CHAPTER 10

Transportation

Statement of Purpose

The Capitol Region’s identity as a viable, interconnected region hinges on the quality of its transportation system. Though the major interstate highways that crisscross the region are perhaps the most recognizable and most used portion of this system, automobile travel on interstate roads is merely one of many important components. The region’s transportation system must effectively move both people and goods, using a variety of modes: street and highway, public transportation, rail, air, and active transportation (travel on foot or by bike). The improvement, integration, and accessibility of these components to all residents of the Capitol Region are essential not only to regional quality of life, but also to the region’s competitiveness in a global market.
As the Metropolitan Planning Organization (MPO) for the Capitol Region, the Capitol Region Council of Governments, helps to coordinate transportation planning in the region. As such, CRCOG is involved in several transportation innovations that have the potential to change the face of the region and to insure its continued success:

- Creation of public transportation linkages within the region and to the larger northeast megalopolis. This includes the investment in passenger rail from New Haven to Springfield with linkages to Boston, Vermont and New York City and the investment in the more localized CTfastrak, formerly known as the New Britain to Hartford Busway.
- Reconstruction of the I-84 viaduct in downtown Hartford, reclaiming space for development, reconnecting neighborhoods, and reducing the impact of the road on the community.
- Adoption of a complete streets ethic, with accommodations for all users being a routine transportation project consideration, as per Connecticut’s 2009 Complete Street Law.34
- Comprehensive analysis of transit routes in the Greater Hartford area and re-examining the 2001 Regional Transit Strategy (RTS).35
- Recognition that any success in increasing transit use is dependent upon changes in land use, creating dense nodes of development that transit can serve. The region will also continue to focus upon supporting and enabling transit-oriented development.

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34 Public Act No. 09-154, An Act Improving Bicycle and Pedestrian Access, http://1.usa.gov/1opTyRR
Current Conditions

The Gallis Report36, a high-profile study prepared for the Connecticut Regional Institute for the 21st Century warned that Connecticut was in danger of becoming a huge “cul-de-sac.” The implication of this statement is that Connecticut’s transportation system at the time was inadequate to the task of competing globally in the movement of goods, services, people, and ideas. The Gallis Report rightly identified the need for the state and the region to be linked to the global interconnected economy, and emphasized the importance of strong linkages to new trade corridors and seaboard centers. The Hartford area must connect to the trade corridors through either the New York metro area or through Albany. The nearest major seaboard centers to the Capital Region are Halifax, New York and Norfolk, with each having less than ideal freight linkage to the region. The Gallis Report also identified the importance of the I-91/Connecticut Valley corridor as an economic region with Hartford and Springfield at its center. Since publication of the Gallis Report, the regions of the I-91 Corridor, also known as the Knowledge Corridor, have come together to take a larger view of transportation needs and issues. Much of that larger view is reflected in this Plan.

In addition to the larger issues with regard to access to the global trade network raised by the Gallis Report, our transportation system has shortcomings based upon infrastructure development and internal development patterns.

In the 1980s the decision was made not to complete an interstate ring road around the region’s center. Two segments – Route 9 to the southwest and I-291 to the northeast were the only two segments ever built. While this decision eliminated the impact that such highways might have had on the suburban and rural landscape, it has resulted in the need for through traffic, both passenger car and truck, to travel through downtown Hartford to get to and from points east and north of the City. This has led to I-84 through downtown Hartford having the highest traffic volumes of any highway segment in the state. This makes it difficult for travel and leads to high levels of air pollution in the adjacent neighborhoods.

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Additionally, in the latter half of the 20th century and continuing today, development trends have favored placement of both jobs and housing in the suburbs. This makes transit service inefficient at best, and impossible at worst, leading to more reliance on the automobile and making many jobs inaccessible to individuals that most need them. And as fuel prices continue to climb, more people are finding their reliance on automobile travel to live and/or work in the suburbs has become cost prohibitive. These suburban developments have generally been designed to meet the transportation needs of motor vehicles, with pedestrians and bicyclists left to fend for themselves on roads that offer no safe accommodations for these modes. As the suburbs have developed, there has been hesitance to develop new roadways and in particular, there is little evidence of grid street systems, as are found in earlier suburban and urban developments. The failure to develop grid road systems in the developing suburbs leads to congestion on the roads that do exist, and generally makes the major arterials and collector roads difficult for bicyclists and pedestrians, who generally have no alternatives to using these inadequate roads.

At this point, our transportation system needs to be realigned with the triple bottom line goals of a sustainable region:

- **Environment**: how does the transportation system support environmental goals to reduce greenhouse emissions and to minimize impact on natural resources?
- **Economy**: does the transportation system allow for economic growth and support competitiveness of the region as a whole?
- **Equity**: does the transportation system provide equitable access to jobs and opportunities for all our region’s citizens, with a particular sensitivity to the needs of vulnerable citizens?

This section of the Plan briefly describes the strengths and weaknesses of each component of the region’s transportation system with regard to the triple bottom line and suggests long-term strategies for improvement. A complete and current report on transportation priorities and policy directions can be found in the *Capitol Region Transportation Plan: A Guide for Transportation Investments Through the Year 2040* (adopted by the CRCOG Policy Board in 2011).37

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37 [http://bit.ly/1mIK0e2](http://bit.ly/1mIK0e2)
Streets and Highways

The street and highway system is composed of local streets and collector roads that are built and maintained by municipalities, and larger arterial and freeway routes generally built and maintained with state and federal resources. The road system is easily the most prominent facet of the Capitol Region’s transportation system, with its core in the central municipalities of Hartford and East Hartford.

I-91 is a north-south route through the Connecticut River Valley that connects Hartford with Springfield, MA to the north, and New Haven to the south, with further connections to Bridgeport and New York City via I-95. I-84 runs east-west through Hartford, linking the region to Massachusetts in the northeast and to Waterbury, Danbury and New York State in the southwest. Important highways in the region also include I-384, I-291, Routes 2, 5, 9, and 15. The state routes radiate from Hartford and East Hartford to the suburbs and provide primary access in and out of the core of the region.

Because both major interstate highways run directly through the employment and population center of Hartford, peak hour congestion can be severe. Unlike many similarly sized cities, Hartford does not have a complete beltway, causing both the interstates and many of the smaller state routes to operate over capacity much of the time. Despite frequent public complaints about slow traffic and paralyzing congestion, individuals’ dependence on the automobile has been growing over time. In the 20 years from 1980 to 2000, the population of the Capitol Region increased approximately eight percent. In that same span, the number of passenger vehicles in the Capitol Region increased by 32 percent, while the highway system was not enlarged significantly.38

While we do not have comparable data for 2010 because of changes in the decennial census, there are some signs that change, though minor in scale, is on the horizon. Journey to Work data does indicate a very slight shift in use of the private auto to get to work in recent years.39 The percentage of individuals driving alone has decreased slightly from 2000 to 2010 (82.5 to 81.3 percent), but at the same time, the percent carpooling or using vanpools has decreased (9.0 to 8.4 percent). Small increases were measured in the percent using transit (2.6 to 2.8 percent40) and biking and walking to work (2.7 to 2.8 percent). Telecommuting and working from home has seen a significant increase (from 2.5 to 3.8 percent). These changes do not signal a wholesale abandonment of the automobile, but they highlight the potential for more change going forward. Moreover, recent studies, including the transit-oriented development...
A market analysis of the Knowledge Corridor, show that young adults (the millennials or echo boom generation) are less interested in driving and have more of a propensity to live in dense neighborhoods and to use transit than their parents’ generation. 41

CRCOG’s Transportation Department has undertaken a number of corridor studies to address specific local traffic problems on state routes in coordination with affected municipalities. CRCOG has concluded that increasing highway capacity is not always the appropriate solution to the automobile congestion problem. Generally large scale capacity improvements on highways are not acceptable to the public, and are extremely costly. In fact, CTfastrak was identified as the most cost effective way to deal with congestion on I-84 west of downtown Hartford.

Given the above, and understanding the interstate highway system and many bridges in the area are at or approaching the end of their useful life, the primary regional emphasis for the street and highway system must be maintenance of existing capacity and structures. To ensure that the transportation system meets upcoming national performance goals and measures, a primary objective is to sustain all facilities in a “state of good repair.” Timely maintenance and rehabilitation can provide opportunities to not only maintain traffic capacity and safety, but also to reduce lifecycle costs.

The major highway rehabilitation need in the region is the reconstruction of the I-84 viaduct as it comes through downtown Hartford. This elevated structure has reached the end of its useful life, with short-term repairs made in 2010 to keep it functional for another decade. CRCOG conducted a study of the viaduct, in cooperation with the Connecticut Department of Transportation (DOT) and the City of Hartford, to identify options to replacing the viaduct as is. Rebuild options provide an opportunity to knit together city neighborhoods that were severed by the highway and to create new ground for development in the heart of the city. This project can have far reaching impact upon the City of Hartford and the region, making the city more attractive for residents and attracting new development.

Additionally, the rebuilding of the viaduct will present an opportunity to move the Amtrak rail line, straightening out a speed reducing curvature. Given that this section of highway has the highest traffic volumes in the region (and the state), maintenance of traffic and economic opportunity during the rebuilding of this highway will be a challenge.

In addition to the reconstruction of the I-84 viaduct, the Putnam Bridge which carries Route 3 over the Connecticut River between Glastonbury and Wethersfield, is currently being rehabilitated. The project, slated for completion in 2015, will also include...
the construction of a 6-foot-wide pedestrian walkway on the bridge structure. Options for multi-use paths that link to the bridge are currently being studied by DOT and other stakeholders.

There are also a number of other freeway segments and interchanges within the region that will need improvements in the future. Specific areas needing operational improvements are identified in the Capitol Region Transportation Plan. As the region works to improve the efficiency and effectiveness of the current roadway system, there are other areas that need addressing, outlined on the following pages.

Traffic Calming and Context Sensitive Design

The street system not only moves goods and people but largely it creates the community setting through which it travels. For too many decades, this aspect of street design has been forgotten, but through federal, state and local initiatives there is now a new awareness of the importance of context when designing road modifications. Sometimes this new approach is reflected in traffic calming or road diets\(^{42}\), in other cases, it is reflected in the roadside design. Frequently, it is the neighbors of a project who can be of most help in identifying the proper context for road design.

Other Road Users

It is no longer appropriate to consider the street and highway system the province of only motorized vehicles. Bicyclists and pedestrians need safe and convenient access to many of the same destinations that motor vehicle operators travel to, and the road system will continue to be relied upon by bicyclists and pedestrians for this access. Some individuals choose to bike or walk for health, for convenience, and/or for the savings in fuel and vehicle operational costs. Others rely on these modes because they have no other options. The road system needs to provide for all potential bicyclists and pedestrians. The Regional Pedestrian and Bicycle Plan identified a very real potential for shifting travel from automobile to biking and walking, with a possible reduction in annual vehicle miles of travel by 8.8 to 17.4 million miles.\(^{43}\)

This is also a matter of safety: a recent study by CRCOG of bicycle and pedestrian crashes in the region from 1995 to 2010 has shown that while bicyclists and pedestrian crashes represented less than three percent of all crashes in the analysis period, they represented 17.3 percent of all traffic fatalities. Moreover, pedestrian and bicycle fatalities occur disproportionately on federal and state routes. With levels of biking and walking increasing in the region, it is essential that the roads be designed with these users in mind.

\(^{42}\) A road diet is a technique in transportation planning where a road is reduced in the number of travel lanes and/or effective width in order to achieve systemic improvements.

Importance of the Grid

“Grid lock” is an often used term to describe traffic congestion, but frequently the term is misused, because, in fact, there is no grid. While drivers may experience severe traffic congestion, gridlock may not be the problem. Where development is characterized by cul-de-sacs and streets that don’t connect, a single collector or arterial street will have the job of distributing all traffic to all destinations and is likely to become overloaded and very unfriendly to bicyclists and pedestrians. Where a street system is laid out in a grid, the interconnected streets provide many ways to get to a destination and enable traffic to be dispersed throughout the grid. In addition, the grid network permits more trips to be made via walking, because walking distances are reduced. Creating a grid street system in developing suburbs can alleviate roadway congestion and improve accessibility.

Public Transportation

With a growing population and a highway system that will not be increased significantly in capacity, the public transportation system offers the best potential for expansion.

With a growing population and a highway system that will not be increased significantly in capacity, the public transportation system offers the best potential for expansion. Currently, most of the region’s bus routes originate or end in Hartford, where a large percentage of the resident population do not own vehicles. Low car ownership combined with the current limits of the region’s transit system in suburban communities limit the social and economic opportunities of much of Hartford’s population.

The City of Hartford is initiating a major $25 million transit-oriented project in downtown Hartford that will complement the CTfastrak busway and rail improvements anticipated in the upcoming years. The Intermodal Triangle, an outgrowth of the City’s iQuilt project will enhance downtown circulation and the pedestrian network in the downtown area. The Intermodal Triangle will create a multimodal transportation hub at Union Station and make street improvements to Main Street and other downtown areas to enhance transit, taxi, pedestrian and bicycle connections. The project is intended to tie transit to employment and housing centers while increasing transit options.

The local bus service in the region is owned by the DOT and operated by HNS Management Company, Inc. DOT contracts with a variety of private operators for express service operated in the region. Americans with Disabilities Act (ADA) compliant transportation is provided by ADA Paratransit Service, a program of the Greater Hartford Transit District (GHTD).
Twenty-four municipalities in the region are presently served by bus transit. Fifteen of these towns have local service, which includes frequent stops and more flexible routes. Nineteen towns are served by express service, which often uses park and ride lot origin points and generally carries passengers nonstop into Hartford. In many cases the express routes now include “reverse commute” trips, enabling city residents to access jobs in the suburbs.

In much of the region, population density is not high enough to warrant more extensive bus transit service. Suburban office locations provide particular challenges to the transit system. While a single suburban location might have large number of jobs, those jobs are spread out, with access required through a sea of parking, and frequently with little pedestrian infrastructure to deliver transit users from bus stops to employment sites. With increasing gas prices, this becomes more of a problem and it is possible in the near future, that employers in these locations will have great difficulty in recruiting workers because of the increasing cost to driving to work.

Over the past several years, improvements to routes and levels of service to major employment areas (for example, the reverse commute service mentioned above, serving Buckland Hills Mall area) have been implemented through the Jobs Access program. In addition, a Locally Coordinated Human Services Transportation Plan was developed in 2007 and updated in 2010 by CRCOG with assistance from the Midstate and Central Connecticut Regional Planning Agencies to better address the needs of elderly and low income residents and persons with disabilities. 44

Currently, there are many different town Dial-a-Ride operations, with only a few towns working together to deliver this important social service. Many of the programs operate through town senior service offices.

In addition to bus routes, current transit options for Capitol Region residents include Easy Street vanpools or other carpool options. CTrides, the state’s transportation demand management provider, offers a variety of services to employers to encourage employees to try alternatives to the automobile for getting to work. The only passenger rail service in the region, operated by Amtrak, runs from New Haven through Hartford to Springfield. The route offers limited service, and thus has not been classified as a “commuter rail line” to this point. As stated previously, in the absence of highway expansion projects, public transportation must be increased.

Over the past several years, ridership on the local and express bus service in the region has increased a few percent a year, with the exception of the years at the height of the economic downturn. From 2006 to 2011, annual ridership increased by 12.5 percent and expectations are that the base ridership will continue to increase at the rate of a few percent a year in the future.

In order to focus state, federal, and intermunicipal cooperation on mass transit, CRCOG developed a Regional Transit Strategy (RTS) in 2001 to improve current bus transit and increase transportation options to the region’s residents. The RTS recommendations continue to guide the region’s efforts in improving transit service as noted below:

1. **Rapid Line Haul Service**, or fixed guideway service, is a transit mode that does not run on mixed traffic routes, and thus is not slowed by automobile congestion. The RTS recommended a system of busways, or bus only roadways and investment in the New Haven-Hartford-Springfield Rail Program to bring it up to commuter rail standards. These investments will improve transit service for those already using it, and make it feasible for others to switch from private automobile to public transportation. The RTS recommended immediate implementation of the CTfastrak and further study of three other busways – Griffin, Manchester/Vernon and Rocky Hill. Progress has been made with these recommendations: 1) the CTfastrak now under construction (see Figure 10.2 CTfastrak Service Plan Map); 2) the Manchester Busway Study completed and phased implementation recommended; 3) the Bloomfield (Griffin) Busway feasibility study completed, with recommendation to defer construction pending experience with the CTfastrak. In the meantime, a Northwest Corridor transit study was undertaken to preserve the viability of this corridor for future busway use; and 4) Commuter Rail – DOT and the Massachusetts Department of Highways are moving this interstate proposal forward, with a broader vision than just commuter rail. Commuter rail service will be provided that links New Haven, Hartford and Springfield, with new stations put in place in North Haven, Newington, West Hartford and Enfield. Additionally, this corridor will be improved to provide high speed intercity service, eventually linking New York to Boston along the inland corridor. The I-84 viaduct rehabilitation project may also create an opportunity to remove a speed limiting curve on this rail line in Hartford. There are also a couple of proposals being put forward to create an entirely new route for high speed rail from New York City to Boston, with Amtrak proposing an entirely new corridor which would travel through Danbury and Hartford, and a University of Pennsylvania idea that would send trains under the Sound, up the I-91 corridor and the I-84 corridor. CRCOG will remain involved with the evaluation of these ideas.
2. **A Downtown Circulator** is believed to be an integral part of the success of a Capitol Region transit plan. This bus system makes it easier for people to move between activity centers in Hartford, and will make for easy connections to CTfastrak and commuter rail stations. The Hartford dash, formerly the Star Shuttle, which began operating in 2005, provides free service connecting the CT Convention Center, Riverfront, Union Station, several hotels and other points of interest. The on-going study of downtown transit circulation may identify additional ways to link the downtown by modifying existing transit routes.

3. **Local Bus Service** improvements are needed to maintain the core transit service within Hartford and between major activity and employment centers (such as Buckland Hills and Bradley International Airport). Enhancements included in the RTS include more hours of service, more express routes, more timed transfer centers, and the increased use of alternative-fuel vehicles. Since the RTS was completed, CRCOG has completed additional transit studies of how to improve bus service to the Day Hill Road Corridor, to and within Enfield, to and within Manchester, and in downtown Hartford. A comprehensive system analysis will be undertaken and is expected to result in many new recommendations for improving local bus service. It is important to continually study local bus service and work with CT Transit and DOT to implement improvements.

4. **Timed Transfer Centers** are proposed at Copaco Plaza (Bloomfield), West Farms Mall (Farmington), Buckland Hills Mall (Manchester), and Wethersfield Shopping Center (Wethersfield). These centers provide opportunity to travel to more places throughout the region with greater convenience by creating a multihub bus system and help to make transit work more efficiently and effectively in suburban developments. In addition, these centers, which would consist of covered platforms with enclosed station areas, could be the focus of transit-oriented development to improve overall convenience for local passengers and the general population. Since the RTS was developed additional analysis has identified the importance of mini transit hubs at the Poquonnock park and ride lot, the Buckland Hills park and ride lot, and at Union Station in downtown Hartford.
In addition to pursuing the important recommendations of the RTS, CRCOG has made great strides in coordinating land use and transit planning. Transit-oriented development (TOD) is a popular term, but what does it mean? The simplest definition is development that takes advantage of an investment in transit infrastructure and that builds ridership for the investment. TOD can create a “virtuous” cycle – more development begets more transit riders begets more transit service begets more development and so on. Generally, TOD consists of compact, mixed use development, with high quality pedestrian and public spaces, with parking management, and with superior bicycle and pedestrian access. The baby-boomer (born between 1946 and 1965) and echo-boomer (born between 1981 and 2000) generations are both exhibiting a preference for living in walkable, mixed use neighborhoods with good access to transit.

As part of CT fasttrack planning, CRCOG developed station area planning guidance for the busway. In this project, town officials and residents along the busway were encouraged to imagine the new kinds of development that could be encouraged to take place at station areas. This project also laid out the tools and strategies that towns need to implement to allow the kind of development they want. The TOD market analysis of the Knowledge Corridor is taking this work a step further, evaluating market conditions on the ground and identifying what types of development are most likely to work in which station area, and how to encourage TOD when the time is right for new development.

There is a flip side to TOD that CRCOG has also been exploring: how difficult-to-serve suburban locations can be transformed into places that can be credibly served by transit. The Northwest Corridor Study developed a brochure that imagines how a suburban office park can be transformed into a transit service area.45

45 http://bit.ly/1mW3OKW
Figure 10.2. C\textit{fastrak} Service Plan Map

**Shuttle Service:**
- New Britain Hartford Shuttle
- Bristol Hartford Shuttle
- Stanley Limited
- UConn Health Center Limited
- Off-busway Section of Route

**Express Service:**
- Express Bus Service

**Travel times:**
- New Britain - Hartford = 20 min.
Active Transportation

The dedication of federal and state transportation funds for the development of non-vehicular facilities, such as multiuse trails to accommodate pedestrians and bicycles, is a notable trend that began with the adoption of the first multi-modal surface transportation authorization (ISTEA) in 1991. Additionally, there has been increased awareness in the past decade of the role that the transportation system plays in public health and public safety, and how the lack of safe and efficient pedestrian and bicycle facilities can disproportionately affect those with lower incomes, those with disabilities, and senior citizens and youth. A very specific benefit of bicycle and pedestrian access is providing access to and from transit stations and stops. This is often known as the “first mile/last mile” problem. Maximizing mobility options by implementing strategies that enhance these critical first and last mile links should not be overlooked.

In 2008 CRCOG approached bicycle and pedestrian planning from this new awareness and convened a group of stakeholders unified by the desire to create a walkable and bikeable region that allows for active transportation. The resulting Regional Bicycle and Pedestrian Plan represents CRCOG’s commitment to a walkable and bikeable region, where individuals can easily choose active transportation to get where they need to go. This plan addresses the five Es of bicycle and pedestrian planning – engineering, education, enforcement, encouragement and evaluation. In its engineering recommendations, it identified a regional trail system and a regional on road bicycle network (Shown on the Transportation Systems Map).

Significant progress has been made in trail development, with the Farmington Canal Heritage Trail complete from Meadow Road in Farmington, north to the Massachusetts border in Suffield. Eventually this trail will connect to New Haven on the south. The Farmington River Trail is complete from the Farmington Canal Heritage Trail terminus in Farmington through Collinsville to Route 44. This trail features an underpass under Route 4. The trail systems east of the Connecticut River provide miles of opportunity on the Vernon Rail Trail system, the Hop River Trail, and the Charter Oak Greenway. With the Hop River Trail bridge installed in Andover in the spring of 2012, it is now possible to envision the day when a bicyclist can travel from the Rhode Island border all the way to downtown Hartford, entirely on trails. Currently work is progressing to design and build the missing links in Bolton, Manchester and East Hartford. A key challenge for the region is to link the trails east and west of the Connecticut River together with a connection through Hartford, Bloomfield and Simsbury. The East Coast Greenway, a planned trail that will link Calais, Maine with Key West, Florida,
will be located on the Hop River Trail, the Charter Oak Greenway, this missing link, and the Farmington Canal Heritage Trail. Bloomfield is actively pursuing construction of its segments and Hartford and Simsbury are also making plans for this link. There are many other trails existing and planned in the region, with the major additional system located along the Connecticut River.

While trails are an essential part of the bicycle and pedestrian network, and the region has made great strides in the last five years in completing trails, they cannot serve all travel needs so a bike and pedestrian accessible road system is essential. The on-road network (shown on the Transportation Systems Map) does not show the roads that are currently suitable for bicycles, but rather, the roads that should be made suitable, so that bicyclists can easily circulate throughout the region. There is work to be done to implement this vision, however if transportation projects are viewed as opportunities to improve bicycle and pedestrian access and safety, the region will quickly make progress. CTfastrak provides a good example of this principle in action – because of a request from CRCOG during the planning phase, the busway will include a multi-use path that parallels the busway from New Britain to Newington Junction.

In 2009, the Connecticut State Legislature adopted a Complete Streets Law. This law requires that all transportation projects making use of money from the state transportation fund (which includes most federally and state funded projects) consider all users in planning, design, construction and maintenance projects. In accordance with the legislation, recommended improvements for all modes of transportation are considered in all CRCOG administered planning studies. Similarly, CRCOG’s selection criteria for transportation projects funded under the Surface Transportation Program incorporate many complete street components that enhance transit, pedestrian and bicycle mobility. Opportunities to refine the selection criteria based on enhancements to the state or U.S. DOT policies will be explored in future project solicitations, continuing CRCOG’s commitment to advance projects that support complete streets.

Pedestrian networks are also important transportation elements, providing ultimate access to the economic activity of the region. Well-planned pedestrian networks can enhance the livability of the region and its communities. Pedestrian facilities support sustainable development objectives by seeking to reduce vehicular travel and associated impacts.
Air Transportation

The Capitol Region’s “regional scale” airports include Bradley International Airport in Windsor Locks and Brainard Airport in Hartford. Bradley, identified as the “Gateway to New England”, is a primary transportation hub in the I-91/Connecticut Valley Corridor, providing commercial passenger, commuter, and freight service. An Environmental Assessment for a new passenger terminal and associated improvements was recently completed for Bradley. Brainard Airport provides corporate and private service, and is currently in the process of updating their Master Plan. The update will include sustainability principals while identifying opportunities for future development of the airport. There are also three private airports in the region, Simsbury Tri Town Airport (general aviation), and Skylark Airport in East Windsor and Ellington Airport (both public use airports). A study of Skylark Airport is currently underway which will access the benefits and costs related to municipal ownership and operation of the airport.

Air travel is becoming an increasingly critical transportation component for the region. The regional and national economies are continuing to shift from manufacturing-based to service-oriented and research and development-based industries (this is also termed the “new economy”). The commerce of the “new economy” requires sufficient airline access for people and freight. In addition, metropolitan regions that seek to expand their economy need access to emerging global markets. The Gallis Report states that metropolitan regions function as hubs in the global transportation and communications network, and regional airports are important hubs for linking transportation, logistics, and communications networks. Thus, air passenger and freight service is an important component in the region’s global transportation network.

The Bradley International Airport: Airport Master Plan presents recommendations for a phased, 20-year development program. The DOT anticipates a substantial increase in demand for passenger service during this period. The Master Plan concluded that runway space will be sufficient, but new and expanded terminals, vehicular improvements, and increased parking will be required. The flight options for the region’s passengers increased when Southwest Airlines and JetBlue Airlines added service to Bradley, and when, for several months beginning in 2007, Northwest Airlines operated daily transatlantic service to Amsterdam. (This service was suspended in 2008 because of high fuel costs). Looking forward, the Connecticut Airport Authority (CAA), formed in 2011 to oversee Connecticut’s airports, will be working to identify new flight strategies and route development to enhance overall economic development and corporate business development. Bradley is the

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46 PB Aviation, 2005, Bradley International Airport Master Plan Update.
second largest airport in New England and the busiest airport in the state, but daily flight options are limited in comparison with Boston or New York.

Improvements in bus and rail transit are expected to both improve Bradley’s accessibility from Hartford and create at Bradley a multimodal transportation hub.

The Bradley Area Transportation Study (BATS) was undertaken by CRCOG, the State of Connecticut, and the Towns of Suffield, East Granby, Windsor, and Windsor Locks to help focus on the Bradley area as a major facet of the region’s economic and transportation future. Improvements identified in the study were categorized as either “regional” or “local” based on the nature of their impacts and/or benefits. While most were classified as local improvements, four of the improvements were classified as regional in nature. The regional recommendations include a new roadway connecting the northeast area of the airport to the Route 190 bridge, the enhancement and extension of Bradley Park Road, improvements to Route 75 in the commercial area near the airport, and improvements to transit services for airport passengers and the airport area employees. These improvements are essential for the continued viability of Bradley, especially in its role as an air cargo center.

More recently, the DOT completed an Environmental Assessment / Environmental Impact Evaluation for a new passenger terminal building with concourses, a modified roadway system to access the terminal, a new parking garage and both airside and landside improvements. The new passenger terminal will replace the existing Terminal B (the Murphy Terminal) and accommodate forecasted growth in passenger activity and aircraft operations for 2028. Construction of the terminal will occur in phases, with the initial phase slated for 2018 and completion in 2028.

Transportation of Goods

A study of the growing global marketplace identified the “NAFTA Corridor” as one of the most important trade routes for the next century. This route, which extends from Nova Scotia in the northeast through Toronto and south through the Midwest toward Mexico, comes very close to the Capitol Region. Unfortunately, much of the region’s highway and rail access to this corridor is severely limited by few available Hudson River crossings. In fact, there is no rail crossing of the Hudson from Albany to New York City. This cuts Connecticut off from the major freight rail lines. In general, it is projected that the relatively modest freight capacity of the Capitol Region, and Connecticut as a whole, will lead to difficulty here competing in the global economic market.

Trucking: The ratio of truck-to-other (rail, water and pipeline) freight tonnage in Connecticut is very high at 98 percent, compared to the national average of 79 percent. In large part, this is due to limited rail freight capacity in the state and region as well as the volume of high value, low weight freight that comes in and out by air. Additionally, there is an imbalance of freight flows (more inbound freight than outbound freight) and a lack of intermodal freight transfer capacity within the region, which discourage shipping by rail. As the table below shows, there is also a high proportion of truck traffic coming through the area, as compared to freight traffic that is locally destined. Large volumes of heavy truck traffic impose a negative impact on the region and its communities. At the community level, impacts include: noise and vibration; accelerated wear to roadways; and decreased driver safety. At the regional scale, these factors impact the economic efficiency and livability of the region’s communities. The manufacturing sector remains an important component of the region’s economy, despite the decline in this sector across the state and nation. Investing in the networks to move goods may help to stabilize the manufacturing sector.

Table 10.1 Sum of Study Area Truck Volumes 2002

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<tr>
<th>Direction</th>
<th>Annual Truck Units</th>
<th>Percentage of Total Units</th>
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<td>Inbound</td>
<td>2,990,734</td>
<td>22.1%</td>
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<tr>
<td>Outbound</td>
<td>1,429,358</td>
<td>10.6%</td>
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<tr>
<td>Through</td>
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<td>40.1%</td>
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<tr>
<td>Grand Total</td>
<td>13,518,001</td>
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</table>

Source: Global Insight, Inc. Transearch 2002 Database

Rail Freight: Hartford Yard, located northeast of Union Station, is the hub of the region’s rail freight network. The region’s freight routes include: South Windsor to Enfield (Central New England Railroad), Hartford to Manchester and several interregional routes operated by Connecticut Southern Railroad. The Amtrak line from Springfield to New Haven is the primary route for moving freight by rail both into and out of the region, where it is dispersed to several shorter rail lines within the region. While this main line is an excellent physical facility, time restrictions and high fees imposed by Amtrak limit its usefulness. As a result, rail freight service in Connecticut comprises a substantially lower percentage of total goods movement than the national average, and there is a high volume of truck traffic on the region’s highways. Freight service in the region is undergoing modest expansion: a freight route from Hartford to Middletown has been made continuous, and the Griffin Line from Hartford to Bloomfield was reopened. The Connecticut Department of Transportation owns substantial, contiguous rail rights-of-way in the western and eastern sectors of the region where rail service could be initiated in the future.

In 2005, Global Insight completed a study of freight traffic for the greater Hartford/Springfield area (including the geography covered by CRCOG, the Central Connecticut Regional Planning Agency, the Midstate Regional Planning Agency, and the Pioneer Valley Planning Commission. This study noted the dominance of truck tonnage, the large volume of through freight traffic, and the imbalance between inflows (higher) and outflows of freight traffic.49

The Global Insight study noted that the region’s use of intermodal freight is about one-tenth of what might be expected based on national averages. CSX Railroad has a terminal and intermodal facility in West Springfield, MA, that is not used to capacity. If the region could take advantage of this, it might be able to divert some of the truck traffic to rail intermodal. However, diversion to this facility, or the Providence and Worcester facility in Worcester, would likely not decrease truck traffic on our roads to a great extent, since trips to and from these facilities would be made by truck, on one end or the other of any trips.

Air Freight: United Parcel Service (UPS) has a strong presence in the region; one of seven national minihubs is located at Bradley International Airport, and a ground hub in Hartford serves the entire Northeast. The demand for air cargo and mail service at Bradley has increased dramatically since 1984, and continued growth is anticipated. In 2009, Bradley was ranked 57 out of 542 in volume of passengers enplaned but 31 out of 122 in the volume of air cargo handled. The percentage of freight moved by air in Connecticut is comparable to the national average. The recommendations of the BATS are intended to help maintain the competitive advantage that Bradley International Airport has in air freight due to its good ground access.

49 Ibid.
GOALS & POLICY RECOMMENDATIONS

A. Provide a Range of Viable Transportation Options within Region

Changes in demographics over the past 20 years have led to transit carrying a smaller and smaller percentage of the region’s trips. Economic activity is shifting away from downtown Hartford to suburban centers, personal income is rising, and automobile ownership rates are growing. These changes enable and attract increasing automobile travel. Most of these changes point to increasing amounts of automobile-oriented travel – yet there are numerous environmental, land use and economic concerns about the impacts of rising auto use and new highways on the region’s quality of life. Also, increases in highway congestion may lead to economic stagnation. Because of these concerns, many citizens are seeking to reduce their dependence on the automobile. In addition, there will always be a portion of the population that depends on public transportation and active transportation to meet their mobility needs. If these modes are to remain viable transportation options for all travelers, they must respond to changing travel needs and provide mobility and accessibility competitive with the automobile.

Recent CRCOG policy decisions have favored transit investments over highway expansion to relieve congestion and to serve future transportation needs.

Policy Recommendations

1. Support the planning, design and development of the Knowledge Corridor passenger rail line (New Haven Hartford Springfield commuter rail and high speed rail proposals), as being led by Connecticut DOT.
2. Support the investigation of alternative high speed rail routes through Connecticut, working to insure that Hartford will be a scheduled stop on any such proposals.
3. Support goals and recommendations of the Regional Transit Strategy including the construction the CTfastrak system.
4. Support the planning and design of an effective link from the Knowledge Corridor rail line to Bradley International Airport.
5. Support the development of mobility hubs, providing a focus for improved transit service and for bicycle and pedestrian access. Identified mobility hubs include Union Station in downtown Hartford, the Poquonnock park and ride lot in Windsor, and the Buckland park and ride lot in Manchester.
6. Study the current bus transit system and recommend improvements and realignment to better serve today’s travel patterns.
7. Encourage telecommuting or off-peak hour commuting when practical. Examine the regional bus transit system to determine the feasibility of introducing bus rapid transit on arterial roadways.
8. Work with local and state transportation officials to assure accommodations for all users are a routine transportation project consideration, as per Connecticut’s 2009 Complete Street Law.
9. Coordinate local, regional, and state efforts to improve traffic flow in key corridors and ensure continued investment in computer-controlled traffic signal systems.
11. Work with local and state officials to develop new, dedicated bicycle and pedestrian trails and connect existing trails to form regional and interregional trails, with a particular focus upon completing the East Coast Greenway through the region.
12. Explore opportunities to further integrate bicycle access with bus service, including the provision of bike parking at transit stops and stations and enhancing “first mile” and “last mile” linkages.
13. Examine human services transportation needs and support efforts to streamline and coordinate these services, including the development of a Greater Hartford Transit District (GHTD) regional paratransit operations and maintenance facility, and the continued operation of the region’s Jobs Access program.
14. Support the implementation of intelligent transportation systems that will make timely information on transit service more widely available, enhancing the user experience and helping potential passengers to utilize transit.
15. Work with CTrides and Connecticut DOT to encourage greater implementation of transportation demand management strategies, including flexible work hours, employer provided transit benefits, telecommuting, bike commuting, and development of transportation management associations where applicable (beginning with the Day Hill Road corridor).
16. Work with the region’s towns to implement transit-oriented development. (See additional information on this topic under Goal C).
17. Work to support the historic preservation, continued operation, and improvement of the Rocky Hill-Glastonbury Ferry.
18. Continue to implement bicycle and pedestrian encouragement, education, enforcement, and evaluation programs to enhance facilities improvements.
B. Improve Interregional and Interstate Transportation

The success of the Capitol Region as a regional unit in the global marketplace hinges on the ability of businesses to easily transport people, goods, services, and information into and out of the region. In order to compete, the transportation infrastructure must be in place to facilitate this movement. This was a conclusion of the Gallis Report referenced above and was reinforced by the regional analysis and recommendations of the MetroHartford Alliance Comprehensive Economic Development Strategy (CEDS).50

Policy Recommendations

1. Support the redesign and reconstruction of the I-84 Viaduct through downtown Hartford with goals of reconnecting City neighborhoods, reclaiming developable space, and building the structure to serve the existing traffic volumes now and into the future.
2. Work with state and federal officials to improve truck transportation through the region. One component should focus upon the importance of providing alternate routes around Hartford for through truck traffic while the I-84 viaduct is rebuilt.
3. Work with local, state, and federal officials to promote a multimodal strategy for Bradley International Airport and Union Station in Hartford.
4. Support improved access and continued development of Bradley International Airport as a transportation center, an employment center, and an important economic resource. Work towards implementing the airport access recommendations of the Bradley Area Transportation Study and associated improvements identified for the new passenger facility.
5. Encourage maintenance and expansion of rail freight service through the region, recognizing that our region will likely continue to host branch freight lines, and that even with greater use of intermodal freight yards (located in Worcester and West Springfield) much of our freight will continue to be transported by truck to and from final destinations in the region.
6. Support efforts to upgrade the information infrastructure of the region to remain competitive in the new economy.
7. Support the timely rehabilitation of roads and bridges in the region that have reached the end of their useful life, and insure bridge rehabilitations include bike and pedestrian access.
8. Support improvements to Bradley Airport cargo handling facilities.
9. Work with Connecticut DOT and other stakeholders to identify options for improving freeway segments and interchange bottlenecks within the region.

C. Coordinate Land Use, Environmental and Transportation Efforts

The coordination of land use planning with transportation and environmental planning is key to supporting desirable growth patterns at both local and regional scales. Low density growth supported by automobile proliferation results in longer commutes, more traffic, and environmental degradation. A transportation or transit strategy must include land use, economic and environmental policies that improve convenience and quality of life, and also expand the housing, employment, and transportation choices available to the region’s population.

Policy Recommendations

1. Support livable communities and smart growth goals, to develop more transit supportive trip origins and destinations in the region. The Partnership for Sustainable Communities states that transit supportive development reduces commute distances, increases transit ridership, and improves economic development. 

2. Support complete streets, context sensitive solutions, and the inclusion of land use elements in transportation studies, and training and education.

3. Work with local officials to provide mixed use zoning in areas of existing or proposed transit stops and stations.

4. Encourage the use of environmentally-friendly transportation, including the addition of bicycle lanes to any new street development or street renovation, the use of alternative-fuel vehicles and the implementation of sidewalks and other pedestrian amenities.

5. Work with economic development planners to match businesses to regional and local transit centers.

6. Educate local officials, economic developers, and the public about the benefits of transit-oriented development (TOD) and transit supportive development.

7. Encourage infill development in areas close to existing or proposed transit.

8. Work with state and local officials, as well as community groups, to develop street and traffic improvements that are auto, bicycle, pedestrian, and business friendly, including investments in grid street systems.

D. Anticipate and Plan for Future Transportation Needs

As the economic and demographic makeup of the Capitol Region changes, so changes the transportation needs of the region’s population. For example, the aging of the baby-boomer generation and preferences of the millennial generation will likely result in more demand for alternatives to automobile use. Also, roadway infrastructure changes are likely to be necessary to accommodate the needs of an aging driving population. CRCOG’s Transportation Department prepares regional transportation strategies that detail current and anticipated priorities for the region’s transportation system. The current Capitol Region Transportation Plan addresses transportation concerns and investment priorities through the year 2040. These efforts are crucial to coordination and allocation of state and federal funding for various transportation and transit projects.

Policy Recommendations

1. Track regional economic and demographic trends and relate them to changes in transportation patterns and needs.

2. Encourage local officials to plan transportation projects for anticipated growth.

3. Pursue continued and increased funding sources for innovative transportation projects.

4. Support proactive policies that set priorities for future transportation patterns and systems.

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51 Partnership for Sustainable Communities, http://bit.ly/1kAa0Xx
Map 10.1. Transportation Systems

Map showing various transportation systems including:
- Airport
- CT Transit Route Service Area (quarter mile buffer)
- CTfastrok
- New Haven-Hartford-Springfield Commuter Rail Line
- Rail Lines
- Interstate Highway
- Major Highway
- Local Street
- Regional On-Road Bike Network
- Completed Bike Trail
- Bike Trail Funded/Under Construction
- Planned Bike Trail

Sources:
- CRCOG Internal GIS Database
- CT Department of Transportation
- CT Transit, TeleAtlas

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