

Decatur Belt Abandonment Technical Review Committee Findings Report

March 20, 2009

Prepared by:



Transit Implementation Board
WORKING TOGETHER – CONNECTING OUR REGION



TABLE OF CONTENTS

Overview of Findings

Purpose of Report	1
Description of Decatur Belt	1
Description of West Trunk	4
Summary of Evaluation	5
Summary of Findings	7

Background Information and Assumptions

Freight Rail	9
Amtrak	9
Commuter Rail	12
High Speed Rail	14
Multi-modal Passenger Terminal	16

Detailed Analysis of Alternatives

Northside Amtrak Station Location	18
Passenger Rail Operations	20
Potential Environmental Impacts of Alignment Alternatives	31
Regional Transit Planning Coordination	32
Development Impacts	34
Order of Magnitude Costs	35

Appendices

Technical and Executive Team Members	A
Amtrak Alternative Station Analysis Matrix	B
Preliminary West Trunk Freight Relief Options	C
Amtrak Alternative Site Memoranda	D
Long Range Regional Transit Planning Context Memo	E

1. Overview of Findings

1.1 Purpose of Report

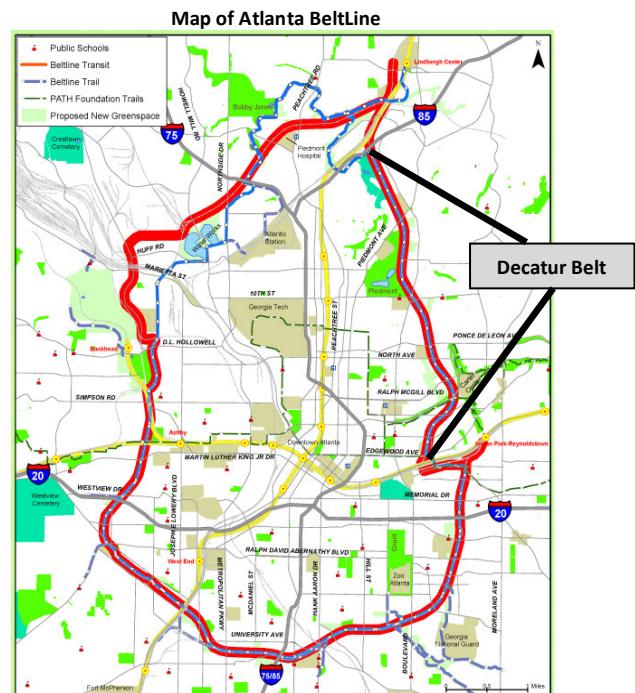
This report was prepared in conjunction with a technical analysis of the proposed abandonment of the Decatur Belt in Atlanta, Georgia. The report authors include representatives from Atlanta BeltLine, Inc., Georgia Department of Transportation (GDOT), City of Atlanta, Metropolitan Atlanta Rapid Transit Authority (MARTA), Amtrak, Atlanta Regional Commission (ARC), Georgia Regional Transportation Authority (GRTA) and the Transit Implementation Board (TIB). A detailed list of committee members may be found in Appendix A.

The analyses included in the report pertain to the potential use of the Decatur Belt for passenger rail and/or BeltLine transit, trails and development. The report intentionally excludes a detailed analysis of freight capacity in or through the metro-Atlanta region.

Because the report was prepared during a 30-day time period, reliance was placed on previous studies and supplemented with independent analyses by the authors and their consultants. Certain assumptions and recommendations will be elaborated upon and validated through additional studies including a State-wide Rail Capacity Study to assess the existing and future needs for growing freight and passenger service. The authors of this report intend that such a Study would adhere to federal requirements to allow Georgia to qualify for federal funding for design and construction of future rail improvements.

1.2 Description of Decatur Belt

The Decatur Belt is a 4.3 mile rail spur located in northeast Atlanta and formerly owned by Norfolk Southern Railway (NSR) that was subsequently sold to Atlanta BeltLine, Inc. (ABI). The spur extends from the NSR rail connecting Atlanta and Charlotte to Decatur Street. However, due to extensive redevelopment in the area and the relocation of industrial facilities, the spur has been inactive for over 8 years.



ABI purchased the Decatur Belt in 2007 as a part of the BeltLine project. An ambitious urban redevelopment project connecting 45 intown neighborhoods with a 22 mile transit loop and 33 miles of multi-use trails, the BeltLine provides new mobility options for Atlantans. Portions of the project are currently in design and construction. Over \$300M in public and private funds have already been invested in the BeltLine. Plans for the project include the construction of a new public realm complete with brownfield redevelopment, affordable housing, economic development, greenspace, bike and pedestrian trails, new parks and light-rail transit. The Decatur Belt accounts for nearly 20% of the overall BeltLine corridor as shown in the graphic to the right.

Status of Abandonment

After ABI's purchase of the corridor, NSR filed for the abandonment of the 30-foot rail easement from the Federal Surface

Transportation Board (STB). The abandonment of the easement is a critical step in moving forward with the design and construction of the BeltLine vision. The request for abandonment was filed by NSR on December 2, 2008.

During the public comment period of the abandonment process, the Georgia Department of Transportation (GDOT) filed a Petition for Stay with the STB with the assertion that the Decatur Belt may be needed to accommodate future passenger rail in and through the City of Atlanta.¹ Previous studies conducted by GDOT indicated that the Decatur Belt could be used to route one of the future passenger rail lines from the northeast to the proposed Multi-Modal Passenger Terminal (MMPT) planned for downtown Atlanta. Shortly thereafter, Amtrak filed a similar petition² asserting that its recent study³ of potential passenger rail routes had identified the Decatur Belt as a possible way to reach the MMPT.

In their respective responses ABI, NSR and Atlanta contended that the regional transportation plans, developed with input from GDOT by the Atlanta Regional Commission



¹ January 2, 2009 – GDOT files Petition to Stay

² January 15, 2009 – Amtrak files Petition to Intervene

³ *Evaluation of High-Speed Rail Options in the Macon-Atlanta-Greenville-Charlotte Rail Corridor*, Volpe Center, August 2008

(ARC)⁴ and the Transit Planning Board (TPB)⁵, consistently showed the use of Decatur Belt exclusively by the BeltLine. In all, a total of ten filings were submitted to the STB regarding the Decatur Belt between January 2 and January 28.

On February 2, 2009 a meeting was convened between ABI, GDOT, Amtrak, the City of Atlanta, ARC, MARTA and others to elevate the conversation and begin identifying possible solutions. During the meeting it was agreed that the group would issue a joint petition to STB requesting to hold in abeyance all actions on the abandonment proceedings for 30 days (through March 6, 2009) while alternatives were reviewed. The group also agreed that Atlanta might be better served by several intermodal stations to reflect the multiple activity centers in the metro region while complimenting the proposed MMPT.

From this conversation two committees were established: a Technical Review Committee consisting of planners and engineers from the various agencies; and an Executive Committee representing the leadership of the parties involved.

The Technical Review Committee was tasked with evaluating the following issues:

- 1) Amtrak use of the Decatur Belt to access the proposed MMPT.
- 2) Commuter rail use of Decatur Belt to access the proposed MMPT.
- 3) What is the best downtown location and configuration of the MMPT to serve the regional, local and intercity transit services that supports downtown economic development?
- 4) High-speed rail use of the Decatur Belt to access the proposed MMPT.

This report focuses on the need of the Decatur Belt to meet these passenger rail objectives. The subsequent issues will be addressed in more detailed future studies.

⁴ Envision6 Regional Transportation Plan, Mobility 2030

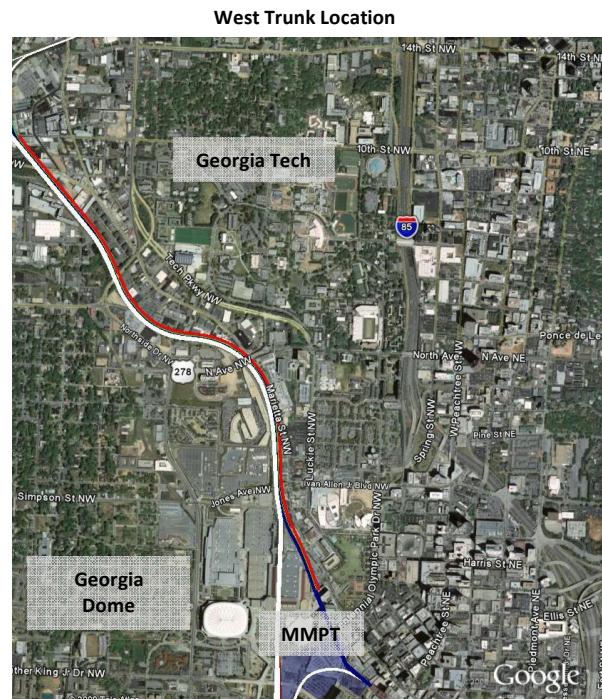
⁵ Concept 3 Long Range Transit Vision

1.3 Description of West Trunk

The West Trunk, another route from points north of Atlanta to the MMPT, is considered by existing commuter rail and regional transit plans as the most critical link to providing capacity for passenger rail services into and through Atlanta. This critical segment of rail is owned by the State of Georgia and leased to CSX. The technical team evaluated this alignment to determine the opportunities, issues and costs associated with using it for passenger rail purposes and as a comparison point to the analyses related to the Decatur Belt.



The West Trunk is approximately 4 miles running along the northwest and west sides of Atlanta to the MMPT via tracks underneath the Omni. The route begins in the Armour Industrial area of the City of Atlanta at the point where the Decatur Belt wyes off of NSR. It runs southwest within NSR right-of-way to the Howell Interlocking (Howell Junction). The route then transitions to CSXT (operating on the State-owned Western and Atlantic Railroad) and runs southeast paralleling Marietta Street under the Georgia World Congress Center and Omni to the site of the proposed MMPT. The West Trunk provides direct access to the MMPT from both the north and south. Since freight rail travels through and under the heart of the City, the ability to ultimately move freight around the metropolitan area would alleviate freight congestion on the West Trunk and would have a significant impact on Homeland Security for the City. A bypass for appropriate existing and future routes should be studied in more detail in the near future.



1.4 Summary of Evaluation

This section provides an overview of the technical analyses of the Decatur Belt, West Trunk, Amtrak station locations and MMPT configuration that led to the technical team findings.

Decatur Belt

The technical team looked at several scenarios to assess the costs of adding passenger rail to the Decatur Belt and the impacts to the BeltLine project inclusive of its transit, trail greenspace and economic development components. Most of the scenarios included Light Rail type transit and trail and at least one passenger rail track. In order for passenger rail to be provided in the corridor at grade the technical team found that it would require replacement of 10 bridges along with acquisition of 6 acres of right-of-way. The estimate of costs for construction not including right-of-way of adding the passenger rail ranged from \$180 - 260M depending on the extent of double track passenger rail in the corridor.

The technical team found that coexistence of the passenger rail at grade with the BeltLine components would be technically feasible, though not financially practical. The team determined that the different BeltLine light rail transit and passenger rail technologies could not share the same tracks due to regulatory and operational constraints, thereby requiring two separate sets of infrastructure along the Decatur Belt. In addition, the technical team determined that coexistence would have economic development impacts to the BeltLine including a loss of at least \$214M dollars in Tax Allocation District (TAD), and private sector funds over 25-years, and a loss of at least 12 acres of greenspace in the corridor. It was also found that, in comparison to the West Trunk, the Decatur Belt route to the MMPT has a significantly higher concentration of protected historic resources, parklands and population; increasing the likelihood of negative environmental impacts from the addition of passenger rail in the corridor.

West Trunk

A single scenario was evaluated by the technical team for the West Trunk. In order for passenger rail to use the trunk route to access the MMPT the technical team determined that rail capacity would need to be added to the route. Approximately four acres of right of way would need to be acquired and four bridges would require replacement. The estimate of costs for constructing an additional passenger rail line, not including right-of-way, was \$230M.

The technical team identified other conceptual alternatives options for adding rail capacity and/or reducing freight rail volumes in on the west side of Atlanta to facilitate the realization of the

full 25-year vision of commuter and intercity passenger rail services and projected increases in freight traffic. These have been summarized in Appendix C, but are outside the scope of analysis for resolution in the current 30-day effort.

MMPT Configuration

The technical team evaluated the current design of the MMPT to assess its ability to address long term passenger, capacity, operation and safety needs. As part of this process reconfiguring the station so that it could have north-south oriented platforms near the location of the old Terminal Station was deemed to have merit for further study. With the existing configuration of the MMPT, the technical team found that this would require a back-up move of the train to turn around for the existing Amtrak New Orleans Crescent service, but that this is feasible as Amtrak already does this in several other cities. It was also concluded that to eliminate the back-up movement, the provision of dedicated wye at the MMPT for train turnarounds may be feasible, if the station platform location is moved from the current proposed location to the Terminal Station area.

New Northside Amtrak Station

Two themes have emerged from the technical review to date. One is that using the Decatur Belt to access the MMPT should be considered in the broader context of a lack of capacity to meet the long-term passenger and freight rail needs of the region. Whether or not the BeltLine is implemented, it is clear that the Decatur Belt, by itself, will not solve this issue. In order for the region to realize its passenger rail vision, there needs to be large scale investment to increase capacity for both freight and passenger rail.

The second theme is that, due to the costs associated with the long-term solution, there needs to be significant consideration given to the cost and benefits of having all future services converge at the MMPT. It may be the most prudent path forward to consider building additional smaller-scale stations as proposed in Concept 3. Additionally, phasing the access of Amtrak's passenger rail service to the MMPT to coincide with the region's identification, funding and construction of the necessary capacity improvements would expedite upgrades to Amtrak's current service, which is limited at its current Peachtree Station.

In order to evaluate the opportunity for Amtrak to move its existing station to an improved location for operations with MARTA access that could also serve some of its future needs as well

as commuter rail, the technical team did an evaluation of potential station sites at the Lenox, Brookhaven and Doraville MARTA stations.

1.5 Summary of Findings

The technical team found that the Decatur Belt, although technically feasible, is not required for passenger rail to access the downtown MMPT. This conclusion was based on a review of the technical challenges, right-of-way constraints, operational issues and MMPT designs as well as a comparison of the costs between these two routes. The analysis showed that it is feasible to provide passenger rail access to the MMPT on the West Trunk route by making passenger and freight capacity improvements including, but not limited to, Howell Junction and Western Atlantic railroad. Furthermore, it was concluded that the right-of-way and construction costs of using the West Trunk for passenger rail services are comparable to those of using Decatur Belt, so there is not a cost savings for passenger rail to use the Decatur Belt to access the MMPT.

Commuter Rail

Only the proposed Gainesville line was considered during the planning process to use Decatur Belt. At this time, none of the commuter rail lines are expected to use the Decatur Belt. Proposed commuter lines are planned to access the MMPT via the West Trunk and would also require the improvements identified by the technical team.

Amtrak and High Speed Rail

Existing Amtrak and future passenger rail services could access the existing MMPT via the West Trunk with capacity improvements. The technical team also concluded that a new intermodal station for its existing New Orleans Crescent service and future service additions is feasible at three existing MARTA stations along MARTA's northeast line and that the same location would also have potential to serve some commuter rail services consistent with the adopted regional transit plan as shown in Concept 3. The technical team also determined that moving the Amtrak station has merit in that leaving the Peachtree Station increases freight capacity while providing flexibility for future passenger rail development.

MMPT

The MMPT has been in City plans for many decades. In fact, a regional 1962 study calls the MMPT the "Transit Center" and describes the site development and the layout of this nexus of

all train routes through the City. GDOT's 1999 Intermodal Program for Rail Passenger Service Report also outlines services and operations of the terminal. The MMPT Concept Design Report was adopted by the management team in February 2002 as the official Concept Design.

Clearly, the MMPT has always been planned to serve the transportation needs of the state, region and city. The terminal would not only enhance the regional transportation network, but also create a civic landmark and a catalyst for economic development for the area. Large transportation infrastructure projects will set the stage for intense mixed-use development – office, retail, residential and visitor destinations – in downtown Atlanta's railroad gulch area.

The region should continue to develop the MMPT where as many services as feasible can come together. Other intermodal stations also make sense. These stations may be relatively less complicated and costly to implement and should be considered as key regional investments in addition to the MMPT. The intermodal stations will also allow for a phased implementation of regional passenger rail service.

The technical team recommends the re-orientation of the passenger platforms in the MMPT be aligned in a north-south configuration to provide for maximum flexibility of proposed passenger rail options. The current layout of the MMPT, shown with east-west platforms, will require cumbersome and time-consuming operations for north and south-bound trains which account for the majority of the routes currently under consideration.

2. Background Information and Assumptions

2.1 Freight Rail

The State-owned West Trunk, defined as the section of railroad between Howell Junction on the north and roughly the Circle Track on the south in the Downtown Atlanta Gulch, may be a potential alternative for passenger rail to access an MMPT in the Five Points area. However, for this option to be viable to meet the capacity needs of future freight and full build-out of all the passenger rail services, there would have to be significant new capacity along the West Trunk or, preferably a freight by-pass around downtown Atlanta. The West Trunk is used by both CSXT and NSR.

One of challenges of implementing a passenger rail program in the Atlanta region will be mitigating the impact on the freight rail movements. Since many of the passenger rail movements will most likely impact the most congested part of the Atlanta rail network, the three track mainline between the Gulch and Howell Interlocking, providing alternate routes for freight trains through these areas is of paramount importance. One project that would benefit both carriers, proposed in the *ARC Regional Freight Mobility Plan*, is to grade separate Howell Junction. This project would improve efficiency of the current rail network, although it would not provide any new alternative routes. In other words, grade separating Howell Junction will improve throughput, but the West Trunk will still remain a critical link for both freight carriers.

Another potential reliever would be a “Western By-Pass”, which could upgrade the existing NSR line through Cedartown, Carrollton, Newnan, Senoia and Griffin to allow trains between Chattanooga and Macon that do not need to stop in Atlanta to by-pass Atlanta entirely. However, this would require placing back into service the out-of-service line between Senoia and Griffin and would add additional freight traffic between Griffin and Macon the S-Line proposed for passenger rail service. Such a by-pass could potentially help alleviate some of the Homeland Security concerns of freight travel under the heart of Downtown.

A memo detailing these freight relief options for the West Trunk, prepared for the technical team by the Transit Implementation Board, can be found in Appendix C.

2.2 Amtrak

The focus of this section is identification of Amtrak current operating characteristics, preferences and standards as related to station location and design. Operating characteristics were determined from field review of current operations at the Peachtree Station in Atlanta and conversations with local and national Amtrak representatives, some of whom participated on the Technical Committee. Amtrak also provided information related to desired characteristics at stations for passengers, infrastructure, access and servicing. The Technical Committee was directed to the following website for design standards: www.greatamericanstations.com; additional illustrative information regarding key aspects of design were provided to the Committee by Amtrak.

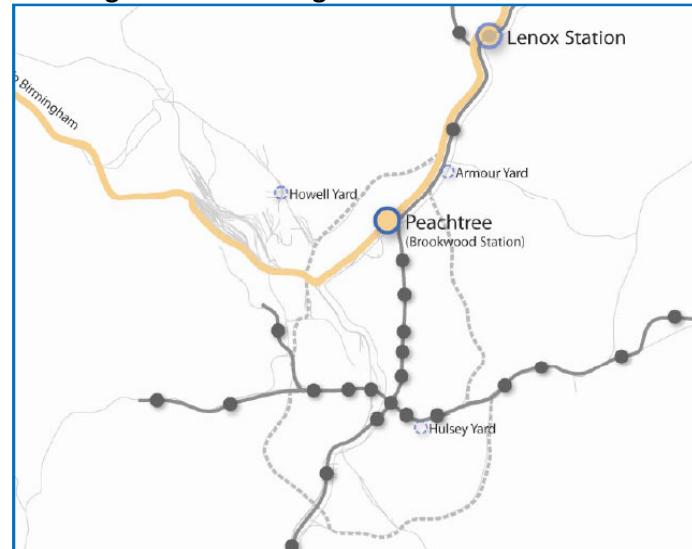
Current Operations and Issues – Amtrak

The Atlanta regional market is currently served by two daily trains. The Amtrak Crescent operates northbound and southbound, providing service from Atlanta to New York and to New Orleans with an average of 300 passenger boardings per day. The only Atlanta area stop is at the Peachtree Station on Peachtree Street adjacent to I-85 in the Brookwood section of Atlanta.

The Peachtree Station is centrally located as shown in Figure 2-1, but not readily accessible by private vehicle from I-75 or I-85 or by MARTA rail. MARTA bus service links the Peachtree Station to the Arts Center MARTA station and travels directly to Midtown, downtown (Five Points MARTA rail station) and the Buckhead area (Buckhead and Lenox MARTA rail station). Limited capacity for short or long-term parking is also an issue for the station.

The Peachtree Station platform is below street level and is accessible by stairs and an elevator. The platform is situated between railroad tracks and is narrow. Canopy supports in the center of the platform hinder passenger flow, wheelchair movement and baggage servicing. As no separate service access is available, all baggage handling and any train servicing must occur from the passenger platform which slows overall operations at the Peachtree Station.

Figure 2-1 – Existing Amtrak Station Location



Amtrak's New Orleans Crescent utilizes NSR mainline tracks. When the Crescent stops at the Peachtree Station, all freight movements are locked out of that track segment to avoid compromising passenger safety. This is a direct impact to freight operations. The current Crescent alignment is straightforward through Atlanta as no turns are required for normal Amtrak service. A siding exists for Amtrak to store trains when necessary. Also, should a train need to be turned in Atlanta, as when track maintenance activities close tracks between Atlanta and Birmingham, this can be accomplished at the Decatur Belt wye which is relatively close to the Peachtree Station. The flexibility to turn trains at this location is a primary reason NSR may desire to maintain this trackage.

Amtrak's local Atlanta staff indicated that the majority of passengers boarding and alighting in Atlanta arrive from areas outside the Atlanta region. This observation underscores the importance of convenient roadway and transit access to an Amtrak station. Should a new Amtrak station be located adjacent to a MARTA rail station, parking locations throughout the MARTA district could be used by Amtrak passengers. This would not be unlike the significant number of airline passengers who park at MARTA lot and take MARTA rail to the airport.

Design Requirements – New Amtrak Station

A key consideration of this study is relocation of the Amtrak station to better provide access to MARTA rail. This was regarded as a first step in addressing the necessity of Amtrak to access the downtown MMPT. For current Amtrak service, an alternate location with better vehicular and transit access would significantly enhance passenger convenience. Secondarily, an alternate location where dedicated tracks can be provided for Amtrak, off the NSR mainline, would potentially improve operations for NSR. A new station location therefore could accommodate current as well as some current expansion, but would not preclude Amtrak service at the future MMPT.

Amtrak noted new stations being developed in Miami (MIC, or Miami Intermodal Center) and planned in Charlotte would be examples that may be appropriate for Atlanta to consider, particularly for passenger amenities and footprint. However, the operating demand at these facilities varies markedly from current service in Atlanta. The Miami facility accommodates terminating trains from the north, including Amtrak and commuter rail; it is located adjacent to Miami International Airport and will be served by the future east-west Metrorail line. The Charlotte facility is planned on the western fringe of the downtown (designated "Uptown" in

Charlotte) area adjacent to a new football stadium and will incorporate a transit center for local buses, a light rail extension, Amtrak and commuter rail.

Amtrak identified the following desired characteristics for a new station:

- A 1200 – 1500 foot platform, preferably along tangent track, to accommodate train of 11 to 14 or 15 cars; curved platforms are possible up to a 1°30' curve;
- A typical train is an 11 car consist and two engines;
- A potable and non-potable water supply near the track for supplying and servicing the train;
- A sewer connection for pumping the train at an “end of line” station; should this not be available, a pump truck would be used;
- Access for a forklift and baggage train;
- A larger crew change facility;
- A siding stop rather than a mainline stop for the train. Occasionally, Atlanta serves as an end of line station when there are disturbances or other anomalies along the line; therefore, it is necessary to have the capability to store a train off the mainline;
- A concession area;
- An airport-style baggage handling system;
- Capability to have the UPS type baggage tracking;
- Long term (5 years) on-site record storage;
- Express mail handling capability; and
- Good access to other transportation modes such as bus, taxi, MARTA.

The parameters listed above served as basis for identifying proposed intermodal station locations in Atlanta. As current Amtrak service was a guiding parameter, sites considered were along the NSR mainline.

2.3 Commuter Rail

The following is a brief summary of the planned commuter rail program including its routing to the MMPT and midday storage of trains. The commuter rail plan calls for seven lines converging at the MMPT in downtown Atlanta. The seven lines and their route into the MMPT are as summarized below and shown in Figure 2-2:

- **Griffin** – Trains approach from the south and enter MMPT using the southern section of the West Trunk;
- **Athens** - Trains approach from the east and enter MMPT using Howell Junction and the West Trunk;

- **Bremen**- Trains approach from the west and enter MMPT using Howell Junction and the West Trunk;
- **Canton**- Trains approach from the north and enter MMPT using Howell Junction and the West Trunk;
- **Madison** - Trains approach from the east and enter MMPT using CSXT rail from the east on a line parallel to the MARTA east line;
- **Senoia** - Trains approach from the south and enter MMPT using the southern section of the West Trunk;
- **Gainesville** - Trains approach from the northeast and enter MMPT using Howell Junction and the West Trunk.

Proposed service levels for GDOT's commuter rail program are as follows:

<u>Line</u>	<i>Trains per day</i>
Griffin	4-6
Athens	6
Bremen	4-6
Canton	4
Madison	4-8
Senoia	4
Gainesville	4

Midday storage of the initial train sets for the Griffin line will be along the passenger boarding platforms of the MMPT. As service increases and new lines begin, the design is to create a storage yard called Castleberry Yard. This yard could be located south of the MMPT site and located west of the former NSR office building. Future storage sites would be located where appropriate as service increases and new services are placed in to service.

Currently, the only proposed commuter line with federal funding is the Lovejoy line. The following is GDOT's documented plan regarding the Lovejoy line with excerpts from the Intermodal Program for Rail Passenger Service Report.

GDOT will use currently available ear-marked funding and other Federal transportation funds to make improvements and acquisitions in order to open commuter train service on the 26 miles from Lovejoy to Atlanta. In the first phase, four trains daily will serve Lovejoy, Jonesboro, Morrow, Forest Park, East Point, and downtown Atlanta at the MMPT, without accessing the Decatur Belt.

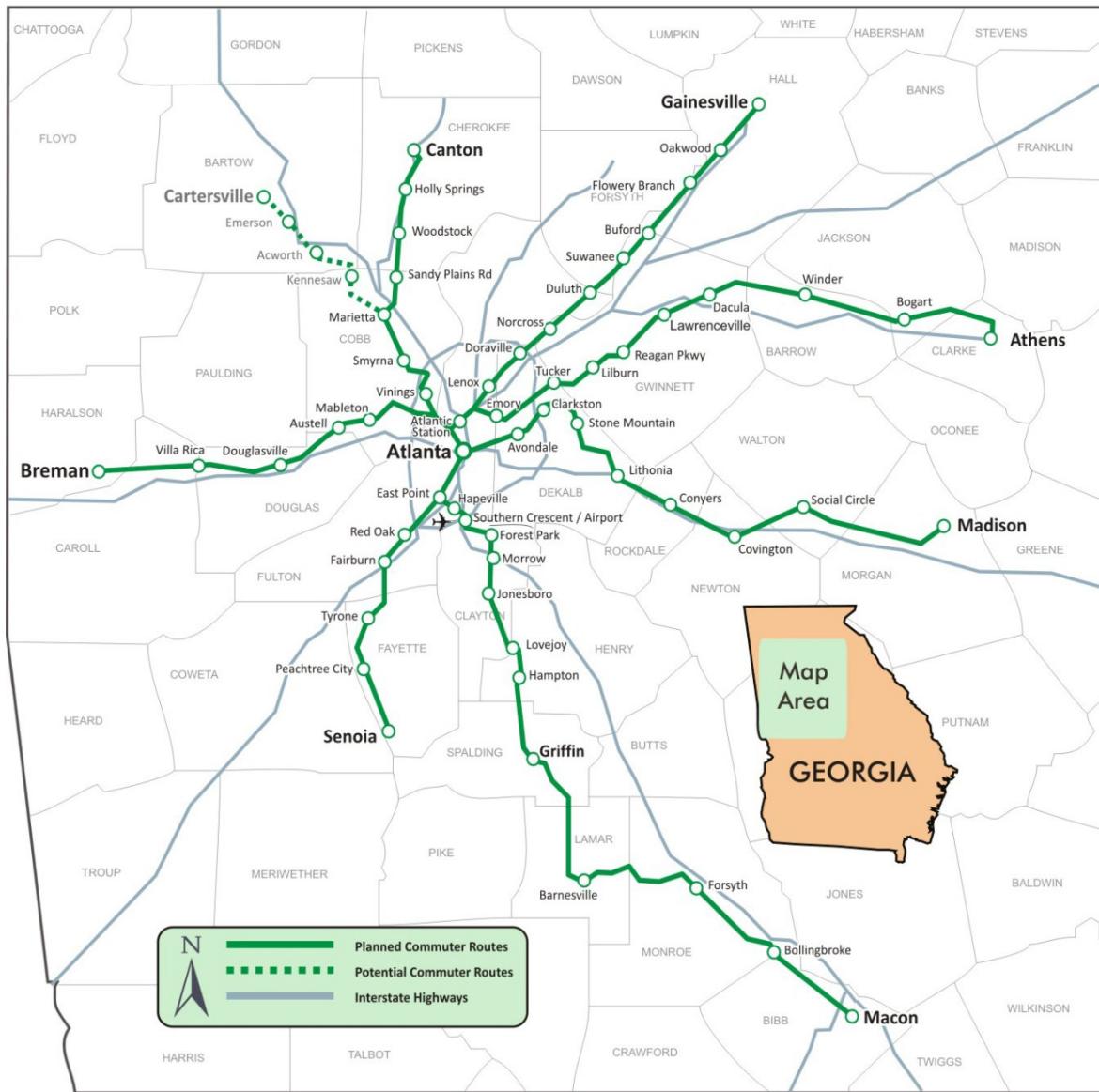
Commuter rail service between Lovejoy and Atlanta is ready for implementation:

- Environmental clearance has been accomplished.

- The Macon Commuter Rail line is in the adopted, conforming regional transportation plan as well as the current ARC's Transportation Improvement Program (TIP).
- NSR, the owning railroad, has shown willingness to reach agreement within the costs envisioned.
- A total of \$106 million in funding is available from DOT; Congress has earmarked \$87 million.

In GDOT, GRPP, and GRTA's Intermodal Program for Rail Passenger Service Report, none of the proposed rail lines were shown to use the Decatur Belt. They either arrive from the south or from the north via the West Trunk, which is referred to as a heavily used freight corridor. The following excerpt is from the report itself: "The commuter and intrastate rail passenger services will use existing rail freight lines to link suburban stations with activity centers inside the Perimeter. All of the passenger lines will converge on the MMPT in downtown Atlanta, passing through heavily used freight facilities. A detailed analysis of existing rail line capacity and of the impacts of adding rail passenger service is needed to define track, signal system and/or operational improvements to avoid congestion and delay and is essential to successful negotiation with the owner of the freight railroads. This task will also include detailed studies of in-town and out-of-town bypass routes, which could divert freight railroad trains away from the congested downtown area."

Figure 2-2 – Georgia Commuter Rail Plan



2.4 High Speed Rail

The characteristics, benefits and right-of-way requirements of high speed rail (HSR), as well as the proposed high speed lines in Atlanta are summarized in this section.

Characteristics

High speed rail is intercity passenger ground transportation that is time-competitive with air and/or autos on a door-to-door basis for trips in the approximate range of 100 to 500 miles.

Technology options consider transit speeds between 110 mph to 200+ mph as high speed. In the context of the Southeast Region, high speed rail is proposed to operate on existing freight infrastructure which will limit speeds to 125 mph utilizing conventional diesel-electric trains. High speed rail trains reduce their operating speed to 35-50 mph as they approach suburban and urban areas, such as the approach to Atlanta's MMPT, to conform more closely to freight train operations.

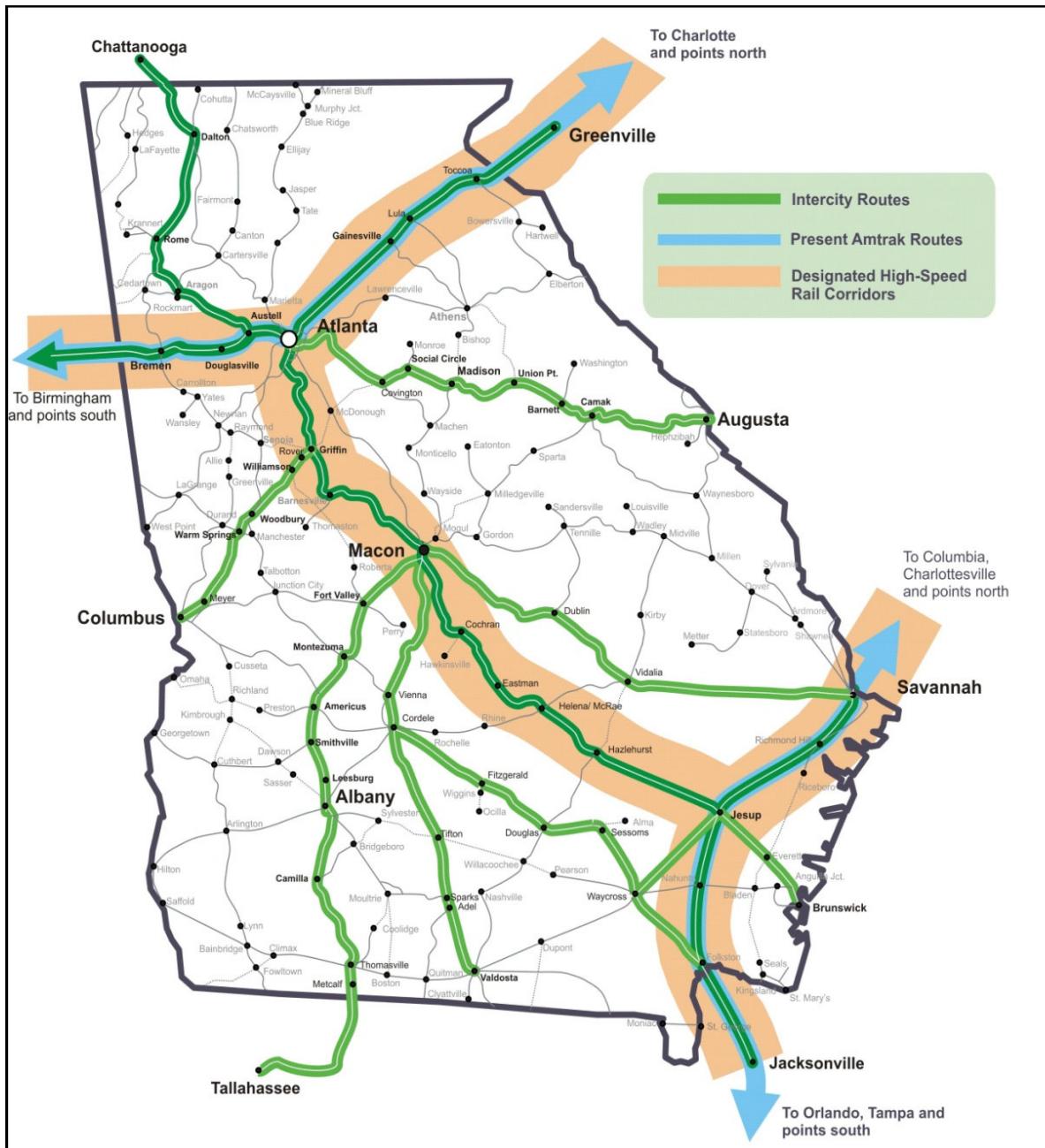
Right-of-Way Requirements

Right-of-way requirements for high speed rail within the urban core of Atlanta is consistent with the requirements for traditional passenger rail.

Atlanta High Speed Rail Lines

As shown in Figure 2-3, two high speed rail corridors are currently designated to serve Atlanta.

Figure 2-3 – High Speed Rail Corridors in Georgia



2.5 MMPT

In the late 1980's the idea of expanding Amtrak long-distance service from Chicago to Florida through Atlanta began gaining popularity. Given Amtrak's Atlanta facilities, one drawback was that such a train would have to be pulled back from Peachtree ("Brookwood") Station to the north-south mainline for it to continue its journey. A through station would be needed for such a train, and the idea of a MMPT in downtown Atlanta, near the sites of the original Terminal and Union stations was conceived.

Artist Rendering of MMPT



While the Chicago-Florida passenger train has not gotten beyond the idea stage to date, the MMPT became the subject of several concept studies and an \$8 million design that was completed in 1994.

The facility envisioned seamless connections between commuter and intercity passenger trains, intercity bus service and MARTA. But by the end of the decade, with expansion of Greyhound bus service and the institution of GRTA's Xpress Bus service.

Subsequent efforts led to the conception and adoption of Concept 6, which expanded the MMPT footprint from one square block to seven, in effect filling the railroad gulch completely with private development and passenger services.

Through and terminal service

The MMPT, as presently envisioned, has facilities for both through passenger trains and trains that terminate at the facility. In the first phase, only terminal tracks for commuter trains from the south would be built, with direct access from the platform under Forsyth Street and into MARTA's Five Points Station. Final build-out would include four tracks for trains from the south that terminate in Atlanta, and six tracks served by three platforms for through trains.

MMPT Station modifications

Thought is being given to changing the platforms of the MMPT from their present orientation to one that uses the alignment used by Terminal Station, along a north-south orientation. This would allow for direct access for trains coming into Atlanta from the west, north and northeast to directly access the MMPT and continue south to Macon and other destinations.

Commuter, standard intercity and high-speed trains could use a north-south oriented MMPT with ease. Access to MARTA would not be as direct as with the original plan, but it would still be an easy connection from this site. In addition, such an orientation would allow for straight platform tracks, making compliance with ADA standards much easier than with the curved platforms presently envisioned.

As with the original orientation, trains like the *Crescent* would still have to be turned (a 35-45 minute operation), but they could do that at the station site, with little or no interference with freight railroad train movements. Such an operation is not untypical for passenger rail service. The new orientation could ease connections with intercity and regional buses as there will be more space available for these activities in this area of the city.

Coordination with downtown plans

A re-orientation of the MMPT tracks would necessitate a new location for the station building itself, but as this would remain within the envelope of Concept 6, there would be little impact to plans being formulated for downtown Atlanta. The new orientation could ease connections with intercity and regional buses, as there is more space available for these activities in this area of the city.

3. Detailed Analysis of Alternatives

3.1 Northside Amtrak Station Location

The focus of this section is the evaluation of alternate station sites for Atlanta's Amtrak service. Currently, there is no possibility of accommodating future rail growth at the Peachtree Station. Principal issues for Amtrak's current Peachtree Station are difficult access, insufficient short and long-term parking, and cumbersome platform circulation for passengers and baggage handling.

An intermodal station, servicing Amtrak and commuter rail users, would enhance passenger access through better multi-modal connections, parking and enhance railroad operations through a dedicated track for passenger rail. In addition, intermodal stations would provide Amtrak and the region the opportunity to phase the growth of passenger rail in the metro Atlanta region.

Potential Station Sites

Initially, the Technical Committee identified the following sites for a new station location:

- Atlantic Station
- Armour Yard
- Lenox
- Brookhaven
- Chamblee
- Doraville

All of the above sites are situated along the current Amtrak New Orleans Crescent route. The Committee reviewed Amtrak criteria and noted that access to MARTA rail is a primary consideration. Neither the Atlantic Station nor the Armour Yard site has current access to MARTA rail or other transit service. Also, the Committee felt that focusing on sites currently served by MARTA rail represented the greatest opportunity to achieve a short-term solution for Amtrak.

The Committee decided to further review the Lenox, Brookhaven, Chamblee, and Doraville sites. Further discussion noted the following:

- **Lenox.** The Lenox site serves a major activity center with hotels and other amenities and has a reasonable pedestrian infrastructure, but vehicular access from nearby freeways is difficult and parking is limited. Due to the change in grade between the surface and NSR track, station implementation would most likely be expensive.

- **Brookhaven.** Brookhaven was identified as a reasonable alternative to Lenox. While Brookhaven is relatively close to Lenox, the major activity center characteristic of Lenox does not exist, the pedestrian infrastructure is inadequate, and there are few adjacent activities that would attract a traveler. However, sufficient parking exists and the station could be efficiently constructed at the current track level with convenient connection to the current MARTA rail station.
- **Chamblee.** The Chamblee site was considered too distant from major roadways or major activities to be considered a reasonable alternative. Also, no long-term parking is available. The Committee did not feel this site should be advanced for further study.
- **Doraville.** This site was considered to have good vehicular access as it is basically adjacent to the I-85/I-285 interchange. However, it was also noted that access to the parking lot is indirect. Also noted was the potential redevelopment of the former General Motors Plant site that could transform this location into a major activity center.

Amtrak Station Evaluation Matrix

Based discussion at the Executive Committee meeting on February 10, 2009, a preliminary matrix, provided in Appendix B, was developed for evaluation of alternative sites for an Amtrak station. The draft matrix was presented to the Technical Committee at the February 12, 2009 meeting. Team members agreed that the following broad categories were appropriate for evaluating the alternate Amtrak station sites and designs: compliance with regional transit plans, location, access, multi-modal connections, design, parking, operations, and implementation. Each broad category includes several evaluation criteria. Further team review resulted in addition of the following evaluation criteria:

- Freight – to address impact to track expansion, mainline crossing movements and railroad infrastructure – was added under Operations
- Neighborhood Impacts – to address visual and noise – was added as a distinct subcategory under Environmental Impacts in the Implementation category
- Economic Development – with respect to an enhancement, catalyst, or impact – was added as a distinct subcategory under Environmental Impacts in the Implementation category
- Travel Time – to Midtown, Downtown and the Airport – was added under Operations

Appendix B provides the revised evaluation matrix, incorporating comments from Technical Committee members. The Technical Committed completed the matrix based on a 1 to 5 scale, with 5 representing the best.

Evaluation Results

The evaluation results indicated the highest score for Doraville, followed by Lenox and Brookhaven. Appendix D contains the memoranda describing the evaluation methodology, evaluation questions and findings.

3.2 Passenger Rail Operations

The focus of this section is an evaluation of possible scenarios for passenger rail to access the region and the MMPT. Three base operating scenarios will be addressed:

- Current – Passenger rail along NSR
- Decatur Belt – Passenger rail via the Decatur Belt to the MMPT
- West Trunk – Passenger rail via the West Trunk to the MMPT

Each of the above scenarios could provide access to the downtown MMPT, either directly or through an intermodal station (i.e. the proposed Northside Amtrak Station) with immediate access to MARTA.

However, the current configuration of the MMPT, the Concept 6 plan of a primarily stub terminal, will not allow the most efficient terminal operation. Discussion of alternative alignments requires a more detailed consideration of the MMPT design as these two issues are inextricably related. Also, the MMPT must function efficiently for future south-bound passenger rail service as well as the proposed commuter rail network. In fact the volume of service at the MMPT will be primarily attributable to commuter rail and secondarily by Amtrak and intercity rail. Table 3-1 summarizes potential future train volumes assuming that all services stop at the MMPT.

As shown in the table, the most significant volumes are noted for full build-out of the GDOT commuter rail service, which in this case assumes peak period service only. Should commuter rail service operate hourly throughout the midday and early evening, corresponding commuter rail volumes would exceed 100 trains daily.

Table 3-1
Potential Train Volumes at MMPT

Service Type	AM	PM	Daily
Amtrak Long Distance¹			
Crescent – NYC/New Orleans	1	1	2
Chicago – Miami	1	1	2
Total	2	2	4
Intercity Corridor¹			
Atlanta – Charlotte/NYP	2 - 6	2 - 6	4 - 12
Atlanta – Columbia/Savannah	1 - 4	1 - 4	2 - 8
Atlanta – Macon/Jacksonville	2 - 4	2 - 4	4 - 8
Atlanta – Birmingham	1 - 4	1 - 4	2 - 8
Atlanta – Chattanooga	1 - 5	1 - 5	2 - 10
Total	9 - 23	9 - 23	18 - 46
Commuter Rail			
Athens	6	6	12
Bremen	6	6	12
Canton	6	6	12
Gainesville	6	6	12
Lovejoy/Griffin	6	6	12
Madison	6	6	12
Senoia	6	6	12
Total	42	42	84

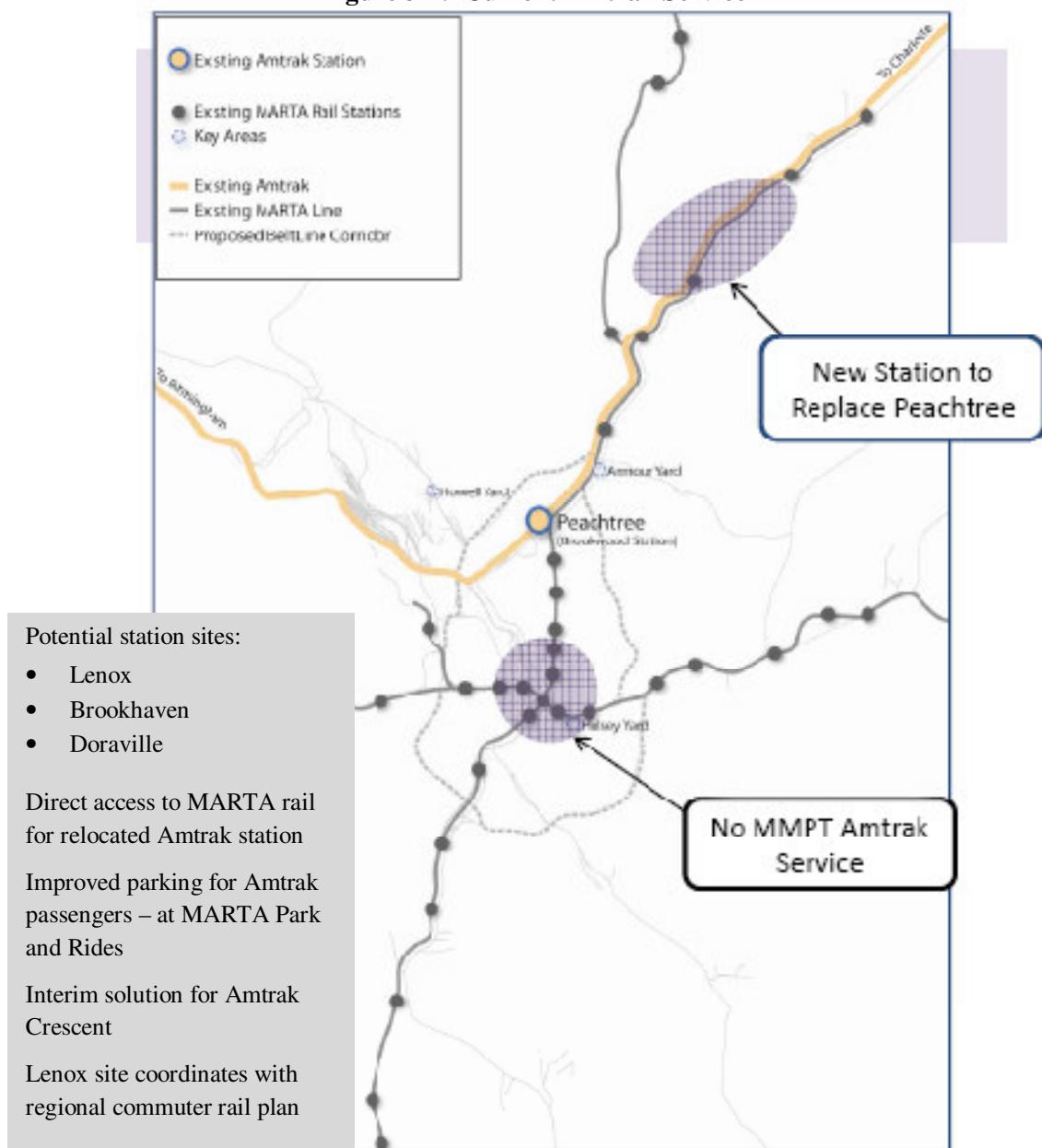
¹Source: Amtrak Strategic Partnerships

Operating Alternatives – Amtrak

Current

Amtrak's New Orleans Crescent operates along NSR with a stop at the Peachtree Station. Amtrak does not currently access downtown Atlanta. Relocation of the Amtrak station from the current Peachtree location to a new facility at Lenox, Brookwood or Doraville would not require a change in current alignment. Figure 3-2 displays the current Amtrak alignment and indicates that alternative new station sites could be implemented adjacent to the Lenox, Brookhaven or Doraville MARTA rail stations.

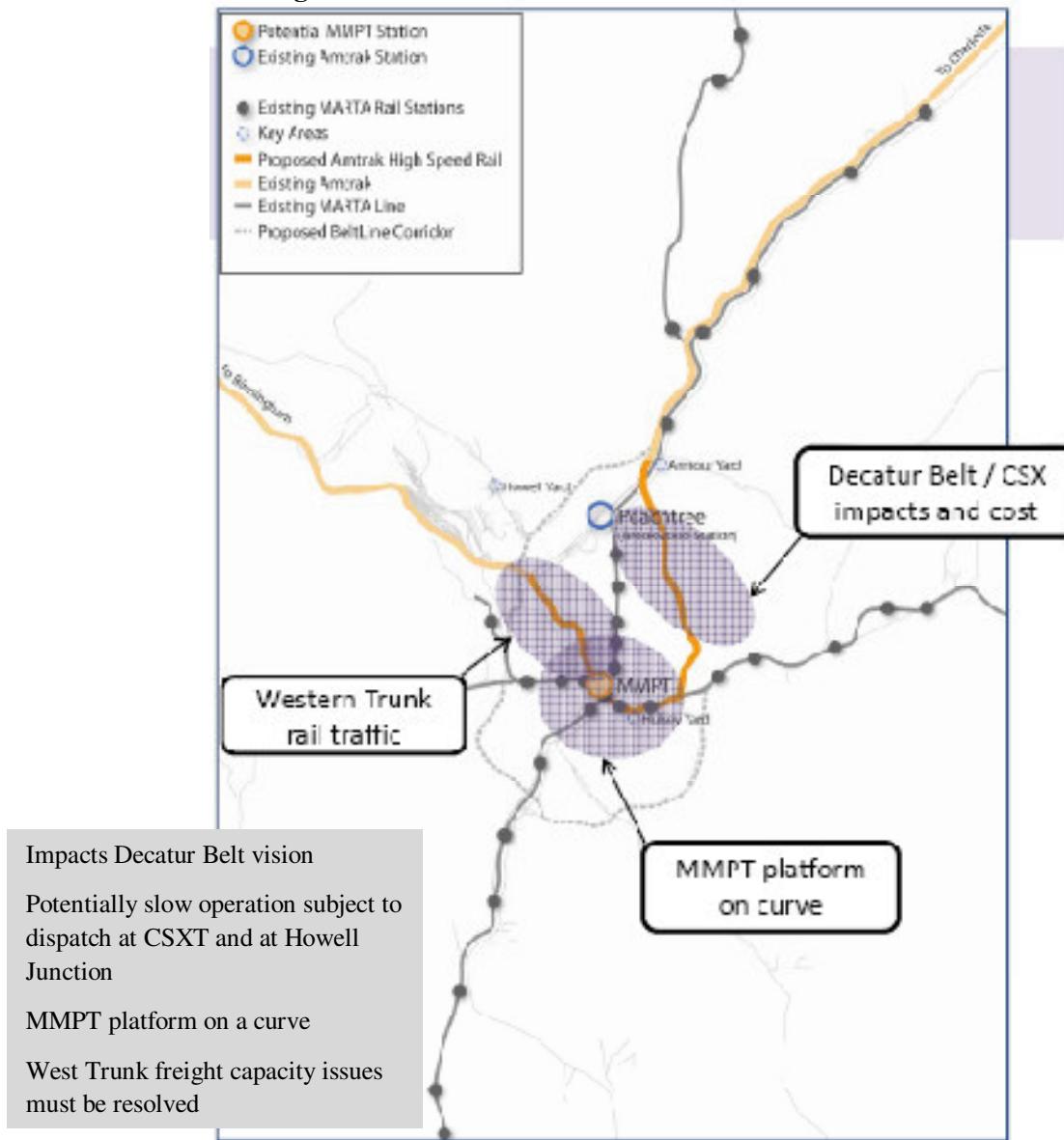
Figure 3-2: Current Amtrak Service



Amtrak Routing Alternatives – Decatur Belt

For travel from the northeast, Amtrak would follow the Decatur Belt to the CSXT corridor to continue to the MMPT, then via the West Trunk to Howell Junction and continue to Birmingham and New Orleans. From New Orleans the reverse movement would be made. Figure 3-3 displays the alignment. This alternative requires east-west platforms as shown in the Concept 6 MMPT design. This configuration places the majority of the platform on a curve. This alternative would be subject to relatively slow operation along the Decatur Belt, potential dispatch delays to enter the CSXT rail in downtown Atlanta and for access through Howell Junction. This alternative also does not alleviate the need to address the limited rail capacity on the West Trunk.

Figure 3-3: Amtrak via Decatur Belt and West Trunk



Amtrak Routing Alternatives – West Trunk

Figure 3-4 displays the alignment via the West Trunk. For travel from the northeast, passenger rail would follow NSR to Howell Junction, and then continue south the MMPT. Assuming the current Concept 6 MMPT plan, the New Orleans Crescent would enter the station in an easterly direction. To continue to Birmingham, the train must reverse direction. To do so, it would pull forward to approximately Piedmont Avenue, and then back up along the Circle Wye to a point south of Mitchell Street where the train can clear the switch then continue north along the West Trunk en route to Birmingham and New Orleans. For easterly movement to Charlotte and New York, the same maneuver would be required. Should the MMPT be reoriented to a north-south direction as was Terminal Station, the Crescent still would have to wye; however, a dedicated track could be provided for the movement so that it would not be subject to delays by freight movements.

Figure 3-4: Amtrak via West Trunk

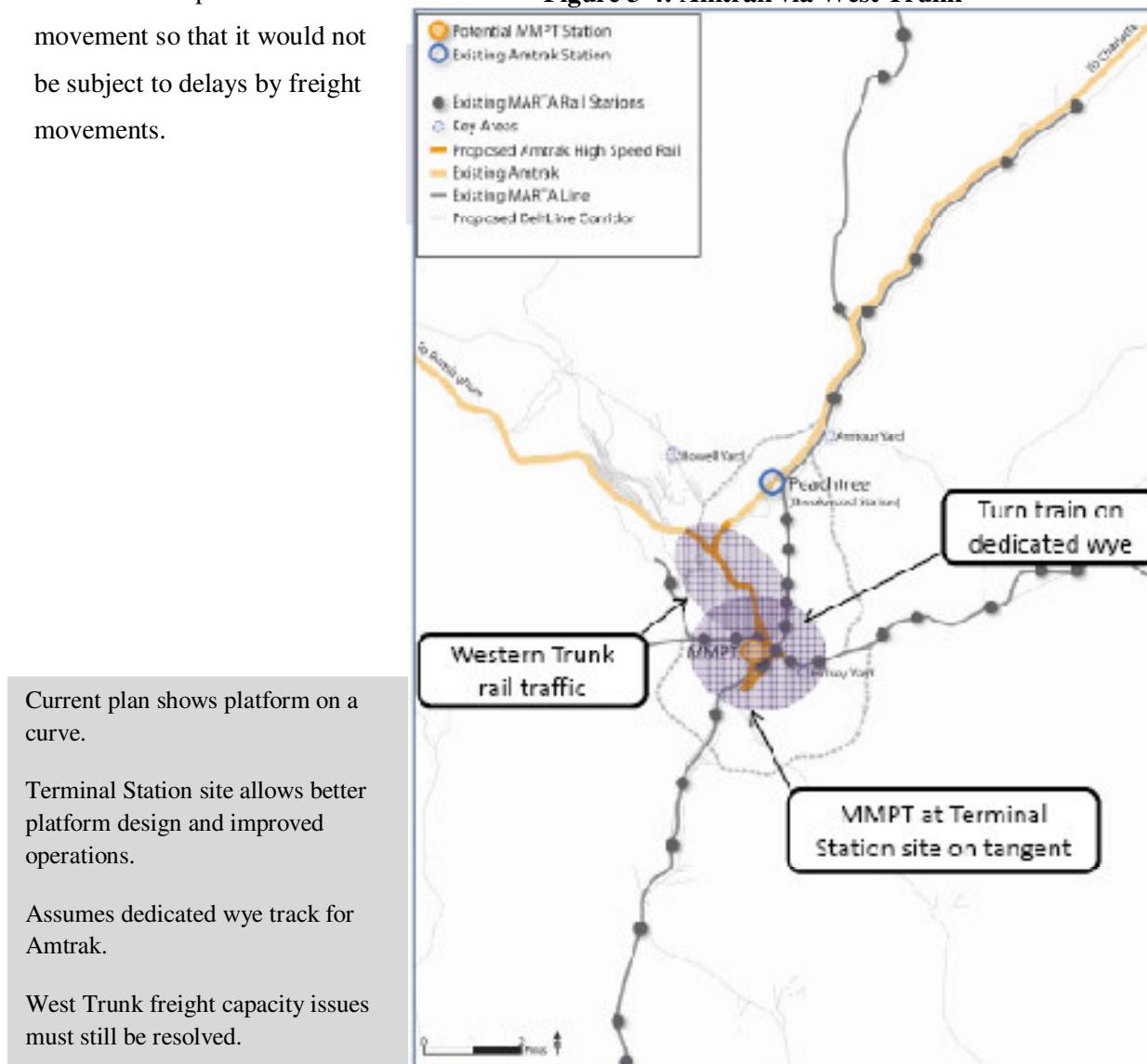
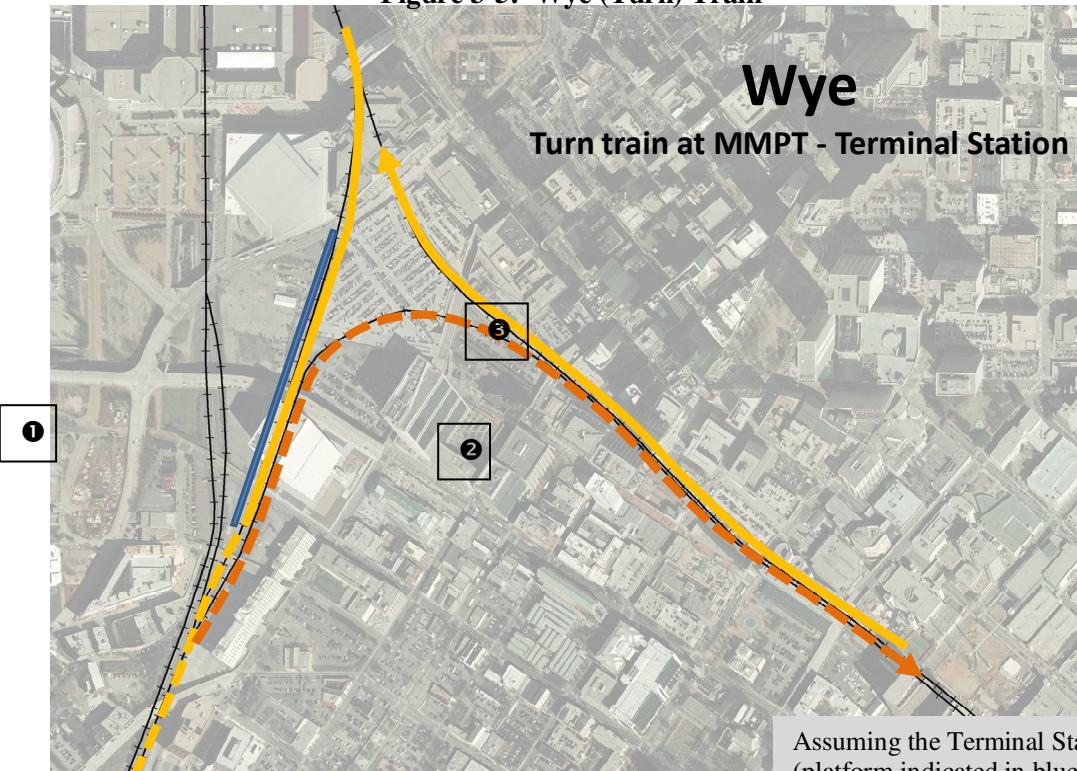


Figure 3-5 displays the Circle Wye and indicates how a train turn would occur, assuming the Terminal Station site is ultimately used for the MMPT. Delays may be expected for access to the West Trunk and through Howell Junction, unless additional capacity can be provided through this critical link.

Figure 3-5: Wye (Turn) Train



Assuming the Terminal Station site (platform indicated in blue), the following steps are required to turn a train.

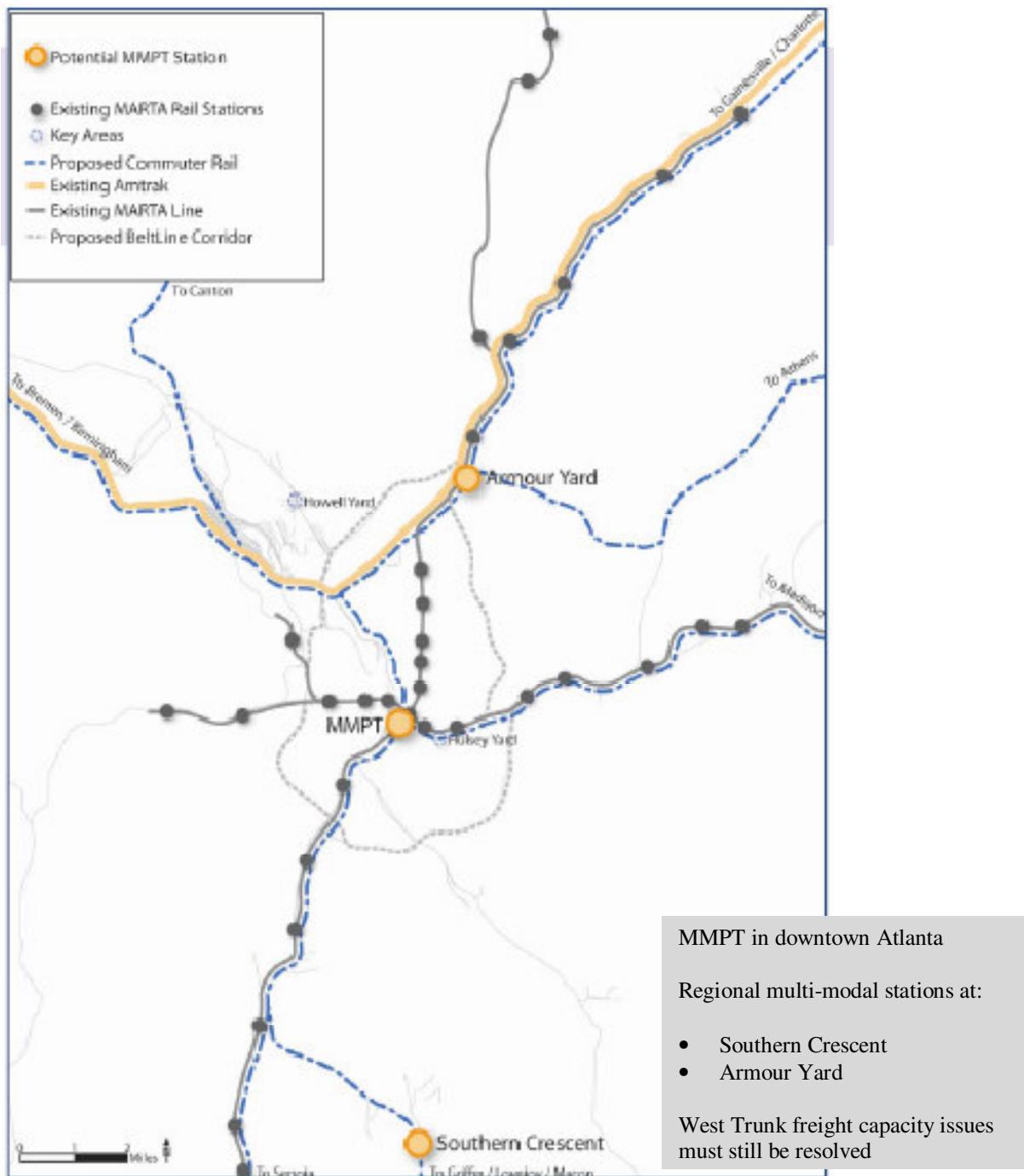
1. Train pulls south to clear switch
2. Train back up on wye track to approximately Piedmont Avenue
3. Train begins northbound movement

Total time – 35 to 45 minutes

Operating Alternatives – Commuter Rail

The commuter rail network comprises seven lines, Athens, Gainesville, Canton, Bremen, Senoia, Lovejoy/Griffin, and Madison. Figure 3-6 displays these as dashed blue lines; also shown is the current Amtrak New Orleans Crescent alignment in orange. All commuter rail lines serve the MMPT. From the north, the Athens, Canton and Bremen lines access the MMPT via the West Trunk. No through movement of commuter rail trains was assumed although it may be desirable.

Figure 3-6: Commuter Rail Concept



Terminating all trains in downtown Atlanta ignores the multi-activity center character of the Atlanta region, requires a large number of tracks and results in a less efficient operation. The concept displayed in Figure 3-6, however, assumes through service at the MMPT key multi-modal transfer stations at Southern Crescent adjacent to the airport and at Armour Yard. Commuter rail lines from the north could continue through the MMPT and terminate at Southern Crescent. Also, selected commuter rail trains from the south could continue through downtown to Armour Yard or to a terminus in Gainesville or Athens, for example. This concept allows multi-modal connections to MARTA rail, buses, and to other commuter rail lines at several locations. In addition, this concept allows interlining, or linking, commuter lines from the south and north to best meet regional travel needs.

Operating Alternatives – Intercity Rail

Options for intercity rail alignments to serve the MMPT are analogous to those described for Amtrak. Figures 3-7 and 3-8 display intercity rail alignments along the Decatur Belt and the West Trunk, respectively. Figure 3-9 displays a scenario where Amtrak's New Orleans Crescent service continues to operate as current and does not serve the MMPT, whereas other intercity rail would operate along the West Trunk to serve the MMPT. Figure 3-8 also is based on the MMPT, plus regional multi-modal stations at Southern Crescent/Hartsfield Jackson International Airport and Armour Yard – this base assumption could be applied to all intercity rail scenarios.

Figure 3-7: Intercity Rail via Decatur Belt

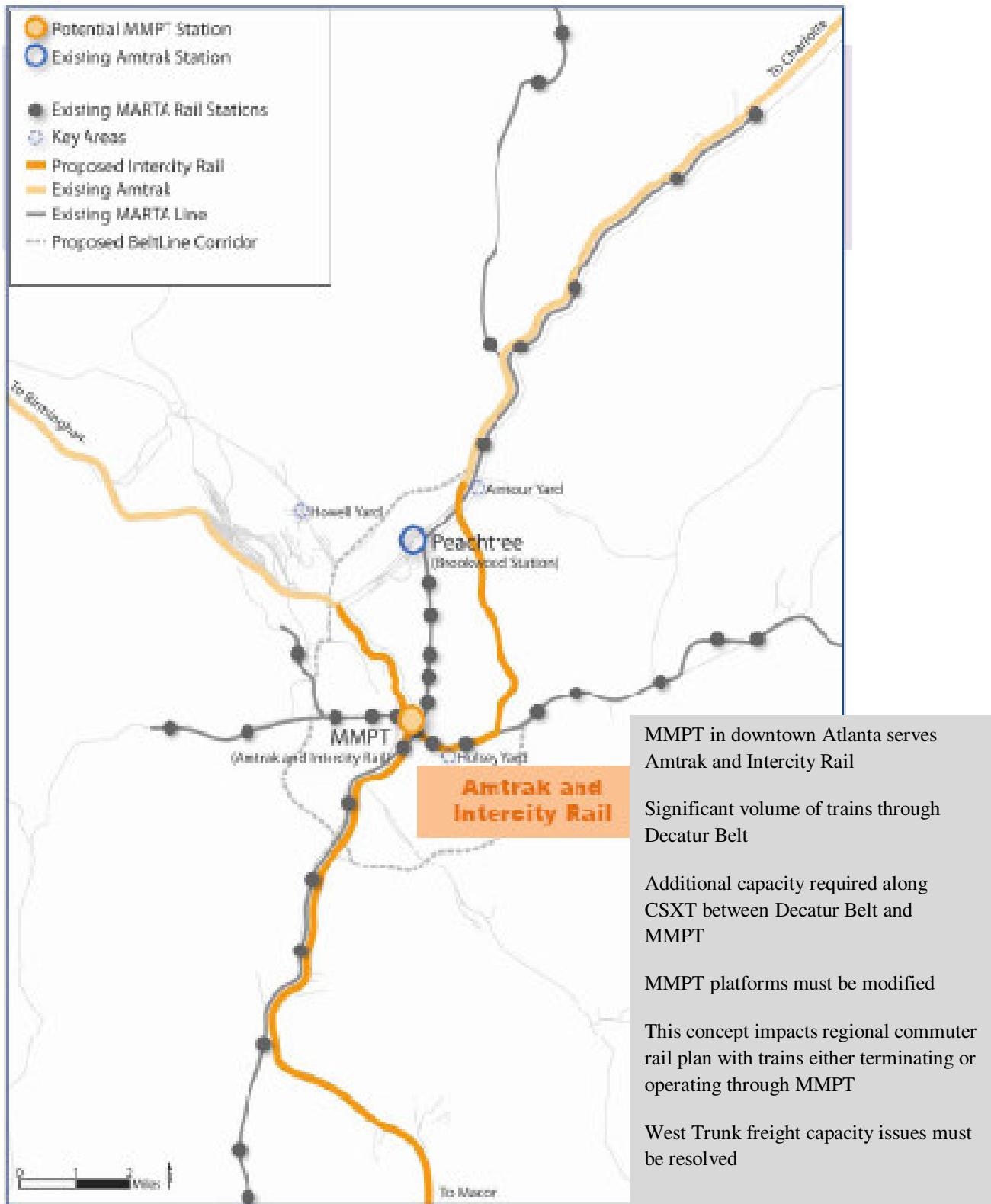
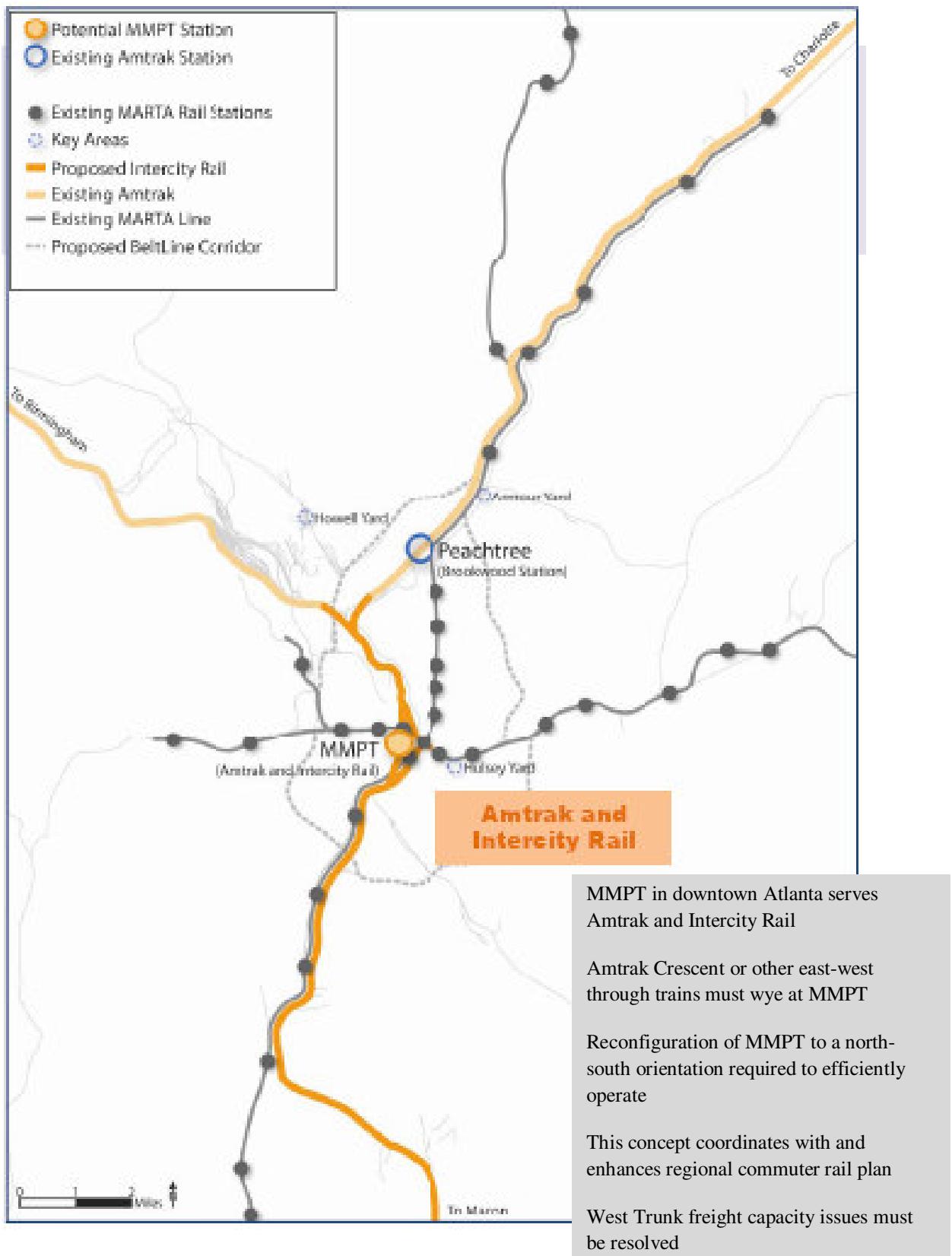
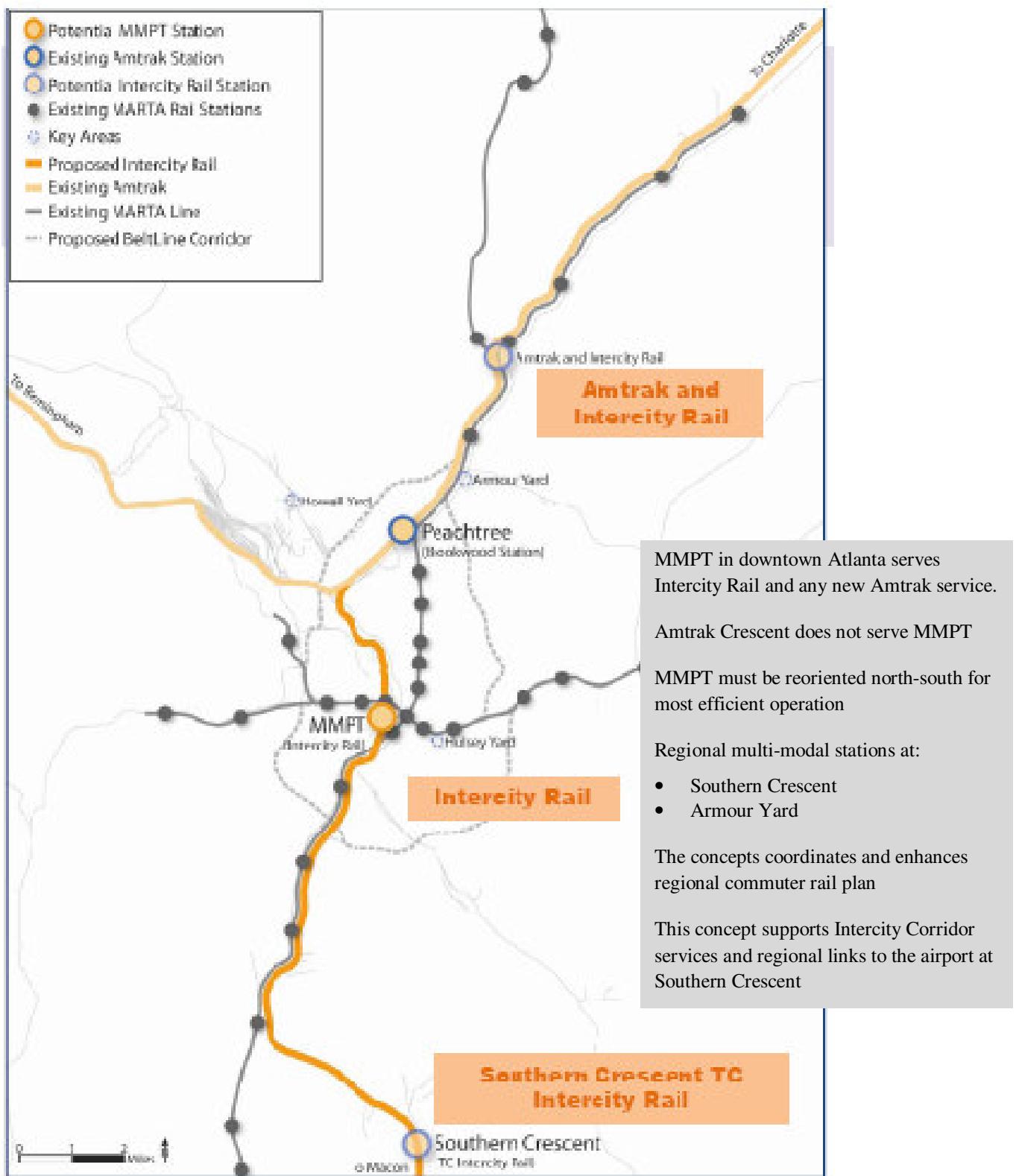


Figure 3-8: Intercity Rail via West Trunk



**Figure 3-9: Intercity Rail via West Trunk
Amtrak as Current**



3.3 Potential Environmental Impacts of Alignment Alternatives

The technical group conducted a broad based analysis of potential environmental impacts of new passenger rail services in the West Trunk and the Decatur Belt through a Geographic Information Systems (GIS) analysis using available data from the City of Atlanta database. A $\frac{1}{4}$ mile buffer around the routes was used to estimate the potential environmental impacts. While this level of analysis cannot accurately quantify specifics impacts, it does provide a rough idea of the potential of one project to incur impacts compared to another. As shown in Table 3-3 the potential for impacts in the Decatur Belt is significantly higher than along the West Trunk route.

Table 3-3: Environmental Resources in Proximity to Alignment Alternatives

Year 2005	Decatur Belt	West Trunk
Population	13,343	3797
Residential Properties	5180	2250
Commercial Properties	788	537
Industrial Properties	145	241
Schools	2	0
City Parks ¹	13 (410 acres)	1 (2 acres)

¹ Acreage is combined acreage of parks partially within 1/4-mile of route; entire acreage may not lie within 1/4 mile

The Decatur Belt has more than three times as many persons living in proximity to the corridor who may be impacted by noise, vibrations or local air quality issues generated by passenger rail. It also has more than 400 acres of parks in proximity to the corridor including Piedmont Park that is bisected by the Decatur Belt and is currently in the midst of a major expansion on both sides of the corridor. The expansion plans for the park have taken into account the BeltLine, but have not assumed a passenger rail service. This raises the potential for federal 4F issues (mandating that federally funded projects must avoid directly impacting parks when alternatives are available) with the implementation of passenger rail in the corridor. The portion of the Decatur Belt running from Montgomery Ferry Road to Park Drive also has floodplains and wetlands within the corridor that might be a limiting factor in the development of transit facilities.

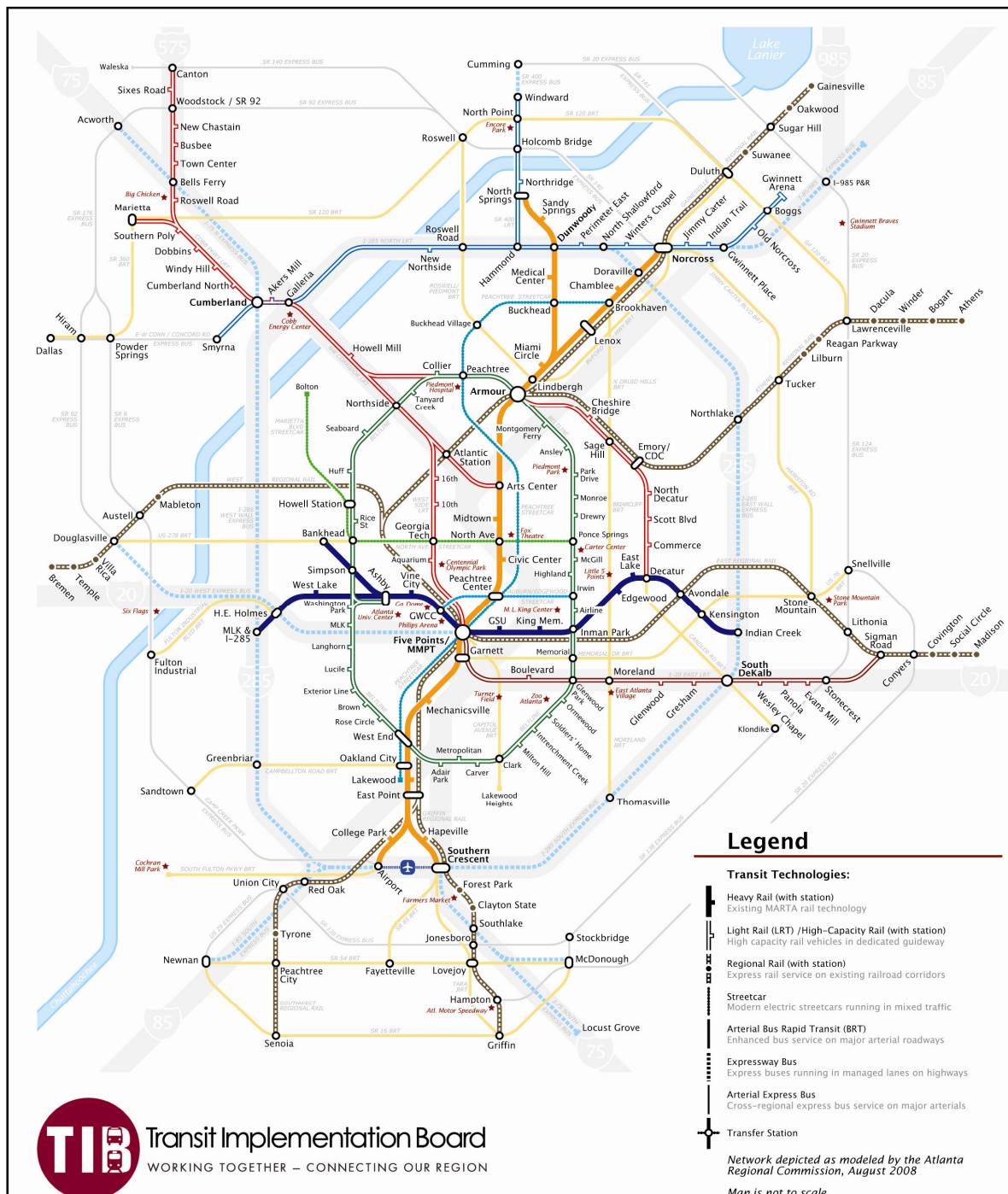
3.4 Regional Transit Plan Coordination

In August 2008, following a two-year plan development process, the Transit Planning Board adopted Concept 3, an ambitious long-range vision for a greatly expanded multimodal transit system serving the Atlanta region. The plan was later adopted by the Atlanta Regional Commission, becoming the transit component of the regional “Aspirations Plan” (the financially-unconstrained element of the Regional Transportation Plan), and was also adopted by other planning partners including MARTA, the Georgia Regional Transportation Authority and the City of Atlanta who incorporated Concept 3 recommendations into their Connect Atlanta Plan. A stylized illustration of Concept 3 is depicted in Figure 3.10.

As the region moves forward with expanded passenger rail service, there are other intermodal stations identified in Concept 3 that should be considered (i.e. East Point and Southern Crescent). A more detailed description of these proposed stations is located in Appendix E.

Concept 3 does not directly address the topic of future intercity passenger rail and no assumptions were made regarding the impact of these services. However, the Concept 3 vision, being representative of the region's comprehensive long-range transit planning effort, does offer an important planning context for ongoing work regarding both near-term and long-term intercity/HSR transfer opportunities.

Figure 3-10: Adopted Concept 3 Vision



3.5 Development Impacts

Two scenarios were examined for impacts on development in the BeltLine TAD. The first assumes two passenger rails, two light rail BeltLine tracks, and a multi-use path. Per the cross-section presented by Systra on February 23, 2009, this scenario requires 102-foot width for the entire corridor. The second scenario assumes that two passenger tracks will be tunneled underneath the Decatur Belt with no resultant impact to BeltLine development.

The impact for development in the first scenario is summarized by Table 3-4, and results in an approximately \$214 million reduction in direct BeltLine revenues over 25 years as well as a \$1.3 billion reduction in added tax base over 25 years.

Table 3-4: Scenario 1 Impact on Development

	Base Incremental Tax Base	Shared Alignment Incremental Tax Base	Tax Base Δ	Annual Tax Revenue Δ	BeltLine Revenue Δ
Development w/i BeltLine corridor	\$ 70.7	\$ -	\$ (70.7)	\$ (2.9)	\$ (78.3)
Adjacent Property w/i BeltLine TAD	\$ 6,370.2	\$ 5,096.2	\$ (1,274.0)	\$ (52.3)	\$ (136.1)
TOTAL (millions)	\$ 6,440.9	\$ 5,096.2	\$ (1,344.7)	\$ (55.2)	\$ (214.4)

3.5 Order of Magnitude Costs

Initially the technical committee identified six alternatives for review and cost analysis. These include the following five options for the Decatur Belt:

- a) 2 Passenger, 2 Light-rail and trail
- b) 2 Light-rail and trail
- c) 1 Passenger, 1 Light-rail and trail
- d) 2 Passenger and trail
- e) 2 Light-rail and trail at grade, 2 Passenger in tunnel

The option considered for the West Trunk consisted of the construction of 2 passenger lines on the eastern side of the right of way.

Alternates (b) and (d) were eliminated due to regulatory and operational incompatibilities of joint track use. Alternate (c) was modified to include two passenger tracks at both ends of the Decatur Belt approach (Armour Yard and Dekalb Avenue).

The following high level order of magnitude cost estimates were developed for the options described above.

Decatur Belt, 2 FRA, 2 LRT, Trail - Option (a)				
2 LRT	\$45	miles	4.3	\$0.00
2 FRA	\$13	miles	4.3	\$55.90
Quiet Zone	\$1	miles	4.3	\$0.00
Bridges	\$4	each	11	\$44.00
 Decatur Belt to MMPT				
Decatur Street	\$40	each	1	\$40.00
Downtown Connector	\$20	each	1	\$20.00
Underground	\$40	each	1	\$40.00
Sub-Total				\$199.90
30% Contingency				\$59.97
Total				\$260M
Additional Right of Way Required	6.0	acres		

Decatur Belt Abandonment
Technical Review Committee
Findings Report

Decatur Belt, 1 FRA, 2 LRT, Trail, 2 FRA at north & south ends of the line – Modified Option (c)

2 LRT	\$45	miles	4.3	\$0.00
2 FRA	\$13	miles	2	\$26.00
1 FRA	\$8	miles	2.3	\$18.40
Quiet Zone	\$1	miles	4.3	\$0.00
Bridges	\$4	each	7	\$28.00

Decatur Belt to MMPT

Decatur Street	\$40	each	1	\$40.00
Downtown Connector	\$20	each	1	\$20.00
Underground	\$40	each	1	\$40.00
Sub-Total				\$172.40
30% Contingency				\$51.72
Total				\$224M

Decatur Belt, 2 FRA in Tunnel, 2 LRT and Trail At Grade - Option (e)

2 LRT	\$45	miles	4.3	\$0.00
Tunnel	\$500	miles	4.3	\$2,150.00
2 FRA	\$4	miles	4.3	\$17.20
Quiet Zone	\$1	miles	4.3	\$0.00
Bridges	\$2	each	11	\$0.00

Decatur Belt to MMPT

Decatur Street	\$40	each	1	\$40.00
Downtown Connector	\$20	each	1	\$20.00
Underground	\$40	each	1	\$40.00
Sub-Total				\$2,267.20
30% Contingency				\$680.16
Total				\$2,947M

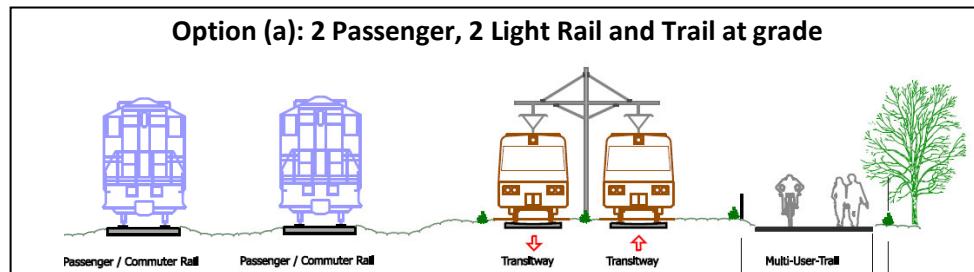
West Trunk - Howell Junction to MMPT

Howell Junction Grade Separation	\$100	each	1	\$100.00
2 FRA	\$13	miles	2.5	\$32.50
1 FRA to Armour	\$8	miles	2	\$16.00
Bridges	\$4	each	4	\$16.00
Decatur Street Impacts	\$50	each	1	\$30.00
Right of Way	4	acres		
Sub-Total				\$194.50
30% Contingency				\$58.35
Total				\$252M
Additional Right of Way Required	4.0	acres		

Additional right of way requirements were identified for each alternative as shown but not assigned costs. Each approach has operational and technical challenges. Significant conceptual planning and design and preliminary design of select elements is needed to more accurately identify the cost of the different passenger rail access to the MMPT. Quiet zones were assumed to be required for both light rail (LRT) and Federal Railroad Administration (FRA)-compliant options and thus were not included in the cost estimates. Right of way includes separation for safe operation of LRT and passenger rail.

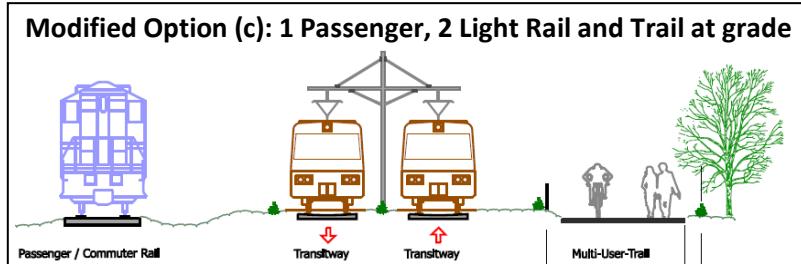
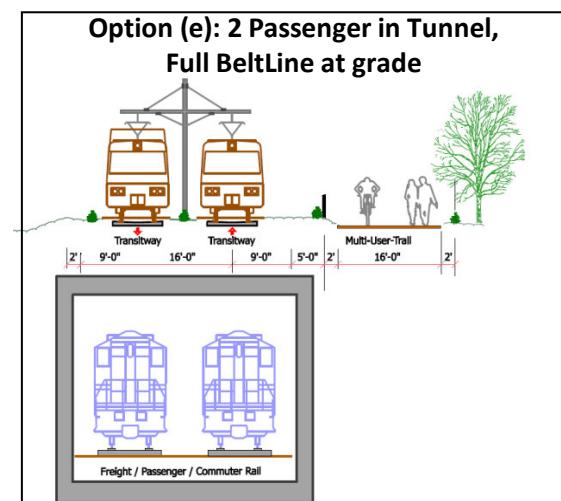
Co-existence in Decatur Belt of Intercity Rail and BeltLine

The base case for co-existence of is Option (a) has a minimum right of way required of 104 feet in width. Additional right of way needs for this alternative is approximately 5.5 acres, consisting of sections of the Historic Inman Park neighborhood and the Martin Luther King Jr Historic District.



The second alternative considered, Option (e), includes providing passenger rail access via the BeltLine by tunneling the length of the BeltLine.

The modified base is the modified Option (c) described above which provides two tracks for passenger access to the first mile of the Decatur Belt from Armour Yard and the first mile from Dekalb Avenue and providing a single intercity/high-speed passenger rail track in the center portion of the BeltLine.



All scenarios access the MMPT via two passenger rail tracks between the start of the Decatur Belt at Dekalb Avenue and the MMPT. Costs are significant due to the presence of CSXT's Hulsey Yard, a pinch point between the MARTA King Memorial Station and Oakland Cemetery, a new bridge over the downtown connector, and significant reconstruction between the downtown connector and the MMPT. In the future, much of these costs might possibly be redirected towards freight improvements which could then allow passenger rail to use existing tracks for MMPT access and storage.

Passenger Rail along West Trunk

The base case for the West Trunk includes right of way sufficient for two dedicated intercity/high-speed passenger tracks beginning just west of the existing Amtrak Station, grade separating Howell Junction and providing additional right of way for two dedicated intercity/high-speed passenger tracks accessing the MMPT. Additional right of way needs are approximately 4 acres.

Significant costs include grade separating Howell Junction, impacts to Decatur Street and re-establishing the former CSXT Main beneath CNN Center. Howell Junction grade separation includes a flyover structure for intercity/high-speed passenger rail (estimated grade of 3%) and simple bridge U-wall structures separation of the Western and Atlantic (W&A) CSXT and NSR at 1% grades. Of the 4 acres of right of way needed, 3 acres are allocated to grade separating Howell Junction.

Appendix A

Technical Review Committee Members

Erik Steavens, GDOT	Nate Conable, ABI
Steve Yost, GDOT	Lee Harrop, ABI
Doug Alexander, GDOT	Rich Krisak, MARTA
Heather Alhadeff, City of Atlanta	Derek Crider, MARTA
Sandra Jennings, City of Atlanta	John Crocker, TIB
Ed Campbell, Georgia Rail Consultants	David Emory, ARC
Virginia Beck, CSXT	Crew Heimer, GRTA
Drew Galloway, Amtrak	Angie Laurie, Central Atlanta Progress

Executive Committee Members

Gerald Ross, PE, GDOT	Terri Montague, ABI
Ann Witt, Amtrak	Luz Borrero, City of Atlanta
Eldrin Bell, TIB	Joe Basista, City of Atlanta
Chick Krautler, ARC	Beverly Scott, MARTA

Appendix B

Amtrak Alternative Station Analysis Matrix

Criteria		Station Site Analysis		
		Lenox	Brookhaven	Doraville
Location				
Activity Center	Is a major activity center nearby that would meet Amtrak's key criteria for locating a station?			
Adjacent Destinations	Are there other primary destinations within reasonable walk or taxi distance of the station?			
Adjacent Parking	Is adjacent parking available for passengers, short-term waiting as well as long-term?			
Employment Center	Is a key employment center adjacent to the station; is the employment center one of regional significance?			
Multi-modal Connections	Are multi-modal connections available at the station to allow convenient access to other regional activity centers			
Adjacent Hotels/Amenities	If the area is an activity center, are there adjacent hotels and amenities comparable to downtown areas?			
Concept 3 Transit Facility	Is the station location a Concept 3 transit station or transfer facility? Can the station design meet envisioned long-term needs?			
Expansion	Can the location accommodate expansion of passenger waiting areas? Can additional platforms be added?			
Access				
Vehicular	Is the site readily accessible from local roadways and from freeways?			
Pedestrian	Is the site easily and safely accessible by pedestrians? Are sidewalks available and is access impeded or made more difficult by traffic or blocked by railroads or private property?			
Multi-modal Connections				
MARTA Rail	If there is a current connection to MARTA rail; what are travel times to Midtown, Downtown and the airport and how many transfers are required?			
Local/Express Bus	Is there a current connection to local and express bus service; what are travel times to Midtown, Downtown and the airport and how many transfers are required?			
Future Commuter Rail	Which line(s) will serve the station.			
LRT/streetcar	Which of the Concept 3 on other regional rail lines will serve the station?			
Intercity Rail	Which intercity rail lines will serve the station, short- and long-term?			
Intercity Bus	Is intercity bus a potential mode at the facility?			
Taxi/Shuttle Service	Can the facility accommodate taxis and shuttles?			
Station Design				
Passenger Platform Length	Is the platform length sufficient for intercity rail?			
Center or Side Platforms	What are the access implications for center or side platforms at each site for short- and long-term operations by intercity and commuter rail.			
Passenger Platform Width	Can adequate width be provided for vertical access, circulation and evacuation			
Dedicated Track Possible	Can one or two dedicated tracks be provided for intercity and Commuter Rail?			
Tangent Track	Can tangent track be provide for the entire platform length?			
High Platforms Possible	Are high platforms possible?			
ADA Access to Platforms	If high platforms are not possible how will ADA compliance be met considering Amtrak, Commuter Rail and HSR?			
Service Platform Possible	Can a service platform be provided for intercity rail baggage handling and servicing?			
Service Roadway Possible	Can a service roadway be provided? If not, is track access possible for intercity train servicing?			
Passenger Lobby	Is sufficient space available to provide passenger lobby and passenger services as required by Amtrak?			
Passenger Services	Can baggage be handled for intercity rail?			
Emergency Evacuation	Can emergency evacuation of the station lobby and platforms be achieved readily?			
Long Term Utility	Could station serve as a long-term multi-modal facility for intercity or an interim facility?			

Appendix B

Amtrak Alternative Station Analysis Matrix (continued)

Parking					
Current Availability	Is parking currently available at the facility?				
Current Capacity	Based on current utilization, would long-term parking be available for intercity passengers?				
Distance from Station	Is parking located at a convenient distance from the station?				
Access to Station	Is there direct access from the parking area to a current MARTA facility? Could direct access be provided to MARTA?				
Long-term Parking	Is long-term parking currently available?				
Short-term Parking	Is short-term parking available on adjacent roadways?				
Operations					
Train Storage	Can a train be stored at the station or nearby?				
Wye	Is a wye near the station? Where could a train be turned?				
Station on Mainline	Is the station located on the mainline?				
Dedicated Track Possible	Can a dedicated track for intercity and commuter rail be provided?				
Freight Operations	Would the station impacts to current and future freight operation				
Freight Right-of-Way	Would the station impact utilities or infrastructure within right-of-way				
Meets Future Service Needs	Does station meet future intercity and commuter rail needs -- tracks and platforms to meet service demand?				
Travel Time	What is travel to Midtown, Downtown and Airport from this station				
Implementation					
Right-of-Way Required	Must additional ROW be acquired?				
Modifications of Current Facility	Must the current facility or site be significantly modified to accommodate intercity and commuter rail?				
Utilities	Are there potential utility impacts?				
Railroad Requirements and Design Criteria	Can station design conform to railroad design criteria and operating parameters?				
Environmental Impacts	Are there potential impacts to the natural environment?				
Neighborhood	Are there potential neighborhood visual and noise impacts?				
Economic Development	Would the station enhancement or be a catalyst for economic development?				
Cost	What are potential costs of alternative designs?				
Construction	What is the likely construction timeline?				

Appendix C
Preliminary West Trunk Freight Relief Options

Appendix D
Amtrak Alternative Site Memo

Appendix E

Long Range Regional Transit Planning Context Memo