

# Embark Richmond Highway Advisory Group Meeting #6

April 25, 2016



# Presentation Outline

- Draft Transit-Oriented Development (TOD) Plan Guidance
- 2040 Land Use Data and Observations
- Factors for Developing Land Use Alternative(s)
- Street Design and Draft Conceptual Grids - Penn Daw and Beacon Hill

# I. PROPOSED REVISIONS TO PLAN GUIDANCE FOR TRANSIT ORIENTED DEVELOPMENT

# Proposed Revisions to Comp Plan Guidance

## *Glossary:*

- Add definition for bus rapid transit.
- Revise the definition of Transit Oriented Development to include bus rapid transit.

## *Concept for Future Development:*

- Revise the definition of Community Business Center

## *Land Use Section, Appendix 11, Transit Oriented Development:*

- Revise text to include bus rapid transit (see handout)

## Add To Glossary Of Comprehensive Plan:

“BUS RAPID TRANSIT (BRT): A flexible, rubber-tired, rapid-transit mode that mostly operates in a dedicated right-of-way with at-grade intersections. Limited sections are in mixed traffic. BRT is an integrated system of facilities, services, and amenities that collectively improves the speed, reliability, and identity of bus transit. Distinguishing features may include:

- Distinctive and clearly designated stops/stations with unique passenger amenities at regularly spaced stations;
- Standard or extended sized buses with distinct appearance, high quality passenger comfort, low floor or high platform, and multiple doors for easy and fast boarding/alighting at stops/stations;
- Frequent service headways throughout the day; and
- Well organized movement of buses along the line, dispatching at stops and passenger information controlled by various Intelligent Transportation Systems (ITS) measures to provide reliability.”

# Modify Definition In Glossary of Comprehensive Plan:

“TRANSIT-ORIENTED DEVELOPMENT (TOD): Transit-oriented development (TOD) in Fairfax County is defined as compact, pedestrian- and biking-friendly, mixed-use development containing medium to high density residential, office and retail uses within walking distance of certain rail and bus rapid transit stations identified in the Area Plans. Well-planned TOD should incorporate good design principles and an appropriate mix of uses to build a healthy, multi-generational community around rail transit stations to and promote transit usage ~~and~~ while create creating vibrant neighborhood centers at these locations. TOD should create a high quality public realm that includes attractive streetscape and a network of public spaces that integrate open and natural spaces within the built environments and work to conserve and protect natural resources.”

*[Strikethroughs indicate proposed deletion and underlines indicate proposed additions.]*

# Modify Concept For Future Development in Comprehensive Plan:

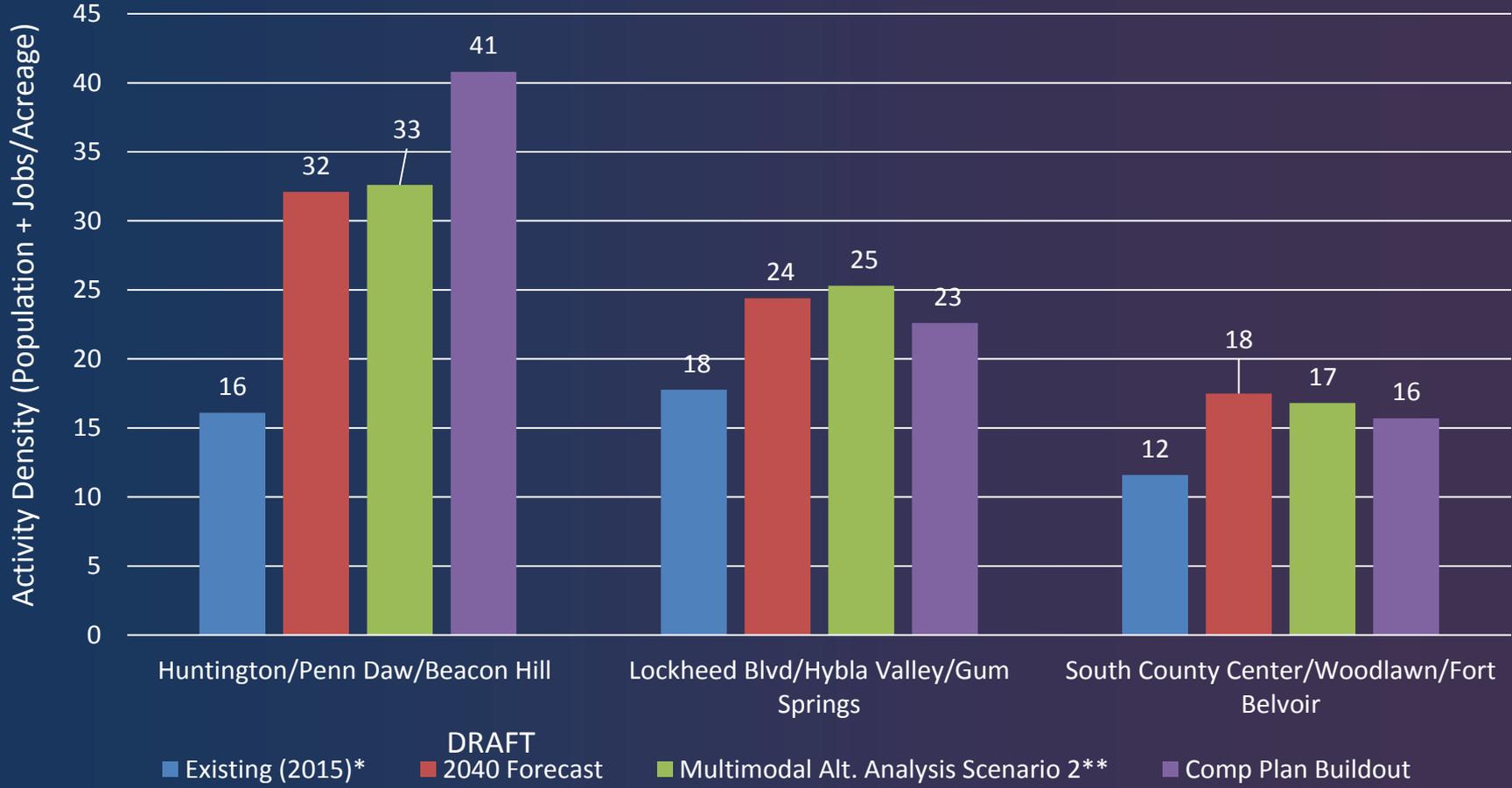
## “Community Business Centers:

*Historically older community-serving commercial areas that emerged along major roadways, Community Business Centers (CBCs) are areas where redevelopment should encourage a mix of uses focused around a core area of higher intensity, such as a town center or main street in a pedestrian-oriented setting. Transitions in intensity and compatible land uses should protect surrounding stable residential neighborhoods.*

- Appropriate revitalization and selected redevelopment advance the goal of sustaining the economic vitality in older commercial centers and adjacent neighborhoods. Revitalization efforts should also seek reinvestment in these communities and aim to foster a sense of place. There may be a particular need to address aging infrastructure.
- CBC’s should emphasize design that advances pedestrian amenities and circulation.
- ~~Given limited transportation infrastructure, a balance of retail, residential and office uses should optimize~~ The generally older road networks should be optimized through a balance of retail, residential and office uses supported by transit to that provide access to CBCs. Where appropriate, a mix of uses is encouraged to create a more vibrant environment throughout the day.”

## II. 2040 LAND USE DATA AND OBSERVATIONS

# Activity Density Comparison for BRT Station Area Groupings



\* 2015 forecast for population and jobs

\*\* Assumes “reasonable increment of growth (15-25% per station area)” above 2035 forecast resulting from new development attributed to bus rapid transit and county policies that promote transit oriented development.



# Preliminary Observations

- Increase in population and jobs for all station groupings over the next 25 years (assumes bus rapid transit operational):
  - Northern (Huntington to Beacon Hill): 99%
  - Middle (Lockheed Blvd to Gum Springs): 37%
  - Southern (South County Center to Accotink/Ft. Belvoir): 51%
- Most recent 2040 forecast similar to Multimodal Alternatives Analysis Scenario 2 (2035 forecast + 15-25% growth at stations areas)
- Entire bus rapid transit line rather than individual station activity densities is considered to achieve overall ridership thresholds.

# Considerations

- Scenario 2 assumes greater growth in jobs at the southern station areas compared to 2040 forecast.

For instance in the Hybla Valley Cluster:

- There are 80% more jobs in Scenario 2 than in the DRAFT 2040
- There are app. 20% fewer people (residents) in Scenario 2 than in the DRAFT 2040
- The proportions of jobs and population will be reviewed in developing the land use alternative.

# III. DRAFT FACTORS FOR DEVELOPING A LAND USE ALTERNATIVE

# Draft Factors for Developing Land Use Alternative

*Land use alternative would include increased density and/or a different mix of uses to support BRT.*

- Location within 10-minute walk of a proposed BRT station
- Ability to create a grid pattern and walkable blocks

Walk Score  
**49**

**Richmond is a Car-Dependent city**

Most errands require a car.



## 6700 Richmond Highway

Alexandria, Virginia, 22306

Commute to **Downtown Rose Hill**

20 min 33 min 26 min 60+ min [View Routes](#)

Favorite

Map

Nearby Apartments

[Looking for a home for sale in Alexandria?](#)

Walk Score  
**69**

**Somewhat Walkable**

Some errands can be accomplished on foot.

Transit Score  
**46**

**Some Transit**

A few nearby public transportation options.

[About your score](#)

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# Draft Factors for Developing Land Use Alternative

- Ability to protect/restore Resource Protection Area and/or Environmental Quality Corridor

- Quander Brook
- Dogue Creek



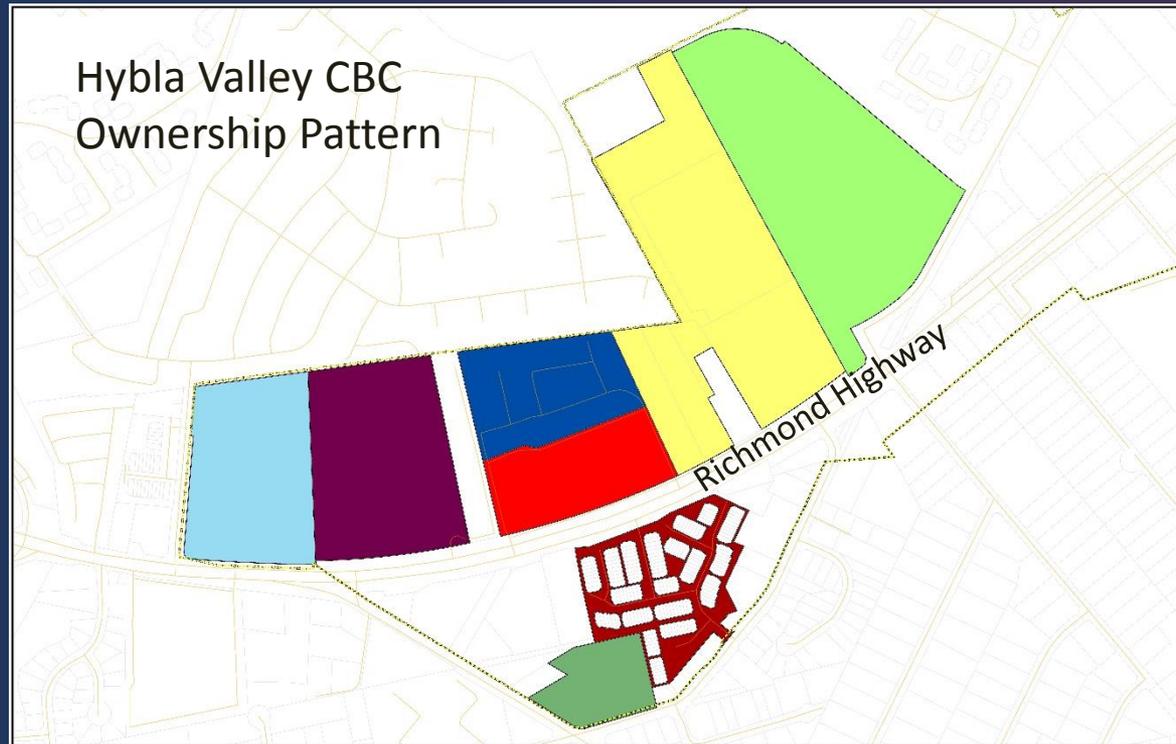
- Ability to establish effective transitions along edges of station areas

- Beacon at Groveton
- The Shelby



# Draft Factors for Developing Land Use Alternative

- Ease of parcel assemblage and configuration
- Ownership patterns



# Questions for Discussion

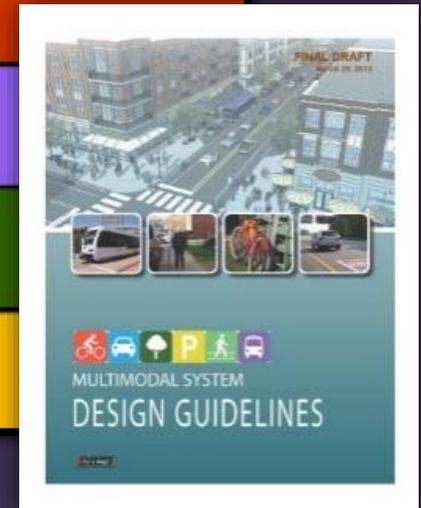
- Are these the right factors?
- How should any of these factors be modified?
- What other factors should be considered?

# IV. Street Design and Conceptual Grids

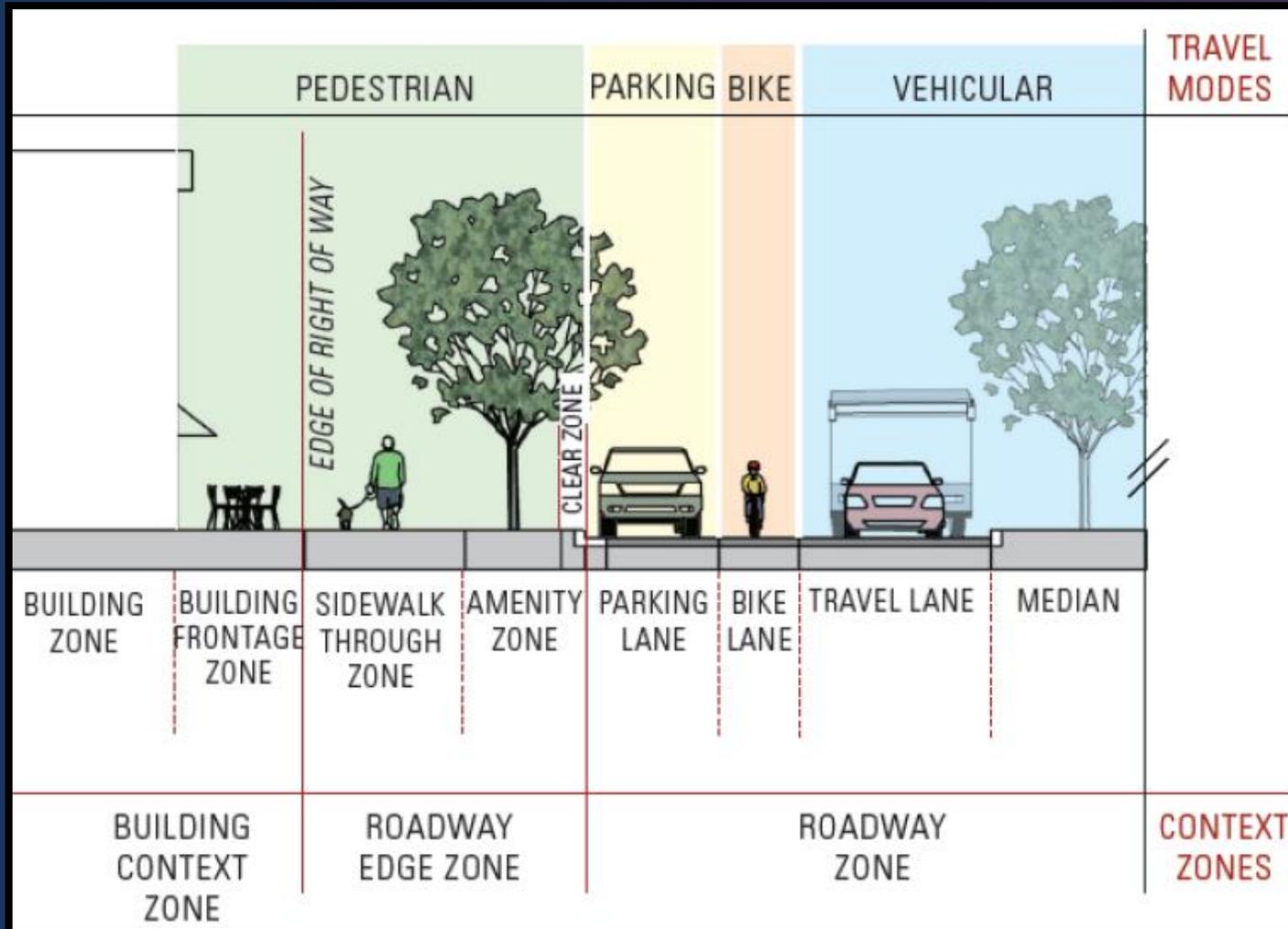


# What makes a Complete Street?

	Modes	Elements
	Auto	<ul style="list-style-type: none"> <li>• Travel Lane Element</li> </ul>
	Pedestrian	<ul style="list-style-type: none"> <li>• Building Frontage Element</li> <li>• Sidewalk Through Element</li> <li>• Amenity Element</li> </ul>
	Bicycle	<ul style="list-style-type: none"> <li>• Bicycle Element</li> </ul>
	Transit	<ul style="list-style-type: none"> <li>• Amenity Element</li> <li>• Travel Lane Element</li> </ul>
	Green	<ul style="list-style-type: none"> <li>• Amenity Element</li> <li>• Median Element</li> </ul>
	Parking	<ul style="list-style-type: none"> <li>• Parking Element</li> </ul>



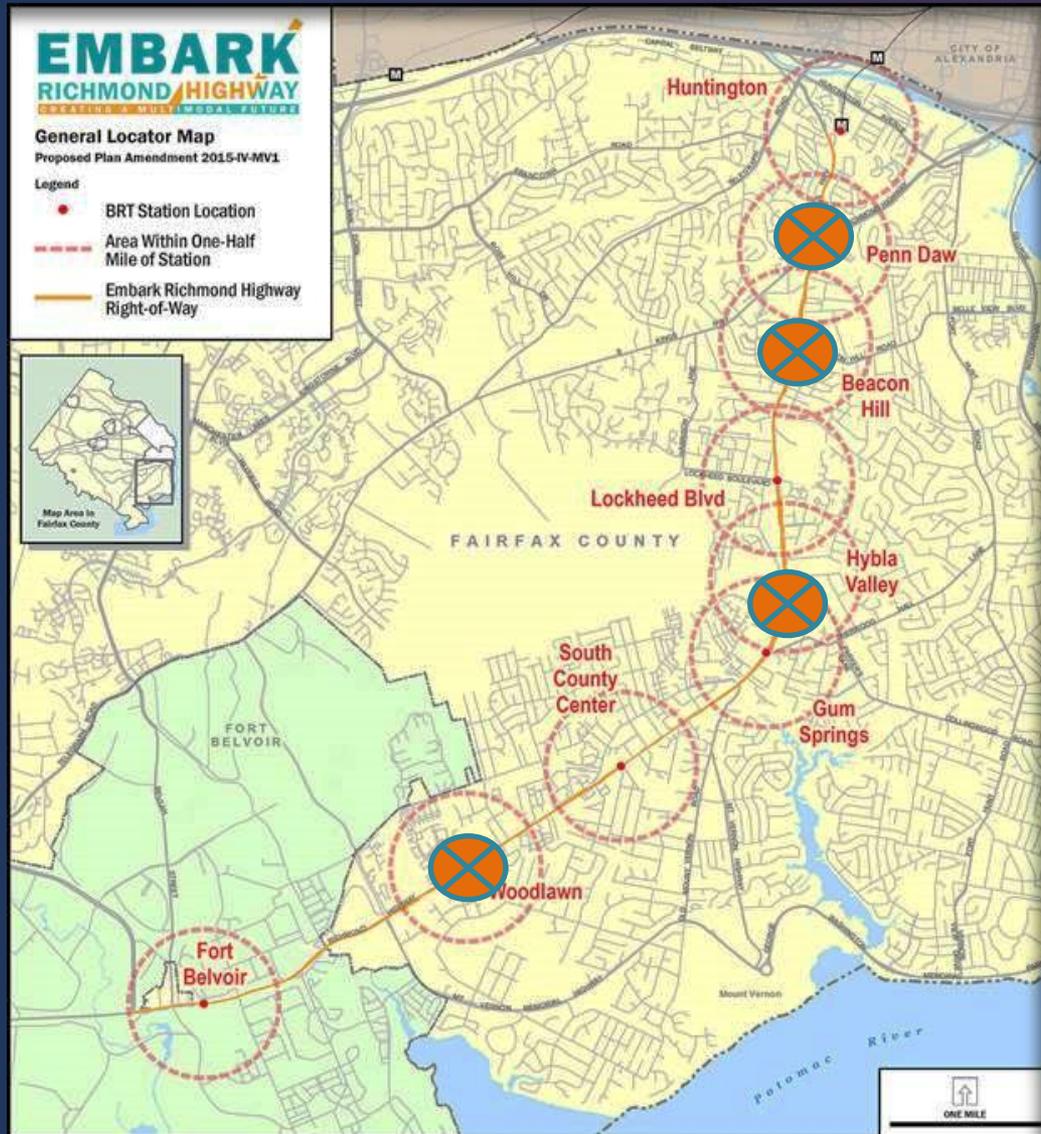
# Complete Street Illustrative Cross-section



# DRAFT Penn Daw and Beacon Groveton Conceptual Grids

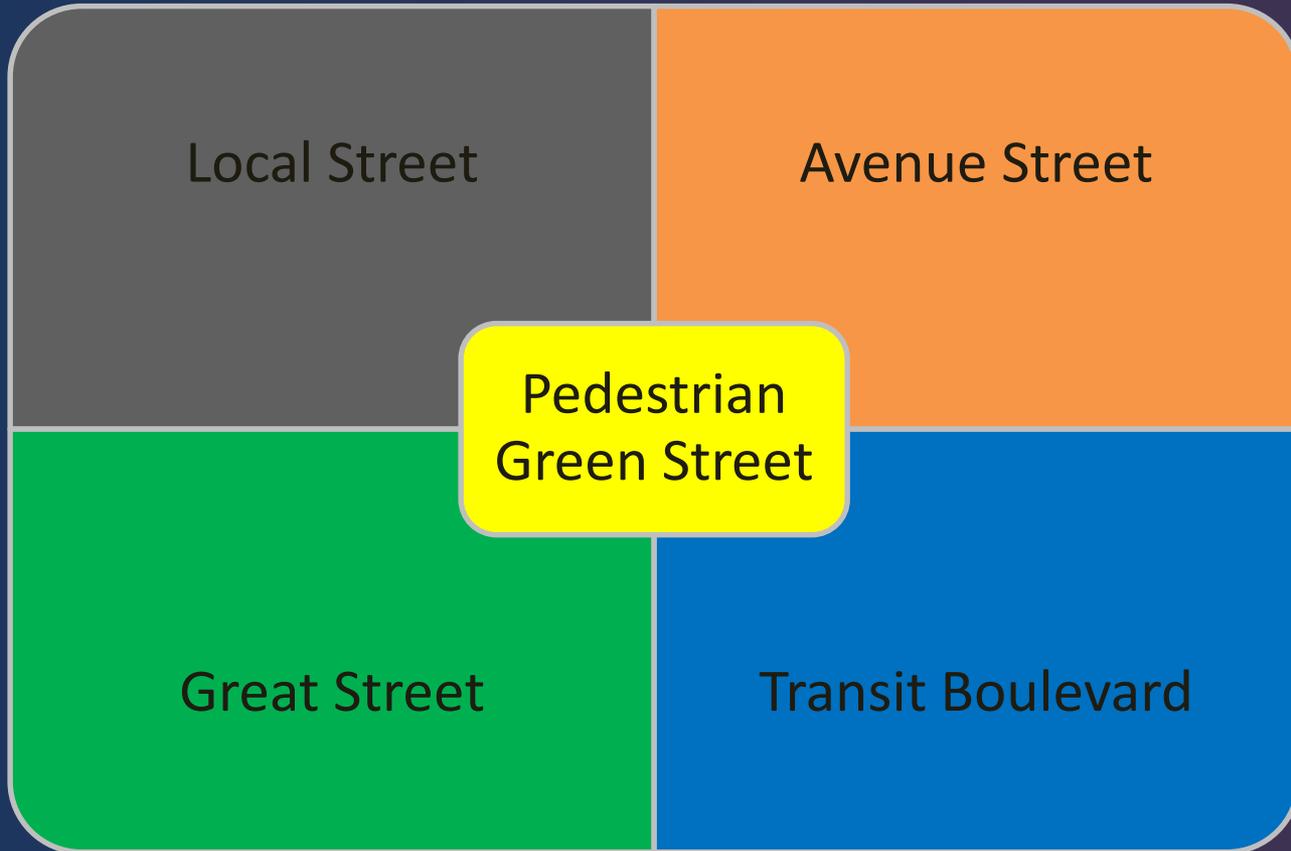
- Connectivity
- Livability
- Practicality

# Corridor-wide Concept Of Grid Network



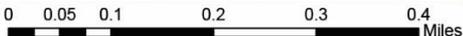
 Indicates General Grid Location

# Street Typology



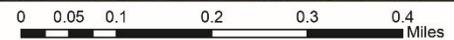


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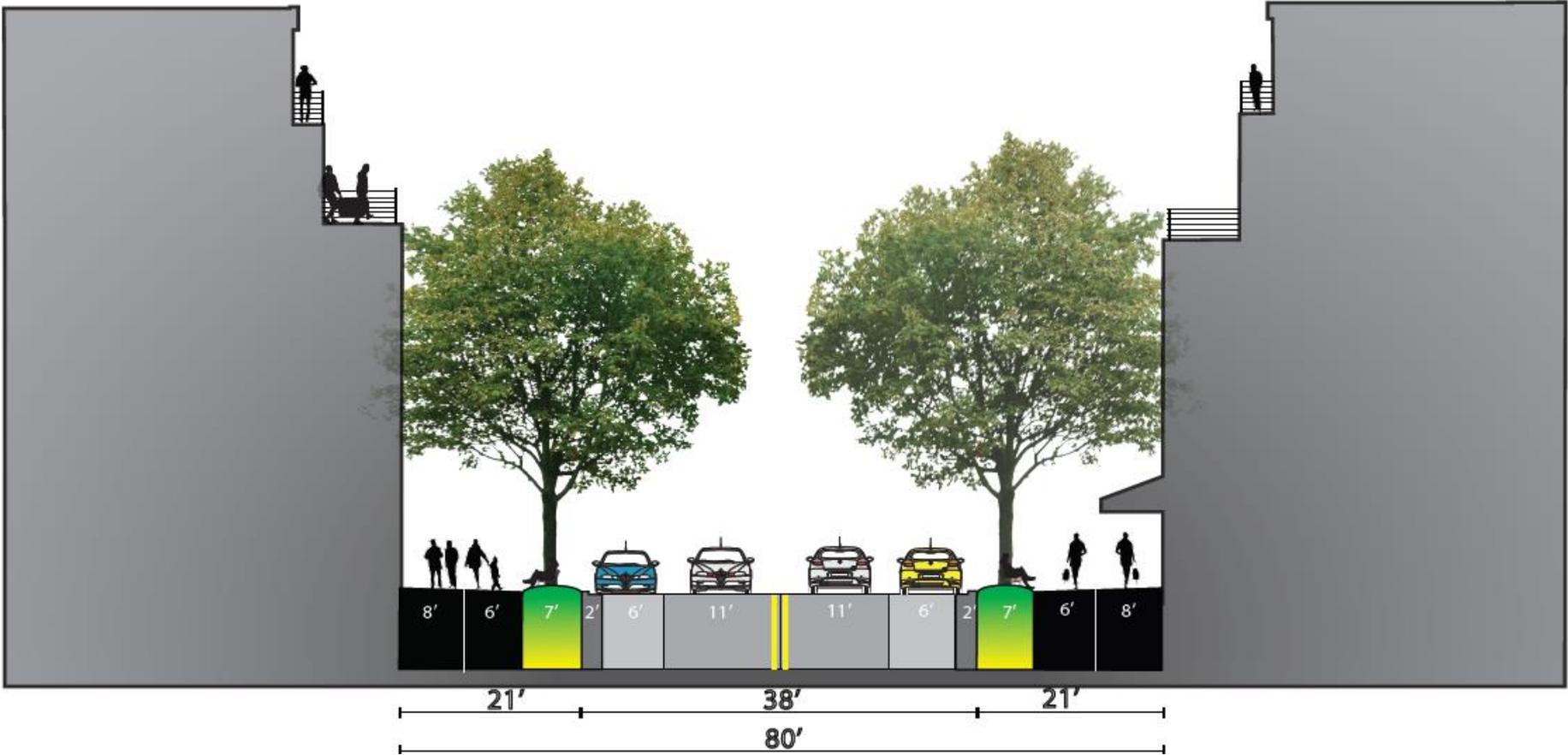




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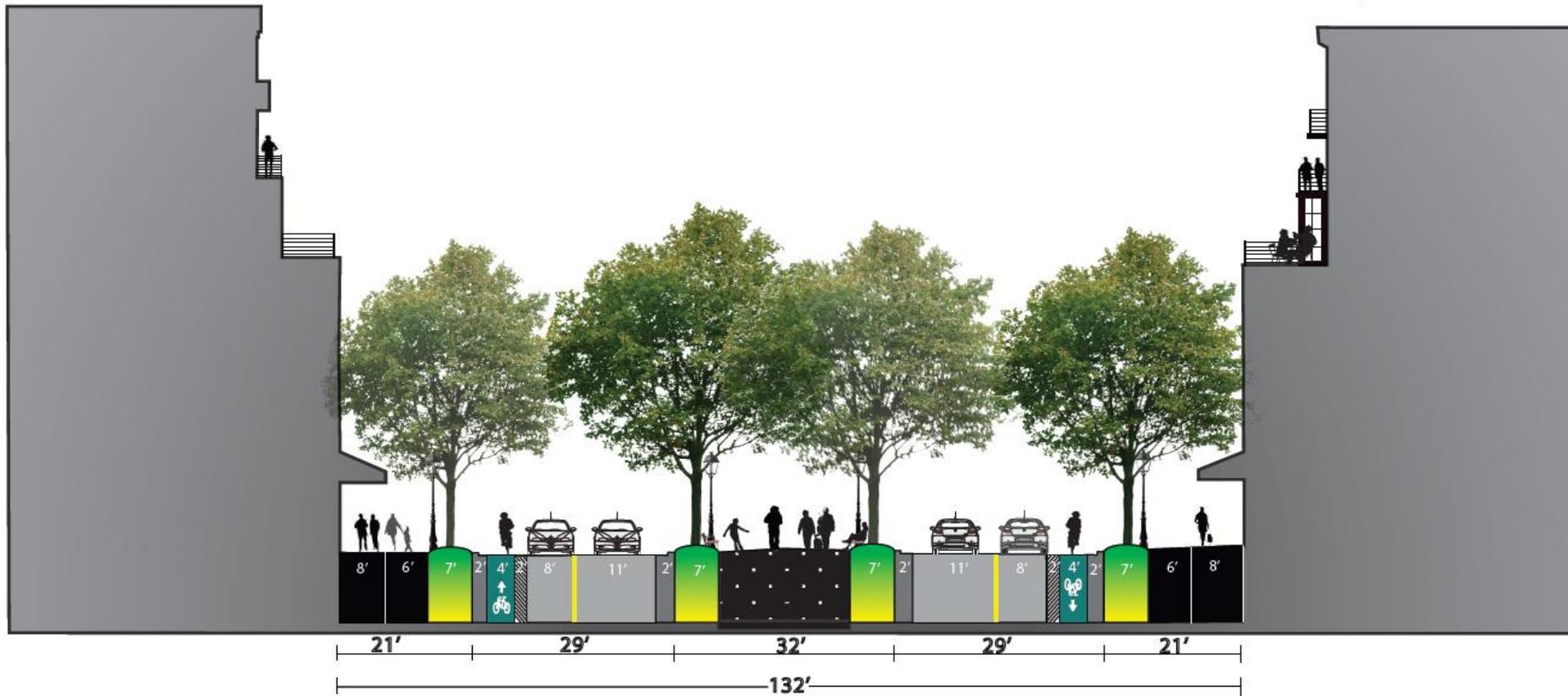
# Local Street



# Local Street Precedents



# Great Street Section with Linear Plaza



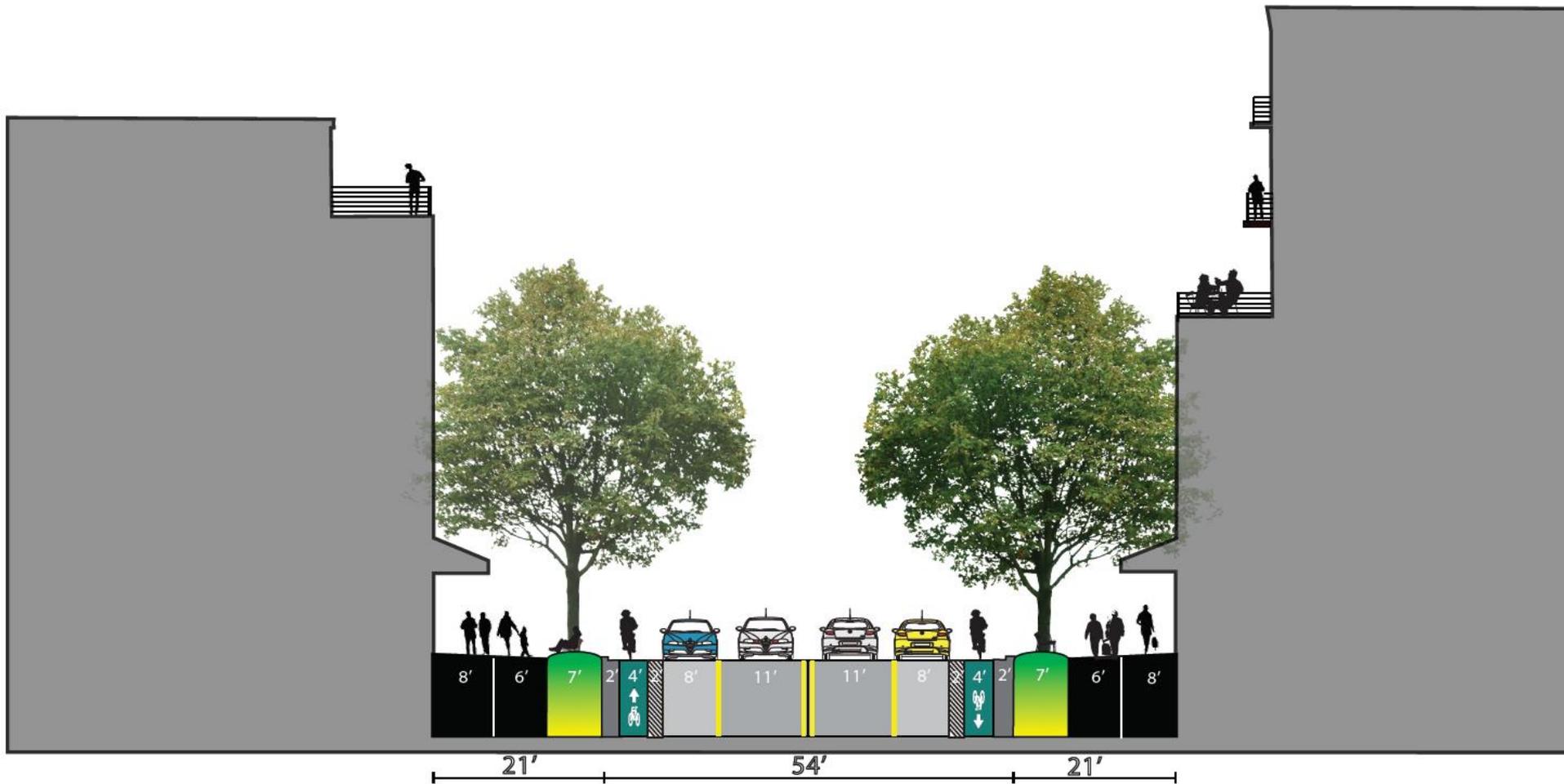
# Great Street Precedent Images



# Interconnected Pedestrian Network of Streets



# Avenue Street with On Street Bike Lane



# Questions and Comments?



End of Presentation