

# *City of Alexandria, Virginia*

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## **MEMORANDUM**

DATE: MAY 2, 2012

TO: JOHN KOMOROSKE, CHAIRMAN AND MEMBERS OF THE PLANNING COMMISSION; AND  
KEVIN POSEY, CHAIRMAN AND MEMBERS OF THE TRANSPORTATION COMMISSION

FROM: RICHARD BAIER, P.E., LEED AP., DIRECTOR, T&ES

SUBJECT: AGENDA ITEM #3 - PUBLIC HEARING AND CONSIDERATION OF IMPLEMENTATION FOR THE HIGH CAPACITY TRANSIT CORRIDOR A (ROUTE 1/NORTH-SOUTH) and CORRIDOR B (DUKE STREET)

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**ISSUE:** Consideration of the High Capacity Transit Corridor A (Route 1/North-South) and Corridor B (Duke Street) and the High Capacity Transit Corridor Work Group (CWG) recommendation for the corridors (Attachment 1).

**RECOMMENDATION:** Staff recommends the following:

1. That the Planning Commission and Transportation Commission receive a staff update on the CWG recommendations for Transitway Corridor A (Route 1/North-South) and Corridor B (Duke Street);
2. That the Planning Commission and Transportation Commission receive public comments, and provide input to the City Manager and City Council in consideration of the CWG recommendation for Corridors A and B.

**DISCUSSION:** The City's 2008 Transportation Master Plan, and the City Council's 2010 Strategic Plan identify high capacity transitways within the City as high priority projects. The Transportation Master Plan identifies a network of High Capacity Transitways in three of Alexandria's most important travel corridors. These transitways will allow frequent and reliable transit service to existing and future development areas and to local and regional transit hubs. These transitways (which represent the corridors served and not necessarily the actual transitway alignment) are shown in Attachment 2 and include:

- Corridor A: Route 1 / North-South
- Corridor B: Duke Street / Eisenhower Avenue
- Corridor C: Van Dorn / Beauregard

The transitways are part of a larger regional system of high capacity transit between major

activity centers, transit facilities, high density mixed use areas and employment centers. All three of the transitways being planned for in Alexandria provide connectivity to major activity areas within Alexandria, and connectivity to regional destinations such as the Pentagon, Shirlington, and Fairfax County.

The City is currently analyzing the feasibility and implementation of the three transitways as part of the Transitway Corridor Feasibility Study, which began in Fall 2010. The Transitway Corridor Feasibility Study includes the following:

- Development of concepts to provide enhanced transit services
- Evaluation of different transit mode technologies (bus, enhanced bus, bus rapid transit, and streetcar)
- Evaluation of alternatives for transit operations considering median and side running configurations
- Evaluation of the trade-offs between mixed traffic and dedicated lane facilities
- Identification of overall corridor implementation action plans to inform and guide future study and engineering efforts for each corridor
- Coordination with environmental permitting agencies to discuss the likely scope of future environmental documentation to be required based on the type of funding to be sought
- Coordination with adjacent localities and regional agencies
- Review of financial feasibility of alternatives

The first phase of the analysis focused on Corridor C, due to the completion and opening of the BRAC-133 facility, and the related Beauregard Corridor land use planning effort that is currently underway. A recommendation for Corridor C was made by the CWG at its May 17, 2011 meeting. The recommendation was for the implementation Alternative D (Bus Rapid Transit in dedicated lanes between Van Dorn Metrorail Station and the Pentagon), until such time that Alternative G (Streetcar in dedicated lanes between Van Dorn Metrorail Station and the Pentagon) becomes feasible. The City Council held a public hearing on September 17, 2011, and following the public hearing, approved the CWG recommendation, with a caveat that the Corridor C transitway provide an improved connection to the Northern Virginia Community College (NVCC). Staff is in the process of initiating an Alternatives Analysis / Environmental Assessment (AA/EA), which is required to be completed in order to receive federal funding. The Corridor C Transitway is anticipated to begin operation by 2017.

### **High Capacity Transit Corridor Work Group**

Given the City-wide importance of implementing the Transportation Master Plan and to ensure an open and transparent process, a citizen group was created to provide input to such issues as route alignments, cross-sections, methods of operation, type of vehicles, land use considerations, ridership, and financial implications. The group, known as the High Capacity Transit Corridor Work Group (CWG) includes: two members of City Council, one representative from the Planning Commission, one representative of the Transportation Commission, one representative of the Budget and Fiscal Affairs Advisory Commission, one representative of the Chamber of Commerce, two residents appointed by the Federation of Civic Associations, and one resident with transit planning expertise.

The CWG held a total of fourteen public meetings throughout the course of the project. Three of the meetings focused on Corridor A, and six of the meetings focused on Corridor B. An

opportunity for public comment was provided at all meetings, and staff has received public comments through other efforts as well, including via the project webpage, e-mails and letters. All public comments related to Corridors A and B provided to date have been forwarded to the CWG and a summary of the key issues and constraints identified by the consultant and public are attached as part of this memorandum (Attachment 4).

### **Corridor A – Route 1 / North-South**

Analysis for Corridor A included a review of existing conditions, an assessment of corridor needs, and the development of concepts. Four concepts were developed and reviewed with the CWG. These four concepts are described in the Corridor A Technical Report (dated December 2011). The four concepts included:

- **Concept 1:** No Build
- **Concept 2:** West Street
- **Concept 3:** Patrick Street / Henry Street
- **Concept 4:** Washington Street

The concepts were initially reviewed to identify the advantages and disadvantages of each. The concepts would typically be evaluated using more detailed screening criteria. The screening criteria include four broad categories including 1) effectiveness; 2) impacts; 3) cost effectiveness; and 4) financial feasibility. In the case of Corridor A, the study team recognized that the development of a transit service and infrastructure for additional north-south through transit service south of the Braddock Road Metrorail station was not a priority by either the CWG or the public. The public and the CWG expressed a strong desire to focus on transportation solutions to enhance local mobility and connectivity within Old Town and existing Metrorail stations at Braddock Road and King Street. Therefore, the four concepts did not proceed through the more detailed screening analysis.

The technical report, dated December, 2011 was prepared by the consultant and recommended that a circulator service within Old Town be further analyzed in the near-term as part of the City's Comprehensive Operations Analysis. The report recommended that in the long term, the City should continue to monitor transportation, land use and development, and regional policy and planning conditions as they relate to Corridor A.

### **Corridor A Recommendation by High Capacity Transit Corridor Work Group**

Based on the analysis described above, at their December 15, 2011 meeting, the CWG recommended that no dedicated transitway be constructed on Corridor A south of Braddock Road metrorail station, and that in the near term, the City examine a potential circulator route within Old Town. Such a circulator service would be analyzed as part of the Comprehensive Operations Analysis that will begin in Summer, 2012. The following motion was made and approved by the CWG:

*"Whereas the Alexandria Comprehensive Transportation Master Plan conceptually envisioned the eventual location of high capacity transit in dedicated lanes in the portion of Corridor A south of Braddock METRO Station; and Whereas the High Capacity Transit Corridor Work Group was appointed to recommend methods for implementing the Alexandria Comprehensive Transportation Master Plan to City Council;*

*Be it hereby resolved that the High Capacity Transit Corridor Work Group recommends that there be no dedicated-lane high capacity transit on the portion of Corridor A south of Braddock METRO Station. Instead, the High Capacity Transit Corridor Work Group recommends that available resources be used to explore the possibility of putting circulator buses/trolleys or other forms of conventional and scale appropriate transit in this portion of the City”.*

### **Corridor B – Duke Street / Eisenhower Avenue**

Analysis for Corridor B included a review of existing conditions, an assessment of corridor needs, development of alternatives and screening criteria, and analysis of the alternatives using screening criteria.

Transitway alignment alternatives were developed for Corridor B (the Duke Street/Eisenhower Avenue corridor). The three alignments were evaluated to weigh the benefit of a transitway along Duke Street, Eisenhower Avenue, or a combination of Duke Street and Eisenhower Avenue. Duke Street was selected as the preferred alignment for a dedicated transitway, based upon an evaluation of preliminary screening criteria, feedback from the CWG, and public input. At the same time, it was recommended that existing transit service along Eisenhower Avenue be improved through additional transit service and improved passenger amenities.

For the Duke Street preferred alignment, six preliminary transitway alternatives were initially evaluated. The alternatives varied by the number of lanes and manner in which transit and general purpose lanes were accommodated, but had identical termini. Based on CWG and public input, the six alternatives were narrowed to four refined alternatives for more detailed screening.

These four alternatives are described in the Corridor B Technical Report, (dated December 2011). The four alternatives included:

- **Alternative 1:** Existing Lane Configuration
- **Alternative 2:** Uses Service Road Right-of-Way
- **Alternative 3:** Reversible Lane to Allow Dedicated Transit Lanes
- **Alternative 3 Variation:** Reversible Lane to Allow Peak Period Dedicated Transit Lanes
- **Alternative 4:** Median Running

All of the alternatives include pedestrian enhancements, especially at transit stations. Screening criteria included four broad categories including 1) effectiveness; 2) impacts; 3) cost effectiveness; and 4) financial feasibility. The screening criteria are further described in the Corridor B Technical Report (dated April, 2012). As a result of the secondary evaluation, Alternative 1 and a variation of Alternative 3 were selected for further investigation. The CWG expressed interest for a more detailed impact evaluation of these alternatives both with and without on-street bike lanes. The provision of bike facilities would be consistent with the City’s Complete Streets Policy, which was adopted by Council in April 2011. The alternatives were redefined as:

- **Alternative 1a:** Existing Lane Configuration (without bike accommodation)
- **Alternative 1b:** Existing Lane Configuration (with bike accommodation)

- **Alternative 3a:** Reversible Lane (without bike accommodation)
- **Alternative 3b:** Reversible Lane (with bike accommodation)

At its February 16, 2012 meeting, the CWG expressed interest in an option that combined Alternative 3b (where space is available for bike lanes) and Alternative 3a (where bike facilities are provided along a parallel route to Duke Street). This option became known as **Alternative 3c**.

After the completion of the detailed screening, staff worked with the consultant to develop a recommendation for Corridor B, based on the screening evaluation, and input from the CWG, staff and the public. A technical memorandum, dated April, 2012 summarizes the recommendation for a preliminary preferred alternative and phasing strategy that was presented to the CWG for consideration.

### **Corridor B Recommendation by High Capacity Transit Corridor Work Group**

Based on the analysis described above, at their March 15, 2012 meeting, the CWG recommended a phased approach to implementation of an effective transit operation with minimized property impacts. The recommendation included initiating Bus Rapid Transit along Duke Street through the implementation of Alternative 1a, but examined an off-Duke Street, parallel bicycle facility. Following implementation of Alternative 1a, the City should proceed with implementation of Alternative 3c, and continue to examine a bicycle facility along Duke Street.

The following motion was made and approved by the CWG:

*"The combination of Duke Street Alternatives 1a and 3c, are the preferred approach for phased implementation of a dedicated transitway in Corridor B. Alternative 1a would be the first phase of transitway implementation on Duke Street. It would create dedicated transit lanes in existing six-lane sections of Duke Street between Landmark Mall and Jordan Street and between Roth Street and Diagonal Road. In the remaining section of Duke Street between Jordan Street and Roth Street, transit would operate in mixed flow. A parallel off-corridor bicycle facility should be examined to accommodate bicyclists along Duke Street and improved pedestrian facilities would be provided at intersections and near transit stations. Preliminary implementation should prioritize enhanced pedestrian safety and improvements at Taylor Run Parkway.*

*Alternative 3c would be the subsequent phase of transitway implementation on Duke Street. It would build on Alternative 1a by widening Duke Street to provide a reversible lane between Jordan Street and Roth Street. The reversible lane would be configured to allow Duke Street to accommodate a dedicated transit lane in the peak hour and peak direction of traffic flow during the a.m. and p.m. peak periods along Duke Street. Alternative 3c should continue to examine a bicycle facility along Duke Street along with corridor-wide pedestrian improvements. However, the Work Group believes that bicycles should be accommodated in this corridor if studies demonstrate that the streetscape can still be enhanced".*

## **Consistency with Land Use and Small Area Plans**

### **Corridor A**

Under this proposal, the transit vehicles cross the Monroe Avenue bridge and would turn east on First Street to the service road located along the Metro rail tracks and to the Braddock Road Metrorail station. The transit vehicles north of the bridge to the Metrorail station will be within shared lanes.

This approach is consistent with the Braddock Metro Neighborhood Plan, which states the “*transit route will operate along the Route 1 corridor between the Pentagon and the Braddock Road station and offer transit access to and from the areas between these two Metro stations that are spaced over three miles apart... As to the portion of the alignment that is within the Braddock Metro neighborhood, the community has expressed a preference for the transit route to be located along the service road adjacent to the Metro Rail tracks after and connecting with First Street at Route 1. The final transit alignment is contingent on right-of-way access to the service road and operational analysis, such as turning radii.*” The plan also states that some members of the community also “expressed opposition to bus rapid transit and any potential transit corridors in any location within the Braddock Metro neighborhood.

The location and routing of Corridor A is consistent with the planning that occurred as part of the Braddock Metro Neighborhood Plan. In fact as part of the recently approved Braddock Gateway proposal, a condition was added to incorporate a station as part of the development proposal in anticipation of the transit route. First Street and the Metrorail service road will not be widened. The location, route and character of the proposed route is consistent with the Braddock Metro Neighborhood Plan and recent development approvals.

### **Corridor B**

The planned corridor is within the Taylor Run and Seminary Hill and Landmark/Van Dorn Small Area Plans. The proposed transit improvements are generally within the existing right-of-way. The zoning adjacent to the transit corridor generally consists of relatively low-density commercial zones such as C-G and C-L, and lower density residential zones such as R-8 and RB. The area within the Landmark/Van Dorn Plan anticipates CDD zoning as part of the potential redevelopment within the Plan. The proposed transit way would be an extension of the transit way planned as part of the future redevelopment of the Landmark Mall.

### **Process**

Generally, significant planned capital road and transit improvements within the City are included in a Master Plan when approved by the Planning Commission and City Council. In this case, the general alignments of Corridors A and B were approved as part of the 2008 adopted Transportation Master Plan and are a Citywide transportation facility with Citywide transportation and land use implications. Given the importance of these transit facilities and their broad citywide benefit, staff is recommending a phased implementation strategy for each of the three transitway corridors already approved in the Transportation Master Plan.

After the specific alignments are approved by City Council, transitway elements including landscaping, streetscape and shelters will require subsequent briefing to the Planning Commission and the Transportation Commission and consideration and approval by City Council. This approach provides the community and stakeholders the opportunity to review and comment on the proposed transitway.

## **Conclusion**

The proposed transitways along all three corridors will significantly improve transit speed and reliability through areas of the City that are positioned for redevelopment and increased employment and population. These transitways were discussed extensively as part of the 2008 Transportation Master Plan. The Council's Strategic Plan includes an objective to increase transit options for locally oriented trips emphasizing inter-jurisdictional coordination. The recommendation by the CWG is a necessary implementation component of the Master Plan. Staff supports the recommendations for Corridors A and B, as they balance many of the goals of the City and the existing and planned development for these areas of the City. As with all implementation measures, the City often must balance competing objectives, including transit, cost and neighborhood context.

## **Next Steps**

Staff is presenting the preliminary preferred recommendations for Corridor A and B to the Council at its June 13, 2012 regular session, and a public hearing is scheduled for June 16, 2012 where staff will ask Council to adopt the CWG recommendations for Corridors A and B and authorize staff to proceed to the next stages of implementation. Once a final Council decision is made, the project can proceed to the next phases. For Corridor A, this would include the analysis of a circulator within Old Town, as part of the Comprehensive Operations Analysis, scheduled to begin in Summer, 2012. For Corridor B, the next step would be to conduct an Alternatives Analysis / Environmental Assessment (AA/EA). Since Corridor B is a lower priority than Corridor C, the AA / EA is not anticipated to begin until 2018. Following the AA/EA, if finances are in place, the project will move into design, right-of-way acquisition and construction.

## **FISCAL IMPACT:**

For Corridor A, there will be a negligible amount of capital funds required to implement the recommendation of the CWG. If an additional circulator service is implemented in Old Town, the cost of this service could be around \$1 million annually, based upon the City's experience in operating the King Street Trolley. This is only an approximate estimate, and the actual alignment, service patterns, and the manner that existing transit services are modified to accommodate this service will be determined by the Comprehensive Operational Analysis.

For Corridor B, the planning level capital cost estimate to implement Bus Rapid Transit as part of Option 3c is \$39 million. These estimates do not include right of way costs, maintenance facility, rolling stock or ongoing operating costs. The funding sources would likely primarily be City CIP and developer monies, as well as federal assistance in addition to City and developer monies. Given the state of federal transportation funding and the fact that the federal funds for this purpose are competitively awarded, there is a high degree of uncertainty regarding substantial future federal transportation funding.

**Attachment 1** – CWG Corridor A Recommendation

**Attachment 2** – CWG Corridor B Recommendation

**Attachment 3** – City Transitway Initiatives

**Attachment 4** - Summary of Key Issues and Constraints (Corridors A and B)

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