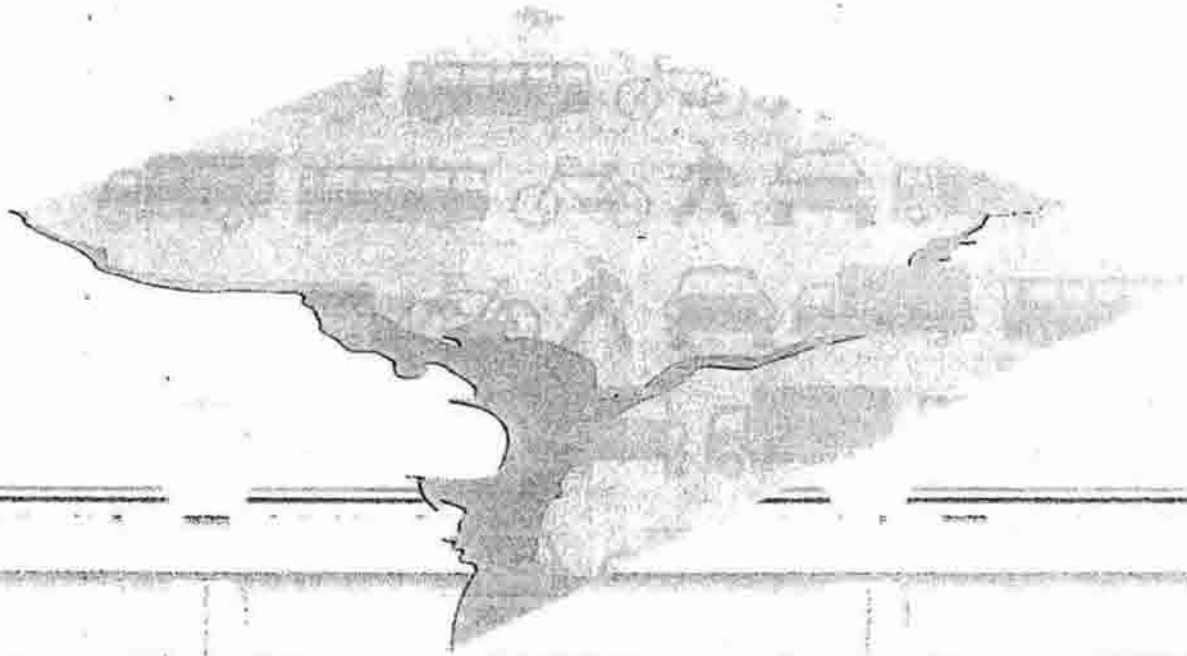
Appendix A

Transportation Vision, Strategy an Action Plan by the District Department of Public Works (March 1997)

Transportation Plan for the District of Columbia

A TRANSPORTATION VISION, STRATEGY, AND ACTION PLAN FOR THE NATION'S CAPITAL



★ ★ ★ Government of the District of Columbia
Marion Barry Jr., Mayor

Department of Public Works

THE DISTRICT OF COLUMBIA
WASHINGTON, D.C. 20001

MARION BARRY, JR.
MAYOR

March 1997

We are happy to present the first Strategic Transportation Plan for the District of Columbia. The plan and the process that produced it are groundbreaking in a number of ways. The plan presents a vision for the District's transportation system twenty years out and a strategy and action plan for building towards realization of that vision, starting today. Both are based on the premise that transportation is neither an end in itself nor a slave to today's travel habits, patterns and trends. Rather, transportation systems are developed to help achieve larger societal goals, and transportation projects can both catalyze and support change. We believe that to revitalize the District, transportation investments must be made strategically to support and nurture the trends and practices that will strengthen the District's economy and improve its quality of life.

The plan is nationally pioneering. It is a product of the first application of scenario planning to an urban transportation system in the United States. Rather than accept bleak forecasts that merely extrapolate today's problems into the future, this planning process started with the future and worked back to the present. A large and diverse cross section of people helped develop alternative scenarios- future visions or end states, and the events over the next twenty years that would have to occur (and not occur) in order for these end states to be realized. This was done to learn about the forces influencing change and to identify the potential actions that might foster change in the desired direction. Many more people provided input and feedback in five formal public meetings, twelve planning workshops and dozens of presentations to and discussions with civic, professional and community groups.

The methodology was controversial in some quarters, but the process and the product have also been praised. We believe that it was the right process for the District at this point in its history, with all of the challenges that it faces.

We would like to thank the Federal Highway Administration for its financial and technical support of this planning effort, and look forward to working with FHWA on near term tactical implementation plans.

Sincerely,

Marion Barry, Jr.
Mayor

Cellerino C. Bernardino
Acting Director
Department of Public Works

A Transportation Vision, Strategy and Action Plan for the Nation's Capital

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A Transportation Vision, Strategy and Action Plan for the Nation's Capital

1. INTRODUCTION

The Department of Public Works is pleased to present this Strategic Transportation Plan for the District of Columbia. It provides the blueprint for a transportation system that supports a dynamic vision for the District. This Transportation Plan represents the first application of scenario-based planning to public sector transportation planning in this country, a planning process in which a desirable future scenario is envisioned and strategic decisions and investments are developed to support this future. (Section 3 and Appendix A of this report contain more detailed descriptions of the planning approach and the scenarios developed for the District as part of this transportation planning process.)

Innovative both in the way it was developed and in its content, this Transportation Plan presents a strategy for using transportation to help reverse current downward trends in population and employment, making Washington, DC, a vibrant, world-capital city. The Plan starts with a vision of the transportation system that supports a dynamic future for the District. This vision will be realized through the implementation of the strategy and actions that are recommended in this Transportation Plan. The transportation vision, strategy and recommended actions are described in this document. A number of the action recommendations identified in this plan are already being implemented in the District; this document also identifies these and other early action items.

While the scenario planning approach is pioneering, the Transportation Plan meets all applicable Federal planning regulations. These regulations require an early and active public involvement process, a regional transportation improvement program that is financially constrained by a realistic revenue stream, and the consideration of planning factors that are specifically cited in the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991. This report documents each of these areas with respect to the State Transportation Plan for the District of Columbia (see Appendix B).

2. DEVELOPMENT OF THE TRANSPORTATION PLAN

The District of Columbia today faces tremendous challenges. Residents and businesses continue to move out, draining the District of valuable wealth. In fact, the Metropolitan Washington Council of Governments' (MWCOG's) 20-year forecasts for the District suggest that there will be almost no growth in population and very minimal growth in jobs. The fiscal crises of the last few years continue to hinder City services across the board, and deferred maintenance, brought on by lack of funding, is resulting in a crumbling infrastructure. The trends of recent years, and the daily newspaper headlines, paint a bleak picture of the District.

While the challenges faced by the District often seem insurmountable, they also present opportunities. The District of Columbia, like each of the 50 states, is required by the ISTEA to prepare a comprehensive transportation plan for the next 20 years. The Department of Public Works (DPW) seized this opportunity to assess the ways in which the transportation system could not only improve the efficiency of travel in and around the District, but also improve the overall quality of life and create wealth in the City by attracting residents and businesses. Planning in this way required a new and innovative approach that rejected the limitations of traditional forecasting.

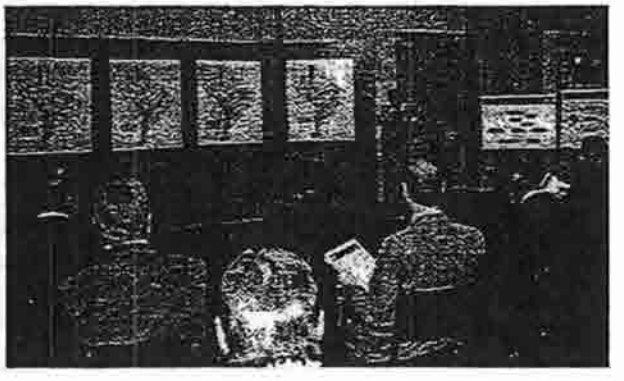
This Transportation Plan was developed in two phases over a 24-month period. Phase I of this study involved the identification of transportation, political, institutional, and economic issues, and the synthesis of five scenarios (or future end-states) for the District. These scenarios were developed after more than 50 structured interviews with civic and business leaders in the community, and they represent a range of possible futures for the District.

The Action Plan was then developed in Phase II of the study, through a detailed assessment of the existing transportation system and an ongoing public participation process. In Phase II, the public assisted in: (1) identifying existing and projected transportation issues and potential solutions; (2) exploring the future scenarios in terms of desirability, achievability and transportation implications; (3) considering the future scenarios in the context of existing transportation issues; and (4) developing the transportation vision statement, strategy and action plan.

3. SCENARIO PLANNING

Typical planning techniques involve forecasting, or predicting, the most probable future based on historical trends. One problem with this approach is that forecasts tend to become self-fulfilling prophecies. In contrast, scenario planning starts, not with the most probable future, but with the most desirable future. This allows for flexibility in planning and provides a proactive process to achieve a more desirable future than what the forecasts predict.

The scenario planning technique was invented by Royal Dutch Shell in the 1970's. It is a planning process in which a range of possible futures is created first, followed by the determination of the stream of events that would have to occur in order to realize each of the future outcomes. Scenarios provide for the realization of more than one desirable future over time or for the realization of one composite outcome by implementing the elements of more than one scenario. This is possible because the scenarios are not mutually exclusive; there may be common elements among the scenarios. Companies have found that in today's world, where change is discontinuous and rapid, not linear as it used to be, this type of process works better.



Five future outcomes for the District were carefully developed, in detail, in the first phase of this study. They are described in detail in Appendix A of this report, and are summarized here:

Tourism and Entertainment Center: With this scenario, the Nation's Capital has expanded, grown and built on the existing base of tourism to create a thriving economy driven by a multi-billion dollar tourist industry. The District is attracting tourists and business travelers from around the world to its museums and historic monuments, the newly built Children's Island Theme Park and a state-of-the-art Convention Center. Tourism has expanded well beyond the monumental core and into the diverse neighborhoods in the City and its surrounding region. Local residents from Maryland and Virginia come to the District for its sports and entertainment complexes such as the MCI Center, Kennedy Center, Lincoln Theater, and rebuilt stadium, and for specialty shopping, restaurants and nightlife. Transportation systems have been developed to move tourists from the City's gateways to their hotels in comfort. Easy-to-use public transportation provides access to the major sites in Washington, DC. Recent transportation initiatives include a parking facility for buses, with subway connections providing easy access to the monumental core, new facilities at National Airport to accommodate the increased demand, additional rail service, a water transportation system that is popular for both conveyance and recreation, and a state-of-the-art people mover that transports pedestrians to key sights around the Mall.

Transportation Emphasis: The transportation system focuses on being user-friendly and easy to use. The system provides convenient service to major tourist destinations within the monumental core, as well as to potential new tourist attractions away from the core.

Free Market Model City: A growing national economy, combined with rapid development of information technology and telecommunications, has produced a diverse economy in the District. There have been changes in the structure of the City's government: a highly skilled, politically seasoned, city manager was hired by the newly elected board of selectmen following passage of revised home-rule legislation. Also, plans were made to outsource the management of law enforcement, buses and subways, University of the District of Columbia, welfare administration, and even the fire department. Business friendly conditions in the City, plus the lure of the vast sea of government-based information, attracted new computing and communications companies along with the usual government-related professional services businesses to the City and the surrounding region. The District earned a reputation as a "model city" in the early years of the new century in recognition of its success in providing efficient services to residents and businesses who came to be considered "customers". In an effort to use land more efficiently, the government has introduced minimum, not maximum, density requirements for some residential and office buildings. The City now offers incentives to developers and transportation providers that limit net transportation demand in the City.

Transportation Emphasis: A flexible transportation system provides services for developing areas outside of the traditional business core. The system accommodates more flexible working hours and telecommuting. The capacity and efficiency of the transportation system serves as the draw for those businesses that currently benefit from situating in urban areas.

City and Federal Partnership: With this scenario, the concept of re-engineering – streamlining and re-building processes to make them more effective – has flowed from business to government. Reform efforts on the part of the District Council and the Mayor's Office have strengthened the relationship between the City and Congress. The City/Federal partnership is not viewed as diminishing the value of home rule; instead, it is considered an ideal representation of what home-rule should have been from its inception. The business of government dominates the City's economy. An intricate agreement has been made balancing the U.S. General Services Administration's (GSA) desire to acquire more office space in the District with the City government's need to generate revenue and bring life to impoverished neighborhoods. District residents now seem to feel that it is a fine thing to be the seat of the Federal government; it is something to take advantage of and build upon rather than complain about. Transportation within the City and from the suburbs to the core is a priority. Electric buses and other forms of "light" transportation systems are being put in place to accommodate employees of the GSA office complexes that are built outside the core. Also, new forms of transportation have been introduced that have emerged as tourist attractions.

Transportation Emphasis: The transportation system provides improved service to major areas of Federal and City employment, both existing and potential. Transportation policies such as the Federal employee parking charges are developed to maximize the efficiency of the transportation system.

Regional Partnership: The Washington, DC, metropolitan area, though somewhat slower to build needed regional coalitions than some areas, overcame the special problems associated with District/multi-state relations and built strong regional ties. Regional projects in the Capital Region range from joint purchasing initiatives to shared operations of public works, jails and hospitals. The real breakthrough came when the governments of the Capital Region hammered out reciprocal income tax agreements and when the region had to start addressing environmental problems in a unified manner. Washington, DC's, concentration of government and related businesses has proven to be a sufficient magnet to attract additional international business and to promote economic development throughout the region. Economic competition between City and suburbs has given way to cooperative marketing of the whole region. Tysons Corner, Reston and the Dulles Corridor have all developed as strong commercial centers, each with its own niche. As Federal requirements for clean air, equal opportunity for education, jobs, housing, and physical access have become more stringent, it has become increasingly clear that the fate of the whole area is intertwined. A common ticketing system has been adopted by METRO, VRE and MARC; bi-directional transportation links connect the key business centers, residential suburbs and urban core; and several bus routes have been privatized in order to ensure flexible service. Dense residential and commercial centers have emerged along transit lines making room for new parks and recreation areas.

Transportation Emphasis: The transportation system focuses on connectivity and efficiency across the region. Growth is focussed in areas where the transportation system can most efficiently provide service.

World Capital: City government has worked with the assistance of friendly Federal agencies and numerous foreign embassies to promote the transformation of the Capital into an international business center. The District has offered generous incentives and tax-breaks to commercial and high-end residential developers to help rebuild the City. Both of these have contributed to the burgeoning growth of Washington, DC, as a new international capital. The new interest in the District has greatly strengthened commercial and high-end residential development that is rapidly transforming Washington, DC, into a world-class capital. Real-estate developers have revitalized many of the District's neighborhoods in order to attract new businesses and residents to the expanded downtown area. The total number of residences in the City has nearly doubled since 1994, making it an attractive market for a variety of amenity providers -- restaurants, theaters, retail stores and specialty services. The District is cosmopolitan, with world-class arts, entertainment, dining and nightlife to meet the demands of the multiple cultures that converge in the City. This new vitality has caused many people, newcomers and former suburbanites, to settle in popular residential areas throughout the City. Mixed-use, carefully zoned developments proliferate in the District. Transportation from the City's gateways to its core and transportation within the core are the government's priorities.

Transportation Emphasis: Transit service is expanded with increased capacity, coverage and hours of operation in order to serve higher residential densities and entertainment and cultural activity centers.

Through the planning process, citizens and business representatives consistently found that the Tourism scenario was the most achievable, and there was broad support for investments in the transportation and information systems that would improve tourists' experience, as well as that of local residents. Many viewed the World Capital scenario, however, as the most desirable future for the Nation's Capital. Indeed many of the elements necessary to achieve World Capital status are present in the District today and are a logical extension of a growing center for vacation and business-related tourism. These include the broad, attractive boulevards and vistas that were planned in the early years of our Nation's history, the Mall, the Smithsonian and other world-class attractions, a growing international community, the presence of many major national and international firms, and the location of the District as the Nation's Capital. The World Capital scenario also includes elements that make the District a vibrant and attractive place to live.

To achieve the ultimate World Capital scenario, participants stressed the need for improved and strategic City/Federal government partnerships. Thus, as a course is charted for transportation to help realize a better future for the District, key aspects of the City/Federal Partnership scenario will also

play a role. By making strategic investments in transportation, the future of the District can evolve from the most likely (Tourism) to the most desirable (World Capital) outcome, including elements of the City/Federal Partnership scenario.

4. THE TRANSPORTATION VISION

At the heart of scenario planning, as it was used here, is the idea that transportation decisions can make a major contribution to the realization of a bright, dynamic future for the District. In order for this to occur, improvements and changes to the transportation system need to be developed to support a vision for the District, and decisions need to be made within a strategic framework. A composite vision that incorporates elements from three of the five scenarios was developed. This transportation vision is stated as follows:

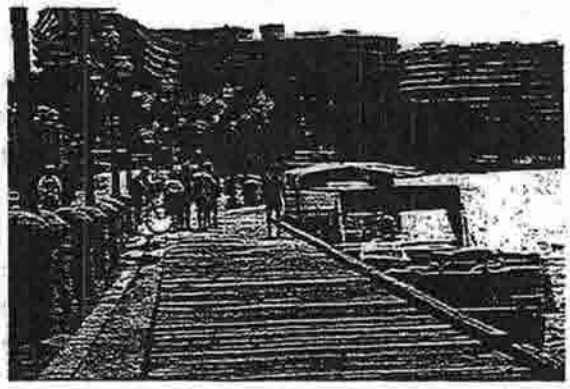
> *By 2020, the District of Columbia's transportation system will be widely viewed as one of its principal assets. Designed, built, operated and maintained to world-class standards, the transportation system will play a major role in the City's enhanced quality of life, its attractiveness as a residential and business location, the opportunities it offers for entrepreneurship, and its position as the capital of the free world and the cultural and entertainment core of the region.*

With this vision realized a resident or visitor in the District in the next century will find that:

- *People, goods and information will move efficiently and safely, with minimal adverse impacts on District residents and the environment.*

- *Improved transportation information will make the system as user-friendly for the first-time visitor as it is for the lifelong resident or commuter, regardless of mode of travel or native language of the traveler.*

- *Tourist travel around town will increasingly be part of the fun of visiting the Nation's Capital, as the transportation system, deliberately planned to take advantage of the District's historical design, current land uses, and natural advantages, becomes part of the City's ambience.*



- *Transit, automotive travel and parking, water transportation, bicycling, and walking will be balanced and integrated to offer excellent internal mobility, along with convenient access to City gateways, the region, the eastern seaboard and the world.*

5. THE TRANSPORTATION STRATEGY

How will the District turn this vision into reality? It will require strategic planning that is very different from the way transportation planning is currently performed in the District. The existing, reactive planning process will be replaced with planning that takes into account goals and initiatives that are needed to guide the District towards achieving the transportation vision. Current planning is limited by the need to react to daily demands, as well as fiscal and institutional constraints. A transportation strategy provides the framework for allocating limited funds and resources to maximize benefits.

The transportation strategy developed for this Transportation Plan will guide resource allocation and serve as the initial filter for specific project proposals. It address current needs and provides a framework for developing and implementing improvements that will help the District realize its vision. This strategy consists of six elements:

1. *Develop sufficient and consistent funding to sustain world-class infrastructure and an exemplary multi-modal transportation project planning and institutional coordination process. This will be accomplished by creating new revenue opportunities and innovative financing techniques.*
2. *Improve the efficiency, safety and attractiveness of the existing transportation system through improved maintenance, streetscaping and signage.*
3. *Focus transit investment on internal circulation to provide City residents and visitors with improved alternatives to the automobile.*
4. *Reduce the impacts of suburb to City travel on District residents by intercepting automotive traffic at key locations and providing excellent alternatives to driving in the City.*
5. *Promote business in the District by addressing goods movement through improved loading facilities and by improving rail as an alternative to moving goods into and out of the City.*
6. *Develop non-traditional, "signature" transportation for the District, including a water-taxi system, light rail and a world-class bicycle transportation network.*

6. ACTION PLAN

The transportation vision for the District will be realized through the implementation of an Action Plan derived from and consistent with the strategy above. This Action Plan addresses the ways in which transportation is planned, decisions are made, and projects are funded. The Action Plan promotes a transportation system that is efficient, balanced across modes, and enhances connectivity between modes. While the action items are described in detail within individual travel modes, this connectivity across modes is highlighted in the following discussion.

An efficient transportation system enhances the travel experience while minimizing overall traffic congestion and negative environmental impacts. Consistent with the Federal Planning Requirements in the ISTEA, the Transportation Plan for the District is designed to improve safety, efficiency, multi-modal access and mobility, and neighborhood and regional connectivity, as well as to protect the unique environment of the District.

This Transportation Plan recognizes that the District is a built environment. While almost every transportation improvement involves some level of impact, the recommendations in this Plan are largely intended to be implemented within existing rights-of-way, with the goal of minimizing adverse impacts to residents, businesses and the environment.

The following is a summary of the recommendations contained in this Transportation Plan which are necessary to achieve the District's transportation vision for the year 2020 and beyond.

6.1 Information

Improved mobility is addressed in the Action Plan through improved transportation information and signage that provides travelers with information that is user-friendly, accurate, relevant and timely. New transportation signs that incorporate international transportation symbols will assist all visitors as they travel to attractions throughout the District. Effectively placed signs to parking facilities or major attractions for motorists and tour buses reduce unnecessary travel by motorists looking for parking. Real-time information on service, availability and transfers makes it easier to take transit. Information kiosks and welcome centers, as well as the provision of transit travel information at all Metrorail and Metrobus stations and stops, will improve the flow of useable information to travelers and introduce travelers to other travel modes. Existing technology makes the dissemination of information easier through tools such as the Internet or interactive information kiosks that are tied to real-time traveler information systems.

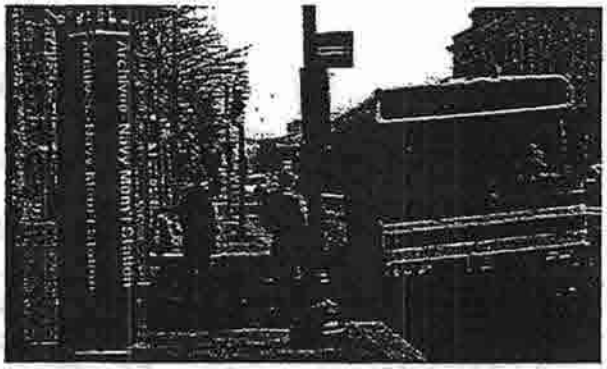
6.2 Parking/Roadway

Provisions for increased parking at strategic locations, in conjunction with improved internal transit and better connections to transit, bicycle facilities and walkways, are intended to decrease internal automotive travel and relieve parking demand pressures from both automobiles and buses. This package of improvements will allow motorists who choose to come into the city by car to park once and then travel around by transit, walking or bicycle for all trips within the City. This "park once" concept would encourage the use of alternative travel modes that are convenient to residents, workers, and visitors. The increased focus on internal transit service will also improve choices for District residents for work, shopping and recreational travel.

To alleviate substantial traffic delay and safety concerns, several intersections within the District are proposed to be grade-separated. These grade-separations, along with the completion of several connections in the District's roadway system, will complete the District's perimeter road and freeway system, in order to improve mobility within the City and access to Metrorail stations and "park once" facilities.

6.3 Transit

While the percentage of travel in the District made by transit is one of the highest in the country, the current system supports travel primarily to and from work, and the radial routes of both Metrorail and Metrobus are oriented towards the suburb to downtown trip. Shopping, entertainment and tourist trips are often made by car because the existing transit system does not provide good internal circulation and is both too infrequent and ends too early at night. In addition, many District residents choose to drive to the suburbs because parking there is easier.

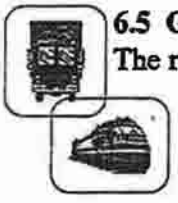


Addressing these concerns requires a balanced and integrated transportation system. Retail and entertainment activity can be supported by a number of transit improvements, such as access to these parking areas, better internal circulation, increased service operating hours, common ticketing across transit services, and the use of smaller buses and more flexible bus routes. Sufficient and equitable funding is necessary to ensure that transit service of regional significance continues to be viable in the long term. This Transportation Plan, therefore, recommends the development of an independent regional funding mechanism for regionally significant Metrobus, Metrorail and commuter rail services.

6.4 Bicycle/Pedestrian

The improvements recommended in this Transportation Plan seek to provide the District with connectivity and balance across travel modes. Bicycling and walking are important ways to get around the District today, and the Transportation Plan seeks to further enhance travel by these modes through improvements to the bicycle and pedestrian system and to connect these facilities more closely with other transportation modes. A bicycle spine network is proposed in this Transportation Plan to connect some of the existing, dedicated bicycle paths with one another and with new paths and dedicated bicycle lanes. Pedestrian promenades, sidewalk improvements and new, dedicated bicycle lanes and paths are recommended in specific areas and neighborhoods to improve access to restaurants,

shopping, entertainment centers and other modes of travel. An emphasis is placed on gateways into the District for bicyclists and pedestrians and other policies to encourage bicycle use and pedestrian activity, as well as connections to streets and other bicycle and pedestrian facilities and bicycle racks and lockers at strategic locations.

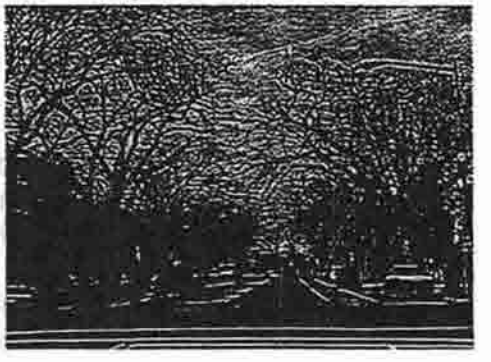


6.5 Goods Movement

The realization of a World Capital city scenario for the District requires an effective and efficient system for moving goods. Encouraging growth in business activity, while minimizing negative impacts, forms the basis for the recommended goods movement action items. The approach reflected in this Transportation Plan is three-fold: (1) remove trucks from the roadway system, to the greatest possible extent, by promoting rail as an alternative, with intermodal facilities strategically placed to intercept goods and divert them to smaller trucks; (2) accommodate goods delivery requirements and decrease the traffic impacts of double-parking by delivery vehicles by increasing loading zone and commercial parking areas; and (3) minimize the impacts of the remaining trucks by improving a number of roadways.

6.6 Multi-Modal Transportation Corridors

Recommendations are also set forth to incorporate additional travel modes within existing roadway corridors when they are reconstructed as part of ongoing transportation system preservation efforts. These will improve the quality of life in neighborhoods and retail areas of the City by creating a more walkable and bicycle-friendly environment. These roadway reconstructions would typically take place within existing rights-of-way and would allow existing roadways to accommodate a balance of transportation modes, enhance street life, and minimize the negative impacts of transportation.



6.7 Institutional/Financial

Preserving and enhancing the transportation system, while, at the same time, enhancing the quality of life in the District, is the primary goal of this long-range Transportation Plan. Transportation improvements have been devised to enhance tourist, recreational, and commuter travel, minimize the impacts of automotive traffic on City residents, create wealth, and increase the District's tax base.

The transportation system will be improved through several institutional, planning, and funding initiatives, including (1) consolidation of needed coordination efforts with the numerous Federal agencies having responsibility for transportation issues through the designation of a dedicated Federal liaison; (2) improved relationships with surrounding jurisdictions, especially the inner ring jurisdictions of Arlington, Montgomery and Prince George's Counties and the City of Alexandria, to ensure coordination and agreement on urban transportation issues; (3) re-establishment of a formal pre-project planning process, actively involving all DPW administrations and other District agencies

at the earliest stages of projects, which will allow for the efficient implementation of improvements across modes; (4) development of new, improved mechanisms for communicating with the public to promote a constructive, ongoing dialogue with District citizenry; (5) increased flexibility in the use of Federal-aid funding, which would allow funds to be used for all District streets and for the maintenance of existing infrastructure; and (6) increased funding for the Transportation Trust Fund, including fees for right-of-way utility use, permit parking, and air rights over public rights-of-way, and an increase in the District's gas tax.

This Transportation Plan will also promote the development of increased funding for transportation by directing transportation investments in a strategic manner that supports economic development, which, in turn, can lead to additional transportation improvements. These improvements can be both publicly and privately developed and/or funded. For example, the tourism industry will benefit from certain transportation-related improvements that will encourage tour buses to stay in the District for longer periods, provide better travel information to tourists, and offer "signature" transportation opportunities (as attractions themselves, as well as a means to get to tourist destinations). These improvements can actually attract more tourist activity to the District; the revenues from which can be used to support maintenance activities and future capital investments in transportation.

6.8 Early Action Items

The early action items listed below involve low-cost improvements, including inexpensive construction activities, study items and other actions (such as developing standards) that can then be implemented through ongoing DPW efforts. These early action items are the initial steps to the realization of the vision for the District's transportation system:

- Develop standards for the signing and lighting of Gateways.
- Perform a detailed signage study that includes the development of signage standards. Implement these new standards for all sign replacements as soon as possible.
- Perform a study for implementing Intelligent Transportation Systems (ITS) in the District of Columbia, with a focus on the use of new technologies for disseminating traveler information and improving the flow and ridership of bus transit service.
- Coordinate with the American Bus Association to develop a tour bus information package that includes tour bus routes and parking locations.
- Identify potential locations and demand for public parking facilities and prioritize these locations.
- Convert all or part of the South Capitol Street parking lot to tour bus parking.
- Coordinate with the Stadium/Armory Board to permit and/or accommodate tour bus parking.

- Identify needed regulatory changes and coordinate with the appropriate agencies to implement the changes necessary to develop a water taxi and dock system.

- Institute trial service for a neighborhood bus service that uses smaller buses and provides for increased route flexibility.

- Construct the following bicycle facilities: the Metropolitan Branch Trail, the Pennsylvania Avenue Cross-Town Route, and connections from the Theodore Roosevelt Memorial Bridge into downtown, at the 14th Street Bridge, and from the Capital Crescent Trail into Georgetown.

- Develop quantifiable and qualitative guidelines and criteria for and implement a multi-modal, pre-planning and project prioritization process in the Department of Public Works. Implement the multi-modal considerations in this Transportation Plan for all roadway corridor reconstruction projects. Improve coordination efforts with Federal agencies.

- Initiate the development of an independently funded regional transportation authority for Metrobus, Metrorail and commuter rail.

7. DETAILED DESCRIPTIONS OF PLAN RECOMMENDATIONS

The following pages provide detailed descriptions of the recommended projects, policies and procedures that constitute the Strategic Long-Range Transportation Plan for the District of Columbia. These descriptions include the purpose and need for each improvement, a timeline of implementation activities and estimated costs. A timeline is not included for those projects that do not require any construction and/or do not require any public-sector outlay. Improvement descriptions include map coordinates, which are keyed to Exhibits 1-3 and the Transportation Plan Map that accompanies this document. All cost estimates are in 1997 dollars; the effects of inflation on construction costs are accounted for in Section 8, Financing the Transportation Plan. The list below specifies all of the recommended actions items by area or transportation mode:

Transportation Information Action Items

Gateway Program
Information Centers and Interactive Information Kiosks
Transportation Signage Improvement Program
Traveler Information (Printed and Electronically Available)

Parking/Roadway Action Items

Public Parking
Tour Bus Parking
Roadway Safety and System Connection Improvements

Transit Action Items

Waterways Transportation System
Light Rail Transit Corridors
Major Investment Study for the Construction of Metrorail Line and Stations (Between Georgetown and Fort Lincoln)
New Metrorail Station
Bus Trunk Routes/Priority Corridors
Feeder and Alternative Bus Service
Independent Regional Funding for Metrobus, Metrorail and Commuter Rail
Transit Service and Fare Structure
Intercity and Commuter Rail Service and Intermodal Connections to Regional Airports

Bicycle/Pedestrian Action Items

Bicycle Spine Network
Pedestrian Corridor Development

Goods Movement Action Items

Increased Use of Rail for Goods Movement in the District
Additional Loading and Parking Zones for Commercial Vehicles
Improved Roadways to Minimize Impacts from Trucks

Institutional/Financial Action Items

Coordinated, Multi-Modal Transportation Decision-Making
Expand the District's Multi-Modal Transportation Trust Fund

7.1 ACTION ITEM: Gateway Program

DESCRIPTION: Twenty roadway entrances will welcome visitors to the Nation's Capital with uniform signs and attractive landscaping, lighting, signage and architectural elements designed to reflect the personalities of these neighborhoods. These gateways will provide visitors with a positive impression of the District as they enter. Once standards are developed and adopted, the gateway program would be implemented through public/private partnerships, with some portion of the minor land acquisition, signage and landscaping costs, and all of the maintenance costs provided by private companies through a program similar to "adopt-a-highway." In addition to a welcome sign, the private companies' names could be displayed, giving companies an incentive to adopt gateways and providing advertising for District-based businesses. The proposed Gateways are all along the District boundary line at each of the following streets:

- Clara Barton Parkway (A5 on map),
- Massachusetts Ave. (B4),
- Wisconsin Avenue (C4),
- Connecticut Ave. (D3),
- Beach Drive (E1),
- 16th Street (F1),
- Georgia Avenue (G1),
- New Hampshire Avenue (H3),
- Michigan Avenue (J5),
- Rhode Island Ave. (K6),
- New York Avenue (L7),
- Kenilworth Avenue (M8),
- East Capitol Street (N9),
- Pennsylvania Ave. (L11),
- Suitland Parkway (K13),
- South Capitol St. (H15),
- Anacostia Freeway (G16),
- I-95/I-395 Bridge (F11),
- I-66 Bridge (D9) and
- Key Bridge (D8)

INITIAL IMPLEMENTATION STEPS:

- Develop gateway standards for signs and landscaping.
- Identify properties for sign placement and landscaping.
- Publicize program within the business community.
- Coordinate with roadway reconstruction projects to enhance general streetscape quality at gateway locations.

TIMELINE	*1998*	*2000*	*2002*	*2004*	*2006*	*2008*	*2010*	*2012*	*2014*	*2016*	*2018*	*2020*
Feasibility Studies												
Design												
Property/Right-of-Way Acquisition												
Construction/ Implementation												
Performance Evaluation												

ESTIMATED COST: The estimated public cost for construction and start-up is $20,000 per gateway – $400,000 for the entire program, with an additional 10 percent for feasibility and design costs. All necessary maintenance would be privately funded.

7.2 ACTION ITEM: Information Centers and Interactive Information Kiosks

DESCRIPTION: Improved transportation information holds the promise of improving the efficiency of the transportation system without high levels of capital expenditure. This is particularly true in the District, which accommodates 19 million tourists per year and where so many trips are made using transit. The purpose of implementing a system of coordinated information centers and interactive information kiosks is to provide visitors with easy-to-understand information that will help to strengthen one of Washington's strongest industries, tourism. Information centers will be placed strategically to capture tourists as they enter the District, and would provide information on travel routes, parking locations, transit options, and bicycle and pedestrian routes. Tourist related information will also be available on such topics as tourist attractions, shopping, entertainment, hotels, restaurants, upcoming events, concerts, museum exhibitions and Smithsonian schedules. These centers will support the tourist industry, while providing information to tourists on various transportation options for reaching the destinations, particularly by mass transit. Each information center will include ample parking and would be located at major entry points to the District.

These information centers would be constructed at the following locations:

- New York Avenue just inside the District line (L7 on map),
- I-295 near the Anacostia Metro Station (H11) and
- I-395 at East Potomac Park (F10).

As with the other two information centers, the center at East Potomac Park is intended to capture tourists as they enter the District. The East Potomac Park location is located close to a tourist information center in the Castle Building of the Smithsonian Institution. Coordination of the Smithsonian's tourist information activities with the Department of Public Work's activities in disseminating transportation information would be beneficial for both. Further study and discussions with the Smithsonian may result in the elimination of the need for the information center at East Potomac Park.

Automated information kiosks would also provide travelers with information on various transportation modes, as well as tourist attractions and services. The kiosks would be placed at locations where tourists would be on foot. Up-to-date event information, transportation maps, automated route and travel mode guidance, and real-time travel condition information would be provided at these information kiosks.

The proposed locations for these kiosks are:

- Pennsylvania Avenue, SE, at 8th Street (I10),
- 1st Street, SE, at the Capitol Building (H9),
- National Airport (F12),
- Union Station (H9),
- H Street at 7th Street, NW (G8),
- I Street at 13th Street, NW (G9),
- Dupont Circle (F8),
- Adams Morgan (F6),
- Woodley Park-National Zoo (E6),
- M Street in Georgetown (D8) and
- Key Bridge at Arlington Circle (D9).

INITIAL IMPLEMENTATION STEPS: Perform a study for implementing Intelligent Transportation Systems (ITS) in the District of Columbia with a focus on the use of new technologies for disseminating traveler information and improving the flow and use of bus transit service.

TIMELINE	*1998*	*2000*	*2002*	*2004*	*2006*	*2008*	*2010*	*2012*	*2014*	*2016*	*2018*	*2020*
Feasibility Studies												
Design												
Property/Right-of-Way Acquisition												
Construction/ Implementation												
Performance Evaluation												

IMPLEMENTATION CONSIDERATIONS:

- Provision of information and maintenance of the information centers and kiosks are critical and require a consistent source of funding. Such funding should be developed, at least partially, through public/private efforts, including the Chamber of Commerce, the Hotel Association, and the business community at large.
- Real-time traveler information could be provided through on-going efforts in Intelligent Transportation Systems in the region.

ESTIMATED COST: The estimated cost per information center is $250,000. The estimated cost per information kiosk is $20,000. Total estimated construction cost is $970,000, with an additional 10 percent for feasibility and design costs. Funding for necessary maintenance would come from private sources, such as advertising revenue.

7.3 ACTION ITEM: Transportation Signage Improvement Program

DESCRIPTION: Deficiencies in signage play a major role in the lack of efficiency in a transportation system. Inability to find one's destination or a convenient place to park because of inadequate signage leads to unnecessary driving. Lack of signage for transit results in frustrated transit riders that give up and choose to drive. Unclear signage for on-street parking results in many parking citations, which leads to frustration of residents and visitors alike. Addressing the District's signage system is clearly a top priority for improving the transportation system.

The signage improvement program will provide for consistency and clarity of signage in the District. Signs used by different agencies and for different modes will be consistent in design and utilize international transportation symbols that can be understood by residents, commuters and visitors from around the world. Sign standards will be set and agreed upon by those agencies responsible for putting up signage in the District (including the National Park Service [NPS], Washington Metropolitan Area Transit Authority [WMATA], the Architect of the Capitol, and several agencies within the Department of Public Works).

A program to replace all transportation signs in the District over a 5-year period will be instituted. New signage will include a focus on directing motorists to parking locations, providing clear direction to Metrorail stations and other transportation modes, and highlighting bicycle and pedestrian routes. Bus stop signage will be enhanced to provide schematic drawings of the routes that pass a particular stop and information regarding the frequency of service.

INITIAL IMPLEMENTATION STEPS: Perform a study to develop standards for transportation signage. These standards will include sign criteria such as wording size and symbols, as well as sign placement standards. As signs are replaced, the new standards will be applied.

TIMELINE	*1998*	*2000*	*2002*	*2004*	*2006*	*2008*	*2010*	*2012*	*2014*	*2016*	*2018*	*2020*
Feasibility Studies												
Design												
Property/Right-of-Way Acquisition												
Construction/ Implementation												
Performance Evaluation												

IMPLEMENTATION CONSIDERATIONS: Signage deficiencies occur throughout the Washington region and a regional approach will be required to address these deficiencies. The District should work with the region through the Council of Governments to reach consensus on signage standards and encourage all regional jurisdictions to implement a common standard.

ESTIMATED COST: The estimated cost to replace signage in the District is $10 million, with an additional $200,000 for initial studies.

7.4 ACTION ITEM: Traveler Information (Printed and Electronically Available)

DESCRIPTION: As a major tourist destination, a substantial portion of travel in the District is made by persons unfamiliar with the City's transportation system. In addition to improving signage, the provision of transportation information to these travelers provides a cost-effective way to improve the transportation system's efficiency. This action item includes preparing and distributing maps and other information regarding travel within the District. These maps will illustrate: pedestrian routes and walking tours, bicycle routes with locker locations, Metrobus and Metrorail ridership tips, the best routes to get into and out of the City, park locations, and information on unique transportation opportunities, such as the proposed water taxi or light rail.

At a minimum, maps will be provided to travel agents, tour bus operators and trucking companies. This information will also be electronically available over the Internet so that tourists, commuters and residents, alike, could gather travel route and mode guidance and travel condition information prior to making their trips.

INITIAL IMPLEMENTATION STEPS:

- Develop an inventory of transportation information to be provided to tourists, tour bus operators and trucking companies.
- Develop travel information on the World Wide Web (Internet) with links to other Washington, DC, tourist information sources.

TIMELINE	*1998*	*2000*	*2002*	*2004*	*2006*	*2008*	*2010*	*2012*	*2014*	*2016*	*2018*	*2020*
Feasibility Studies												
Design												
Property/Right-of-Way Acquisition												
Construction/ Implementation												
Performance Evaluation												

IMPLEMENTATION CONSIDERATIONS: Traveler information is the focus of much of the research and implementation efforts in Intelligent Transportation Systems (ITS). It is crucial to tie into national and regional efforts to maximize the benefits of District efforts to provide traveler information.

ESTIMATED COST: The estimated cost of preparing and distributing this information is $300,000 over a 23-year period, including study.

7.5 ACTION ITEM: Public Parking

DESCRIPTION: Lack of sufficient parking is an urban problem that can be a frustration to those wishing to enjoy the District's attractions and nightlife, and to its residents. Residents, commuters, tourists, visitors and businesses compete for the same limited number of parking spaces. In some neighborhoods, such as Georgetown and Adams Morgan, this problem causes substantial traffic congestion as motorists circle trying to find parking. People attempting to enjoy the City's night life, shops and restaurants become frustrated and, in turn, frustrate police and parking enforcement officers. This action item proposes a shift away from the current punitive ticketing policy that is intended to encourage parking space turnover, to a policy that promotes increased parking supply, coupled with transit service that provides improved internal circulation.

The construction of new public parking facilities at up to 15 locations is recommended for further study. The facilities would be located to intercept automobile traffic, and be in close proximity to convenient and easy to use transit, bicycle routes and attractive pedestrian corridors. The facilities will reduce overall automotive traffic by allowing motorists to park once and use other travel modes for getting around the District. The parking pricing policy at these locations will discourage drivers from parking for only a short time, encouraging transit use rather than travel by car.

While it is assumed that most of these facilities will be municipally-owned, to ensure that parking is available when needed, some or all of these facilities may be privately-owned, with incentives to stay open for longer hours. Parking facilities at the following general locations are proposed to be studied:

- Adams Morgan (F7 on map),
- U Street-Cardozo (G7),
- Proposed Convention Center (G8),
- Brookland-Catholic University (I6),
- New York Avenue/Ft. Lincoln (K7),
- Kenilworth Avenue/DC line (M8),
- Hains Point/SW Waterfront (G10),
- South Capitol Street/M Street (H10),
- Barney Circle (J10),
- Upper Wisconsin Avenue (C4),
- Upper Connecticut Avenue (D4),
- Navy Yard (H10),
- Upper Georgia Avenue (G3),
- Georgetown (E8) and
- Upper Massachusetts Avenue (C5).

If it is determined that constructing parking facilities at any or all of the above locations is not feasible, then other measures may be considered to accommodate parking demand in certain areas. These measures might include providing incentives for making existing private commercial/office parking available for residential/retail use.

INITIAL IMPLEMENTATION STEPS:

- Identify demand for parking at the above locations and prioritize locations for construction of new public parking facilities.
- Consider providing incentives for making existing private commercial/office parking available for residential/retail use.

TIMELINE	*1998*	*2000*	*2002*	*2004*	*2006*	*2008*	*2010*	*2012*	*2014*	*2016*	*2018*	*2020*
Feasibility Studies												
Design												
Property/Right-of-Way Acquisition												
Construction/ Implementation												
Performance Evaluation												

IMPLEMENTATION CONSIDERATIONS:

- Funding (consider use of bonds with payback from parking revenues).
- Need for signage (included as part of traveler information action item).
- Sensitive design/landscaping to minimize visual impacts and enhance security.

ESTIMATED COST: In estimating these costs, it was assumed that six of these parking facilities would be built by the year 2020, with the remaining facilities to be built at some point thereafter. Each of the six facilities would be built as a parking deck and would provide 400 spaces, for a total of 2,400 parking spaces. Specifics would be developed with further study. The total estimated construction cost, assuming all six facilities would be publicly constructed, is $31.2 million, with an additional 10 percent for feasibility and design costs and an additional 20 percent for right-of-way acquisition costs. Additionally, initial parking studies are estimated to cost $250,000.

7.6 ACTION ITEM: Tour Bus Parking

DESCRIPTION: As a major tourist destination, Washington, DC, is host to over 100,000 tour buses every year, an average of almost 300 per calendar day. Currently, only a limited number of areas are available for tour buses to load and unload passengers or park. In addition, tour buses are restricted to a three minute idling time limit, including the loading/unloading of passengers. These conditions, and strictly enforced regulations in the District, create difficulties for tour buses. As a result, the buses stop or park on neighborhood streets and circle the blocks near the tourist loading areas to avoid exceeding the limits on idling times. Many tour bus operators remain in the District only long enough to take tourists to major attractions and then leave, resulting in loss of revenues as tourists shop, dine and spend the night in suburban jurisdictions. Nearby jurisdictions (such as Alexandria) reap the benefits of this by capturing an estimated $5,000 to $7,000 per night per tour bus for the local economy.

A program to support and promote the tourism industry in the District and to minimize the adverse impacts of tour buses on the transportation system includes developing tour bus parking areas, loading zones and designated routes. The parking areas will provide tour buses with longer term parking while tourists are sight-seeing around the downtown core. Each location would be within a 10 to 15-minute drive from where passengers would re-board the bus at the end of their stay. The parking areas would each accommodate between 60 and 150 tour buses. Additionally, the collection of tour bus parking fees could be a potential source of revenue for the District.

The proposed locations for new tour bus parking are:

- Georgetown near K Street (D8 on map),
- Robert F. Kennedy Stadium (J9),
- South Capitol Street underneath the Southeast Freeway (H10) and
- Anacostia Freeway, near South Capitol Street (I11).

This action item also includes steps to improve the tour bus usage of the currently under-utilized Union Station parking garage. Encouraging expanded use of this facility would include improved signage, illustrating this facility on tour bus maps, and improved access.

A study of curb space usage near major tourist destinations would be performed to determine the need to convert parking spaces to tour bus loading zones. In coordination with the American Bus Association, programs such as the use of beepers to notify buses when the tour group is ready for pick-up (and, therefore, minimizing loading time) would be investigated. Tour bus maps highlighting loading/unloading areas and parking lots, major tourist areas, retail areas, restaurant districts, bus routes, and tour bus procedures and policies would be developed and made available to tour bus operators through the American Bus Association.

INITIAL IMPLEMENTATION STEPS:

- Convert the South Capitol Street facility to tour bus parking.
- Coordinate with the Stadium/Armory Board to permit and/or accommodate tour bus parking.

- Develop an information package in cooperation with the American Bus Association that includes route maps and tour bus parking locations. Include the Union Station parking garage on such a map and erect signs leading tour bus drivers to this location from major tour group drop-off areas.
- Identify potential locations and demand for tour bus parking facilities.
- Acquire additional right-of-way, design and secure funding.
- Perform a comprehensive study of tour bus and truck loading zone requirements.
- Implement a driver information program that includes beepers to notify drivers of passenger pick-up times.

TIMELINE	*1998*	*2000*	*2002*	*2004*	*2006*	*2008*	*2010*	*2012*	*2014*	*2016*	*2018*	*2020*
Feasibility Studies												
Design												
Property/Right-of-Way Acquisition												
Construction/ Implementation												
Performance Evaluation												

IMPLEMENTATION CONSIDERATIONS: Coordinate with the private sector, including tour bus companies, hotels and major attractions, to ensure that parking facilities meet the needs of the industry and minimize the impacts on the City.

ESTIMATED COST: The total estimated construction cost for the approximately 420 spaces is $2.9 million, with an additional 10 percent for feasibility and design costs and an additional 20 percent for right-of-way acquisition costs.

7.7 ACTION ITEM: Roadway Safety and System Connection Improvements

DESCRIPTION: Several existing intersections in the District present substantial traffic delay and safety concerns to motorists. These intersections, East Capitol Street at Benning Road, New York Avenue at Bladensburg Road, and New York Avenue at Florida Avenue, are proposed to be grade separated. In addition, several connections in the District's roadway system are proposed to be completed. These include a section of Southern Avenue from Naylor Road to Erie Street, which would complete the District's perimeter road system and improve access to the Naylor Road Metrorail station, and the Barney Circle Freeway, which would complete a connection between the Southeast and Anacostia Freeways. The Barney Circle Freeway project already has been subject to extensive environmental studies. The Southern Avenue connection is included in this Transportation Plan for feasibility study.

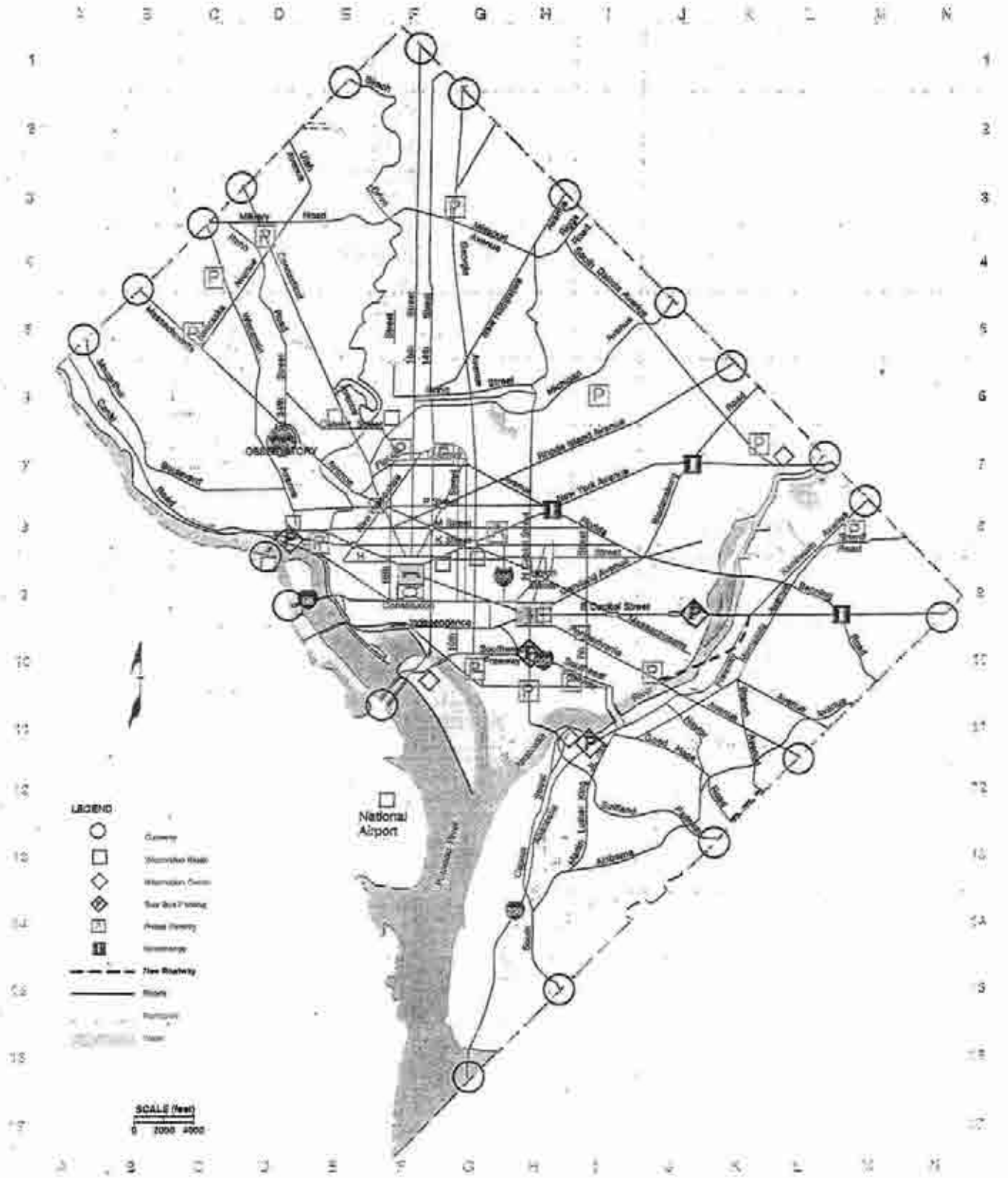
INITIAL IMPLEMENTATION STEPS:

- Perform a feasibility study for the Southern Avenue connection.
- Ensure reservation of right-of-way for each of these roadway safety and system connection improvements.

IMPLEMENTATION CONSIDERATIONS: Coordination for the study and design of the interchange recommendations and the roadway connections will be required with WMATA, CSX Railroad, MWCOG and the State of Maryland.

ESTIMATED COST: Construction of the East Capitol Street at the Benning Road interchange is estimated to cost $20 million. Construction of the New York Avenue at Bladensburg Road interchange is estimated to cost $30 million. Construction of the New York Avenue at Florida Avenue interchange is estimated to cost $25 million. The total estimated construction cost for these interchange projects is $75 million, with an additional 10 percent for feasibility and design costs and an additional 20 percent for right-of-way acquisition costs. Federal funds for the Barney Circle Freeway have already been obligated; the District's share of this project is estimated to be $10 million. Study cost for the Southern Avenue connection is estimated to be $250,000.

Transportation Plan for the District of Columbia
Exhibit 1
Information and Parking/Roadway Action Items



7.8 ACTION ITEM: Waterways Transportation System

DESCRIPTION: The Potomac and Anacostia Rivers represent the largest under-utilized tourist and transportation resource in the District of Columbia. These waterways provide an opportunity to open large portions of the City by offering travel to tourists, recreational users, and, to some extent, commuters. A waterways transportation system is proposed to extend from Rock Creek, on the Potomac River, and from Children's Island, on the Anacostia River, to National Airport and Old Town Alexandria, Virginia. Water taxis, privately owned and operated, would load and unload passengers at docks built with public-private funding. Chartered boats, ferryboats and tour boats would provide views of historic sites from the water and stop at several tourist attractions. Service would also be extended to National Airport and Old Town Alexandria.

Water taxi docks are proposed to be constructed at the following locations in the District:

- Rock Creek/Georgetown Waterfront (E8 on map),
- Kennedy Center (E9),
- West Potomac/Lincoln Memorial (E9),
- Southwest Waterfront/ Water Street (G10),
- Tidal Basin (F10),
- Hains Point (G12),
- Navy Yard (H11),
- Anacostia Park (I11) and
- Children's Island (K9).

INITIAL IMPLEMENTATION STEPS:

- Identify the needed regulatory changes and coordinate with appropriate agencies to implement these changes to develop a water taxi and dock system.
- Study demand and ways to encourage use of the water taxi system. Coordinate with the City of Alexandria and Washington National Airport regarding service to and from these areas.
- Identify public/private funding mechanisms, such as docking fees, space rental, etc.

TIMELINE	*1998*	*2000*	*2002*	*2004*	*2006*	*2008*	*2010*	*2012*	*2014*	*2016*	*2018*	*2020*
Feasibility Studies												
Design												
Property/Right-of-Way Acquisition												
Construction/ Implementation												
Performance Evaluation												

IMPLEMENTATION CONSIDERATIONS: The primary obstacle to waterways transportation has been the regulation of the service along the rivers. There is no regulatory system in place, which acts as a deterrent to potential water transportation businesses in the District. Coordination between the existing water taxi businesses and the District is important in the pre-planning and planning stages.

ESTIMATED COST: Based on a dock size of 120 feet by 30 feet, it is estimated that construction cost for the nine proposed docks would be $4.5 million, with an additional 10 percent for feasibility and design costs. Some of this cost could be offset with private funding. Maintenance costs would be covered by docking fees charged to the private water transportation service providers.

7.9 ACTION ITEM: Light Rail Transit Corridors

DESCRIPTION: From the days of streetcars to the present, the transit system in Washington has been radially oriented. When work, shopping and entertainment activities were all centered in the downtown core, such service could be used for all kinds of travel. With the dispersion of shopping and entertainment centers away from the downtown, the current transit service has become primarily commuter oriented. In addition, options for convenient, internal cross-town travel by transit are currently very limited. Internal circulation by transit, particularly cross-town, is needed and is critical to the achievement of the transportation vision.

A new system of surface transit is recommended that would allow many of the city's residents and workers to travel conveniently across town. Strategically placed cross-town transit service, including new light rail (described below) and Metrorail lines and stations (described in Sections 7.10 and 7.11) will address this deficiency and accommodate both internal and radial commuter transit. This proposed transit service will promote internal circulation in the City, and, by tying into the public parking areas, will allow those who choose to drive to park once and then get to and from various employment, shopping and entertainment areas by transit. Light rail service will also open up other areas of the City to tourists by providing transportation to these areas that is both functional and fun to ride.

Light Rail Corridors:

- Georgetown (E8 on map) via Buzzard Point to Navy Yard (H10),
- Adams Morgan (F7) to Minnesota Avenue (L9) and
- Georgia Avenue/7th Street (G2) to Barney Circle (J10).

The light rail lines will also provide increased access to the waterfront and connect to the waterways transportation system (Section 7.8) and the pedestrian system (Section 7.18). To support this increased interaction, and to better connect the Kennedy Center to downtown, the feasibility of connecting the Kennedy Center to the Georgetown – Navy Yard light rail line, either directly or through improved pedestrian access, would be investigated.

INITIAL IMPLEMENTATION STEPS:

- Conduct a right-of-way analysis of all proposed new internal transit corridors. Select the routes that are suitable for a modern light rail system.
- Feasibility studies, design, right-of-way acquisitions, construction, and performance monitoring would be on-going between 2002 and the year 2020. As roadways are slated for reconstruction, the multi-modal considerations described above would be included in the design and construction.

TIMELINE	*1998*	*2000*	*2002*	*2004*	*2006*	*2008*	*2010*	*2012*	*2014*	*2016*	*2018*	*2020*
Feasibility Studies												
Design												
Property/Right-of-Way Acquisition												
Construction/ Implementation												
Performance Evaluation												

IMPLEMENTATION CONSIDERATIONS: Coordination with WMATA, MWCOG and the regional funding authority discussed in Section 7.14.

ESTIMATED COST: Cost estimates include capital costs only.

Light Rail Corridors:

- The Georgetown to Navy Yard Line, approximately 5.8 miles, is estimated to cost $120 million.
- The Adams Morgan to Minnesota Avenue Line, approximately 6.1 miles, is estimated to cost $126 million.
- The Georgia Avenue/7th Street to Barney Circle Line, approximately 8.7 miles, is estimated to cost $179 million.

The total estimated construction cost for these light rail projects is $425 million, with an additional 10 percent for feasibility and design costs.

7.10 ACTION ITEM: Major Investment Study for the Construction of a Metrorail Line from Georgetown to Fort Lincoln

DESCRIPTION: A new WMATA Metrorail line, from Georgetown (D8 on map) east along M Street and New York Avenue to Fort Lincoln (L7) (and then continuing into Prince George's County), would be studied as a means to support planned economic development and existing activity in this area, including Georgetown University, the waterfront development, and the restaurant, theater and retail districts. Stations would be located, at a minimum, at Fort Lincoln, the red line at New York and Florida Avenues (see Section 7.11), and in Georgetown, at M Street, NW, near Wisconsin Avenue (D8).

IMPLEMENTATION CONSIDERATIONS: Coordination would be required with WMATA, MWCOG, the New York Avenue Task Force, the regional funding authority discussed in Section 7.14, and interest groups for the various neighborhoods, land uses and economic activities along this proposed line and in Georgetown. Early coordination with Prince George's County would be needed to determine the extent to which the rail line would extend into the county and potential station locations.

ESTIMATED COST: The Georgetown to Fort Lincoln Line, approximately 6.5 miles, is estimated to cost $1.13 billion. This construction cost is not specifically included in this Transportation Plan. The cost to study the feasibility of this line is included, at approximately $2 million.

7.11 ACTION ITEM: Metrorail Station

DESCRIPTION: A new WMATA Metrorail station on the Red Line near the intersection of New York and Florida Avenues (H8 on map) would be constructed to support large-scale planned activity generators, potentially including a baseball stadium and mixed use/entertainment activity at this location. Planning and design activities at this station need to consider the action item on the Georgetown to Fort Lincoln Metrorail (Section 7.10).

INITIAL IMPLEMENTATION STEPS:

- Secure funding.
- Acquire additional right-of-way at the location, if necessary.
- Design the station.
- Revisit the zoning and economic development plans for this area.
- Coordinate with the New York Avenue Task Force (New York/Florida Avenues station only).

TIMELINE	*1998*	*2000*	*2002*	*2004*	*2006*	*2008*	*2010*	*2012*	*2014*	*2016*	*2018*	*2020*
Feasibility Studies												
Design												
Property/Right-of-Way Acquisition												
Construction/ Implementation												
Performance Evaluation												

IMPLEMENTATION CONSIDERATIONS: Coordination with WMATA, the regional funding authority discussed in Section 7.14, the New York Avenue Task Force (New York/Florida Avenues station only), and interest groups for the various land uses proposed to be developed near this location.

ESTIMATED COST: The estimated cost for construction of this Metrorail station is $20 million, with an additional 10 percent for feasibility and design costs and an additional 20 percent for right-of-way acquisition costs.

7.12 ACTION ITEM: Bus Trunk Routes/Priority Corridors

DESCRIPTION: High volumes of commuter travel by single-occupant vehicle along the major arterials into downtown affect the quality of life for District residents by creating traffic congestion, along with its attendant air and noise impacts. In addition, the need to accommodate this rush hour traffic requires that City residents move their parked vehicles during the rush hour periods. Minimizing this commuter traffic is best accomplished by providing transit service in the corridors that is both cost- and time-effective.

Commuter bus ridership will be encouraged in the major commuter corridors by providing bus bypass lanes at intersections. These bus bypass lanes would allow the buses to pull out of traffic as they approach intersections and stop just at the intersection during the red phase of a signal. The buses will be equipped with the ability to preempt traffic signals. By calling for a short green phase prior to the general traffic green phase, buses will be able to pull ahead of the cars at the signal before merging back into the general travel lane. Ridership exceeding the capacity of these buses would result in the consideration of a light rail line along the same roadways.

The corridors that would be modified to provide priority bus service include:

- 16th Street, NW (F1-F8 on map),
- Wisconsin Avenue, NW (C4-D8),
- K Street, NW (E8-G8),
- South Dakota Avenue, NE/Michigan Avenue, NE/Harvard Street, NW/Irving Street, NW (F6-K7),
- Columbia Road/Calvert Street/Cleveland Avenue/Garfield Street, NW (D6-F6),
- Military Road, NW/Missouri Avenue, NE/Riggs Road, NE (C3-I3) and
- Pennsylvania Avenue, SE/Independence Avenue, SE/Independence Avenue, SW (G10-L11).

INITIAL IMPLEMENTATION STEPS:

- Identify constraints and study the feasibility of the proposed roadway modifications to accommodate bus bypass lanes.
- Feasibility studies, design, right-of-way acquisitions, construction and performance monitoring would be on-going between 1999 and the year 2020. As roadways are slated for reconstruction, the multi-modal considerations described above would be included in the design and construction.

TIMELINE	*1998*	*2000*	*2002*	*2004*	*2006*	*2008*	*2010*	*2012*	*2014*	*2016*	*2018*	*2020*
Feasibility Studies												
Design												
Property/Right-of-Way Acquisition												
Construction/ Implementation												
Performance Evaluation												

IMPLEMENTATION CONSIDERATIONS: Coordination with WMATA and the regional funding authority, discussed in Section 7.14, will be required.

ESTIMATED COST: Roadway improvements would be part of on-going roadway reconstruction (see Section 8). The estimated cost for signal preemption, including the retro-fitting of buses with the necessary equipment, is $14 million, with an additional 10 percent for feasibility and design costs.

7.13 ACTION ITEM: Feeder and Alternative Bus Service

DESCRIPTION: Since major bus priority corridors will be established to speed buses within major corridors (by the implementation of bus bypass lanes and signal preemption capabilities described in Section 7.12), getting riders to bus stops along these corridors is important. Neighborhood bus service areas have been identified where smaller circulator buses (imposing fewer negative impacts on neighborhood streets) will collect riders and bring them to these major bus corridors and Metrorail stations.

Several university bus systems are in place to serve the universities' staff and students. The largest of these is the Georgetown University Transportation Shuttle (GUTS), which carries approximately 750,000 passengers annually. Any actions taken to improve internal circulation by feeder and alternative bus service will take into consideration possible connections to and coordination with these university bus systems.

In addition, a study of the demand for and ways to accommodate reverse commuting (from the District to outlying suburban job centers) would be conducted. This will involve coordination with local adjacent jurisdictions to support commuters traveling outbound from the District. The feasibility of jitney and other paratransit services would be investigated to serve both reverse commuting and travel needs within the District. Ways to support private provision of these services would also be investigated.

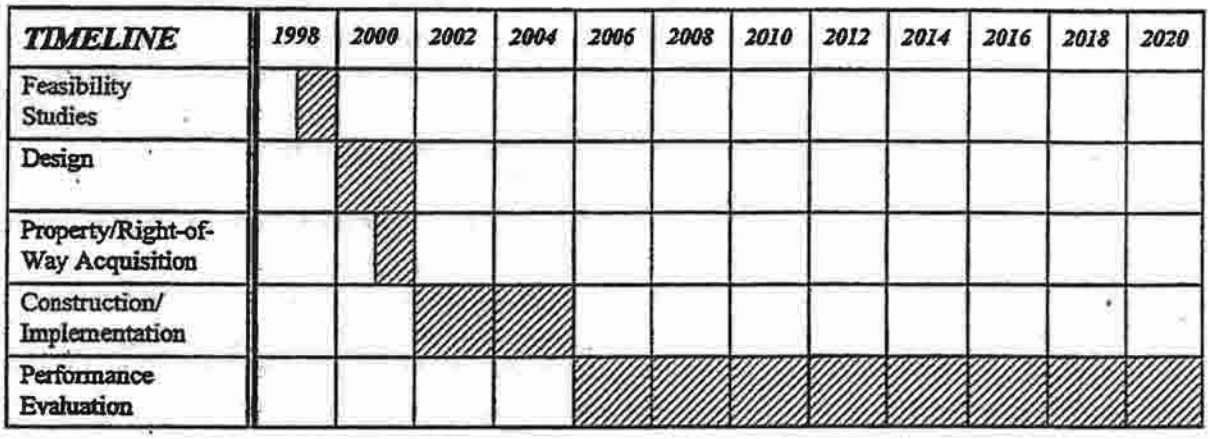
Though the small bus feeder service would be District run, it would be coordinated with the independently-funded regional funding authority discussed in Section 7.14. Proposed service areas include the following:

Small Bus Feeder Service Areas

- Glover Park/Burleith (D7 on map),
- American University Park/Friendship Heights (C4),
- Chevy Chase/Pinehurst Circle/Hawthorn (D3),
- Takoma Park/Brightwood (G2),
- Fort Totten/Michigan Park (I4),
- Petworth (G5),
- Adams-Morgan/Columbia Heights/Mount Pleasant (F6),
- Woodley Park/Cleveland Park (E6),
- Brentwood Village/Ivy City/Trinidad (I7),
- Fort Lincoln/Gateway (K7),
- Deanwood/Central Northeast/Lincoln Heights/Benning Heights/Marshall Heights (M9),
- Hillcrest/Naylor Gardens/Knox Hill/Woodland/Good Hope (K12) and
- Washington Highlands/Bellview/Congress Heights/Shipley Terrace/Douglass (I14).

INITIAL IMPLEMENTATION STEPS:

- Institute trial service for neighborhood bus service that uses smaller buses and provides for increased route flexibility.
- Conduct a right-of-way analysis of all proposed new internal transit corridors. Select the routes that are suitable for 25-foot neighborhood buses.



IMPLEMENTATION CONSIDERATIONS:

- Coordination with WMATA and MWCOG.
- Coordination with Advisory Neighborhood Commissions.
- Consider economic development impacts and possible public/private funding and operation for routes.

ESTIMATED COST: Operation of the feeder bus system is considered cost-neutral and is not expected to affect current transit subsidy levels. The estimated capital cost for the small bus system, based on the purchase of 40 buses, is $6 million, with an additional 10 percent for feasibility and design costs. Alternative bus service would be promoted by the District but would be privately provided and/or operated. Subsidies for the alternative bus service would be part of the overall transit subsidy.

7.14 ACTION ITEM: Independent Regional Funding for Metrobus, Metrorail and Commuter Rail

DESCRIPTION: The District's transit service is provided by WMATA, a regional body that includes representation from each member jurisdiction. Each jurisdiction contributes a share of the WMATA operating subsidy, based on a jurisdictional usage formula that has not been changed since 1975. Despite major changes in population, employment and transit ridership, discussions to address inequities in the allocation formula for bus service have been extremely contentious. The negative impacts of this allocation on the District are clear, as the District has had to reduce Metrobus service by 26 percent since 1991 in order to limit the growth of its WMATA subsidy.

Other jurisdictions in the Washington region, in the face of subsidies that are comprising an increasingly larger part of their transportation budgets, have begun their own bus service and have decreased their WMATA contributions accordingly. While addressing their own fiscal constraints, the proliferation of independent transit service does not provide for bus service at a regional scale in a manner that is viable in the long term. This Transportation Plan recognizes that many of the bus routes in the Washington region are of regional significance and should continue to be operated at the regional level. Locally operated feeder and alternative bus service that ties to these regional routes is recommended in Section 7.13. The existing funding mechanism for Metrobus service is not a viable long-term option for the District or the region.

The District should pursue, in cooperation with the rest of the Washington region, the development of an independent regional funding mechanism for regional transportation assets. This would include, at a minimum, the Metrorail system, major Metrobus routes, and Maryland (MARC) and Virginia (VRE) commuter trains. The independent funding could come from a mix of regional transportation taxes on gasoline, vehicle registrations and car rental taxes. A major reformulation of WMATA's responsibilities and operational structure would accompany the development of this regional funding mechanism.

INITIAL IMPLEMENTATION STEPS: Work closely with other jurisdictions in the region to develop support for an independent regional funding source for Metrobus, Metrorail and commuter rail operations. The benefits of maintaining an effective regional transit service, while freeing local funds for other transportation needs, should be emphasized. The earmarking of a gasoline tax for only transportation uses will make the establishment of such a tax more palatable to both area jurisdictions and residents.

IMPLEMENTATION CONSIDERATIONS: Close and careful coordination with area jurisdictions and the Council of Governments, to develop a consensus on the need for regional funding of those transportation assets that are clearly regional in nature, will be necessary. Coordination with WMATA will also be necessary.

ESTIMATED COST: There are not expected to be any capital costs associated with this action item. Study costs for the District are estimated to be $100,000.

7.15 ACTION ITEM: Transit Service and Fare Structure

DESCRIPTION: Current bus passenger trends both within the District and the region are the result of a downward spiral that results when decreased ridership leads to services being cut, which then further reduces ridership leading to further reductions in service. Bus service in the District has been cut by 26 percent over the last six years alone. Reversal of this downward spiral requires increased and focused service.

Increased transit service in the District could be provided at the same level of expenditure based on a critical assessment of current salary and benefit packages of transit staff and the system's relatively high level of administrative burden. In recent years, WMATA has expended over one-third of its operating expenses on general administration, a percentage level about twice that of systems in cities such as Chicago, Boston, Philadelphia and New York. Reduction in bus service and the increase in independent suburban bus service has also resulted in underutilized physical plant facilities for service and storage within the District. Closing and/or selling some of these properties would further reduce transit expenses and allow for increased service.

This action item also proposes extending transit service later at night so that transit can be a viable option for travel to evening entertainment areas. Transit service should work with the "park-once" concept to provide convenient service that encourages residents, visitors and tourists to leave their cars and travel by transit. In addition, a common fare system would be implemented. This would allow transit users to travel on all transit systems in the District and within the region by purchasing a single travel voucher, smart card or ticket. This action item is intended to be implemented by the regional funding authority, discussed in Section 7.14, in conjunction with "Promoting Intercity and Commuter Rail Service and Intermodal Connections to Regional Airports," the next action item.

IMPLEMENTATION CONSIDERATIONS: Implementation of this action item would require coordination with the region for a study of WMATA's cost structure and with WMATA and suburban bus system operators for implementation of a common fare system.

ESTIMATED COST: The equipment and operating costs of the common fare system would be covered as part of the transit system preservation costs (see Section 9, Financing the Transportation Plan).

7.16 ACTION ITEM: Intercity and Commuter Rail Service and Intermodal Connections to Regional Airports

DESCRIPTION:

Intercity Rail Service – Amtrak provides high frequency rail service between Washington's Union Station and other points in the Northeast Corridor and beyond. Current train service consists of 27 northbound and 27 southbound Northeast Corridor trains per day (15 Metroliners and 12 Northeast Direct trains each way) with half-hour service or less during peak travel periods. In addition, Amtrak operates a number of long haul trains through Union Station, including the Vermonter and the Silver Meteor (to Florida). Current Amtrak ridership at Union Station is over 10,000 intercity passengers per day, making it one of Amtrak's busiest stations. This also makes Union Station an important intercity gateway to the District.

High speed rail service will be initiated in three years, with 16 new train sets. Speeds of 150 miles per hour along the Washington-New York-Boston corridor are planned. Some additional peak hour service is also anticipated, along with increased ridership. As part of the high speed rail project, Amtrak is investing more than $100 million in track and maintenance facility improvements in the District, which will serve as the southern terminus of the high speed rail corridor. The Ivy Maintenance Facility, one of Amtrak's largest with over 600 employees, will be expanded to accommodate high speed rail, creating an additional 200 to 250 skilled jobs.

Commuter Rail Service – The District is currently served by two commuter rail systems – Maryland Commuter Rail (MARC), which provides service from Maryland, and the Virginia Rail Expressway (VRE), which provides service from Virginia. These systems, which are focused on Union Station, currently provide up to 30,000 trips in and out of Union Station on a typical weekday. Overall commuter ridership has grown substantially over the last five years. MARC's Union Station ridership has almost doubled since 1985, and VRE's service, which was only initiated in 1993, has grown by 25 percent over the last four years. Both systems anticipate continued growth.

The expansion of intercity and commuter rail service has yielded substantial benefits for the District, in terms of both economic development and increased tax base, as well as substantially increased regional accessibility. Millions of square feet of office space have been developed since the renovation of Union Station. With enhanced commuter rail service, Maryland and Virginia residents now have viable alternatives to driving for reaching District employment centers, and DC residents have increased access to suburban employment centers. Increased rail service has also yielded benefits for Metrorail – even as system-wide ridership remained constant between 1990 and 1995 – boardings and alightings at Union Station rose by 15 percent, making Union Station one of the most utilized stations in the system.

Regional Airports – Washington National, Washington Dulles International and Baltimore-Washington International Airports are key components of the District's transportation system, as well as that of the region and the nation. They serve approximately 15 million, 13 million, and 14 million passengers, respectively, each year. The combined total of over 41 million passengers ranks the Washington region as the fifth largest in the country in number of passengers served.

This action item includes several steps designed to promote and coordinate service between intercity and commuter rail and the regional airports. Specific steps include:

- Support Amtrak's high speed rail service by upgrading platform structures and other facilities at Union Station.

- Encourage future extensions of commuter rail service through the District -- MARC to L'Enfant Plaza and Crystal City and VRE to New Carrollton. Encourage commuter rail service from West Virginia.

- Support coordinated ticketing and scheduling between Amtrak, MARC, VRE and WMATA.

- Provide coordinated information across modes between intercity rail, commuter rail, Metro, and the airport access at intermodal centers, including the provision of real-time information on Metro connections from Union Station.

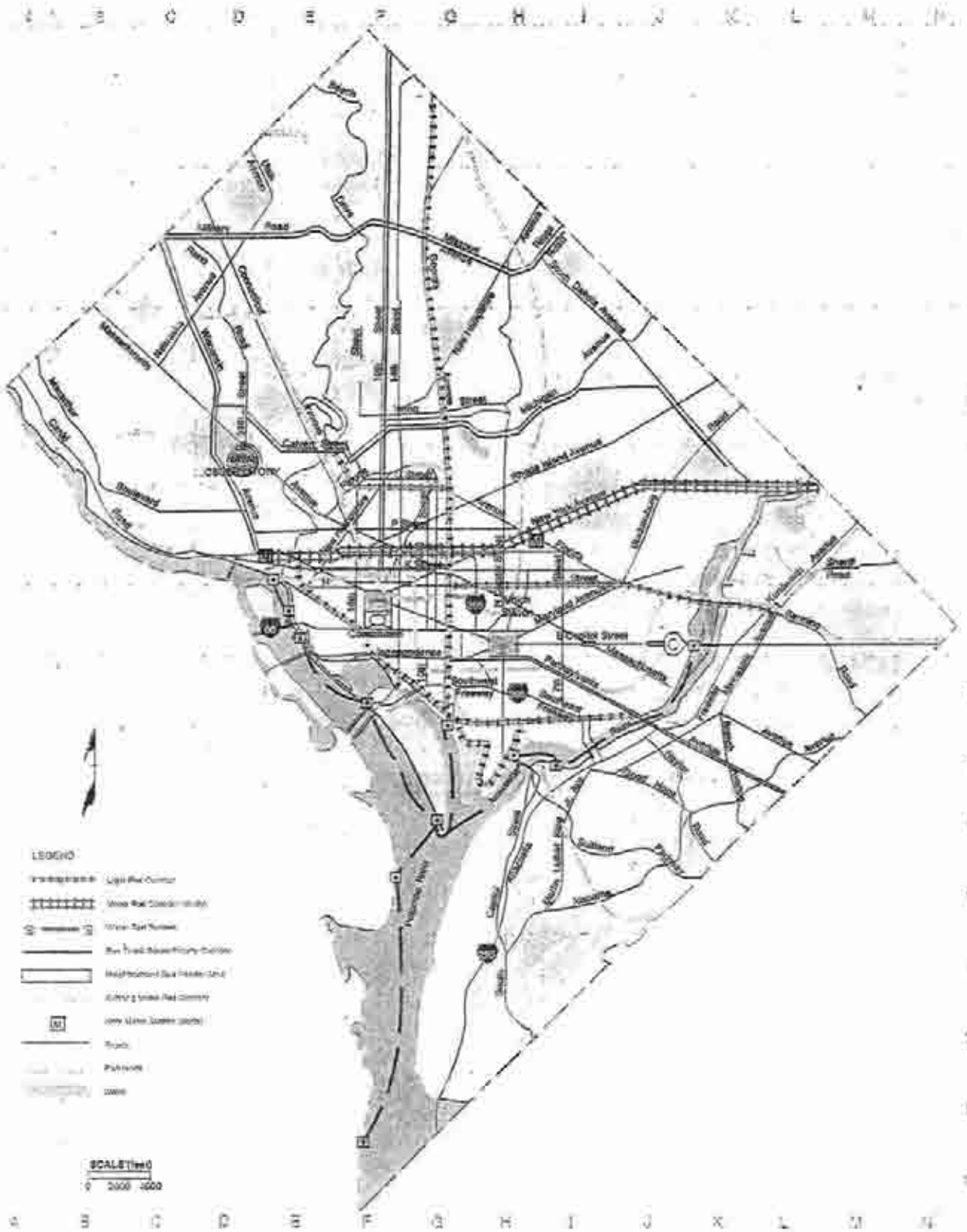
- Establish Washington Flyer shuttle service between Union Station and Dulles and shuttle service from the VRE Crystal City station to National Airport.

- Support continued transit-oriented development and redevelopment around Union Station through infrastructure investments such as upgraded sidewalks, landscaping, improved lighting and signage, and street maintenance and repairs, with a special emphasis on Massachusetts Avenue, First Street, NE, and North Capitol Street.

IMPLEMENTATION CONSIDERATIONS: Coordination with WMATA, the Washington Metropolitan Airports Authority (WMAA), Amtrak, MARC, VRE, the regional funding authority discussed in Section 7.14, and suburban transit operators will be required.

ESTIMATED COST: Costs associated with this action item would be largely non-District.

Transportation Plan for the District of Columbia
Exhibit 2
Transit Action Items



7.17 ACTION ITEM: Bicycle Spine Network

DESCRIPTION: Currently, most bicycle travel within the District is on-street, in competition with motorized traffic. By providing safe and attractive bicycle routes, the District can encourage a growing demand for bicycle travel for recreation, commuting and shopping. A world-class bicycle path system contributes to a balanced transportation system and to the overall attractiveness of the District's transportation system.

The size and scale of the District of Columbia, along with its temperate climate, provide substantial opportunities for accommodating both recreational and work travel by bicycle. The bicycle spine network will be composed of a series of bike paths running within the existing street right-of-way, either on the roadway pavement as a striped bicycle lane or separated from motorized traffic, as well as through city parks. There is a need for an interconnected system that allows for serious bicycle travel for recreation, commuting and shopping. The new bicycle spine network will connect to other modes of travel, such as Metrorail and new public parking facilities.

The District's tens of thousands of students comprise the single largest group of City residents most likely to make regular use of the new bicycle spine network; therefore, connections need to be made between the City-wide bicycle spine pathways, the smaller bike paths and campus facilities. In this way, an immediate constituency for the larger bicycle spine network can be established. The local street bike path connections will consist of on-road bike lanes on neighborhood streets where maximum speed limits could be reduced to 15 mph to allow for safe bicycle use.

The following bicycle trails and paths would be maintained, improved and/or constructed:

- Potomac Waterfront Trail, from K Street to East Potomac Park, including the Theodore Roosevelt and 14th Street Bridge crossings (within National Park Service) (E8-F10 on map),
- Washington Channel Trail, from the southern tip of East Potomac Park to the Tidal Basin (NPS) (F10-G12),
- Metropolitan Branch Trail, from Union Station to the DC line (G2-H9),
- Rock Creek Park Trail, from the DC line to the Potomac Waterfront Trail (NPS) (E1-E8);
- 16th Street, from the DC line to Lafayette Park (F1-F9),
- Upper Capitol Hill Path, from Constitution Avenue, NE, to the DC line (H9-K6),
- Macomb Street/Klingle Road Path, from Massachusetts Avenue to the Rock Creek Trail (C6-E6),
- Anacostia Park Trail, from the Suitland Parkway Trail to the DC line (NPS) (I11-L7),
- The Mall Loop Bike Trail, along Independence Avenue, 4th Street, Constitution Avenue and 23rd Street (NPS) (E9-H9),
- The Cross-Town Bike Route, along Pennsylvania Avenue from M Street to 15th Street, south on 15th Street back to Pennsylvania Avenue, and along Pennsylvania Avenue to Constitution Avenue (E8-G9),
- Lower Capitol Hill Path, from 2nd Street, SE, to Minnesota Avenue, SE (H9-J10),
- The Uptown Path, from Rock Creek Parkway Trail to the DC line (E6-J5),
- Suitland Parkway Trail, from the Anacostia Park Trail to the DC line (NPS) (I11-K13),

- Glover Park Trail, from Massachusetts Avenue to the Capital Crescent Trail (NPS) (C6-C8),
- Massachusetts Avenue Path, from the DC line to 19th Street, SE, and from Minnesota Avenue to the DC line (B4-L11),
- South Capitol Street/Martin Luther King, Jr. Avenue Bike Route, along South Capitol Street from Galveston Street to Martin Luther King, Jr. Avenue, north on Martin Luther King, Jr. Avenue to Howard Road, east on Howard Road to South Capitol Street, and along South Capitol Street, across the Frederick Douglass Memorial Bridge, to Independence Avenue (H9-H15) and
- Fort Circle Trial in Anacostia, from Suitland Parkway to the Anacostia Park Trial (NPS) (J12-K8).

Major needed connections between existing bicycle facilities and City streets to be improved or constructed include:

- A connection from the Theodore Roosevelt Bridge into downtown (D9 on map),
- A connection from the 14th Street Bridge into downtown (F10),
- A connection from the Capital Crescent Trail, along K Street, into Georgetown and downtown (D8),
- A cross-town route (proposed along Pennsylvania Avenue) (E8-G9) and
- A connection from the Capital Crescent Trial to the Chain Bridge (A6).

INITIAL IMPLEMENTATION STEPS:

- The construction of the Metropolitan Branch Trail and the connections listed above.
- Feasibility studies, design, right-of-way acquisitions, construction, and performance monitoring will be on-going between now and the year 2020. As roadways are slated for reconstruction, the multi-modal considerations described above will be included in the design and construction.

TIMELINE	*1998*	*2000*	*2002*	*2004*	*2006*	*2008*	*2010*	*2012*	*2014*	*2016*	*2018*	*2020*
Feasibility Studies												
Design												
Property/Right-of-Way Acquisition												
Construction/ Implementation												
Performance Evaluation												

IMPLEMENTATION CONSIDERATIONS: Since bicycle travel represents a demand that can be realized through the development of an integrated bicycle network, coordination with adjacent jurisdictions is crucial in constructing bicycle routes. Nine of the proposed routes are on National Park Service (NPS) or other Federal land, and coordination with Federal agencies is necessary. The District will not be responsible for the planning, design, construction or maintenance of these Federal

trails. Coordination with bicyclists and bicycle user groups, while further developing routes and standards, is also important.

ESTIMATED COST: Costs for the on-road bicycle facilities within the District's jurisdiction are included in the cost of the roadway reconstruction action item (see Section 8). The estimated construction cost for off-road bicycle facilities under NPS jurisdiction, including the Waterfront Trail (a pedestrian corridor listed in the next action item), is $13.9 million; this will be funded by NPS. The estimated cost of the Metropolitan Branch Trail, the only proposed off-road bicycle facility under District jurisdiction is $7.5 million. Costs for the five bicycle-street connections listed above will be constructed using funds allocated for bicycle system preservation (see Section 9, Financing the Transportation Plan, for details on funding).

7.18 ACTION ITEM: Pedestrian Corridor Development

DESCRIPTION: The District is a beautiful city with impressive monuments and broad avenues, many of which provide interesting and convenient pedestrian access throughout the city. Despite these pedestrian amenities, many transportation corridors need to be improved to be more inviting to pedestrians along their entire lengths. Attractive corridors with street activity generated by retail and restaurant uses will be developed and promoted. A system of priority pedestrian corridors, where residents, workers and tourists could walk from one section of town to another, will be planned and constructed. At a pedestrian scale, these corridors will connect major origins and destinations, but will also be attractions in themselves, with quality streetscapes. The corridors will be characterized by broad sidewalks lined with top-quality landscaping, shady trees, benches and pocket parks, and activities of interest along the way, such as sidewalk cafes and newspaper/magazine vendors.

Current District streetscape standards will be used, with modifications for specific areas and neighborhoods, as appropriate. Landscaping will buffer, but not screen, sidewalks from the road, because roadway traffic provides additional activity, and thus, promotes added security. Zoning and/or incentive programs to encourage retail and restaurant activity on these pedestrian corridors will be implemented.

Pedestrian corridors in need of improvement include:

- 10th Street, SW, from Independence Avenue to Water Street and along the Tidal Basin (G9-G12 on map),
- 14th Street (including Thomas Circle), from U Street to M Street (F7-F8),
- 16th Street, from Columbia Road to U Street (F6-F7),
- Columbia Road/18th Street, NW/U Street, NW, beginning and ending at 16th Street (F6-F8),
- Connecticut Avenue/17th Street (including Dupont Circle) (D5-F9),
- H Street/2nd Street/F Street/Union Station (H9-I9),
- M Street/Pennsylvania Avenue, NW, to Washington Circle (E8),
- New Hampshire Avenue/Georgia Avenue/7th Street (G9-H4),
- North Capitol Street/1st Street, NE/Massachusetts Avenue (H7-H9),
- P Street, NW, from Rhode Island Avenue to Wisconsin Avenue, NW (D8-G8),
- Pennsylvania Avenue, SE, from the Capitol Building to Minnesota Avenue, SE (H9-J11),
- Potomac Waterfront, from Washington Harbour to Hains Point (D8-G12),
- Rhode Island Avenue, from North Capitol Street to Connecticut Avenue (F8-H7),
- South Capitol Street, from the Potomac River to Independence Avenue (H9-H11),
- Virginia Avenue, from Constitution Avenue to the Kennedy Center (E8-F9),
- Wisconsin Avenue, from Massachusetts Avenue to the DC line (C4-D6) and
- New Hampshire Avenue, from Virginia Avenue to Washington Circle (E8-E9).

INITIAL IMPLEMENTATION STEPS:

- Refine standards for defined pedestrian corridors and develop specific streetscape standards.
- Feasibility studies, design, right-of-way acquisitions, construction, and performance monitoring will be on-going between now and the year 2020. As roadways are slated for reconstruction, the multi-modal considerations described above will be included in the design and construction.

IMPLEMENTATION CONSIDERATIONS: The development of a vital pedestrian corridor depends as much on encouraging economic activity as it does on physical improvements. Ways to encourage businesses that support pedestrians, such as boutiques for window shopping or restaurants, should be pursued in cooperation with local business associations, community groups and the District's Office of Planning.

ESTIMATED COST: The construction cost for pedestrian corridors, with the exception of the Waterfront Trail, is included in the cost of the roadway reconstruction action item (see Section 8).

7.19 ACTION ITEM: Increased Use of Rail for Goods Movement in the District

DESCRIPTION: At a national level, goods movement by rail is increasing rapidly. The current trend in goods delivery at a national scale is for larger delivery vehicles to make longer trips from more consolidated distribution centers. This trend is the result of computerized inventory and delivery systems and demands for just-in-time delivery. These trends in goods delivery, along with the increasing containerization of rail cargo, provide an opportunity for the District to make greater use of rail for carrying goods that are currently carried into the City by truck. The rail system in the District offers the potential for moving goods into and out of the City without the impacts of heavy trucks traveling on local streets. Also, rail service is typically more cost-effective as the distance that goods are shipped increases. The District can capitalize on this by working closely with rail companies on ways to better accommodate such service and by providing start-up funds for the construction of intermodal goods movement transfer centers.

Wholesale centers, such as the major grocery distribution centers in the New York metropolitan area that are serviced by rail, would be developed through a public/private partnership. Deliveries from such centers to individual businesses would be made using trucks that are smaller than those used for long-haul truck travel.

Potential locations for such a facility include the vicinity of Kenilworth Avenue and Benning Road, NE, and along Anacostia Freeway near the proposed Barney Circle Freeway. At either location, this facility would connect to the existing rail system and to roadways that would be improved to accommodate trucks. A detailed feasibility study for such a facility would be performed by the Department of Public Works.

INITIAL IMPLEMENTATION STEPS:

- Study the options for encouraging goods movement into the District by rail.
- Study potential intermodal transfer and warehouse centers that provide good rail access, good roadway access, and sufficient land to develop efficient goods transfer centers.
- Identify potential funding sources including public/private funding opportunities.

TIMELINE	*1998*	*2000*	*2002*	*2004*	*2006*	*2008*	*2010*	*2012*	*2014*	*2016*	*2018*	*2020*
Feasibility Studies												
Design												
Property/Right-of-Way Acquisition												
Construction/ Implementation												
Performance Evaluation												

IMPLEMENTATION CONSIDERATIONS: In order to compete with the large distribution centers, the intermodal facilities would have to be designed to move and store goods efficiently. Close coordination with rail and truck companies to develop such facilities would be required.

ESTIMATED COST: The estimated construction cost for an intermodal transfer facility is $25 million, with an additional 10 percent for feasibility and design costs and an additional 20 percent for right-of-way acquisition costs. It is assumed that 50 percent of the construction cost would be privately provided.

7.20 ACTION ITEM: Additional Loading and Parking Zones for Commercial Vehicles

DESCRIPTION: Severe shortages of loading and commercial vehicle parking zones, particularly downtown, result in high percentages of vehicles double-parking while making deliveries. This double-parking blocks vehicular traffic and, because delivery firms need to absorb the costs of parking tickets and administrative costs, results in a business-unfriendly atmosphere. The efficient delivery and movement of materials and packages is key to the realization of the District's transportation vision. Following a detailed study of impacts, on-street parking in some locations would be converted for commercial vehicle use. This program would be revenue-neutral through the implementation of electronic parking meters that accept debit or charge cards that delivery firms purchase. In addition, ways to encourage more deliveries during off-peak and night-time hours would be implemented, addressing industry concerns such as delivery safety.

INITIAL IMPLEMENTATION STEPS:

- Perform a detailed study of potential impacts of converting on-street parking in some locations for commercial vehicle use.
- Investigate the feasibility of installing electronic parking meters that would accept debit or charge cards.
- Establish policies and regulations, where possible, to encourage more deliveries during off-peak and night-time hours.

TIMELINE	*1998*	*2000*	*2002*	*2004*	*2006*	*2008*	*2010*	*2012*	*2014*	*2016*	*2018*	*2020*
Feasibility Studies												
Design												
Property/Right-of-Way Acquisition												
Construction/ Implementation												
Performance Evaluation												

IMPLEMENTATION CONSIDERATIONS: Assess overall general use parking demand and availability prior to converting to commercial use parking.

ESTIMATED COST: Capital costs would include signage and electronic meters. No roadway reconstruction or other capital costs would be required. The total estimated cost is $1.5 million, with an additional 10 percent for feasibility and design costs.

7.21 ACTION ITEM: Improved Roadways to Minimize Impacts from Trucks

DESCRIPTION: The efficient movement of trucks is of key importance to the economic vitality of a city. High costs imposed by congestion, wear and tear on vehicles, and regulatory measures (including parking tickets) can motivate businesses to move to areas where these costs are lower. Goods movement also creates negative impacts on a community from truck traffic, noise, air pollution and vibration.

Improvements to specific roadways would be implemented to minimize the negative impacts of truck traffic on surrounding areas. A spine network of roadways would be improved to have adequate travel lanes, an enhanced pavement base, and landscaping buffers both in the median and along each edge. Through-trucks and other heavy vehicles, such as tour buses, would be restricted to the inside travel lanes on these roadways to minimize impacts to immediately adjacent land uses.

The following roadways would be improved to minimize the impacts of trucks:

- 9th Street, NW, from Florida Avenue to Pennsylvania Avenue (G7-G9 on map),
- Alabama Avenue, SE, from DC line to Martin Luther King, Jr. Avenue (I13-M11),
- Anacostia Freeway, SE/Kenilworth Avenue, from DC line to DC line (G16-M8),
- Benning Road, NE/Florida Avenue, NE/NW, from DC line to U Street (G7-M10),
- Bladensburg Road, NE, from DC line to Benning Road (J8-K6),
- Connecticut Avenue, NW, from Nebraska Avenue to K Street (D4-F8),
- East Capitol Street/C Street, NE, from DC line to 19th Street, NW (J9-N9),
- Georgia Avenue, NW/7th Street, from DC line to New York Avenue (G1-G8),
- Good Hope Road, SE, from Alabama Avenue to Martin Luther King, Jr. Avenue (I11-K12),
- I-395 Freeway, SW/NW, from DC line to New York Avenue, NW (F11-G8),
- K Street, NW/Pennsylvania Avenue/M Street, from New York Avenue to Wisconsin Avenue (D8-G8),
- Martin Luther King, Jr. Avenue, SE/11th Street, from South Capitol Street to Southeast Freeway (H14-I10),
- Michigan Avenue, NW, from DC line to North Capitol Street (H6-J5),
- North Capitol Street/Massachusetts Avenue, from Riggs Road to Columbus Circle at Union Station (H4-H9),
- Nebraska Avenue, NW, from Military Road to Massachusetts Avenue (C5-D3),
- New York Avenue, NE/NW, from DC line to 7th Street, NW (G8-L7),
- Pennsylvania Avenue, SE/Independence Avenue/14th Street, NW, from DC line to K Street, NW (F8-L11),
- Rhode Island Avenue, NE/NW, from DC line to Connecticut Avenue, NW (F8-K6),
- Riggs Road, NE/Missouri Avenue/Military Avenue, from DC line to Nebraska Avenue (D3-I3),
- South Capitol Street, from DC line to Southeast Freeway (H10-H15),
- Southeast Freeway, from I-395 to 11th Street, SE (G10-I10),
- South Dakota Avenue, NE, from New York Avenue to Riggs Road (H4-K7) and
- Wisconsin Avenue, NW, from DC line to M Street (C4-D8).

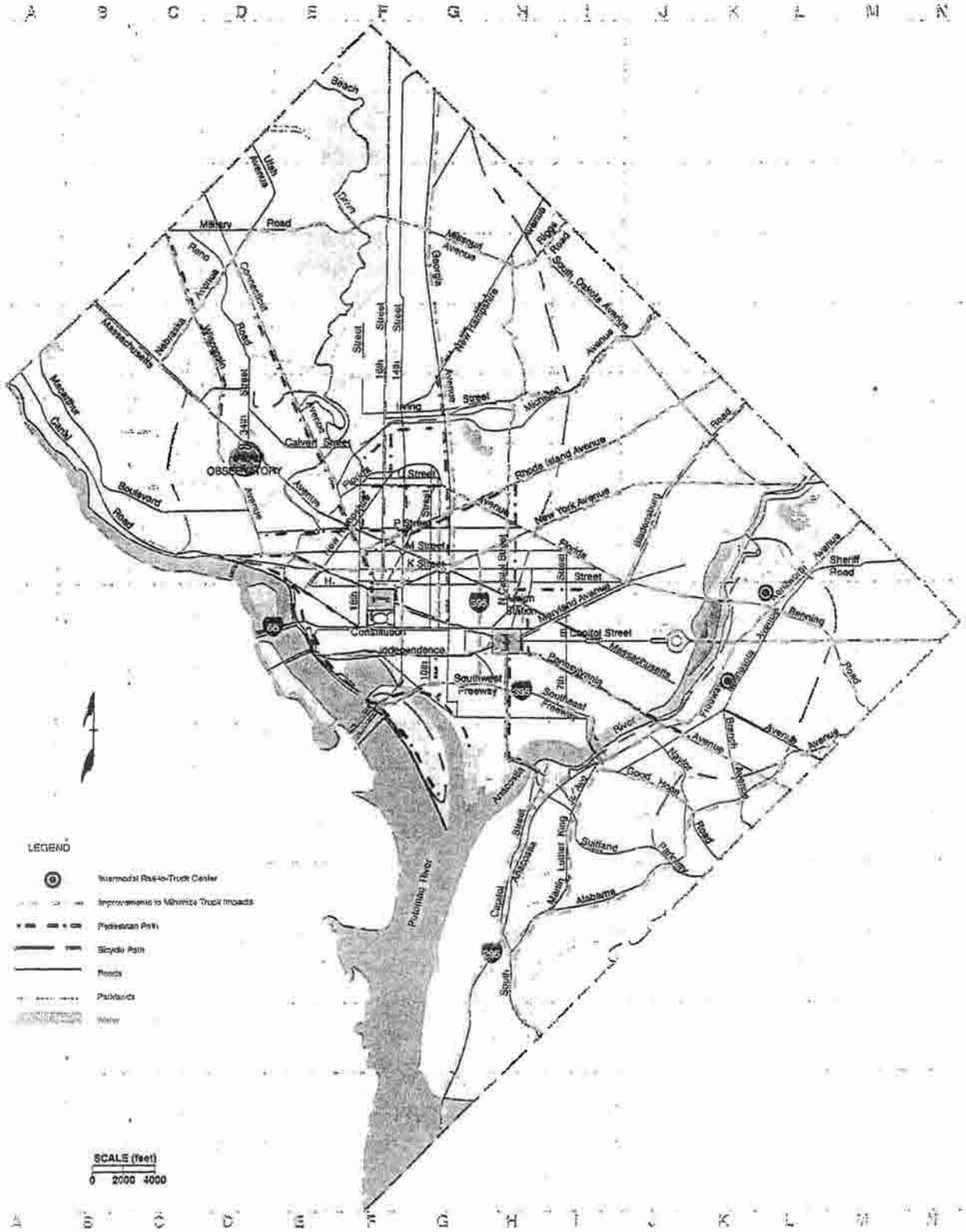
INITIAL IMPLEMENTATION STEPS:

- Perform feasibility and prioritization studies for improving roadways to minimize the impacts of trucks.
- Feasibility studies, design, right-of-way acquisitions, construction, and performance monitoring would be on-going between now and the year 2020. As roadways are slated for reconstruction, the multi-modal considerations described above would be included in the design and construction.

IMPLEMENTATION CONSIDERATIONS: Coordination with trucking companies to determine ways to better serve goods movement while minimizing impacts.

ESTIMATED COST: The cost to improve roadways to better accommodate trucks is included in the cost of the roadway reconstruction action item (see Section 8).

Transportation Plan for the District of Columbia
Exhibit 3
Bicycle/Pedestrian and Goods Movement Action Items



7.22 ACTION ITEM: Coordinated, Multi-Modal Transportation Decision-Making

DESCRIPTION: The current transportation planning and decision-making process in the District of Columbia is hampered by four overall factors:

(1) the high level of coordination needed with Federal, regional and state agencies; private groups, citizens and citizen associations; and the limited amount of staff resources to address these coordination needs;

(2) the decreasing level of influence that the District has in directing regional resources toward specifically urban transportation issues that it and immediately adjacent urban counties and cities (such as Arlington County and the City of Alexandria) experience;

(3) the lack of coordination across the various transportation modes, from pre-planning to construction; and

(4) the lack of a formal pre-planning and prioritization process within the Department of Public Works for transportation improvements.

This action item addresses each of these four factors through the following recommendations:

Coordination. The District's multiple roles as the central city within a major metropolitan region, seat of the Federal government, and independent jurisdiction with many state functions, requires that it coordinate with an extraordinary number of agencies in the transportation planning and decision-making process. Transportation coordination with adjacent state and local agencies takes place to some extent through committees of the MWCOG. There is no similar mechanism for coordination with Federal agencies that have either advisory or approval authority, or can make unilateral decisions about transportation (illustrated by the closing by Federal agencies of Pennsylvania Avenue and the removal of on-street parking). Consolidation of needed coordination efforts with numerous Federal agencies, such as the National Park Service, the Architect of the Capitol, the Secret Service, the Fine Arts Commission and the National Capital Planning Commission should take place through a designated liaison person at DPW. This person would work to coordinate efforts, particularly special event facilitation, improvements to tourist information and facilities, sharing of data, and issues included in this Transportation Plan that affect each agency such as signage and parking.

Regional Coordination and Influence. While the District is represented on all regional agencies related to transportation such as MWCOG, WMATA and WMAA, the District's influence on decisions made by these regional agencies continues to decrease. In order for the District to continue to make its voice heard at the regional level, the District needs to improve relationships with surrounding jurisdictions and to form strategic alliances with the inner ring jurisdictions (Arlington County, the City of Alexandria, Prince George's County and Montgomery County) to ensure coordination and agreement on urban transportation issues such as efficient regional transit service, air quality, traffic management, locational decisions on regional facilities, such as sport and

convention facilities, in central areas that are served by transit, and a regional emphasis on maximizing the use of existing transportation facilities rather than supporting new transportation that promotes continued urban sprawl.

Multi-Modal Transportation Planning within District Agencies. The lack of a formalized pre-project planning process that crosses the agencies responsible for the various transportation modes in the District results in inefficiencies and the inability to efficiently and strategically implement transportation decisions. Planning staff responsible for intra-District coordination have been eliminated through attrition over the last decade. The District must re-establish a formal pre-project planning process that actively involves all administrations in the Department of Public Works and other District agencies at the earliest stages of projects. This would allow for the efficient implementation of improvements across modes, such as revamping parking, pedestrian and bicycle accommodations or bus stop locations, as part of street reconstruction projects.

Development of Improved Public Communication Mechanisms. The Department of Public Works needs to develop new mechanisms for communicating with the public so that the lines of communication are not simply one-way -- complaints from the public when things do not go right. Regular town-hall style meetings with the general public, periodic surveys of citizens, and meetings early in pre-project planning efforts to solicit ideas to help projects better address community requirements would promote a constructive, ongoing dialogue with DPW's customers, the citizens of the District.

INITIAL IMPLEMENTATION STEPS: Develop an appropriate pre-project scoping and prioritization process through a cooperative effort between those responsible for transportation planning in the District (including the Department of Public Works and other District agencies, as well as Federal and regional agencies).

IMPLEMENTATION CONSIDERATIONS: A project scoping and prioritization process would only be effective if it is agreed to by all agencies responsible and becomes part of each agency's standard operating procedure. Coordination and the development of a consensus on this process would be of key importance. Communication between the various transportation agencies should be improved through monthly meetings and/or briefing memoranda.

7.23 ACTION ITEM: Expand the District's Multi-Modal Transportation Trust Fund

DESCRIPTION: The District has faced substantial funding shortages for its transportation infrastructure for the past decade, resulting in the need to defer maintenance and necessary improvements. Several studies in the late 1980's by the Federal City Council and the Rivlin Commission concluded that, at that time, the District was spending 50 percent or less of what was needed to maintain its transportation system. The situation has only gotten worse in the last few years. For instance, the funding level in 1995 for capital maintenance, which is locally funded, was $13.7 million, roughly equivalent to 1980 levels in nominal dollars and a 38 percent decrease in real dollars. The combined local and Federal contributions for streets, highways and related infrastructure declined by 25 percent in real dollars over the 10 year period between 1986 and 1995, and was less than 30 percent of the amount recommended in the Rivlin Commission report.

There is an acute need to increase the available funds in the District's Transportation Trust Fund and to increase the flexibility for expending these funds. Because three-quarters of the vehicle miles traveled on the District streets are by non-residents, the number of roadways in the District that qualify for Federal aid should be increased to reflect the realities of roadway travel and uses. Additionally, there should be more flexibility in the use of Federal aid so funds could be used for all District streets and, because the District is largely built with few new roads planned for the future, for maintaining existing infrastructure.

Motor vehicle registration fees, motor vehicle excise taxes, parking meter revenue, traffic fines, commercial parking taxes, and bus shelter franchise fees are currently directed into the District's General Fund. In 1997, these fees total $113 million. These funds, along with a shortfall made up by other taxes, are used to pay the District's contribution to the Washington Metropolitan Area Transit Authority (this payment is $183 million in 1997). In conjunction with the action item that shifts transit operating costs to an independently funded regional authority (described in Section 7.14), this action item recommends shifting these five revenue sources to the Transportation Trust Fund. These two actions combined would provide the General Fund with an additional $1.03 billion over the 24-year period from 1997 to 2020 (by reducing the need for the General Fund to cover the difference between transportation fees collected and the WMATA payment), and provide the Transportation Trust Fund with an additional $2.42 billion over the same period for maintenance of the existing transportation system. Additional detail on these savings is provided in Section 9, Financing the Transportation Plan.

Other new funding sources, as well as increases in existing sources of funding, can also be used to increase the Transportation Trust Fund, while at the same time also increasing the General Fund. These include right-of-way utility use fees, curb use fees for permit parking, additional air rights agreements over public rights-of-way, and an increase in the District's gas tax. The District's current gas tax is 20 cents per gallon, with the last increase having occurred in 1992. By comparison, Maryland's gas tax is 23.5 cents per gallon. A two cent per gallon increase in the District's gas tax is expected to provide an additional $3.0 million annually for transportation improvements in the District.

INITIAL IMPLEMENTATION STEPS: Begin study and implementation of the funding sources listed above. Work with the Federal Highway Administration to increase the scope of the Federal-aid system in the District and to provide additional flexibility in the use of Federal-aid funds.

IMPLEMENTATION CONSIDERATIONS: This action item ties closely with the development of an independent regional funding source for Metrobus, Metrorail and commuter rail described in Section 7.14. If such an independent funding mechanism is not implemented, additional, alternative funding would need to be identified to maintain and improve the District's transportation system. Recognizing the regional nature of much of the travel within the District, such funding sources should be investigated at a regional level.

8. MULTI-MODAL TRANSPORTATION CORRIDORS

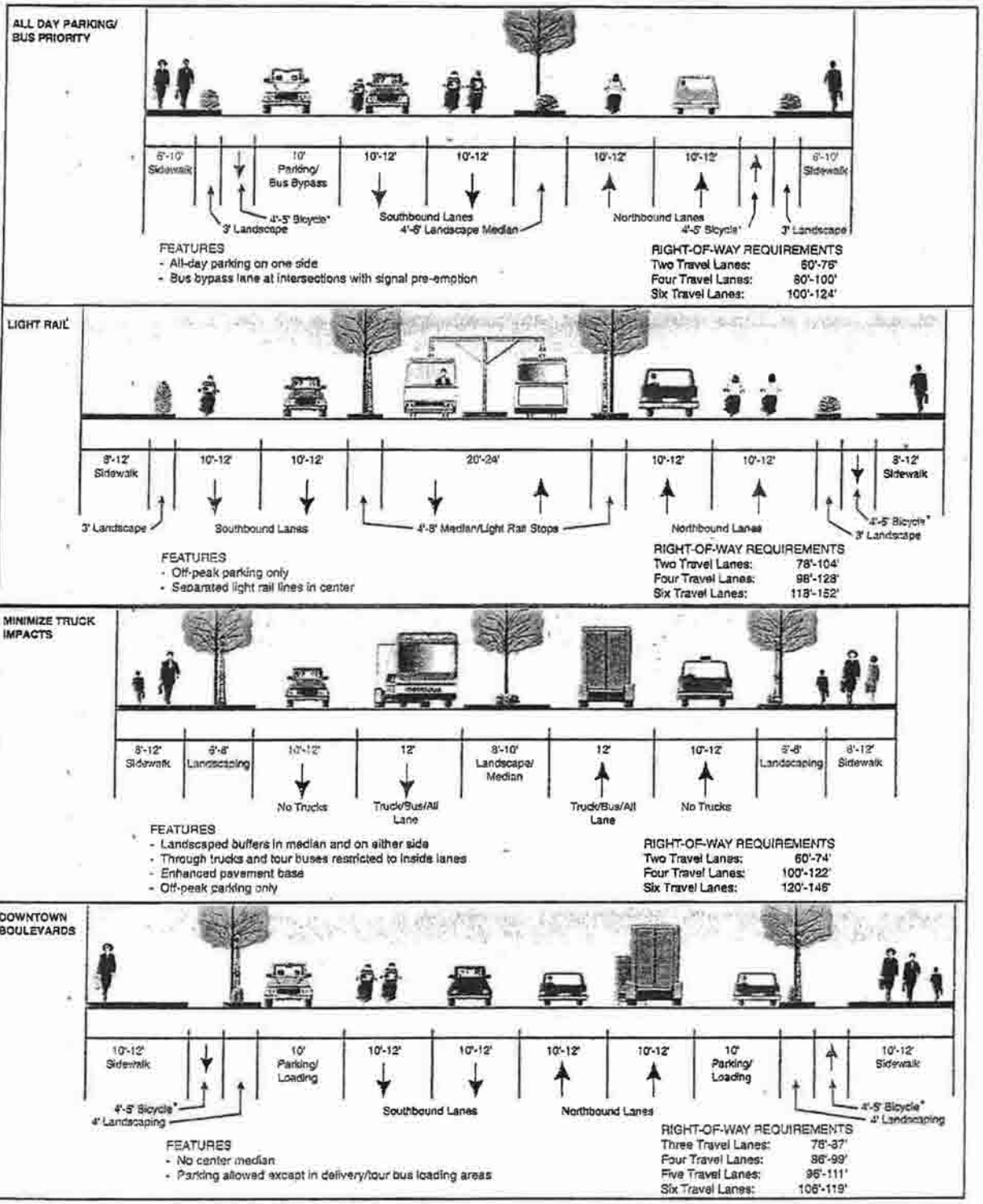
Many of the recommendations in this Transportation Plan require changes to roadway corridors in the District to better accommodate non-automotive travel and to minimize the impacts of cars and trucks on adjacent land uses. These improvements include adding bus bypass lanes and signal preemption, new transit options, bicycle and pedestrian facilities, enhanced pavement and landscaping (additional funds have been included in this Plan's proposed capital expenditures for landscaping projects that are separate from these major reconstruction efforts). Exhibit 4 illustrates, conceptually, how some of these corridors might be improved to better accommodate a balance of travel modes. It is important to note that right-of-way constraints, particularly in a built environment such as the District's, require that detailed studies be performed before the concepts shown in Exhibit 4 can be applied to any particular corridor.

It is intended that multi-modal improvements to these corridors would be implemented as roadways are scheduled for reconstruction over the next 20 years. Funding for these improvements are, therefore, included within system preservation and are not listed in this Transportation Plan as separate capital expenditures.

The listing below summarizes the roadway segments included in this Transportation Plan for improvements across one or more travel modes. These roadways cover 141.7 road-miles.

- 1st Street, NW, from Independence Avenue to Massachusetts Avenue (H9 on map),
- 1st Street, SE, from P Street to M Street (H10-H11),
- 2nd Street, SW, from P Street to U Street (H11),
- 7th Street, NW, from Florida Avenue to I Street, SW (G7-G8),
- 9th Street, NW, from Pennsylvania Avenue to U Street/Florida Avenue (G7-G9),
- 10th Street, SW, from Independence Avenue to Water Street (G9-G10),
- 14th Street, NW, from Independence Avenue to H Street, NW (F8-F9),
- 16th Street, NW, from DC line to K Street, NW (F1-F8),
- 17th Street, from Constitution Avenue to Independence Avenue (F9),
- 18th Street, NW, from New Hampshire Avenue to Calvert Street (F7-F8),
- 25th Street, from M Street, NW, to Virginia Avenue (E7-E9),
- 34th Street, NW, from Woodley Road to Cleveland Avenue (D6),
- Alabama Avenue, from Martin Luther King, Jr. Avenue to DC line (I13-M11),
- Along Tidal Basin, from Ohio Drive to Water Street (F10-G10),
- Anacostia Freeway/Kenilworth Avenue, from DC line to DC line (G16-M8),
- Beach Drive, from DC line to Shoreham Drive (E1-E7),
- Benning Road, from Bladensburg Road to DC line (J8-M10),
- Bladensburg Road, from DC line to Benning Road (J8-K6),
- C Street, NE, from East Capitol Street to 19th Street (J9),
- Calvert Street, NW, from Cleveland Avenue to 18th Street (E7-F7),
- Cleveland Avenue, NW, from 34th Street, NW, to Calvert Street (D6-E7),
- Columbia Road/Harvard Street, from 18th Street to Irving Street/Michigan Avenue (F6-G6),

Transportation Plan for the District of Columbia
Exhibit 4
Conceptual Cross-Sections



The conceptual cross-sections shown here represent ways in which many of the action items described on the reverse side could be implemented. This Transportation Plan addresses the needs of all transportation modes, and recognizes that a balance across travel modes is necessary. It also recognizes that the District's environment is largely built and that the needs of various transportation modes must be accommodated largely within existing rights-of-way. These cross-sections illustrate some of the ways in which competing transportation demands could be accommodated, while minimizing roadway impacts.

* Depending on the characteristics of the corridor, bicycle lanes could be adjacent either to the roadway travel lanes or the sidewalk.

- Connecticut Avenue, from Nebraska Avenue to K Street (D4-F8),
- East Capitol Street, from DC line to C Street, NE (K9-N9),
- Florida Avenue, from H Street to 9th Street/U Street (G7-J8),
- Georgia Avenue/7th Street, from DC line to Florida Avenue (G1-G7),
- Good Hope Road, from Martin Luther King, Jr. Avenue to Alabama Avenue (I11-K12),
- I-395, SW/NW, from DC line to New York Avenue (F11-G8),
- Idaho Avenue, NW, from Massachusetts Avenue to Woodley Road (D6),
- Independence Avenue, from 2nd Street, SE, to Maine Avenue (F9-H9),
- Irving Street, from Michigan Avenue east to Michigan Avenue west (G6-H6),
- K Street, NW, from New Hampshire Avenue to 7th Street, NW (E8-G8),
- Klingle Road, NW, from Woodley Road to Beach Drive (D6-E6),
- M Street, NW, from Wisconsin Avenue to New York Avenue (D8-G8),
- M Street, SE, from 1st Street, SE, to Barney Circle (H10-J10),
- Maine Avenue, from Independence Avenue to P Street, SW (F9-G11),
- Maryland Avenue, NE, from 1st Street, NE, to Benning Road (H9-J9),
- Massachusetts Avenue, NW, from DC line to 19th Street, SE, and from Minnesota Avenue to DC line (B4-L11),
- Michigan Avenue, from DC line to Irving Street (H6-J5),
- Military Road, from Nebraska Avenue to Georgia Avenue (D3-G3),
- Missouri Avenue, from Georgia Avenue to North Capitol Street (G3-H4),
- Nebraska Avenue, from Massachusetts Avenue to Military Road (C5-D3),
- New Hampshire Avenue, NW, from Georgia Avenue to Emerson Street, from P Street to 18th Street, and from Washington Circle to the Kennedy Center (H4-G5, F8, E8-E9),
- New York Avenue, from 7th Street to DC line (G8-L7),
- North Capitol Street, from Riggs Road to Massachusetts Avenue (H4-H9),
- P Street, NW, from Wisconsin Avenue to New Hampshire Avenue (D8-F8),
- P Street, SW, SE, from Maine Avenue to 1st Street, SE (G11-H11),
- Pennsylvania Avenue, NW, from M Street to Constitution Avenue (E8-G9),
- Pennsylvania Avenue, SE, from 2nd Street, SE, to DC line (H9-L11),
- Rhode Island Avenue, from Connecticut Avenue to DC line (F8-K6),
- Riggs Road, from North Capitol Street to DC line (H4-I3),
- Rock Creek & Potomac Parkway, from Shoreham Drive to K Street, NW (E7-E8),
- South Capitol Street/Frederick Douglass Memorial Bridge, from DC line to Independence Avenue (H9-H15),
- South Dakota Avenue, from Riggs Road to New York Avenue (H4-K7),
- Southeast Freeway, from I-395 to 11th Street, SE (G10-I10),
- Suitland Parkway, from DC line to just east of I-295 Interchange (I12-K13),
- U Street, NW, from 18th Street to Florida Avenue (F7),
- Virginia Avenue, from 25th Street to Constitution Avenue (E9-F9),
- Water Street, from Tidal Basin to Fort McNair (F10-G11),
- Martin Luther King, Jr. Avenue/11th Street, SE, from Southeast Freeway to South Capitol Street (D8-G8),
- Wisconsin Avenue, NW, from DC line to M Street, NW (C4-D8) and
- Woodley Road, NW, from Idaho Avenue to Klingle Road (D6).

9. FINANCING THE TRANSPORTATION PLAN

Improving the District's transportation system and achieving the transportation vision requires that the existing system be maintained and that improvements be made strategically. Adequate funding to meet both the maintenance and capital needs is critical. While this Transportation Plan incorporates a series of capital improvements, system preservation is projected to account for almost 92 percent of total transportation expenditures in the District over the next 24 years. This focus emphasizes the first element in the transportation strategy, sustaining a world-class infrastructure.

The Transportation Plan also incorporates a number of action items that address funding needs. These action items, which include developing an independent regional funding source for Metrobus, Metrorail and commuter rail, and expanding the District's multi-modal Transportation Trust Fund, are critical if the District is to achieve its transportation vision. Exhibit 5 shows a summary breakdown of transportation costs and funding, by five-year increments, to the year 2020 (a detailed year-by-year breakdown of costs and funding is included in Appendix C). Within the description of each action item in this document, costs are given in 1997 dollars; an annual cost inflation of 3 percent is assumed for the costs shown in Exhibit 5. On the revenue side, the Federal transportation program apportionment is assumed to be a constant $90 million per year through 2003 and a constant $100 million per year thereafter; gas tax revenues are based on recent receipts and declining trends; and air rights fees and other transportation fees are assumed to grow by 3 percent per year.

Exhibit 5 shows that, without transportation funding beyond that identified in this Transportation Plan, the District will continue to have to defer some system maintenance. This deferral would average about $49 million per year in the first five-year period, and decrease to approximately $48 million per year during the second five-year period. Over the 24-year period covered by this Transportation Plan, an additional $1.77 billion would be needed to cover expected transportation costs. While most of the capital improvement cost estimates assume 100 percent public funding, some of these could be paid for through public/private collaborations, bonding that could be repaid through user fees (such as for public parking), and additional Federal subsidy (such as for rail transit construction). Since most of the transportation costs are for system preservation, however, there is a clear need for both the new revenue sources identified in this Transportation Plan and for additional sources.

The importance to the District and its transportation system of two key action items in this Transportation Plan are shown in Exhibit 6. These are: 1) the development of independent funding for regionally significant Metrobus, Metrorail and commuter rail service (described in Section 7.14), and 2) increased funding for the Transportation Trust Fund (described in Section 7.23). Over the 24-year period from 1997 to 2020, the implementation of the independently funded regional transit would provide the District with an additional $3.45 billion. By removing the burden on the General Fund to cover the cost difference between receipts from transportation fees and the transit subsidy, the General Fund itself would realize a gain of $1.03 billion. The shifting of transportation fees from the General Fund to the Transportation Trust Fund, along with the reduction in the transit subsidy that the regional transit authority would allow, will also enable the District to spend an additional $2.42 billion on the transportation system preservation that is crucial for the realization of the

District's transportation vision. Without these two action items, the District would, over the next 24 years, need to defer almost $175 million per year of transportation system preservation, resulting in a continuation of the recent pattern of insufficient funding for transportation infrastructure over the last decade, where funding has been only about 50 percent of that needed to cover the basic maintenance of the District's transportation infrastructure.

The capital projects in this Transportation Plan would be implemented over the next 24 years based on needs for additional study, design, acquisition of rights-of-way, and funding availability. A summary of the implementation schedules for all of the major capital improvement action items is shown in Exhibit 7. Many of the improvements in this Transportation Plan, such as on-street bicycle lanes, bus bypass lanes, pedestrian enhancements and the minimization of truck impacts, would be performed as part of ongoing roadway reconstruction projects that are included under the category of transportation preservation costs shown in Exhibit 5. A number of action items also involve some level of additional capital expenditure, but much of the actual implementation can take place as part of ongoing maintenance and preservation efforts. For instance, the action item on improved signage would require up-front capital costs for the study and development of sign standards, as well as some initial funds for sign purchase and installation, but much of the signage overhaul can be performed as part of an accelerated replacement schedule, which is part of the maintenance program.

Many of the action items in this Transportation Plan present potential opportunities for public/private partnerships and at least some level of private funding. Private funding opportunities should be aggressively pursued, as they allow the District to further close the gap between transportation costs and funding. Public/private opportunities in this Transportation Plan include the gateway program, where businesses can adopt gateways; information centers, kiosks, and traveler information brochures, where tourist attractions, hotels, and restaurants can participate and defray some of the cost; commercial loading zones, where delivery businesses would be charged for commercial meter usage; water docks, where docking fees could be used to defray some of the capital cost; and goods intermodal centers. Feasibility and implementation studies for these improvements should be performed with the participation of potential private partners.

This Transportation Plan provides the District with a realistic blueprint for achieving the transportation vision that was developed and forged through a 24-month process of public meetings, interviews and workshops. The importance of the transportation system to the realization of a dynamic future for the District was recognized by participants throughout the planning process. Continued public involvement, to assist in achieving the strategic goals of this Transportation Plan and to assure that adequate funding is made available to make these needed investments, is crucial to the realization of the District's transportation vision.

Transportation Plan for the District of Columbia

Exhibit 5

Summary of Estimated Annual Transportation Costs & Revenues by 5-Year Increments

Transportation Costs (,000)	1997-2001	2002-2006	2007-2011	2012-2016	2017-2020 [1]	Total
Capital Improvement Costs	$74,752	$174,188	$216,945	$192,463	$85,126	$743,475
Transit System Preservation	$525,104	$235,424	$272,921	$316,390	$289,026	$1,638,864
Other Transportation System Preservation	$1,035,156	$1,199,996	$1,391,124	$1,612,694	$1,473,219	$6,712,188
Total Transportation Costs	**$1,635,012**	**$1,609,608**	**$1,880,990**	**$2,121,547**	**$1,847,371**	**$9,094,527**

Transportation Revenues (,000)						
Federal Transportation Program Apportionment	$450,000	$480,000	$500,000	$500,000	$400,000	$2,330,000
Local Gas Tax Revenue	$154,100	$149,900	$150,000	$150,000	$120,000	$724,000
Payments to Mass Transit from General Fund [2]	$387,353	$0	$0	$0	$0	$387,353
Transportation Fees to Trust Fund [3]	$371,401	$697,099	$808,128	$936,842	$855,819	$3,669,289
Air Rights Fees (Public Rights-of-Way)	$3,716	$4,308	$4,995	$5,790	$5,289	$24,099
Other Potential Revenues	$21,514	$38,196	$41,902	$46,187	$40,489	$188,287
Total Transportation Revenues	**$1,388,085**	**$1,369,503**	**$1,505,025**	**$1,638,819**	**$1,421,597**	**$7,323,028**

System Preservation Needs Deferred	$246,927	$240,105	$375,965	$482,728	$425,774	$1,771,499
Cumulative Total (Preservation Deferral)	$246,927	$487,032	$862,998	$1,345,725	$1,771,499	

Notes:

[1] - This final period covers 4 years.

[2] - Annual transit subsidy payments to WMATA come from the General Fund and are partially covered by motor vehicle registration fees, motor vehicle excise taxes, traffic fines, parking meter revenue, commercial parking taxes and bus shelter franchise fees.

[3] - This assumes that, as indicated in the Transportation Trust Fund action item, as regional transit operations are covered by the independently funded transit authority, funds collected for motor vehicle registration fees, motor vehicle excise taxes, traffic fines, parking meter revenue, commercial parking taxes and bus shelter franchise fees would be available in the Transportation Trust Fund. After 1999, approximately $47 million per year of other General Fund monies, or $1 billion over the period to 2020, would then also be available for other uses in the District.

Transportation Plan for the District of Columbia
Exhibit 6
Estimated Fiscal Impact of Independently Funded Regional Transit by 5-Year Increments (Thousands)

Overall Financial Impacts (,000)	1997-2001	2002-2006	2007-2011	2012-2016	2017-2020 [1]	Total
Estimated Transit System Preservation Costs without Regionally Funded Transit [2]	$840,295	$897,068	$1,039,947	$1,205,584	$1,101,318	$5,084,212
Estimated Transit System Preservation Costs with Regionally Funded Transit [3]	$525,104	$235,424	$272,921	$316,390	$289,026	$1,638,864
Additional Funds Available to the District with Regionally Funded Transit	$315,191	$661,644	$767,027	$889,194	$812,292	$3,445,348

Impacts on DC General Fund (,000)	1997-2001	2002-2006	2007-2011	2012-2016	2017-2020 [1]	Total
Transportation Fees Going into General Fund without Regionally Funded Transit [4]	$601,323	$697,099	$808,128	$936,842	$855,819	$3,899,211
Transportation Fees Going into General Fund with Regionally Funded Transit [5]	$229,922	$0	$0	$0	$0	$229,922
Transit Subsidy Shortfall Covered by Non-Transportation Fees without Regionally Funded Transit	$238,971	$199,969	$231,819	$268,742	$245,500	$1,185,001
Transit Subsidy Shortfall Covered by Non-Transportation Fees with Regionally Funded Transit	$157,431	$0	$0	$0	$0	$157,431
Savings to the General Fund with Regionally Funded Transit	$81,540	$199,969	$231,819	$268,742	$245,500	$1,027,570

Impacts on Overall Transportation Funding (,000)						
Additional Funds Available for Transportation Maintenance	$233,651	$461,675	$535,208	$620,452	$566,792	$2,417,778

Notes:

[1] - This final period covers 4 years.

[2] - This is based on the FY 1997 WMATA subsidy and a 3 percent per year increase in subsidy requirement. These subsidy costs would come from the General Fund.

[3] - This assumes that, after 1998, operating subsidies for both Metrobus and Metrorail would be reduced over a two-year period. Approximately $24 million per year (in 1998 dollars and escalated by 3 percent per year) would continue to be budgeted for operation of internal bus service in the District.

[4] - This includes motor vehicle registration fees, motor vehicle taxes, traffic fines, parking meter revenue, commercial parking taxes and bus shelter franchise fees. All of these fees currently go into the General Fund.

[5] - This includes motor vehicle registration fees, motor vehicle tax, traffic fines, parking meter revenue, commercial parking taxes and bus shelter franchise fees. Based on the actions items included in this Transportation Plan, these fees would no longer go into the General Fund after 1998.

Transportation Plan for the District of Columbia
Exhibit 7
Capital Improvement Implemtation Schedule

	Implementation Cost	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Gateway Program	$440,000			D	D	C	C																		
Information Centers/Kiosks	$1,067,000			D	C	C	C																		
Signage Program	$10,200,000		S	S	C	C	C	C	C																
Traveler Information	$300,000		S	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
Public Parking	$40,810,000	S	S		D	DR	R	C		C		C		C		C		C							
Tour Bus Parking	$3,770,000			D	D	R	R	C	C	C	C	C	C	C	C	C	C								
Roadway Safety/System Connection Improvements	$107,750,000			S	D	DR	C	C	C	C	C	C	C	C	C	C									
Water Docks	$4,950,000					D	D	C	C																
Light Rail [1]	$467,500,000						D	D	D	D	D	D	D	C	C	C	C	C	C	C	C	C	C		
Metrorail	$2,000,000				S	S																			
Florida Avenue/New York Avenue Metro Station	$26,000,000			D	R	R	C	C	C																
Bus Trunk Routes/Priority Corridors	$15,400,000			D	C	C	C	C																	
Feeder and Alternative Bus Service	$6,600,000			D	D	C	C	C	C																
Regional Transit Funding	$100,000	S																							
Bicycle Trail (Metropolitan Branch Trail)	$7,500,000			C	C																				
Goods Intermodal Centers [2]	$32,500,000								D	D	R	C	C												
Commercial Loading/ Parking Zones	$1,650,000			D	C	C	C	C	C																
Landscaping	$22,500,000		C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C

Capital costs are in 1996 dollars.

Legend:
D - Feasibility and design -- costs, assumed in most cases to be an additional 10% of construction cost, are included in the Implementation Cost
R - Right-of-way acquisition -- costs, assumed in most cases to be an additional 20% of construction cost, are included in the Implementation Cost
C - Construction
S - Study -- costs are included in the Implementation Cost

Notes:
[1] - Cost shown is total estimated construction cost. The funding stream shown in Exhibits 5 and 6 and Appendix C are based on an assumption that 50 percent of construction cost will be Federal.
[2] - Cost shown is total estimated construction cost. The funding stream shown in Exhibits 5 and 6 and Appendix C are based on an assumption that 50 percent of construction cost will come from private sources.

APPENDIX A – SCENARIO PLANNING

A.1. Background

Traditional transportation planning relies on the extrapolation of current trends into the future, a process that often precludes creative thinking and does not explicitly take into account the events or decisions that can change current trends. For this reason, traditional planning was rejected in the development of the District's Transportation Plan. In its place, the Department of Public Works chose to become one of the first municipalities to use the process of scenario planning in the development of its Transportation Plan. Details on the scenario planning process and its application in the District are provided below.

A.2. Scenario Planning

Scenario planning involves the development of a range of potential future outcomes, or end-states, followed by a process of looking at the events and decisions that would lead to each of these end-states. The process permits exploration of a range of end-states, rather than a single end-state that is extrapolated from current trends. Events that must and must not occur for an end-state to be realized are identified in order to assess the effects that events and decisions have on the future. The process effectively allows decisions to be pre-tested to assess how well they support or hinder progress towards a desirable future. By looking at a range of futures, the process also produces a transportation plan with the flexibility needed to react to changes that affect the future.

Beyond the overall benefits of scenario planning, the situation in the District of Columbia is ideal for the use of this process. Current trends in population and employment do not paint a very positive picture for the City. Current regional projections show the District first losing population and then gaining slightly, to the point that, by 2015, population will be only 0.5 percent higher than it is today. Employment in the District is projected to grow, but at a lesser rate than the region. The combination of no growth in population and only a 20 percent growth in employment over the next 20 years also points to continued increases in suburban to downtown commuting, with its attendant impacts on the quality of life for District residents. It was clearly time to explore ways in which the District could "buck" the current trends and work toward becoming an attractive place to live, work and visit.

Phase I in the development of this Transportation Plan involved the identification of transportation, political, institutional and economic issues and the synthesis of five future end-states for the District. These end-states were developed after more than 50 interviews with civic and business leaders in the community. The five end-states represent a range of futures for the District, and they are described below:

Destination DC – A Tourism and Entertainment Scenario

This scenario describes a city that has been built on a foundation of international tourism, entertainment and business travel. The Nation's Capital has expanded, grown and built on the existing base of tourism to create a thriving economy with a multi-billion dollar tourist industry. Envision a City that expands tourism beyond the monumental core. It attracts visitors from around

the country, and the world, to its historic monuments, the newly built Disney theme park, and the state-of-the-art Convention Center. Visitors from the surrounding states and the suburban region are attracted to DC's sports and entertainment complexes such as the MCI Center; Kennedy Center; Lincoln Theater; rebuilt stadium; and new, large, modern shopping mall. The physical gateways to the City -- airports, train stations, taxi cabs and highways -- are among the cleanest, safest and most inviting in the nation. Employment is up, as the travel and entertainment-focused industries have increased the total number of semi-skilled service jobs in the City by nearly 25 percent. Taxes on new DC businesses and employee-residents bring a wealth of revenue into the City, much of which is re-invested into expanding and diversifying areas that attract tourists.

Deliberate actions by the City government, the Congress, the business community and regional bodies have been necessary to achieve this end-state. For example, in the early years, the District Council established new regulations for the Hotel Revenue Tax, allocating money to District organizations to benefit tourism. In later years, as tourism increased, the tax was reduced in order to make the City more affordable for visitors. Private companies collaborated with City government to introduce tourist friendly services and moderately priced hotels. Information kiosks and online information services were established to encourage tourism and inform visitors of all kinds about the City and its attractions. Public/private collaborations have enabled the development of new tourist destinations such as the Arena, Convention Center, Disney's America, Children's Island, and a "Kennedy Center" east of the Anacostia River that features R&B, jazz, and rock and roll.

Efficient transportation systems are critical to making the City a pleasant, friendly, welcoming place. The team believes that it is critical that all transportation providers and other stakeholders work together to create Destination DC. Systems are developed to move arriving visitors to their hotels in comfort -- from Dulles, as well as from National, Union Station and bus depots. Easy-to-use public transportation systems provide access to the major sites in Washington, DC; additional links are made to attractions outside the District. There is a seamless web for air and ground travel. In 1996, an independent authority was created to oversee transportation. The authority established criteria for selecting transportation projects that emphasized (in addition to cost/benefit analyses) benefits to the District and its residents. Two of the major criteria focus on public support for projects and minimal disruption to the community.

On the basis of these criteria, intermodal transportation systems were developed that included a service center for buses with easy access to the monumental core, new facilities at National Airport to accommodate the increased demand, additional rail space, a water transportation system that is popular for both conveyance and recreation, and a state-of-the-art circulator -- people mover -- that transports pedestrians to key sights around the mall. This circulator and the new light rail lines have become tourist attractions in themselves. Expanding railroad capacity in the District is particularly important. Union Station is at capacity, and in the next few years there will be a new high speed rail system in place making the trip between New York and Washington in less than one hour. This will put additional strain on existing systems.

For this scenario to develop successfully, the Federal government must be convinced to invest in the City, public/private collaborative efforts must be encouraged, and public support must be engendered

to increase community acceptance of the City's focus on tourism and entertainment. Programs for supporting local residents' management and ownership of hotels, restaurants, and other tourist businesses would increase local interest and investment. The City must also launch an aggressive anti-crime campaign to make Destination DC attractive to visitors. This end-state builds on the image of DC as the Nation's Capital: it is the City's strength, with 19 million visitors in 1994. The scenario imagined a many-fold increase in tourism and a robust economy if the City mobilizes for the future -- Destination DC.

Free Market Model City -- A Public/Private Partnership

This scenario described an end-state in which a growing national economy, combined with rapid development of information technology and telecommunications, produce a diverse economy in the District. Business-friendly conditions in the City, plus the lure of the vast sea of government-based information, attracted new computing and communications companies, along with the usual government related professional services businesses. The disorganized pool of data created by the Federal government was ripe with opportunities for people who could process and resell such information in more useful forms. The City focused on its primary advantage, information, and launched a concerted effort to attract new companies by initiating business-friendly tax structures and easing regulatory restrictions. The DC NetPlex (encompassing both the City and the suburbs) grows larger than Silicon Valley and provides leading edge information management services to clients throughout the world. The approval of a reciprocal income tax agreement provides a major boost to the City in its attempt to become economically viable.

This scenario calls for changes in the structure of the City's government; a highly skilled, politically seasoned, city manager was hired by the newly elected board of selectmen following passage of revised home-rule legislation. Plans were made to outsource the management of law enforcement, buses and subways, UDC, welfare administration, and even the fire department. The management contracts negotiated by the City demand performance levels within clear budget constraints; failure to perform means losing the contract. The District earned a reputation as a "model city" in the early years of the new century, in recognition of its success in providing efficient services to residents and businesses who came to be considered "customers." City government and the business community worked together to promote and encourage the involvement of individual business leaders in the process and to establish conditions necessary for the District's success. The team thought that a financial/governmental crisis may need to occur before leaders realized the extent of the commitment that will be needed to improve the City.

While privatization and outsourcing are an integral element in achieving this scenario, that policy raises many obstacles to be overcome on the way to this future. For example, outsourcing and downsizing of government shifts jobs from the public to the private sector. Some people cannot compete in the new environment. The City government must then focus on education and training. It will be necessary to work to instill an entrepreneurial spirit in the citizenry and to provide a safety net for workers who have difficulty adjusting to the new environment. Wealthy neighborhoods sprouted in some parts of the City, creating inequalities and disparities that contribute to crime. While community policing programs can be used effectively to combat sporadic outbreaks, there is

worry about the quality of life in a world driven by and focused on business benefits and business values.

An outline of the implications for the transportation systems in this scenario are: (1) telecommuting will change traditional traffic patterns; (2) mass transit will increase in popularity, leading to reduced single occupant vehicle (SOV) use; (3) the Federal government will begin charging for parking, and promoting telecommuting; and (4) more customized public transportation services (feeders, buses, etc.) will be needed. The team listed the following strategic criteria for selecting transportation projects: overall trip reduction, environmental improvement, transportation "quality of life" (bikeways, pedestrian, busways), cost, links to the regional system, high service standards, and accessibility for low-income and under-served areas.

The Common Good -- A Federal/City Partnership

This scenario sees the nationwide trend of streamlining and rebuilding business processes to make them more effective adopted by many governmental jurisdictions. A mutual understanding of the necessity to renew the economic and social vitality of the District, in which the City and Federal governments must co-exist, has invoked a strategic partnership. Reform efforts on the part of the City Council and the Mayor's office have strengthened the relationship between the City and Congress. As a result, the Federal and District governments have teamed together to restore the Nation's Capital to prosperity. Washington, DC, has become a successful company town. Its residents are proud to be at the seat of the Federal government, as most of them either work for the government or in closely related industries. The old animosity between DC and Federal politicians has dissipated; the Federal/City partnership is not viewed as diminishing the value of home rule, but, instead, is considered an ideal representation of what home rule should have been from its inception.

There are several factors that might precipitate a Federal/City partnership: enlightened City leadership, an enlightened U.S. President or a major catastrophe. A serious crisis, such as a series of ozone alert days or any number of other environmental hazards that triggered sanctions, would be the most probable catalyst of such a partnership. According to the scenario, the District changed its political approach dramatically in the late-1990s. For example, the District introduced a fast-track permit process for GSA projects, made more land available to the Federal government for office space, and restored its own fiscal health. In response, the Federal government began to pay a larger share of the City's budget, thus strengthening the partnership. Congress agreed to fund Medicaid for the District, paid a real estate "contribution" equal to taxes levied on private owners, and launched several innovative transportation initiatives. As a result, the two jurisdictions are developing a new pattern of working together for the "Common Good".

Transportation decisions are made with the City's best interests in mind. Given the degree of Federal activity in the Capital, the Federal government has helped support important transportation initiatives by financing, managing, and sponsoring them. For example, Congress passed the National Capital Transportation Extension Act, providing additional funding for mass transit in the region, and the Federal government began charging for parking to deter commuters from driving to work. Innovative transportation systems such as light rail, electric bus, and water transit have also been

introduced through collaborative efforts between the Federal government and the City. Recently, there has been an effort to make public transit itself part of the tourist attraction of the District, as is the case in San Francisco and New Orleans. A boat tour of the City, for example, might take visitors to each of the monuments, and new forms of light rail might pass by a series of other tourist attractions.

The city described in this scenario is achievable; it builds on Washington's unique status. The team, however, identified several barriers to its success. They argued that the emphasis on the City as the seat of the Federal government might limit economic and social diversity. Further, GSA developments in remote areas might promote sprawl, stretching the City's boarders beyond manageable boundaries. In addition, there was worry about the long-term sustainability of the scenario, both economically and politically. Finally, this scenario could be perceived to be antithetical to hopes for statehood.

Potomac Renaissance – A Regional Solution

In this end-state, regional solutions to problems, and regional responses to opportunities, have proliferated nationwide. The Washington, DC, metropolitan area, though somewhat slower to build the necessary coalitions than some regions, overcame the special problems associated with District/multi-state relations and built strong regional ties. The concentration of government and related businesses offered a sufficient magnet to attract additional international business and promote economic development throughout the entire region – City and suburbs no longer compete, but cooperate, to attract residents and businesses. Tysons Corner, Reston, and the Dulles Corridor have all developed strong commercial centers, each with its own clearly defined niche. These centers complement each other, offering diverse settings for businesses with varying needs. Increasingly, large companies are locating various parts of their operations in appropriate centers throughout the Potomac region. For example, a company may locate its headquarters in the District, its manufacturing plant in Reston, and its logistics operations in the Dulles Corridor.

In the course of this scenario, a series of shared problems and challenges compel the region's stakeholders to rally together. For example, air quality was not meeting attainment levels, so new, environmentally-friendly programs had to be adopted; DC General Hospital closed its doors, which, in turn, created a health care supply deficit in the region; and part of the Woodrow Wilson Bridge collapsed, increasing congestion throughout the region. In order to deal with these dilemmas, independent governing bodies joined together to come up with dynamic, regional solutions. As they worked together, the region's leaders realized that sharing resources in crime prevention, environmental clean-up, waste removal, and water usage would reduce their overall costs and enhance the value provided to residents and visitors.

Thus, major catastrophes in the region were the catalyst that united independent organizations and jurisdictions, and led to a shared belief that regional collaboration was the most effective way for the City and its surroundings to prosper. Some of the events identified in the scenario include: independent governmental bodies meet together regularly; a regional transportation plan was

accepted by Maryland, Virginia, and the District; and, at the turn of the century, a regional council was elected to promote regional planning and implementation efforts.

The primary criterion for pursuing transportation projects in this scenario is ensuring regional integrity. For example, a common ticketing system has been adopted by WMATA, VRE, and MARC; bi-directional transportation links connect the key business centers, residential suburbs, and urban core; and several bus routes have been privatized in order to ensure flexible service. Another important criterion is that projects must meet stringent environmental standards. The region has promoted telecommuting as an alternative to traditional transportation and has preserved several "green" areas, both inside the core and in its surrounding neighborhoods, as parks and recreation grounds. Sustainability and intermodal connectivity are the other important criteria cited for transportation projects.

This scenario, while very desirable, was judged to be difficult to achieve. First, it depends on turning around an ingrained cultural pattern -- a long history of conflict between the City, Congress, and the surrounding region. Secondly, many of the transportation initiatives, particularly efficient links between the suburbs and the City, will levy a significant financial burden. Finally, the District community may not support regional unification, particularly if they believe it threatens their independence. Some measures are proposed that might help overcome these barriers, such as strong government policies to signal to other parts of the region that change is needed, adopting a reciprocal income tax to generate additional revenue, developing a negotiating stance toward other jurisdictions, and building coalitions and support within the community. There was solid agreement among the team that some sort of shared crisis would have to occur to precipitate this scenario.

New Columbia World Center -- the District Becomes a World Capital

The City that has been transformed from a National Capital in some disarray in 1994 to a prosperous international business center -- a World Capital -- by 2015. New wealth and business has been attracted by a special IRS tax status granted to the District. The new City is cosmopolitan, offering world-class arts, entertainment, dining, and night life to its diverse residents and visitors. This new vitality has caused many people, newcomers and former suburbanites alike, to settle in popular residential areas throughout the District. To accommodate the expanded population, the beauty, cleanliness, and security of the downtown area has been extended well beyond the monumental core, paving the way for upgrading neighborhoods in many parts of the City. Washington's prestige as the center of the world's only superpower has fulfilled its promise; the City has become headquarters for many foreign businesses. Employment is up, particularly in the high paying service professions such as lawyers, lobbyists, financial analysts, and consultants, and the residential population has nearly doubled since 1994. The team felt strongly that the City's high schools must offer multi-lingual education and advanced training and apprentice programs to prepare the population for the new working environment. The District's universities have become world-renowned for their excellence in international studies.

Aggressive efforts were made on the part of the District and Federal governments to attract international businesses and residents to the New Columbia World Center. High-quality developers

were offered generous incentives to build up the waterfront and other inner city areas; luxury office and residential buildings have appeared. The government lured the United Nations from New York; its migration brought with it thousands of highly paid diplomats and their staffs, who contribute to the international ambiance of the City. At the same time, though, careful attention has been paid to preserving Washington, DC, for local residents. The team adamantly opposed a scenario that would gentrify the whole City, pushing all low income residents to the inner suburbs. Thus the education system has been vastly enhanced; low income housing is still available; and the Federal government, which employs many of the City's middle class workers, maintains a stable foothold in the District. Also, Anacostia was made a free-trade zone, which has spurred the development of light manufacturing plants and jobs in the District.

The District has noticeably changed its approach to transportation and land use to accommodate its new status. The international population, unaccustomed to single occupancy vehicles and the pollution they bring, demands alternative transportation systems. Well beyond compliance with Federal regulations, the government has enhanced, promoted, and introduced environmentally friendly transportation options. A host of organizations have worked together to expand the Metrorail beyond its 103-mile limit, introduce water taxis, increase the number of bike paths in the City, and widen sidewalks in highly traveled areas. In addition, there has been a strong effort to connect disparate modes of transportation so that, for example, travelers have seamless connections between the airports and their hotels. Another priority has been the building of links that have long-term sustainability, not just as temporary solutions to travel peaks. To accommodate the influx in travelers, Amtrak has bought the Benning Road facility and expanded the number of trains traveling into and out of the Capital.

For this scenario to develop, the City must lay out a cogent vision for its future. While the team recognizes that the City might offer enticing tax breaks to lure companies into the District, it also indicated that such a program may temporarily reduce the revenue stream coming from taxes. Also, the team raised concerns about balancing growth with the maintenance of a strong sense of community in the District. The City's growth will not only affect the types of jobs available to middle- and low-income workers, but it might also detrimentally affect land use for historical sites and open space. These issues will have to be managed carefully in order for this scenario to unfold successfully. The team indicated that while this end-state builds on the District's reputation and unique strengths today, it will not be easy to create the New Columbia World Center of tomorrow.

A.3. Incorporating the Scenarios into the Development of the Transportation Plan

Phase II in the development of the Transportation Plan involved further exploration of the Phase I scenarios and identification of transportation improvements that support or hinder each scenario. District residents, businesses, and decision-makers participated in workshops where the transportation implications of the scenarios were explored fully. A composite scenario was developed based on overall consensus of Phase I and Phase II participants that the Tourism scenario represented the most achievable end-state and that the World Capital scenario represented the most desirable. Participants also generally agreed that a Federal/City partnership was necessary for the District to achieve world-class city status. The discussion findings from these workshops resulted in the development of a transportation vision, strategy, and action plan for the District.

APPENDIX B - FEDERAL PLANNING REQUIREMENTS

B.1. Background

The District's Transportation Plan was developed to provide the City with a strategic framework for planning and implementing transportation improvements that maintain and enhance the existing system and contribute to the realization of a vital future for the District and region. The Transportation Plan was developed in accordance with Federal planning requirements as cited in the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991. This Transportation Plan was developed through an extensive and proactive public participation process that addresses all of the applicable planning factors cited in the ISTEA. This appendix provides additional information on the District's Transportation Plan and its relationship to Federal planning requirements.

B.2. Public Participation Process

The Transportation Plan was developed over the course of 24 months, incorporated two sets of public meetings and received comments on various plan components (a total of 5 meetings), 12 planning workshops to gain public input on transportation planning issues and potential solutions, three planning forums that included exercises to work with and sort transportation solutions within the scenario planning framework, and a public hearing to garner input on the draft Transportation Plan. In addition, over 90 interviews were completed with transportation stakeholders in the District and the region, covering government, business, and civic groups.

Public input was key to the process of identifying transportation issues, solutions, and working with the full range of possible solutions to develop a set of improvements to the District's transportation system. The transportation strategy developed for the Plan addresses both existing public transportation concerns and the goal of moving the District to the realization of a transportation vision for the year 2020.

Participants in the issues identification workshops and the planning forums were representative stakeholders in the District and the region, including government, business, and civic groups. They were invited by letter and follow-up telephone calls two to three weeks prior to these working sessions. Each of the public meetings were advertised (at least one week prior to the meeting) using at least two of the following methods: advertisement in the District Weekly or Metro Section of the Washington Post; Cable Television advertisement; notices sent to representatives of interest, neighborhood, and business groups; and displays at several area libraries with information posted regarding the meetings.

All public information display panels for each of the public meetings were on display at the Department of Public Works prior to the meetings.

The input received from individuals through interviews, and at the workshops, planning forums, and public information meetings was incorporated in the action plan, which led to the final Transportation Plan. On display and available at each of the subsequent meetings were brochures, maps, and descriptions of projects, policies, and procedures that reflected the input received at the previous workshop or meeting. Presentations on the scenario planning process and the development

of the Transportation Plan were made by the Department of Public Works staff to interested groups at their request.

Attempts were made to improve the public information process throughout the development of the Transportation Plan by mailing invitation and announcement letters to interest groups in advance of all workshops and meetings, conducting follow-up telephone calls to invitees, additional advertising, and greater responsiveness to the interests and needs of individual groups by being available to make presentations. At each meeting, attendees were encouraged to comment on the effectiveness of the particular event they attended, as well as on the Transportation Plan as a whole.

B.3. Statewide Planning Factors

The statewide planning factors *(Section 450.208 of title 23, CFR part 450 & title 23, CFR part 613)* in the ISTEA legislation are intended to ensure that transportation plans are developed that consider all transportation modes, the environmental and social impacts of transportation projects, and better planning for the future through such actions as early preservation of transportation rights-of-way. These factors must be considered as part of the planning process for all states.

The 23 statewide planning factors are listed below, along with a description of how these factors have been considered and analyzed, and how they are reflected in the District's Transportation Plan.

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

This Long-Range Transportation Plan was developed to make use of the data collection, analysis, and results of the District of Columbia's Transportation Management System (DCTMS), a combination of three of the six previously required management systems (congestion, public transportation facilities, and intermodal facilities management systems). This Transportation Plan was developed using a similar, multi-modal approach and reflects the strategies developed in the DCTMS. The timeline for implementation of each action item in the Transportation Plan also incorporates performance evaluation. This would be accomplished using methods identified in the DCTMS.

(2) **Any Federal, State, or local energy use goals, objectives, programs, or requirements;**

By providing efficient and balanced transportation, this Transportation Plan will maximize the energy efficiency of the transportation system. Improvements in the provision of transportation information will reduce overall travel and will maximize the use of non-automotive travel by residents, commuters, and visitors. The extensive bicycle system will serve both recreational and commuter travel with no energy use or vehicular emissions. Improvements in the internal transit system in the District, along with the increased efficiency for radial commuter transit travel afforded by bus bypass lanes, will increase the use of more energy-efficient transit travel.

(3) **Strategies for incorporating bicycle transportation facilities and pedestrian walkways in appropriate projects throughout the State;**

Three of the six strategy elements defined in the development of this Transportation Plan point to providing alternatives to driving, supporting investments that make the District a more attractive place to live and work, and developing improvements that consider all modes of travel. The bicycle spine network and pedestrian paths are separate, distinct action items proposed in this plan, and facilities accommodating bicyclists and pedestrians have also been incorporated into several other proposed projects.

Bicycle and pedestrian generators were identified as areas where improvements to the bicycle/pedestrian facilities are to be focused, such as universities. A bicycle spine network was identified that connects several existing paths with other viable new paths to encourage increased commuter and recreational travel by bicycle. Major corridor improvements incorporate in their design a cross-section that provides for a bicycle lane, either on one side of the road for both directions of travel or single direction lanes on both sides of the road, which are separated from motorized traffic by a landscaped median.

New pedestrian walkways and sidewalks and improvements to sidewalks are included in a number of proposed projects intended to encourage greater pedestrian activity in areas where retail and recreational activities can be concentrated. Six- to twelve-foot sidewalks are elements of each of the four conceptual cross-sections proposed for many corridor reconstruction projects. Walking tours that can be publicized on tourist-oriented maps are also recommended in this plan.

(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;**

Several projects, though not designed primarily to improve access, will have a direct positive impact on the ability of travelers to reach their desired destination efficiently. Providing accurate and up-to-date information is seen as the key element in achieving this goal. The information centers and interactive kiosks will provide information about available modes of travel within the District, tourist attractions and access to them, parks, recreation and scenic areas, monuments and historic sites, and other entertainment, retail, and related activities.

Improving the District's signage system is also a top priority in increasing the efficiency of the transportation system and reducing unnecessary travel within the District. Replacement of all transportation signs in the District with uniform, clear signs with internationally recognized symbols will improve access to parking areas, Metro stations, and other modes of travel.

The water taxi, light rail, and small bus systems are proposed to improve access to neighborhoods, business and residential areas, and military installations, as well as to parks, scenic areas, and other

tourist attractions. The water taxi system also provides improved access and an alternative mode of travel to the Washington National Airport.

Three intermodal freight distribution centers are proposed where goods can be brought into the District by rail and transferred to trucks of various sizes for distribution throughout the City. Several major corridors throughout the District are also recommended for specific improvements to better accommodate trucks through wider lanes, enhanced pavement design, and landscaping to act as buffers between the motorized traffic and pedestrians.

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

The District of Columbia is entirely within the Washington Metropolitan Area. There are no nonmetropolitan areas within the area encompassed by this Plan.

(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;

This Transportation Plan was developed in coordination with the regional transportation plan developed by the Washington Metropolitan Council of Governments, the regional metropolitan planning organization.

(7) Connectivity between metropolitan planning areas within the State and with metropolitan planning areas in other States;

Since the District of Columbia is contained entirely within one metropolitan area, connectivity between metropolitan areas within the State is not applicable. The Transportation Plan does address transportation between population and activity centers within the District through improvements to internal transit, bicycle, pedestrian, and roadway and parking facilities. This Plan also addresses connections to other metropolitan areas through improvements to roadways and transit entering and exiting the District, enhancement of the viability of rail service to transport goods into and out of the District, and improved access to National Airport. Improved connections to other metropolitan areas throughout the country and the world are part of the District's transportation vision, as promoted by this Transportation Plan, and will continue to be pursued as part of the metropolitan area transportation planning process.

(8) Recreational travel and tourism;

Tourism, the largest revenue source and a leading industry in the District, provides the foundation upon which to build an effective and efficient transportation system. Information centers and kiosks, streetscaping and beautification, municipal and tour bus parking, internal circulation through new transit options, and the proposed walking tours and bicycle spine network are all designed to respond to the needs of tourists and recreational travelers within the District.

(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);**

All transportation projects proposed in this Plan will be planned and designed to minimize impacts on aquatic resources and will follow all guidelines and regulations pursuant to the Federal Water Pollution Control Act.

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

Maintenance of the District's transportation system is of prime importance and forms the basis for several key recommendations, and, in some ways, for the entire Plan. Maintenance of the existing system is hampered today by severe funding limitations. Sufficient and consistent funding is the basis of one of the strategy elements in the Plan. Recommendations that relate to this strategy element include the earmarking of major revenue sources for the Transportation Trust Fund, and the study and promotion of increased regional transportation funding through the development of an independently funded regional transit system. Improvement of the planning process to include all transportation modes, from initial pre-planning efforts to project implementation, will work to improve the efficiency of the transportation system by making sure that the needs of all modes are included when roadways are reconstructed or otherwise improved. The entire Transportation Plan addresses this planning factor by assisting in the realization of a vision for a District of Columbia, with increased population and business activity that can support a well-maintained and efficient transportation system.

(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 transportation strategy elements three through six on page 7 address this ISTEA planning factor. The action recommendations of the Plan address this planning factor through the development of a bicycle spine network that will make bicycle traveling a transportation mode that is more competitive with other modes in terms of convenience and safety. Reductions in automobile traffic will be realized through the construction of strategically placed municipal parking facilities that allow motorists to park once and then use other modes for other internal trips, and roadway improvements that provide for light rail lanes, and bus bypass lanes. Improved dissemination of information will also allow residents, commuter, and tourists to plan their trips efficiently by route and across modes, thereby conserving energy.

Improvements to the transportation system were also developed in part to create positive economic and social effects (i.e., encouraging residents and businesses to move to the District). Land use changes and opportunities for growth have been identified, and transit, bicycle, pedestrian, and parking facilities will be concentrated within these areas to meet the needs of residents and

businesses. Streetscaping and beautification efforts have also been incorporated in all major reconstruction projects recommended in this plan.

(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;**

The reduction of traffic congestion and its attendant impacts on the quality of life for District residents is one of the prime goals of this Transportation Plan and is reflected in several of the strategy elements and action items. Several action items that specifically address reducing traffic congestion and single occupant vehicle travel are: (1) the provision of traffic signal preemption for buses along corridors carrying substantial commuter traffic; (2) increasing internal transit service to increase the availability of attractive options to automotive travel for intra-District travel; and (3) the provision of additional municipal parking facilities that will reduce congestion resulting from motorists circling looking for parking areas, and, in conjunction with improved internal transit and bicycle and pedestrian options, allow motorists to park once and use these other modes to get around the City.

(13) **Methods to expand and enhance appropriate transit services and to increase the use of such services (including commuter rail);**

Travelers will be encouraged to use modes other than single-occupant vehicles through the provisions of a new Metro station, bus priority routes, improved internal circulation through smaller, more frequent bus service, cross-town bus service, light rail, signal pre-emption for buses at traffic lights.

(14) **The effect of transportation decisions on land use and land development, including the need for consistency between transportation decision-making 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 Transportation Plan was developed in cooperation with the District's Office of Planning and takes into account existing and planned land use for the District. This Plan, however, seeks to provide transportation improvements that will spur changes in the current land use projections that will allow the District to create additional wealth and vitality within its boundaries. The proposed transportation improvements will provide improved multi-modal transportation service and access to areas planned for growth such as the Union Station/North Capitol Street corridor, the New York Avenue corridor, the Buzzard's Point/Southeast Federal Center, and others.

(15) Strategies for identifying and implementing transportation enhancements where appropriate throughout the State;

The transportation vision and supporting strategy elements provide the strategic framework for identifying transportation enhancements in the District of Columbia. This Transportation Plan describes a number of enhancements that will support the transportation vision, including development of landscaping to provide buffers and to enhance the visual character of roadways, intermodal transfer facilities, water docks, and more.

(16) The use of innovative mechanisms for financing projects, including value capture pricing, tolls, and congestion pricing;

Subsidization of parking and traffic services, by artificially reducing the cost of driving, encourages sprawl development and excessive use of single-occupant vehicles (SOVs). This has negative impacts on the economy and environment. The public sector can create pricing mechanisms that educate citizens about the costs of auto travel, and that encourage car pools and transit. Of equal importance, these mechanisms encourage households and businesses to locate close to existing infrastructure amenities, such as transit.

The District has recently enacted the "Clean Air Compliance Act" (DC Law 10-242), which replaces the subsidy that many free parkers now receive by requiring them to compensate transit for the congestion reduction benefit they receive from transit services. This law will use price incentives to encourage car pools and transit as alternatives to SOV travel while providing between $8 million and $10 million annually for transit needs. Environmental benefits accrue to all jurisdictions within the region. Likewise, increased transit patronage will increase farebox revenues that should reduce transit subsidy requirements for all jurisdictions.

Studies have shown that many investments in transportation infrastructure enhance land values sufficiently to cover all or most initial investment costs. The public sector in our region has been actively pursuing value capture techniques to finance transportation investments. Examples include:

- WMATA lease of land and air rights at market rents for development;
- Private financing for design and construction of a new Metrorail station based upon expected increases in land values; and the
- Expansion of Route 28 in Virginia.

The DC Tax Revision Commission is actively investigating value capture as a possible reform to the existing property tax system.

Value capture financing has been shown to have two advantages. First, it returns to the public sector value that has been created by the public sector in the first place. In this manner, infrastructure investments can become self-financing. Second, it promotes compact development around transportation infrastructure, discouraging sprawl and its negative fiscal and environmental consequences.

Clearly, the achievement of the transportation vision requires adequate and consistent funding. This Transportation Plan addresses this need by building on the creation of the transportation trust fund (created for the District in 1995). This dedicated transportation trust fund would be multi-modal, allowing funds to be used for the balanced, multi-modal transportation system envisioned in this Transportation Plan.

This Plan would increase transportation funding by dedicating revenue sources to the fund in addition to the currently dedicated gas taxes, including vehicle registration fees and parking enforcement revenues. As a Federal city with limited revenue raising abilities, the District would also request additional Federal funding which would be dedicated to transportation by being allocated to the trust fund.

Public/private partnerships are also an important feature of many of the transportation action items proposed in this Plan. Private companies can adopt-a-gateway, help to maintain these areas, and have their names featured in conjunction with the welcome signs. Private companies will also be approached in creating partnerships to develop, design, operate, and maintain the water taxi system, the small neighborhood bus service, the intermodal goods movement transfer centers, and the information centers and interactive kiosks.

(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);

The undeveloped or unused land that would be needed to build new roads or transit corridors is in short supply in the District of Columbia. The goal in this Plan is not to build new roads, but to preserve the existing rights-of-way and improve the effectiveness and efficiency of the existing transportation system. The proposed projects have all been evaluated in terms of the existing and available rights-of-way, and have been developed in ways to take advantage of the existing right-of-way, and minimize the need to acquire additional land for construction.

(18) Long-range needs of the State transportation system for movement of persons and goods;

The Transportation Plan addresses the long-range needs for movement of persons and goods through a balanced transportation system comprising roadways, transit, pedestrian and bicycle facilities, water transportation, rail, and airport access.

(19) Methods to enhance the efficient movement of commercial motor vehicles;

The efficient movement of trucks is of key importance to the economic vitality of a city. The District's streets are currently not designed to accommodate the increasingly larger trucks that delivery services are using. As part of this plan, improvements to specific roadways would be

implemented to minimize the negative impacts from these trucks. A spine network of roadways would be improved to have adequate travel lanes, an enhanced pavement base, and landscaping buffers both in the median and along each edge. Through trucks and other heavy vehicles, such as tour buses, would be restricted to the inside travel lanes to minimize impacts to adjacent land uses.

(20) **The use of life-cycle costs in the design and engineering of bridges, tunnels, or pavements;**

Life cycle costing will be used for the individual projects that are ultimately selected for each corridor.

(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 within transportation systems;**

This Transportation Plan is developed to meet the requirements for both statewide planning factors and MPO planning factors.

(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; and**

The Transportation Plan specifically focuses on the development of tourism and improving recreational development through better multi-modal access to recreational areas including the waterfront and rivers. There are no rural areas in or immediately adjacent to the District.

(23) **The concerns of Indian tribal governments having jurisdiction over lands within the boundaries of the State.**

There are no Indian tribal governments having jurisdiction over lands within the District of Columbia. This factor does not apply to the District's Long-Range Transportation Plan.

Transportation Plan for the District of Columbia
Appendix C
Estimated Annual Transportation Costs & Revenues

ANNUAL TRANSPORTATION COSTS (,000)	1997	1998	1999	2000	2001	2002	2003	2004	2005
Capital Improvement Costs									
Gateway Program	$0	$0	$21	$22	$225	$232	$0	$0	$0
Information Centers/ Kiosks	$0	$0	$103	$318	$437	$337	$0	$0	$0
Signage Program [1]	$0	$103	$106	$3,278	$3,377	$2,319	$1,194	$1,230	$0
Traveler Information	$0	$31	$13	$13	$14	$14	$15	$15	$16
Public Parking [2]	$100	$155	$0	$1,705	$5,072	$3,617	$6,209	$0	$6,587
Tour Bus Parking	$0	$0	$154	$158	$326	$336	$346	$357	$367
Roadway Safety/ System Connection Improvements	$0	$0	$265	$4,098	$21,103	$9,854	$10,149	$10,454	$10,768
Water Docks	$0	$0	$0	$0	$253	$261	$2,687	$2,767	$0
Light Rail [3]	$0	$0	$0	$0	$0	$7,390	$7,612	$7,840	$8,076
Metrorail [4]	$0	$0	$0	$656	$1,576	$0	$0	$0	$0
Florida/ New York Avenue Metro Station	$0	$0	$2,122	$2,185	$2,251	$11,593	$9,552	$2,460	$0
Bus Priority Corridors [5]	$0	$0	$1,485	$3,825	$3,939	$4,057	$4,179	$0	$0
Feeder and Alternative Bus Service [6]	$0	$0	$318	$328	$2,025	$2,087	$2,149	$738	$0
Regional Transit Funding	$100	$0	$0	$0	$0	$0	$0	$0	$0
Bicycle Trail (Metropolitan Branch Trail)	$0	$0	$3,978	$4,098	$0	$0	$0	$0	$0
Goods Intermodal Centers [7]	$0	$0	$0	$0	$0	$0	$0	$1,537	$1,583
Commercial Loading/ Parking Zones	$0	$0	$159	$328	$338	$348	$358	$369	$0
Landscaping	$0	$500	$1,000	$1,030	$1,061	$1,093	$1,126	$1,159	$1,194
Subtotal (Capital Cost)	$200	$788	$9,725	$22,041	$41,997	$43,538	$45,577	$28,926	$28,591
Transit System Preservation Costs									
Bus Operating Subsidy [8]	$74,609	$79,676	$82,066	$84,528	$87,064	$89,676	$92,366	$95,137	$97,991
School Transportation Operating Subsidy	$3,888	$3,845	$3,960	$4,079	$4,202	$4,328	$4,457	$4,591	$4,729
Metrorail [9]	$36,637	$36,676	$37,776	$38,910	$40,077	$41,279	$42,518	$43,793	$45,107
Program Adjustments [10]	$17,745	$18,277	$18,826	$19,390	$19,972	$20,571	$21,188	$21,824	$22,479
Capital Construction, Rehabilitation, and Replacement [11]	$50,000	$41,000	$12,000	$12,360	$12,731	$13,113	$13,506	$13,911	$14,329
Cost Shifts With Regional Transit [12]	$0	$0	($84,636)	($109,561)	($120,994)	($124,624)	($128,362)	($132,213)	($136,180)
Subtotal (Transit)	$182,879	$179,474	$69,993	$49,706	$43,052	$44,343	$45,673	$47,044	$48,455
Other Transportation Preservation Costs									
Federal Aid Highways and Streets [13]	$47,000	$48,410	$49,862	$51,358	$52,899	$54,486	$56,120	$57,804	$59,538
Bridges [13]	$52,000	$53,560	$55,167	$56,822	$58,526	$60,282	$62,091	$63,953	$65,872
Local Streets [14]	$35,000	$36,050	$37,132	$38,245	$39,393	$40,575	$41,792	$43,046	$44,337
Traffic Operations [15]	$12,000	$12,360	$12,731	$13,113	$13,506	$13,911	$14,329	$14,758	$15,201
Bicycle Facilities [16]	$1,000	$1,000	$1,030	$1,061	$1,093	$1,126	$1,159	$1,194	$1,230
DPW Operations [17]	$48,000	$49,440	$50,923	$52,451	$54,024	$55,645	$57,315	$59,034	$60,805
Subtotal (Other)	$195,000	$200,820	$206,845	$213,050	$219,441	$226,025	$232,805	$239,790	$246,983
TOTAL TRANSPORTATION COSTS	$378,079	$381,083	$286,563	$284,797	$304,490	$313,905	$324,056	$315,760	$324,029

ANNUAL TRANSPORTATION REVENUES (,000)	1997	1998	1999	2000	2001	2002	2003	2004	2005
Revenue From Existing Sources									
Federal Transportation Program Apportionment [18]	$90,000	$90,000	$90,000	$90,000	$90,000	$90,000	$90,000	$100,000	$100,000
Local Gas Tax Revenue	$31,500	$31,100	$30,800	$30,500	$30,200	$29,900	$30,000	$30,000	$30,000
Fees for Air Rights Over Public Rights-of-Way	$700	$721	$743	$765	$788	$811	$836	$861	$887
Payments to Mass Transit from General Fund [19]	$182,879	$179,474	$20,000	$5,000	$0	$0	$0	$0	$0
Transportation Fees to Trust Fund [20]	$0	$0	$120,160	$123,764	$127,477	$131,302	$135,241	$139,298	$143,477
Subtotal (Existing Sources)	$305,079	$301,295	$261,702	$250,029	$248,465	$252,013	$256,077	$270,159	$274,364
Other Potential Revenue Sources									
2 Cent Increase in Gas Tax [21]	$0	$0	$3,080	$3,050	$3,020	$2,990	$3,000	$3,000	$3,000
Right-of-Way Utility Fees [22]	$0	$0	$2,000	$2,060	$2,122	$2,185	$2,251	$2,319	$2,388
Curb Use Fees for Permit Parking	$0	$0	$2,000	$2,060	$2,122	$2,185	$2,251	$2,319	$2,388
Subtotal (Potential Sources)	$0	$0	$7,080	$7,170	$7,264	$7,361	$7,502	$7,637	$7,776
TOTAL TRANSPORTATION REVENUE	$305,079	$301,295	$268,782	$257,199	$255,729	$259,374	$263,579	$277,796	$282,140

System Preservation Needs Deferred (Annual)	$73,000	$79,787	$17,781	$27,598	$48,761	$54,531	$60,477	$37,964	$41,889
Cumulative Total (Preservation Deferral)	$73,000	$152,787	$170,568	$198,166	$246,927	$301,459	$361,936	$399,899	$441,788

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ANNUAL TRANSPORTATION COSTS (,000)	2006	2007	2008	2009	2010	2011	2012	2013	2014
Capital Improvement Costs									
Gateway Program	$0	$0	$0	$0	$0	$0	$0	$0	$0
Information Centers/ Kiosks	$0	$0	$0	$0	$0	$0	$0	$0	$0
Signage Program [1]	$0	$0	$0	$0	$0	$0	$0	$0	$0
Traveler Information	$16	$16	$17	$17	$18	$19	$19	$20	$20
Public Parking [2]	$0	$6,986	$0	$7,414	$0	$7,865	$0	$8,344	$0
Tour Bus Parking	$378	$390	$401	$413	$426	$439	$452	$0	$0
Roadway Safety/ System Connection Improvements	$11,091	$11,423	$11,766	$12,119	$12,483	$12,857	$0	$0	$0
Water Docks	$0	$0	$0	$0	$0	$0	$0	$0	$0
Light Rail [3]	$8,318	$8,567	$8,883	$30,297	$31,206	$32,143	$33,107	$34,100	$35,123
Metrorail [4]	$0	$0	$0	$0	$0	$0	$0	$0	$0
Florida/ New York Avenue Metro Station	$0	$0	$0	$0	$0	$0	$0	$0	$0
Bus Priority Corridors [5]	$0	$0	$0	$0	$0	$0	$0	$0	$0
Feeder and Alternative Bus Service [6]	$0	$0	$0	$0	$0	$0	$0	$0	$0
Regional Transit Funding	$0	$0	$0	$0	$0	$0	$0	$0	$0
Bicycle Trail (Metropolitan Branch Trail)	$0	$0	$0	$0	$0	$0	$0	$0	$0
Goods Intermodal Centers [7]	$8,624	$8,399	$8,651	$0	$0	$0	$0	$0	$0
Commercial Loading/ Parking Zones	$0	$0	$0	$0	$0	$0	$0	$0	$0
Landscaping	$1,230	$1,267	$1,305	$1,344	$1,384	$1,426	$1,469	$1,513	$1,558
Subtotal (Capital Cost)	$27,857	$37,052	$28,024	$51,605	$45,517	$54,748	$35,045	$43,977	$36,701
Transit Systems Preservation Costs									
Bus Operating Subsidy [8]	$100,931	$103,959	$107,078	$110,290	$113,599	$117,007	$120,517	$124,133	$127,857
School Transportation Operating Subsidy	$4,871	$5,017	$5,167	$5,322	$5,482	$5,647	$5,816	$5,990	$6,170
Metrorail [9]	$46,460	$47,854	$49,289	$50,768	$52,291	$53,860	$55,476	$57,140	$58,854
Program Adjustments [10]	$23,153	$23,848	$24,563	$25,300	$26,059	$26,841	$27,646	$28,476	$29,330
Capital Construction, Rehabilitation, and Replacement [11]	$14,758	$15,201	$15,657	$16,127	$16,611	$17,109	$17,622	$18,151	$18,696
Cost Shifts With Regional Transit [12]	($140,255)	($144,473)	($148,807)	($153,271)	($157,870)	($162,606)	($167,484)	($172,508)	($177,684)
Subtotal (Transit)	$49,909	$51,406	$52,948	$54,536	$56,173	$57,858	$59,593	$61,381	$63,223
Other Transportation Preservation Costs									
Federal Aid Highways and Streets [13]	$61,324	$63,164	$65,059	$67,011	$69,021	$71,092	$73,224	$75,421	$77,684
Bridges [13]	$67,848	$69,884	$71,980	$74,140	$76,364	$78,655	$81,014	$83,445	$85,948
Local Streets [14]	$45,667	$47,037	$48,448	$49,902	$51,399	$52,941	$54,529	$56,165	$57,850
Traffic Operations [15]	$15,657	$16,127	$16,611	$17,109	$17,622	$18,151	$18,696	$19,256	$19,834
Bicycle Facilities [16]	$1,267	$1,305	$1,344	$1,384	$1,426	$1,469	$1,513	$1,558	$1,605
DPW Operations [17]	$82,629	$84,508	$86,443	$88,437	$70,490	$72,604	$74,782	$77,026	$79,337
Subtotal (Other)	$254,393	$262,025	$269,885	$277,982	$286,321	$294,911	$303,758	$312,871	$322,257
TOTAL TRANSPORTATION COSTS	$331,958	$350,482	$350,857	$384,124	$388,011	$407,517	$398,396	$418,229	$422,181

ANNUAL TRANSPORTATION REVENUES (,000)	2006	2007	2008	2009	2010	2011	2012	2013	2014
Revenue From Existing Sources									
Federal Transportation Program Apportionment [18]	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000
Local Gas Tax Revenue	$30,000	$30,000	$30,000	$30,000	$30,000	$30,000	$30,000	$30,000	$30,000
Fees for Air Rights Over Public Rights-of-Way	$913	$941	$969	$998	$1,028	$1,059	$1,091	$1,123	$1,157
Payments to Mass Transit from General Fund [19]	$0	$0	$0	$0	$0	$0	$0	$0	$0
Transportation Fees to Trust Fund [20]	$147,781	$152,215	$156,781	$161,485	$166,329	$171,319	$176,459	$181,752	$187,205
Subtotal (Existing Sources)	$278,695	$283,155	$287,750	$292,483	$297,357	$302,378	$307,549	$312,876	$318,362
Other Potential Revenue Sources									
2 Cent Increase in Gas Tax [21]	$3,000	$3,000	$3,000	$3,000	$3,000	$3,000	$3,000	$3,000	$3,000
Right-of-Way Utility Fees [22]	$2,460	$2,534	$2,610	$2,688	$2,768	$2,852	$2,937	$3,025	$3,116
Curb Use Fees for Permit Parking	$2,460	$2,534	$2,610	$2,688	$2,768	$2,852	$2,937	$3,025	$3,116
Subtotal (Potential Sources)	$7,919	$8,067	$8,219	$8,376	$8,537	$8,703	$8,874	$9,050	$9,232
TOTAL TRANSPORTATION REVENUE	$286,614	$291,222	$295,969	$300,858	$305,894	$311,081	$316,423	$321,926	$327,594

System Preservation Needs Deferred (Annual)	$45,244	$59,259	$54,888	$83,265	$82,117	$96,436	$81,975	$96,303	$94,587
Cumulative Total (Preservation Deferral)	$487,032	$546,292	$601,180	$684,445	$766,562	$862,998	$944,972	$1,041,275	$1,135,863

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ANNUAL TRANSPORTATION COSTS (,000)	2015	2016	2017	2018	2019	2020	TOTAL
Capital Improvement Costs							
Gateway Program	$0	$0	$0	$0	$0	$0	$500
Information Centers/ Kiosks	$0	$0	$0	$0	$0	$0	$1,195
Signage Program [1]	$0	$0	$0	$0	$0	$0	$11,606
Traveler Information	$21	$22	$22	$23	$24	$24	$428
Public Parking [2]	$0	$0	$0	$0	$0	$0	$54,056
Tour Bus Parking	$0	$0	$0	$0	$0	$0	$4,945
Roadway Safety/ System Connection Improvements	$0	$0	$0	$0	$0	$0	$138,429
Water Docks	$0	$0	$0	$0	$0	$0	$5,968
Light Rail [3]	$36,177	$37,262	$38,380	$39,531	$0	$0	$401,013
Metrorail [4]	$0	$0	$0	$0	$0	$0	$2,231
Florida/ New York Avenue Metro Station	$0	$0	$0	$0	$0	$0	$30,163
Bus Priority Corridors [5]	$0	$0	$0	$0	$0	$0	$17,486
Feeder and Alternative Bus Service [6]	$0	$0	$0	$0	$0	$0	$7,646
Regional Transit Funding	$0	$0	$0	$0	$0	$0	$100
Bicycle Trail (Metropolitan Branch Trail)	$0	$0	$0	$0	$0	$0	$8,076
Goods Intermodal Centers [7]	$0	$0	$0	$0	$0	$0	$26,696
Commercial Loading/ Parking Zones	$0	$0	$0	$0	$0	$0	$1,900
Landscaping	$1,605	$1,653	$1,702	$1,754	$1,806	$1,860	$31,037
Subtotal (Capital Cost)	$37,802	$38,936	$40,104	$41,308	$1,830	$1,885	$743,475
Transit System Preservation Costs							
Bus Operating Subsidy [8]	$131,692	$135,643	$139,712	$143,904	$148,221	$152,667	$2,660,325
School Transportation Operating Subsidy	$6,355	$6,546	$6,742	$6,944	$7,153	$7,367	$128,659
Metrorail [9]	$60,620	$62,438	$64,312	$66,241	$68,228	$70,275	$1,226,879
Program Adjustments [10]	$30,210	$31,116	$32,049	$33,011	$34,001	$35,021	$610,898
Capital Construction, Rehabilitation, and Replacement [11]	$19,256	$19,834	$20,429	$21,042	$21,673	$22,324	$457,441
Cost Shifts With Regional Transit [12]	($183,014)	($188,505)	($194,160)	($199,984)	($205,984)	($212,164)	($3,445,348)
Subtotal (Transit)	$65,119	$67,073	$69,085	$71,158	$73,292	$75,491	$1,638,864
Other Transportation Preservation Costs							
Federal Aid Highways and Streets [13]	$80,014	$82,415	$84,887	$87,434	$90,057	$92,759	$1,618,044
Bridges [13]	$88,527	$91,182	$93,918	$96,735	$99,637	$102,626	$1,790,176
Local Streets [14]	$59,585	$61,373	$63,214	$65,110	$67,064	$69,076	$1,204,926
Traffic Operations [15]	$20,429	$21,042	$21,673	$22,324	$22,993	$23,683	$413,118
Bicycle Facilities [16]	$1,653	$1,702	$1,754	$1,806	$1,860	$1,916	$33,453
DPW Operations [17]	$81,717	$84,168	$86,693	$89,294	$91,973	$94,732	$1,652,471
Subtotal (Other)	$331,925	$341,883	$352,139	$362,703	$373,584	$384,792	$6,712,188
TOTAL TRANSPORTATION COSTS	$434,847	$447,892	$461,329	$475,169	$448,706	$462,168	$9,094,527

ANNUAL TRANSPORTATION REVENUES (,000)	2015	2016	2017	2018	2019	2020	TOTAL
Revenue From Existing Sources							
Federal Transportation Program Apportionment [18]	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$2,330,000
Local Gas Tax Revenue	$30,000	$30,000	$30,000	$30,000	$30,000	$30,000	$724,000
Fees for Air Rights Over Public Rights-of-Way	$1,192	$1,227	$1,264	$1,302	$1,341	$1,382	$24,099
Payments to Mass Transit from General Fund [19]	$0	$0	$0	$0	$0	$0	$387,353
Transportation Fees to Trust Fund [20]	$192,821	$196,606	$204,564	$210,701	$217,022	$223,532	$3,669,289
Subtotal (Existing Sources)	$324,013	$329,833	$335,828	$342,003	$348,363	$354,914	$7,134,741
Other Potential Revenue Sources							
2 Cent Increase in Gas Tax [21]	$3,000	$3,000	$3,000	$3,000	$3,000	$3,000	$66,140
Right-of-Way Utility Fees [22]	$3,209	$3,306	$3,405	$3,507	$3,612	$3,721	$61,074
Curb Use Fees for Permit Parking	$3,209	$3,306	$3,405	$3,507	$3,612	$3,721	$61,074
Subtotal (Potential Sources)	$9,419	$9,611	$9,810	$10,014	$10,224	$10,441	$188,287
TOTAL TRANSPORTATION REVENUE	$333,432	$339,444	$345,638	$352,017	$358,587	$365,355	$7,323,028

System Preservation Needs Deferred (Annual)	$101,415	$108,447	$115,691	$123,152	$90,119	$96,813	$1,771,499
Cumulative Total (Preservation Deferral)	$1,237,278	$1,345,725	$1,461,416	$1,584,568	$1,674,687	$1,771,499	

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Notes:

[1] - Portions of the cost for this action item would be performed as part of system preservation.

[2] - The cost shown assumes this parking would be municipal. Some or all may ultimately be privately provided.

[3] - Fifty percent of construction cost is assumed to be provided by the Federal government. No Federal contribution is assumed for design.

[4] - The New York Avenue to Georgetown Metrorail line is included as a study item only (the Georgetown Metrorail station has already been studied). Construction of this line as Metrorail is estimated to cost $1.13 billion.

[5] - Costs shown include bus and signal equipment only. Roadway improvements would be made as part of ongoing roadway reconstruction (included as system preservation costs).

[6] - The capital costs to purchase small feeder buses are included in this cost. Alternative bus service would be promoted by the District, but would be privately provided. Subsidies for the alternative bus service would be part of the overall transit subsidy.

[7] - Fifty percent of construction cost is assumed to be provided by private sources. No private contribution is assumed for design or land acquisition.

[8] - After 1998, most of the bus operating costs would be borne as part of the proposed regionally funded transit system. Remaining funds would be for smaller feeder bus systems and local routes. See report text for additional detail on this recommendation.

[9] - Metrorail operating costs after 1997 would increasingly be borne as part of the regionally funded transit system. See report text for additional detail on this recommendation.

[10] - Includes audit adjustments and para-transit costs less FTA Section 9 allocation.

[11] - Beyond 1999, estimated costs do not include major construction. Major construction costs are included with the capital improvement costs shown above.

[12] - The independently funded regional transit is assumed to begin in 1999. It is assumed to cover 70 percent of bus operating costs from 1999 on. For Metrorail, it is assumed to cover all but $20 million in 1999, all but $5 million in 2000, and 100 percent thereafter. For para-transit costs (included in program adjustments), it is assumed to cover 50 percent of the cost in 1999, 85 percent of the cost in 2000, and 100 percent thereafter.

[13] - In recent years, between $5 and $30 million of these funds have been diverted to transit usage. In 1997, the request for shifting federal funds to transit is $14.2 million. These shifts in funding do not reduce the need for sufficient funds to adequately maintain District streets and bridges.

[14] - Includes sidewalks, alleys and street trees.

[15] - This includes traffic signals, street markings and other traffic control devices.

[16] - Includes construction of connections to Potomac River Bridges and from the Capital Crescent Trail to downtown.

[17] - Includes DPW staffing costs, some system maintenance costs and snow removal.

[18] - Based on FY 1997 apportionment.

[19] - Annual transit subsidy payments to WMATA come from the General Fund and are partially covered by motor vehicle registration fees, motor vehicle excise taxes, traffic fines, parking meter revenue, commercial parking taxes and bus shelter franchise fees.

[20] - This assumes that, as indicated in the Transportation Trust Fund action item, as regional transit operations are covered by the independently funded transit authority, funds collected for the motor vehicle registration fees, motor vehicle excise taxes, traffic fines, parking meter revenue, commercial parking taxes and bus shelter franchise fees would be available in the Transportation Trust Fund. Approximately $62 million per year of other General Fund monies, or $1.5 billion over the period to 2020, would then also be available for other uses in the District.

[21] - District only, separate from the recommended regional gas tax for independent regional transit funding.

[22] - Fees to utilities to use street rights-of-way. The first $11 million goes into the District's General Fund.

This report was prepared by the District of Columbia Department of Public Works in fulfillment of Intermodal Surface Transportation Efficiency Act of 1991 requirements to develop a long-range transportation plan for the Nation's Capital. The Department would like to extend a sincere thank you to all residents and concerned citizens who contributed their efforts toward making this Transportation Plan a significant contribution to the City and region's transportation future.

This Plan is a collaborative effort of the following people:

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