



Route 20 Transportation & Land Use Study Windsor Locks, CT

# **Executive Summary**

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

May 2024



Tighe&Bond



The Route 20 Transportation and Land Use Study (Study) was conducted by the Capitol Region Council of Governments (CRCOG) on behalf of the Town of Windsor Locks (Town). The project was funded by the Connecticut Department of Transportation (CTDOT) and administered by CRCOG.

The purpose of the Study was to review current transportation infrastructure and land use to develop a comprehensive transportation improvement plan. This planning document aims to assist the CRCOG, with Town, and CTDOT implementing transportation improvements that meet future development, local and regional transportation needs, and economic development goals.

The Study Area included the corridor surrounding Route 75 (Ella T. Grasso Turnpike in Windsor Locks including Route 75, State Route 401 (Schoephoester Road), Halfway House Road, and Old County Road.



The study goals and objectives were identified early on in the Study based on input and collaboration with CRCOG, the Town, Technical Advisory (TAC), and were formalized by developing a The Study Vision Statement as follows:

- Develop feasible and community supported transportation solutions that address identified safety concerns, maintain traffic flow, and provide guidance on access management issues while accommodating future land use development opportunities.
- Improve transportation system access and mobility for alternative travel modes including sidewalk, bicycle, and transit infrastructure and amenities to provide a complete transportation system.
- Develop a comprehensive transportation and development management plan that prioritizes and defines implementation timelines to enable the programming, funding, and construction of improvements.

The Study process included an assessment of existing and future conditions, identification and analysis of alternatives, and the development of a Transportation Improvement and Development Management Plan. In addition, an extensive stakeholder and public outreach program was conducted for the duration of the study to engage the public and obtain input. The Final Report summarizes the findings during each phase of the study and is available on CRCOG website: <a href="https://crcog.org/rt20/">https://crcog.org/rt20/</a>.

## **Existing Conditions Assessment**

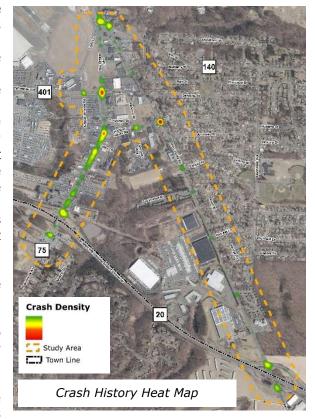
The assessment of existing conditions included extensive data collection and analysis to establish the current condition of the transportation system in the Study Area.

## **Roadways & Traffic**

State roadways within the Study Area include Route 75 (Ella T. Grasso Turnpike) and State Route 401 (Schoephoester Road). Route 75 is a four-lane undivided roadway running north to south through the Study Area with turn lanes provided at signalized intersections. Schoephoester Road runs west to east from the Route 20 ramp terminus to Route 75, providing a primary access route to the airport. Route 20, while not located immediately within the Study Area, provides a key regional connection from Interstate 91 to the east, to the Study Area. Local roadways within the Study Area include Old County Road and Halfway House Road. Old County Road serves as a parallel route to Route 75. Halfway House Road provides an east to west connection between Route 75 and Old County Road. National Drive and Corporate Drive are private roadways located to the east of Route 75 and north of Halfway House Road and provide access to several businesses along Route 75 and Halfway House Road.

daily traffic volumes Average approximately 17,000 to 18,000 vehicles per day on Route 75 within the Study Area in 2022. Historic traffic volumes on the Study Area roadways indicated no growth since 2007. However, it is important to note that geometric changes to the Route 20 terminus at the airport within the last 10 years, the recent opening of the Bradley Ground Transportation Center/ subsequent relocation of rental car facilities, and the lingering effects of air travel due to the COVID-19 pandemic may have impacted historical traffic volumes and travel patterns along the two major routes to the airport (Route 75 via Schoephoester Road and Route 20). Based on speed data collected in 2022, operating speeds along Route 75 were often greater than 10 miles per hour (mph) above the posted speed limit of 35 mph. Field observations and public input also indicated high travel speeds on Old County Road.

Crash data analyses show that there were several hot spots and identified safety issues within the Study Area.



The 2022 Existing Conditions capacity analysis results indicated all Study Area intersections operate acceptably at overall LOS C or better and no individual movements operate at worse than LOS D during both the weekday morning and afternoon peak hours.

Estimated average and design queues are accommodated within the available storage at each intersection.

Based on a review of existing Study Area roadways condition, the following key transportation system deficiencies were noted during the Existing Conditions Assessment:

- High vehicle travel speeds along Route 75 and Old County Road.
- Closely spaced driveways, high driveway density, and high collision rate along Route 75 between Route 20 and Schoephoester Road.
- Safety deficiencies at the intersection of Old County Road at Halfway House Road related to intersection sight distance, vehicular speeds, and advanced warning signage.

## **Land Use & Development**

The land use and development analysis prepared for the Study established baseline land use, zoning, development, and environmental data. The main objectives of the Existing Conditions and Market Analysis were to evaluate current and projected market indicators, including socio-economic and real estate trends, and to offer an assessment of the opportunities for continued economic growth and asset diversity within the Study Area. The analysis was predicated on establishing baseline information for demographics, 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. The analysis included 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. The following key trends were noted:

- A relatively stable projected population base for the Town of Windsor Locks is anticipated over the 2020 to 2050 period, but there may be opportunities for new housing development associated with those seeking to downsize or seeking assisted living.
- Projected strong employment growth both in Windsor Locks and Hartford County in the office/ flex-type, industrial/ warehousing distribution, and medical office space countywide could translate to an increased local demand for these sectors within Windsor Locks.
- The Town's ability to increase its share of countywide employment growth and then translating to opportunities for new development is likely enhanced by several locational amenities, including available sites, highway access and proximity to Bradley International Airport.
- Discussions with representatives of the Town of Windsor Locks, as well as local area developers, indicated that several projects are in the "development pipeline". However, access to planned or proposed developments from major arterials remains a key obstacle to realizing these projects.

- The Bradley Airport Development Zone (BADZ), located within portions of the Study Area, provides a tax incentive for businesses located within the zone that meet certain requirements.
- The Town zoning regulations do not appear to present any barriers to future development within the Study Area. However, building height restrictions 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.
- There are several existing industrial buildings, large vacant parcels of land and underdeveloped business-zoned parcels within the Study Area that may provide an opportunity for redevelopment.
- The Town may consider offering increased development densities for mixed-use developments in an effort to make projects financially feasible.



Bradley Airport Development Zone (BADZ)

#### **Pedestrians**

The Study Area generally has a well-connected pedestrian network primarily due to the completion of a recent pedestrian facility improvement project on Route 75 and Halfway House Road. Accessible pedestrian signals (APS) with exclusive phasing and ADA-compliant ramps are present at all signalized intersections along Route 75 and Schoephoester Road. Existing sidewalk is provided on the east side of Old County Road between Route 140 and Stonebrook Village. Existing pedestrian facility deficiencies include:

- Long sidewalk gaps on the west side of Old County Road and non-ADA compliant sidewalk ramps on Old County Road.
- Long crossing distances at signalized crossings along Route 75 due to roadway width.
- Long distances between crosswalks on Route 75 and Old County Road.

## **Bicyclists**

Bike facilities within the corridor are limited with narrow shoulders provided along Route 75, Schoephoester Road, and Halfway House Road. Existing 5-foot wide shoulders on Old County Road provide a suitable space for bicyclists. Key bicycle deficiencies include:

- Limited shoulder space on most Study Area roads requiring bicyclists to mix with high-speed traffic.
- Wider shoulders provided on Old County Road have safety limitations for bicyclists due to high speed traffic and heavy trucks which create an unsafe environment.
- The driveway density along Route 75 creates potential conflict points between bicycles and vehicular traffic.

#### **Transit**

Transit service is provided throughout the Study Area via CTtransit bus Route 24 (Windsor-Bradley International Airport – Windsor Locks), Route 30 (Bradley Flyer), and Route 34 (Kennedy Road), providing a mix of local and regional service. Bus stop amenities are most prevalent along Route 75 with four shelters provided and a majority of bus stops located adjacent to a sidewalk. Old County Road includes more limited facilities. A review of recent ridership indicates that ridership has generally increased over the last decade due to the recent opening of large retail distribution centers in the area. In addition, bus routes have been revised recently to better accommodate the increased transit demand. Key transit deficiencies within the Study Area include:

- Lack of amenities such as shelters, benches, or trash cans at existing bus stops
- Lack of sidewalks at several bus stops on Old County Road, Halfway House Road, and Schoephoester Road.
- Long distances to cross the major road to get to and from a bus stop and the ultimate destination.
- Infrequent bus service with typical headways between 30-60 minutes.

#### **Future Conditions Assessment**

The Assessment of Future Conditions conducted an analysis of the Route 20 Study Area under existing geometric and operational conditions utilizing projected 2050 Future Traffic volumes. This process identified operational concerns as compared to existing conditions, and also reviewed areas of concern that are expected to develop in the future if no improvements are made to the transportation system.

#### **2050 Future Conditions**

The 2022 Existing traffic volumes were projected out to the 2050 Future Conditions based on a general background growth rate and any approved but not yet constructed developments. Overall traffic volume growth is projected to be between approximately 20-30% along Route 75, and slightly lower growth between 15-20% on the Route 140, Halfway House Road, and Old County Road during both the weekday morning and weekday afternoon peak hours under 2050 Future Conditions. The Study Area intersections and movements continue to operate acceptably at LOS D or better in the 2050 Future Condition during both peak hours with minor timing adjustments at select locations.

## **Future Development Scenario**

The land use and market analysis completed during the Existing Conditions Assessment provided important data that was reviewed to guide the potential development program. Based on projected employment growth within the Town of Windsor Locks and Hartford County, the results of the market analysis, discussions with area brokers, active developers, and Town officials, as well as public survey feedback, the following preferred future potential development scenario was selected:

Residential/ Assisted Living: 165 units

Hotel: 80 rooms

Warehouse/ Industrial/ Business Park: 225,000 square feet

• Retail/ Medical/ Service: 37,000 square feet

Locations for the potential development scenario include warehouse/ industrial uses in close proximity to the airport to support air cargo uses, mixed-use development in the transition area between Route 75 and Old County Road, and residential development along Old County Road.

## **2050 Future Conditions with Development**

The potential development traffic volumes for the future development scenario were estimated using standard Institute of Transportation Engineers (ITE) Trip Generation, methodology. In total, the development scenario has the potential to generate approximately 300 weekday morning and 400 weekday afternoon vehicle trips to the Study Area. These potential development traffic volumes were then distributed to the Study Area intersections based on existing travel patterns and approximate desired development locations. Modest traffic volume increases are experienced on the Study Area roadways as compared to the 2050 Future Conditions traffic volumes. The capacity analysis results indicated the added traffic volumes to the Study Area intersections result in minor increases in delay as compared to the 2050 Future Conditions.

# **Improvements & Recommendations**

The following section outlines the recommended proposed improvement projects and describes them in terms of the scope, project type, complexity, safety benefit, estimated project cost, time horizon, property impacts, and associated permitting needs. It should be noted that some priorities are subjective and founded in the policies and goals of the Town, CRCOG, project stakeholders, and were refined through a public involvement process to address the goals and objectives outlined in the Study Vision Statement. The local and regional priorities should continue to be reviewed and evaluated to determine if changes to the priorities or recommendations are needed to remain current with local and state trends, and policies, as well as the conditions within the Study Area. It is important to note the recommended projects generally seek to address safety deficiencies within the Study Area. The Existing Conditions and Future Conditions capacity analysis results do not indicate capacity issues at the Study Area intersections. Therefore, capacity or traffic volume thresholds were not considered as a basis for project recommendation and subsequent implementation. The following tables summarize the improvement recommendations followed by sections that explain general recommendations within the Study Area. Snapshots of the proposed improvement concept plans are provided in the tables for reference and the Final Report should be referenced for full size concept plans.

#### Project 1A: Route 75 Road Diet with Bike Facility (Concepts A-1 or A-2 & E-1) **Project** Reduce vehicle speeds **Complexity:** Low Goals: Improve safety Cost: \$3.5M Improve access Time Horizon: Short Provide bike facility **Safety Benefits:** High **Property Impact:** None Major Reduce one travel lane in each direction to provide a center turn lane

## **Project Elements:**

- Minor curb line modifications
- Provide 6-foot bike lane with buffer
- Pedestrian crossing on north leg of Route 20 westbound ramps and Halfway House Road intersections
- Mid-block crossing with refuge island & RRFB or PHB near Homewood Suites
- Minor traffic signal adjustments and signage modifications
- Optional: merge two northbound travel lanes north of Schoephoester Road or provide northbound right-turn lane at Route 140
- Optional: Route 140 realignment (See Project 3 Summary)
- Optional: Delineators within bike lane buffers (Concept D-3)
- Alternate Project: Road Diet with 6-foot-wide Shoulder (Concept A-2)

#### Permits:

CTDOT Encroachment Permit (if Town managed project)

#### **Potential** Funding:

- CTDOT Vendor-in-Place Resurfacing Program
- State/ Federal Programs with Medium Funding Limits

#### References:

- Figures 1, 2, & 4 (Appendix C)
- Capacity Analysis Results Tables (Tables 4-1 and 4-2)



Project 1B	: Route 75 Long-Term Vision (Concept	t A-3)	
Project	Reduce vehicle speeds	Complexity:	High
• II	improve sursey	Cost:	\$16-20M
	5p. 6 / 6 / 10	Time Horizon:	Long
	Trovide bike identity	Safety Benefits:	High
		Property Impact:	Moderate

#### Major Project Elements:

- Roundabouts along Route 75 at three key intersections: Route 20
  westbound ramps, Halfway House Road, and Schoephoester Road; optional
  roundabouts at Route 20 eastbound ramps and Route 140
- Median island along segments between intersections
- Left-turn lane pockets at key driveways
- · Major curb line modifications
- Implement after Old County Road Improvements
- Potential modification to Route 20 bridge median island
- Optional: Delineators within bike lane buffers (Concept D-3)
- Optional: merge two northbound travel lanes north of Schoephoester Road or provide northbound right-turn lane at Route 140

#### Permits:

• CTDOT Encroachment Permit (if Town managed project)

# Potential Funding:

• State/ Federal Programs with Large Funding Limits

#### References:

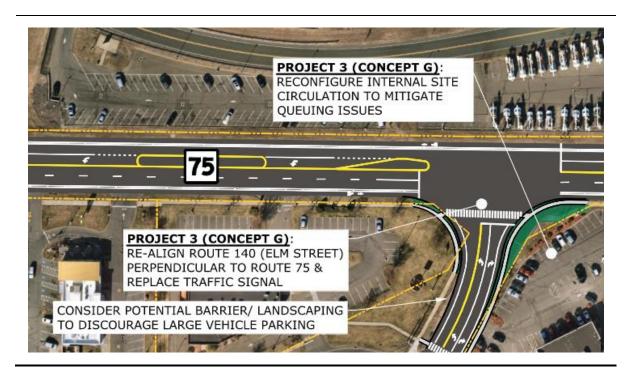
- Figures 3 & 4 (Appendix C)
- Capacity Analysis Results Tables (Tables 4-3 & 4-4)



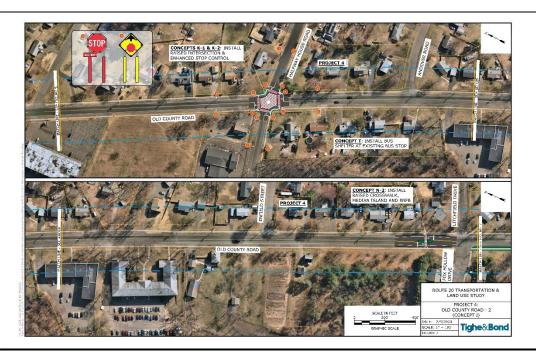
Project 2: Route 75 at Route 20 EB Ramps Intersection Improvements (Concept B)				
Project	Upgrade outdated signal equipment	Complexity:	Moderate	
Goals:	Improve safety	Cost:	\$800,000	
	Improve access	Time Horizon:	Medium	
		Safety Benefits:	Moderate	
		Property Impact:	None	
Major Project Elements:	<ul> <li>Modify signal phasing to provide protect</li> <li>Add pedestrian facilities including sides pedestrian signal heads</li> </ul>	Add Bear's restaurant driveway to signalized operation  Modify signal phasing to provide protected northbound left-turn  Add pedestrian facilities including sidewalks, PROWAG/ADA ramps, and pedestrian signal heads  Optional: Consider southbound right-turn slip lane during design		
Potential Funding:	<u> </u>	State/ Federal with Lower Funding Limits		
References:	<ul> <li>Figures 1, 2, &amp; 3 (Appendix C)</li> <li>Capacity Analysis Results (Tables 4-5 8</li> </ul>	k 4-6)		



Project 3: Ro	Project 3: Route 75 at Route 140 Realignment (Concept G)					
Project	Eliminate Route 140 skew	Complexity	Moderate			
Goals:	<ul> <li>Shorten the crossing distance across Route 140</li> </ul>	Cost:	\$2M			
	<ul> <li>Address operational issues at adjacent</li> </ul>	Time Horizon:	Long			
	driveways	Safety Benefits:	Moderate			
		Property Impact:	Moderate			
Major	Realign Route 140 to be perpendicular to Route 75					
Project Elements:	<ul> <li>Upgrade existing traffic signal</li> </ul>					
Licincino	Install vegetation or potential barrier along south side of Route 140 to discourage truck parking					
Permits:	CTDOT Encroachment Permit (if Town n	nanaged project)				
Potential Funding:	State/ Federal with Medium Funding Lin	nits				
References:	<ul> <li>Figures 1, 2, 3, 5, &amp; 6 (Appendix C)</li> </ul>					



Project 4: Old County Road Traffic Calming – North (Concepts I, K-1, K-2, L, N)					
Project	Reduce vehicle speeds	Complexity:	Low		
Goals:	Deter truck/commercial traffic	Cost:	\$2.2M		
	<ul> <li>Improve bike, pedestrian, vehicular, safety and access</li> </ul>	Time Horizon:	Short		
	Decrease distance between crossings	Safety Benefits:	High		
	along Old County Road	Property Impact:	None		
Major	Corridor-wide traffic calming between C	old County Circle and Ro	ute 140		
Project Elements:	<ul> <li>Mid-block crossings with raised crosswa</li> </ul>	ilks, median islands, and	l RRFB		
Elements.	enhanced stop control including advanc stop sign, signs on both sides of the roa	Raised intersection at Old County Road at Halfway House Road with enhanced stop control including advanced warning signs, oversized blinker stop sign, signs on both sides of the roadway			
		Formal bike lanes			
	<ul> <li>Speed limit change and speed radar fee automated enforcement</li> </ul>	Speed limit change and speed radar feedback signs with potential automated enforcement			
	<ul> <li>Install PROWAG/ADA sidewalk ramps as and major commercial driveways</li> </ul>	Install PROWAG/ADA sidewalk ramps and crosswalks at all road crossings and major commercial driveways			
	Implement improvements prior to Route	e 75 road diet			
	<ul> <li>Review lighting during design</li> </ul>				
	Review height/ clearance of existing over	erhead utilities during de	esign		
Permits:	CTDOT Encroachment Permit (if Town n	nanaged project)			
	Sightline Easements from Properties on	Corners			
Potential Funding:	<ul><li>Community Connectivity Grant Program</li><li>Municipal Funding</li></ul>	ı (CCGP)			



**References:** • Figures 5 thru 9 (Appendix C)

Project 5: Old County Road Traffic Calming – South (Concepts I & L)						
Project	Reduce vehicle speeds	Complexity:	Moderate			
Goals:	Deter truck/commercial traffic	Cost:	\$6M			
	<ul> <li>Improve bike/ pedestrian safety and access</li> </ul>	Time Horizon:	Long			
		Safety Benefits:	High			
		Property Impact:	Moderate			
Major Project Elements:	<b>Project</b> and Joseph Lane and on the east side of the roadway between St					
	<ul> <li>Formal bike lanes</li> </ul>	Formal bike lanes				
	<ul> <li>Roundabout at Old County Road at</li> </ul>	Roundabout at Old County Road at Old County Circle/ Village Lane				
	<ul> <li>Evaluate potential road diet or bridg sufficient width for proposed sidewa</li> </ul>					
	<ul> <li>Pedestrian signal installation should intersections during design</li> </ul>	be reviewed at the Route	20 ramp			

Permits:

- Local Permitting
- CTDOT Encroachment Permit (if Town managed project)

Potential Funding:

• Local Transportation Capital Improvement Program (LOTCIP)

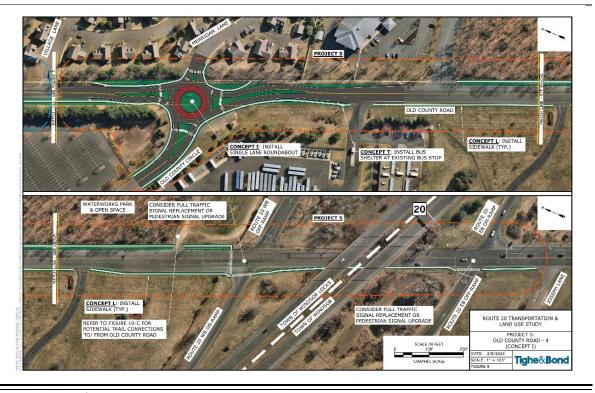
Potential roundabout(s) at Route 20 interchange pending development and

Municipal Funding

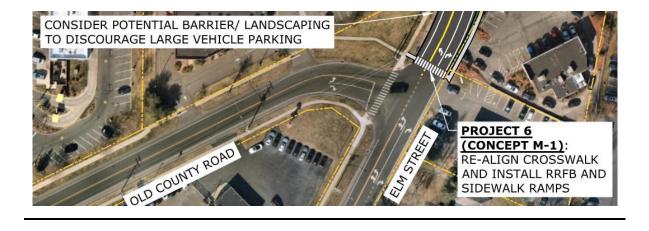
References: •

• Figures 5 & 9 (Appendix C)

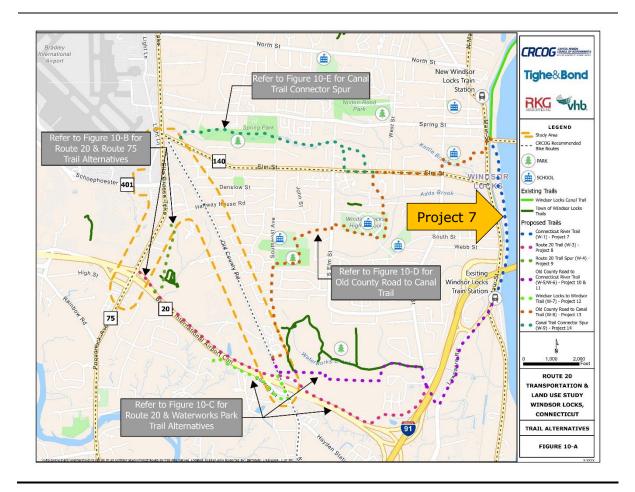
operational analysis



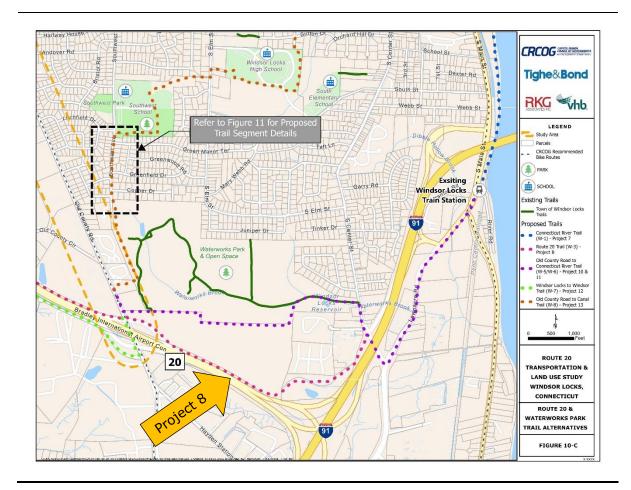
Project 6: Ole	d County Road at Route 140 Improveme	nts (Concept M-1)		
Project	Provide pedestrian access on north	Complexity:	Low	
Goals:	<ul><li>side of Route 140</li><li>Improve skewed crosswalk across</li></ul>	Cost:	\$200,000	
	Route 140	Time Horizon:	Short	
		Safety Benefits:	High	
		Property Impact:	None	
Major Project Elements:	<ul><li>Realign crosswalk across Route 140</li><li>Install RRFB at crossing</li></ul>	Install RRFB at crossing Provide barrier/ vegetation along south side of Route 140 to eliminate truck		
Permits:	<ul><li>Local Permitting</li><li>CTDOT Encroachment Permit (if Town r</li></ul>	Local Permitting CTDOT Encroachment Permit (if Town managed project)		
Potential Funding:	Community Connectivity Grant Program	n (CCGP)		
References:	• Figures 1, 2, 3, 5, & 6 (Appendix C)	Figures 1, 2, 3, 5, & 6 (Appendix C)		



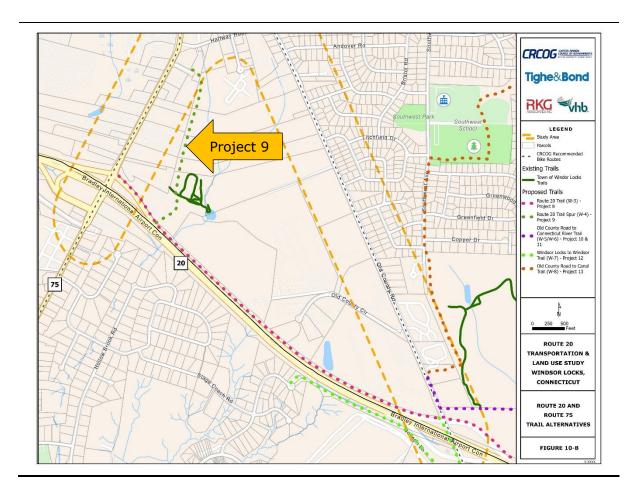
Project 7: CRCOG Proposed Connecticut River Trail (Concept W-1)				
Project	Connect existing Windsor Locks Canal	Complexity:	High	
Goals:	Trail to existing Windsor Locks Train Station	Cost:	\$1.75M	
		Time Horizon:	Medium	
		Safety Benefits:	High	
		Property Impact:	Moderate	
Major Project Elements:	between current Canal Trail terminus a station	Additional coordination with private property owners is required during		
Permits:	<ul><li>Local Wetlands</li><li>Flood Zone Permitting</li></ul>			
Potential Funding:	<ul><li>CT DEEP Recreational Trails Program</li><li>Local Transportation Capital Improven</li></ul>	nent Program (LOTCIP)		
References:	Figure 10-A (Appendix C)			



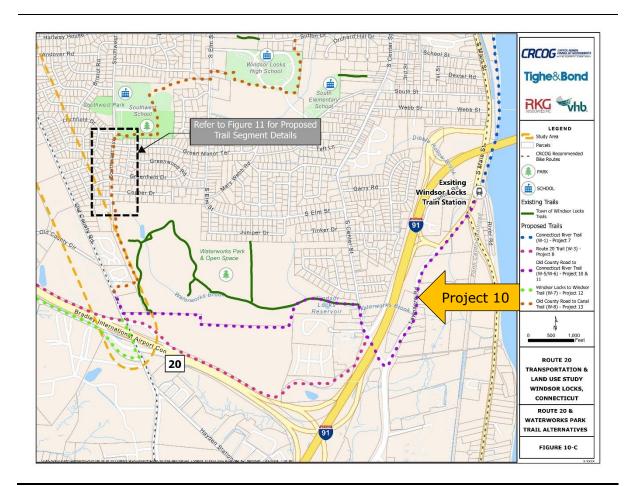
Project 8: Ro	Project 8: Route 20 Multi-Use Trail (Concept W-3)				
Project	•	Provide off-road bike facility between	Complexity:	Moderate	
Goals:		South Center Street and Route 75	Cost:	\$3.7M	
			Time Horizon:	Medium	
			Safety Benefits:	High	
			Property Impact:	Moderate	
Major Project	•	Install paved 10-foot wide multi-use trail adjacent Route 20 within the Route 20 right-of-way			
Elements:	•	Potential private property impacts should be reviewed during design			
Permits:	•	CTDOT Encroachment Permit (if Town n Local Wetlands	nanaged project)		
Potential Funding:	•	CT DEEP Recreational Trails Program Local Transportation Capital Improvement Program (LOTCIP)			
References:	•	Figure 10-A & 10-C (Appendix C)			



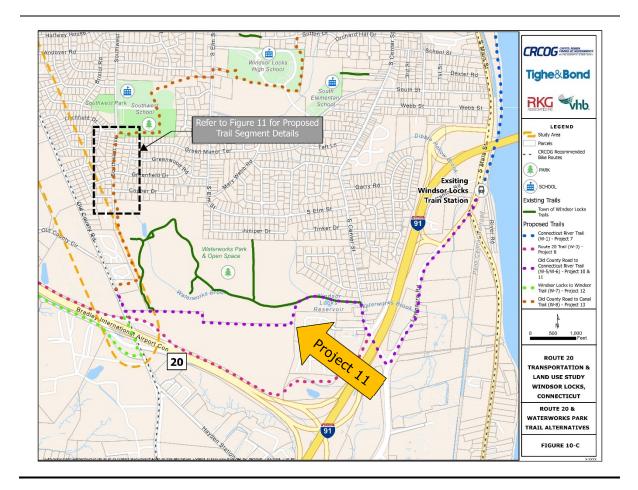
Project 9: Route 20 Alignment Trail Spur (Concept W-4)						
Project Goals:	•	records on read sine radine, seemed.	Complexity:	High		
		Route 20 and Loten Drive	Cost:	\$800,000		
			Time Horizon:	Long		
			Safety Benefits:	High		
			Property Impact:	Moderate		
Major Project	•	Install 10-foot wide paved multi-use trail between Route 20 and Loten Drive running parallel to Route 75				
Elements:	•	Environmental and private property impacts should be reviewed during design				
Permits:	•	CTDOT Encroachment Permit (if Town managed project)				
	•	Local Wetlands				
Potential	•	CT DEEP Recreational Trails Program				
Funding:	•	Local Transportation Capital Improvement Program (LOTCIP)				
References:	•	Figure 10-A & 10-B (Appendix C)				



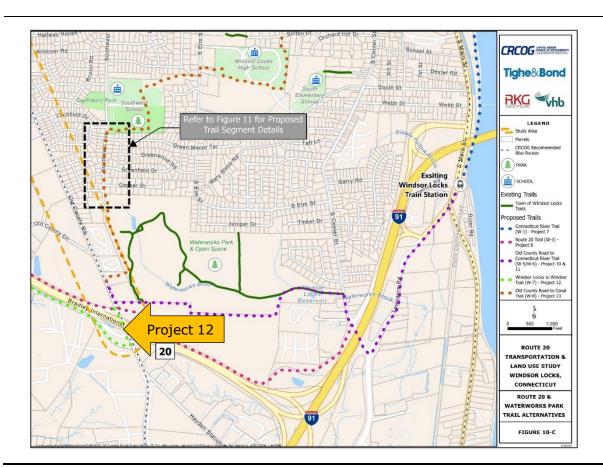
#### Project 10: Old County Road to Proposed CT River Multi-Use Trail - East Segment (Concept W-5) Provide off-road bike facility between **Complexity: Project** Moderate Goals: South Center Street and proposed Cost: \$1.5M Connecticut River Trail **Time Horizon:** Medium **Safety Benefits:** High **Property Impact:** Moderate Major Install 10-foot wide multi-use trail between South Center Street and the **Project** proposed Connecticut River Trail terminus at the existing train station **Elements:** Utilize side path adjacent roadway along South Center Street and Lawnacre Road segments Provide roadway crossings as required **Permits:** Local Wetlands **Potential** CT DEEP Recreational Trails Program **Funding:** Local Transportation Capital Improvement Program (LOTCIP) References: Figure 10-A & 10-C (Appendix C)



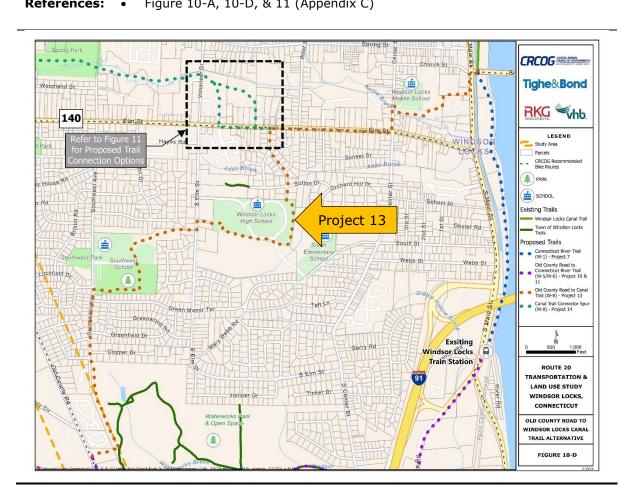
Project 11: Old County Road to Connecticut River Trail – West Segment (Concept W-6)				
Project	Provide off-road bike facility between	Complexity:	High	
Goals:	Old County Road and South Center Street	Cost:	\$2.25M	
		Time Horizon:	Long	
		Safety Benefits:	High	
		Property Impact:	Moderate	
Major Project Elements:	<ul> <li>Project should be coordinated with th development</li> </ul>	Alignment and environment impacts through Waterworks Park		
Permits:	Local Wetlands	Local Wetlands		
Potential Funding:	<ul><li>CT DEEP Recreational Trails Program</li><li>Local Transportation Capital Improver</li></ul>	nent Program (LOTCIP)		
References:	Figure 10-A & 10-C (Appendix C)			



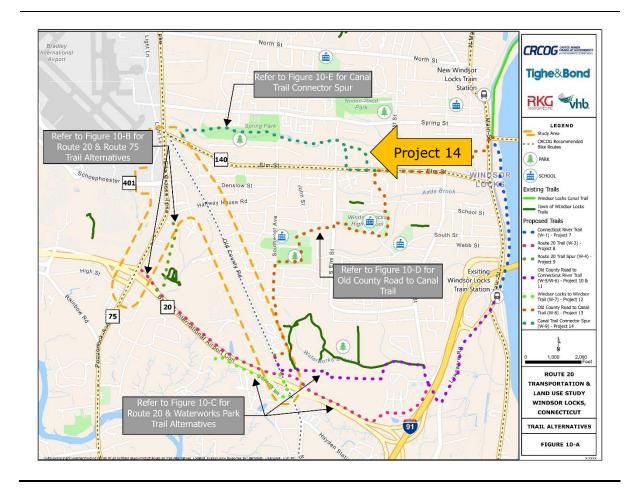
Project 12:	Windso	or Locks to Windsor Multi-Use Trail	(Concept W-7)		
Project		Provide connectivity between Windsor	Complexity:	High	
Goals:	Lo	ocks and Windsor	Cost:	\$1.25M	
			Time Horizon:	Medium	
			Safety Benefits:	High	
			Property Impact:	None	
Major Project Elements:	Si R • U K	Install 10-foot wide multi-use trail between Old County Road and Strawberry Hill Road to provide connection to River Street and Farmington River Trail to the south  Utilize existing Joseph Lane right-of-way to formalize connection between Kennedy Road and Strawberry Hill Road  Height and width restrictions under the Route 20 overpass on Old County Road should be reviewed during design			
Permits:		CTDOT Encroachment Permit (if Town managed project) Local Wetlands			
Potential Funding:		CT DEEP Recreational Trails Program Local Transportation Capital Improvement Program (LOTCIP)			
References:	• Fi	igure 10-A & 10-C (Appendix C)			



Project 13: Old County Road to Canal Trail Multi-Use Trail (Concept W-8)					
Project Goals:	•	Provide off-road bike facility to	Complexity:	High	
		improve east to west connectivity within Windsor Locks	Cost:	\$5.25M	
			Time Horizon:	Long	
			Safety Benefits:	High	
			Property Impact:	Moderate	
Major Project	•	Install 10-foot wide paved multi-use trail from Old County Road to the existing Windsor Locks Canal Trail			
Elements:	•	Utilize Waterworks Park, Southwest Park, Town-owned properties, and on- road sections to minimize right-of-way impacts			
Permits:	•	CTDOT Encroachment Permit (if Town managed project) Town Wetlands			
Potential Funding:	•	CT DEEP Recreational Trails Program  Local Transportation Capital Improvement Program (LOTCIP)			
References:	•	Figure 10-A, 10-D, & 11 (Appendix C)			



Project 14: Route 75 at Route 140 to Proposed Train Station Trail (Concept W-9)							
Project Goals:	•	Provide off-road bike facility to improve east to west connectivity within Windsor Locks	Complexity:	High			
			Cost:	\$2.5M			
			Time Horizon:	Long			
			Safety Benefits:	High			
			Property Impact:	Moderate			
Major Project Elements:	•	Install 10-foot wide paved multi-use trail Review environmental impacts in Spring Park and private property impacts during design					
Permits:	•	CTDOT Encroachment Permit (if Town managed project) Local Wetlands					
Potential Funding:	•	CT DEEP Recreational Trails Program Local Transportation Capital Improvement Program (LOTCIP)					
References:	•	Figures 10-A, 10-D, & 11 (Appendix C)					



Project 15: National Drive and Corporate Drive Improvements (Concept X)							
Project Goals:	Improve access for existing	Complexity:	High				
	<ul><li>businesses</li><li>Promote future development</li></ul>	Cost:	\$4.5M				
	Eliminate private roadway ownership	Time Horizon:	Medium				
	Improve pedestrian connectivity	Safety Benefits:	Moderate				
		Property Impact:	Moderate				
Major Project Elements: Permits:	<ul> <li>Install sidewalks, sidewalk ramps/ cross driveways</li> </ul>	Consolidate business driveways during redevelopment, when possible					
Potential Funding:	<ul><li>Municipal Funding</li><li>Partnership with Owners Association</li></ul>	, ,					
References:	<ul> <li>Figure 12 (Appendix C)</li> </ul>						



#### Illumination

Illumination along all Study Area roadways should be provided under existing standards and regulations to improve safety for all roadway users. Existing and proposed pedestrian crossings, bus stops, and bike facilities as well as high crash locations should have adequate illumination installed under the proposed improvement projects.

## **Access Management**

Access management strategies are recommended for Study Area, particularly in the commercial areas along the Route 75 corridor. Route 75 contains a high number of closely spaced driveways, which interrupt traffic flow, cause traffic safety concerns, and function as a deterrent for bike and pedestrian traffic. Recommendations have been identified throughout the improvements to consolidate access, interconnect adjacent parcels, and remove redundant driveways. The recommendations also plan access locations for potential redevelopments to address traffic and safety concerns. The concept provides the Town with recommendations to facilitate discussions with property owners as properties along the corridor are developed or redeveloped.

#### **Transit**

The Study Area is served by Connecticut Transit (CTtransit) Routes 24, 30 and 34, providing local service on Route 75 and Old County Road as well as regional connections to the airport and a park and ride. These routes provide essential services for those who live and work in Windsor Locks. While there are several bus stops located along both Route 75 and Old County Road, many lack key amenities. Recommended improvements to existing bus stops include new bus shelters at stops with no shelters, walkways between sidewalks and bus stops, hardscape waiting areas, area maps, schedules, art installations, plantings, and/ or trash receptacles at bus stops to improve the transit experience for riders.

Bus routing improvement recommendations include reducing headways during peak times, expanding weekend service where appropriate, adding a crosstown route between the Study Area and the new train station/ airport, reviewing connectivity improvements between Windsor Locks and the Hartford Express service, and considering future routing changes in coordination with current and potential future employers.

### **Land Use & Development**

The following land uses recommendations for future land uses within the Study Area were developed based on the market study during the Future Conditions market analysis:

- Residential, retail, medical, and service uses in the transition area between Route
   75 and Old County Road
- Residential uses on the Old County Road Corridor
- Warehouse, industrial, and business park uses in the areas near the airport
- Potential warehouse at 700 Old County Road parcel

In addition, it is recommended for that future developments provide sidewalk connection to the public sidewalk, include bicycle storage and amenities to promote non-vehicular travel modes, implement a Transportation Demand Management (TDM) plan to mitigate traffic impacts, and adhering to standard access management recommendations.

## **Implementation Plan**

The project priority for each recommended improvement was based on the safety need/benefit and the complexity. The priorities were broken down into short-term, mid-term, and long term with 4, 5, and 7 projects in each category, respectively. The projects ranked by priority as shown in Table ES-1.

**TABLE ES-1**Summary of Projects in Implementation Plan

Project Number	Project Description	Complexity	Project Cost	Safety Benefit	Priority
Project 4	Old County Road Traffic Calming – North	Low	\$2.2M	High	Short- Term
Project 1A	Route 75 Road Diet	Low	\$3.5M	High	Short- Term
Project 2	Route 75 at Route 20 EB Ramps Improvements	Moderate	\$800k	Moderate	Short- Term
Project 6	Old County Road at Route 140 Pedestrian Crossing	Low	\$200k	High	Short- Term
Project 5	Old County Road Traffic Calming – South	Moderate	\$6M	High	Mid-Term
Project 3	Route 75 at Route 140 Realignment	Moderate	\$2M	Moderate	Mid-Term
Project 8	Route 20 Multi-Use Trail	Moderate	\$3.7M	High	Mid-Term
Project 10	Old County Road to CT River Trail – East	Moderate	\$1.5M	High	Mid-Term
Project 15	National Drive and Corporate Drive Improvements	Moderate	\$4.5M	Moderate	Mid-Term
Project 1B	Route 75 Long-Term Vision	High	\$16 to \$20M	High	Long- Term
Project 7	CRCOG Proposed Connecticut River Trail	High	\$1.75M	High	Long- Term
Project 11	Old County Road to CT River Trail – West	High	\$2.25M	High	Long- Term
Project 13	Old County Road to Canal Trail Multi-Use Trail	High	\$5.25M	High	Long- Term
Project 14	Route 75 to Proposed Train Station Trail	High	\$2.5M	High	Long- Term
Project 12	Windsor Locks to Windsor Multi-Use Trail	High	\$1.25M	High	Long- Term
Project 9	Route 20 Alignment Trail Spur	High	\$800k	High	Long- Term

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