

WS
6-9-09

For your information - attached is the presentation from the June 2, 2009, Planning Commission work session regarding the Potomac Yard Planning Advisory Group and the Metrorail Station Feasibility Work Group. You will be given a compressed version of this presentation for the work session on the same topic scheduled for Tuesday, June 9, but staff thought slides from this longer version would be helpful to review prior to the work session.

Potomac Yard Small Area Plan Update

A hundred years after we are gone and forgotten,
those who never heard of us will be living with the
results of our actions. - Oliver Wendell Holmes



Planning Commission Work Session
June 2, 2009

Planning Commission Worksession Potomac Yard

- Update on Potomac Yard Planning Advisory Group
- Overview of Preliminary Results of Transportation Study
- Update on Metrorail Station Feasibility Work Group

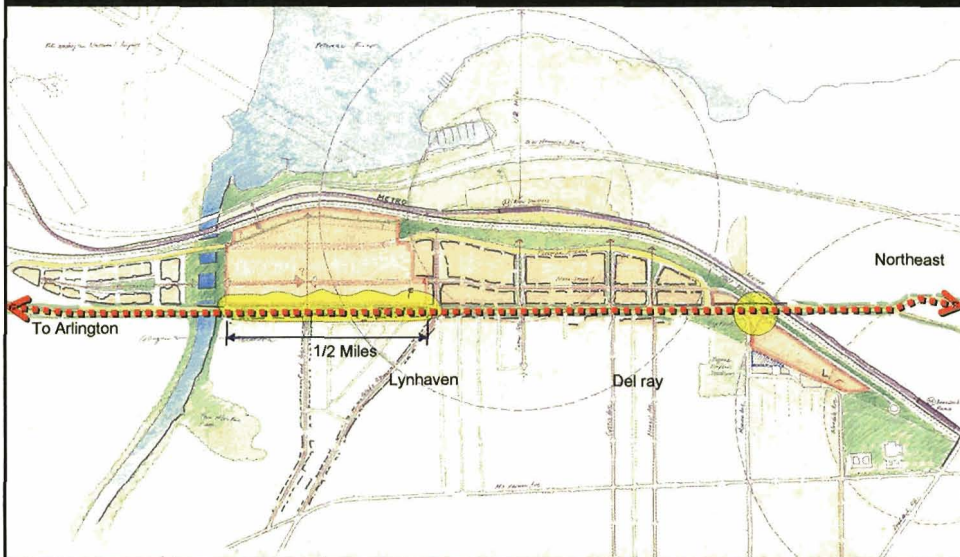


Potomac Yard Existing Retail Center Landbay - F

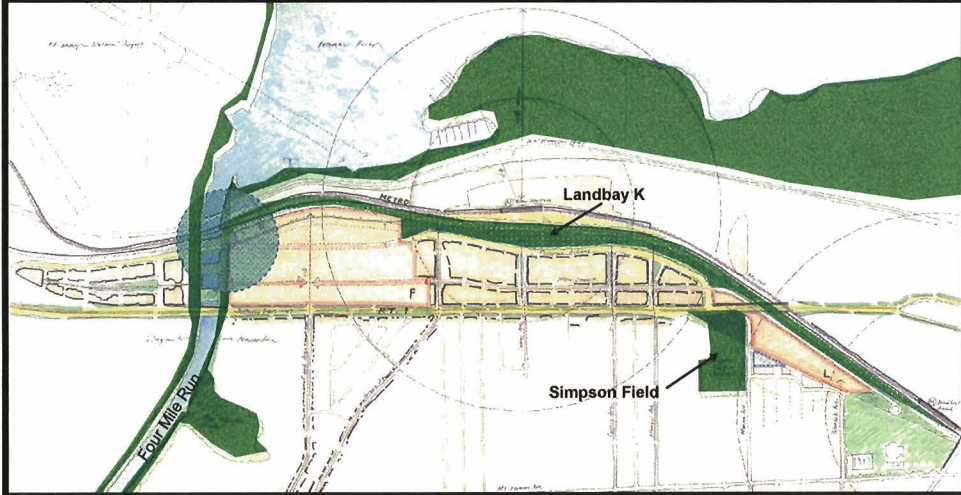


Total Land Area: 69.07 acres
Existing Development: 590,000 sq. ft.
Permitted Development: 600,000 sq. ft.

Site Constraints and Opportunities



Open Space Opportunities



History – Parkway – Washington Street



Potomac Yard PYPAG Vision Statement

"The Potomac Yard Planning Advisory Group envisions Potomac Yard as an environmentally and economically sustainable and diverse 21st Century urban, transit-oriented, mixed-use community that is compatible with adjacent neighborhoods. We seek to create a regional destination with diverse built and natural spaces where people want to spend time in a wide variety of pursuits."

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PYPAG - Plan Principles

- Create Potomac Yard as a **model of environmental sustainability** for its site planning, infrastructure, and buildings.
- Create an **economically sustainable** development.
- Promote **excellence in design** with a new standard in architecture, urban design, and materials that creates a compelling and lasting identity.
- Create a **vibrant and diverse mixed-use community** that provides options for living, working, shopping, recreation, culture, and civic uses for a wide range of incomes and ages.
- Pursue a **comprehensive multi-modal approach to transportation** based on a highly walkable urban environment, minimal automobile use impact, and a maximum use of existing and new Metro stations.
- Create attractive **landscaped streets and a network of usable open spaces** and parks with a strong connection to Four Mile Run and the Potomac.
- Provide **connections and transitions** appropriate to and protective of the character of surrounding neighborhoods.

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Framework Streets

*A street is a spatial entity
and not the residue between buildings.*

- Anonymous



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Potomac Yard Framework Streets



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Potomac Yard Open Space



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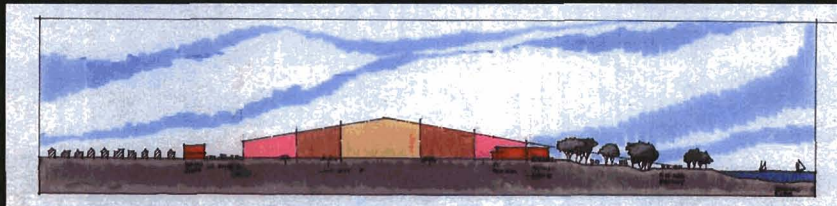
Potomac Yard Mix of Uses



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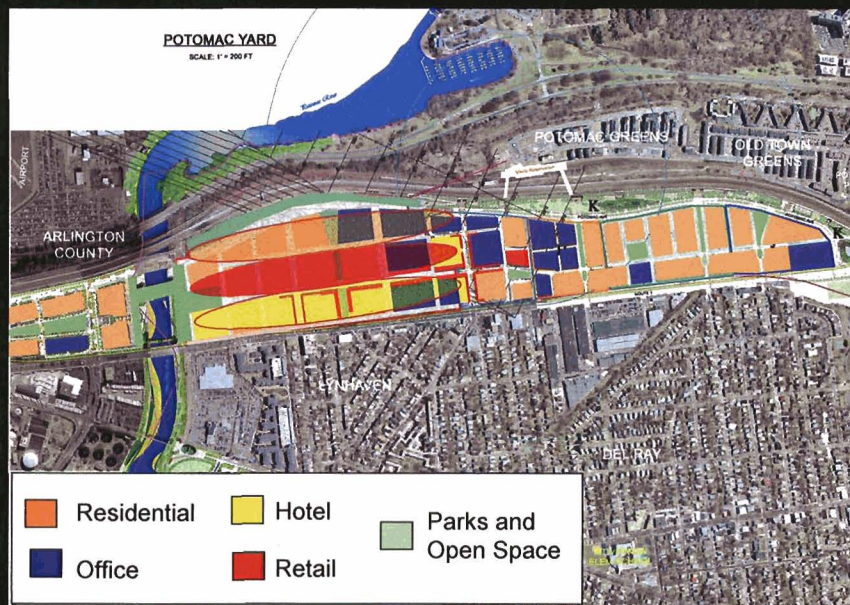
Building Height Principles

- Provide transitions appropriate to the character of surrounding neighborhoods (**lower heights at periphery**)
- Provide vibrant and diverse, mixed-use community (**variety of heights**)
- Provide strong connection to Four Mile Run and Potomac
 - **Minimize impacts on GW Parkway**
 - **Provide density near Metro**
 - **Height of buildings related to width of streets**
 - **Height at strategic and gateway locations**



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Framework Plan



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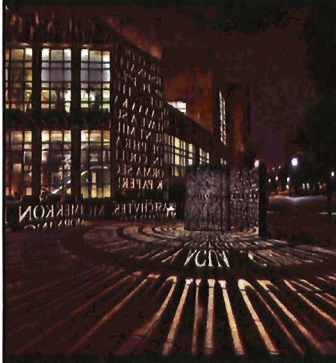
Potomac Yard Conceptual Massing and Height



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Potomac Yard Future Discussions

- Affordable Housing
- Sustainability—environmental and economic
- Streetscape Improvements – Route 1
- Public Art
- Civic Facilities
- Transportation Amenities



Background – Landbay L

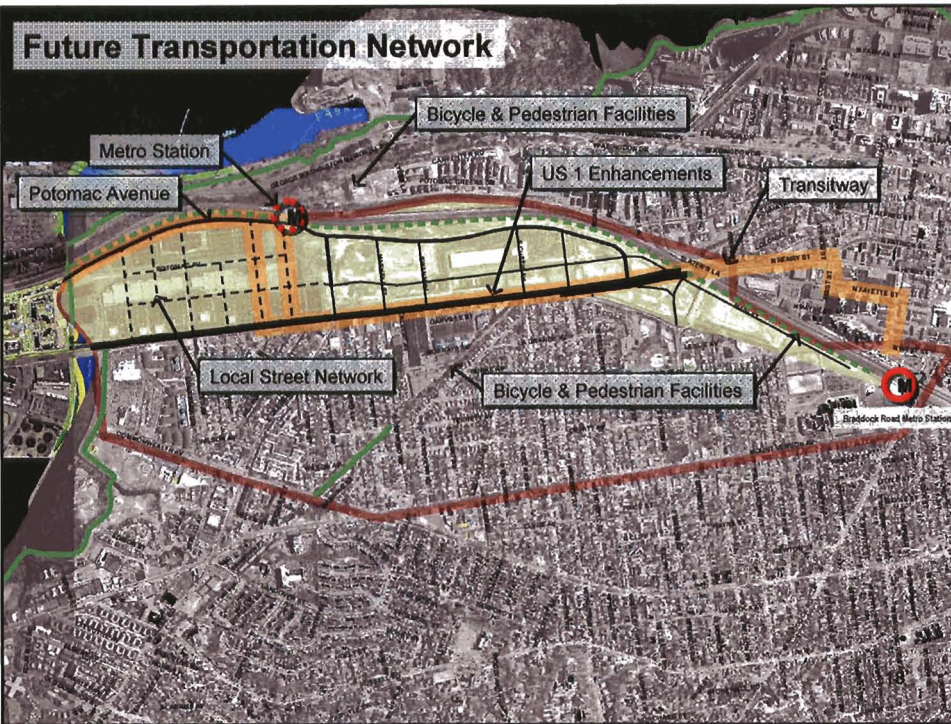
Land Area – Ownership – Features & Constraints



Legend

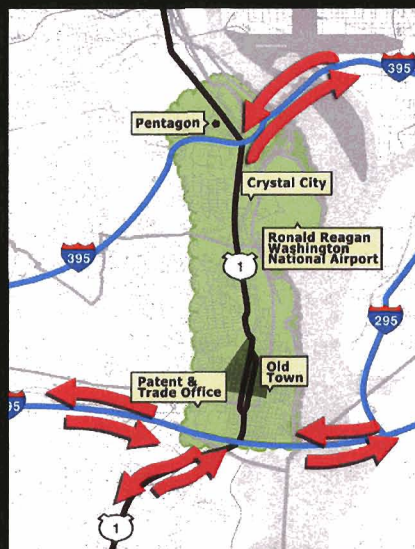
- GW Middle School & Braddock Fields
- Landbay L
- Landbay M
- Landbay K
- 230 KV Line
- Underground BMP Stormwater Tank

| Owner | Acres |
|-------------------------------------|---------|
| City of Alexandria | +/- 24 |
| Potomac Yard Development (PYD) | +/- 12 |
| Potomac Yard Development (PYD) | +/- 2.5 |
| Total Acreage = +/- 38 Acres | |



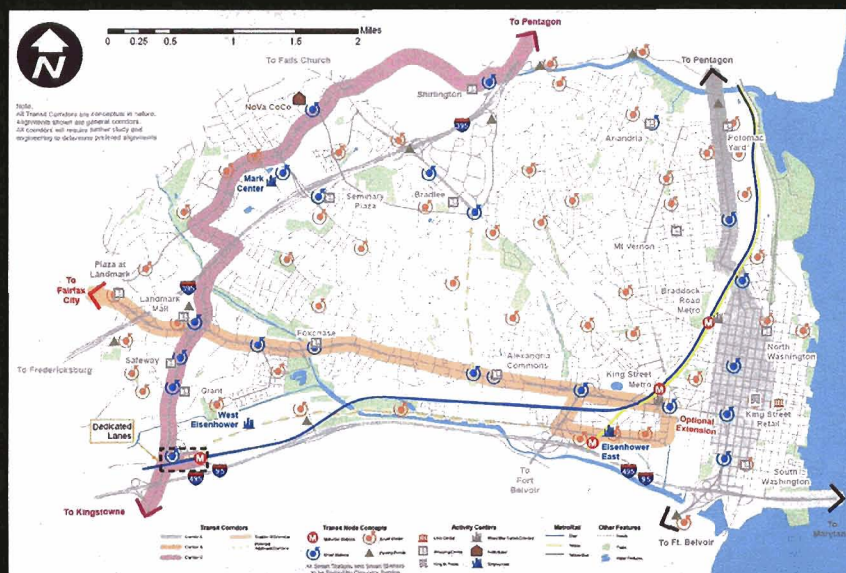
Regional Conditions

- Natural and physical barriers constrain travel options
- Major destinations along Route 1
- Beltway heavily influences traffic conditions along Route 1



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Future Transit Corridors

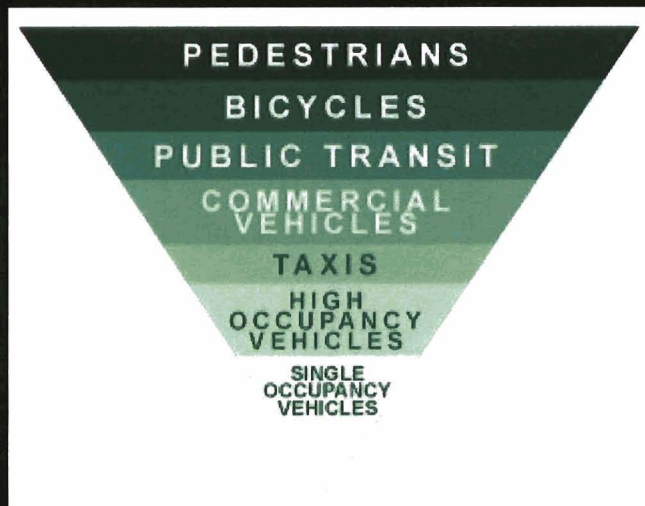


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Dedicated Route 1 Transit Corridor



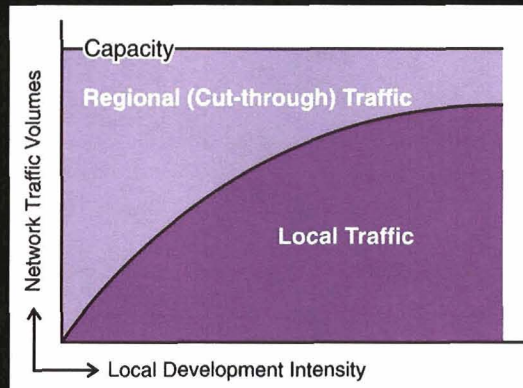
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What does this assessment tell us?

- Congestion on US 1 will continue
- Local growth in a constrained network results in:
 - “squeezing out” of regional trips
 - Peak hour spreading (extended duration of congestion)

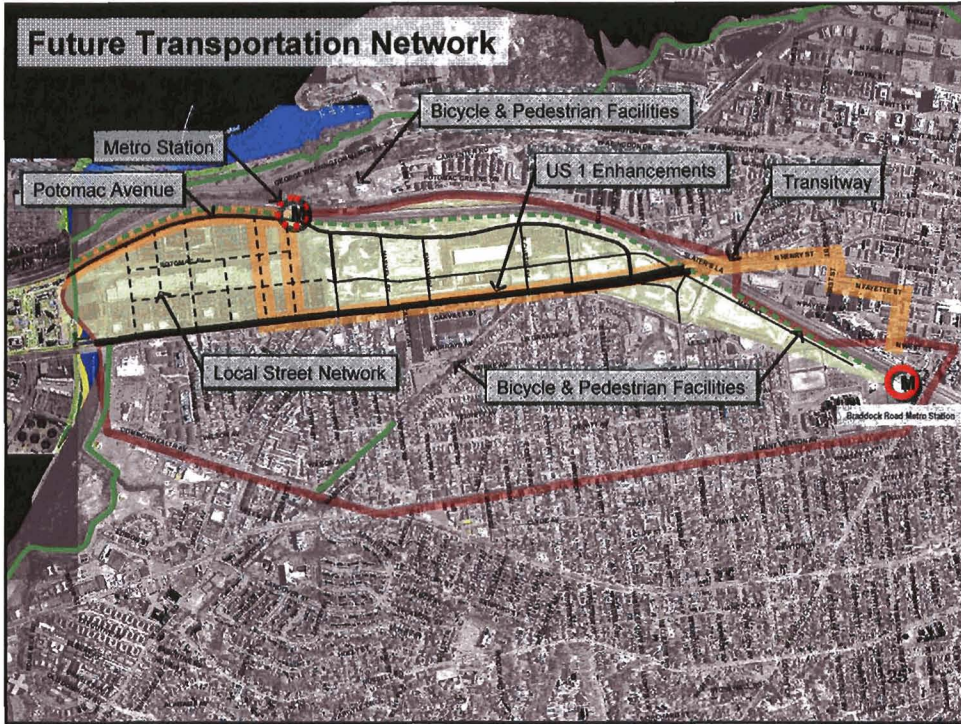


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Study Assumptions

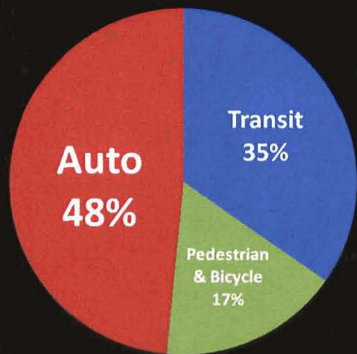
- Development density
- Future transportation network
- Travel mode choice
- General traffic growth

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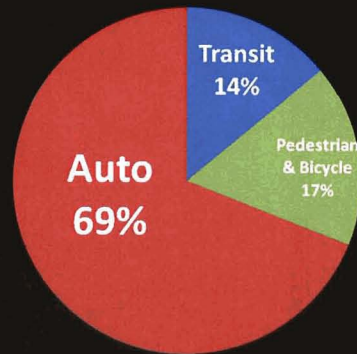


Travel Mode Choice

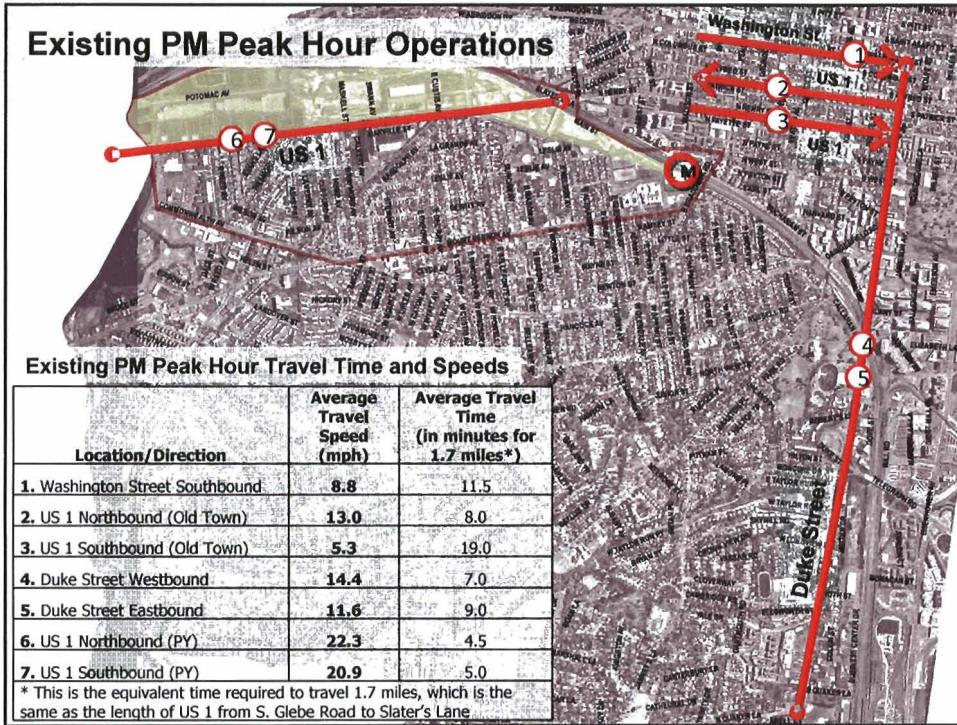
Scenario Including a New Metro Station



Scenario Not Including a new Metro Station



Existing PM Peak Hour Operations

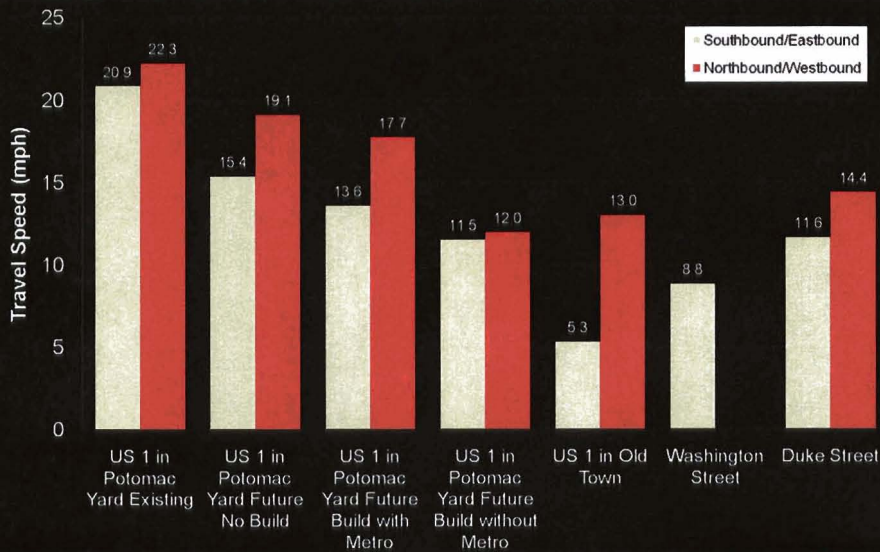


Existing PM Peak Hour Travel Time and Speeds

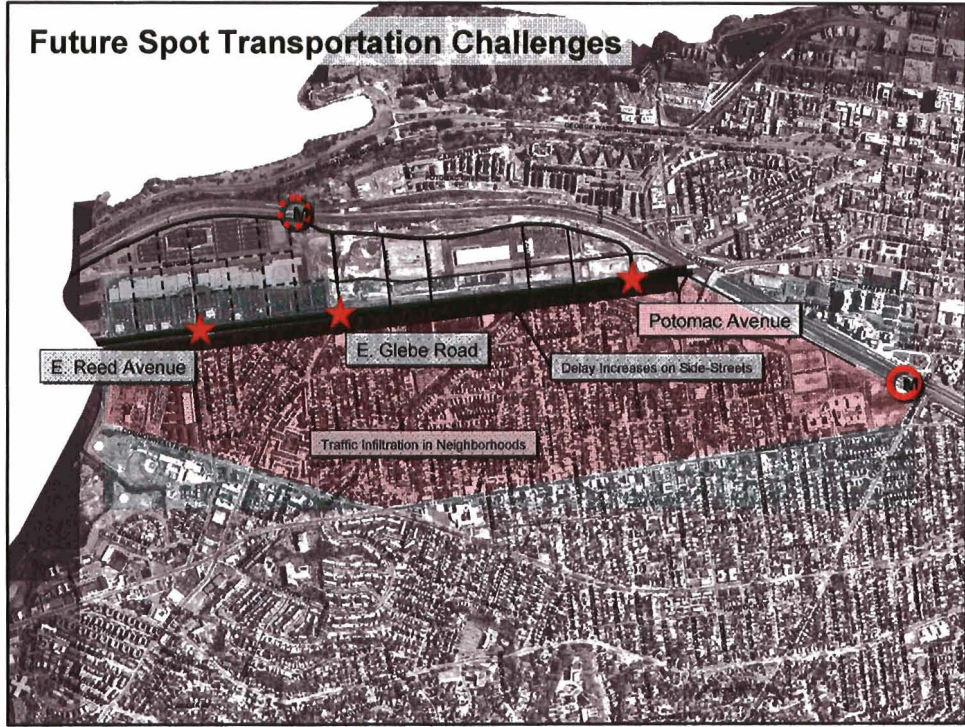
| Location/Direction | Average Travel Speed (mph) | Average Travel Time (in minutes for 1.7 miles*) |
|---------------------------------|----------------------------|---|
| 1. Washington Street Southbound | 8.8 | 11.5 |
| 2. US 1 Northbound (Old Town) | 13.0 | 8.0 |
| 3. US 1 Southbound (Old Town) | 5.3 | 19.0 |
| 4. Duke Street Westbound | 14.4 | 7.0 |
| 5. Duke Street Eastbound | 11.6 | 9.0 |
| 6. US 1 Northbound (PY) | 22.3 | 4.5 |
| 7. US 1 Southbound (PY) | 20.9 | 5.0 |

* This is the equivalent time required to travel 1.7 miles, which is the same as the length of US 1 from S. Glebe Road to Slater's Lane

PM Peak Hour Travel Speed in Alexandria



Future Spot Transportation Challenges



Comprehensive Neighborhood Protection



Comprehensive Neighborhood Protection



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Summary Points

- US 1 will approach capacity regardless of redevelopment
 - With additional urbanization, more local trips will be carried
 - With less urbanization, more regional through trips will be carried
- Planned multimodal improvements can accommodate projected levels of density
 - With new Metro station – additional density can be accommodated
 - Without new Metro station – less new density can be accommodated
- Neighborhood streets can be protected
 - Managing intersections
 - Comprehensive neighborhood traffic management strategy
- Redevelopment creates opportunity
 - New Metro station
 - Transitway
 - Decreased auto-orientation
 - Amenities

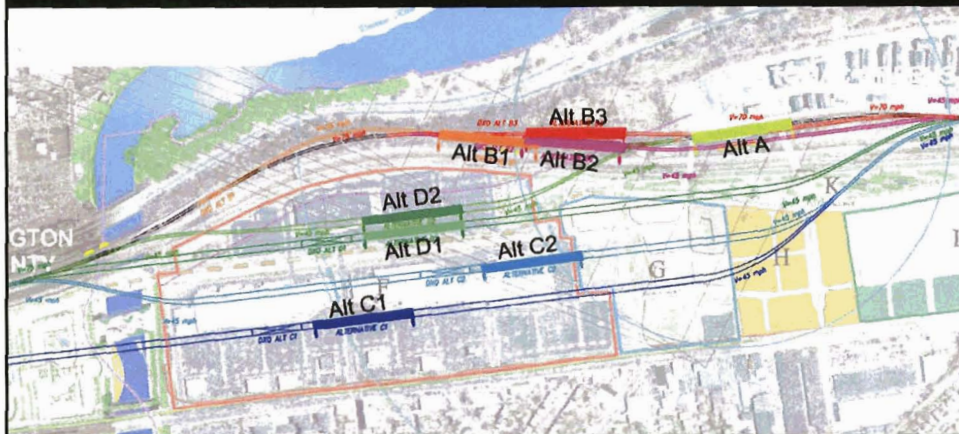
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PYPAG and Transportation Subcommittee Consensus Points

- Planning for Potomac Yard should include a Metro
- Generally comfortable with conditions with 2.5 FAR
- The proposed level of delay is acceptable
- Framing of findings in terms of travel time delay is reasonable
- Maximize access to transit corridor
- Manage impacts to protect surrounding neighborhoods

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Metrail Station Location Alternatives



- Alt A – Existing Reservation
- Alt B – Northern Stations
- Alt C – Underground
- Alt D – Aerial

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Station Design Requirements

- 600 foot long platform (8 car train length)
- 730 feet of level, straight track at the station
- Maximum grade is 4% (4 ft of rise for 100 ft of travel)
- Curved track to accommodate 45 mph train speed
- Redundant elevators for ADA accessibility
- Double cross-over ('x' shaped track) for operational flexibility
- Ancillary space for operational requirement

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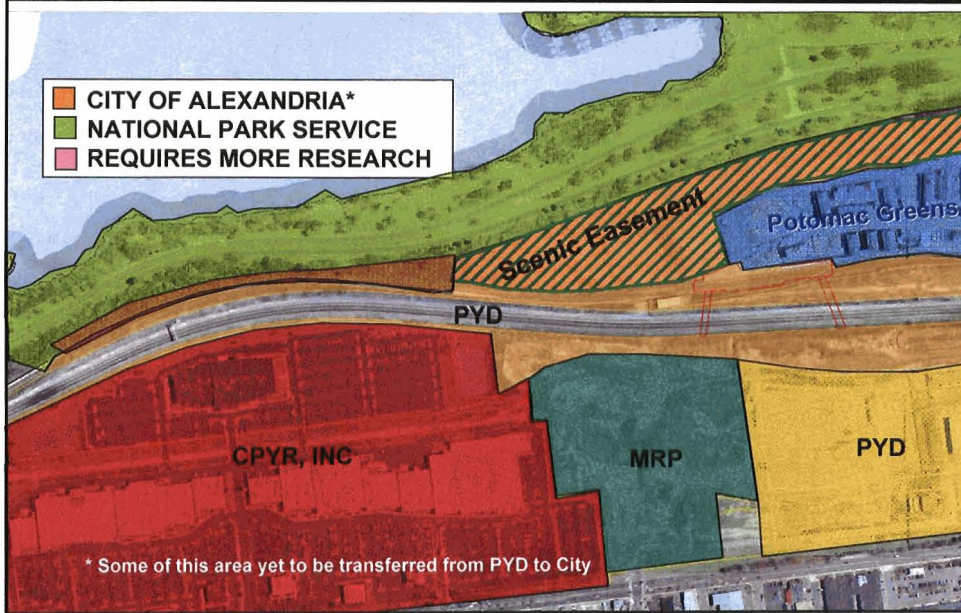
Summary of Alternatives

| Characteristic | Alternatives | | | | | | | |
|--|-------------------------|------------|-------------------------|-------------------------|------------|----------------------------|-------------------------|-------------------------|
| | A | B1 | B2 | B3 | C1 | C2 | D1 | D2 |
| Station Type | At-grade, side platform | Not Viable | At-grade, side platform | At-grade, side platform | Not Viable | In tunnel, center platform | Aerial, center platform | Aerial, center platform |
| Approximate development within ¼ mile, million square feet | 3.5 | | 5.5 | 5.5 | | 10.0 | 9.5 | 9.5 |
| Approximate development within ½ mile, million square feet * | 10.0 | | 14.0 | 14.0 | | 14.5 | 14.0 | 14.0 |
| Construction impacts on Metrorail operations | High | | High | Medium | | Medium | Medium | Medium |
| Preliminary estimated capital cost, million 2012 dollars | \$140-180 | | \$150-200 | \$140-180 | | \$410-520 | \$230-300 | \$200-260 |

* Does not include potential development for properties west of Route 1

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Property Ownership



Site Constraints

Wetlands



Potomac Greens

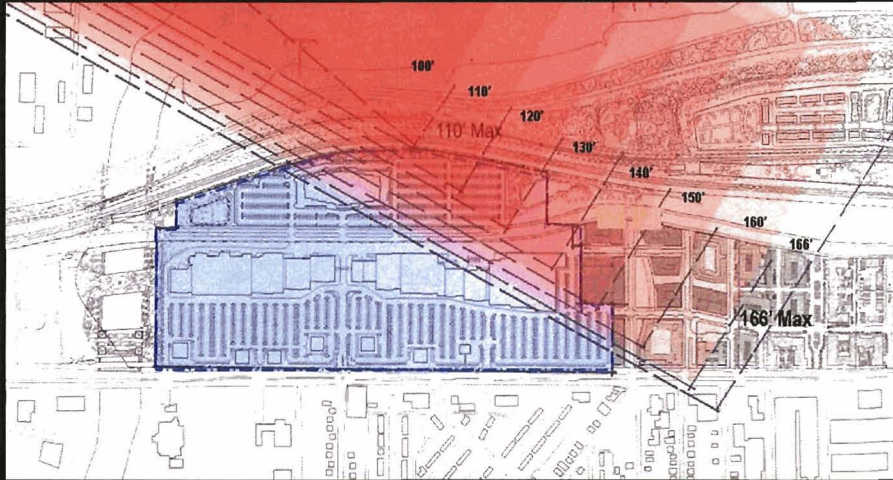


Park Service



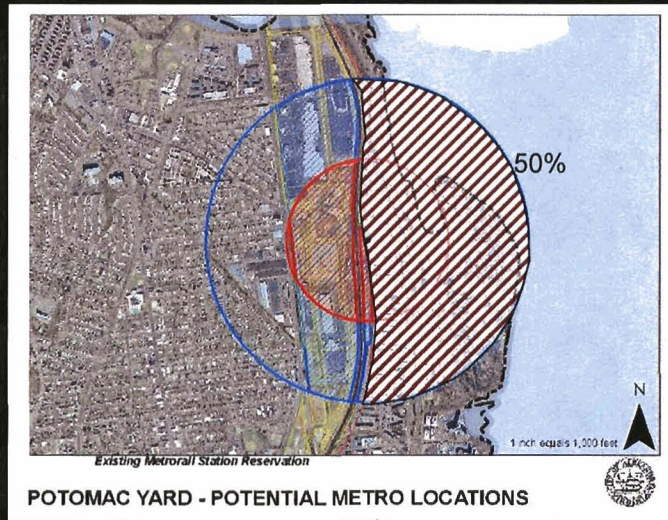
CSX Tracks

FAA Height Restrictions



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Walkshed

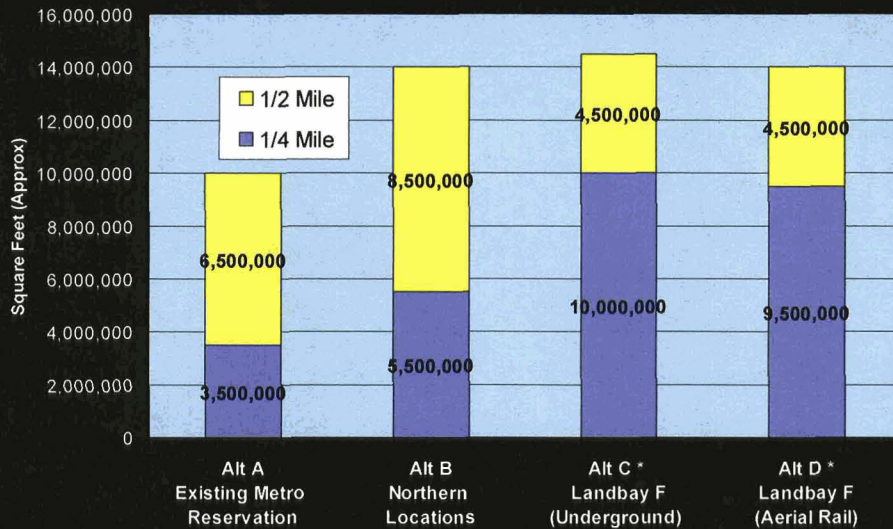


POTOMAC YARD - POTENTIAL METRO LOCATIONS

Approximately 50% of walkshed cannot be developed

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Potential Density – ¼ and ½ mile walksheds

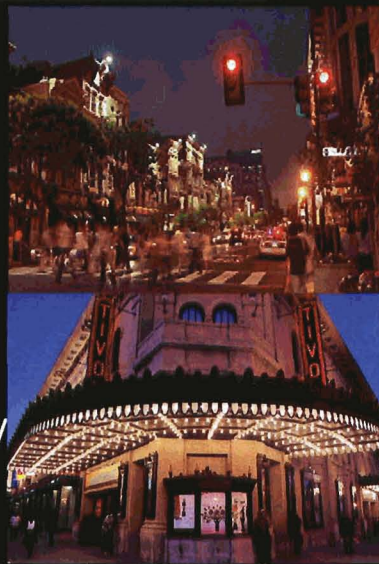


* NOTE: Development for Landbay F was assumed equal (in size and distribution) for each alternative and does not account for likely increases in density for alternatives located within the main body of Potomac Yard.

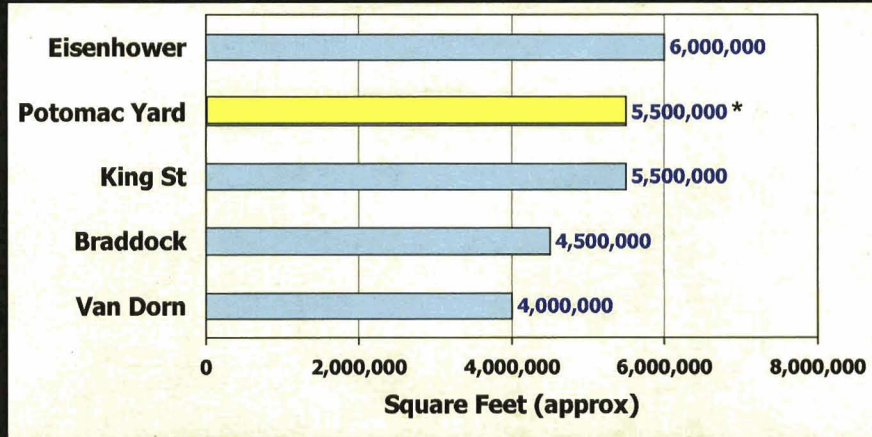
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Balancing Issues – Cost vs. Value

- Land Use – Density
- Economic Values
- Accessibility & Ridership
- Transit Corridor Impacts
- Urban Amenities
- Open Space Impacts
- Environmental Sustainability



Potential Density – Within ¼ mile walkshed of Metro Stations



* NOTE: Density estimated from existing zoning & planning efforts subject to change

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Economic Value Added by Metro

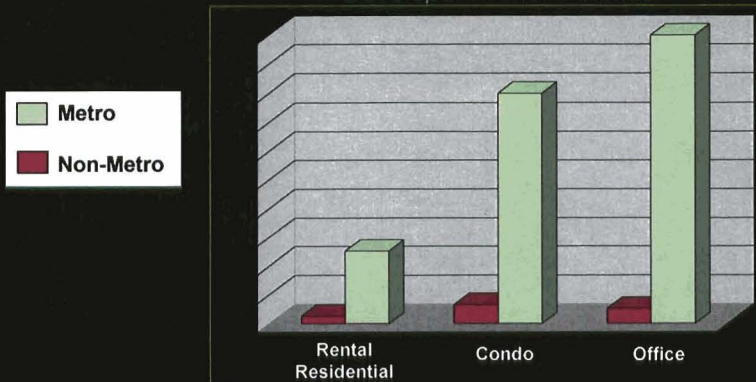
•W-ZHA Analysis - Metro Impact on Developer Proffer Potential:

Residential Rental Value: Increase about \$350/unit

Condo Value: Increase about \$20/sf in residential value

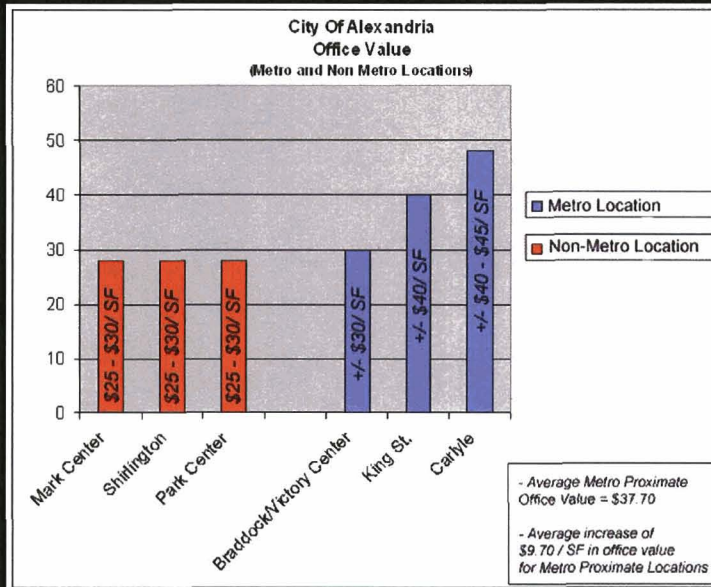
Office Value: Avg Increase of approx \$10/sf in office value

Developer Proffer Potential



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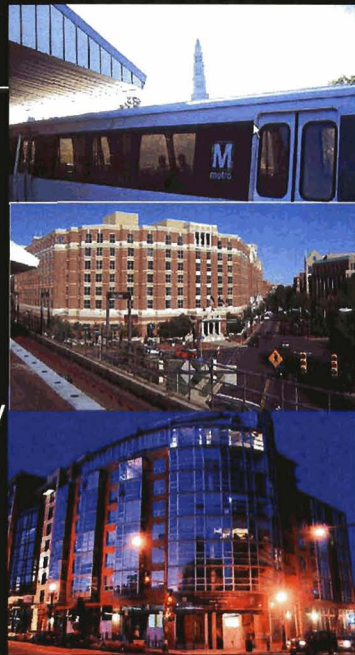
Economic Value Added by Metro



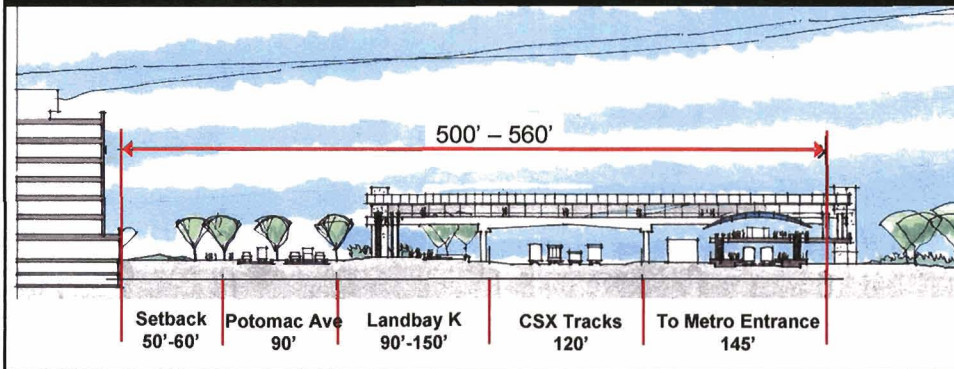
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Potential Ridership

- Design
- Uses
- Density
- Walking Distance – Proximity

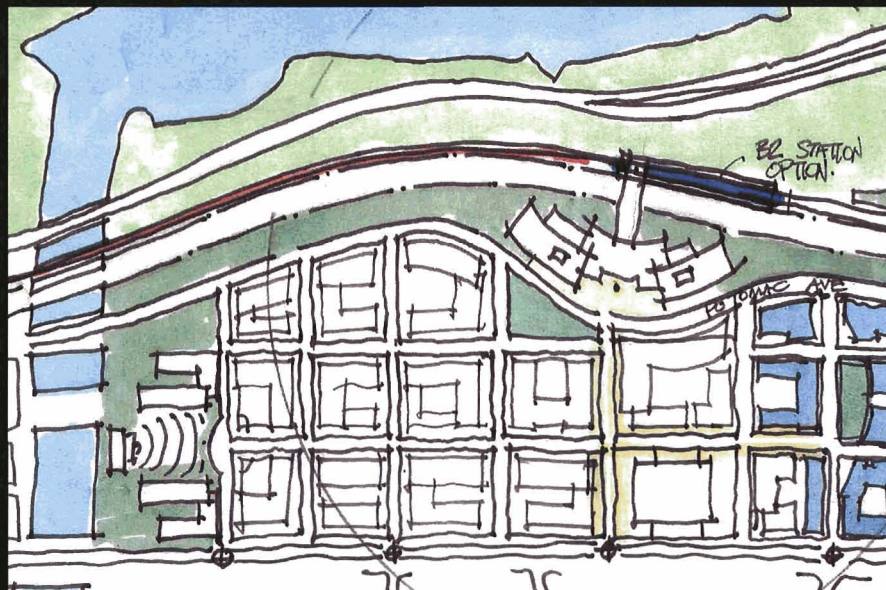


Accessibility Challenges with Existing & Northern Stations

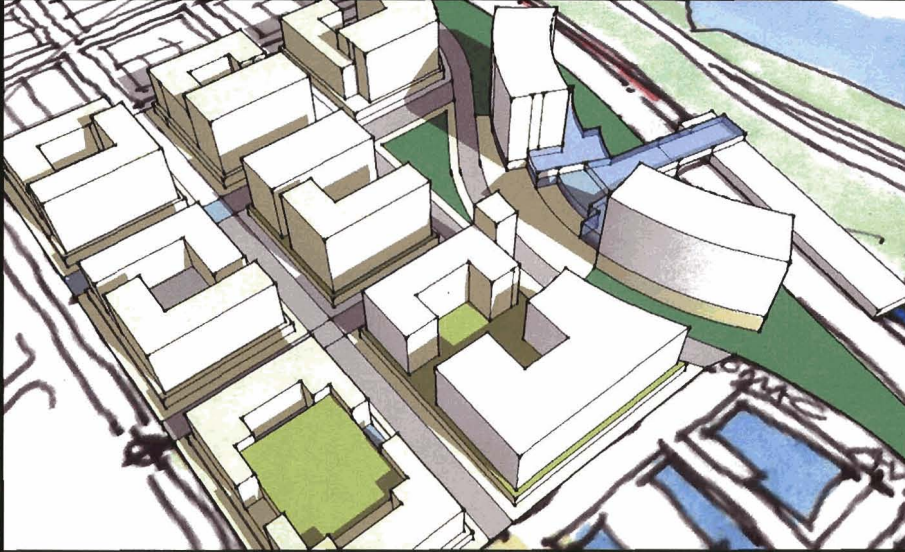


Cross-Section of Possible Station Design

Potential Access – Alternative B (Northern)

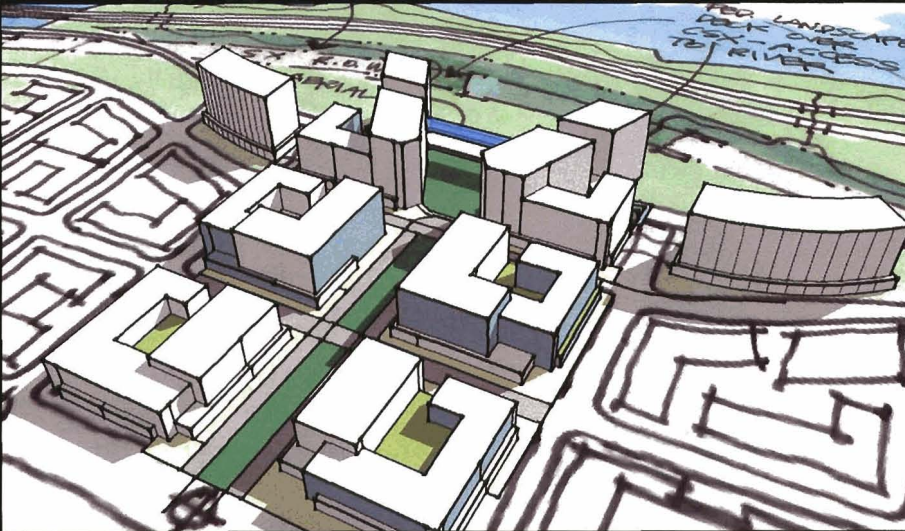


Potential Access – **Alternative B (Northern)**



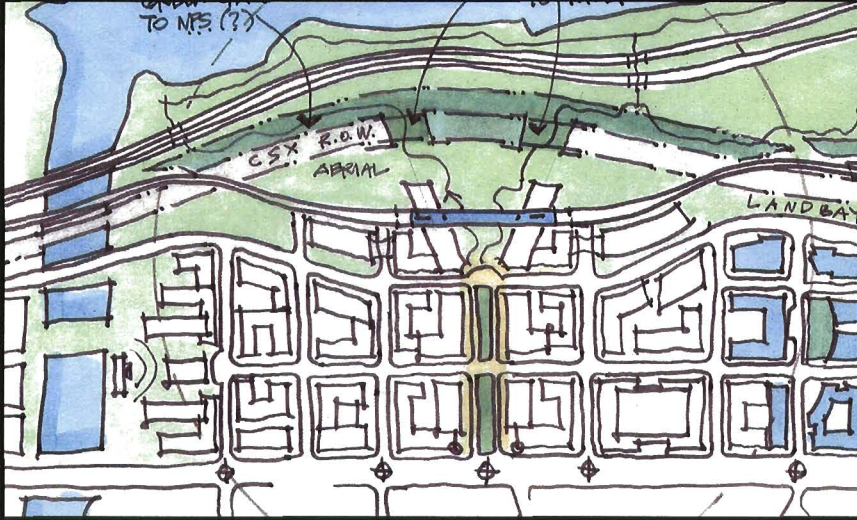
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Potential Access – **Alternative D (Aerial)**



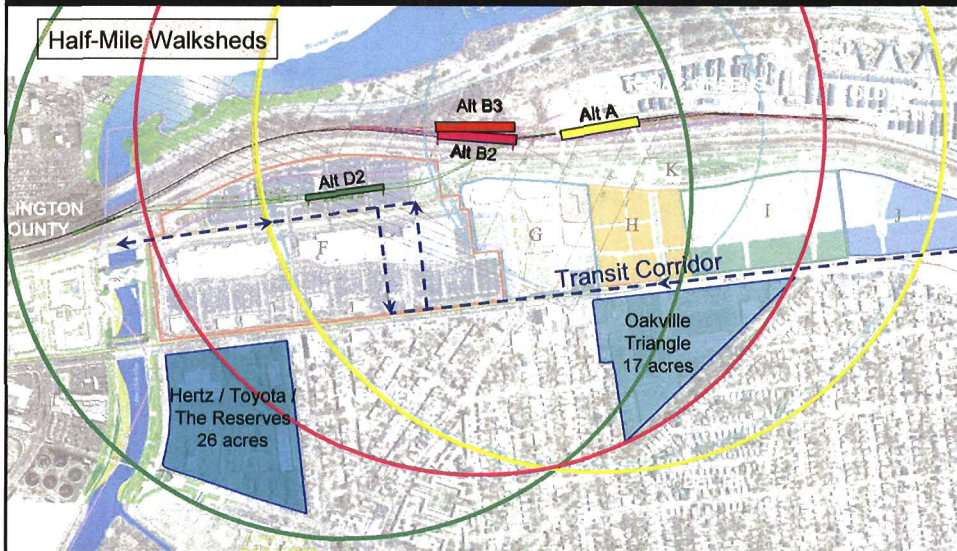
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Potential Access – Alternative D (Aerial)



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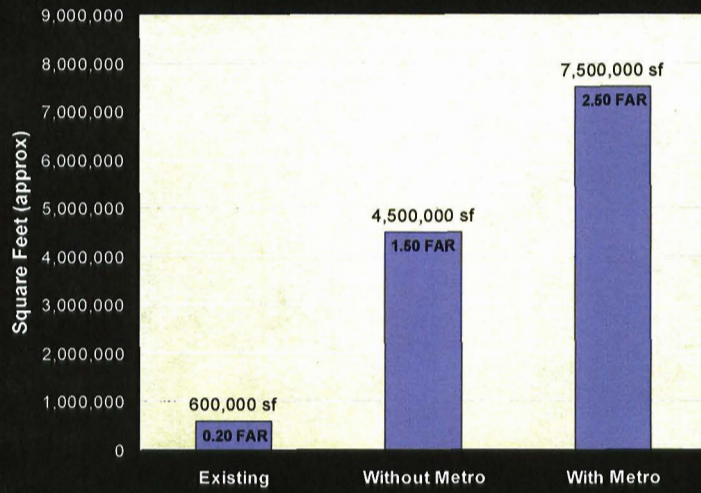
Impact / Benefits to Transit Corridor



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Impact / Benefits to Transit Corridor

Development Potential of Lbay F

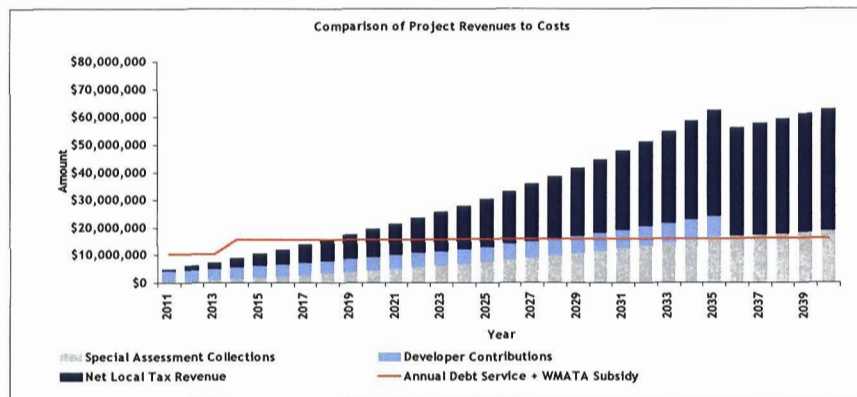


Station Alternative D2

100% Local Tax + Developers Contributions + Special Assessment

Results

- Size of Funding Gap: \$24.1 million
- Breakeven Year: Year 2019
- NPV: \$182.8 million

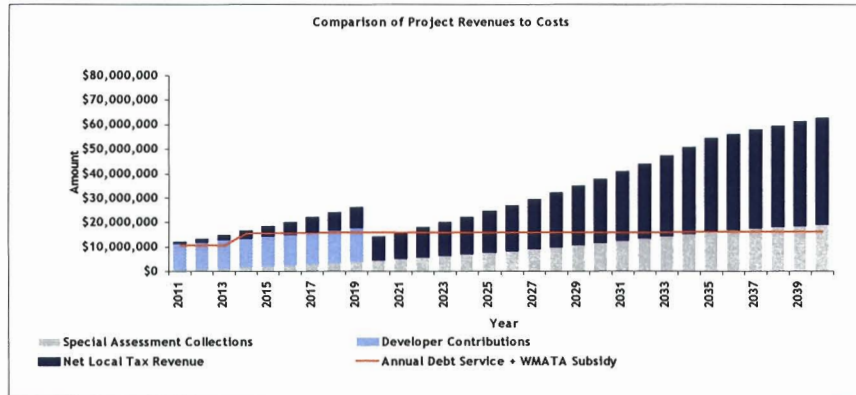


Station Alternative D2

Closing the Funding Gap with Upfront Developer Contributions

Results

- Size of Funding Gap: \$890 thousand
- Breakeven Year: Year 2021
- NPV: \$192.2 million



Transportation Master Plan

"The City expects that any amendment to the Potomac Yard/ Potomac Greens Small Area Plan which results in an increase in density beyond what is currently approved will include reasonable provisions to address the development and funding of an additional Metrorail Station"