

# BINGHAMTON METROPOLITAN TRANSPORTATION STUDY

## ANNUAL PERFORMANCE REVIEW OF *TRANSPORTATION TOMORROW:2025*

The current long range regional transportation plan for the Binghamton metropolitan area is *TRANSPORTATION TOMORROW:2025*, adopted by the BMTS Policy Committee in March 2000. In order to make sure that this plan has its expected impact on transportation investment decisions, the Policy Committee in the 2001-2002 Unified Planning Work Program directed BMTS Central Staff to complete an annual performance review. This review will help maintain the validity and credibility of the plan until the five-year update cycle provides the opportunity for a full reevaluation.

*TRANSPORTATION TOMORROW:2025* included both planning and programming objectives. For example, high priority metropolitan corridors were identified for immediate further study; and goals were set for improvement in pavement and bridge sufficiency. This evaluation will focus on both aspects. The Goals and Objectives portion of the plan is reproduced here, and accomplishments through the end of 2001 are enumerated.

*"The statements of goals and objectives reflect the priorities of the Binghamton Metropolitan Transportation Study Policy Committee and their understanding of the community's goals as elicited through public outreach activities.*

### SYSTEM PRESERVATION AND MAINTENANCE

Maintaining and preserving the metropolitan transportation system is among the highest priorities of the Binghamton Metropolitan Transportation Study. This priority reflects the enormous investment that has been made over the years in highways and streets, bridges, transit systems, and other transportation facilities. It also reflects the understanding that it is difficult to provide properly for personal and freight mobility and safety with a system whose infrastructure is deficient.

**GOAL:** It is the goal of the BMTS to invest sufficient resources to maintain pavements, bridges, transit system fleets and facilities, and related transportation system infrastructure in a state of good repair; and to invest in proven, cost-effective preventive maintenance techniques that lengthen the useful life of this infrastructure.

#### OBJECTIVES:

- To achieve within ten years pavement sufficiency of no more than 10% poor for arterial highways and streets, and 25% poor for collector streets.
- To reduce the number of deficient bridges by 10% within the first ten years of the program, and to maintain that level thereafter.
- To replace all buses exceeding the useful life as defined by the Federal Transit Administration within the current five-year program and to retain transit fleets at that level.

- To fund preventive maintenance of pavements, bridges, and buses when such techniques are demonstrated to reduce the overall life-cycle cost.

## PLAN ACCOMPLISHMENTS THROUGH 2001

The majority of the projects in the current 2002-2006 BMTS Transportation Improvement Program invest in maintaining the transportation system in a state of good repair. The cost of some projects must be allocated among multiple purposes; for example, an arterial reconstruction project is primarily system preservation, but there may be some capacity elements like intersection improvements, and some safety elements. Nonetheless, the allocated costs present a reasonably accurate picture.

In the 2002-2006 TIP, just over 75% of total Federal aid is being invested in system preservation activities. This includes \$28 million in Surface Transportation Program funds, primarily for arterial reconstruction projects; nearly \$15 million in Interstate Maintenance funds for pavement reconstruction; and over \$17 million in HBRR funds for bridge rehabilitation and replacement projects.

In that period, Federal aid will be used to rehabilitate 12 bridges and to replace 6 others. New York State funds will be used for one bridge rehabilitation, and for preventive maintenance painting of 2 major Susquehanna River bridges.

There are 6 major arterial reconstruction projects. Two segments of I-81 will also be reconstructed. There are 5 simplified or preventive maintenance paving projects funded with either Federal aid or the NYS Dedicated Fund program.

Broome County's bus fleets for both fixed route and paratransit service are currently all within FTA standards.

## PERSONAL MOBILITY

Another priority of the BMTS is to enhance personal mobility. In selecting investments to accomplish this goal, there is an explicit recognition that mobility involves access to many modes of travel, allowing the traveler to plan a trip based on travel time, cost, and personal choice.

**GOAL:** It is the goal of the BMTS to improve personal mobility within the metropolitan area by enhancing each mode of travel, including automobile, shared ride, public transit and paratransit, bicycle, and pedestrian; and the linkages between them.

### OBJECTIVES:

- To invest, within the full horizon of this plan, in High Priority Metropolitan Corridors ensuring that travel by all modes within these corridors is addressed as appropriate. These corridors are:
  - NY Route 434 and Vestal Road
  - NY Route 17C
  - Access to the Binghamton Regional Airport
  - Access to the City of Binghamton Central Business District

- To invest, within the full horizon of this plan and as resources permit, in other metropolitan corridors, ensuring that travel by all modes within these corridors is addressed as appropriate. These corridors are:
  - Front Street (Route 11/Route 12)
  - NY Route 96
  - Hooper Road, including a new Susquehanna River crossing connecting Endwell to the Town of Vestal.
- To provide for additional public transit service within the initial five years of this plan through increased service frequency and hours of service, and interconnectivity between Broome and Tioga Counties.
- To invest in an intermodal transit terminal in Binghamton.
- To provide resources for the completion of the implementation of the BMTS Pedestrian and Bicycle Plan.
- To ensure proper consideration of and investment in “intelligent transportation system” (ITS) technology to enhance personal mobility.

<b>PLAN ACCOMPLISHMENTS THROUGH 2001</b>
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➤ High Priority Metropolitan Corridors:

The **Vestal Corridor Study** is well underway, being conducted by a consultant under contract to NYSDOT. BMTS has been a participant throughout, from scoping the study to ensure that it was responsive to the needs identified in *TRANSPORTATION TOMORROW:2025*, to assisting with the public participation process, to providing all traffic forecasts. A Vestal Study Advisory Group was created as the main avenue for public input; open public meetings have been held as well. The study is slated for completion in summer 2002. The output will include specific recommendations for capital projects and operational strategies to improve mobility and safety. The 2002-2006 Transportation Improvement Program includes a “Vestal Corridor Block” of \$5 million (matched) of FHWA STP funds. Upon completion of the study, the BMTS Planning and Policy Committees will be involved in reprogramming that money to specific priority projects.

The **City of Binghamton Access Study** is also underway, but has been delayed. This work is being done by BMTS Central Staff. The scope of the study was extended to include an examination of access to the First Ward and the East Frederick/Brandywine areas, as well as the Central Business District. The First Ward has a large former industrial site that has been cleared; the East Frederick/Brandywine area has a number of vacant industrial properties. The study was intended to move concurrently with the City of Binghamton Comprehensive Plan Update, so that transportation needs could be directly tied to land use plans. The comprehensive plan effort has fallen well behind schedule, delaying the BMTS study. The work has been included in the 2002-2003 Unified Planning Work Program. Similar to the Vestal Corridor, the 2002-2006 Transportation Improvement Program includes a “City of Binghamton Access Block” of \$4.75 million.

Interest in the **Airport Road Corridor** was driven primarily by the potential for development that would follow the planned extension of municipal water and sewer service to the airport and Broome County landfill. However, construction of the water lines is now scheduled for 2002; final planning for the sewer service has not yet been concluded. As such, there is no immediate need to progress this corridor study.

The **NY Route 17C (Main Street) Corridor Study** is included in the 2002-2003 Unified Planning Work Program.

➤ Other Metropolitan Corridors:

No work has been initiated to study **Front Street**, or **NY Route 96** in Owego.

The proposed Susquehanna River crossing connecting the Towns of Vestal and Union is being studied in two phases. As part of the Vestal Corridor Study, the consultant is examining various alignments and making an engineering feasibility determination. This will specifically determine the ability to interchange with NY Route 17, as well as logical termini on both sides of the river. The second phase, included in the 2002-2003 Unified Planning Work Program, is a complete traffic study of the feasible alignments. The scope of this work will include an evaluation of the long range needs of the **Hooper Road Corridor**.

➤ Transit Service Enhancements:

BMTS completed the Binghamton Regional Job Access Study, which served as the basis for applications for funds from the Federal Transit Administration's Job Access Reverse Commute (JARC) program, and for New York State TANF/CST funding. Over \$1.1 million has been earmarked for Broome County to expand their fixed route bus service. Currently, service stops on most routes on weekdays at 6:00 PM. Saturday service is limited, and there is no service on Sunday. The service enhancement, to be implemented in April 2002, will extend weekday service to midnight, enhance Saturday service, and initiate limited Sunday service. While the basis is to provide access to more employment opportunities (night shifts, weekend duty), the general public will benefit from the enhancement. The acknowledged challenge will be funding the service when special grants are no longer available.

While operating hours have been extended, frequency of service has not been addressed. In fact, in a service adjustment, two routes are slated for longer headways.

Connectivity between Broome and Tioga Counties will be addressed in two ways. The Broome County Rural Paratransit Study, currently underway by a consultant under contract to BMTS, will examine some rural connection needs. Tioga County will undertake a countywide transit analysis in 2002, which will address the question more directly.

➤ Intermodal Transit Terminal

The BMTS Policy Committee included in the 2002-2006 Transportation Improvement Program an allocation of \$1 million in FHWA-STP funding for this project to demonstrate their investment commitment. An earmark of \$2 million in FTA Bus Discretionary funding has been included in the FY 2002 transportation appropriation. Additional FTA funding will be sought in the FFY 2003 appropriation.

➤ Bicycle and Pedestrian Plan

Two segments of the BMTS Greenway Plan are being constructed with funding from the Transportation Enhancement Program; two additional segments are being considered in the current TEP grant award round. No additional resources have been provided through the BMTS TIP.

The BMTS Pedestrian and Bicycle Advisory Committee is monitoring and commenting on all capital project design reports, and has accomplished some design modifications.

➤ ITS Investment

With support from BMTS, the scope of the preliminary design activity for the NY Route 17/I-86 Prospect Mountain Curve reconstruction project was expanded to include an ITS element. That subtask will develop an ITS plan for all of Route 17, I-81, and I-88 in the metropolitan area.

## SYSTEM MANAGEMENT AND OPERATIONS

A key element of providing safe and efficient mobility for both persons and freight is managing the operation of the transportation system. System management often involves the realtime communication of information between system users and system operators. This may rely on what has become known as “intelligent transportation system” technology, which ranges from advanced traffic signal control systems to automated traveler information systems to advanced transit operations systems with automatic vehicle locators and rider information kiosks. System management requires a different perspective than capital construction because of ongoing operational costs. When a highway or bridge is constructed, there are some maintenance costs associated with it; when a traffic management and operations center is created, there is a significant personnel cost.

**GOAL:** It is the goal of the BMTS to provide for the effective management and operation of the metropolitan transportation system.

**OBJECTIVES:**

- To develop partnerships among the agencies responsible for operating various elements of the transportation system to facilitate a unified operating strategy.
- To identify appropriate opportunities for installation of ITS technology, and to support such installations.
- To set aside necessary resources for ongoing operational functions.

<b>PLAN ACCOMPLISHMENTS THROUGH 2001</b>
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BMTS has supported NYSDOT Region 9 in the development of an Incident Management Plan for NY Route 17 and I-81 in the metropolitan area. BMTS staff has participated in the stakeholders group developing the plan. While progress has been slow, most detours are now pre-planned. Six overhead variable message signs will be installed on these routes. There will be activated with pre-programmed messages by the Broome County emergency dispatch center, demonstrating the beginning of an important resource-sharing partnership.

The BMTS Unified Planning Work Program includes a task to develop a regional ITS architecture and ITS integration strategy.

## SAFETY

The safety and security of the travelling public is of great importance to the BMTS. In many cases safety is an element of a more comprehensive investment. Well maintained infrastructure is safer than that which is poorly maintained. A system that provides for many modes of travel is often safer too. But there are also many safety deficiencies that need to be addressed as stand-alone projects.

**GOAL:** It is the goal of the BMTS to invest necessary resources to provide for the safety and security of the travelling public regardless of the mode that they choose. It is recognized that safety improvements are often implemented in response to proven deficiencies, but that a proactive approach that addresses safety in the planning, design, and operation of transportation facilities may have a larger positive impact.

### OBJECTIVES:

- To provide sufficient resources throughout the horizon of this plan to ensure that all appropriate safety features are included in all capital projects included in the Transportation Improvement Program.
- To address on an ongoing basis all high accident locations within the metropolitan area, and to program funds promptly for any countermeasures that require capital construction.
- To improve the safety and security of public transit riders by funding appropriate facilities and amenities on transit vehicles and at bus stops.
- To investigate all rail-highway grade crossings in the metropolitan area within two years and identify candidates for closure; to proceed with closure projects within the next five years.
- To achieve within ten years the safety goals of the BMTS Pedestrian and Bicycle Plan.

### PLAN ACCOMPLISHMENTS THROUGH 2001

Nearly 11% of the funds in the 2002-2006 Transportation Improvement Program are invested in safety improvements. Represented in this total are two kinds of projects. One category consists of specific safety projects; there are 4 such projects on the program, including rail-highway grade crossing improvements. The remainder, which account for the majority of the funding, are arterial or freeway reconstruction projects. NYSDOT has a process that identifies in a statistically valid way high crash locations, which are then noted as Priority Investigation Locations (PIL). In the course of designing arterial reconstruction projects, all PILs in the project limits are addressed. In addition, safety features such as guiderail are replaced, and signs and pavement markings upgraded.

The ability to identify high accident locations on non-State highways is more difficult. While BMTS has some success, the crash record database for local roads is less reliable than that for State highways. NYSDOT and the NYS Department of Motor Vehicles are in the process of a major effort to overhaul crash record systems, eventually providing prompt electronic access. Until this is in place, it will be difficult to meet the objective of identifying and remedying high crash locations in the metropolitan area.

No action was taken this year on transit safety, nor on the investigation of rail-highway grade crossings.

## **ECONOMIC GROWTH AND FREIGHT MOBILITY**

There is a clear linkage between the economic vitality of a region and the quality of its transportation system. Shipping costs and modal flexibility are a key determinant of the competitiveness of local businesses when compared to other regions of the country. Of equal importance can be the ability of a business to access the necessary labor force or market area. In some instances, transportation investment can be used to leverage private sector development.

**GOAL:** It is the goal of the BMTS to support the regional economy with appropriate transportation investments. The primary focus is improving the efficiency of freight movement by both truck and rail to support the retention of existing business. A secondary goal is to fund transportation facilities that are targeted toward economic growth through improved access to a specific site or subarea.

### **OBJECTIVES:**

- To identify within one year a priority truck route system; to inventory all barriers to truck movement on that system; to invest in capital projects over the first ten years of this plan to remove those barriers and enhance truck movement efficiency.
- To support the development by the railroad industry of a truck-rail intermodal terminal by being prepared to invest as necessary in truck access improvements.
- To support economic development efforts in the region by responding appropriately to the transportation and access needs of proposed development in relation to the level of economic activity created.

### **PLAN ACCOMPLISHMENTS THROUGH 2001**

Work was begun, but not completed, on a BMTS Freight Plan. The plan is scoped to meet the first objective in terms of identifying priority truck routes and inventorying barriers to efficient truck movement. This will be completed in 2002.

The railroads serving Binghamton have not indicated any interest in the development of a truck-rail Intermodal terminal, nor has the local manufacturing sector demonstrated the need for such a facility. There is simply not a large enough volume of containerized freight moving into or out of the area to justify a terminal operation. Such freight is typically trucked to the Port of New York.

## **ENVIRONMENTAL PROTECTION AND QUALITY OF LIFE**

The BMTS recognizes that the use of transportation funds can support measures that enhance the environment and improve our quality of life. Some of these measures are reflected in other priority areas: providing for all modes of transportation, for example, can reduce reliance on

automobiles and improve air quality. There are many low cost strategies that can have a positive impact on quality of life.

**GOAL:** It is the goal of the BMTS to ensure that its program of transportation investments has a positive impact on the quality of both the physical and social environment of this community.

**OBJECTIVES:**

- To ensure that alternative fuel technologies are considered in all bus purchases funded by BMTS.
- To encourage communities in the region to consider appropriate use of traffic calming techniques on local streets where appropriate.
- To encourage communities in the region to take advantage of the FHWA Transportation Enhancements Program by applying for funds for bicycle and pedestrian facilities.

<b>PLAN ACCOMPLISHMENTS THROUGH 2001</b>
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BMTS entered into discussions with the Broome County Department of Public Transportation concerning alternate fuel technology when the last bus purchase was made. The understanding was that experience with CNG powered buses was not uniformly positive; and that because they require separate storage and maintenance areas because of the hazardous nature of the fuel, having a part of the fleet be CNG buses is not cost-effective. Broome County is very interested in diesel-electric hybrid technology, which avoids the problems associated with CNG. The technology was still in the demonstration phase when the last bus purchase was made, and therefore not considered. The indication is that this technology will be strongly considered in future bus purchases.

Discussions have been held on the issue of traffic calming, but to date no municipality has indicated interest in pursuing this strategy.

As noted earlier, the region has been relatively successful in funding greenway trails with Transportation Enhancement Program money.

## **SUMMARY ASSESSMENT**

It can be fairly reported that the goals and objectives of *TRANSPORTATION TOMORROW: 2025* have guided the activities of the Binghamton Metropolitan Transportation Study since its adoption. The highest priorities for investment, system preservation and personal mobility, are reflected in the investments of the 2002-2006 Transportation Improvement Program. That is, available Federal and State funds are indeed being directed toward the types of projects identified by the BMTS Policy Committee as a priority.

The same can be said of the use of the planning resources of BMTS Central Staff, and of NYSDOT, including consultant services. A good deal of effort has been expended on study of the High Priority Metropolitan Corridors, with the expectation that these plans will enumerate specific investments needed to improve safety and mobility in the corridor, while accomplishing development goals. As time progresses toward the next update of the Transportation Plan, lower priority tasks will move to the front to be programmed and accomplished.