

Introduction:

Purpose of the Demonstration Program

The Regional Activity Centers Demonstration Program was initiated to demonstrate low-cost transit improvements and supportive demand management policies that offer alternatives to the single-occupancy automobile. Neighborhoods and activity centers were the focus.

The demonstration program was undertaken as part of WMATA's Regional Mobility Initiative, a comprehensive effort to coordinate WMATA bus service and facility enhancements with supportive actions and mobility improvements made by local transportation and planning agencies. The Initiative grew out of a number of local agency and WMATA programs designed to improve regional mobility and accessibility by enhancing the quality of transit service. These programs all share a common theme: to provide lower-cost, faster-to-implement strategies for improving transit service and helping to achieve regional goals of reducing traffic congestion, increasing mobility and accessibility, and improving the quality of life in the region. In an era of fiscal constraints, it seeks to apply the capabilities and resources of both the public and private sectors to the common goal of enhancing mobility.

Background

The Regional Activity Centers Demonstration Program builds upon other studies and projects that WMATA has undertaken prior to the Regional Mobility Initiative:

Regional Bus Study. WMATA performed a two-year comprehensive analysis of the region's bus services. The study was intended to create a more integrated network of a family of transit services including Metrobus, Metrorail, and local bus systems, as well as to improve the bus system's quality and image. The study developed strategies for expanding service into new markets as well as serving present customers better, focusing on priority and strategic corridors. Recommendations consisted of improvements to existing routes, including more frequent service over longer periods of the day, expanded feeder service to Metrorail stations, and increased services within growing activity centers and neighborhoods.

10-Year Capital Improvement Plan. This November 2002 plan laid out the steps necessary to recapitalize the transit system and keep its assets in a state of good repair, to increase its rail and bus capacity to meet demand and serve new markets, and to expand fixed-guideway service. The plan includes bus fleet replacement and major expansion to provide for improved station access, neighborhood and activity area circulators, base service expansion, and priority corridor services.

Bus Map Enhancement Program. In December 2003 the WMATA Board of Directors approved a program to improve the quality of bus information at bus passenger waiting shelters. This program will develop stop-specific bus maps to be installed at all WMATA-owned bus shelters.

Metro Matters. WMATA is implementing a capital program that combines federal funds with support from the local jurisdictions to replace and expand the Metrobus and Metrorail fleets and the facilities that support them.

Objectives

The Regional Activity Centers Demonstration Program has four objectives:

- Foster collaboration with the public and private sectors in a select number of activity centers around the region.
- Encourage demand management strategies that increase transit use, reduce congestion, and improve air quality.
- Promote bus priority treatment to improve bus operations on congested arterials and other roadways providing access to Metrorail stations.
- Facilitate improved access to Metrorail stations for pedestrians and bicyclists.

Center Selection

The demonstration program addressed six activity centers that were selected to be representative of the range of types in the Washington region. The selection of these centers was based upon a variety of technical, demographic, and institutional factors. The selection process was coordinated with local-jurisdiction staff.

Activity center selection began with the list identified in "Metropolitan Washington Regional Activity Centers: A Tool for Linking Land Use and Transportation Planning," published by the Metropolitan Washington Council of Governments in July 2002. Meetings were held with local-jurisdiction staff with planning and transportation responsibilities to review the MWCOG list. Center characteristics considered in the selection included present transit ridership, quality of present transit service, degree of transit-dependency of center population, ease of implementing improvements, and designation as a revitalization area. The selection process was described in "Task 3: Technical Memorandum on Center Selection."

Based upon this analysis, WMATA selected six centers for the demonstration program:

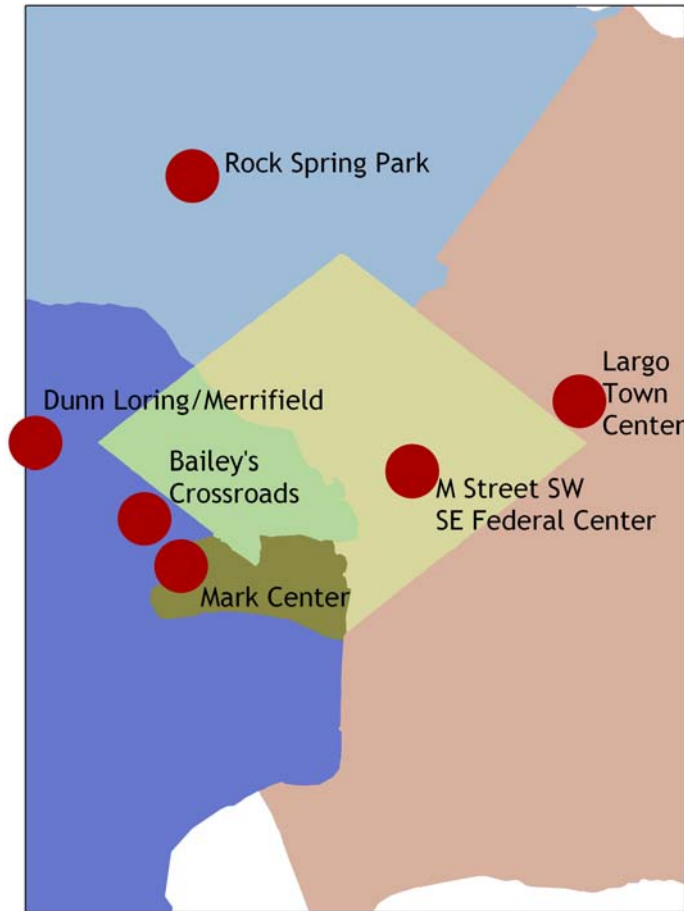
- M Street SW/SE Federal Center, District of Columbia
- Largo Town Center, Prince George's County, Maryland
- Rock Spring Park, Montgomery County, Maryland
- Bailey's Crossroads, Fairfax County, Virginia
- Mark Center-Beauregard Street, Alexandria, Virginia
- Dunn Loring-Merrifield, Fairfax County, Virginia

The selected centers were intended to represent the range of centers in the region: downtown core, suburban employment and mixed use. Originally WMATA assumed that centers without a Metrorail station would be most in need of enhanced transit service, and so would benefit most from the attention of the demonstration program. However, meetings with jurisdictions' staff revealed that some centers served by Metrorail were in need of improvements to enhance transit within the center. Largo Town Center, Dunn Loring-Merrifield and M Street SW-SE Federal Center all have rail stations.

Some of the activity centers defined by the MWCOG are geographically extensive. Including such large areas in the demonstration program would have complicated the analysis and could have made the results less clear-cut. Consequently, some activity

center study areas defined for this demonstration program are smaller and more focused than their respective MWCOG-defined centers.

Regional Activity Centers Selected for the Demonstration Program



The lessons learned from developing plans for the six centers are to serve as the basis for broader applications in other centers across the metropolitan area. The demonstration program is designed not only to benefit the selected centers but also to create processes and relationships that can be applied in other locations.

WMATA's Role in Transportation Programs in the Region

The Washington Metropolitan Area Transit Authority Compact, the legal agreement that establishes WMATA's powers, defines the authority's roles in ways that are both limited and expansive. The Compact gives the authority the powers "to plan, develop, finance, and cause to be operated improved transit facilities, in coordination with transportation and general development planning for the Zone, as part of a balanced regional system of transportation, utilizing to their best advantage the various modes of transportation...."

This language limits WMATA's authority to the region's transit system, but it recognizes the transit system's complex relationships to other types of transportation and the region's development. By calling for WMATA to coordinate the transit system with these other elements, the Compact prescribes cooperative partnerships among WMATA, the state and local jurisdictions, and private entities.

These partnerships are critical to improving transportation services to and within activity centers. While WMATA can improve transit services, the states, counties, and cities control roadways and pedestrian facilities, and can ensure they are built and maintained in ways that support transit services. Landowners near transit can in some cases enhance walkways and waiting areas at transit stops. The local jurisdictions that control land use and development can consider access to transit services in planning for new development. Employers, business organizations, and civic associations can create information and incentive programs that encourage people to use transit.

The improvements designed in this demonstration program are based in these partnerships. The improvements include not only WMATA's transit system actions but also the supportive actions by others in each center. The actions and the responsibility to accomplish them vary among the centers because of differing characteristics and needs, but the theme of cooperation is a constant.

Purpose of This Report

This report describes the proposed bus service enhancements and supportive actions designed to better serve the six activity centers. This report also includes the methodology and key assumptions used to develop capital, operating, and maintenance cost estimates associated with the proposed bus service enhancements as well as supportive policies to enhance those capital improvements and the steps recommended for implementing the entire package.

The report reflects the findings described in earlier technical reports produced in the demonstration program. "Needs Assessment," dated 25 January 2005, identified the needs in each center based upon a detailed field review of transit operations, transit facilities, pedestrian environment, and land use. An outreach effort to area planners, employers and other stakeholders was used to verify and expand upon the field review results. The report included preliminary recommended improvements.

The report draws upon information presented in a technical memorandum, "Task 2: Transportation Demand Management Toolbox," dated January 2005. The technical memorandum presents information on TDM strategies that could be used to improve transit ridership in the activity centers. This information includes a review of TDM experience in a range of cities throughout the United States, the selection of TDM strategies with the highest potential to be of value in the demonstration program, and research into measures of effectiveness to demonstrate the ability of a given strategy to improve selected center conditions.

Bus Service Enhancements

The proposed bus services detailed in this report were identified in the Needs Assessment dated 22 October 2004. Many of the service enhancements are adopted from the *Washington Metropolitan Area Transit Authority Regional Bus Study*, dated September 2003. Other transit improvements were originated in the demonstration program and developed specifically to provide better transit service to the activity centers. The recommendations contained in this report are conceptual and the associated cost, operating statistics, and other data should be interpreted as order-of-magnitude. This analysis is intended to aid in determining which bus service enhancements appear most feasible and which may generate support for more detailed study and/or implementation.

Supportive Policies

In addition to the bus service enhancements that are recommended in the plan, in keeping with the study's objectives, supportive policies to promote transit use have been recommended at each location. These include lower-cost improvements to transit infrastructure, information systems and demand management strategies that support transit service. These recommendations are based on an assessment of the local and system-wide policies, infrastructure, and programs against national examples of such policies, infrastructure, and programs. Potential improvements to existing systems that could enhance their effectiveness and increase their potential for success include:

- Facilities and amenities at transit stops, stations, and transit centers, including lighting, shelters and benches for passenger comfort, and passenger information systems.
- Pedestrian conditions and access to transit stops and stations from adjacent residential, employment, and activity centers.
- Availability and accessibility of parking at stations
- Opportunities to improve regional demand management and transit-supportive programs, or an increase in emphasis on those programs in each of the priority areas.

The Washington area and the transit and transportation agencies that serve it have long been among the earliest and most effective in implementing travel demand management and transit supportive programs and strategies. As a result, the region already has a relatively high use of public transportation and other alternatives to driving. Given this pre-eminence in alternative transportation relative to other regions, there are fewer potential strategies available for implementation to increase the attractiveness of transit and other driving alternatives, and to increase their use. However, the availability of programs, and particularly the condition and accessibility of facilities, can differ greatly between locations within the region. Increasing the uniformity of the programs and infrastructure throughout the locations identified in this effort represents most of the recommendations in the area of transit-supportive policies in this implementation plan.

Transit agencies have had varying degrees of success implementing TDM policies. Transit agencies throughout the United States and in many other developed countries have seen significant ridership through strategies unrelated to fundamental changes to the transit service itself, such as increased service frequency or changes to route alignment or service hours. Such strategies, including improvements to information systems, passenger amenities or bus facilities, and demand management and transit supportive programs, often can be implemented more easily and at lower costs than more basic changes to transit service.

It is important to note that the most important variables in determining transit ridership are factors that are beyond the control of the transit agency. These include the population and employment levels and rate of growth of the region, employment in the region's central business district (CBD) and other regional employment centers, the density and availability and price of parking in the CBD and other employment centers, income levels and differentials among local residents, levels of car ownership, fuel prices, and the development orientation and density of the region.

Moreover, of the factors that are within the agency's control, major changes to the system, which generally are high in cost and relatively difficult to implement, have the greatest impact on increasing ridership. Such improvements include route restructuring or realignments, increases in service frequency, the addition of fixed-guideway (rail or bus rapid transit) service, new stations on an existing rail line, or improvements to service reliability and on-time performance (which imply significant management changes). By a wide margin, the literature and research on transit ridership indicate that improving bus routing, increasing service area coverage, increasing service frequencies, and instituting new bus routes and feeder services are the most effective ways to improve transit ridership.

By comparison, the potential ridership increases generated by lower-cost changes to the system, demand management programs and transit supportive policies, either individually or in combination, is relatively minor. One study of recent ridership increases indicated that most agencies experiencing ridership increases had made service adjustments or expansions, while half or fewer credited ridership increases to other improvements such as fare and pricing adaptations or collaborative efforts with employers or universities (Stanley, Robert G., and Robert Hyman, Transportation Research Board, *TCRP Research Results Digest 69, Evaluation of Recent Ridership Increases*, April 2005, p. 2.).

The Washington region has long been an originator or early implementer of such programs, and they have allowed WMATA and other Washington area transit operations to offer better and more efficient services. A number of such programs, including WMATA's transit check program and universal fare media, have been successfully implemented. Appendix B contains a sampling of examples of such programs that have been successful at other transit agencies.