

1 TRANSIT DEVELOPMENT PLAN INTRODUCTION

1.1 TDP Background

Purpose of the TDP

In July 2007, Fairfax County Department of Transportation (FCDOT) issued a Request for Proposals to develop a comprehensive Transit Development Plan (TDP) for all bus service in the County. The intent was to develop a TDP that supports and complements the Fairfax County Department of Transportation's Vision and Mission Statements, the Fairfax Connector Section Purpose Statement, and the Board of Supervisors' vision of connecting people with places.

Department of Transportation Vision

In the twenty-first century, Fairfax County will have a world-class transportation system that allows greater mobility of people and goods and enhances the quality of life.

Department of Transportation Mission

To plan, coordinate, and implement a multi-modal transportation system for Fairfax County that moves peoples and goods, consistent with the values of the community.

Fairfax Connector Section Purpose Statement

The purpose of the Fairfax Connector Section is to facilitate the delivery of public transit service through management and oversight of the Fairfax Connector Bus System in order to provide safe, convenient, efficient transit service which enhances the quality of life and provides mobility options for the citizens of Fairfax County.

Work on the Fairfax County TDP commenced in January, 2008 and was completed in December, 2009. The TDP blends and coordinates existing Metrobus and Connector services, and recommends service enhancements based on customer demand, through a focus on cost efficiency and service effectiveness. Planning focused on priority corridors and activity centers to best link the County's vibrant economic activity centers with its growing population by making the best use of existing transportation infrastructure.

The TDP accomplishes this through prioritized service plans that incorporate enhancements to existing Metrobus and Connector fixed-route services and proposals for new services, as well as by providing recommendations for transit-supportive facilities such as park and ride lots and transit centers. The plans were developed based on:

- An analysis of existing ridership;
- A review of existing operating conditions;
- Service requests provided by a variety of stakeholders;
- Customer demand;
- Analysis of current and projected demographic, economic, and land use data; and
- Projections of future operating conditions and customer demand.

The resulting proposed service enhancements to Metrobus and Fairfax Connector routes intend to yield a high-performing transit system which addresses the lifestyle needs (access to employment, educational, medical and retail sites, or connection to other modes of transport) of both captive and choice riders. These improved transit operations would not only enhance Fairfax County residents' mobility and travel options, but also address larger regional goals of reducing single occupancy vehicle (SOV) travel, congestion mitigation, and the improvement of air quality in Fairfax County and the region.

County and Bus System Overview

Fairfax County, Virginia, is a suburban jurisdiction in the Washington, D.C., metropolitan area with over 1,000,000 residents. A ten-member Board of Supervisors governs the County; a County Executive appointed by the Board of Supervisors is responsible for the administration of County functions.

Fairfax County provides a locally owned and controlled fixed-route/fixed-schedule bus transit system called Fairfax Connector (Connector). Policy determination is provided by the Board of Supervisors. Administration and oversight is provided by the Fairfax County Department of Transportation (FCDOT) through its Transit Services Division (TSD) and, more specifically, the Fairfax Connector Section (FCS). In addition to Fairfax Connector, the Washington Metropolitan Area Transit Authority (WMATA) provides approximately 50 percent of the bus service in the County through Metrobus.

The County initiated the Fairfax Connector in September 1985 as a County-sponsored, cost-effective alternative to the provision of fixed-route/fixed-schedule bus service by WMATA, and significant expansion of the system has occurred since then. By the spring of 2010, the Fairfax Connector's available revenue vehicle fleet will consist of 266 buses, serving over 63 routes that operate approximately 550,000 revenue hours annually. On an average weekday, the system carries more than 40,000 passengers. The revenue vehicle fleet consists of a combination of 30-, 35- and 40-foot heavy-duty transit buses, all of which are owned by the County but maintained under contract with a private contractor who also operates the service on a daily basis. Some smaller cut-a-way vehicles have been introduced into the fleet with the intention of servicing lower ridership routes. Fairfax Connector buses operate in fixed-route, fixed-schedule public transit service within Fairfax County (including the Towns of Vienna and Herndon, Virginia), as well as commuter service to and from Arlington County, Virginia (Crystal City and Pentagon).

Fairfax Connector service is dispatched from three separate garage locations: Huntington Division, located in the southern part of the County; Reston-Herndon Division, located in the northern part of the County; and West Ox Division in the mid-portion of the County. The West Ox Bus Operations Center is a joint use facility with WMATA's Metrobus that opened early in 2009.

1.2 TDP Outline

The list below shows the chapters that are contained within this final report for the Fairfax County Transit Development Plan. Following the table is a brief description of the contents of each chapter.

- Chapter 1: Introduction
- Chapter 2: Outreach Efforts
- Chapter 3: Existing Conditions
- Chapter 4: Existing Transportation System
- Chapter 5: Survey Results
- Chapter 6: Ridechecks
- Appendix 5-6: Customer Survey and Ridecheck Data by Route
- Chapter 7: Service Recommendations
- Chapter 8: Tysons Corner Analysis
- Chapter 9: Criteria and Standards for Locating Transit Centers, Connector Stores, and Park and Ride Lots
- Chapter 10: Park and Ride Lot Development
- Chapter 11: Special Populations Analysis
- Chapter 12: Costs and Implementation Plan

1.3 Summary of TDP Contents

Chapter 2: Outreach Efforts

The *Outreach Efforts* Chapter outlines all of the involvement efforts undertaken to reach individuals and organizations, both within and outside of FCDOT. It also details the roles of: the Project Management Team, which was the oversight committee consisting of FCDOT and WMATA staff; the Citizen Representative Advisory Groups (select County appointed citizen representative groups); the members of the County Board of Supervisors; citizen groups; business groups; and the general public.

Chapter 2 also provides an overview of the formal public outreach process, the materials that were provided to the public for their review, and comments received from the public. Finally, the chapter provides a list of all of the changes that were made to the “draft final” TDP recommendations in direct response to input received from members of the public.

Chapter 3: Existing Conditions

The *Existing Conditions* Chapter summarizes current and projected demographic information for the County, including population and employment, land use, and travel trends. It also contains information on expected population and employment growth and other key demographic attributes for different parts of the County that impact transit usage, such as median household income and auto availability.

Chapter 4: Existing and Planned Transportation Systems

The *Existing and Planned Transportation Systems* Chapter reviews current bus services in the County (as of the beginning of the TDP study in January 2008). The chapter also reviews planned highway and transit improvements (both transit infrastructure and operational changes). One of the critical pieces in developing the service recommendations was to consider the needs of several big transportation projects that were currently being planned or constructed. These include the Silver Line Metrorail extension through Tysons Corner to Reston and eventually to Dulles Airport and Loudoun County and High Occupancy Toll (HOT) Lanes along I-95/I-395 and I-495 (the Capital Beltway). In addition, smaller transportation improvement projects, such as the extension of the Fairfax County Parkway, are reviewed.

Chapter 5: Survey Results

The *Survey Results* Chapter provides a summary of the methodology and results for two large surveys that were conducted as part of the TDP: (1) a customer survey that was conducted on-board the Fairfax Connector buses¹; and (2) a telephone survey of Fairfax County residents that was administered in order to gauge the opinions of the non-bus riders. The results of each survey are presented in this chapter and were key drivers in the development of the service recommendations.

Chapter 6: Ridechecks

The *Ridechecks* Chapter reviews the ridechecks that were conducted as part of the TDP. Ridechecks were conducted on all Fairfax Connector routes and most Metrobus routes on weekdays, Saturdays, and Sundays so that the ridership information could be utilized as part of the service analysis. Chapter 6 reviews the methodology followed to conduct the ridechecks and provides some sample reports to illustrate the analytic methodology applied in gathering and analyzing this data. The full datasets are available in more detailed spreadsheets provided to the County separately from this final report. Finally, the chapter summarizes total ridership by route and by day of the week.

Appendix 5-6: Customer Survey and Ridecheck Data by Route

The *Appendix to Chapters 5 and 6* contains route-by-route ridecheck data and survey results from the on-board survey. It also includes a descriptive narrative of the land use and demographics along each route, including population and employment densities, location of lower-income households, and location of seniors.

¹ A similar survey was simultaneously conducted on Metrobuses in the County, and those results were also used in the TDP analysis. Those survey results are not presented as part of Chapter 5 but are referenced in Chapter 7 and in the Appendix to Chapters 5 and 6.

Chapter 7: Service Recommendations

The *Service Recommendations* Chapter provides the core recommendations of the TDP. More specifically, it provides an overview of how bus service change recommendations were developed and provides some of the key data for each route, including ridership and rider demographics. It also provides a summary of all of the recommendations for service changes, cuts and additions by corridor/area of the County and summarizes all recommendations countywide for particular types of service, including neighborhood shuttles and circulators and Bus Rapid Transit (BRT)/Enhanced Bus services. Beyond the summaries, each route is analyzed, and the detailed recommendations are described both in narrative and tabular format that show recommended operating characteristics of the new and revised routes. Chapter 7 also provides maps to fully illustrate the exact route structure that is proposed for all bus service in the County.

Chapter 8: Tysons Corner Analysis

The *Tysons Corner Analysis* Chapter provides the results of a detailed review of the Tysons Corner area in light of the transportation and land use changes that will result from the first phase of the Silver Line Metrorail extension through Tysons Corner to Reston. One of the key components of the analysis included the development of a system of five internal circulators for Tysons Corner to link the new rail stations with destinations within Tysons Corner. An overview of these routes, tentatively called “Tysons Link,” is provided in Chapter 8, but detail is provided in Chapter 7 along with all of the other service recommendations in the County.

Recognizing the potential impact of the Silver Line, Chapter 8 includes further analysis of the Tysons Corner area relevant to transit service provision. First, it reviews the existing private shuttle services that are operated in the area to serve as a baseline for the design of the new internal circulator routes. The chapter also includes a discussion of existing and future transportation and land use in Tysons Corner as a basis for the design of the new routes. In support of the new routes, Chapter 8 provides a garage location analysis that offers guidance on locating a small bus storage and maintenance facility for the Tysons Link buses, a discussion of branding for these routes, and an outline of the capital and operating budget that would be required for both the routes and garage. Finally, an analysis of best practices for bus stop design and location is provided to address the much more urban environment expected in Tysons Corner as land uses evolve around the Metro stations.

Chapter 9: Criteria and Standards for Locating Transit Centers, Connector Stores, and Park and Ride Lots

The *Criteria and Standards* Chapter provides an analysis of criteria and standards to locate park and ride facilities, transit centers and Connector Stores, recognizing that this additional infrastructure remains critical to the long-term success of the Fairfax Connector and Metrobus systems in Fairfax County. For each facility type, the chapter provides an analysis of data on existing facilities and their usage, provides a set of criteria for determining when and where new facilities of each type should be provided, and proposes new facilities that should be implemented over the course of the TDP time period.

Chapter 10: Park and Ride Lot Development

The *Park and Ride Lot Development* Chapter expands on the list of new transit facilities developed in Chapter 9 and provides detailed recommendations for 26 new park and ride lots throughout the County to enhance access to existing and new bus service. While it is not the intention that all of these recommended facilities be implemented during the ten year time horizon of the TDP, the breadth of options provides the County with choices as it pursues the growth of its park and ride lot network. Chapter 10 provides details on each proposed lot, all of which would be shared-use lots with existing shopping centers or churches. Information is provided on which bus routes would serve the lot, the accessibility of the lot to buses, automobiles and pedestrians, and land ownership data. It also contains photographs of each lot and aerial imagery with bus routes and access points.

Chapter 11: Special Populations Analysis

The *Special Populations Analysis* Chapter analyzes the existing and proposed bus route network in Fairfax County vis-à-vis three particular populations: older adults, persons with disabilities, and residents of county-subsidized moderate- and low-income housing. The analysis, which is focused on fixed-route bus service only, includes maps of existing and future locations of these specific populations and identifies how the proposed bus network would enhance the mobility of these populations. The analysis also summarizes discussions with representatives of each of these groups, the concerns that they raised, and addresses how the concerns are addressed in the TDP.

Chapter 12: Costs and Implementation Plan

The *Costs and Implementation Plan* Chapter provides the results of a systematic prioritization of the bus service recommendations that are recommended for the TDP time period into three distinct time frames: short-term (years 1-3); mid-term (years 4-6); and long-term (years 7-10). It also includes timeframes for building additional bus garage and maintenance facilities, transit centers and Connector Stores. In addition to time-period recommendations, Chapter 12 fully details the changes in operating and capital costs that would be incurred to implement the TDP recommendations. Costs are provided by recommendation as well as total by time-period. Finally, costs are provided in both constant Fiscal Year 2010 dollars as well as future dollars inflated to each of the three time horizons.