



# **Purple Line Light Rail P3 Project**

**TPB Meeting**

**May 18, 2016**

# Topics



○ **General Project Overview**

○ **The P3 Contract**

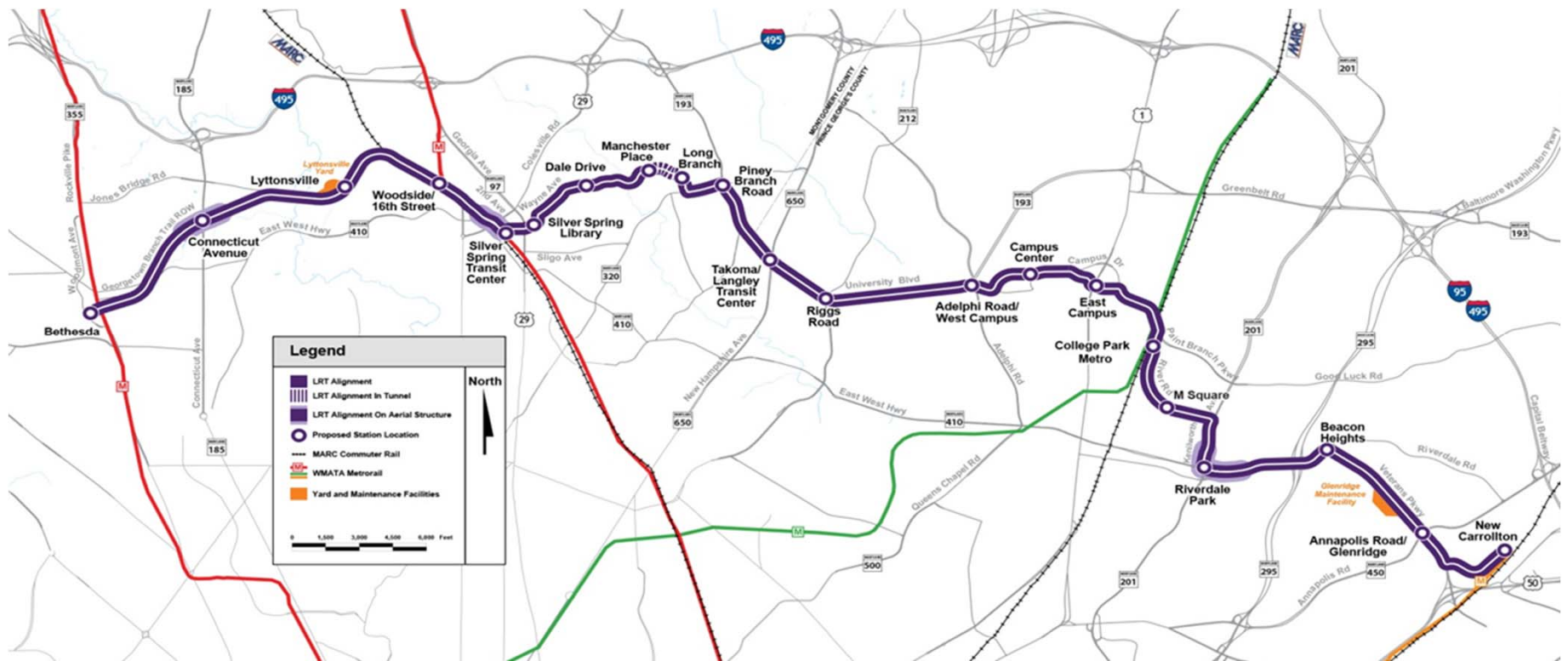
○ **Details on The Successful Proposal**

# Recap of Purple Line P3 Events

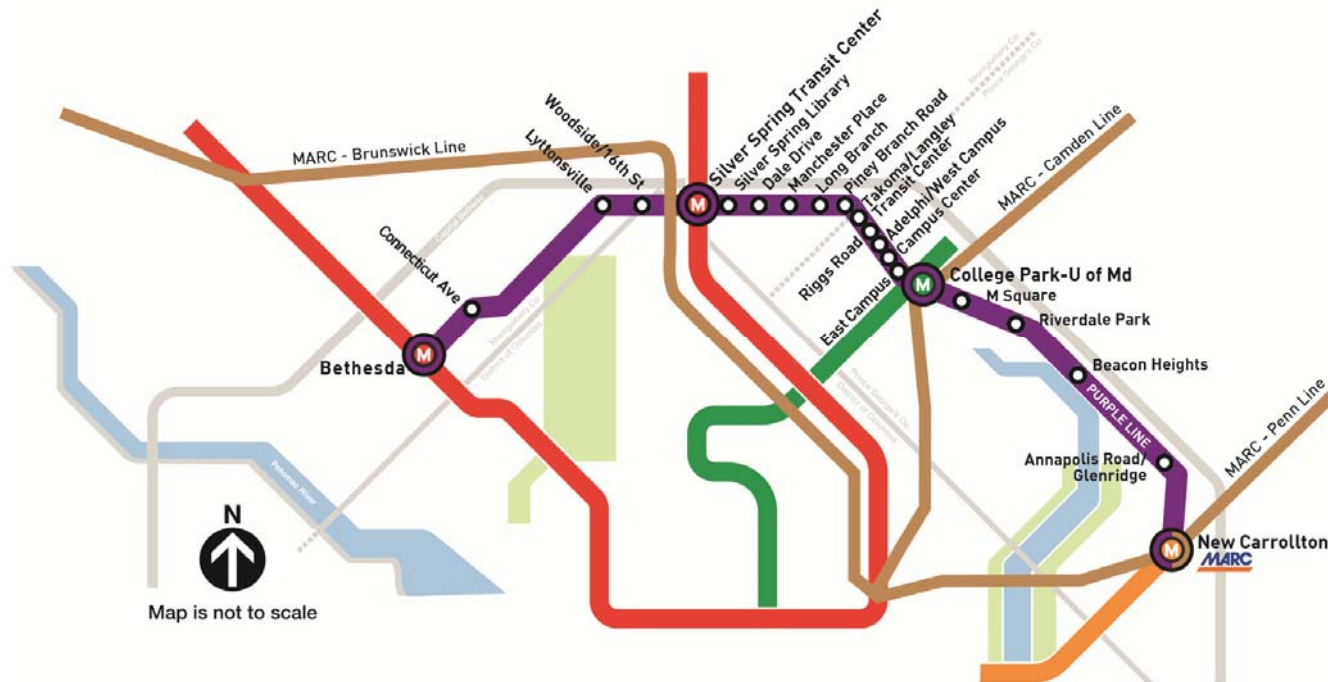
- In November 2013 MTA initiated a P3 procurement for the Purple Line, shortlisting 4 of the 6 teams responding to the RFQ
- December 8<sup>th</sup>
  - ❑ All four of the shortlisted bidding teams submitted P3 proposals
- January
  - ❑ MTA identified the best value proposal and entered into negotiations
- March 2<sup>nd</sup>
  - ❑ MTA successfully concluded negotiations
  - ❑ Governor Hogan announced Purple Line Transit Partners (PLTP) is the selected proposer
- April 6<sup>th</sup>
  - ❑ Maryland's Board of Public Works (BPW) approved the Purple Line P3 Contract

# Project Description

- 16.2 mile east-west light rail line between Bethesda in Montgomery County and New Carrollton in Prince George's County
- Operates mostly on the surface with 21 stations



# Connecting Maryland's Transit Systems



## Links with Metro at:

- Red Line at Bethesda
- Red Line at Silver Spring
- Green Line at College Park
- Orange Line at New Carrollton

- Connects to all three MARC lines
- Connects to Amtrak Northeast Corridor at New Carrollton
- Links up with regional and local bus services

# Project Characteristics

- 59,500 daily riders in 2022 when the Purple Line is up and running for passenger service and more than 74,000 daily riders in 2040.
- Hours of operation generally match Metrorail hours.
- Trains will arrive every 7.5 minutes during peak periods and 10-15 minutes off-peak.
- Approximately 30% of riders will use Metrorail or MARC for a portion of their trips.
- End-to-end travel time is just over an hour; majority of riders will take shorter trips.
- Primary Maintenance & Operations Center will be located in Prince Georges County about a mile from New Carrollton.

# Project Benefits

- The project will generate more than 23,000 jobs during the 5 ½ year design and construction period.
- Disadvantaged Business Enterprise (DBE) project goals are 26% for design services and 22% for construction services.
- At least 33% of construction work will be performed by workers of social and economic disadvantage.
- The project will serve as a catalyst for economic development and revitalization of the communities along the corridor (Local developers, businesses, and prospective employees are already inquiring about the project).
- Typically for every dollar spent on public transit projects, \$6 dollars in local economic activity is also generated.
- The Purple Line will connect residents to jobs and attract private, federal, and state agency employment centers.

# Purple Line P3 Basics

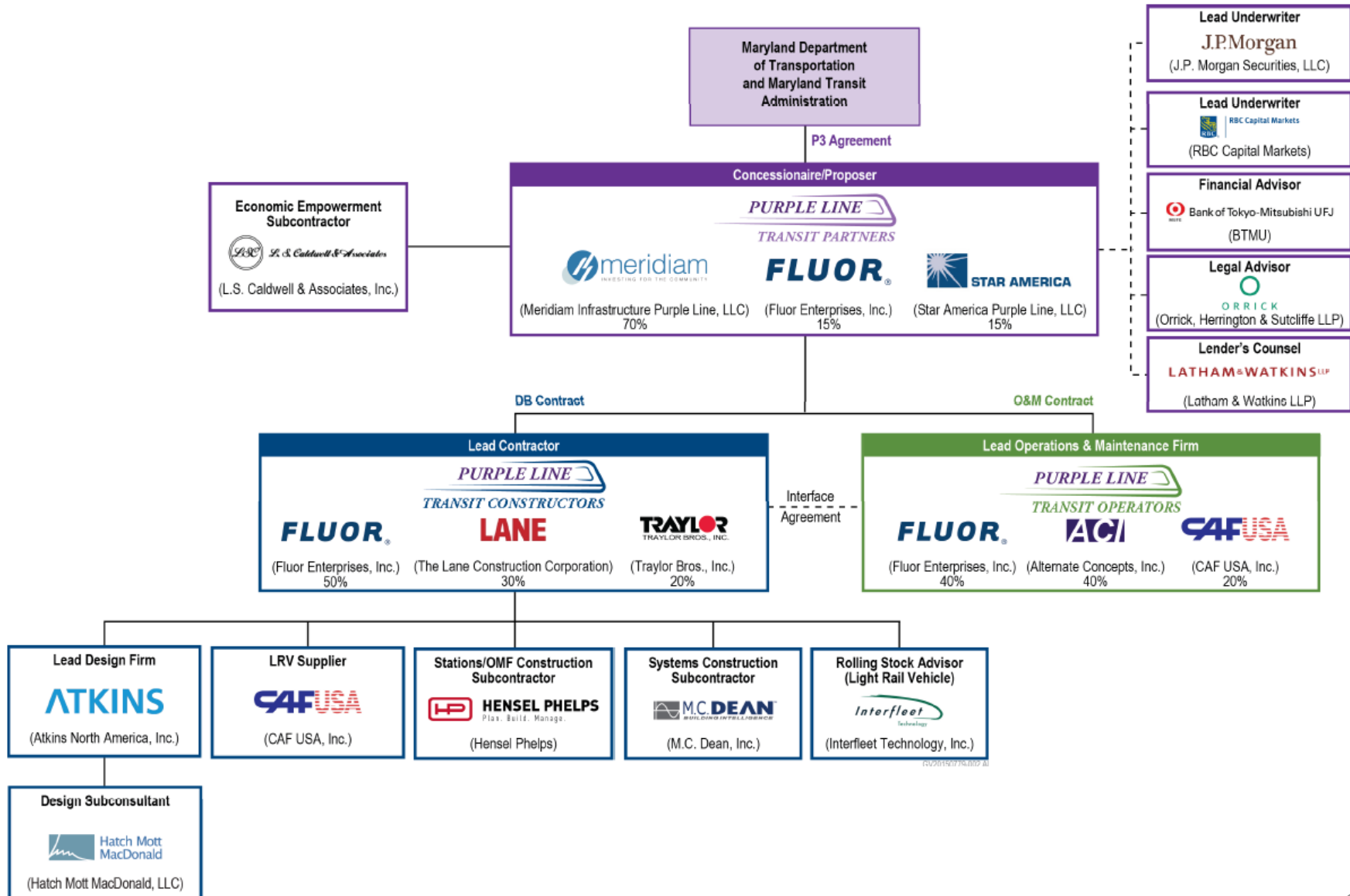
- April 7<sup>th</sup>
  - MTA and PLTP achieved Commercial Close
  - MTA issued a Limited Notice to Proceed on design work
- **Combines the design, construction, financing, operations and maintenance into one umbrella contract**
- 6 year design/construction + 30 year O&M period
- Shares risk between MTA and the Concessionaire
- Allows the Concessionaire to manage costs and innovate to mitigate risk and earn return on investment
- Based on performance standards, not detailed specifications
- Payments are tied to construction, financing, capital renewal and operating performance
- 30-year handback standards protect long-term public interest



# Who/What is a Concessionaire?

- Multiple companies combine into a consortium referred to as the “Concessionaire”
  - Investors
  - Design/Builder(s)
  - Operator/Maintainer(s)
  - Vehicle Supplier
- Concessionaire led by investors who are focused on optimizing its long-term performance, not on individual components of the project

# Concessionaire: Purple Line Transit Partners



# How Does the Concessionaire Get Paid?

- **Construction progress payments**
  - Payments made by the public agency for a portion of the project cost during design and construction
    - MTA will pay the concessionaire \$990 million of the \$1.99 billion construction cost
  - Concessionaire will finance the remaining \$1 billion
- **Availability Payments**
  - Monthly payments to the concessionaire once the project opens; based on the “availability” of the project at a certain level of performance
  - The concessionaire uses these funds to repay financing as well as fund ongoing operating, maintenance, insurance, and capital renewal costs over the 30 years

## The P3 Contract Provides Strong Incentives and Accountability

- A few examples:
  - Availability Payments are a fixed price (tied to inflation)
    - Cost overruns are the concessionaire's risk
    - Vehicle or infrastructure failures are entirely the concessionaire's cost to fix
  - Concessionaire forfeits Availability Payments if it is late in opening the project for revenue service
  - Up to 100% of the monthly Availability Payment can be deducted for poor operating performance\*
    - Largest factor is on-time performance of trains
    - Deductions also possible for other issues (e.g., \$40K deduction if elevator availability is only 97%)
  - Contract can be terminated (resulting in equity and debt lender losses) if there is sustained poor performance

## PLTP – Innovative Ideas and a Strong Design

- PLTP offered more innovative ideas and Alternative Technical Concepts (ATCs) than any other proposer, such as:
  - ❑ Use of jet fans to avoid constructing a ventilation tower in Bethesda's Woodmont Plaza.
  - ❑ Use of solar powered lubricators to reduce wheel noise and vibration on tight curves.
  - ❑ Avoidance of construction impacts at the BW Parkway by boring under the road.
  - ❑ Offering a 1500 Volt power system to cut the number of traction power substations by nearly 50% and reduce the need to acquire property.

## Innovative Ideas and a Strong Design Cont.

- ❑ Use of a flexible modular single car trains that provide the same capacity as a two car train at less cost.
- ❑ Investing more upfront in a grade separated rail crossing at Glenridge Plaza to avoid traffic impacts.
- ❑ Use of noise barriers during the construction of the Plymouth Tunnel to reduce impacts on the community.

# CAF Light Rail Vehicle



*Exterior Purple Line LRV Rendering (based on Houston LRV design)*

## *General Characteristics of The Proposed LRV*

- *Modern spacious design*
- *80% low floor*
- *Service-proven design*
- *Bi-directional operability*
- *80 seats (including 40 flip-downs)*
- *Open floor design in low floor area*
- *1500 V supply to reduce system energy consumption*
- *Modular and easier to maintain*



# Light Rail Vehicle Interior



*Interior Rendering 1*



*Interior Rendering 2*



*Interior Rendering 3*



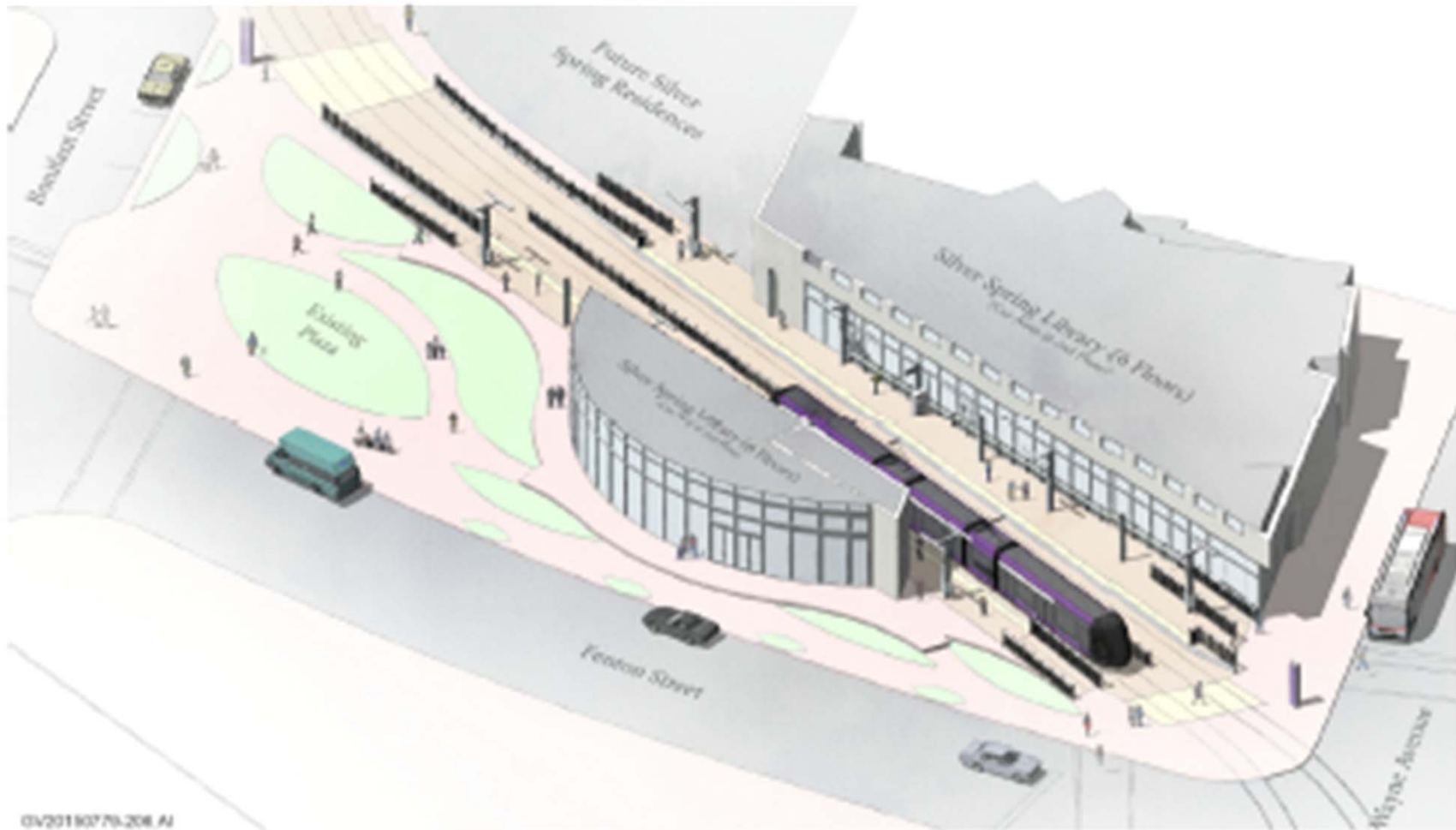
*Interior Rendering 4*



# Silver Spring Transit Center ATC



# Silver Spring Library Station



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# Glenridge Operations and Maintenance Facility

- Serves as the primary Operations and Maintenance (OMF) facility for the Purple Line
  - ❑ Includes the Operations Control Center (OCC)
- LEED Silver facility





# Lyttonsville Backup Operations Facility

- The site provides space for additional operations and a backup control center.



## Next Steps

- ❑ Financial Close – June 2016
- ❑ FTA Full Funding Grant Agreement – Summer 2016
- ❑ Commence Construction – Late 2016
- ❑ Begin Revenue Service – Spring 2022