Maryland National Capital Purple Line Bethesda to New Carrollton, Maryland

New Starts Engineering (Rating Assigned November 2014)

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 2020): \$54.49 Million

Current Year Ridership Forecast (2014): 44,300 Daily Linked Trips

16,627,600 Annual Linked Trips

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

20,979,500 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, University of Maryland, and Riverdale. The National Capital Purple Line would cross 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 would include dedicated or semi-exclusive guideway on surface streets that allow cross traffic. The route would include approximately four miles of semiexclusive guideway on the Georgetown Branch right-of-way, a former freight railroad corridor between Bethesda and Silver Spring, approximately 0.7 miles of elevated guideway, and 0.2 miles of tunnel. The project includes 16 at-grade stations, three elevated stations, and two below-grade stations; the purchase of 58 light rail vehicles (LRV); and construction of two rail car storage and maintenance facilities. The project does not include any new park-and-ride facilities. In the opening year service would 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, every six 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 to construct the Purple Line.

Project Purpose: The Purple Line would provide fast and reliable transit service in this cross-county 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, Greenbelt, 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 Purple Line 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 Purple Line 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 as the locally preferred alternative an LRT line between Bethesda and New Carrollton 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 National Capital Purple Line into preliminary engineering in October 2011. The Final EIS was published in August 2013, and a Record of Decision was issued on March 19, 2014. Under MAP-21, the project was approved into the Engineering phase in August 2014. MTA anticipates receipt of a Full Funding Grant Agreement in mid-2015, and start of revenue service in late 2020.

Significant Changes Since Last Evaluation (July 2014): Changes since the project was approved into Engineering have been minor. Hours of service were reduced slightly from 5:00 a.m. to 1:00 a.m. on weekdays, and 7:00 a.m. to 3:00 a.m. on weekends, to 5:00 a.m. to 12:00 a.m. on weekdays, and 7:00 a.m. to 12:00 a.m. on weekends. Estimated miles and hours of service provided were modified to reflect revised estimates of off-peak running times, and the reduction in number of service hours per day. Project capital costs increased from \$2,427.97 million to \$2,448.22 million primarily due to further refinement of project design and increased real estate costs.

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)	\$738.07	30.1%
Other: TIFIA Loan repaid by private concessionaire using funding from availability payments it receives from the Maryland TTF	\$729.16	29.8%
Private Equity and Borrowed Funds	\$81.00	3.3%
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, Montgomery and Prince George's counties, Purple Line (Rating Assigned November 2014)

Factor	Rating	Comments	
Local Financial Commitment Rating	Medium-High		
Non-Section 5309 New Starts Share	+1 level	The New Starts share of the project is 36.8 percent.	
Composite Financial Rating	Medium		
Capital and Operating Condition (25% of composite rating)	Medium	 The average age of the Maryland Transit Administration (MTA) bus fleet is 7.1 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 2014, are as follows: Moody's Investors Service Aa1, Fitch AA+ and Standard & Poor's AAA. MDOT's current ratio of assets to liabilities, as reported in its most recent audited financial statement, is 1.12 (FY2013). There have been no service cutbacks in the past five years. MDOT had positive cash flow in 2013, though shortfalls occurred in 2011 and 2012 that were covered from reserves. 	
Commitment of Capital and Operating Funds (25% of composite rating)	Medium-High	 Approximately 47.7 percent of the non-Section 5309 New Starts funds are committed or budgeted. Sources of funds include State Transportation Trust Fund (TTF), a TIFIA loan repaid by the private concessionaire using payments it receives from the TTF, and private equity. 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 formula funds, State TTF revenues, and farebox and other operating revenues. 	
Capital and Operating Cost Estimates, Assumptions and Financial Capacity (50% of composite rating)	Medium-Low	 Assumed growth in TTF capital revenues is more optimistic than historical experience. The capital cost estimate is reasonable for this stage of the project. Assumed growth in TTF operating revenues, operating costs, and other operating revenues is more optimistic than historical experience. MTA, along with MDOT, has the financial capacity to cover cost increases or funding shortfalls equal to 31 percent of the estimated project cost and five percent of annual MDOT operating expenses in the first full year of the project's operation. 	

Maryland National Capital Purple Line Bethesda to New Carrollton, Maryland

Project Development (Rating Assigned January 2014)

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 9,190, 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 1.51, which corresponds to a medium rating.
- 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.

