THE CITY WILL EXPAND LOCAL AND REGIONAL TRANSPORTATION OPTIONS TO REDUCE TRAFFIC CONGESTION AND DECREASE PUBLIC DEPENDENCE ON THE AUTOMOBILE.

Introduction

This Transit Element outlines a progressive vision for the future of travel throughout the City of Alexandria with the development of the City of Alexandria Transit Concept Plan. Studies show that a reduction in the intensity of the peak hour traffic congestion within the City is not a realistic long-term aspiration. As congestion increases, alternative transit services that provide seamless travel, time savings for commuters, real-time travel information, desirable passenger amenities, and an enjoyable travel experience will become more desirable.

In response to this reality, the City envisions a system of innovative transit vehicles operating along three primary transit corridors within secure rights-of-way dedicated exclusively to transit use. These corridors will provide access to the City’s major population and activity centers, and connectivity to local and regional destinations. The state-of-the-art vehicles will provide for a clean, quiet, enjoyable commuting experience, resulting in minimal impact on existing neighborhoods, traffic routes and the environment. The City’s new transit system will be linked through circulator shuttles as well as intermediate transit services offered via DASH that complete the transit network, providing access to all residents who are not located in direct proximity of the newly designated transit corridors.

The entire transit network will be linked by way of Smart Stops, Shelters and Stations located along all transit routes. These smart facilities will provide varying levels of passenger amenities such as wireless access, coffee, ticket machines and information kiosks. All of these facilities will provide real-time transit information, bicycle parking, shelter and seating for transit users. The Smart Stops, Shelters and Stations will provide a natural transition from the pedestrian environment to the transit environment, making mass transit attractive, enjoyable and efficient alternative to the private automobile.

City of Alexandria Transit Concept Plan

**Goal:** Ensure that people can travel into, within and out of the City of Alexandria by providing a mass transit system that combines different modes of travel into a seamless, comprehensive and coordinated effort.

**Objective:** A reliable and convenient mass transit system integrated with surrounding land uses and existing transportation connections that offers travel time savings and an enjoyable transit experience for its riders, featuring advanced technology and passenger amenities.
Issue: Transit is not viewed as a comparable alternative to the private automobile.

Metrobus, Metrorail, Virginia Railway Express (VRE) and DASH lack the flexibility, efficiency and convenience of the automobile. Transit usage is often a result of necessity versus choice and is generally perceived unfavorably, particularly concerning reliability and safety. Insufficient service hours, geographic coverage, capacity and frequency of service have all been identified as problems. Lack of real-time information, long headways, difficulty of transfers and lack of connections to preferred destinations discourage existing and potential riders.

Solution: Secure dedicated, congestion-free, transit rights-of-way for future transit services using advanced technologies.

The main emphasis of the Transit Concept Plan is to secure dedicated, congestion-free, transit rights-of-way for future transit services. The expansion of transit and dedicated lanes will provide the residents of Alexandria an alternative mode of travel that is fast, efficient, comfortable and reliable. Existing local bus service in general, is characterized by frequent stops routed along, or traveling on congested roads, thus offering limited incentives to riders in terms of travel time, comfort and convenience. This Plan’s success will hinge upon the ability to provide superior transit service levels that:

♦ are competitive with the private automobile;

♦ coordinate feeder services and enhancements to the existing local transit services offered by DASH; and

♦ connect with existing local and regional services including WMATA Metrorail, commuter rail, other rail-based transit services, major highway portals.

This transit concept must be fully integrated with existing regional services and coordinated with proposed future services in order to truly serve Alexandrians. The City will work diligently to foster regional cooperation and coordination with the future transit plans of Arlington, Fairfax and other regional entities to ensure that new services are coordinated, and provide the most efficient means of operation.

What’s Different about this Plan for Transit?

♦ Focus on securing dedicated, congestion-free transit right-of-way

♦ Use of state-of-the-art clean, environmentally friendly, comfortable, accessible, vehicles (Light Rail, Street Car, Bus Rapid Transit) that provide amenities to make the daily commute an enjoyable experience

♦ Use of smart technology to provide transit users and riders with up to the minute information

♦ Shorter headways, making it easier for riders to catch a ride when and where they need to

♦ Focus on enhanced connectivity between various modes of transit, bicycle and pedestrian facilities
The Ad Hoc Transportation Task Force, in collaboration with City officials, worked on the analysis of City trends in transit ridership, socioeconomic conditions, travel demand forecasts for automobile and transit travel, and regional plans. The result of this in-depth analysis is the designation of three primary transit corridors: Corridor A in the vicinity of Route 1, Corridor B in the general vicinity of Van Dorn/Shirlington, and Corridor C in proximity to Duke Street.

In addition to the above mentioned analysis, the designation of the proposed transit corridors was developed with consideration of the following important goal and objective and input from

**Goal:** Ensure that people can travel into, within and out of the City of Alexandria by providing transportation choices that combine different modes of travel into a seamless, comprehensive and coordinated transportation system.

**Objective:** A reliable and convenient mass transit system integrated with surrounding land uses and existing transportation connections that offers travel time savings and an enjoyable transit experience for its riders, featuring advanced technology and passenger amenities.

In addition to the three transit corridors being proposed for future transit investments, other potential alignments are also proposed on the Transit Plan Concept Map. Specific alternatives depicted include potential service along Eisenhower Avenue and Quaker Lane. In many cases, these and other potential alignments represent options for future extension. These additional alternatives will only be pursued when travel demand and corridor development dictate.

The corridor outlines presented in the following map have been developed only at a conceptual level, with the purpose of identifying initial issues and concerns. Upon public review and stakeholder input, one or more corridors may be identified as a priority to move forward in the project development process. At that time, the specific corridor concept would be subject to a formal feasibility study which would encompass more focused alignment, conceptual design of guideway/station improvements, and initial service planning scenarios. Order-of-magnitude capital costs would be estimated.

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### What Do Alexandrians Say?

**Desired Public Transit Improvements**

- More peak hour buses and bus-only lanes
- Smaller buses
- Increase shelter lighting and safety
- Improve pedestrian walkways and access to public facilities
- Provide automated schedule
- Better maintenance, recognizable, visible transit signage
- More and clearer bus schedules
- Integrate transit with city planning/development

Community Meeting—July 9 & 10, 2003
City of Alexandria Transit Concept

Note:
All Transit Corridors are conceptual in nature. Alignments shown are general corridors. All corridors will require further study and engineering to determine preferred alignments.

Transit Corridors
- Corridor A
- Corridor B
- Corridor C
- Corridor B Extension
- Potential Additional Corridors

Transit Node Concepts
- MetroRail Stations
- Smart Stations
- Smart Shelters
- Transit-Oriented Employment
- Smart Shelter
- Smart Station
- Planning Portal

Activity Centers
- Civic Center
- Shopping Center
- King St. Retail
- Institutional

MetroRail
- Blue
- Yellow
- Yellow-Blue

Other Features
- Roads
- Parks
- Water Features

Optional Extension

Corridor A
- MetroRail Stations

Corridor B
- MetroRail Stations
- Corridor B Extension

Corridor C
- MetroRail Stations

Corridor B Extension
- MetroRail Stations

Note:
All Transit Corridors are conceptual in nature. Alignments shown are general corridors. All corridors will require further study and engineering to determine preferred alignments.
Transit Concept Characteristics

► Provides for a Seamless Transit Feeder Network
Transit improvements will be developed along routes that parallel existing roads and areas of high travel demand. Current DASH service will be integrated with new transit elements to provide high frequency feeder and circulator service. The feeder bus network will circulate in lower density communities, connect to developments beyond walking distance of the corridor transit system, and provide timed transfers at smart stations along the main route.

► Focusses Investments on Mobility Needs
Three corridors have been proposed as identified in the following pages, each of which can be developed independently as funds and development dictate, as part of a larger, more flexible system.

This Transit Concept will provide guidelines for the identified corridors, specifically addressing the following:

- Location and type of dedicated right-of-way and transit priority features (vehicle type will be determined during the feasibility study stage)
- Local transit access to and internal circulation at Metrorail Stations
- Traffic flow in congested areas
- Coordinated parking, pedestrian and bicycle improvements

► Integrates Key Elements with Transit Plans in Surrounding Jurisdictions
This Transit Concept proposes essential regional connections with destinations beyond the City of Alexandria for each corridor including connections to Fort Belvoir, Fairfax City, the Pentagon, and potentially to Maryland via the Woodrow Wilson Bridge.

Key external planning efforts that will be incorporated into the detailed design of service in these corridors include:

- Capital Beltway Corridor Study\(^1\)
- Transaction 2030\(^2\)
- Crystal City/Potomac Yard Transit Alternatives Analysis\(^3\)

► Advocates Policy to Encourage Future Transit Supportive Land-Use
This Transit Concept proposes coordination with City planning efforts to adequately review and comment on all new land use/development adjacent to the designated corridors. Review will consist of:

- Identification of rights-of-way to be dedicated as part of future development planning or approvals
- Encouragement and coordination of an appropriate mixture and density of activity around transit stations
- Addition of design requirements to create a comfortable walking environment for pedestrians and good connections for bicyclists.

Dedicated Right-of-Way
The Transit Concept is focused on having the running surface for the transit vehicles, alternatively called a right-of-way or alignment, within existing lanes of traffic. The lanes would be dedicated, for the use of transit vehicles only, thus improving schedule reliability and travel time. This approach minimizes the need to expand the width of roads within the corridor, thereby minimizing the construction costs as well as impacts on surrounding development.
**Transit Concept Characteristics**

**Transit Vehicles**
While this transit concept does not identify the specific vehicle type that will be utilized in the City of Alexandria, it does recognize that there are a variety of vehicle types, options and related costs. The graphic below provides a brief primer on vehicle types and characteristics.

**SHUTTLE BUS**
- **Characteristics:** Local circulators that connect to major routes/transit centers.
- **Corridor Applicability:** Central Business District and lower density communities with mixed-land uses.

**BUS/EXPRESS BUS**
- **Characteristics:** Expanded bus service with improved frequency and added bus routes and enhanced quality of service.
- **Corridor Applicability:** Enhanced bus potential on all corridors. Express bus suited for arterials where bus priority can be given.

**STREET CAR**
- **Characteristics (Modern):** Articulated multiple unit cars operating on city streets, at-grade, elevated, or subway alignments.
- **Corridor Applicability:** Applicable in high demand, heavily urbanized corridors. Heritage trolleys present potential for tourism market in appropriate context.

**BUS RAPID TRANSIT**
- **Characteristics:** Street bus or articulated bus operating on exclusive guideway or lane, at grade or elevated.
- **Corridor Applicability:** Applicable in high demand corridors where LRT is not yet feasible. Best for line-haul applications, with feeder bus and park-and-ride where necessary.

**LIGHT RAIL TRANSIT**
- **Characteristics:** Articulated multiple unit cars operating on city streets, at-grade, elevated or subway alignments.
- **Corridor Applicability:** Applicable in high demand, heavily urbanized corridors. Strong transit-oriented development potential.

**Exclusive Right-of-Way**
- Separate (but costly) facility to maintain service reliability regardless of congestion level.

**Congestion Pricing**
- Peak hour charges to reduce congestion, incentive for transit.

**Bus Zones**
- Restrictions on auto movements on streets enable more schedule reliability
  - Need alternative routes for displaced traffic.

**Signal Priority**
- Accelerates bus service in congested corridors.

**Bus Lane**
- Restricted access to existing lane or newly constructed lane
  - Impact to on-street parking.

**Lower:** Cost, Performance, Effectiveness

- **Strip Retail**
  - Parking Dominance
  - Unconnected Parcels
  - Hostile pedestrian amenities

- **Clusters**
  - At 7 dwelling units/acre transit usage increases sharply

- **Main Street**
  - Variety of uses combined with pedestrian activity
  - Frequent/Enhanced transit supported

- **Town Center**
  - Supportive of intermodal transit options (hubs)
  - If mixed-use, can capture walk-up trips

**Higher:** Cost, Performance, Effectiveness

- **High Density**
  - At 60 dwelling units/acre transit mode share can increase to 50%

**Main Street**
- Variety of uses combined with pedestrian activity
- Frequent/Enhanced transit supported

**Street Car Characteristics (Modern):**
- Articulated multiple unit cars operating on city streets, at-grade, elevated, or subway alignments.
- **Corridor Applicability:** Applicable in high demand, heavily urbanized corridors. Heritage trolleys present potential for tourism market in appropriate context.

**Bus Rapid Transit Characteristics:**
- Street bus or articulated bus operating on exclusive guideway or lane, at grade or elevated.
- **Corridor Applicability:** Applicable in high demand corridors where LRT is not yet feasible. Best for line-haul applications, with feeder bus and park-and-ride where necessary.

**Light Rail Transit Characteristics:**
- Articulated multiple unit cars operating on city streets, at-grade, elevated or subway alignments.
- **Corridor Applicability:** Applicable in high demand, heavily urbanized corridors. Strong transit-oriented development potential.

**Exclusive Right-of-Way**
- Separate (but costly) facility to maintain service reliability regardless of congestion level.
Providing reliable transit service on dedicated transitways where possible through Corridor A will provide a much needed resource for through commuters. This is needed to accommodate commuters who currently choose automobile travel over transit due to the lack of incentive and benefit to use transit. This corridor will also provide an alternative to Metro for tourists to access the Old Town area.

Corridor A is a primary link between the Pentagon to the north and Ft. Belvoir to the south. The focus of Corridor A is on accommodating through trips and providing connectivity between City neighborhoods. Corridor A also provides a critical route for Alexandrians who commute to the Pentagon and Crystal City on a daily basis. The transit corridor will enter the northern City limit through Arlington – coordinating and integrating service with the City of Arlington to provide a seamless connection to the Pentagon and the North. Traveling south on Corridor A will provide access to the Potomac Yard Development, Mount Vernon Avenue retail area, Old Town and the South Washington area of the City. To the south, Corridor A will coordinate and integrate with service provided by Fairfax County to Fort Belvoir. In addition, a transit connection to Maryland, via the Woodrow Wilson Bridge, is possible.

Length: 4 Miles

Demographics 2000 / 2030 (1/4 mi buffer):

- Population: 15,850 / 21,157
- Pop. Density (sq. mi.): 7,304 / 9,705
- Employment: 18,405 / 30,479
- Emp. Density (sq mi): 8,443 / 13,980

Major Activity Centers
Potomac Yard
King Street Corridor

Strength
High through trip demand with no transit alternatives.

Opportunities
Coordination with services provided by adjacent jurisdictions including connections to Crystal City, Fairfax, Fort Belvoir and the Pentagon.
Corridor B will connect parts of the city with various land uses. This corridor also provides a critical link between Alexandria and Fairfax County to the west. The Corridor B transit alignment would also feature a loop to better enhance connectivity to the Eisenhower East area.

Corridor B crosses the western City limit from Fairfax County, coordinating and integrating service with the County to provide a seamless connection to Fairfax City to the West. Traveling east, the corridor will provide access to the Landmark Mall area, Foxchase, Alexandria Commons and the King Street Metrorail station. At its eastern terminus, Corridor B will follow a loop around the East Eisenhower area comprised of Holland Lane, Eisenhower Avenue and Telegraph Road.

In addition, this corridor will provide for the option of an extension of Corridor B between Holland Avenue and Route 1, providing a direct connection to transit services along the Route 1 corridor.

**Length:** 6.25 miles

**Demographics**

(1/4 mi buffer):

- Population: 26,722 / 35,587
- Pop. Density (sq. mi.): 8,430 / 11,226
- Employment: 24,843 / 50,209
- Emp. Density (sq mi): 7,837 / 15,839

**Major Activity Centers**

- King Street & Eisenhower Metrorail Station
- East Eisenhower Development
- Landmark Mall

**Strength**

Important corridor with proven existing transit ridership base.

**Opportunities**

Redevelopment and infill of the Landmark Mall area provides opportunities for a range of transit amenities and could serve as a hub for regional and local transit services.
Corridor C provides a key link between Kingstowne and points south with the Pentagon. The corridor would serve both to capture through traffic as well as provide vital connectivity to key destinations.

Corridor C will begin at the northern City limit with Arlington along Beauregard Street, coordinating and integrating service with the City of Arlington to provide a seamless connection to the Pentagon to the North. Traveling South the corridor will provide access to the Mark Center, Landmark Mall area, and Eisenhower area of the City. At its southern terminus, Corridor C will coordinate and integrate with service provided by Fairfax County to Kingstowne and points south. In addition, this corridor will provide for a direct connection to the Van Dorn Street Metrorail station via dedicated lanes.

**Length:** 6.25 miles

**Demographics**

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**Opportunities**

Improved connection with Van Dorn Metrorail Station from points north.

**Major Activity Centers**

- Van Dorn Street Metrorail Station
- Landmark Mall
- Mark Center
- Northern Virginia Community College

**Strength**

Serves area of high employment growth
Passenger Amenities

A variety of amenities can be provided at transit Smart Stops, Shelters and Station locations to enhance the attractiveness of public transportation, to brand the system and to provide passenger information and amenities. The treatment of transit stations and stops is a key component of this Transit Concept as a means to promote the visibility of a new, high-tech transit system.

The potential design features of these facilities that set them apart from traditional bus shelters would be:

- Extensive use of wireless technology for personal passenger information
- Ticket machines / information kiosks
- Real-time travel information (at stop and available on-line)
- Cell phone text messaging for next bus departure
- The use of environmental design and operation (solar power)
- Efficient layout of weather protected interior spaces, with inclusion of off-vehicle fare collection technology.
- Designs that permit efficient, orderly and rapid flow of alighting and boarding passengers from the stop to the vehicle
- Bicycle and pedestrian amenities including bicycle racks, lockers and benches.
- Vendors for coffee, newspaper, magazines, etc.

Smart Stations and Shelters

Smart Stations, Shelters and Stops will transform the way Alexandrians perceive and utilize transit by providing users with weather protected access to traveler information systems and electronic payment systems, resulting in enhanced safety, scheduling and improved quality of service. These facilities will be fully accessible by pedestrians and bicyclists, provide adequate lighting for safety and varying levels of amenities depending on demand and location. Services and amenities provided at these facilities may include bicycle racks, lockers, coffee service, newspaper stands and internet access.

Traveler Information Systems

Include wireless communication and technologies to provide information to travelers at home, at work, on the roadside, at transit stations, or on transit vehicles. Travelers can access real-time schedules and traffic information via cell phone, television, computer, PDA, variable message signs, or information kiosks. Electronic notification of transit information, routes and schedules can also be provided at stations and on vehicles.

Electronic Payment Systems

These systems may utilize magnetic swipe cards or smart cards to provide convenient fare payment for travelers and reduce costs for revenue collection by transit providers. Smart cards can be standardized to provide a single form of fare access to multiple transit providers.
In high traffic volume areas of Alexandria, numerous private operators provide shuttle service from major developments to nearby destinations and Metrorail Stations. These are often initiated as the result of Transportation Management Plans, which are developed to identify and finance the transportation strategies to induce people to use public transportation. Often these services travel only from point-to-point and are not coordinated.

The Transit Concept proposes a consolidation of these services into circulator routes with integrated stops and schedules providing connectivity between neighborhoods and the dedicated transit corridor services. This consolidation would focus on providing reliable service into lower-density neighborhoods and shopping areas. This will result in an increase of citywide transit mobility options, while at the same time, ensuring that existing routes and services funded through previous TMPs are maintained.

Circulator routes are designed to collect, distribute, and feed riders into the larger transit network, offering services that penetrate into neighborhoods, provide localized trips and operate on secondary roadways. Circulator routes are generally confined to a single community, with intercommunity trips offered via transfers to other bus or rail services. The routes are generally short, and smaller vehicles reflect more frequent and smaller passenger loads as well as the need to operate on smaller streets, or more confined spaces.

Circulators may focus around a certain development or Metrorail Station and can be implemented in stages along the corridor. In fact, a circulator network could begin to be implemented prior to initiation of the transit improvements within the corridor, provided they are coordinated with the schedules and routes of other transit providers. Operation of these circulators could be provided via contract or operated by DASH. In general, the characteristics identified below define successful circulator systems and are recommended to be considered during the public input and planning stages that will refine this concept and its circulator routes.

Characteristics of Successful Circulator Systems

- Coordinated Intermodal Connections
- Population and Population Density
- Established Ridership Demand
- Mixed-Use Setting or Special Conditions
- Appropriate Headway and Travel Times
- Low Operating Cost
- Attractive Pricing
- Accessible to older adults and disabled citizens
Funding

Various components of the Transit Concept could potentially have different project delivery approaches. Typically the system (right-of-way, vehicles) is better suited for traditional financing while development of station areas has significant potential to attract private interest and funding. The funding mechanisms available to project sponsors and local partners are outlined in the following sections.

Federal Funding Options

Federal transportation funding legislation known as SAFETEA-LU, authorizes $286 billion in spending for the six-year period 2004-09 and incorporates federal programs for transit projects. This includes the discretionary Section 5309 New Starts program, administered by the Federal Transit Administration (FTA), which is the primary capital funding source for major fixed-guideway transit investments. Eligible projects include BRT, busways, and rail systems. As previously indicated, this program on average finances 50% of the capital costs. Significant scrutiny is placed upon the technical requirements, evaluations, and funding recommendations associated with the project. While meeting these conditions is better geared for mega projects, such as the Dulles Corridor Metrorail, a new “Small Starts” program is envisioned for smaller-scale circulator systems.

The entire Alexandria Transit Concept, implemented as BRT, or one specific streetcar or LRT corridor could qualify under this program. On a corridor-by-corridor basis, alternatives and their components can be packaged uniquely to reach the $250 million threshold. Small Starts funding has several requirements, which would need to be incorporated into the design of BRT facilities, vehicles, and the service plan. The requirements that correspond with the Small Starts program include:

- Substantial Transit Stations
- Signal Priority/Pre-emption (for Bus/LRT)
- Low Floor/Level Boarding Vehicles
- Special Branding of Service
- Frequent Service - 10 min peak/15 min off peak
- Service offered at least 14 hours per day

The Small Starts funding application will compete with other projects nationwide. Favorable evaluation depends on key considerations, such as overall cost effectiveness, inclusion of transit supportive land-use plans and policies, and a demonstrated local financial commitment. The financial commitment must indicate a reasonable plan to secure funding for the local share of capital costs or sufficient available funds for the local (non Federal) share and demonstrate the agency sponsoring the project is in good financial condition. The Small Starts program follows a consolidated Alternatives Analysis Development process as prescribed by the FTA. In this case, other potential solutions It is important to also note, that in order to secure these Federal funds and comply with regulations, the project sponsor must work with the Metropolitan Washington Council of Governments (MWCOG) to ensure the project is included in the region's long-term planning documents.

The Small Starts program is new, and currently no appropriations have been made. Draft rules, following up on interim guidance are anticipated in spring 2007, with final implementation expected in 2008. The FTA is actively soliciting viable Small Starts project proposals to advance the new program, while rulemaking is underway.

Other Federal Programs

There are also various other federal funding mechanisms available through SAFETEA-LU. Typically, the programs identified here do not represent a primary source of project capital funding, yet rather support components of the overall project, such as vehicle purchase or station area development. Other programs are available to transit providers by formula, based upon population served and the amount of service provided. Finally, Some programs represent credit assistance, rather than grant funds, which are often useful to deliver a project more rapidly and at lower cost.
Funding

Other Federal Programs that may be applicable to the Transit Concept include:

**STP/CMAQ** - Flexible Highway/Transit funding which may be used for a variety of transit improvements.

**Formula Funds** - Section 5307 represents the primary funding that is a formula grant program for urbanized areas, providing capital, operating, and planning assistance for mass transportation.

**State infrastructure banks (SIBs)** - These state or multi-state funds operate in the same manner as private banks and provide flexible transportation funding in the form of loans, lines of credit and other credit enhancements to allow states to accelerate the completion of transportation projects.

**Transportation Infrastructure Finance and Innovation Act (TIFIA)** - Credit assistance available to support no more than 33 percent of the eligible project costs of projects that are budgeted at $100 million or more. Dedicated revenue streams (e.g., tolls for highway projects) must support eligible projects.

**Grant Anticipation Revenue Vehicles (GARVEEs)** - Mechanism to accelerate future federal revenues to fund transportation projects.

State Funding Options

While Federal funds typically represent a primary funding source for large, capital intensive transit projects, there are other state, local, and private funding options available either in lieu of Federal funds or to provide the local match requirement for receipt of Federal funds. In Northern Virginia, state funding is primarily directed through recommended projects from the Northern Virginia Transportation Authority (NVTA). Funding sources are generally Northern Virginia’s own allocation of primary highway system funds with some state transit assistance. Funding levels have been minimal, but have been directed to such projects as the Columbia Pike bus service and Loudoun County commuter bus service. Currently, the metropolitan Washington regional constrained long range plan produced by the Transportation Planning Board (TPB), which applies only revenue sources reasonably expected to be available, has not included sufficient funds for known capital needs in the area. Current reform initiatives, such as the Office of Intermodal Planning and the Transportation Accountability Commission are tasked with addressing these funding shortfalls.

**Virginia Department of Rail and Public Transportation** - Including programs that oversee Transportation Efficiency Improvement Funds, Mass Transit Capital Assistance and Technical/Demonstration Project Assistance.

Under the **Virginia Multimodal Public-Private Partnership Act of 2003** - administered through the department, private entities are allowed to propose innovative solutions for designing, building, financing and operating transportation improvements. Typically, there are cost and time-savings associated with public-private partnerships as the private sector often has more appropriate incentives to limit costs than the public sector.

**SAFETEA-LU Enhancement Funds** - These funds are available for ancillary improvements and may also be useful for implementing other elements of the Master Plan. Primary applications include bike / pedestrian improvements and landscaping / beautification.

**Northern Virginia Regional Fees** - Currently pending state legislation to authorize a combination of regional fees that would be apportioned by the NVTA. These regional funds would be distributed by jurisdiction, assuring that locally generated revenues support projects that benefit the jurisdiction. Set asides for WMATA and Virginia Rail Express (VRE) would be included in this funding mechanism.
Implementation

The transit concept that is presented in this plan is an innovative and ambitious proposal that will challenge City leaders and residents throughout the implementation process. The proposed transit corridors and services must be developed from a concept level to an operating transit service following a process that will be context sensitive, provide ongoing opportunity for public involvement and preserve eligibility for federal funding to support implementation. As illustrated in the graphic below, the development process that will be followed is intended to identify and evaluate increasingly refined alternatives based on information that becomes broader in scope and more detailed during each development phase. Progressing from the initial corridor feasibility studies through alternatives analyses, environmental impact assessments, and preliminary and final engineering to construction and initiation of service, the process is open for public input as key implementation decisions (such as the preferred transit route and mode for a particular corridor, the level of service to be provided, the type (s) of transit priority that will provided in individual corridor segments, and the locations of stations and stops) are being made. For any individual corridor, this process may take six to ten years to complete.

During the implementation process, it may be determined that providing fully dedicated transit lanes or running ways along the full length of the corridor may not be possible due to prevailing constraints. Under these circumstances, it may be necessary to employ other transit priority techniques, such as operating in mixed traffic with transit priority at signalized intersections and “queue jumping” in critical congestion areas, in certain corridor segments in order to achieve a feasible implementation plan.

A key element of the project development process is the preparation of environmental impact documents pursuant to the National Environmental Protection Act (NEPA) to ensure that information is available for public officials and citizens to properly balance infrastructure development, economic prosperity, health and environmental protection, community and neighborhood preservation, and quality of life issues. The potential project impacts that are required to be identified, evaluated and documented in these environmental evaluations include several factors that have already been identified as early community concerns. These include: air quality; environmental justice; historic, archeological and cultural resources; noise and vibration (both during construction and operation); historic sites; social and economic impacts (factors influencing the character and nature of the community); and transportation (both traffic and parking).
Actions & Strategies

In order to implement the proposed transit concept and to enhance the transportation network for the City of Alexandria the City has identified the following actions and strategies. All action items have been developed in order for the City and the public to track progress toward achieving the overall goal for the Transit Concept Plan.

T1. The City will conduct extensive public outreach to educate citizens and stakeholders on the proposed concept, the process and to determine where the greatest support lies for implementation of a major transit investment.
   
   T1.A. The City will hold public meetings on transit plans and investments.
   
   T1.B. The City will develop a website dedicated to the Transit Concept Plan.
   
   T1.C. The City will develop informational brochures that explain the Transit Concept.

T2. The City will coordinate closely with adjacent jurisdictions, specifically Arlington County, Prince George’s County in Maryland, Fairfax County, WMATA, the City of Fairfax and other stakeholders to ensure that the City Transit Concept is integrated into existing services where feasible and to explore opportunities for future connections that would provide for enhanced regional connectivity.
   
   T2.A. The City will designate a regional liaison to continually coordinate and keep up to date with the plans and actions of neighboring jurisdictions.
   
   T2.B. The Regional Liaison will conduct initial meetings with representatives of adjacent jurisdictions.
   
   T2.C. The Regional Liaison will establish a schedule of quarterly meetings with regional representatives to maintain an active dialogue.

T3. The City will prioritize transit corridors for investment.
   
   T3.A. The City will establish a prioritized list of transit corridors.
   
   T3.B. The City will initiate one or more feasibility studies to conduct a more detailed analysis for the highest priority corridor(s) in order to determine: Conceptual Alignment and Engineering; Proposed Station Locations; Transit Vehicle Technology and Suitability; Initial Scan of Environmental Issues; Fatal Flaw Analysis. The City will develop and issue an RFP for a feasibility study of the highest priority corridor.

T4. The City will develop corridor-specific plans for dedicated transit lanes along these corridors and ensure that new developments do not preclude development of dedicated transit lanes.
   
   T4.A. The Department of Transportation and Environmental Services (T&ES) will coordinate with Planning and Zoning (P&Z) to establish a framework for identifying high priority rights-of-way.
   
   T4.B. T&ES will coordinate with P&Z to establish corridor specific plans and/or overlays for the highest priority corridor (as established under T3.A.).

T5. The City will identify locations for smart stations that will serve both the new system and existing transportation modes.
   
   T5.A. The City will establish a list of prioritized locations for smart stations and stops.
   
   T5.B. The City will coordinate with DASH and other existing services to identify priority areas for transit stop retrofits to transform existing stops to meet the Transit Concept vision for Smart Stations and Stops.
Actions & Strategies

T6. The City will ensure that development and redevelopment does not preclude efforts to expand public transit infrastructure.

T6.A. The City expects that any amendment to the Potomac Yard/ Potomac Greens Small Area Plan which results in an increase in density beyond what is currently approved will include reasonable provisions to address the development and funding of an additional Metrorail Station.

T6.B. The City expects that any proposed amendment to the Eisenhower West Area Plan, the King Street Metro/Eisenhower Avenue Small Area Plan or the Seminary Hill Small Area Plan that includes land in the Eisenhower Valley and that proposes an increase in density beyond what is currently approved shall study the feasibility of the development and funding of an additional Metrorail Station. If a City-directed feasibility study concludes and City Council agrees that a new Metrorail station is viable and desirable, then any proposals to add additional density to the Eisenhower Valley sections of the above mentioned plans must include a specific plan to support the development of an additional Metrorail station on Eisenhower Avenue to serve the Valley.

T7. The City will further identify specific transit mode technology and newest techniques best suited in the identified transit corridors and for the system as a whole.

T7.A. The City will implement a technology pilot program to test the success of various transit mode technologies throughout the City.

T7.B. The City will dedicate funding toward the implementation of technology into existing and future transit services.

T7.C. The City will coordinate the development and deployment of transit information technologies with regional service providers to provide seamless delivery to transit users.

T8. The City will integrate existing DASH bus service with new transit system elements for DASH to serve as a high frequency feeder system.

T8.A. The City will coordinate with Dash to determine proposed routes for a feeder system.

T8.B. The City will work with Dash to develop an operations plan for feeder systems.

T8.C. The City will coordinate the development and deployment of transit information technologies with regional service providers to provide seamless delivery to transit users.

T9. The City will incorporate traffic signal priority, traffic circulation changes, pedestrian and other on-street enhancements into the new system for the benefit of transit vehicles and riders.

T9.A. The City will develop a prioritized list of locations for transit system spot improvements.

T9.B. The City will earmark funds for the completion of priority spot improvements.

T10. The City will create Transportation Management Plans, Transit Overlay Zoning Districts, Parking Management Zones, etc. to coordinate efforts to support the system.

T10.A. T&ES will work in coordination with P&Z to develop revised Transportation Management Plan requirements with the goal of creating a more consistent, integrated approach to Citywide transit issues within individual TMPs.

T10.B. T&ES will work in coordination with P&Z to develop a citywide comprehensive parking management plan.

T11. The City will investigate potential funding available through existing, new, and innovative revenue sources.

T11.A. The City will develop a funding priority plan that identifies potential funding opportunities, applicability, deadlines, and requirements for requesting funds.

T11.B. The City will identify a revenue source to be dedicated toward actual investment in and/or matching funds for transit improvements.
Actions & Strategies

T12. The City will develop an extensive public outreach and marketing campaign to energize the citizenry around Alexandria’s transportation future

   T12.A. The City will create a website, email list, posters and other marketing materials to educate citizens on the vision for the future, benefits, and how they can make a difference in the City.

   T12.B. The City will develop a logo for the overarching transportation plan initiatives.

T13. The City will coordinate with pertinent Alexandria Boards and Commissions, such as the Commission on Aging and The Alexandria Commission on Persons with Disabilities, to ensure that the special transportation needs of all citizens are considered.