TRANSIT AND TRANSIT ORIENTED DEVELOPMENT: GETTING THERE FROM HERE

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Presentation Overview

1. Why Transit, Why Now
2. What Value Can Transit Bring to the Knoxville Region
3. Linking Transit and Development
4. Emerging Lessons Learned from Transit and TOD
5. Concluding Thoughts
Why Transit, Why Now
Why is Transit Important for Knoxville - The City and Region Want to Grow “Smarter”

Plan ET Community Goals

1. Clean Air and Water
2. Healthy People
3. Regional Prosperity
4. Local Food Production
5. Transportation Choices
6. Efficient Infrastructure
7. Great Places
8. Housing Choices
Transportation Choice Will Help Knoxville Grow Smarter

Source: KATS Corridor Study Appendix D, TOD Toolkit. 2013
What Value Can Transit Bring to the Knoxville Region
Transit Supports Clean Air and Water

Commuting by Public Transportation—One of the Most Significant Actions to Reduce Household Carbon Emissions

By taking existing public transportation instead of driving a car, a single person saves 4,800 pounds of CO₂ per year. Source: Public Transportation’s Contribution to U.S. Greenhouse Gas Reduction 4

Transit Supports Healthy People

Figure 12: Mode Split Versus National Obesity Rates (Bassett, et al 2008)

Transit Supports Regional Prosperity

“Every time a metro area added about 4 seats to rails and buses per 1,000 residents, the central city ended up with 320 more employees per square mile — an increase of 19 percent.”

Cities Are Starting to Plan for Transit and Urban Agriculture in Proximity to Each Other
Transportation Choice

People who live within a half-mile radius are 5 times as likely to walk to a major transit stop than others.

Source: San Francisco Bay Area Metropolitan Transportation Commission
Compact Development, Like TOD, Supports Efficient Infrastructure

Calgary, Alberta

Capital Costs
- 32% savings

Operating Costs
- 13% savings

Development Scenario: Dispersed, Compact

Source: IBI – Implications Of Alternative Growth Patterns On Infrastructure Costs, Plan-It Calgary, City of Calgary, 2008
Great Places Create Great Value, and Transit Adds More Value

Figure 1. Office Rent Premiums Associated with Proximity to BART Compared to Areas More than a Half Mile from a Station: East Bay

*Percentage difference in annual average rental rate compared to being located more than 1/2 mile from a BART station, after controlling for other factors with regression analysis. Source: Strategic Economics, 2015.
Different Development Types
Compliment Multi-Modal Transportation
“Infilling” Neighborhoods Can Also Take Different Forms
Linking Transit and Development
Transit Ridership is Highly Dependent on Land Use Patterns

Figure 39: Geographic Indicators of High Ridership Potential
Development Near Transit – Transit Oriented Development (TOD)

- Development located within ¼ to ½ mile of a frequent transit station/stop (really a district)
- Located in an area where it is also easy to bike/walk
- Serves as an “origin”, a “destination,” or both for the transit system
There Is No Single Transit or Building Type in TOD
Transit Corridors Reflect the Range of Land uses and Densities – It’s the Connections that Count!
Employment Destinations Are Essential to Transit Because Commuters Ride Transit

By a wide margin, the largest group of transit trips are commute trips.

Commuters are key to transit’s productivity.

Source: Pisarski, *Commuting in America*
Any Transit That Supports Successful TOD is:

1. High quality
   - Frequent
   - Clean and Comfortable
   - Fast

2. Stops/stations that are easily accessible by biking or walking

3. Connected to employment centers/activity centers and major institutions
Emerging Lessons Learned from Transit and TOD
Lesson 1: Changing Demographics is Driving Demand For Transit Oriented Locations

76 Million Baby Boomers, many of whom are downsizing

75-80 Million Millennials – The newest members of the work force

Almost ½ of All Households are Single People
This Demand is Generating Price Premiums for Both Residential and Commercial Properties

Average Rents per Square Foot
Walkable vs Suburban Neighborhoods in Atlanta

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<th>Suburban</th>
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Source: Leinberger, GWU School of Business – The WalkUP Wake-Up Call: Atlanta 2013
And, This is Not Just about “Downtown” Locations

Source: Leinberger, GWU School of Business – The WalkUP Wake-Up Call: Atlanta 2013
The Greenwood Park neighborhood in Atlanta is a transit-oriented redevelopment in anticipation of a streetcar.
This Investment Trend is Happening in Cities Big and Small

Lesson 2: Transit is Not a Silver Bullet, Market Conditions have to be Right

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<td>Existing Downtowns/Urban Business Districts</td>
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<td>Other</td>
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<tr>
<td>Total Corridor</td>
<td>100%</td>
<td>100%</td>
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Lesson 3: More Businesses are Relocating to Be Near Transit

“I think it’s essential we be accessible to Metro and that limits the options. I think as with many other things our younger folks are more inclined to be Metro-accessible and more urban.” - Arne M. Sorenson, Chief Executive, Marriott International. Washington Post, March 2015

“While Microsoft and Nintendo have stayed in the suburbs, Amazon is building a futuristic new inner-city home. “ – The Guardian, May 22, 2014

“State Farm exec: Transit helped Tempe get $600M hub” – Parker Leavitt, The Republic, February 20, 2015

Citrix, Raleigh

Rolls Royce, Indianapolis
Lesson 4: These Other Transportation Systems Also have Economic Benefits

Bike Share =
Additional $150,000 in rider expenditures (Minneapolis)

Urban Bike “Trails” =
As much as $846 million in economic impact (Indianapolis Cultural Arts Trail)
Lesson 5: Planning for TOD Includes Planning for All Household Income Levels

Transportation Costs Have a Significant Impact on total Household Income

Figure 1. Percent of Income Spent on Housing and Transportation by Neighborhood where Households Live
In 1980, Low Income HH Were Concentrated in The Region’s Core, Closer To Transit
Over 20 Yrs, Many More Low Income Households Were Pushed Away From Transit

Figure 3: By 2000, income segregation had spread through much more of the core and outer ring.

Source: Data from the Neighborhood Change Database (Geolytics); Simpson’s D calculations by the Center for Community Innovation.
Lesson 6: Invest In Good Pedestrian Design Upfront, or It Will Cost You More in the Long Run: A Lesson From Pittsburgh
Concluding Thoughts
Four Important Things To Remember About Transit and TOD as Knoxville Moves Forward

1. Transit Investment Leverages Many Other Benefits
2. These benefits will be greatest if future Development is linked to transit
3. Planning and investment, both public and private will be required
4. Being patient!