Red Yes Yes Yes Yes Yes Yes Yes Satd. Flow (RTOR) 21 15 92 106 Link Speed (mph) 35 35 25 30 Link Distance (ft) 624 466 420 346 Travel Time (s) 12.2 9.1 11.5 7.9 Peak Hour Factor 0.70 0.70 0.69 0.50 0.88 0.67 0.83 0.92 0.50 0.63 0.92 0.66 Heavy Vehicles (%) 0% 3% 0% 7% 3% 3% 0% 100% 33% 11% 7% 1% Adj. Flow (vph) 86 250 29 20 348 30 24 0 20 16 0 106 Shared Lane Traffic (%) Lane Group Flow (vph) 86 279 0 20 378 0 0 44 0 0 16 106 Turn Type pm+pt NA pm+pt NA Perm NA Perm NA Perm Protected Phases 1 6 5 2 4 4 4 4 4 4 Permitted Phases 6 2 2 4 4 4 4 4 4 4 4		0.950	0.001		0.950	0.000						0.950	0.000
Fit Permitted			3459	0		3347	0	0		0	0		1706
Satid Flow (perm) 1003 3459 0 996 3347 0 0 1401 0 0 1329 1706 Right Turn on Red Yes Ye			0100	Ū		00 11				· ·	, and the second		1100
Right Turn on Red			3459	0		3347	0	0		0	0		1706
Said, Flow (RTOR)		1000	0400		330	00+1		U	1401		0	1023	
Link Speed (mph) 35 35 25 30 Link Distance (ft) 624 466 420 346 Travel Time (s) 12.2 9.1 11.5 7.9 Peak Hour Factor 0.70 0.70 0.69 0.50 0.88 0.67 0.83 0.92 0.50 0.63 0.92 0.66 Heavy Vehicles (%) 0% 3% 0% 7% 3% 3% 0% 100% 33% 11% 7% 1% Adj. Flow (vph) 86 250 29 20 348 30 24 0 20 16 0 106 Shared Lane Traffic (%) Lane Group Flow (vph) 86 279 0 20 378 0 0 44 0 0 16 106 Tum Type pm+pt NA pm+pt NA perm NA Perm NA Perm NA Perm NA Perm NA Perm NA Per			21	103		15	103		92	103			
Link Distance (ft)												30	100
Travel Time (s)	,												
Peak Hour Factor													
Heavy Vehicles (%)		0.70		0.60	0.50		0.67	0.83		0.50	0.63		0.66
Adj. Flow (vph) 86 250 29 20 348 30 24 0 20 16 0 106 Shared Lane Traffic (%) Lane Group Flow (vph) 86 279 0 20 378 0 0 44 0 0 16 106 Turn Type pm+pt NA pm+pt NA pm+pt NA Perm NA 4 4 4 4 4 4 4 4 4 4 4 4 4													
Shared Lane Traffic (%) Lane Group Flow (vph) 86 279 0 20 378 0 0 44 0 0 0 16 106 Turn Type													
Lane Group Flow (vph) 86 279 0 20 378 0 0 44 0 0 16 106 Turn Type pm+pt NA pm+pt NA Perm NA 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4		00	250	23	20	340	50	27	U	20	10	U	100
Turn Type pm+pt NA pm+pt NA Perm NA Perm NA Perm NA Perm Perm NA Wind <td< td=""><td></td><td>86</td><td>279</td><td>n</td><td>20</td><td>378</td><td>0</td><td>0</td><td>11</td><td>0</td><td>Λ</td><td>16</td><td>106</td></td<>		86	279	n	20	378	0	0	11	0	Λ	16	106
Protected Phases 6 2 4 4 4 4 4 A Detector Phase 6 2 4 4 4 4 4 4 4 4 A A Switch Phase				U			U			U			
Permitted Phases 6 2 4 4 4 4 4 4 4 4 5 8								1 01111			1 01111		1 01111
Detector Phase 1 6 5 2 4 4 4 4 4 4 4 4 4		· ·	•			_		4			4	•	4
Switch Phase Minimum Initial (s) 5.0 15.0 5.0 15.0 7.1 2.1 2.1 2.1 2.1 2.1 2.1 2.1 2.1 2.1 2.1 2.1 2.1 2.1			6			2			4			4	4
Minimum Initial (s) 5.0 15.0 5.0 15.0 7.0 7.0 7.0 7.0 7.0 Minimum Split (s) 9.0 21.6 9.0 21.6 12.1 27.1<		•				_		•	•		•	•	•
Minimum Split (s) 9.0 21.6 9.0 21.6 12.1 27.1		5.0	15.0		5.0	15.0		7.0	7.0		7.0	7.0	7.0
Total Split (s) 9.0 53.9 9.0 53.9 27.1 30.1% 30.2 20.1 20.1 20.1 20.1 20.1 20.1 20.1 20.1 <													
Total Split (%) 10.0% 59.9% 10.0% 59.9% 30.1% 30.0													
Yellow Time (s) 3.0 4.4 3.0													
All-Red Time (s) 1.0 2.2 1.0 2.2 2.1 2.1 2.1 2.1 2.1 2.1 2.1 Lost Time Adjust (s) 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.													3.0
Lost Time Adjust (s) 0.0													2.1
Total Lost Time (s) 4.0 6.6 4.0 6.6 5.1 5.1 5.1 5.1 Lead/Lag Lead-Lag Optimize? Recall Mode None C-Min None C-Min None None None None None Act Effet Green (s) 72.7 66.8 72.5 66.8 7.5 7.5 7.5 7.5 Actuated g/C Ratio 0.81 0.74 0.81 0.74 0.08 0.08 0.08 0.08 v/c Ratio 0.10 0.11 0.02 0.15 0.22 0.15 0.45 Control Delay 2.0 4.5 1.8 4.8 3.5 41.0 14.4 Queue Delay 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 14.4 0.00 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0													0.0
Lead/Lag Lead-Lag Optimize? Recall Mode None C-Min None 0.08 0.08 0.08 0.08 <th< td=""><td>, ,</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>5.1</td></th<>	, ,												5.1
Lead-Lag Optimize? Recall Mode None C-Min None C-Min None None <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>													
Recall Mode None C-Min None C-Min None 10.0 None None													
Act Effct Green (s) 72.7 66.8 72.5 66.8 7.5 7.5 7.5 Actuated g/C Ratio 0.81 0.74 0.81 0.74 0.08 0.08 0.08 v/c Ratio 0.10 0.11 0.02 0.15 0.22 0.15 0.45 Control Delay 2.0 4.5 1.8 4.8 3.5 41.0 14.4 Queue Delay 0.0 0.0 0.0 0.0 0.0 0.0 0.0 Total Delay 2.0 4.5 1.8 4.8 3.5 41.0 14.4		None	C-Min		None	C-Min		None	None		None	None	None
Actuated g/C Ratio 0.81 0.74 0.81 0.74 0.08 0.08 0.08 v/c Ratio 0.10 0.11 0.02 0.15 0.22 0.15 0.45 Control Delay 2.0 4.5 1.8 4.8 3.5 41.0 14.4 Queue Delay 0.0 0.0 0.0 0.0 0.0 0.0 Total Delay 2.0 4.5 1.8 4.8 3.5 41.0 14.4													7.5
v/c Ratio 0.10 0.11 0.02 0.15 0.22 0.15 0.45 Control Delay 2.0 4.5 1.8 4.8 3.5 41.0 14.4 Queue Delay 0.0 0.0 0.0 0.0 0.0 0.0 Total Delay 2.0 4.5 1.8 4.8 3.5 41.0 14.4													0.08
Control Delay 2.0 4.5 1.8 4.8 3.5 41.0 14.4 Queue Delay 0.0 0.0 0.0 0.0 0.0 0.0 Total Delay 2.0 4.5 1.8 4.8 3.5 41.0 14.4													0.45
Queue Delay 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 Total Delay 2.0 4.5 1.8 4.8 3.5 41.0 14.4													14.4
Total Delay 2.0 4.5 1.8 4.8 3.5 41.0 14.4													0.0
													14.4
LOS A A A A A D B													В
Approach Delay 3.9 4.6 3.5 17.9													
Approach LOS A A A B													

105: Airport Servuce Road/Light Lane & Route 401 (Schoephoester Road) 2050 Future with Development Weekday AM Peak

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	6	22		1	33			0			9	0
Queue Length 95th (ft)	12	30		3	54			5			28	19
Internal Link Dist (ft)		544			386			340			266	
Turn Bay Length (ft)	170			120								200
Base Capacity (vph)	859	2572		841	2487			411			324	497
Starvation Cap Reductn	0	0		0	0			0			0	0
Spillback Cap Reductn	0	0		0	0			0			0	0
Storage Cap Reductn	0	0		0	0			0			0	0
Reduced v/c Ratio	0.10	0.11		0.02	0.15			0.11			0.05	0.21
Intersection Summary												

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow

Natural Cycle: 45

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.45

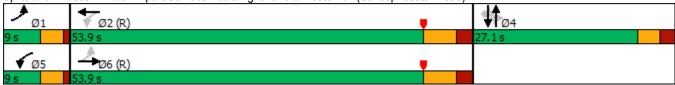
Intersection Signal Delay: 6.0
Intersection Capacity Utilization 38.2%

Intersection LOS: A

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 105: Airport Servuce Road/Light Lane & Route 401 (Schoephoester Road)



	•	•	†	~	-	ţ
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	YVDL T	77	†	ADIC	N N	↑ ↑
Traffic Volume (vph)	104	259	536	74	264	474
Future Volume (vph)	104	259	536	74	264	474
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	1900	1900	1900	1900	1900	1900
. ,	0	400	12	0	675	11
Storage Length (ft)						
Storage Lanes	1 25	0		0	1 35	
Taper Length (ft)		4.00	0.05	0.05		0.05
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	0.95
Frt	0.050	0.850	0.981		0.050	
Flt Protected	0.950	4450	0045		0.950	2022
Satd. Flow (prot)	1711	1459	3245	0	1589	3202
FIt Permitted	0.950				0.355	
Satd. Flow (perm)	1711	1459	3245	0	594	3202
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		154	24			
Link Speed (mph)	40		35			35
Link Distance (ft)	300		1839			990
Travel Time (s)	5.1		35.8			19.3
Peak Hour Factor	0.80	0.87	0.87	0.84	0.94	0.89
Heavy Vehicles (%)	2%	7%	10%	3%	6%	9%
Adj. Flow (vph)	130	298	616	88	281	533
Shared Lane Traffic (%)	100	230	010	00	201	000
Lane Group Flow (vph)	130	298	704	0	281	533
Turn Type	Prot		NA	U	D.P+P	NA
Protected Phases		pt+ov 1 4	NA 2			1 2
	4	14	2		1	1 2
Permitted Phases		4			2	
Detector Phase	4	4			1	
Switch Phase			4= 0			
Minimum Initial (s)	9.0		15.0		5.0	
Minimum Split (s)	13.0		20.9		9.0	
Total Split (s)	25.0		39.0		16.0	
Total Split (%)	31.3%		48.8%		20.0%	
Yellow Time (s)	3.0		4.4		3.0	
All-Red Time (s)	1.0		1.5		1.0	
Lost Time Adjust (s)	0.0		0.0		0.0	
Total Lost Time (s)	4.0		5.9		4.0	
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None		C-Max		None	
Act Effct Green (s)	13.2	25.8	44.3		54.8	58.8
Actuated g/C Ratio	0.16	0.32	0.55		0.68	0.74
	0.16		0.39			0.74
v/c Ratio		0.52			0.55	
Control Delay	34.6	12.3	6.3		8.5	4.1
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	34.6	12.3	6.3		8.5	4.1
LOS	С	В	Α		A	Α
Approach Delay	19.1		6.3			5.6
Approach LOS	В		Α			Α

2050 Future with Development Weekday AM Peak

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Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Queue Length 50th (ft)	60	55	37		35	34
Queue Length 95th (ft)	89	91	50		83	68
Internal Link Dist (ft)	220		1759			910
Turn Bay Length (ft)		400			675	
Base Capacity (vph)	449	580	1805		580	2355
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.29	0.51	0.39		0.48	0.23
Intersection Summary						

Area Type: Other

Cycle Length: 80

Actuated Cycle Length: 80

Offset: 43 (54%), Referenced to phase 2:NBSB, Start of Yellow

Natural Cycle: 50

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.55

Intersection Signal Delay: 8.8
Intersection Capacity Utilization 50.9%

Intersection LOS: A ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 106: Route 75 & Route 140 (Elm Street)



Route 20 Corridor Study Tighe & Bond

Intersection						
Int Delay, s/veh	6.6					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
		LDK	VVDL		NDL Š	
Lane Configurations	1 →	203	62	4↑		7 42
Traffic Vol, veh/h			63	147	196	42
Future Vol, veh/h	115	203	63	147	196	
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	50
Veh in Median Storage,		-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	92	66	74	87	58
Heavy Vehicles, %	10	2	3	3	3	7
Mvmt Flow	122	221	95	199	225	72
Major/Minor N	//ajor1	N	Major2	N	/linor1	
	_					000
Conflicting Flow All	0	0	343	0	523	233
Stage 1	-	-	-	-	233	-
Stage 2	-	-	-	-	290	-
Critical Hdwy	-	-	4.145		6.645	
Critical Hdwy Stg 1	-	-	-		5.445	-
Critical Hdwy Stg 2	-	-	-		5.845	-
Follow-up Hdwy	-	-2	2.2285	- 3	3.5285	
Pot Cap-1 Maneuver	-	-	1208	-	497	791
Stage 1	-	-	-	-	802	-
Stage 2	-	-	-	-	732	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1208	-	453	791
Mov Cap-2 Maneuver	-	-	-	-	453	-
Stage 1	-	-	_	-	802	-
Stage 2	_	_	_	_	668	-
2.5.50 2					200	
Approach	EB		WB		NB	
HCM Control Delay, s	0		2.8		18	
HCM LOS					С	
Minor Lane/Major Mvm	+ 1	NBLn11	JRI 52	EBT	EBR	WBL
	ı I					
Capacity (veh/h)		453	791	-		1208
HCM Lane V/C Ratio		0.497		-		0.079
HCM Control Delay (s)		20.6	10	-	-	8.2
HCM Lane LOS		С	В	-	-	Α
HCM 95th %tile Q(veh)		2.7	0.3	-	-	0.3

Route 20 Corridor Study
Tighe & Bond
Synchro 11 Report
HCM 6th TWSC

Intersection												
Intersection Delay, s/veh	20.5											
Intersection LOS	C											
mioroccion 200												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
	EDL		EDR	VVDL		WDK	INDL		INDIX	SDL		SDR
Lane Configurations	40	♣ 26	109	11	↔ 30	13	96	↔ 225	1	11	♣	60
Traffic Vol, veh/h Future Vol, veh/h	40	26	109	11	30	13	96	225	<u> </u>	11	255 255	60 60
Peak Hour Factor	0.62	0.25	0.79	0.50	0.58	0.25	0.74	0.86	0.92	0.25	0.84	
Heavy Vehicles, %	5	0.25	0.79	9	11	0.25	3	3	50	0.25	0.04	0.86
Mymt Flow	65	104	138	22	52	52	130	262	1	44	304	70
Number of Lanes	00	104	0	0	1	0	0	202	0	0	1	0
		ı	0			U			0		ı	
Approach	EB			WB			NB			SB		
Opposing Approach	WB			EB			SB			NB		
Opposing Lanes	1			1			1			1		
Conflicting Approach Left	SB			NB			EB			WB		
Conflicting Lanes Left	1			1			1			1		
Conflicting Approach Right	NB			SB			WB			EB		
Conflicting Lanes Right	1			1			1			1		
HCM Control Delay	17.3			13			22.7			22.9		
HCM LOS	С			В			С			С		
Lane		NBLn1	EBLn1	WBLn1	SBLn1							
Vol Left, %		30%	23%	20%	3%							
Vol Thru, %		70%	15%	56%	78%							
Vol Right, %		0%	62%	24%	18%							
Sign Control		Stop	Stop	Stop	Stop							
Traffic Vol by Lane		322	175	54	326							
LT Vol		96	40	11	11							
Through Vol		225	26	30	255							
RT Vol		1	109	13	60							
Lane Flow Rate		392	306	126	417							
Geometry Grp		1	1	1	1							
Degree of Util (X)		0.694	0.551	0.256	0.71							
Departure Headway (Hd)		6.362	6.476	7.321	6.125							
Convergence, Y/N		Yes	Yes	Yes	Yes							
Сар		565	555	487	588							
Service Time		4.433	4.553	5.419	4.194							
HCM Lane V/C Ratio		0.694	0.551	0.259	0.709							
HCM Control Delay		22.7	17.3	13	22.9							
HCM Lane LOS		С	С	В	С							
LIOM OF H. Ell. O		F 4	2.2		г 0							

Synchro 11 Report HCM 6th AWSC Route 20 Corridor Study Tighe & Bond

5.8

3.3

5.4

HCM 95th-tile Q

	۶	→	•	•	←	•	4	†	~	/	+	- ✓
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4					ሻ	^		ሻ	^	7
Traffic Volume (vph)	142	0	40	0	0	0	70	474	0	0	424	450
Future Volume (vph)	142	0	40	0	0	0	70	474	0	0	424	450
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	12	12	16	12	11	12	12	11	11	11
Storage Length (ft)	0		0	0		0	70		0	80		300
Storage Lanes	0		0	0		0	1		0	1		1
Taper Length (ft)	25			25			45			55		•
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	0.970	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.850
Flt Protected		0.963					0.950					0.000
Satd. Flow (prot)	0	1951	0	0	0	0	1694	3505	0	1717	3421	1473
Flt Permitted	•	0.963				•	0.482				•	
Satd. Flow (perm)	0	1951	0	0	0	0	859	3505	0	1717	3421	1473
Right Turn on Red	· ·	1001	Yes	•		Yes	000	0000	Yes		0121	Yes
Satd. Flow (RTOR)		33				. 00						608
Link Speed (mph)		35			25			35			35	000
Link Distance (ft)		394			120			257			652	
Travel Time (s)		7.7			3.3			5.0			12.7	
Peak Hour Factor	0.80	0.92	0.78	0.92	0.92	0.92	0.82	0.96	0.92	0.92	0.90	0.74
Heavy Vehicles (%)	4%	0%	0%	7%	7%	7%	3%	3%	7%	7%	2%	6%
Adj. Flow (vph)	178	0	51	0	0	0	85	494	0	0	471	608
Shared Lane Traffic (%)	110		0.1	•		· ·	- 00	.0.	•			000
Lane Group Flow (vph)	0	229	0	0	0	0	85	494	0	0	471	608
Turn Type	Split	NA	· ·	, and the second	Ū	Ū	Perm	NA		Perm	NA	Perm
Protected Phases	4	4					. •	2			2	
Permitted Phases	•	-					2	_		2	_	2
Detector Phase	4	4					2	2		2	2	2
Switch Phase	•	-					_	_		_	_	_
Minimum Initial (s)	7.0	7.0					15.0	15.0		15.0	15.0	15.0
Minimum Split (s)	24.2	24.2					20.4	20.4		20.4	20.4	20.4
Total Split (s)	25.0	25.0					45.0	45.0		45.0	45.0	45.0
Total Split (%)	35.7%	35.7%					64.3%	64.3%		64.3%	64.3%	64.3%
Yellow Time (s)	3.0	3.0					4.1	4.1		4.1	4.1	4.1
All-Red Time (s)	2.2	2.2					1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)		0.0					0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)		5.2					5.1	5.1		5.1	5.1	5.1
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None					C-Max	C-Max		C-Max	C-Max	C-Max
Act Effct Green (s)		11.7					48.0	48.0			48.0	48.0
Actuated g/C Ratio		0.17					0.69	0.69			0.69	0.69
v/c Ratio		0.65					0.14	0.21			0.20	0.51
Control Delay		31.3					5.6	4.8			8.9	9.6
Queue Delay		0.0					0.0	0.0			0.0	0.0
Total Delay		31.3					5.6	4.8			8.9	9.6
LOS		С					Α	Α			Α	A
Approach Delay		31.3						4.9			9.3	
Approach LOS		С						Α			Α	

	•				—	4	_	•		Λ.	ı	1
		-	*	₩	•	_	7	ı		*	*	•
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)		79					11	33			57	126
Queue Length 95th (ft)		134					28	64			97	133
Internal Link Dist (ft)		314			40			177			572	
Turn Bay Length (ft)							70					300
Base Capacity (vph)		575					588	2402			2344	1201
Starvation Cap Reductn		0					0	0			0	0
Spillback Cap Reductn		0					0	0			0	0
Storage Cap Reductn		0					0	0			0	0
Reduced v/c Ratio		0.40					0.14	0.21			0.20	0.51
Intersection Summary												
Area Type:)ther											
Cycle Length: 70												
Actuated Cycle Length: 70												
Offset: 0 (0%), Referenced to	phase 2:	NBSB, Sta	art of Yell	ow								
Natural Cycle: 50												
Control Type: Actuated-Coord	dinated											
Maximum v/c Ratio: 0.65												

Intersection Capacity Utilization 48.9% Analysis Period (min) 15

Intersection Signal Delay: 10.6

Splits and Phases: 101: Route 75 & Route 20 EB Ramps/Private Driveway

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45 s

Intersection LOS: B

ICU Level of Service A

Lane Group		۶	→	•	€	+	•	•	†	~	/	+	-√	
Traffic Volume (γρh)	Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Traffic Volume (γρh)	Lane Configurations					্ব	#	*	44			44	1	
Future Volume (vph)		0	0	0	60					0	0			
Ideal Flow (ryphpl)														
Lane Width (ft)	· · · /													
Storage Length (ft)														
Storage Lanes 0														
Taper Length (ft)														
Lane Util. Factor							•						•	
Fith Frotected 1.0			1 00	1 00		1 00	1 00		0.95	1 00		0.95	1 00	
Fit Protected		1.00	1.00	1.00	1.00	1.00		1.00	0.00	1.00	1.00	0.00		
Satd. Flow (prot)						0.950	0.000	0.950					0.000	
Fit Permitted		0	0	0	0		1509		3505	0	0	3355	1487	
Satd. Flow (perm) 0		J	•	J	V		1000		0000	J	· ·	0000	1 101	
Right Turn on Red Yes Yes Yes Yes Yes Yes Yes Satd. Flow (RTOR) Sa		0	0	0	0		1509		3505	0	0	3355	1487	
Satd. Flow (RTOR)		U	· ·		U	1004		0/ 1	0000		U	0000		
Link Speed (mph) 30 30 30 35 35 Link Distance (ft) 591 524 652 2293 Travel Time (s) 134 11.9 12.7 44.7 Peak Hour Factor 0.92 0.92 0.92 0.76 0.92 0.92 0.92 0.96 0.68 Heavy Vehicles (%) 7% 7% 7% 3% 0% 7% 2% 3% 7% 7% 44.7 Adj. Flow (vph) 0 0 0 79 0 735 36 600 0 0 848 199 Shared Lane Traffic (%) 10 0 0 79 735 36 600 0 848 199 Turn Type Split NA Prof Perm NA NA Perm Protected Phases 4 4 4 2 2 2 2 Permitted Phases 7 7.0 7.0 15.0 15.0				100						100				
Link Distance (ft) 591 524 652 2293 Travel Time (s) 13.4 11.9 12.7 44.7 Peak Hour Factor 0.92 0.92 0.92 0.92 0.92 0.96 0.92 0.92 0.96 0.88 Heavy Vehicles (%) 7% 7% 7% 3% 0% 7% 2% 3% 7% 7% 4% 5% Adj. Flow (vph) 0 0 0 79 735 36 600 0 848 199 Shared Lane Traffic (%) 2 8 4 4 4 2 2 2 Lane Group Flow (vph) 0 0 0 79 735 36 600 0 848 199 Turn Type Split NA Perot Perm NA NA Perm NA NA Perm NA NA Perm Perm NA NA 190 2 2 2 2			30			30	30		35			35	100	
Travel Time (s)														
Peak Hour Factor 0.92 0.92 0.92 0.92 0.92 0.92 0.92 0.92 0.92 0.96 0.68 Heavy Vehicles (%) 7% 7% 7% 7% 7% 3% 0% 7% 2% 3% 7% 7% 4% 5% Adj. Flow (vph) 0 0 0 79 735 36 600 0 0 848 199 Shared Lane Traffic (%) 1 0 0 0 0 79 735 36 600 0 0 848 199 Turn Type Split NA Prot Perm NA NA Perm Protected Phases 4 4 4 2 2 2 2 Detector Phase 4 4 4 2 2 2 2 2 Whinimum Split (s) 7.0 7.0 7.0 15.0 15.0 15.0 15.0 Total Split (%)														
Heavy Vehicles (%)		0 02		0.92	0.76		N 95	U 84		0.92	N 92		0.68	
Adj. Flow (vph) 0 0 0 79 0 735 36 600 0 848 199 Shared Lane Traffic (%) Lane Group Flow (vph) 0 0 0 79 735 36 600 0 0 848 199 Turn Type Split NA Protected Phases 4 4 4 2 2 2 Permitted Phases 4 4 4 2 <td></td>														
Shared Lane Traffic (%) Lane Group Flow (vph) 0 0 0 0 0 0 79 735 36 600 0 0 848 199 1 1 1 1 1 1 1 1														
Lane Group Flow (vph) 0 0 0 0 79 735 36 600 0 848 199 Turn Type Split NA Prot Perm NA NA Perm Protected Phases 2 <		U	U	U	13	U	100	30	000	U	U	0+0	199	
Tum Type Split NA Prot Perm NA Perm Protected Phases 4 4 4 2 2 2 Permitted Phases 2 2 2 2 2 2 Detector Phase 4 4 4 2		n	0	Λ	0	79	735	36	600	Λ	n	848	199	
Protected Phases 4		U	U	U						U	U			
Permitted Phases 2 2 2 2 2 2 2 2 2								1 01111					1 01111	
Detector Phase 4					•	•	•	2	_			_	2	
Switch Phase Minimum Initial (s) 7.0 7.0 7.0 15.0 15.0 15.0 15.0 Minimum Split (s) 12.1 12.1 12.1 20.4 20.4 20.4 20.4 Total Split (s) 42.2 42.2 42.2 27.8 27.8 27.8 27.8 Total Split (%) 60.3% 60.3% 60.3% 39.7%					4	4	4		2			2		
Minimum Initial (s) 7.0 7.0 7.0 15.0 15.0 15.0 Minimum Split (s) 12.1 12.1 12.1 20.4 20.4 20.4 Total Split (s) 42.2 42.2 42.2 27.8 27.8 27.8 Total Split (%) 60.3% 60.3% 60.3% 39.7% 39.7% 39.7% Yellow Time (s) 3.0 3.0 3.0 4.4 4.4 4.4 4.4 All-Red Time (s) 2.1 2.1 2.1 1.0 1.0 1.0 1.0 Lost Time Adjust (s) 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 Total Lost Time (s) 5.1 5.1 5.4 5.4 5.4 5.4 Lead-Lag Optimize? 8 8.7 34.7 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8<					•	•	•	_	-			_	_	
Minimum Split (s) 12.1 12.1 12.1 20.4 20.4 20.4 20.4 Total Split (s) 42.2 42.2 42.2 27.8 27.8 27.8 27.8 Total Split (%) 60.3% 60.3% 60.3% 39.7%					7.0	7.0	7.0	15.0	15.0			15.0	15.0	
Total Split (s) 42.2 42.2 42.2 27.8 27.8 27.8 Total Split (%) 60.3% 60.3% 60.3% 39.7% 39.7% 39.7% 39.7% Yellow Time (s) 3.0 3.0 3.0 4.4 4.4 4.4 4.4 All-Red Time (s) 2.1 2.1 2.1 1.0 1.0 1.0 1.0 Lost Time Adjust (s) 0.0 0.0 0.0 0.0 0.0 0.0 0.0 Total Lost Time (s) 5.1 5.1 5.4 5.4 5.4 5.4 Lead/Lag Lead-Lag Optimize? Recall Mode None None C-Max C-Max <td colsp<="" td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td>	<td></td>													
Total Split (%) 60.3% 60.3% 60.3% 39.7% 39.7% 39.7% Yellow Time (s) 3.0 3.0 3.0 4.4 4.4 4.4 4.4 All-Red Time (s) 2.1 2.1 2.1 1.0 1.0 1.0 1.0 1.0 Lost Time Adjust (s) 0.0														
Yellow Time (s) 3.0 3.0 3.0 4.4 4.4 4.4 4.4 4.4 All-Red Time (s) 2.1 2.1 2.1 1.0 1.0 1.0 1.0 1.0 Lost Time Adjust (s) 0.0 <														
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Lead/Lag Lead-Lag Optimize? Recall Mode None None None C-Max C-Max C-Max C-Max Act Effct Green (s) 34.7 34.7 24.8 24.8 24.8 24.8 Actuated g/C Ratio 0.50 0.50 0.35 0.35 0.35 0.35 v/c Ratio 0.09 0.93 0.27 0.48 0.71 0.32 Control Delay 8.7 33.9 23.8 19.5 24.7 7.0 Queue Delay 0.0 0.0 0.0 0.0 0.0 0.0 0.0 Total Delay 8.7 33.9 23.8 19.5 24.7 7.0 LOS A C C B C A Approach Delay 31.5 19.7 21.3														
Lead-Lag Optimize? Recall Mode None None None C-Max C-Max<						<u> </u>	<u> </u>	• • • • • • • • • • • • • • • • • • • •	<u> </u>				V	
Recall Mode None None None C-Max														
Act Effct Green (s) 34.7 34.7 24.8 24.8 24.8 24.8 Actuated g/C Ratio 0.50 0.50 0.35 0.35 0.35 0.35 v/c Ratio 0.09 0.93 0.27 0.48 0.71 0.32 Control Delay 8.7 33.9 23.8 19.5 24.7 7.0 Queue Delay 0.0 0.0 0.0 0.0 0.0 0.0 0.0 Total Delay 8.7 33.9 23.8 19.5 24.7 7.0 LOS A C C B C A Approach Delay 31.5 19.7 21.3					None	None	None	C-Max	C-Max			C-Max	C-Max	
Actuated g/C Ratio 0.50 0.50 0.35 0.35 0.35 v/c Ratio 0.09 0.93 0.27 0.48 0.71 0.32 Control Delay 8.7 33.9 23.8 19.5 24.7 7.0 Queue Delay 0.0 0.0 0.0 0.0 0.0 0.0 0.0 Total Delay 8.7 33.9 23.8 19.5 24.7 7.0 LOS A C C B C A Approach Delay 31.5 19.7 21.3														
v/c Ratio 0.09 0.93 0.27 0.48 0.71 0.32 Control Delay 8.7 33.9 23.8 19.5 24.7 7.0 Queue Delay 0.0 0.0 0.0 0.0 0.0 0.0 0.0 Total Delay 8.7 33.9 23.8 19.5 24.7 7.0 LOS A C C B C A Approach Delay 31.5 19.7 21.3	. ,													
Control Delay 8.7 33.9 23.8 19.5 24.7 7.0 Queue Delay 0.0 0.0 0.0 0.0 0.0 0.0 0.0 Total Delay 8.7 33.9 23.8 19.5 24.7 7.0 LOS A C C B C A Approach Delay 31.5 19.7 21.3														
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Total Delay 8.7 33.9 23.8 19.5 24.7 7.0 LOS A C C B C A Approach Delay 31.5 19.7 21.3														
LOS A C C B C A Approach Delay 31.5 19.7 21.3														
Approach Delay 31.5 19.7 21.3														
• •														
	Approach LOS					С			В			С		

102: Route 75 & Route 20 WB On Ramp/Route 20 WB Off Ramp 2050 Future with Development Weekday PM Peak

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)					16	228	13	121			172	13
Queue Length 95th (ft)					34	#468	37	171			240	29
Internal Link Dist (ft)		511			444			572			2213	
Turn Bay Length (ft)						190	75					90
Base Capacity (vph)					897	842	131	1241			1188	627
Starvation Cap Reductn					0	0	0	0			0	0
Spillback Cap Reductn					0	0	0	0			0	0
Storage Cap Reductn					0	0	0	0			0	0
Reduced v/c Ratio					0.09	0.87	0.27	0.48			0.71	0.32

Intersection Summary

Area Type: Other

Cycle Length: 70

Actuated Cycle Length: 70

Offset: 1 (1%), Referenced to phase 2:NBSB, Start of Yellow

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.93

Intersection Signal Delay: 24.2 Intersection LOS: C
Intersection Capacity Utilization 67.9% ICU Level of Service C

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 102: Route 75 & Route 20 WB On Ramp/Route 20 WB Off Ramp



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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			414		*	ħβ	<u> </u>
Traffic Volume (vph)	14	12	24	119	10	31	14	937	143	31	706	11
Future Volume (vph)	14	12	24	119	10	31	14	937	143	31	706	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	15	12	12	16	12	12	12	12	12	12	12
Storage Length (ft)	0	10	0	0	10	0	0	12	0	415	12	0
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (ft)	25		U	25		U	25		U	50		U
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	1.00	0.95	0.95
Frt	1.00	0.931	1.00	1.00	0.975	1.00	0.33	0.980	0.33	1.00	0.996	0.55
Flt Protected		0.987			0.969			0.998		0.950	0.550	
Satd. Flow (prot)	0	1920	0	0	1983	0	0	3357	0	1752	3446	0
Flt Permitted	U	0.886	U	U	0.684	U	U	0.864	U	0.167	0770	U
Satd. Flow (perm)	0	1724	0	0	1400	0	0	2906	0	308	3446	0
Right Turn on Red	U	1124	Yes	U	1400	Yes	U	2300	Yes	300	J ++ 0	Yes
Satd. Flow (RTOR)		71	163		15	163		27	163		5	163
Link Speed (mph)		25			30			35			35	
Link Distance (ft)		250			258			2293			1019	
Travel Time (s)		6.8			5.9			44.7			19.9	
Peak Hour Factor	0.38	0.38	0.33	0.80	0.25	0.73	0.25	0.93	0.86	0.91	0.86	0.50
Heavy Vehicles (%)	0.30	0.30	0.00	4%	0%	0.73	0.23	6%	2%	3%	4%	17%
Adj. Flow (vph)	37	32	73	149	40	42	56	1008	166	34	821	22
Shared Lane Traffic (%)	01	02	10	173	70	72	30	1000	100	04	021	LL
Lane Group Flow (vph)	0	142	0	0	231	0	0	1230	0	34	843	0
Turn Type	Perm	NA	U	Perm	NA	U	Perm	NA	0	D.P+P	NA	U
Protected Phases	1 01111	4		1 01111	4		1 01111	2		1	12	
Permitted Phases	4	•		4	•		2	_		2	• =	
Detector Phase	4	4		4	4		_			1		
Switch Phase	•	•		•	•					•		
Minimum Initial (s)	5.0	5.0		5.0	5.0		15.0	15.0		5.0		
Minimum Split (s)	9.5	9.5		9.5	9.5		21.5	21.5		9.0		
Total Split (s)	31.0	31.0		31.0	31.0		40.0	40.0		9.0		
Total Split (%)	38.8%	38.8%		38.8%	38.8%		50.0%	50.0%		11.3%		
Yellow Time (s)	3.0	3.0		3.0	3.0		4.4	4.4		3.0		
All-Red Time (s)	1.5	1.5		1.5	1.5		2.1	2.1		1.0		
Lost Time Adjust (s)		0.0			0.0			0.0		0.0		
Total Lost Time (s)		4.5			4.5			6.5		4.0		
Lead/Lag							Lag	Lag		Lead		
Lead-Lag Optimize?							Yes	Yes		Yes		
Recall Mode	None	None		None	None		C-Max	C-Max		None		
Act Effct Green (s)		15.5			15.5			48.0		53.6	56.0	
Actuated g/C Ratio		0.19			0.19			0.60		0.67	0.70	
v/c Ratio		0.36			0.81			0.70		0.11	0.35	
Control Delay		16.1			49.9			16.5		3.2	2.6	
Queue Delay		0.0			0.0			0.0		0.0	0.0	
Total Delay		16.1			49.9			16.5		3.2	2.6	
LOS		В			D			В		Α	Α	
Approach Delay		16.1			49.9			16.5			2.7	
Approach LOS		В			D			В			Α	

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)		30			104			225		1	16	
Queue Length 95th (ft)		12			32			#427		m3	26	
Internal Link Dist (ft)		170			178			2213			939	
Turn Bay Length (ft)										415		
Base Capacity (vph)		618			473			1755		297	2412	
Starvation Cap Reductn		0			0			0		0	0	
Spillback Cap Reductn		0			0			0		0	0	
Storage Cap Reductn		0			0			0		0	0	
Reduced v/c Ratio		0.23			0.49			0.70		0.11	0.35	

Intersection Summary

Area Type: Other

Cycle Length: 80

Actuated Cycle Length: 80

Offset: 57 (71%), Referenced to phase 2:NBSB, Start of Yellow

Natural Cycle: 65

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.81

Intersection Signal Delay: 14.7 Intersection LOS: B
Intersection Capacity Utilization 65.4% ICU Level of Service C

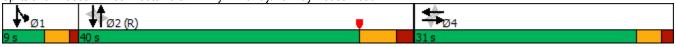
Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 103: Route 75 & LAZFly Driveway/Halfway House Road



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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ	4	7	ሻ	ĵ»		ሻ	↑ ↑		ሻ	^	7
Traffic Volume (vph)	254	23	200	10	23	26	310	640	20	26	557	153
Future Volume (vph)	254	23	200	10	23	26	310	640	20	26	557	153
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	10	10	10	12	12	12	12	12	12	12
Storage Length (ft)	0		220	200		150	450	· <u>-</u>	0	0		400
Storage Lanes	1		1	0		1	1		0	1		1
Taper Length (ft)	25			25		•	50			25		
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Frt	0.00	0.00	0.850	1.00	0.928	1.00	1.00	0.994	0.00	1.00	0.00	0.850
Flt Protected	0.950	0.961	0.000	0.950	0.020		0.950	0.001		0.950		0.000
Satd. Flow (prot)	1609	1637	1409	1532	1646	0	1703	3327	0	1805	3438	1568
Flt Permitted	0.950	0.961	1 100	0.950	1010	J	0.950	0021	J	0.950	0100	1000
Satd. Flow (perm)	1609	1637	1409	1532	1646	0	1703	3327	0	1805	3438	1568
Right Turn on Red	1003	1007	Yes	1002	10-10	Yes	1700	0021	Yes	1000	0400	Yes
Satd. Flow (RTOR)			213		37	100		5	100			251
Link Speed (mph)		35	210		25			35			35	201
Link Distance (ft)		466			418			1019			1839	
Travel Time (s)		9.1			11.4			19.9			35.8	
Peak Hour Factor	0.86	0.69	0.78	0.88	0.58	0.71	0.88	0.96	0.75	0.50	0.89	0.74
Heavy Vehicles (%)	3%	0.03	7%	10%	0.30	0.71	6%	8%	4%	0.30	5%	3%
Adj. Flow (vph)	295	33	256	11	40	37	352	667	27	52	626	207
Shared Lane Traffic (%)	45%	55	250	11	70	31	332	001	21	JZ	020	201
Lane Group Flow (vph)	162	166	256	11	77	0	352	694	0	52	626	207
Turn Type	Split	NA	pt+ov	Split	NA	U	Prot	NA	U	Prot	NA	Free
Protected Phases	8	8	18	4	4		1	6		5	2	1100
Permitted Phases	U	U	10	7	7			U		0		Free
Detector Phase	8	8	18	4	4		1	6		5	2	1100
Switch Phase	U	U	10	7	7			U		0		
Minimum Initial (s)	7.0	7.0		5.0	5.0		5.0	15.0		5.0	15.0	
Minimum Split (s)	12.7	12.7		9.8	9.8		10.1	20.8		9.0	20.6	
Total Split (s)	22.0	22.0		10.0	10.0		18.0	30.0		18.0	30.0	
Total Split (%)	27.5%	27.5%		12.5%	12.5%		22.5%	37.5%		22.5%	37.5%	
Yellow Time (s)	3.0	3.0		3.3	3.3		3.0	4.4		3.0	4.4	
All-Red Time (s)	2.7	2.7		1.5	1.5		2.1	1.4		1.0	1.2	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.7	5.7		4.8	4.8		5.1	5.8		4.0	5.6	
Lead/Lag	0.7	0.7		7.0	7.0		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Act Effct Green (s)	12.3	12.3	39.8	6.0	6.0		21.8	40.4		6.7	20.6	80.0
Actuated g/C Ratio	0.15	0.15	0.50	0.08	0.08		0.27	0.50		0.08	0.26	1.00
v/c Ratio	0.66	0.66	0.32	0.10	0.49		0.76	0.41		0.35	0.71	0.13
Control Delay	44.3	44.4	4.6	36.4	32.9		36.2	12.0		37.3	36.4	0.13
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.2
Total Delay	44.3	44.4	4.6	36.4	32.9		36.2	12.0		37.3	36.4	0.0
LOS	44.3 D	44.4 D	4.6 A	30.4 D	32.9 C		30.2 D	12.0 B		37.3 D	30.4 D	0.2 A
Approach Delay	U	26.9	A	D	33.4		U	20.2		D	28.0	A
Approach LOS		26.9 C			33.4 C			20.2 C			28.0 C	
Apploach LOS		C			C			U			U	

104: Route 75 & Route 401 (Schoephoester Road)/National Road 2050 Future with Development Weekday PM Peak

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	81	83	11	5	19		126	154		26	161	0
Queue Length 95th (ft)	130	103	37	21	32		#368	247		32	200	0
Internal Link Dist (ft)		386			338			939			1759	
Turn Bay Length (ft)			220	200			450					400
Base Capacity (vph)	327	333	793	116	158		464	1681		315	1048	1568
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	0
Reduced v/c Ratio	0.50	0.50	0.32	0.09	0.49		0.76	0.41		0.17	0.60	0.13

Intersection Summary

Area Type: Other

Cycle Length: 80

Actuated Cycle Length: 80

Offset: 12 (15%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow

Natural Cycle: 70

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.76

Intersection Signal Delay: 24.8
Intersection Capacity Utilization 60.5%

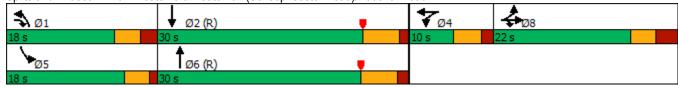
Intersection LOS: C
ICU Level of Service B

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 104: Route 75 & Route 401 (Schoephoester Road)/National Road



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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ	∱ }		ሻ	↑ ↑			4			ર્ન	7
Traffic Volume (vph)	90	437	20	10	446	30	30	10	20	20	10	130
Future Volume (vph)	90	437	20	10	446	30	30	10	20	20	10	130
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	11	11	12	15	12	12	14	14
Storage Length (ft)	170		0	120		0	0		0	0		200
Storage Lanes	1		0	1		0	0		0	0		1
Taper Length (ft)	40			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.993			0.986			0.959				0.850
Flt Protected	0.950			0.950				0.982			0.969	
Satd. Flow (prot)	1787	3551	0	1745	3350	0	0	1968	0	0	1964	1723
Flt Permitted	0.447			0.436				0.850			0.688	
Satd. Flow (perm)	841	3551	0	801	3350	0	0	1704	0	0	1394	1723
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8			19			23				186
Link Speed (mph)		35			35			25			30	
Link Distance (ft)		624			466			420			346	
Travel Time (s)		12.2			9.1			11.5			7.9	
Peak Hour Factor	0.75	0.80	0.75	0.42	0.90	0.58	0.67	0.25	0.54	0.46	0.42	0.70
Heavy Vehicles (%)	1%	1%	0%	0%	3%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	120	546	27	24	496	52	45	40	37	43	24	186
Shared Lane Traffic (%)												
Lane Group Flow (vph)	120	573	0	24	548	0	0	122	0	0	67	186
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	Perm
Protected Phases	1	6		5	2			4			4	
Permitted Phases	6			2			4			4		4
Detector Phase	1	6		5	2		4	4		4	4	4
Switch Phase												
Minimum Initial (s)	5.0	15.0		5.0	15.0		7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	9.0	21.6		9.0	21.6		12.1	12.1		12.1	12.1	12.1
Total Split (s)	9.0	53.9		9.0	53.9		27.1	27.1		27.1	27.1	27.1
Total Split (%)	10.0%	59.9%		10.0%	59.9%		30.1%	30.1%		30.1%	30.1%	30.1%
Yellow Time (s)	3.0	4.4		3.0	4.4		3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	1.0	2.2		1.0	2.2		2.1	2.1		2.1	2.1	2.1
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	0.0
Total Lost Time (s)	4.0	6.6		4.0	6.6			5.1			5.1	5.1
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	None
Act Effct Green (s)	66.7	58.0		66.4	58.0			10.2			10.2	10.2
Actuated g/C Ratio	0.74	0.64		0.74	0.64			0.11			0.11	0.11
v/c Ratio	0.17	0.25		0.04	0.25			0.58			0.43	0.52
Control Delay	3.3	7.5		2.9	7.4			40.9			44.7	11.0
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	0.0
Total Delay	3.3	7.5		2.9	7.4			40.9			44.7	11.0
LOS	Α	Α		Α	Α			D			D	В
Approach Delay		6.8			7.2			40.9			19.9	
Approach LOS		Α			Α			D			В	

105: Airport Servuce Road/Light Lane & Route 401 (Schoephoester Road) 2050 Future with Development Weekday PM Peak

	۶	→	•	•	•	•	•	†	~	-	↓	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	12	62		2	58			54			36	0
Queue Length 95th (ft)	24	93		4	102			18			32	22
Internal Link Dist (ft)		544			386			340			266	
Turn Bay Length (ft)	170			120								200
Base Capacity (vph)	688	2289		653	2164			433			340	561
Starvation Cap Reductn	0	0		0	0			0			0	0
Spillback Cap Reductn	0	0		0	0			0			0	0
Storage Cap Reductn	0	0		0	0			0			0	0
Reduced v/c Ratio	0.17	0.25		0.04	0.25			0.28			0.20	0.33
Intersection Summary												

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow

Natural Cycle: 45

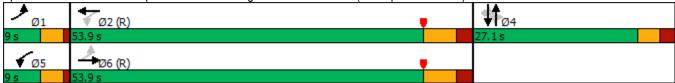
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.58

Intersection Signal Delay: 11.5 Intersection LOS: B
Intersection Capacity Utilization 41.4% ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 105: Airport Servuce Road/Light Lane & Route 401 (Schoephoester Road)



	•	4	†	~	\	
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
	VVDL	VVDR		NDN	SDL 1	
Lane Configurations Traffic Volume (vph)	ា 156	236	↑ ↑ 714	206	3 49	↑↑ 613
Future Volume (vph)	156	236	714	206	349	613
· · ·	1900	1900	1900	1900	1900	1900
Ideal Flow (vphpl) Lane Width (ft)	1900	1900	1900	1900	1900	1900
			12			11
Storage Length (ft)	0	400		0	675	
Storage Lanes	1	0		0	1	
Taper Length (ft)	25	4.00	0.05	0.05	35	0.05
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	0.95
Frt	0.050	0.850	0.961		0.050	
Flt Protected	0.950		06.1=	_	0.950	
Satd. Flow (prot)	1745	1473	3345	0	1620	3355
Flt Permitted	0.950				0.124	
Satd. Flow (perm)	1745	1473	3345	0	211	3355
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		75	74			
Link Speed (mph)	40		35			35
Link Distance (ft)	300		1839			990
Travel Time (s)	5.1		35.8			19.3
Peak Hour Factor	0.89	0.89	0.86	0.71	0.87	0.91
Heavy Vehicles (%)	0.03	6%	5%	0%	4%	4%
Adj. Flow (vph)	175	265	830	290	401	674
Shared Lane Traffic (%)	113	200	030	230	701	074
. ,	175	265	1120	0	401	674
Lane Group Flow (vph)				U		
Turn Type	Prot	pt+ov	NA		D.P+P	NA
Protected Phases	4	14	2		1	12
Permitted Phases					2	
Detector Phase	4	4			1	
Switch Phase						
Minimum Initial (s)	9.0		15.0		5.0	
Minimum Split (s)	13.0		20.9		9.0	
Total Split (s)	25.0		39.0		16.0	
Total Split (%)	31.3%		48.8%		20.0%	
Yellow Time (s)	3.0		4.4		3.0	
All-Red Time (s)	1.0		1.5		1.0	
Lost Time Adjust (s)	0.0		0.0		0.0	
Total Lost Time (s)	4.0		5.9		4.0	
Lead/Lag	T.U		Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None				None	
		27.0	C-Max			E0 0
Act Effct Green (s)	13.8	37.0	33.1		54.2	58.2
Actuated g/C Ratio	0.17	0.46	0.41		0.68	0.73
v/c Ratio	0.58	0.37	0.78		0.83	0.28
Control Delay	37.7	11.5	20.9		37.3	4.5
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	37.7	11.5	20.9		37.3	4.5
LOS	D	В	С		D	Α
Approach Delay	21.9		20.9			16.7
Approach LOS	С		С			В

2050 Future with Development Weekday PM Peak

	•	•	T		-	¥
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Queue Length 50th (ft)	82	56	290		134	47
Queue Length 95th (ft)	129	109	128		#335	93
Internal Link Dist (ft)	220		1759			910
Turn Bay Length (ft)		400			675	
Base Capacity (vph)	458	711	1427		481	2441
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.38	0.37	0.78		0.83	0.28

Intersection Summary

Area Type: Other

Cycle Length: 80

Actuated Cycle Length: 80

Offset: 43 (54%), Referenced to phase 2:NBSB, Start of Yellow

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.83

Intersection Signal Delay: 19.4 Intersection Capacity Utilization 65.9% Intersection LOS: B
ICU Level of Service C

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 106: Route 75 & Route 140 (Elm Street)



Intersection							
Int Delay, s/veh	8.8						
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	\$	LDIK	TIDL	41∱	ሻ	T T	
Traffic Vol, veh/h	219	306	64	158	214	65	
Future Vol, veh/h	219	306	64	158	214	65	
Conflicting Peds, #/hr	0	0	0	0	0	0	
Sign Control	Free	Free	Free	Free	Stop	Stop	
RT Channelized	-	None	-		-	None	
Storage Length	-	-	-	-	0	50	
Veh in Median Storage,		-	-	0	0	-	
Grade, %	0	-	-	0	0	-	
Peak Hour Factor	94	91	66	72	89	84	
Heavy Vehicles, %	2	2	0	5	2	0	
Mvmt Flow	233	336	97	219	240	77	
Major/Minor N	lajor1	ı	Major2	ı	Minor1		
Conflicting Flow All	0	0	569	0	705	401	
Stage 1	-	-	-	-	401	-	
Stage 2	-	-	-	-	304	-	
Critical Hdwy	-	-	4.1	-	6.63	6.2	
Critical Hdwy Stg 1	-	-	-	-	5.43	-	
Critical Hdwy Stg 2	-	-	-	-	5.83	-	
Follow-up Hdwy	-	-	2.2	-	3.519	3.3	
Pot Cap-1 Maneuver	-	-	1013	-	386	653	
Stage 1	-	-	-	-	675	-	
Stage 2	-	-	-	-	723	-	
Platoon blocked, %	-	-		-			
Mov Cap-1 Maneuver	-	-	1013	-	344	653	
Mov Cap-2 Maneuver	-	-	-	-	344	-	
Stage 1	-	-	-	-	675	-	
Stage 2	-	-	-	-	644	-	
Approach	EB		WB		NB		
HCM Control Delay, s	0		2.9		30.4		
HCM LOS					D		
Minor Lane/Major Mvmt	1	NBLn11	NRI n2	EBT	EBR	WBL	WBT
Capacity (veh/h)		344	653	LDI		1013	-
HCM Lane V/C Ratio		0.699				0.096	-
HCM Control Delay (s)		36.5	11.3	_	_	8.9	0.3
HCM Lane LOS		50.5 E	В	_	_	Α	Α
HCM 95th %tile Q(veh)		5	0.4	_	_	0.3	-
1.5W 55W 70W Q(VOII)		- 3	ਹ.ਜ			0.0	

Route 20 Corridor Study
Tighe & Bond
Synchro 11 Report
HCM 6th TWSC

HCM 95th-tile Q

Intersection												
Intersection Delay, s/veh	60.5											
Intersection LOS	F											
IIItoracottori ECC												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			4	
Traffic Vol, veh/h	80	49	149	21	48	11	121	298	11	13	307	60
Future Vol, veh/h	80	49	149	21	48	11	121	298	11	13	307	60
Peak Hour Factor	0.86	0.37	0.86	0.69	0.43	0.50	0.88	0.97	0.50	0.50	0.87	0.64
Heavy Vehicles, %	0	4	2	0	0	0	3	1	0	0	2	1
Mvmt Flow	93	132	173	30	112	22	138	307	22	26	353	94
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Approach	EB			WB			NB			SB		
Opposing Approach	WB			EB			SB			NB		
Opposing Lanes	1			1			1			1		
Conflicting Approach Left	SB			NB			EB			WB		
Conflicting Lanes Left	1			1			1			1		
Conflicting Approach Right	NB			SB			WB			EB		
Conflicting Lanes Right	1			1			1			1		
HCM Control Delay	45			19.2			75.9			72.7		
HCM LOS	Е			С			F			F		
Lane		NBLn1	EBLn1	WBLn1	SBLn1							
Vol Left, %		28%	29%	26%	3%							
Vol Thru, %		69%	18%	60%	81%							
Vol Right, %		3%	54%	14%	16%							
Sign Control		Stop	Stop	Stop	Stop							
Traffic Vol by Lane		430	278	80	380							
LT Vol		121	80	21	13							
Through Vol		298	49	48	307							
RT Vol		11	149	11	60							
Lane Flow Rate		467	399	164	473							
Geometry Grp		1	1	1	1							
Degree of Util (X)		1.018	0.87	0.421	1.009							
Departure Headway (Hd)		8.035	8.026	9.481	7.865							
Convergence, Y/N		Yes	Yes	Yes	Yes							
Сар		453	455	382	463							
Service Time		6.035	6.026	7.481	5.865							
HCM Lane V/C Ratio		1.031	0.877	0.429	1.022							
HCM Control Delay		75.9	45	19.2	72.7							
HCM Lane LOS		F	Е	С	F							

Route 20 Corridor Study
Tighe & Bond
Synchro 11 Report
HCM 6th AWSC

13.6

9

2

13.4

APPENDIX N

Route 20 Study Existing Conditions & Market Analysis (RKG Associates)

TOWN OF WINDSOR LOCKS, CT - ROUTE 20 CORRIDOR STUDY

Existing Conditions and Market Analysis

Prepared by RKG Associates 76 Canal Street, Suite 401 Boston, MA 02143 RKG Associates, Inc. is a multi-disciplinary consulting firm, founded in 1981. We serve private, public, and institutional clients and provide a comprehensive range of advisory, planning, marketing, and management services throughout the US and around the world.

We are proud that the projects we are involved in are projects that get built – projects that happen – projects that work.

RKG is headquartered in Alexandria, VA, and has offices in Boston, Atlanta, Dallas, and Durham, NH.



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EXECUTIVE SUMMARY

RKG Associates (RKG), in cooperation with Tighe & Bond were retained by the Capitol Region Council of Governments (CRCOG), and on behalf of the Town of Windsor Locks, Connecticut to investigate and evaluate current transportation infrastructure deficiencies along Route 75, including the Route 20 (Corridor) interchange, as well as review and provide alternative transportation mode recommendations for adjacent roadways. The intent of this effort is to address current operational and connectivity concerns, and support future economic growth within and adjacent to the Route 20 Corridor in the Town of Windsor Locks. The Route 20 Corridor is a highly visible and highly traveled limited access highway that serves the Bradley International Airport. The land use mix within the Route 20 Corridor includes residences, retail, restaurant and service establishments, industrial buildings, and several large vacant parcels of land that may be well positioned for future development.

RKG's primary role in this effort is to evaluate current and projected market indicators, including socioeconomic and real estate trends, to offer an assessment of the opportunities for continued economic growth and asset diversity within the Route 20 Corridor study area. The key findings of this analysis are summarized next and then discussed in greater detail throughout the remainder of this report.

METHODOLOGY

PROCESS

This analysis is predicated on establishing baseline information for demographics, the economic base, and relevant real estate markets. Demographic and economic base conditions help identify the Town of Windsor Locks' strengths in terms of market segments, spending power, employment, and potential opportunities in local and regional markets for new development and support for existing uses. This includes both a quantitative review and analysis as well as qualitative feedback through interviews with area stakeholders and others active in the business and real estate sectors of the local economy.

DATA SOURCES

Sources for demographic data include publicly available federal and state resources. The analysis makes use of the most recently available US Census American Community Survey (ACS) and Center for Economic Studies data, as well as estimates and projections offered by ESRI Business Analyst, a private sector industry leader in providing such metrics and proprietary modeling. Additional data has been provided through the Connecticut Data Collaborative. Employment and economic and other economic indicators were developed through proprietary sources, such as EMSI/Burning Glass for industry employment statistics, as well as the Connecticut Department of Labor. Finally, information regarding local zoning, land use and other parcel data was derived, in part, from Town sources.

Real estate information is derived from a mix of public and proprietary sources, including the *Warren Group Banker & Tradesman*, Moody's Analytics REIS (real estate data analytics software) market reports, LoopNet, Apartments.com, and interviews with area professionals in the commercial and residential market sectors.

Executive Summary RKG

KEY FINDINGS

Demographics



The population of the Town of Windsor Locks is projected to increase by 0.94% over the 2020 to 2050 time period and reach 12,674 persons by 2050. In comparison, the statewide population is projected to increase by 2.06% and total nearly 3.68 million persons by 2050. As a result, the population of the Town of Windsor Locks remains more or less steady representing approximately 0.3% of the statewide population as indicated by projections offered by the Connecticut Data Collaborative and RKG.

In the near term between 2022 and 2027, the population of the Town of Windsor Locks is projected to decrease by 76 persons (or 0.6%). however, the population aged 35 to 54, representing peak earning and consumption years, is projected to increase marginally (1.2%). The population aged 65 and older (those often to seek downsizing residences) is projected to decline, but still represents 23% of the total population by 2027.

Between 2017 and November 2022, the Town of Windsor Locks labor force has increased by 171 persons, averaging 7,656 persons annually. In contrast, over the same time period, the labor force of the North Central Workforce Development Area (WDA) which includes the Town of Windsor Locks, experienced a decline of 7,969 persons while the statewide labor force declined by 27,800 as indicated by data offered by the Connecticut Department of Labor.

Economic Base



After spiking in 2020/2021 during the onset of the COVID-19 pandemic, the average rate of unemployment has declined to 4.9% for the Town of Windsor Locks, compared to 5.1% for the WDA and 5% statewide – all of which represent declines from 2017 figures, as well.

In 2021, the average annual wage (all industry sectors) in the Town of Windsor Locks was nearly \$79,075, representing an increase of 13.2% over 2017. For the WDA the annual wage was approximately \$79,425, for a 13.7% increase since 2017. The statewide wage increased by 16.8% to nearly \$77,840 by 2021. The Town of Windsor Locks thus has the highest annual wages of any of the comparison areas, while the rate of wage growth for each area exceeded the estimated 13.1% inflation over the same time period.

There was an overall decline of 533 jobs (4.1%) in the Town of Windsor Locks from 2017 to 2021. The decline for the WDA was 4.4% (or 23,758 positions) and 4.7% statewide (77,929 positions). In both 2017 and 2021, employment in the Town of Windsor Locks was heavily concentrated in four industry sectors, comprising more than 70% of the employment: Manufacturing, Transportation/Warehousing, Arts/Entertainment and Government. For the WDA and statewide, these sectors accounted for approximately one-third of the employment in both 2017 and 2021.

Households in the Town of Windsor Locks are predominantly owner-occupied, representing 70%% \pm of households for 2010, 2022 and 2027. The median selling price of single-family units has increased by 28% since 2010 to \$230,000 in 2022, about \$50,000 less than the countywide median . Despite limited projected population growth, the changing age distribution of the population may suggest a shift in future demand for housing toward smaller units or units targeted to the needs of an aging population.

Real Estate & Development

Employment projections suggest some demand for office and industrial space in the Town of Windsor Locks, predicated on the community's capacity to garner an increased share of the projected employment for Hartford County as a whole.

 On an annualized basis (ten-year) the projected Hartford County employment growth equates to a demand for nearly 516,170 SF in industrial and transportation/warehousing sectors, led by the latter.

Employment growth in sectors that use office and/or flex space is projected to account for an annualized demand of nearly 162,350 SF, led by the professional services and management sectors. Medical space related to the health care sector adds another 281,775 SF

The retail sector is generally well served with an average of 22.4 SF per capita within a 10-minute drive time of the Route 20 Corridor, which is similar to that national average of 24.5 SF per capita. However, there exists "sales leakage" within the 10-minute drive time and if re-captured at 30% suggests opportunities for an additional 116,085 SF across various retail store types. More notable is the estimated demand for 6,950 SF (in total) for every new 100 households in the market area.

Land Analysis & Opportunity Sites



The largest share of land that intersects with the Route 20 Corridor is the Bradley International Airport (exempt) to the northwest of the corridor, followed by vacant land (special) at the beginning of Old County Road, which is to the southeast side of the study area.

However, land in the study area itself is composed very differently (refer to Figure 1). As highlighted in purple in Figure 17, the land use composition shifts away from exempt and special uses towards primarily commercial and residential. Within the Route 20 Corridor study area, almost all the residential uses fall along Old County Road, consisting primarily of single-family homes. The 40% of commercial uses within the study area concentrate along the Ella T. Grasso Turnpike.

There are several existing industrial buildings and larger vacant parcels of land along the Route 20 Corridor which may be well positioned for development. Along Old County Road, there are underdeveloped business-zoned parcels that also present an opportunity for redevelopment. Additionally, within the Corridor, there are several parcels that have recently been redeveloped or otherwise re-positioned. More importantly, outreach to area stakeholders indicates that continued development parcels and projects are currently under consideration within the Route 20 Corridor – however, several also indicated that plans for new development are hampered by access issues to their sites.

CURRENT MARKET

The existing real estate market in the Town of Windsor Locks is influenced by a number of factors, including demographic trends, existing and projected industry performance, and the existing property inventory. RKG performed a market analysis that details these factors and how they may influence the future of the Route 20 Corridor.

DEMOGRAPHIC ANALYSIS

The population of the Town of Windsor Locks is relatively stable, however, the size of the population cohorts of people aged 35 to 54 years and those over 65 years suggest future demand for housing options targeted to the needs of aging families. The former is projected to comprise one-fourth of the population in 2027 and the latter growing to 23% of the total population. Projected household change (2022 to 2027) is nominal at 1.5% for owner units and a decline of 4.4% in renter units. However, single-family home values (median selling price) remain strong and income levels are increasing.

While the Town of Windsor Locks' population is stable, age-cohort growth offers demand for housing. This may be further supported by a strong growth in household incomes, with more than 40.0% earning \$100,000 or more.

While the Town of Windsor Locks residents tend to have a somewhat overall lower educational attainment compared to Hartford County, more than 35% have a college degree, accounting for 3,245 persons aged 25 and older and representing an educated and skilled workforce base within the community.

ECONOMIC BASE

The Town of Windsor Locks labor force increased by 171 persons (a 2.3% growth) from 7,520 persons in 2017 to 7,691 persons as of November 2022. The average annual number of persons in the labor force during the time period was 7,656 persons. In comparison, the North Central WDA¹ (of which the Town of Windsor Locks is a part) witnessed a decline of 1.5% in the labor force (or 7,969 persons), from 548,410 persons (2017) to 540,441 persons (November 2022). The average annual labor force over this period was 546,169 persons for the WDA.

Executive Summary RKG 4

¹ The North Central WDA (Workforce Development Area) includes the communities of Andover, Avon, Berlin, Bloomfield, Bolton, Bristol, Burlington, Canton, East Granby, East Hartford, East Windsor, Ellington, Enfield, Farmington, Glastonbury, Granby, Hartford, Hebron, Manchester, Marlborough, New Britain, Newington, Plainville, Plymouth, Rocky Hill, Simsbury, Somers, South Windsor, Southington, Stafford, Suffield, Tolland, Vernon, West Hartford, Wethersfield, Windsor and the **Town of Windsor Locks**.

After spiking in the 2020/2021 period, coincident with the onset of the Covid-19 pandemic, unemployment rates for all three areas have returned to pre-pandemic levels at approximately 4% or less, well within the range of what is typically considered to be full employment. The Town of Windsor Locks led the way with an unemployment rate of 3.8% in November 2022. While a low unemployment rate is generally considered to be a good thing, it may also suggest very little slack in the local labor market, i.e., employers may have a hard time hiring due to a lack of available workers which could constrain business growth. This may have an outsized impact on retail and food service sector jobs as those have been most acutely impacted by the pandemic and employees leaving the workforce.

This may be further indicated by the mix of the actual employment in the Town of Windsor Locks, with nearly 8,235 of those employed in the Town of Windsor Locks commuting from outside of the Town of Windsor Locks, led by commuters from Hartford and Springfield, MA. Furthermore, nearly 6,300 persons in the resident labor force of the Town of Windsor Locks commute outside of the Town of Windsor Locks for their place of employment, led by commutes to Hartford and East Hartford. Fewer than 950 persons employed in the Town of Windsor Locks both reside and work there.

Employment in the Town of Windsor Locks is projected to increase by nearly 1,980 persons by 2032. This includes an increase in transportation and warehousing. Field observations indicated an extensive existing inventory of such facilities in the Town of Windsor Locks.

Employment in the Town of Windsor Locks is heavily concentrated in a few industry sectors, including the manufacturing, transportation/warehousing, accommodations/food and government sectors; these account for 75% of the employment in 2021. However, employment projections for 2032 indicate a dramatic 52% decline in these sectors, with a particularly sharp decline in manufacturing partially offset by an increase in employment in transportation/warehousing.

REAL ESTATE & DEVELOPMENT

Recent development trends, the potential for real estate sectors to expand in the Town of Windsor Locks, and the availability of various types of spaces should all guide the Town's policy and regulatory choices to shape the future of the Route 20 Corridor. The following sections summarize the projected demand for housing, office, retail, and industrial uses.

HOUSING

There is limited projected demand for housing growth in the Town of Windsor Locks over the next five years. While the market is predominantly comprised of owner-occupied housing, there is a renter-occupied component at about 25%± of occupied housing units. The expansion of the population aged 65 and older could suggest some demand for new development geared toward those seeking to downsize or desiring housing with assisted living or other health/elderly related amenities, similar to Stonebrook Village which opened in 2016.

Field observations indicated multiple rental complexes within the Route 20 Corridor several which appear to be of older stock. These complexes may offer opportunities for retro-fitting to newer and more modern units. Nonetheless, opportunities may also be present for mixed-use development with ground

floor commercial uses and upper story residential uses. As RKG understands, one such project is under consideration at 5 National Drive.

OFFICE

Employment projections for Hartford County suggest opportunities for additional office sector demand, notably in the professional services and management sectors. Channeling some of this demand to the Route 20 Corridor would hinge on the capacity to attract it away from elsewhere in the county. Field observations did not indicate recent speculative development in the Route 20 Corridor. The prevailing stable inventory, high vacancy and effectively flat lease rates in the North Hartford submarket (as identified by REIS) further suggests that opportunities for new speculative development may be marginal. However, opportunities for specific end users, with particular requirements (such as medical related), or for owner occupants may be somewhat stronger.

RETAIL

With the exception of a large grocer in the Route 20 Corridor, most retail uses are of a smaller footprint and tend to meet the needs of a local consumer base as opposed to a destination draw consumer base. Nonetheless, there are numerous eating establishments in the Route 20 Corridor, some recently opened or planned, and which likely serve the employment base as well as the observed

Estimates indicate that the demand for additional retail equates to 6,950 SF for every new 100 households.

high concentration of hospitality projects. A potential re-capture of existing sales leakage within the market area could indicate some demand for new built retail, but more realistically would represent opportunities for existing merchants to expand their footprint or increase their market share through revisiting or expanding their merchandise lines, store operations and overall marketing.

INDUSTRIAL

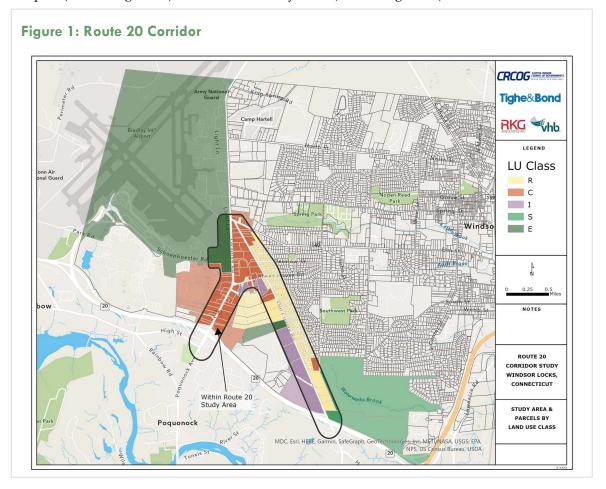
Employment projections, locally and throughout Hartford County, suggest strong employment growth and resulting demand for development, particularly in the transportation and warehousing distribution sectors. Observations indicated a very strong presence of the latter in the Route 20 Corridor and continued growth may, in part, be a function of available land to accommodate such large scale developments.

LAND ANALYSIS

RKG Associates performed an analysis of the land within the corridor study area to understand opportunities for redevelopment. The analysis examined land uses, total assessed values, and land values as a percentage of total assessed value at a parcel level.

The development patterns along the Route 20 Corridor are diverse and include a mix of land use types ranging from residential to commercial and industrial. The Route 20 Corridor is a highly visible and highly traveled limited access highway that serves the Bradley International Airport, which is located to the northwest of the study area. Along with the existing mix of land uses, there are several large vacant parcels of land that are well positioned for redevelopment along the study area.

The combination of accessibility, visibility and connectivity to multi-modal transportation offers high potential for the parcels along the corridor, such as the proposed developments at 3 Ella T. Grasso Turnpike (refer to Figure 26) and 700 Old County Road (refer to Figure 27).



DEMOGRAPHIC ANALYSIS

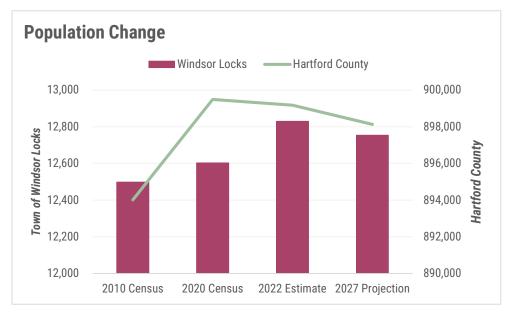
POPULATION TRENDS

A community's population is a critical factor in its economic development prospects. Population growth can drive economic activity, and changes in the numbers or proportions of particular population subgroups impact both local policy decisions and market responses. For example, increases in the number of people in family-forming age groups can increase the demands for larger homes and for youth and educational services, while also augmenting the local workforce. Growth in older cohorts can mean an increase in demand for smaller homes, and for specific retail opportunities and support services.

TOTAL POPULATION

Near term population trends in the Town of Windsor Locks compare favorably to Hartford County. The 2027 projected² population for the Town of Windsor Locks, at 12,754 persons, represents a 2.05% increase over 2010 – therefore, the overall population remains is expected to remain more or less stable. This also holds for Hartford County with a projected growth of 0.46% (refer to Figure 2).





Demographic Analysis RKG 8

² As offered by the US Census ad ESRI, a leading private sector vendor of socioeconomic data and proprietary modeling.

Over the longer term, from 2020 through 2050, the Town of Windsor Locks population is projected to peak in 2030 and decline somewhat thereafter and account for 12,674 persons by 20250. This is in comparison to the statewide population which is projected to continue to grow through 2050.³

Both in the near and longer term, a growing regional and state population suggests that there will be opportunities for existing businesses to expand, and for new development to take place. However, the relatively stable population in the Town of Windsor Locks indicates that new development or business expansion is likely to occur as a result of capturing, for example, spending power from outside its borders by creating a destination retail draw, or for non-retail businesses, an expansion or relocation of operations.

AGE DISTRIBUTION

In terms of the age distribution of the population for the Town of Windsor Locks and Hartford County (2010 to 2027), both exhibit similar trends, as follows:

- **Under age 20** a declining percent of the total population in this age cohort since 2010, possibly representing a decrease in the birth rate, but moreover an inability to retain the younger generation locally.
- Age 20 to 34 a modest growth in the cohort typically considered to be first time home buyers or otherwise establishing their own households (often as renters).
- Age 35 to 54 a decline since 2010 among the cohort often exhibiting their peak earning and spending years. Nonetheless, for the Town of Windsor Locks and countywide this cohort represents the greatest proportion of the overall population.
- Age 55 to 64 those in their peak disposable income years and also in pre-retirement years,
 possibly realizing a decline in average household size and subsequently seeking to downsize
 their housing needs.
- **65 and Older** those often in retirement with possible needs for downsized housing or housing with special health care and/or other amenities. In 2010, this cohort accounted for 16.7% of the Town of Windsor Locks' population and is projected to represent 23% by 2027. Similarly, the change countywide is from a 14.5% of the total population in 2010 to 21.6% by 2027.

Demographic Analysis RKG 9

³ As provided by the Connecticut Data Collaborative (and RKG) – projections for Hartford County were unavailable after the year 2025, so for this comparison the statewide projection is offered.

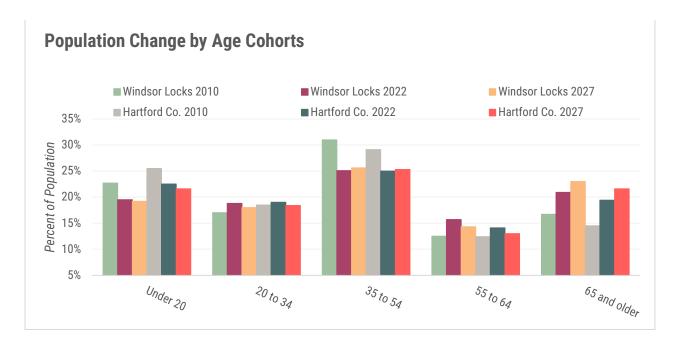


Figure 3 – Population Change by Age Cohorts

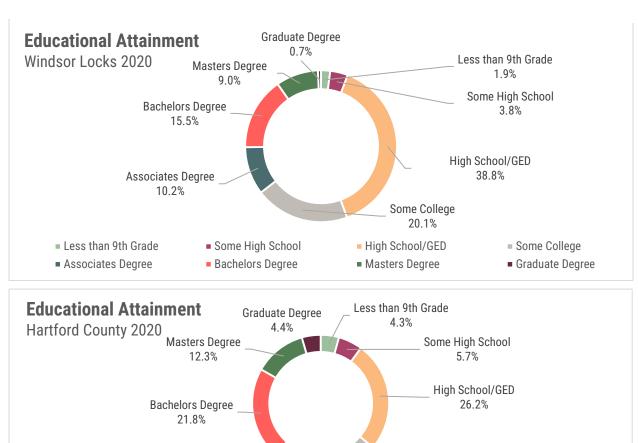
EDUCATION

Educational attainment is important for a community as many businesses and developers see education as a proxy for "talent" – one of the things that employers care about the most when choosing where to locate is the availability of appropriately skilled workers. Educational attainment levels for 2020⁴ are compared in Figure 4, for the Town of Windsor Locks relative to Hartford County. Nearly 40% of the Town of Windsor Locks' population over the age of 25 had a high school degree (or GED equivalent) in 2020, comparing well against the 26% for the county as a whole. Similarly, less than two percent of the Town of Windsor Locks had an education limited to less than ninth grade as compared to slightly more than 4% countywide.

The Hartford County population had a greater concentration of the 25+ population with college degrees. This is the case for those with a Bachelors' degree, as well as those with Masters' and Graduate level degrees. Despite this, slightly more than 25% of the Town of Windsor Locks population had completed Bachelors' degrees as compared with more than 38% for Hartford County. In both instances, these educational attainment levels suggest an existing pool of talent and/or skilled workers within the community and county.

Demographic Analysis RKG

⁴ Data reflects 2016-2020 average from American Community Survey (ACS)



Some College

16.8%

Some College

■ Graduate Degree

High School/GED

■ Masters Degree

Figure 4 – Educational Attainment for Windsor Locks and Hartford County

Associates Degree

8.5%

Less than 9th Grade Some High School

Associates Degree
 Bachelors Degree

HOUSING

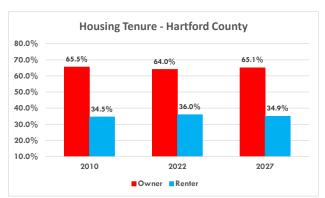
Over the 2022 to 2027 time, the number of housing units in the Town of Windsor Locks and countywide are both projected to increase by 0.4% each. For the Town of Windsor Locks this represents a growth of 24 units to nearly 5,990 units in 2027. Overall, the increase since 2010 for the Town of Windsor Locks is projected at a total of 560 units or about 33 units on average annually. Countywide this 0.4% projected growth equates to an increase of almost 1,600 units to 389,075 in 2027. Since 2010, the county is projected to increase by 14,155 units or about 833 units annually on average. Both the Town of Windsor Locks and Hartford County are projected to experience an increase in vacant units between 2022 and 2027, though the estimate of 10.3% in the Town of Windsor Locks contrasted to 2.5% countywide. However, in 2027 the projected vacancy rate for the Town of Windsor Locks, at 5%, is less than the 6.5% rate projected countywide. The marginal growth in housing units combined with increased vacancy in the Town of Windsor Locks may likely impact future demand for a variety of non-residential development, either in

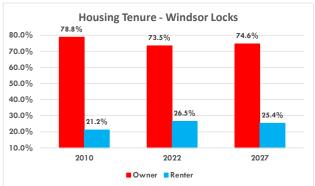
the Town of Windsor Locks in general or within the Route 20 corridor specifically. As the adage goes "retail follows rooftops" meaning that retail growth is in response to residential growth which in turn equates to increased consumer (household) spending demand.

TENURE

For both the Town of Windsor Locks and Hartford County, households (occupied housing units) are predominantly owner occupied, slightly more so for the Town of Windsor Locks at 70% or more for 2010, 2022 and projected for 2027 (refer to Figure 5), noting a marginal decline since 2010. In comparison, countywide the owner occupancy rate is stable at approximately 65%. The percentage of renter occupied housing in the Town of Windsor Locks is projected to increase while for Hartford County it is more or less stable at 35%. The mix of owner and renter housing in Hartford County is on par with generally acknowledged national averages.

Figure 5 - Comparisons of Housing Tenure





Considering the previously noted stable population for the Town of Windsor Locks (2022 to 2027) the overall demand for additional housing may be marginal for both owner and renter units. However, the changes in the dynamics of the population (the shift in age cohorts) could suggest some demand in the Town of Windsor Locks for "downsize housing" associated with an aging population. Whether such demand could be realized within the Route 20 Corridor depends on several factors including available land for such development, local zoning and regulatory and if densities of development (the number of units) could attract a willing and able developer. This could be enhanced with the concept of mixed-use development allowing for ground floor commercial and residential on upper stories, as this may also tend to reduce a developer's financial risks through diversity and density.

OWNER MEDIAN VALUES

For 2022 the median value of owner housing in the Town of Windsor Locks is estimated at \$216,676 and is projected to increase by 1.5% to \$220,022 in 2027. The median value for Hartford County, in 2020, is estimated at \$270,727 and is projected to increase to \$277,127 (or by 2.4%) by 2027. The absolute increase for the Town of Windsor Locks is approximately \$3,350 as compared to \$6,400 countywide. As indicated in Figure 6, approximately 97% of the owner housing in the Town of Windsor Locks was valued at less

than \$400,000 in 2022 and this drops to approximately 96% in 2027. Countywide, the decrease is from 82% in 2022 to 79% by 2027.





Figure 6 – Comparisons of Owner Median Values

While some change in owner values could in part reflect inflation and/or upgrades to existing units (in place), it is may also reflect an increase in the valuation of new built housing, with the Town of Windsor Locks lagging Hartford County at the upper margins.

Conversely, owner values exceeding \$400,000 in the Town of Windsor Locks is expected to increase from 3.5% of units to approximately 4.5% by 2027. The shift for Hartford County is more dramatic at 18% in 2022 to 21% by 2027. Increases in median owner home values for the Town of Windsor Locks are driven by owner values in the \$200,000 to \$750,000 range with 85 units. For Hartford County these are driven by the \$400,000 to \$750,000 range with an increase of nearly 6,865 units. The change in units valued at \$750,000 is negligible for the Town of Windsor Locks at fewer than ten (10) units in total as compared with nearly 1,580 units countywide.

This could further reflect the variance in the median selling price of housing, as described by the *Warren Group, Banker & Tradesman*, for residential units, both single-family and condominium, between the Town of Windsor Locks and Hartford County as a whole. As shown in Figure 7, the median selling prices countywide have consistently been well above those for the Town of Windsor Locks (2010 to 2022). During this period, the increase in the Town of Winsor Locks was 28% and countywide it was 38%. Furthermore, the average annual selling price in the Town of Windsor Locks was \$177,615 but was 20% greater countywide at nearly \$212,695.

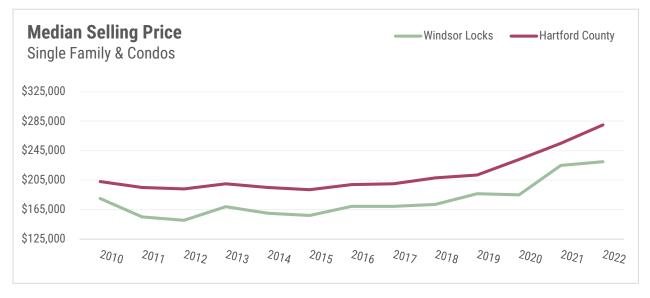
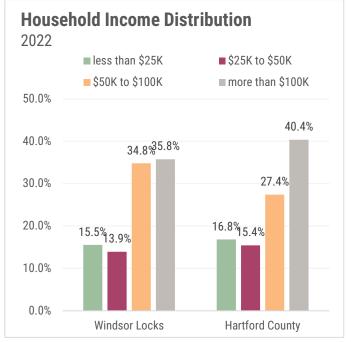


Figure 7 - Comparison of Median Selling Price

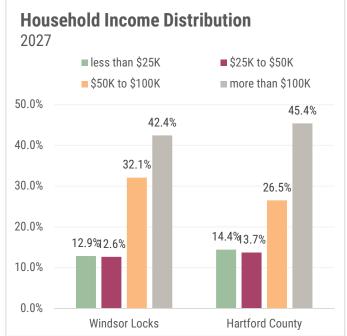
INCOME

Between 2022 and 2027, both the Town of Windsor Locks and Hartford County are projected to realize a decline in the percent of households earning less than \$50,000 (refer to Figure 8). For the Town of Windsor Locks this decline represents approximately 230 households while the decline countywide accounts for approximately 14,615 households. Both areas are also projected to experience a drop in the number of households earning \$50,000 to \$100,000, at approximately 150 units in the Town of Windsor Locks and 2,980 units countywide. Despite this decline in the Town of Windsor Locks, the percent of households in this earnings bracket continues to account for nearly one-third of the households in the Town; countywide this represents slightly more than one-fourth of the households in both time periods.

The number of households earning more than \$100,000 are projected to increase by approximately 380 units in the Town of Windsor Locks and nearly 18,590 units countywide. As a result, in 2027, more than 40% of all households in the Town and countywide are projected to be in this earnings bracket. Although typically household expenditures are likely to grow over a five-year period, the increase nonetheless may also represent a potential increase in consumer/household spending demand for a variety of retail goods and services. Whether or not this would translate to demand for additional stores depends on a variety of factors, but at minimum it would likely represent an opportunity for increased demand and spending at existing retail establishments.





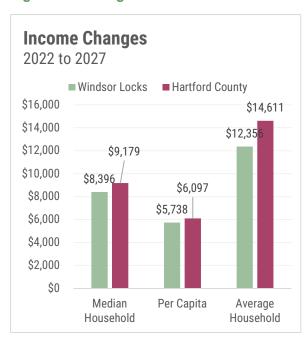


Median Household Income – for the Town of Windsor Locks, the median household income is projected to increase by nearly \$8,400 by 2027 and be at just under \$84,400 in total. The projected increase countywide is approximately \$9,120 and total \$88,970 in 2027. While an increase is projected for the Town and countywide, in total the Town lags Hartford County by approximately \$4,585 or by 5.2%.

Per Capita Income – by 2027 the per capita income for the Town of Windsor Locks is projected to be nearly \$49,130 or an increase of approximately \$5,740 from 2022. The projected increase countywide is \$6,100 and results in a 2027 per capita income of \$50,050 which is \$2,920 greater than the Town, or a difference of 5.6.%.

Average Household Income – the average household income for the Town of Windsor Locks is projected to increase by a little over \$12,350 by 2027 and be \$110,142. For Hartford County the average household income in 20227 is projected at \$128,250, representing an increase of \$14,610 since 2022. By 2027, the countywide average household income is projected to be approximately \$18,105 greater than that of the Town, a difference of just over 14%.

Figure 9 - Change in Incomes



KEY FINDINGS

- From 2010 and projected to 2027, the Town of Windsor Locks population is expected to remain stable at 12,498 persons (2010) to 12,784 persons (2027). There was some estimated growth from 2020 to 2022, but a slight decline is projected by 2027.
- The Town of Windsor Locks population in the age cohort of 35 to 54 years, those in peak earning and consumption years, represents the largest cohort for both 2022 and 2027 slightly more than one-fourth of the Town population. Those aged 65 and older, often seeking to downsize their residential needs or desiring assisted or health care related housing, are projected to account for 23% of the town population by 2027, representing the second largest age cohort.
- In 2020, of the population aged 25 and older in the Town of Windsor Locks, slightly more than 35% have an Associate's Degree or higher); this compares to 47% countywide.
- Households are predominantly owner-occupied in the Town of Windsor Locks, with the proportion expected to reach 74.6% by 2027. The median value of owner-occupied housing in the Town of Windsor Locks, for 2027, is projected at \$220,022 which is more than \$50,000 less than Hartford County at \$227,127.
- By 2027, 42.4% of the Town households are projected to have incomes exceeding \$100,000, as
 compared to 45.4% countywide. For both geographies this represents the highest concentration of
 households by earnings bracket. The 2027 median household income in the Town of Windsor
 Locks is projected to be nearly \$84,400 but still is expected to be below countywide estimates at
 \$88,970.

ECONOMIC BASE

LABOR MARKET

The Town of Windsor Locks' labor force is comprised of residents over the age of 16 who are currently working or actively seeking work. In this analysis, comparative information is offered for the Town of Windsor Locks, the North Central Workforce Development Area (WDA) of which it is a part, and Connecticut. Trends in the labor force and unemployment rates follow for the 2017 through November 2022 as provided by the Connecticut Department of Labor.

The Town of Windsor Locks labor force increased by 171 persons (2.3%) increasing from 7,520 persons in 2017 to 7,691 persons as of November 2022. The average annual number of persons in the labor force during the time period was 7,656 persons. The North Central WDA witnessed a decline of 1.5% in the labor force (or 7,969 persons) declining from 548,410 persons (2017) to 540,441 persons (November 2022). The average annual labor force over this period was 546,169 persons. Statewide the labor force declined from 1.92 million in 2017 to approximately 1.90 million (November 2002) accounting for a 1.4% decline or 27,800 persons. The average labor force was approximately 1.91 million annually.

The unemployment rates for all three areas followed a similar pattern, spiking in 2020 and 2021 coincident with the beginning of the pandemic, but returning to pre-pandemic levels (or slightly below) by November of 2022. The unemployment rate in the Town of Windsor Locks was 3.8% in November 2002, down from 4.4% in 2017 for a decrease of 0.6 percentage points. In comparison, the unemployment rates declined by 0.3 and 0.2 percentage points for the WDA and statewide, respectively. For all three areas, current unemployment is well within the range of what is typically considered full employment.

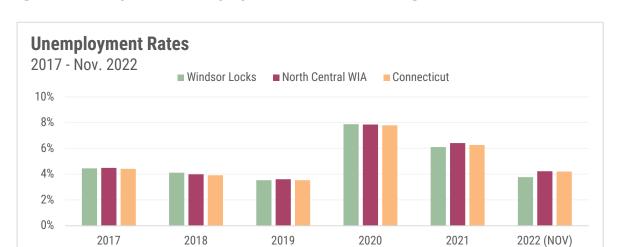


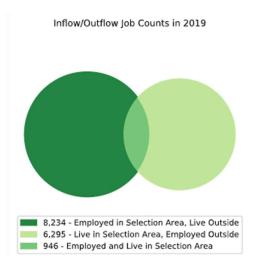
Figure 10 - Comparative Unemployment Rates - 2017 through November 2022

COMMUTING PATTERNS

In 2019, commuting patterns for all workers,⁵ indicated (refer to Figure 11) that approximately 90% of the employment came from outside of the community while 10% of the employment was comprised of local residents. Conversely, approximately 13% of the employment was comprised of local residents and 87% by residents from elsewhere. As a result, the inflow of workers into the Town of Windsor Locks exceeds the Town of Windsor Locks resident workforce by nearly 1,940 persons indicating that the community is a net importer of workers.

Table 1 presents the 2019 commuting patterns for the Town of Windsor Locks by place of residence and by place of (destination) of work indicating that 946 workers both resided in and worked in the Town of Windsor Locks. Another 10.2%

Figure 11 — Commuting Patterns



of the Town of Windsor Locks employment commuted from Hartford, followed by East Hartford and Springfield. Conversely, 9.7% of the Town of Windsor Locks residents commuted to Hartford for their place of employment, followed by Springfield and East Hartford. As noted previously, approximately 87% of the employment in the Town of Windsor Locks is from out of community residents and nearly 90% of the Windsor Locks employed labor force commutes out of the Town of Windsor Locks for their place of employment.

Table 1 - Windsor Locks Employment (2019) by Place of Residence and Place of Work

Place of Residence	Place of Work (Windsor Locks)	Count of Workers	Share of Total
Windsor Locks, CT		946	13.1%
Hartford CT		742	10.2%
East Hartford, CT		282	3.9%
Springfield, MA		224	3.1%
West Hartford, CT		136	1.9%
Newington, CT		82	1.1%
Manchester, CT		76	1.0%
New Britain, CT		67	0.9%
Thompsonville, CT		62	0.9%
Glastonbury Center, CT		61	0.8%

Place of Work	Place of Residence (Windsor Locks)	Count of Workers	Share of Total
		ı	40.00
Windsor Locks, CT		946	10.3%
Hartford, CT		888	9.7%
Springfield, MA		407	4.4%
East Hartford, CT		351	3.8%
Manchester, CT		184	2.0%
West Hartford, CT		161	1.8%
New Britain, CT		144	1.6%
Southwood Acres, CT		141	1.5%
Thompsonville, CT		127	1.4%
Agawam, MA		122	1.3%

 $^{^{\}rm 5}$ US Census Bureau – On The Map Tool

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As shown in Table 2, nearly 50% of those workers residing in the Town of Windsor Locks commute from distances of less than 10 miles followed by 36% who commute 10 to 24 miles for work and less than 8% commute 50 miles or more for work. For those workers who work in the Town of Windsor Locks, approximately 62% commute from distances greater than 10 miles.

Table 2 - Commute Distances

Place of Residence	Place of Work (Windsor Locks)	Count of Workers	Share of Total
less than 10 miles		3,616	49.9%
10 to 24 miles		2,605	36.0%
25 to 50 miles		471	6.5%
more than 50 miles		549	7.6%

Place of Work	Place of Residence (Windsor Locks)		Share of Total
less than 10 miles		3,486	38.0%
10 to 24 miles		4,058	44.2%
25 to 50 miles		1,070	11.7%
more than 50 miles		566	6.2%

INDUSTRY INDICATORS

Table 3 presents changes in the employment, by selected industry sector (2017 and 2021)⁶ for Windsor Locks, the WDA and statewide, noting the following:

- The Town of Windsor Locks total employment declined by 4.1% and was observed to decline
 across most industry sectors. Despite this, double digit percent increases were realized in
 construction, transportation/warehousing and the management sectors.
- North Central WDA an overall decline of 4.4% in employment, also across most industry sectors with double digit increases in the transportation/warehousing and management.
- Statewide a decrease of 4.7% across all sectors with only the transportation/warehousing sector realizing a double digit percent increase.

The change in employment by the industry sector reflects areas in which the economy may be growing and/or shrinking. Further, depending on the direction of these individual sectors then reflects changes in average wages and income levels – translating to spending power.

Economic Base RKG

⁶ The last full year of data reported by the Connecticut Department of Labor

Table 3 - Comparative Employment by Industry Sector 2017 - 2021

Emplo	yment Trends by NAICS Industry	Win	dsor Locks,	CT	Nor	rth Central WDA		(Connecticut	
Secto	rs	2017	2021	% Δ	2017	2021	% Δ	2017	2021	% Δ
23	Construction	364	469	28.8%	17,893	18,220	1.8%	58,311	59,317	1.7%
31	Manufacturing	3,995	4,191	4.9%	56,102	53,828	-4.1%	158,810	152,859	-3.7%
42	Wholesale Trade	643	557	-13.4%	19,295	16,458	-14.7%	62,553	57,252	-8.5%
44	Retail Trade	376	317	-15.7%	52,248	47,381	-9.3%	183,501	167,286	-8.8%
48	Transportation/Warehousing	2,472	2,831	14.5%	18,161	23,317	28.4%	46,012	60,443	31.4%
51	Information	na	48	na	10,251	8,513	-17.0%	31,513	29,908	-5.1%
52	Finance/Insurance	94	56	-40.4%	50,470	47,036	-6.8%	106,207	97,447	-8.2%
53	Real Estate	338	182	-46.2%	6,311	5,743	-9.0%	19,864	18,620	-6.3%
54	Professional/Technical	219	174	-20.5%	32,597	31,506	-3.3%	96,354	95,314	-1.1%
55	Management	117	133	13.7%	11,134	12,576	13.0%	32,309	30,426	-5.8%
56	Administration	644	407	-36.8%	29,171	26,553	-9.0%	89,707	87,855	-2.1%
61	Education	na	na	na	11,111	10,469	-5.8%	57,860	57,571	-0.5%
62	Health Care	314	326	3.8%	82,395	83,826	1.7%	267,590	268,078	0.2%
71	Arts/Entertainment	145	88	-39.3%	7,120	5,818	-18.3%	28,285	23,165	-18.1%
72	Accommodations/Food	1,066	776	-27.2%	37,199	31,540	-15.2%	128,235	111,170	-13.3%
81	Other Services not Govt.	506	295	-41.7%	18,576	15,306	-17.6%	64,284	50,461	-21.5%
	Government	1,540	1,475	-4.2%	72,379	70,562	-2.5%	227,238	212,385	-6.5%
All Inc	lustry Sectors	12,886	12,353	-4.1%	534,577	510,819	-4.4%	1,669,766	1,591,837	-4.7%

Source: CT Department of Labor and RKG (2023)

na - data not reported or suppressed

All three areas witnessed a decline in retail sector employment, with the 15.7% drop in the Town of Windsor Locks as the highest. Similarly, all experienced a decline in industry sectors typically associated with office and/or flex space use such as finance/insurance, real estate, professional/technical and administration – again with the sharpest percent declines observed for the Town of Windsor Locks. In 2017 and in 2021, total employment in the Town of Windsor Locks represented approximately 2.4% of the total employment in the WDA.

Employment in the Town of Windsor Locks is heavily concentrated in a handful of industry sectors, which include the manufacturing, transportation/warehousing, accommodations/food and government sectors. In 2017, approximately 70% of the employment was in these four sectors and this increased to a 75% representation by 2021. By comparison, for both 2017 and for 2021, approximately one-third of the WDA and statewide employment was in the same sectors.

Notably, however, manufacturing employment, which typically is comprised of higher wage jobs, in the Town of Windsor Locks accounted for 7.1% of the WDA employment in the same sector and increased to a 7.8% representation by 2021. As such, the employment and resulting wages from this sector are a major contributor to the local economy and also represent the sector "most at risk" resulting from any potential downturn in this sector. Conversely, the Town of Windsor Locks employment in the retail and accommodations/food sectors, typically with lower wages, accounted for more than three percent of the WDA employment for both periods.

AVERAGE ANNUAL WAGES

Table 4 offers a comparison of the average annual wage, by industry sector (2017 and 2021) for the Town of Windsor Locks relative to the WDA and Connecticut. Despite a comparatively lower growth rate in the average annual wage for all sectors at 13.2%, the absolute dollar wage in the Town of Windsor Locks exceeds that for both the WDA and the state. The highest wages in the Town of Windsor Locks are in the

manufacturing and finance/insurance sectors; for the WDA in the finance/insurance and management sectors; and, statewide in the finance/insurance and management sectors.

Although average annual wage growth for all three areas exceeded Consumer Price Index (CPI) inflation of 13.1% over the 2017 to 2021 period, indicating real growth in income, several sectors fell below inflation. This was less so for the Town of Windsor Locks where wage growth in the manufacturing, wholesale trade, and government sectors did not keep pace with inflation. In other words, some of the stringer sectors of the local economy, in terms of their employment base, are realizing wage increase less than inflation.

Table 4 - Comparative Average Annual Wage Trends by Industry Sector 2017 - 2021

Avera	ge Annual Wage Trends by NAICS	Win	dsor Locks,	CT	Noi	th Central WDA		C	onnecticut		Windsor Locks	as a % (2021)
Indust	ry Sectors	2017	2021	% Δ	2017	2021	% ∆	2017	2021	% Δ	WDA	State
23	Construction	\$66,136	\$80,711	22.0%	\$71,195	\$80,316	12.8%	\$68,629	\$77,102	12.3%	100.5%	104.7%
31	Manufacturing	\$112,598	\$115,391	2.5%	\$83,731	\$89,454	6.8%	\$81,874	\$89,608	9.4%	129.0%	128.8%
42	Wholesale Trade	\$59,197	\$64,154	8.4%	\$77,670	\$92,978	19.7%	\$94,622	\$111,232	17.6%	69.0%	57.7%
44	Retail Trade	\$30,623	\$43,941	43.5%	\$31,319	\$39,253	25.3%	\$33,492	\$41,652	24.4%	111.9%	105.5%
48	Transportation/Warehousing	\$50,003	\$56,959	13.9%	\$44,502	\$48,776	9.6%	\$47,366	\$50,353	6.3%	116.8%	113.1%
51	Information	na	\$84,056	na	\$100,393	\$130,805	30.3%	\$103,192	\$150,055	45.4%	64.3%	56.0%
52	Finance/Insurance	\$103,976	\$130,957	25.9%	\$130,615	\$143,375	9.8%	\$168,959	\$195,442	15.7%	91.3%	67.0%
53	Real Estate	\$45,435	\$55,084	21.2%	\$65,764	\$68,186	3.7%	\$66,281	\$79,228	19.5%	80.8%	69.5%
54	Professional/Technical	\$78,131	\$91,182	16.7%	\$93,919	\$107,577	14.5%	\$103,531	\$121,874	17.7%	84.8%	74.8%
55	Management	\$86,191	\$97,534	13.2%	\$124,709	\$133,778	7.3%	\$154,167	\$158,567	2.9%	72.9%	61.5%
56	Administration	\$59,916	\$79,709	33.0%	\$40,489	\$46,625	15.2%	\$45,568	\$54,005	18.5%	171.0%	147.6%
61	Education	na	na	na	\$48,637	\$55,283	13.7%	\$64,844	\$76,168	17.5%	na	na
62	Health Care	\$30,016	\$36,497	21.6%	\$52,519	\$60,540	15.3%	\$51,629	\$60,835	17.8%	60.3%	60.0%
71	Arts/Entertainment	\$21,592	\$31,899	47.7%	\$21,085	\$27,197	29.0%	\$28,603	\$36,069	26.1%	117.3%	88.4%
72	Accommodations/Food	\$23,663	\$29,381	24.2%	\$20,534	\$25,115	22.3%	\$21,839	\$26,769	22.6%	117.0%	109.8%
81	Other Services not Govt.	\$29,214	\$40,315	38.0%	\$34,534	\$45,415	31.5%	\$33,409	\$44,079	31.9%	88.8%	91.5%
	Government	\$69,513	\$74,806	7.6%	\$66,493	\$73,557	10.6%	\$74,530	\$83,079	11.5%	101.7%	90.0%
All Inc	lustry Sectors	\$69,838	\$79,072	13.2%	\$65,434	\$74,422	13.7%	\$66,648	\$77,839	16.8%	106.2%	101.6%
C	CT Department of Labor and DVC (2022)		Jana 4	han actimated	CDI inflation	£ 10 10					Windoor Le	aka ia s

Source: CT Department of Labor and RKG (2023)

less than estimated CPI inflation of 13.1%

Windsor Locks is >

na - data not reported or suppressed

LOCATION QUOTIENTS

Location quotients compare employment by industry in two or more geographic areas. The location quotient is a ratio of the percentage of an industry's employment in one geography to that of a larger comparison geography, such as the Town of Windsor Locks to the North Central WDA. If the ratio falls between 0.80 and 1.20, then the proportion of jobs is very similar in both geographies. If the ratio is less than 0.80, then the identified industry sector is thought to be under-represented in the local economy. Conversely, a ratio greater than 1.20 can show a specialty within the local economy (an over-performer) as compared to the larger geography. The location quotient can be useful in pointing out opportunities for certain industry sectors to gain a larger share of the employment base or to indicate when a community may be heavily reliant on one or two industry sectors. In some cases, a high location quotient may indicate a specialty area in the local economy. Table 5 presents the 2017 and 2021 location quotients, by industry sector, comparing the Town of Windsor Locks to the WDA and the WDA to Connecticut.

In 2017, five industry sectors in the Town of Windsor Locks under-performed relative to the WDA, while two sectors in the WDA under-performed relative to the state. By 2021 this had increased to eight sectors for the Town of Windsor Locks and declined to one sector for the WDA. More notable is that of the 17 industry sectors, the location quotient declined for ten sectors in the Town of Windsor Locks and for 12 sectors in the WDA. For the Town of Windsor Locks this included the transportation/warehousing sector, which otherwise strongly outperformed the WDA in employment growth, increasing 14.5% locally.

The manufacturing and wholesale trade sectors in the Town of Windsor Locks both over-perform (as measured by the location quotient) the WDA while the WDA is on par with the state. In terms of the manufacturing sector employment increased in the Town of Windsor Locks and employment decreased in the wholesale trade sector.

Table 5 - Location Quotient Comparisons 2017 and 2021

Emplo	yment Trends by NAICS Industry	Location Quotie	nt Windsor Lock	s vs WDA	Location (Quotient WDA vs	Connecticut
Secto	s	2017	2021	% Δ	2017	2021	% Δ
23	Construction	0.844	1.064	26.1%	0.958	0.957	-0.1%
31	Manufacturing	2.954	3.220	9.0%	1.103	1.097	-0.6%
42	Wholesale Trade	1.382	1.399	1.2%	0.963	0.896	-7.0%
44	Retail Trade	0.299	0.277	-7.3%	0.889	0.883	-0.8%
48	Transportation/Warehousing	5.647	5.021	-11.1%	1.233	1.202	-2.5%
51	Information	na	0.233	na	1.016	0.887	-12.7%
52	Finance/Insurance	0.077	0.049	-36.3%	1.484	1.504	1.3%
53	Real Estate	2.222	1.310	-41.0%	0.992	0.961	-3.1%
54	Professional/Technical	0.279	0.228	-18.1%	1.057	1.030	-2.5%
55	Management	0.436	0.437	0.3%	1.076	1.288	19.7%
56	Administration	0.916	0.634	-30.8%	1.016	0.942	-7.3%
61	Education	na	na	na	0.600	0.567	-5.5%
62	Health Care	0.158	0.161	1.7%	0.962	0.974	1.3%
71	Arts/Entertainment	0.845	0.625	-26.0%	0.786	0.783	-0.5%
72	Accommodations/Food	1.189	1.017	-14.4%	0.906	0.884	-2.4%
81	Other Services not Govt.	1.130	0.797	-29.5%	0.903	0.945	4.7%
	Government	0.883	0.864	-2.1%	0.995	1.035	4.1%
All Inc	ustry Sectors	na	na	na	na	na	na

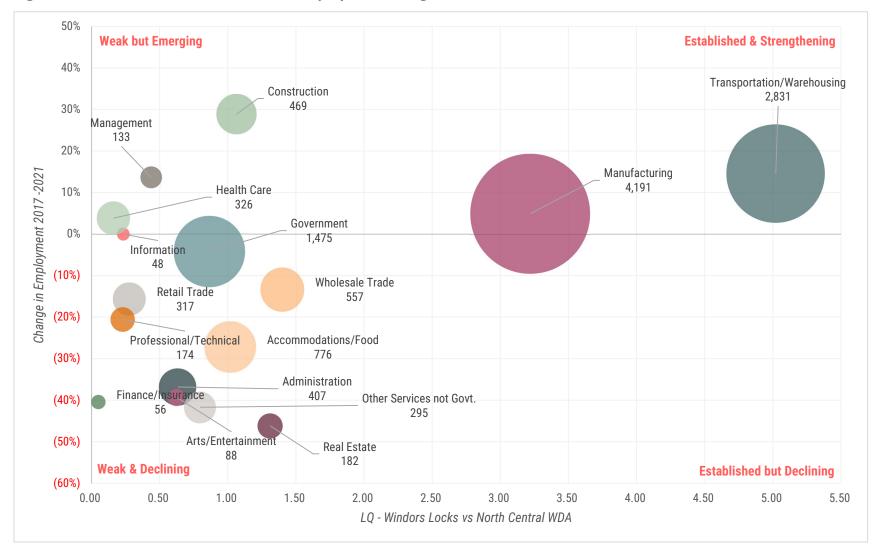
Source: CT Department of Labor and RKG (2023) under-performs over-performs

na - data not reported or suppressed

Figure 12 shows the relationship between employment growth in an industry and its prevalence in the Town of Windsor Locks relative to the North Central WDA. Industry sectors to the right of the 1.00 line (read as the LQ) are more common than in the WDA overall, and those above 0% (read as the percent employment change) have grown between 2017 and 2021. In the Town of Windsor Locks, only the manufacturing and transportation/warehousing sectors are in the established and strengthening quadrant of the graphic. Most industry sectors are in the weak and declining quadrant of the graphic.

Space requirements for each of these industries should be considered during conversations about zoning or rezoning, and site design. Many of these sectors have unique demands for building floorplates, building heights, parking, and infrastructure, which can influence the likelihood of their locating on a particular site.

Figure 12 - Location Quotients Relative to Employment Change for Windsor Locks vs. the North Central WDA



EMPLOYMENT PROJECTIONS AND DEMAND FOR SPACE

RKG analyzed the 10-year projected employment change, by industry sector, for the Town of Windsor Locks and Hartford County and estimated the demand for space (SF) as based on typical industry standards with respect to the average amount of SF per FTE (full-time equivalent) employment. In short, projected employment gains could equate to demand for additional (SF) development. Employment projections, 2022 to 2032, as offered by EMSI, an industry sector leader in providing such metrics and proprietary modeling, are presented in Table 6 for the Town of Windsor Locks and Hartford County.

Town of Windsor Locks – A projected growth of 1,977 positions representing an increase of 16.4% and accounting for 2.4% of the 2032 countywide employment across all sectors. Significant employment growth (in absolute terms) is projected for the transportation/warehousing and health care/services sectors. There are projected declines in employment for several other sectors, notably 89 positions in the wholesale trade sector.

Hartford County – A projected 8.9% increase in employment, approximately one-half of the rate for the Town, and representing an overall increase of 48,310 positions. Employment growth is led by the health care/services sector at 18,785 position. There is employment growth in most other sectors, excluding utilities and wholesale trade, retail trade and finance/insurance, with each of the latter three losing 1,000 positions or more, each.

Table 6 - Comparative Employment Projections By NAICS Industry Sectors

Employi	nent Projections by NAICS	Town	of Winds	or Locks	ь, СТ		Hartford Co	ounty, CT		Town as Cour	
Industry	Sectors	2022	2032	# ∆	% Δ	2022	2032	#Δ	% Δ	2022	2023
22	Utilities	0	0	0	na	548	330	(218)	-39.8%	0.0%	0.0%
23 31	Construction Manufacturing	421 853	448 923	27 70	6.4% 8.2%	24,485 51,815	25,329 54,346	844 2,531	3.4% 4.9%	1.7% 1.6%	1.8% 1.7%
42 44	Wholesale Trade Retail Trade	389 331	300 329	(89) (2)	-22.9% -0.6%	15,576 46,065	13,656 43,810	(1,920) (2,255)	-12.3% -4.9%	2.5% 0.7%	2.2% 0.8%
48	Transportation/Warehousing	3,864	4,441	577	14.9%	26,324	32,661	6,337	24.1%	14.7%	13.6%
51 52	Information Finance/Insurance	46 92	47 83	(9)	2.2% -9.8%	8,598 50,358	8,646 49,255	48 (1,103)	0.6% -2.2%	0.5% 0.2%	0.5% 0.2%
53 54	Real Estate Professional Services	178 176	169 200	(9) 24	-5.1% 13.6%	7,131 35,877	7,224 39,266	93 3,389	1.3% 9.4%	2.5% 0.5%	2.3% 0.5%
55	Management	0	0	0	na	12,974	15,466	2,492	19.2%	0.0%	0.0%
56 61	Administrative Services Education	1,046 103	1,078 115	32 12	3.1% 11.7%	28,301 13,762	30,487 15,309	2,186 1,547	7.7% 11.2%	3.7% 0.7%	3.5% 0.8%
62 71	Health Care/Services Arts, Entertainment, and Recreation	1,945 17	3,159 27	1,214 10	62.4% 58.8%	87,299 6,772	106,084 8,139	18,785 1,367	21.5% 20.2%	2.2% 0.3%	3.0% 0.3%
72	Accommodation and Food Services	611	611	0	0.0%	30,586	35,602	5,016	16.4%	2.0%	1.7%
81	Other (not government)	784	782	(2)	-0.3%	23,333	25,013	1,680	7.2%	3.4%	3.1%
Total Al	l Sectors	12,071	14,048	1,977	16.4%	541,795	590,105	48,310	8.9%	2.2%	2.4%
Source: EN	ISI and RKG (2023)							·		Increa	ase

Town of Windsor Locks – a 10 year total demand of 537,020 SF led by the projected employment growth in the manufacturing, transportation/warehousing and health care/services sectors. All other sectors for the Town of Windsor Locks suggest only nominal demand relative to employment change. This is more

pronounced on an annualized basis. Lesser projections of employment growth translate to a potential diminished demand for additional (SF) of development which in turn could hinder speculative development.

Hartford County – based on employment projections, the estimated 10-year total demand for space equates to an approximate 12.32 million SF across a wide variety of industry sectors. On an annualized basis, this includes 516,167 SF in typical industrial and warehouse/distribution uses; 162,345 SF in typical office/flex spaces uses; and 281,775 SF for medical/health related uses. These in turn represent growth sectors and potential demand countywide, a portion of which may be realized in the Route 20 Corridor if parcel(s) are available and local developers are able to attract the growth from elsewhere in Hartford County (refer to Table 7 and Figure 13).

Apart from the projected employment growth in the aforementioned industry sectors, potential demand for additional development SF in the Town of Windsor Locks, and thus the Route 20 Corridor, could arise from the Town's capacity to attract growth (and SF demand) from elsewhere in Hartford County. Moreover, not all demand equates to newly built space, as some may be captured by the repositioning or expansion of existing facilities as well as reductions in existing vacancies.

Table 7 – Estimated Demand (SF) from 10-Year Employment Change

	nent Projections by NAICS	Average SF per FTE	Estimated SF year emplo	
Industry	Sectors	Employee	Windsor Locks	County
22	Utilities	na	na	na
23	Construction	150	4,050	126,600
31	Manufacturing	750	52,500	1,898,250
42	Wholesale Trade	525	na	na
44	Retail Trade	200	na	na
48	Transportation/Warehousing	495	285,615	3,136,815
51	Information	175	175	8,400
52	Finance/Insurance	275	na	na
53	Real Estate	200	na	18,600
54	Professional Services	195	4,680	660,855
55	Management	200	na	498,400
56	Administrative Services	200	6,400	437,200
61	Education	na	na	na
62	Health Care/Services	150	182,100	2,817,750
71	Arts, Entertainment, and Recreation	150	1,500	205,050
72	Accommodation and Food Services	400	na	2,006,400
81	Other (not government)	300	na	504,000
Total Al	Sectors	na	537,020	12,318,320
Source: EM	ISI and RKG (2023)	Office/Flex	Whse/Ind	Medical

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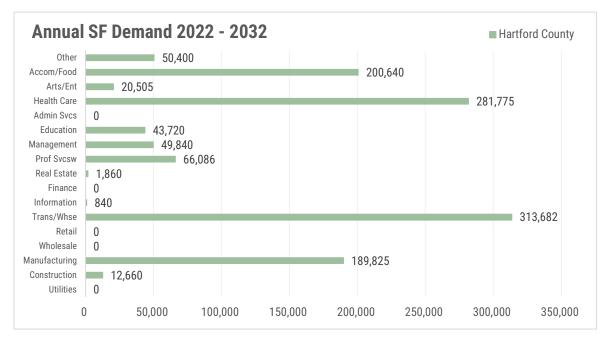


Figure 13 – Annualized SF Demand – Hartford County

KEY FINDINGS

- Between 2017 and November of 2022, the Town of Windsor Locks labor force grew by a modest 2.3%, faring better than a 1.5% decline in the North Central WDA labor force and a 1.4% decline statewide.
- The current (November 2022) unemployment rate in the Town of Windsor Locks has recovered from spiking in 2020/2021 and is somewhat lower than it was in 2017 well below 4% which is typically considered as full employment.
- However, overall employment in 2021 in the Town of Windsor Locks had decreased by about 500 persons since 2017 and remains heavily concentrated (75%±) in three industry sectors: manufacturing, transportation/warehousing, accommodations/food and government.
- For all industry sectors, the average annual wage in the Town of Windsor Locks, both in 2017 and in 2021, exceeded that for the North Central WDA and statewide.
- The overall average annual wage in the Town of Windsor Locks increased by 13.2% over the same time, marginally ahead of the estimated inflation of 13.1%, indicating that there was a small growth in real income. However, annual wages in the manufacturing and wholesale trade sectors did not keep pace with inflation.

- Industry location quotients comparing the Town of Windsor Locks to the North Central WDA indicate that only the manufacturing and transportation/warehousing sectors have been identified as established and strengthening sectors of the local economy.
- Based on employment growth, opportunities for commercial and industrial development in the
 Town of Windsor Locks are expected for the manufacturing, transportation/warehousing and
 health care/services sectors. However, perhaps the best opportunities for growth may involve the
 Town of Windsor Locks' ability to capture growth from within the region. Additional demand for
 space in the Town of Windsor Locks could also arise from local needs and efforts, as for example
 that may be associated with the Bradley International Airport.

REAL ESTATE & DEVELOPMENT

A core component of this market analysis is an examination of the real estate markets in the Town of Windsor Locks. Development patterns and the balance of available and needed space influence everything from the total population to the distinct business types that are attracted to and able to move to a community. These factors likewise have sweeping effects for quality of life and long-term economic sustainability. For this section of the analysis, RKG referred to market sector trends reports as offered by REIS, a leading private sector vendor for such metrics; the time-frame considered was 2017 through 2022. Datapoints from REIS are further supplemented with summaries of RKG's outreach and discussions with key stakeholders in the Town of Windsor Locks area, as well as with area real estate professionals knowledgeable of trends and conditions. The analysis is focused on the office, retail and warehousing/distribution real estate market sectors. For the retail sector, RKG also developed a retail gap analysis, comparing local spending demand relative to local retail sales, in this manner suggesting potential opportunities for additional retail development.

RKG cautions that the information offered by REIS is limited to rental properties and does not include owner-occupied metrics or performance trends in any of the real estate market sectors under review in this analysis. As a result, particularly for the office and industrial sectors, opportunities may be present for owner-occupants or those with particular space and/or fit-out requirements, such as the medical sectors or R&D lab space.

Further, specifically for the retail sector, the REIS data and inventory is often limited to those properties exceeding 10,000 SF and may not include smaller independent and/or freestanding retail. However, the REIS data does typically include retail metrics for:

Neighborhood Centers – the most common type of shopping center is the appropriately named neighborhood center. These properties use the outdoor straight line strip configuration, typically featuring one (1) anchor store (typically a grocery or drugstore component), and generally range from 30,000 SF to 150,000 SF. As the name implies, the typical market area served is a primary trade area of 3 miles. Neighborhood center retailers mainly offer day to day needs including groceries, convenience items, personal services, snacks, pharmaceuticals, and other health related items.

Community Centers – these centers are larger versions of neighborhood centers characterized by a wider range of retail stores. They normally offer 100,000 SF to 300,000 SF of retail space featuring two anchor stores. With a broader focus, the community center draws customers from a primary trade area of 3 to 6 miles. Community center anchors include grocery stores, super drugstores, discount department stores, and in certain markets, home improvement stores. Many community centers featuring discount department stores are also referred to as discount centers.

COMMERCIAL/INDUSTRIAL REAL ESTATE MARKET SECTORS

OFFICE

The inventory for the office market has been steady over the 2015 through 2022 time period, at approximately 2.74 million SF (refer to Table 8). However, vacancy has increased by nearly 58%, from 599,000 SF in 2015 to 946,000 SF in 2022. This is further reflected in the vacancy rate which has averaged 26.8% over the time period but increased sharply from this in 2021 and then again in 2022. Asking rents increased nominally year-over-year and averaged \$18.16 per SF for the time period. The stable inventory of office space in conjunction with relatively flat asking rents and an increasing vacancy rate suggests that opportunities for new speculative development may be minimal. However, opportunities for specific end users, with particular requirements (such as medical related) or for owner occupants may be somewhat stronger.

Table 8 - Trends in the Office Sector

Trends in the Office Sector (North Hartford submarket)	2015	2016	2017	2018	2019	2020	2021	2022
Inventory (SF)	2,735,000	2.735.000	2,735,000	2,735,000	2,735,000	2.735.000	2,735,000	2,735,000
Vacant (SF)	599,000	577,000	648,000	673,000	826,000	762,000	832,000	946,000
Vacancy Rate	21.9%	21.1%	23.7%	24.6%	30.2%	27.9%	30.4%	34.6%
Asking Rent / SF	\$17.82	\$17.89	\$18.04	\$18.11	\$18.17	\$18.41	\$18.40	\$18.41
% Δ over Prior Year	na	0.39%	0.84%	0.39%	0.33%	1.32%	-0.05%	0.05%

Source: REIS and RKG (2023)

na - data not available or suppressed

BROKER INTERVIEWS - OFFICE

A sample of office properties for lease, according to LoopNet, indicated slightly more than 29,500 SF available with an average asking rent of approximately \$12.60 per SF. Also, as a part of this analysis, RKG contacted area real estate professionals who are active in and knowledgeable about the real estate trends in the Town of Windsor Locks market.

These contacts noted that the office sector is considered to be the weakest of the non-residential sectors, as many companies are still wrestling with the increase in the "work-from-home" realities in the post-COVID-19 environment. As a result, some companies are re-calibrating their physical (SF) space needs and vacancies are anticipated to increase as existing lease terms and options expire.

WAREHOUSING AND DISTRIBUTION

REIS does not offer total industrial metrics for the North Hartford submarket however they do provide performance trends⁷ for the warehousing and distribution sector (refer to Table 9). Since 2017, the inventory has increased by nearly 2.95 million SF, with the greatest increase most recently in 2022. Overall, the increase in inventory was approximately 22% and the recent additions (2002) could reflect

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⁷ Information provided by REIS did not offer metrics for this sector for 2015 or 2016.

the continued development of large-scale distribution centers as are being developed by Amazon, Federal Express and other similar entities. Overall vacant space has declined by 48%, or by 603,000 SF, and has declined from 9.6% in 2017 to 4.1% in 2022. The average asking rents increased by \$0.70 per SF over the time period. However, at a little over \$6.00 per SF by 2020, rents are just within the range often considered sufficient to support speculative development. As noted previously, large scale users and distribution centers appear to be the dominant factor in recent development activity.

Table 9 – Trends in the Warehousing and Distribution Sector

Trends in the Warehouse/Distribution Sector (North Hartford submarket)	2015	2016	2017	2018	2019	2020	2021	2022
Inventory (SF)	na	па	13,221,000	14,118,000	14,118,000	14,539,000	14,844,000	16,166,000
Vacant (SF)	na	na	1,269,000	1,294,000	1,490,000	1,823,000	1,363,000	666,000
Vacancy Rate	na	na	9.6%	9.2%	10.6%	12.5%	9.2%	4.1%
Asking Rent / SF	na	na	\$5.51	\$5.52	\$5.56	\$5.67	\$5.96	\$6.21
% Δ over Prior Year	na	na	na	0.18%	0.72%	1.98%	5.11%	4.19%

Source: REIS and RKG (2023)

na - data not available or suppressed

BROKER INTERVIEWS - INDUSTRIAL

A sample of properties⁸ for lease, according to LoopNet, indicated approximately 58,450 SF available with an average asking rent of approximately \$7.25 per SF, greater than the average as presented in Table 9 for 2022. The average year built of these properties was 1980, suggesting an available inventory that may be dated for some users in the current market. Also, as a part of this analysis, RKG contacted area real estate professionals who are active in and knowledgeable of the real estate trends in the Town of Windsor Locks market.

These professionals noted that, in general, demand for industrial type space is high, originating from local entities as well as out-of-county and out-of-state entities, but inventory is essentially non-existent. The Route 20 Corridor is built-out for these with the exception of the parcel formerly anticipated for a sports facility. Users include a mix of owner-occupants and renters, often varying with the size (SF) of the facility. Opportunities for additional development within the Route 20 Corridor may best be reflected in re-positioning existing properties as opposed to new-built given the lack of sites (land).

Furthermore, Demand for warehousing and distribution space is most prevalent and such facilities currently exist within the Route 20 Corridor and are quite common. The existing Amazon facility, for example, has a footprint of 850,000 SF to 900,000 SF and has multiple floors. Such facilities are considered as "super-regional" and parcels with sufficient acreage to accommodate these facilities, with good highway access, are often scarce.

RETAIL

The inventory of rental retail space in the submarket has also been relatively flat, increasing by 32,000 (1%) from 2017 to 2022 (refer to Table 10). Over the same period, there was a 65,000 SF increase in

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⁸ These include two (2) in East Granby, and one (1) each for Windsor and the Town of Windsor Locks.

vacancy and as a result the vacancy rate shifted from 6.7% in 2017 to 9.0% by 2022. Average asking rents hovered around \$22.00 per SF over the time period, declining somewhat in 2020/2021 (the beginning of the COVID-19 pandemic), but rising in 2022. The prevailing asking rents may be "out-of-reach" for many smaller independent retailers. For example, according to information from LoopNet, the Dexter Plaza Shopping Center in the Town of Windsor Locks has 77,192 SF of rental space and has three listed vacancies totaling approximately 25,600 SF (or 33% of the center) with an average asking rent of \$10,60 per SF, approximately one-half of the submarket-wide average for 2022 in Table 10.

Table 10 - Trends in the Retail Sector

Trends in the Retail Sector (North Hartford submarket)	2015	2016	2017	2018	2019	2020	2021	2022
Inventory (SF) Vacant (SF)	2,746,000	2,746,000	2,746,000	2,778,000	2,778,000	2,778,000	2,778,000	2,778,000
	155,000	158,000	185,000	231,000	230,000	244,000	240,000	250,000
Vacancy Rate	5.6%	5.8%	6.7%	8.3%	8.3%	8.8%	8.6%	9.0%
Asking Rent / SF	\$20.52	\$21.30	\$21.50	\$21.54	\$21.94	\$21.84	\$21.79	\$21.84
% Δ over Prior Year	na	3.80%	0.94%	0.19%	1.86%	-0.46%	-0.23%	0.23%

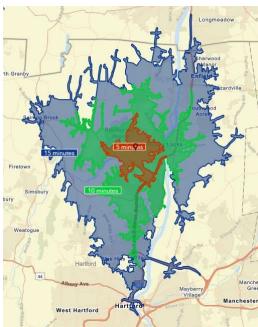
Source: REIS and RKG (2023)
na - data not available or suppressed

RETAIL GAP ANALYSIS

RKG developed a retail gap analysis for the Town of Windsor Locks, for a 5-, 10- and 15-minute drive time from the approximate intersection of Old County Road and Halfway House Road within the study area. A retail gap analysis compares the expected average annual household spending demand, across a variety of retail sectors, to the estimated actual retail sales occurring within the same geography. In this manner, an estimate of sales leakage – the spending demand of local households is not being captured by local merchants – can be determined. If this is the case, for these retail sectors, a market area is a net exporter of sales and opportunities for retail development (SF) may be present through a re-capture of some portion of this sales leakage.

Conversely, if the market area is a net importer of sales – meaning that sales exceed local demand – this is a strength, in that the market area may be a destination draw for retail

Figure 14 – Retail Market Drive Times



sales. This latter point is often the case if a "superstore" or big box retailer is part of the local retail mix, if the local market has a concentration and diversification of eating/drinking establishments, or if the local market is home to a collection of unique specialty retailers.

Figure 14 presents the drive-time market areas for this analysis. RKG has focused on the 10-minute drive time (green highlight in Figure 14) as appropriate for this analysis, reflecting the mid-measure. Notable findings of the gap analysis include (also refer to Table 11):

Household Spending Demand – There are approximately 15,353 households with an average spending demand, among the selected retail sectors, of \$27,746 per household annually. This in turn translates to a cumulative and aggregate demand of nearly \$426.0 million.

Retail Sales – Total retail sales are approximately \$370.7 million, indicating that the 10-minute market area is a net exporter of approximately \$55.3 million in sales. This indicates that there is local household spending demand not being captured by local merchants – i.e., sales leakage. While this estimated sales leakage is present across many retail store types, there are some sectors which are net importers.

Table 11 - Retail GAP Analysis for Windsor Locks, CT

	Windsor Locks, CT - 10 Minute Drive Time							
Merchandise Category	Demand/HH	Total Demand	Total Sales	(Export) /Import	Estimated SF based on Avg. Sales / SF	Estimated Store Count	Estimated Average Sales / Store	Potential SF w/ 30% Re-Capture
	\$27,746	\$425,979,964	\$370,723,329	(\$55,256,635)	828,439	267	\$1,388,477	116,085
Furniture & Home Furnishings Stores	\$1,401	\$21,508,810	\$7,527,080	(\$13,981,730)	35,559	8	\$940,885	,
Furniture Stores	\$713	\$10,945,935	\$1,694,387	(\$9,251,548)	5,648	1	\$1,694,387	9,252
Home Furnishings Stores	\$688	\$10,562,875	\$5,832,693	(\$4,730,182)	29,911	7	\$833,242	7,277
Electronics & Appliance Stores	\$1,305	\$20,038,376	\$15,226,581	(\$4,811,795)	43,505	14	\$1,087,613	4,124
Bldg Materials, Garden Equip. & Supply Stores	\$2,286	\$35,104,212	\$16,135,545	(\$18,968,667)	49,289	22	\$733,434	·
Bldg Material & Supplies Dealers	\$2,047	\$31,426,811	\$12,178,577	(\$19,248,234)	30,446	14	\$869,898	14,436
Lawn & Garden Equip & Supply Stores	\$240	\$3,677,401	\$3,956,968	\$279,567	18,843	8	\$494,621	,
Food & Beverage Stores	\$6,503	\$99,845,276	\$89,077,456	(\$10,767,820)	154,917	29	\$3,071,636	
Grocery Stores	\$5,552	\$85,241,644	\$74,886,923	(\$10,354,721)	136,158	10	\$7,488,692	5,648
Specialty Food Stores	\$263	\$4,039,885	\$5,181,316	\$1,141,431	10,260	6	\$863,553	· ·
Beer, Wine & Liquor Stores	\$688	\$10,563,747	\$9,009,217	(\$1,554,530)	8,499	13	\$693,017	440
Health & Personal Care Stores	\$2,243	\$34,443,548	\$43,517,153	\$9,073,605	66,949	14	\$3,108,368	
Clothing & Clothing Accessories Stores	\$2,649	\$40,667,416	\$9,018,901	(\$31,648,515)	26,413	14	\$644,207	
Clothing Stores	\$1,876	\$28,809,592	\$4,838,658	(\$23,970,934)	17,595	7	\$691,237	26,150
Shoe Stores	\$293	\$4,494,552	\$2,327,721	(\$2,166,831)	7,054	2	\$1,163,861	1,970
Jewelry, Luggage & Leather Goods Stores	\$480	\$7,363,272	\$1,852,522	(\$5,510,750)	1,764	4	\$463,131	1,575
Sporting Goods, Hobby, Book & Music Stores	\$1,259	\$19,325,632	\$7,498,654	(\$11,826,976)	31,817	10	\$749,865	
Sporting Goods/Hobby/Musical Instr Stores	\$1,115	\$17,116,515	\$6,066,315	(\$11,050,200)	26,961	7	\$866,616	14,734
Book, Periodical & Music Stores	\$144	\$2,209,116	\$1,432,340	(\$776,776)	4,855	2	\$716,170	790
General Merchandise Stores	\$5,069	\$77,827,469	\$77,683,837	(\$143,632)	157,068	11	\$7,062,167	
Department Stores Excluding Leased Depts.	\$3,418	\$52,476,602	\$73,200,878	\$20,724,276	144,952	3	\$24,400,293	
Other General Merchandise Stores	\$1,651	\$25,350,867	\$4,482,959	(\$20,867,908)	12,116	8	\$560,370	16,920
Miscellaneous Store Retailers	\$1,324	\$20,319,825	\$10,320,664	(\$9,999,161)	41,953	32	\$322,521	
Florists	\$115	\$1,763,622	\$1,746,562	(\$17,060)	5,822	8	\$218,320	17
Office Supplies, Stationery & Gift Stores	\$364	\$5,588,707	\$2,148,601	(\$3,440,106)	9,766	8	\$268,575	4,691
Used Merchandise Stores	\$132	\$2,024,983	\$1,038,985	(\$985,998)	3,921	5	\$207,797	1,116
Other Miscellaneous Store Retailers	\$713	\$10,942,513	\$5,386,516	(\$5,555,997)	22,444	12	\$448,876	6,945
Food Services & Drinking Places	\$3,706	\$56,899,400	\$94,717,458	\$37,818,056	220,968	113	\$838,208	
Restaurants	\$3,541	\$54,370,708	\$89,911,586	\$35,540,878	206,693	107	\$840,295	
Special Food Services	\$106	\$1,629,242	\$3,616,048	\$1,986,806	11,300	2	\$1,808,024	
Drinking Places - Alcoholic Beverages	\$59	\$899,451	\$1,189,823	\$290,372	2,975	3	\$396,608	

Source: ESRI and RKG (2023)

Retail Square Feet – Assuming typical average sales per SF, by store type, estimates suggest that within the 10-minute drive time there is nearly 828,500 SF of existing development. Within the 10-minute drive

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⁹ This may actually be understated as the data compiled by ESRI typically does not include freestanding smaller-scale development, such as street front stores or "mom-and-pop" stores or ground floor retail in mixed-use developments.

time the population is estimated to be 37,060 persons indicating an average of 22.4 SF per capita, similar to the national average of 24.5 SF per capita.

Retail Stores – For the selected retail merchandise lines (store types), ESRI estimates a total of 267 stores in the 10-minute drive time with average annual sales of \$1.34 million. However, the average sales by individual store type vary widely, from a little over \$200,000 (florists and second-hand stores) to as much as \$24.4 million for department stores.

Potential for New Development – Assuming that a re-capture of sales leakage, for the net exporting retail categories, could entice new development, RKG estimates that would translate to an opportunity for an additional 116,085 SF of retail within the 10-minute drive time, some of which may occur within the Route 20 Corridor. However, RKG cautions that this is dependent, in part, on the availability of parcels to accommodate such development and the willingness and ability of developers to pursue such opportunities. Further, a re-capture of this demand may not necessarily equate to new built space but could also represent an opportunity for existing retailers to garner a larger market share of sales by expanding their merchandising lines, expanding on-site or otherwise recalibrating their sales and marketing approaches.

Retail Strengths – As noted previously, there are several retail sectors where the 10-minute drive time is a net importer, meaning that sales are being captured from households and others not residing with the 10-minute drive time. These are considered to be local retail strengths, or destination draws, and notably include dining and drinking establishments where total sales exceed local demand by 66%.

ESTIMATES OF DEMAND FROM NEW HOUSEHOLDS

Lastly, RKG analyzed the annual household retail spending demand for each aggregate NAICS sector that would be represented by 100 new households within the 10- minute drive time, where average annual demand was measured at nearly \$27,750 per household, or approximately \$2.77 million in total. According to these calculations, the supportable demand (SF) from every 100 new households in the market area totals approximately 6,950 SF across all major retail categories (refer to Figure 15). Again, this may not necessarily equate to new built space, but it does represent the overall supportable demand, be it new, a re-occupation of vacant space in the market area or an opportunity for existing merchants and retailers to broaden their selection and potentially increase market share.



Figure 15 – Estimated Supportable SF Demand per 100 Households

BROKER INTERVIEWS - RETAIL

As a part of this analysis, RKG contacted a sampling of area real estate professionals who are active in and knowledgeable of the real estate trends in the market. Commentary from these local experts indicated that some opportunities for additional retail SF are present, but these are more focused to smaller footprints and typically include specialty retail (noting restaurants) or service-oriented retail, both offering a range of consumer products/services that are typically not purchased on-line.

MULTIFAMILY RESIDENTIAL MARKET

RKG also relied on REIS information for the apartment (multifamily) residential sector for the North/West Hartford submarket for the 2015 through 2022 time period (summarized in Table 12).

Over the 2015 to 2022 time-frame the inventory of multifamily residential increased by 2,278 units, or by nearly 41%. Growth was observed year-over-year until stabilizing in 2021/2022. The number of vacant units increased by a total of 40 units, or by 27.6%. However, the vacancy rate year-over-year varied and was at 2.6% in 20215 and at 2.4% units in 2022 suggesting that the market area rental residential is at full occupancy.¹⁰

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¹⁰ There is always some flux in vacancy rates, as apartments experience turnover. Typically, vacancy rates of 5.05 or less are considered as fully-occupied.

Table 12 - Trends in the Multifamily Residential Sector

Trends in the Apartment Residential Sector (North/West								
Hartford submarket)	2015	2016	2017	2018	2019	2020	2021	2022
Unit Count Vacant Units	5,586 145	5,948 235	6,455 336	7,070 395	7,555 476	7,684 297	7,864 181	7,864 185
Vacancy Rate	2.6%			5.6%	6.3%	3.9%		2.4%
New Units Delivered	42	362	507	615	485	129	180	0
% ∆ over Prior Year	па	761.9%	40.1%	21.3%	-21.1%	-73.4%	39.5%	-100.0%
Net Absorption of Units % Δ over Prior Year	99 na	272 174.7%	406 49.3%	556 36.9%	404 -27.3%	308 -23.8%	296 -3.9%	(4) -101.4%
Asking Rent / Unit	\$1,225.95	\$1,286.69	\$1,343.32	\$1,421.36	\$1,465.51	\$1,478.95	\$1,656.75	\$1,702.26
% Δ over Prior Year	na	4.95%	4.40%	5.81%	3.11%	0.92%	12.02%	2.75%

Source: REIS and RKG (2023)

na - data not available or suppressed

According to the US Census Bureau, the approximate rate of inflation (as measured by the consumer price index) was 25.5% over the 2015 through 2022 time period. For the North/West Hartford submarket the average asking monthly rent rate, per unit, increased by 38.9% since 2015, or by \$476/unit/month. The year-over-year changes were gradual, until a sharp increase in 2021, and then less than a 3% increase in 2022. These changes may in part reflect the introduction of newer and more modern units in the inventory in the latter years, though many experienced a general rent increase post-COVID-19 (Table 12).

Nearly 90% of this inventory consists of apartment units built pre-2109, and approximately 66% of the new units delivered were delivered pre-2019, both somewhat indicative of an older stock. The limited deliveries of new units since 2019, especially since 2020, coupled with vacancy rates of less than 5% and increasing average monthly rents/unit suggest opportunities for additional multifamily development in the North/West Hartford submarket. Some of this may be appropriate within the Route 20 Corridor, further noting the projected Town of Windsor Locks population increase in the cohort of those aged 65 and older.

Figure 16 - Year-over-Year Change in Unit Change and Average Monthly Rent



RKG examined advertised, available apartments in the Town of Windsor Locks (refer to Table 13) to further understand the existing rental market. While RKG notes that this sample includes older complexes, the average rent/SF are less than other projects RKG has recently worked, suggesting that for a mid-rise complex (as may be associated with mixed-use) projects which typically exceed average \$3.00± per SF. In other words, the average rent levels per SF, as presented in Table 13, may not support the costs associated with newer and modern rental residential development.

Table 13 - Sample of Available Apartments in Windsor Locks

Available Apartments in		1 BR Units	;		2 BR Units	
Windsor Locks, CT	Avg \$	Avg SF	\$/SF	Avg \$	Avg SF	\$/SF
Montgomery Hill	\$2,408	659	\$3.65	\$2,498	926	\$2.70
25 Canal Bank Road						
Countryside Apartments	\$1,375	650	\$2.12	\$1,645	863	\$1.91
266 Main Street						
Bradley Court	\$1,280	658	\$1.95	\$1,665	1,082	\$1.54
279 Elm Street						
Averages	\$1,688	656	\$2.57	\$1,936	957	\$2.02

Source: Apartments.com and RKG (2023)

BROKER INTERVIEWS - RESIDENTIAL

As a part of this analysis, RKG contacted a sampling of area real estate professionals who are active in and knowledgeable about the real estate trends in the market. These local experts noted that there is a healthy and stable market for single-family residential sales. There is a good base inventory, pricing is competitive and there are generally multiple bids for a property. One broker indicated that their average days-on-market (DOM) for their listings was just five (5) days.

Another firm noted that pre-COVID-19, the typical inventory of single-family residential for sale was 15 to 20 listings on a daily basis, post-COVID-19 this has declined to six (6), indicating a gap between supply and demand. Part of the reasoning behind the demand is that the residential taxes are considered relatively low, noting the many non-residential properties contributing to the Town's tax base. Another reason is that the price points are also considered affordable, typically in the \$250,000 to \$275,000 price range.

Furthermore, there is an existing demand for residential development, both owner and renter, but in general available land, or parcel assemblages, for such development (of any density) are scarce. This would further be impacted if the 90.0± acre site near the intersection of Old County Road and Route 20¹¹ (formerly the site for the proposed sports facility) were to transition to industrial use, which is reportedly in consideration.

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¹¹ Identified as tax parcel #056-127-001.

TOWN OF WINDSOR LOCKS, CT - DEVELOPMENT PIPELINE

RKG was provided with an inventory of the Town of Windsor Locks development pipeline (current as of 17 January 2023) and as summarized in Table 14, indicating 17 separate projects and noting the following:

- **Route 20 Corridor** Slightly more than one-half of this total inventory is represented by projects within the Route 20 Corridor.
- **Built** Six projects delivered with four (4) in the Route 20 Corridor.
- **Permitting or Under Construction** Another seven (7) projects are either in the permitting process or are under construction, with three (3) in the Route 20 Corridor.
- **Under Consideration** The remaining four (4) projects are under consideration with two (2) in the Route 20 Corridor.

Please note that these Pipeline Parcels are highlighted in red, in order to cross-reference their location within the Route 20 Corridor, (refer to Figure 23), which appears in a subsequent section of this report.

Table 14 – Windsor Locks, CT – Development Pipeline

Windsor Locks, CT -		Permitting		
Pipeline Development	Built	or U/C	Considered	Comments and Considerations
16 Old County Road	Χ			renovation project - car wash
220 Old County Circle	Х			UPS moved into an already completed spec building
73 Old County Road	Х			health and wellness center in existing strip plaza
20 Main Street	X			Dexter's Best Liberty Safe
483 Spring Street	Χ			reuse of the old HARP mechanical business - arts related
2 National Drive	Х			new artisan café – DORO Market
110 Old County Circle		Х		PZC approved new parking lot lighting for The Parts Authority
8-10 Northgate Drive		Х		industrial office and associated parking for construction company
30 Hamilton Road		Х		250,000 SF new construction, reuse of existing 100,000 SF - Whse/Dist
61 South Main Street		Х		new drive-thru Dunkin' Donuts
2 Corporate Drive		Х		new Mexican café
1 National Drive		Х		MTV powerline company offices
700 Old County Road		Х		Distribution center
5 National Drive			Х	Mixed-use ground commercial, residential upper floors
66 Lawnacre Road			Х	Self storage
2 Ella Grasso Turnpike			Х	Lithium battery storage
177 Old County Road			Х	Meadowbrooks Commons Residential

Source: Windsor Locks, CT and RKG (2023)

in the Route 20 Corridor Study Area

Conversations with an area real estate professional indicated that the 90.0± acre site near the intersection of Old County Road and Route 20¹² (formerly the site for the proposed sports complex facility) is currently zoned as Business Zone B-1 and permits a wide array of commercial uses such as retail, restaurants, and office. This parcel is also part of the Bradley Airport Development Zone (BADZ) and as such, permits a mix of business and residential uses controlled by an overall Master Plan. Per the broker,

¹² Identified as tax parcel #056-127-001.

discussions are considered to re-zone this parcel for industrial uses. Reportedly, there is interest in redeveloping this parcel with two separate facilities at 1 million SF and 120,000 SF. If so, this would transition the potential development of this parcel away from mixed-use, residential and other commercial and retail uses toward an industrial use.

The same broker noted that there are some scattered sites along Ella T. Grasso Turnpike that could be repositioned for development, as well as properties abutting or within the perimeter of the Bradley International Airport, if the latter were to become available.

LAND ANALYSIS

OVERVIEW

The development patterns along the Route 20 Corridor include a diverse mix of land use types ranging from residential and commercial uses to industrial. The Route 20 Corridor is a highly visible and highly traveled limited access highway that serves Bradley International Airport, which is located to the northwest of the study area. Along with the existing mix of land uses, there are several large vacant parcels of land in the study area that are well positioned for redevelopment.

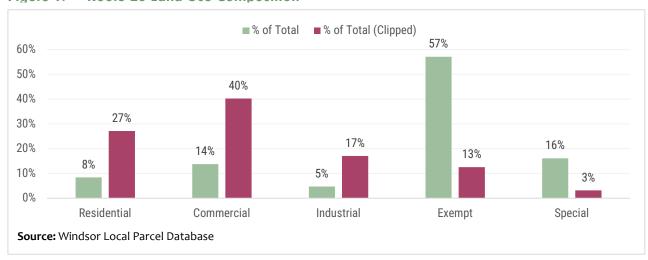


Figure 17 - Route 20 Land Use Composition

LAND USE

To understand how parcels fronting Route 20 are being used, RKG aggregated land use data by parcel from data provided by Tighe & Bond and the Capital Region Council of Governments (CRCOG). Due to the size of some very large vacant and airport-related parcels that only partially intersect with the Route 20 Corridor study area, two land use compositions by acreage are provided.

• The first (Table 15) illustrates the composition of land uses in the Route 20 Corridor. The *first two columns* reflect all the total acreage of those parcels that have some portion of the acreage in the Corridor, in other words they intersect with the Corridor. For this metric, the largest share of land that intersects with the Route 20 Corridor is the Bradley International Airport (a tax exempt use) to the northwest of the corridor – accounting for 57% of the total acreage. This then followed by vacant land (special – 16% of the total acreage) at the beginning of Old County Road, which is to the southeast side of the study area – which is partially comprised of the development site at 700 Old County Road (refer to Figure 27).

The *last two columns* of Table 15 then "clips" ¹³ the total parcels for that portion specifically within the Route 20 Corridor study area. In this manner, this includes only land that falls within the study area (refer to the boundaries as shown in Figure 18). In doing this, the land use composition shifts away from exempt and special uses towards primarily commercial (40%) and residential (27%). Within the Route 20 Corridor study area, almost all the residential uses fall along Old County Road, consisting primarily of single-family homes. The 40% of commercial uses in the study area are concentrated along the Ella T. Grasso Turnpike.

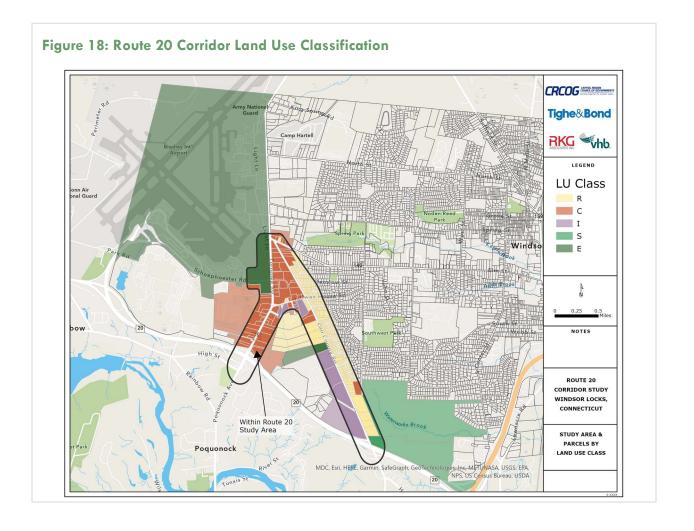
• The second (Figure 18), is the composition of all land uses that intersect with the Route 20 Corridor study area regardless of if all of the acreage is in the study area or only a portion of the acreage is in the study area. Note that the portion specifically in the study area is approximately 355-acres, or approximately 20% of the total 1,805-acres.

Table 15 - Route 20 Corridor Land Use Composition

	ACRES TOTAL	% OF TOTAL	ACRES (CLIPPED)	% OF TOTAL (CLIPPED)
Residential	151.63	8%	96.40	27%
Commercial	247.86	14%	142.93	40%
Industrial	84.52	5%	60.43	17%
Exempt	1,030.88	57%	44.51	13%
Special	290.52	16%	11.16	3%
Total	1,805.40		355.43	

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¹³ RKG notes that in terms of development potential it is unlikely that a parcel would be "clipped" or put another way, subdivided, however is not impossible. In this analysis the "clipped" parcels are often as a reflection of that portion specifically in the study area boundaries which could be somewhat arbitrary.



IN FIELD OBSERVATIONS

RKG completed a driving survey (30 January 2023) of the Route 20 Corridor (also refer to Figure 19) to better understand development patterns and the characteristics of the corridor.. Entering the Corridor from Route 20 and traveling north along Old County road, immediate uses to the west are comprised of densely developed single-family residential uses, primarily of an older housing stock. An exception is the vacant parcel formerly identified as a potential site for a sports complex – currently under consideration for potential warehousing and/or distribution use(s).

- Continuing north to Halfway House Road and the Bradley International Airport the development offers a mix of retail, service and entertainment uses - primarily freestanding development.
- There are numerous hospitality uses as well as uses associated with the Bradley International Airport such as off-site car rental, parking and other support uses.

- The west side of Old County Road consists of larger scale developments including hospitality use, multifamily residential.
- Closer to Old County Circle and the connection to Route 20 these uses transition to warehouse, distribution and the American Honda Motor manufacturing facility.
- On Old County Circle, large scale warehousing and distribution uses are predominant.
- Along the Ella T. Grasso Turnpike (Route 75), to the north, there is the Bradley International Airport.
- Southbound on the Ella T. Grasso Turnpike, on both sides of the street, hospitality uses, restaurants and some retail/service uses are most noted.

As noted from the interviews with area stakeholders, regarding their planned or proposed developments, a key obstacle to realizing these projects was frontage to the primary arterials and the inability, to date, of establishing new access and ingress points.

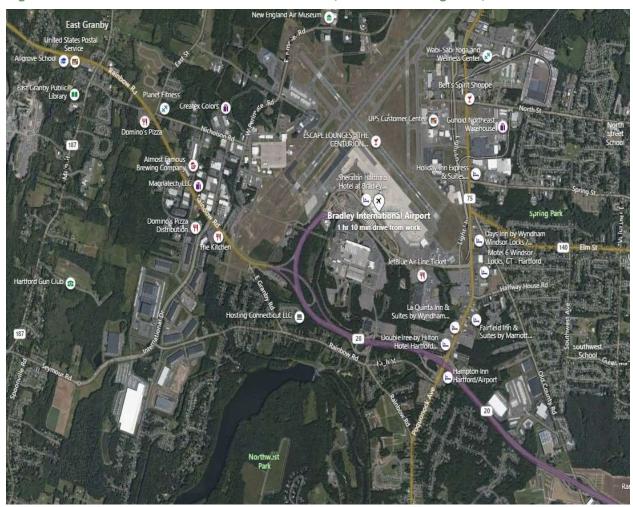


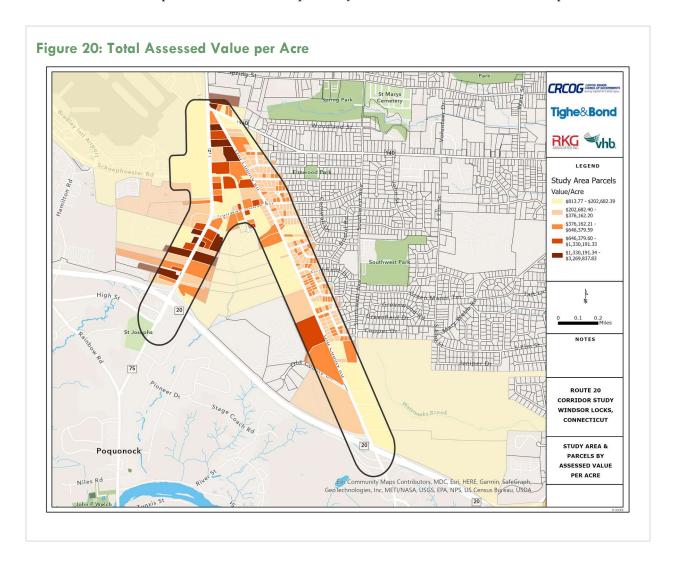
Figure 19 – Aerial View of the Route 20 Corridor (and surrounding area)

TAX VALUE

The following map (Figure 20) presents the relationship between total and clipped acreage by land use throughout the Route 20 Corridor. The assessed tax value of a property is not a perfect analog for market value, but it does convey important information about the effectiveness of the use of a site or district in comparison to its neighbors and the town overall. This analysis looks specifically at total assessed value (AV) per acre and the AV of land as a percentage of the total AV, both of which can help identify sites that are underperforming. Many of the districts and parcels that do well in measures of total AV/acre have low scores for land as a percentage of total AV, but these do not perfectly align, and each tells decisionmakers a distinct story about the site as it exists today.

TOTAL ASSESSED VALUE PER ACRE

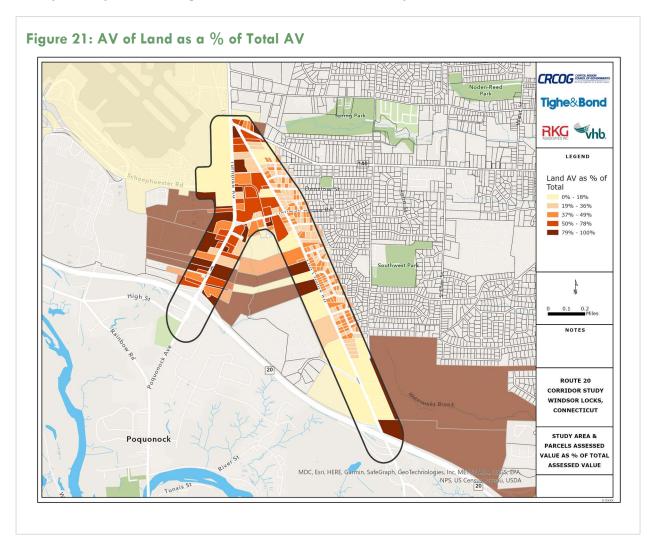
Total assessed value per acre varies significantly throughout the corridor. Residential parcels along Old County Road have a total assessed value per acre ranging from about \$202,000-\$646,000 per acre except for a few parcels located in the Multifamily Special Development Zone (discussed in next section). Along the Ella T. Grasso Turnpike, which consists of primarily commercial uses, assessed values per acre are



considerably higher. Some of the lower assessed values shown throughout the corridor are linked to special and exempt parcels.

LAND AV/TOTAL AV

In the Town of Windsor Locks, there are three parts that comprise a property's total assessed value: assessed value of buildings, assessed value of improvements (personal property, parking, etc.), and assessed value of land. The AV of land as a percentage of total AV is an effective measure of the performance of existing structures on a parcel. If the percentage is high, then it is likely that the parcel is either underdeveloped (not as much square footage) or not the highest and best use. Such parcels thus contain a latent potential value through redevelopment, which can be realized through a change in zoning, a change in ownership, or even collaboration with existing landowners.



ZONING DISTRICTS

Zoning is the primary regulatory tool municipalities have to set development policy within their jurisdiction. The Route 20 Corridor is a mix of zoning districts that range from residential and commercial to some industrial. The Ella T. Grasso Turnpike area within the corridor is primarily zoned for commercial uses while Old County Road has a mix of residential and industrial uses. Figure 22 presents the zoning composition for the Town of Windsor Locks and the Route 20 Corridor.

RESIDENTIAL ZONES

The Route 20 Corridor has two residential zoning districts that are primarily along Old County Road:

- Residence A Zone (R-A)
- Multiple Family Special Development Zone (MFSD)

The R-A district allows a minimum lot size of 28,000 square feet or roughly a little over half-acre. Uses allowed are generally restricted to single- family homes as-of-right and multiple-family residential uses through Special Permit. In 2019, the Planning and Zoning Commission increased the permitted density of units per acre in the Multiple Family Special Development Zone from 5 to 8. In the town's Plan of Conservation & Development (POCD), the MFSD zones along Old County Road were identified as places to consider down-zoning to better reflect existing and adjacent land uses and to arrive at an optimal transition of land uses. The minimum lot area for the MFSD zone is 3 acres with a density of 8 dwelling units per acre.

COMMERCIAL ZONES

The Route 20 Corridor has two commercial zoning districts that primarily span the Ella T. Grasso Turnpike:

- Business Zone 1 (B-1)
- Business Zone 2 (B-2)

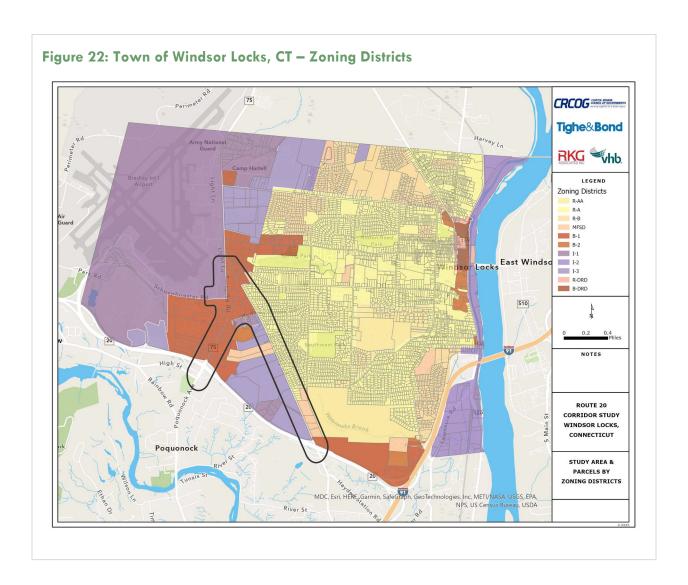
Both B-1 and B-2 commercial districts support a wide array of commercial uses such as retail, restaurants, and office but along the Route 20 Corridor most of the commercial uses are positioned to support the Bradley International Airport. Running along the Ella T. Grasso Turnpike towards the airport, current commercial uses are primarily hotels, parking lots/valet and restaurants.

INDUSTRIAL ZONES

One of the major industrial areas in Windsor Locks lies along the Route 20 Corridor on Old County Road. There are two industrial zoning districts within this area:

- Industrial Zone 1 (I-3)
- Industrial Zone 3 (I-3)

Uses within the Old County Road industrial zone include the Federal Express, Ford Motor Company, Mazak Corporation, and Serta Simmons Bedding. Based on the POCD findings, these parcels were carefully developed to avoid any additional curb cuts onto Old County Road, direct all truck traffic to the south toward Route 20, and mandate significant landscaped buffers to mitigate the impacts on the residential area across the street on the east side of Old County Road.



AIRPORT INTERCHANGE OVERLAY ZONE

As RKG understands, the Airport Interchange Overlay Zone (AIOZ) is not a specifically and geographically designated (meaning boundaries) area but rather a "floating" boundary. The AIOZ was designated to empower the Town with a measure of control over the type and quality of development to accommodate the transition from residential uses to commercial uses by providing for a variety of uses including single family dwellings, multi-family dwellings, mixed business and residential uses, and

commercial uses; and to insure that such development is accomplished in an orderly manner with minimal negative impact to neighboring residential areas and critical natural resources. The AIOZ designation may waive and modify the underlying existing regulations to encourage a variety of uses, lot dimensions and coverages which best promote development at the interface of the airport corridor.

The following was taken from the *Town of Windsor Locks, Connecticut – Zoning Regulations* (2020 printing):

- **A.** Applications for designation as an AIOZ will be accepted for the following locations: (1) that area fronting on the easterly side of Old County Rd within 2500 feet of its intersection with Route 20; (2)that area on the westerly side of South Center Street and the northerly side of Route 20 currently zoned B-1, and (3) that area fronting on the Easterly side of Route 75, within 2500 feet of its intersection with Route 20.
- **B. General Concepts** -- In considering the appropriateness of the AIOZ, the Commission shall consider the following:
- **a.** That the potential exists for the zone to accommodate a wide variety of land uses including business, office/business, hotel/motel, conference center, restaurant and residential. That there be minimal restrictions on the location of these uses within the zone provided that compatibility with an adjacent development (within the zone) or existing land use in an abutting zone, can be satisfactorily demonstrated.
- **b.** That all development exhibits a high standard of quality in construction detail materials and appearance. That development reflects accepted professional standards of design and is consistent with the applicable state and local standards, codes and regulations.
- **c.** That site planning is an essential criterion of the AIOZ. Sites developed in the AIOZ are intended to be carefully planned, both within the sites own boundaries and in relation to surrounding properties.
- **d.** That sites within the AIOZ be developed in a manner to encourage the reduction of the number of driveway cuts onto arterial streets in order to mitigate the deterioration of traffic flow generally caused by driveways on arterial streets. Shared driveways (or provisions for future shared driveways), interior service drives, and related techniques shall be encouraged.
- **e.** That all development be sensitive to environmentally regulated areas within the AIOZ. That maximum effort is made to retain and integrate significant natural features into the development proposal wherever possible.
- **C. Permitted Uses** -- The following uses are deemed appropriate and permitted in the AIOZ but not at every or any location therein or without restrictions or conditions being imposed by reason of special problems of use, and the Commission shall have the discretion to decide whether the mixing of uses is appropriate and should be required or maintained:

- **a.** Multiple single family and multi-family dwellings, which shall be subject to the requirements of the MFSD zone.
- **b.** Business offices, professional offices, and financial institutions
- c. Hotels and Motels
- d. Banquet and catering facilities, and conference centers
- e. Full service restaurants
- **f.** Retail stores, retail service or personal service shops
- **g.** Residential units in commercial buildings, in accordance with the requirements of Section 412 of the Regulations.
- **h.** Accessory uses customarily incidental to the listed uses.
- **i.** Any other use, building or service as determined by the Commission to be similar to the uses permitted above.
- **D. Special Permit** -- All uses in this Zone shall be approved as part of the General Plan of Development (GPD) special permit process and shall require a determination by the Commission that:
- a. Traffic or other hazards will not be created;
- b. General property values will be conserved;
- **c.** There will be no adverse effects on existing uses in the area;
- **d.** The general welfare of the community will be served;
- **e.** There will be no adverse impacts on the capacity of present and proposed utilities, streets, drainage systems, sidewalks, and other infrastructure.

The Commission shall grant all approvals subject to such conditions and safeguards as will carry out the expressed purpose of this regulation.

- **E. Consolidated Parcels** -- For purposes of integrated development, any number of contiguous parcels may be consolidated, and the consolidated parcel shall be construed to be one lot when computing building coverage and yard requirements, and permitted uses, provided:
- **a.** The owner of each lot shall give to the owner of each lot in the consolidated parcel by deed, easement, or agreement filed in the office of the Town Clerk, the right of entrance exit, passage, parking and loading.
- **b.** The consolidated parcel is developed with an integrated plan of buildings, parking, loading and unloading.

- **F. Site Appearance Requirements** Development proposals for the AIOZ will be reviewed for appearance and compatibility. The following are general guidelines:
- **a.** Relationships to land use in abutting zones and adjacent developments within the zone (compatibility) are important considerations that will be critically reviewed by the Commission. Concerns in this regard will include buffers (vegetative and architectural), building scale/massing/configuration/ height, light spill, emissions (noise), use intensity/frequency, and signage.
- **b.** Building height shall be compatible with highway elevation and, for hotels that are proximate to the Route 20 airport connector, shall not exceed five stories or sixty feet. Office buildings shall be appropriately scaled and may exceed the height limitations set for other business zones, but in no instance shall exceed three stories or 45 feet.
- **c.** No outdoor storage shall be allowed. All business servicing or processing (except for off street parking/loading shall be conducted within completely enclosed buildings).
- **d.** Outdoor storage and display of products for sale are prohibited.
- **<u>e</u>**. All dumpsters shall be placed on a concrete pad and suitably screened with trees, shrubs, fencing or by other appropriate means.
- **f**. Single family detached housing common interest communities which maintain a minimum distance of twenty (20) feet between units shall be exempt from the requirements of Section 409 C 3 and 4; however, the Commission reserves the right to increase the minimum separation distances based on site design, natural features, and proposed buffering.

G. Signage General Criteria:

- **a**. All signage is subject to approval from the Commission and must be designed as an integral part of the site plan. All sign locations shall be shown on the GPD and shall be described as to area dimensions, height, materials and purpose.
- **b.** In recognition of the special nature of the AIOZ, additional signage may be permitted, especially for sites that are highly visible from the Route 20 airport connector.
- **c.** Multiple tenant buildings will be allowed building signage for each tenant that has distinct, exclusive, building frontage with individual entrances. Separate building signage for tenants will not be allowed where tenants are sharing buildings that do not have distinct tenant space characteristics on the outside of the building.
- **d.** Residential common interest community developments within the zone having two curb cuts onto arterial roads may have an identification sign incorporated into an entry feature at each curb cut and such additional signage as the Commission may deem appropriate.
- **e.** Hotels visible from Route 20 may have signs on the front and at each end of the building as necessary to identify the use from Route 20.

f. Unless otherwise approved as part of the GPD, signs on the parcels approved for the AIOZ shall have the size, shape, location, and lighting as set forth in Chapter 6.

ZONING REGULATIONS

The following was taken from the *Town of Windsor Locks, Connecticut – Zoning Regulations* (2020 printing):

Section 403 Required Lot Area, Yards, Coverage, Height, Frontage (footnote e. of this section was modified effective 3/8/06, footnote f. of this section was added effective 11/30/2007).

No lot shall have an area, width, or front, side, or rear yards less than given in the following table and no building or buildings, including accessory buildings, shall cover a greater percentage of the lot area nor exceed in height the figures given below. All yards in business or industrial zones which abut a residential zone shall contain a landscaped buffer strip as defined in these regulations. Where appropriate, in the judgment of the Commission:

- A. Suitable walls or fencing may be used for a part or all of the buffer strip;
- B. Existing trees may be retained and interplanted, as required for planting areas;
- C. The above requirements may be modified where two different but compatible uses abut a common lot line.

Explanation of footnotes (refer to Table 16):

- **a.** An open passageway for motor vehicles, no less than twenty feet wide and extending across the rear yard, the total length of any building, shall be maintained and kept free of parked vehicles or truck loading zones. In Business 1 Zone, on two adjoining lots having a frontage of one hundred feet or more, and upon agreement of the owners recorded in the land records of the Town of Windsor Locks, one side yard may be omitted from each lot provided that the buildings are built on the common lot line, and the party walls separating each building are of masonry construction.
- **b.** In Business 2 Zone, no side yards are required for business buildings, but where a side yard is maintained, it shall be not less than four feet.
- **c.** Minimum floor area shall be computed from the outsides of building walls and may include bay windows when built over a cellar or closed foundation, but may not include garages, space for heating or other utilities, vestibules, porches, basement rooms and storage space other than normal room closets.
- **d.** A buffer of the indicated width is required in Residential Districts whenever a Special Permit use is approved in a Residence District and directly abuts or is located across the street from another residence district parcel. And a buffer of the indicated width is required in the non-residential districts where they directly abut or located across the street from a residentially zoned parcel or developed with a residential use.

- e. For Business 1 (B-1) properties in the airport corridor on Ella Grasso Turnpike (Route 75) not abutting single-family residentially zoned property and in compliance with FAA runway approach height limitations, the maximum building height shall be five (5) stories or a maximum of 60 feet. By Special Permit, for applications showing excellence in design, the Commission may allow additional building height for a parapet and/or other architectural elements that may include atrium glass, signage, or other such features.
- **f.** For Industrial 1 (I-1) and Business 1 (B-1) properties in excess of 10 acres and located within 2,500 feet of the Bradley Connector (Route 20) and in compliance with FAA runway approach height limitations, a maximum building height of four (4) stories may be permitted by Special Permit for corporate office buildings exhibiting, in the opinion of the Commission, excellence in building design, where maximum impervious area does not exceed 50%, and where the site design provides landscaping in excess of the minimum requirements as set forth in these Regulations.
- g. Except that within the MSOZ for buildings fronting directly onto Main Street the Commission may increase the maximum number of stories to five (5) stories.
- **h.** The Commission may reduce the minimum front yard to "0" feet subject to the standards in Section 418.
- *50 feet from residential property lines. Side yards are not required for buildings whose front wall is parallel to and within 50 feet of Main Street.

NR=No requirements.

In RKG's assessment the zoning regulations identified in Table 16 do not appear, in general, to present any "regulatory restriction" to future development in the Route 20 Corridor. However, noting that there are some exceptions, potentially requiring a Special Permit (f.) or with properties having frontage to Main Street (g.), the noted building height restrictions vary from two (2) to three (3) stories which may prove inadequate to accommodate some mixed-use development projects with ground floor commercial uses and residential uses above – particularly if structured parking were to be included.

35

RES RES RES BUS a BUS В MS IND IND IND DRD AA b 2 OZ 28,000 21,000 15,000 50,000 7,500 NR 40,000 15,000 Minimum lot area, square feet 5 acre Minimum frontage, feet 140 120 100 200 50 NR 150 400 Minimum lot dimension, feet, 140 x 120 x 100 x 200 x 50 x minimum width x minimum 200 175 150 250 100 depth 50 40 40 60 NR 10 h 10h 60 40 60 Min Front yard, feet Max Front Yard, feet 15 Each side yard, feet 10* 25 25 40 10* Rear yard, feet Maximum coverage, percent 66% 75% Maximum impervious area (added on 4-1-1999) Maximum height, stories 2 1/2 2 1/2 2 1/2 3 g Maximum height, feet 35 35 30 30 50 40 40 50 50 60 2 Minimum Height, stories 1100 1250 900 NR NR NR NR NR NR NR Minimum floor area, 1-story, square feet c 1000 NR NR NR NR NR 720 NR Minimum floor area required. 2-story, 1st floor, square feet c Minimum floor area, 2-story, 2nd 500 450 400 NR NR NR NR NR NR NR floor, square feet c

25

Table 16 – Town of Windsor Locks, CT – Zoning Dimensional Regulations

Explanation of footnotes (refer to Table 17):

Buffer Requirement d

a. Applies to total acreage, not to individual units.

15

- **b.** As measured from finished grade at the highest point of the building's perimeter. Neither the basement nor the half story shall be occupied as living or sleeping quarters.
- c. Usable Open Space in R-DRD Developments. For every dwelling unit, other than one-family attached dwellings, there shall be provided at least two square feet of usable open space for every three square feet of dwelling unit area. Such open space, the minimum dimension of which shall be forty (40) feet, shall consist of an unenclosed portion or portions of the ground of a parcel which is not devoted to driveways or parking spaces and is free of structures of any kind; of which not more than twenty percent (20%) is roofed for shelter purposes only; and which is available and accessible to all occupants of the building or

buildings on the lot for purposes of active or passive outdoor recreation. Not less than Page | 37 twenty percent (20%) of such open space shall be devoted to suitable paved and landscaped recreation areas. (This paragraph was revised effective 11/10/08.)

- **d.** Off-street parking spaces or garages shall be provided in a ratio of 2 spaces for every dwelling unit. All parking areas shall be screened from the street by means of a substantial screen consisting of any combination of hedges, walls or trees, having a minimum height of five feet above the finished grade of the parking area. No parking area may be located within ten feet of any parcel line or within any required front yard. The parking of motor vehicles is prohibited within fifteen (15) feet of any wall of a residential building.
- **e.** Dwelling unit floor areas required shall be computed from the inside plaster of the outer walls, but may not include the net areas of stairs or halls giving access to a dwelling unit.
- **f.** The density of the development in a MFSD Zone shall be computed from the "gross acreage" of the parcel. Gross acreage shall exclude the following: areas within a 100 year flood line, wetlands, water courses, waterbodies, detention areas, utility easements, rights of way, or areas with slopes at or in excess of fifteen percent (15%). Computations of density and gross acreage shall appear on the site plan. (This paragraph was revised effective 11/10/08.)
- g. 30% lot coverage is allowed for developments utilizing Low Impact Development (LID) techniques. LID includes the minimization of other impervious surfaces and treatment of runoff from all impervious surfaces with localized Best Management Practices (BMP's) as specified in the 2004 CT Stormwater Quality Manual as amended. BMP's shall be utilized on a unit by unit basis rather than "end of pipe" treatments. BMP's shall utilize infiltration unless soils are determined to be unsuitable for infiltration. The applicant must demonstrate to the satisfaction of the Commission in consultation with the Town Engineer that LID measures have been implemented to the maximum extent practicable.

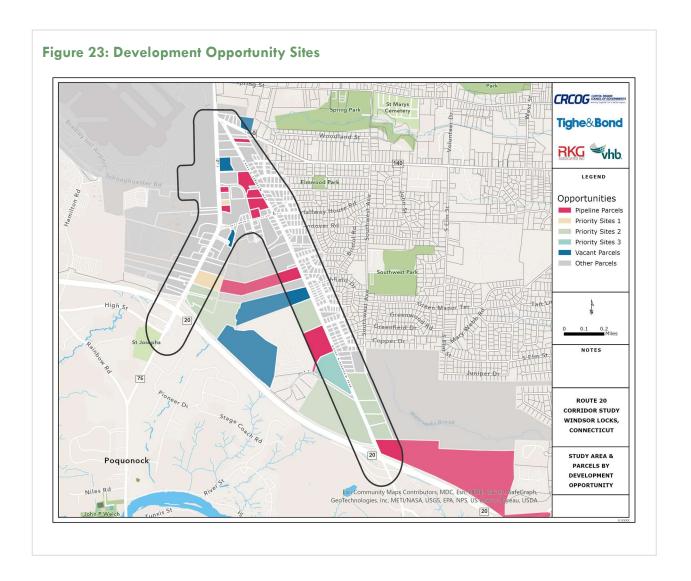
Table 17 - Town of Windsor Locks, CT - Required Lot Area

404 Required Lot Area MFSD and R-DRD (amended 10-1-2019, 2-1-2020)

Zone	MFSD	R-DRD
Minimum lot area	3 acres	15,000 square feet
Density *f *g	8 dwelling units or 20 bedrooms per acre, whichever is less	10 dwelling units per acre
Minimum frontage	a 200 feet	a 100 feet
Front yard	a 40 feet	a 20 feet
Each side yard	a 25 feet	a 15 feet
Rear yard	a 25 feet	a 20 feet
Building Coverage	20 % (or 30% footnote g)	c 30 %
b Building Height	30 feet	2 1/2 stories or 30 feet
d Off-street parking	2 spaces per dwelling unit	2 spaces per dwelling unit
Number of dwelling units per structure	Not more than 12	No requirement
Floor area required per dwelling unit *e	4 rooms: 700 square feet 3 rooms: 550 square feet minimum: 425 square feet	4 rooms: 700 square feet 3 rooms: 550 square feet minimum: 425 square feet

DEVELOPMENT OPPORTUNITY SITES

As noted previously, the known Pipeline Parcels within the Route 20 Corridor, are highlighted in **red** in Figure 23, as are priority sites for development or re-positioning as identified in conjunction with the Town of Windsor Locks. Also, in Figure 23, RKG has highlighted those parcels which are vacant (**blue**) as identified through the GIS/Assessment records from the Town of Windsor Locks.



STAKEHOLDER OUTREACH

In conjunction with the Town of Windsor Locks, and other consultants as a part of this overall analysis for the Route 20 Corridor, RKG contacted area stakeholders to further discuss their plans for continued development within the Corridor, summarizing these discussions as follows:

Connecticut Airport Authority – RKG, in conjunction with others from the project consultant team, completed informal discussions with representatives of the Connecticut Airport Authority (CAA), the Capitol Region Council of Governments (CROG) and the Town of Windsor Locks, to discuss development needs and opportunities as associated with the Bradley International Airport, summarizing the following:

- There are currently two (2) RFP's (requestfor-proposals) for new hangar development and possible cargo facilities.
- Another RFP for a future, large but unspecified project.
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Figure 24 - Bradley International Airport

- The Airport has commissioned a HBU (highest and best use) study for former car rental lot(s) on its premises. A report is anticipated to be delivered for late April/May of 2023.
- The Airport has also identified a need for more parking (presumably surface lots at this time, although a structured facility may be considered at a later date.
- The priority for parking lots, relative to some other development (such as a hospitality facility)
 will be a matter to be further considered in light of the HBU findings and report (on a parcel by
 parcel basis).
- In either event, ownership of the land for such development would be retained by the Airport.
- The Airport is also considering the potential consolidation of existing parking (lots) into one facility, thereby resulting in potential future land available for new development.¹⁴

An inventory of these locations (Table 18) and a site map (Figure 25) are offered on the following pages – as identified in the *Airport Master Plan – Bradley International Airport* (March 2019).

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¹⁴ These include Lot 5A (overflow lot with 377 public parking spaces); Lot 5B (overflow lot with 572 public parking spaces); and Lot 4 (long-term parking with 577 public parking spaces) as identified in the *Airport Master Plan – Bradley International Airport* (March 2019).

Table 18 - Inventory of Competing Off-Airport Parking Facilities

Table 2-7 - Competing Off-Airport Parking Facilities

Facility ID	Facility Name/ Owner/Operator	Facility Address	Estimated Capacity	Type of Operation	Driving Distance to Airport
Α	Z Airport Parking	3 International Dr., East Granby, CT 06026	790	Self- Park/Valet	2.6 mi.
В	Executive Valet Parking	1186 South Street, Suffield, CT 06078	1760	Valet	2.8 mi.
С	Dollar Airport Parking	593 Elm St., Windsor Locks, CT 06096	140	Valet	1.0 mi.
D	Days Inn	185 Ella Grasso Tpke., Windsor Locks, CT 06096	146	Self-Park	0.7 mi.
E	Econo Lodge Inn & Suites	34 Old Country Rd., Windsor Locks, CT 06096	190	Self-Park	1.2 mi.
F	Roadway Inn & Suites	161 Bridge St., East Windsor, CT 06088	290	Self-Park	6.2 mi.
G	Baymont Inn & Suites	260 Main St., East Windsor, CT 06088	132	Self-Park	4.9 mi.
Н	LAZ Fly Economy Parking	110 Ella Grasso Tpke., Windsor Locks, CT 06096	1060	Self- Park/Valet	0.8 mi.
1	La Quinta Inn & Suites	64 Ella Grasso Tpke., Windsor Locks, CT 06096	107	Self-Park	1.0 mi.
J	LAZ Fly Premier Parking	35 Ella Grasso Tpke., Windsor Locks, CT 06096	859	Self-Park	1.1 mi.
K	Quality Inn	5 Ella Grasso Tpke., Windsor Locks, CT 06096	191	Self-Park	1.1 mi.
L	LAZ Fly Premier Parking	24 Ella Grasso Tpke., Windsor Locks, CT 06096	1360	Valet	1.1 mi.
M	Roncari Valet Parking	9 Schoephoester Rd., Windsor Locks, CT 06096	3410	Valet	0.3 mi.
N Source: C	Galaxy Self-Park	9 Schoephoester Rd., Windsor Locks, CT 06096	1047	Self-Park	0.3 mi.

Source: CAA, 2016

This inventory includes a total of 11,482 parking spaces including a mix of self-parking and valet parking. Of the total inventory, approximately 91% (or 10,426 spaces) are privately held and the reaming 9% (or 1,056 spaces) as a part of the on-site parking associated with nearby hospitality facilities.

Further, as indicated in Table 18, all of the hospitality related projects, and associated parking spaces, are located in the Town of Windsor Locks, however, approximately 7,876 of the privately held parking spaces are located on properties with the Town of Windsor Locks.

According to the *Airport Master Plan – Bradley International Airport* (March 2019) (Table 4-50 – Existing CAA Parking Facilities) the available public parking at the Airport totals 7,442 spaces. This represents an approximate increase of 65% over and above the off-Airport parking (lots and hospitality properties).

Figure 25 – Location of Competing Off-Airport Parking Facilities



Figure 2-11 - Competing Off-Airport Parking Facilities

Source: Desman, 2016

As tabulated from Town assessment records, and cross-referenced to parcels (from Figure 25), those parcels located in the Town of Windsor Locks range from 2.06-acres to as much as 25.22- acres, totaling 59.93-acres.

RKG was unable to land area from CAA for the aforementioned CAA parking lots 4, 5A and 5B which may be under consideration for consolidation. However, applying an average metric of 300 SF per parking space could yield potential development sites of 3.97-acres, 2.60-acres and 3.94-acres, respectively.

Patusan Millenium Group, LLC – Kevin Casey,

CEO – the approximately 7½-acre parcel at 3 Ella T. Grasso Turnpike was purchased 15 years ago and subsequently combined with an additional 10-acres to the rear of land formerly owned by the Town. The developer noted that the parcel has 15 feet of frontage and is situated at the convergence of Route 20 and Route 75, serving as a gateway to the Corridor. Development plans called for a mixeduse project to include 274 residential units with a mix of condominiums and mid-rise residential, both for owner and renter occupancy. Four pad sites were envisioned with frontage to the arterial,

Figure 26 - Site for 3 Ella T. Grasso Turnpike



including a better quality gas/convenience store. Plans also called for a Residence Inn hospitality project. The challenge for the project was its proximity to the interstate access ramp.

As a part of the project, the developer proposed traffic signalization and roadway improvements, which included re-alignment of the ramps, requiring approximately $2\frac{1}{2}$ -acres of the site. This proposal (2015) received approvals from the Town and an estimated \$2.5 million in state grants was allocated to it. The Town also worked with the developer to secure a tax increment financing district (TIF) to assist in infrastructure costs. However, the proposal did not receive CTDOT approvals.

Scannell Properties #698, LLC and Robinson & Cole LLP – Daniel

Madrigal, Director of Development for Scannell Properties #698. Reportedly (from others) this is the parcel formerly anticipated for a sports facility and current considerations are for warehousing and distribution use. Per RKG's correspondence with a representative of the property, it is early in the entitlement process with the Town of Windsor Locks and as such, further discussions of the project are considered premature at this time.

Figure 27 – Site for 700 Old County Road



Ohana Investment and AMA

Architects – Masood Ali Syed (Ohana Investment) and Amath Ba (AMA Architects) – this is a 3.32-acre parcel, currently improved with approximately 24,000 SF of retail use. The developer is in the process of negotiations for acquisition of the land which are anticipated in March/April of 2023. Currently, plans are underway

Figure 28 – Site for 5 National Drive

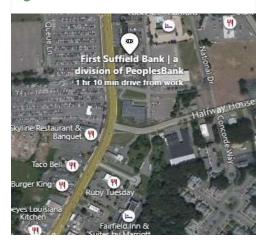


for re-positioning of the site and preliminary discussions have been held with representatives of the Town and the Zoning Board, both initially reacting favorably to the proposal.

The proposed project would re-position the existing retail as a mixed-use project with commercial use on the ground floor and 10 one-bedroom apartments on the upper level(s). The project will also include 20 two-bedroom townhomes as well as a clubhouse (which may be available for some public use) as well as green space and interior recreation space. Commercial elements under consideration include a grocery component and lifestyle uses such as cafes or coffee shops. The overall intent is to re-position this property from an industrial focus to more of a mixed-use community.

HartZito Properties LLC – Shawn DiBella – this is a 0.8-acre parcel which is part of a larger assemblage of land along National Drive, approximately 10 or 12 parcels totaling roughly 16 acres. The developer is open to a variety of potential uses for this project, given it location and visibility, but access is the key concern. CTDOT's Office of the State Traffic Administration (OSTA) has denied requests for a curb cut on Route 75 due to the number of existing access points on the roadway and the fact that the National Drive parcels have signalized access to Route 75 via the National Drive intersection to the north and unsignalized access via Coporate Drive to the south.

Figure 29 - Site for 6 National Drive



VACANT PARCELS

As presented in Figure 23 (blue colored parcels), this analysis highlighted several land parcels within the Route 20 Corridor study area that were identified as vacant land (Table 19), specifically noting:

- Seven (7) parcels totaling 67.81-acres
 - o One parcel of 20.53-acres zoned IND3 (30.3% of the total acreage)
 - One parcel of 32.33-acres zoned IND3 (47.7% of the total acreage) this reflects the location of the Serta/Simmons mattress manufacturing facility which has announced a closing effective 4 August 2023 which for the purpose of this analysis is assumed to become available as development opportunity site
 - One parcel of 3.11-acres zoned BADZ (4.6% of the total acreage)
 - o One parcel of 4.58-acres zoned MFSD (6.8% of the total acreage)
 - o Three (3) parcels totaling 7.26-acres zoned BUS1 (10.7% of the total acreage)
- For these latter three (3) parcels totaling 7.26-acres, and averaging 2.42-acres, development opportunities, especially for mixed-use with commercial on the ground floor and residential above, may require a greater density allowance to enhance a potential developers' financials to "pencil out".

Table 19 - Vacant Land Parcels - Route 20 Corridor Study Area

Route 20 Corridor - Windsor Locks, CT -			
Vacant Parcels	Acres	Zoning	Parcel ID
558 Elm Street	2.89	BUS1	025-039-006
179 Ella T. Grasso Turnpike	2.91	BUS1	032-066-018
4 Loten Drive	1.46	BUS1	039-125-040
100 D. Hagen Drive (1)	32.33	IND3	045-125-003
Old County Road	20.53	IND3	045-125-017
Parcel 051-127-182	3.11	BADZ	051-127-182
Parcel 051-127-182	4.58	MFSD	051-127-182
TOTAL	67.81		

Source: Windsor Locks, CT and RKG (2023)

^{(1) -} a news clipping (dated 11 April 2023) noted that the Serta Mattress Manufacturing facility would be closing as of 4 August 2023, resulting in an estimated job loss of 157 employees at this location. While the disposition of this property is unknown at this time, for purposes of this analysis the site is assumed to become a vacant parcel and potential development opportunity site.

BRADLEY AIRPORT DEVELOPMENT ZONE

As RKG understands, the Bradley Airport Development Zone (BADZ), and is a static boundary that is not related to or referenced in the Town zoning regulations. The BADZ designation provides a tax abatement for businesses that meet the qualifying requirements in an airport development zone. ¹⁵ As noted by the *Connecticut Department of Economic and Community Development*: ¹⁶

KEY INCENTIVES FOR BUSINESS

For qualifying businesses:

- a five-year 80% abatement of local property taxes on qualifying real estate and personal property (machinery and equipment)—the investment must be new to the municipality's Grand List as a direct result of a business expansion and/or renovation, and
- other benefits as stipulated in the Connecticut General Statutes.

ELIGIBILITY

A variety of businesses may be eligible for these incentives, including but not limited to the following:

- manufacturer, process or assemble raw materials or parts;
- perform manufacturing-related research and development; or
- significantly service, overhaul or rebuild industrial machinery and equipment;
- warehouse and transport freight (as long as the business is dependent on goods shipped by air);
- provide business services, including information technology services, directly related to airport operations.

These programs are designed to encourage capital improvements to land and/or buildings, businesses must be prepared to either renovate an existing facility by investing at least 50% of its pre-acquisition value in the renovation, OR construct a new facility, OR expand an existing facility, OR acquire a facility that has been idle (minimum period of idleness depends on average number of employees). Note: if the applicant is leasing this qualifying facility, the lease must be for at least five years with the option at that point to either 1) renew the lease for an aggregate term of not less than 10 years or 2) buy the facility. The three approved Airport Development Zones include the following:

- Bradly International Airport (BDL)
- Groton-New London Airport (KGON)
- Waterbury-Oxford Airport (KOXC)

¹⁵ Statutory Reference - CGS Sec. 32-75d.

¹⁶ Also note - Airport Development Zone Program - https://ctairports.org/economic-development/development-zone-program/

HOW TO APPLY

For businesses seeking tax incentives and other benefits: Across all cities and towns that are approved by the DECD to participate in the Enterprise Zone program:

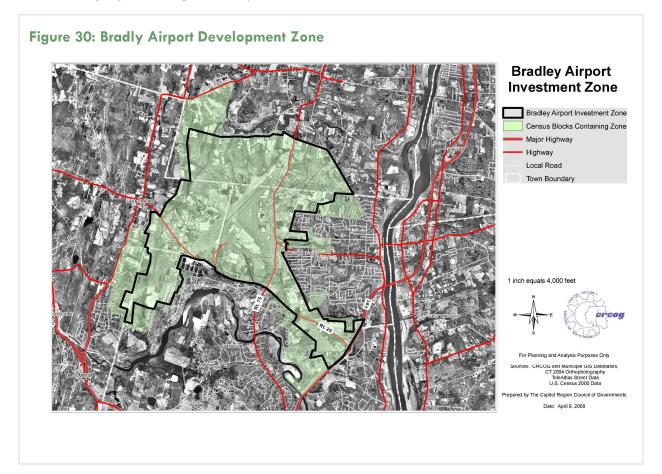
STEP ONE

- 1. Before starting any project, the business must first submit a formal request through the local economic development office of the municipality in order to obtain a Preliminary Questionnaire.
- 2. If pre-qualified, the business would receive from the DECD a formal application and an invitation to apply.

STEP TWO

- 1. The business submits a complete application with required documentation to the DECD prior to October 1 of the year in which the project will be completed.
- 2. If approved, DECD would issue a Certificate of Eligibility.

The following Figure 30, as provided by the Town of Windsor Locks, delineates the BADZ.



APPENDIX O
Potential Site Generated Traffic Summary Tables

TABLE B-1Total Potential Development Site-Generated Traffic Summary

Proposed Retail Trips			
Peak Hour Period	Enter	Exit	Total
Weekday Morning	58	42	100
Weekday Afternoon	85	84	189
Proposed Residential/Wa	•	· · · · · · · · · · · · · · · · · ·	Tatal
Peak Hour Period	Enter	Exit	Total
Weekday Morning	107	82	189
Weekday Afternoon	88	118	206
Total Vehicular Trips Peak Hour Period	Enter	Exit	Total
Weekday Morning	165	124	289
Weekday Afternoon	173	202	395

Source: Institute of Transportation Engineers, Trip Generation, 11th Edition, 2021

Land Use - 130 Industrial Park Land Use - 140 Manufacturing Land Use - 150 Warehousing

Land Use - 220 Multifamily Housing (Low-Rise) Land Use - 215 Single Family Attached Housing

Land Use - 254 Assisted Living Land Use - 312 Business Hotel

Land Use - 822 Strip Retail Plaza (<40k)

Land Use - 937 Coffee/Donut Shop with Drive-Through Window

SITE 2, I & JSite-Generated Traffic Summary - Residential

Proposed - 55 Apartments					
Peak Hour Period	Enter	Exit	Total		
Weekday Morning	5	17	22		
Weekday Afternoon	18	10	28		

Source: Institute of Transportation Engineers, Trip Generation, 11th Edition, 2021 Land Use - 220 Multifamily Housing (Low-Rise)

SITE 2, I & JSite-Generated Traffic Summary - Retail

Peak Hour Period	Enter	Exit	Total
Weekday Morning	35	24	59
Weekday Afternoon	83	82	165
Pass-by Trips Peak Hour Period	Enter	30% Exit	Total
Weekday Morning		No Pass-by Trips	
Weekday Afternoon	25	25	50
Net Vehicular Trips Peak Hour Period	Enter	Exit	Total
Weekday Morning	35	24	59
Weekday Afternoon	58	57	115

Source: Institute of Transportation Engineers, Trip Generation, 11th Edition, 2021 Land Use - 822 Strip Retail Plaza (<40k)

SITE 4 Site-Generated Traffic Summary

Weekday Afternoon

Peak Hour Period	Enter	Exit	Total
Weekday Morning	88	84	172
Weekday Afternoon	39	39	78
Pass-by Trips Peak Hour Period	Enter	90% Exit	Total
Weekday Morning	79	76	155
Weekday Afternoon	35	35	70
Net Vehicular Trips Peak Hour Period	Enter	Exit	Total
Weekday Morning	9	8	17

4

Source: Institute of Transportation Engineers, Trip Generation, 11th Edition, 2021 Land Use - 937 Coffee/Donut Shop with Drive-Through Window

4

8

SITE ASite-Generated Traffic Summary

Proposed - 50,000 SF Warehouse					
Peak Hour Period	Enter	Exit	Total		
Weekday Morning	7	2	9		
Weekday Afternoon	3	6	9		

Source: Institute of Transportation Engineers, Trip Generation, 11th Edition, 2021 Land Use - 150 Warehousing

SITE B & CSite-Generated Traffic Summary

Proposed - 100,000 SF Manufacturing					
Peak Hour Period	Enter	Exit	Total		
Weekday Morning	52	16	68		
Weekday Afternoon	23	51	74		

Source: Institute of Transportation Engineers, Trip Generation, 11th Edition, 2021 Land Use - 140 Manufacturing

SITE D, E & FSite-Generated Traffic Summary - Residential

Proposed - 35 Apartments					
Peak Hour Period	Enter	Exit	Total		
Weekday Morning	3	11	14		
Weekday Afternoon	11	7	18		

Source: Institute of Transportation Engineers, Trip Generation, 11th Edition, 2021 Land Use - 220 Multifamily Housing (Low-Rise)

SITE D, E & FSite-Generated Traffic Summary - Retail

Proposed - 10,000 SF Reta Peak Hour Period	Enter	Exit	Total
Weekday Morning	14	10	24
Weekday Afternoon	33	33	66
Pass-by Trips Peak Hour Period	Enter	30% Exit	Total
Weekday Morning		No Pass-by Trips	
Weekday Afternoon	10	10	20
Net Vehicular Trips Peak Hour Period	Enter	Exit	Total
Weekday Morning	14	10	24
Weekday Afternoon	23	23	46

Source: Institute of Transportation Engineers, Trip Generation, 11th Edition, 2021 Land Use - 822 Strip Retail Plaza (<40k)

SITE GSite-Generated Traffic Summary

Proposed - 80-Room Hotel					
Peak Hour Period	Enter	Exit	Total		
Weekday Morning	11	18	29		
Weekday Afternoon	14	11	25		

Source: Institute of Transportation Engineers, Trip Generation, 11th Edition, 2021 Land Use - 312 Business Hotel

SITE HSite-Generated Traffic Summary

Proposed - 75,000 SF Industrial Park					
Peak Hour Period	Enter	Exit	Total		
Weekday Morning	21	5	26		
Weekday Afternoon	6	20	26		

Source: Institute of Transportation Engineers, Trip Generation, 11th Edition, 2021 Land Use - 130 Industrial Park

SITE KSite-Generated Traffic Summary

Proposed - 50-Bed Assisted Living					
Peak Hour Period	Enter	Exit	Total		
Weekday Morning	5	4	9		
Weekday Afternoon	5	7	12		

Source: Institute of Transportation Engineers, Trip Generation, 11th Edition, 2021 Land Use - 254 Assisted Living

SITE LSite-Generated Traffic Summary

Proposed - 25 Townhouses					
Peak Hour Period	Enter	Exit	Total		
Weekday Morning	3	9	12		
Weekday Afternoon	8	6	14		

Source: Institute of Transportation Engineers, Trip Generation, 11th Edition, 2021 Land Use - 215 Single Family Attached Housing

APPENDIX P

2050 Improved Conditions Capacity Analysis Results Worksheets

	•	→	•	•	←	•	•	†	~	/		-√
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4		ሻ	(Î		ሻ	†	7
Traffic Volume (vph)	83	0	20	0	0	0	70	243	0	10	353	338
Future Volume (vph)	83	0	20	0	0	0	70	243	0	10	353	338
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	12	12	16	12	11	12	12	11	11	11
Storage Length (ft)	0		0	0		0	70		0	80		300
Storage Lanes	0		0	0		0	1		0	1		1
Taper Length (ft)	25			25			45			55		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.970										0.850
Flt Protected		0.962					0.950			0.950		
Satd. Flow (prot)	0	1878	0	0	2012	0	1662	1810	0	1631	1733	1346
FIt Permitted		0.773					0.515			0.584		
Satd. Flow (perm)	0	1509	0	0	2012	0	901	1810	0	1002	1733	1346
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		33										360
Link Speed (mph)		35			25			35			35	
Link Distance (ft)		394			120			257			652	
Travel Time (s)		7.7			3.3			5.0			12.7	
Peak Hour Factor	0.71	0.92	0.60	0.92	0.92	0.92	0.88	0.85	0.92	0.92	0.87	0.94
Heavy Vehicles (%)	9%	7%	0%	7%	7%	7%	5%	5%	7%	7%	6%	16%
Adj. Flow (vph)	117	0	33	0	0	0	80	286	0	11	406	360
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	150	0	0	0	0	80	286	0	11	406	360
Turn Type	Perm	NA					Perm	NA		Perm	NA	Perm
Protected Phases		4			4			2			2	
Permitted Phases	4			4			2			2		2
Detector Phase	4	4		4	4		2	2		2	2	2
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		15.0	15.0		15.0	15.0	15.0
Minimum Split (s)	24.2	24.2		24.2	24.2		20.4	20.4		20.4	20.4	20.4
Total Split (s)	25.0	25.0		25.0	25.0		45.0	45.0		45.0	45.0	45.0
Total Split (%)	35.7%	35.7%		35.7%	35.7%		64.3%	64.3%		64.3%	64.3%	64.3%
Yellow Time (s)	3.0	3.0		3.0	3.0		4.1	4.1		4.1	4.1	4.1
All-Red Time (s)	2.2	2.2		2.2	2.2		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)		5.2			5.2		5.1	5.1		5.1	5.1	5.1
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	C-Max
Act Effct Green (s)		11.3					51.9	51.9		51.9	51.9	51.9
Actuated g/C Ratio		0.16					0.74	0.74		0.74	0.74	0.74
v/c Ratio		0.56					0.12	0.21		0.01	0.32	0.33
Control Delay		27.8					5.5	5.1		5.9	5.3	1.9
Queue Delay		0.0					0.0	0.0		0.0	0.0	0.0
Total Delay		27.8					5.5	5.1		5.9	5.3	1.9
LOS		С					Α	Α		Α	Α	Α
Approach Delay		27.8						5.2			3.7	
Approach LOS		С						Α			Α	

101: Route 75 & Route 20 EB Ramps/Private Driveway 2050 Future with Development (Road Diet) Weekday AM Peak

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)		48					9	34		1	36	0
Queue Length 95th (ft)		86					33	86		m3	105	42
Internal Link Dist (ft)		314			40			177			572	
Turn Bay Length (ft)							70			80		300
Base Capacity (vph)		450					668	1342		742	1284	1091
Starvation Cap Reductn		0					0	0		0	0	0
Spillback Cap Reductn		0					0	0		0	0	0
Storage Cap Reductn		0					0	0		0	0	0
Reduced v/c Ratio		0.33					0.12	0.21		0.01	0.32	0.33
Intersection Summary												
Area Type:	Other											
Cycle Length: 70												
Actuated Cycle Length: 70)											

Actuated Cycle Length: 70

Offset: 0 (0%), Referenced to phase 2:NBSB, Start of Yellow

Natural Cycle: 45

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.56

Intersection Signal Delay: 6.9 Intersection LOS: A Intersection Capacity Utilization 49.7% ICU Level of Service A

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 101: Route 75 & Route 20 EB Ramps/Private Driveway

Ø2 (R)

Lane Group EBL EBT EBR WBL WBT WBR NBL NBT NBR SBL Lane Configurations ☐ ☐	BT SBR ↑ ↑ 661 110
Traffic Volume (vph) 0 0 0 40 10 545 40 296 0 0	
Traffic Volume (vph) 0 0 0 40 10 545 40 296 0 0	
	טוו וטכ
- 1 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	661 110
\ \ \ /	900 1900
Lane Width (ft) 12 14 12 12 11 12 11 12 11	11 11
Storage Length (ft) 0 0 0 190 75 0 0	90
Storage Lanes 0 0 0 1 1 0 0	1
Taper Length (ft) 25 25 40 25	
	.00 1.00
Frt 0.850	0.850
Flt Protected 0.972 0.950	0.000
	655 1382
Flt Permitted 0.972 0.302	1002
	655 1382
Right Turn on Red Yes Yes Yes	Yes
Satd. Flow (RTOR) 460	103
Link Speed (mph) 30 35	35
	293
\setminus /	4.7
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	.94 0.83
	1% 13%
Adj. Flow (vph) 0 0 0 53 40 612 48 379 0 0	703 133
Shared Lane Traffic (%)	100
Lane Group Flow (vph) 0 0 0 0 93 612 48 379 0 0	703 133
Turn Type Split NA Prot Perm NA	NA Perm
Protected Phases 4 4 4 2	2
Permitted Phases 2	2
Detector Phase 4 4 4 2 2	2 2
Switch Phase	
	5.0 15.0
	0.4 20.4
	5.0 45.0
	3% 64.3%
Yellow Time (s) 3.0 3.0 4.4 4.4	4.4 4.4
All-Red Time (s) 2.1 2.1 1.0 1.0	1.0 1.0
Lost Time Adjust (s) 0.0 0.0 0.0 0.0	0.0 0.0
Total Lost Time (s) 5.1 5.4 5.4	5.4 5.4
Lead/Lag	
Lead-Lag Optimize?	
	Max C-Max
	4.7 44.7
Actuated g/C Ratio 0.21 0.64 0.64	.64 0.64
v/c Ratio 0.27 0.91 0.14 0.33	.67 0.14
Control Delay 22.9 26.4 6.7 6.6	3.5 2.9
Queue Delay 0.0 0.0 0.0 0.0	0.0 0.0
,	3.5 2.9
LOS C C A A	В А
	1.8
Approach LOS C A	В

102: Route 75 & Route 20 WB On Ramp/Route 20 WB Off Ramp 2050 Future with Development (Road Diet) Weekday AM Peak

	ᄼ	-	•	•	•	•	•	†	~	>	↓	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)					32	56	8	68			180	5
Queue Length 95th (ft)					17	#238	20	87			346	22
Internal Link Dist (ft)		511			444			572			2213	
Turn Bay Length (ft)						190	75					90
Base Capacity (vph)					472	746	337	1144			1057	920
Starvation Cap Reductn					0	0	0	0			0	0
Spillback Cap Reductn					0	0	0	0			0	0
Storage Cap Reductn					0	0	0	0			0	0
Reduced v/c Ratio					0.20	0.82	0.14	0.33			0.67	0.14
Intersection Summary												

Intersection Summary

Area Type: Other

Cycle Length: 70

Actuated Cycle Length: 70

Offset: 1 (1%), Referenced to phase 2:NBSB, Start of Yellow

Natural Cycle: 50

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.91

Intersection Signal Delay: 15.7 Intersection LOS: B
Intersection Capacity Utilization 58.1% ICU Level of Service B

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 102: Route 75 & Route 20 WB On Ramp/Route 20 WB Off Ramp



	ၨ	→	•	•	←	•	4	†	<i>></i>	\	↓	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4		ሻ	f)		ሻ	1>	
Traffic Volume (vph)	1	1	14	75	2	20	15	740	76	31	522	4
Future Volume (vph)	1	1	14	75	2	20	15	740	76	31	522	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	15	12	12	16	12	12	12	12	12	12	12
Storage Length (ft)	0		0	0		0	50		0	50		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.870			0.970			0.983			0.999	
Flt Protected		0.999			0.963		0.950			0.950		
Satd. Flow (prot)	0	1812	0	0	1966	0	1687	1733	0	1597	1727	0
Flt Permitted		0.996			0.827		0.433			0.166		
Satd. Flow (perm)	0	1807	0	0	1689	0	769	1733	0	279	1727	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		56			19			10			1	
Link Speed (mph)		25			30			35			35	
Link Distance (ft)		250			258			2293			1017	
Travel Time (s)		6.8			5.9			44.7			19.8	
Peak Hour Factor	0.92	0.92	0.25	0.72	0.92	0.67	0.92	0.88	0.70	0.75	0.86	0.92
Heavy Vehicles (%)	7%	7%	0%	2%	7%	3%	7%	8%	6%	13%	10%	0%
Adj. Flow (vph)	1	1	56	104	2	30	16	841	109	41	607	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	58	0	0	136	0	16	950	0	41	611	0
,	Perm	NA		Perm	NA		Perm	NA		D.P+P	NA	
Protected Phases		4			4			2		1	12	
Permitted Phases	4			4			2			2		
Detector Phase	4	4		4	4					1		
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		15.0	15.0		5.0		
Minimum Split (s)	9.5	9.5		9.5	9.5		21.5	21.5		9.0		
Total Split (s)	31.0	31.0		31.0	31.0		40.0	40.0		9.0		
Total Split (%)	38.8%	38.8%		38.8%	38.8%		50.0%	50.0%		11.3%		
Yellow Time (s)	3.0	3.0		3.0	3.0		4.4	4.4		3.0		
All-Red Time (s)	1.5	1.5		1.5	1.5		2.1	2.1		1.0		
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0		
Total Lost Time (s)		4.5			4.5		6.5	6.5		4.0		
Lead/Lag							Lag	Lag		Lead		
Lead-Lag Optimize?							Yes	Yes		Yes		
Recall Mode	None	None		None	None		C-Max	C-Max		None		
Act Effct Green (s)		9.9			9.9		53.7	53.7		59.2	61.6	
Actuated g/C Ratio		0.12			0.12		0.67	0.67		0.74	0.77	
v/c Ratio		0.21			0.60		0.03	0.82		0.14	0.46	
Control Delay		11.0			38.8		7.3	20.2		2.5	3.3	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		11.0			38.8		7.3	20.2		2.5	3.3	
LOS		В			D		Α	С		Α	Α	
Approach Delay		11.0			38.8			20.0			3.2	
Approach LOS		В			D			В			Α	

	•	-	*	•	•	•	1	Ť	~	-	↓	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)		1			56		3	344		1	11	
Queue Length 95th (ft)		31			104		12	#687		m2	47	
Internal Link Dist (ft)		170			178			2213			937	
Turn Bay Length (ft)							50			50		
Base Capacity (vph)		636			572		515	1165		289	1329	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	
Reduced v/c Ratio		0.09			0.24		0.03	0.82		0.14	0.46	

Intersection Summary

Area Type: Other

Cycle Length: 80

Actuated Cycle Length: 80

Offset: 57 (71%), Referenced to phase 2:NBSB, Start of Yellow

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.82

Intersection Signal Delay: 15.1 Intersection LOS: B
Intersection Capacity Utilization 64.9% ICU Level of Service C

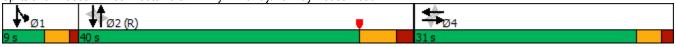
Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 103: Route 75 & LAZFly Driveway/Halfway House Road



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1 0			T DD	▼ M/DI	WDT	WDD	\ NDI	I NDT	/	001	▼	000
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	\	€		<u>ነ</u>	^	4.4	7	}	40	<u>ነ</u>	↑	145
Traffic Volume (vph)	93	12	90	10	11	14	210	540	10	20	447	115
Future Volume (vph)	93	12	90	10	11	14	210	540	10	20	447	115
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	10	10	10	12	12	12	12	12	12	12
Storage Length (ft)	0		220	200		150	450		0	0		400
Storage Lanes	1		1	0		1	1		0	1		1
Taper Length (ft)	25			25			50			75		
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.902			0.994				0.850
Flt Protected	0.950	0.968		0.950			0.950			0.950		
Satd. Flow (prot)	1417	1517	1311	1306	1433	0	1671	1693	0	1530	1696	1568
Flt Permitted	0.950	0.968		0.950			0.950			0.950		
Satd. Flow (perm)	1417	1517	1311	1306	1433	0	1671	1693	0	1530	1696	1568
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			130		28			3				251
Link Speed (mph)		35			25			35			35	
Link Distance (ft)		466			418			1017			1839	
Travel Time (s)		9.1			11.4			19.8			35.8	
Peak Hour Factor	0.78	0.50	0.69	0.50	0.75	0.50	0.78	0.95	0.44	0.31	0.84	0.93
Heavy Vehicles (%)	17%	0%	15%	29%	11%	12%	8%	12%	0%	18%	12%	3%
Adj. Flow (vph)	119	24	130	20	15	28	269	568	23	65	532	124
Shared Lane Traffic (%)	40%											
Lane Group Flow (vph)	71	72	130	20	43	0	269	591	0	65	532	124
Turn Type	Split	NA	pt+ov	Split	NA	-	Prot	NA	•	Prot	NA	Free
Protected Phases	8	8	18	4	4		1	6		5	2	
Permitted Phases			. •	•	•		•	•			-	Free
Detector Phase	8	8	18	4	4		1	6		5	2	1100
Switch Phase			10				•	J		· ·	_	
Minimum Initial (s)	7.0	7.0		5.0	5.0		5.0	15.0		5.0	15.0	
Minimum Split (s)	12.7	12.7		9.8	9.8		10.1	20.8		9.0	20.6	
Total Split (s)	22.0	22.0		10.0	10.0		18.0	30.0		18.0	30.0	
Total Split (%)	27.5%	27.5%		12.5%	12.5%		22.5%	37.5%		22.5%	37.5%	
Yellow Time (s)	3.0	3.0		3.3	3.3		3.0	4.4		3.0	4.4	
All-Red Time (s)	2.7	2.7		1.5	1.5		2.1	1.4		1.0	1.2	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
• • • • • • • • • • • • • • • • • • • •	5.7	5.7		4.8	4.8		5.1	5.8		4.0	5.6	
Total Lost Time (s)	5.7	5.7		4.0	4.0							
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Nama	Nama		Mana	Nama		Yes	Yes		Yes	Yes	
Recall Mode	None	None	20.4	None	None		None	C-Min		None	C-Min	00.0
Act Effct Green (s)	9.1	9.1	30.4	5.1	5.1		18.2	47.2		7.7	32.9	80.0
Actuated g/C Ratio	0.11	0.11	0.38	0.06	0.06		0.23	0.59		0.10	0.41	1.00
v/c Ratio	0.44	0.42	0.22	0.24	0.37		0.71	0.59		0.44	0.76	0.08
Control Delay	41.2	39.9	3.8	42.9	28.4		30.9	19.1		38.8	34.2	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	41.2	39.9	3.8	42.9	28.4		30.9	19.1		38.8	34.2	0.1
LOS	D	D	Α	D	С		С	В		D	С	Α
Approach Delay		23.0			33.0			22.8			28.7	
Approach LOS		С			С			С			С	

104: Route 75 & Route 401 (Schoephoester Road)/National Road 2050 Future with Development (Road Diet) Weekday AM Peak

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	35	35	0	10	7		90	304		32	243	0
Queue Length 95th (ft)	63	40	13	17	29		m143	m#438		21	#421	0
Internal Link Dist (ft)		386			338			937			1759	
Turn Bay Length (ft)			220	200			450					400
Base Capacity (vph)	288	309	574	84	119		379	1000		267	697	1568
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	0
Reduced v/c Ratio	0.25	0.23	0.23	0.24	0.36		0.71	0.59		0.24	0.76	0.08

Intersection Summary

Area Type: Other

Cycle Length: 80

Actuated Cycle Length: 80

Offset: 12 (15%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.76

Intersection Signal Delay: 25.4

Intersection LOS: C
ICU Level of Service B

Intersection Capacity Utilization 58.4%

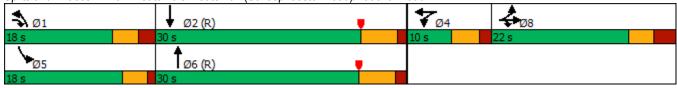
Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 104: Route 75 & Route 401 (Schoephoester Road)/National Road



Tarefic Volume (vph)		۶	→	•	•	+	•	•	†	~	/	+	-√
Traffic Volume (vph)	Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	Lane Configurations	*	∳ ሴ		*	∳ Љ			43-			4	7
Future Volume (vph)				20			20	20		10	10		70
													70
Lane Width (ft)	,												
Storage Length (ft) 170													
Storage Lanes			· <u>-</u>										
Taper Length (ft)													1
Lane Util. Factor					-								
Fit			0.95	0.95		0.95	0.95		1 00	1 00		1 00	1 00
Fit Protected		1.00		0.00	1.00		0.00	1.00		1.00	1.00	1.00	
Satd. Flow (prot) 1805 3459 0 1631 3347 0 0 1660 0 0 1735 1706 Fit Permitted 0.528 0.580 0.821 0.728 Satd. Flow (perm) 1003 3459 0 996 3347 0 0 1401 0 0 0 1329 1706 Right Turn on Red Yes Yes Yes Yes Yes Yes Satd. Flow (RTOR) 21 15 992 106 Link Speed (mph) 35 35 25 330 Link Distance (ft) 624 466 420 346 Travel Time (s) 12.2 9.1 11.5 7.9 Peak Hour Factor 0.70 0.70 0.69 0.50 0.88 0.67 0.83 0.92 0.50 0.63 0.92 0.66 Heavy Vehicles (%) 0% 3% 0% 7% 3% 3% 0% 100% 33% 11% 7% 11% Adj. Flow (vph) 86 250 29 20 348 30 24 0 20 16 0 106 Shared Lane Traffic (%) Lane Group Flow (vph) 86 279 0 20 378 0 0 44 0 0 16 106 Turn Type pm+pt NA pm+pt NA Perm NA Perm NA Perm Protected Phases 1 6 5 2 4 4 4 4 4 Permitted Phases 6 2 2 4 4 4 4 4 4 Switch Phase 4 Minimum Initial (s) 5.0 15.0 5.0 15.0 7.0 7.0 7.0 7.0 7.0 Minimum Split (s) 9.0 53.9 9.0 53.9 37.1 27.1 27.1 27.1 27.1 27.1 Total Split (%) 9.0 53.9 9.0 53.9 37.1 27.1		0.950	0.001		0.950	0.000						0.950	0.000
Fit Permitted			3459	0		3347	0	0		0	0		1706
Satid Flow (perm) 1003 3459 0 996 3347 0 0 1401 0 0 1329 1706 Right Turn on Red Yes Ye			0100	•		00 11				· ·	, and the second		1100
Right Turn on Red			3459	0		3347	0	0		0	0		1706
Said, Flow (RTOR)		1000	0400		330	00+1		U	1401		0	1023	
Link Speed (mph) 35 35 25 30 Link Distance (ft) 624 466 420 346 Travel Time (s) 12.2 9.1 11.5 7.9 Peak Hour Factor 0.70 0.70 0.69 0.50 0.88 0.67 0.83 0.92 0.50 0.63 0.92 0.66 Heavy Vehicles (%) 0% 3% 0% 7% 3% 3% 0% 100% 33% 11% 7% 1% Adj. Flow (vph) 86 250 29 20 348 30 24 0 20 16 0 106 Shared Lane Traffic (%) Lane Group Flow (vph) 86 279 0 20 378 0 0 44 0 0 16 106 Tum Type pm+pt NA pm+pt NA perm NA Perm NA Perm NA Perm NA Perm NA Perm NA Per			21	103		15	103		92	103			
Link Distance (ft)												30	100
Travel Time (s)													
Peak Hour Factor	` /												
Heavy Vehicles (%)		0.70		0.60	0.50		0.67	0.83		0.50	0.63		0.66
Adj. Flow (vph) 86 250 29 20 348 30 24 0 20 16 0 106 Shared Lane Traffic (%) Lane Group Flow (vph) 86 279 0 20 378 0 0 44 0 0 16 106 Turn Type pm+pt NA pm+pt NA pm+pt NA Perm NA 4 4 4 4 <td></td>													
Shared Lane Traffic (%) Lane Group Flow (vph) 86 279 0 20 378 0 0 44 0 0 0 16 106 Turn Type													
Lane Group Flow (vph) 86 279 0 20 378 0 0 44 0 0 16 106 Turn Type pm+pt NA pm+pt NA Perm NA Perm NA Perm NA Perm NA Perm Perm NA 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4		00	250	23	20	340	50	27	U	20	10	U	100
Turn Type pm+pt NA pm+pt NA Perm NA Perm NA Perm Protected Phases 1 6 5 2 4 4 4 Permitted Phases 6 2 4 4 4 4 4 Switch Phase Winimum Initial (s) 5.0 15.0 5.0 15.0 7.0		86	279	0	20	378	0	0	11	0	Λ	16	106
Protected Phases 6 2 4 4 4 4 4 A Detector Phase 6 2 4 4 4 4 4 4 4 4 A A Detector Phase 1 6 5 2 4 4 4 4 4 4 4 4 A A A A Switch Phase Minimum Initial (s) 5.0 15.0 5.0 15.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 Minimum Split (s) 9.0 21.6 9.0 21.6 12.1 12.1 12.1 12.1 12.1 12.1 12.1				U			U			U			
Permitted Phases 6 2 4 4 4 4 4 4 4 5 4 5 5 5 2 4 4 4 4 4 4								1 01111			1 01111		1 01111
Detector Phase 1 6 5 2 4 4 4 4 4 4 4 4 4		<u> </u>	•			_		4			4	•	4
Switch Phase Minimum Initial (s) 5.0 15.0 5.0 15.0 7.1 7.1 7.1 7.1 7.1 7.1 7.1 7.1 7.1 7.1 7.1 7.1			6			2			4			4	4
Minimum Initial (s) 5.0 15.0 5.0 15.0 7.0 7.0 7.0 7.0 7.0 Minimum Split (s) 9.0 21.6 9.0 21.6 12.1<		•				_		•	•		•	•	•
Minimum Split (s) 9.0 21.6 9.0 21.6 12.1 27.1		5.0	15.0		5.0	15.0		7.0	7.0		7.0	7.0	7.0
Total Split (s) 9.0 53.9 9.0 53.9 27.1 30.1% 30.2 30.2 30.2 30.2 30.2													
Total Split (%) 10.0% 59.9% 10.0% 59.9% 30.1% 30.0													
Yellow Time (s) 3.0 4.4 3.0													
All-Red Time (s) 1.0 2.2 1.0 2.2 2.1 2.1 2.1 2.1 2.1 2.1 2.1 Lost Time Adjust (s) 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.													3.0
Lost Time Adjust (s) 0.0													2.1
Total Lost Time (s) 4.0 6.6 4.0 6.6 5.1 5.1 5.1 5.1 Lead/Lag Lead-Lag Optimize? Recall Mode None C-Min None C-Min None None None None None Act Effet Green (s) 72.7 66.8 72.5 66.8 7.5 7.5 7.5 7.5 Actuated g/C Ratio 0.81 0.74 0.81 0.74 0.08 0.08 0.08 0.08 v/c Ratio 0.10 0.11 0.02 0.15 0.22 0.15 0.45 Control Delay 2.0 4.5 1.8 4.8 3.5 41.0 14.4 Queue Delay 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 14.4 0.00 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0													0.0
Lead/Lag Lead-Lag Optimize? Recall Mode None C-Min None 0.08 0.08 <th< td=""><td>• ()</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>5.1</td></th<>	• ()												5.1
Lead-Lag Optimize? Recall Mode None C-Min None C-Min None None <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>													
Recall Mode None C-Min None													
Act Effct Green (s) 72.7 66.8 72.5 66.8 7.5 7.5 7.5 Actuated g/C Ratio 0.81 0.74 0.81 0.74 0.08 0.08 0.08 v/c Ratio 0.10 0.11 0.02 0.15 0.22 0.15 0.45 Control Delay 2.0 4.5 1.8 4.8 3.5 41.0 14.4 Queue Delay 0.0 0.0 0.0 0.0 0.0 0.0 0.0 Total Delay 2.0 4.5 1.8 4.8 3.5 41.0 14.4		None	C-Min		None	C-Min		None	None		None	None	None
Actuated g/C Ratio 0.81 0.74 0.81 0.74 0.08 0.08 0.08 v/c Ratio 0.10 0.11 0.02 0.15 0.22 0.15 0.45 Control Delay 2.0 4.5 1.8 4.8 3.5 41.0 14.4 Queue Delay 0.0 0.0 0.0 0.0 0.0 0.0 Total Delay 2.0 4.5 1.8 4.8 3.5 41.0 14.4													7.5
v/c Ratio 0.10 0.11 0.02 0.15 0.22 0.15 0.45 Control Delay 2.0 4.5 1.8 4.8 3.5 41.0 14.4 Queue Delay 0.0 0.0 0.0 0.0 0.0 0.0 0.0 Total Delay 2.0 4.5 1.8 4.8 3.5 41.0 14.4													0.08
Control Delay 2.0 4.5 1.8 4.8 3.5 41.0 14.4 Queue Delay 0.0 0.0 0.0 0.0 0.0 0.0 Total Delay 2.0 4.5 1.8 4.8 3.5 41.0 14.4													0.45
Queue Delay 0.0 0.0 0.0 0.0 0.0 0.0 0.0 Total Delay 2.0 4.5 1.8 4.8 3.5 41.0 14.4			4.5		1.8				3.5			41.0	14.4
Total Delay 2.0 4.5 1.8 4.8 3.5 41.0 14.4												0.0	0.0
													14.4
LOS A A A A D B													В
Approach Delay 3.9 4.6 3.5 17.9													
Approach LOS A A A B													

105: Airport Servuce Road/Light Lane & Route 401 (Schoephoester Road) 2050 Future with Development (Road Diet) Weekday AM Peak

	•	→	•	•	←	•	4	†	/	\	ļ	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	6	22		1	33			0			9	0
Queue Length 95th (ft)	12	30		3	54			5			28	19
Internal Link Dist (ft)		544			386			340			266	
Turn Bay Length (ft)	170			120								200
Base Capacity (vph)	859	2572		841	2487			411			324	497
Starvation Cap Reductn	0	0		0	0			0			0	0
Spillback Cap Reductn	0	0		0	0			0			0	0
Storage Cap Reductn	0	0		0	0			0			0	0
Reduced v/c Ratio	0.10	0.11		0.02	0.15			0.11			0.05	0.21
Intersection Summary												
Area Type:	Other											
Cycle Length: 90												
A streets of Create I smarth. Of	1											

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow

Natural Cycle: 45

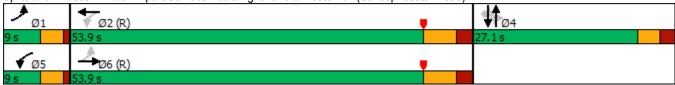
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.45

Intersection Signal Delay: 6.0 Intersection LOS: A Intersection Capacity Utilization 38.2% ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 105: Airport Servuce Road/Light Lane & Route 401 (Schoephoester Road)



	•	•	†	/	\	ļ
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	YVDL T	₩DIX	†	אטוז	JDL	<u> </u>
Traffic Volume (vph)	104	259	T ₱ 536	74	264	T 474
Future Volume (vph)	104	259	536	74	264	474
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	1900	1900	1900	12	1900	1900
Storage Length (ft)	0	400	12	0	675	11
	1			0		
Storage Lanes	25	0		U	1 35	
Taper Length (ft) Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
	1.00			0.95	1.00	1.00
Frt	0.050	0.850	0.981		0.050	
Flt Protected	0.950	4450	2045	0	0.950	4005
Satd. Flow (prot)	1711	1459	3245	0	1589	1685
Flt Permitted	0.950		00:-	_	0.355	
Satd. Flow (perm)	1711	1459	3245	0	594	1685
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		154	24			
Link Speed (mph)	40		35			35
Link Distance (ft)	300		1839			990
Travel Time (s)	5.1		35.8			19.3
Peak Hour Factor	0.80	0.87	0.87	0.84	0.94	0.89
Heavy Vehicles (%)	2%	7%	10%	3%	6%	9%
Adj. Flow (vph)	130	298	616	88	281	533
Shared Lane Traffic (%)			0.0			
Lane Group Flow (vph)	130	298	704	0	281	533
Turn Type	Prot	pt+ov	NA	- 0	D.P+P	NA
Protected Phases	4	14	2		1	12
Permitted Phases	4	14	Z		2	1 2
	1	1			1	
Detector Phase	4	4			I	
Switch Phase	^ ^		45.0		.	
Minimum Initial (s)	9.0		15.0		5.0	
Minimum Split (s)	13.0		20.9		9.0	
Total Split (s)	25.0		39.0		16.0	
Total Split (%)	31.3%		48.8%		20.0%	
Yellow Time (s)	3.0		4.4		3.0	
All-Red Time (s)	1.0		1.5		1.0	
Lost Time Adjust (s)	0.0		0.0		0.0	
Total Lost Time (s)	4.0		5.9		4.0	
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None		C-Max		None	
Act Effct Green (s)	13.2	25.8	44.3		54.8	58.8
Actuated g/C Ratio	0.16	0.32	0.55		0.68	0.74
v/c Ratio	0.16	0.52	0.39		0.00	0.74
	34.6	12.3	6.7		8.5	6.1
Control Delay						
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	34.6	12.3	6.7		8.5	6.1
LOS	C	В	A		A	Α
Approach Delay	19.1		6.7			6.9
Approach LOS	В		Α			Α

106: Route 75 & Route 140 (Elm Street) 2050 Future with Development (Road Diet) Weekday AM Peak

	•	•	†	<i>></i>	>	↓
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Queue Length 50th (ft)	60	55	37		35	80
Queue Length 95th (ft)	89	91	78		83	176
Internal Link Dist (ft)	220		1759			910
Turn Bay Length (ft)		400			675	
Base Capacity (vph)	449	580	1805		580	1239
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.29	0.51	0.39		0.48	0.43
Intersection Summary						
Area Type:	Other					
Cycle Length: 80						
Actuated Cycle Length: 8	0					
Offset: 43 (54%), Referen	nced to phase	2:NBSB,	Start of Y	'ellow		
Natural Cycle: 45						
Control Type: Actuated-C	oordinated					
Maximum v/c Ratio: 0.55						
Intersection Signal Delay	: 9.5			In	tersection	LOS: A
Intersection Capacity Util	ization 50.9%			IC	U Level o	of Service A

Splits and Phases: 106: Route 75 & Route 140 (Flm Street)

Analysis Period (min) 15

Cplits and i mases.	100. Noute 13 & Noute 140 (Ellif Sti	5
▼ Ø1	▼ IØ2 (R)	♥ Ø4
16 s	39 c	25 s

Route 20 Corridor Study Tighe & Bond

Synchro 11 Report

Lanes, Volumes, Timings

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4		7	ĵ»		, j	†	7
Traffic Volume (vph)	132	10	40	10	20	20	70	464	10	30	394	450
Future Volume (vph)	132	10	40	10	20	20	70	464	10	30	394	450
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	12	12	16	12	11	12	12	11	11	11
Storage Length (ft)	0		0	0		0	70		0	80		300
Storage Lanes	0		0	0		0	1		0	1		1
Taper Length (ft)	25			25			45			55		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.970			0.946			0.997				0.850
Flt Protected		0.965			0.990		0.950			0.950		
Satd. Flow (prot)	0	1959	0	0	1885	0	1694	1838	0	1631	1801	1473
Flt Permitted		0.750			0.934		0.478			0.440		
Satd. Flow (perm)	0	1522	0	0	1778	0	852	1838	0	755	1801	1473
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		21			22			3				608
Link Speed (mph)		35			25			35			35	
Link Distance (ft)		394			120			257			652	
Travel Time (s)		7.7			3.3			5.0			12.7	
Peak Hour Factor	0.80	0.92	0.78	0.92	0.92	0.92	0.82	0.96	0.92	0.92	0.90	0.74
Heavy Vehicles (%)	4%	0%	0%	7%	7%	7%	3%	3%	7%	7%	2%	6%
Adj. Flow (vph)	165	11	51	11	22	22	85	483	11	33	438	608
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	227	0	0	55	0	85	494	0	33	438	608
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		4			4		_	2		_	2	
Permitted Phases	4			4			2			2		2
Detector Phase	4	4		4	4		2	2		2	2	2
Switch Phase							4= 0			1= 0	4-0	4= 0
Minimum Initial (s)	7.0	7.0		7.0	7.0		15.0	15.0		15.0	15.0	15.0
Minimum Split (s)	24.2	24.2		24.2	24.2		20.4	20.4		20.4	20.4	20.4
Total Split (s)	25.0	25.0		25.0	25.0		45.0	45.0		45.0	45.0	45.0
Total Split (%)	35.7%	35.7%		35.7%	35.7%		64.3%	64.3%		64.3%	64.3%	64.3%
Yellow Time (s)	3.0	3.0		3.0	3.0		4.1	4.1		4.1	4.1	4.1
All-Red Time (s)	2.2	2.2		2.2	2.2		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)		5.2			5.2		5.1	5.1		5.1	5.1	5.1
Lead/Lag												
Lead-Lag Optimize?	Mana	Mana		Mana	Mana		O M	O M		O M	O M	O M
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	C-Max
Act Effct Green (s)		14.0			14.0		45.7	45.7		45.7	45.7	45.7
Actuated g/C Ratio		0.20			0.20		0.65	0.65		0.65	0.65	0.65
v/c Ratio		0.71			0.15		0.15	0.41		0.07	0.37	0.52
Control Delay		35.3			15.0		6.9	7.9		6.3	7.6	2.5
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	0.0
Total Delay		35.3			15.0		6.9	7.9		6.3	7.6	2.5
LOS		D			15 O		Α	A		Α	A	Α
Approach LOS		35.3			15.0			7.8			4.7	
Approach LOS		D			В			A			A	

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)		83			12		12	86		4	74	0
Queue Length 95th (ft)		138			35		33	180		17	157	10
Internal Link Dist (ft)		314			40			177			572	
Turn Bay Length (ft)							70			80		300
Base Capacity (vph)		445			518		556	1202		493	1176	1173
Starvation Cap Reductn		0			0		0	0		0	0	0
Spillback Cap Reductn		0			0		0	0		0	0	0
Storage Cap Reductn		0			0		0	0		0	0	0
Reduced v/c Ratio		0.51			0.11		0.15	0.41		0.07	0.37	0.52
Base Capacity (vph) Starvation Cap Reductn Spillback Cap Reductn Storage Cap Reductn		0 0			0 0 0		556 0 0	0 0 0		493 0 0 0	0 0	1173 0 0 0

Intersection Summary

Area Type: Other

Cycle Length: 70

Actuated Cycle Length: 70

Offset: 0 (0%), Referenced to phase 2:NBSB, Start of Yellow

Natural Cycle: 50

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.71

Intersection Signal Delay: 9.5 Intersection LOS: A Intersection Capacity Utilization 67.3% ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 101: Route 75 & Route 20 EB Ramps/Private Driveway

₩ Ø2 (R)
45 s
25 s

Lane Group		۶	→	•	•	+	•	•	†	~	/	↓	-√
Lane Configurations	Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph) 0 0 0 60 0 698 30 576 0 0 0 814 135 Inture Volume (vph) 1900 1900 1900 1900 1900 1900 1900 190	Lane Configurations					্ব	#	*	•			•	7
Future Volume (vph)		0	0	0	60					0	0		
Ideal Flow (ryphpl)													
Lane Width (ft)	(, ,												
Storage Langth (ft)													
Storage Lanes 0													
Taper Length (ft)													
Lane Util. Factor							•						
Fith Frite Fith Fith Frite Fith Frite Fith Frite Fith Frite Fith Fith Frite Fith Frite Fith Frite Fith Frite Fith F			1 00	1 00		1 00	1 00		1 00	1 00		1 00	1 00
Fit Protected		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Satd. Flow (prot)						0.950	0.000	0.950					0.000
Fit Permitted		0	0	0	0		1509		1845	0	0	1766	1487
Satd. Flow (perm) 0 0 0 1694 1509 166 1845 0 0 1766 1487 148		•	v	J	•		1000		1010	J	· ·	1700	1 101
Right Turn on Red		0	0	0	0		1509		1845	0	0	1766	1487
Satd. Flow (RTOR)		U	· ·		U	1004		100	10-10		U	1700	
Link Speed (mph) 30 30 35 35 Link Distance (ft) 591 524 652 2293 Travel Time (s) 134 11.9 12.7 44.7 Peak Hour Factor 0.92 0.92 0.92 0.92 0.92 0.92 0.92 0.92 0.92 0.92 0.96 0.68 Heavy Vehicles (%) 7% 7% 7% 3% 0% 7% 2% 3% 7% 7% 44.7 Adj. Flow (vph) 0 0 0 79 0 735 36 600 0 0 848 199 Shared Lane Traffic (%) 1 2<				100						100			
Link Distance (ft)			30			30	210		35			35	04
Travel Time (s)													
Peak Hour Factor 0.92 0.92 0.92 0.92 0.92 0.92 0.92 0.92 0.92 0.96 0.68 Heavy Vehicles (%) 7% 7% 7% 7% 3% 0% 7% 2% 3% 7% 7% 4% 5% Adj. Flow (vph) 0 0 79 735 36 600 0 0 848 199 Shared Lane Traffic (%) 1 NA Prot Perm NA NA Perm Lane Group Flow (vph) 0 0 0 79 735 36 600 0 0 848 199 Turn Type Split NA Prot Perm NA NA Perm NA NA Perm NA NA Perm Perm NA NA Perm NA NA Perm NA NA Perm NA NA NA Perm NA NA NA NA NA													
Heavy Vehicles (%)		0.02		0.92	0.76		N 95	0.84		0.92	N 92		0.68
Adj. Flow (vph) 0 0 0 79 0 735 36 600 0 848 199 Shared Lane Traffic (%) Lane Group Flow (vph) 0 0 0 79 735 36 600 0 0 848 199 Turn Type Split NA Prote Protected Phases 4 4 4 2													
Shared Lane Traffic (%) Lane Group Flow (vph) 0 0 0 0 0 0 79 735 36 600 0 0 848 199 1 1 1 1 1 1 1 1													
Lane Group Flow (vph)		U	U	U	13	U	100	30	000	U	U	040	133
Tum Type Split NA Prot Perm NA Perm Protected Phases 4 4 4 2 2 2 Permitted Phases 2 2 2 2 2 2 Detector Phase 4 4 4 2		0	0	Λ	0	79	735	36	600	Λ	n	848	199
Protected Phases 4		U	U	U						U	U		
Permitted Phases 2 2 2 2 2 2 2 2 2								1 01111					1 01111
Detector Phase 4						•	•	2	_			_	2
Switch Phase Minimum Initial (s) 7.0 7.0 7.0 15.0 15.0 15.0 15.0 Minimum Split (s) 12.1 12.1 12.1 20.4 20.4 20.4 20.4 Total Split (s) 41.0 41.0 41.0 49.0 49.0 49.0 49.0 Total Split (%) 45.6% 45.6% 54.4% 44.4 4.5 5.2 5.2					4	4	4		2			2	
Minimum Initial (s) 7.0 7.0 7.0 15.0 15.0 15.0 Minimum Split (s) 12.1 12.1 12.1 20.4 20.4 20.4 Total Split (s) 41.0 41.0 49.0 49.0 49.0 49.0 Total Split (%) 45.6% 45.6% 45.6% 54.4% 54.4% 54.4% 54.4% Yellow Time (s) 3.0 3.0 3.0 4.4 4.5 6.7 4.5<					•	•	•	_	-			-	_
Minimum Split (s) 12.1 12.1 12.1 20.4 20.4 20.4 20.4 Total Split (s) 41.0 41.0 41.0 49.0 49.0 49.0 49.0 Total Split (%) 45.6% 45.6% 45.6% 54.4% 54.4% 54.4% 54.4% Yellow Time (s) 3.0 3.0 3.0 4.4 4.4 4.4 4.4 All-Red Time (s) 2.1 2.1 2.1 1.0 1.0 1.0 1.0 Lost Time Adjust (s) 0.0 0.0 0.0 0.0 0.0 0.0 0.0 Total Lost Time (s) 5.1 5.1 5.4 5.4 5.4 5.4 Lead-Lag Lead-Lag Optimize? Recall Mode None None None C-Max C-Max C-Max C-Max Act Effet Green (s) 35.9 35.9 35.9 43.6 43.6 43.6 43.6 Act Lead (JC Ratio 0.40 0.40 0.48 0.48 0.48 0.48 0.48 0.48 0.48 0.48 0.48 0.48 <					7.0	7.0	7.0	15.0	15.0			15.0	15.0
Total Split (s) 41.0 41.0 41.0 49.0 49.0 49.0 49.0 Total Split (%) 45.6% 45.6% 45.6% 54.4% 54.4% 54.4% 54.4% Yellow Time (s) 3.0 3.0 3.0 4.4 4.4 4.4 4.4 All-Red Time (s) 2.1 2.1 2.1 1.0 1.0 1.0 1.0 Lost Time Adjust (s) 0.0 0.0 0.0 0.0 0.0 0.0 0.0 Total Lost Time (s) 5.1 5.1 5.4 5.4 5.4 5.4 Lead/Lag Lead-Lag Optimize? Recall Mode None None None None C-Max C-Max C-Max C-Max Act Effet Green (s) 35.9 35.9 43.6 43.													
Total Split (%)													
Yellow Time (s) 3.0 3.0 3.0 4.4 4.4 4.4 4.4 All-Red Time (s) 2.1 2.1 2.1 1.0 1.0 1.0 1.0 Lost Time Adjust (s) 0.0 0.0 0.0 0.0 0.0 0.0 0.0 Total Lost Time (s) 5.1 5.1 5.4 5.4 5.4 5.4 Lead/Lag Lead-Lag Optimize? Recall Mode None None None C-Max C-Max C-Max Act Effct Green (s) 35.9 35.9 43.6 43.6 43.6 43.6 Actuated g/C Ratio 0.40 0.40 0.48 0.48 0.48 0.48 v/c Ratio 0.12 1.01 0.45 0.67 0.99 0.26 Control Delay 17.7 55.7 37.5 22.4 53.7 8.7 Queue Delay 0.0 0.0 0.0 0.0 0.0 0.0 0.0 Total Delay 17.7 55.7 37.5 22.4 53.7 8.7													
All-Red Time (s) 2.1 2.1 2.1 1.0 0.0 <td></td>													
Lost Time Adjust (s) 0.0 0.4 5.4	. ,												
Total Lost Time (s) 5.1 5.1 5.4 5.4 5.4 5.4 Lead/Lag Lead-Lag Optimize? Recall Mode None None None C-Max C-Max C-Max C-Max Act Effct Green (s) 35.9 35.9 43.6 48.0 48.0 48.0 48.0 48.0 48.0 48.0 48.0													
Lead/Lag Lead-Lag Optimize? Recall Mode None None None C-Max C-Max C-Max C-Max Act Effct Green (s) 35.9 35.9 43.6 43.6 43.6 43.6 Actuated g/C Ratio 0.40 0.40 0.48 0.48 0.48 0.48 v/c Ratio 0.12 1.01 0.45 0.67 0.99 0.26 Control Delay 17.7 55.7 37.5 22.4 53.7 8.7 Queue Delay 0.0 0.0 0.0 0.0 0.0 0.0 Total Delay 17.7 55.7 37.5 22.4 53.7 8.7 LOS B E D C D A Approach Delay 52.0 23.2 45.1													
Lead-Lag Optimize? Recall Mode None None None C-Max A 0.48 0.67 0.99 0.26						<u> </u>	<u> </u>	.	.			• • •	
Recall Mode None None None C-Max													
Act Effct Green (s) 35.9 35.9 43.6 43.6 43.6 43.6 Actuated g/C Ratio 0.40 0.40 0.48 0.48 0.48 0.48 v/c Ratio 0.12 1.01 0.45 0.67 0.99 0.26 Control Delay 17.7 55.7 37.5 22.4 53.7 8.7 Queue Delay 0.0 0.0 0.0 0.0 0.0 0.0 0.0 Total Delay 17.7 55.7 37.5 22.4 53.7 8.7 LOS B E D C D A Approach Delay 52.0 23.2 45.1					None	None	None	C-Max	C-Max			C-Max	C-Max
Actuated g/C Ratio 0.40 0.40 0.48 0.48 0.48 0.48 v/c Ratio 0.12 1.01 0.45 0.67 0.99 0.26 Control Delay 17.7 55.7 37.5 22.4 53.7 8.7 Queue Delay 0.0 0.0 0.0 0.0 0.0 0.0 0.0 Total Delay 17.7 55.7 37.5 22.4 53.7 8.7 LOS B E D C D A Approach Delay 52.0 23.2 45.1													
v/c Ratio 0.12 1.01 0.45 0.67 0.99 0.26 Control Delay 17.7 55.7 37.5 22.4 53.7 8.7 Queue Delay 0.0 0.0 0.0 0.0 0.0 0.0 0.0 Total Delay 17.7 55.7 37.5 22.4 53.7 8.7 LOS B E D C D A Approach Delay 52.0 23.2 45.1	. ,												
Control Delay 17.7 55.7 37.5 22.4 53.7 8.7 Queue Delay 0.0 <													
Queue Delay 0.0													
Total Delay 17.7 55.7 37.5 22.4 53.7 8.7 LOS B E D C D A Approach Delay 52.0 23.2 45.1													
LOS B E D C D A Approach Delay 52.0 23.2 45.1													
Approach Delay 52.0 23.2 45.1													
11							_	_					
	Approach LOS					D			C			D	

102: Route 75 & Route 20 WB On Ramp/Route 20 WB Off Ramp 2050 Future with Development (Road Diet) Weekday PM Peak

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)					28	~325	13	249			458	35
Queue Length 95th (ft)					57	#580	#47	371			#727	47
Internal Link Dist (ft)		511			444			572			2213	
Turn Bay Length (ft)						190	75					90
Base Capacity (vph)					675	731	80	893			855	763
Starvation Cap Reductn					0	0	0	0			0	0
Spillback Cap Reductn					0	0	0	0			0	0
Storage Cap Reductn					0	0	0	0			0	0
Reduced v/c Ratio					0.12	1.01	0.45	0.67			0.99	0.26
Intersection Summary												
Area Type:	Other											
Cycle Length: 90												

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:NBSB, Start of Yellow

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.01

Intersection Signal Delay: 41.8

Intersection LOS: D

Intersection Capacity Utilization 82.3%

ICU Level of Service E

Analysis Period (min) 15

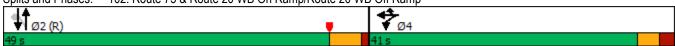
Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 102: Route 75 & Route 20 WB On Ramp/Route 20 WB Off Ramp



	۶	→	•	•	←	•	1	†	~	/	ţ	✓
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4		*	ĵ.		ሻ	₽	
Traffic Volume (vph)	14	12	24	119	10	31	14	937	143	31	706	11
Future Volume (vph)	14	12	24	119	10	31	14	937	143	31	706	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	15	12	12	16	12	12	12	12	12	12	12
Storage Length (ft)	0		0	0		0	50		0	50		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.931			0.975			0.979			0.996	
Flt Protected		0.987			0.969		0.950			0.950		
Satd. Flow (prot)	0	1920	0	0	1983	0	1805	1764	0	1752	1814	0
Flt Permitted		0.885			0.682		0.178			0.086		
Satd. Flow (perm)	0	1722	0	0	1396	0	338	1764	0	159	1814	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		64			13			15			2	
Link Speed (mph)		25			30			35			35	
Link Distance (ft)		250			258			2293			1017	
Travel Time (s)		6.8			5.9			44.7			19.8	
Peak Hour Factor	0.38	0.38	0.33	0.80	0.25	0.73	0.25	0.93	0.86	0.91	0.86	0.50
Heavy Vehicles (%)	0%	0%	0%	4%	0%	0%	0%	6%	2%	3%	4%	17%
Adj. Flow (vph)	37	32	73	149	40	42	56	1008	166	34	821	22
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	142	0	0	231	0	56	1174	0	34	843	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			4		1	6		5	2	
Permitted Phases	4			4			6			2		
Detector Phase	4	4		4	4		1			5		
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	15.0		5.0	15.0	
Minimum Split (s)	9.5	9.5		9.5	9.5		9.0	21.5		9.0	21.5	
Total Split (s)	25.0	25.0		25.0	25.0		9.0	46.0		9.0	46.0	
Total Split (%)	31.3%	31.3%		31.3%	31.3%		11.3%	57.5%		11.3%	57.5%	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	4.4		3.0	4.4	
All-Red Time (s)	1.5	1.5		1.5	1.5		1.0	2.1		1.0	2.1	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		4.5			4.5		4.0	6.5		4.0	6.5	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Act Effct Green (s)		15.3			15.3		53.8	48.3		53.8	48.3	
Actuated g/C Ratio		0.19			0.19		0.67	0.60		0.67	0.60	
v/c Ratio		0.37			0.84		0.18	1.10		0.17	0.77	
Control Delay		17.8			53.5		6.1	78.6		6.6	21.2	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		17.8			53.5		6.1	78.6		6.6	21.2	
LOS		B			D		Α	E		Α	C	
Approach Delay		17.8			53.5			75.3			20.7	
Approach LOS		В			D			E			С	

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)		33			105		7	~723		4	325	
Queue Length 95th (ft)		15			34		6	#1022		15	#585	
Internal Link Dist (ft)		170			178			2213			937	
Turn Bay Length (ft)							50			50		
Base Capacity (vph)		488			367		319	1071		206	1096	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	
Reduced v/c Ratio		0.29			0.63		0.18	1.10		0.17	0.77	

Intersection Summary

Area Type: Other

Cycle Length: 80

Actuated Cycle Length: 80

Offset: 57 (71%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow

Natural Cycle: 130

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.10

Intersection Signal Delay: 50.6

Intersection LOS: D

Intersection Capacity Utilization 82.8%

ICU Level of Service E

Analysis Period (min) 15

Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 103: Route 75 & LAZFly Driveway/Halfway House Road



Lane Group EBL Lane Configurations			•		_	7	ı		-	¥	4
	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lune Communications 1	4	7	ች	1>		7	1>		ሻ	^	7
Traffic Volume (vph) 254	23	200	10	23	26	310	640	20	26	557	153
Future Volume (vph) 254	23	200	10	23	26	310	640	20	26	557	153
Ideal Flow (vphpl) 1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft) 11	11	10	10	10	12	12	12	12	12	12	12
Storage Length (ft) 0		220	200		150	450		0	0		400
Storage Lanes 1		1	0		1	1		0	1		1
Taper Length (ft) 25			25			50			75		
Lane Util. Factor 0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850		0.928			0.994				0.850
Flt Protected 0.950	0.961		0.950			0.950			0.950		
Satd. Flow (prot) 1609	1637	1409	1532	1646	0	1703	1751	0	1805	1810	1568
Flt Permitted 0.950	0.961		0.950			0.950			0.950		
Satd. Flow (perm) 1609	1637	1409	1532	1646	0	1703	1751	0	1805	1810	1568
Right Turn on Red		Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		254		37			3				272
Link Speed (mph)	35			25			35			35	
Link Distance (ft)	466			418			1017			1839	
Travel Time (s)	9.1			11.4			19.8			35.8	
Peak Hour Factor 0.86	0.69	0.78	0.88	0.58	0.71	0.88	0.96	0.75	0.50	0.89	0.74
Heavy Vehicles (%) 3%	0%	7%	10%	0%	0%	6%	8%	4%	0%	5%	3%
Adj. Flow (vph) 295	33	256	11	40	37	352	667	27	52	626	207
Shared Lane Traffic (%) 45%											
Lane Group Flow (vph) 162	166	256	11	77	0	352	694	0	52	626	207
Turn Type Split	NA	pt+ov	Split	NA		Prot	NA		Prot	NA	Free
Protected Phases 8	8	18	4	4		1	6		5	2	
Permitted Phases											Free
Detector Phase 8	8	18	4	4		1	6		5	2	
Switch Phase											
Minimum Initial (s) 7.0	7.0		5.0	5.0		5.0	15.0		5.0	15.0	
Minimum Split (s) 12.7	12.7		9.8	9.8		10.1	20.8		9.0	20.6	
Total Split (s) 16.0	16.0		12.0	12.0		25.0	53.0		9.0	37.0	
Total Split (%) 17.8%	17.8%		13.3%	13.3%		27.8%	58.9%		10.0%	41.1%	
Yellow Time (s) 3.0	3.0		3.3	3.3		3.0	4.4		3.0	4.4	
All-Red Time (s) 2.7	2.7		1.5	1.5		2.1	1.4		1.0	1.2	
Lost Time Adjust (s) 0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s) 5.7	5.7		4.8	4.8		5.1	5.8		4.0	5.6	
Lead/Lag						Lead	Lag		Lead	Lag	
Lead-Lag Optimize?						Yes	Yes		Yes	Yes	
Recall Mode None	None		None	None		None	C-Min		None	C-Min	
Act Effct Green (s) 10.7	10.7	36.0	6.3	6.3		19.6	51.4		5.0	34.1	90.0
Actuated g/C Ratio 0.12	0.12	0.40	0.07	0.07		0.22	0.57		0.06	0.38	1.00
v/c Ratio 0.85	0.85	0.36	0.10	0.51		0.95	0.69		0.52	0.91	0.13
Control Delay 69.6	70.3	3.5	40.8	36.2		72.6	20.1		60.5	48.3	0.2
Queue Delay 0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay 69.6	70.3	3.5	40.8	36.2		72.6	20.1		60.5	48.3	0.2
LOS E	Е	Α	D	D		Е	С		Е	D	Α
Approach Delay	40.8			36.8			37.8			37.7	
Approach LOS	D			D			D			D	

104: Route 75 & Route 401 (Schoephoester Road)/National Road 2050 Future with Development (Road Diet) Weekday PM Peak

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	97	101	0	6	22		197	292		29	350	0
Queue Length 95th (ft)	#189	#130	2	22	33		#350	442		36	#566	0
Internal Link Dist (ft)		386			338			937			1759	
Turn Bay Length (ft)			220	200			450					400
Base Capacity (vph)	191	195	719	122	165		376	1001		100	686	1568
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	0
Reduced v/c Ratio	0.85	0.85	0.36	0.09	0.47		0.94	0.69		0.52	0.91	0.13

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.95

Intersection Signal Delay: 38.4
Intersection Capacity Utilization 74.5%

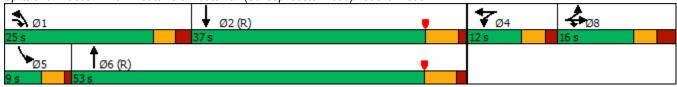
Intersection LOS: D
ICU Level of Service D

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 104: Route 75 & Route 401 (Schoephoester Road)/National Road

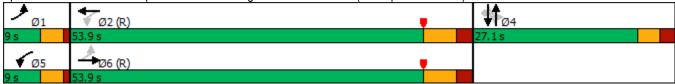


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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	*	↑ ↑		ሻ	∱ }			4			ર્ન	7
Traffic Volume (vph)	90	437	20	10	446	30	30	10	20	20	10	130
Future Volume (vph)	90	437	20	10	446	30	30	10	20	20	10	130
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	11	11	12	15	12	12	14	14
Storage Length (ft)	170		0	120		0	0		0	0		200
Storage Lanes	1		0	1		0	0		0	0		1
Taper Length (ft)	40			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.993			0.986			0.959				0.850
Flt Protected	0.950			0.950				0.982			0.969	
Satd. Flow (prot)	1787	3551	0	1745	3350	0	0	1968	0	0	1964	1723
Flt Permitted	0.447			0.436				0.850			0.688	
Satd. Flow (perm)	841	3551	0	801	3350	0	0	1704	0	0	1394	1723
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8			19			23				186
Link Speed (mph)		35			35			25			30	
Link Distance (ft)		624			466			420			346	
Travel Time (s)		12.2			9.1			11.5			7.9	
Peak Hour Factor	0.75	0.80	0.75	0.42	0.90	0.58	0.67	0.25	0.54	0.46	0.42	0.70
Heavy Vehicles (%)	1%	1%	0%	0%	3%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	120	546	27	24	496	52	45	40	37	43	24	186
Shared Lane Traffic (%)												
Lane Group Flow (vph)	120	573	0	24	548	0	0	122	0	0	67	186
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	Perm
Protected Phases	1	6		5	2			4			4	
Permitted Phases	6			2			4			4		4
Detector Phase	1	6		5	2		4	4		4	4	4
Switch Phase												
Minimum Initial (s)	5.0	15.0		5.0	15.0		7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	9.0	21.6		9.0	21.6		12.1	12.1		12.1	12.1	12.1
Total Split (s)	9.0	53.9		9.0	53.9		27.1	27.1		27.1	27.1	27.1
Total Split (%)	10.0%	59.9%		10.0%	59.9%		30.1%	30.1%		30.1%	30.1%	30.1%
Yellow Time (s)	3.0	4.4		3.0	4.4		3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	1.0	2.2		1.0	2.2		2.1	2.1		2.1	2.1	2.1
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	0.0
Total Lost Time (s)	4.0	6.6		4.0	6.6			5.1			5.1	5.1
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	None
Act Effct Green (s)	66.7	58.0		66.4	58.0			10.2			10.2	10.2
Actuated g/C Ratio	0.74	0.64		0.74	0.64			0.11			0.11	0.11
v/c Ratio	0.17	0.25		0.04	0.25			0.58			0.43	0.52
Control Delay	3.3	7.5		1.8	5.6			40.9			44.7	11.0
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	0.0
Total Delay	3.3	7.5		1.8	5.6			40.9			44.7	11.0
LOS	A	A		A	A			D			D	В
Approach Delay	, ,	6.8		, ,	5.4			40.9			19.9	
Approach LOS		Α			Α.4			то.5 D			13.3 B	
, approach Loo		А			Λ.			<i>D</i>			ט	

105: Airport Servuce Road/Light Lane & Route 401 (Schoephoester Road) 2050 Future with Development (Road Diet) Weekday PM Peak

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBF
Queue Length 50th (ft)	12	62		1	41			54			36	(
Queue Length 95th (ft)	24	93		m2	m47			18			32	2:
Internal Link Dist (ft)		544			386			340			266	
Turn Bay Length (ft)	170			120								200
Base Capacity (vph)	688	2289		653	2164			433			340	56
Starvation Cap Reductn	0	0		0	0			0			0	(
Spillback Cap Reductn	0	0		0	0			0			0	(
Storage Cap Reductn	0	0		0	0			0			0	(
Reduced v/c Ratio	0.17	0.25		0.04	0.25			0.28			0.20	0.33
Intersection Summary												
Area Type:	Other											
Cycle Length: 90												
Actuated Cycle Length: 90												
Offset: 0 (0%), Referenced	to phase 2:\	NBTL and	d 6:EBTL, S	Start of \	ellow/							
Natural Cycle: 45												
Control Type: Actuated-Co	ordinated											
Maximum v/c Ratio: 0.58												
Intersection Signal Delay:					tersection							
Intersection Capacity Utiliz	ation 41.4%			IC	U Level c	f Service	Α					
Analysis Period (min) 15												
m Volume for 95th perce	ntile queue is	s metered	by upstrea	am signa	al.							

Splits and Phases: 105: Airport Servuce Road/Light Lane & Route 401 (Schoephoester Road)



	•	•	†	~	\	Ţ
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	**************************************	₩DIX	†	HUIL	JOE 1	
Traffic Volume (vph)	156	236	714	206	349	613
Future Volume (vph)	156	236	714	206	349	613
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	12	10	11
Storage Length (ft)	0	400	14	0	675	11
Storage Lanes	1	0		0	1	
Taper Length (ft)	25	U		U	35	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
	1.00	1.00		0.95	1.00	1.00
Frt	0.050	0.850	0.961		0.050	
Flt Protected	0.950	4.4=0	00.45		0.950	4700
Satd. Flow (prot)	1745	1473	3345	0	1620	1766
Flt Permitted	0.950	, .			0.157	
Satd. Flow (perm)	1745	1473	3345	0	268	1766
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		82	76			
Link Speed (mph)	40		35			35
Link Distance (ft)	300		1839			990
Travel Time (s)	5.1		35.8			19.3
Peak Hour Factor	0.89	0.89	0.86	0.71	0.87	0.91
Heavy Vehicles (%)	0%	6%	5%	0%	4%	4%
Adj. Flow (vph)	175	265	830	290	401	674
Shared Lane Traffic (%)	110	200	000	250	-101	017
Lane Group Flow (vph)	175	265	1120	0	401	674
Turn Type	Prot	pt+ov	NA	U	D.P+P	NA
Protected Phases		1 4			D.P+P	1 2
	4	14	2		•	1 2
Permitted Phases					2	
Detector Phase	4	4			1	
Switch Phase			4			
Minimum Initial (s)	9.0		15.0		5.0	
Minimum Split (s)	13.0		20.9		9.0	
Total Split (s)	15.0		40.0		25.0	
Total Split (%)	18.8%		50.0%		31.3%	
Yellow Time (s)	3.0		4.4		3.0	
All-Red Time (s)	1.0		1.5		1.0	
Lost Time Adjust (s)	0.0		0.0		0.0	
Total Lost Time (s)	4.0		5.9		4.0	
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None		C-Max		None	
Act Effct Green (s)	10.6	32.1	38.0		57.4	61.4
Actuated g/C Ratio	0.13	0.40	0.48		0.72	0.77
v/c Ratio	0.13	0.40	0.40		0.72	0.77
					29.2	
Control Delay	55.8	12.8	18.8			5.1
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	55.8	12.8	18.8		29.2	5.1
LOS	Е	В	В		С	Α
Approach Delay	29.9		18.8			14.1
Approach LOS	С		В			В

106: Route 75 & Route 140 (Elm Street) 2050 Future with Development (Road Diet) Weekday PM Peak

	•	•	†	<i>></i>	\	ţ
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Queue Length 50th (ft)	85	58	214		110	99
Queue Length 95th (ft)	#175	109	282		198	153
Internal Link Dist (ft)	220		1759			910
Turn Bay Length (ft)		400			675	
Base Capacity (vph)	239	632	1629		553	1355
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.73	0.42	0.69		0.73	0.50
Intersection Summary						
Area Type:	Other					
Cycle Length: 80						
Actuated Cycle Length: 8						
Offset: 43 (54%), Referen	ced to phase	2:NBSB,	Start of Y	'ellow		
Natural Cycle: 60						
Control Type: Actuated-C	oordinated					
Maximum v/c Ratio: 0.82						
Intersection Signal Delay:					tersection	
Intersection Capacity Utili	zation 65.9%			IC	U Level o	of Service C
Analysis Period (min) 15						
# 95th percentile volum			eue may	be longer.		
Queue shown is maxir	num after two	cycles.				



				HCS	7 Rou	ındal	οοι	uts R	epor	t						
General Information						S	ite	Infor	matio	n						
Analyst	Tighe	& Bond	l				Inter	section			Route 7	5 at Half	way H	louse		
Agency or Co.							E/W	Street N	lame		Halfway	/ House F	Rd			
Date Performed	11/30	/2023					N/S S	Street N	ame		Route 7	5				
Analysis Year	2050						Analy	ysis Tim	e Period	(hrs)	0.25					
Time Analyzed	Future	e w/ Dev	. AM Pea	ık			Peak	Hour Fa	actor		0.94					
Project Description	Route	20 Corr	idor Stud	dy			Juriso	diction			Windso	r Locks				
Volume Adjustments	and S	Site C	haract	teristic	s											
Approach		E	В			WB				N	В				SB	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Number of Lanes (N)	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0
Lane Assignment			Lī	R			L	LTR			LTR					LTR
Volume (V), veh/h	0	1	1	14	0	75	2	20	0	15	740	76	0	31	522	4
Percent Heavy Vehicles, %	0	7	7	0	0	2	7	3	0	7	8	6	0	13	10	0
Flow Rate (VPCE), pc/h	0	1	1	15	0	81	2	22	0	17	850	86	0	37	611	4
Right-Turn Bypass		No	one			None				No	ne				Vone	
Conflicting Lanes			1			1				1					1	
Pedestrians Crossing, p/h			0			0				()				0	
Critical and Follow-U	Јр Неа	adway	/ Adju	stmen	t											
Approach				EB		Π		WB			NB		Т		SB	
Lane			Left	Right	Bypass	Left	1	Right	Bypass	Left	Right	Bypass	L	.eft	Right	Bypass
Critical Headway (s)				4.9763			4	1.9763			4.9763				4.9763	
Follow-Up Headway (s)				2.6087			2	2.6087			2.6087				2.6087	
Flow Computations,	Capac	ity ar	nd v/c	Ratios												
Approach				EB				WB			NB		Τ		SB	
Lane			Left	Right	Bypass	Left	ı	Right	Bypass	Left	Right	Bypass	L	.eft	Right	Bypass
Entry Flow (v _e), pc/h				17.00			1	105.00			953.00		Т		652.00	
Entry Volume veh/h				16.87			1	102.64			884.06				592.20	
Circulating Flow (v _c), pc/h				729				868			39	•			100	
Exiting Flow (vex), pc/h				124				23			873				707	
Capacity (c _{pce}), pc/h				656.07			5	69.35			1326.18				1246.18	
Capacity (c), veh/h							5	556.55			1230.24		Т		1131.88	
v/c Ratio (x)	c Ratio (x) 0.							0.18			0.72				0.52	
Delay and Level of S	ervice															
Approach				EB				WB			NB		Т		SB	
Lane			Left	Right	Bypass	Left	ı	Right	Bypass	Left	Right	Bypass	L	.eft	Right	Bypass
Lane Control Delay (d), s/veh				5.8				8.8			13.6				9.2	
Lane LOS						Α			В				Α			
95% Queue, veh							0.7			6.6				3.1		
Approach Delay, s/veh	5.8							8.8			13.6				9.2	
Approach LOS				Α				Α			В				Α	
Intersection Delay, s/veh LO	S				1	1.6							В			
anyright @ 2023 University of		VII Di alat	- D	ام			احادمت	la a ta \ /	orcion 7.7	,				1. 12	(1 (2022 1	·20·06 DM

				HCS	7 Roι	ındal	οοι	uts R	epor	t						
General Information						9	Site	Infor	matio	n						
Analyst	Tighe	& Bond				\neg	Inter	section			Route 7	'5 at Half	way H	ouse		
Agency or Co.							E/W	Street N	lame		Halfway	y House F	Rd			
Date Performed	11/30	/2023					N/S S	Street N	ame		Route 7	7 5				
Analysis Year	2050						Analy	ysis Time	e Period	(hrs)	0.25					
Time Analyzed	Future	e w/ Dev	. PM Pea	ık			Peak	Hour Fa	actor		0.93					
Project Description	Route	20 Corr	idor Stud	dy			Juriso	diction			Windso	r Locks				
Volume Adjustments	and	Site C	haract	teristic	s											
Approach		E	В			WB				N	В				SB	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Number of Lanes (N)	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0
Lane Assignment			נז	TR .			L	LTR			LTR					LTR
Volume (V), veh/h	0	14	12	24	0	119	10	31	0	14	937	143	0	31	706	11
Percent Heavy Vehicles, %	0	0	0	0	0	4	0	0	0	0	6	2	0	3	4	17
Flow Rate (VPCE), pc/h	0	15	13	26	0	133	11	33	0	15	1068	157	0	34	790	14
Right-Turn Bypass		No	one			None	9			No	ne			1	Vone	
Conflicting Lanes			1			1				1					1	
Pedestrians Crossing, p/h			0			0				C					0	
Critical and Follow-U	р Неа	adway	/ Adju	stmen	t											
Approach				EB		T		WB			NB		Т		SB	
Lane			Left	Right	Bypass	Left	1	Right	Bypass	Left	Right	Bypass	L	eft	Right	Bypass
Critical Headway (s)				4.9763			4	1.9763			4.9763				4.9763	
Follow-Up Headway (s)				2.6087			2	2.6087			2.6087				2.6087	
Flow Computations,	Capac	city ar	nd v/c	Ratios												
Approach				EB		Π		WB			NB		Т		SB	
Lane			Left	Right	Bypass	Left	1	Right	Bypass	Left	Right	Bypass	L	eft	Right	Bypass
Entry Flow (v _e), pc/h				54.00			1	177.00			1240.00		Т		838.00	
Entry Volume veh/h				54.00			1	171.88			1176.47				804.59	
Circulating Flow (v∈), pc/h				957				1098			62		Т		159	
Exiting Flow (vex), pc/h				204				40			1116				949	
Capacity (c _{pce}), pc/h				519.94			4	150.29			1295.43		Т		1173.40	
Capacity (c), veh/h							4	137.28			1229.06		Τ		1126.62	
v/c Ratio (x)	/c Ratio (x) 0.							0.39			0.96				0.71	
Delay and Level of Se	ervice															
Approach				EB				WB			NB		Τ		SB	
Lane			Left	Right	Bypass	Left	1	Right	Bypass	Left	Right	Bypass	L	eft	Right	Bypass
Lane Control Delay (d), s/veh				8.2				15.4			34.9				14.3	
Lane LOS				А				С			D				В	
95% Queue, veh				0.3				1.8			18.0				6.5	
Approach Delay, s/veh	8.2							15.4			34.9				14.3	
Approach LOS				А				С			D				В	
	Intersection Delay, s/veh LOS 25.2															

				HCS ⁻	7 Rou	ndab	ou	ts R	eport							
General Information						S	ite I	Infor	matio	n						
Analyst	Tighe	& Bond				ī	nterse	ection			Route 7	5 at Rout	e 20 E	 В		
Agency or Co.						1	/W S	treet N	ame		Route 2	0 EB Ram	ps			
Date Performed	11/30	/2023				-	N/S St	treet Na	ame		Route 7	5				
Analysis Year	2050					,	Analys	sis Time	e Period (hrs)	0.25					
Time Analyzed	Future	e w/ Dev	. AM Pea	k		ı	Peak H	Hour Fa	ctor		0.92					
Project Description	Route	20 Corr	idor Stuc	ly		J	urisdi	iction			Windso	r Locks				
Volume Adjustments	and S	Site C	haract	eristic	s											
Approach		E	ΕB			WB				N	В				SB	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Number of Lanes (N)	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0
Lane Assignment			LT	R			LT	R			LTR					LTR
Volume (V), veh/h	0	83	0	20	0	0	0	0	0	70	243	0	0	10	353	338
Percent Heavy Vehicles, %	0	9	0	0	0	0	0	0	0	5	5	7	0	7	6	16
Flow Rate (VPCE), pc/h	0	98	0	22	0	0	0	0	0	80	277	0	0	12	407	426
Right-Turn Bypass		No	ne			None				No	ne			N	lone	
Conflicting Lanes			1			1				1					1	
Pedestrians Crossing, p/h			0			0				0					0	
Critical and Follow-U	/ Adju	t														
Approach				EB			١	WB			NB				SB	
Lane			Left	Right	Bypass	Left	Ri	ight	Bypass	Left	Right	Bypass	Le	ft	Right	Bypass
Critical Headway (s)				4.9763			4.9	9763			4.9763				4.9763	
Follow-Up Headway (s)				2.6087			2.6	6087			2.6087				2.6087	
Flow Computations,	Capac	ity ar	nd v/c	Ratios												
Approach				EB			١	WB			NB				SB	
Lane			Left	Right	Bypass	Left	Ri	ight	Bypass	Left	Right	Bypass	Le	ft	Right	Bypass
Entry Flow (v _e), pc/h				120.00			0	0.00			357.00				845.00	
Entry Volume veh/h				111.91			0	0.00			340.00				762.42	
Circulating Flow (v _c), pc/h				419				455			110				80	
Exiting Flow (vex), pc/h				12			5	506			375				429	
Capacity (c _{pce}), pc/h				900.06			86	57.61			1233.53			1	1271.86	
Capacity (c), veh/h							86	57.61			1174.79			1	1147.56	
v/c Ratio (x)	Ratio (x) 0.						0	0.00			0.29				0.66	
Delay and Level of Se	ervice															
Approach				EB			١	WB			NB				SB	
Lane			Left	Right	Bypass	Left	Ri	ight	Bypass	Left	Right	Bypass	Le	ft	Right	Bypass
Lane Control Delay (d), s/veh				5.6			4	4.1			5.8				12.4	
Lane LOS				А				А			А				В	
95% Queue, veh				0.5				0.0			1.2				5.3	
Approach Delay, s/veh				5.6							5.8				12.4	
Approach LOS				А							Α				В	
Intersection Delay, s/veh LOS	5				9	.9							Α			

				HCS	7 Ro	unda	abo	uts F	Repor	t						
General Information							Site	e Info	rmatio	n						
Analyst	Tighe	& Bond					Inte	ersection			Route 7	5 at Rou	ite 20	EB		
Agency or Co.							E/W	V Street I	Name		Route 2	0 EB Ra	mps			
Date Performed	11/30	/2023					N/S	Street N	lame		Route 7	5				
Analysis Year	2050						Ana	alysis Tim	e Period	(hrs)	0.25					
Time Analyzed	Future	e w/ Dev	. PM Pea	k			Pea	ık Hour F	actor		0.93					
Project Description	Route	20 Corr	idor Stud	ly			Juri	sdiction			Windso	r Locks				
Volume Adjustments	and S	Site C	haract	eristic	s											
Approach		E	B	П		W	/B		T	N	В				SB	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Number of Lanes (N)	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0
Lane Assignment			LT	R				LTR			LTR					LTR
Volume (V), veh/h	0	132	10	40	0	10	20	20	0	70	464	10	0	30	394	450
Percent Heavy Vehicles, %	0	4	0	0	0	7	7	7	0	3	3	7	0	7	2	6
Flow Rate (VPCE), pc/h	0	148	11	43	0	12	23	23	0	78	514	12	0	35	432	513
Right-Turn Bypass		No	ne			No	ne			No	ne			N	lone	
Conflicting Lanes			1				1			1					1	
Pedestrians Crossing, p/h		(0			()			()				0	
Critical and Follow-U	р Неа	adway	/ Adju	stmen	t											
Approach	EB							WB			NB		Т		SB	
Lane	Left Rig						ft	Right	Bypass	Left	Right	Bypas	s L	_eft	Right	Bypass
Critical Headway (s)				4.9763			\Box	4.9763			4.9763		Т		4.9763	
Follow-Up Headway (s)				2.6087				2.6087			2.6087		Т		2.6087	
Flow Computations,	Capac	ity ar	nd v/c	Ratios	;											
Approach				EB		T		WB			NB		Т		SB	
Lane			Left	Right	Bypas	s Le	ft	Right	Bypass	Left	Right	Bypas	s L	_eft	Right	Bypass
Entry Flow (v _e), pc/h				202.00				58.00			604.00				980.00	
Entry Volume veh/h				196.31				54.21			585.97				940.20	
Circulating Flow (v _c), pc/h				479				740			194		Т		113	
Exiting Flow (vex), pc/h				58				614			685				487	
Capacity (c _{pce}), pc/h				846.63				648.75			1132.25				1229.77	
Capacity (c), veh/h				822.77				606.31			1098.45				1179.82	
v/c Ratio (x)	0.24							0.09			0.53				0.80	
Delay and Level of Se	ervice															
Approach				EB				WB			NB				SB	
Lane			Left	Right	Bypas	s Le	ft	Right	Bypass	Left	Right	Bypas	s L	_eft	Right	Bypass
Lane Control Delay (d), s/veh				6.9				7.0			9.6				17.8	
Lane LOS				А				Α			А				С	
95% Queue, veh				0.9				0.3			3.3				9.0	
Approach Delay, s/veh				6.9				7.0			9.6				17.8	
Approach LOS				Α				Α			Α				С	
Intersection Delay, s/veh LOS	5					13.5							В			

				HCS	7 Roı	undal	οοι	ıts R	eport							
General Information						S	ite	Infor	matio	n						
Analyst	Tighe	& Bond				\neg	Inters	section			Route 7	5 at Rout	e 20 W	/B		
Agency or Co.							E/W S	Street N	lame		Route 2	0 WB Rar	nps			
Date Performed	11/30	/2023					N/S S	Street N	ame		Route 7	5				
Analysis Year	2050						Analy	/sis Time	e Period (hrs)	0.25					
Time Analyzed	Future	w/ Dev	. AM Pea	ık			Peak	Hour Fa	actor		0.92					
Project Description	Route	20 Corr	idor Stud	dy			Jurisc	diction			Windso	r Locks				
Volume Adjustments	and S	Site C	haract	teristic	s											
Approach		E	В			WB				N	В				SB	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Number of Lanes (N)	0	0	0	0	0	0	1	1	0	0	1	0	0	0	1	0
Lane Assignment					LT			R			LT					TR
Volume (V), veh/h					0	40	10	545	0	40	296		0		661	110
Percent Heavy Vehicles, %					0	13	0	10	0	5	6		0		11	13
Flow Rate (VPCE), pc/h					0	49	11	652	0	46	341		0		798	135
Right-Turn Bypass		No	ne			None				No	ne			Ν	lone	·
Conflicting Lanes						1				1					1	
Pedestrians Crossing, p/h						0				C					0	
Critical and Follow-U	р Неа	ndway	Adj u	stmen	t											
Approach		T		EB		Τ		WB			NB		П		SB	
Lane			Left	Right	Bypass	Left	F	Right	Bypass	Left	Right	Bypass	Le	eft	Right	Bypass
Critical Headway (s)		\Box				4.5436	5 4.	.5436			4.9763				4.9763	
Follow-Up Headway (s)						2.5352	2 2.	.5352			2.6087				2.6087	
Flow Computations,	Capac	ity ar	ıd v/c	Ratios	;		İ									
Approach				EB				WB			NB		П		SB	
Lane			Left	Right	Bypass	Left	F	Right	Bypass	Left	Right	Bypass	Le	eft	Right	Bypass
Entry Flow (v _e), pc/h						60.00	6	52.00			387.00				933.00	
Entry Volume veh/h						54.53	5	92.56			365.51				838.39	
Circulating Flow (v _c), pc/h				847				387			0				106	
Exiting Flow (vex), pc/h				0				192			993				847	
Capacity (c _{pce}), pc/h						998.49	9	98.49			1380.00				1238.58	
Capacity (c), veh/h			907.46	5 9	07.46			1303.36				1112.98				
v/c Ratio (x)						0.06		0.65			0.28				0.75	
Delay and Level of Se	ervice															
Approach				EB				WB			NB				SB	
Lane			Left	Right	Bypass	Left	F	Right	Bypass	Left	Right	Bypass	Le	ft	Right	Bypass
Lane Control Delay (d), s/veh	l Delay (d), s/veh							14.4			5.2				16.1	
Lane LOS								В			А				С	
95% Queue, veh						0.2		5.0			1.2				7.5	
Approach Delay, s/veh								13.5			5.2				16.1	
Approach LOS								В			А				С	
Intersection Delay, s/veh LOS	5					13.1							В			

				HCS	7 Roi	ında	boı	uts R	lepor	t						
General Information						!	Site	Infor	matio	n						
Analyst	Tighe	& Bond				\neg	Inter	rsection			Route 7	5 at Rou	e 20 \	WB		
Agency or Co.							E/W	Street N	lame		Route 2	0 WB Ra	nps			
Date Performed	11/30	/2023					N/S	Street N	lame		Route 7	5				
Analysis Year	2050						Anal	lysis Tim	e Period	(hrs)	0.25					
Time Analyzed	Future	e w/ Dev	. PM Pea	k			Peak	Hour F	actor		0.97					
Project Description	Route	20 Corr	idor Stud	dy			Juris	diction			Windso	r Locks				
Volume Adjustments	and S	Site C	haract	teristic	:s											
Approach		E	В			WB				N	В				SB	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Number of Lanes (N)	0	0	0	0	0	0	1	1	0	0	1	0	0	0	1	0
Lane Assignment					LT			R			LT					TR
Volume (V), veh/h					0	60	0	698	0	30	576		0		814	135
Percent Heavy Vehicles, %					0	3	0	7	0	2	3		0		4	5
Flow Rate (VPCE), pc/h					0	64	0	770	0	32	612		0		873	146
Right-Turn Bypass		No	ne			Non	e			No	ne			N	lone	
Conflicting Lanes						1				1					1	
Pedestrians Crossing, p/h						0				C					0	
Critical and Follow-U	adway	, Adju	t													
Approach				EB				WB			NB				SB	
Lane			Left	Right	Bypass	Left		Right	Bypass	Left	Right	Bypass	L	eft	Right	Bypass
Critical Headway (s)		\Box				4.543	6 4	4.5436			4.9763				4.9763	
Follow-Up Headway (s)						2.535	2 2	2.5352			2.6087				2.6087	
Flow Computations,	Capac	ity ar	ıd v/c	Ratio	s											
Approach				EB		Τ		WB			NB		Τ		SB	
Lane			Left	Right	Bypass	Left		Right	Bypass	Left	Right	Bypass	L	eft	Right	Bypass
Entry Flow (v _e), pc/h		\Box				64.00) 7	770.00			644.00			1	1019.00	
Entry Volume veh/h						59.99	9 7	721.77			625.55				978.47	
Circulating Flow (v₂), pc/h				937				644			0				96	
Exiting Flow (vex), pc/h				0				178			1382				937	
Capacity (c _{pce}), pc/h						790.2	7 7	790.27			1380.00				1251.28	
Capacity (c), veh/h							7 7	740.77			1340.46				1201.51	
v/c Ratio (x)	/c Ratio (x)							0.97			0.47				0.81	
Delay and Level of Se	ervice															
Approach				EB				WB			NB				SB	
Lane			Left	Right	Bypass	Left		Right	Bypass	Left	Right	Bypass	L	eft	Right	Bypass
Lane Control Delay (d), s/veh						5.7		50.5			7.3				18.6	
Lane LOS						А		F			А				С	
95% Queue, veh				0.3		15.3			2.6				9.8			
Approach Delay, s/veh	s/veh										7.3				18.6	
Approach LOS								E			Α				С	
Intersection Delay, s/veh LOS	S					25.0							С			

				HCS	7 Ro	und	abc	outs F	≀ер	ort							
General Information							Site	e Info	rma	atior	1						
Analyst	Tighe	& Bond					Inte	ersection				Route 7	5 at Rou	te 20 V	ΝB		
Agency or Co.							E/V	N Street	Name	е		Route 2	0 WB Ra	mps			
Date Performed	11/30	/2023					N/S	S Street I	Name	9		Route 7	5				
Analysis Year	2050						An	alysis Tin	ne Pei	eriod (ł	hrs)	0.25					
Time Analyzed	Future	w/ Dev	. AM Pea	ık			Pea	ak Hour I	actor	r		0.92					
Project Description	Route	20 Corr	idor Stud	dy			Jur	isdiction				Windso	r Locks				
Volume Adjustments	and S	Site C	haract	teristic	:s												
Approach		E	В			٧	VB				N	В				SB	
Movement	U	L	Т	R	U	L	Т	R		U	L	Т	R	U	L	Т	R
Number of Lanes (N)	0	0	0	0	0	0	1	0		0	0	1	0	0	0	1	0
Lane Assignment								LTR				LT					TR
Volume (V), veh/h					0	40	10	545		0	40	296		0		661	110
Percent Heavy Vehicles, %					0	13	0	10		0	5	6		0		11	13
Flow Rate (VPCE), pc/h					0	49	11	652		0	46	341		0		798	135
Right-Turn Bypass		No	ne			No	one				No	ne			١	None	
Conflicting Lanes							1				1					1	
Pedestrians Crossing, p/h							0				0					0	
Critical and Follow-U	stmen	t															
Approach		T		EB		Т		WB				NB		Т		SB	
Lane			Left	Right	Bypass	s Le	eft	Right	Вур	pass	Left	Right	Bypass	L	eft	Right	Bypass
Critical Headway (s)		\Box						4.9763				4.9763				4.9763	
Follow-Up Headway (s)								2.6087				2.6087				2.6087	
Flow Computations,	Capac	ity ar	ıd v/c	Ratio	5												
Approach				EB		Τ		WB				NB		Π		SB	
Lane			Left	Right	Bypass	5 Le	eft	Right	Вур	pass	Left	Right	Bypass	L	eft	Right	Bypass
Entry Flow (v _e), pc/h							\Box	712.00				387.00				933.00	
Entry Volume veh/h								647.09				365.51				838.39	
Circulating Flow (v _c), pc/h				847				387				0				106	
Exiting Flow (vex), pc/h				0				192				993				847	
Capacity (c _{pce}), pc/h								929.92				1380.00				1238.58	
Capacity (c), veh/h			Т		845.15				1303.36				1112.98				
v/c Ratio (x)					0.77				0.28				0.75				
Delay and Level of Se	ervice																
Approach				EB		Τ		WB				NB				SB	
Lane			Left	Right	Bypass	5 Le	eft	Right	Вур	pass	Left	Right	Bypass	L	eft	Right	Bypass
Lane Control Delay (d), s/veh	ol Delay (d), s/veh							20.5				5.2				16.1	
Lane LOS								С				Α				С	
95% Queue, veh					7.5				1.2				7.5				
Approach Delay, s/veh								20.5				5.2				16.1	
Approach LOS								С				А				С	
Intersection Delay, s/veh LOS	5					15.5								С			

			HCS	7 Ro	und	abc	outs l	Re	port							
						Sit	e Info	rm	atior	1						
Tighe	& Bond					Int	ersection	1			Route 7	5 at Rou	te 20 \	WB		
						E/\	N Street	Nan	ne		Route 2	0 WB Ra	mps			
11/30	/2023					N/	S Street	Nam	ne		Route 7	5				
2050						An	alysis Tir	ne P	Period (l	hrs)	0.25					
Future	e w/ Dev	. PM Pea	ık			Pea	ak Hour	Facto	or		0.97					
Route	20 Corr	idor Stud	dy			Jur	risdiction				Windso	r Locks				
and S	Site C	haract	teristic	cs												
	E	В			٧	VB		Т		NI	3				SB	
U	L	Т	R	U	L	Т	R	T	U	L	Т	R	U	L	Т	R
0	0	0	0	0	0	1	0	T	0	0	1	0	0	0	1	0
							LTR				LT					TR
				0	60	0	698	3	0	30	576		0		814	135
				0	3	0	7		0	2	3		0		4	5
				0	64	0	770)	0	32	612		0		873	146
	No	ne			No	one				No	ne			1	None	
						1		T		1					1	
						0				0					0	
Critical and Follow-Up Headway Adjustment																
	$\neg \neg$		EB		Т		WB				NB		Т		SB	
		Left	Right	Bypas	s Le	eft	Right	Ву	ypass	Left	Right	Bypass	L	.eft	Right	Bypass
							4.9763				4.9763				4.9763	
							2.6087				2.6087				2.6087	
Capac	ity ar	ıd v/c	Ratio	s												
			EB				WB				NB		Τ		SB	
		Left	Right	Bypas	s Le	eft	Right	Ву	ypass	Left	Right	Bypass	L	.eft	Right	Bypass
							834.00				644.00				1019.00	
							781.76				625.55				978.47	
			937				644				0				96	
			0				178				1382				937	
							715.49				1380.00				1251.28	
apacity (c), veh/h							670.67				1340.46				1201.51	
v/c Ratio (x)							1.17				0.47				0.81	
ervice																
Approach EB											NB				SB	
		Left	Right	Bypas	s Le	eft	Right	Ву	ypass	Left	Right	Bypass	L	.eft	Right	Bypass
y (d), s/veh							112.5				7.3				18.6	
					F				А				С			
							25.4				2.6				9.8	
							112.5				7.3				18.6	
							F				Α				С	
S					46.4								Е			
	11/30 2050 Future Route and S U 0 Capac	Future w/ Dev Route 20 Corr and Site Cl U U O No No Capacity and 11/30/2023 2050 Future w/ Dev. PM Pea Route 20 Corridor Stude and Site Charact B U L O O None Left Capacity and v/c Left Left Left Left Left	Tighe & Bond 111/30/2023 2050 Future w/ Dev. PM Peak Route 20 Corridor Study and Site Characteristic EB U	Tighe & Bond 11/30/2023 2050 Future w/ Dev. PM Peak Route 20 Corridor Study and Site Characteristics EB U	Tighe & Bond 11/30/2023 2050 Future w/ Dev. PM Peak Route 20 Corridor Study and Site Characteristics EB	Tighe & Bond	Site Info Tighe & Bond	Tighe ≥ Bond	Tighe & Bond	E/W Street Name	Site Interpretation	Tighe & Bond	Tighe & Bond	Site Information	Tighe & Bond	

				HCS	7 Ro	und	abc	outs	Re	port							
General Information							Sit	e Info	orn	natio	n						
Analyst	Tighe	& Bond					Int	ersection	n			Route 7	5 at Rout	e 140)		
Agency or Co.							E/\	W Stree	t Na	ime		Route 1	40				
Date Performed	11/30	/2023					N/	'S Street	Naı	me		Route 7	5				
Analysis Year	2050						An	alysis T	ime	Period (hrs)	0.25					
Time Analyzed	Future	e w/ Dev	. AM Pea	nk			Pe	ak Houi	Fac	tor		0.98					
Project Description	Route	20 Corr	idor Stud	dy			Jur	risdictio	n			Windso	r Locks				
Volume Adjustments	and S	Site C	haract	teristic	:s												
Approach		E	B			V	VB				N	3				SB	
Movement	U	L	Т	R	U	L	Т	F	₹	U	L	Т	R	U	L	Т	R
Number of Lanes (N)	0	0	0	0	0	0	1	()	0	0	1	1	0	0	1	0
Lane Assignment								LR			Т	R					LT
Volume (V), veh/h					0	104		25	59	0		536	74	0	264	474	
Percent Heavy Vehicles, %					0	2		-	7	0		10	3	0	6	9	
Flow Rate (VPCE), pc/h					0	108		28	33	0		602	78	0	286	527	
Right-Turn Bypass		No	one			No	one				Noi	ne			N	lone	
Conflicting Lanes							1				1					1	
Pedestrians Crossing, p/h							0				0					0	
Critical and Follow-U	ıt																
Approach				EB		\top		WB				NB				SB	
Lane			Left	Right	Bypas	s Le	eft	Right	E	Bypass	Left	Right	Bypass	L	.eft	Right	Bypass
Critical Headway (s)							\neg	4.9763			4.5436	4.5436		Т		4.9763	
Follow-Up Headway (s)								2.6087	,		2.5352	2.5352				2.6087	
Flow Computations,	Capac	ity ar	nd v/c	Ratio	s												
Approach				EB		Т		WB				NB				SB	
Lane			Left	Right	Bypas	s Le	eft	Right	E	Bypass	Left	Right	Bypass	L	.eft	Right	Bypass
Entry Flow (v _e), pc/h							\neg	391.00			602.00	78.00				813.00	
Entry Volume veh/h								370.37	,		551.54	71.46				753.30	
Circulating Flow (v _c), pc/h				921				602				286		Т		108	
Exiting Flow (vex), pc/h				364				0				885				635	
Capacity (c _{pce}), pc/h								746.81	Τ		1094.61	1094.61			T.	1236.05	
Capacity (c), veh/h								707.40)		1002.86	1002.86			1	1145.28	
v/c Ratio (x)					0.52	T		0.55	0.07				0.66				
Delay and Level of S	ervice																
Approach	\top		WB				NB		Т		SB						
Lane			Left	Right	Bypas	s Le	eft	Right	E	Bypass	Left	Right	Bypass	L	.eft	Right	Bypass
Lane Control Delay (d), s/veh								13.2			10.6	4.2				12.3	
Lane LOS						В			В	А				В			
95% Queue, veh	, veh							3.1			3.5	0.2				5.2	
Approach Delay, s/veh	oroach Delay, s/veh							13.2				9.9				12.3	
Approach LOS								В				Α				В	
Intersection Delay, s/veh LO	S					11.6								В			
Converight @ 2022 University of	ersection Delay, s/veh LOS 11.6												C	norat	od: 12/	1/2022 1	·44·51 PM

				HCS	7 Ro	und	abc	outs	Re	port							
General Information							Site	e Info	rn	natio	ı						
Analyst	Tighe	& Bond					Inte	ersectio	n			Route 7	75 at Rou	te 140)		
Agency or Co.							E/V	V Street	Nar	me		Route 1	140				
Date Performed	11/30	/2023					N/S	S Street	Nar	ne		Route 7	75				
Analysis Year	2050						Ana	alysis Ti	ne l	Period (hrs)	0.25					
Time Analyzed	Future	e w/ Dev	. PM Pea	k			Pea	ak Hour	Fact	tor		0.94					
Project Description	Route	20 Corr	idor Stuc	dy			Jur	isdiction	1			Windso	r Locks				
Volume Adjustments	and S	Site C	haract	teristic	:S												
Approach		E	В			V	√B				N	3				SB	
Movement	U	L	Т	R	U	L	Т	R	Î	U	L	Т	R	U	L	Т	R
Number of Lanes (N)	0	0	0	0	0	0	1	0		0	0	1	1	0	0	1	0
Lane Assignment								LR			Т	R					LT
Volume (V), veh/h					0	156		23	6	0		714	206	0	349	613	
Percent Heavy Vehicles, %					0	0		6		0		5	0	0	4	4	
Flow Rate (VPCE), pc/h					0	166		26	6	0		798	219	0	386	678	
Right-Turn Bypass		No	ne			No	one				No	ne			١	None	
Conflicting Lanes							1				1					1	
Pedestrians Crossing, p/h						(0				0					0	
Critical and Follow-U	р Неа	dway	Adju	stmen	t												
Approach				EB		Т		WB				NB				SB	
Lane			Left	Right	Bypas	s Le	eft	Right	В	Bypass	Left	Right	Bypass	i L	.eft	Right	Bypass
Critical Headway (s)								4.9763	Τ		4.5436	4.5436				4.9763	
Follow-Up Headway (s)								2.6087			2.5352	2.5352				2.6087	
Flow Computations,	Capac	ity ar	ıd v/c	Ratio	5												
Approach				EB				WB				NB				SB	
Lane			Left	Right	Bypas	s Le	eft	Right	В	Bypass	Left	Right	Bypass	i L	.eft	Right	Bypass
Entry Flow (v _e), pc/h								432.00	Т		798.00	219.00				1064.00	
Entry Volume veh/h								416.94	Т		768.18	210.82				1023.08	
Circulating Flow (v _c), pc/h				1230				798				386				166	
Exiting Flow (vex), pc/h				605				0				1064				844	
Capacity (c _{pce}), pc/h								611.48			999.40	999.40				1165.05	
Capacity (c), veh/h								590.17			962.06	962.06				1120.24	
v/c Ratio (x)								0.71			0.80	0.22				0.91	
Delay and Level of Se	ervice																
Approach				WB				NB				SB					
Lane			Left	Right	Bypas	s Le	eft	Right	В	Bypass	Left	Right	Bypass	L	.eft	Right	Bypass
Lane Control Delay (d), s/veh	l Delay (d), s/veh							23.0			20.7	5.9				29.5	
Lane LOS							С			С	Α				D		
95% Queue, veh						5.7	Γ		8.7	0.8				14.4			
Approach Delay, s/veh								23.0				17.5				29.5	
Approach LOS								С				С				D	
Intersection Delay, s/veh LOS	5		Poconio			23.5		Jahouts						С			

				HCS	7 Ro	und	abo	outs F	Repo	ort							
General Information							Site	e Info	rmat	ior	1						
Analyst	Tighe	& Bond					Inte	ersection				Route 7	75 at Ro	ute 14	0		
Agency or Co.							E/V	V Street I	Name			Route 1	140				
Date Performed	11/30	/2023					N/S	S Street N	lame			Route 7	75				
Analysis Year	2050						Ana	alysis Tin	ne Peri	od (l	hrs)	0.25					
Time Analyzed	Future	e w/ Dev	. AM Pea	ak			Pea	ak Hour F	actor			0.98					
Project Description	Route	20 Corr	idor Stud	dy			Juri	isdiction				Windso	r Locks				
Volume Adjustments	and	Site C	haract	teristic	:s												
Approach		E	B			V	VB		Т		N	В				SB	
Movement	U	L	Т	R	U	L	Т	R	ι	J	L	Т	R	U	L	Т	R
Number of Lanes (N)	0	0	0	0	0	0	1	0	()	0	1	0	0	0	1	0
Lane Assignment								LR				TR					LT
Volume (V), veh/h					0	104		259	()		536	74	0	264	474	
Percent Heavy Vehicles, %					0	2		7	()		10	3	0	6	9	
Flow Rate (VPCE), pc/h					0	108		283	()		602	78	0	286	527	
Right-Turn Bypass		No	ne			No	one				No	ne			١	lone	·
Conflicting Lanes							1				1					1	
Pedestrians Crossing, p/h							0				C					0	
Critical and Follow-U	stmen	t															
Approach	EB		\top		WB				NB		Т		SB				
Lane			Left	Right	Bypas	s Le	eft	Right	Вура	ss	Left	Right	Вура	ss	Left	Right	Bypass
Critical Headway (s)		\Box						4.9763				4.9763		T		4.9763	
Follow-Up Headway (s)								2.6087				2.6087				2.6087	
Flow Computations,	Capac	ity ar	nd v/c	Ratio	5												
Approach		\Box		EB		Т		WB				NB		Т		SB	
Lane			Left	Right	Вурая	s Le	eft	Right	Вура	ss	Left	Right	Вура	ss	Left	Right	Bypass
Entry Flow (v _e), pc/h								391.00		I		680.00		Т		813.00	
Entry Volume veh/h								370.37				623.00				753.30	
Circulating Flow (v _c), pc/h				921				602				286				108	
Exiting Flow (vex), pc/h				364				0				885		Т		635	
Capacity (c _{pce}), pc/h								746.81				1030.83				1236.05	
Capacity (c), veh/h								707.40				944.42				1145.28	
v/c Ratio (x)								0.52				0.66				0.66	
Delay and Level of Se	ervice																
Approach				EB				WB				NB				SB	
Lane	Left Righ						eft	Right	Вура	ss	Left	Right	Вура	ss	Left	Right	Bypass
Lane Control Delay (d), s/veh								13.2				14.2				12.3	
Lane LOS								В				В				В	
95% Queue, veh								3.1				5.2				5.2	
Approach Delay, s/veh								13.2				14.2				12.3	
	pproach LOS									\neg		D				_	
Approach LOS								В				В				В	

				HCS	7 Ro	und	abc	outs	Re	port								
General Information								Site Information										
Analyst	nalyst Tighe & Bond					Intersection				Route 75 at Route				ıte 14	e 140			
Agency or Co.							E/W Street Name					Route 140						
Date Performed	11/30/2023						N/S Street Name					Route 75						
Analysis Year	2050						Analysis Time Period (hrs) 0.25							
Time Analyzed	Future w/ Dev. PM Peak						Peak Hour Factor				0.94							
Project Description Route 20 Corridor Study							Jurisdiction				Windsor Locks							
Volume Adjustments and Site Characteristics																		
Approach	E	EB V					VB			NB			SB					
Movement	U	L	Т	R	U	L	Т		₹	U	L	Т	R	U	L	Т	R	
Number of Lanes (N)	0	0	0	0	0	0	1	()	0	0	1	0	0	0	1	0	
Lane Assignment							LR				TR				LT			
Volume (V), veh/h					0	156		23	36	0		714	206	0	349	613	Т	
Percent Heavy Vehicles, %					0	0		(5	0		5	0	0	4	4		
Flow Rate (VPCE), pc/h					0	166		26	56	0		798	219	0	386	678		
Right-Turn Bypass	None					No	None				None				None			
Conflicting Lanes							1				1			1				
Pedestrians Crossing, p/h							0	0			0			0				
Critical and Follow-U	Јр Неа	adway	/ Adju	stmer	ıt													
Approach	$\neg \neg$	EB				WB				NB				SB				
Lane			Left	Right	Right Bypass		eft Right		1	Bypass	Left	Right Bypa		is	Left Right		Bypass	
Critical Headway (s)								4.9763	3			4.9763		Т		4.9763		
Follow-Up Headway (s)								2.6087	7			2.6087				2.6087		
Flow Computations, Capacity and v/c Ratios																		
Approach			EB				WB			NB			SB					
Lane			Left	Right	Вурая	s Le	eft	Right	I	Bypass	Left	Right	Bypas	is	Left	Right	Bypass	
Entry Flow (v _e), pc/h								432.00)			1017.00				1064.00		
Entry Volume veh/h							Ì	416.94	1			979.00				1023.08		
Circulating Flow (v _c), pc/h			1230				798				386				166			
Exiting Flow (vex), pc/h			605				0				1064			844				
Capacity (c _{pce}), pc/h								611.48				930.87			1165.05			
Capacity (c), veh/h								590.17	7			896.09				1120.24		
v/c Ratio (x)								0.71				1.09				0.91		
Delay and Level of S	ervice																	
Approach EB							WB					SB						
Lane			Left	Right	Bypas	s Le	eft	Right	I	Bypass	Left	Right	Bypas	s	Left	Right	Bypass	
Lane Control Delay (d), s/veh								23.0				78.9				29.5		
Lane LOS								С				F				D		
95% Queue, veh								5.7				25.0				14.4		
Approach Delay, s/veh							23.0				78.9				29.5			
Approach LOS								С			F				D			
Intersection Delay, s/veh LO		48.4								E								
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	HCS7 I									t							
General Information							Site	e Info	rmatic	n							
Analyst	Tighe	& Bond	l				Inte	ersection			Route 7	5 at SR 4	101				
Agency or Co.							E/V	V Street I	Name		SR 401	(Schoep	hoeste	er Rd)			
Date Performed	11/30	/2023					N/S	S Street N	Name		Route 7	75					
Analysis Year	2050						Ana	alysis Tin	ne Period	(hrs)	0.25						
Time Analyzed	Future	e w/ Dev	. AM Pea	ık			Pea	ak Hour F	actor		0.97						
Project Description	Route	20 Cori	ridor Stud	dy			Juri	isdiction			Windso	r Locks					
Volume Adjustments	and S	Site C	haract	teristic	s												
Approach		I	В			W	/B			N	В				SB		
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R	
Number of Lanes (N)	0	0	1	0	0	0	1	1 0		1	1	0	0	0	1	0	
Lane Assignment			נז	ΓR				LTR		L	TR					LTR	
Volume (V), veh/h	0	93	12	90	0	10	11	14	0	210	540	10	0	20	447	115	
Percent Heavy Vehicles, %	0	17	0	15	0	29	11	12	0	8	12	0	0	18	12	3	
Flow Rate (VPCE), pc/h	0	112	12	107	0	13	13	16	0	234	234 624 10			24	516	122	
Right-Turn Bypass		N	one			No	one			No	ne		None				
Conflicting Lanes			1			2	2			1					1		
Pedestrians Crossing, p/h			0			()			0					0		
Critical and Follow-U	р Неа	adwa	y Adju	stmen	t												
Approach				EB		Т		WB			NB		Т		SB		
Lane			Left	Right	Bypass	Le	ft	Right	Bypass	Left	Right	Bypas	s I	Left	Right	Bypass	
Critical Headway (s)	(s) 4.976							4.3276		4.5436	4.5436		Т		4.9763		
Follow-Up Headway (s)				2.6087				2.5352		2.5352	2.5352		Т		2.6087		
Flow Computations,	Capac	ity a	nd v/c	Ratios													
Approach				EB				WB			NB				SB		
Lane			Left	Right	Bypass	Le	ft	Right	Bypass	Left	Right	Bypas	s I	Left	Right	Bypass	
Entry Flow (v _e), pc/h				231.00			42.00			234.00	634.00				662.00		
Entry Volume veh/h				200.77		П	П	36.07		211.30	572.51		Т		599.50		
Circulating Flow (v _c), pc/h				553				970			148				260		
Exiting Flow (vex), pc/h				46				369			752				636		
Capacity (c _{pce}), pc/h				785.08				622.61		1241.08	1241.08				1058.53		
Capacity (c), veh/h				682.34				534.77		1120.70	1120.70				958.60		
v/c Ratio (x)				0.29				0.07		0.19	0.51				0.63		
Delay and Level of Se	ervice																
Approach				EB				WB			NB				SB		
Lane			Left	Right	Bypass	Le	ft	Right	Bypass	Left	Right	Bypas	s I	Left	Right	Bypass	
Lane Control Delay (d), s/veh				8.9				7.6		4.9	9.1				12.9		
Lane LOS				Α				Α		А	А				В		
95% Queue, veh				1.2				0.2		0.7	3.0				4.5		
Approach Delay, s/veh				8.9				7.6			7.9		12.9				
Approach LOS				А				Α			Α				В		
Intersection Delay, s/veh LOS						9.9		laboute \		A						·38·07 DN	

	7 Ro	und	abc	outs l	Rep	port												
General Information							Sit	e Info	rm	ation	n							
Analyst	Tighe	& Bond					Int	ersection	1			Route 7	'5 at SR 4	101				
Agency or Co.							E/V	N Street	Nan	ne		SR 401	(Schoep	noeste	er Rd)			
Date Performed	11/30	/2023					N/:	S Street	Nam	ne		Route 7	'5					
Analysis Year	2050						An	alysis Tir	ne P	Period (hrs)	0.25						
Time Analyzed	Futur	e w/ Dev	. PM Pea	ık			Pea	ak Hour	Facto	or		0.96						
Project Description	Route	20 Corr	idor Stud	dy			Jur	risdiction				Windso	r Locks					
Volume Adjustments	and	Site C	haract	teristic	s						·							
Approach		E	:B			V	VB		Т		NI	3	\Box			SB		
Movement	U	L	Т	R	U	L	Т	R		U	L	Т	R	U	L	Т	R	
Number of Lanes (N)	0	0	1	0	0	0	1	0	Т	0	1	1	0	0	0	1	0	
Lane Assignment			Lī	ΓR				LTR		L		TR					LTR	
Volume (V), veh/h	0	254	23	200	0	10	23	26		0	310	640	20	0	26	557	153	
Percent Heavy Vehicles, %	0	3	0	7	0	10	0	0		0	6 8 4		4	0	0	5	3	
Flow Rate (VPCE), pc/h	0	273	24	223	0	11	24	27		0	342	720	22	0 27 609			164	
Right-Turn Bypass		No	one			No	one				No	ne			١	None		
Conflicting Lanes			1			:	2		T		1					1		
Pedestrians Crossing, p/h			0			(0				0					0		
Critical and Follow-U	р Неа	adway	/ Adju	stmen	t													
Approach				EB		Т		WB				NB		Т		SB		
Lane	Left Right Bypass					s Le	eft	Right	Ву	ypass	Left	Right	Bypas	L	Left	Right	Bypass	
Critical Headway (s)	4.9763							4.3276	Г		4.5436	4.5436		Т		4.9763		
Follow-Up Headway (s)								2.5352			2.5352	2.5352				2.6087		
Flow Computations,	Capa	ity ar	nd v/c	Ratios	;							1						
Approach				EB		Т	WB				NB		3			SB		
Lane			Left	Right	Bypas	s Le	eft	Right	Ву	ypass	Left	Right	Bypas	5 L	Left	Right	Bypass	
Entry Flow (v _e), pc/h				520.00				62.00			342.00	742.00		T		800.00		
Entry Volume veh/h				497.46			61.00				318.80	691.66				766.22		
Circulating Flow (v _c), pc/h				647				1335		3.0.0		324				377		
Exiting Flow (vex), pc/h				73				530				1020				843		
Capacity (c _{pce}), pc/h				713.30				456.54			1057.41	1057.41				939.46		
Capacity (c), veh/h				682.38				449.17	Π		985.67	985.67		Т		899.79		
v/c Ratio (x)				0.73				0.14			0.32	0.70				0.85		
Delay and Level of So	ervice																	
Approach				EB				WB				NB		Т		SB		
Lane			Left	Right	Bypas	s Le	eft	Right	Ву	ypass	Left	Right	Bypas	i L	Left	Right	Bypass	
Lane Control Delay (d), s/veh				21.8				9.9			7.0	15.3				26.3		
Lane LOS				С				Α			Α	С				D		
95% Queue, veh				6.3				0.5			1.4	6.1				10.5		
Approach Delay, s/veh				21.8			9.9				12.7				26.3			
Approach LOS				С				Α				В				D		
Intersection Delay, s/veh LO	S					19.0								С				
2, , ,							Pounc	dabouts '	Vorci	ion 7.7			C	anorat	tod: 12/	1 /2022 1	1·39·42 PM	

Number of Lanes (N)		7 Roι	ında	bo	uts R	lepo	rt												
Agency or Co.	General Information							Site	Info	mati	on								
Date Performed 11/30/2023	Analyst	Tighe	& Bond	l			\neg	Inte	rsection				Route 7	'5 at SR	101				
Analysis Year	Agency or Co.							E/W	/ Street N	Name		ĺ	SR 401	(Schoep	noest	er Rd)			
Peak Hour Face Peak	Date Performed	11/30	/2023					N/S	Street N	lame			Route 7	'5					
Note Note	Analysis Year	2050						Ana	alysis Tim	e Perio	d (hı	rs)	0.25						
Movement Movement	Time Analyzed	Future	e w/ Dev	v. AM Pea	ık			Peal	k Hour F	actor			0.97						
Approach EB	Project Description	Route	20 Cori	ridor Stud	dy			Juris	sdiction				Windso	r Locks					
Movement	Volume Adjustments	and S	Site C	haract	teristic	S													
Number of Lanes (N) 0 0 1 0 0 1 0 0 0 0 1 0 0 0 0 1 0 0 0 0 0 1 0 0 0 0 0 1 0	Approach		I	EΒ			WE	3				N	В						
Lane Assignment Lit Lit Lit Lit Lit Lit L	Movement	U	L	Т	R	U	L	Т	R	U		L	Т	R	U	L	Т	R	
Volume (V), veh/h 0 93 12 90 0 10 11 14 0 210 540 10 0 20 447 11 Percent Heavy Vehicles, 0 17 0 15 0 29 11 12 0 0 8 12 0 0 0 18 12 10 0 0 18 12 12 10 10 10 10 10 10 10 10 10 10 10 10 10	Number of Lanes (N)	0	0	1	0	0	0	1	0	0		0	1	0	0	0	1	0	
Percent Heavy Vehicles, % 0 17 0 15 0 29 11 12 0 8 12 0 0 18 12 3 Flow Rate (vxce), pc/h 0 112 12 107 0 13 13 16 0 234 624 10 0 24 516 12 Right-Turn Bypass None																			

	7 Roı	oundabouts Report Site Information															
General Information							Site	e Infor	matio	n							
Analyst	Tighe	& Bond					Inte	ersection			Route 7	'5 at SR	401				
Agency or Co.							E/W	V Street N	lame		SR 401	(Schoep	hoeste	er Rd)			
Date Performed	11/30	/2023					N/S	Street N	lame		Route 7	' 5					
Analysis Year	2050						Ana	alysis Tim	e Period	(hrs)	0.25						
Time Analyzed	Future	e w/ Dev	. PM Pea	k			Pea	k Hour F	actor		0.96						
Project Description	Route	20 Corr	idor Stud	dy			Juri	sdiction			Windso	r Locks					
Volume Adjustments	and S	Site C	haract	teristic	S												
Approach		E	В			W	'B			N	В				SB		
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R	
Number of Lanes (N)	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	
Lane Assignment			Lī	R				LTR			LTR					LTR	
Volume (V), veh/h	0	254	23	200	0	10	23	26	0	310	640	20	0	26	557	153	
Percent Heavy Vehicles, %	0	3	0	7	0	10	0	0	0	6	8	4	0	0	5	3	
Flow Rate (VPCE), pc/h	0	273	24	223	0	11	24	27	0	342	720	22	0	27	609	164	
Right-Turn Bypass		No	ne			No	ne			No	ne			N	lone		
Conflicting Lanes			1			1									1		
Pedestrians Crossing, p/h		()			0)			()				0		
Critical and Follow-U	р Неа	adway	⁄ Adju	stmen	t												
Approach				EB				WB			NB		Т		SB		
Lane			Left	Right	Bypass	Le	ft	Right	Bypass	Left	Right	Bypas	ss l	Left	Right	Bypass	
Critical Headway (s)				4.9763				4.9763			4.9763		Т		4.9763		
Follow-Up Headway (s)				2.6087				2.6087			2.6087				2.6087		
Flow Computations,	Capac	ity ar	nd v/c	Ratios	;												
Approach				EB			WB				NB		Т		SB		
Lane			Left	Right	Bypass	Le	ft	Right	Bypass	Left	Right	Bypas	ss l	Left	Right	Bypass	
Entry Flow (v _e), pc/h				520.00			62.00				1084.00				800.00		
Entry Volume veh/h				497.46			П	61.00			1010.46		Т		766.22		
Circulating Flow (v₅), pc/h				647				1335			324				377		
Exiting Flow (vex), pc/h				73				530			1020				843		
Capacity (c _{pce}), pc/h				713.30				353.60			991.64				939.46		
Capacity (c), veh/h				682.38				347.89			924.37				899.79		
v/c Ratio (x)				0.73				0.18			1.09				0.85		
Delay and Level of Se	ervice																
Approach				EB				WB			NB		Т		SB		
Lane			Left	Right	Bypass	Le	ft	Right	Bypass	Left	Right	Вура	ss l	Left	Right	Bypass	
Lane Control Delay (d), s/veh				21.8				13.4			78.4				26.3		
Lane LOS				С				В			F				D		
95% Queue, veh				6.3				0.6			25.6				10.5		
Approach Delay, s/veh				21.8				13.4		78.4				26.3			
Approach LOS				С				В			F				D		
Intersection Delay, s/veh LOS			Posonio			17.5			orsion 7.7	E							

Volume (V), veh/h 0 60 175 20 0 10 306 20 0 20 0 10 0 10 0 Percent Heavy Vehicles, % 0 0 3 0 7 3 3 0 0 100 33 0 11 7 Flow Rate (vPcE), pc/h 0 66 198 22 0 12 346 23 0 22 0 15 0 12 0	R 0					
Agency or Co. E/W Street Name SR 401 Date Performed 11/30/2023 N/S Street Name Light Ln Analysis Year 2050 Analysis Time Period (hrs) 0.25 Time Analyzed Future w/ Dev. AM Peak Peak Hour Factor 0.91 Project Description Route 20 Corridor Study Jurisdiction Windsor Locks Volume Adjustments and Site Characteristics Approach EB WB NB SB Movement U L T R U L T R U L T R U L T T NB SB	0 TR					
Date Performed 11/30/2023 N/S Street Name Light Ln Analysis Year 2050 Analysis Time Period (hrs) 0.25 Time Analyzed Future w/ Dev. AM Peak Peak Hour Factor 0.91 Project Description Route 20 Corridor Study Jurisdiction Windsor Locks Volume Adjustments and Site Characteristics Approach EB WB NB SB Movement U L T R U L T R U L T T R U L T T R U L T T R U L T T R U L T T R U L T R U L T R U L T R U L T R U L T R U L T L T L T L T L L<	0 TR					
Analysis Year 2050	0 TR					
Future Future	0 TR					
Project Description Route 20 Corridor Study Jurisdiction Windstrucks Volume Adjustments and Site Characteristics Approach EB WB NB NB SB Movement U L T R U L T R U L T R U L T R U L T R U L T R U L T R U L T R U L T R U L T R U L T R U L T R U L T R U L T R U L T R U L T R U L T L T L L T L L L L T L L L L T <	0 TR					
Volume Adjustments and Site Characteristics Approach EB SB SB<	0 TR					
Approach EB WB WB NB VB SB SB SB Movement U L T R U L T R U L T R U L T R U L T R U L T R U L T R U L T R U L T R U L T R U L T R U L T R U L T R U L T R U L T R U L T R U L T R U L T L T L T L T L T L T L T L T L T L T L T L L T L T <td>0 TR</td>	0 TR					
Movement U L T R U L T E L T L T L T L T L T L T L T L T L T L T L T	0 TR					
Number of Lanes (N) 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 0 1 Lane Assignment LTR <	0 TR					
Lane Assignment LTR	TR					
Volume (V), veh/h 0 60 175 20 0 10 306 20 0 20 0 10 0 10 0 Percent Heavy Vehicles, % 0 0 3 0 7 3 3 0 0 100 33 0 11 7 Flow Rate (v _{PCE}), pc/h 0 66 198 22 0 12 346 23 0 22 0 15 0 12 0	_					
Percent Heavy Vehicles, % 0 0 3 0 0 7 3 3 0 0 100 33 0 11 7 Flow Rate (VPCE), pc/h 0 66 198 22 0 12 346 23 0 22 0 15 0 12 0	70					
Flow Rate (V _{PCE}), pc/h 0 66 198 22 0 12 346 23 0 22 0 15 0 12 0	'0					
	1					
	78					
Right-Turn Bypass None None None None						
Conflicting Lanes 1 1 1 1 1						
Pedestrians Crossing, p/h 0 0 0 0						
Critical and Follow-Up Headway Adjustment						
Approach EB WB NB SB						
Lane Left Right Bypass Left Right Bypass Left Right Bypass Left Right Right	Bypass					
Critical Headway (s) 4.9763 4.9763 4.9763 4.9763 4.9763 4.9763						
Follow-Up Headway (s) 2.6087 2.6087 2.6087 2.6087						
Flow Computations, Capacity and v/c Ratios						
Approach EB WB NB SB						
Lane Left Right Bypass Left Right Bypass Left Right Bypass Left Right Right	Bypass					
Entry Flow (ve), pc/h 286.00 381.00 37.00 90.00						
Entry Volume veh/h 280.23 369.47 33.28 88.04						
Circulating Flow (vc), pc/h 24 88 276 380						
Exiting Flow (vex), pc/h 225 446 89 34						
Capacity (c _{pce}), pc/h 1346.63 1261.53 1041.40 936.59						
Capacity (c), veh/h 1319.47 1223.34 936.65 916.17						
v/c Ratio (x) 0.21 0.30 0.04 0.10						
Delay and Level of Service						
Approach EB WB NB SB						
Lane Left Right Bypass Left Right Bypass Left Right Bypass Left Right Right Right Right	Bypass					
Lane Control Delay (d), s/veh 4.5 5.7 4.2 4.8						
Lane LOS A A A A A A A						
95% Queue, veh 0.8 1.3 0.1 0.1 0.3						
Approach Delay, s/veh 4.5 5.7 4.2 4.8						
Approach LOS A A A A A						
Intersection Delay, s/veh LOS 5.1 A	A					

Volume (V), veh/h 0 90 437 20 0 10 446 30 0 30 10 20 0 20 10	R 0 0 TR 130					
Agency or Co. E/W Street Name SR 401 Date Performed 11/30/2023 N/S Street Name Light Ln Analysis Year 2050 Analysis Time Period (hrs) 0.25 Time Analyzed Future w/ Dev. PM Peak Peak Hour Factor 0.83 Project Description Route 20 Corridor Study Jurisdiction Windsor Locks Volume Adjustments and Site Characteristics Approach EB WB NB SB Movement U L T R U L T R U L T T R U L T T R U L T T R U L T T R U L T T R U L T T R U L T T R U L T R U L T R U L T R U L T	0 TR 130					
Date Performed 11/30/2023 N/S Street Name Light Ln Analysis Year 2050 Analysis Time Period (hrs) 0.25 Time Analyzed Future w/ Dev. PM Peak Peak Hour Factor 0.83 Project Description Route 20 Corridor Study Jurisdiction Windsor Locks Volume Adjustments and Site Characteristics WB NB SB Movement U L T R U L T R U L T R U L T R U L T T R U L T T R U L T T R U L T R U L T R U L T R U L T R U L T R U L T R U L T R U L T R U L T R U </td <td>0 TR 130</td>	0 TR 130					
Analysis Year 2050	0 TR 130					
Time Analyzed Future w/ Dev. PM Peak Peak Hour Factor 0.83 Project Description Route 20 Corridor Study Jurisdiction Windsort Locks Volume Adjustments and Site Characteristics Approach EB WB NB NB SB Movement U L T R U L T R U L T R U L T R U L T R U L T R U L T R U L T R U L T R U L T R U L T R U L T R U L T R U L T R U L T R U L T R U L T R U L T R U L T R U L T L T L <td>0 TR 130</td>	0 TR 130					
Project Description Route 20 Corridor Study Jurisdiction Windsort Locks Volume Adjustments and Site Characteristics Approach EB WB NB NB SB Movement U L T R U L T R U L T R U L T R U L T R U L T R U L T R U L T R U L T R U L T R U L T R U L T R U L T R U L T R U L T R U L T R U L T R U L T R U L T R U L T L T L	0 TR 130					
Volume Adjustments and Site Characteristics Approach EB VB VB<	0 TR 130					
Approach EB WB WB NB SB Movement U L T R U L T L T L T L T L	0 TR 130					
Movement U L T R U L T E L T L T L T L T L T L T L T<	0 TR 130					
Number of Lanes (N) 0 0 1 0 0 1 0 0 1 0 0 1 0 0 0 1 0 0 1 0 0 0 1 Lane Assignment LTR LTR LTR LTR LTR LTR LTR D 0 20 0 20 10 Volume (V), veh/h 0 90 437 20 0 10 446 30 0 30 10 20 0 20 10	0 TR 130					
Lane Assignment LTR	TR 130					
Volume (V), veh/h 0 90 437 20 0 10 446 30 0 30 10 20 0 20 10	130					
Percent Heavy Vehicles, % 0 1 1 0 0 3 0 <td>0</td>	0					
Flow Rate (VPCE), pc/h 0 110 532 24 0 12 553 36 0 36 12 24 0 24 12	157					
Right-Turn Bypass None None None None						
Conflicting Lanes 1 1 1 1 1						
Pedestrians Crossing, p/h 0 0 0						
Critical and Follow-Up Headway Adjustment						
Approach EB WB NB SB						
Lane Left Right Bypass Left Right Bypass Left Right Bypass Left Right	Bypass					
Critical Headway (s) 4.9763 4.9763 4.9763 4.9763 4.9763						
Follow-Up Headway (s) 2.6087 2.6087 2.6087 2.6087 2.6087						
Flow Computations, Capacity and v/c Ratios						
Approach EB WB NB SB						
Lane Left Right Bypass Left Right Bypass Left Right Bypass Left Right	Bypass					
Entry Flow (v _e), pc/h 666.00 601.00 72.00 193.00						
Entry Volume veh/h 659.64 584.89 72.00 193.00						
Circulating Flow (vc), pc/h 48 158 666 601						
Exiting Flow (vex), pc/h 580 746 158 48						
Capacity (c _{pce}), pc/h 1314.06 1174.60 699.61 747.57						
Capacity (c), veh/h 1301.52 1143.12 699.61 747.57						
v/c Ratio (x) 0.51 0.51 0.10 0.26						
Delay and Level of Service						
Approach EB WB NB SB						
Lane Left Right Bypass Left Right Bypass Left Right Bypass Left Right	Bypass					
Lane Control Delay (d), s/veh 8.1 9.0 6.2 7.8						
Lane LOS A A A A A						
95% Queue, veh 3.0 3.0 0.3 1.0						
Approach Delay, s/veh 8.1 9.0 6.2 7.8						
Approach LOS A A A A A						
Intersection Delay, s/veh LOS 8.3 A	A					

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					ર્ન	7	ሻ	1>		*	1	7
Traffic Volume (vph)	0	0	0	110	40	545	40	256	40	30	601	80
Future Volume (vph)	0	0	0	110	40	545	40	256	40	30	601	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	12	12	12	11	11
Storage Length (ft)	0		0	0	· <u>-</u>	0	75		0	50		90
Storage Lanes	0		0	0		1	1		0	1		1
Taper Length (ft)	25			25		•	40			25		•
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	1.00	1.00	1.00	0.850	1.00	0.983	1.00	1.00	1.00	0.850
Flt Protected					0.964	0.000	0.950	0.000		0.950		0.000
Satd. Flow (prot)	0	0	0	0	1712	1509	1662	1760	0	1687	1655	1382
Flt Permitted	•	•	· ·	•	0.964	1000	0.354	1100	•	0.533	1000	1002
Satd. Flow (perm)	0	0	0	0	1712	1509	619	1760	0	946	1655	1382
Right Turn on Red	U	· ·	Yes	U	17.12	Yes	010	1700	Yes	J-10	1000	Yes
Satd. Flow (RTOR)			100			528		16	100			85
Link Speed (mph)		30			30	320		35			35	00
Link Distance (ft)		591			493			652			2293	
Travel Time (s)		13.4			11.2			12.7			44.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.84	0.78	0.92	0.92	0.94	0.83
Heavy Vehicles (%)	7%	7%	7%	7%	7%	7%	5%	6%	7%	7%	11%	13%
Adj. Flow (vph)	0	0	0	120	43	592	48	328	43	33	639	96
Shared Lane Traffic (%)	U	U	U	120	70	332	70	320	70	33	000	30
Lane Group Flow (vph)	0	0	0	0	163	592	48	371	0	33	639	96
Turn Type	U	U	U	Split	NA	Prot	Perm	NA	U	Perm	NA	Perm
Protected Phases				4	4	4	1 01111	2		1 01111	2	1 01111
Permitted Phases					•	•	2	_		2	_	2
Detector Phase				4	4	4	2	2		2	2	2
Switch Phase					•	•	_	_		_	_	_
Minimum Initial (s)				7.0	7.0	7.0	15.0	15.0		15.0	15.0	15.0
Minimum Split (s)				12.1	12.1	12.1	20.4	20.4		20.4	20.4	20.4
Total Split (s)				24.0	24.0	24.0	46.0	46.0		46.0	46.0	46.0
Total Split (%)				34.3%	34.3%	34.3%	65.7%	65.7%		65.7%	65.7%	65.7%
Yellow Time (s)				3.0	3.0	3.0	4.4	4.4		4.4	4.4	4.4
All-Red Time (s)				2.1	2.1	2.1	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)				۷.۱	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)					5.1	5.1	5.4	5.4		5.4	5.4	5.4
Lead/Lag					0.1	0.1	0.7	0.4		0.1	0.4	0.4
Lead-Lag Optimize?												
Recall Mode				None	None	None	C-Max	C-Max		C-Max	C-Max	C-Max
Act Effct Green (s)				TTOTIC	13.0	13.0	46.5	46.5		46.5	46.5	46.5
Actuated g/C Ratio					0.19	0.19	0.66	0.66		0.66	0.66	0.66
v/c Ratio					0.51	0.83	0.12	0.32		0.05	0.58	0.10
Control Delay					30.1	15.6	5.6	5.5		5.9	10.4	2.3
Queue Delay					0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay					30.1	15.6	5.6	5.5		5.9	10.4	2.3
LOS					30.1	13.0 B	J.0	J.5		J.9 A	10.4 B	2.5 A
Approach Delay					18.7	D		5.5			9.2	
Approach LOS					10.7 B			3.5 A			9.2 A	
Approach LOG					D			٨			٨	

102: Route 75 & Route 20 WB On Ramp/New Town Road 2050 Future with Development (Misc Imp) Weekday AM Peak

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)					65	24	4	61		4	119	1
Queue Length 95th (ft)					106	128	19	80		16	280	16
Internal Link Dist (ft)		511			413			572			2213	
Turn Bay Length (ft)							75			50		90
Base Capacity (vph)					462	792	410	1173		627	1098	945
Starvation Cap Reductn					0	0	0	0		0	0	0
Spillback Cap Reductn					0	0	0	0		0	0	0
Storage Cap Reductn					0	0	0	0		0	0	0
Reduced v/c Ratio					0.35	0.75	0.12	0.32		0.05	0.58	0.10
Intersection Summary												
Area Type:	Other											

Cycle Length: 70

Actuated Cycle Length: 70

Offset: 1 (1%), Referenced to phase 2:NBSB, Start of Yellow

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.83

Intersection Signal Delay: 12.1 Intersection LOS: B Intersection Capacity Utilization 58.4% ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 102: Route 75 & Route 20 WB On Ramp/New Town Road



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Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	<u> </u>		.,,,,,,	<u>₩</u>	ሻሻ	7
Traffic Volume (vph)	70	0	0	140	555	40
Future Volume (vph)	70	0	0	140	555	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.97	1.00
Frt	1.00	1.00	1.00	1.00	0.51	0.850
Flt Protected					0.950	0.000
Satd. Flow (prot)	1776	0	0	1776	3273	1509
Flt Permitted	1770	0	- 0	1110	0.950	1000
Satd. Flow (perm)	1776	0	0	1776	3273	1509
Right Turn on Red	1770	Yes	U	1770	3213	Yes
Satd. Flow (RTOR)		168				43
	30			20	30	43
Link Speed (mph)				30 470		
Link Distance (ft)	493			479	857	
Travel Time (s)	11.2	0.00	0.00	10.9	19.5	0.00
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	76	0	0	152	603	43
Shared Lane Traffic (%)						
Lane Group Flow (vph)	76	0	0	152	603	43
Turn Type	NA			NA	Prot	Prot
Protected Phases	2			2	4	4
Permitted Phases						
Detector Phase	2			2	4	4
Switch Phase						
Minimum Initial (s)	5.0			5.0	5.0	5.0
Minimum Split (s)	22.5			22.5	22.5	22.5
Total Split (s)	32.0			32.0	38.0	38.0
Total Split (%)	45.7%			45.7%	54.3%	54.3%
Yellow Time (s)	3.5			3.5	3.5	3.5
All-Red Time (s)	1.0			1.0	1.0	1.0
Lost Time Adjust (s)	0.0			0.0	0.0	0.0
Total Lost Time (s)	4.5			4.5	4.5	4.5
Lead/Lag	7.0			7.0	7.0	7.0
Lead-Lag Optimize?						
Recall Mode	Max			Max	None	None
Act Effct Green (s)	27.6			27.6	15.2	15.2
` /						
Actuated g/C Ratio	0.53			0.53	0.29	0.29
v/c Ratio	0.08			0.16	0.63	0.09
Control Delay	7.3			7.8	18.9	5.3
Queue Delay	0.0			0.0	0.0	0.0
Total Delay	7.3			7.8	18.9	5.3
LOS	Α			Α	В	Α
Approach Delay	7.3			7.8	18.0	
Approach LOS	А			Α	В	
Queue Length 50th (ft)	10			21	80	0
Queue Length 95th (ft)	31			56	121	16
Internal Link Dist (ft)	413			399	777	
Turn Bay Length (ft)						
Base Capacity (vph)	946			946	2124	994
= 300 000000 (*Pii)	3.0			0.10		001

301: Route 20 WB Off Ramp & New Town Road 2050 Future with Development (Misc Imp) Weekday AM Peak

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Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Starvation Cap Reductn	0			0	0	0
Spillback Cap Reductn	0			0	0	0
Storage Cap Reductn	0			0	0	0
Reduced v/c Ratio	0.08			0.16	0.28	0.04
Intersection Summary						
Area Type:	Other					
Cycle Length: 70						
Actuated Cycle Length: 5	51.8					
Natural Cycle: 45						
Control Type: Actuated-U						
Maximum v/c Ratio: 0.63						
Intersection Signal Delay	: 15.3			Int	tersection	LOS: B
Intersection Capacity Util	ization 30.7%			IC	U Level c	f Service
Analysis Period (min) 15						

Splits and Phases: 301: Route 20 WB Off Ramp & New Town Road

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Route 20 Corridor Study Tighe & Bond

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			4	
Traffic Volume (vph)	40	26	109	11	30	13	96	225	1	11	255	60
Future Volume (vph)	40	26	109	11	30	13	96	225	1	11	255	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.939			0.944						0.977	
Flt Protected		0.990			0.991			0.984			0.995	
Satd. Flow (prot)	0	1702	0	0	1675	0	0	1813	0	0	1812	0
Flt Permitted		0.898			0.916			0.777			0.930	
Satd. Flow (perm)	0	1544	0	0	1548	0	0	1432	0	0	1693	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		92			52						26	
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		295			384			221			403	
Travel Time (s)		6.7			8.7			4.3			7.9	
Peak Hour Factor	0.62	0.25	0.79	0.50	0.58	0.25	0.74	0.86	0.92	0.25	0.84	0.86
Heavy Vehicles (%)	5%	0%	6%	9%	11%	0%	3%	3%	50%	0%	2%	3%
Adj. Flow (vph)	65	104	138	22	52	52	130	262	1	44	304	70
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	307	0	0	126	0	0	393	0	0	418	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			4			2			2	
Permitted Phases	4			4			2			2		
Detector Phase	4	4		4	4		2	2		2	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	23.0	23.0		23.0	23.0		23.0	23.0		23.0	23.0	
Total Split (s)	23.0	23.0		23.0	23.0		27.0	27.0		27.0	27.0	
Total Split (%)	46.0%	46.0%		46.0%	46.0%		54.0%	54.0%		54.0%	54.0%	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		5.0			5.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None		None	None		Min	Min		Min	Min	
Act Effct Green (s)		11.3			11.3			18.0			18.0	
Actuated g/C Ratio		0.29			0.29			0.45			0.45	
v/c Ratio		0.61			0.26			0.61			0.54	
Control Delay		14.3			8.9			14.0			11.2	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		14.3			8.9			14.0			11.2	
LOS		В			Α			В			В	
Approach Delay		14.3			8.9			14.0			11.2	
Approach LOS		В			Α			В			В	
Queue Length 50th (ft)		36			11			56			53	
Queue Length 95th (ft)		9			22			147			131	
Internal Link Dist (ft)		215			304			141			323	
Turn Bay Length (ft)												

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)		777			757			825			987	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.40			0.17			0.48			0.42	
Intersection Summary												
Area Type:	Other											
Cycle Length: 50												
Actuated Cycle Length: 39	9.6											
Natural Cycle: 50												
Control Type: Actuated-U	ncoordinated											
Maximum v/c Ratio: 0.61												
Intersection Signal Delay:	12.6			In	tersection	LOS: B						
Intersection Capacity Utiliz	zation 61.7%			IC	U Level o	of Service	В					
Analysis Period (min) 15												
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Splits and Phases: 302: Old County Road & Halfway House Road

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					4	7	ሻ	ĵ»		ሻ	†	7
Traffic Volume (vph)	0	0	0	130	30	668	30	506	70	60	744	105
Future Volume (vph)	0	0	0	130	30	668	30	506	70	60	744	105
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	12	12	12	11	11
Storage Length (ft)	0		0	0		0	75		0	50		90
Storage Lanes	0		0	0		1	1		0	1		1
Taper Length (ft)	25			25			40			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850		0.981				0.850
Flt Protected					0.961		0.950			0.950		
Satd. Flow (prot)	0	0	0	0	1706	1509	1711	1801	0	1687	1766	1487
Flt Permitted					0.961		0.133			0.273		
Satd. Flow (perm)	0	0	0	0	1706	1509	239	1801	0	485	1766	1487
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						265		14				91
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		591			493			652			2293	
Travel Time (s)		13.4			11.2			12.7			44.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.84	0.96	0.92	0.92	0.96	0.68
Heavy Vehicles (%)	7%	7%	7%	7%	7%	7%	2%	3%	7%	7%	4%	5%
Adj. Flow (vph)	0	0	0	141	33	726	36	527	76	65	775	154
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	174	726	36	603	0	65	775	154
Turn Type				Split	NA	Prot	Perm	NA		Perm	NA	Perm
Protected Phases				4	4	4		2			2	
Permitted Phases							2			2		2
Detector Phase				4	4	4	2	2		2	2	2
Switch Phase												
Minimum Initial (s)				5.0	5.0	5.0	15.0	15.0		15.0	15.0	15.0
Minimum Split (s)				22.5	22.5	22.5	20.4	20.4		20.4	20.4	20.4
Total Split (s)				30.6	30.6	30.6	39.4	39.4		39.4	39.4	39.4
Total Split (%)				43.7%	43.7%	43.7%	56.3%	56.3%		56.3%	56.3%	56.3%
Yellow Time (s)				3.5	3.5	3.5	4.4	4.4		4.4	4.4	4.4
All-Red Time (s)				1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)					0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)					4.5	4.5	5.4	5.4		5.4	5.4	5.4
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode				None	None	None	C-Max	C-Max		C-Max	C-Max	C-Max
Act Effct Green (s)					26.1	26.1	34.0	34.0		34.0	34.0	34.0
Actuated g/C Ratio					0.37	0.37	0.49	0.49		0.49	0.49	0.49
v/c Ratio					0.27	1.00	0.31	0.68		0.28	0.90	0.20
Control Delay					16.8	49.7	16.9	16.7		14.7	33.4	5.4
Queue Delay					0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay					16.8	49.7	16.9	16.7		14.7	33.4	5.4
LOS					В	D	В	В		В	С	Α
Approach Delay					43.3			16.7			27.8	
1 p · · · · · · · · · · · · · · · · · ·												

102: Route 75 & Route 20 WB On Ramp/New Town Road 2050 Future with Development (Misc Imp) Weekday PM Peak

	•	→	•	•	•	•	4	†	-	-	ļ	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)					51	213	7	216		16	288	14
Queue Length 95th (ft)					95	#453	20	330		43	#518	25
Internal Link Dist (ft)		511			413			572			2213	
Turn Bay Length (ft)							75			50		90
Base Capacity (vph)					636	728	116	881		235	857	769
Starvation Cap Reductn					0	0	0	0		0	0	0
Spillback Cap Reductn					0	0	0	0		0	0	0
Storage Cap Reductn					0	0	0	0		0	0	0
Reduced v/c Ratio					0.27	1.00	0.31	0.68		0.28	0.90	0.20

Intersection Summary

Area Type: Other

Cycle Length: 70

Actuated Cycle Length: 70

Offset: 0 (0%), Referenced to phase 2:NBSB, Start of Yellow

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.00

Intersection Signal Delay: 30.5 Intersection LOS: C
Intersection Capacity Utilization 80.5% ICU Level of Service D

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 102: Route 75 & Route 20 WB On Ramp/New Town Road



	→	•	•	←	4	/
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	A		.,,,,,,	<u>₩</u>	ሻሻ	7
Traffic Volume (vph)	130	0	0	140	688	70
Future Volume (vph)	130	0	0	140	688	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.97	1.00
Frt	1.00	1.00	1.00	1.00	0.51	0.850
Flt Protected					0.950	0.000
Satd. Flow (prot)	1776	0	0	1776	3273	1509
Flt Permitted	1770	U	- 0	1110	0.950	1000
Satd. Flow (perm)	1776	0	0	1776	3273	1509
Right Turn on Red	1770	Yes	U	1770	3213	Yes
Satd. Flow (RTOR)		168				76
	30			20	30	70
Link Speed (mph)				30 470		
Link Distance (ft)	493			479	857	
Travel Time (s)	11.2	0.00	0.00	10.9	19.5	0.00
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	141	0	0	152	748	76
Shared Lane Traffic (%)						
Lane Group Flow (vph)	141	0	0	152	748	76
Turn Type	NA			NA	Prot	Prot
Protected Phases	4			4	2	2
Permitted Phases						
Detector Phase	4			4	2	2
Switch Phase						
Minimum Initial (s)	5.0			5.0	5.0	5.0
Minimum Split (s)	23.0			23.0	23.0	23.0
Total Split (s)	29.0			29.0	41.0	41.0
Total Split (%)	41.4%			41.4%	58.6%	58.6%
Yellow Time (s)	3.0			3.0	3.0	3.0
All-Red Time (s)	2.0			2.0	2.0	2.0
Lost Time Adjust (s)	0.0			0.0	0.0	0.0
Total Lost Time (s)	5.0			5.0	5.0	5.0
Lead/Lag	5.0			3.0	3.0	3.0
Lead-Lag Optimize?						
Recall Mode	None			None	May	Max
	None			None 9.4	Max	
Act Effct Green (s)	9.4				38.8	38.8
Actuated g/C Ratio	0.16			0.16	0.67	0.67
v/c Ratio	0.49			0.53	0.34	0.07
Control Delay	27.2			28.4	5.1	1.6
Queue Delay	0.0			0.0	0.0	0.0
Total Delay	27.2			28.4	5.1	1.6
LOS	С			С	Α	Α
Approach Delay	27.2			28.4	4.8	
Approach LOS	С			С	Α	
Queue Length 50th (ft)	43			46	45	0
Queue Length 95th (ft)	86			92	87	12
Internal Link Dist (ft)	413			399	777	
Turn Bay Length (ft)						
Base Capacity (vph)	736			736	2180	1030
				, 00	_100	. 500

301: Route 20 WB Off Ramp & New Town Road 2050 Future with Development (Misc Imp) Weekday PM Peak

	→	\rightarrow	•	←		/
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Starvation Cap Reductn	0			0	0	0
Spillback Cap Reductn	0			0	0	0
Storage Cap Reductn	0			0	0	0
Reduced v/c Ratio	0.19			0.21	0.34	0.07
Intersection Summary						
Area Type:	Other					
Cycle Length: 70						
Actuated Cycle Length: 58	3.3					
Natural Cycle: 50						
Control Type: Actuated-U	ncoordinated					
Maximum v/c Ratio: 0.53						
Intersection Signal Delay:	10.8			Int	tersection	LOS: B
Intersection Capacity Utili	zation 35.3%			IC	U Level c	of Service

Splits and Phases: 301: Route 20 WB Off Ramp & New Town Road

Analysis Period (min) 15

41 s		29 s	
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Opino ana i naoco.	oon: Nodic 20 WB on Namp a New Town Noda		

Route 20 Corridor Study Tighe & Bond

	۶	→	•	•	←	•	4	†	~	/		✓
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			4	
Traffic Volume (vph)	80	49	149	21	48	11	121	298	11	13	307	60
Future Volume (vph)	80	49	149	21	48	11	121	298	11	13	307	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.941			0.982			0.994			0.973	
Flt Protected		0.988			0.991			0.985			0.997	
Satd. Flow (prot)	0	1728	0	0	1849	0	0	1832	0	0	1812	0
Flt Permitted		0.877			0.905			0.754			0.963	
Satd. Flow (perm)	0	1534	0	0	1689	0	0	1402	0	0	1751	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		77			15			6			31	
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		295			384			221			403	
Travel Time (s)		6.7			8.7			4.3			7.9	
Peak Hour Factor	0.86	0.37	0.86	0.69	0.43	0.50	0.88	0.97	0.50	0.50	0.87	0.64
Heavy Vehicles (%)	0%	4%	2%	0%	0%	0%	3%	1%	0%	0%	2%	1%
Adj. Flow (vph)	93	132	173	30	112	22	138	307	22	26	353	94
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	398	0	0	164	0	0	467	0	0	473	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			4			2			2	
Permitted Phases	4			4			2			2		
Detector Phase	4	4		4	4		2	2		2	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	23.0	23.0		23.0	23.0		23.0	23.0		23.0	23.0	
Total Split (s)	24.0	24.0		24.0	24.0		31.0	31.0		31.0	31.0	
Total Split (%)	43.6%	43.6%		43.6%	43.6%		56.4%	56.4%		56.4%	56.4%	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		5.0			5.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None		None	None		Min	Min		Min	Min	
Act Effct Green (s)		14.7			14.7			20.3			20.3	
Actuated g/C Ratio		0.32			0.32			0.45			0.45	
v/c Ratio		0.73			0.30			0.75			0.59	
Control Delay		21.2			13.3			19.9			12.9	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		21.2			13.3			19.9			12.9	
LOS		С			В			В			В	
Approach Delay		21.2			13.3			19.9			12.9	
Approach LOS		С			В			В			В	
Queue Length 50th (ft)		80			32			102			88	
Queue Length 95th (ft)		40			29			#219			161	
Internal Link Dist (ft)		215			304			141			323	
Turn Bay Length (ft)												

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)		725			760			856			1079	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.55			0.22			0.55			0.44	
Intersection Summary												
Area Type: (Other											
Cycle Length: 55												
Actuated Cycle Length: 45.6												
Natural Cycle: 55												
Control Type: Actuated-Unco	oordinated											
Maximum v/c Ratio: 0.75												
Intersection Signal Delay: 17	'.3			In	tersection	LOS: B						
Intersection Capacity Utilizati	ion 78.3%			IC	U Level o	of Service	D					
Analysis Period (min) 15												
# 95th percentile volume ex	xceeds capac	ity, que	eue may l	oe longer								
Queue shown is maximur	n after two cy	cles.										
0.111 1.01												
Splits and Phases: 302: O	ld County Ro	ad & Ha	altway Ho	ouse Roa	d							
₩ _{ø2}						1 ** 2	14					

HCS7 Roundabouts Report																
General Information							Site	Infor	mati	on						
Analyst	Tighe	& Bond					Inte	rsection			New To	wn Road	at Of	f Ramp)	
Agency or Co.							E/W	/ Street N	Name		New To	wn Road				
Date Performed	6/30/	2023					N/S	Street N	lame		Route 2	20 Off Ra	mp			
Analysis Year	2050						Ana	lysis Tim	e Perio	l (hrs)	0.25					
Time Analyzed	Future	e AM Pe	ak Hour				Peal	k Hour F	actor		0.92					
Project Description	Route	20 Corr	idor Stud	dy			Juris	sdiction			Windso	or Locks				
Volume Adjustments	s and S	Site C	haract	teristic	s											
Approach		E	В			W	В				NB		SB			
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Number of Lanes (N)	0	0	1	0	0	0	1	0	0	0	1	0	0	0	0	0
Lane Assignment				г				Т			LR					
Volume (V), veh/h	0		70		0		140		0	555		40				
Percent Heavy Vehicles, %	3		3		3		3		3	23		3				
Flow Rate (VPCE), pc/h	0		78		0		157		0	742		45			\top	
Right-Turn Bypass		No	one			Nor	ne			N	one			1	Vone	
Conflicting Lanes			1			1					1					
Pedestrians Crossing, p/h			0			0					0					
Critical and Follow-U																
Approach EB								WB		T	NB		Τ		SB	
Lane			Left	Right	Bypass	Lef	ft	Right	Bypas	Left	Right	Bypas	s L	.eft	Right	Bypass
Critical Headway (s)				4.9763			-	4.9763			4.9763		T			
Follow-Up Headway (s)				2.6087				2.6087			2.6087					
Flow Computations,	Capac	ity ar	nd v/c	Ratios												
Approach				EB			WB				NB		\Box		SB	
Lane			Left	Right	Bypass	Lef	eft Right Bypass			Left	Left Right E		s L	.eft	Right	Bypass
Entry Flow (v _e), pc/h				78.00				157.00			787.00		T			
Entry Volume veh/h				75.73				152.43			646.94					
Circulating Flow (v _c), pc/h				0				742			78		T		899	
Exiting Flow (vex), pc/h				123				899			0				0	
Capacity (c _{pce}), pc/h				1380.00				647.43			1274.46					
Capacity (c), veh/h				1339.80				628.57			1047.65		Т			
v/c Ratio (x)				0.06				0.24			0.62					
Delay and Level of S	ervice															
Approach EB								WB			NB				SB	
Lane		Left Right Bypass					ft	Right	Bypas	Left	Right	Bypas	s L	.eft	Right	Bypass
Lane Control Delay (d), s/veh	eh 3.1							8.8			11.9					
Lane LOS A								Α			В					
95% Queue, veh 0.2								0.9			4.4					
Approach Delay, s/veh 3.1								8.8			11.9					
Approach LOS				Α				Α		В						
Intersection Delay, s/veh LO	10.6	6 В														
Copyright @ 2022 University of	Flaviola /	All Diales	- D	. al	1.14	CCENT D	a constant a	aboute V		7		<u></u>		-L 10/1	0./2022.0	2-2 Q-1 // Λ Λ

Analyst Agency or Co.	Tighe				HCS7 Roundabouts Report General Information Site Information													
Agency or Co.	Tighe										1							
	<u> </u>							ersection				New To	wn Road	at Off	Ramp			
							E/W	V Street N	lame	e		New To	wn Road					
Date Performed	6/30/2	2023					N/S	Street N	lame)		Route 2	0 Off Ran	np				
Analysis Year	2050						Ana	alysis Tim	e Per	riod (ł	nrs)	0.25						
Time Analyzed	Future	PM Pea	ak Hour				Pea	ık Hour F	actor	r		0.92						
Project Description	Route	20 Corr	idor Stud	ly			Juri	isdiction				Windso	r Locks					
Volume Adjustments a	and S	Site C	haract	eristic	s													
Approach		E	В			W	/B		Т		N				SB			
Movement	U	L	Т	R	U	L	Т	R		U	L	L T R			L	Т	R	
Number of Lanes (N)	0	0	1	0	0	0	1	0		0	0	1	0	0	0	0	0	
Lane Assignment			1	-				T				LR						
Volume (V), veh/h	0		130		0		140			0	688		70					
Percent Heavy Vehicles, %	3		3		3		3 3			3	10		3					
Flow Rate (VPCE), pc/h	0		146		0		157	,		0	823		78					
Right-Turn Bypass		No	ne			No	ne				Noi	ne		None				
Conflicting Lanes			1			1	1				1							
Pedestrians Crossing, p/h		()			C)				0							
Critical and Follow-Up																		
Approach EB								WB				NB		Т		SB		
Lane			Left	Right	Bypass	s Le	ft	Right	Вур	oass	Left	Right	Bypass	L	eft	Right	Bypass	
Critical Headway (s)				4.9763			┪	4.9763				4.9763		Т				
Follow-Up Headway (s)				2.6087				2.6087				2.6087						
Flow Computations, C	Capac	ity an	nd v/c	Ratios														
Approach				EB		Т		WB		П	NB			Т		SB		
Lane			Left	Right	Bypass	Le	eft Right Bypass			oass	Left	Right	Bypass	L	eft	Right	Bypass	
Entry Flow (v _e), pc/h		\neg		146.00			157.00					901.00						
Entry Volume veh/h				141.75				152.43				823.91						
Circulating Flow (v _c), pc/h				0				823				146				980		
Exiting Flow (vex), pc/h				224				980				0				0		
Capacity (c _{pce}), pc/h				1380.00			П	596.09				1189.06						
Capacity (c), veh/h				1339.80				578.73				1087.32						
v/c Ratio (x)				0.11				0.26				0.76						
Delay and Level of Ser	rvice																	
Approach EB								WB				NB				SB		
Lane	Left Right Bypass					s Le	ft	Right	Вур	oass	Left	Right	Bypass	L	eft	Right	Bypass	
Lane Control Delay (d), s/veh	3.5							9.7				16.6						
Lane LOS				А				А				С						
95% Queue, veh				0.4				1.1			7.6							
Approach Delay, s/veh				3.5				9.7				16.6						
Approach LOS				А			A C											
Intersection Delay, s/veh LOS	14.0) В																

HCS7 Roundabouts Report																
General Information							Site	e Info	matic	n						
Analyst	Tighe	& Bond	l			\neg	Inte	ersection			OCR at	HHR				
Agency or Co.							E/W	V Street I	Name		Halfwa	y House	Road			
Date Performed	6/30/	2023					N/S	Street N	lame		Old Co	unty Roa	d			
Analysis Year	2050						Ana	alysis Tim	e Period	(hrs)	0.25					
Time Analyzed	Future	e AM Pe	ak Hour				Pea	ık Hour F	actor		0.92					
Project Description	Route	20 Corı	idor Stud	dy			Juri	sdiction			Windso	r Locks				
Volume Adjustments	and S	Site C	haract	teristic	s											
Approach		E	В			WI	В			١	IB				SB	
Movement	U	L	Т	R	U	L	Т	R	U	L	T R		U	L	Т	R
Number of Lanes (N)	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0
Lane Assignment			Lī	ΓR				LTR			LTF					LTR
Volume (V), veh/h	0	40	26	109	0	11	30	13	0	96	225	1	0	11	255	60
Percent Heavy Vehicles, %	3	5	0	6	3	9	11	0	3	3	3	50	3	0	2	3
Flow Rate (VPCE), pc/h	0	46	28	126	0	13	36	14	0	107	252	2	0 12 283 6			67
Right-Turn Bypass		No	one			Nor	ne			N	one		١	None		
Conflicting Lanes			1			1					1				1	
Pedestrians Crossing, p/h			0			0					0				0	
Critical and Follow-U	р Неа	adway	/ Adju	stmen	t											
Approach EB								WB			NB				SB	
Lane			Left	Right	Bypass	Lef	t	Right	Bypass	Left	Right	Bypas	s I	Left	Right	Bypass
Critical Headway (s)				4.9763				4.9763			4.9763				4.9763	
Follow-Up Headway (s)				2.6087				2.6087			2.6087				2.6087	
Flow Computations,	Capac	ity aı	nd v/c	Ratios	3											
Approach				EB			WB			NB		\top		SB		
Lane			Left	Right	Bypass	Lef	ft Right Bypass			Left	eft Right By		s I	Left	Right	Bypass
Entry Flow (v _e), pc/h				200.00				63.00			361.00				362.00	
Entry Volume veh/h				190.68		Π	П	58.36			349.88				354.50	
Circulating Flow (v _c), pc/h				308				405			86				156	
Exiting Flow (vex), pc/h				42				210			312				422	
Capacity (c _{pce}), pc/h				1007.96				913.01			1264.10				1176.99	
Capacity (c), veh/h				960.97				845.75			1225.15				1152.61	
v/c Ratio (x)				0.20				0.07			0.29				0.31	
Delay and Level of Service																
Approach	EB							WB			NB				SB	
Lane		Left Right Bypass					t	Right	Bypass	Left	Right	Bypas	s I	Left	Right	Bypass
Lane Control Delay (d), s/veh		5.7						4.9			5.5				6.0	
Lane LOS	A							Α			А				Α	
95% Queue, veh 0.7								0.2			1.2				1.3	
Approach Delay, s/veh 5.7							4.9			5.5				6.0		
Approach LOS				А				Α		A A						
Intersection Delay, s/veh LOS	5.7		abouts \		A											

HCS7 Roundabouts Report																			
General Information								Site Information											
Analyst	Tighe & Bond							rsection			OCR at HHR								
Agency or Co.							E/W	Street N	lame		Halfway House Road								
Date Performed	6/30/	2023					N/S	Street N	lame		Old Co	unty Roa							
Analysis Year	2050						Ana	lysis Tim	e Perioc	(hrs)	0.25								
Time Analyzed	Future PM Peak Hour							k Hour F	actor		0.92								
Project Description Route 20 Corridor Study								sdiction		Windsor Locks									
Volume Adjustments	and S	Site C	haract	teristic	s														
Approach	EB W							Ν	В				SB						
Movement	U	L	Т	R	R U		. Т		U	L	Т	R	U		Т	R			
Number of Lanes (N)	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0			
Lane Assignment	LTR			R			LTR				LTR					LTR			
Volume (V), veh/h	0	80 49 149		149	0	21	48	11	0	121	298	11	0	13	307	307 60			
Percent Heavy Vehicles, %	3	5	0	6	3	9	11	0	3	3	3	50	3	0	2	3			
Flow Rate (VPCE), pc/h	0	91	53	172	0	25	58	12	0	135	334	18	0 1		340	67			
Right-Turn Bypass		No	ne			Non	e			No	ne	None							
Conflicting Lanes	1					1						1							
Pedestrians Crossing, p/h			0			0	0			0			0						
Critical and Follow-U	р Неа	adway	/ Adju	stmen	t														
Approach			EB					WB		T	NB		SB						
Lane			Left	Right	Bypass	Left	eft Right		Bypass	Left	Right	Bypass	L	eft	Right	Bypass			
Critical Headway (s)				4.9763			1	4.9763			4.9763				4.9763				
Follow-Up Headway (s)				2.6087			1	2.6087			2.6087				2.6087				
Flow Computations,	Capac	ity ar	nd v/c	Ratios															
Approach			EB			T	WB			NB			Т		SB				
Lane			Left	Right	ght Bypass			Right	Bypass	Left	Right	Bypass	L	eft	Right	Bypass			
Entry Flow (v _e), pc/h				316.00				95.00			487.00		Т	421.00					
Entry Volume veh/h				301.93			87.19				467.34				412.38				
Circulating Flow (v _c), pc/h		379					560			158		218							
Exiting Flow (vex), pc/h			85					260			437		537						
Capacity (c _{pce}), pc/h			937.54				779.49				1174.60				1104.87				
Capacity (c), veh/h				895.80			1	715.40			1127.18		Т		1082.25				
v/c Ratio (x)				0.34				0.12			0.41				0.38				
Delay and Level of Se	rvice																		
Approach		EB			WB				NB		Τ	SB							
Lane			Left	Right	Bypass	Left		Right	Bypass	Left	Right	Bypass	L	eft	Right	Bypass			
Lane Control Delay (d), s/veh				7.7				6.3			7.5				7.3				
Lane LOS				А				Α			А				Α				
95% Queue, veh				1.5				0.4			2.1				1.8				
Approach Delay, s/veh		7.7					6.3			7.5				7.3					
Approach LOS			Α				Α			Α				Α					
Intersection Delay, s/veh LOS	7.4					А													

				HCS	7 Roι	ındab	outs	Re	eport										
General Information								Site Information											
Analyst	Tighe & Bond							on			Route 75 at New Town Road								
Agency or Co.						E	/W Stre	et Na	ime		New Town Road								
Date Performed	rmed 6/30/2023										Route 75								
Analysis Year	2050					1	nalysis [·]	ime	Period (hrs) 0.25									
Time Analyzed	Future	e AM Pe	ak Hour			F	eak Hou	r Fac	ctor	0.92									
Project Description Route 20 Corridor Study								on		Windsor Locks									
Volume Adjustments	and S	Site C	haract	teristic	s														
Approach			WB				N	В				SB							
Movement	U	L	Т	R	U	L	T R		U	L	Т	R	U	L	Т	R			
Number of Lanes (N)	0	0	0	0	0	0	1	1	0	0	1	0	0	0	1	0			
Lane Assignment		LT									LTR				LTR				
Volume (V), veh/h					0	110	10 5	45	0	40	256	40	0	30	601	80			
Percent Heavy Vehicles, %					3 13		3	10	3	5	6	3	3	3	11	13			
Flow Rate (VPCE), pc/h					0	135	45 652		0	46	295	45	0		725	98			
Right-Turn Bypass		No	None	None			No	ne	None										
Conflicting Lanes					1				1		1								
Pedestrians Crossing, p/h							0			0		0							
Critical and Follow-U	р Неа	adway	/ Adju	stmen	t														
Approach				EB			WB			NB				SB					
Lane			Left	Right	Bypass	Left	t Right		Bypass	Left	Right Bypa		L	Left R		Bypass			
Critical Headway (s)						4.5436	4.543	6			4.9763				4.9763				
Follow-Up Headway (s)						2.5352	2.535	2			2.6087				2.6087				
Flow Computations,	Capac	city ar	nd v/c	Ratios	;														
Approach			EB				WB				NB		Τ		SB				
Lane			Left	Right	Bypass	Left	Righ	t I	Bypass	Left	Right	Bypass	ypass Le		Right	Bypass			
Entry Flow (v _e), pc/h						180.00	652.0	0			386.00		Т		857.00				
Entry Volume veh/h						163.53	3.53 592.35				365.80		772		772.89	72.89			
Circulating Flow (v _c), pc/h					341				34		226								
Exiting Flow (vex), pc/h				79		189													
Capacity (c _{pce}), pc/h					104		8 1041.18				1332.96				1095.89				
Capacity (c), veh/h						945.93	945.9	3			1263.21				988.33				
v/c Ratio (x)						0.17	0.63				0.29				0.78				
Delay and Level of Se	ervice	1																	
Approach	EB			WB				NB		SB									
Lane			Left	Right	Bypass	Left	Righ	t l	Bypass	Left	Right	Bypass	L	eft	Right	Bypass			
Lane Control Delay (d), s/veh						5.5	13.1				5.5				19.2				
Lane LOS						А	В				А				С				
95% Queue, veh						0.6	4.6				1.2				8.2				
Approach Delay, s/veh				11.4			5.5				19.2								
Approach LOS				В			A C												

HCS7 Roundabouts Report																			
General Information								Site Information											
Analyst	Tighe & Bond										Route 75 at New Town Road								
Agency or Co.							E/W S	Street N	lame		New Town Road								
Date Performed	erformed 6/30/2023									Route 75									
Analysis Year	2050						Analy	/sis Time	e Period (hrs)	0.25								
Time Analyzed	Future	e PM Pea	ak Hour				Peak	Hour Fa	actor		0.92								
Project Description Route 20 Corridor Study								diction		Windsor Locks									
Volume Adjustments	and S	Site C	haract	teristic	s														
Approach			WB				N	В				SB							
Movement	U	L	Т	R	U	L	T R		U	L	Т	R	U	L	Т	R			
Number of Lanes (N)	0	0	0	0	0	0	1	1	0	0	1	0	0	0	1	0			
Lane Assignment		LT					R				LTR					LTR			
Volume (V), veh/h					0	130	30	668	0	30	506	70	0	60	744	105			
Percent Heavy Vehicles, %					3 3		3	7	3	2	3	3	3	3	4	5			
Flow Rate (VPCE), pc/h					0	146	34 77		0	33	566	78	0 67		841	120			
Right-Turn Bypass	None									No	ne	None							
Conflicting Lanes				1				1			1								
Pedestrians Crossing, p/h							0			C		0							
Critical and Follow-U	р Неа	adway	/ Adju	stmen	t														
Approach				T		WB			NB		SB								
Lane			Left	Right	Bypass	Left	ft Right		Bypass	Left	Right Bypa		Le	Left Righ		Bypass			
Critical Headway (s)						4.5436	5 4.	.5436			4.9763				4.9763				
Follow-Up Headway (s)						2.5352	2 2.	.5352			2.6087				2.6087				
Flow Computations,	Capac	ity ar	nd v/c	Ratios	5		İ												
Approach			EB				WB				NB		Τ		SB				
Lane			Left	Right	Bypass	Left	F	Right	Bypass	Left	Right	Bypass	Le	eft	Right	Bypass			
Entry Flow (v _e), pc/h						180.00) 7	77.00			677.00		Т		1028.00				
Entry Volume veh/h						169.45	69.45 731.47				657.60				987.99				
Circulating Flow (v _c), pc/h						599			67		213								
Exiting Flow (vex), pc/h					187					987									
Capacity (c _{pce}), pc/h						823.30	8	23.30			1288.84				1110.52				
Capacity (c), veh/h						775.06	5 7	75.06			1251.90				1067.29				
v/c Ratio (x)						0.22		0.94			0.53				0.93				
Delay and Level of Se	rvice																		
Approach	EB			WB				NB		SB									
Lane			Left	Right	Bypass	Left	F	Right	Bypass	Left	Right	Bypass	Le	eft	Right	Bypass			
Lane Control Delay (d), s/veh						7.0		42.9			8.6				32.3				
Lane LOS						А		Е			А				D				
95% Queue, veh						0.8		14.1			3.2				14.9				
Approach Delay, s/veh						36.1			8.6				32.3						
Approach LOS					E			Α			D								
Intersection Delay, s/veh LOS		2	27.6				D												

APPENDIX Q
CTDOT Final Study Report Comment Responses

Route 20 Study Final Report CTDOT Comment Responses

To: CRCOG & CTDOT

FROM: Tighe & Bond

Date: March 20, 2024

This memo is provided in response to comments received via email from CTDOT Project Development Unit (PDU) concerning the Route 20 Transportation Study Final Report. The following includes the comments summarized in italics and responses following in bold. The revisions have been incorporated into the revised Final Report.

Project Development Unit Comments

The following comments pertain to the Final Report comments received from the CTDOT Project Development unit on March 8, 2024.

1: Previous Comments

Comment 1: Please provide reasoning for recommending Concurrent Pedestrian Phasing in this corridor. I believe the FHWA material included compares LPI's to standard concurrent pedestrian phasing as opposed to exclusive pedestrian phasing which presently exists.

Response: This comment was previously addressed in the Alternatives Analysis response to comments. The response to comments was included as Appendix F of the finalized Alternatives Analysis Memo for record keeping purposes. Additional commentary has been added to the Final Report (Section 4.1.6) to outline considerations that should be reviewed during design.

Comment 2: Newer DOT guidance favors installing crosswalks across all legs of an intersection. As noted in response to previous comments, the design team believes there are instances where this will be detrimental. Wherever a crosswalk is not included, please include the reasons for not doing so within the text of the report.

Response: This comment was previously addressed in the Alternatives Analysis response to comments. The response to comments was included as Appendix F of the finalized Alternatives Analysis Memo for record keeping purposes. In addition, the Final Report has been updated in Sections 4.1.2, 4.1.5, and 4.1.6 to add specific justification for excluding crosswalks on certain intersection legs.

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Comment 3: Please include details discussed in the response to comments such as the existing skew of Elm Street, in the technical report either within the text or by including responses to previous comments in an appendix.

Response:

This comment was previously addressed in the Alternatives Analysis response to comments. The response to comments was included as Appendix F of the finalized Alternatives Analysis Memo for record keeping purposes. In addition, the Final Report has been updated in Section 4.1.5 for the Elm Street realignment as well as in other sections to include details from the response to comments, where appropriate.

2: New Comments

Comment 4: AADT for Route 75 is over 20k VPD. Under present Complete Streets guidance, anything less than a buffered bicycle lane would require a design exception. Please remove the 6-foot-wide Shoulder option or provide technical reasoning for why a buffered bicycle would not be feasible.

Response:

Most recent ADT data collected for the Study in 2022 indicates average daily traffic of approximately 17,500 vehicles per day. A road diet option for a 6-foot shoulder was included based on Town feedback to utilize the additional space created by the road diet without promoting additional bike traffic by designating formal bike lanes. The two road diet alternatives largely maintain the existing curbline and balances the extra available roadway width with one option being a wider shoulder that can accommodate bikes though not designated as a bicycle facility and the other being a buffered bike lane. There is the possibility to revisit the cross-section during the design to move the curb lines to reduce the width of the shoulder, if desired.

Comment 5: For the Mid-Block Pedestrian Crossings, reference CTDOT's pedestrian countermeasure table (attached).

Response:

Based on our review of the table and the proposed future conditions, we have revised the recommendation to be a rectangular rapid flashing beacon (RRFB) or pedestrian hybrid beacon (PHB) for the mid-block crossing on Route 75 based on the roadway volume, high vehicle speeds, and potential high pedestrian traffic. The proposed midblock crossing locations on Old County Road do not meet the recommended guidelines for a PHB based on available data.

Comment 6: It is mentioned in several places that improvements to Old Colony Road should come before improvements to Route 75 due to the potential for traffic to be shifted to town roadways. Was there any modelling which suggested this or is this the consultant's opinion? Please clarify within the text.

Response:

The phasing was determined by engineering judgement and via discussions with the community who expressed concern that a proposed road diet on Route 75 may shift traffic to parallel routes (i.e., Old County Road). In addition, Old County Road is seen as a priority corridor because it is within Town control. The Final Report acknowledges this concern while refraining from making a definitive statement that a shift in traffic will occur, only noting it may occur. In addition, community feedback suggested that the Old County Road

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improvements are completed first and was therefore prioritized in the implementation plan.

Comment 7: Please include sidewalks on both sides of the roadway in Concept L by the Route 20 ramps or provide reasoning or why this cannot be done.

Response: The improvements balance the need for a continuous sidewalk network and the impacts to the Route 20 overpass bridge structure along with project cost. The report has been revised to state that sidewalks should be added on both sides of the roadway when the bridge is replaced.

Comment 8: Was the adoption of automated enforcement considered for the speed problems on Old Colony Road? Speed Enforcement cameras are an FHWA proven safety countermeasure and may discourage truck traffic from the local road as well.

Response: Future consideration for automated enforcement on Old County Road has been added to the Final Report and was presented to the Technical Advisory Committee (TAC) on February 26, 2024.

Comment 9: Was analysis performed for a Future Build scenario without development (and associated traffic)? If so, please include this in an appendix.

Response: Capacity analyses were not conducted for the Future Build scenario without development traffic under the proposed concept improvement plans. However, analyses conducted during the Future Conditions Technical Memorandum under existing roadway configuration indicates minimal impact to traffic operations at the Route 75 intersections. Therefore, it is reasonable to assume that capacity analyses conducted under the Future Build Scenario without Development traffic volumes will yield similar results as the Future Build Scenario with Development.

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