WEST VIRGINIA'S STATEWIDE TRANSPORTATION POLICY PLAN 1995-2014

REI FTRA Prepared by West Virginia Department of Transportation, **Division of Transportation Planning** in cooperation with the United States Department of Transportation,

Federal Highway Administration

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BACKGROUND

Mobility and access are basic needs of society. Transportation is essential to earning a living, seeking recreation, and conducting personal business; these basic needs are satisfied by a variety of modes, including riding on highways or rails, flying, floating, and walking. Further, transportation is provided by individuals, companies and governments. While no one entity, public or private, is responsible for planning and providing all transportation, State, federal and municipal governments are all heavily involved.

Within West Virginia, major transportation systems have been developed to facilitate the movement of people and goods to and from homes to businesses and markets, and to promote economic development and tourism. The existing systems consist of a network of highways, railroads, waterways and airports, and, to a lesser extent, motorized and non-motorized trails. The West Virginia Department of Transportation (WVDOT) was created in 1989 as a means to coordinate the planning and development of such systems under one State agency. The individual agencies that compose the WVDOT are the Division of Highways (WVDOH), the Division of Motor Vehicles (WVDMV), the Division of Public Transit (WVDPT), the Aeronautics Commission, the Public Port Authority, the State Rail Authority (WVSRA), and the Parkways, Economic Development and Tourism Authority (WVPEDTA). The mission of the WVDOT is to fulfill transportation needs in varying degrees for the different modes. Meeting these needs effectively, efficiently, and safely is facilitated by a planning process which establishes goals, estimates the costs of achieving these goals (needs) and proposes means to meet them by provision and allocation of fiscal resources. The development of current transportation policies has evolved through numerous planning studies, public participation efforts, and national and State legislative mandates.

The WVDOT is responsible for the coordination of a diverse transportation system in West Virginia. The major responsibility for the existing transportation system consists of 34,408 miles of highways maintained by the WVDOH. Additionally, the 88 miles of the WV Turnpike are maintained by the WVPEDTA. The WVSRA is responsible for rail transportation planning within the state, and also owns and operates two branch lines: the Wheeling Terminal and the South Branch Valley Railroad. Other railroads in the State are privately owned; however all are federally regulated by the Interstate Commerce Commission (ICC). Four rivers (the Ohio, the Kanawha, the Monongahela, and the Big Sandy) compose over 400 miles of the navigable inland waterways in West Virginia. The United States Army Corps of Engineers (USCOE) is responsible for maintaining navigation on these waterways. Currently in West Virginia, there are three airports served by commercial, scheduled air carriers and seven airports served by commuter airlines. These public airports are under the authority of the city or county in which they are located. The trail system within the State is comprised of both motorized and non-motorized facilities, and may be publicly or privately owned. An Intermodal Management System (IMS) is currently being implemented by the WVDOT to plan and coordinate a seamless, multi-modal transportation system (see Figure 1), to develop strategies to enhance the safe and efficient movement of people and goods using this transportation system, to maintain an inventory of intermodal facilities, and to provide input into the planning processes.

FIGURE 1 MAJOR TRANSPORTATION FACILITIES West Virginia



LEGEND

GRE	ΥΗΟ	JND	Station
0		· · · · ·	



- TRANSIT SERVICE
- PUBLIC RIVERPORT
- PUBLIC FERRY
 - RAIL-TRAIL

Image: State of the state

In the next twenty years in West Virginia, the major expenditures of public funds will relate to meeting the goals and objectives of the State highway system. For planning purposes, the highway system has been functionally classified, with the major categories being the arterial, collector, and local highway systems. The backbone of the arterial highway system was established in 1956 with approval of the Dwight D. Eisenhower System of Interstate and Defense Highways, and further strengthened in 1965 with the development of the Appalachian Regional Highway System. Other Congressionally mandated highways have been approved to supplement the expansion of the existing highway network; completion of these highways remains a major goal. On the national level, the interim National Highway System (NHS) has been identified (see Figure 2), and plans are currently underway to develop a National Transportation System (NTS). These national efforts are a consideration in West Virginia's planning process.

Due to limited financial resources, other State-funded expansion of the highway system is likely to be limited. Additional improvements and expansion of the system will be concentrated, to the extent possible, on economic development opportunities. Future expenditures will be focused on maintenance and preservation of the existing system, safety improvements and traffic congestion mitigation. Strategies to achieve these goals will be the result, to a large degree, of the management systems (pavement, bridge, traffic congestion, highway safety, intermodal facilities, and public transportation), which will be incorporated into the planning process. The WVDOT will continue to coordinate this planning process and work closely with State and federal agencies, and with the Metropolitan Planning Organizations (MPOs) to implement measures in the State Implementation Plan (SIP), as required by the Clean Air Act Amendments of 1990, and to support State environmental and development policies. Additionally, innovative technological advancements are expected to enhance the efficient and safe movement of people and goods in the future. The WVDOT monitors the technology being developed within the Intelligent Transportation System (ITS) program, and as appropriate, will incorporate applications of this technology into the planning process.

This document was prepared as a result of the statewide planning process, in accordance with the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA), Section 1025, and 23 U.S.C. Part 450, Subpart B, and constitutes the official Statewide Transportation Plan for the West Virginia Department of Transportation. This Plan will be continually evaluated and periodically updated, as appropriate, and will be subject to public inspection and comment.

PURPOSE

The purpose of this document is to present those results of the statewide planning process that relate how the WVDOT currently intends to invest its available resources for the next twenty years to achieve long-range transportation objectives. It is not the intent of the WVDOT that this report necessarily document adherence to all steps in the planning process.

FIGURE 2 INTERIM NATIONAL HIGHWAY SYSTEM West Virginia



SOURCE: US Department of Transportation, Federal Highway Administration

<u>SCOPE</u>

The scope of the statewide planning process includes, but is not limited to, the following:

- All areas of the State, rural or urban;
- All modes of transportation, including consideration and provision, as applicable, of elements and connections of and between rail, commercial motor vehicle, waterway, and aviation facilities, particularly with respect to intercity travel (it should be noted that the only mode for which the WVDOT has almost exclusive responsibility is the highways mode);
- Intermodal interfaces, including public ports (air and water), parking facilities, warehouses, transit malls, etc.;
- A twenty-year investment period;
- A plan for bicycle transportation and pedestrian walkways and trails, which will be appropriately interconnected with other modes of transportation;
- Capital investment, renovations, routine maintenance, operations, and debt service (depending on mode);
- Rural economic growth; and
- Recreation and tourism.

During the continuing statewide transportation planning process, the WVDOT considered and analyzed the following factors, in accordance with §450.208, 23 U.S.C. Part 450, Subpart B. It should be noted that not all factors apply to West Virginia (see Appendix B for further clarification):

- The transportation needs (strategies and other results) identified through the management systems required by 23 U.S.C. 303;
- Any Federal, State, or local energy use goals, objectives, programs, or requirements;
- Strategies for developing bicycle transportation facilities and pedestrian walkway projects throughout the State;
- International border crossings and access to ports, airports, intermodal transportation facilities, major freight distribution routes, national parks, recreation and scenic areas, monuments and historic sites, and military installations;
- The transportation needs of nonmetropolitan areas (areas outside MPO planning boundaries) through a process that includes consultation with local elected officials with jurisdiction over transportation;
- Any metropolitan area plan developed pursuant to 23 U.S.C. 134 and section 8 of the Federal Transit Act 49 U.S.C. app. 1607;
- Connectivity between metropolitan planning areas within the State and with metropolitan planning areas in other States;
- Recreational travel and tourism;
- Any State plan developed pursuant to the Federal Water Pollution Control Act, 33 U.S.C. 1251 *et seq.* (and in addition to plans pursuant to the Coastal Zone Management Act);

- Transportation system management and investment strategies designed to make the most efficient use of existing transportation facilities (including consideration of all transportation modes);
- The overall social, economic, energy, and environmental effects of transportation decisions (including housing and community development effects and effects on the human, natural and manmade environments);
- Methods to reduce traffic congestion and to prevent traffic congestion from developing in areas where it does not yet occur, including methods which reduce motor vehicle travel, particularly single-occupant motor vehicle travel;
- Methods to expand and enhance appropriate transit services and to increase the use of such services (including commuter rail);
- The effect of transportation decisions on land use and land development, including the need for consistency between transportation decisionmaking and the provisions of all applicable short-range and long-range land use and development plans (analyses should include projections of economic, demographic, environmental protection, growth management and land use activities consistent with development goals and transportation demand projections);
- Strategies for identifying and implementing transportation enhancements where appropriate throughout the State;
- The use of innovative mechanisms for financing projects, including value capture pricing, tolls, and congestion pricing;
- Preservation of rights-of-way for construction of future transportation projects, including identification of unused rights-of-way which may be needed for future transportation corridors, identification of those corridors for which action is most needed to prevent destruction or loss (including strategies for preventing loss of rights-of-way);
- Long-range needs of the State transportation system for movement of persons and goods;
- Methods to enhance the efficient movement of commercial motor vehicles;
- The use of life-cycle costs in the design and engineering of bridges, tunnels or pavement;
- The coordination of transportation plans and programs developed for metropolitan planning areas of the State under 23 U.S.C. 134 and section 8 of the Federal Transit Act with the statewide transportation plans and programs developed under this Subpart [B], and the reconciliation of such plans and programs as necessary to ensure connectivity with transportation systems;
- Investment strategies to improve adjoining State and local roads that support rural economic growth and tourism development, Federal agency renewable resources management, and multipurpose land management practices, including recreation development;

FIGURE 3 Transportation Planning and Programming Conceptual Process -- WVDOT

Goals and Objectives

The WVDOT is faced with unique challenges relating to the State's transportation system. For example, the mountainous terrain may effect large earthwork quantities during construction phases. The rural nature of West Virginia also presents difficulties relating to public transportation, highway construction, etc. To meet these challenges, to the extent possible, the WVDOT has developed goals and objectives for the next twenty years. Prior to the development of these goals and objectives, however, several broad assumptions had to be made, such as that no major changes in societal values nor any catastrophic events will occur. These goals and objectives are set forth as a means for the WVDOT to fulfill its responsibilities to the public in the most effective manner within the constraints of reasonable funding. An important goal of all agencies within the WVDOT is the fulfillment of all applicable local, State and federal laws, statutes, regulations and requirements; specific goals and objectives for each of the developmental agencies within the WVDOT are outlined, by agency, as follows:

• WV Division of Highways Goals and Objectives

- paying debt service and operating expenses;
- performing routine maintenance;
- renovating or replacing the highway infrastructure;
- addressing safety, operations and congestion issues;
- matching all available federal aid;
- improving, expanding, and preserving the highway system;
- continuing progress on major transportation corridors, such as:
 - Appalachian Development Highway System;
 - US 52;
 - Shawnee Parkway;
 - WV 9;
 - Coalfields Expressway;
 - other National Highway System routes;
- developing bicycle transportation facilities and pedestrian walkways, as appropriate, throughout the State, primarily by:
 - incorporating bicycle/pedestrian facilities into highway projects;
 - incorporating bicycle/pedestrian facilities as "stand-alone" transportation enhancement projects;

• WV State Rail Authority Goals and Objectives

- operating the South Branch Valley Railroad (SBVR);
- monitoring lines marked for abandonment and proposing alternatives to abandonment;
- supporting the Maryland Rail Commuter (MARC) train service;
- improving West Virginia's rail infrastructure;
- maintaining rail service to critical industries;
- promoting new rail services, both passenger and freight;

• WV Division of Public Transit Goals and Objectives

- improving efficiency in transit operations;
- determining the feasibility of developing a public transportation system for southern West Virginia;
- adapting all transportation systems to comply with the Americans with Disabilities Act of 1990 (ADA);
- continuing the driver training program;

• WV Public Port Authority Goals and Objectives

- performing the necessary planning and environmental assessments of riverport locations;
- providing employment opportunities by stimulating business activity through better transportation;
- maximizing opportunities for utilization of the most appropriate transportation mode;
- providing necessary intermodal transfer facilities;
- utilizing economy of scale by providing for joint use by several tenants and by using centralized organization for research, studies, development and funding;

• WV Aeronautics Commission Goals and Objectives

- providing a portion of the needed matching monies for all available federal Airport Improvement Program (AIP) funds;
- completing and updating the State System Plan;
- attracting economic development to West Virginia
- WV Parkways, Economic Development and Tourism Authority Goals and Objectives
 - paying debt service and operating expenses;
 - performing necessary maintenance;
 - rehabilitating pavement and bridges; and
 - incorporating capital improvements to stimulate economic growth.

<u>Needs</u>

To fulfill the goals and objectives developed for the WVDOT, technical studies are performed (many by WVDOT staff utilizing the management systems), not only to determine the transportation needs of an area, but also to estimate the costs associated with these needs. Although many of these studies are performed on a statewide basis, the transportation needs within metropolitan planning areas (see Figure 4) in West Virginia also may be identified by these studies. The Metropolitan Planning Organizations are then provided with the data for their respective planning areas, for use in the metropolitan planning processes.

In addition to these metropolitan areas, other regions of the State are currently experiencing, or are anticipating, growth-related transportation problems. As a result, several of these regions (e.g., Harrison, Marion, Monongalia and Raleigh Counties, the Eastern Panhandle, etc.), in cooperation

FIGURE 4 METROPOLITAN PLANNING AREAS West Virginia

with the WVDOT, have initiated transportation planning studies. As these studies mature, the identified transportation needs resulting from them will be appropriately incorporated into future updates of the Statewide Transportation Plan.

Transportation needs categories can be considered either finite or open-ended. Finite categories are those that require a limited financial obligation, such as debt service or operations. These categories offer little flexibility during the fund allocation process. It is logical, therefore, to allocate from available resources the full amount required to satisfy the needs of these categories. Conversely, open-ended categories, such as "improvement," do not possess obvious financial limits. For example, a majority of the miles of State-maintained highways in West Virginia were constructed decades ago. Since that time, traffic volumes have increased, and design standards and performance measures have become more advanced. As a result, many of these highways are in need of improvements; however the costs associated with improving these highways to meet modern design standards would be many billions of dollars. Since the amount of funds necessary to accomplish such a task are not currently available, it is reasonable to fully satisfy the basic needs of the finite categories and utilize the remainder of funds among the open-ended categories, taking into consideration any limitations and earmarking inherent with the funds available, while attempting to maintain a balanced program.

Investment Categories

For purposes of this document, the WVDOT has outlined broad investment categories for each affected agency; however, it should be noted that these categories are intended only as a means for public presentation and *do not necessarily relate to the actual budgetary allocations of any of these agencies*.

To effectively plan and operate, the WVDOH uses budgetary investment categories which are consistent with its goals and needs. These categories, with a brief description of each, are as follows:

- **Debt Service**—bond obligation payment which decreases annually until the bond(s) are retired [100% State-funded];
- **Operations**—administrative and operating costs, such as utilities, rent, and any other cost that is not directly chargeable to a specific project [100% State-funded];
- **Routine Maintenance**—includes such items as snow removal, grass cutting, etc. [100% State-funded];
- **Renovation**—includes the bridge, contract paving, and resurfacing programs, and is intended to add service life to the highway infrastructure by approaching the "original good" condition [funded by State and federal-aid (formula) funds];
- **Safety**—intended to improve and maintain a safe highway system [funded by federal-aid (formula) funds];
- **Congestion and Traffic Operations**—designed to reduce highway congestion to the extent possible [funded by federal-aid (formula) funds];

- Other Formula Federal-Aid—any other program for which the WVDOH may receive federal-aid funds;
 - Surface Transportation Program (STP)—includes the Transportation Enhancement Program (TEP) [funded by State and federal-aid (formula) funds];
 - National Highway System (NHS) [funded by State and federalaid (formula) funds];
 - Scenic Byways Program [(80%) federal funding may be awarded following an application process (State match 20%)];
 - National Recreational Trails [Symms] Program (NRT) [100% federally-funded, if allocated to the State];
 - Any other "non-traditional" program;
- Special Authorization Federal-Aid—any federal-aid funds received by the WVDOH that are not based on a formula allocation [funded by State and federal-aid funds];
- State Improvement and Expansion—designed to improve access and enhance economic development throughout the State— includes the Industrial Access Roads Program (100% State-funded); and
- Appalachian Development Corridors—completion of this portion of the NHS intended to improve access and enhance economic development opportunities (funded by federal general revenues and State funds).

The investment categories developed for the WVSRA include general operating costs; operation of the South Branch Valley Railroad (SBVR); expansion and improvement; and maintenance of designated rail services. Those categories developed for the WVDPT include general operations; operating and technical assistance; transit equipment purchase; and capital improvement and expansion. The investment categories for the Public Port Authority include general operations, and administering both regional airport funds and riverport (USCOE) funds. Categories developed for the Aeronautics Commission are for general operating costs and for administering Airport Improvement Program (AIP) funds. The WVPEDTA categories include debt service; operating costs; maintenance; capital improvements; and rehabilitation.

Available Funds

Before the availability of funds may be determined, certain assumptions for the next twenty years must be made. First, it is assumed that the federal-aid funding level currently authorized will not decrease, but will *at least* remain at the present level in each investment category; second, an assumption is made that no new State bonds will be obligated; and finally, it is assumed that State transportation revenues will not decrease.

Based on the previous assumptions, for a "typical" year, the approximate funding available (total federal and State) for each affected WVDOT agency could be:

WVDOT AGENCY	FUNDING
Division of Highways	\$645.0 million
State Rail Authority	\$3.4 million
Division of Public Transit	\$11.2 million
Public Port Authority	\$1.1 million
Aeronautics Commission	\$4.4 million
Parkways, Economic Development and Tourism Authority	\$41.1 million

Fund Allocation

Following the determination of goals and objectives, needs, and funding availability, a fund allocation process may be undertaken. One of the results of this allocation process is the extent to which needs in each category will be met by the proposed investment. This is one of the most strategic investment policy decisions, since determining the amount to be invested in each category is tantamount to deciding upon the percent of the needs for that category that will be met over the next twenty years. Further, the preliminary engineering, design, and construction activities will be paced to achieve that overall rate of needs satisfaction. In theory, the amount of funds invested for each investment category would be chosen to achieve a desired level of needs fulfillment. In reality, however, this level of needs fulfillment is not always attainable, due not only to the limited amount of funding available, but also due to the allocation constraints associated with certain federal-aid funds. Therefore, if the rate of needs satisfaction for any investment category does not seem acceptable, an attempt should be made to alter the budget allocation process to achieve the results desired. However, since the total funds available for investment are greatly exceeded by the total needs, all the rates of needs satisfaction may appear intolerably low. Consequently, the most practical approach is to insure that the relative rates of needs satisfactions are in line with the desired investment strategy. To accomplish this task, an investment method, or practical plan, must be used that will achieve the desired allocation of investment among the various categories, while not violating any earmarking of federal-aid funds.

Frequently, a practical plan will differ greatly from needs, due to the fact that needs exist regardless of current funding capabilities, while plans must be realistic and subject to fiscal constraints. As a result, limitations must be accepted as to the degree to which needs will be met. In a situation wherein unlimited funds are available, these limitations would be unnecessary; all needs would be met in an "across-the-board" manner. However, much as in personal financing, some transportation needs are more basic and must take precedence over others. In personal life, for example, it is necessary to pay first for general obligations, such as utility bills, rent, insurance, etc. Next, one must look to preservation activities, such as patching a roof or servicing an automobile. Perhaps next in priority, one could consider improvements such as remodeling a kitchen. At the extreme end of the spectrum, provided funds were available, consideration might be given to some expansion project such as the addition of a room to the home.

The illustration just cited is understandable and simple; unfortunately, it is too simple. In the real world, there are practical overriding factors which influence and alter the theoretical program priority hierarchy. Among these practical factors are the influence of federal policy as expressed through its federal-aid matching program. Further, even at extremely low funding levels there is still a need, to some extent, for a full spectrum of program activities, i.e., a balanced program. In recognition of these practical considerations, use is made of program increments in an attempt to satisfy both theoretical priorities and balanced program requirements. Basically this means that not all of one program need be, or should be, accomplished before undertaking some small portion of a lower priority program. As an example, if expansion and improvement are funded before renovation, it is contradictory to the theoretical prioritization, but recognizes the overriding influence of the importance of capturing federal dollars, maintaining a balanced program and providing economic opportunities.

It is important to understand that some federal funds may only be used for specific programs and projects. For example, the Appalachian Development Highway System and the Interstate System each are appropriated funds, either by a formula or through special legislation, and these funds must be used *only* for specific projects along these highway systems; these funds may not be used for maintenance, preservation, etc., for any other highway. This earmarking limits the amount of flexibility the WVDOT may exercise during the fund allocation process, although these funds are an integral part of the highway program. As a result, since the WVDOT receives only a certain amount of federal funds, the fund allocation among the various other highway programs is determined after the federally earmarked funds are allocated. This limits the amount of funding for these programs.

After the fund allocation process is completed, a range of programs may be proposed that will most effectively utilize the funds available. These funding programs should reflect local, State and national transportation goals and constitute a balanced program of transportation activities. Foremost among these programs is the complete fulfillment of all debt service and operating costs. Expansion and improvement will be undertaken to the degree necessary to further economic development, while maintenance and preservation activities will be accomplished to the extent possible to maintain a viable transportation infrastructure. Safety issues will remain an important consideration, as will congestion reduction.

RESULTS

By following the methodology discussed previously, a balanced program of preservation, improvement and expansion activities has been developed. Due to the diversity of the modes of transportation covered in this Plan, the most effective manner of presenting this program may be by use of tables and graphs. The following tables illustrate a "typical" annual funding allocation for each of the agencies covered in this report; as previously discussed, for the most fiscally complex agency, the WVDOH, graphs are also provided (see Figures 5 and 6).

TABLE I "TYPICAL" ANNUAL FUNDING ALLOCATION WV Division of Highways

INVESTMENT CATEGORY	TOTAL FUNDS	FEDERAL FUNDS	STATE FUNDS
Debt Service *	\$50,000,000	\$0	\$50,000,000
Operations	\$34,000,000	\$0	\$34,000,000
Routine Maintenance	\$163,000,000	\$0	\$163,000,000
Renovations			
Bridge	\$100,000,000	\$63,000,000	\$37,000,000
Resurfacing	\$110,000,000	\$55,000,000	\$55,000,000
Other	\$12,000,000	\$0	\$12,000,000
Safety	\$3,000,000	\$3,000,000	\$0
Congestion & Traffic Operations	\$3,000,000	\$3,000,000	\$0
Other Formula Federal-aid	\$45,000,000	\$36,000,000	\$9,000,000
Special Authorization Federal-aid		**	
State Improvement & Expansion	\$25,000,000	\$0	\$25,000,000
Appalachian Development Corridors (APD)	\$100,000,000	\$80,000,000	\$20,000,000
TOTALS	\$645,000,000	\$240,000,000	\$405,000,000

- NOTES: * Figure shown is for current year, debt will decrease at a rate of approximately \$5 million per year until bond is retired (bond is scheduled for retirement in 2006)
 - ** Funds are obtained through special legislation
- SOURCE: West Virginia Department of Transportation, Division of Highways, *Programming Division*

FIGURE 5 "TYPICAL" ANNUAL FUNDING ALLOCATION WV Division of Highways

Program Category by Funding Source

NOTE: "Special Authorization Federal-aid" funds are obtained through special legislation * Represents the federal program amount; these items are a consideration in every project ** Decreases until bond is retired (scheduled for 2006)

FIGURE 6 "TYPICAL" ANNUAL FUNDING ALLOCATION WV Division of Highways Funding Source by Program Category

NOTE: "Special Authorization Federal-aid" funds are obtained through special legislation * Represents the federal program amount; these items are a consideration in every project ** Decreases until bond is retired (scheduled for 2006)

TABLE II "TYPICAL" ANNUAL FUNDING ALLOCATION WV State Rail Authority

INVESTMENT CATEGORY	TOTAL FUNDS	FEDERAL FUNDS	STATE FUNDS
General Operations	\$294,000	\$0	\$294,000
South Branch Valley Railroad Operations	\$1,661,000	\$0	\$1,661,000
Expansion & Improvement	\$1,427,000	\$600,000	\$827,000
TOTALS	\$3,382,000	\$600,000	\$2,782,000

SOURCE: West Virginia Department of Transportation, State Rail Authority

TABLE III "TYPICAL" ANNUAL FUNDING ALLOCATION WV Division of Public Transit

INVESTMENT CATEGORY	TOTAL FUNDS	FEDERAL FUNDS	STATE FUNDS
General Operations	\$2,725,000	\$2,725,000	\$0
Operating & Technical Assistance	\$3,745,000	\$3,172,000	\$573,000
Equipment Purchase	\$2,745,000	\$2,445,000	\$300,000
Capital Improvement & Expansion	\$1,980,000	\$1,980,000	\$0
TOTALS	\$11,195,000	\$10,322,000	\$873,000

SOURCE: West Virginia Department of Transportation, Division of Public Transit

TABLE IV "TYPICAL" ANNUAL FUNDING ALLOCATION WV Public Port Authority

INVESTMENT CATEGORY	TOTAL FUNDS	FEDERAL FUNDS	STATE FUNDS
General Operations	\$222,000	\$0	\$222,000
Regional Airport Aid (AIP)	\$600,000	\$540,000	\$60,000
Riverport Aid	\$300,000	\$0	\$300,000
TOTALS	\$1,122,000	\$540,000	\$582,000

SOURCE: West Virginia Department of Transportation, Public Port Authority

TABLE V "TYPICAL" ANNUAL FUNDING ALLOCATION WV Aeronautics Commission

INVESTMENT CATEGORY	TOTAL FUNDS	FEDERAL FUNDS	STATE FUNDS
General Operations	\$50,000	\$0	\$50,000
Airport Improvement Program (AIP)	\$4,400,000	\$4,000,000	\$400,000
TOTALS	\$4,450,000	\$4,000,000	\$450,000

SOURCE: West Virginia Department of Transportation, Aeronautics Commission

TABLE VI "TYPICAL" ANNUAL FUNDING ALLOCATION WV Parkways, Economic Development and Tourism Authority

INVESTMENT CATEGORY	TOTAL FUNDS	FEDERAL FUNDS	STATE FUNDS
Debt Service *	\$11,150,000	\$0	\$11,150,000
General Operations	\$12,939,000	\$0	\$12,939,000
Maintenance	\$9,555,000	\$0	\$9,555,000
Capital Improvements	\$2,450,000	\$0	\$2,450,000
Pavement & Bridge Rehabilitation	\$5,000,000	\$0	\$5,000,000
TOTALS	\$41,094,000	\$0	\$41,094,000

NOTE: * Figure remains constant until bond is retired (scheduled retirement date is 2019)

SOURCE: West Virginia Department of Transportation, Parkways, Economic Development and Tourism Authority

CONCLUSIONS & SUMMARY

Generally, as a result of the planning process, it appears that the overall available investment levels will be adequate to maintain and preserve the transportation infrastructure while pursuing a balanced program of improvements that will further the economic goals of the State. The WVDOT will strive to match all possible federal aid to further national goals, while optimizing the use of public funds, and will also continue the current policies and practices while maintaining the flexibility necessary to respond to changing state and national legislation.

APPENDIX A

REFERENCES

- 1. Banks, R.L. & Associates, Inc., and West Virginia Department of Transportation, Railroad Maintenance Authority. *State Rail Plan.* 1995 Update. Washington, DC: February 1994.
- 2. Rails-to-Trails Conservancy. Abandoned Rail Corridor Assessment for the State of West Virginia. Washington, DC: September 1994.
- 3. West Virginia Department of Commerce, Labor and Environmental Resources, Development Office. *Statewide Comprehensive Outdoor Recreation Plan 1993-1997*. Charleston, WV: 1993.
- 4. West Virginia Department of Highways. Transportation Goals, Needs and Plans for the Future. Charleston, WV: January 1982.
- 5. West Virginia Department of Highways, Commissioner's Task Force for Highway Program Analysis. West Virginia Twenty-Year Highway Plan of Action Interim Report. Charleston, WV: September 1973.
- 6. West Virginia Department of Transportation. FY 95 Budget Presentation. Charleston, WV: 1994.
- 7. West Virginia Department of Transportation. Public Involvement Process Document. Charleston, WV: February 1995.
- 8. West Virginia Department of Transportation, Division of Highways. Attracting Federal Highway Funding: The Effect of the 5-Cent Fuel Increase. Charleston, WV: 1993.
- 9. West Virginia Department of Transportation, Division of Highways. Comprehensive Annual Financial Report: Year ended June 30, 1993. Charleston, WV: 1994.
- 10. West Virginia Department of Transportation, Division of Highways. Report to Governor Gaston Caperton. Charleston, WV: February 1994.
- 11. West Virginia Department of Transportation, Division of Public Transit. 1994 West Virginia Statewide Transportation Providers Survey. Charleston, WV: 1994.
- 12. West Virginia Department of Transportation, Parkways, Economic Development and Tourism Authority. 30 Year Facilities Plan. Charleston, WV: April 1994.
- West Virginia Department of Transportation, Parkways, Economic Development and Tourism Authority. 30 Year Pavement and Bridge Rehabilitation Plan. 1995 Update. Charleston, WV: 1994.

APPENDIX B

WVDOT APPROACH TO THE 24 PLANNING FACTORS

1. "The transportation needs (strategies and other results) identified through the management systems required by 23 U.S.C. 303":

To date, the use of transportation needs identified through the management systems has been limited, due to the fact that these systems have not yet been fully implemented. The data currently available, such as the present serviceability ratings (PSRs) from the pavement management system (PMS), have been used to the extent possible.

2. "Any Federal, State, or local energy use goals, objectives, programs, or requirements":

The WVDOT has been responsive, in general, to energy goals in that the intermodal planning effort to use the most efficient mode is supportive of wise energy use. Appropriate use of rail, air, water and transit promotes economic efficiency and energy conservation.

3. "Strategies for incorporating bicycle transportation facilities and pedestrian walkways in appropriate projects throughout the State":

Bicycle and pedestrian facilities have been incorporated into this plan and the statewide transportation improvement program (STIP) through the transportation enhancement program. These facilities are also given every appropriate consideration during the developmental stages of all construction projects. Further, the WVDOT has solicited plans and strategies for such facilities from each identified organization within the State. As received, these plans and strategies are provided to the State Bicycle and Pedestrian Coordinator, for his review and consideration.

4. "International border crossings and access to ports, airports, intermodal transportation facilities, major freight distribution routes, national parks, recreation and scenic areas, monuments and historic sites, and military installations":

Access to ports and other intermodal transfer facilities is considered during modal planning studies, such as the Port Authority Feasibility Study and the Western West Virginia Regional Airport Study, in which the role of access roads to the proposed airport sites was pivotal.

Access roads for the distribution of freight are addressed on a continuing basis, especially within the Industrial Access Road Program, which is jointly administered with the West Virginia Development Office.

Recreation area access has been a traditional area of planning activity, with recent efforts enhanced by both the Scenic Byways Program and the Forest Highway Program. Additionally, the WVDOH annually considers and implements resurfacing and bridge repair projects on State park access roads.

5. "The transportation needs of nonmetropolitan areas (areas outside MPO planning boundaries) through a process that includes consultation with local elected officials with jurisdiction over transportation":

The WVDOH has jurisdiction over county and state roads. Consequently, the only other officials having jurisdiction over transportation are those in municipalities, and this jurisdiction is limited to routes that are not on the State system. Coordination with such officials generally occurs during transit and/or traffic engineering activities; however, municipal officials are also consulted during project level studies at all stages of development.

6. "Any metropolitan area plan developed pursuant to 23 U.S.C. 134 and section 8 of the Federal Transit Act 49 U.S.C. app. 1607":

Section 134 and Section 8 plans are key considerations during the statewide planning process. The WVDOT maintains considerable staff dedicated exclusively to this effort.

7. "Connectivity between metropolitan areas within the State and with metropolitan areas in other states":

West Virginia shares a border with five states (Kentucky, Maryland, Ohio, Pennsylvania, and Virginia) and a number of West Virginia cities are on or near these borders. Additionally, five of the six MPOs in West Virginia are multi-state. As a result, many key transportation facilities connect cities and metropolitan areas within these states. Further, the recent National Highway Functional Classification required coordination of state line crossings.

8. "Recreational travel and tourism":

Recreational travel and tourism have traditionally been major transportation planning factors in West Virginia. The WVDOT cooperates with the Development Office in producing the transportation chapter of the annual Statewide Comprehensive Outdoor Recreation Plan (SCORP). The WVDOT has recently been involved in multi-agency efforts focused on both the State and National Scenic Byways Programs, and also the Heritage Areas Program. 9. "Any State plan developed pursuant to the Federal Water Pollution Control Act, 33 U.S.C. 1251 *et seq.* (and in addition to plans pursuant to the Coastal Zone Management Act)":

Transportation planning, design and operation are all conducted in compliance with pollution guidelines as established at the federal and State levels from NEPA regulations, through the Section 404, Section 401 and NPDES permitting processes. Consideration ranges from program and project evaluation of pollution potentials of alternatives, to control of runoff during construction and at salt storage locations.

10. "Transportation system management and investment strategies designed to make the most efficient use of existing transportation facilities (including consideration of all transportation modes)":

Unless otherwise specified or indicated, it is customary for a full range of transportation alternatives to be considered. These alternatives range from high capital through transportation systems management (TSM) to and including the "no-build" alternative.

11. "The overall social, economic, energy, and environmental effects of transportation decisions (including housing and community development effects and effects on the human, natural and manmade environments)":

The evaluation of SEEE (social, economic, energy and environmental) effects has become customary for all but the simplest and lowest impact proposals.

12. "Methods to reduce traffic congestion and to prevent traffic congestion from developing in areas where it does not yet occur, including methods which reduce motor vehicle travel, particularly single-occupant motor vehicle travel":

> Congestion has been a traditional area of identified transportation need. Methods to reduce congestion include the provision of additional capacity, such as added lanes and/or improved alignment, as well as reduction in demand, such as park-and-ride; examples of both abound.

13. "Methods to expand and enhance appropriate transit services and to increase the use of such services (including commuter rail)":

Both expansion and enhancement of transit services are the primary responsibility of the DPT, which provides training and operating assistance, purchases equipment, renovates transit buildings, etc. 14. "The effect of transportation decisions on land use and land development, including the need for consistency between transportation decisionmaking and the provisions of all applicable short-range and long-range land use and development plans (analyses should include projections of economic, demographic, environmental protection, growth management and land use activities consistent with development goals and transportation demand projections)":

The effect of transportation on land use and, conversely, the effect of land use on transportation, have been standard ingredients in the transportation planning process in West Virginia for some time. Traffic models used in planning simulate and predict traffic generation, and distribution by and among land uses. In evaluating transportation alternatives, the effect on land use and development is basic: it is the use of the land that creates the demand for transportation. The purpose of transportation is to support existing land uses and to be consistent with and supportive of land use plans. Some of the tools used to achieve this goal involve land use maps; traffic zone maps; maps (county and USGS) showing culture such as buildings; aerial photography; and on-site surveys. Corridor location and design studies include intensive environmental surveys.

15. "Strategies for identifying and implementing transportation enhancements where appropriate throughout the State":

The WVDOT has developed a process for soliciting and evaluating transportation enhancement projects and has aggressively pursued this program since its inception.

16. "The use of innovative mechanisms for financing projects, including value capture pricing, tolls, and congestion pricing":

In the past, innovative mechanisms for project financing have been focused primarily in the area of tolls and joint participation with the private sector (such as coal companies). Recent activities in the transportation enhancement program have heavily involved intergovernmental transfers from the Division of Culture and History and the Division of Tourism. The FHWA has recognized the WVDOT for its efforts in implementing innovative financing mechanisms. 17. "Preservation of rights-of-way for construction of future transportation projects, including identification of unused rights-of-way which may be needed for future transportation corridors, identification of those corridors for which action is most needed to prevent destruction or loss (including strategies for preventing loss of rights-of-way)":

Preservation of right-of-way is considered in the planning and project development process. Recently the WVDOH has been involved, through the transportation enhancement program, with the use of abandoned rail rightsof-way for trail use. Additionally, "advanced buys" have been made of parcels in rail corridors in order to preclude development inconsistent with later taking. Preservation, though permissible, has not been widely used because of the general lack of local planning and zoning. It will be considered increasingly as such practices increase.

18. "Long-range needs of the State transportation system for movement of persons and goods":

Studies of long range needs have been conducted by the WVDOH on a regular basis since the early 1940s. Since the late 1970s, needs studies have been jointly performed by the WVDOH and the FHWA by means of the Highway Performance Monitoring System (HPMS). The HPMS provides data on investment and performance on a systems basis and has been an invaluable aid to planning at both federal and State levels. In the future, the management systems will provide both broader and more detailed estimates of long range needs.

19. "Methods to enhance the efficient movement of commercial motor vehicles":

The WVDOH has identified a system of highways on which the larger and heavier commercial (STAA) vehicles may operate, and this system is modified as required by changing conditions and demands. The special requirements of these vehicles is recognized in such design features as runaway ramps and climbing lanes, as well as maximum grades, turning radii, and pavement design. Intermodal transfer of goods and persons at ports (air and water) is currently and will continue to be studied.

20. "The use of life-cycle costs in the design and engineering of bridges, tunnels or pavement":

Life-cycle cost analysis has been mandated as part of both the bridge and pavement management systems. Used now, to the extent that data will permit, the management systems, with their richer data bases, greatly facilitate such analysis. 21. "The coordination of transportation plans and programs developed for metropolitan planning areas of the State under 23 U.S.C. 134 and section 8 of the Federal Transit Act with the statewide transportation plans and programs developed under this Subpart, and the reconciliation of such plans and programs as necessary to ensure connectivity with transportation systems":

The ongoing coordination of Section 134 and Section 8 plans with statewide planning has presented few problems. The relatively small and centralized nature of the WVDOT has facilitated such coordination and communication. Further, the size and often linear shape of the metropolitan areas is such that extensions of the statewide systems into and through these areas often encompass most of the principal urban facilities resulting in a great commonality of interest.

22. "Investment strategies to improve adjoining State and local roads that support rural economic growth and tourism development, Federal agency renewable resources management, and multipurpose land management practices, including recreation development":

The WVDOH is one of only a few agencies nationwide having jurisdiction over local roads. This fact has greatly facilitated development and planning, since there is a seamless transition from arterial and collector roads to the local system. The WVDOH works closely with the West Virginia Development Office on both the Industrial Access Road Program and the Statewide Comprehensive Outdoor Recreation Plan (SCORP) to pursue rural economic growth, as well as tourism development. It also works with appropriate Federal agencies, such as the Corps of Engineers, Soil Conservation Service, National Park Service and the Forest Service, in the planning and development of resources and recreation. As previously mentioned, the WVDOH annually considers and implements resurfacing and bridge projects on State park access roads.

23. "The concerns of Indian tribal governments having jurisdiction over lands within the boundaries of the State":

Although there are no Indian tribal governments with jurisdiction over lands in West Virginia, coordination of archaeological and religious matters concerning Indian persons has been, and will continue to be practiced.

24. "Consideration of factors, to the extent appropriate, contained in §450.210, 23 U.S.C. Part 450, Subpart B":

This section requires coordination among various plans and programs within the WVDOT. To the extent possible, the WVDOT will continue to consult and coordinate with public and private entities during project development.