



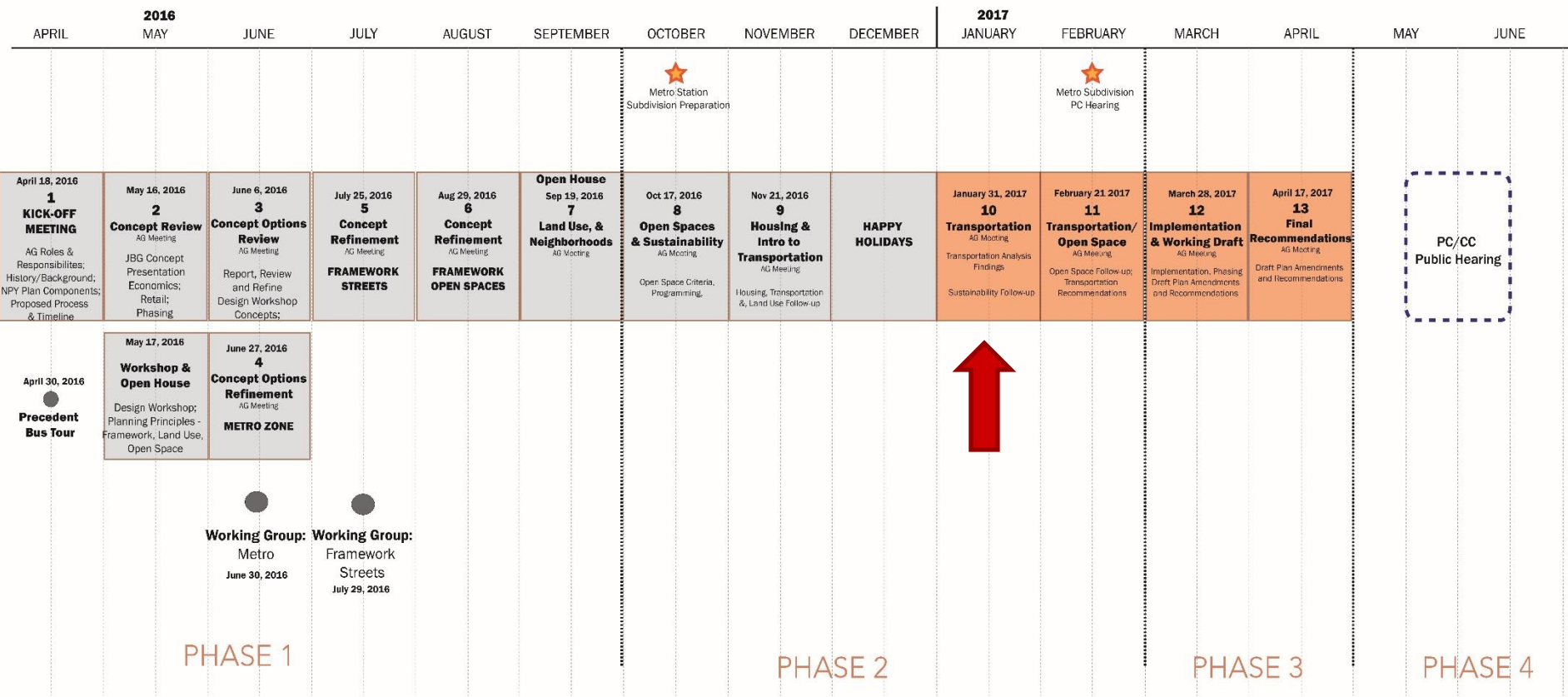
# North Potomac Yard

# Advisory Group Work Plan

# DRAFT

## NORTH POTOMAC YARD UPDATE ADVISORY GROUP WORK PLAN - REVISED

December 7, 2016



# Meeting Agenda

Topics below include time for AG questions and discussion

- Welcome & Recap
- Transportation Analysis
- Comments
- Sustainability Follow-up
- Comments
- Next Steps

# Transportation Analysis

# The Need for A Transportation Study

- Changes to the proposed roadway network
- Incorporate Route 1 / Oakville Triangle Corridor Plan land use and transportation recommendations
- South Potomac Yard mostly completed
- Metroway is now operational
- Updated mix and location of land uses, more specific development assumptions

# Transportation Study Elements

## **Future Build**

Build-out of NPY  
Mitigation

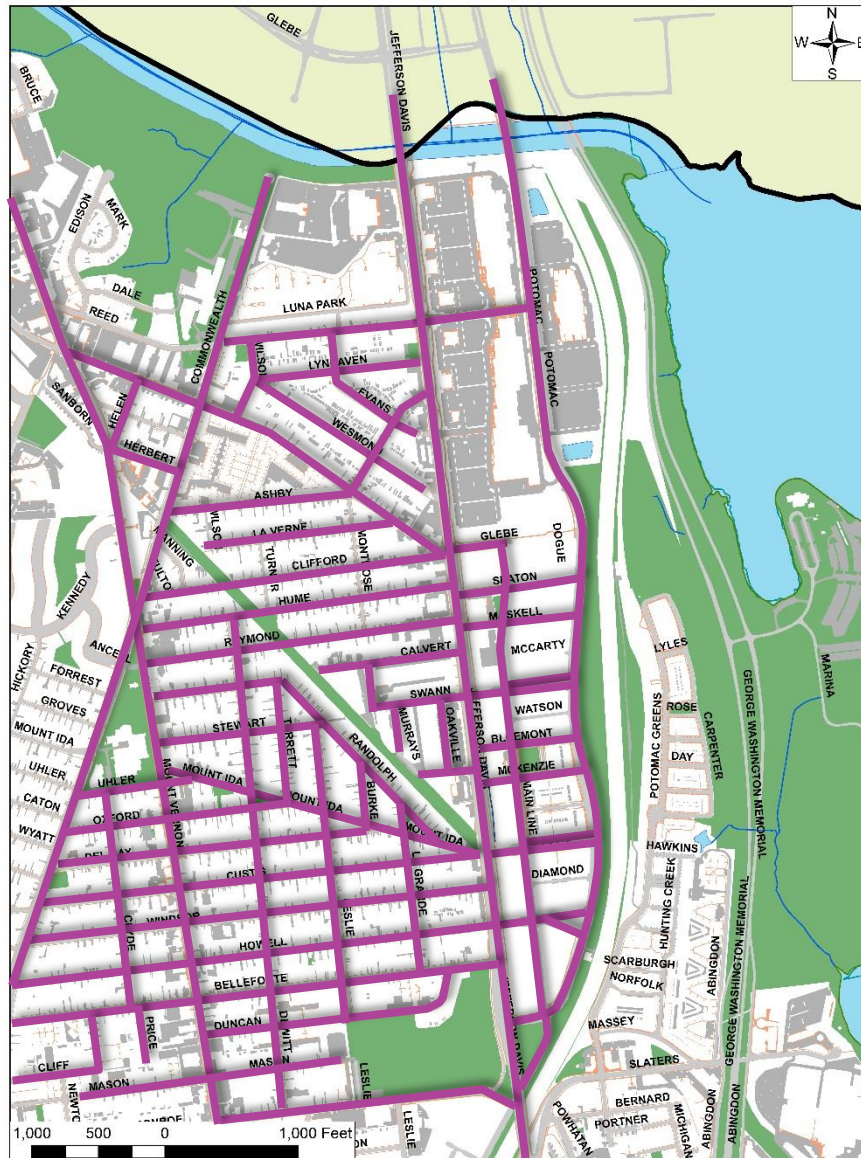
## **Future Background**

Approved and Unbuilt Developments  
Future Transportation Network Improvements  
Regional Traffic Growth

## **EXISTING**

Existing Transportation Network

# Existing Transportation Network



## US Route 1

- 40,000 vehicles per day along US Route 1
- 4 to 6 vehicle travel lanes + 2 dedicated transit lanes
- 10 signalized intersections from Slaters Lane to City line
- Multiple unsignalized right-in, right-out streets connecting to neighborhoods to the east and west of US Route 1

## Potomac Avenue

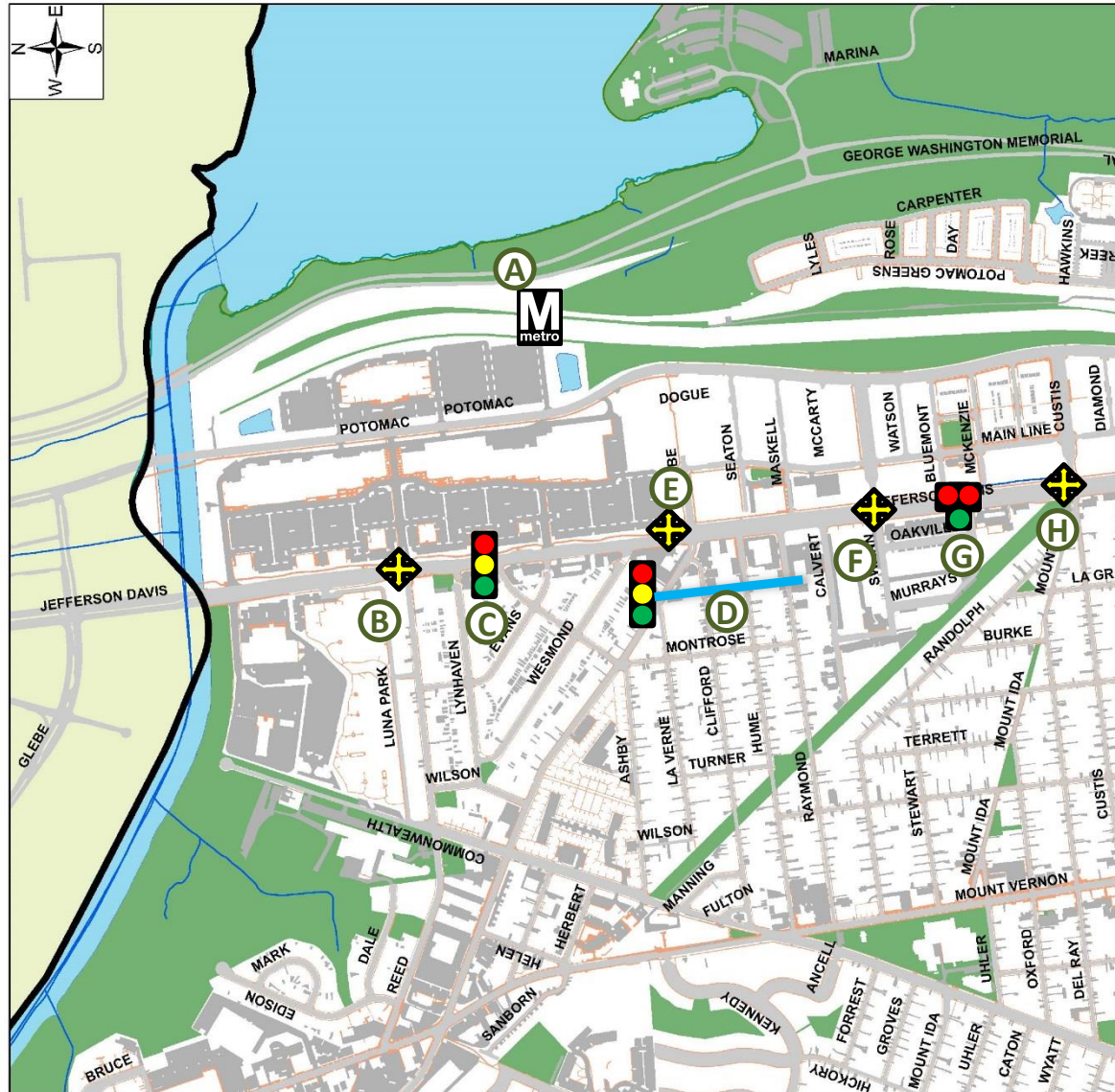
- 14,000 vehicles per day along Potomac Avenue
- 4 vehicle travel lanes
- 5 signalized intersections between US Route 1 and City line
- Multiple unsignalized right-in, right-out streets connecting to neighborhoods to the west of Potomac Avenue

## Transit Service along US 1 and Potomac Avenue:

- Metroway
- Metrobus
- DASH


**Pedestrian sidewalk or path along one or both sides US Route 1 and Potomac Avenue**


# Background Network Improvements



- (A)** Potomac Yard Metrorail Station
- (B)** E. Reed Avenue intersection improvements
  - Allow EB/WB through movements
  - Construct SB right turn lane
  - Allow EB/WB exclusive turn lanes
- (C)** Traffic Signal at Montrose Avenue
- (D)** Construction of North-South Road from Calvert Avenue to E. Glebe Road
- (E)** E. Glebe Road lane restriping to allow EB/WB exclusive left turn lanes
- (F)** Swann Avenue lane restriping to allow EB/WB exclusive left turn lanes
- (G)** Fannon Street signalized pedestrian Crossing to Metroway
- (H)** Custis Avenue lane restriping to allow EB/WB exclusive left turn lanes

\*Background network assumes signal timing adjustments to enhance north-south progression

 All-way Intersection

 Traffic Signal

 Signalized Pedestrian Improvement

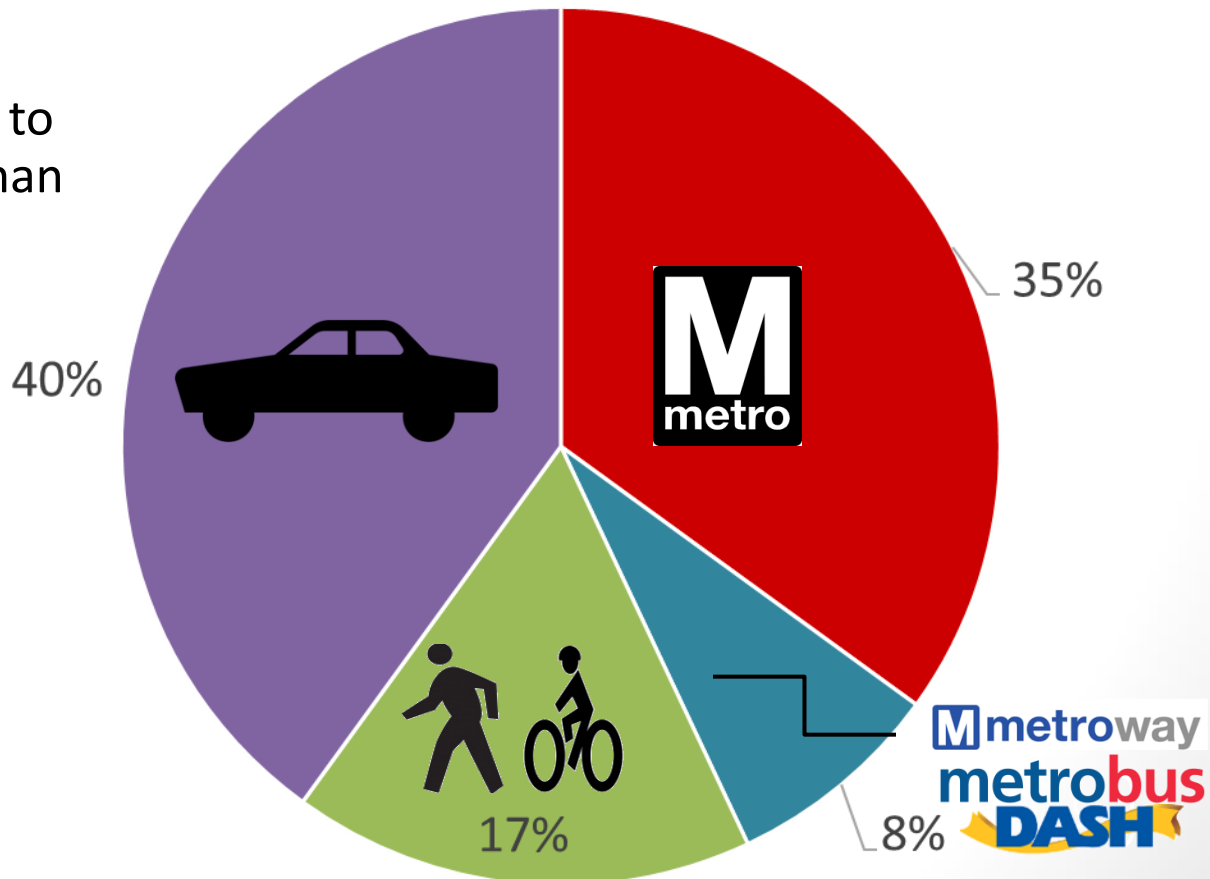


# North Potomac Yard Mode Split

- Based on land use and proximity to high-capacity transit
- Consistent with mode split assumptions used in the Oakville Triangle Study, the 2010 North Potomac Yard Study, and the current Old Town North SAP Update

# 60%

of trips anticipated to use modes other than personal vehicles



# Vehicle Trip Comparison

## Current Approval (2010 )

- ~2,200 vehicle trips during AM peak hour
- ~3,500 vehicle trips during PM peak hour



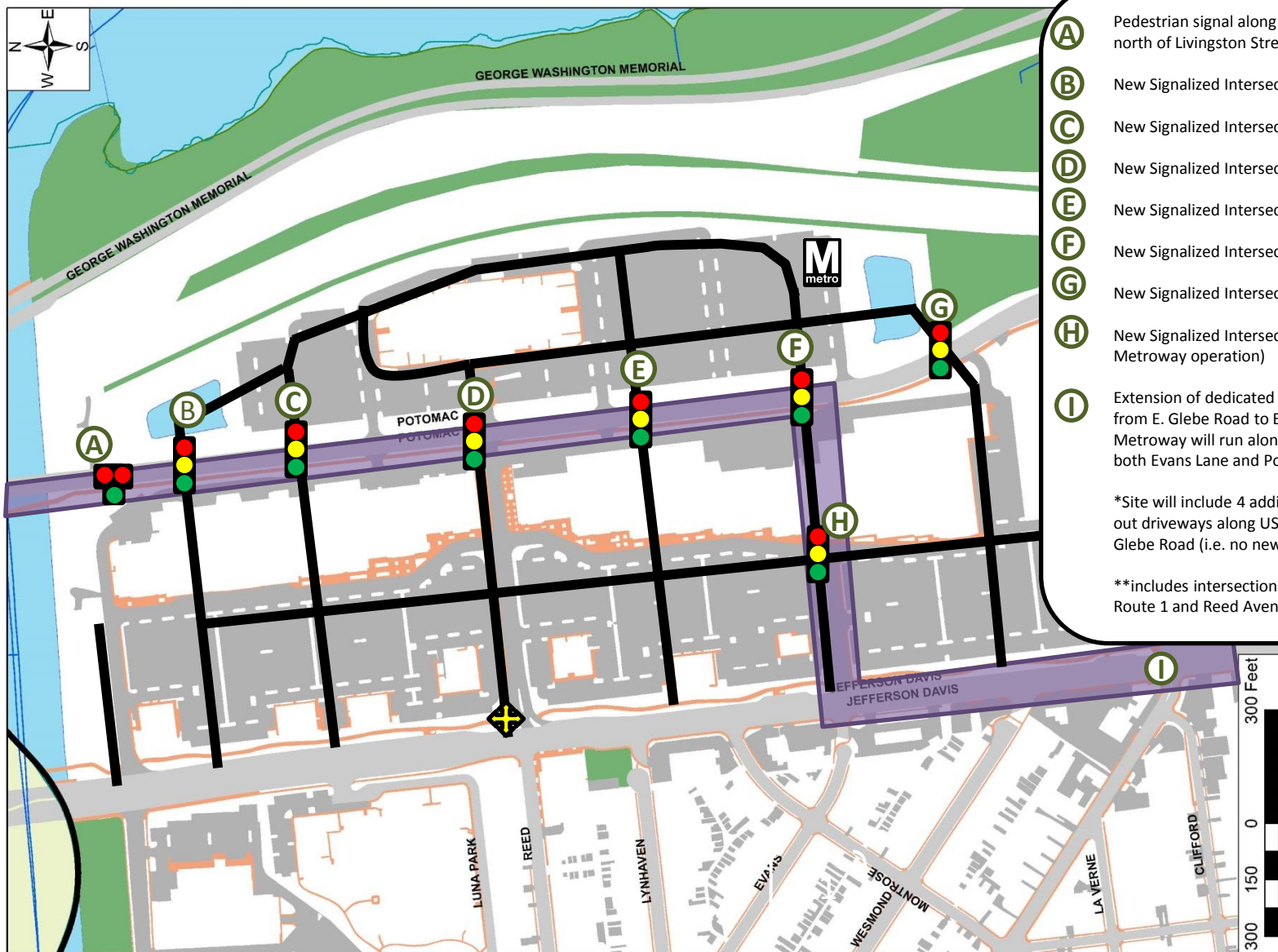
## Proposed Update (2016 -2017)

- ~2,600 vehicle trips during AM peak hour
- ~3,700 vehicle trips during PM peak hour



Note: Vehicle trips above are spread over the entire future development street network. Assumes 7.525M SF of mixed use development (hotel, office, residential, cinema, retail). (Same SF as approved in 2010)

# North Potomac Yard Network Improvements

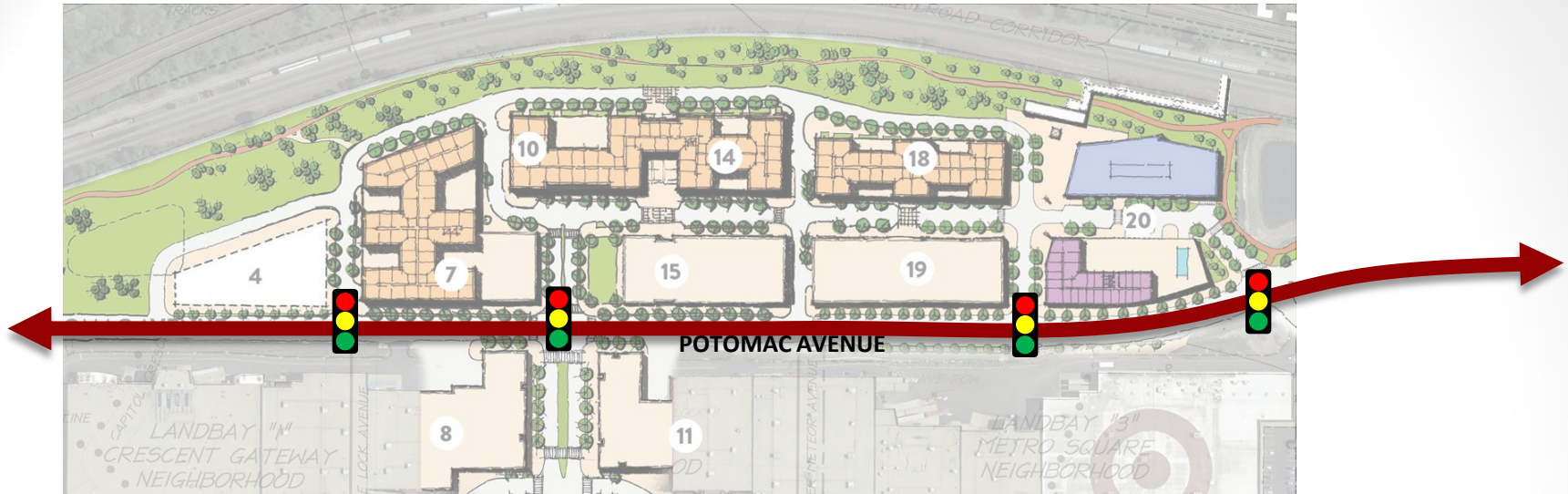


- (A) Pedestrian signal along Potomac Avenue north of Livingston Street
  - (B) New Signalized Intersection
  - (C) New Signalized Intersection
  - (D) New Signalized Intersection
  - (E) New Signalized Intersection
  - (F) New Signalized Intersection
  - (G) New Signalized Intersection
  - (H) New Signalized Intersection (necessary for Metroway operation)
  - (I) Extension of dedicated Metroway corridor from E. Glebe Road to Evans Lane (2040). Metroway will run along dedicated lanes on both Evans Lane and Potomac Avenue
- \*Site will include 4 additional right-in, right out driveways along US Route 1 north of E. Glebe Road (i.e. no new median breaks)
- \*\*includes intersection improvements at us Route 1 and Reed Avenue

# Next Steps: February AG Meeting

Next Steps: Finalize analysis and document findings to be discussed at a future AG meeting

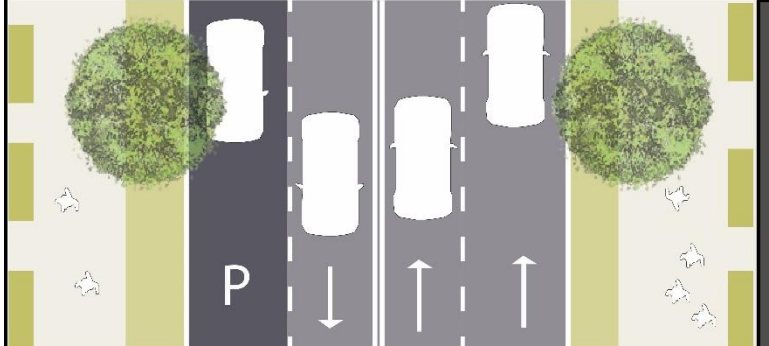
# Potomac Avenue Design Draft Criteria – Phase 1



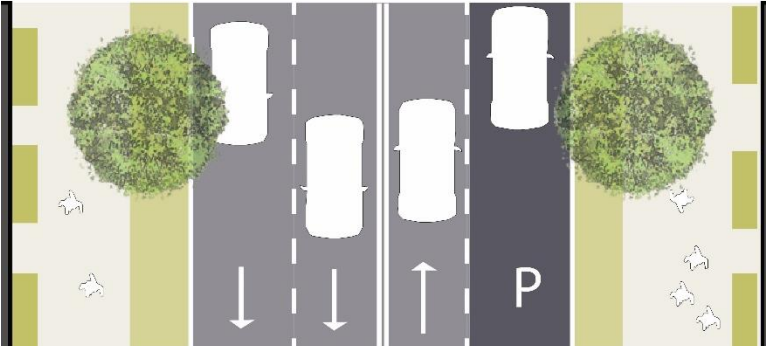
- Provide frequent and safe pedestrian and bicyclist crossing access
- Provide on-street parking
- Design the street to facilitate connections between neighborhoods east and west of the street, knitting the two areas together
- Design buildings to frame and activate the street
- Provide streetscape enhancements for walkability and safety
- Provide traffic signals at regular intervals
- Maintain existing bike trail along western side of Potomac Avenue
- Maximize accessibility to the Metroway (bus rapid transit) service

# Potomac Avenue Design – Phase 1

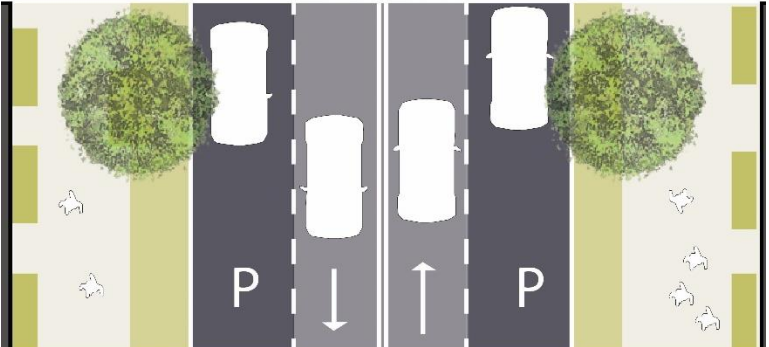
**AM PEAK**



**PM PEAK**



**OFF PEAK**



# Potomac Avenue Draft Criteria – Phase II

Potomac Avenue will be designed to be a north-south multimodal urban street within Potomac Yard. The Avenue will be designed to prioritize pedestrians, bikes, transit and cars in that order. The following criteria should be met with Phase II of redevelopment:

- BRT alignment will be integrated to maintain urban scale streets and walkability
- Design for the minimum width necessary to accommodate planned multi-modal functions of the street
- Provide generous 20-25 ft. streetscape on both sides
- Minimize distance needed for pedestrian and cyclist walkability and safety
- Provide traffic signals at regular urban intervals to facilitate safe pedestrian crossings
- Design buildings to frame and activate the street
- Provide on-street parking where feasible
- Ensure street design that facilitates connections between neighborhoods east and west of the street, knitting the two areas together
- Provide good accessibility to Metroway (bus rapid transit) to maximize ridership



# Questions and Comments

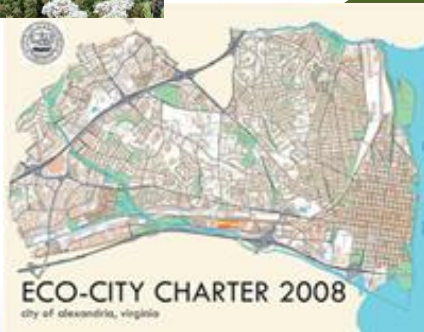
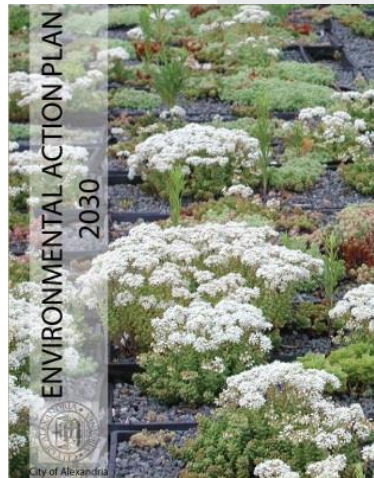


Environmental Performance  
&  
Sustainability

# Sustainability Policies & Implementation



North Potomac Yard  
Small Area Plan



# Sustainability Measures – Overall Plan

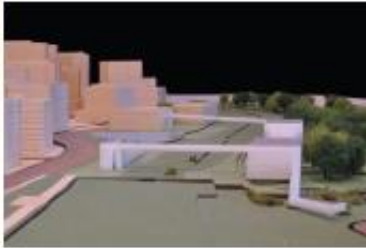
- Multi-Modal Transportation
- Site
- Building

# Transportation

# Dedicated Transitway (Metroway)



# Metrorail Station



Site

# Mixed Use, Walkable and Bikeable

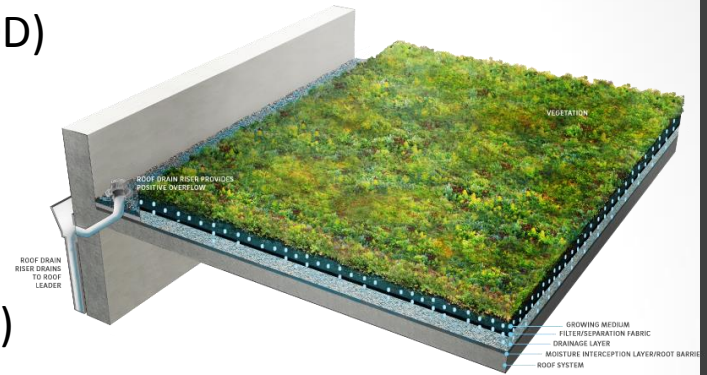


Note: Requirements of the North Potomac Yard Plan and CDD Zoning.



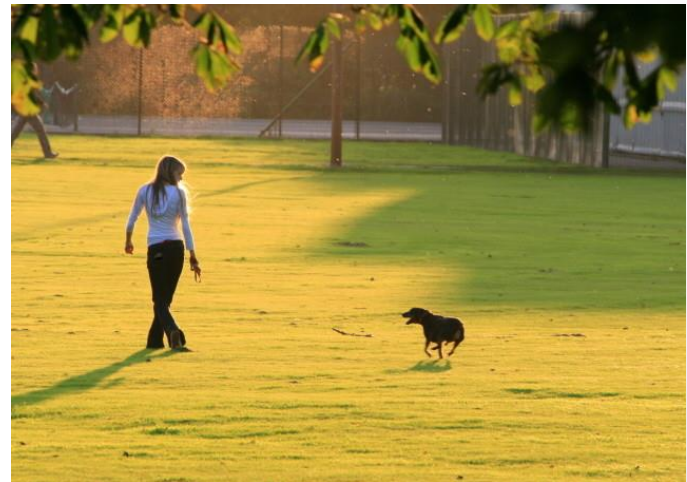
# Existing Site Measures – Sustainability

- Capture and reuse rainwater runoff (SAP, CDD)
- Green roofs and water treatment (SAP, CDD)
- Enhanced storm water treatment (SAP, CDD)



# Existing Site Measures – Sustainability

- Rainwater harvesting (SAP, CDD)
- Pervious pavement (CDD)
- Curbside bio-retention facilities (SAP, CDD)
- Tree canopy (CDD)
- Increase open space (SAP, CDD)



# LEED-ND: Leadership in Energy and Environmental Design - Neighborhood Development

- Framework to integrate the principles of smart growth and sustainability at the site scale.
- Reduces energy use, water use and stormwater runoff, improves indoor air quality, protects open space, enhances transportation choices to enhance health, community, the local economy, and the environment.
- Rates neighborhoods according to four categories:
  1. Smart location
  2. Neighborhood design
  3. Green infrastructure and buildings
  4. Innovation and design
- Ratings are awarded as Certified, Silver, Gold, and Platinum.

Note: Requirements of the North Potomac Yard Plan and CDD Zoning.

Building

# Existing Building Measures - Sustainability

- LEED – ND Certification
- LEED - Silver Certification for non-residential
- LEED - Certification residential and LEED Homes

Note: Requirements of the North Potomac Yard Plan and CDD Zoning.



## Evolution within Standards

- Since 2010...
  - Stormwater Management Regulations have become more stringent
  - Building Code requirements have become more stringent (Energy efficiency, etc.)
  - LEED requirements have increased
- North Potomac Yard in 2017 will be subject to more stringent performance standards than in 2010.

# VA Building Energy Codes, 2010 vs. 2016

- 2012 International Energy Conservation Code (IECC) replaced the 2009 IECC. Increased the energy performance of new residential & commercial buildings by increasing stringency of:
  - Envelope tightness and air sealing;
  - Lighting efficiency and efficacy;
  - Thermal bridging mitigation;
  - Increasing insulation;
  - Windows and doors performance;
  - HVAC system performance
- Energy performance on average **15%** greater than 2009 IECC

# Evolution of LEED Standards

## LEED v4 (Current) vs. LEED 2009:

- Emphasizes early planning, design team integration
- Increases stringency of achieving levels of certification:
  - Location: particular focus on access, connectivity, and diversity of transit and mobility solutions
  - Increased building energy and water performance standards greater than baseline
  - Adaptive reuse of structures, material life-cycles, and location & source of raw materials and products
  - Emphasis on indoor environmental quality, including lighting quality and noise mitigation



# Draft Sustainability Recommendations

## Environmental Leadership

- 2.1 Strive to achieve carbon neutrality by **2040**.
- 2.2 Provide a mix of land uses, and a transit-oriented development as part of the redevelopment of the Plan area.
- 2.3 Explore the possibility of community gardens so that residents and visitors could have access to edible and non-edible plantings. Community gardens also offer a unique educational opportunity.

**BLACK – ALREADY IN PLAN**

**GREEN – ADDED BY JEREMY**

**ORANGE – ADDED BY STAFF (including comments from AG during Briefings)**

# Draft Sustainability Recommendations

## Reduce Energy Use

- 2.4 Explore a minimum of LEED Silver or comparable, or the City's Green Building standards and requirements, whichever is greater. **In addition, new buildings will comply with the Environmental Action Plan (EAP), as implemented through City policies.**
- 2.5 Encourage the use of alternative energy sources including but not limited to solar and wind power throughout the Plan area.
- 2.6 Integrate the use of natural daylighting in all proposed buildings.

**BLACK – ALREADY IN PLAN**

**GREEN – ADDED BY JEREMY**

**ORANGE – ADDED BY STAFF (including comments from AG during Briefings)**

# Draft Sustainability Recommendations

## Employ District – Wide Sustainability Measures

- 2.7 Require the submission of a Sustainability Plan as part of the submission of the first development special use permit (DSUP) that demonstrates the compliance with the goals and recommendations of the Plan **and identifies short-term, mid-term and long-term strategies to achieve the goal of district-wide sustainability measures. The Plan should be updated with each subsequent block(s) and/or building(s) to show how the project achieves the Plan's goals.**
- 2.8 Require plan area-wide sustainability through LEED-ND or comparable.
- 2.9 Require the provision of green roofs for new development.
- 2.10 Provide an integrated network of open space, which incorporates environmental components as part of its design.
- 2.11 **Design new development to prioritize travel by pedestrians, bikes and transit and minimize the need for car use.**
- 2.12 **Design parking garages to accommodate electric vehicle charging stations.**
- 2.13 **Provide affordable housing within ½ mile of Metro Station.**

# Draft Sustainability Recommendations

## Reduce Stormwater Runoff – Water Conservation

- 2.14 Require minimum quantities of green roof and/or solar power generation on building roofs.
- 2.15 Encourage reuse of captured rainwater.
- 2.16 Require stormwater management to be integrated as part of the street, open space, and proposed buildings design.
- 2.17 Encourage water conservation using sustainable methods such as ultra-low and/or low flow plumbing fixtures.
- 2.18 Use native plant species and water-efficient landscaping.

# Draft Sustainability Recommendations

## Design for Longevity

- 2.18 Design buildings for long-term aesthetic appeal and flexibility for future changes in land use.
- 2.19 Utilize quality building materials that consider the long term life cycle of the building.
- 2.20 Maintain a walkable small block network of streets and sidewalks for pedestrians; avoid super blocks.

# Comments/Questions

# Next Steps/Upcoming Meetings

## **February 21, AG Meeting #11**

- *Transportation Analysis Findings*
- *Draft Transportation Recommendations*
- *Open Space Follow-up*

## **March 21, Draft Plan Submittal to AG Members**

## **March 28, AG Meeting #12**

- *Implementation*
- *Draft Amendments/Recommendations – Part I*

## **April 17, AG Meeting #13**

- *Draft Amendments/Recommendations – Part II*
- \*April TBD: Work Sessions with PC and CC

## **June PC/CC Public Hearings – Master Plan Amendment**