Maryland National Capital Purple Line Bethesda to New Carrollton, Maryland

New Starts Engineering (Rating Assigned November 2015)

Summary Description

Proposed Project: Light Rail Transit

16.2 Miles, 21 Stations

Total Capital Cost (\$YOE): \$2,448.22 Million (Includes \$123.1 million in finance charges)

Section 5309 New Starts Share (\$YOE): \$900.00 Million (36.8%)

Annual Operating Cost (opening year (2021): \$53.44 Million

Current Year Ridership Forecast (2014): 41,000 Daily Linked Trips

15,511,800 Annual Linked Trips

Horizon Year Ridership Forecast (2035): 56,100 Daily Linked Trips

20,579,500 Annual Linked Trips

Overall Project Rating: Medium-High Project Justification Rating: Medium-High

Local Financial Commitment Rating: Medium-High

Project Description: The Maryland Transit Administration (MTA) proposes to build a light rail transit (LRT) line between Bethesda in Montgomery County and New Carrollton in Prince George's County passing through Silver Spring, Takoma Park, Langley Park, College Park, the University of Maryland, and Riverdale. The project crosses several major arterial roadways and existing radial transit routes that travel between suburban Maryland and Washington, DC, inside the National Capital Beltway (Interstate 495). The project includes approximately four miles of semi-exclusive guideway on the Georgetown Branch right-of-way, a former freight railroad line between Bethesda and Silver Spring, approximately 0.7 miles of elevated guideway, and approximately 0.2 miles of tunnel. The project includes 16 at-grade stations, three elevated stations, and two below-grade stations; the purchase of 46 light rail vehicles; and construction of two rail car storage and maintenance facilities. The project does not include any new park-andride facilities. In the opening year service is planned to be provided from 5:00 a.m. to 12:00 a.m. on weekdays and from 7:00 a.m. to 12:00 a.m. on weekends, with trains every 7.5 minutes during peak periods, and every 10 to 15 minutes during off-peak periods and on weekends. MTA and the Maryland Department of Transportation (MDOT) are pursuing a Public-Private Partnership (P3) to design, build, operating and maintain the project.

Project Purpose: The project would provide fast and reliable transit service in this crosscounty corridor, improving access to several business districts and activity centers along the route. It would connect passengers via transfers to existing radial transit routes including branches of the Washington Metropolitan Area Transit Authority's Red, Green, and Orange heavy rail lines. The project would also connect with three Maryland Area Regional Commuter (MARC) rail lines at Silver Spring, College Park, and New Carrollton, and with Amtrak on the Northeast Corridor in New Carrollton. While the project corridor has extensive radial transit service crossing the proposed route, the only existing transit available for travel along the length of the corridor is bus service, which is slow and unreliable – much of it operating at less than 10 miles per hour on indirect routes. The project is expected to provide significant travel time savings. For example, a peak period bus trip on parallel roads between Bethesda and Silver

Spring would take 40 minutes in 2030, while the same trip on the project is estimated to take only 10 minutes.

Project Development History, Status and Next Steps: Following publication of the alternatives analysis and Draft Environmental Impact Statement (EIS) in October 2008, the State of Maryland selected an LRT line between Bethesda and New Carrollton as the locally preferred alternative in August 2009. The National Capital Region Transportation Planning Board approved the Purple Line into the financially constrained long-range regional transportation plan, including updated capital cost estimates for the project, in October 2009 and May 2011. Under SAFETEA-LU, FTA approved the project into New Starts Preliminary Engineering in October 2011. The Final EIS was published in August 2013, and a Record of Decision was issued in March 2014. Under MAP-21, FTA approved the project into the New Starts Engineering phase in August 2014. MTA anticipates receipt of a Full Funding Grant Agreement in mid-2016, and the start of revenue service in late 2021.

Significant Changes Since Last Evaluation (November 2014): MTA reduced the amount of State of Maryland Transportation Trust Funds (TTF) programmed for the project from \$738.07 million to \$483.97 million, and increased the amount of private equity and borrowed funds to be provided by the P3 concessionaire from \$810.16 million to \$1,064.25 million. The borrowed funds include a Transportation Infrastructure Finance and Innovation Act (TIFIA) loan. MTA altered the proposed service plan during peak periods in the opening year from every six minutes to every 7.5 minutes. Consequently, the number of passenger trips expected in the current year was reduced from 44,300 per day to 41,000 per day. MTA also changed the project scope by reducing the number of vehicles to be purchased from 58 to 46.

Locally Proposed Financial Plan				
Source of Funds	Total Funds (\$million)	Percent of Total		
Federal: Section 5309 New Starts	\$900.00	36.8%		
State: Maryland Transportation Trust Fund (TTF)	\$483.97	19.8%		
Other: P3 Concessionaire Funds, Private Equity and Borrowed Funds (including a TIFIA loan) repaid by concessionaire using funds from availability payments it receives from Maryland TTF	\$1,064.25	43.5%		
Total:	\$2,448.22	100.0%		

NOTE: The financial plan reflected in this table has been developed by the project sponsor and does not reflect a commitment by DOT or FTA. The sum of the figures may differ from the total as listed due to rounding.

MD, Bethesda to New Carrollton, National Capital Purple Line (Rating Assigned November 2015)

Factor	Rating	Comments
Local Financial Commitment	Medium-	
Rating	High	
Non-Section 5309 New Starts	+1 level	The New Starts share of the project is 36.8 percent.
Share		
Project Financial Plan	Medium	
Capital and Operating Condition (25% of plan rating)	Medium	• The average age of the Maryland Transit Administration's (MTA) bus fleet is 7.0 years, which is in line with the industry average.
		• The Maryland Department of Transportation (MDOT) is the parent organization of MTA. Its most recent bond ratings, issued in June 2015, are as follows: Moody's Investors Service Aa1, Fitch's AA+, and Standard & Poor's Corporation AAA.
		• MDOT's current ratio of assets to liabilities as reported in its most recent audited financial statement is 1.16 (FY2014).
		• There have been minor (less than one percent) bus service cutbacks in the past five years, while service for other modes grew. MDOT had positive cash flow in 2013 and 2014; shortfalls occurred in 2011 and 2012, which were covered from reserves.
Commitment of Capital and	Medium-	• 31.3 percent of the non-Section 5309 funds are committed or budgeted, and the rest
Operating Funds	High	are considered planned. Sources of funds include the State Transportation Trust
(25% of plan rating)	_	Fund (TTF), a Transportation Infrastructure Finance and Innovation Act loan repaid
		by the private concessionaire using payments it receives from the TTF, and private
		equity. Prince George's and Montgomery counties would contribute \$160 million,
		via the TTF, to support the project.
		• All of the funds needed to operate and maintain the transit system in the first full year of operation are committed. Sources of funds include FTA Section 5307
		Urbanized Area formula funds, State TTF revenues, and farebox and other
		operating revenues. The private concessionaire will pay for operation and
		maintenance of the project from availability payments it receives from MTA, using
		these sources.
Capital and Operating Cost	Medium-	Assumed growth in TTF revenue and operating revenues is more optimistic than
Estimates, Assumptions and Financial	Low	historical experience.

Capacity	•	The Project capital cost estimate is toward the lower end of the range of what may
(50% of plan rating)		be expected, and is slightly optimistic.
	•	MTA, along with MDOT, has the financial capacity to cover cost increases or
		funding shortfalls equal to 18 percent of estimated project costs and five percent of
		annual MDOT operating expenses in the first full year of the Project's operation.

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LAND USE RATING: Medium

The land use rating reflects population and employment densities within ½-mile of proposed station areas, as well as the share of legally binding affordability restricted housing in the corridor compared to the share in the surrounding county(ies).

- Average population density across all station areas is 9,191, which corresponds to a Medium rating
 according to FTA benchmarks. Total employment served is 153,618, corresponding to a Medium-High
 rating. Parking costs are \$10-\$15 per day in downtown Bethesda and \$8 in downtown Silver Spring,
 corresponding to a Medium rating.
- The proportion of legally binding affordability restricted housing in the project corridor compared to the proportion in the counties through which the project travels is 2.07, which corresponds to a Medium rating according to FTA benchmarks.
- The corridor includes downtown Bethesda and Silver Spring, and the University of Maryland campus, along with station areas dominated by strip commercial development and residential neighborhoods of single family homes, garden apartments, townhouses, and intermittent high-rise apartment/ condominium buildings.
- Downtown Bethesda and Silver Spring have pedestrian-friendly, walkable street networks, while most of the other station areas have more automobile-oriented development patterns.

ECONOMIC DEVELOPMENT RATING: Medium-High

Transit-Supportive Plans and Policies: Medium-High

- Growth Management: State policies support the concentration of growth in existing cities and towns.
 The entire Purple Line corridor is located within a State-designated Priority Funding Area eligible for growth-related State infrastructure funding.
- Transit-Supportive Corridor Policies: Montgomery County has a growth policy that directs development
 to areas where public services are in place. Prince George's County has identified most of the Purple
 Line Corridor for concentrated growth, providing incentives for high-density housing and mixed use infill
 and redevelopment. Plans for new development and redevelopment with transit-supportive character
 have been developed for over half of the station areas.
- Supportive Zoning Regulations Near Transit Stations: A recently completed transit-oriented development study for the project created a zoning template consisting of station-specific zoning plans. Zoning in downtown Bethesda and Silver Spring allows development at transit-supportive densities. Prince George's County has adopted new zoning policies to encourage higher-density and mixed-use development in Purple Line station areas.
- Tools to Implement Land Use Policies: The State of Maryland offers financial incentives for compact, transit supportive development and permits local governments to use tax increment financing (TIF) and special taxing districts to pay for transit-oriented development infrastructure. Prince George's County offers financing, tax deferral, streamlined development review processes, and affordable housing tax credits to encourage transit-supportive development.

Performance and Impacts of Policies: Medium-High

- Performance of Land Use Policies: Prime examples of successful transit supportive development can be found in Bethesda and Silver Spring, where land use policies have played a key role in rejuvenating the areas around Metrorail stations. Multiple large-scale transit-supportive development projects recently have been completed or are under way, planned, or proposed within the project corridor.
- Potential Impact of Transit Investment on Regional Land Use: Substantial population and employment growth is forecast for the corridor, particularly in station areas. Expanded transportation capacity and new transit connections in the corridor are expected to increase employment opportunities for residents and help to concentrate growth in areas with high quality transit access.

Tools to Maintain or Increase Share of Affordable Housing: Medium-High

- Montgomery County has laws and policies to ensure that a substantial share of new housing is
 affordable. It also has loan programs and financial incentives to increase home ownership among lowand moderate-income households. Prince George's County has identified a need for additional
 affordable housing but has adopted few policies or tools to increase the affordable housing supply.
- The State of Maryland provides financial assistance to maintain and increase the supply of affordable housing and to provide resources for low- and moderate-income households to afford rents and mortgages.

