

City of North Charleston Transit Oriented Development (TOD) Opportunities Public Meeting

April 20, 2021

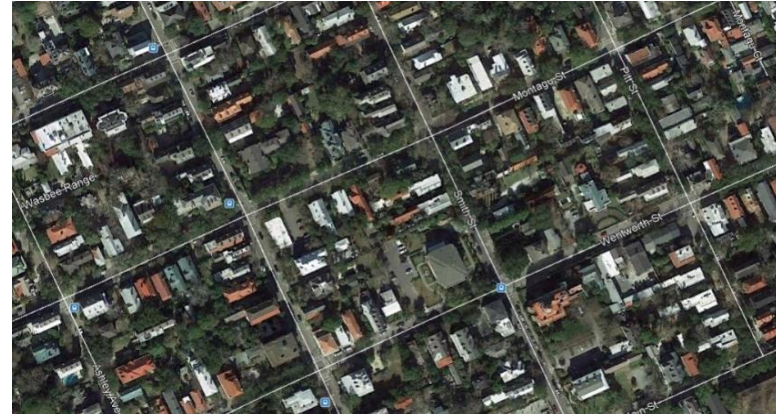
TOD & LCRT

Transit oriented development is a strategy for optimizing development patterns in station areas to support:

- High transit ridership
 - Targeting a high concentration of people and jobs into station areas
- Positive economic impact
 - Catalyzing infill and redevelopment and creating new employment clusters
- Equitable access
 - Improving walk/bike conditions, creating more housing options and supply close to transit and improving access to opportunity

Key Features of TOD

- A well-connected, complete street grid
- Development density within $\frac{1}{4}$ to $\frac{1}{2}$ mile of station
- Pedestrian-oriented building entrances, site design
- Bicycle and pedestrian infrastructure
- A strong mix of uses
- Housing at different price points
- Efficient parking
- Strong place making elements



TOD Planning

COMPLETED INPUTS TO THE TOD PLAN

TOD Market Assessment

Value Capture Toolkit

Affordability Assessment

TOD Placetypes

LCRT TOD Plan

FINAL ELEMENTS

Station Area Plans

Policy Toolkit

ENGAGEMENT ON TOD

Public Workshops (December 2019)

- Allocation of TOD Placetypes to Station Locations

Local Government and Stakeholder Meetings (2020)

Public Meetings (Spring 2021)



Transit Impact on Real Estate Development



PACE OF
DEVELOPMENT

1.1 – 2.0x



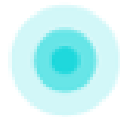
DEVELOPMENT
SHARE

1.1 – 3.1x



DEVELOPMENT
DENSITY

1.3 – 3.5x



IMPROVED ACCESS CREATES A MULTIPLIER EFFECT

Corridor Market Dynamics

MARKET DEMAND PROJECTION



RESIDENTIAL
19,800 units (SF)
22,800 units (MF)



RETAIL
4.1M SF



HOTEL
5,400 keys



INDUSTRIAL
4.0M SF



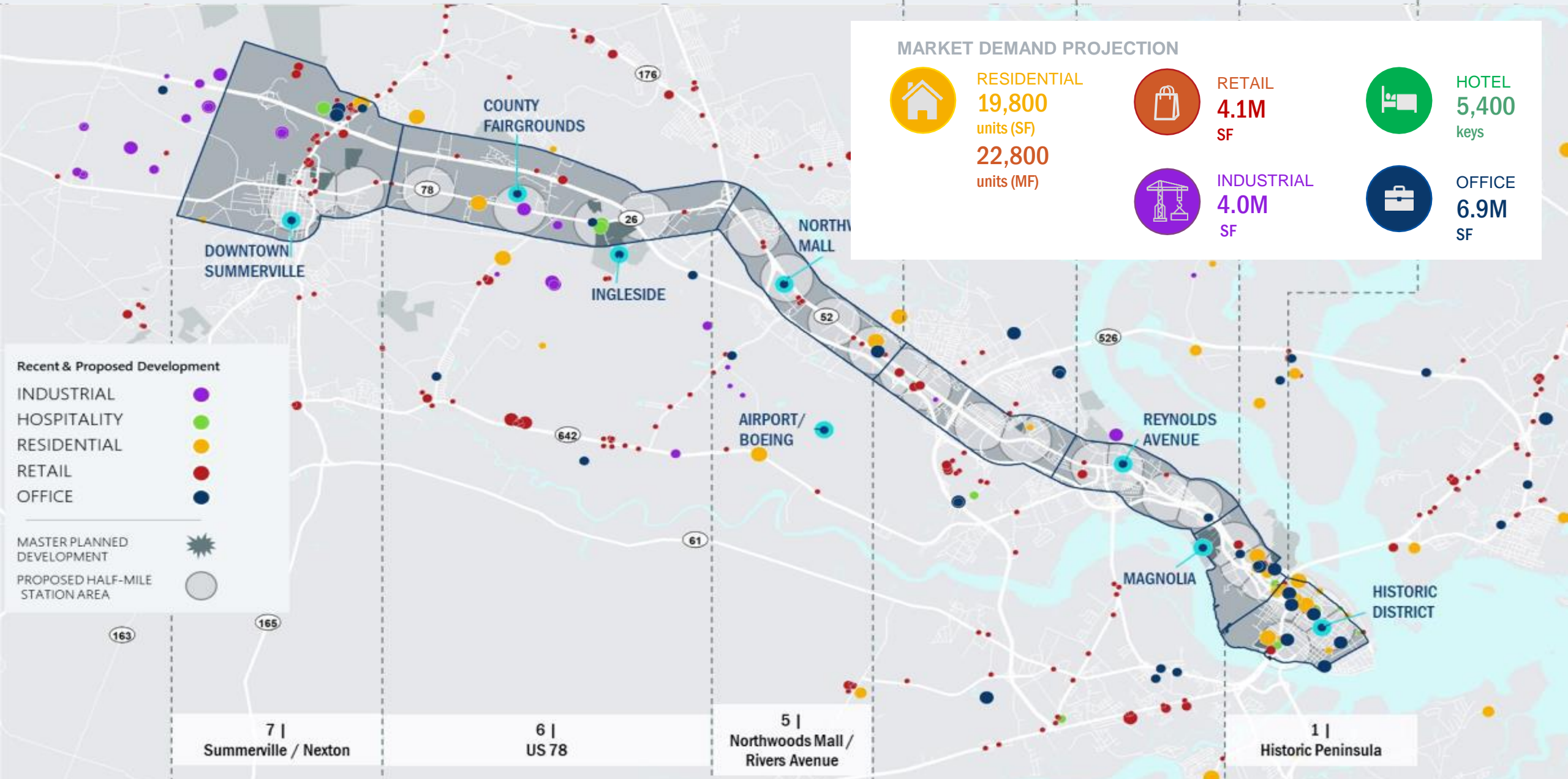
OFFICE
6.9M SF

Recent & Proposed Development

- INDUSTRIAL ●
- HOSPITALITY ●
- RESIDENTIAL ●
- RETAIL ●
- OFFICE ●

MASTER PLANNED DEVELOPMENT ✦

PROPOSED HALF-MILE STATION AREA



7 | Summerville / Nexton

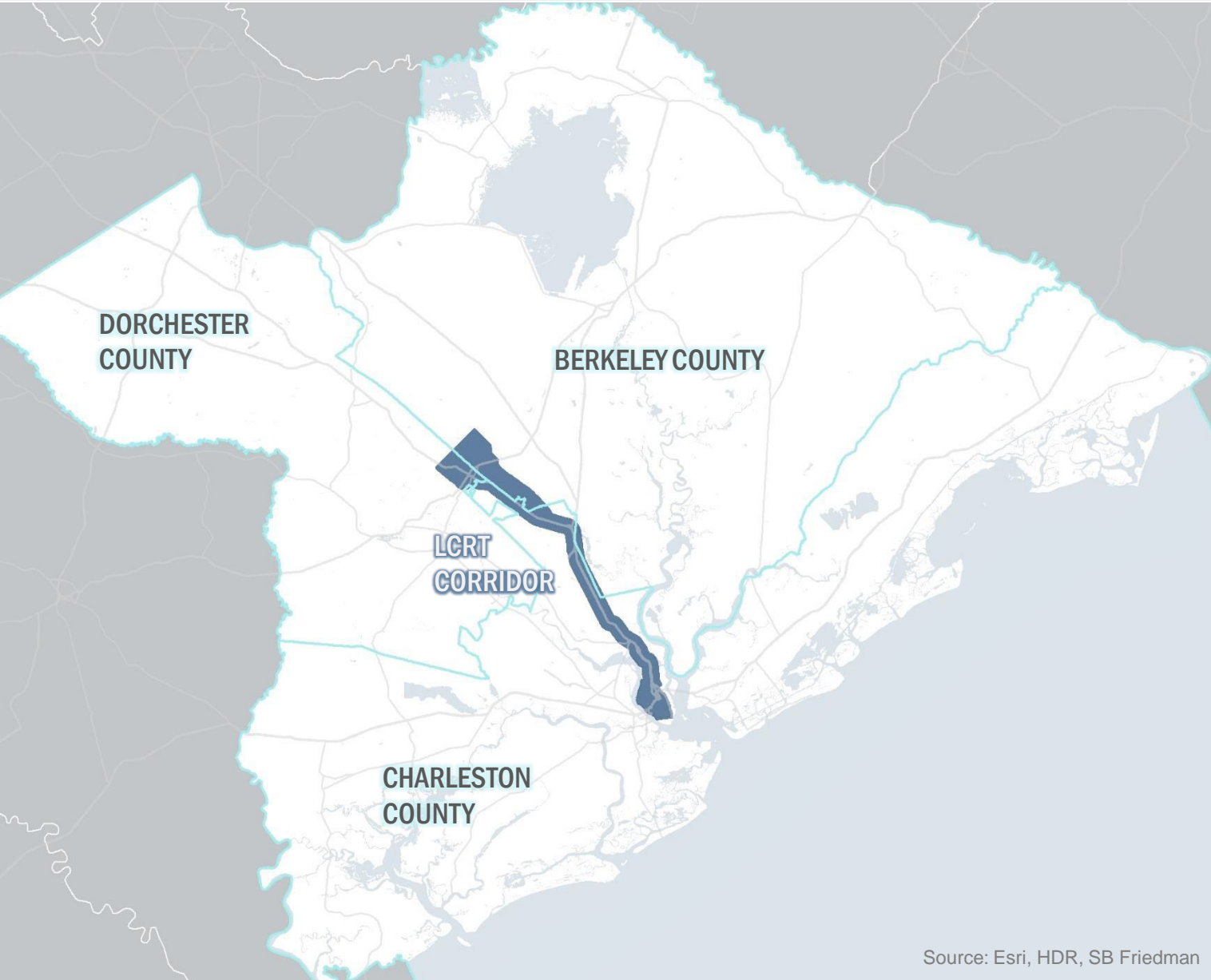
6 | US 78

5 | Northwoods Mall / Rivers Avenue

1 | Historic Peninsula

Transit & Affordable Housing

LCRT and TOD work along the Corridor is an opportunity to address the affordability in the region



Source: Esri, HDR, SB Friedman

COST BURDENED BCD HOUSEHOLDS



HOUSING & TRANSPORTATION

Two largest expenditures
for most households

25% TO 9%

Decline in transportation costs
as a percent of households
income when a variety of
mobility options are provided to
formerly auto-dependent
households

Source: Guidebook for Creating Connected Communities (HUD), SB Friedman

Planning Context



ADOPTED JUNE 2020

Mixed Use Corridor/Transit Boulevard:

- 4-6 travel lanes
- Landscaped medians; applied access management techniques
- High multi-modal accommodations transit shelters and facilities, sidewalks, bicycle lanes, multi-use path
- High visibility crosswalks, pedestrian level lighting



Mixed-Use Corridor (MUC)

The Mixed-Use Corridor designation is to provide for commercial, retail, office and higher-density housing adjacent to principal transportation corridors throughout the City. These areas are intended to promote development of mixed-uses that will enhance access to a wider range of services for nearby neighborhoods. Appropriate uses include office, retail, multi-family and light industry (manufacturing and assembly).

Development within the MU and MUC designations may be intensified within areas identified around transit centers. Intensified development in these areas is referred to as Transit-Oriented Development (TOD).

WHAT IS TRANSIT ORIENTED DEVELOPMENT?



TOD Placetypes

- Naturally occurring TOD-like patterns already present in the region
- New TOD Typologies build from existing
- Help match market demand, complement existing character, support overall corridor goals

REGIONAL



Downtown Charleston

COMMUNITY



Downtown Summerville

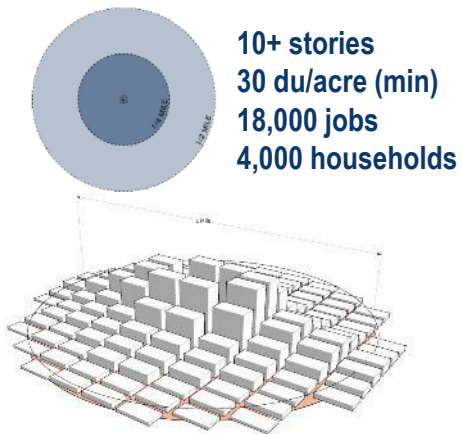
NEIGHBORHOOD



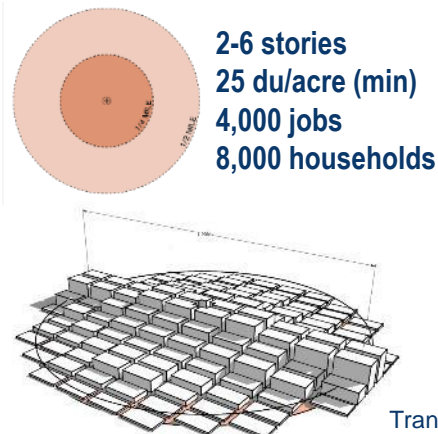
Park Circle

TOD Placetypes

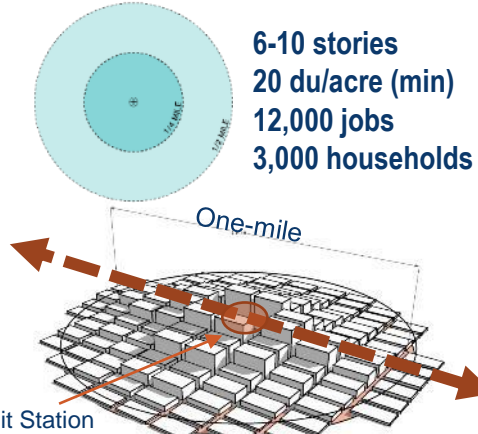
Downtown Employment



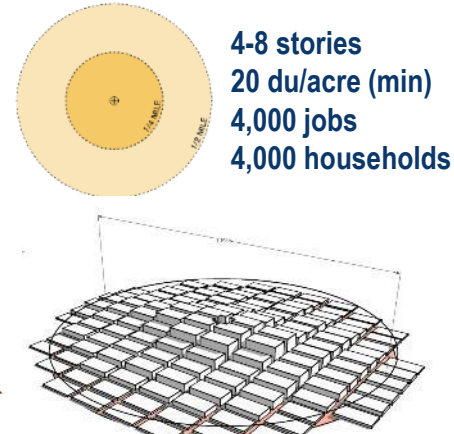
Downtown Neighborhood



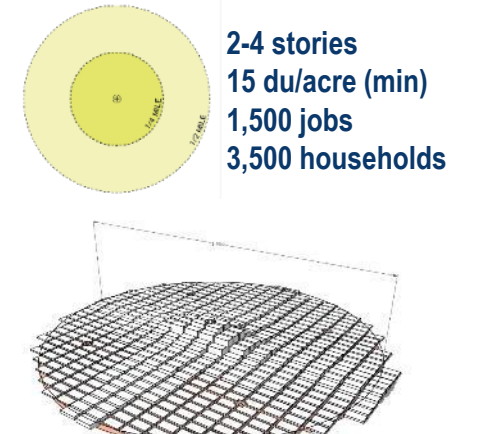
Employment Hub



Town Center



Neighborhood



The above diagrams illustrate prototypical building massing and density gradients for different TOD Placetypes

Trends in Redevelopment and Infill

Citadel Mall investors outline Epic plans for Charleston shopping center

BY WARREN L. WISE WWISE@POSTANDCOURIER.COM
AUG 15, 2019, UPDATED SEP 14, 2020



TOD Opportunities and Concepts

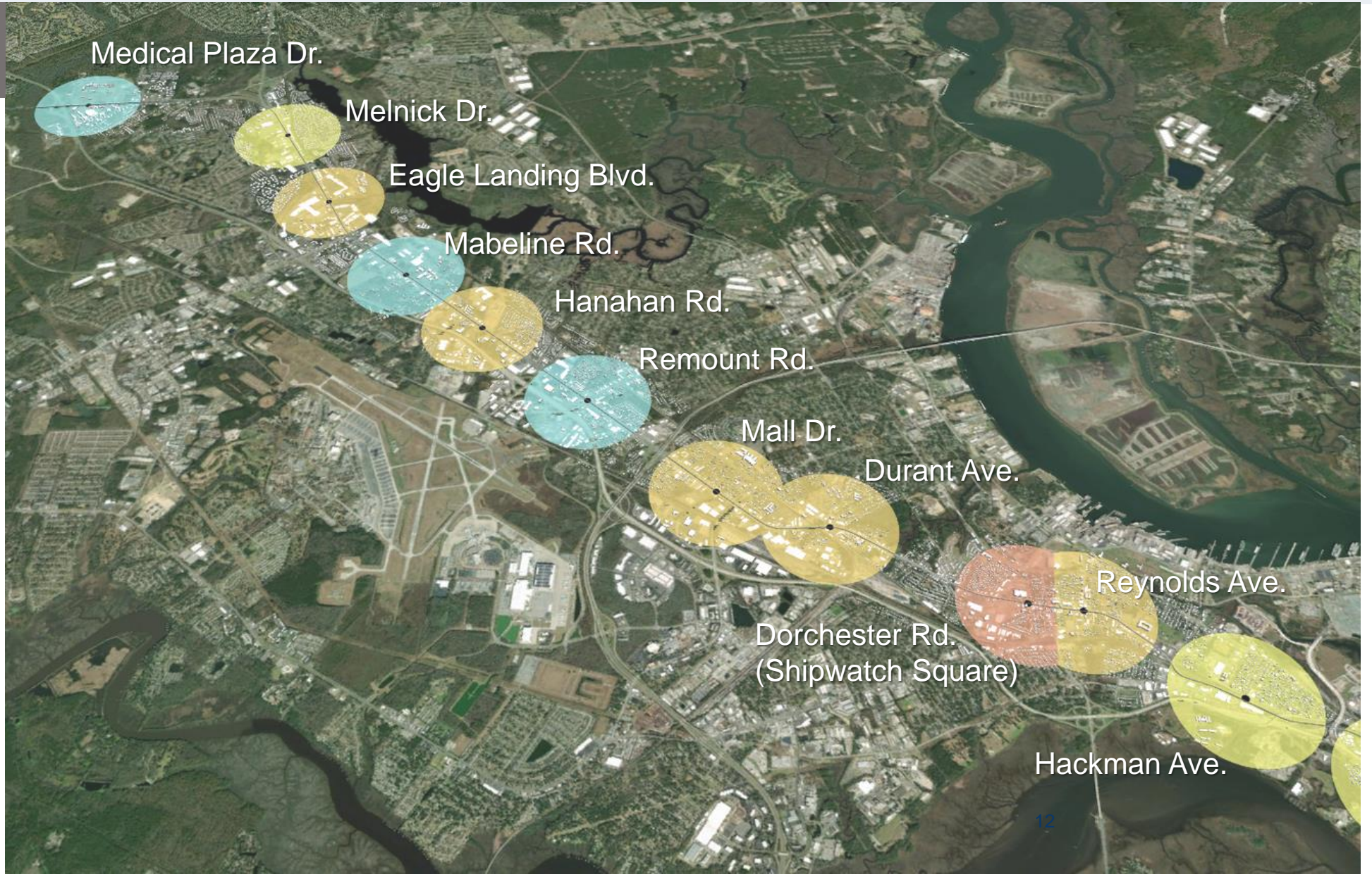
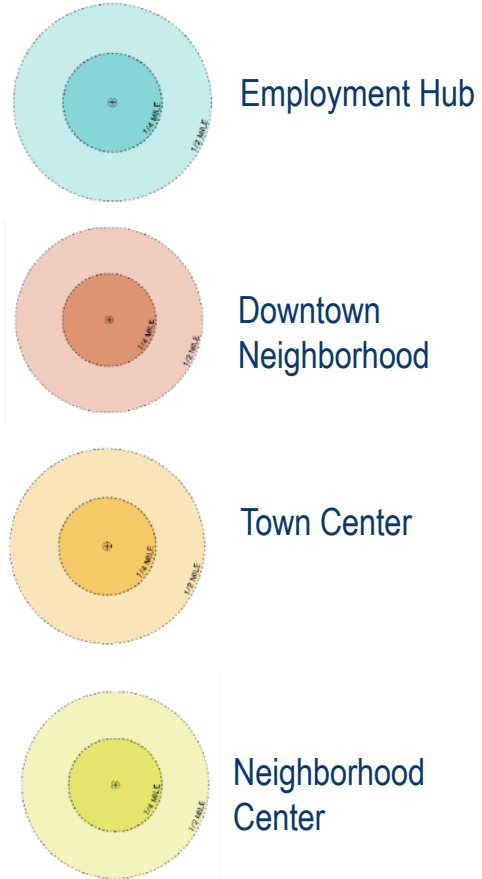
- Allocation of TOD Placetypes to North Charleston station areas
- Focus on 4 station areas for deeper opportunity assessment
 - Northwoods Mall
 - Remount Road
 - Durant Avenue
 - Shipwatch Square & Reynolds Avenue
- Testing market demand and redevelopment opportunity sites
- Station Area Concepts
 - Testing the program of the TOD Placetype
 - Mix of uses, building heights and long-term redevelopment and infill potential
 - Identifying key design themes
 - Assessing against current land use policies



Participants share their vision for station locations and place types at the North Charleston Transit Center.

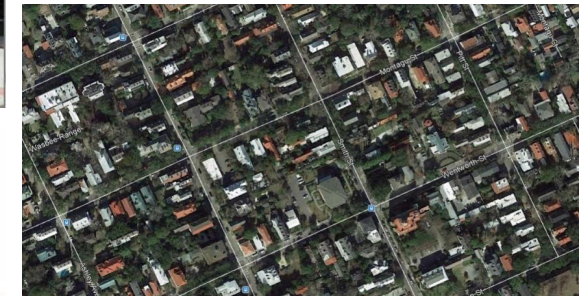
North Charleston Corridor-wide TOD Concepts

TOD Placetypes and LCRT Station Locations



TOD Design Themes for North Charleston

- Transition from **suburban** to **TOD**
- Create connected **green infrastructure and open space**
- Establish or reconnect the **street grid**
- Increase the **housing supply**
- **Consolidate parcels** over the long term
- Develop vertical and horizontal **mixed use** at of **2-6 stories**
- Establish **walkable commercial and residential streets** on and off Rivers Avenue
- Concentrate **infill and redevelopment** of lower density commercial, vacant lands and parking areas
- Dedicate **less land to parking**



Eagle Landing Blvd. Station (Northwoods Mall Station Area)

Northwoods Mall Station Area Today

- Regional retail hub with 'Big Box' commercial and auto-dominated patterns
- Small percentage on office and retail
- Relatively strong retail hub for region
- Large mall as the anchor
- Pockets of residential within retail node, additional residential on the periphery
- Larger areas of surface parking
- Notable stormwater facilities above and underground flowing into natural waterways



Station Area Opportunities

- Demand for residential and potential to reconfigure retail into more urban patterns
- Redevelopment of commercial big box a national trend
- TOD Town Center with stronger balance of jobs & housing
- Large acreage of commercial makes larger transformation more viable



Phase I - Out Parcel Redevelopment



Phase II&III – Main Street Corridor

High performing retail remains
As it vacates, mixed use becomes the option

Establishment of new Main Street corridor to anchor infill

Major greenspace as amenity and district wide stormwater strategy



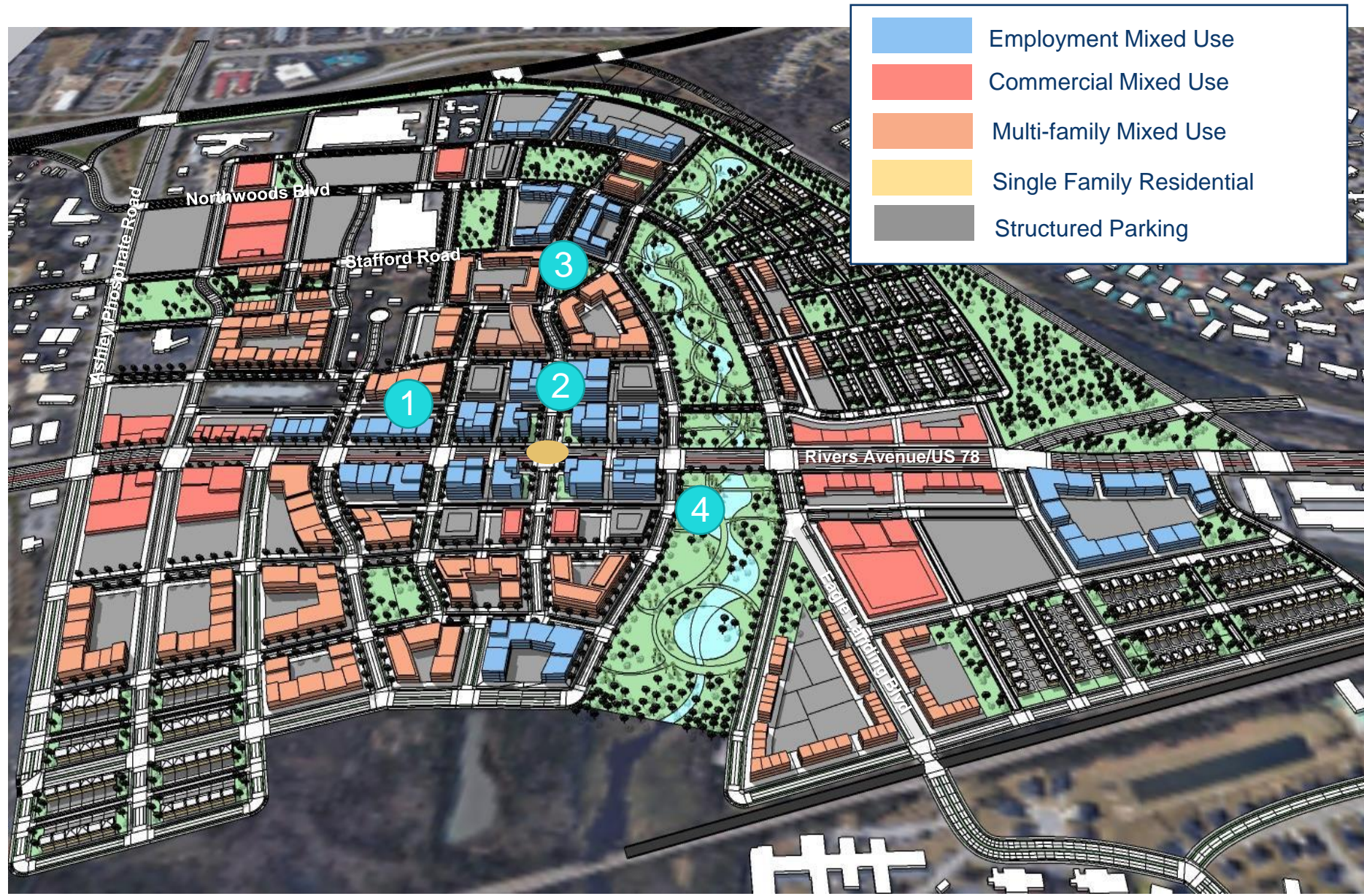
	Employment Mixed Use
	Commercial Mixed Use
	Multi-family Mixed Use
	Structured Parking

Development Form & Program



TOD Elements	Before	After
Housing Units	2,800	4,900
Dwelling Units/Ac	7	15
Office	380,000 sf	1.4M sf
Retail	3.0M sf	2.5M sf
Building Heights	1-2 Stories	2-5 Stories

Northwoods Mall Station Area – Key Themes

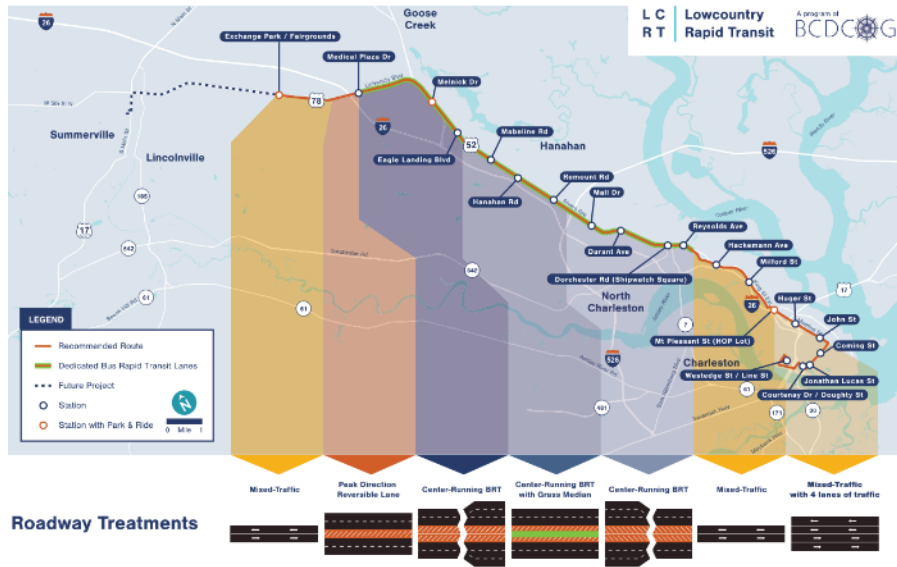


- 1 Connected, walkable gridded street network
- 2 Concentrated employment development within ¼ mile of station
- 3 Re-organization of traditional mall into Mainstreet mixed use corridor
- 4 Regional open space and stormwater mitigation park

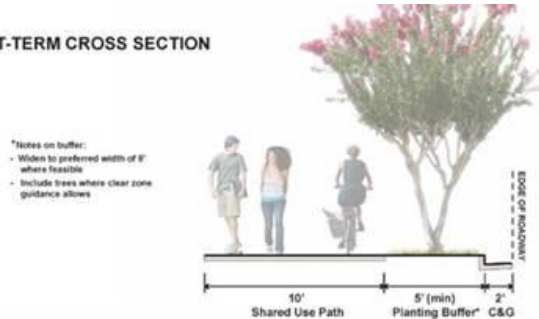
Multimodal Network

1

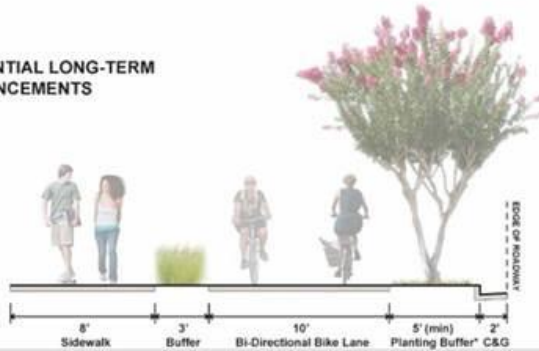
Street typologies build on previous work
Establish link between street type and development patterns
Allow for slower speed through streets and slower speed 'walk streets'



SHORT-TERM CROSS SECTION



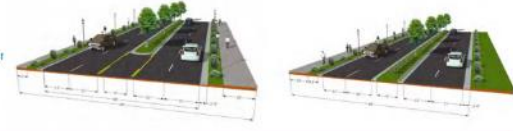
POTENTIAL LONG-TERM ENHANCEMENTS



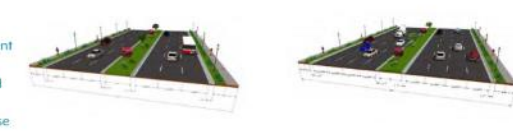
- Neighborhood/Main Street Corridor**
- 1-2 travel lanes (optional median)
 - Low Vehicle volumes and speeds
 - Moves people through and between neighborhood
 - On-Street parking where appropriate
 - Pedestrian and bicycle accommodated through slow vehicular travel speeds



- Connector Corridor:**
- 2-4 travel lanes
 - Balances traffic flow and connectivity
 - Landscaped medians; applied access management techniques
 - Accommodates transit, pedestrian and bicycle through separated or dedicated facilities



- Employment/Commuter Corridor:**
- 4-6 travel lanes
 - High vehicle volumes and speeds
 - Landscaped medians; applied access management techniques
 - Accommodates local truck/freight movement and transit
 - Pedestrian and bicycle facilities (sidewalk, multi-use path)

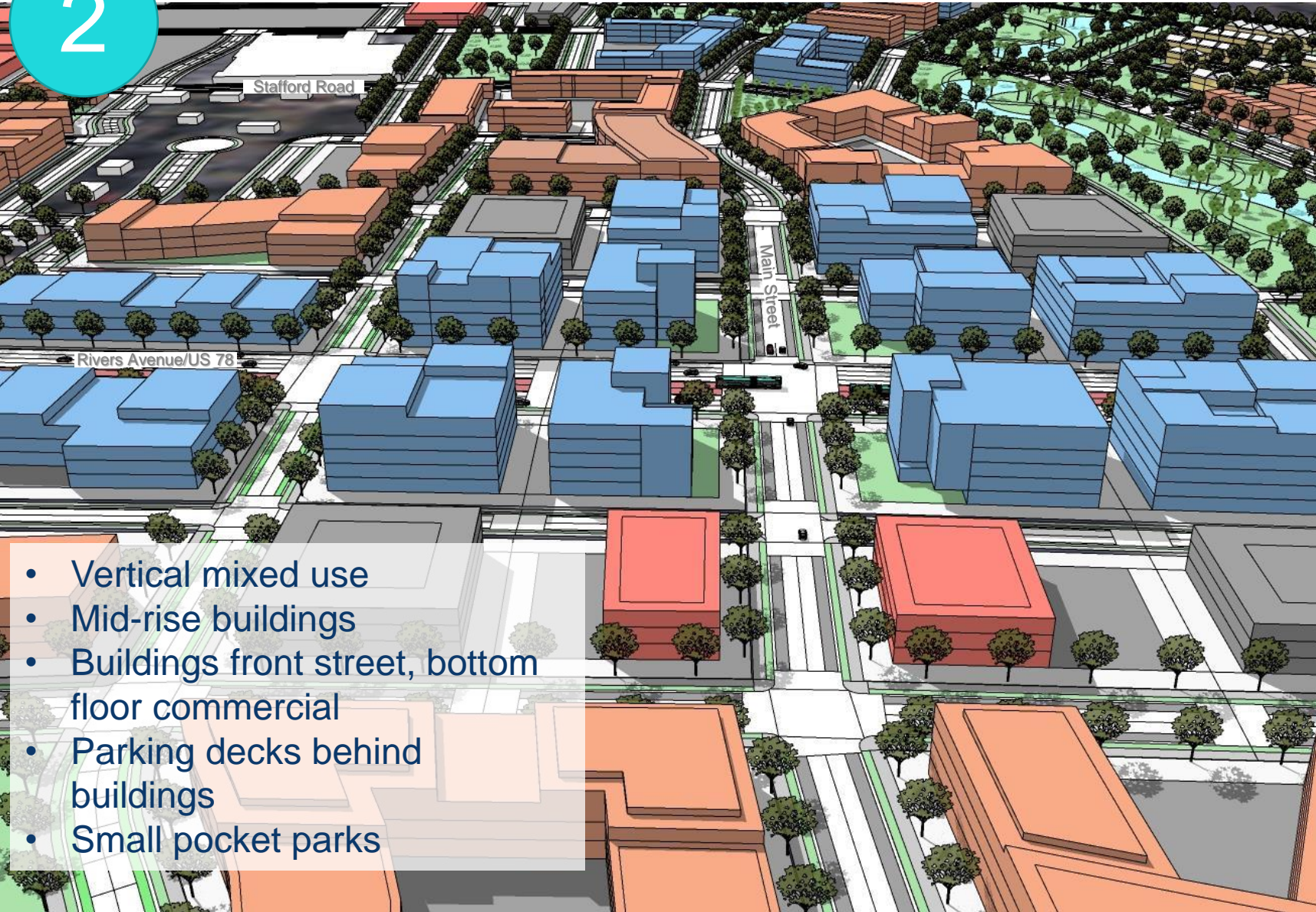


- 2. Sketch up "3-D" rendering (Brigade and Meeting)



High Density Mixed Use Employment Core

2

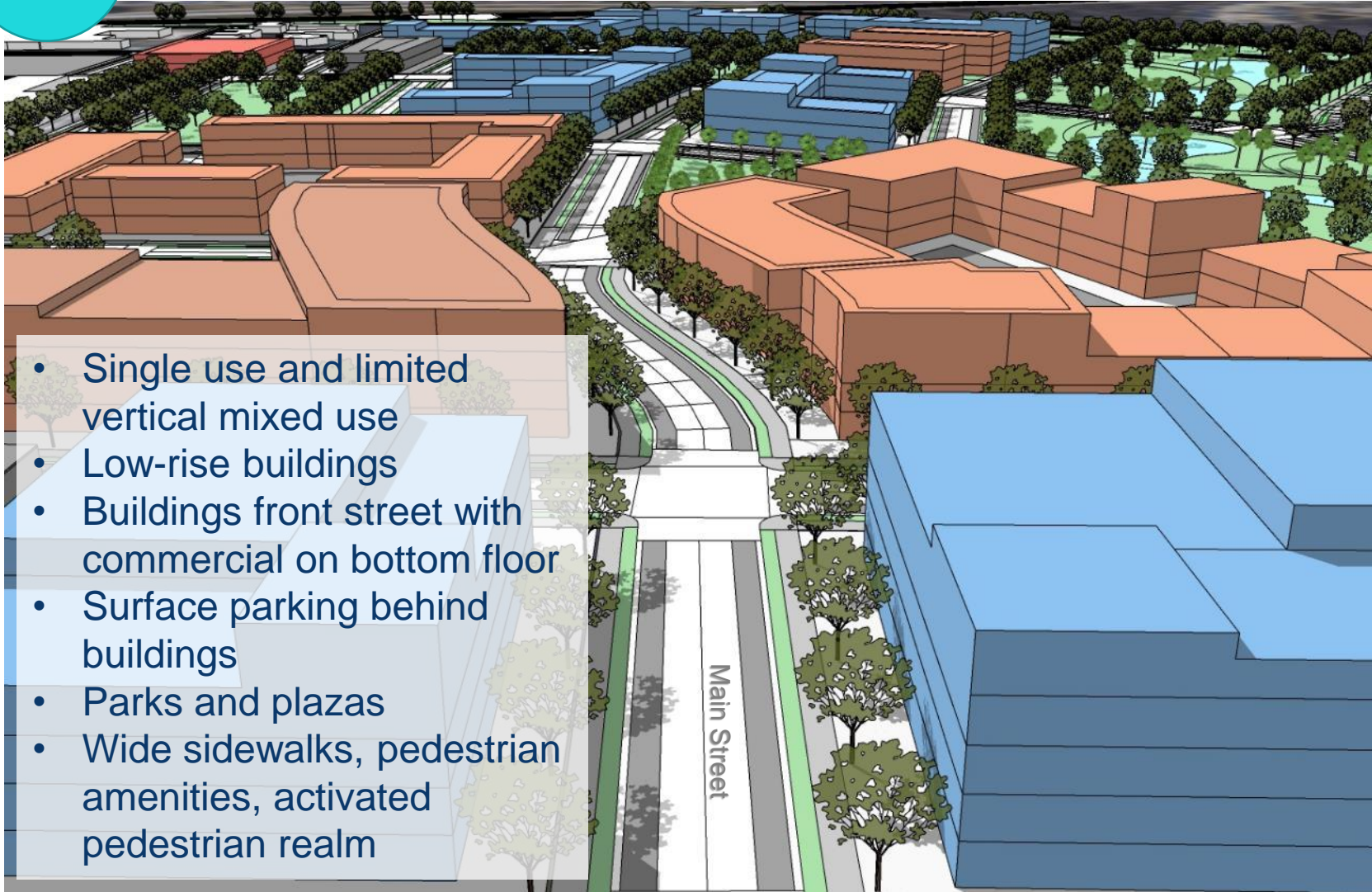


- Vertical mixed use
- Mid-rise buildings
- Buildings front street, bottom floor commercial
- Parking decks behind buildings
- Small pocket parks



Main Street Commercial Corridor

3

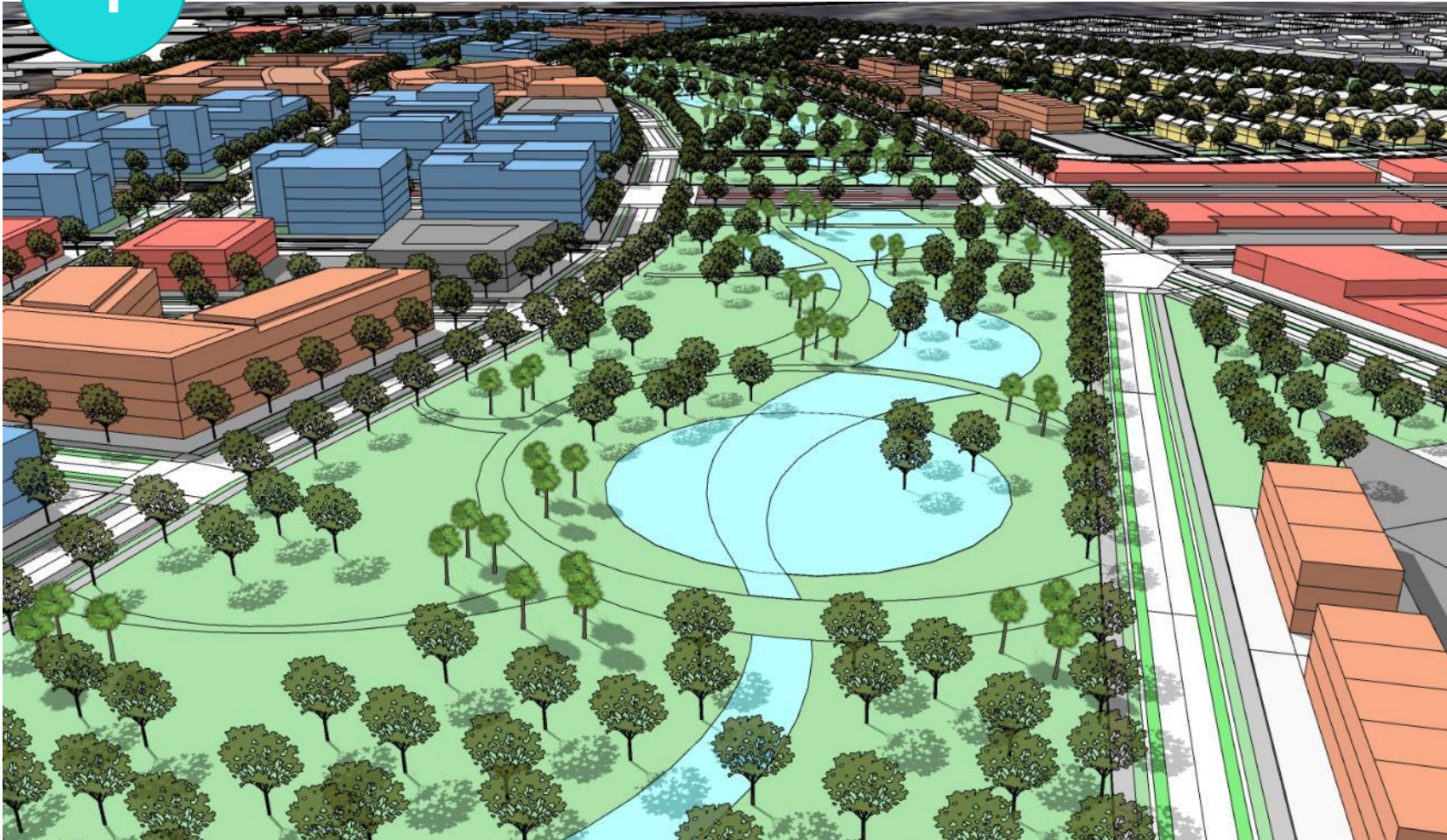


- Single use and limited vertical mixed use
- Low-rise buildings
- Buildings front street with commercial on bottom floor
- Surface parking behind buildings
- Parks and plazas
- Wide sidewalks, pedestrian amenities, activated pedestrian realm



Open Space and Storm Water Mitigation Park

4



Station Area Vision

Building Form, Scale and Uses

- Mix of uses, building heights
- Multimodal elements
- Connected green spaces
- *Other features?*

Policy

Recommendations

- Minimum heights
- Affordable housing
- Pedestrian orientation
- Civic plazas
- Strategic parking
- *Other elements?*

Cultural, historical and anchor organizations

- Public space features
- Civic/community spaces
- *Other layers of community story?*

- Illustrations to provide ‘what ifs’ for infill and redevelopment density associated with TOD
- Facilitate discussions with private sector
- Help local community members and city staff advance more detailed planning and zoning changes

Did we get it right?

- What is missing or what needs to be pulled back?
- What are the biggest barriers or opportunities to implementation?

Remount Road Station Area

Remount Station Area Dynamics

- Major transportation crossroads with strong airport connections
- Auto-oriented commercial
- Notable barriers to walkability to west, but residential areas to the east within walking distance to station
- Jobs rich area
- Development activity present

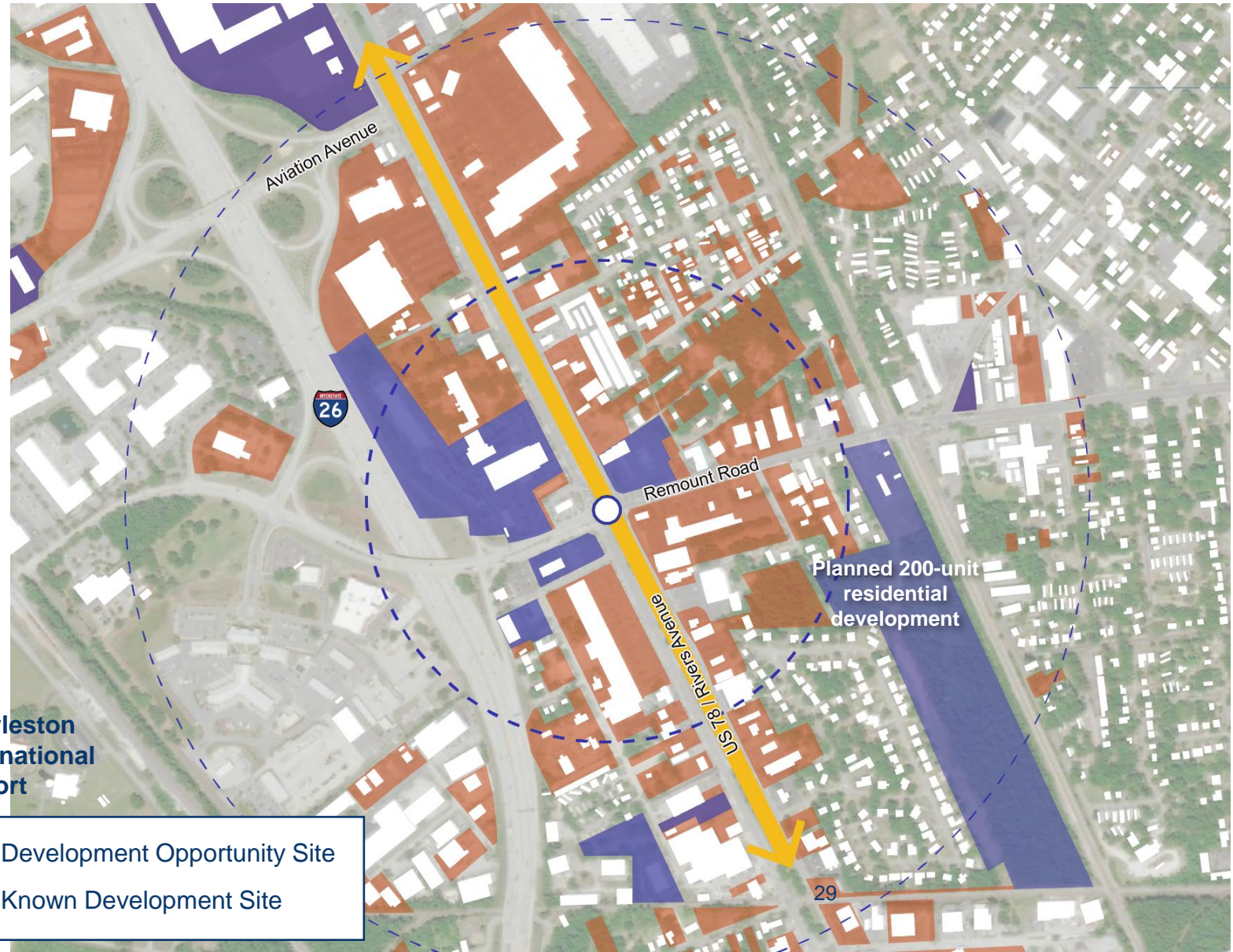


Looking north on US 78 towards station



Station Area Opportunities

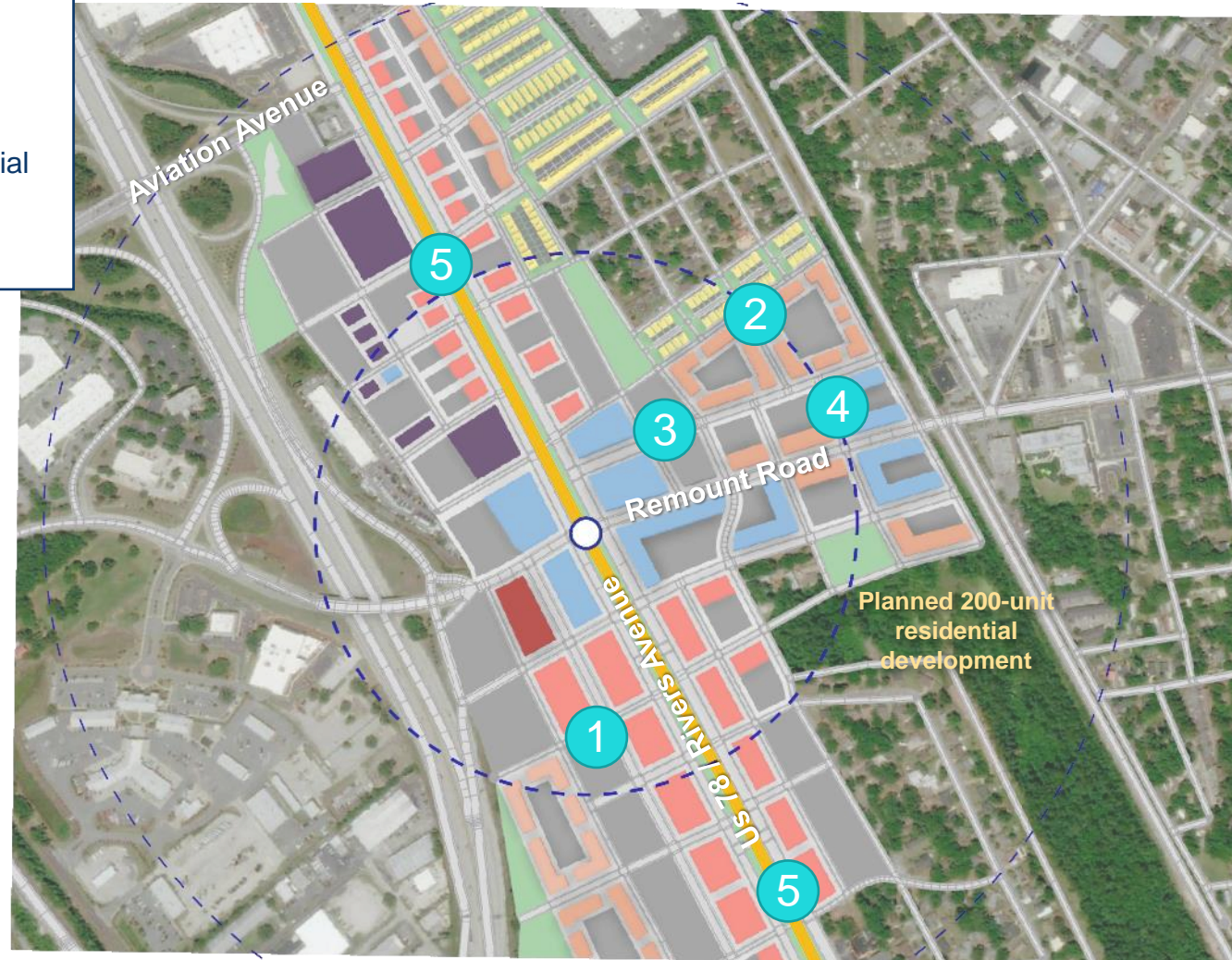
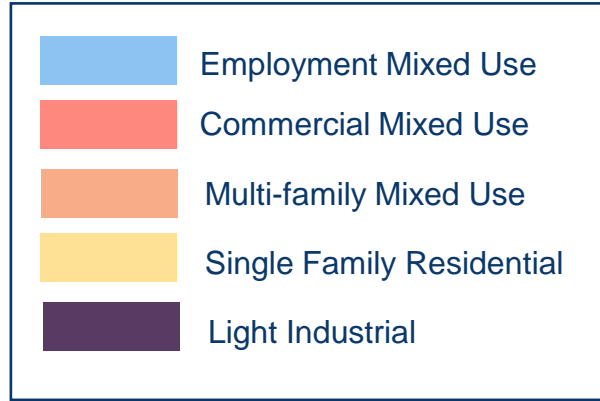
- Airport adjacent business uses
- Some larger parcel commercial property redevelopment potential
- Build on public/private employment hub uses
- New Palmetto Parkway strengthens overall access to the area
- Connect fragmented greenspaces
- Expand neighborhood grid to the east



	Development Opportunity Site
	Known Development Site

Station Area Opportunities

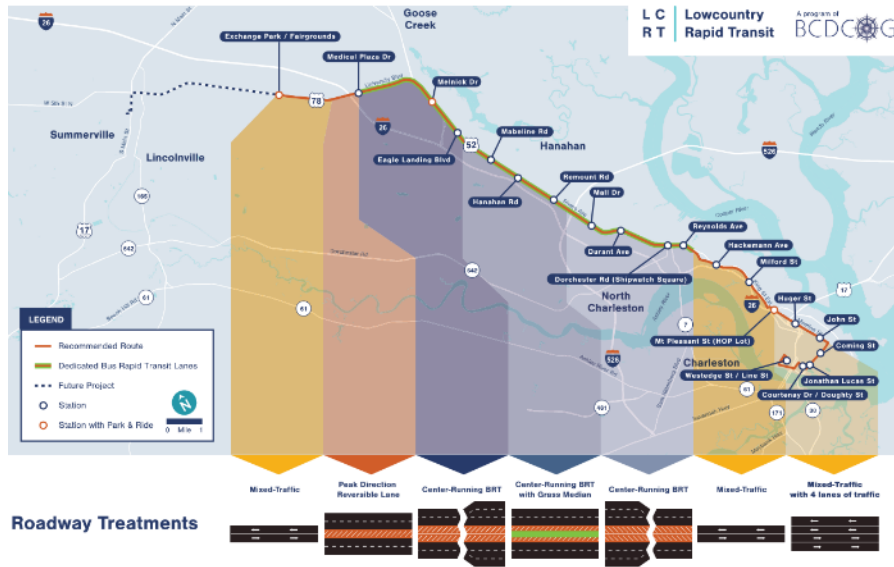
- 1 Expand the grided street network
- 2 Neighborhood infill with higher density residential
- 3 Employment / commercial infill in station core
- 4 Commercial edge connecting to points east
- 5 Smaller blocks and liner commercial buildings along LCRT corridor



Multimodal Network

1

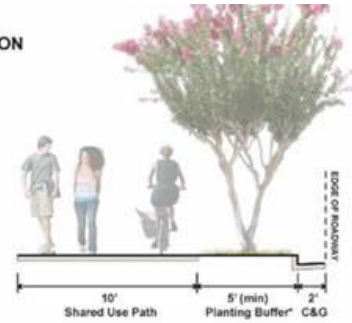
Street typologies build on previous North Charleston work
 Establish link between street type and development patterns
 Allow for slower speed “through streets” and slower speed “walk streets”
 Additional LCRT bicycle and pedestrian enhancements at station



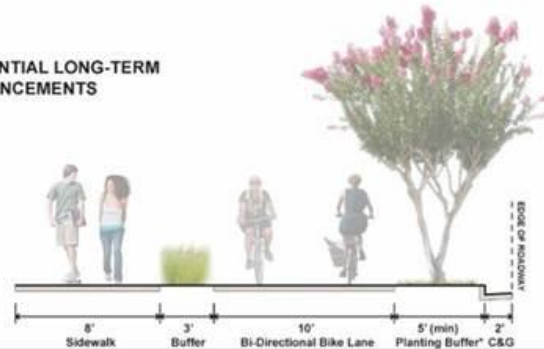
Roadway Treatments

SHORT-TERM CROSS SECTION

- *Wider on buffer:
- Wider to preferred width of 8' where feasible
- Include trees where clear zone guidance allows



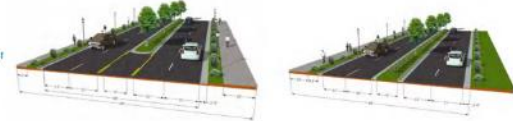
POTENTIAL LONG-TERM ENHANCEMENTS



- Neighborhood/Main Street Corridor:
- 1-2 travel lanes (optional median)
 - Low Vehicle volumes and speeds
 - Moves people through and between neighborhood
 - On-Street parking where appropriate
 - Pedestrian and bicycle accommodated through slow vehicular travel speeds



- Connector Corridor:
- 2-4 travel lanes
 - Balances traffic flow and connectivity
 - Landscaped medians; applied access management techniques
 - Accommodates transit, pedestrian and bicycle through separated or dedicated facilities



- Employment/Commuter Corridor:
- 4-6 travel lanes
 - High vehicle volumes and speeds
 - Landscaped medians; applied access management techniques
 - Accommodates local truck/freight movement and transit
 - Pedestrian and bicycle facilities (sidewalk, multi-use path)



- 2. Sketch up “3-D” rendering (Brigade and Meeting)



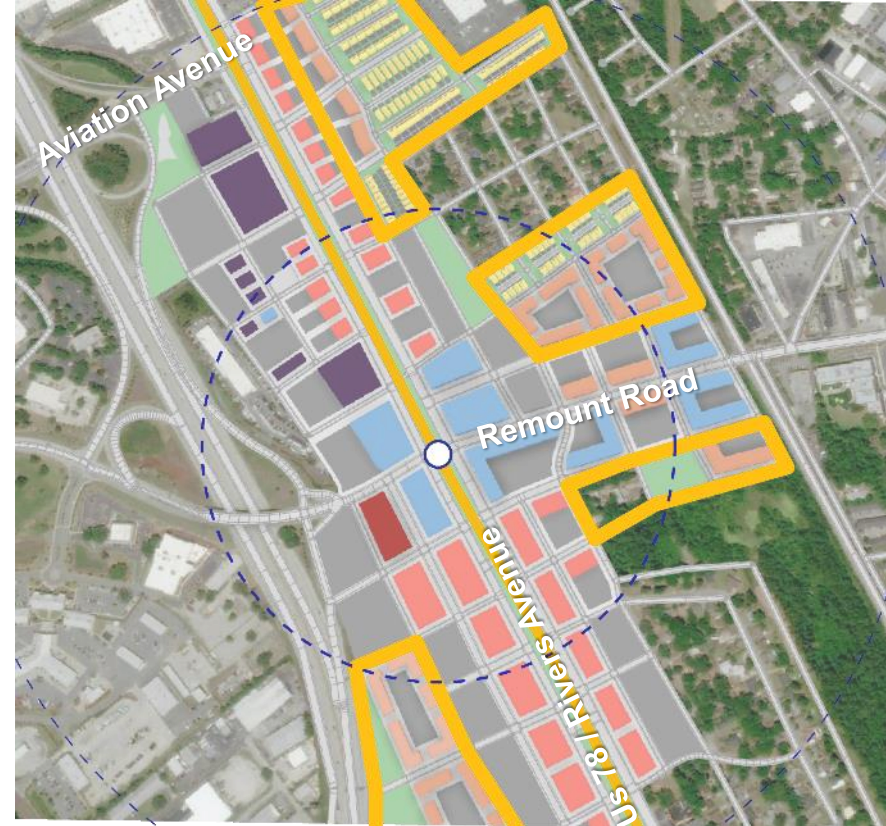
Center Running BRT Concept at Remount Road

1



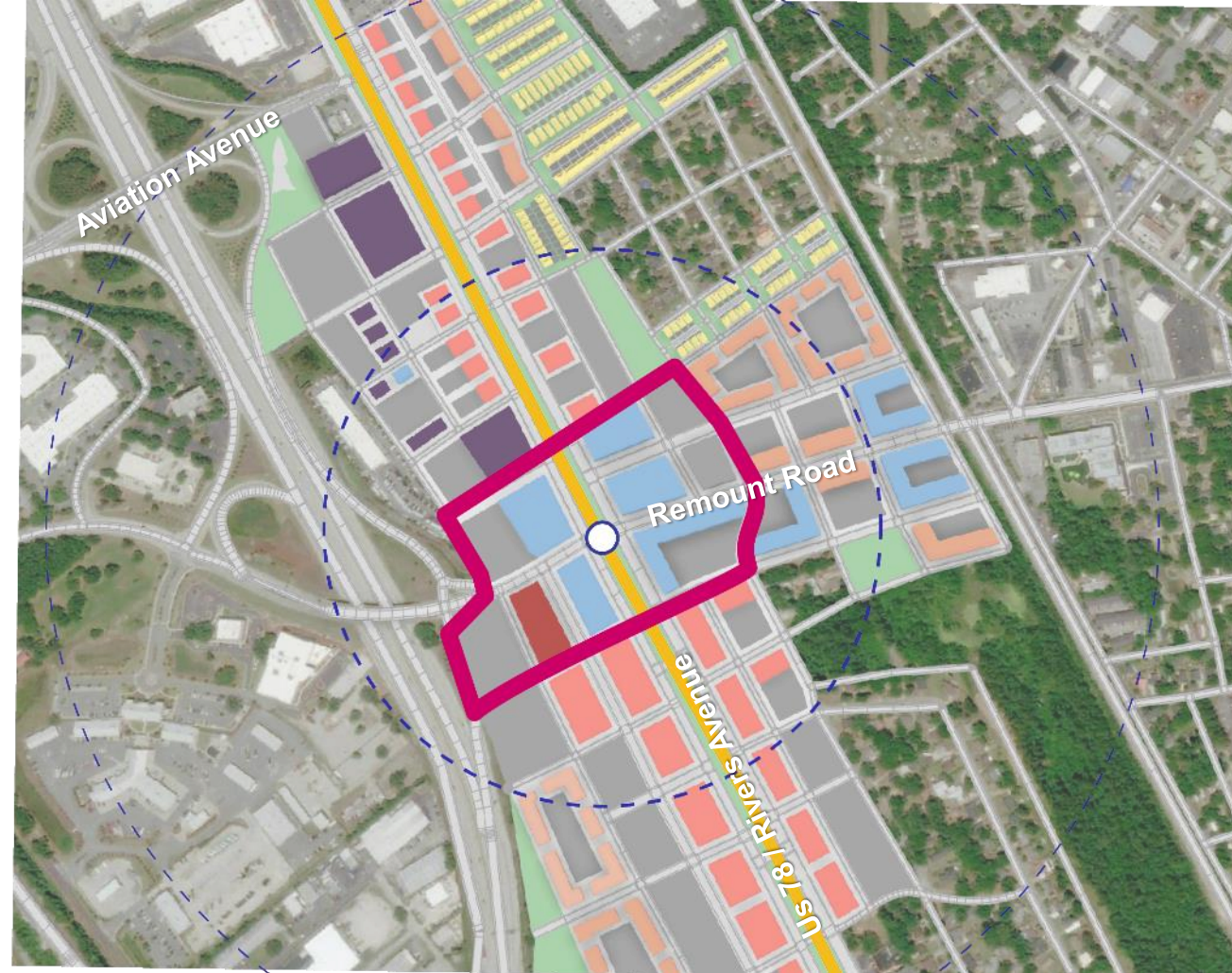
Neighborhood Infill

2



Concentrated Employment in Station Core

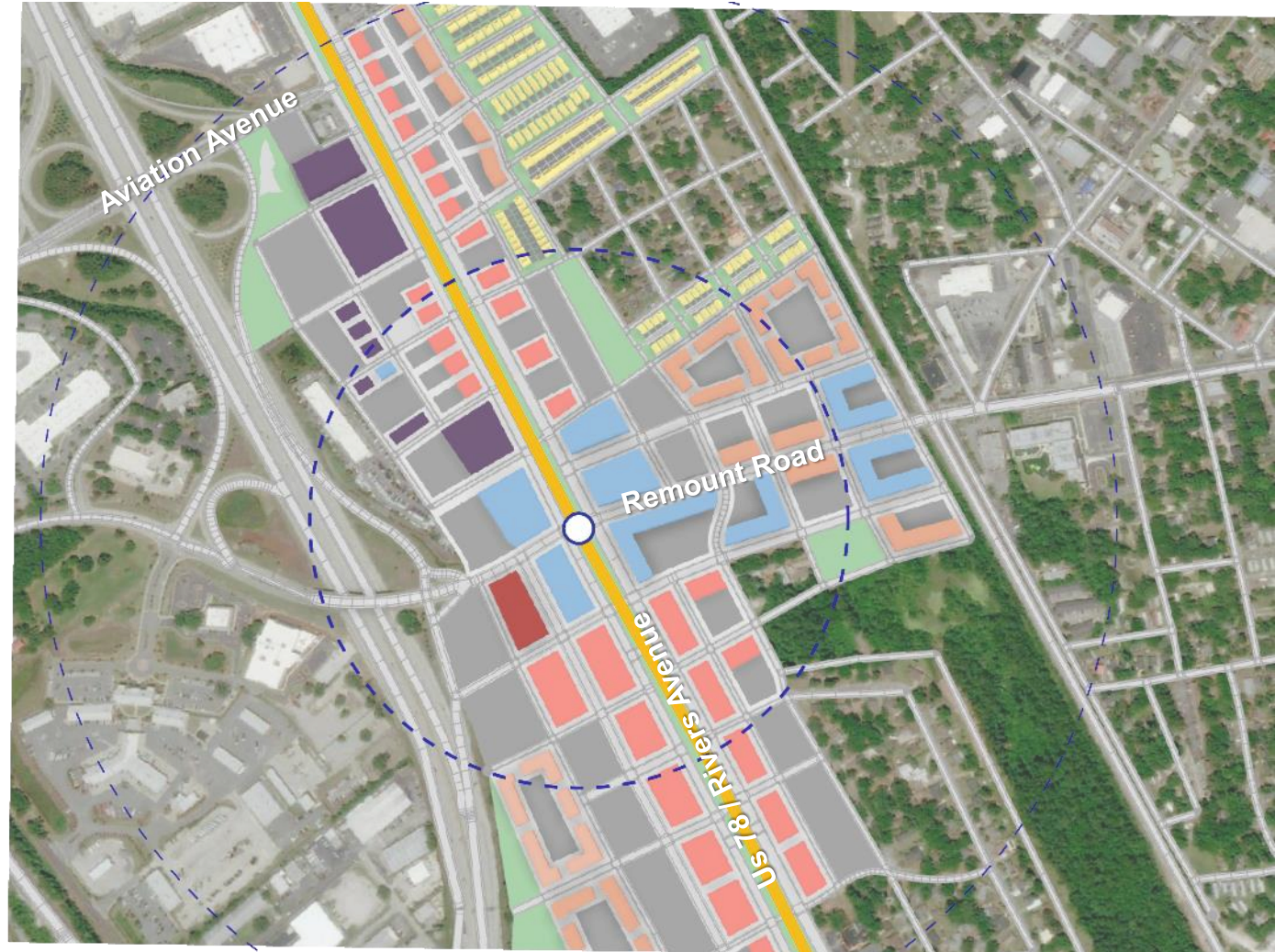
3



Mixed-use Commercial Edges

4

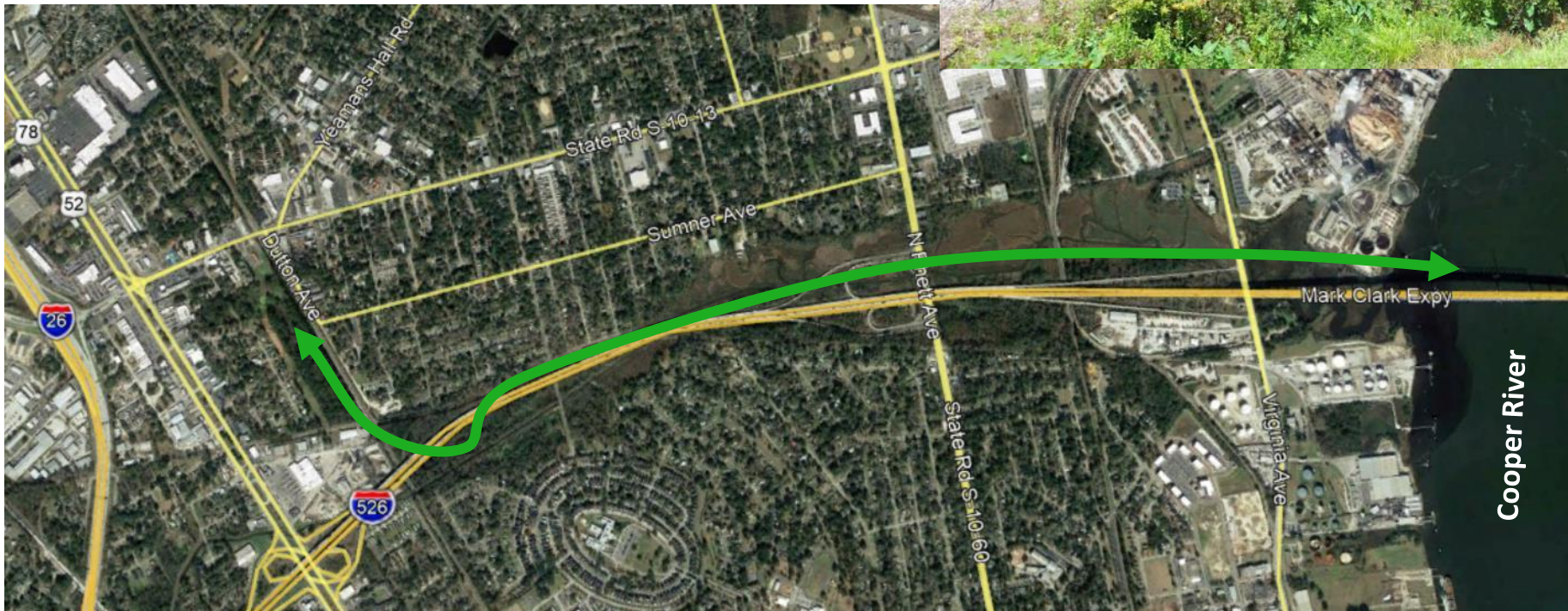
5



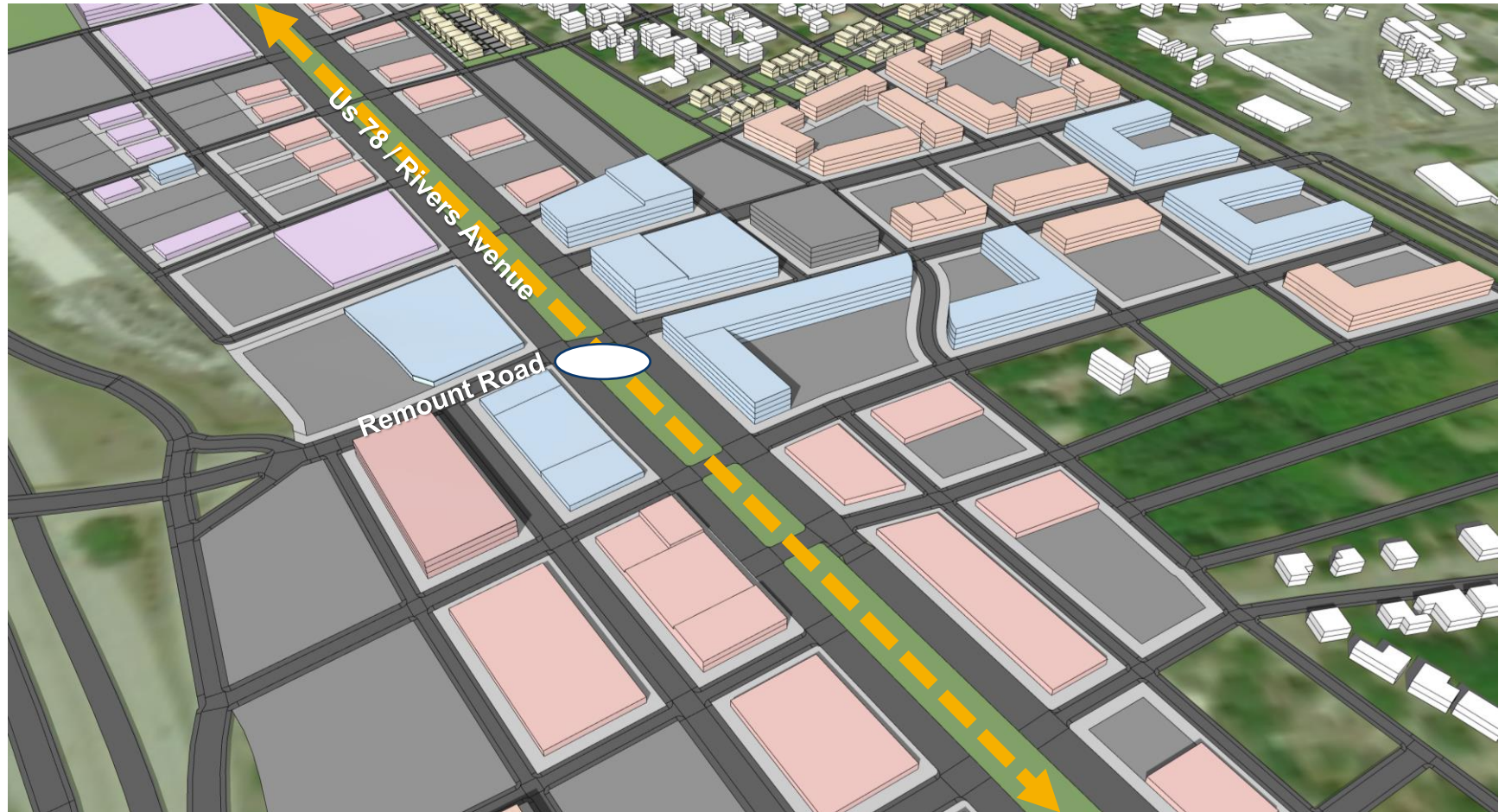
Connected Green Space

5

- Preserve existing wetlands
- Stormwater treated with street ROW and conveyed to treatment ponds or treated on site
- Small parks and community parks utilized with stormwater features
- Rain gardens and other LID applications to be utilized where feasible



Development Massing & Program



TOD Elements	Before	After
Housing Units	840	2,000
Dwelling Units/Ac	2.5	8
Office	1.6M sf	2.0M sf
Retail	1.4M sf	1.4M sf
Hotel	0	185,000 sf
Building Heights	1-2 Stories	2-6 Stories

Station Area Vision

Building Form, Scale and Uses

- Mix of uses, building heights
- Multimodal elements
- Connected green spaces
- *Other features?*

Policy

Recommendations

- Minimum heights
- Affordable housing
- Pedestrian orientation
- Civic plazas
- Strategic parking
- *Other elements?*

Cultural, historical and anchor organizations

- Public space features
- Civic/community spaces
- *Other layers of community story?*

- Opportunity illustrations to help inform any additional policy recommendations
- Illustrations to provide public with tangible 'what ifs' for infill and redevelopment density associated with TOD
- Facilitate discussions with private sector

Did we get it right?

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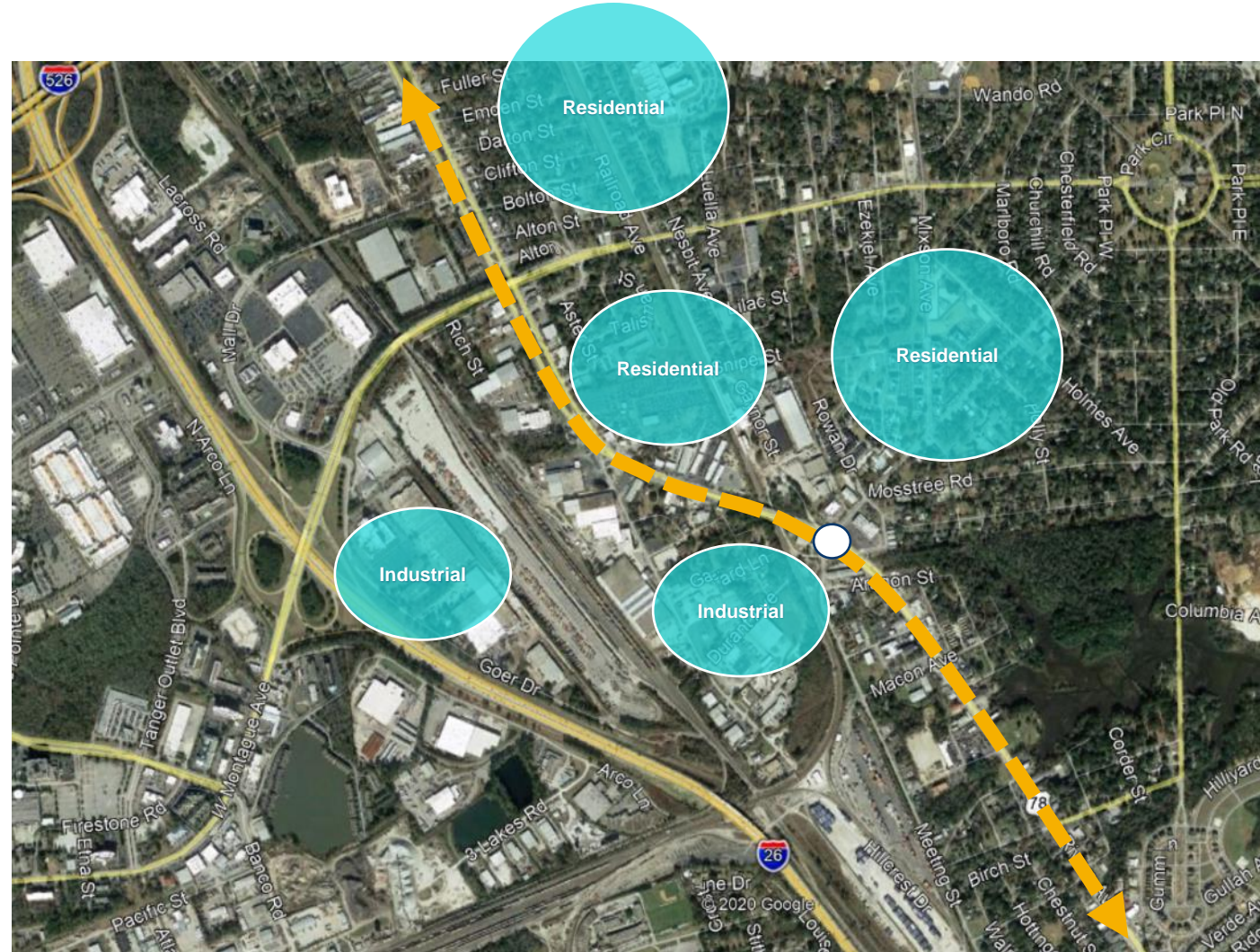
Durant Avenue Station Area

Durant Station Area Today

- Physical constraints associated with railroads and elevated roadway
- North Charleston Amtrak connection and community center
- Key redevelopment potential targeted for existing industrial areas in first ¼ mile
- Mixon residential a template for expanding residential developments



Looking north on US 78 towards station



Station Area Opportunities






- Build on momentum of Mixon Development for more infill residential
- Large parcel east of Rivers corridor and west of Amtrak a key site for mixed use node
- Retain light industrial and office uses to the west

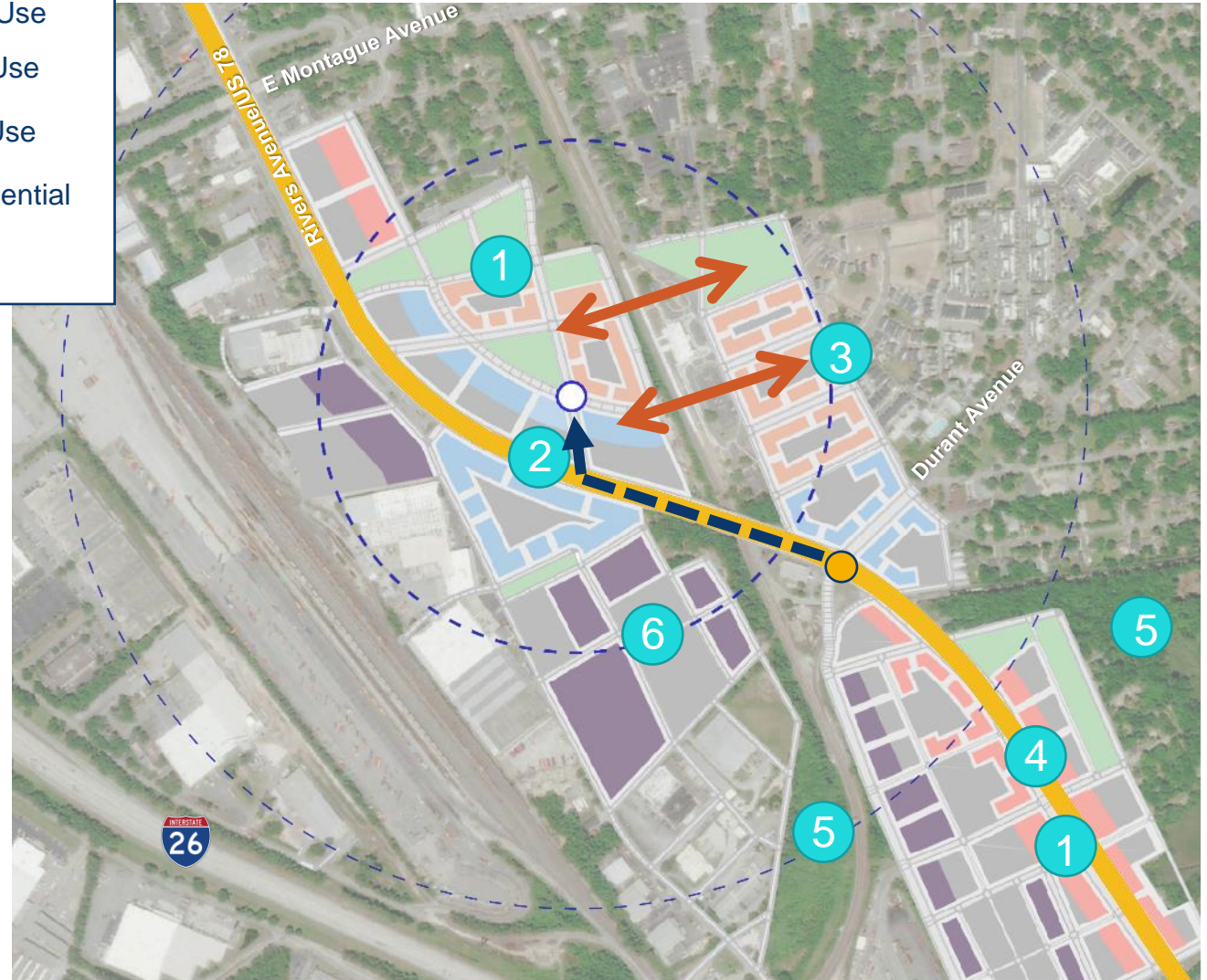


Development Form – Town Center TOD Place Type

- 1 Walkable gridded street network
- 2 Employment infill
- 3 Mixed use multi-family neighborhoods
- 4 Infill small lot commercial with building edges to street
- 5 Connected green network
- 6 Maintain / infill industrial

↔ Pedestrian bridge connection

	Employment Mixed Use
	Commercial Mixed Use
	Multi-family Mixed Use
	Single Family Residential
	Light Industrial



Multimodal Network

1

Street typologies build on previous North Charleston work
 Establish link between street type and development patterns
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Neighborhood/Main Street Corridor

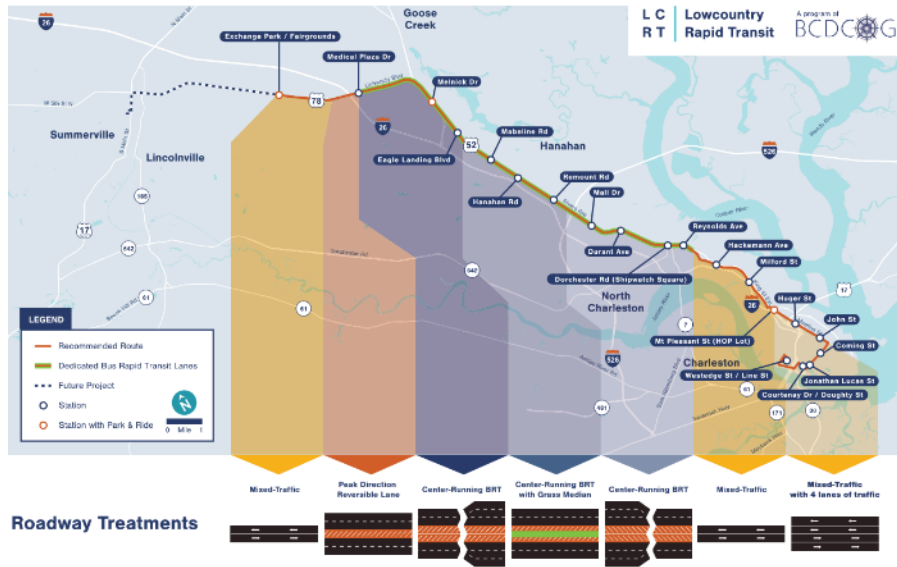
- 1-2 travel lanes (optional median)
- Low Vehicle volumes and speeds
- Moves people through and between neighborhood
- On-Street parking where appropriate
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Connector Corridor:

- 2-4 travel lanes
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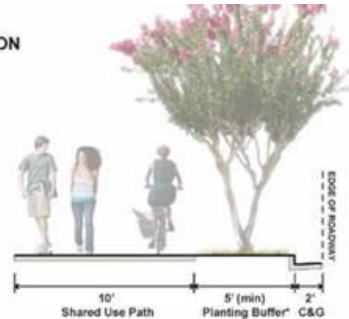
Employment/Commuter Corridor:

- 4-6 travel lanes
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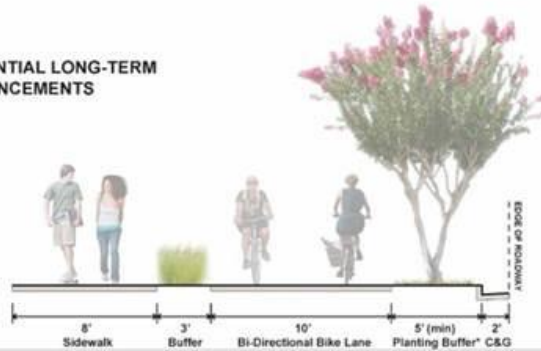


SHORT-TERM CROSS SECTION

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POTENTIAL LONG-TERM ENHANCEMENTS

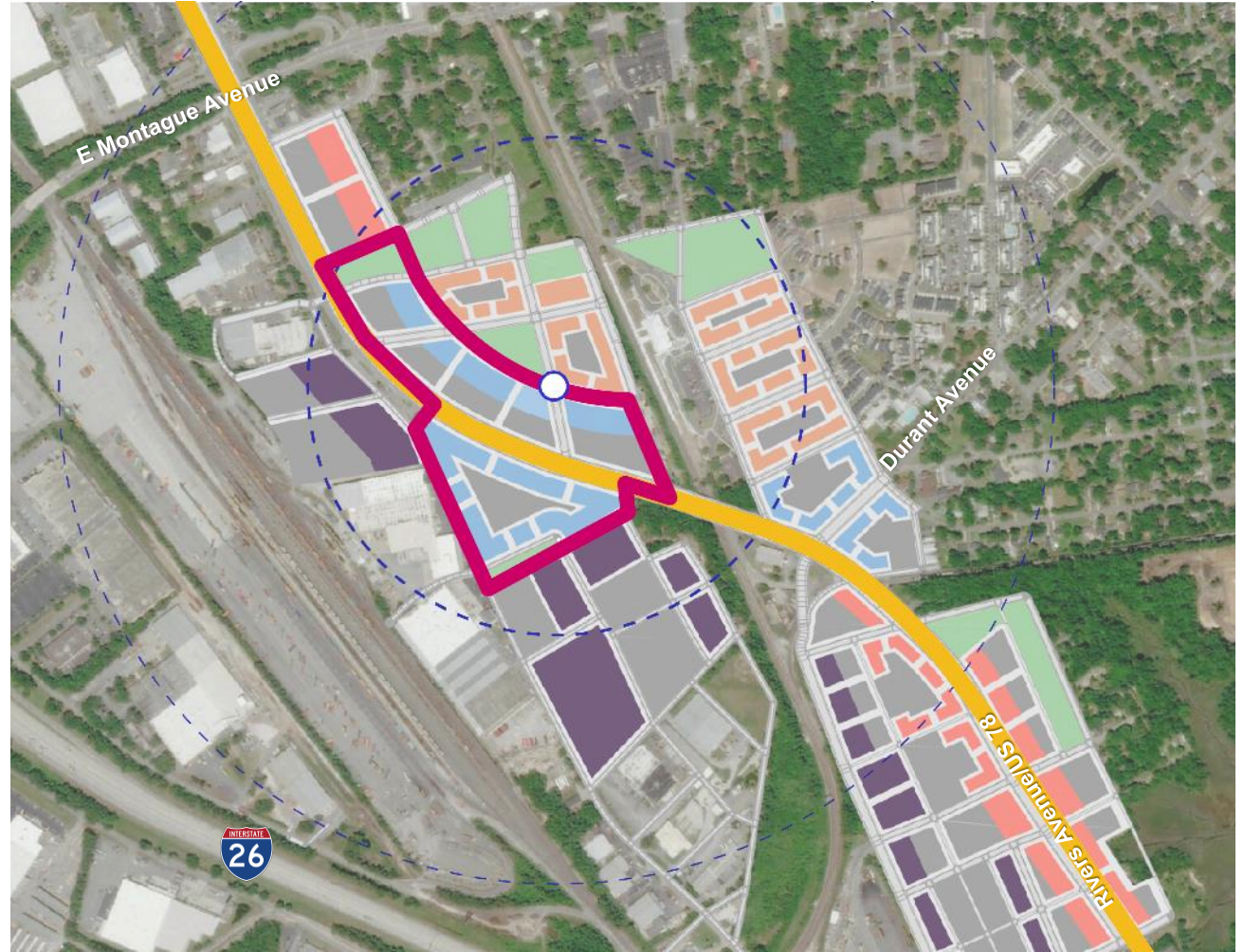


- 2. Sketch up “3-D” rendering (Brigade and Meeting)



Concentrated Employment in Station Core

2



Mixed-use Family Neighborhoods

3



Small Lot Infill Commercial

4



Connected Drainage System

5

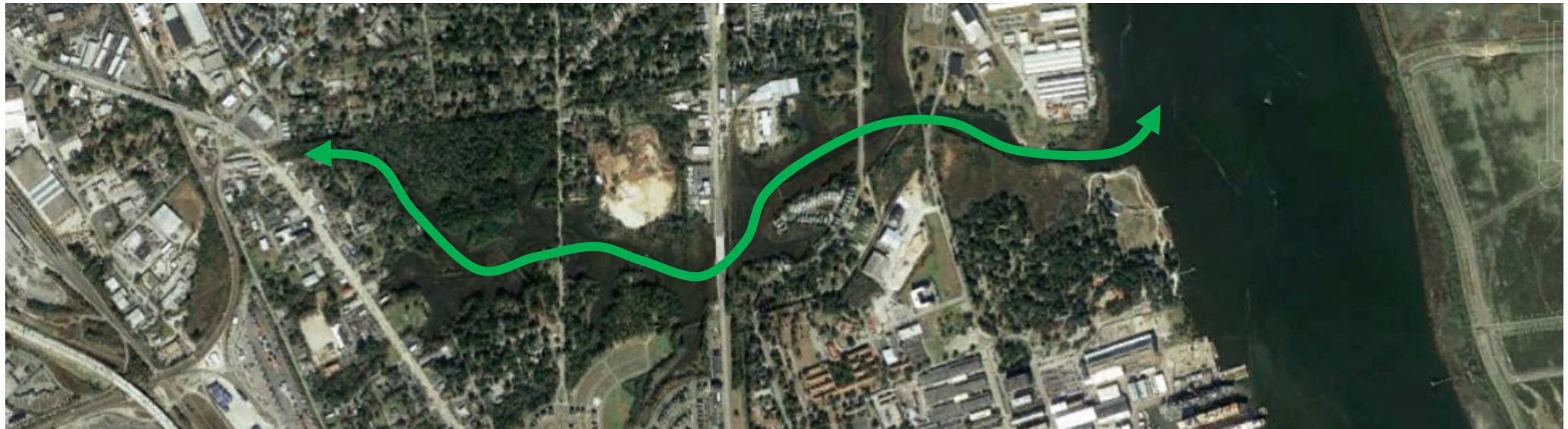
- Preserve existing wetlands
- Stormwater treated with street ROW and conveyed to treatment ponds or treated on site
- Small parks and community parks utilized with stormwater features
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Community park with recreation

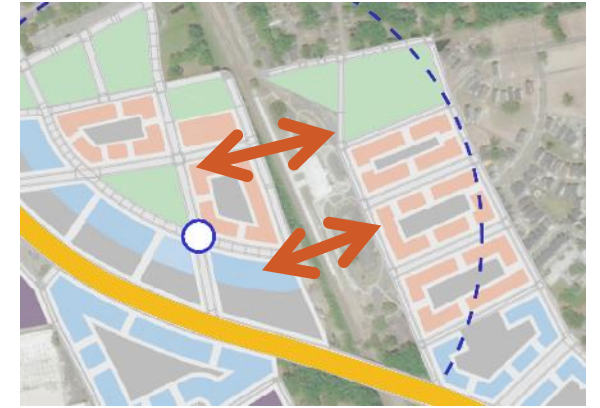


Cooper River tributary and marsh – looking west from SR S 10 60



Drainage conveyance – Storm water to be mitigated and treated within station area

Intermodal Connectivity

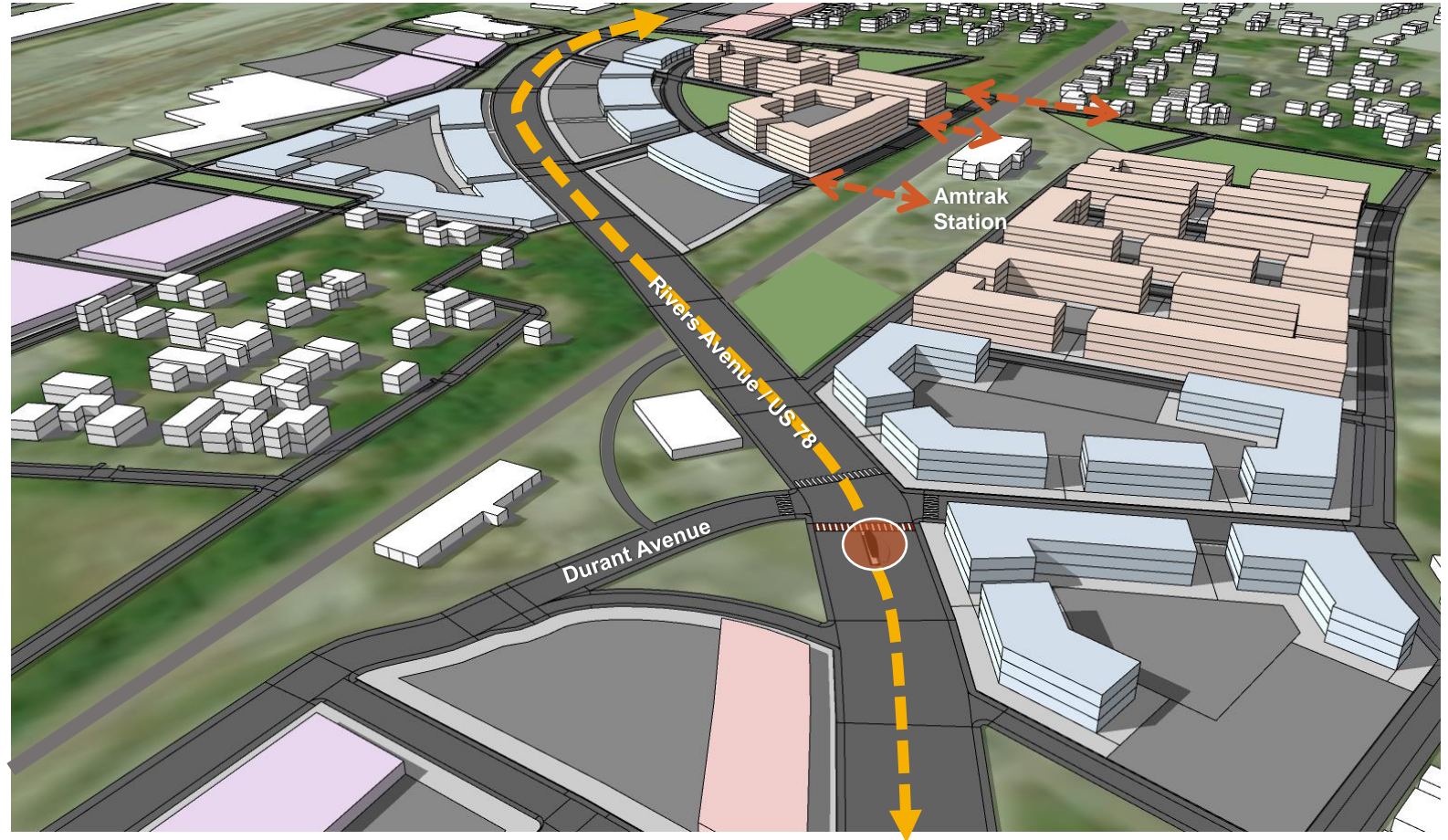


Pedestrian crossing into mixed use town center



Development Form & Program

TOD Elements	Before	After
Housing Units	1,400	2,100
Dwelling Units/Ac	6	9
Office	1.2M sf	1.2M sf
Retail	650,000 sf	920,000 sf
Industrial	924,000 sf	1.2 M sf
Building Heights	1-2 Stories	2-5 Stories



Station Area Vision

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- Facilitate discussions with private sector

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Dorchester Road (Shipwatch Square) and Reynolds Avenue

Shipwatch Square and Reynolds Ave. Station Area Dynamics

- Historic grid pattern within residential neighborhoods
- Existing Main Street character on Reynolds
- Notable supply of affordable housing nearby
- Underutilized existing commercial and smaller lots along Rivers
- Some large parcels of publicly owned and vacant
- Planned Charleston County social services hub and relocated CARTA SuperStop
- Active community organizations and revitalization efforts
- New freight corridor emerging along Cosgrove Avenue



Shipwatch Square – Looking south down US 52



Shipwatch Square – Former Naval Hospital



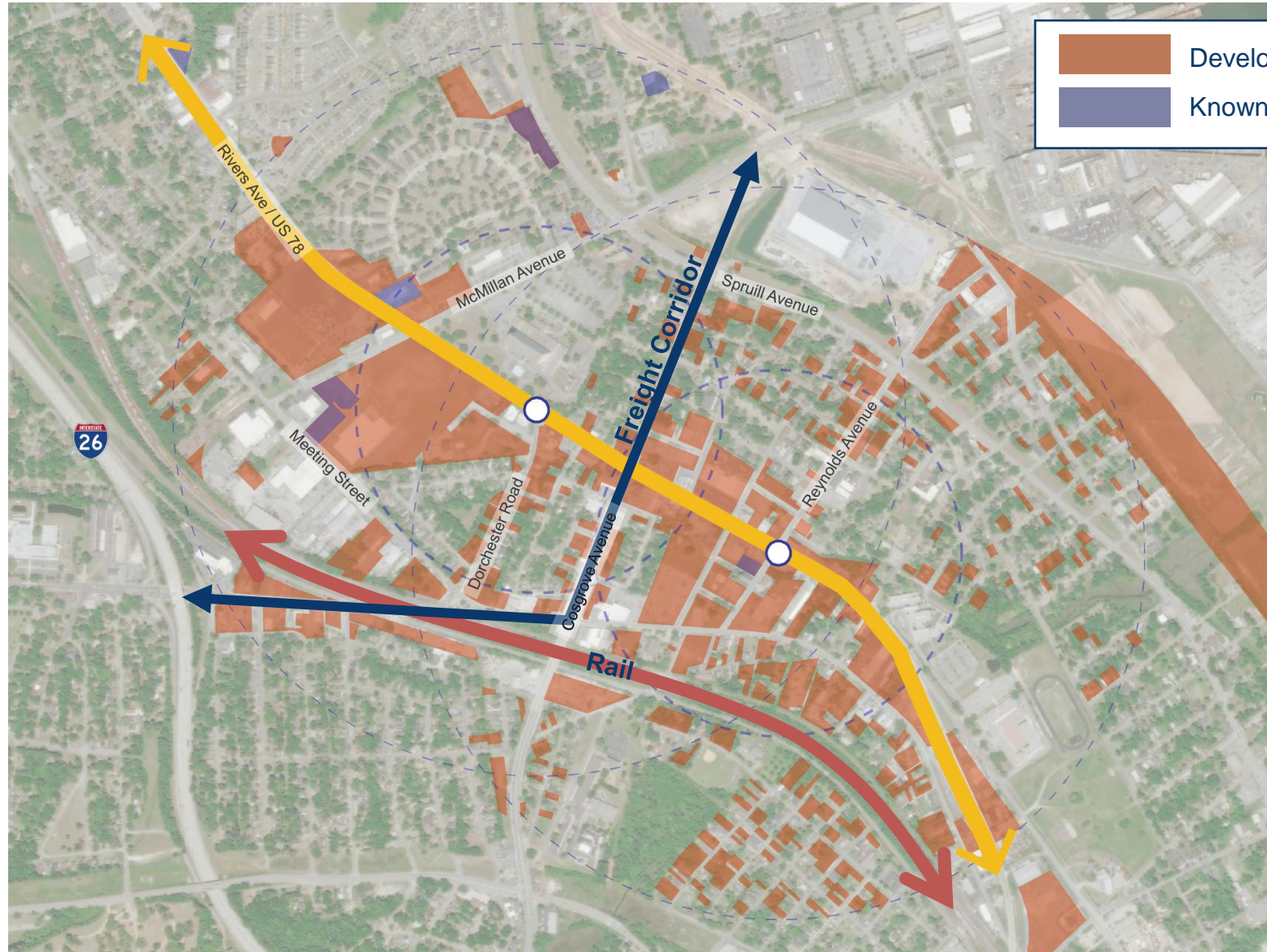
Rivers and Reynolds – Looking northeast on US 78



Rivers and Reynolds – Looking west on Reynolds Ave.

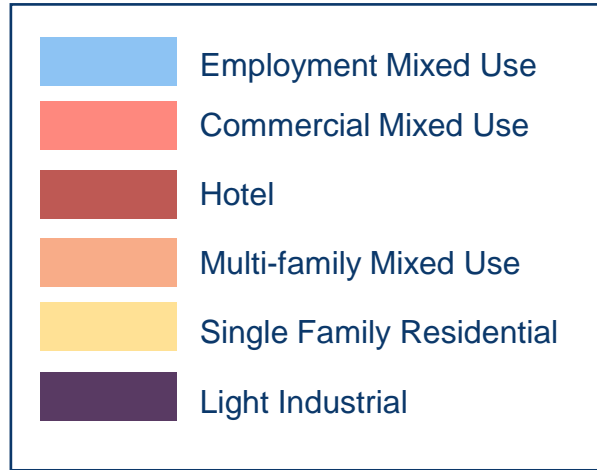
Station Area Opportunities

- Existing historic neighborhood grid can be expanded
- Main Street reinvestment underway on Reynolds with small scale infill
- New Main Street/Commercial Corridor opportunities along McMillan Avenue
- Aging affordable housing creates opportunities for redevelopment with new affordable and market rate housing
- Large single ownership parcels provide most catalytic opportunities
- Smaller scale infill within residential and commercial areas on underutilized and vacant lots



Redevelopment and Infill Potential

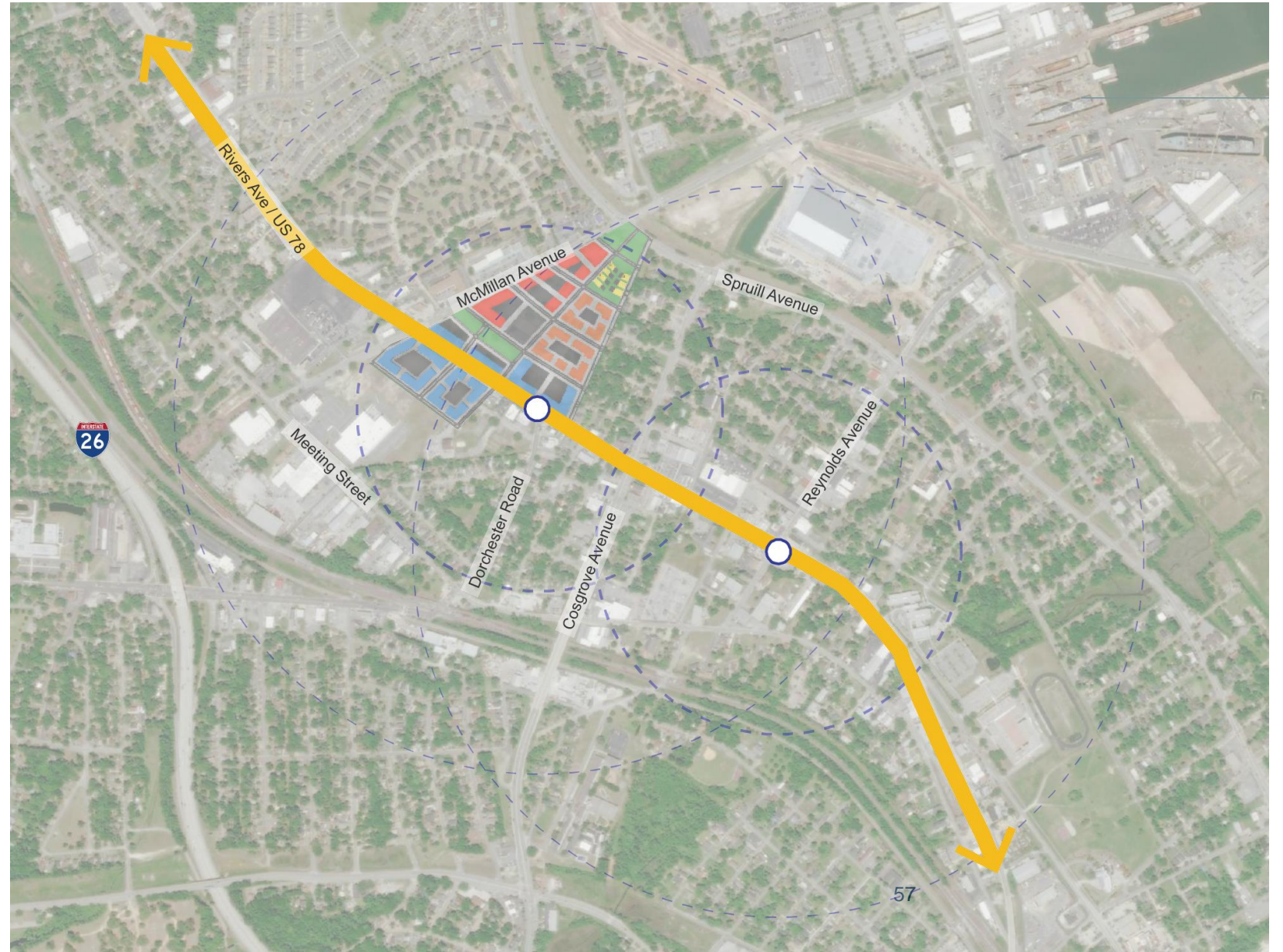
- 1 Reconnect and expand the grid when possible
- 2 Infill employment with public/private uses
- 3 Reinforce Main Street on Reynolds
- 4 Infill with higher density residential to enable more housing supply and affordability
- 5 Create new upland open space and green infrastructure networks to connect with lowland environmental uses
- 6 Redevelopment to New Mixed Income and Affordable Housing
- 7 Office and market rate residential



Potential Concept Phasing

Phase 1

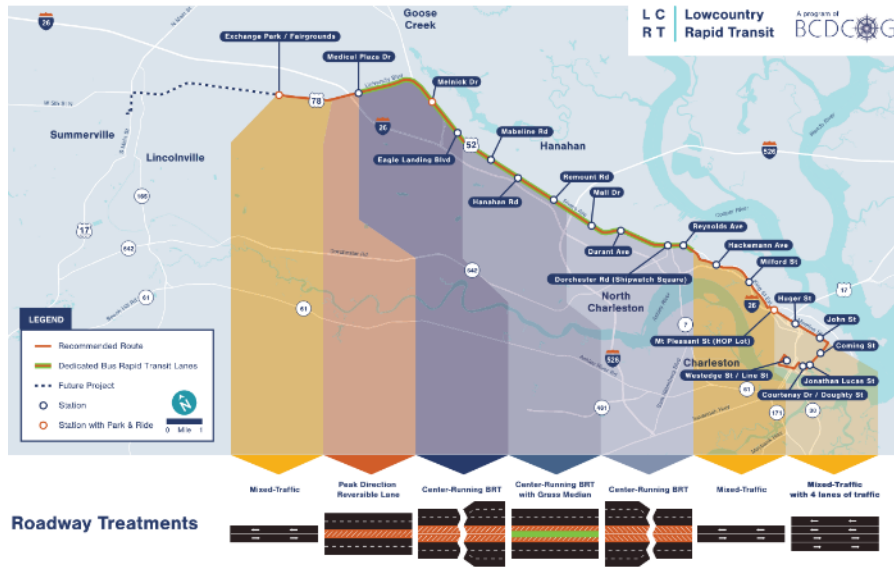
- Naval Hospital and nearby large parcels redevelop and infill



Multimodal Network

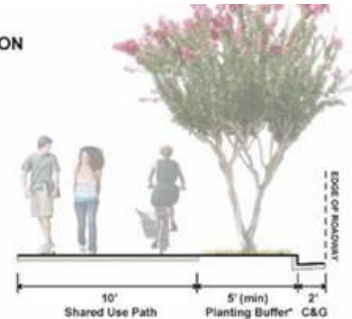
1

Street typologies build on previous North Charleston work
 Establish link between street type and development patterns
 Allow for slower speed “through streets” and slower speed “walk streets”
 Additional LCRT bicycle and pedestrian enhancements at station

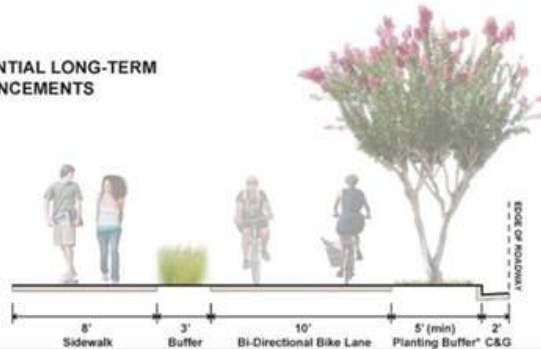


SHORT-TERM CROSS SECTION

- *Wider on buffer:
- Wider to preferred width of 8' where feasible
- Include trees where clear zone guidance allows



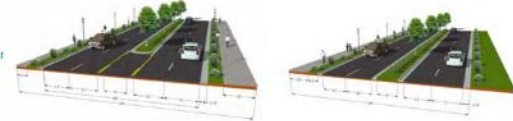
POTENTIAL LONG-TERM ENHANCEMENTS



- Neighborhood/Main Street Corridor:
- 1-2 travel lanes (optional median)
 - Low Vehicle volumes and speeds
 - Moves people through and between neighborhood
 - On-Street parking where appropriate
 - Pedestrian and bicycle accommodated through slow vehicular travel speeds



- Connector Corridor:
- 2-4 travel lanes
 - Balances traffic flow and connectivity
 - Landscaped medians; applied access management techniques
 - Accommodates transit, pedestrian and bicycle through separated or dedicated facilities



- Employment/Commuter Corridor:
- 4-6 travel lanes
 - High vehicle volumes and speeds
 - Landscaped medians; applied access management techniques
 - Accommodates local truck/freight movement and transit
 - Pedestrian and bicycle facilities (sidewalk, multi-use path)

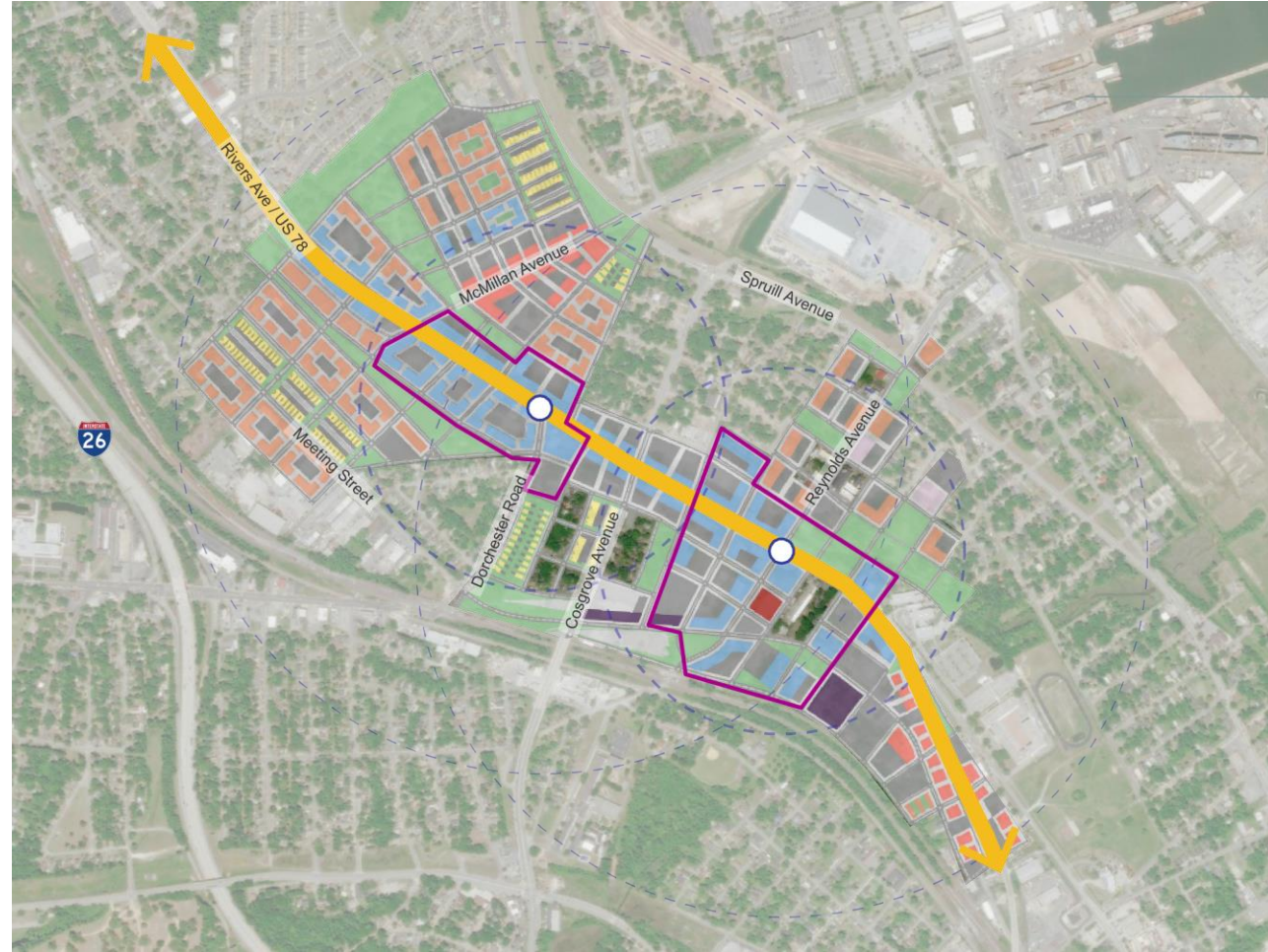


- 2. Sketch up "3-D" rendering (Brigade and Meeting)



Concentrated Employment in Station Core

2



Main Street Commercial Corridors

3

New McMillan Main Street Character

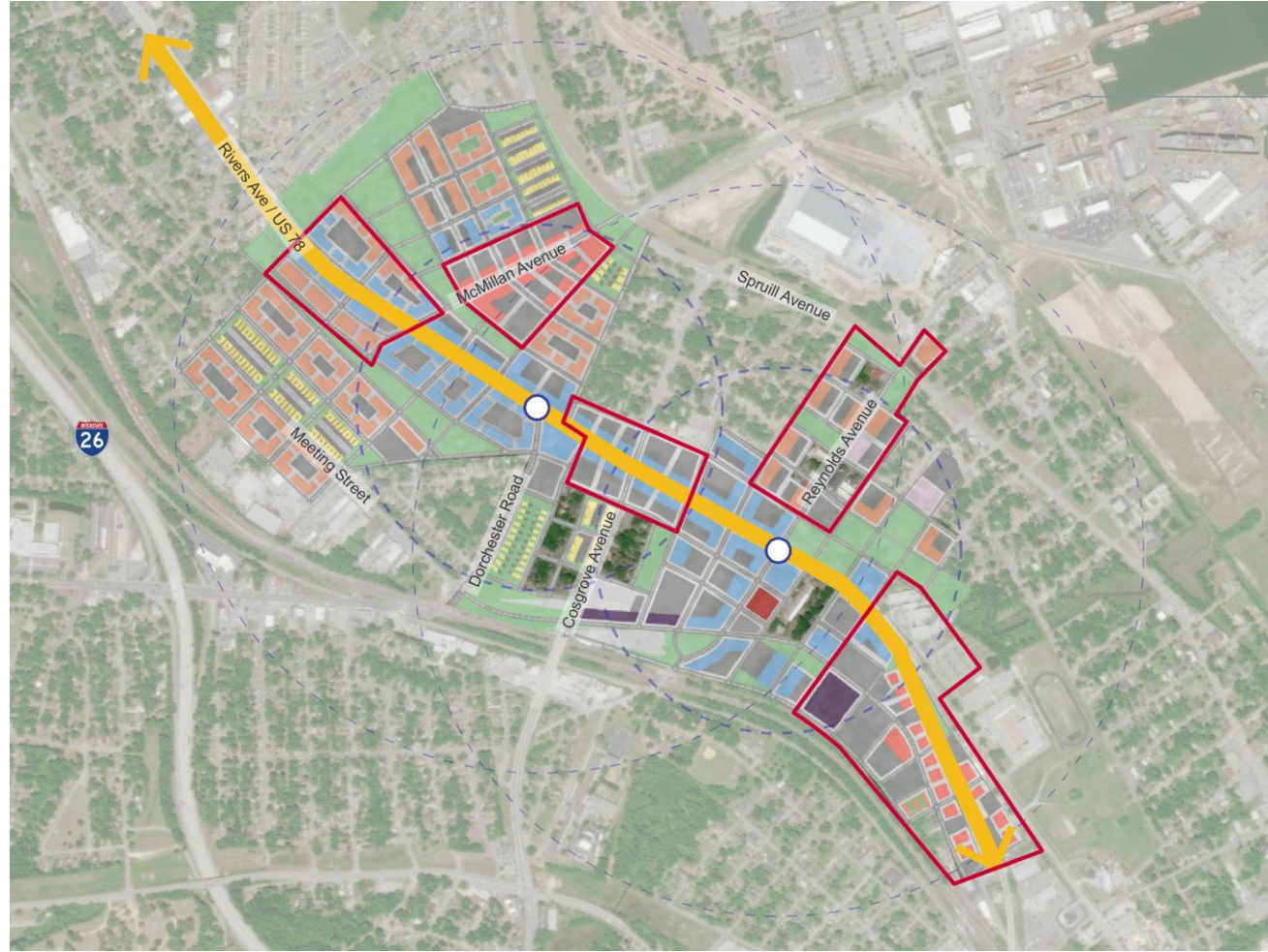


Existing and Improved Reynolds Main Street Character



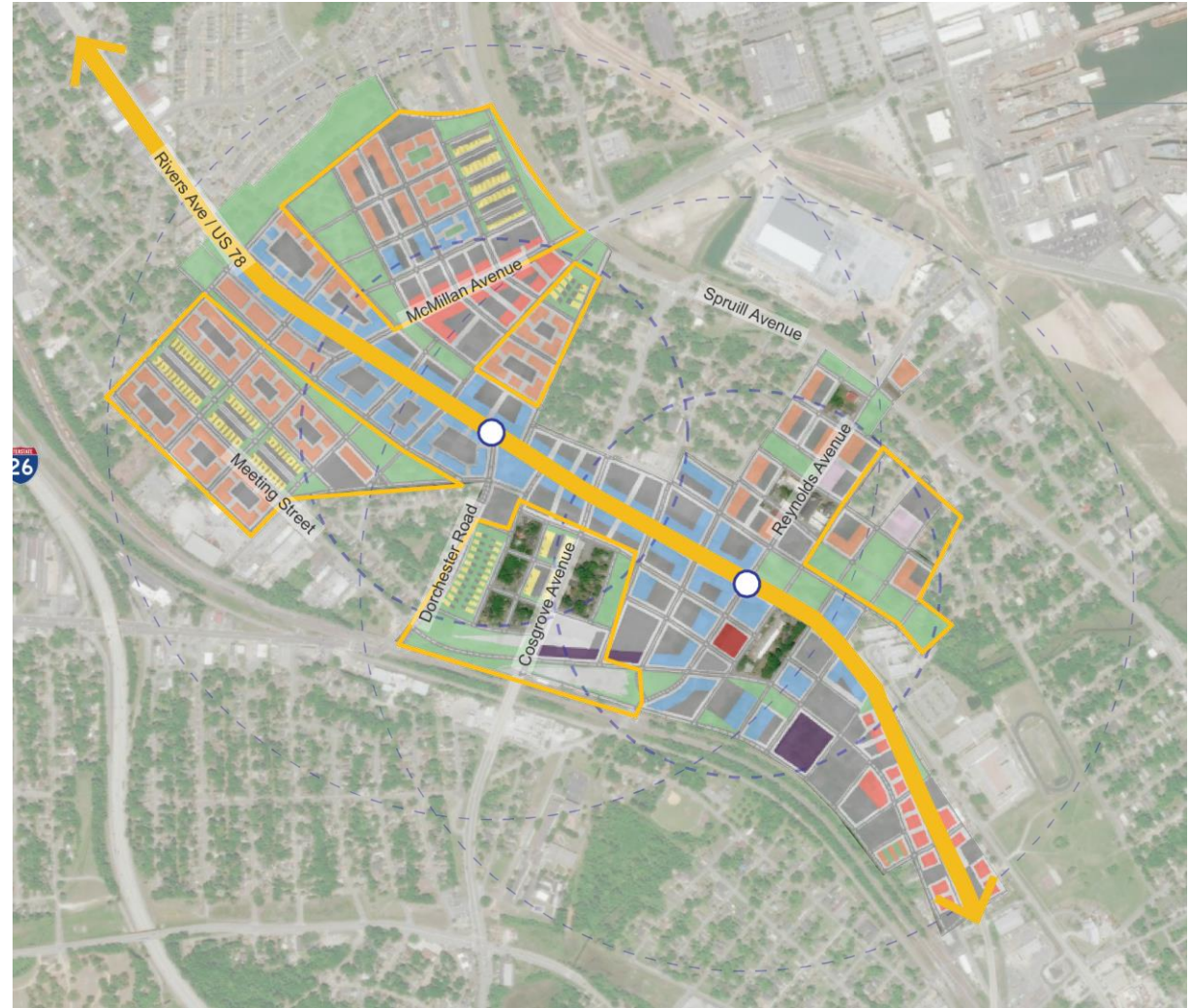
Edge Infill Commercial Mixed Use

3



Mixed-use Neighborhoods

4



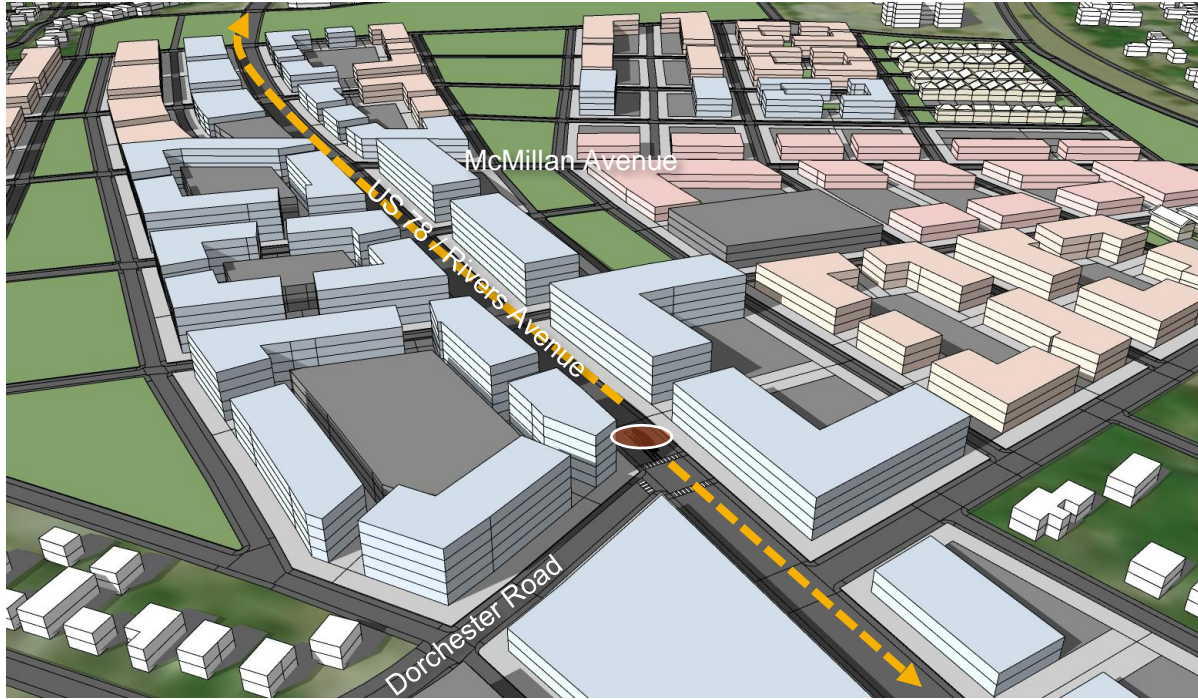
Connected Green Network

5

- Preserve existing wetlands
- Stormwater treated with street ROW and conveyed to treatment ponds or treated on site
- Small parks and community parks utilized with stormwater features
- Rain gardens and other LID applications to be utilized where feasible



Development Form & Program



Shipwatch Square Station Core



Rivers Avenue and Reynolds Avenue Station Core

TOD Elements	Before	After
Housing Units	3,200	4,200
Dwelling Units/Ac	8	10
Office	3.0M sf	3.0M sf
Retail	1.0M sf	1.6M sf
Building Heights	1-2 Stories	2-5 Stories

Station Area Vision

Building Form, Scale and Uses

- Mix of uses, building heights
- Multimodal elements
- Connected green spaces
- *Other features?*

Policy

Recommendations

- Minimum heights
- Affordable housing
- Pedestrian orientation
- Civic plazas
- Strategic parking
- *Other elements?*

Cultural, historical and anchor organizations

- Public space features
- Civic/community spaces
- *Other layers of community story?*

- Opportunity illustrations to help inform any additional policy recommendations
- Illustrations to provide public with tangible 'what ifs' for infill and redevelopment density associated with TOD
- Facilitate discussions with private sector

Did we get it right?

- What is missing or what needs to be pulled back?
- What are the biggest barriers or opportunities to implementation?