



**Worcester
Municipal
Research
Bureau**

AN INDEPENDENT VOICE FOR RESPONSIBLE GOVERNMENT

WORCESTER'S TRANSPORTATION PROJECTS: AN UPDATE

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EXECUTIVE SUMMARY

After reviewing the status of Worcester's major transportation projects, the Research Bureau makes the following observations:

- The Route 146 Connector between the new MassPike Interchange in Millbury and I-290 in Worcester begun in 1995, will not be completed until late 2005 or early 2006.
- Worcester Regional Airport currently has nine flights per day to three destinations. By April 2001, there will be eleven daily flights to four destinations. That is still fewer than when the airport was at the peak of its enplanements in 1988 and there were fifteen daily flights to five destinations.
- Governor Cellucci recently announced that commuter rail service between Worcester and Boston will be increased from seven to ten trains a day by May, 2001. The final environmental impact report of 1997 promised the implementation of the new schedule when the Grafton Station opened which occurred almost a year ago. It should also be noted that the expanded service is still geared largely toward inbound commuters and does not accommodate "reverse" commuters.

These observations indicate the need for Worcester area community leaders, both public officials and business leaders, to closely monitor these projects to ensure their successful completion in an expeditious manner.

I. Introduction

There are currently three major transportation projects being developed and expanded in the City of Worcester that could have a major impact on the City's ability to attract new development, expand existing businesses, and improve the quality of life for residents of the region. Those projects are: the Route 146 Connector between the MassPike and I-290, expansion of airline service at Worcester Regional Airport, and expansion of commuter rail service between Worcester and Boston.

The Route 146 Connector will result in significant improvements to the regional traffic network. There will be improved access to Worcester and the Blackstone

Valley Region, which should enhance their attractiveness for both residential and commercial investment. In fact, this has already occurred in the Blackstone Valley. Since the completion of the MassPike interchange, property values have risen from 15% to 50% for industrial and business zoned properties in the Blackstone Valley while home values have increased by 10%. On the Worcester segment, a number of land parcels will become accessible for development. It will also result in a re-routing of regional traffic, including heavy truck traffic, away from local streets, making Worcester's neighborhoods more attractive.

The economic impact of Worcester Regional Airport is also significant for this region. According to a 1999 Massachusetts Aeronautics Commission study on "The Economic Impact of Public-Use Airports in Massachusetts," Worcester Airport generated \$30 million in economic benefits to Worcester County in 1998 when 76,000 passengers used the airport. At 1988 peak levels, Worcester Airport handled 360,000 passengers and contributed \$100 million in economic benefits. If Worcester Airport captured one-third (or 800,000 passengers) of its market potential (based on the number of ticket sales in this region), it would produce more than \$200 million in economic benefits.

The benefits of expanded commuter rail service to the Worcester area are clear. First, it gives Worcester residents access to an expanded range of job opportunities in the Boston area while allowing them to take advantage of the lower cost of housing in the Worcester area.¹ Second, those living east of Worcester would be able to use commuter rail to get to the many jobs available in the Worcester area. Third, with commuters better able to leave their cars at home, pollution and traffic congestion along the MassPike and highways feeding into it would be reduced. Finally, the chances of successfully developing market-rate housing downtown, long considered essential to the revitalization of Worcester's central core, would be improved.

The purpose of this report is to provide an update on the status of those projects.

¹ According to a MassInc-Heinz Foundation study conducted in 1999, "The Road Ahead: Emerging Threats to Workers, Families & the Massachusetts Economy," a major reason for the exodus of highly skilled workers from Massachusetts is the high cost of living in the Boston area.

II. Summary of Route 146/I-90 Project

The \$290 million Route 146/MassPike Interchange project will relocate and widen about four miles of Route 146 from Route 122A in Milbury to Route I-290 in Worcester. Construction was started in 1995 and is expected to be completed in late 2005 or early 2006. It is one of the largest roadway projects in Massachusetts, along with the Central Artery/Ted Williams Tunnel and Route 3 North projects. The project is divided into 10 major construction segments and several smaller landscaping and railroad agreement contracts. Of the major contracts, nine segments are to be funded and constructed by MassHighway. One segment was funded and constructed by the Massachusetts Turnpike Authority (MTA).

The Route 146 project will upgrade the existing two-lane, unlimited access roadway segment to a four-lane, divided, limited access highway. It also involves the reconstruction of a segment of Route 20, grade separation of local streets and Route 146 at Hurley and Kane Squares, and completion of the newly constructed interchange between the MassPike, Route 146 and Route 20. A bikeway will be constructed utilizing local streets on the northern segment of the project and running along the Blackstone River on an independent path along the southern segment of the project. The project entails the acquisition of approximately 105 housing units and 56 business properties. It includes a gateway and parkway, and water quality enhancement areas. MassHighway has worked closely with Worcester and Millbury to lessen the adverse community impact, by including landscaping, a canoe launch, bicycle paths and recreational access.

- Major Construction Segments:

(The accompanying map identifies the components of the project.)

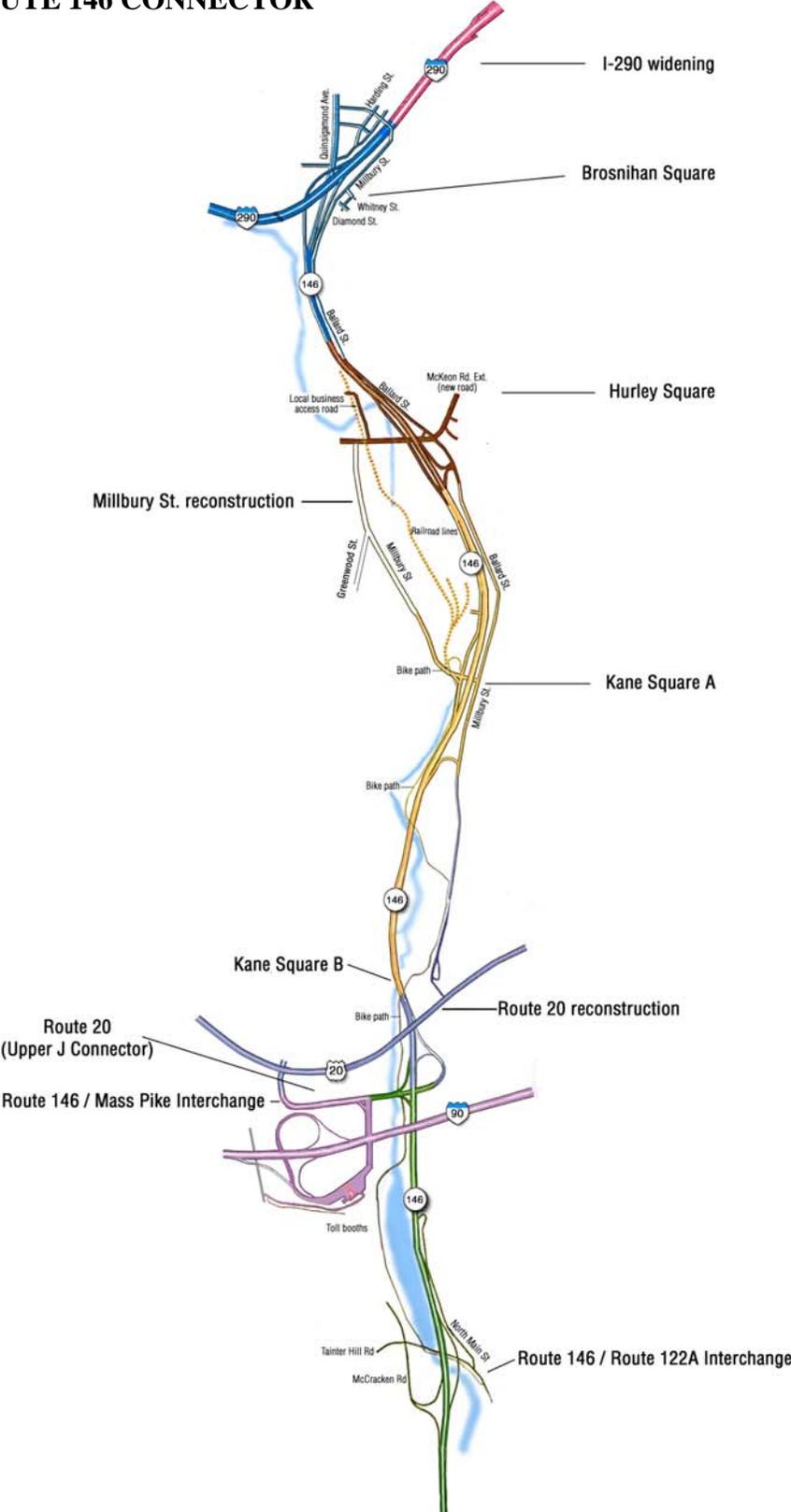
Interstate Route 290 Widening (\$5.6 Million):

This project included the reconstruction of the section of Interstate Route 290 from Vernon Street to Brosnihan Square. Also included in this project were the modification of two bridges and two walls, the total reconstruction of a third wall, and the widening of I-290 from three lanes to five on the westbound side. The work began in 1995 and was completed in September of 1997.

Route 146/MassPike Interchange (\$33 Million):

This segment connects the new Route 146 with the MassPike. It was funded and constructed by the MTA. The new interchange accommodates traffic movement

ROUTE 146 CONNECTOR



from the Turnpike to Worcester and the Blackstone Valley through to Providence, RI. The project scope included the construction of approximately 1.25 miles of roadway, 4 bridges, a toll plaza, and park-and-ride facilities. Work began in 1996, and the project was opened to traffic on October 22, 1998. The project was completed in summer, 1999.

Route 20 (Upper J) Connector/Temporary Route 20 (\$22.9 Million):

This segment of the project includes the construction of a connector roadway that will accommodate vehicular movement between the new turnpike interchange, reconstructed Route 20, and the new Route 146. Construction of the "J" Connector is critical to traffic management for the Route 20 construction because it will serve as a detour roadway for Route 20 traffic during the scheduled reconstruction. The scope of this project includes the construction of over 1 mile of new permanent and temporary roadways, including the excavation of 1/2 million cubic yards of earth and rock and the construction of 2 bridges and a portion of a new rail yard. This segment of the project also includes changes required for the Providence and Worcester Railroad operations.

Roads Corporation began this project in the spring of 1997. The project was opened to traffic on October 22, 1998, in conjunction with the opening of the MassPike interchange, providing a connection between the MassPike, Route 146 and Route 20. The project is approximately 98% complete. The remaining work involves the installation of the final pavement surface on the off-ramp from Route 146 Southbound to the Connector roadway. This work will be completed in spring 2001.

Kane Square "B"/Blackstone River Area (\$12.7 Million):

This segment of the project extends the new Route 146 north from Route 20 to the Kane Square area of Worcester along the Blackstone River. It involves the construction of approximately 1/2 mile of new four-lane divided highway and 2 major bridges over the Blackstone River and adjacent wetland areas. The roadway and associated landscaping areas in this segment will cap a major deposit of slag left behind by the major steel/wire manufacturing industry previously operated in this part of Worcester. This is the only segment of Route 146 that will be constructed significantly off of the existing Route 146 alignment. The contract was advertised in August 1997. Roads Corporation began work in June of 1998. The project is 99% complete.

Route 146/Route 122A Interchange (\$31.7 Million):

This segment creates a grade-separated interchange between the new Route 146 and Route 122A in Millbury. The new interchange will be a combination diamond and cloverleaf configuration that will accommodate traffic movements between Millbury Center via Route 122A, the new Route 146, the Turnpike, and downtown Worcester. This contract will include construction of over a mile of the new Route 146, approximately 1 mile of new local roadways, 1 mile of bike path, 11 bridges, and major areas of landscaping/gateway treatments.

The contract was advertised for construction in September, 1997. Roads Corporation began work in July of 1998. The project is 72% complete. It is expected to be completed in November, 2001.

Kane Square "A"/Ballard Street (\$28.5 Million):

This segment of the project includes the construction of an interchange between the new Route 146 and local streets in the Kane Square area of Worcester, and the construction of almost a mile of the new Route 146 roadway and 2 bridges at the northern terminus of the proposed or planned bicycle path at Millbury Street in Worcester. It also includes the construction or reconstruction of approximately 1-1/2 miles of local streets, including allowances for the bikeway, reconstruction of an existing rail spur, and construction of a new railroad bridge over the Blackstone River to provide continued rail access to existing development in the area.

The contract was advertised in March, 1998, and awarded to The Middlesex Corp. in December, 1998. Work began in April, 1999. The work is approximately 55% complete. It is expected to be completed in November, 2001.

Route 20 Reconstruction (\$20.5 Million):

The reconstruction of Route 20 will include the construction of a 1-mile section of a new four-lane divided highway, a new partial interchange between Millbury Street (the old Route 146) and Route 20, and the completion of the Route 146/Route 20/MassPike interchange. It will also include a mile of new bike path, 2 bridges, and a portion of a new rail yard, and the reconstruction of approximately 3/4 of a mile of Millbury Street (the old Route 146) in Worcester.

The Route 20 reconstruction will be completed under three contracts. The first contract consists of the construction of a new access road for the Upper Blackstone Treatment Plant. Cullinan Engineering is finalizing the design plans for this work. The second contract is for the demolition of the existing Route 20 bridge

structures. This contract was advertised in September, 2000. The bids were opened in December, 2000, with MRP Site Development submitting the apparent low bid of \$1 million. The third contract involves the construction of the new Route 20 bridge as well as roadway sections of Route 20 and Route 146. DeLeuw Cather and Steinman is preparing the final design documents. This project is expected to be advertised in early 2001. The project is expected to be completed 2-1/2 years after construction commences.

Hurley Square (\$33 Million):

This segment of the project includes approximately 3/4 of a mile of the new Route 146 roadway adjacent to the Vernon Hill neighborhood in Worcester; an interchange between the new Route 146 and the local street network; the construction or reconstruction of approximately 1-1/2 miles of City streets; and construction of 3 highway bridges and a new pedestrian bridge over Route 146 linking the Vernon Hill and Quinsigamond Village neighborhoods, and providing access to the Blackstone Valley Heritage Corridor Visitor Center. As part of this project, the Millbrook conduit will be extended to alleviate flooding in the Green Island area of the City. The design consultant for this segment is Greenman-Pederson, Inc. The design is currently under review. The project is expected to be advertised in the late fall of 2001. The project is expected to be completed two years after construction commences.

The project team is currently studying the hazardous materials in the ground in that area. Design may have to be revised depending on findings. The team has encountered, in other segments of the project, more hazardous materials from the former U.S. Steel site than was anticipated based on the environmental reports. Some materials were cleaned on-site; others had to be removed and cleaned. The hazardous materials have extended the time for completion and increased the cost of these parts of the project.

Brosnihan Square (\$50 Million):

This segment is the most complex element of the project. It includes the reconstruction of the existing Route I-290/Route 146/Quinsigamond Avenue interchange as well as the reconstruction of over 1/2 mile of existing Route I-290 roadway, over 1 mile of the new Route 146 and associated ramps, and over a mile of new City streets. It also includes the construction of 7 bridges and major wall structures. All of this work will be done while maintaining traffic operations on Route I-290, the adjacent City streets, Route 146, and within the existing Brosnihan Square interchange.

The design consultant for this segment is a joint venture of HDR/Volmer Associates. The 75% design is underway. It is expected that it will be advertised for bidding in late 2002 or early 2003. The project is expected to be completed three years after construction commences.

Millbury Street Reconstruction (\$525,000):

This segment includes the reconstruction of over 1/2 mile of Millbury Street through both an industrial section of Worcester, south of Greenwood Street, and the historic Quinsigamond Village, north of Greenwood Street. The construction will include sidewalks along with resurfacing and roadway reconstruction. Traffic signals will be installed at the Millbury/Greenwood Street intersection. MassHighway is designing the project in-house. The project is at the 100% design stage. The project will be constructed after the Kane A and Hurley Square projects are completed to ensure that the reconstructed intersection is not affected by the work associated with those projects. The project is expected to be completed one year after construction commences.

Route 146 Landscaping (Grow & Install) Contracts (\$6 Million):

MassHighway is proceeding with three separate contracts for extensive planting and landscaping work along the Route 146 corridor. The three contracts are in the area of the Route 122A interchange, Kane Square A area, and Kane Square B area. The project is currently 5% complete. The landscaping work is expected to be completed in 2003.

SUMMARY OF ROUTE 146 CONNECTOR CONSTRUCTION

SEGMENT	COST (Millions)	DATE OF COMPLETION
Interstate Route 290 Widening	5.6	September, 1997
Route 146/MassPike Interchange	33.0	Summer, 1999
Route 20 (Upper J) Connector/Temporary Route 20	22.9	Spring, 2001
Kane Square "B"/Blackstone River Area	12.7	2001
Route 146/Route 122A Interchange	31.7	November, 2001
Kane Square "A"/Ballard Street	28.5	November, 2001
Route 20 Reconstruction	20.5	2 1/2 years after construction commences
Hurley Square	33.0	2 years after construction commences
Brosnihan Square	50.0	3 years after construction commences
Millbury Street Reconstruction	0.525	1 year after construction commences
Route 146 Landscaping (Grow and Install) Contracts	6.0	2003
TOTAL	244.4	Early 2006

III. Summary of Activity at Worcester Regional Airport

Massport took over operation of Worcester Airport on January 15, 2000, under an agreement aimed at reviving the underutilized facility and reducing the burden on Logan Airport. The Worcester Regional Airport market includes nearly one million people who generate approximately 2 million trips per year. In 1999, the airport served fewer than 50,000 passengers - less than three percent of the region's demand for air service. In 2000, the total passenger count will have more than doubled to 106,145. Currently, there are 9 departures a day (10 as of February, 2001 and 11 as of April, 2001) vs. 5 departures one year ago. It is the first time in 8 years that Worcester Regional Airport has been served by 3 (and soon 4) airlines.

- **Airport Operations:**

Since Massport took over operations, two major airlines, Delta/ASA and American Eagle, have started new service to Atlanta and New York, respectively. Currently travelers have three choices: Delta/ASA serves Worcester with twice-daily non-stop jet service to Atlanta; American Eagle operates three daily round-trip flights to JFK on a 34-seat Saab 340b turboprop aircraft; US Airways Express flies four daily round-trips to Philadelphia. Pan Am will begin daily flights to Orlando/Sanford in February, and Delta will offer an additional flight to Atlanta starting in April.

- **Construction Projects:**

Runway 15-33:

Total project cost is \$5.5 million, 90% Federal and 10% State-funded. The purpose of this project is to rebuild the shorter runway, install safety areas at the ends of the runway, install new lighting and improve drainage. The project began in early April, 2000 and anticipated completion is Spring, 2001.

Jet Way Rehabilitation:

Total project cost is \$216,150, 100% funded by Massachusetts Aeronautics Commission. This project was completed recently and resulted in two completely rebuilt passenger loading bridges for the airport.

Parking Lot Rehabilitation:

Estimated project cost is \$400,000 funded 100% by the City of Worcester. This project will rehabilitate the parking lot at the east end of the terminal building,

which will result in 230 additional parking spaces. The project also includes installation of a pay-on-foot automated system, which will allow passengers to pay for their parking at a machine inside the terminal, and receive a ticket which they can insert into a gate arm, upon exiting the airport. This system will be available in both the main parking lot and the soon-to-be rehabilitated lot. Massport has designed the project, developed the bid documents, and will oversee the construction. It is expected to be completed in Spring, 2001.

Headwall Project:

Estimated project cost is \$300,000, funded by Passenger Facility Charges (PFCs). This project will replace a storm drain system at the airport so as to slow the rate of water draining into a reservoir near the airport. This will help to improve water quality by reducing silt and turbidity in the water flowing to the reservoir. This project is expected to be completed in late Summer, 2001.

- Restaurant/Other Concessions:

Massport has developed an RFP for food and beverage/news and gift service at the airport which will be published by the City of Worcester shortly. Other concession opportunities at the airport will include in-terminal advertising and development of a Hotel and Travel phone board. These should be operational within six months.

- Master Plan and 5-Year Capital Improvement Plan:

This year Massport and the City of Worcester plan to select a consultant to update the airport Master Plan. The plan will include the development of forecasts of passenger demand and aircraft operations, assessment of the existing facilities in relation to projected demand, and recommendations on any additional facilities required to accommodate forecasted demand. The process will consider specific site selection alternatives for improvements such as a new Aircraft Rescue Fire Fighting/Security building and a consolidated facility to accommodate rental car parking and servicing. During the process, land-use requirements and alternatives for airport-owned land will be reviewed.

- Category II/Category III Feasibility Analysis:

Consultant selection will soon begin to conduct a feasibility study and preliminary design for a Category II or Category III Instrument Landing System (ILS). Runway 11-29 is equipped with two Category I ILSs at each end of the runway which allow aircraft to land when the ceiling (height of the lowest layer of clouds above the

earth's surface) is at or above 200 feet and visibility is reported at or above 1,800 feet.

A Category II ILS, which allows commercial carriers to land when the visibility is as low as 1,200 feet, would be highly desirable to reduce the number of flight cancellations and diversions due to poor weather conditions. In order for the FAA to fund the installation of a Category II ILS, however, an airport must meet a number of qualifications. These include 2,500 air carrier instrument approaches annually for three consecutive fiscal years. In 2000, Worcester had 881 ILS landings. Many cargo carriers which ship time-sensitive packages will not consider using an airfield that does not have a Category II ILS. (A Category III ILS allows commercial carriers to land when visibility is zero.)

It is expected that this study will review all relevant factors including topography and airspace, frequency of poor weather conditions, potential users of such systems, and make recommendations on the feasibility and methods for improving the ILS. The current FAA regulations regarding the number of instrument approaches needed to qualify for an upgraded ILS system does not take account of the New England region's need for a regional airport system that can accommodate increased demand for air travel and provide a more balanced distribution of passenger demand throughout the region.

- Marketing Initiatives:

New Airline Service:

Massport is working with SH&E, an international aviation consultant, to develop a marketing program to airlines in an effort to recruit new service. Massport has already met with jetBlue, US Airways Express, Shuttle America, American Airlines/American Eagle and Delta as part of its recruitment effort.

Meetings that will be scheduled include Continental, ATA and America West. The primary goal is to attract additional jet service to unserved and existing hubs, i.e., Chicago (American & United), New York (American & jetBlue), Cincinnati (Delta & Comair), Pittsburgh (USAirways), Cleveland (Continental), and Phoenix (America West).

An equally important goal is to attract additional service to Origin and Destination (O&D) markets from Worcester, i.e., Washington D.C., Detroit, and a number of cities in Florida. Carriers such as ATA, Spirit and Pan Am, all of which have

scheduled service as well as charter operations, could accommodate this type of service.

Massport is also strongly encouraging charter and tour operators at Logan to consider using one or all of the regional airports in New England. Worcester can accommodate some operators flying to a number of domestic destinations such as markets in Florida. Worcester will not serve international destinations such as Europe, Asia, or Latin America, since these flights would require customs and immigration services as well as improvements to the physical plant.

Consumer Marketing:

In May, 2000, Massport launched a \$150,000 advertising campaign. To market Worcester Airport. This campaign followed a \$40,000 campaign started in January, 2000. The campaign goals were twofold: to increase awareness of Worcester Regional Airport within a 50-mile radius of Worcester and to encourage travelers to “*Fly Worcester - It's Convenient!*” The campaign included print, radio, billboard and cinema advertising. Radio and print ads ran May-June; cinema ran 12 weeks (May 15-August 7); and the billboard along the MassPike ran June through September.

Worcester Regional Airport was part of Massport's Regional Airport advertising campaign, which was launched in July. This \$70,000 campaign gave Worcester exposure in four major markets - central Massachusetts, greater Boston, "North Shore" and business periodicals. These formats featured all four regional airports.

Massport budgeted \$240,000 for Regional Airport advertising during FY01. The New England Governors Transportation Summit held in December provided priorities and guidance from which Massport will develop the next phase of this campaign. Worcester Regional Airport will gain additional exposure and support from this Regional Airport effort.

To support the new ASA/Delta jet service to Atlanta, Massport held a press conference, sponsored an Open House at the Airport for travel trade professionals, placed print ads in the *Worcester Telegram & Gazette*, *Atlanta Business Chronicle* and *Atlanta Constitution*, and participated in a sales mission to Atlanta.

To support the new American Eagle Service to JFK, Massport held a press conference, generated stories in local media, sponsored an open house for the travel trade, and included the American Eagle service in the print ad copy (which was part of the \$150,000 launch campaign).

On August 25, 2000 ownership of the *flyworchester.com* domain name was transferred from the City to Massport. The new home page is linked to the Worcester Airport pages of the *Massport.com* site. The *flyworchester.com* home page reflects Massport's operator-owner relationship with the City and provides a number of links to travel and weather, tourism, City, Convention Bureau and other useful sites.

A \$300,000 advertising budget to market Worcester Airport was approved by Massport for FY01. In addition, Massport has budgeted an additional \$50,000 shared between Massport (45%) and the City (55%) for sales and marketing. The FY01 campaign will build on the theme of "*Fly Worcester - It's Convenient!*" It will run throughout the year. Massport launched this in November for peak travel periods.

Massport continues to hold quarterly meetings with representatives of organizations in the greater Worcester area that have a strong interest in promoting the airport. This group includes City of Worcester, Worcester Regional Chamber of Commerce, Massachusetts Aeronautics Commission, Worcester Regional Airport Commission, Worcester County Convention & Visitors Bureau, Colleges of Worcester Consortium, Inc., *Worcester Telegram & Gazette*, and UMass Health Care Consortium.

- Problems Confronting Worcester Regional Airport:

In 1993, the Research Bureau issued a report discussing the future of Worcester Regional Airport (#93-2) that identified several problems that prevented the airport from capturing a greater share of the potential demand for air service in the Worcester area. Among the most serious problems were the unreliability of scheduled flights due to weather conditions, the higher price of tickets from Worcester Regional Airport compared with other area airports to the same destinations, and the lack of flights.

Unreliability of Flights Due to Weather Conditions:

Since the Research Bureau's 1993 report, a second category ILS was installed at the other end of Runway 11-29 which improves the ability of planes to land during storms and high winds. In addition, a surface movement guidance control system (SMGCS) has been installed which allows planes to take off when the ceiling is as low as 600 feet. Since November 1, 2000, the start of severe weather conditions, Worcester Regional Airport has been closed only part of one day. The consultant

who has been retained is expected to document the change in reliability that has occurred since the installation of this technology.

Higher Price of Tickets:

In its 1993 report, the Research Bureau documented the higher price of tickets from Worcester compared to the surrounding regional airports in order to reach the same destinations. The report noted that airlines seem to have two fundamental operating strategies, one for small, non-competitive markets and the other for larger, competitive markets. In the competitive markets, they compete vigorously, matching fares and promoting their service. In small, isolated markets where there is no other carrier, they seem to price their service as a monopoly operation. Airlines apparently use the “small market” strategy at Worcester Airport. This strategy in all probability hurts the load factors in Worcester. Since Worcester is not an isolated market, but is actually competing with Logan, Bradley, Manchester, and Green, the “small market” strategy does not seem justifiable.

The most recent monthly sample published the first Sunday of each month in the *Telegram & Gazette* indicates that the price of tickets from Worcester is still higher; in fact it is the highest to each of the destinations listed when compared with fares from other area airports. However, this has not been the case in previous months. During this last year, the fare between Worcester and Atlanta has generally been lower than the fare to Atlanta from the other regional airports. And frequently, the fares from Worcester to other cities like Orlando are lower than they are from Manchester.

**FARE WATCH
JANUARY 31 - FEBRUARY 4, 2001**

TO: FROM:	SAN FRANCISCO	DENVER	CHICAGO	ATLANTA	ORLANDO
Worcester	\$484.00	\$527.00	\$251.00	\$207.50	\$237.00
Boston	\$298.00	\$289.50	\$209.50	\$171.50	\$109.50
Providence	\$226.50	\$393.00	\$215.50	\$204.50	\$109.50
Manchester	\$226.50	\$393.00	\$200.00	\$204.50	\$120.00
Hartford	\$341.50	\$389.00	\$206.50	\$161.50	\$106.50

Source: Telegram & Gazette
Prepared by: Worcester Municipal Research Bureau

Lack of Flights:

In its 1993 report, when Worcester Airport had fourteen daily departures on four airlines, the Research Bureau commented on the impact of an insufficient number of flights and destinations. “If a flight is cancelled,...a passenger may have to wait

hours or even overnight for the next flight to the same destination... The lack of options discourages people from using Worcester Airport, especially if their schedules are unable to accommodate long delays.” Even with the recent announcements of additional service at Worcester Airport, there will be only 11 daily departures as of April. Therefore, the problems attendant an insufficient number of flights to relatively few destinations remain. In order to compensate for the small numbers of flights, Massport is focusing its strategy on securing services to hubs like Atlanta, New York and Chicago in order to maximize passenger options once reaching the hub as well as maximizing the likelihood of the passenger reaching his ultimate destination in the event of a flight cancellation from Worcester.

IV. Summary of Commuter Rail Service

- Train Service:

Commuter rail service was reinstated in Worcester in 1994² with five trains a day serving inbound commuters to Boston. According to an MBTA audit in February, 2000, those trains served an estimated 917 inbound commuters per day. In February, after the opening of the Grafton Station, the service was expanded to seven trains per day. An MBTA audit in June, 2000, indicated that the seven trains were serving an estimated 855 inbound passengers from Worcester and 505 from Grafton, for a total of 1360 commuters. That represents an increase of 47% in four months. Worcester’s ridership is more than double the numbers projected by the final environmental impact report issued by the Executive Office of Environmental Affairs in 1997. This report had projected that by 2000, daily weekday ridership at the Worcester station would reach 414 passengers. The report also promised that "by mid-1997 with the Grafton Station in operation, the train schedule will be increased to provide the proposed Basic Service consisting of ten operations in each direction per day." Although the Grafton Station opened almost one year ago, the service has not increased to ten trains per day. This situation is about to change. Governor Cellucci announced that as of January 22, one early morning commuter train will be added. It will leave South Station at 4:55 a.m., arriving in Worcester at 6:13 a.m., leave Worcester at 6:27 a.m. and arrive back in South Station at 7:47 a.m. Two additional round trip trains will be added in May: an afternoon rush-hour trip and a mid-evening trip.

² Commuter rail service between Boston and Worcester was discontinued in 1975.

The delay in expanding service has been attributed to the lack of rolling stock (passenger cars and engines) and the need to complete the interim stations in Westboro, Southboro and Ashland. (Construction of the interim stations began in December 2000 and will be completed by the end of 2001.) In its report on commuter rail issued in January 2000 (#00-1), the Research Bureau suggested that Worcester and adjacent communities commission an analysis to assess the feasibility of reallocating underutilized rolling stock from other commuter rail lines. (According to the MBTA audit of June 8, 2000, the line between Porter Square and Fitchburg, which is served by ten inbound trains to Boston, had a total of 4,401 passengers with 284 boarding in Fitchburg compared to 855 boarding in Worcester and a total of 8,413 on the line between Worcester and South Station.) The MBTA has conducted this analysis and determined that it could move more rolling stock to Worcester. The new cars that will be delivered to the MBTA in November will be able to be used elsewhere in the system. It should be noted, however, that the promised expanded service is still geared largely toward inbound Boston commuters. The earliest trains arriving from Boston to Worcester will leave South Station at 4:55 a.m., arriving at 6:13 a.m., and 9:00 a.m. arriving in Worcester at 10:15 a.m. The only trains leaving Worcester after the morning commute are at 2:07 p.m. and 11:35 p.m. This schedule makes it impossible for “reverse” commuters, those people living east of Worcester to commute to Worcester by commuter rail for employment in Worcester. City officials and the state legislative delegation should continue to request additional service to accommodate the reverse commute.

COMMUTER RAIL SCHEDULE

**MONDAY THROUGH FRIDAY
CURRENT INTERIM SERVICE**

INBOUND	552	*	556	558	562	564	566	586
<i>Read Down</i>	AM	AM	AM	AM	AM	AM	PM	PM
Depart Worcester	6:12	6:27	6:42	7:12	7:42	10:35	2:07	11:35
Arrive South Station	7:20	7:47	8:05	8:20	8:58	11:55	3:18	12:46
OUTBOUND	*	559	565	571	575	577	579	585
<i>Read Down</i>	AM	AM	PM	PM	PM	PM	PM	PM
Depart South Station	4:55	9:00	12:05	4:55	5:30	6:05	7:15	10:05
Arrive Worcester	6:13	10:14	1:23	6:03	6:52	7:13	8:37	11:22

*Service Added 1/22/01

Source: Mass Bay Transportation Authority

Prepared by: Worcester Municipal Research Bureau

- **Parking Facilities for Commuter Rail Passengers:**

Worcester currently has 435 spaces available for commuter rail passengers. (Fifty of those spaces are owned by local businesses which have agreed to allow passengers to use them during the day, and about 100 more are rented out by other owners such as Our Lady of Mount Carmel Church and the Common Outlet garages.) When compared with other stations on the Framingham line, Worcester has substantially more parking available to its commuters (one space for every 2 passengers, in comparison to one for every 14.8 riders at the Framingham Station).

PARKING AVAILABILITY			
STATION	DAILY INBOUND RIDERSHIP	PARKING SPACES	RATIO OF PARKING SPACES TO RIDERS
Worcester	855	435	1 for every 2.0
Grafton	505	271	1 for every 1.9
Framingham	1790	121	1 for every 14.8
W. Natick	1192	163	1 for every 7.3
Natick	929	71	1 for every 13.1
Wellesley Sq.	809	260	1 for every 3.1
Wellesley Hills	527	50	1 for every 10.5
Wellesley Farms	510	135	1 for every 3.8
Auburndale	353	35	1 for every 10.1
W. Newton	381	45	1 for every 8.5
Newtonville	515	0	NA
Back Bay	NA	0	NA
South Station	NA	0	NA

Source: MBTA Audit, June 8, 2000 and City of Worcester Traffic Engineering Department
 Prepared by: Worcester Municipal Research Bureau

The City's Off-Street Parking Board has control over municipal parking spaces. The Board charges \$1.00 per day per car, which is used by the Board to renovate and improve lots. In addition, the Worcester Redevelopment Authority has a commitment of \$5 million from the state to build a 500-space parking facility. Those funds will be supplemented by \$3 million from the Federal government. The site for this facility has not yet been determined.

Given the growing passenger demand for commuter rail service, the City should decide on a site for the garage and construct it as soon as possible. The garage should also be able to accommodate other uses in the Union Station area.

- Amtrak Station:

Amtrak has committed to moving into Union Station by the end of February, 2001. The cost of relocation, creation of a baggage area, and modifications to the ticket area of \$25,000 will be paid by the State and Federal governments. Amtrak will pay its share of operating costs at Union Station but will not pay rent. The State's Executive Office of Transportation and Construction is negotiating with Amtrak to purchase its ticket station near Union Station off Shrewsbury Street. Amtrak currently offers daily service to New York and Washington at 9:44 a.m. and to Chicago at 2:41 p.m.

City officials and the Worcester area legislative delegation should join with Boston area officials in pursuing additional Amtrak service.

Upcoming Research Bureau Events

Tuesday, February 27, 2001

State of the City's Finances

7:45 – 9:15 a.m., La Maison Française, Assumption College

Speakers:

Stephen P. Crosby, Secretary, Executive Office of Administration and Finance,
Commonwealth of Massachusetts

James DelSignore, City Auditor, City of Worcester

John Prankevicius, Budget Director, City of Worcester

Moderator:

Agnes E. Kull, Executive Vice President, Green, Rosenblatt, Kull & Bitsoli,
President, Worcester Municipal Research Bureau

Tuesday, March 27, 2001

The Status of Worcester's Transportation Projects

7:45 – 9:15 a.m., Location To Be Determined

Speakers:

Matthew Amorello, Commissioner, Mass Highway

Eric Waldron, Director, Worcester Regional Airport

Representative of MBTA

*For reservations and more information, please contact: Worcester Municipal
Research Bureau, 500 Salisbury Street, Worcester, MA 01609, 508/799-7169.*