IT’S TIME FOR REALISTIC TOD PLANS:
AVOIDING THE ASPIRATIONAL DESIGN TRAP
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!
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

ESTABLISH A STARTING POINT: SYNTHESIZE THE ANALYSIS
A CONTEXTUAL VISION – DEFINE STATION AREA TYPOLOGIES

CORE NEIGHBORHOOD
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

ESTABLISH THE TOD FRAMEWORK
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
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
• 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
• 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
SCENARIO PLANNING & TOD
MAKING THE CASE IN JACKSONVILLE
How to work towards a desired outcome – even when conditions are not clear and the trend line is not obvious?
MARKET & DEMOGRAPHIC FINDINGS VS. COVID-19

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.

<table>
<thead>
<tr>
<th>Biggest gains in net arrivals</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3</td>
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<td>8</td>
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<td>9</td>
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<tr>
<td>10</td>
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</table>

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.
NEW CONSTRUCTION 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
CONTINUED TOD PLANNING & VISIONING FOR JTA
INTEGRATING A SCENARIO PLANNING METHODOLOGY

EXISTING CONDITIONS
- 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

TOD GOALS, TYPOLOGIES & FRAMEWORKS

STATION AREA PLANNING

IMPLEMENTATION

Current Trend Scenario

VARIABLES / INPUTS

Moderate Growth Scenario

VARIABLES / INPUTS

High Growth Scenario
ASPIRATIONAL TOD VISIONING & SCENARIO PLANNING
SCENARIO PLANNING & TOD
US 52 & CHARLESTON REGION
IF THIS IS WHAT YOU MEAN BY TRANSIT AND TOD...
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
PROCESS

Scenario Development

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

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
• 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.
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
• 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
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

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

• 50% of expected growth in the study area outside the nodes redirected to the nodes
• 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.
LAND USES - SCENARIOS
How can TOD visions be more than “pretty pictures”?
EXAMPLE NODE
ASSEMBLAGE

GROWTH MANAGEMENT SCENARIO
EXAMPLE NODE
ASSEMBLAGE

TOD SCENARIO
EXAMPLE NODE TYPOLOGY: TOD SCENARIO
SCENARIO OUTPUTS: EVALUATION

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Number of jobs in the study area</th>
<th>Number of jobs with access to transit</th>
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<tbody>
<tr>
<td>Base</td>
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<td>0</td>
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<tr>
<td>Growth Management</td>
<td>5,500</td>
<td>0.55</td>
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<td>Transit Oriented Development</td>
<td>11,000</td>
<td>1.1</td>
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<td></td>
<td>16,500</td>
<td>1.65</td>
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<tr>
<td></td>
<td>22,000</td>
<td>2.2</td>
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</table>

- Base: Residential units per acre
- Growth Management: ...within 1/2 mile of proposed transit stop
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
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?
THANK YOU!