Executive Summary

Regional Transit Strategy

A new vision for transit in the Capitol Region

Capitol Region Council of Governments
February 2001
February 2001

Dear Interested Citizen:

Enclosed with this letter is your copy of a new vision for transit service in the Capitol Region. Sponsored by the Capitol Region Council of Governments, this study takes a comprehensive look at the transportation needs and possibilities in the Hartford Region. After careful consideration of a full range of alternatives, the report recommends construction of four transitways for buses, significant new investment in commuter rail service linking Hartford with New Haven and Springfield, Massachusetts (including a new spur to Bradley International Airport), and numerous improvements to existing bus service in the region.

What’s particularly exciting to me about this Regional Transit Strategy, is that it reflects the needs and preferences of the people who live and work in the Hartford Region. Through abundant and varied outreach efforts, the study team took this project directly to people in the area to ask about their personal transportation needs, their vision for the future of the region, and what they saw as obstacles and opportunities for achieving that vision. The message we heard loud and clear was, “restore the balance!” Transportation experts, elected officials, and residents of our region all described a need to restore balance to the transportation system—to make it less dependent on automobiles, and to make public transportation more accessible, attractive and user-friendly to a greater number of people.

CRCOG used input from the community to develop a series of transportation alternatives, and to develop criteria for evaluating those alternatives. People said, among other things, there is too much congestion on our roadways, more roadway construction is NOT the answer, existing transit service doesn’t meet the needs of very many people, and we care about our environment and strengthening our hub city. The transit alternatives presented in the enclosed report are those that demonstrate the greatest probability of success, thus improving and sustaining regional economic viability, and improving regional livability.

I am looking to the future with both optimism and caution. I am optimistic about the great potential this regional vision represents. Now, we must implement the Regional Transit Strategy. To be successful, we must work hard to insure that a governance system and reliable funding dedicated to transit are put into place to enable our vision to become reality. Careful consideration should be given to the recommendations we make for governance and finance in this Regional Transit Strategy. Please share your ideas with friends, family, neighbors, and co-workers. As we forge ahead toward implementation of these plans, we will need help from business, civic and government leaders and all citizens who want to strengthen our region for the long term. I invite your questions, your comments, and your participation in the next phase of development. Please feel free to contact CRCOG to let us know your thoughts.

Yours truly,

s/Stephen T. Cassano

Stephen T. Cassano
Chairman
CRCOG Policy Board
BACKGROUND

A new vision for transit service in the Capitol Region – that is the recommendation of the recently completed Regional Transit Strategy. The vision recommends construction of several busways, roadways built for the exclusive use of buses. Upon fulfillment of this vision, buses will whisk travelers between Hartford and numerous outlying communities: New Britain, Bloomfield, Manchester, and Rocky Hill. And this service won’t be limited to the end points of the busways, but each of the following towns along the busway will have improved access: West Hartford, Newington, Wethersfield, East Hartford, Vernon, and Windsor. In addition, all communities in the region can be linked to the busway with bus routes that use the busway for part of their trip. The vision also includes commuter rail service linking New Haven, Hartford, and Springfield and will include a new connection to Bradley International Airport. And bus service improvements throughout the system will increase the mobility of all our region’s citizens. In short, the vision for regional transit in the Hartford region aims to restore the balance to the transportation system.

This executive summary describes this exciting vision for transit in the Capitol Region. The Regional Transit Strategy has been a multi year effort of the Capitol Region Council of Governments (CRCOG). CRCOG chose to undertake the project in order to answer the following questions:

- What changes are needed in our region’s transit system to meet the travel needs of the future?
- What is the proper role of fixed guideway or “rapid” transit in the region?
- Once needed changes to our transit system are identified, what is the most reasonable way to implement those changes?

The Regional Transit Strategy was funded with a grant from the Federal Transit Administration and matching funds from the Connecticut Department of Transportation, the MetroHartford Millennium and CRCOG. A consulting team, led by Parsons Brinckerhoff, carried out technical analysis for the study. Two project committees, the Planning and Stakeholders committees, met frequently throughout the study and provided invaluable guidance for the work. The Committees were comprised of local and state elected officials, local, state and federal government staff, community organizations, transit advocates, transit providers, economic development agencies, and members of the public.

This Executive Summary is organized in the following sections.

- Why improve transit?
- What transit improvements are recommended?
- How can transit and land use be coordinated?
- How can the transit improvements be implemented?

For those looking for greater detail, the full Regional Transit Strategy Report presents extensive analysis in several areas and is organized in the following Sections and Appendices:

Section 1 Introduction
Section 2 Market Trends / Transit Needs
Section 3 Transit Modes
Section 4 Project Alternatives
Section 5 Evaluation
Section 6 Land Use and Evaluation Management
Section 7 Transportation Demand Management
Section 8 Governance
Section 9 Finance
Section 10 Public Outreach
Section 11 Implementation Schedule

Technical Appendices:
- Land Use Report
- Low Capital Alternative Report
- High Capital operating and Capital Cost Report
- Financing Strategies Report
- Regional Transportation Forecasting Model Documentation
- Public Outreach Documentation
WHY IMPROVE TRANSIT?

Changes in demographics over the past twenty 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. 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. 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 to meet their basic mobility needs. If transit is to remain a viable transit option for all travelers, it must respond to changing travel needs and provide a service competitive with the automobile.

To better understand how transit needs to change, the first step in the Regional Transit Strategy was to reach out to the public and various stakeholders to find out what transit’s current role is in the community and what changes are needed in transit’s relationship to the community. Interviews were held with business leaders, social service providers, community leaders, and the public to learn about their attitudes toward transit. From those sessions, we established a set of goals for the Regional Transit Strategy which guided the remainder of the study and provided the basis for evaluation of alternatives.

Goals for our transit system:

Improve and Sustain Regional Economic Viability
- Improve access to jobs
- Alleviate congestion by reducing the use of single occupant vehicles (sovs)
- Make efficient use of existing public infrastructure by enabling denser development.
- Sustain downtown Hartford
- Support economic development

Improve Regional Livability
- Provide mobility for those unable to use an automobile
- Provide travel options
- Protect existing residential neighborhoods
- Provide a tool to reshape the urban form: reinforce the City of Hartford and encourage the reduction of sprawl.
- Improve the environment

When we asked individuals what specific changes would be needed in the transit system to cause them to use transit more often (or to begin using transit if they were not currently a patron), they pointed out these areas for improvement:
- More hours of service (earlier and later in the day)
- Greater frequency of service, so a schedule would not always be necessary
- Improved transfers between routes
- Better connections between suburbs
- Transit trip times that are more competitive with the private automobile
- Better information systems, especially for the casual user
- Cleaner operating (alternate fuel) vehicles
Currently more than 55,000 daily trips are made via transit in our region. For many of the current patrons, transit is their only means of travel. With all of the above goals and specific changes in mind, the study was also guided by the need to improve and not diminish in any way transit’s utility to current users.

The goals for the regional transit strategy and the needed transit improvements cited were distilled to three guidelines for designing transit alternatives for consideration:

- **Provide for the basic mobility of all the Region’s residents**
- **Develop innovative approaches to serve new and changing travel markets**
- **Provide high quality, competitive transit services**

The transit system which best meets these guidelines is described in the following section.

**TRANSIT SERVICE RECOMMENDATIONS**

Any transit system consists of one or more of the following four distinct elements that combine to create the transit system architecture. Those four elements are:

- Rapid line haul service
- Local feeder, distributor service
- Circulation within activity centers
- Passenger portals (bus stops, stations, transfer centers)

Currently the transit system in the Hartford region consists primarily of local feeder/distributor services the majority of which focus on downtown Hartford. Circulation within activity centers, including downtown Hartford, is provided as part of longer bus routes. Passenger portals vary from bus stops identified by a marking on a utility pole to weather protected shelters. The region has minimal rapid line haul service, limited to express bus routes, but since these operate in mixed traffic, they are not truly rapid services. The RTS proposes to improve each of these four elements, resulting in a true rapid transit system that meets our region’s needs for many years to come.

The recommendations will be described in terms of each element. Overall, it should be noted that for this proposed transit system to meet the needs of the traveling public, it must be carefully designed with special attention to customer wants and needs. It needs to be clean, and well maintained, with stations and stops that feel safe and are pleasant to use.

**Rapid Line Haul Service (Fixed Guideway Facilities)**

Five corridors are recommended for development of exclusive transit facilities (see Figure 1). Exclusive facilities (or fixed guideways) insure that transit will not be slowed by automobile and truck traffic. The improved transit travel time encourages more commuters to consider leaving their cars at home and commuting via transit. In addition, the reduced travel time for transit vehicles enables each vehicle to make more trips, reducing operating costs. In the right circumstances, fixed guideways can be a tool in encouraging sustainable economic development.
**New Britain Hartford Busway:** this facility is located in the Amtrak corridor from Hartford to Newington and then in the Newington Secondary corridor for the connection to New Britain. This facility was originally identified as a promising busway corridor in the Hartford West Major Investment Study, which was completed in 1998. This proposal is furthest along in planning, and is currently undergoing environmental review.

**Griffin Busway:** located in the Griffin rail corridor from Union Station to Bloomfield.

**Manchester Busway:** located in the freight rail corridor from Union Station to Manchester or in the Interstate 84 high occupancy vehicle lanes. Final location will be determined with further study.

**Rocky Hill Busway:** located in the Hartford/Middletown rail corridor from Union Station to Rocky Hill.

**New Haven-Hartford-Springfield Commuter Rail** service, with a connection to Bradley Field: located in the existing Amtrak corridor.

Four of the corridors will be developed as busways, which are roadways built for the exclusive use of buses. Buses operating on a busway can operate in express mode, stopping only at either end of the facility, or in local mode, stopping at each busway station. A busway provides rapid service over its length and permits a flexible operation. For example, feeder route service can circulate through a neighborhood and then get on the busway for a quick trip to downtown Hartford. Access points will be located at several points on the busways, enabling many different routes to use the facilities and broadening the reach of the facilities. This permits more patrons to have a “one-seat ride”: no need to transfer to another vehicle in order to ride on the busway. The busways will be built to allow future conversion to light rail transit if increases in passenger volumes warrant a higher capacity system.

The New Haven Hartford Springfield corridor will be developed for commuter rail service. This service will differ from the existing Amtrak service in that it will have two new stations (Enfield and North Haven) and will have more frequent service. Today’s service is so infrequent that it is not a feasible connection for most travelers. The enhanced service will provide an effective direct rail link between our region and the rail services operating out of New Haven: MetroNorth, Shoreline East and the new high speed Acela service. In effect, we will have a transit link to New York City and beyond. And those who want to get to the Capitol Region, to use our airport, to visit state offices and facilities, will have an easy connection.

**Downtown Circulator**

A downtown circulation system was evaluated as part of the RTS and proved to be integral to the success of the rapid transit facilities. Currently, the City of Hartford and The Greater Hartford Transit District are studying the specifics of a downtown circulation system, so the RTS did not attempt to define the system. But the RTS does emphasize the importance of a downtown circulator to make it easier for people to move between activity centers downtown and for transit services to integrate with the busway service.

### WHAT IS A BUSWAY?

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Figure 1

Rapid Transit Service
Fixed Guideway Recommendations
**Local Bus Service**
Even with significant investments in a fixed guideway system, the local bus service will continue to provide the fabric that ties our transit system together. Proposed enhancements to existing services include (Figure 2):

- More hours of service.
- More timed transfer centers.
- Increased service frequency to provide timed transfers at the new centers.
- Increased service frequency on express routes.
- New routes: to provide for greater suburb to suburb service, to provide circulators within activity centers where appropriate, and to provide a circumferential route in the region’s inner ring suburbs.
- Modifications to existing routes: to create more direct service, improve operating efficiency or to prevent duplication of route segments.
- Integration of alternate fueled vehicles in the transit fleet as soon as practicable.

**Passenger Portals: Transit Centers**
The RTS recommends that timed transfer centers be located throughout the region (see Figure 2):

- Copaco Plaza (Bloomfield)
- West Farms Mall (Farmington)
- Buckland Hills Mall (Manchester)
- Wethersfield Shopping Center (Wethersfield)

Transfer centers, which create a “multi hub” system, are ideal for implementation in suburban centers outside of the downtown hub. In a predominantly radial network, where downtown Hartford is the inbound end-point of most routes, a passenger who wishes to travel “across town” must first travel into the city center before transferring to another outbound radial route which serves the desired location. In addition, the frequency of service is often focused in the peak direction, which lengthens overall travel time even further. A transfer center creates the opportunity for a person to get to other bus routes more directly and more quickly. Furthermore, the transfer center encourages several routes to come together outside of downtown Hartford, resulting in improved mobility at the new hub.

In addition, transit stations will be located along each of the busways and commuter rail corridors. Stations will include covered platforms with enclosed station areas at high ridership locations. Transit oriented development is being encouraged at all stations.

The transfer centers and transit stations play an important part in the transit system operation but they also provide an opportunity for development of other uses, which can lead to making transit more attractive for patrons. When individuals travel to and from work today, their trip often has several purposes: dropping children at day care, taking care of errands, picking up dinner. For some commuters, these other needs make transit infeasible for the work trip. But if retail facilities, day care, dry cleaning establishments (and other uses) are made available at transit centers and stations, the transit trip becomes feasible. It is the intent of the RTS to encourage the development of other services at key transit centers and stations.
Figure 2

Local Bus Service Recommendations

Bradley Int’l Airport
Copaco Shop. Ctr.
Buckland Hills Mall
Hartford Circulator
Wethersfield Circulator
West Farms Mall
Wethersfield Shop Ctr.

Timed Transfer Center
Plainville / New Britain / Newington Connector
Circulator
Additional Bradley Connector
Circumferential Route
RT10: Granby / Plainville

Note: Modifications to Existing Bus Routes and TSM Improvements are Not Depicted
**Transit Land Use Connections**

In order for the proposed transit improvements to realize their full promise, they need to be fully integrated into the surrounding land use. Before the advent of the automobile, cities were largely shaped by their transit lines and routes. Today, highways and roadways tend to be a stronger determinant of land use and urban form. But one of the clear goals of the RTS (and also a factor on which the FTA judges transit investment proposals) has been to use transit as a tool to shape urban form. In examining transit and land use connections in other cities, the RTS found that transit can indeed shape development in our auto-oriented culture, but these factors have to be in place:

- **Strong development climate**
- **Supportive public policies**
- **A clear, long-term regional plan with a strong transit component and with transit supportive land use policies**
- **A strong transit agency, reliable transit service, supportive institutions, and a “transit culture”**

To better understand the land use implications of potential transit developments in the Hartford region, the RTS reviewed the potential for applying Transit Oriented Design or Development (TOD) along the corridors. TOD is not a new concept, but it has gotten significant attention in the past decade. The term refers to compact, mixed-use land development that occurs adjacent to transit stations. This type of development commonly occurred along streetcar lines in the 19th and early 20th centuries. Only with the advent of the automobile have land use patterns shifted away from the compact developments that support transit to the more auto-dependent uses common today. The RTS also examined how changes in land use patterns might affect transit ridership in the region.

To accomplish this, the RTS examined four scenarios for transit supportive development in the Hartford region.

- **Scenario 1** examined the implications of directing 25 percent of the region’s forecast population growth, and 50 percent of the region’s forecast employment growth into the five fixed guideway transit corridors.
- **Scenario 2** directed 5 percent of future population growth into downtown Hartford, and 25 percent of future employment growth into downtown Hartford.
- **Scenario 3** directed 20 percent of population and employment growth in the region into the New Britain Busway corridor.
- **Scenario 4** looked specifically at the New Britain Busway and evaluated likely growth and development based only on implementation of current transit-oriented land use policies. (i.e. no major policy changes).

Conclusions from this scenario analysis indicate that increasing employment and population in downtown Hartford (Scenario 2) will have the greatest effect on increasing transit ridership in the region. Also, it was demonstrated that increases in transit ridership on fixed route corridors would result in higher usage of feeder bus services and other local routes. Therefore, transit-oriented development in the fixed guideway corridors will have system-wide benefits. The Scenario analysis was also undertaken to determine if new land use patterns would result in transit ridership levels that warrant a higher capacity mode (like light rail transit). In fact, the analysis showed
that a busway system will still be the most cost effective mode, under each of the four scenarios. Lastly, the detailed analysis of the New Britain Busway corridor indicates that there are opportunities to improve the understanding of TODs by private developers and local leadership (public and private). As part of the RTS, workshops have been held in each of the New Britain Busway corridor towns so that officials and developers can begin planning for the opportunities for TOD provided by the busway.

A series of next steps are recommended for the greater Hartford region with respect to transit-oriented development:

- Develop a long-range strategy plan for the region which includes transit and supportive land use policies as part of an overall package of how the region wants to be defined and characterized over the next 25 years.
- Build support for transit from regional stakeholders, including community groups and business leaders.
- Engage the public and the development community in the station area and corridor planning processes from an early stage. (This is already happening with the New Britain Busway)
- Work with planners and the development community to integrate transit-oriented development into their plans and development projects.
- Embark on a public education campaign.

Future transit studies in the region, regardless of scope or size, should continue to address transit and land use connections at an early stage, including recommended actions to promote development at key station areas.

CRCOG is committed to making progress in this area. Already, studies are underway that address some of these next steps. The Transportation and Community and System Preservation (TCSP) Project conducted both a visual preference survey and a formal, statistically valid attitude survey which provide a useful gauge of the public’s knowledge of, and interest in, transit oriented and sustainable development. This project is also seeking to build support amongst stakeholders and business leaders for these concepts. Finally, the TCSP project will provide us with some sustainable development tools to link land use and transportation. CRCOG intends to build on this initial work by assisting towns in the New Britain corridor with station area planning.

**IMPLEMENTATION**

**Implementation Schedule**

In general, implementation of the bus service improvements can be undertaken more quickly than construction of the fixed facility improvements. As shown in Figure 3 on the following page, for most of the high capital investments additional multi-year studies will be required by the federal funding agencies before they can be implemented. An exception is the commuter rail service from New Haven to Hartford to Springfield. Connecticut DOT already studied the feasibility of

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**Rapid Transit Facilities Require Additional Study and Design**
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¹ EIS = Environmental Impact Statement
² The Griffin Line BRT schedule includes a three-year combined feasibility study and EIS because some environmental review work has already been completed in the corridor. The Manchester BRT includes a separate two-year feasibility study and two-year EIS.
this service, and the project is unlikely to require a lengthy federal review.

In addition to the long-term actions identified in Figure 3, the following steps should be taken in the short-term to implement the RTS:

- Connecticut Transit should examine all the recommended local bus routing and scheduling changes and develop time frames for their implementation. Coordination with the recommendations in the recently released Statewide Bus Study is important.

- CRCOG and Connecticut Transit should continue to monitor transit vehicle technology so that alternate fueled vehicles can be deployed as soon as practicable.

- Transit system information for the current system should be improved to be more user friendly, especially for the casual user.

- Transit center development should be initiated with development of two prototype centers: one of the four proposed timed transfer centers and a selected station along one of the fixed guideways. Success with these prototypes will lead to opportunities for success throughout the system.

- The Buckland Hills Mall will be developed as the first prototype timed transfer/transit center. A committee of local officials and transit officials should be convened to develop the transit center concept and to examine all bus routing in the area. Opportunities for reorientation of service, addition of new service, and rescheduling of service will be examined.

  - As busway planning and design proceeds in the New Britain corridor, the Parkville station has been selected as a prototype station for transit center development along a fixed guideway corridor. Investigation of colocation of a full range of mixed uses (day care, retail, service) at the station should be made.

### Transit Governance

Implementation of the RTS requires that an institutional structure be in place that enables and facilitates deployment of transit improvements. In reviewing how transit is governed in the region, the study determined that improvements are needed in order to make the RTS a reality. In developing a new governance system, the following goal statement guided the process:

The goal is to develop a transit governance system that maximizes the inherent advantages of the current system, addresses its shortcomings, and produces a better overall system for the Capitol Region. This governance system should:

- facilitate development of services and facilities which meet local as well as regional goals and needs
- create advocacy for transit
• create a compelling vision of a region-wide transit operation and sell that vision effectively to the traveling public
• maintain economies of scale and service coordination inherent in state operation, while at the same time allow for local input to the decision-making process.

In short, it should connect local issues to a regional operation and motivate the Capitol Region to “Put Transit First.”

The system of governance identified by the RTS that will best address this goal statement includes the following:

• Create a statewide governance structure like that in New Jersey and Rhode Island where a statewide policy board directs all state operations. This Board will initially direct those operations that are currently under state operation.
• Encourage all fixed route transit operations throughout the state to come under the state umbrella.
• Define transit market areas; create local advisory boards for each market area. Market areas will not necessarily be coincident with MPO borders or transit districts or divisions.
• Provide dedicated funding for transit. This might be a combination of existing sources and new sources. Total funding must be more than today’s funding. The sources must result in revenues that will increase with inflation and over time. They must allow for the expansion of transit services when the demand and public benefit warrant it.
• Devise a formula for funding transit operations. The formula should be based at least upon population and service levels and should hold all operations “harmless”. That is, every operation will receive at least as much funding as they receive today.
• Regions could supplement the state operations funding with local contributions at their own discretion. The State should consider authorizing new funding mechanisms other than the property tax for this purpose.

This recommendation purposefully has been kept brief and general. Specifics of who will appoint the governing bodies, what type of funding sources should be utilized, and what funding formula makes the most sense are very important considerations. But it is premature to lay out those specifics before there is general agreement with the broad concepts presented herein.

Transit Finance

With a preferred set of capital investments identified to restore balance to the regional transportation system, how the improvements can be financed becomes a critical issue. Currently, transit in the Hartford region is almost entirely funded by the State of Connecticut. It is likely that new sources will be needed to fund the transit facilities of the RTS. Thus, the study sought to identify what funding options are available to implement the RTS, specifically in terms of the examples set by other similar peer cities or regions as well as considering the existing financing capacity of the Capitol Region.

Cost of the Transit Improvements

In order to implement the RTS, $485 million of capital investment and an additional annual operating subsidy of $30 million will be required, as summarized in the table on this page.
Looking only at the fixed guideway improvements and assuming a compressed implementation (all capital expenditures occurring in year 1) and without considering the cost of financing or reserve requirements, the total annual capital and operating costs for the fixed guideway improvements will be $59.9 million ($38.5 million capital and $21.4 million operating). These costs assume a 7% discount rate and are expressed in 1999 dollars. The costs would persist for the assumed 20-year financial life of the investments, after which the capital debt would be retired and operating costs would continue.

In practice, the capital investments would be staggered, and so too the associated incremental operating costs. By stretching the implementation schedule over more than a dozen years, the annual capital cost burden for the fixed guideway improvements is reduced from a flat $38.5 million over 20 years to a more bell-shaped curve stretching over 42 years, with modest initial and final costs, and a peak annual cost of $35.3 million in year 19. Operating costs are similarly stretched out and reduced.

**TABLE 1**

RIDERSHIP PROJECTIONS AND COST ESTIMATIONS

<table>
<thead>
<tr>
<th>Transit Improvement</th>
<th>Ridership (average daily)</th>
<th>Capital Cost</th>
<th>Operating Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hartford New Britain Busway</td>
<td>14,614</td>
<td>$82 million</td>
<td>$3.67 million</td>
</tr>
<tr>
<td>Griffin Busway</td>
<td>10,244</td>
<td>$95.1 million</td>
<td>$3.322 million</td>
</tr>
<tr>
<td>Manchester Busway</td>
<td>10,321</td>
<td>$88.1 million</td>
<td>$3.25 million</td>
</tr>
<tr>
<td>Rocky Hill Busway</td>
<td>4,075</td>
<td>$101 million</td>
<td>$3.886 million</td>
</tr>
<tr>
<td>New Haven/ Hartford/ Springfield Commuter Rail</td>
<td>5,122</td>
<td>$41.5 million</td>
<td>$7.287 million</td>
</tr>
<tr>
<td>Low Capital Improvements*</td>
<td>18,434</td>
<td>$44 million</td>
<td>$9.8 million</td>
</tr>
<tr>
<td>Downtown Circulator</td>
<td>Not available</td>
<td>$33 million</td>
<td>Not available</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td><strong>484.7 million</strong></td>
<td><strong>31.215 million</strong></td>
</tr>
</tbody>
</table>

* The low capital improvements include the local bus system improvements and the development of four timed transfer centers.
Finance Options

It should be noted that both business leaders and representatives of the state legislature advised that the RTS not identify a single specific funding source, but rather identify a range of options from which the state decision makers can select a financing package. This direction was based on the desire to keep transit funding primarily at the state level to insure coordination between transit systems in the state. Of necessity, the finance options depend, to some extent on the governance system which, as noted in the previous section is recommended to stay at the state level. However, the governance recommendation does note the potential need for state authorization of new local funding mechanisms to allow for local supplementation of state funding.

In comparing the demographic and economic trends of the Capitol Region to peer regions we find, in general, a healthy economy with personal income well above the average. These trends suggest that a sufficient tax base will exist to support additional revenues for financing public infrastructure investments such as the RTS.

The analysis of the tax burden of the Capitol Region identified a number of taxes in the Capitol Region that are underutilized. The Capitol Region has among the lowest rates for personal income, combined state and local sales and use, and corporate income taxes as well as a below average rental car tax rate among those regions that have this tax. Furthermore, the state has one of the highest levels of personal income per capita. These findings suggest an increase in one of the current taxes or the implementation of a new tax is possible. The table on the following three pages summarizes all of the financing mechanisms examined as part of the RTS. Highway tolls or user fees are not included in this table, primarily because the income from these charges would be expected to be used for highway related expenditures. They might play an important role, however, in freeing up other transportation funds, currently spent on highways, to be used for transit purposes.

CONCLUSIONS

The Regional Transit Strategy was undertaken to guide improvements and expansions of the region’s transit services, to determine the role of fixed guideway improvements in the transit system, and to develop recommendations for funding and management of the transit system. The recommendations described in this report, ranging from the improvement and expansion of existing bus services to the development of five new fixed-guideway transit corridors, will lay the foundation for future transit improvement in the Hartford region. Implementation of this strategy will be the first step to creating a balanced transportation system that provides transportation choices, reduces the dependence on automobile travel, promotes sustainable development and provides for a higher quality of life for all citizens of the Capitol Region.

1 The corporate income tax has decreased over the last several years because of concerns about having a competitive business climate in the region. Because of this history, it is unlikely that increases to this tax would be considered.
## Table 2
### Menu of Financing Options

<table>
<thead>
<tr>
<th>Option</th>
<th>Use of Funds (Capital vs. Operations)</th>
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<th>Administrative/ Institutional Effort</th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Grants/Appropriations/ Apportionments</strong></td>
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</tr>
<tr>
<td>Federal Funds</td>
<td>Capital</td>
<td>+ Some current appropriations could be used for capital investments. Capitol region may need to come up with a 20% match.</td>
<td>– Capitol region must compete with other state transportation needs as Connecticut has its own funding formula for federal funds. Funding levels beyond current authorization period may fluctuate.</td>
<td>– Funds cannot be used for operating costs.</td>
<td>+ Arrangements already established.</td>
<td>&gt; $10 Million</td>
<td>+ The ease of administration and revenue potential are selling points of this option. More federal funds could be “flexed” from highway projects to transit projects such as RTS.</td>
</tr>
<tr>
<td>(State) Special Appropriations/General Fund Transfers</td>
<td>Capital and Operations</td>
<td>– Capitol region must compete with a variety of both transportation and non-transportation needs in the state.</td>
<td>– RTS must compete with many other state programs.</td>
<td>– Would require legislative action.</td>
<td>+ Arrangements already established.</td>
<td>&lt; 1$ Million</td>
<td>– Not likely to generate significant revenue and there is a large number of competing interests.</td>
</tr>
<tr>
<td><strong>Debt Financing</strong></td>
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</tr>
<tr>
<td>Bonds</td>
<td>Mainly Capital</td>
<td>– Capitol region would need to find funds to pay back any new bonds.</td>
<td>– The state of Connecticut leads the nation in state tax supported debt per capita.</td>
<td>– The state of Connecticut can issue bonds.</td>
<td>+ Arrangement is already in place.</td>
<td>&gt; $10 Million</td>
<td>– State debt is significant and revenue to pay back debt needs to be identified.</td>
</tr>
<tr>
<td><strong>Public-Private Sources</strong></td>
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</tr>
<tr>
<td>Special Assessment Districts/Tax Increment Financing</td>
<td>Mainly Capital</td>
<td>+ None</td>
<td>– Need to gain private sector support.</td>
<td>– A public sponsor would need to be identified to lead effort to develop partnerships. Legality will depend to some degree on who is the public sponsor (e.g., CRCOG does not have authority to establish benefit districts).</td>
<td>– Need to establish collection mechanism depending on geographic boundaries.</td>
<td>$1-$10 Million</td>
<td>– A public sponsor would need to be identified as well as a private partner.</td>
</tr>
<tr>
<td>Option</td>
<td>Use of Funds (Capital vs. Operations)</td>
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<tr>
<td><strong>Enhanced or New Taxes</strong></td>
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<td></td>
</tr>
<tr>
<td>Income Tax</td>
<td>Capital and Operations</td>
<td>+ Income tax rate is fairly low compared to peer regions. Even a small increase in the income tax could generate significant revenues.</td>
<td>+ In general, state has been reducing taxes, but the state has a fairly low income tax rate particularly in comparison to other similar regions. However, there is not a direct link to transportation.</td>
<td>– Change in the income tax would require legislation action.</td>
<td>+ Arrangement is already in place. An increase would likely need to be a statewide increase, so revenue would need to be distributed on a statewide basis.</td>
<td>$10 Million (1% increase may yield $222 Million in region)</td>
<td>+ Income tax revenues could be used for both capital and operating costs. Tax is fairly underutilized.</td>
</tr>
<tr>
<td>Real Property Tax</td>
<td>Capital and Operations</td>
<td>– This revenue source is heavily utilized by local municipalities in Connecticut.</td>
<td>– Property tax is collected at the local level, thus an increase would require the support of a number of communities. Hartford has a high property tax rate in comparison to its peers. In addition, there is not a direct link to transportation.</td>
<td>+ Local towns are able to collect property tax.</td>
<td>+ Arrangement is already in place, but revenues collected by local towns would need to be redistributed to a project sponsor.</td>
<td>$1–$10 Million</td>
<td>– Tax is already well-utilized.</td>
</tr>
<tr>
<td>Personal Property Tax (Motor Vehicle Excise Tax)</td>
<td>Capital and Operations</td>
<td>– Connecticut already has a fairly high personal property tax rate in comparison to the peer regions.</td>
<td>– An increase may not supported since the state already has an above average rate.</td>
<td>– Change in the personal property tax would require legislation action</td>
<td>+ Arrangement is already in place.</td>
<td>$1–$10 Million</td>
<td>– Tax is already well-utilized.</td>
</tr>
<tr>
<td>Motor Vehicle Registration Fees</td>
<td>Capital and Operations</td>
<td>+ Connecticut collects an average amount in vehicle registration fees relative to its peer regions.</td>
<td>– Neighboring state (Rhode Island) has a lower rate, so an increase may drive residents to register out-of-state.</td>
<td>– Change in the fees would require legislation action</td>
<td>+ Arrangement is already in place.</td>
<td>$1–$10 Million ($1 increase may yield $220,000 in the region)*</td>
<td>+ Potentially underutilized source.</td>
</tr>
</tbody>
</table>

*Yields were calculated by KPMG using separate analysis. Yield values shown are representative only.
## Table 2 (cont’d)
### Menu of Financing Options

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</thead>
<tbody>
<tr>
<td>State and Local Sales Tax</td>
<td>Capital and Operations</td>
<td>+ The sales tax is fairly low compared to peer regions. In addition, even a small increase in the sales tax could generate significant revenues.</td>
<td>- Legislation has recently approved an increase in the clothing tax exemption and a week-long sales tax exemption on clothing. Sale tax is not directly tied to transportation.</td>
<td>- Change in the sales tax would require legislation.</td>
<td>+ Collection mechanism is already in place at the state level, but would require legislative action to implement at local level.</td>
<td>&gt; $10 Million</td>
<td>+ Sales tax is somewhat underutilized, but recent legislative actions do not support increase (i.e., increase in clothing tax exemption and a week-long sales tax exemption).</td>
</tr>
<tr>
<td>Motor Fuel Tax</td>
<td>Capital and Operations</td>
<td>- One of the highest among the peer regions.</td>
<td>- Legislation has recently adopted reductions in fuel tax.</td>
<td>- Change in the fuel tax would require legislation.</td>
<td>+ Arrangements already established.</td>
<td>$1-$10 Million (0.01 increase may yield $3.3 Million in the region)</td>
<td>- Tax is already well utilized, and legislature recently approved reductions.</td>
</tr>
<tr>
<td>State Corporate Income Tax</td>
<td>Capital and Operations</td>
<td>+ Slightly below average among the peer regions.</td>
<td>- Legislation has recently adopted reductions in corporate income tax.</td>
<td>- Change in the corporate income tax would require legislation.</td>
<td>+ Arrangements already established.</td>
<td>$1- $10 Million</td>
<td>- Legislation recently approved reductions.</td>
</tr>
<tr>
<td>Hotel Room Tax</td>
<td>Capital and Operations</td>
<td>- One of the highest among the peer regions.</td>
<td>- Given the rate is high, it may be difficult to gain acceptance from hotel industry.</td>
<td>- Change in the hotel tax would require legislation.</td>
<td>+ Arrangements already established.</td>
<td>&gt;$1 Million</td>
<td>- Tax is already well-utilized.</td>
</tr>
<tr>
<td>Rental Car Tax</td>
<td>Capital and Operations</td>
<td>+ Second lowest among the peer regions that have a rental car tax.</td>
<td>+ Tax is directed more towards visitors, so it may be easier to gain public acceptance.</td>
<td>- Change in the tax would require legislation.</td>
<td>+ Arrangements already established.</td>
<td>&gt; $ 10 Million (5% increase may yield $2.5 Million in region)</td>
<td>+ Potentially underutilized source.</td>
</tr>
<tr>
<td>Replacement Tire Tax</td>
<td>Capital and Operations</td>
<td>+ Currently no tire tax in CT, but tax would not need to be great (e.g., 50 cents per tire) to generate moderate revenue.</td>
<td>- Would require reinstatement from Legislature (as tax was repealed in 1997).</td>
<td>- Implementation would required legislative action.</td>
<td>- Arrangements would need to be reinstated.</td>
<td>$1-$10 Million</td>
<td>+ Source that would provide moderate revenue based on a minor tax rate.</td>
</tr>
</tbody>
</table>

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</tr>
</thead>
<tbody>
<tr>
<td>Vehicle Privilege Tax</td>
<td>Capital and Operations</td>
<td>– Currently no such tax and this flat tax would need to be significant to generate considerable revenue.</td>
<td>– Would require acceptance from Legislature and general public.</td>
<td>– Implementation would require legislative action.</td>
<td>– No collection mechanism in place.</td>
<td>$1-$10 Million ($25 per car may yield $10.8 Million in region) *</td>
<td>– May be difficult to sell to public as fee might be considered a user fee.</td>
</tr>
<tr>
<td>Parking Receipt Tax</td>
<td>Capital and Operations</td>
<td>– Currently no such tax and this tax would need to be significant to generate considerable revenue.</td>
<td>– Would require acceptance from Legislature and general public.</td>
<td>– Implementation would require legislative action.</td>
<td>– No collection mechanism in place</td>
<td>$1-$10 Million (10% tax may yield $2.2 Million in region) *</td>
<td>– May be difficult to sell to businesses in downtown areas. In addition, downtown areas might be penalized unless tax is levied regionally.</td>
</tr>
<tr>
<td>Surface Parking Surcharge</td>
<td>Capital and Operations</td>
<td>– Currently no such tax and this tax would need to be significant to generate considerable revenue.</td>
<td>– Would require acceptance from Legislature and general public.</td>
<td>– Implementation would require legislative action.</td>
<td>– No collection mechanism in place</td>
<td>$1-$10 Million ($1 per day may yield $2.9 Million in region) *</td>
<td>– May be difficult to sell to businesses in downtown areas. In addition, downtown areas might be penalized unless tax is levied regionally.</td>
</tr>
<tr>
<td>Payroll, Occupation Privilege or Head Tax</td>
<td>Capital and Operations</td>
<td>+ Currently no tax, but tax rate would not need to be great (e.g., $1.00 per employee) to generate significant revenue.</td>
<td>– Would require acceptance from Legislature and general public.</td>
<td>– Implementation would required legislative action.</td>
<td>– Arrangements not yet established.</td>
<td>&gt;$10 Million (0.5% may yield $73 Million in region) *</td>
<td>+ New source that could provide significant revenue based on a minor tax rate.</td>
</tr>
<tr>
<td>Admissions or Gross Receipts Tax</td>
<td>Capital and Operations</td>
<td>+ Current tax structure generates a significant amount of revenue. Modifying the tax to be levied on gross receipts could result in greater revenue.</td>
<td>– Would require acceptance from Legislature and general public.</td>
<td>– Implementation would required legislative action.</td>
<td>+ Arrangements already established, but would need to be modified.</td>
<td>$1-$10 Million</td>
<td>– Potential for revenue is great if modified to be based on gross receipts. Not directly related to transportation.</td>
</tr>
</tbody>
</table>

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