

# Southeast Boulevard Feasibility Study

District Department of Transportation

January 2016

**DRAFT**



# Executive Summary

The District Department of Transportation (DDOT) evaluated the feasibility of transitioning a segment of the former Southeast Freeway from 11<sup>th</sup> Street to Barney Circle into an urban boulevard more consistent with the expected travel demand and the character of the adjacent neighborhood. This study builds upon the Southeast Boulevard Planning Study prepared by the District of Columbia (DC) Office of Planning (OP) and examines the Southeast Boulevard Project at a high level to understand the feasibility of the overall vision outlined by OP in its study. Specifically, it reviews the feasibility of the concepts prepared by OP and discusses the effort that would be needed to implement the project.

The feasibility evaluation considered ownership of the rights-of-way, future travel demand, the potential for a transit garage, and the potential cost. A summary of each of the feasibility areas is below:

## Ownership

A preliminary review of land ownership of the site does not indicate significant obstacles to providing the transportation elements of the project. However, it appears that at least two National Park Service (NPS) parcels were acquired for and incorporated into the initial Southeast Freeway. As such, coordination with NPS will be needed to determine their future use. Coordination will also be needed with the Virginia Avenue Tunnel Project and the DC Water Clean Rivers Project.

## Travel Demand

The future Southeast Boulevard will serve less vehicle traffic as compared to the previous Southeast Freeway, but will remain an important vehicle connection between Pennsylvania Avenue and I-695/11<sup>th</sup> Street Bridge. Four travel lanes and multiple connections to north-south streets for vehicles, pedestrians, and bicyclists to cross the boulevard are needed to accommodate multi-modal transportation demand and connections to the Anacostia River. Vehicular connections to north-south streets would likely generate some additional vehicle traffic on these streets which are currently very low vehicle volume streets. However it is these connections along with context sensitive design which will lead to a neighborhood scale urban boulevard.

## Transit Garage

A transit garage could be provided at Southeast Boulevard that takes advantage of the location and topography of the site to minimize visual impacts to surrounding neighborhoods and so that vehicles accessing the facility would not use residential neighborhood streets. Any of the illustrative concepts prepared by OP could be advanced to include this facility. Excess land could be developed in a manner that is generally consistent with the OP concepts, although some minor adjustments would likely be needed to account for access to the garage.

## Cost

Constructing the transportation elements of the project would cost between about \$120 million and a transit garage would add about \$65-70 million in costs. These costs are represented in 2015 dollars and are expected to increase each year beyond 2015.

## Feasibility Assessment & Process Requirements

DDOT's review of the feasibility of the project has found that while the project as envisioned in the Southeast Boulevard Planning Study is largely feasible, rebuilding the facility into an urban boulevard is expected to be a relatively long and expensive undertaking. Preliminary estimates of cost range from \$120M to \$190M while it is expected that it will take at least seven years to complete construction of

the transportation facilities and an additional three years for potential land redevelopment construction.

The project requires the participation and cooperation of multiple District agencies. DDOT would plan, design, and implement the transportation elements of the project. The Deputy Mayor for Economic Development (DMPED) and OP would partner with a third party developer to plan and implement the construction of private development on any lands deemed excess from a transportation viewpoint. Reviews and approvals from federal agencies, most notably the Federal Highway Administration (FHWA), would be required in order to declare excess right-of-way for potential land redevelopment purposes. Coordination with FHWA and consistency with DDOT's *Right of Way Policies and Procedures Manual* would be needed to dispose right-of-way for development and determine whether reimbursement to FHWA would be required.

In addition to evaluating feasibility and process, DDOT also identified important issues which should be addressed in a future environmental review process. Such issues include the design of the facility and potential ways to defray project costs.

## Next Steps

This study's recommendation is to move forward with the federal environmental studies by re-initiating the Environmental Assessment that began in 2013. The EA would advance the vision and modified concepts established in the OP Study. Major elements of the EA include preparing preliminary designs based on the OP concepts, more detailed traffic operations studies, and environmental studies. The environmental studies, however, cannot be completed until a financial plan for project implementation is identified and included in the regional Constrained Long-Range Transportation Plan (CLRP).

Given the cost and duration associated with Southeast Boulevard, it will be important to continue discussions with a broad spectrum of stakeholders during the EA to confirm community support for the project, engage with AWI Signatories, and evaluate project costs and funding options.

As such, it is important for stakeholders to gain consensus for the overall project vision for the project. This includes neighbors in communities immediately surrounding the site, people who depend on the existing facility for access, District agencies (including DDOT, OP, and DMPED), AWI signatories, and decision makers. A substantial effort should be invested to identify how a project of this scope and magnitude could be funded.

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# Background

The area envisioned as the future home to the Southeast Boulevard – roughly bounded by L Street to the north, the CSX rails to the south, the 11<sup>th</sup> Street Bridge to the west, and Barney Circle to the east – is currently home to the former Southeast Freeway. The former freeway is below the elevation of L Street and acts as both a visual and physical barrier between the neighborhoods to the north and the Anacostia River to the south. At the same time, the site has many characteristics that lend it to be redesigned in a way that overcomes the current design’s shortcomings and positively contributes to the adjacent neighborhoods and District as a whole.

## 1.1 Site Overview

The footprint of Southeast Boulevard encompasses twenty acres spanning more than a half mile in length and generally between 200 and 250 feet in width. While this width is typical for an urban freeway, it is more than twice the width of other major DDOT non-grade separated facilities. A more typical right-of-way width would be between 90’, similar to H Street NE, and 160’, similar to Maryland Avenue NE.

As a transportation facility, the site makes an important connection between Pennsylvania Avenue and the I-695/11<sup>th</sup> Street Bridge/M Street SE corridor. The facility connects many communities east of the Anacostia River to Downtown and the Capital Riverfront. Although the current facility serves vehicles only, sidewalks, bicycle facilities, and surface transit accommodations could provide excellent multi-modal connections in the future.

Southeast Boulevard sits at the edge of vibrant neighborhood which is in the process of experiencing an increase in property value. The property is also only three blocks from the Potomac Avenue Metrorail station. Further, the site is nearly adjacent to the Anacostia River. The site’s exceptional access to transit and roads makes the area attractive for potential development and it is likely that the property has a relatively high value.

Another inherent feature of the site is its topography. L Street is approximately 10-20 feet higher than the former Southeast Freeway. This topography challenge currently serves as a barrier between the Anacostia River and neighborhoods to the north. The CSX tracks that run parallel to the site are another barrier.

## 1.2 Anacostia Waterfront Initiative

The study area falls within the boundaries of the Anacostia Waterfront Initiative (AWI), a multi-agency partnership charged with revitalizing the communities along the Anacostia River. AWI was launched in 2000 when 19 Federal agencies partnered with the District of Columbia and committed to create a clean river environment, new parks and other recreational facilities, more job-creating commercial centers, revitalized residential neighborhoods, and multi-modal transportation options.

The launch of the AWI was accompanied by the development of *The Anacostia Waterfront Framework Plan* (2003) which established five mutually-reinforcing goals<sup>1</sup>:

- Restore the Environment – A Clean and Active River
- Connect with Transportation – Breaking Down Barriers and Gaining Access

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<sup>1</sup> Anacostia Waterfront Initiative. “The Anacostia Waterfront Framework Plan. November 2003. <https://www.anacostiawaterfront.org/awi-documents/the-anacostia-waterfront-framework-plan-2003/>

- Play in Parks – A Great Riverfront Park System
- Celebrate Destinations – Cultural destinations of Distinct Character
- Live in Neighborhoods – Building Strong Waterfront Neighborhoods

DDOT’s role under the AWI is to implement transportation projects that would improve access to the waterfront and spur economic development within the communities along the waterfront. Based on the AWI goals, DDOT’s transportation agenda for the AWI Program includes<sup>2</sup>:

- Providing continuous pedestrian and bicycle access along the entire waterfront.
- Promoting the use of alternative transportation choices and public transit.
- Beautifying streetscapes by integrating mixed-use development landscaping and civic spaces.
- Creating distinctive bridges that serve as gateways across the Anacostia River.
- Redesigning highways and freeways to reduce transportation barriers between neighborhoods and the water.
- Reconnecting the city street grid to waterfront parks.

### 1.3 DDOT Planning Work

In 2005 DDOT released the *Middle Anacostia River Crossings Transportation (MAC) Study* to build upon *The Anacostia Waterfront Framework Plan* for the section of the Anacostia River roughly bounded by the 11<sup>th</sup> Street Bridge to the west, Pennsylvania Avenue to the north, Barney Circle to the east, and the Anacostia Freeway to the south. The MAC study identified high level changes for the middle section of the Anacostia River for the study area and suggested near- and long-term changes to advance the AWI goals in this area, including an early vision for Southeast Boulevard. Acknowledging that the 11<sup>th</sup> Street Bridge and South Capitol Street projects would redirect a significant amount of the regional traffic away from the Southeast Freeway, the MAC study identified an opportunity to convert the Southeast Freeway to a surface boulevard more consistent with the facility’s neighborhood context.

Preliminary ideas for a Southeast Boulevard, as shown in Figure 1 included features like a shared use trail, enhanced landscaping, and promoting connections between the neighborhood and waterfront.

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<sup>2</sup> Anacostia Waterfront Initiative, “Transportation Master Plan 2014 Update”. <https://www.anacostiawaterfront.org/awi-documents/awi-transportation-master-plan-2014-update/>

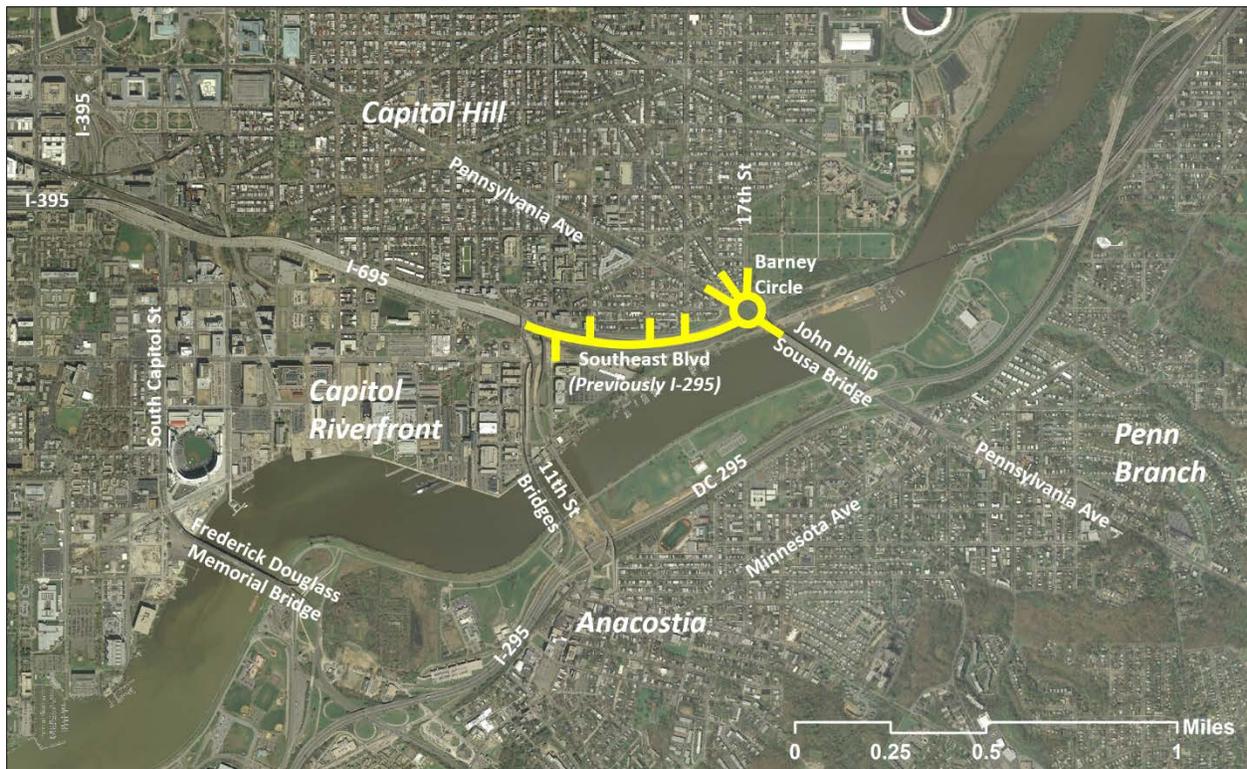


Figure 1: Southeast Boulevard Project Location

In 2012, DDOT coordinated with the Federal Highway Administration (FHWA) to withdraw the portion of I-295 between I-695 and Barney Circle from the Interstate Highway System. This action transitioned the designation of the roadway from an Interstate Highway to a city street, setting the stage for more detailed planning work for the transformation of the facility.

In 2013 DDOT began an Environmental Assessment under the National Environmental Policy Act (NEPA) to further study the facility and prepared concepts for the Southeast Boulevard. The initial phase of work included the preparation of design concepts for the roadway, which DDOT presented at community meetings. Public reaction to the concepts revealed a need to understand how the land around the new boulevard could be developed. To address these concerns, the Office of Planning (OP) completed a land use study which addressed transportation along with urban design issues and began the conversation about potential the land uses and density which the site might be able to accommodate.

## 1.4 Land Use Study

OP completed the *Southeast Boulevard Land Use Study* (Study), which provided the first vision of both transportation and land-use concepts for the area between 11th Street and Barney Circle.

OP identified three concepts for a future Southeast Boulevard. While each concept varies in its specific design, all are consistent with the AWI guiding documents of transforming the former Southeast Freeway into an urban boulevard and also respond to additional community input provided during the development of the Study. Each concept features common transportation characteristics and elements, including boulevard connections with 13<sup>th</sup>, 14<sup>th</sup>, and 15<sup>th</sup> streets, continuous pedestrian and bicycle facilities, landscaping and high-quality public spaces and streetscapes, at-grade redesigns for Barney Circle, and connections to the waterfront.

The Study developed options at a concept level, and did not include detailed land-use planning, site analysis, or economic analysis. Therefore, the three concepts are subject to further refinement as the project moves forward. Of note, OP heard community input suggesting that a hybrid land use concept should be developed incorporating more usable open space within a development program like the one shown in Concept A. Figures 2 through 4 illustrate the concepts prepared by OP. The following summarizes key elements found in each concept.

#### CONCEPT A

- Four-lane Southeast Boulevard
- L Street preserved as a separate street
- Surplus right-of-way used for row homes and multi-family buildings with ground floor retail
- Provision for a transit garage



*Figure 2: Land Use Concept A, Southeast Boulevard Planning Study (DC Office of Planning)*

## CONCEPT B

- Two-lane Southeast Boulevard. Southeast Boulevard and L Street could potentially operate as one-way couplets, each with two travel lanes
- Surplus right-of-way used for row homes
- No provision for a transit garage.



Figure 3: Land Use Concept B, Southeast Boulevard Planning Study (DC Office of Planning)

## CONCEPT C

- Four-lane Southeast Boulevard
- L Street preserved as separate street
- Surplus right-of-way used for open space
- Provision for a transit garage



Figure 4: Land Use Concept C, Southeast Boulevard Planning Study (DC Office of Planning)

## 1.5 Need for an Evaluation of Feasibility

Each of the OP concepts is consistent with the AWI and DDOT guiding documents and offers a glimpse at how the site could take advantage of the asset's beneficial characteristics to transform the facility from its current condition to something that achieves multiple District and neighborhood goals. The OP study offered these concepts in order to illustrate how the vision for Southeast Boulevard could be achieved at a high level and recommended as a next step that DDOT complete an assessment to evaluate the feasibility of implementing the concepts, including constructability, project costs, and process requirements. This document evaluates the concepts to address multiple angles of feasibility to determine if there are fatal flaws with the concepts. Such information is important to help decision makers, neighbors, and District agencies better understand the practicality of the concepts and to determine costs and process requirements associated with the Southeast Boulevard project.

# Feasibility of Concepts

The concepts developed by OP offer a glimpse at how the site could be transformed from its current condition to something that achieves multiple District and neighborhood goals. DDOT evaluated the feasibility of the concepts advanced through the OP Land Use Study. This evaluation consisted of a review of four subject areas:

- Land ownership and restrictions
- Travel demand
- Transit garage
- Cost

The goal of this evaluation is to determine if the concepts as proposed are feasible related to these areas and to outline major future considerations that should be addressed if the concepts are found feasible.

## 2.1 Land Ownership and Restrictions

The Southeast Freeway and Barney Circle area has a long history in the District, from their original inclusion in the L'Enfant Plan as Reservations (55, 56, 300, and 301) to transitioning to uses as a traffic circle, bridge approach, streetcar terminal, and Interstate constructed in the 1960s and early 1970s. As such, DDOT often finds that such facilities are subject to use restrictions of the land based on how projects were initially funded, certain parcels may have use restrictions based on previous owners, or that DDOT may not have title to portions of the existing right-of-way. An initial evaluation was conducted to determine what, if any, restrictions based on land ownership or use restrictions DDOT would face if the project advanced. A more rigorous discussion of the process of right-of-way disposal is found in the Future Efforts section.

### 2.1.1 Land Restrictions

The Southeast Freeway was built as an Interstate Highway. While the Interstate designation is no longer associated with this roadway, the conditions of the original federal investment from the purchase of its land remain. These conditions require the right-of-way to be utilized for transportation purposes consistent with requirements of Title 23 – Highways of the Code of Federal Regulations (CFR). However, if DDOT were to potentially excess a portion of the right-of-way, the property would be required to be disposed by FHWA per the requirements in § 23 CFR 710.409 and proceeds diverted to Title 23 eligible projects.

A new Southeast Boulevard is generally consistent with Title 23. However, the private land use envisioned as part of the concepts is not. Thus, to realize the vision of these concepts, DDOT right-of-way would need to be disposed.

### 2.1.2 Ownership

DDOT conducted a preliminary review of parcel ownership for the Project area and compared that to the land development concepts from the Southeast Boulevard Planning Study to understand potential conflicts. DDOT also compared the OP concepts with other major construction projects occurring within the Project area, including the DC Water Clean Rivers Project and the CSX Virginia Avenue Tunnel Project. Figure 5 illustrates constraints to development parcels in the Project area discovered during these reviews.

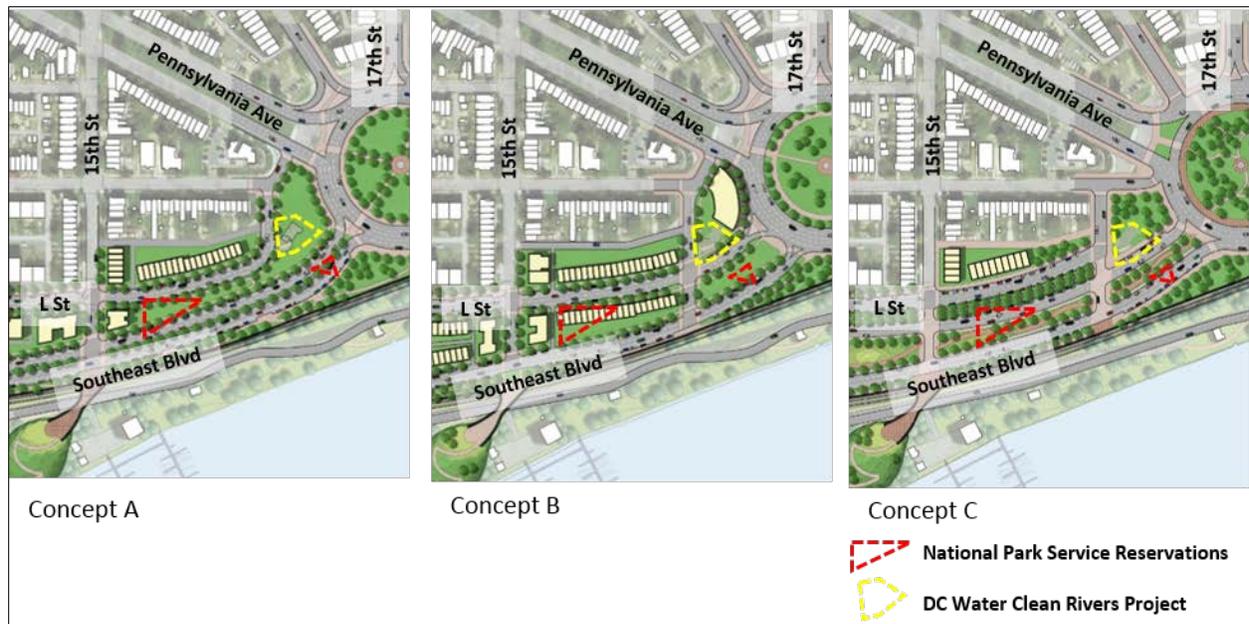


Figure 5: Development Constraints

DDOT found that the project area includes two National Park Service reservations along with a drop shaft and ventilation chamber being constructed near Barney Circle for the DC Clean Rivers Project. After comparing the parcels in question with the basic concepts, it is possible to largely avoid the DC Clean Rivers Project parcel. However, it is not possible to avoid the National Park Service (NPS) parcels. It does seem possible to incorporate the NPS parcels into the transportation portion of the project as is the case in existing conditions. This would not likely present a fatal flaw to completing the project, but it is clear that there would be significant process requirements and challenges to disposing the NPS and incorporating them into private development. Of note, “transportation uses” could be broadly defined to include things like open space and recreational trails, and it is possible that the reservations could be made into neighborhood parks without needing to dispose of the land. Ultimate determination of what is classified as a transportation use would be determined in consultation with FHWA.

Overall, the NPS and DC Water lands represent a small fraction of the overall site, and the land development shown in each of the Concepts could largely be realized with minor revisions. However, the ability to develop land as part of the project is dependent upon the ability to surplus excess land not needed for transportation purposes. This process is governed by FHWA, and the ability to dispose of land cannot be assumed at this stage.

## 2.2 Travel Demand

With the completion of the 11th Street Bridge Project, DDOT anticipates that vehicle traffic volume in the project corridor will be reduced as compared to the previous condition. However, this corridor will still serve as an important connection between the neighborhoods along Pennsylvania Avenue SE in Ward 6 and Ward 7, and the Capitol Riverfront. Due to the reduction in vehicle traffic anticipated in this area, DDOT conducted a high level travel demand analysis to better understand the vehicle capacity needs for a future Southeast Boulevard. A scenario where Southeast Boulevard remains in its current configuration (a four lane roadway with no connections to neighborhood streets) was compared against two potential future scenarios. One future scenario kept Southeast Boulevard as a four lane street with connections at 13th Street, 14th Street, and 15th Street. The other future scenario also included connections at 13th Street, 14th Street, and 15th Street but provided two lanes on Southeast Boulevard.

Figure 6 shows changes in traffic volumes between today and 2040 if no changes are made to the existing conditions of Southeast Boulevard as a grade-separated four lane facility. Even if the roadway stays in its current configuration, traffic would be less on the roadway than it is today.

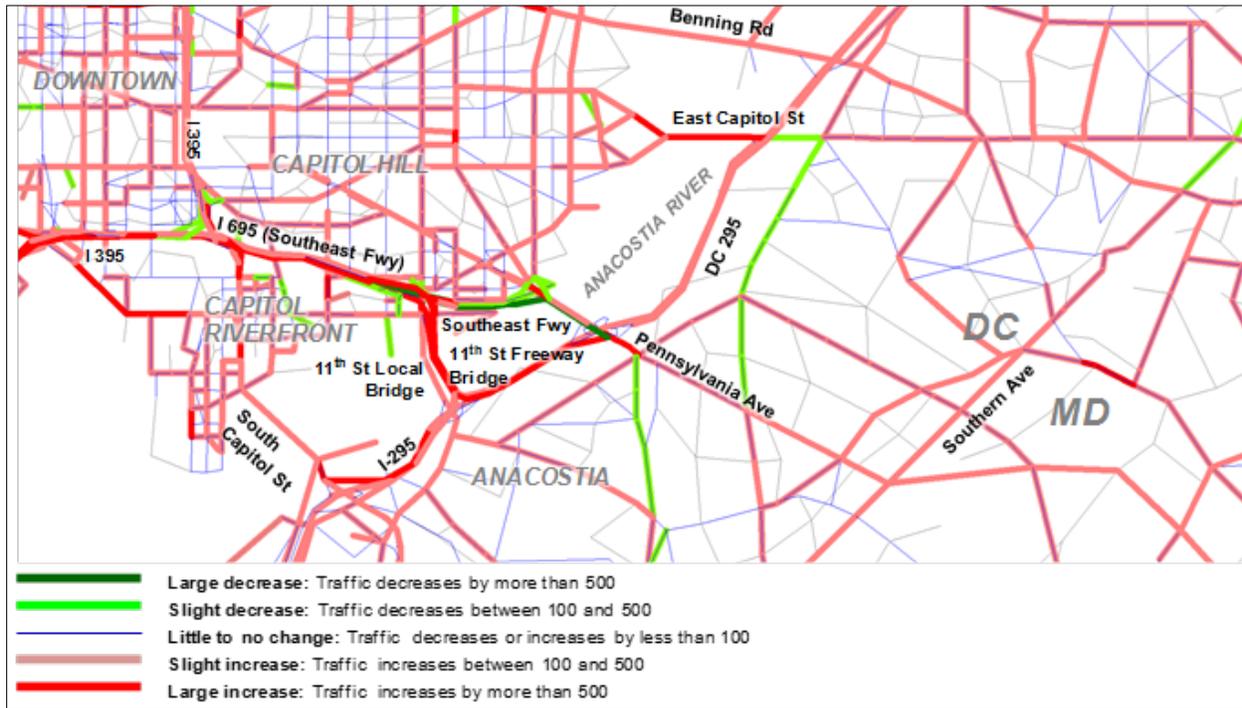


Figure 6: “No Build”; Growth in Traffic between Today and 2040 with Existing SE Boulevard Configuration  
Southeast Boulevard Remains in Current Configuration; AM Peak Period

Figure 7 shows what would happen if Southeast Boulevard remains as a four lane street but is connected to 13th, 14th, and 15th Streets. Several local neighborhood streets would see increases in traffic. The connections to Southeast Boulevard may encourage some level of cut through traffic on local streets.

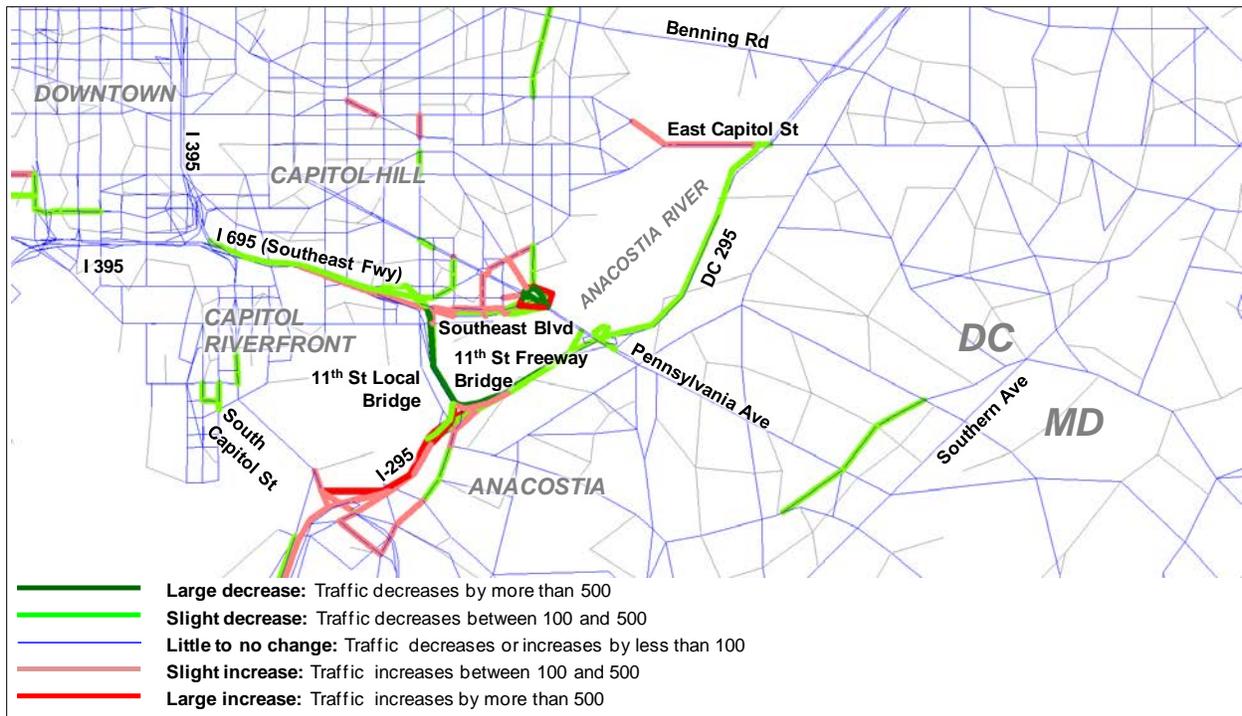


Figure 7: Change in Traffic with a 4 Lane Section and Connections to Local Streets Versus No Build  
*Southeast Boulevard: 4 Total Lanes; Connections at 13th, 14th and 15th Streets; AM peak period*

Figure 8 illustrates what would happen to traffic if Southeast Boulevard becomes a two lane street with connections to 13th, 14th, and 15th Streets. Under this configuration, Southeast Boulevard would serve less traffic but Pennsylvania Avenue and local streets in the vicinity would see higher traffic. Compared to the four lane scenario depicted in Figure 7, a two lane section would result in increased traffic volume in a larger area. The two lane configuration would shift to Pennsylvania Avenue and local streets and would not result in less overall traffic for the neighborhoods surrounding Southeast Boulevard.

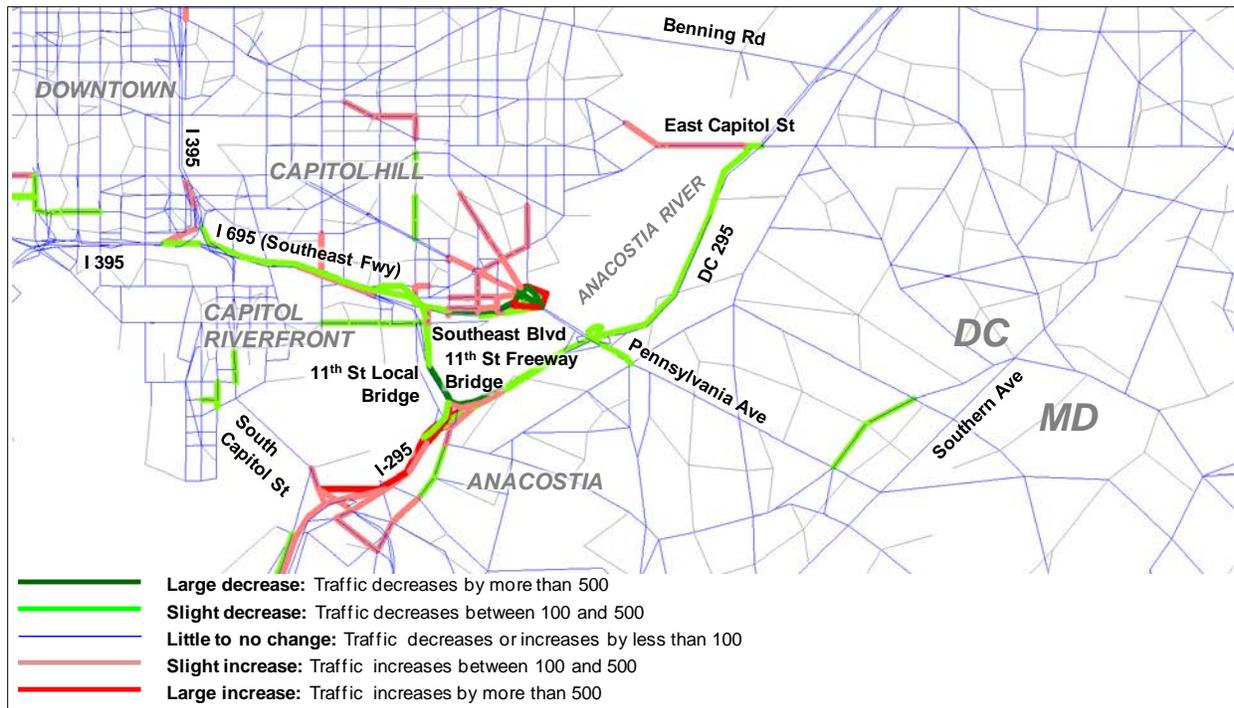


Figure 8: Change in Traffic with a 2 Lane Section and Connections to Local Streets Versus No Build  
 Southeast Boulevard: 2 Total Lanes; Connections at 13th, 14th, and 15th Streets; AM peak period

Based on the travel demand analysis, a neighborhood-sensitive four lane section offers the best balance between accommodating anticipated travel demand, achieving increased multi-modal connection as envisioned in the area's strategic planning documents, and respecting the site's context within the Hill East neighborhood. Connections to 13th, 14th, and 15th Streets would result in increased volumes on those streets, which may require traffic calming measures to deter cut-through traffic. Southeast Boulevard would function as a minor arterial. These streets serve short to medium length trips and provide a balance between mobility (serving through traffic) and access (providing connections to homes and businesses).

Each of the OP concepts could accommodate four vehicle lanes. Both Concept A and C include a four lane boulevard, while Concept B could be adapted to provide four lanes by creating a two way couplet with L Street providing two westbound lanes and the new boulevard providing two eastbound lanes. This feasibility study did not evaluate which option should be pursued and acknowledges that there may be concerns from stakeholders with one or more of the options. A future environmental process would more fully address boulevard design and incorporate community preferences.

## 2.3 Transit garage

The District is in need of transit vehicle storage locations. Such facilities, particularly in centrally located areas, are important to support public transit operations and vital to promoting tourism and economic activity in the District. While detailed programming of storage needs has not yet been undertaken, the District should remain flexible and not preclude the ability to use a portion of the right-of-way for future storage needs. Southeast Boulevard provides an opportunity for the District to accommodate several different storage needs:

- Tour buses that currently park on public streets
- Transit buses for the DC Circulator system or WMATA Metrobus system
- Streetcars for potential future streetcar system

As discussed in the Background section, the site offers several opportunities that are highly conducive to including a transit garage as part of Southeast Boulevard. Most notably, an at-grade Southeast Boulevard would need to be raised to the elevation of L Street, thus potentially creating a large underground storage facility under the boulevard with ample vertical clearance for transit vehicles. Such a facility would be out of sight from adjacent neighborhoods, and access points could be designed from the edges of the site near the 11<sup>th</sup> Street Bridge and at Barney Circle, thus keeping buses away from residential neighborhood streets.

Given the site's topography, the vertical difference between L Street and M Street would need to be reconciled in any scenario that creates an at-grade Southeast Boulevard. As discussed in the Project Costs section below, this could be done through structure (essentially building Southeast Boulevard on a bridge) or through fill (filling in the depressed roadway with dirt and other materials). A storage facility could be relatively easily accommodated within the structure option. Thus, including a vehicle storage facility would make the most of a difficult topography while simultaneously meeting a District-wide need to provide transit vehicle storage.

Figure 9 illustrates potential access locations to the storage facility. A primary access point at the proposed intersection of Southeast Boulevard and 12<sup>th</sup> Street would achieve the goal to establishing a storage vehicle facility under the facility while keeping bus traffic from cutting through the adjacent neighborhoods. This location provides easy access to the Southeast Southwest Freeway and the 11th Street Bridge. A secondary access point could be provided from Barney Circle that would provide access to and from Pennsylvania Avenue. These access points are conceptual, and other options for access exist. More detailed design options for a possible transit garage would be explored during the environmental review and design process. The “potential storage facility footprint” indicates one possible envelope in which a facility could be located and does not necessarily indicate the full size of the potential transit garage. The transit garage design will be more fully studied as part of a future environmental process.

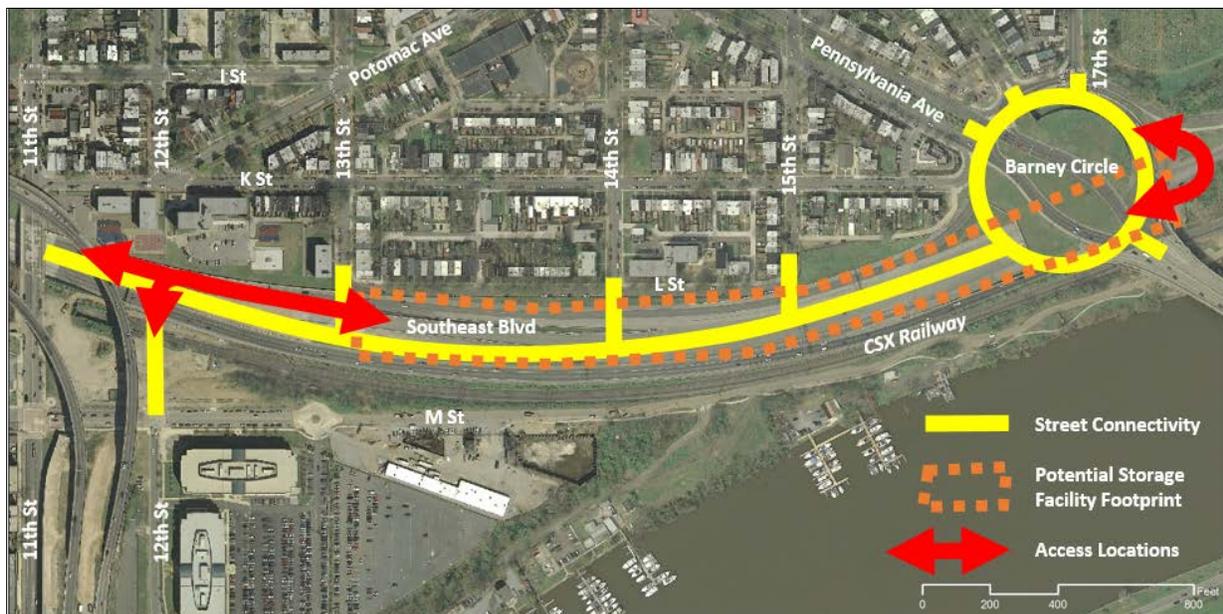


Figure 9: Access Locations for Potential Underground Storage Facility

The storage facility could be accommodated in any of the concepts prepared by OP. While Southeast Boulevard would provide a unique opportunity to accommodate potential storage needs with minimal impacts to adjacent neighborhoods, it could limit potential development footprints and would likely complicate the construction of private development, and the OP concepts would need to be revised to

accommodate access points to the garage. Figures 10 and 11 illustrate changes that may need to occur in order to accommodate access to a potential transit garage for each concept.

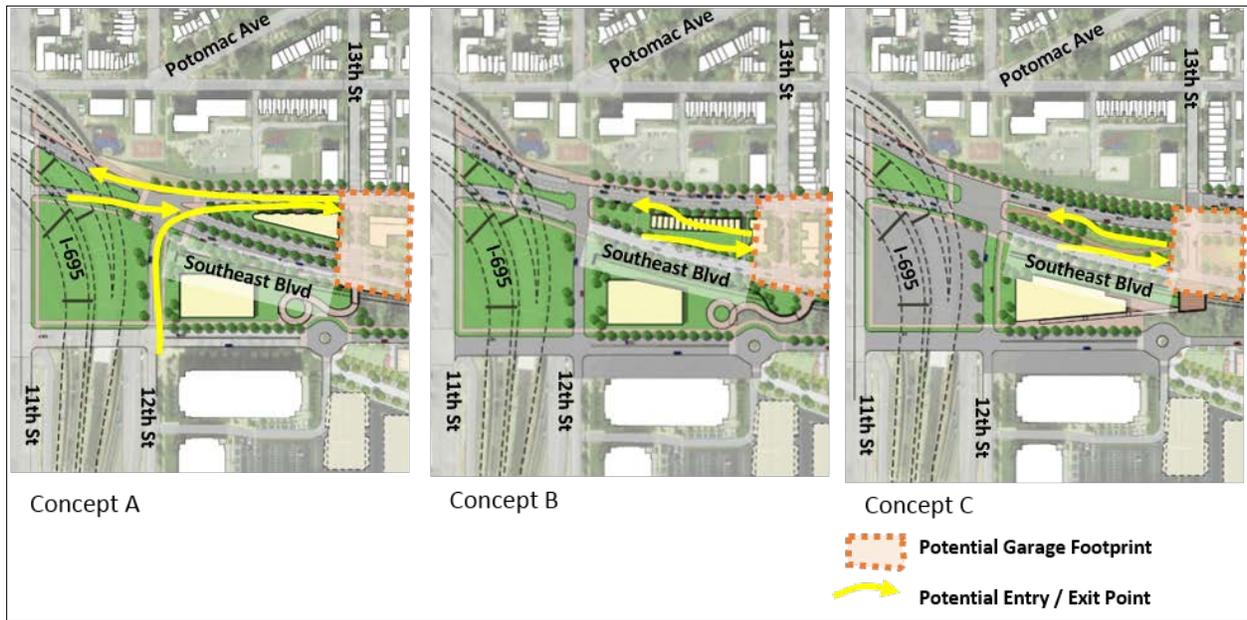


Figure 10: Change to Accommodate Garage Access Point at 12th Street

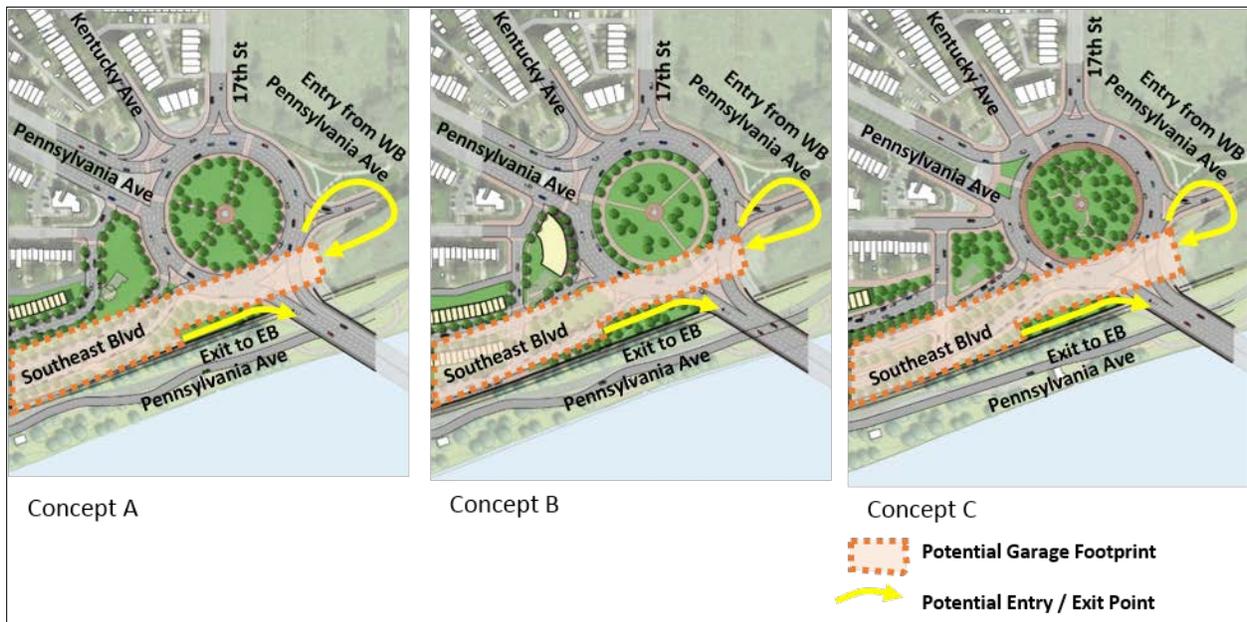


Figure 11: Change to Accommodate Garage Access Point at Barney Circle

## 2.4 Project Costs

The changes envisioned in the OP concepts represent a significant undertaking. Such transformative concepts, while offering many benefits, are expensive. DDOT anticipates that implementing the conceptual transportation elements of the project would cost approximately \$120 to \$190 million. Table 2 compares project costs based on the concepts prepared during the OP study.

Table 1. Estimated Conceptual Transportation Project Cost (millions of dollars in 2015 dollars)

	Concept A with Garage	Concept A without Garage	Concept B with Garage	Concept B without Garage	Concept C with Garage	Concept C without Garage
Roadway Construction	\$57	\$75	\$56	\$73	\$56	\$74
Roadway Contingency	\$23	\$30	\$22	\$29	\$23	\$29
Transit garage	\$79	\$0	\$79	\$0	\$79	\$0
<b>Total Construction Cost</b>	<b>\$159</b>	<b>\$105</b>	<b>\$158</b>	<b>\$103</b>	<b>\$158</b>	<b>\$103</b>
Engineering & Const. Mgmt.	\$29	\$19	\$28	\$19	\$28	\$19
<b>Total Project Cost</b>	<b>\$188</b>	<b>\$123</b>	<b>\$186</b>	<b>\$121</b>	<b>\$186</b>	<b>\$122</b>

Roadway Contingency estimated at 40% of Roadway construction cost. Engineering estimated at 8% of total construction cost. Construction management estimated at 10% of total construction cost.

The costs do not constitute an official engineering or legal estimate. Rather they are an initial cursory assessment for feasibility discussion purposes. More refined costs estimates would be developed during the preliminary and final design processes. All costs are represented in 2015 dollars and are expected to increase each year beyond 2015. The costs represent the effort needed to reconstruct Southeast Boulevard consistent with the project goals outlined in this section. It includes the cost to:

- Reconfigure Barney Circle into an at-grade signalized traffic circle,
- Raise Southeast Boulevard to the same level as L Street, and
- Construct a four lane street that includes sidewalks, bike facilities, and traffic signals.

Contingency is an added cost typically included in preliminary cost estimates. For projects in the conceptual stage without initial design work, cost estimates are normally inflated by an additional 40 percent to account for unknowns that may arise once more detailed design work begins. Additional costs beyond the construction of the transportation infrastructure are expected to be necessary and have not been estimated.

The costs associated with the transportation component of the Southeast Boulevard project are substantial. As a point of reference, DDOT's annual federal-aid budget is approximately \$180 million dollars, including FHWA funds and required local match. This total includes capital projects as well as operations, maintenance, and programmatic funding for the District's Federal-Aid highway network. Although the project could be funded over multiple years, it still represents a substantial piece of DDOT's budget and, if paid for out of DDOT's budget, could preclude other priority transportation projects from being constructed.

It is important to underscore that the cost estimates included in this report are for the transportation portion of the project only – additional costs may be associated with a potential land development component of the project.

## 2.5 Overall Feasibility of Concepts

Based on the above evaluation, any or all of the concepts prepared in the Southeast Boulevard Planning Study could be advanced for further study. Some would need more modifications than others in order to

accommodate the project goals outlined in this report. While there are no apparent significant constructability concerns, the high project cost is a significant inhibitor to moving the concept forward into a project.



## Future Efforts

Advancing the Southeast Boulevard Project from a vision to a completed project will require a multi-agency effort spanning many years. The process will require partnerships between the public and the AWI Signatories involved in making these decisions and funding the planning and construction. The project is actually two projects in one – a transportation project that would be implemented by DDOT and a redevelopment project that would be planned and implemented by others after an excess determination and disposition by DDOT with FHWA. This section outlines the project development process that would advance the Southeast Boulevard project from vision to reality and identifies future considerations to address as the project advances. It concludes with next steps for partnering agencies and the public.

### 3.1 Project Development Process & Schedule

Multiple processes and approvals are necessary before construction can begin. Figure 12 outlines the process for advancing project through design and to construction. The vision has been established with the completion of the OP Study but many details for what elements of the project move forward remain to be resolved. The next step would be to engage the Southeast Boulevard Partners to initiate the process to plan, design, and build the Southeast Boulevard Project.

Because of the substantial amount of coordination between local and federal agencies and the approvals needed to move both the transportation and land development portions of the project forward, the time estimates provide a realistic view of the schedule, but also could be confounded by various steps.

The critical path begins with restarting the federal environmental studies required by NEPA. The environmental studies, however, cannot be completed until a financial plan for project implementation is identified and included in the regional Constrained Long-Range Transportation Plan (CLRP).

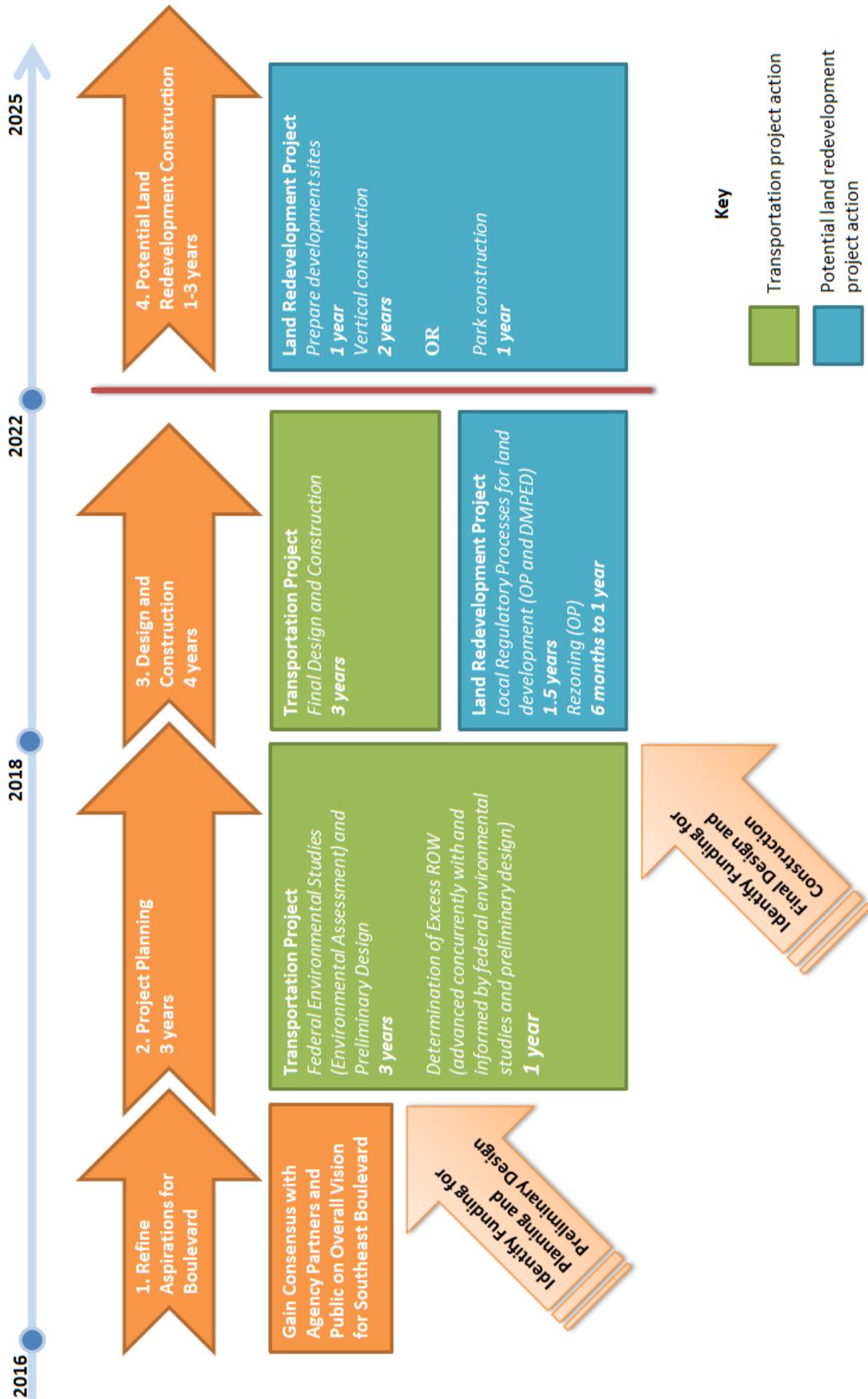


Figure 12: Process for Advancing the Project

### 1. REFINE ASPIRATIONS

The OP Concepts were generally well-received by ANC 6B when they were presented in Spring 2015. Given the cost and duration of the project, support from a broader spectrum of the community should be confirmed. At the same time, decision makers and AWI Signatories should begin to engage to formally coordinate on the project and to commit to advance the vision of the project. A substantial effort should be invested to identify how a project of this scope and magnitude could be funded. This could include contributions from AWI signatories and local funding sources.

### 2. PROJECT PLANNING

During the project planning efforts, DDOT, in partnership with OP and DMPED, would perform the federal environmental studies required by NEPA for the transportation project and begin preliminary design. The environmental study and preliminary designs would establish the right-of-way necessary to complete the transportation project. The layout and use of the proposed underground vehicle storage facility would also be defined in this study. Project planning is anticipated to take approximately three years.

Because the entirety of the study area is currently designated for transportation purposes, only land determined to be “excess” may be eligible for land development. Excess land means land that is not needed for transportation purposes, and is determined through a process by FHWA. This process can only be initiated when firm designs have been completed for the roadway and other transportation elements. Preliminary transportation facility designs could be designed with potential land development in mind. While FHWA process requires that transportation facilities be designed to achieve transportation purpose and needs as defined by the EA, careful attention would be paid to designing a transportation facility that preserves and facilitates the land development goals for potential excess right-of-way.

The designation of excess land is at the discretion of FHWA, and no land may be used for purposes other than transportation until an official designation has been made declaring the land excess. DDOT developed the *Right of Way Policies and Procedures Manual* (June 2011) in order to establish a fair and efficient manner to complete the acquisitions or transfers of property that is consistent with FHWA process requirements as well as local policies and laws. If there is excess right-of-way that could be developed, DDOT may need to conduct additional federal environmental studies to transfer or dispose the right-of-way.

### 3. DESIGN AND CONSTRUCTION

The schedule to complete final design and construction of the transportation project would depend on how the projects are procured and delivered. Traditional procurement and delivery methods would take at least four years.

If there is excess right-of-way as determined by FHWA, OP and DMPED would coordinate in partnership with DDOT on the local regulatory processes for land development, possibly to include the creation of a master plan, small area plan, or Comprehensive Plan amendment, to further define the land use for any excess right-of-way. OP would then begin the rezoning process for the excess right-of-way.

### 4. POTENTIAL LAND REDEVELOPMENT CONSTRUCTION

Once the transportation project is completed, DMPED could initiate the process to construct potential land redevelopment. DMPED could hold a procurement for a master developer to construct the redevelopment portion of the project. Land development construction could take one to three years and would likely include additional costs to prepare land for redevelopment.

## 3.2 Future Considerations

This document shows that the OP concepts are feasible. However, there are substantial decisions that remain to be worked out, and will continue to be discussed if the project moves forward into more detailed project planning. This section identifies two areas that require future attention.

### BOULEVARD DESIGN

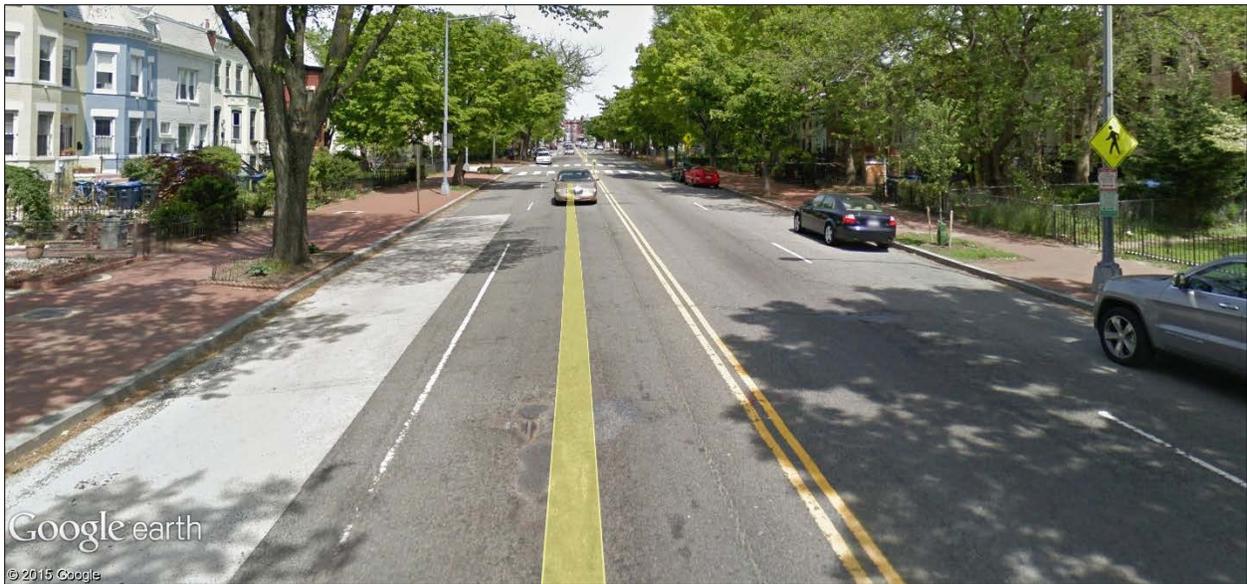
DDOT is committed to the creation of a context-sensitive urban boulevard. A well designed boulevard with four travel lanes can accommodate travel demand while still being sensitive to its context. To that end, a Southeast Boulevard could provide:

- wide sidewalks
- appropriate lane widths, speed limits, and traffic calming measures
- on-street parking (the outer travel lane in each direction may serve as a parking lane during off-peak hours)
- high quality bike facilities
- pedestrian connections to M Street
- trees and landscaping
- connections at intersections
- ability to accommodate surface transit

While moderate levels of vehicle volumes and some additional cut through traffic are expected, carefully crafted designs for intersections with existing streets in particular offer the opportunity to mitigate cut-through traffic.

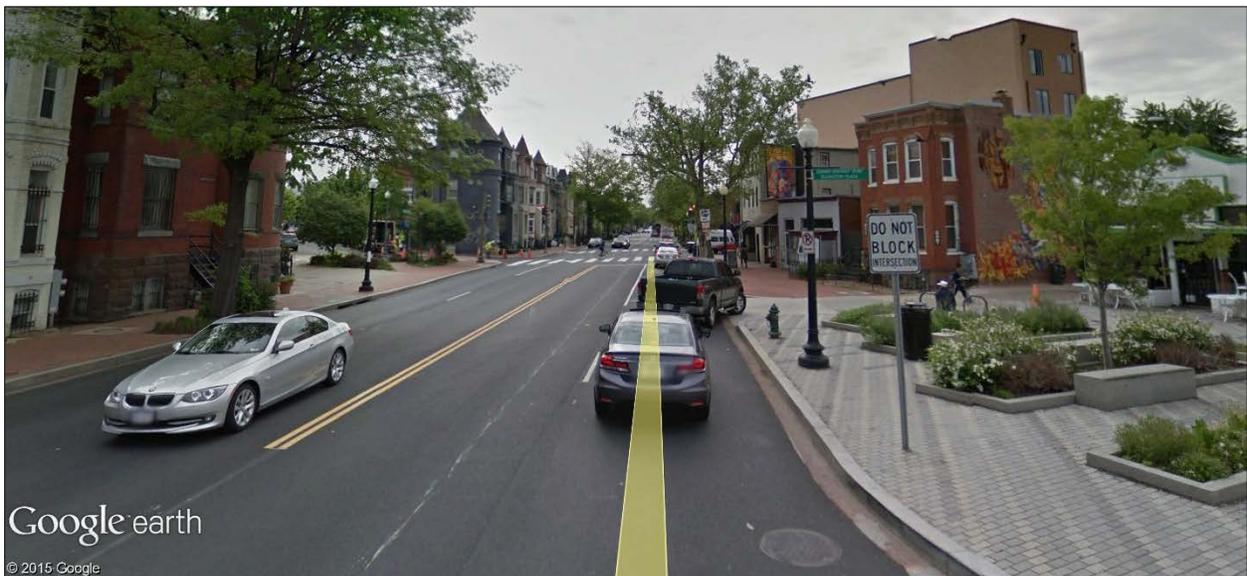
All design elements will be explored in future design efforts for Southeast Boulevard.

Figures 13 through 15 show several four lane streets within the District that serve as a model for the type of street DDOT anticipates for Southeast Boulevard. The figures illustrate a range of potential cross-sections that incorporate the proposed transportation elements for Southeast Boulevard. Both North Carolina Avenue NE and New Jersey Avenue NE are minor arterials at the locations shown. Florida Avenue NW is a principal arterial at the location shown.



*Figure 13: New Jersey Avenue NW*  
Four lane minor arterial with wide sidewalks, row homes, and bus stops.

New Jersey Avenue NW and Florida Avenue NW, shown in Figures 13 and 14, illustrate what a minimized cross-section for Southeast Boulevard could look like. Both streets provide four travel lanes during peak periods. Curb side parking is provided during off-peak hours. The outer travel lane also includes bus stops. The 1600 block of New Jersey Avenue NW includes wide sidewalks and row homes fronting both sides of the street. The 500 block of Florida Avenue NW provides narrower sidewalks but includes street level retail and public spaces. The cross-sections do not show provisions for bike facilities. North Carolina Avenue NE, shown in Figure 15, illustrates what a potentially wider cross-section for Southeast Boulevard could look like. The 1500 block of North Carolina Avenue NE includes four travel lanes separated by a median, on-street bike lanes, and curb side parking. Row homes line both sides of the street.



*Figure 14: Florida Avenue NW*  
Four lane principal arterial, with street level retail, public spaces and bus stops.



**Figure 15: North Carolina Avenue NE**

*Four lane minor arterial, with bike lanes, separate curb side parking lane, median, and row homes.*

#### DEFRAY COSTS

As discussed in the Asset portion of this report, the site's size, location, and topography make it a highly valuable asset. The asset's value has the potential to help defray project costs in the form of a transit vehicle storage facility and excess land development.

Disposal of land for development purposes and a transit vehicle storage facility could help to defray the project costs through rental fees charged to storage facility users or contributing storage facility capital funding. DDOT's review of the feasibility of disposing land and constructing a vehicle storage facility did not reveal any clear obstacles that would prevent the inclusion of these elements, but substantial process and engineering challenges exist to implementing these elements.

Excess land could be developed in a manner that is generally consistent with the OP concepts, although some minor adjustments would likely be needed to account for land that cannot be declared excess or is needed for other infrastructure purposes. Even if the land envisioned for redevelopment in the OP concepts is successfully designated as excess, DDOT does not anticipate that the value of the right-of-way that might be available for development would make a significant contribution to lowering the overall Project cost. DDOT prepared an initial estimate of the land value based on the development intensity proposed in Concepts A and B in the Southeast Boulevard Planning Study. This preliminary estimate valued the developable right-of-way between \$10 and \$16 million. This estimate does not constitute a formal appraisal of the right-of-way value. The value of any potential excess right-of-way for development would be determined based on the market value at the time of the sale and whether the surrounding area is improved or unimproved. In addition, value from the sale and development of land is unlikely to be available until after transportation project funds need to be identified and expended, creating a cash flow problem.

While the transit garage and land development have the potential to defray some project costs, the transportation project remains a very expensive undertaking and a substantial gap would remain between project costs and the funds generated by the offsetting elements. It is highly likely that a delta upwards of 80-90% of overall project costs would remain after accounting for the disposal of land and

vehicle storage facility. This discrepancy between project costs and speculative project offsets serves as a basis for discussions regarding project funding.

### 3.3 Conclusion & Next Steps

Southeast Boulevard is currently a physical and visual barrier. The concepts prepared in the Southeast Boulevard Planning Study would positively transform the corridor through new local connections, a context-sensitive boulevard, and potential land development. This feasibility study confirmed that any or all of the concepts could be advanced for further study, although some modifications may be needed in order to accommodate the project goals outlined in this report. Despite the lack of substantial feasibility concerns, the transformation of Southeast Boulevard would be neither inexpensive nor quick – substantial costs and process needs lie ahead.

This study's recommendation is to move forward with the federal environmental studies required by NEPA by re-initiating the Environmental Assessment that began in 2013. The EA would advance the vision and modified concepts established in the OP Study. Major elements of the EA include preparing preliminary designs based on the OP concepts, more detailed traffic operations studies, and environmental studies. The EA, however, cannot be completed until a financial plan for project implementation is identified and included in the regional Constrained Long-Range Transportation Plan (CLRP).

Given the cost and duration associated with Southeast Boulevard, it will be important to continue discussions with a broad spectrum of stakeholders during the EA to confirm community support for the project, engage with AWI Signatories, and evaluate project costs and funding options.

As such, it is important for stakeholders to gain consensus for the overall project vision for the project. This includes neighbors in communities immediately surrounding the site, people who depend on the existing facility for access, District agencies (including DDOT, OP, and DMPED), AWI signatories, and decision makers. A substantial effort should be invested to identify how a project of this scope and magnitude could be funded.