An integrated approach to transit investments for the City of Atlanta, Invest Atlanta and Atlanta BeltLine, Inc.

# **Final Report**









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A Supplement to the Connect Atlanta Plan and the Atlanta BeltLine 2030 Strategic Implementation Plan









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Atlanta BeltLine/ Atlanta Streetcar System Plan

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### **Executive Summary**

Atlanta is transforming into a more accessible and livable place with improved mobility, more compact and vibrant real estate development, greater quality of life, and new amenities that will continue to attract residents, employers, and investors for decades to come. Since the 1996 Centennial Olympic Games, many areas of the City of Atlanta (City) have continued to see robust development activity including Midtown, Buckhead, the northeast quadrant, and limited parts of the northwest and southeast quadrants just outside of the urban core. Billions of dollars in new private development have been built in response to investments by MARTA, the City, the community improvement districts along the Peachtree Street corridor, and the initial phases of the Atlanta BeltLine program. Together they are re-shaping Atlanta's economy and physical character and setting a platform for continued growth and prosperity.

The Atlanta BeltLine is the most exciting new program to come along in this time period, and it exemplifies the ongoing transformation of the City. The Atlanta BeltLine is a 22-mile redevelopment program for streetcar/light rail transit, trails, parks, housing and economic development that will be built along an historic railroad corridor encircling the central business district. Implementation of the Atlanta BeltLine is guided by the *Atlanta BeltLine Strategic Implementation Strategy* (SIP). The SIP is a comprehensive framework to complete the short and long term elements of the Atlanta BeltLine program, including transit.

Central to supporting and accelerating this transformation of the City is the provision of new interconnected mobility options that will facilitate the concentration of development in appropriate locations. New mobility options will provide greater connectivity to regional transit services and connect neighborhoods and job centers while simultaneously inspiring real estate developers, business owners, and property managers to invest in the Atlanta market. The creation of a new streetcar/light rail network connected to the MARTA rail system is one of the key public investments that the City is making to support this transformation.

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In the spring of 2010, Atlanta BeltLine, Inc. (ABI) initiated what was then called the Atlanta BeltLine Transit Implementation Strategy, or "TIS." The intent of the TIS was to develop a strategy to implement segments of the Atlanta BeltLine corridor incrementally to build out the vision of the entire 22-mile Atlanta BeltLine transit system. The TIS was guided by five principles: project readiness, practicality/ridership, equity, financial options, and development impact. These principles, which were developed by ABI in conjunction with the City and vetted through a community engagement process, were applied throughout every phase of the TIS process to ensure that the recommendations were consistent with the City's vision for streetcar corridor development.

During this planning process, ABI, in coordination with the City of Atlanta, came to the conclusion that transit implementation in the Atlanta BeltLine corridor in the short term would be most effective if combined with streetcar/light rail lines linking the Atlanta BeltLine to the major employment centers of Downtown and Midtown. In addition, linking these business nodes with the cultural, greenspace and housing amenities along the Atlanta BeltLine would increase the effectiveness of streetcar investments being pursued in those areas. In late 2010, in anticipation of the 2012 Transportation Investment Act (TIA) referendum, the scope of the TIS planning effort was modified to include the entire streetcar network included in the Connect Atlanta Plan. ABI and the City of Atlanta Department of Planning and Community Development worked together to present these concepts to and receive input from the public during a series of stakeholder and community meetings and online surveys. This expanded process, aligned with the five guiding principles previously mentioned, evolved into what is now called the Atlanta BeltLine/Atlanta Streetcar System Plan (SSP). The goals of the SSP are to provide



Figure 1: Connect Atlanta Plan





enhanced mobility, increase transportation options and complement economic development as a supplement to the *Connect Atlanta Plan*.

The SSP builds off of the first transit project from the Connect Atlanta Plan, the Downtown Atlanta Streetcar. Currently in the construction phase, the Downtown Streetcar will run from Centennial Olympic Park to the Martin Luther King, Jr. Historic District and will open in the summer 2014. In the years to come, the City, ABI and Invest Atlanta plan to expand this initial project incrementally into a 63-mile network of streetcar/light rail transit lines. More than one-third of this network, or 22 miles, will occur within the Atlanta BeltLine corridor. This portion of the system is already partially funded by a Tax Allocation District and will operate predominantly in exclusive rights-of-way, allowing for highly efficient transit service. Other key corridors in the system will follow existing City roadways, many of which pass through core business districts where the City and community improvement districts are already actively concentrated development encouraging and alternative transportation. Additional corridors will serve a number of the City's economic development focus areas where transit dependence and the need for economic development stimulus are high.

The SSP documents the City of Atlanta's phased approach to building out this streetcar network over time in a manner that is efficient, cost effective, mobility focused, supportive of regional transit, and integrated with the economic development initiatives led by the City, Invest Atlanta and Atlanta BeltLine, Inc.

The Atlanta BeltLine/Atlanta Streetcar System Plan builds on the Concept 3 Regional Transit Vision, the Connect Atlanta Plan, the Atlanta BeltLine Subarea Master Plans, and the Atlanta BeltLine 2030 Strategic Implementation Plan (SIP) to present a vision for implementing a comprehensive network that integrates transportation, development, affordable housing and land use. The SSP divides the 63-mile system into four implementation phases informed by the five guiding principles and vetted through the community and stakeholder engagement process. Phase 1 of the SSP represents the near-term priorities for the City, Invest Atlanta and ABI (see Figure 2). These corridors would extend the Downtown Streetcar east and west along City streets and into the Atlanta BeltLine corridor for a total of 11.3 additional miles. The following streetcar projects are Phase 1 priorities:

- Atlanta Streetcar East Extension Irwin St
- <u>Atlanta Streetcar West Extension Luckie St</u>
- Crosstown/Midtown
- East Atlanta BeltLine
- West Atlanta BeltLine
- <u>Georgia Multi-Modal Passenger Terminal</u>
   (MMPT) Connector

Phase 2 (see Figure 3) adds an additional 7.9 miles of streetcar corridors and includes:

- <u>Southeast Atlanta BeltLine to Glenwood</u>
   <u>Park</u>
- Southwest Atlanta BeltLine
- <u>Atlanta University Center East</u>
- Downtown / Grant Park

Phase 3 (see Figure 4) adds 15.6 miles of streetcar corridors and includes:

- <u>10<sup>th</sup> St</u>
- Atlanta University Center West
- Upper Westside South
- Upper Westside North
- Lakewood North
- Lakewood South
- Greenbriar



Figure 2: Phase 1











Phase 4 (see Figure 5) represents the full build-out of the 63-mile long term vision with 25.1 miles of streetcar corridors:

- Northwest Atlanta BeltLine
- Old Fourth Ward
- Peachtree Corridor
- Southeast Atlanta BeltLine: Glenwood Ave to Lee St
- West End Grant Park
- Atlantic Station
- Buckhead
- Northeast Atlanta BeltLine
- Fort McPherson Greenbriar

In coordination with the City and Invest Atlanta, ABI has initiated the environmental documentation along with advanced conceptual engineering of the Phase 1 projects and the Atlanta BeltLine corridor Phase 2 projects. Environmental documentation will include refinements of ridership potential and evaluation of capital costs, land use, economic development, and environmental impacts. Public and stakeholder input during the project implementation process will continue to be a priority. Simulataneously, the City will develop the financial plans and delivery approaches for these projects with a focus on potential public-private partnerships that would help achieve the goals for development of the streetcar system.

It is anticipated that these tasks can be completed within a two to three year timeframe, allowing the City and ABI to compete for large scale federal grants and advance local funding initiatives as needed. Projects will then advance to final engineering, construction documentation and specifications. It is anticipated that federal funding and financing will be sought for the recommended streetcar projects.

The SSP represents the current priorities for transit implementation for the City of Atlanta, Invest Atlanta, and Atlanta BeltLine, Inc. Implementing the Atlanta Streetcar system is a long-term endeavor. In

response to the Connect Atlanta Plan's target to "embrace new notions of mobility," this strategy has tremendous potential to shape the City's growth and reinvestment, both over the short term and long term planning horizons. Priorities, however, can change over time based on dynamic factors such as City planning, evolving development and transportation priorities, and funding opportunities. Therefore, the SSP should be treated as a "living" document that guides the near-term implementation priorities with an eye to what lies ahead. As progress is made, the SSP will need to be updated to reflect the dynamics of the City.

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### SECTION 1: Introduction

The Atlanta BeltLine/Atlanta Streetcar System Plan (SSP) was created to provide short term direction and long guidance for the expansion of the Atlanta Streetcar system. The SSP prioritizes streetcar projects into four implementation phases and details the City's strategy for integrating transit on the Atlanta BeltLine with targeted implementation of the crosstown streetcar corridors to achieve the goal of system integration with economic growth as per the Connect Atlanta Plan.

To achieve the *Connect Atlanta Plan* goals of provide enhanced mobility; increase transportation options; and complement economic development, the SSP seeks to accomplish the following objectives:

- Evaluate and integrate the implementation of the streetcar projects defined in the *Connect Atlanta Plan*<sup>1</sup>, the *Concept 3 Regional Transit Vision*<sup>2</sup>, and the *Atlanta BeltLine Corridor Environmental Study Tier 1 Final Environmental Impact Statement* (Tier 1 FEIS)<sup>3</sup>;
- Develop funding and implementation strategies for priority streetcar lines including the Atlanta BeltLine and key crosstown connectors;
- 3. Refine and update the streetcar transit element of the *Connect Atlanta Plan;* and
- 4. Provide the basis for the transit element of the Atlanta BeltLine 2030 Strategic Implementation Plan (SIP).

This final report summarizes the process behind the implementation strategy for modern streetcar in Atlanta. In Section 2, it provides an abbreviated chronology of transit planning in Atlanta leading up to the implementation of the Downtown Streetcar project. In Sections 3, 4, and 5, it provides a summary of the SSP transit planning process, technical analysis, corridor evaluation, community engagement, transit priorities, and next steps.

The SSP is supported by a foundation of analyses, conceptual engineering, and planning documented in a series of technical memoranda. These documents can be found online in Appendix: Technical Memoranda. The Technical Memoranda are available at the following link and are summarized below:

http://beltline.org/progress/planning/transitplanning/transit-implementation-strategy/

**Technical Memorandum 1: Planning Process and Technical Evaluation Methodology and Results** documents the SSP planning process, the methodology, and the results of the technical evaluation and screening of the universe of streetcar projects. This process informed the selection of corridors and prioritized projects organized into four implementation phases.

**Technical Memorandum 2A: Market Analysis and Development Capacity Analysis** - forecasts the catalytic economic impact on residential, office and retail development projected to complement the implementation of the Atlanta Streetcar system.

**Technical Memorandum 2B: TAD Revenue Forecasts** - provides estimates of assessed value and tax increment based on projections of future development for four key Tax Allocation Districts (TADs) associated with the Atlanta Streetcar system.

**Technical Memorandum 3: Ridership Modeling Analysis and Results** - documents the methodology, process, and results of the streetcar system's projected transit ridership using the ARC regional travel demand model.

Technical Memorandum 4: Environmental Justice Analysis – identifies environmental justice (EJ)

<sup>&</sup>lt;sup>1</sup>Connect Atlanta Plan website:

http://web.atlantaga.gov/connectatlanta/

<sup>&</sup>lt;sup>2</sup> Concept 3 Regional Transit Vision website:

http://www.atlantaregional.com/transportation/transit/transitplanning

<sup>&</sup>lt;sup>3</sup> Atlanta BeltLine Corridor Environmental Study Tier 1 Final Environmental Impact Statement (Tier 1 FEIS) website: <u>http://beltline.org/progress/planning/transit-planning/final-</u> <u>environmental-impact-statement/</u>



communities adjacent to the proposed streetcar projects and analyzes the potential impacts on travel time and access to employment.

**Technical Memorandum 5: Operations and Maintenance Analysis** - presents the proposed streetcar operating plans, associated operations and maintenance (O&M) costs, maintenance facility options, and transit integration strategies for the Atlanta Streetcar near-term expansion corridors.

**Technical Memorandum 6: Conceptual Engineering Analysis** – provides conceptual engineering for the Atlanta Streetcar near-term corridors including horizontal alignments and typical cross-sections.

**Technical Memorandum 7: Program Management Plan** - documents the overall management approach for the near term projects to guide project development and discussions between the City of Atlanta and local/federal project partners.

The SSP provides a strategic framework for implementation of short term priority streetcar projects and long-term build-out of the Atlanta Streetcar system.

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# SECTION 2: Transit in Atlanta

This chapter describes the context for streetcar implementation planning in Atlanta and the ability of the Atlanta Streetcar network to serve as a tool for last-mile connectivity and increased transit reliability. It will also describe how the Atlanta Steetcar can help meet the growing need for mobility resulting from increased population and employment in the City and the region.

A focus on an integrated regional transit system is critical to the success of the streetcar network the City is advancing:

- The existing MARTA system and regional express bus services (Georgia Regional Transit Authority (GRTA) Xpress, Cobb Community Transit, and Gwinett County Transit) are the backbone of transit connectivity in the region.
- The Atlanta BeltLine program includes implementation of a 22-mile loop for streetcar/light rail transit and is interconnected with the network of Atlanta Streetcar crosstown routes.
- Transit in the Atlanta BeltLine corridor will connect to MARTA rail in at least four locations.
- The Atlanta Streetcar, also connected to the MARTA rail system, provides increased mobility options for transit users by providing premium transit service to neighborhoods not served by MARTA rail and supports economic development in key job centers and visitor destinations.
- Other transit planning entities such as Cobb County are proposing to add new premium transit lines from the City to the suburbs.

The Atlanta BeltLine/Atlanta Streetcar System Plan (SSP) provides a system-wide approach for the integration of Atlanta Streetcar and the Atlanta BeltLine with existing and proposed regional transit projects.

The implementation of transit projects in Atlanta will help accommodate the transportation demands associated with growth in population and employment by orienting transit investments with residential and commercial redevelopment along transit corridors. More importantly, it will provide reliable service that supports time-competitive connectivity between activity centers throughout the City and region. The analysis presented in the *Connect Atlanta Plan* and *Atlanta BeltLine Tier 1 ElS* reveals population and employment densities within the inner core of the City that support the feasibility of premium transit technologies, such as modern streetcar/light rail.

# 2.1 Population, Employment, and Development Trends

According to ARC's Regional Snapshot (August 2012), the 10-county Atlanta region is now home to 4,179,500 people, a population that is larger than that of 24 states, according to the latest US Census Bureau figures. Between 2000 and 2010, metro Atlanta (28 counties) ranked third in overall growth in the nation, adding more than one million people. Only Dallas and Houston added more population during that same period. While the region's growth rate has tapered off, metro Atlanta is still ranked seventh in the nation in total population growth between 2010 and 2011, according to the latest estimates from the US. Census Bureau, adding almost 73,000 new residents. According to the same report, during the fast-growing 2000 decade, the Atlanta region was routinely adding 100,000 new residents each year. From 2010 to 2012, due to the recession, the region added approximately 72,000 new residents.

As population continues to grow, the distribution of employment in metropolitan Atlanta has implications on vehicle travel. Historically, transportation investment has occurred along highway corridors to steer private development to these areas. This has greatly impacted land use, housing choice, and travel patterns in the region.



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The separation of employment and lower density residential areas has resulted in longer commutes and less access to transit.

Over the next twenty years, the success of Atlanta will be determined by how it manages growth, with the City's population forecasted to grow as much as 40%. At the core of the Atlanta Metropolitan Statistical Area, Atlanta is expected to add 300,000 jobs between 2010 and 2030. The challenge for the City is to orient the growth to areas that will have better access to transit and are less reliant on automobiles. An estimated 8,450 housing units, 473,000 square feet of retail, and 1.65 million square feet of office development could be added to the City with the implementation of the Atlanta BeltLine/Atlanta Streetcar System Plan, with more than 70% of each type of growth occuring within Tax Allocation Districts<sup>4</sup>.

The City has targeted economic development in underserved areas with the purpose of ensuring that all of the City's residents have access to employment and affordable housing opportunities. Providing a reliable and integrated transit system throughout Atlanta will help provide connections that support future development along key transit corridors and serve existing residents. The Atlanta BeltLine/Atlanta Streetcar System Plan has been developed in response to these targets.

#### 2.2 Regional Transit Context

Transit service in the Atlanta region is provided largely by MARTA. It is focused on rail transit corridors and on key bus routes serving destinations throughout the region. In addition to MARTA, the Georgia Regional Transportation Authority (GRTA), Cobb Community Transit (CCT) and Gwinnett County Transit (GCT) operate express bus services to serve larger regional corridors with connections to central Atlanta. The Atlanta Streetcar network complements these corridor-based services and is planned to provide critical last-mile connectivity for regional express bus and MARTA rail transit passengers (see Figure 6) to urban neighborhoods and commercial centers surrounding the core of the City. Enabling increased access to transit and providing reliable and efficient transit services in areas targeted for growth will be key to accommodating the projected population and employment growth.

#### 2.3 Chronology of Transit Plans/Studies/Initiatives

Over a dozen planning efforts in the past decade have created a vision for transit and built a foundation for the development of the Atlanta Streetcar system. Table 1, provides a chronological description of key plans, studies, and initiatives that have directly influenced the advancement of transit in Atlanta.

### 2.3.1 Influence of the 2012 Transportation Investment Act

In 2011, the City, with technical support from ABI, submitted four streetcar projects for potential funding under the State of Georgia's Transportation Investment Act (TIA) initiative. In October 2011, the Atlanta Regional Transportation Roundtable, which was responsible for developing the list of transportation projects to be voted on in the 2012 referendum, apportioned \$602 million for City of Atlanta streetcar projects out of a total project list of \$6.1 billion for the Atlanta region. The final TIA list was adopted by the Atlanta Regional Transportation Roundtable on October 15, 2011 and the regional vote on the referendum was held on July 31, 2012.

The Atlanta metropolitan region ultimately voted not to support the 10-county regional transportation referendum. However, the majority of voters within the City of Atlanta, especially in precincts adjacent to the Atlanta BeltLine and Atlanta Streetcar projects, strongly supported the initiative. Building on this strong local support, the City of Atlanta, Invest Atlanta, and ABI are uniquely

<sup>&</sup>lt;sup>4</sup> For more on market projections and potential impacts of the Atlanta Streetcar Expansion, please see Appendix for the Atlanta Streetcar Expansion Technical Memorandum 2a: Market Impact of the Connect Atlanta Plan Transit Projects on the Atlanta BeltLine and Central City.





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#### Table 1: Transit Plans/Studies/Initiatives

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Year	Study	Description
2004	Peachtree Corridor Streetcar Feasibility Study	Atlanta Streetcar, Inc. (ASC) conducted a study to determine the feasibility of developing streetcar service along the Peachtree Corridor to complement MARTA and regional express systems. The study recommended the Downtown Loop (the current Downtown Streetcar project) to connect to the Peachtree Corridor system allowing easy circulation among key destinations for residents and visitors.
2005	Atlanta BeltLine Redevelopment Plan	The Atlanta BeltLine's initial redevelopment proposal to combine greenspace, trails, transit, and new development along 22 miles of historic rail projects that encircle Atlanta's urban core. The plan provided a framework for moving the project forward by determining the boundaries of a Tax Allocation District to provide a primary local funding source for the project.
2007	Inner Core Feasibility Study	The MARTA Inner Core Feasibility Study examined several transit options for the City of Atlanta and recommended the Atlanta BeltLine for inclusion in an Alternatives Analysis (AA). The purpose of the AA study was to identify and evaluate transit improvements within the Atlanta BeltLine corridor which could improve local and regional mobility, accessibility, and connectivity, as well as support the City of Atlanta's redevelopment plans.
2008	Connect Atlanta Plan	The <i>Connect Atlanta Plan</i> was adopted as the City of Atlanta's first official Comprehensive Transportation Plan (CTP) to evaluate and prioritize all modes of transportation including bicycle, freight, pedestrian, roadway, and transit facilities. It established a vision for linking Atlanta residents and visitors with their neighborhoods and employment centers along transit corridors.
2008	Concept 3 – The Atlanta Region's Long-range Transit Vision	<i>Concept 3</i> is the Atlanta region's official long-range transit vision. It was developed through a collaborative, multi-year effort led by the Transit Planning Board, a predecessor to today's Regional Transit Committee (RTC). The vision serves as the transit element of the aspirations plan of the PLAN 2040 regional transportation plan. <i>Concept 3</i> included an inner streetcar network with east-west on-street connections to the Atlanta BeltLine.
2009- 2012	Atlanta BeltLine SubArea Master Plans	The Atlanta BeltLine SubArea Master Plans propose land use recommendations, transportation improvement recommendations, and park master plans. Plans have been developed for the year 2035 based on a variety of data, including projections of population and employment growth, economic conditions, travel patterns and behaviors, and existing physical constraints and opportunities. The Atlanta BeltLine SubArea Master Plans serve as a guide for the growth of vibrant, livable, mixed-use communities, with a particular focus on transit-oriented development surrounding proposed station areas along the Atlanta BeltLine corridor.
2010	Atlanta Streetcar TIGER II Grant	The City of Atlanta was awarded a \$47.7 million TIGER II Grant for the Atlanta Streetcar. The project narrative described the Atlanta Streetcar as a critical connection of national, regional, and local significance, impacting tourism, economic development, and equity concerns. The proposal was supported by more than 50 letters of support from local business, metro area economic development, environmental and transportation organizations, including letters from Congressman John Lewis, Senator Saxby Chambliss, and Senator Johnny Isakson.
2010	Atlanta Streetcar EA	The Atlanta Streetcar NEPA Environmental Assessment found that the build alternative for the Atlanta Streetcar would support and enhance livability in the study area, contribute to long-term economic competitiveness in the Atlanta region, and provide a safe and convenient travel option. The build alternative of the Atlanta Streetcar was selected as the Locally Preferred Alternative. The FONSI (Finding of No Significant Impact) for the Atlanta Streetcar EA was issued by the FTA in March 2011.
2012	Transportation Investment Act	The TIA (see 2.3.1) project selection process involved extensive public input and feedback regarding potential streetcar projects, and served as a framework for the SSP near-term phasing plan.
2012	Atlanta BeltLine Corridor Environmental Study Tier 1 FEIS	The Federal Transit Administration (FTA), in cooperation with the MARTA and Atlanta BeltLine, Inc. (ABI), conducted a Final Environmental Impact Statement (FEIS) process to advance the transit component of the 22-mile Atlanta BeltLine Corridor. Findings concluded the streetcar as the selected transit technology due to its better performance in terms of identified impacts, costs and ROW requirements, as well as compatibility with future streetcar projects.
2012	The Downtown Atlanta Streetcar Project	Construction on the Downtown Streetcar's 2.7 track miles and 12 stops began in early 2012, with completion and beginning of revenue service expected in 2014. The route will connect Centennial Olympic Park, Georgia State University, and the Martin Luther King Jr. National Historic Site.
2012	Georgia Multi Modal Passenger Terminal (MMPT)	The Georgia MultiModal Passenger Terminal (MMPT) will bring together various bus and rail transit services in a centralized downtown Atlanta location. The Georgia MMPT is envisioned as the hub for existing and proposed transportation networks across the state, including the proposed Atlanta Streetcar system.
2013	City of Atlanta-ABI Transportation Services Agreement	The City of Atlanta and Atlanta BeltLine, Inc. executed a services agreement that allows the City to assign the management of transit and transportation projects outside the Atlanta BeltLine corridor to Atlanta BeltLine, Inc. with appropriate City oversight and funding.



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positioned to advance the implementation strategy for an integrated network of modern streetcar corridors that connect neighborhoods, employment, and activity centers throughout the city and the region.

#### 2.4 Integrating Atlanta BeltLine Transit and the Atlanta Streetcar

The City of Atlanta, Invest Atlanta, and Atlanta BeltLine, Inc. have advanced transit planning and implementation for two significant and separate projects, the Atlanta BeltLine and the Atlanta Streetcar. Both will augment Atlanta's current transportation options and urban form in ways that can improve the City's quality of life with increased transit options and accommodate future residential and employment growth. While these projects could be beneficial to Atlanta separately, the additional potential positive impact created by having them work in an integrated fashion will provide the multi-modal transportation alternatives, traffic congestion solutions, environmental sustainability, and urban reinvestment that is core to the objectives of the Connect Atlanta Plan and the Atlanta BeltLine 2030 Strategic Implementation Plan.

The Atlanta BeltLine/Atlanta Streetcar System Plan combines the planning for the Atlanta BeltLine transit Tier 1 Environmental Impact Statement with the planning for on-street transit corridors described in the Connect Atlanta Plan. This results in a network of transit service connected with MARTA bus and rail and regional bus transit services.

#### 2.4.1 The Atlanta BeltLine

The Atlanta BeltLine is the most comprehensive revitalization effort ever undertaken in the City of Atlanta and among the largest, most wide-ranging urban redevelopment and mobility initiatives currently underway in the United States. This program of projects is providing a network of public parks, multi-use trails and transit by re-using 22miles of historic railroad corridors circling downtown and connecting 45 neighborhoods directly to each other. Transit is at the heart of the Atlanta BeltLine. It was the key innovation proposed by Ryan Gravel's thesis in 1999.

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The original concept was to build public light-railtype transit on the 22-mile Atlanta BeltLine corridor, linking to the MARTA system in all four quadrants of the city. This idea carried over to the *Atlanta BeltLine Redevelopment Plan*, adopted by City Council in 2005. Since that time, Atlanta BeltLine, Inc., the City of Atlanta, Invest Atlanta, and MARTA have worked collaboratively to advance transit on the Atlanta BeltLine and in the city through planning studies and required federal environmental documentation.

#### 2.4.2 The Atlanta BeltLine Transit Vision

Today, the vision for Atlanta BeltLine transit is 22miles of modern streetcar/light rail service with stations located every half-mile along the corridor. Transit service will provide high quality, reliable transit circulation and mobility within the City of Atlanta, complement the adjacent greenway, parks and residential neighborhoods, catalyze and link development and communities along the corridor with business centers in Midtown, Downtown and Buckhead. The Atlanta BeltLine transit corridor will provide access to and from job centers through integrated routing with the Atlanta Streetcar crosstown lines and connections to MARTA rail



Since 2006, there has been more than \$775 million in new private development within a half mile of the Atlanta BeltLine Eastside Trail (view of Eastside Trail from Highland Ave. Bridge).



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throughout the region and connect to local and regional bus services including MARTA, CCT and GRTA. To preserve for future regional connections, the Atlanta BeltLine streetcar corridor will be designed to accomodate light rail vehicles.

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### 2.4.3 The *Connect Atlanta Plan* Transit Vision

The comprehensive transit element of the *Connect Atlanta Plan* is a proposed network of multi-modal corridors comprised of ninety-five miles of rail transit, bus rapid transit, light rail and streetcar lines along major corridors within the city. The *Atlanta BeltLine/Atlanta Streetcar System Plan* represents the majority of this future network. The key transit objectives of the *Connect Atlanta Plan* include the following:

- Build rapid transit infrastructure to and between areas of growth – both those areas already experiencing development and those areas that should and will draw activity in the future.
- Build a transit terminal for commuter and intercity rail to reinforce the City's role as the key government center and transit node in the region.
- Fundamentally rethink transit route structures to focus on activity centers and corridors so most transit riders in the City can reach their destinations with no more than one transfer.
- Diversify the rail and bus fleet by providing neighborhood feeders that provide short rides from areas of lower density to stations on the rapid transit lines.
- Provide travel alternatives including transit, bicycle facilities and effective sidewalks in congested areas.

#### 2.4.4 The Atlanta Streetcar Project

The Atlanta Streetcar is the result of a long-term vision for the proposed Peachtree Streetcar that featured a north-to-south route from the MARTA Brookhaven Station to the MARTA Lakewood/Fort McPherson Station and an east-to-west route connecting The M.L. King Historic District to the



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Modern Streetcar tracks at streetcar stop

Centennial Olympic Park area west of Peachtree Street. The 2.7-mile-long Downtown Streetcar project loop is the initial phase of the Atlanta Streetcar system. It is funded by a \$47.6 million Transportation Investment Generating Economic Recovery (TIGER) II Program grant, and through contributions from the City, the Atlanta Downtown Improvement District (ADID) and by grants from the Atlanta Regional Commission's Livable Centers Initiative.

The project, currently under construction, features modern streetcar. Modern streetcars are different from heritage/vintage streetcars, which utilize historic replica vehicles and older technologies and may focus more on a tourist market. Modern streetcar systems are a type of light rail transit characterized by modern design, low-floor vehicles, frequent stations, short service ranges, and mixed traffic operations within existing roadways. In the Atlanta BeltLine corridor, the streetcar will operate in mixed traffic for limited sections but the majority of the transit service will be in exclusive rights-ofway along the corridor.

Streetcars are smaller and lighter than commuter type LRT vehicles, allowing them to more effectively operate in mixed-traffic. Modern streetcar systems currently in operation in Portland, OR, Tacoma, WA, and Seattle, WA, have proven to be effective catalysts for local circulation, connectivity to



regional transit, urban redevelopment, and investment.



Low-Floor Vehicles with Level Boarding

The Atlanta Streetcar will have 12 stations providing access to residential, employment, cultural, educational, and historic centers and will connect with the MARTA rail system at Peachtree Center Station to provide easy access to jobs and downtown attractions. Through incremental expansion of the Downtown Streetcar, the Atlanta Streetcar system will provide greater connectivity and enhance the initial project's sphere of influence to attract more riders, provide wider access to jobs and destinations, and catalyze urban investments and transit-oriented development opportunities.

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### SECTION 3: Planning Process

This section summarizes the SSP planning process and the various inputs and methods used to derive a prioritized set of streetcar projects. The planning process was supported by a foundation of analyses, conceptual engineering, and planning documented in a series of technical memoranda. These documents can be found online and are described in Appendix: Technical Memoranda.

#### 3.1 Guiding Principles

The SSP planning process followed a linear approach based on a framework of guiding principles. The five guiding principles are: project readiness, practicality/ridership, equity, financial options, and development impact. These principles, which were developed by ABI in conjunction with the City and vetted through a community engagement process, were applied throughout every phase of the SSP process to ensure that the recommendations were consistent with the City's vision for streetcar corridor development. These principles and the considerations they address are described in Table 2. A comprehensive community engagement process was woven throughout the SSP planning process, beginning in early 2011. The SSP efforts attracted and involved residents, employees, large institutions and local business interests from around the City. A total of 765 people participated in meetings and online surveys.

To ensure that input was received from the public and stakeholders, the SSP utitlized both the ABI community engagement framework and additional stakeholder and neighborhood meetings outside of the Atlanta BeltLine study area. The objective of the community engagement strategy was to capitalize on community input that would guide the process and to have the public participate at key milestones throughout the study. Various strategies were utilized to inform the public of the purpose of the study, invite potentially impacted communities to participate in discussion, and to document ideas, perceptions, and opinions expressed throughout the planning process.

Most public involvement efforts, including Citywide Conversations, Study Group meetings, Stakeholder Advisory Committee/Technical Advisory Committee (SAC/TAC) meetings, and North Ave/10th St Stakeholder meetings were advertised via flyer distribution, notices to Neighborhood Planning Units and community groups, email blast, web posts on various organizations' websites, social media and direct calls to organizations' representatives.

#### 3.2 Community Engagement Process Overview

Guiding Principle	Description
Project Readiness	This principle considers a project's likelihood to be implemented in a relatively short timeframe.
Practicality/Ridership	This principle considers a project's effectiveness measured in terms of population and employment served and its ability to generate ridership. Combined with financial considerations, practicality also considers the cost effectiveness of a project.
Equity	This principle considers a project's benefit to economically disadvantaged populations.
Financial Options	This principle considers a project's ability to attract local and federal funding. Cost effectiveness and the ability to attract local investment are components of this principle.
Development Impact	This principle considers a project's potential ability to attract real estate development within the corridor.

#### Table 2: SSP Guiding Principles

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#### **Citywide Conversations**

A series of three public meetings, called Citywide Conversations, were conducted at key milestones throughout the study. The Citywide Conversations were intended to provide a forum for community education and dialogue related to the planning, design, and implementation of potential streetcar corridors. A combination of traditional open house and breakout sessions was the typical format used to allow participants to gain hands-on experience in evaluating the different Citywide streetcar transit projects. These meetings also provided educational opportunities on the implementation process with regard to funding alternatives and how to incorporate a regional outlook on criteria that should be used in prioritization.

#### **Peak Democracy Online Survey**

In March 2011, Atlanta BeltLine staff conducted an online survey using Peak Democracy to solicit comments on potential corridors to be considered for regional transportation referendum funding. The online survey was conducted to collect additional input from citizens who could not attend any of the public meetings. 380 people participated online.

#### Technical Advisory Committee/Stakeholders Advisory Committee (TAC/SAC) Meetings

Two committees were formed that would represent distinct stakeholder groups: the TAC, which was composed of federal, state and local government agencies, and the SAC, which was composed of local neighborhood business and association communities. Each committee met three times and provided guidance to ABI staff and the consultant team on issues or concerns that conflicted with the evolving implementation strategy. TAC/SAC membership encompassed a variety of community organizations, institutions and government agencies relevant to the Atlanta Streetcar. Names of committee members are found in the Acknowledgements section of this final report.

#### **Study Group Meetings**

Study Groups met as appropriate to develop, discuss and provide input on the planning, design and implementation issues related to the Atlanta



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#### **SSP Public Meetings**

BeltLine as a whole and to their immediate areas. The five Study Groups are geographically structured around approximately four Neighborhood Planning Units (NPUs) each and are comprised of all interested participants. Established meeting schedules are published by ABI. Study Group meetings were held in early 2011 to discuss the project and solicit feedback on potential referendum corridors. Additional Study Group meetings were held in Spring 2012 to solicit feedback on the North Ave/10<sup>th</sup> St cross-town corridor analysis.

#### North Ave/10<sup>th</sup> Street Stakeholder Meetings

In Spring 2011, Midtown Alliance (a non-profit organizaton dedicated to the revitalization of Midtown) advocated for an additional corridor to be studied in the implementation strategy. Tenth St.



was added as an alternative east-west streetcar corridor to be evaluated with North Ave. as potential crosstown connections linking east and west sides of the Atlanta BeltLine through Midtown. City and ABI staff met several times with corridor stakeholders including the Midtown Alliance, Georgia Institute of Technology, and the Coca-Cola Company to review and discuss the corridor analysis and evaluation results.

#### 3.3 Streetcar Project Prioritization Process

The general framework for prioritizing the streetcar projects was based on the SSP technical evaluation process. The process started with evaluating the performance of planning level transit corridors (Screen 1) to identify buildable transit segments (Screen 2) and then organize the buildable transit segments into prioritized streetcar projects. Figure 7 illustrates the screening process and steps followed to arrive at four priority phases for implementation:

- <u>Screen 1: Corridor Evaluation</u>: Evaluates all 19 planning level streetcar concept corridors against the five SSP guiding principles to determine how each serves the City's needs over time; and recommends a list of highperforming priority corridors to be advanced to Screen 2 based on a combined assessment of guiding principles and project readiness.
- Screen 2: Project Evaluation: Narrows the scope of analysis from the corridor level to the segment level by identifying a group of high-performing streetcar segments to be advanced to the Detailed Analysis phase for rigorous assessment and consideration for implementation as streetcar projects within the next five years. This was achieved by breaking down the Priority Corridors identified in Screen 1 into mutually-exclusive streetcar segments and then screening these segments based on a series of criteria measuring project readiness and practicality/ridership.

• Detailed Analysis of Priority Projects and Phasing: Utilizes the results of the technical evaluation process as the starting point for the detailed analysis and project prioritization phases. The nine projects identified in Screen 2 were rigorously analyzed to determine the optimal phasing for implementation.

Over the course of this process, the universe of SSP concept corridors was distilled down into the four phases. For the purpose of this effort, the phases are not tied to specific timeframes due to the uncertain nature of project development and funding availability. Rather, phases are provided as a general guide for prioritizing projects in sequential groups for future development.

Evaluation measures were developed based on the SSP guiding principles for each step of the technical evaluation process. As the process advanced and the corridors were refined into shorter, mutuallyexclusive projects, the level of analysis became more rigorous. A summary detailing the SSP evaluation measures is presented in Table 3.



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#### **Table 3: SSP Evaluation Measures**

	Corrid	ors	Segments		
Guiding Principles	Screen 1a Measures	Screen 1b Measures	Screen 2 Measures	Detailed Analysis / Segment Prioritization Measures	
Project Readiness	<ul> <li>✓ Conformance with Connect Atlanta Plan</li> <li>✓ Capital cost per mile</li> </ul>	<ul> <li>✓ Connectivity to Atlanta Streetcar</li> <li>✓ Absence of active freight rail</li> <li>✓ Initiation of NEPA / federal documentation</li> </ul>	<ul> <li>✓ Within Tier 1 DEIS Corridor</li> <li>✓ Connectivity to Atlanta Streetcar</li> <li>✓ Connectivity to potential MSF site</li> </ul>	<ul> <li>✓ Project cost per mile</li> <li>✓ Project risk assessment</li> </ul>	
Practicality / Ridership	<ul> <li>✓ Total boardings</li> <li>✓ Population + employment per acre</li> </ul>		<ul> <li>✓ Number of major activity and employment centers served</li> <li>✓ Number of MARTA stations served</li> <li>✓ Population per mile</li> <li>✓ Employment per mile</li> <li>✓ Segment boardings</li> <li>✓ Boadings per mile</li> </ul>	<ul> <li>✓ Connectivity to Atlanta Streetcar</li> <li>✓ Daily Ridership</li> <li>✓ Annual O&amp;M cost per rider</li> <li>✓ Annualized capital cost per rider</li> </ul>	
Equity	<ul> <li>✓ Percent of alignment within ETA as defined by ARC</li> <li>✓ Average transit travel time from corridors to major employment centers</li> </ul>		✓ Average ETA index of census tracts served	<ul> <li>✓ Average ETA score of adjacent census tracts</li> <li>✓ Travel time reduction from EJ zones</li> <li>✓ Jobs access benefits</li> </ul>	
Financial Options	<ul> <li>✓ Annualized capital cost per boarding</li> <li>✓ Potential capital and operating partners</li> </ul>		<ul> <li>✓ Contributes to build-out of common corridors</li> <li>✓ Annualized capital cost per annual boarding</li> <li>✓ Annual O&amp;M cost per annual boarding</li> </ul>	<ul> <li>✓ Estimated TAD attributable development value in adjacent subarea</li> <li>✓ New Starts/Small Starts project justification proxy rating</li> </ul>	
Redevelopment Impact	<ul> <li>✓ Percent of alignment within an Economic Development Priority Area as defined by the City of Atlanta</li> <li>✓ Median parcel utilization</li> </ul>		<ul> <li>✓ Atlanta Emerging Market Corridors and TADs served</li> <li>✓ Planning initiatives served</li> <li>✓ Compatibility with current zoning</li> <li>✓ Compatibility with future land use plans</li> </ul>	<ul> <li>✓ Estimated development value in adjacent subareas</li> </ul>	

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SECTION 4: Atlanta BeltLine/Atlanta Streetcar System Plan Phasing, Operations, Costs and Potential Funding

The proposed 63-mile-long Atlanta Streetcar system is sequenced into four phases beginning with the intial downtown Atlanta Streetcar project expanding to include the entire Atlanta BeltLine corridor and other key corridors as follows:

- Initial Project connects the Sweet Auburn and Old Fourth Ward neighborhoods with downtown and Centennial Olympic Park.
- Phase 1 extends the initial project of the streetcar system and establishes projects on the east and west sides of the Atlanta BeltLine with crosstown routes connecting to and through Downtown and Midtown.
- Phase 2 includes extensions of the east



and west Atlanta BeltLine corridors, along with two new extensions of the Atlanta Streetcar to the Atlanta University Center and Turner Field/Grant Park.

- Phase 3 further extends the west Atlanta BeltLine corridor and adds new connections to Midtown, Westside Park, Southwest Atlanta and Lakewood neighborhoods.
- Phase 4 completes the streetcar system by completing the 22-mile Atlanta BeltLine corridor loop and new connections from the south and north sections of Atlanta.

This chapter discusses the capital costs and the operating and maintenance costs of the streetcar projects in each phase. Next, the chapter presents an analysis of vehicle maintenance and storage facility sites and an overview of possible funding sources for implementing the streetcar network.

#### 4.1 Phasing Strategy

The recommended Atlanta Streetcar system phasing plan was developed based on the technical evaluation process summarized in Section 3.3. The system encompasses approximately 63 streetcar route miles inclusive of the initial streetcar project. Phase 1 includes 11.3 miles of streetcar corridors, Phase 2 includes 7.9 miles, Phase 3 includes 15.6 miles, and Phase 4 includes 25.1 miles.

Projects proposed for Phase 1 and Phase 2 begin streetcar service along the east and west sides of the Atlanta BeltLine corridor. These projects are linked by a key crosstown corridor, and together provide a solid foundation for future transit service expansion to the north and south in Phases 3 and 4.

Atlanta BeltLine Eastside Trail and Phase 1 Streetcar Corridor





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#### 4.1.1 Initial Project

The Atlanta Streetcar downtown project, funded through a federal TIGER II grant, the City, and the Atlanta Downtown Improvement District (ADID), is the system's initial streetcar project. This 2.7-mile long single track alignment connects the Sweet Auburn and Old Fourth Ward neighborhoods with downtown and Centennial Olympic Park. This initial phase of the Atlanta Streetcar system is currently under construction, with service scheduled to begin in 2014



Construction of Downtown Streetcar on Auburn Ave



Completed track of Downtown Streetcar on Edgewood Ave



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#### 4.1.2 Phase 1

Phase 1 extends the initial project of the streetcar system by 11.3 additional miles resulting in a total of 12.7 double track miles and establishes projects on the east and west sides of the Atlanta BeltLine. This package of projects establishes a loop system in the core of the central city leading to the Atlanta BeltLine, with crosstown routes connecting to and through Downtown and Midtown. Projects which would be built in this phase include the following:

- <u>Atlanta Streetcar East Extension Irwin St</u>
  - Termini: Atlanta BeltLine/Irwin St Auburn Ave/Jackson St
  - Description: 0.7-mile long project running along Jackson St and Irwin St or parallel corridor
- <u>Atlanta Streetcar West Extension Luckie St</u>
  - Termini: Andrew Young International Blvd/Centennial Olympic Park Dr – Luckie St/North Ave
  - Description: 1.0 mile long project running along A Young International Blvd, Park Ave West, and Luckie St
- <u>Crosstown/Midtown</u>
  - *Termini:* North Ave/Atlanta BeltLine DL Hollowell Pkwy/Atlanta BeltLine
  - Description: 3.7-mile long project running along North Ave, Northside Dr and DL Hollowell Pkwy
- East Atlanta BeltLine
  - Termini: Montgomery Ferry Road/Atlanta BeltLine – Atlanta BeltLine/Irwin St
  - Description: 3.0-mile long project running along the Atlanta BeltLine corridor

West Atlanta BeltLine

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- *Termini:* DL Hollowell Pkwy/Atlanta BeltLine – Atlanta BeltLine/RD Abernathy Blvd
- Description: 2.5-mile long project running along the Atlanta BeltLine corridor
- <u>Georgia Multi-Modal Passenger Terminal</u> (MMPT) Connector
  - o Termini: Luckie St ML King Jr Dr
  - *Description:* 0.4-mile long project running along Spring St or Forsyth St





#### 4.1.3 Phase 2

Phase 2 builds an additional 7.9 miles, bringing the system total of 21.9 miles. Extensions of the east and west Atlanta BeltLine corridors, along with two new extensions of the Atlanta Streetcar, are included in this phase. The following projects are included in Phase 2:

- <u>Southeast Atlanta BeltLine to Glenwood</u>
   <u>Park</u>
  - Termini: Bill Kennedy Way / Glenwood Ave – Atlanta BeltLine/Irwin St
  - Description: 2.2-mile long project running along the Atlanta BeltLine corridor and B Kennedy Wy
- Southwest Atlanta BeltLine
  - Termini: Atlanta BeltLine/RD Abernathy Blvd – MARTA Oakland City Station or MARTA West End Station
  - Description: 2.1-mile long project running along the Atlanta BeltLine corridor and on-street
- <u>Atlanta University Center East</u>
  - Termini: Forsyth St/MLK Jr Dr Fair St/JE Lowery Blvd
  - *Description:* 1.6-mile long project running along Peters St and Fair St
- Downtown / Grant Park
  - *Termini:* Peachtree St/Auburn Ave Georgia Ave/Cherokee Ave
  - Description: 2.0-mile long project running along Peachtree St, Trinity Ave, Capital Ave and Georgia Ave





#### 4.1.4 Phase 3

The Screen 2 projects which were not programmed in the first two phases are included in Phase 3. This phase includes 15.6 additional miles resulting in a system total of 37.5 miles. The following projects are included in Phase 3:

- <u>10<sup>th</sup> St</u>
  - *Termini:* Northside Dr/DL Hollowell Blvd
     Monroe Dr/Atlanta BeltLine
  - *Description:* 2.9-mile long project running along 10th St and Northside Dr
- <u>Atlanta University Center West</u>
  - Termini: Fair St/JE Lowery Blvd Atlanta BeltLine/Westview Dr
  - *Description:* 0.6-mile long project running along Fair St
- <u>Upper Westside South</u>
  - Termini: DL Hollowell Blvd/Atlanta BeltLine – Marietta Blvd/West Marietta St
  - Description: 1.1-mile long project running along the Atlanta BeltLine corridor (Marietta Blvd)
- Upper Westside North
  - *Termini:* Marietta Blvd/West Marietta
     St Perry Blvd/West Highlands Dr
  - Description: 2.2-mile long project running along Perry Blvd, Johnson Rd and West Highlands Dr
- Lakewood North
  - Termini: Georgia Ave/Capitol Ave Atlanta BeltLine/Pryor Rd
  - Description: 1.6-mile long project running along RD Abernathy Blvd and Pryor Rd
- Lakewood South
  - Termini: Atlanta BeltLine/Pryor Rd Lakewood Ave/Lakewood Wy

• *Description:* 1.7-mile long project running along Pryor Rd

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Greenbriar

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- Termini: MARTA Oakland City Station Greenbriar Pkwy SW/Headland Dr SW
- Description: 5.5-mile long project running through the proposed Fort McPherson redevelopment and along Campbellton Rd to Greenbriar Pkwy SW





#### 4.1.5 Phase 4

Phase 4 illustrates the long-term vision including additional 25.1 miles, resulting in a full build-out of the 63-mile Atlanta Streetcar System. Corridors which were not advanced from the Screen 1 evaluation are included in this phase and include the following:

- Northwest Atlanta BeltLine
  - *Termini:* Atlanta BeltLine / Marietta St Atlanta BeltLine/Armour Dr
  - *Description:* 4.2-mile long project running along Atlanta BeltLine
- Old Fourth Ward
  - *Termini:* Boulevard Ave / Ponce de Leon Ave – Boulevard Ave / Irwin St
  - *Description:* 1.1-mile long project running along Boulevard Ave
- <u>Peachtree Corridor</u>
  - Termini: 15<sup>th</sup> St/Peachtree St Peachtree St/Forsyth St
  - *Description:* 2.3-mile long project running along Peachtree St
- <u>Southeast Atlanta BeltLine: Glenwood Ave</u> to Lee St
  - *Termini:* Atlanta BeltLine / Glenwood Ave – Atlanta BeltLine/Lee St
  - *Description:* 4.3-mile long project running along the Atlanta BeltLine
- West End Grant Park
  - Termini: RD Abernathy Blvd/Lee St RD Abernathy Blvd/Pryor Rd
  - *Description:* 1.1-mile long project running along RD Abernathy Blvd
- <u>Atlantic Station</u>
  - *Termini:* Atlanta BeltLine 15<sup>th</sup> St/Peachtree St
  - Description: 2.2-mile long project running along 17<sup>th</sup> St

<u>Buckhead</u>

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- Termini: 15<sup>th</sup> St/Peachtree St –
   Peachtree Rd/Club Dr
- *Description:* 6.3-mile long project running along Peachtree Rd
- <u>Northeast Atlanta BeltLine</u>
  - *Termini:* MARTA Lindbergh Center
     Station Montgomery Ferry Rd
     /Atlanta BeltLine
  - *Description:* 1.9-mile long project running along the Atlanta BeltLine
- <u>Fort McPherson Greenbriar</u>
  - *Termini:* Fair St/Peters St Atlanta BeltLine/Lee St
  - *Description:* 1.8-mile long project running along Lee St





#### 4.2 Improving Connectivity

The Atlanta BeltLine/Atlanta Streetcar System Plan unifies the 22-mile long Atlanta BeltLine transit corridor with Connect Atlanta Plan crosstown streetcar projects into a 63-mile network of interconnected transit corridors. The Atlanta Streetcar network will connect with MARTA rail at the following stations:

- Buckhead
- Bankhead
- West End
- Oakland City
- Inman Park/Reynoldstown
- Lindbergh Center
- Arts Center
- North Avenue
- Peachtree Center
- Five Points
- Garnett
- Georgia Dome/GWCC/Phillips Arena/CNN
   Center

The Atlanta region relies on MARTA's rail transit to serve as the backbone of the regional transit system with the support of local bus service providing additional connectivity to communities, employment, and activity centers. The proposed streetcar system will be designed to serve as a last mile circulator, or feeder system, for MARTA, as frequent fixed-route service for commuters traveling between in-town destinations, and a circulator within neighborhoods and activity centers.

#### 4.3 Operational Concept

An operational concept was developed for the nearterm streetcar projects prioritized in Phase 1 and Phase 2. General operating assumptions assume a high frequency service required for the core transit system. Streetcar vehicles would run every 10 minutes during peak period, every 15 minutes during midday and weekends, and every 30 minutes during evening hours. Service would ideally operate 18 hours a day, on weekdays, Saturdays, Sundays and holidays. Streetcar operating plans and schedules would be designed to maximize ridership by:

- Minimizing transfers and offering greater opportunities for a one-seat ride;
- Providing crosstown connectivity between major destinations;
- Connecting to and providing service along the Atlanta BeltLine corridor; and
- Offering seamless transfers between the MARTA bus and commuter rail systems and other planned high-capacity transit projects.

#### 4.3.1 Operational Scenarios

Operating scenarios were developed to utilize Phase 1 and Phase 2 streetcar projects and provide connectivity throughout the Atlanta Streetcar system. Schematics of each operating scenario are presented in Figure 14 and Figure 15 with a summary of operating lines by phase and streetcar projects utilized. Below is a brief description of each operating scenario:

- Phase 1 expands the initial Downtown Streetcar project to two streetcar lines. Each line includes a one-way loop, running together in opposite directions, to provide bi-directional service between Midtown and Downtown Atlanta with connections to Southwest Atlanta BeltLine and Northeast Atlanta BeltLine corridors.
- Phase 2 expands Phase 1 to five streetcar lines providing service that connects Atlanta University Center (AUC), Grant Park, Southwest Atlanta BeltLine, Southeast Atlanta BeltLine and Northeast Atlanta BeltLine corridors to Midtown and Downtown Atlanta. Each corridor includes two streetcar lines operating together to provide connections to various destinations throughout the system.





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### 4.3.2 Interface with MARTA Rail and Bus Services

MARTA operates an extensive network of bus and rail transit throughout the City of Atlanta, and Fulton and DeKalb Counties. Integration with the proposed Atlanta Streetcar system can provide seamless service for existing and new transit riders.

Beginning in the early phases of corridor planning, City staff should collaborate with MARTA staff to evaluate modifications to existing MARTA bus and rail services to achieve optimal transit mobility across the existing bus, rail and evolving streetcar transit network.

By making service adjustments to optimize efficiency and coverage, the changes could potentially reduce network operating costs, increase transit ridership, provide service improvements for transit users and attract choice riders. Potential bus route integration strategies should be identified in more detail for future planning efforts to help achieve the following objectives:

• **Promote Operational Efficiencies** The Atlanta Streetcar system and MARTA rail and bus services should be coordinated to provide transit service that is reliable and delivered in the most efficient manner. By coordinating services, bus routes, rail and



**Bus Transfer at MARTA Rail Station** 

streetcar lines that overlap could be designed to complement each other and not result in competitive, redundant service.

#### • Achieve Cost Effective Service

Integration strategies can reduce redundant services to better maximize available operating resources and respond to financial constraints. Identifying bus routes that would offer redundant services once a streetcar route opens may be an opportunity for improvements elsewhere in the MARTA service area.

#### • Optimize Ridership Potential

The integration of services should provide a level of service that responds to ridership demand. Strategies could include designing feeder bus routes or limited stop bus service with Atlanta Streetcar service that supports seamless transfers between transit modes and connects desired origins and destinations throughout the region.

• Ensure Customer Focused Service

The services should meet existing and future travel needs by retaining existing MARTA customers while attracting new customers to the transit system. Atlanta Streetcar system lines are designed to be corridor-based so riders can better understand route alignments.

Introduce Neighborhood Transit Centers
 Transit services should complement each
 other by integrating neighborhood
 circulation with commuting trips by utilizing
 new transit facilities that support seamless
 transfer opportunities and better access
 between transit modes.

### 4.3.3 Vehicle Maintenance and Storage Facility

More than one vehicle maintenance and storage facility (VMSF) will be required to support streetcar operations. The VMSF will provide for midday/overnight storage, vehicle maintenance, routine cleaning, and servicing. Planning the



location and design of the VMSF is an integral component of ensuring optimal system operations and efficiency. For preliminary planning purposes, candidate areas to locate one or more streetcar maintenance facilities were examined relative to the following site requirements:

#### • System Connectivity & Proximity

The maintenance facilities should be in close proximity (less than one mile) of the streetcar alignment, to minimize construction of additional track for nonrevenue deadhead operations. A location close to an endpoint of the alignment can help minimize the operational costs associated with deadhead movements. Additionally, the site should be located to support initial phases of service.

#### • Sufficient Facility Size

Operational requirements include а potential fleet size of 20 streetcar vehicles for the Phase 1 and 40 vehicles for Phase 2. This estimate assumes a 20% spare ratio added to the estimated peak vehicle requirement to account for service interruptions and maintenance of vehicles. Using a general industry rule of thumb for VMSF size requirements of 0.2 – 0.3 acres per vehicle, a site and/or combination of sites at a total size ranging from eight to twelve acres is needed to support the expansion of the Atlanta Streetcar system through Phase 2.

#### Land Use Compatibility

Typical activities performed at streetcar maintenance facilities include vehicle repairs and maintenance during the day, late night and early morning hours, which is generally incompatible with residential areas. Industrial areas are generally preferred and more suited for this type of facility. Land use compatibility was determined based on current and future land use plans adopted by the City, as well as the Atlanta BeltLine Subarea Master Plans.

Streetcar maintenance facilities are often sited with industrial land uses. However, in some cities, streetcar maintenance facilities are being planned and located in non-traditional areas due to the limited availability of industrial properties in redeveloping urbanized areas. Further. maintenance facilities are being developed with smaller footprints to be less intrusive on surrounding land uses. Non-traditional approaches to siting streetcar maintenance facilities include locating under transportation infrastructures, such overpasses and bridges. highway Joint as development opportunities are also being considered to help fund the construction of these facilities, which may include placing the streetcar maintenance facility on the ground floor of a parking garage, as well as adjacent to public schools, parks and athletic fields. These facilities can support job creation requiring skilled labor in professional services, engineering, design, construction administration, architecture, and public art, as well as fostering other economic development opportunities.



Portland Streetcar Maintenance Facility Underneath Freeway Bridge Facility Size: 12,700 square feet Vehicle Capacity: 10 streetcars # Vehicle Maintenance Employees: 4

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Seattle Streetcar Maintenance Facility Adjacent to Residential Neighborhood Facility Size: 9,200 square feet Vehicle Capacity: 3 streetcars Vehicle Maintenance Employees: 3



Atlanta Streetcar Vehicle Maintenance Facility underneath I-75/I-85 Downtown Connector (under construction) Facility Size: 11,767 square feet Vehicle Capacity: 6 streetcars Vehicle Maintenance Employees: 10 The preceding images provide examples of streetcar maintenance facilities in Seattle, WA, Portland, OR, and Atlanta. Seattle's relatively small facility is adjacent to a mid-rise apartment development, with room for development and/or expansion of the facility. Similar to what is planned for the Downtown Streetcar, Portland's maintenance facility is located underneath a freeway overpass, utilizing land previously used for parking that was considered unsuitable for development for other uses.

Figure 16 displays potential maintenance facility locations considered the most suitable based on these site requirements. More detailed site selection and location analysis in future study efforts should include the consideration of existing maintenance facilities, functional layouts and topography for candidate sites, environmental justice issues, capital cost estimates for site development, property acquisition and environmental impacts.





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#### 4.4 Costs and Funding

Significant resources and a long-term financing strategy will be needed to advance a 63-mile system envisioned for the Atlanta Streetcar. The system will not be built all at once – it will be built incrementally over time as resources become available to build streetcar expansion projects and operate the transit vehicles. Annual cost estimates to construct, operate and maintain the Atlanta Streetcar system were created based on the phasing strategy described in Section 4.1. Potential funding sources were identified to help pay for the associated costs for implementing and operating the streetcar system over the next 30 years.

#### 4.4.1 Capital Costs

The development of conceptual capital cost estimates are based on general unit costs adopted from data from similar transit projects in Tacoma and Seattle and projected costs for the Tucson Streetcar and Atlanta Streetcar. Capital costs generally include costs associated with tracks, power systems, overhead catenary wires and poles, street reconstruction, stations, utility relocation, property acquisition, vehicles, planning and engineering.

Table 4 presents the estimated capital costs in 2012 dollars, which does not include the additional costs to construct supporting maintenance facilities.

#### 4.4.2 Operating and Maintenance Costs

Operating and maintenance costs describe the ongoing cost to operate and maintain the streetcar service on an annual basis once revenue service begins. Operating and maintenance costs are comprised of labor costs associated with vehicle operators and maintenance workers, electrical power, vehicle maintenance, track maintenance, station maintenance, and administrative services. Operating and maintenance cost estimates are based on the annual revenue vehicle hours of service required by each streetcar line presented in the annual operating plan. The following tables provide a summary of annual revenue vehicle hours and operating and maintenance costs for Phase 1

#### Table 4: Recommended System Phasing Plan by Segment / Corridor

Segment / Corridor	Length	Estimated Capital Cost
Initial Project		
Downtown Streetcar	2.70	
Phase 1		
ATL SC Ext East - Irwin	0.69	\$37,560,000
ATL SC Ext West - Luckie	1.07	\$54,100,000
Crosstown / Midtown	3.69	\$226,984,000
East Atlanta BeltLine	3.03	\$145,378,000
West Atlanta BeltLine	2.46	\$174,621,000
ММРТ	0.38	\$22,800,000
Phase 1 Total:	11.3	\$661,443,000
Phase 2		
Southeast Atlanta BeltLine to Glenwood Park	2.19	\$172,308,000
Southwest Atlanta BeltLine	2.13	\$110,570,000
AUC East	1.56	\$96,184,000
Downtown - Grant Park	2.02	\$118,559,000
Phase 2 Total:	7.9	\$497,621,000
Phase 3		
10th Street	2.88	\$228,204,000
AUC West	0.62	\$37,200,000
Upper Westside North	2.15	\$129,000,000
Upper Westside South	1.09	\$65,400,000
Lakewood North	1.63	\$97,800,000
Lakewood South	1.71	\$102,600,000
Greenbriar	5.51	\$330,600,000
Phase 3 Total:	15.6	\$990,804,000
Phase 4		
Northwest Atlanta BeltLine	4.16	\$249,600,000
Old Fourth Ward	1.11	\$66,600,000
Peachtree	2.29	\$137,400,000
Southeast Atlanta BeltLine	4.33	\$259,800,000
West End - Grant Park	1.09	\$65,400,000
Atlantic Station	2.21	\$132,600,000
Buckhead	6.27	\$376,200,000
Northeast Atlanta BeltLine	1.92	\$115,200,000
Fort McPherson - Greenbriar	1.76	\$105,600,000
Phase 4 Total:	25.1	\$1,508,400,000
SYSTEM TOTAL:	62.6	\$3,658,268,000

#### and 2 segments in 2012 dollars.

### 4.4.3 Potential Funding Sources

A range of funding options will need to be identified to support building and operating the system over the next 20 to 30 years. As each streetcar project is programmed for implementation, how it is funded may vary depending on the local and federal funding availability.

Most new transit systems use a combination of federal, state, regional, and local funding to pay for the capital costs to implement a project. Table 7 presents potential federal funding sources that reflect the recently passed *Moving Ahead for Progress in the 21st Century* (MAP 21) federal surface transportation legislation.

#### Implementation of the streetcar

system will also result in an increase in the transit operating costs for the Atlanta region. Similar to capital costs, long term operating funding will likely reflect a combination of multiple sources. However, it is critical to initiate the discussions among the public and private partners that would benefit from the proposed service to identify which potential sources have the most political support to carry forward for further evaluation. The fares collected on the streetcar system are used to fund the operating costs, but typically only cover a fraction of the total cost. Table 8 provides potential operating funding sources that could be pursued.

Table 9 provides a summary of the strategies used by twelve streetcar systems either recently implemented or lines that will be implemented in the near future to fund the capital costs. As shown in the table, the majority of the new streetcar lines utilized a variety of federal, state, regional and local funding sources. These systems utilize a variety of sources to fund operating costs based on local policies and legislation in place.

#### Table 5: Summary of Operating Requirement (Phase 1)

ROUTE	ROUND- TRIP ROUTE- MILES	VEHI	CLE REQUIR SPARES	EMENT TOTAL	ANNUAL REVENUE VEHICLE HOURS	ANNUAL O&M COST (2012 DOLLARS)
1A	14.93	10	2	12	41,800	\$9,759,464
1B	8.82	6	1	7	24,950	\$5,825,326
Total	23.75	16	3	19	66,750	\$15,584,790

#### Table 6: Summary of Operating Requirement (Phase 2)

ROUTE	ROUND- TRIP ROUTE-	VEHI	CLE REQUIRI	EMENT	ANNUAL REVENUE VEHICLE	ANNUAL O&M COST (2012 DOLLARS)
	IVIILES		51 / 1125	TOTAL	HUUKS	
2A	22.4	8	2	10	33,040	\$7,714,179
2B	14.32	6	1	7	24,950	\$5,825,326
2C	20.32	8	2	10	33,040	\$7,714,179
2D	14.52	6	1	7	24,950	\$5,825,326
2E	11.4	5	1	6	20,570	\$4,802,684
Total	82.96	33	7	40	136,550	\$31,881,694

#### **Table 7: Potential Capital Funding Sources**

	Funding Sources	Description
	Congestion Mitigation and Air Quality (CMAQ) Improvement Program	These funds are available for transportation projects likely to contribute to the attainment or maintenance of a national ambient air quality standard. In order to be eligible, projects must demonstrate a high level of effectiveness in reducing air pollution, and be included in the MPO's currently adopted LRTP and TIP.
	FTA Section 5309 Fixed Guideway Capital Investment Grant Program	The New Starts Program is for projects with capital costs exceeding \$250 million and provides federal funding for up to 50 percent of a project's capital cost. The Small Starts Program is for fixed guideway projects with capital costs less than \$250 million and provides grant funding up to \$75 million.
5	Surface Transportation Program (STP)	This program provides flexible funding for projects to preserve and improve the conditions and performance on any Federal-aid highway, bridge and tunnel projects on any public road, pedestrian and bicycle infrastructure, and transit capital projects, including intercity bus terminals.
	Transportation Alternatives Program (TAP):	MAP 21 established a new competitive grant program to provide for funding a variety of alternative transportation projects, including many that were previously eligible activities under separately funded programs. The TAP replaces the funding from pre-MAP-21 programs including Transportation Enhancements, Recreational Trails, Safe Routes to School, and several other discretionary programs, wrapping them into a single funding source.
	Transportation Infrastructure Finance and Innovation Act (TIFIA) Program	TIFIA provides Federal credit assistance (financing) for eligible projects of regional and national significance. The TIFIA program is designed to fill market gaps and leverage substantial private and other non-federal co-investment by providing supplemental and subordinate capital to projects.
	USDOT Competitive Grants	Over the last several years the USDOT has issued notices of availability for competitive grants applications include four rounds of Transportation Investment Generating Economic Recovery (TIGER) grants, Urban Circulator grants, Bus and Bus Livability Grants, and State of Good Repair Grants.
	Georgia Transportation Infrastructure Bank (GTIB)	GTIB may be utilized to finance capital costs for eligible roadway projects. However, transit projects are currently ineligible due to the fact that the primary funding source for the program is the motor fuel tax.
זר	Rental Car Taxes	States may authorize local implementation of rental car excise taxes, which are assessed on a percentage or flat-fee basis.
019	Special-Purpose Local- Option Sales Tax (SPLOST)	Local option sales taxes are taxes imposed by a jurisdiction on itself for retail goods and services to pay for capital projects. Georgia authorizes counties to levy a 1% sales tax.
	State General Funds	Transportation projects may be appropriated through a state's general fund on a project-by-project basis. The funds can come from a variety of sources including state sales and income taxes.
	Corridor Improvement District	A Corridor Improvement District is designed to assist economic development and redevelopment in established commercial districts. It allows communities to combine tax dollars from a variety of sources to leverage economic development dollars to make capital improvements.
	Parking Fees	Some cities levy taxes on their parking facilities to generate funds for congestion, air pollution and sprawl mitigation measures. Parking taxes are best suited to central city areas where the need for parking is greatest.
	Payroll Taxes	Employer, or payroll, taxes are levied on a corporation's gross payroll within a transit district and could be employed and administered by a state agency. These taxes must be authorized at the state level, and are usually subject to voter approval at the local level. This source may require a change in state laws.
5	Property Taxes	Property taxes can fund transit improvements, both at the county and/or city level.
8 2 2	Special Purpose Local Option Sales Tax (SPLOST)	Local option sales taxes are taxes imposed by a jurisdiction on itself for retail goods and services to pay for capital projects. Georgia authorizes counties to levy a 1% sales tax.
	Tax Allocation Districts (TADS):	Special taxation districts are created to finance a wide range of projects, including public transportation and assess an extra levy on property owners within a district in order to finance special projects.
	Hotel/Motel Taxes	States may authorize local implementation of hotel/motel taxes, which are assessed on a percentage basis.
	Private Participation	Funding support from the private sector reflects a combination of businesses within an existing improvement or assessment district agreeing to add funding for a streetcar project as part of the district's existing expenditure plan; partnerships with a local energy provider; and donations.

#### **Table 8: Potential Operating Funding Sources**

Funding Source	Description
Fare Revenue	Includes all fares received from passengers, paid either in cash or through pre-paid tickets, passes, etc. An initial order of magnitude on the potential level of fare revenue that corridors would generate is provided by reviewing the existing fare box recovery ratio for MARTA (approximately 22%). Fare box recovery ratio is the share of total operating costs fare revenues cover. In future phases of the project development process, detailed ridership projections will be developed which will allow for the identification of potential fare revenue estimates.
Reallocation of Existing Fixed Route Bus Service Costs within the Corridor	A key planning component of the project development process is the development of an integrated service plan that reflects the incorporation of the proposed streetcar line into the existing bus route network. An outcome of this service plan could be the reduction of fixed route bus service hours and miles reflecting the elimination of duplicative services with the streetcar line or the reorientation of bus service to use the streetcar as a circulator and distributor. The operating cost savings from this reduction could be reallocated to support operating costs related to the implementation of the streetcar.
Congestion Mitigation and Air Quality Improvement (CMAQ) Program	In addition to supporting implementation of capital projects, CMAQ funding is also eligible to support the first three years of operation of a new transit service. The City would have to work with the regional partners on the MPO to identify realistic annual levels of CMAQ funding that could assist with the first three years of streetcar service.
City General Funds	Once the streetcar operating plan and annual O&M costs are finalized, the City could provide an annual operating subsidy for the project. This could be a specified annual amount or annual percent share of O&M costs.
Contributions from Private Partners	For major employers and/or other activity centers served directly by the streetcar line, a revenue structure could be established where the employer / activity center purchases a set number of tickets per year or pays an agreed upon share of operating costs relative to the benefits the streetcar line provides.
Naming Rights/Sponsorships	This potential source reflects a form of revenue participation provided through the provision of equity investments for a project. In return, sponsors receive a combination of advertising, promotion of image, and/or a commitment that their products will be used by the entity they are sponsoring. Sponsorships have become an increasingly important mechanism for funding large public projects, such as stadiums, aquariums, and rail transit projects that attract large attendance and/or provide high visibility.
Advertising Revenue	This could include revenues derived from advertisements placed inside and/or outside the vehicles; at stations; and/or in schedules, maps, flyers, and other promotional materials. Additionally, a potential emerging source of advertising revenue is from smart phone apps that provide passengers with real time travel information.
Special-Purpose Local- Option Sales Tax (SPLOST)	Local option sales taxes are taxes imposed by a jurisdiction on itself for retail goods and services to pay for capital projects. Georgia authorizes counties to levy a 1% sales tax. In addition to potentially supporting construction of the streetcar line, a future voter-approved dedicated transportation funding source could also provide a long term operating funding source for the streetcar.
Parking Fees	A parking fee is a tax or surcharge levied on paid parking. The fee could be applied within the City limits or along the specific streetcar corridors for the use of off-street commercial or employer provided parking spaces. If applied within the streetcar corridors, there would be some degree of relationship between traffic and parking within the corridor relative to parking requirements and parking tax.
Hotel/Motel Taxes	In the future, the State of Georgia may authorize local implementation of hotel/motel taxes, which are assessed on a percentage basis.
Rental Car Taxes	In the future, the State of Georgia may authorize local implementation of rental car excise taxes, which are assessed on a percentage or flat fee basis

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Lotal Construction         Seattle First Hill Line           0.95         0.75         0.75         0.75         0.75         0.74           1.14         mi, opens 2012)         mi, opens 2012)         mi, opens 2012)         mi, opens 2012)           1.15         mi, opens 2012)         mi, opens 2012)         mi, opens 2012)         mi, opens 2012)           1.15         mi, opens 2013)         mi, opens 2013)         mi, opens 2013)         mi, opens 2013)           1.15         mi, opens 2013)         mi, opens 2013)         mi, opens 2013)         mi, opens 2013)           1.15         mi, opens 2013)         mi, opens 2013)         mi, opens 2013)         mi, opens 2013)           1.15         mi, opens 2013)         mi, opens 2013)         mi, opens 2013)         mi, opens 2013)           1.15         mi, opens 2013)         mi, opens 2013)         mi, opens 2013)         mi, opens 2013)           1.15         mi, opens 2013)         mi, opens 2013)         mi, opens 2013)         mi, opens 2013)           1.15         mi, opens 2013)         mi, opens 2013)         mi, opens 2013)         mi, opens 2013)           1.16         mi, opens 2013)         mi, opens 2013)         mi, opens 2013)         mi, opens 2013)           1.15         mi, opens 2013)
Total Costs       \$103.2       \$148.3       \$52.1       \$140.0       \$187.8       \$110.4       \$37.0       \$92.7       \$37.2       \$39.5       \$83.0       \$61.         Federal       \$7.0       \$75.4       \$14.9       \$0.0       \$69.0       \$35.9       \$25.0       \$47.6       \$26.0       \$18.0       \$26.0         FTA Small Starts       \$75.0       \$75.0       \$60
Federal         \$7.0         \$75.4         \$14.9         \$0.0         \$69.0         \$35.9         \$25.0         \$47.6         \$26.0         \$18.0         \$26.0           FTA Small Starts         \$75.0                  \$26.0
FTA Small Starts Exempt \$75.0 \$6.0
FTA Small Starts Exempt \$6.0
FHWA Funds         \$5.0         \$14.9         \$14.0         \$4.0         \$6.0
USDOT – TIGER Grants \$2.0 \$63.0 \$10.9 \$47.6 \$26.0 \$18.0 \$26.
USDOT - Urban Circulator \$25.0 \$25.0
Grant
USDOT – Stimulus Funds \$0.4
State         \$2.1         \$20.0         \$3.0         \$0.0
Connect Oregon \$2.1
State lottery funds   \$20.0
Florida DOT \$35.7
State General Funds \$3.0
Regional         \$10.0         \$3.6         \$0.0         \$14.0         \$4.0         \$0.0         \$6.5         \$0.0         \$6.0         \$15.0
Regional Transportation Funds   \$10.0   \$3.6
Toll Road Revenue     \$15.
UTA Vehicles & ROW Donation \$18.3
ARC Livable Centers Initiative
Program US Construction of the second
Local \$64.7 \$33.8 \$8.5 \$140.0 \$101.6 \$64.0 \$12.0 \$32.6 \$11.2 \$3.5 \$29.3 \$20.4
Local Sales Tax \$140.0 \$75.0 \$20.
General Funds         \$1.8         \$6.1         \$12.0         \$21.8         \$11.2         \$18.8
Parking Bond \$28.6
Parking Fund \$2.0
Transportation Fund \$2.3
Bond Proceeds \$26.6 \$64.0
Tax Increment Finance District   \$21.5   \$3.5
Portland Development \$27.7
Commission
Sale of Property         \$3.1         \$8.5
Land Donation \$10.5
Savings from other capital
projects
Tram Transfer \$0.2
Transportation Systems \$2.5
Development
Misc. \$2.1
Recovery Zone Bond \$10.8
Private         \$19.4         \$15.5         \$25.7         \$0.0         \$3.2         \$6.5         \$0.0         \$6.0         \$0.0         \$5.0         \$0.0
Improvement/Assessment \$19.4 \$15.5 \$25.7 \$6.0
District
Duke Energy         \$6.5         \$5.0
Gadsden Company \$3.2

### Table 9: Capital Funding Strategies of Recent Planned and Implemented Streetcar Projects

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### SECTION 5: Next Steps for Implementation



**Streetcar with Transit Oriented Development** 

The City is uniquely positioned to advance streetcar transit planning and implementation that will connect neighborhoods, employment and activity centers throughout the City and the region. The next steps for expansion of the Atlanta Streetcar and development of streetcar service in the Atlanta BeltLine corridor includes proceeding with environmental documentation and defining local transit capital and operational funding sources that can attract private and federal support for engineering, final design and implementation.

#### 5.1 Project Development

Building off the completed Tier 1 EIS and the recommended phasing strategy described in Section 4, ABI is completing the Tier 2 environmental documentation and advanced conceptual engineering for the Phase 1 projects and Atlanta BeltLine corridor Phase 2 projects. Environmental documentation will include refinements of ridership potential and evaluation of capital costs, land use,

economic development, and environmental impacts. Public and stakeholder input during the project implementation process will continue to be a priority. Simultaneously, the City, ABI and Invest Atlanta will develop the financial plans and delivery approaches for these projects with a focus on potential public-private partnerships that would help achieve the goals for development of the streetcar system.

It is anticipated that these tasks can be completed within a 2-3 year timeframe, allowing the City and ABI to compete for large scale federal grants and advance local funding initiatives as needed. Projects will then advance to final engineering, construction documentation and specifications. It is anticipated that federal funding and financing will be sought for the recommended streetcar projects. A program management plan will be developed to serve as a management tool to guide the project sponsors (City of Atlanta, Invest Atlanta, ABI and the Community Improvement Districts, as applicable) through the implementation of the streetcar project(s).

### 5.1.1 Status of Environmental Documentation

In consultation with the Region IV office of the FTA, Environmental Assessments (EA) were determined to be the preferred level of environmental documentation required for Phase 1 and Atlanta BeltLine Corridor Phase 2 projects. It is expected that the EAs will take 18-24 months to complete.

#### 5.2 Community Engagement

The Atlanta BeltLine Community Engagement Framework, described in Section 3.2, is currently structured to provide community engagement for the Atlanta BeltLine corridor. Corridors proposed for expansion of the Atlanta Streetcar on city streets and not in the Atlanta BeltLine corridor are currently not covered by the Atlanta BeltLine Community Engagement Framework. In order to provide consistency across all the Atlanta Streetcar transit planning efforts, it is recommended that a similar framework be implemented for the projects outside the Atlanta BeltLine corridor.



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#### 5.3 Transit Funding

As described in Section 4, capital and operating funding strategies need to be identified to support building and operating the system into the future. Currently, there are no dedicated funding sources for capital and operational expenses for the projects listed in Table 10. For capital funding, it is assumed that these corridors will rely on the federal New Starts program, but this only covers 50% of the capital costs of the project. The remaining 50% would need to be provided from local sources. For the City of Atlanta, Invest Atlanta and ABI, identifying these local sources will need to be a priority in the coming years as the projects advance through the environmental documentation towards final design and engineering.

Sources for transit operations funding are also described in Section 4. Sources of operations funding for the Downtown Streetcar include fare box revenue, advertising, contributions from Atlanta Downtown Improvement District (ADID), Atlanta car rental and hotel motel tax, and federal funds. This funding package was developed for the Downtown Streetcar only, and will not be enough to support the operations for the proposed expansion projects. New operation funding strategies will need to be developed for these expansion projects.

Long-term operation funding strategies are being considered in other cities providing transit services. A few of these are described in Table 8 in Section 4. A long term funding source for operations will help to provide the consistency and reliability the City's future transit customers will be expecting. Identifying this funding source will be another high priority for the City of Atlanta, Invest Atlanta and ABI.

#### 5.4 Next Steps Summary

#### **Table 10: Next Steps for SSP Projects**

Next Step	Action Item
Project Development	Complete Environmental documentation for SSP projects: East Atlanta BeltLine, Southeast Atlanta BeltLine to Glenwood Park, Atlanta Streetcar Extention East-Irwin Street, Atlanta Streetcar Extention West - Luckie Street Initiate environmental documentation for SSP projects: West Atlanta BeltLine , Southwest Atlanta BeltLine , and Crosstown/Midtown
Community Engagement	<ul> <li>Develop Community Engagement</li> <li>Framework to cover Atlanta Streetcar</li> <li>Extension corridors not in the Atlanta</li> <li>BeltLine corridor: <ul> <li>Initiate Streetcar Study Groups</li> <li>Develop project stakeholder and technical advisory committees</li> </ul> </li> <li>Keep all Atlanta BeltLine Study Groups informed on SSP Project</li> </ul>
Transit Funding/Financing	<ul> <li>Development</li> <li>Develop Financial Plans for expansion projects including recommended approaches to fill funding gaps for capital construction, operations and maintenance.</li> <li>Evaluate the potential of a Public-Private Partnership to help the City expand streetcar including conducting initial outreach to private sector.</li> </ul>



### Appendix: Technical Memoranda

The SSP is supported by a foundation of analyses, conceptual engineering, and planning documented in a series of technical memoranda. <u>These documents can be found online</u> in Appendix: Technical Memoranda. The Technical Memoranda are available at the following link and are summarized below:

http://beltline.org/progress/planning/transit-planning/transit-implementation-strategy/

**Technical Memorandum 1: Planning Process and Technical Evaluation Methodology and Results** - documents the SSP planning process, the methodology, and the results of the technical evaluation and screening of the universe of streetcar projects. This process informed the selection of corridors and prioritized projects organized into four implementation phases.

**Technical Memorandum 2A: Market Analysis and Development Capacity Analysis** - forecasts the catalytic economic impact on residential, office and retail development projected to complement the implementation of the Atlanta Streetcar system.

**Technical Memorandum 2B: TAD Revenue Forecasts** - provides estimates of assessed value and tax increment based on projections of future development for four key Tax Allocation Districts (TADs) associated with the Atlanta Streetcar system.

**Technical Memorandum 3: Ridership Modeling Analysis and Results** - documents the methodology, process, and results of the streetcar system's projected transit ridership using the ARC regional travel demand model.

**Technical Memorandum 4: Environmental Justice Analysis** – identifies environmental justice (EJ) communities adjacent to the proposed streetcar projects and analyzes the potential impacts on travel time and access to employment.

**Technical Memorandum 5: Operations and Maintenance Analysis** - presents the proposed streetcar operating plans, associated operations and maintenance (O&M) costs, maintenance facility options, and transit integration strategies for the Atlanta Streetcar near-term expansion corridors.

**Technical Memorandum 6: Conceptual Engineering Analysis** – provides conceptual engineering for the Atlanta Streetcar near-term corridors including horizontal alignments and typical cross-sections.

**Technical Memorandum 7: Program Management Plan** - documents the overall management approach for the near term projects to guide project development and discussions between the City of Atlanta and local/federal project partners.



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