IT'S TIME FOR REALISTIC TOD PLANS:

AVOIDING THE ASPIRATIONAL DESIGN TRAP

APA GA APA TN

wsp

AUDRA ROJEK
SENIOR LEAD
TRANSPORTATION PLANNER

JOSH TURNER
SOUTHEAST URBAN DESIGN
PRACTICE LEADER

NILESH DESHPANDE
SENIOR TRANSPORTATION
PLANNER

- *THIS MORNING'S SESSION*
-
- *TOD Planning & Visioning: Avoid the Aspirational Design Trap*
- *Crafting a Reality-Based Vision: How we Get There*
- *Planning for the Unknown: Alternate / Plausible Futures Scenario Planning & TOD: Making the Case in Jacksonville*
- *Scenario Planning & TOD: US 52 & the Charleston Region*
- *Conclusions & Discussion*
-

TOD PLANNING & VISIONING
AVOID THE ASPIRATIONAL DESIGN TRAP

A PLACE FOR INSPIRING & ASPIRATIONAL TOD VISIONING

It is a resistance to TOD planning based on a misunderstanding of its nature and strengths, such as:

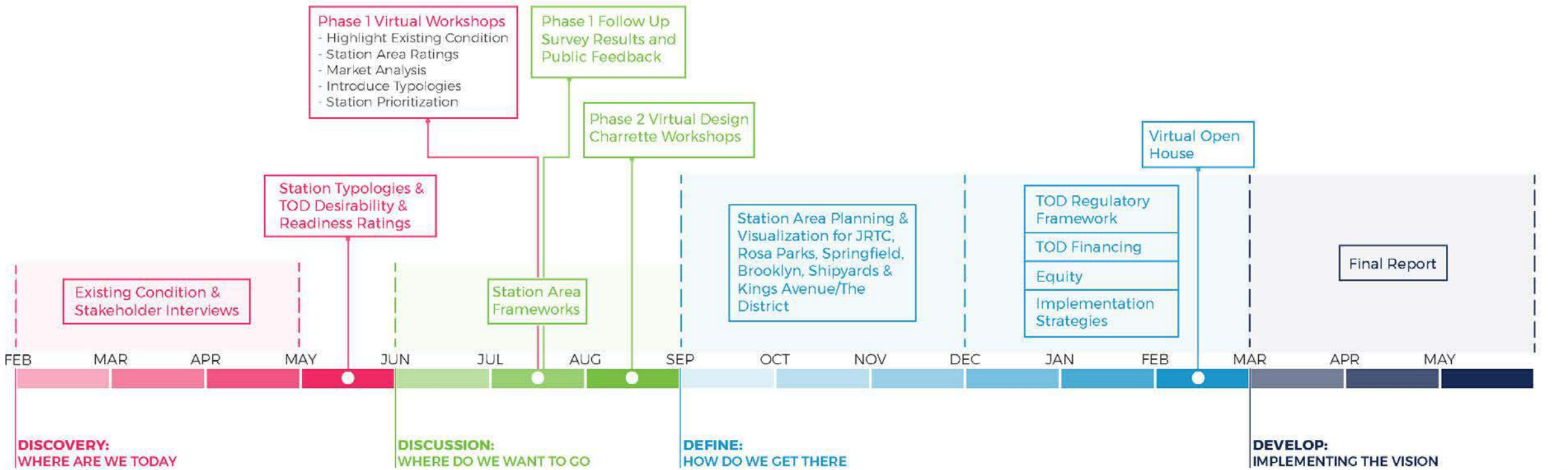
- *TOD is only appropriate for urban areas with existing or upcoming premium transit investments*
- *All TOD is high-rise, ultra dense development*
- *The 'pretty pictures' take the place of strategy*
- *TOD sets economically-unrealistic development goals*

Avoid these misconceptions, and avoid the trap!

WHAT IS THE "ASPIRATIONAL DESIGN TRAP"

CRAFTING A REALITY-BASED TOD VISION
HOW WE GET THERE

EXISTING CONDITIONS → TOD GOALS, TYPOLOGIES & FRAMEWORKS → STATION AREA PLANNING → IMPLEMENTATION



TRADITIONAL APPROACH TO TOD PLANNING

Corridor & station area analysis

Regional growth & travel demand forecasts

Socio-economic data assessment

Multimodal connectivity

Real estate market demand analysis

Community & stakeholder engagement & input

Funding mechanisms assessment

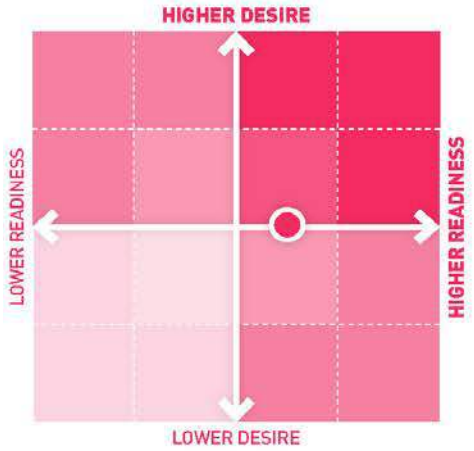
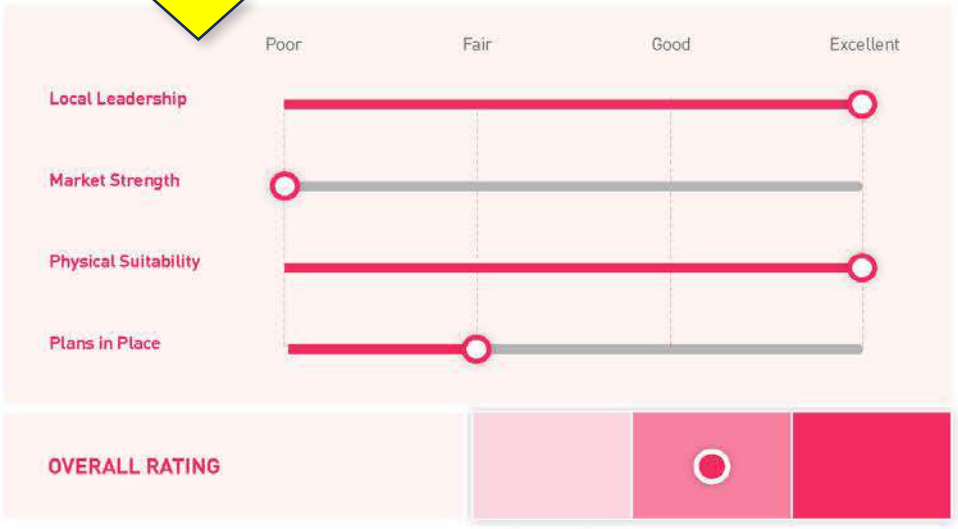
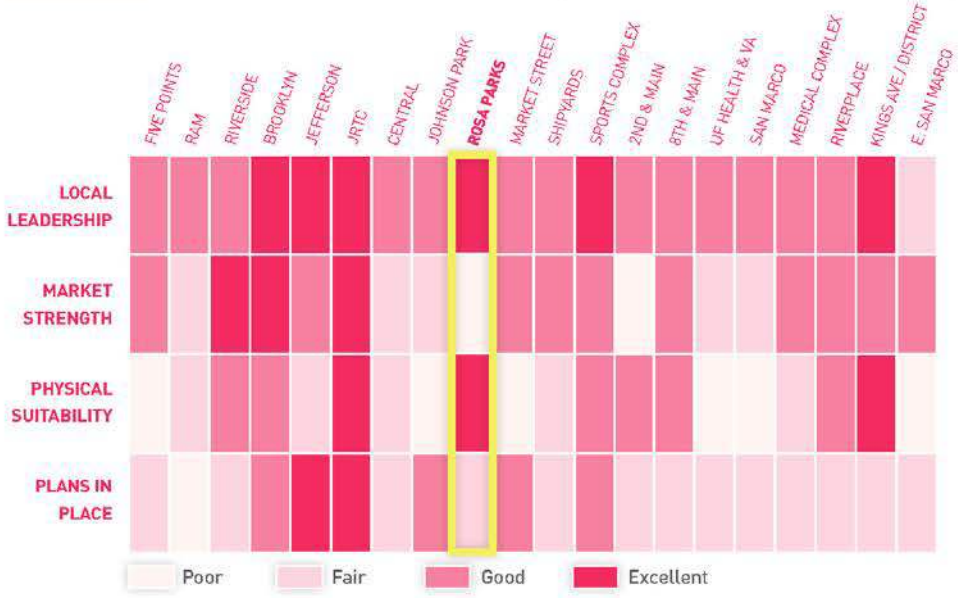


Table 4-28: Rosa Parks U²C Station TOD Desirability and Readiness Matrix

	STRENGTHS & OPPORTUNITIES	WEAKNESSES & CHALLENGES
LOCAL LEADERSHIP	• Station falls within the DIA's Northbank Downtown CRA boundary. The DIA provides strong leadership and influence with the revitalization of downtown and supports the foundational principles of TOD. • JTA-owned assets emphasizes JTA's role as a key stakeholder within the station area.	
MARKET STRENGTH	• First Baptist Church parcels arriving on the market might signal increased interest in the station area.	• Market is untested in station area. Perceptions must be overcome to encourage development. • Florida State College at Jacksonville constrains catchment area of the station. Most TOD opportunity northwest lies in partnership with the college.
PHYSICAL SUITABILITY	• JTA-owned parcel at Rosa Park's Station can be redeveloped as a large-scale mixed-use development that can also serve as a catalyst for similar redevelopment throughout the station are, including the First Baptist Church parcels. • There are abundant surface parking lots adjacent to JTA and First Baptist Church parcels. Including these can help create a clear and cohesive vision for TOD.	• Should First Baptist Church be sold individually vs. as a single portfolio could complicate realizing a cohesive TOD vision for the station area.
PLANS IN PLACE	• Capital Improvement Plans have been instituted to improve key intersections, sidewalks and streetscapes.	• Availability of parking downtown makes it easy to drive.





ESTABLISH A STARTING POINT: SYNTHESIZE THE ANALYSIS

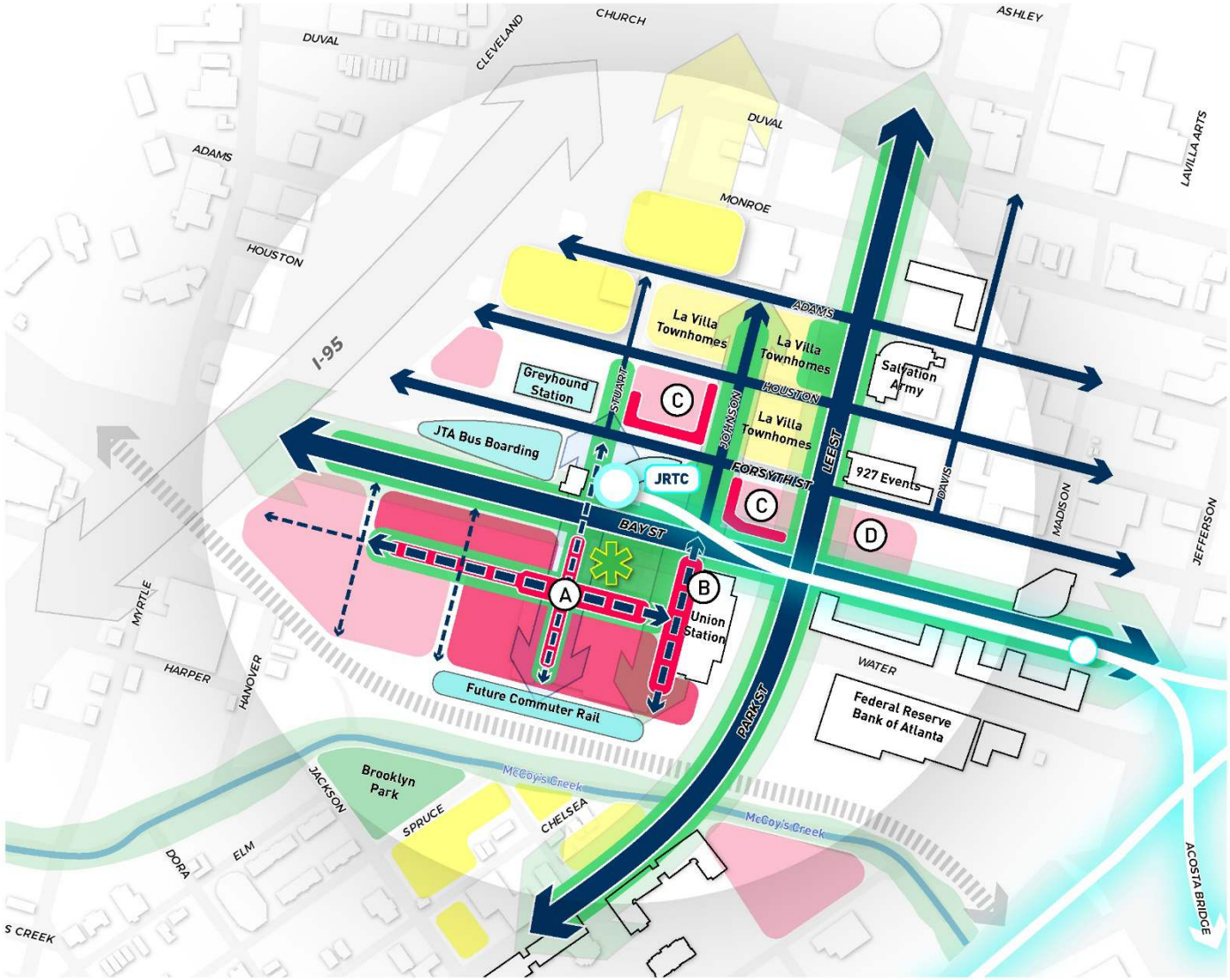
CORE NEIGHBORHOOD

URBAN CENTER

REGIONAL CENTER

CORE NEIGHBORHOOD

A CONTEXTUAL VISION – DEFINE STATION AREA TYPOLOGIES



A – Create new mixed-use center + multifamily residential neighborhood on Convention Center site

B – Reimagine Union Station as major regional destination anchor + JRTC compliment

C - Create new blocks of mixed-use residential development on JTA + other publicly-owned parcels

D – Include surface parking + undeveloped office parcels for future station area TOD

LEGEND

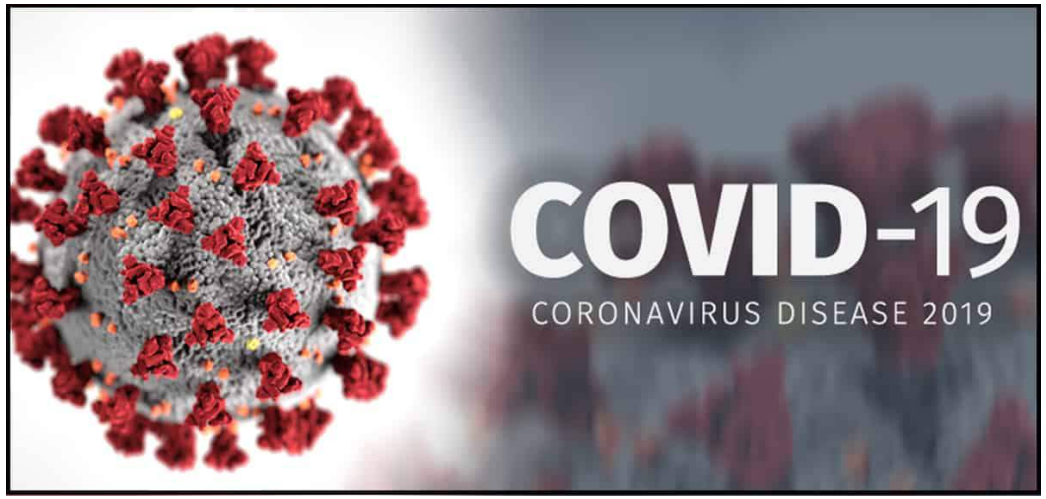
- Mixed-Use Center - Primary
- Mixed-Use Center - Secondary
- Transportation
- Multifamily Residential
- Multifamily Residential - Townhomes
- Key Frontages
- Civic Plaza

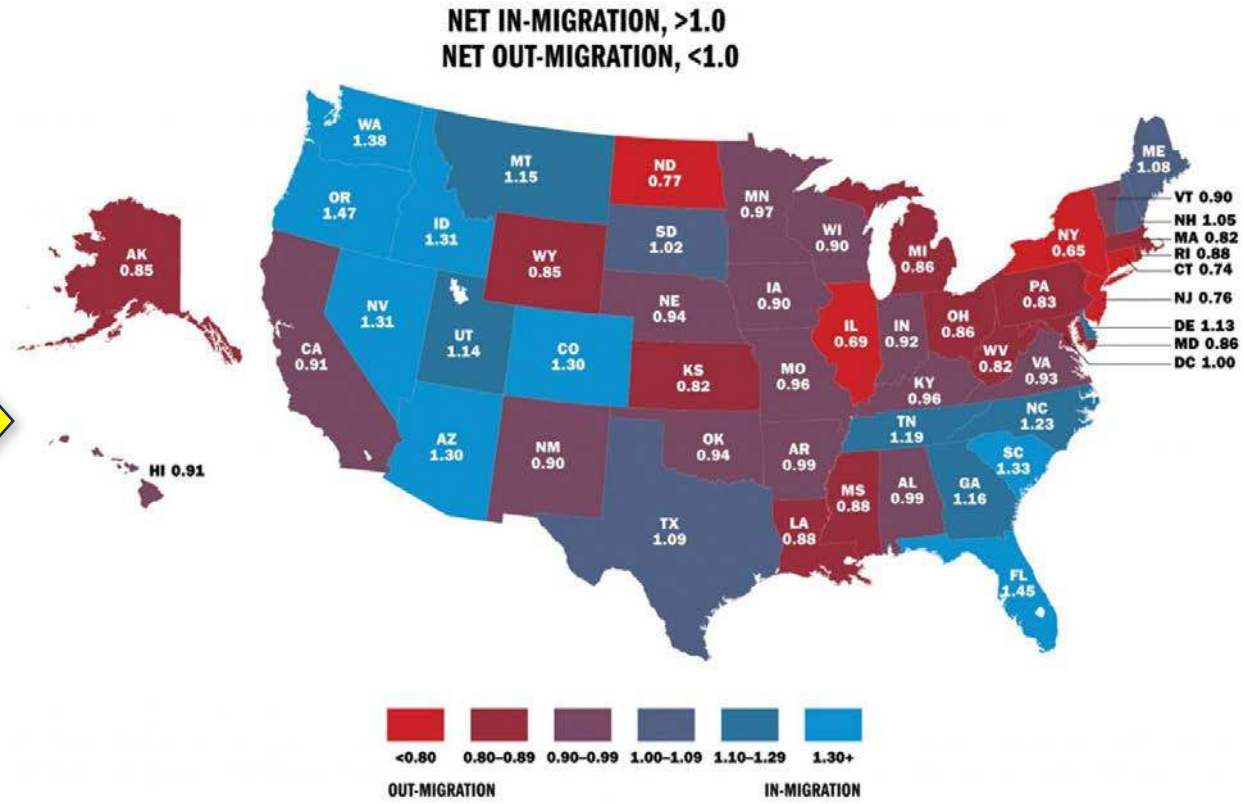
ESTABLISH THE TOD FRAMEWORK

STATION AREA TOD PLANNING & VISIONING

PLANNING FOR THE UNKNOWN
ALTERNATE / PLAUSIBLE FUTURES

What can be gained by looking at outcomes other than those determined by the "trend line" when this relies on what's being or been done?





WHAT ABOUT PLANNING FOR A PANDEMIC?

HOW TO PLAN FOR DESIRED VS. REALITY

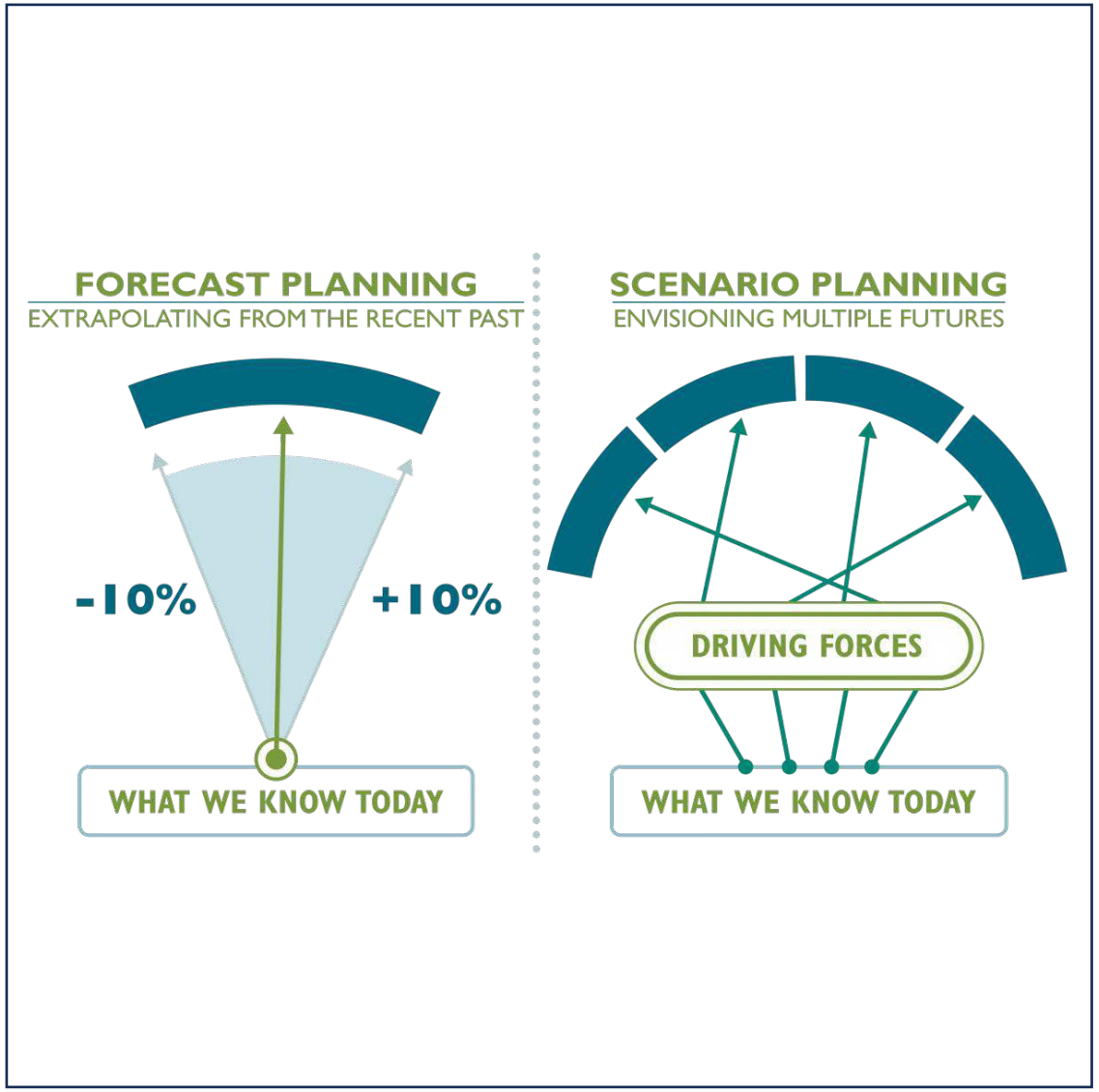
- The future poses some uncertainty and important changes will continue to occur

- Traditional planning and forecasting methods may not allow for the potential unknowns and variations

SCENARIO PLANNING V. TRADITIONAL PLANNING-FORECASTING

The distinct difference from traditional planning and forecasting is that Scenario Planning provides potential visions rather than accepts trend-line projections

- Scenario Planning
  - *Tests multiple future possibilities using a set of variables*
  - *Establishes different pathways when we don't have solid data and trends to determine a direct course of action*
  - *Develops a range of short-, medium- and long-term visions that are not necessarily captured in traditional trend-line modeling*



SCENARIO PLANNING V. TRADITIONAL PLANNING-FORECASTING

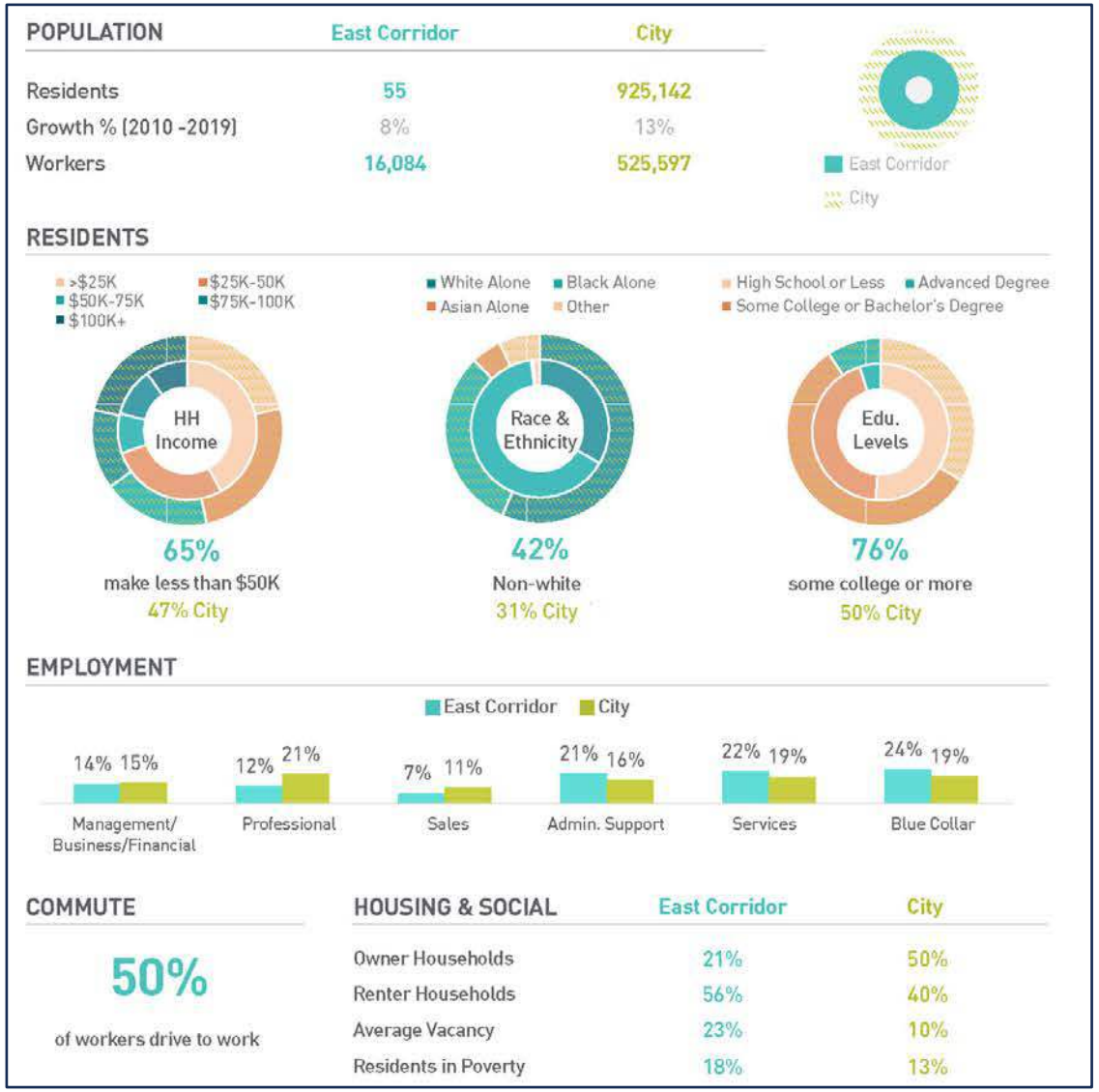
- Land use development patterns
  - *Growth or lack of growth*
  - *Sprawl or consolidation*
  - *Transit-oriented development*
  - *Regional population shifts*
  - *Residential market requirements*

- Economy
  - *Regional and local economy strength, weaknesses & opportunities*
  - *Infrastructure investment*
  - *Housing cost*
  - *Cost of services*

SCENARIO PLANNING - POSSIBLE ASSUMPTIONS & VARIABLES

- Social Characteristics & Demographics
  - *In / out migration*
  - *Residential growth or decline*
  - *Income*

- Environment, Energy & Technology
  - *Green investments*
  - *Natural disasters*
  - *Carbon / energy constrained future*
  - *Telecommuting / hybrid working*



SCENARIO PLANNING - POSSIBLE ASSUMPTIONS & VARIABLES

- *Complimentary to, and works with, traditional TOD planning as an overlay*

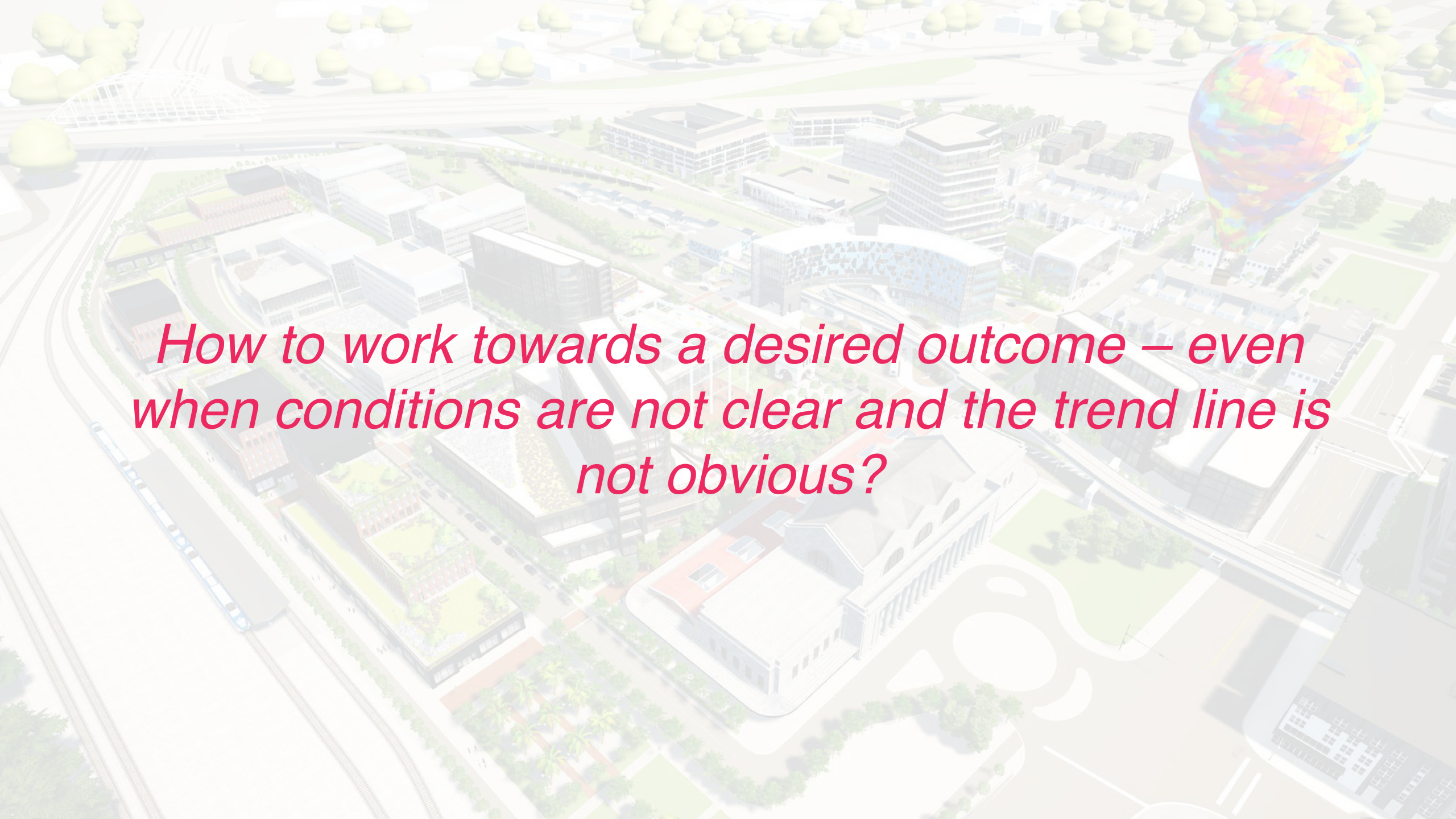
- *Both processes are critical to testing different aspects of the vision to guide planning and investment decisions*

- *Provides an understanding of the potential impact of different plausible outcomes, as well as desired futures*

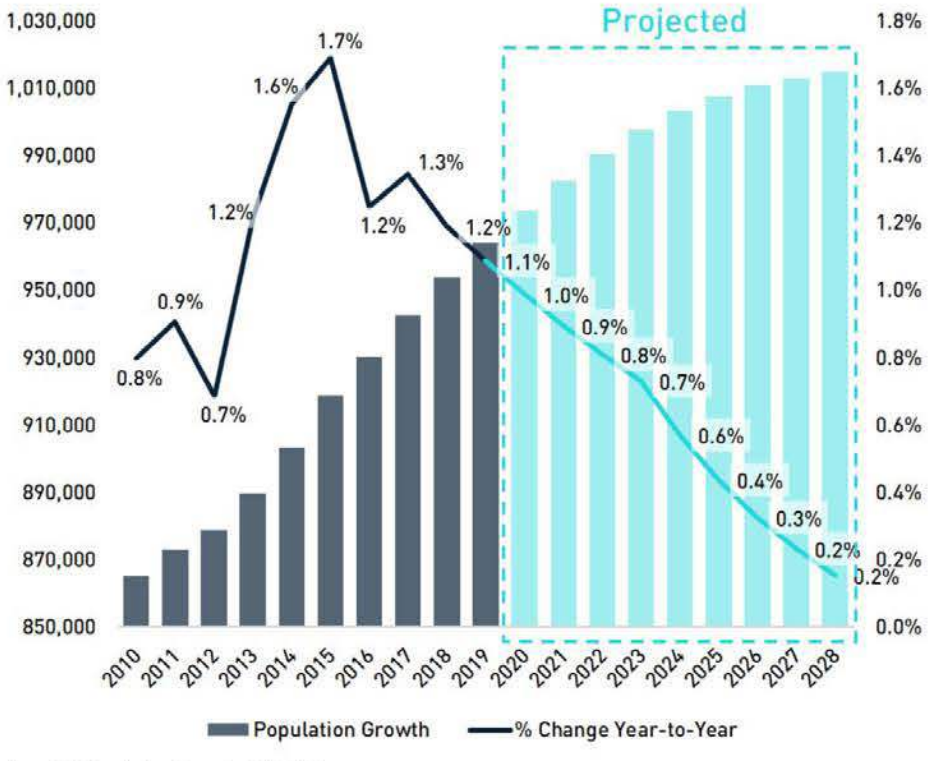
APPLYING A SCENARIO PLANNING OVERLAY TO TOD

SCENARIO PLANNING & TOD
MAKING THE CASE IN JACKSONVILLE

U²C AUTONOMOUS VEHICLE TOD PILOT STUDY



How to work towards a desired outcome – even when conditions are not clear and the trend line is not obvious?



Where are people moving amid the pandemic?

States like Utah and Florida have been making gains in attracting net new residents since the onset of the pandemic last April.

Biggest gains in net arrivals

1	Salt Lake City	12.3%
2	Jacksonville, FL	10.8%
3	Richmond, VA	6.1%
4	Sacramento, CA	6.1%
5	Cleveland	6%
6	Tampa, FL	5.7%
7	Milwaukee	5.1%
8	Kansas City, MO	4.8%
9	Miami-Fort Lauderdale	4.3%
10	Raleigh-Durham-Chapel Hill, NC	4%

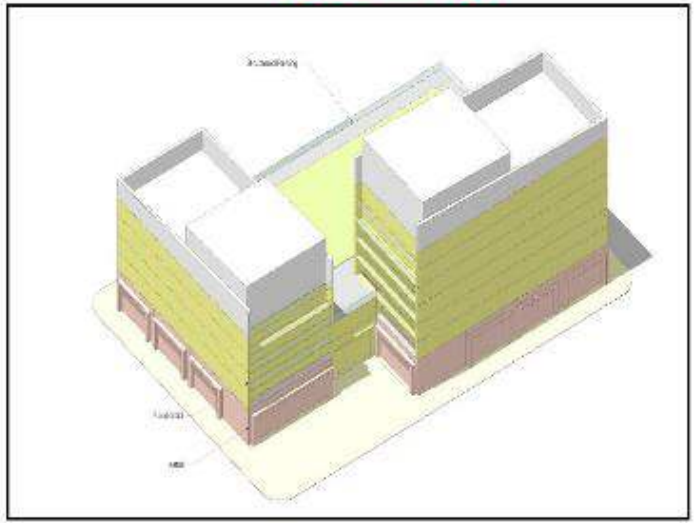
LinkedIn News

Source: LinkedIn Economic Graph

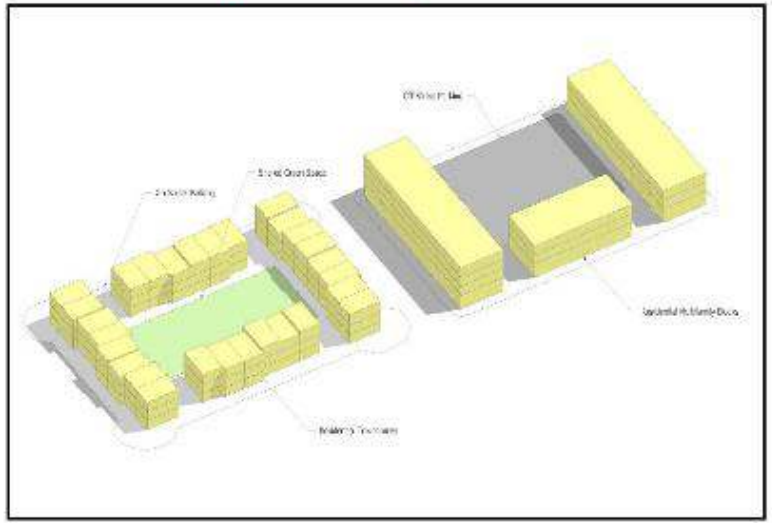
Note: This analysis calculates the inflow-outflow ratio (number of inflows to a market area for every outflow) year-over-year for 38 major U.S. metro areas from April 2020 to February 2021.

MARKET & DEMOGRAPHIC FINDINGS VS. COVID-19

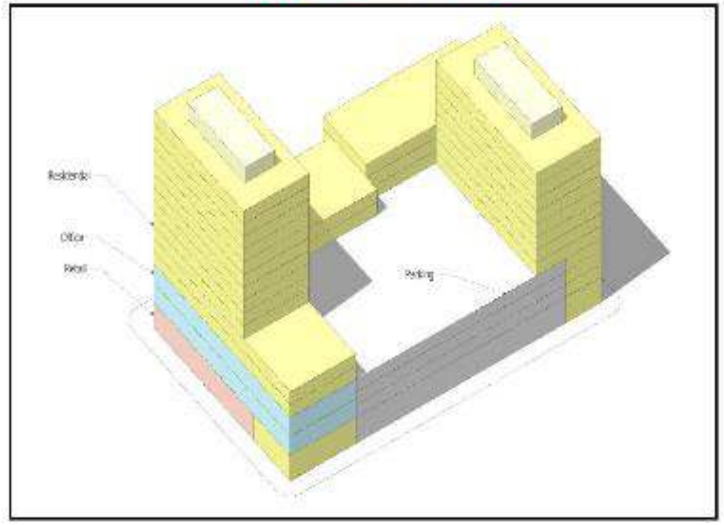
NEW CONSTRUCTUION GAP ANALYSIS



NOT FEASIBLE

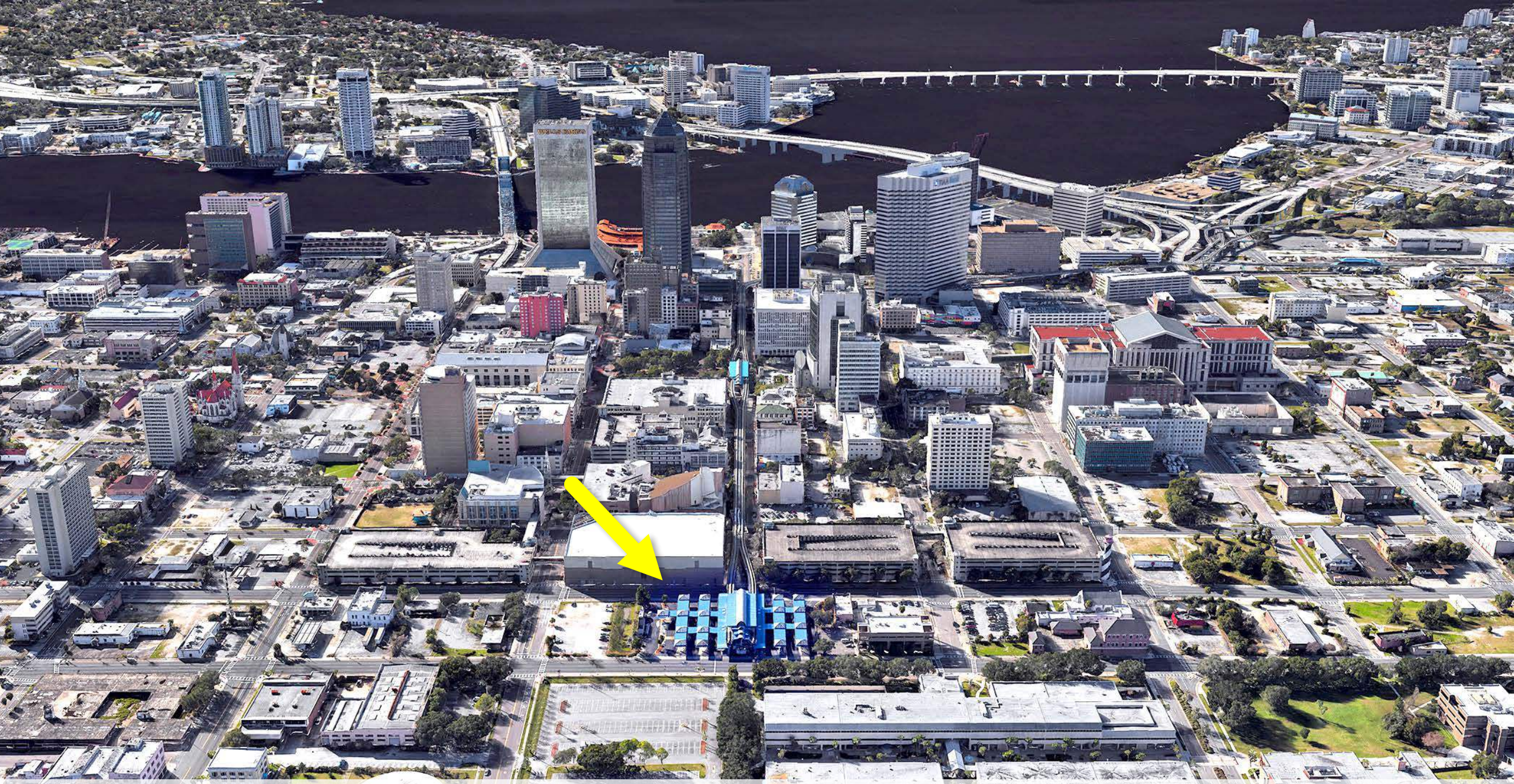


FEASIBLE



SIGNIFICANTLY NOT FEASIBLE

MARKET FINDINGS VS. ECONOMIC DEVELOPMENT



A KEY ASSET IN THE CENTRAL BUSINESS DISTRICT

Scenario 1: Moderate-intensity Mixed-use

Scenario 2: High-intensity Mixed-use

PROMOTING ECONOMIC DEVELOPMENT: ALTERNATIVE FUTURES

WORKING BACKWARDS FROM A DESIRED OUTCOME

10 MILES

5 MILES

2 MILES

U2C

WSP

FIRST COAST COMMUTER RAIL

WSP

CONTINUED TOD PLANNING & VISIONING FOR JTA

EXISTING CONDITIONS → TOD GOALS, TYPOLOGIES & FRAMEWORKS → STATION AREA PLANNING → IMPLEMENTATION

Corridor & station area analysis

Regional growth & travel demand forecasts

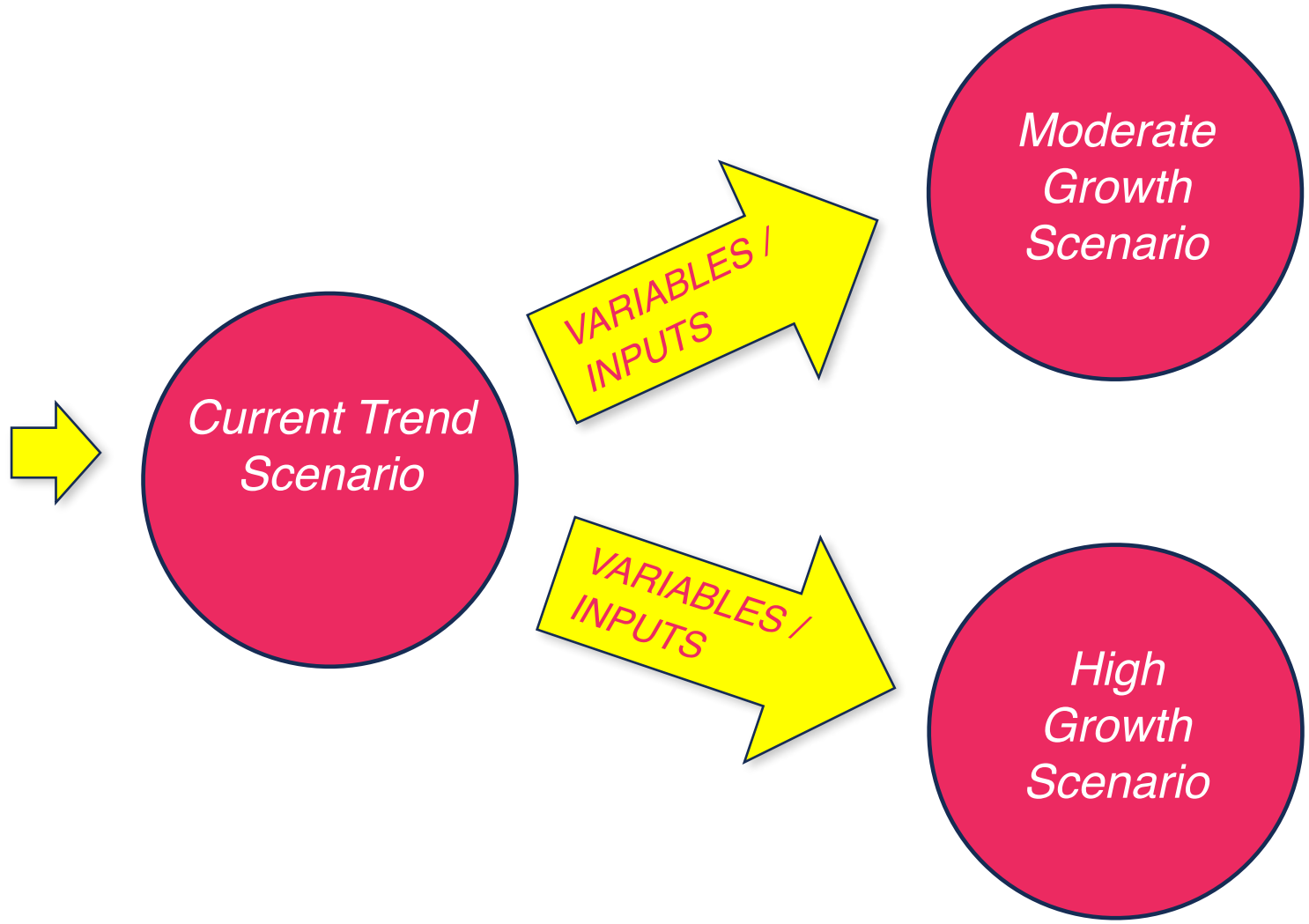
Socio-economic data assessment

Multimodal connectivity

Real estate market demand analysis

Community & stakeholder engagement & input

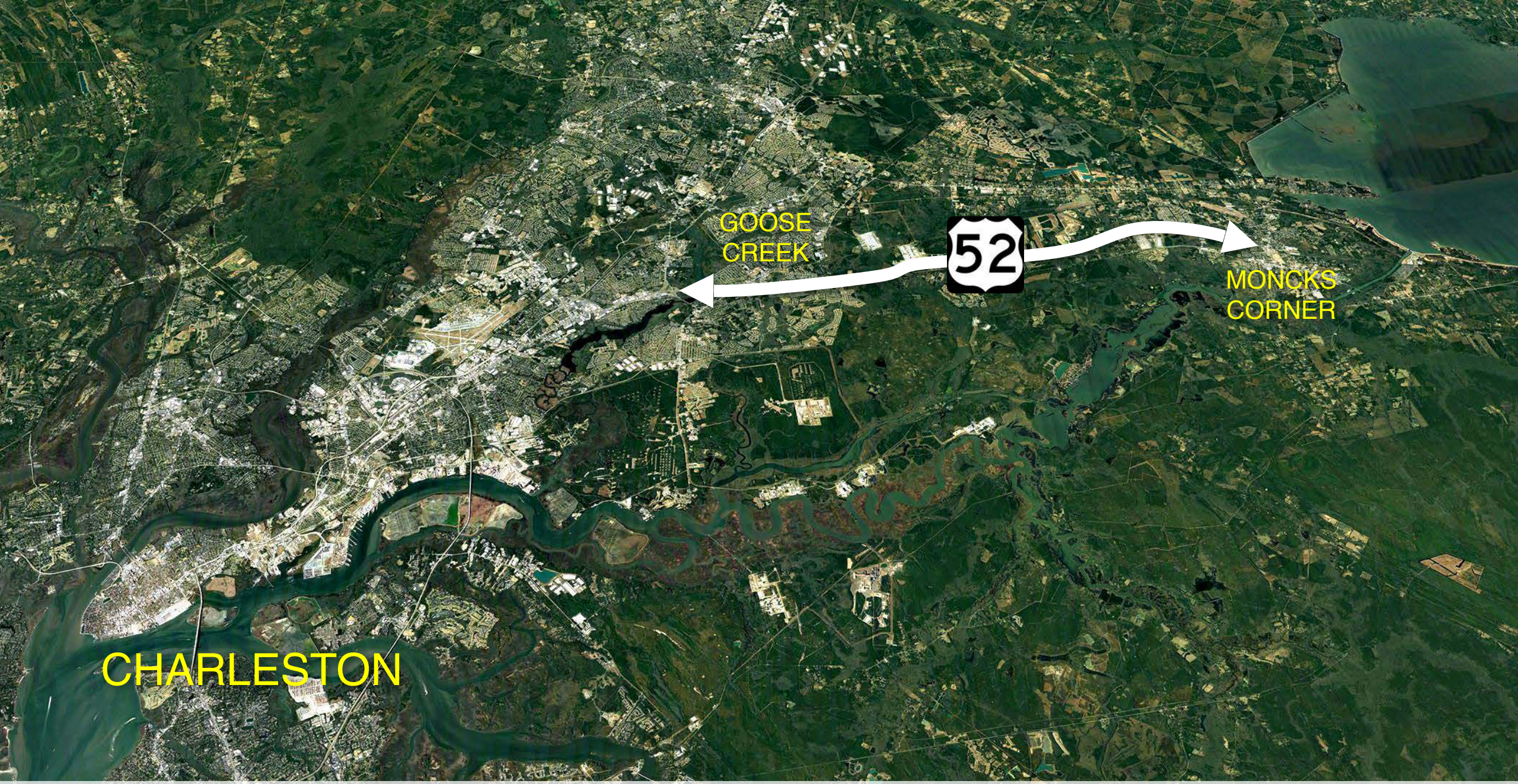
Funding mechanisms assessment



INTEGRATING A SCENARIO PLANNING METHODOLOGY

ASPIRATIONAL TOD VISIONING & SCENARIO PLANNING

SCENARIO PLANNING & TOD
US 52 & CHARLESTON REGION



US 52 & CHARLESTON REGION STUDY

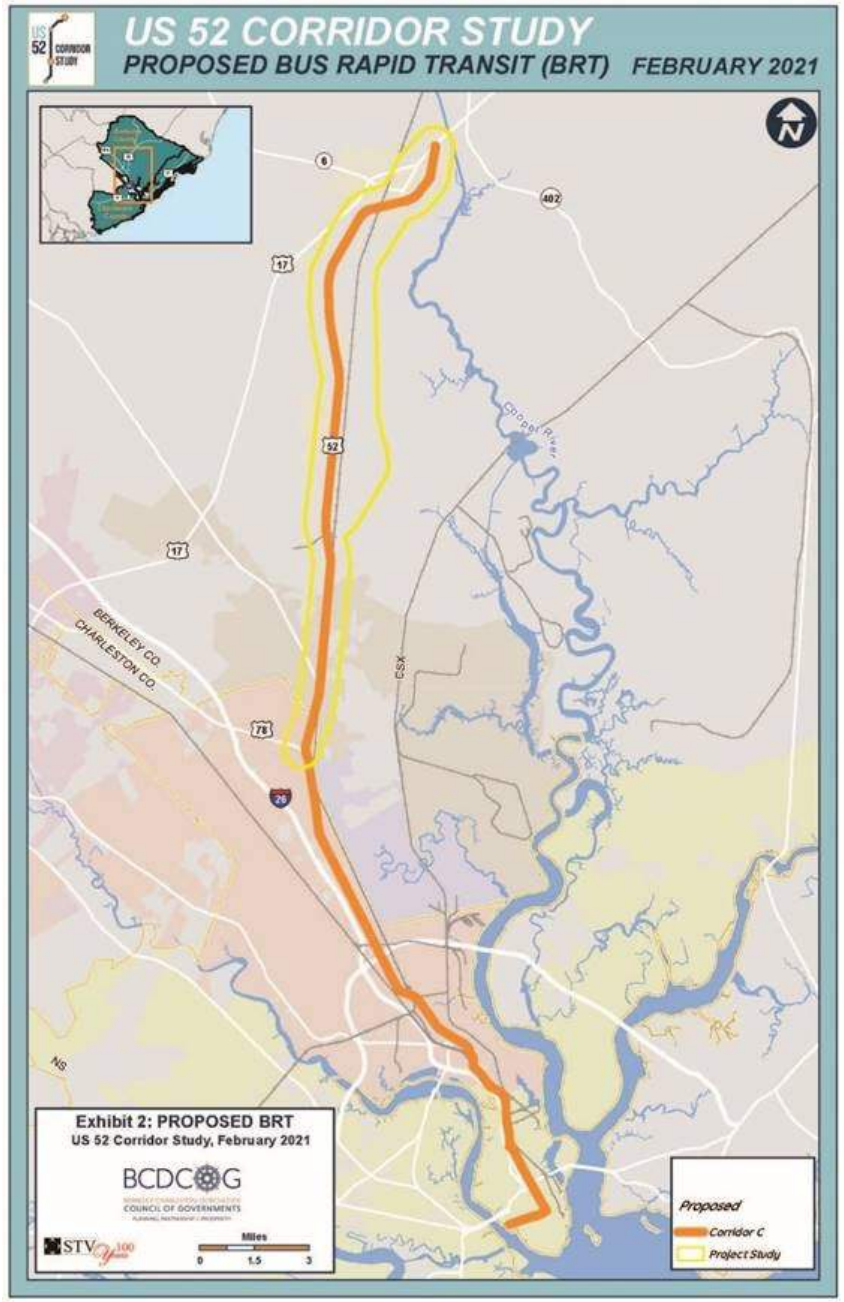
IF THIS IS WHAT YOU MEAN BY TRANSIT AND TOD…

Photo Credit: Brian Stansbury

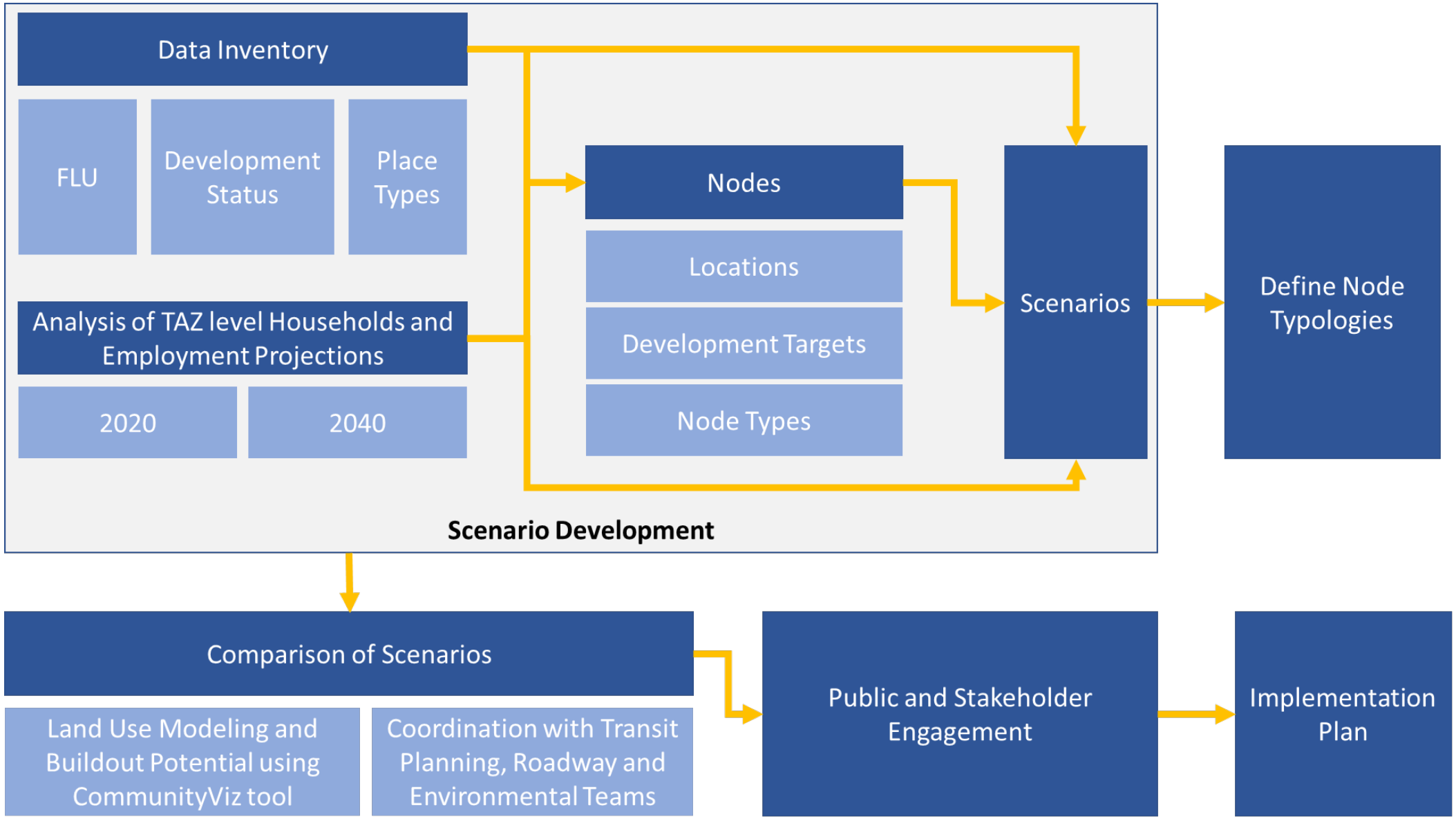
THEN WHAT ARE YOU GOING TO DO HERE?

Why do communities resist TOD or urban design-forward planning?

- Goals:
  - *Support planned transit investment in the US 52 corridor with land use planning*
  - *Tie TOD and potential transit to on-the-ground conditions*
  - *Allow the municipalities to see impacts of today's choices*
  - *Create a positive environment for choosing among potential futures*
  - *Explore unexpected transit-based futures*



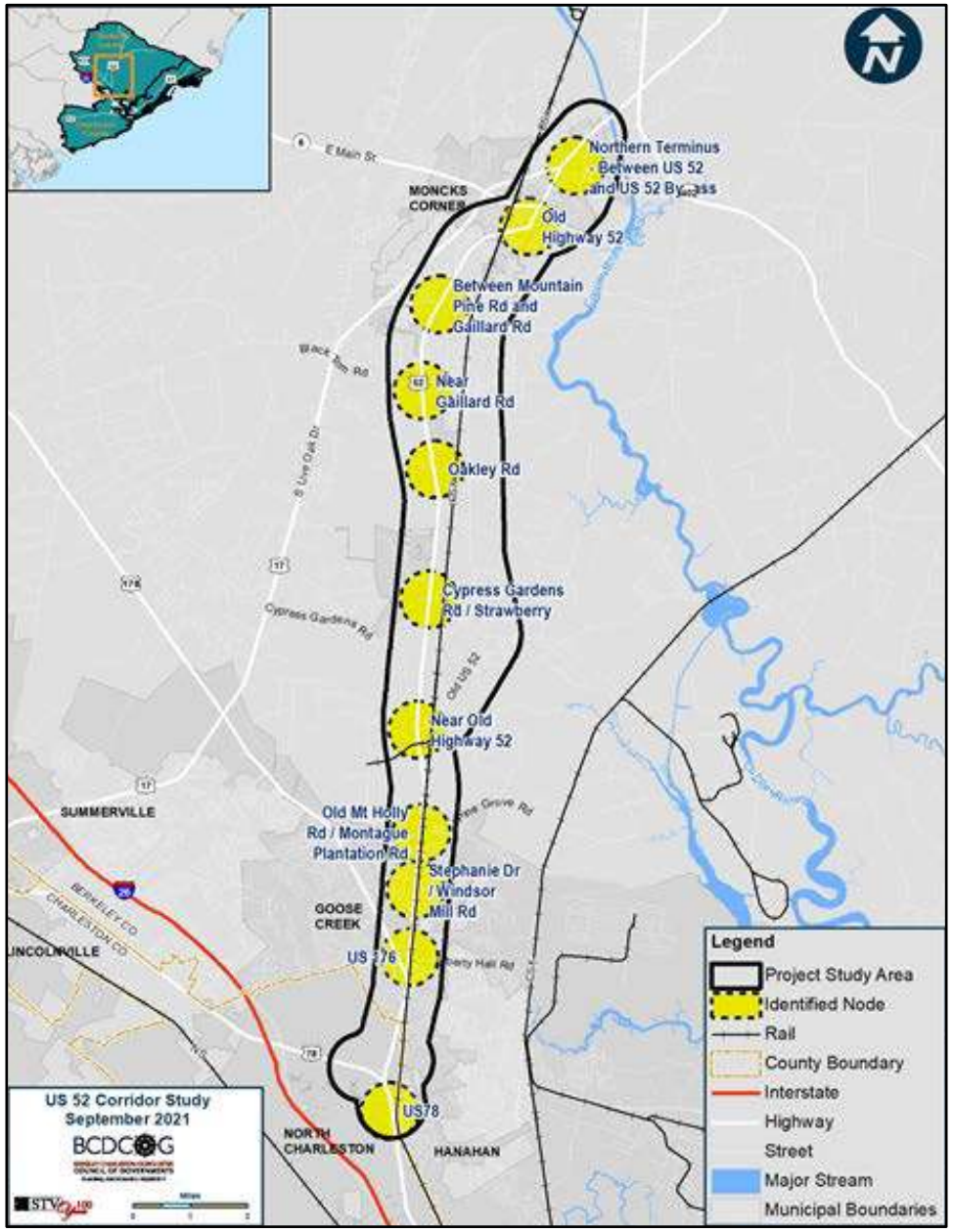
STUDY PURPOSE AND CONTEXT


Data Inventory
FLU
Development Status
Place Types
Analysis of TAZ level Households and Employment Projections
2020
2040
Nodes
Locations
Development Targets
Node Types
Scenarios
Define Node Typologies
Scenario Development
Comparison of Scenarios
Land Use Modeling and Buildout Potential using CommunityViz tool
Coordination with Transit Planning, Roadway and Environmental Teams
Public and Stakeholder Engagement
Implementation Plan

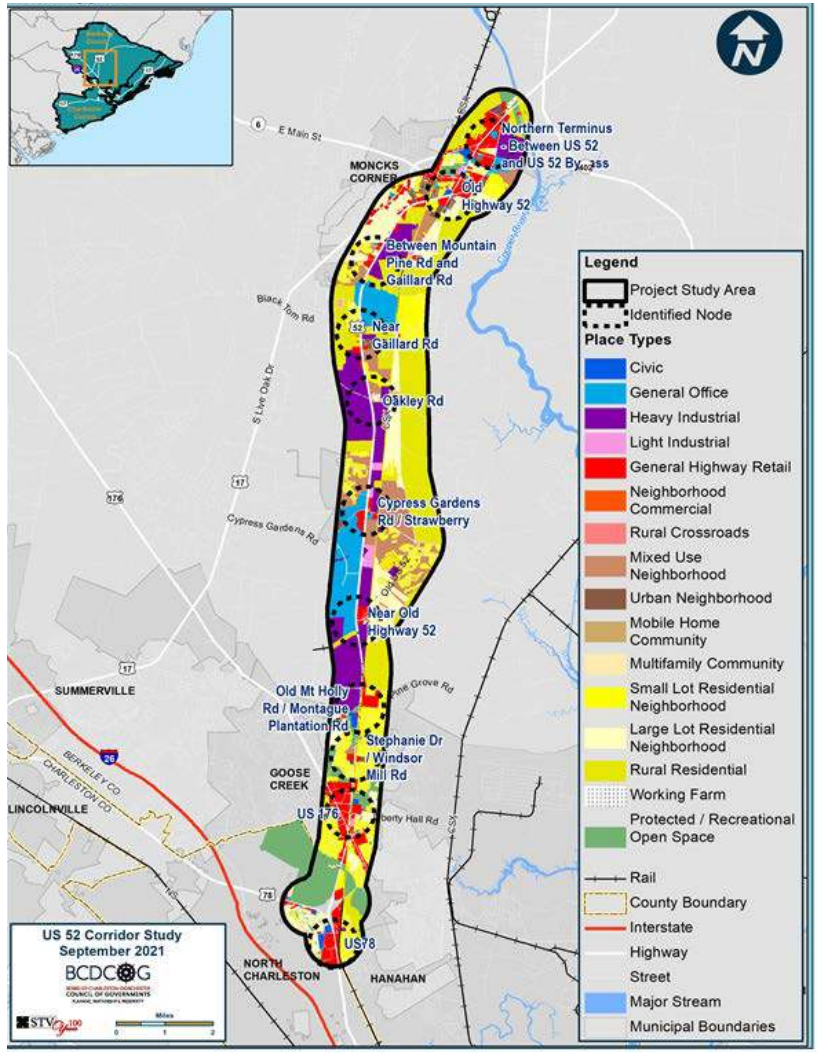
PROCESS

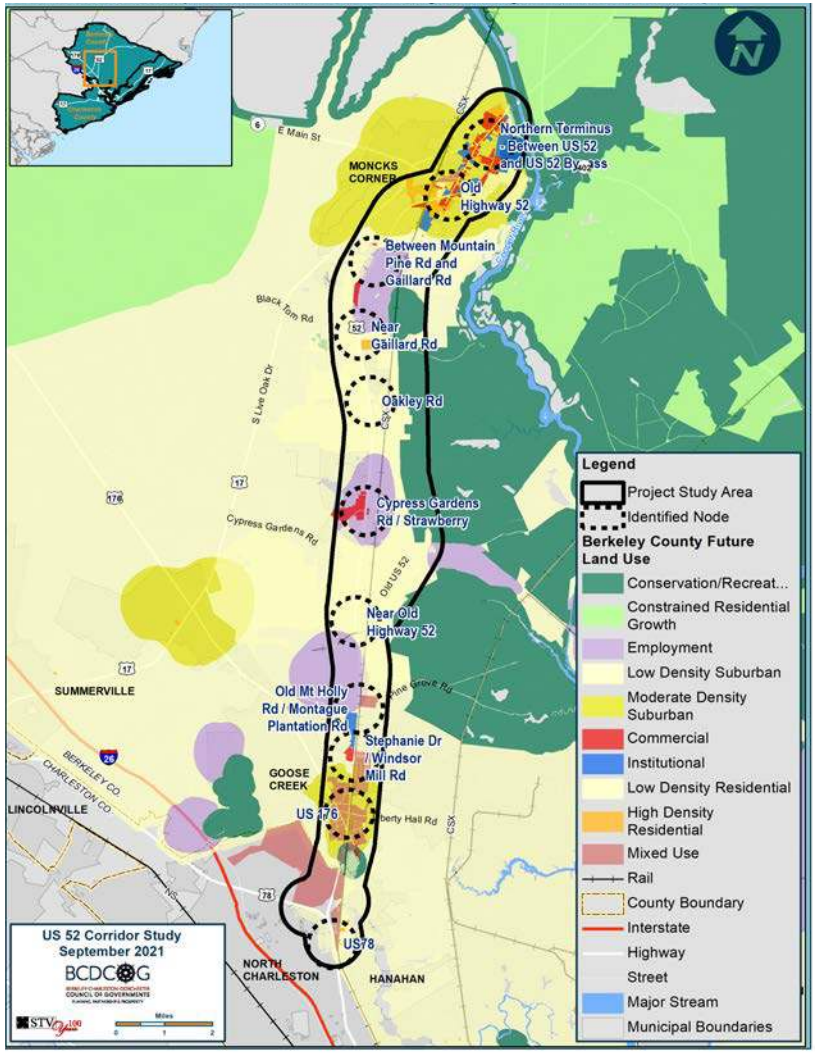
- Identify nodes based on:
  - *Land uses*
  - *2020 and 2040 population density*
  - *Development patterns*
  - *Place types*

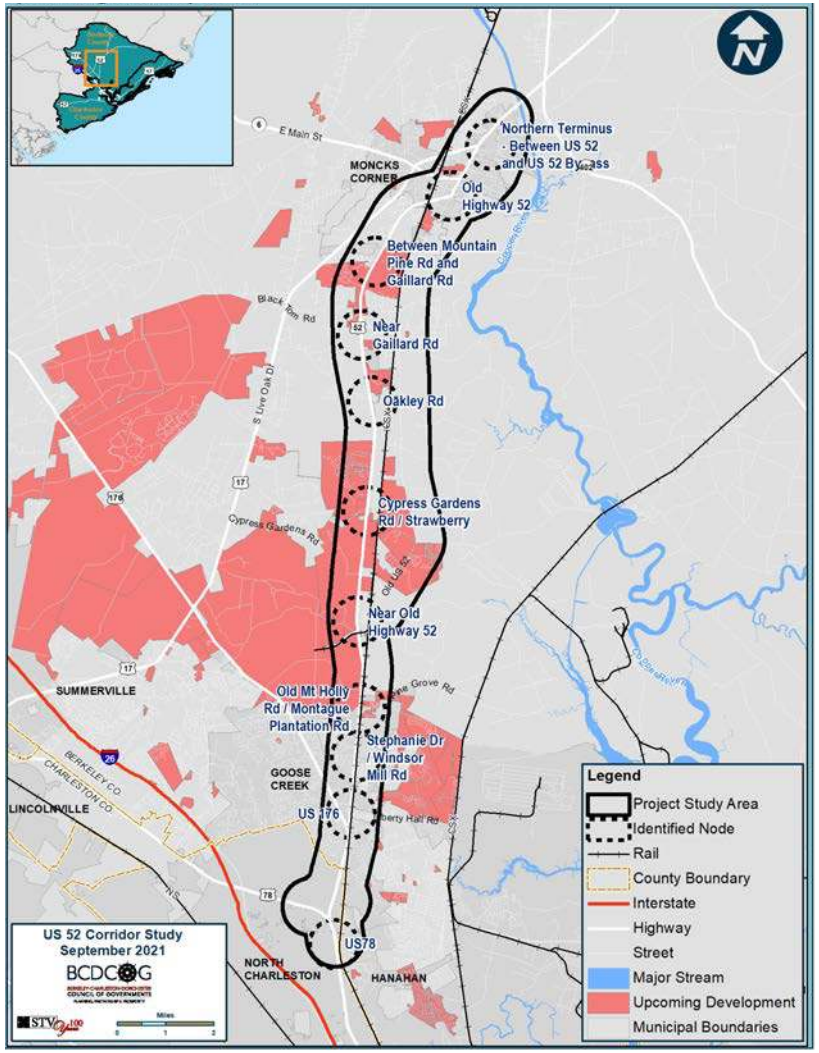
Transit will be an outcome of land uses for each scenario – stops, stations, bus or BRT lite being determined by transit planners now



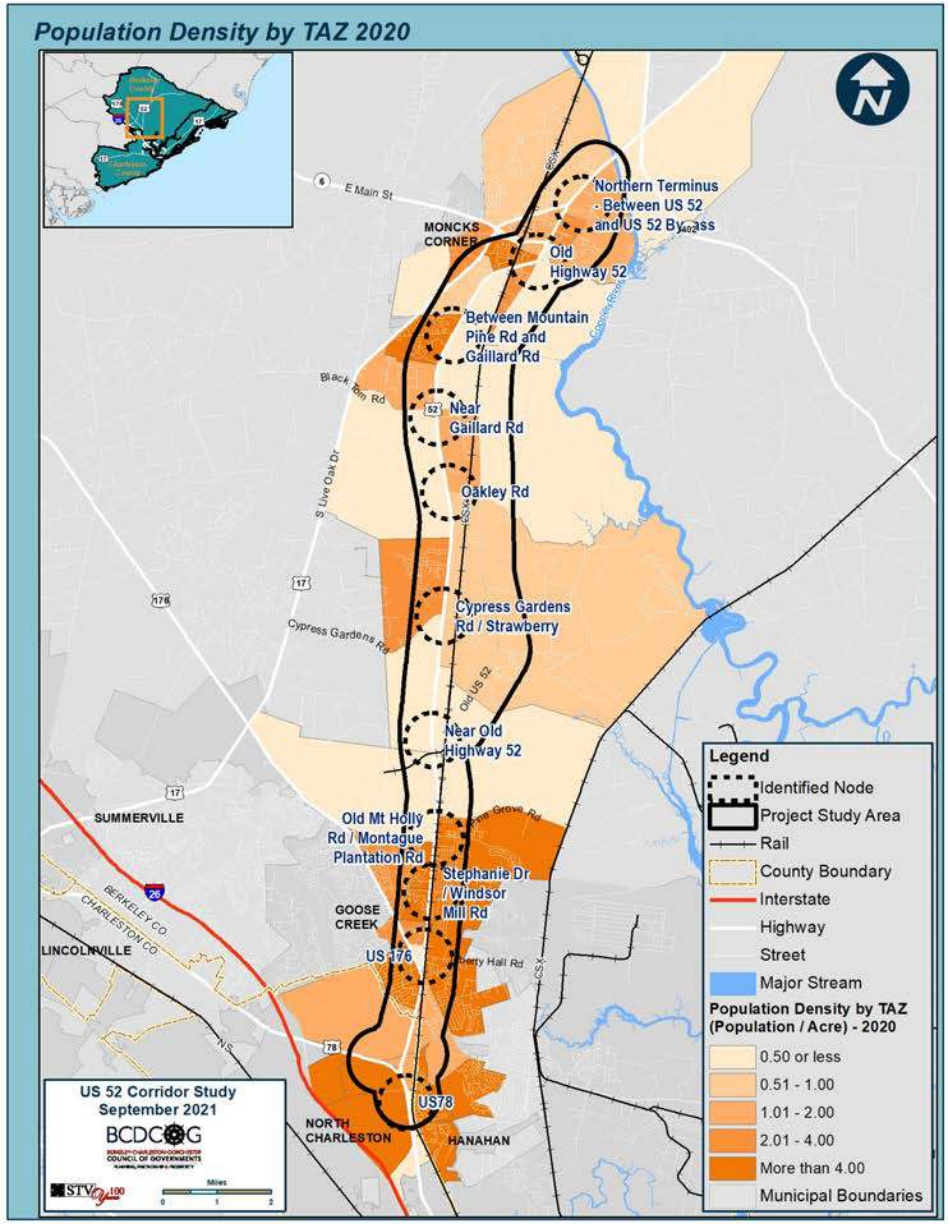
SCENARIO DEVELOPMENT

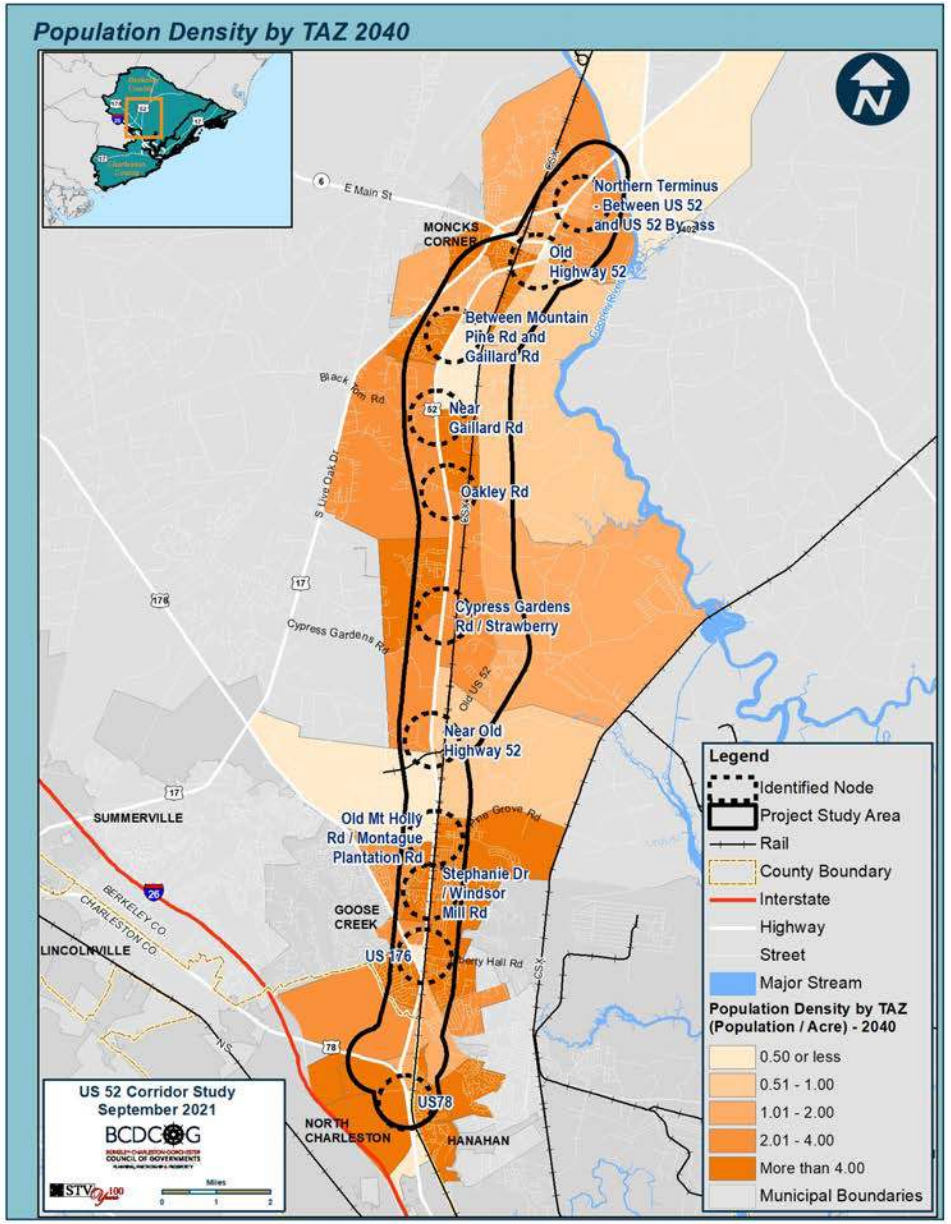




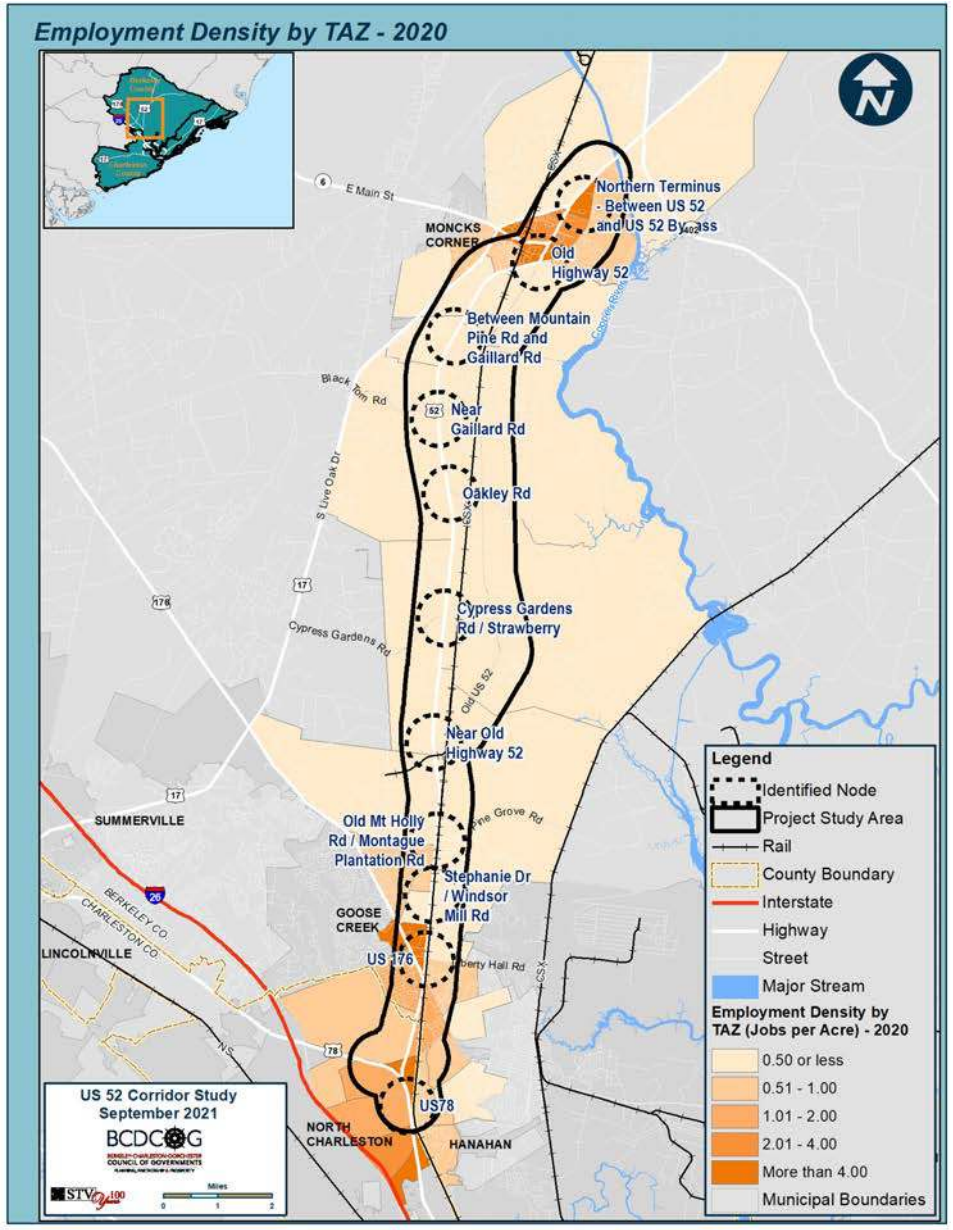


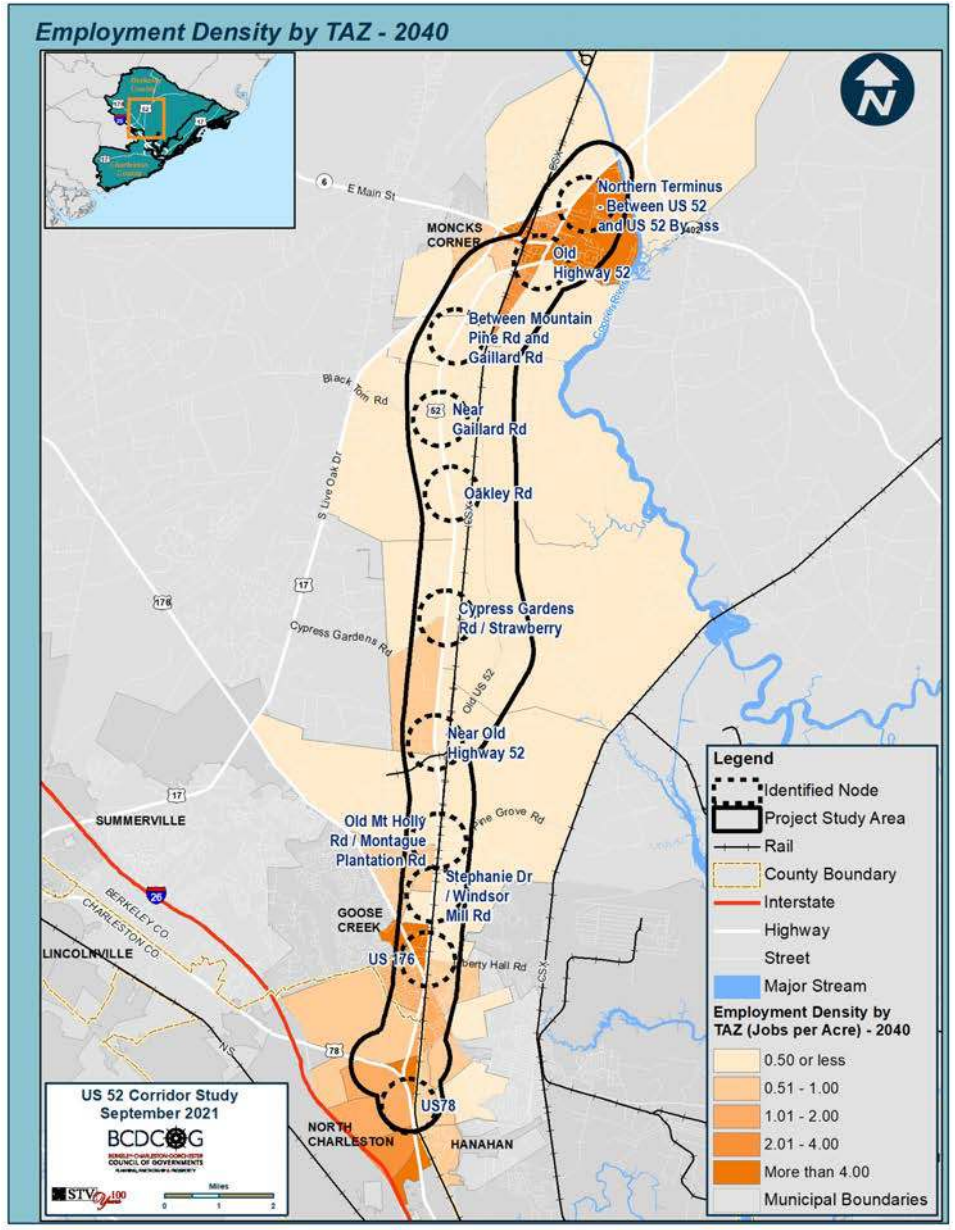
LAND USE AND UPCOMING DEVELOPMENT





POPULATION DENSITY IN STUDY AREA





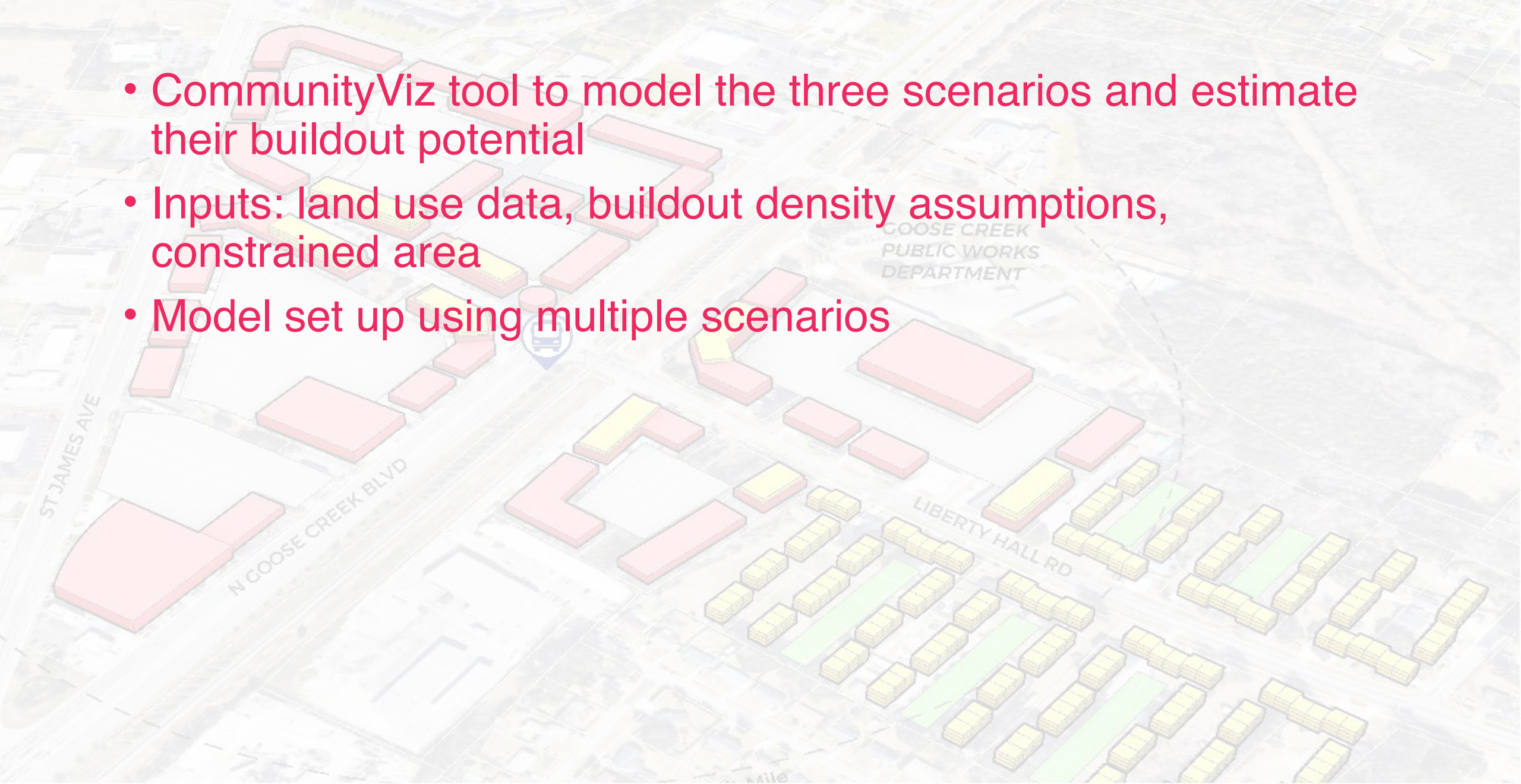
EMPLOYMENT DENSITY IN STUDY AREA

- Building up from existing conditions based on:
  - Future Land Use
  - Density assumptions for existing / future land use
  - Socioeconomic data from the regional travel demand model

- Modeling scenarios based on:
  - Future land use assumptions for each scenario
  - Land use density assumptions
  - Calibration using sample scenarios

LAND USE MODELING

- CommunityViz tool to model the three scenarios and estimate their buildout potential
- Inputs: land use data, buildout density assumptions, constrained area
- Model set up using multiple scenarios



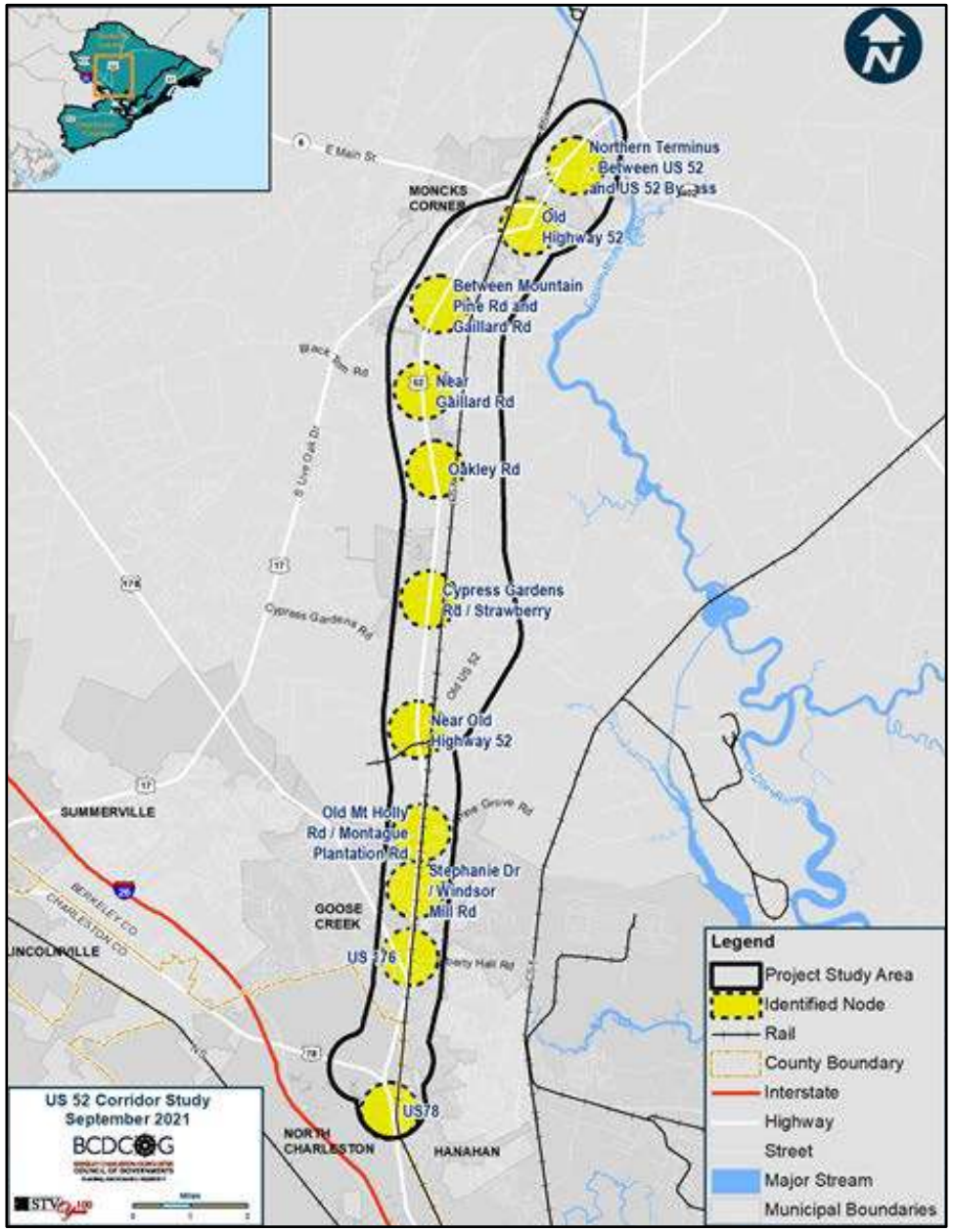
COMMUNITYVIZ MODEL

What can be gained by looking at outcomes other than those determined by the "trend line" when this relies on what's being or been done?

SCENARIOS

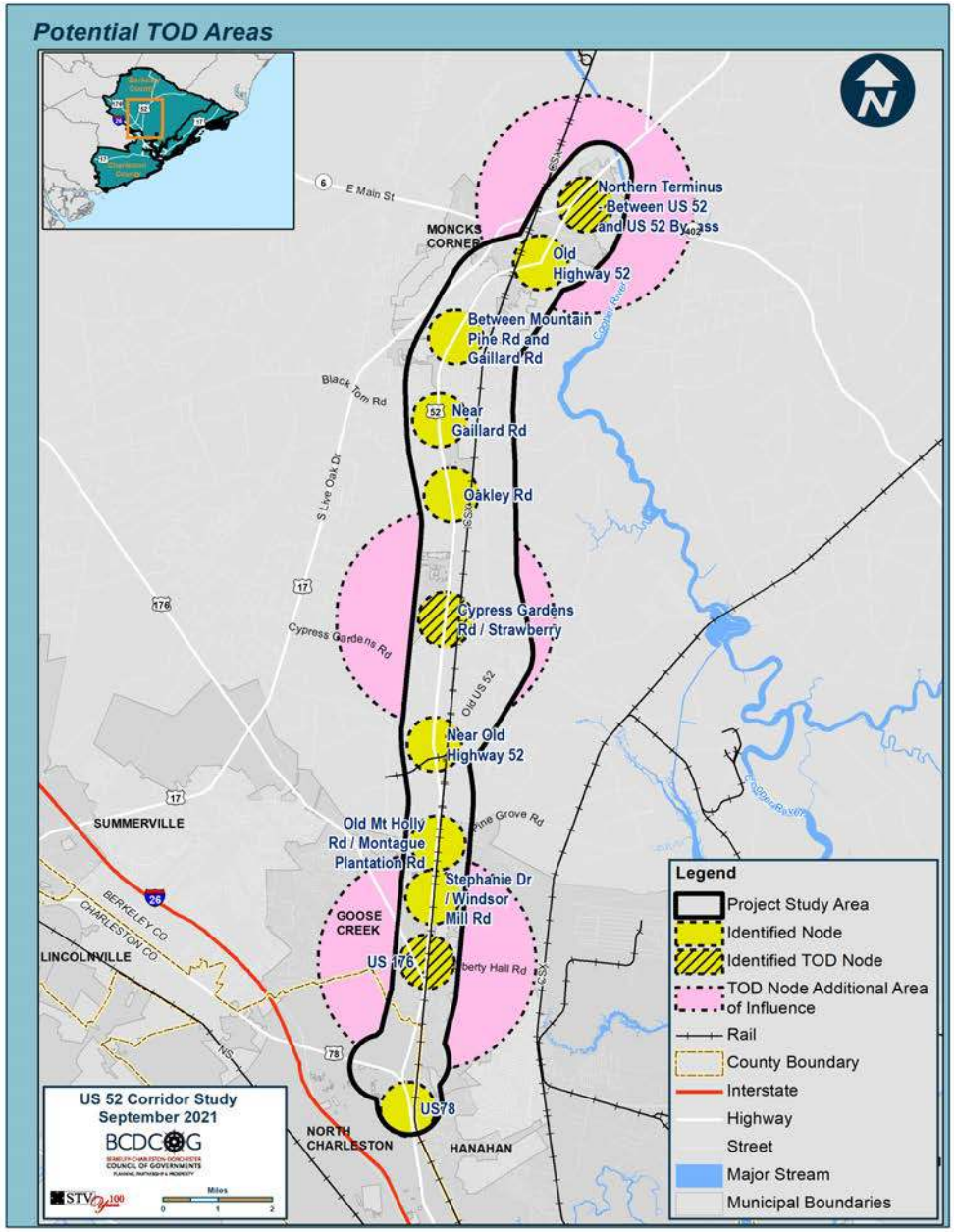
Base Scenario	Growth Management Scenario	Transit-Oriented Development Scenario
• If the existing development patterns continue • Based on existing land use, upcoming development and changes due to future land use •	• Rearranging growth within study area • Focused expected growth near identified nodes	• Focused growth near nodes and identified TOD locations • Assumed to attract growth from a larger influence area around TOD locations

- Focused growth at identified nodes
- 50% of expected growth in the study area outside the nodes redirected to the nodes

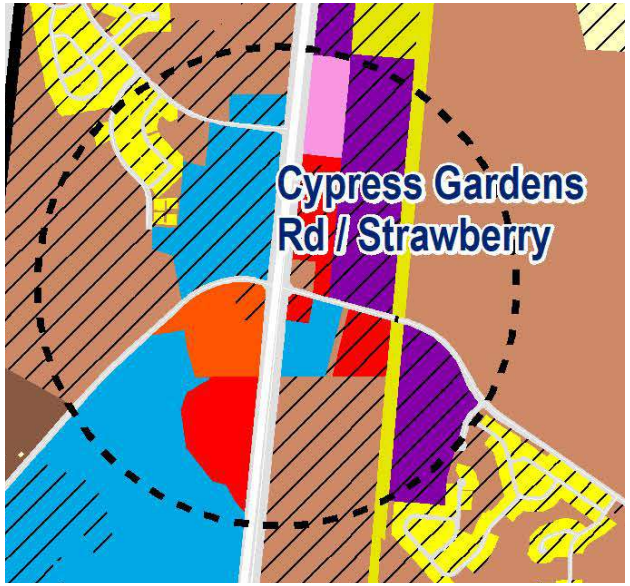


GROWTH MANAGEMENT SCENARIO

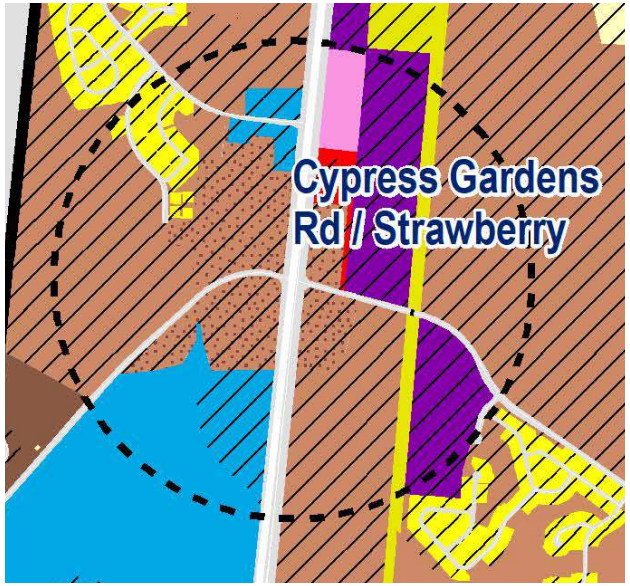
- Focused growth at identified nodes
- 50% of expected growth in the study area outside the nodes redirected to the nodes
- Additional growth at three TOD nodes
- Larger influence area for TOD
    - *25% expected household growth and 50% expected employment growth in the influence areas redirected to the TOD nodes.*



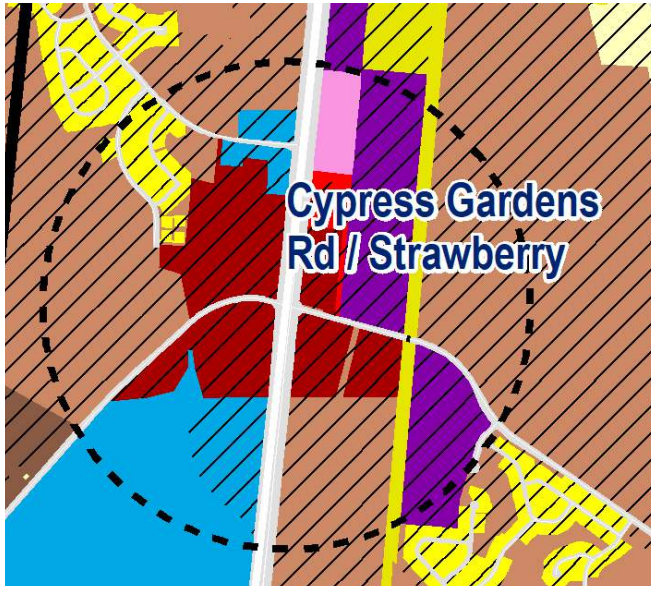
TRANSIT ORIENTED DEVELOPMENT SCENARIO



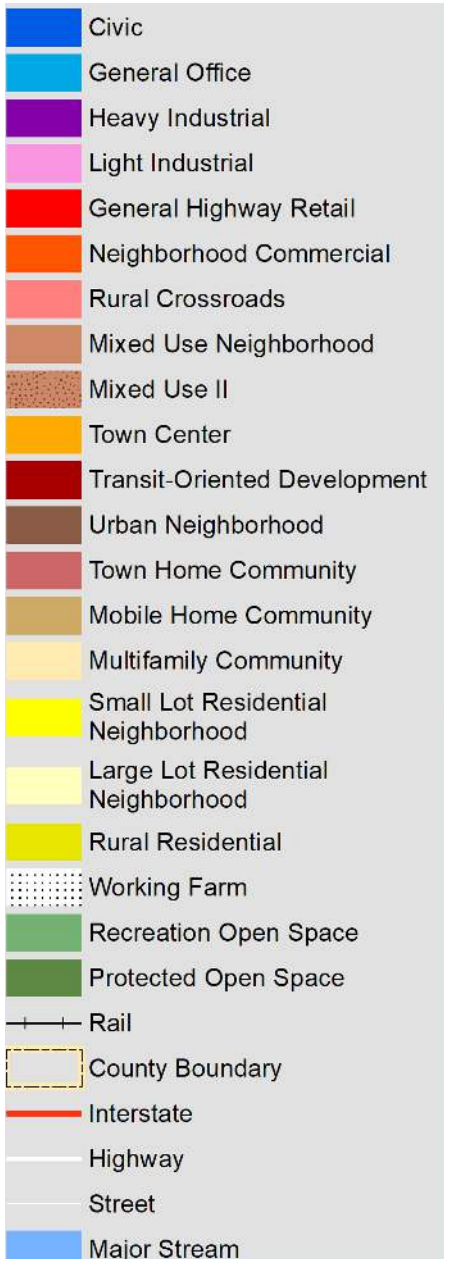
Base



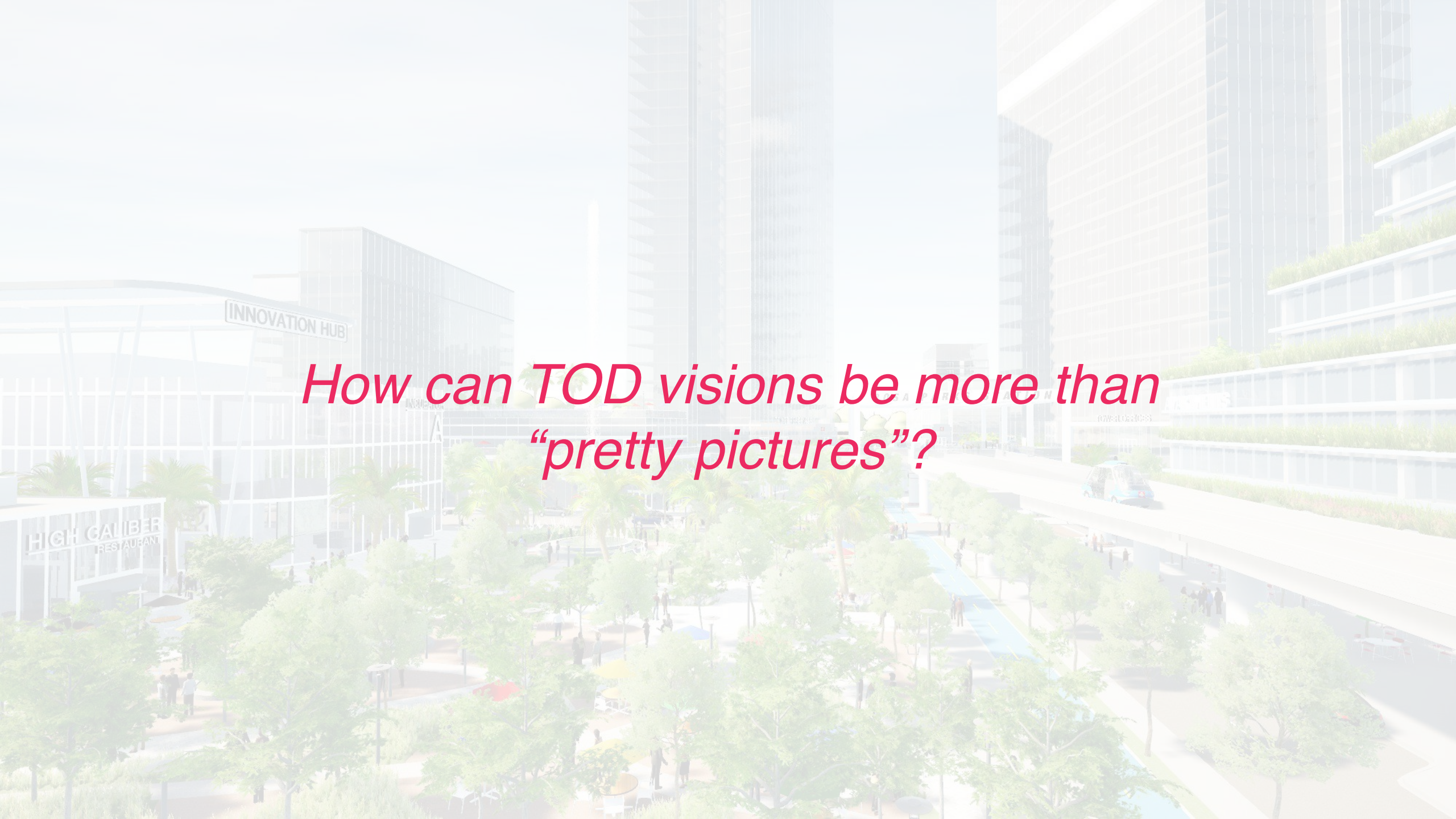
Growth Management



TOD

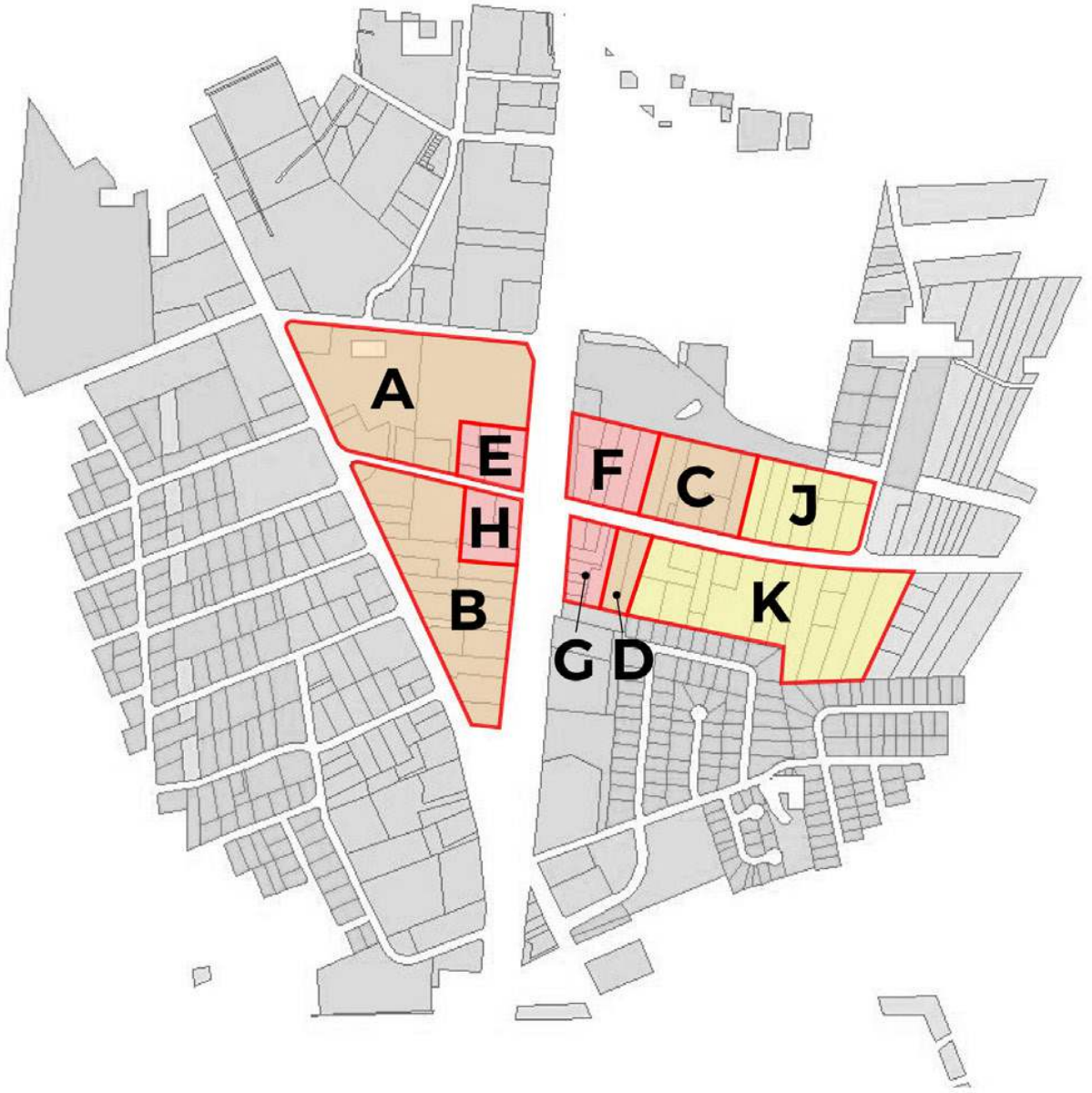


LAND USES - SCENARIOS

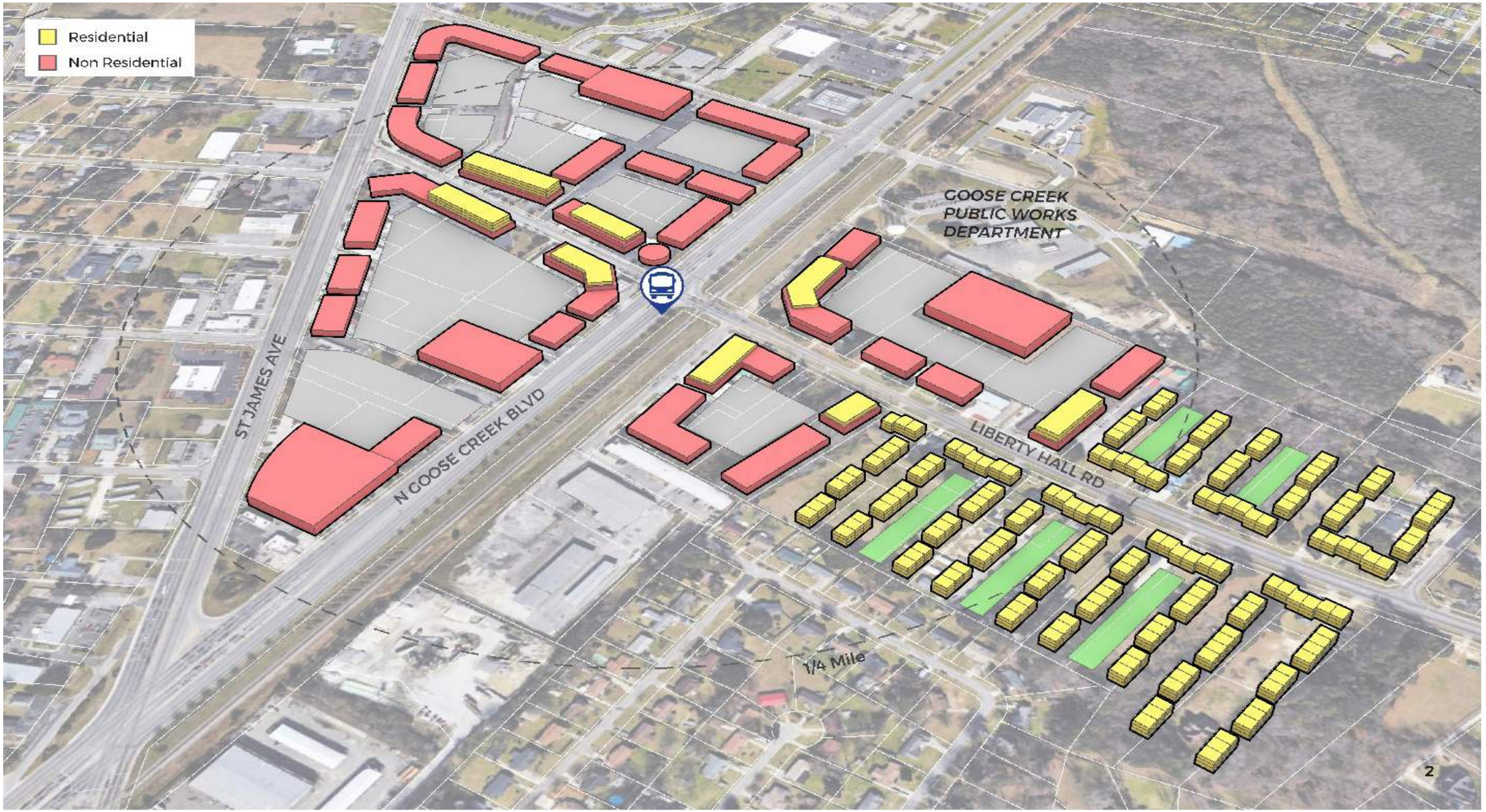


How can TOD visions be more than "pretty pictures"?

EXAMPLE NODE ASSEMBLAGE

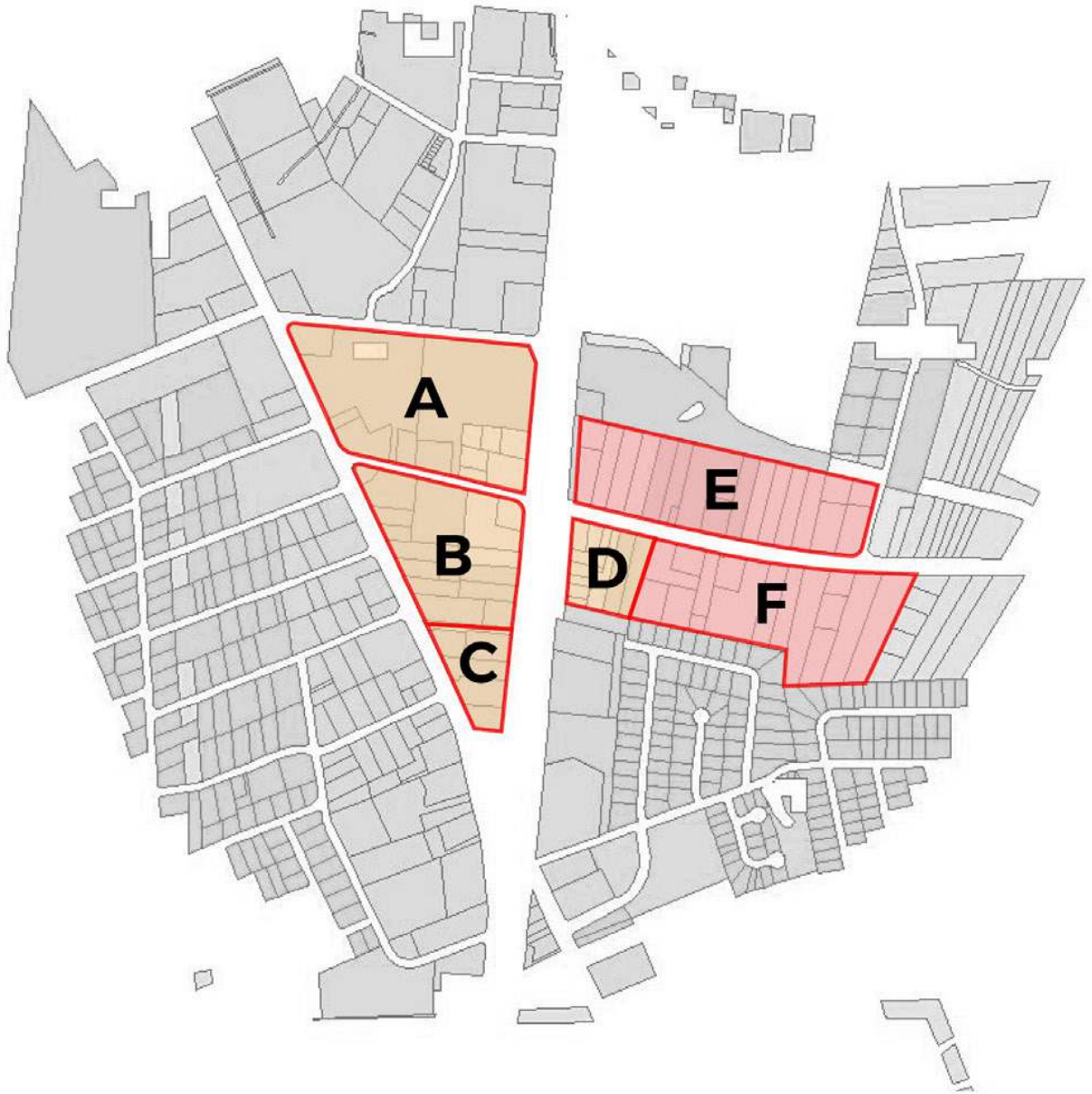


GROWTH MANAGEMENT SCENARIO

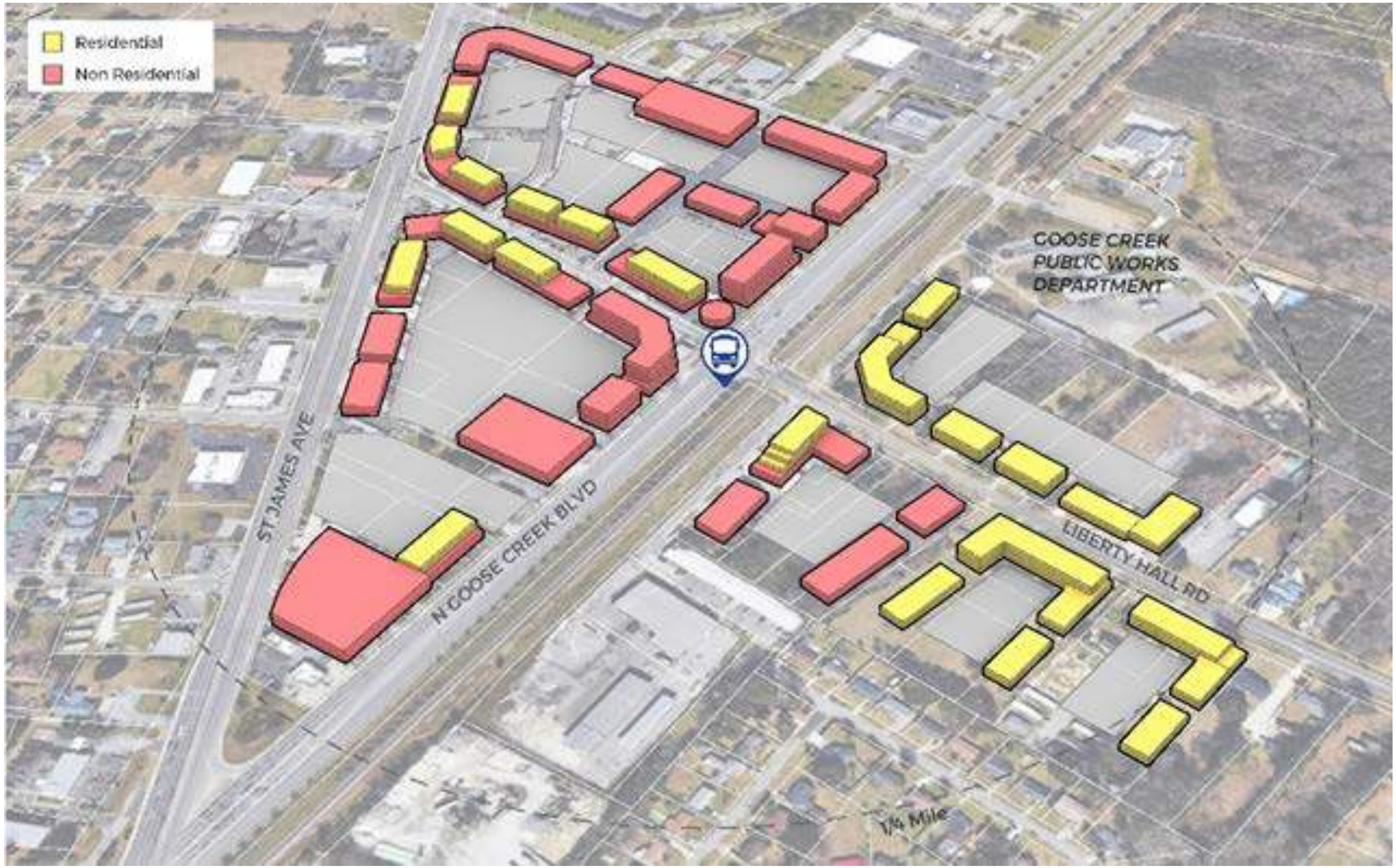


EXAMPLE NODE TYPOLOGY: GROWTH MANAGEMENT SCENARIO

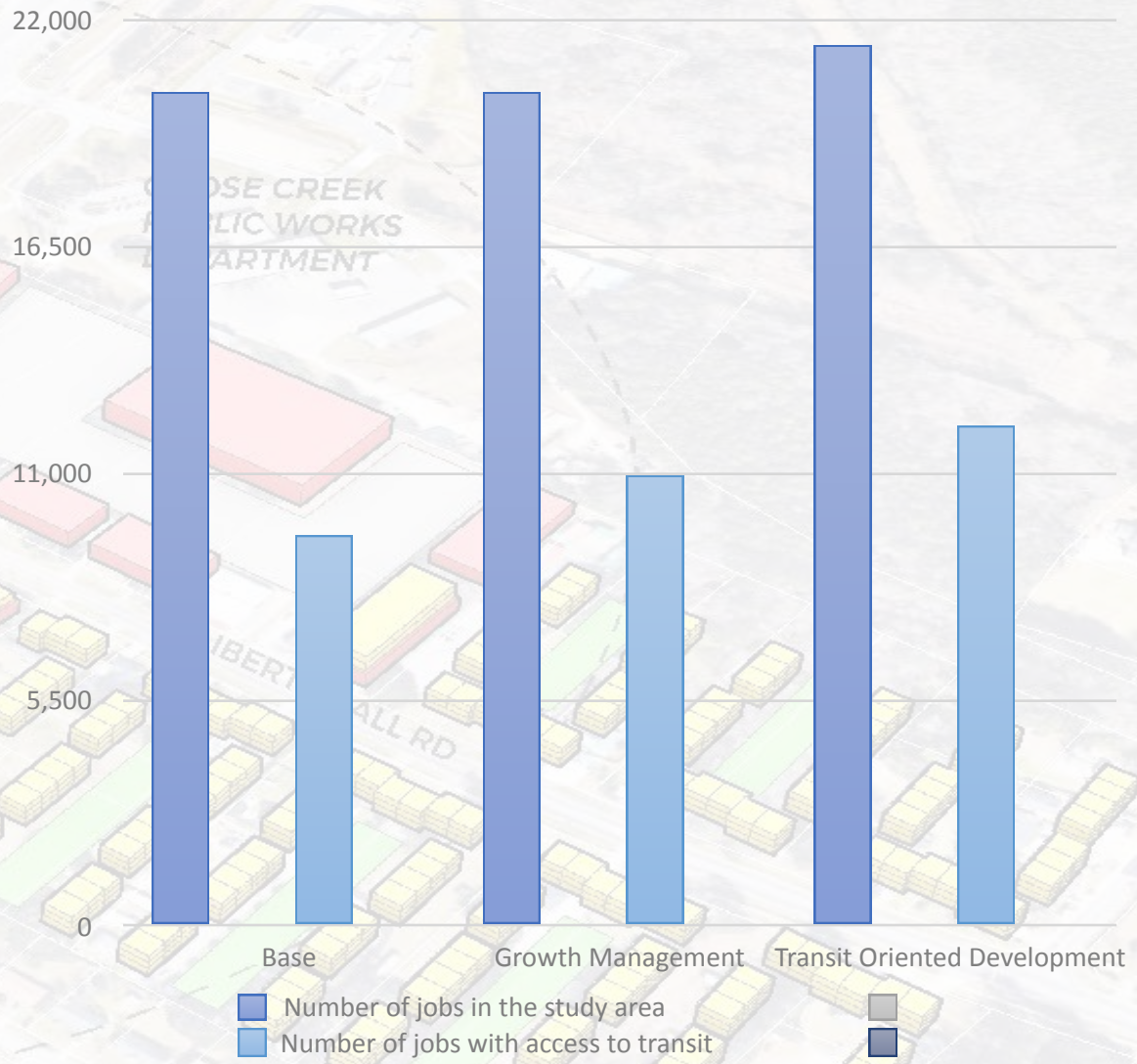
EXAMPLE NODE ASSEMBLAGE



TOD SCENARIO



EXAMPLE NODE TYPOLOGY: TOD SCENARIO



SCENARIO OUTPUTS: EVALUATION

Other Community Viz Outputs for Evaluation of Scenarios

- *Number of residential units per acre*
- *Increased unit density within ½ mile of proposed transit stop*
- *Non-residential area*
- *Number of commercial, office, and industrial uses per acre*
- *Ratio of development nodes to preserved open space*
- *Activity density within ½ mile of proposed transit stops*
- *Number of jobs with access to transit*

Extended Evaluation

- *Impacts on Traffic Congestion through 2040 – Delay, VMT, ADT*
- *Conservation of Green Space*
- *New sidewalk connections*
- *Change in impervious surfaces*

SCENARIO OUTPUTS: EVALUATION


If we want a different future, what choices or investments do we need to make today?

If Scenario-Based TOD Planning can be used for large communities,
and small ones too…
what can each learn from the other?


APA GA
APA TN
wsp
INNOVATION HUB
HIGH CALIBER
RESTAURANT
ROSA PARKS STATION
THANK YOU!