

Transit Alliance Citizens' Academy

## The Economics of TOD

ARLAND  
Land Use Economics

*September 5, 2007*



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### Agenda

- Presenter: Arleen Taniwaki, ArLand Land Use Economics
- Regional (Corridor) Economics
- Station Area Economics
- The Role of the Market Study....Denver TOD
  - Residential
  - Retail
  - Office
  - Other Uses
- Feasibility
  - Costs
  - Financing

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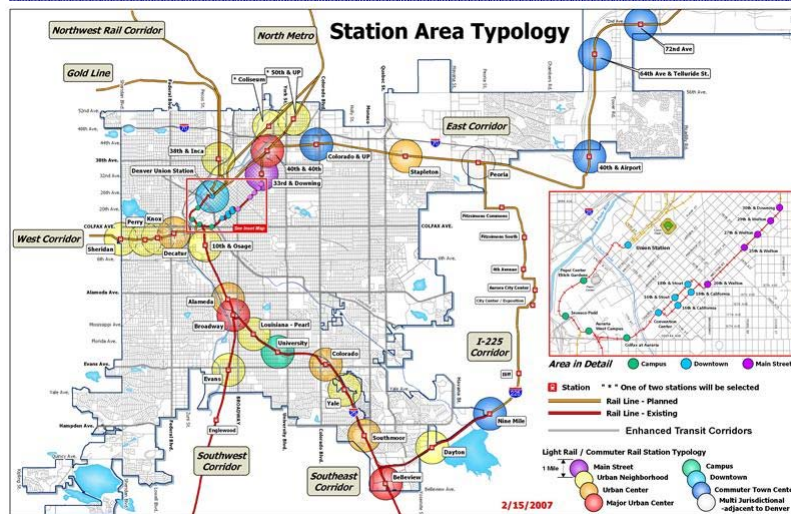
## Regional Corridor Economics

- Transit alone does not create a market for real estate investment
- Transit changes the “context” for development
- Each type of development within the TOD should consider corridor competition as well as local competition
- The same factors that affect all development will affect TODs
  - o Location
  - o Development Type
  - o Development Cycle
  - o Interest Rates, etc.



Source: RTD

## Denver Station Area Typologies



Source: City of Denver, CTOD

## Station Area Analysis

- Existing Conditions
  - Zoning
  - Infrastructure
  - Access
  - Site Size
- Community Needs and Issues
- Potential Themes, Market Niches, Development Concepts, Catalyst Projects
- Need for Public Financing
- Critical Mass



Former Gates Factory, Cherokee Redevelopment

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## What is the Market?

- **For each land use, we typically ask...**
- **What broad trends affect demand for this use (eco/demo/socio)?**
- **What is the market?**
  - Trade area size & shape (customers & competitors, physical boundaries, population & employment concentrations)
  - Who's in the market? (demographics/economics)
- **What is the competition?**
  - Types of competition
  - Size & performance of competitors
- **How much demand is in the market?**
  - Annual "absorption" (in units or square feet), projected forward
- **How much total market demand can this project "capture" and how?**

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## Some Tough Questions

- **What's the true role of ridership in demand for TOD?**
  - o awareness/visibility
  - o residential choice
  - o organization of urban form
  - o retail
  - o employment
- **Development along light rail needs market support *independent of transit*?**
  - o Will this change over time?
- **Is there a limit to demand for "walkable urbanity"?**

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## Trade Area Identification

Determine trade area(s) for proposed land uses considering impacts from:

- Physical barriers, such as highways, major arterials, etc.;
- Location of possible competition, both within and outside the market;
- Proximity to population and/or employment concentrations; and

### Rules of thumb

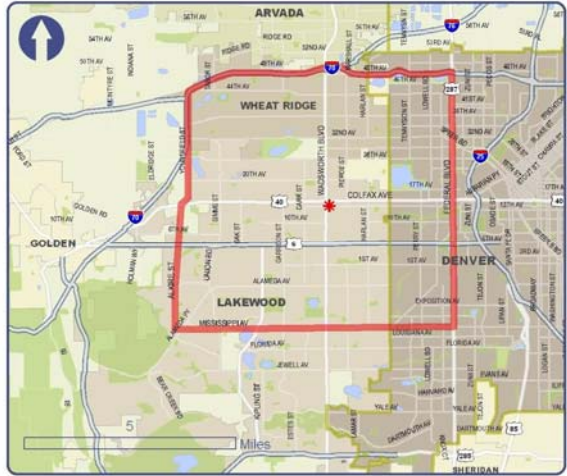
Roughly 5-mi. radius for regional retail (e.g. mall), 3-mi. radius for community retail (big box), 1-2 mi. for neighborhood retail (grocery)

If possible, don't use circles – real trade areas are more irregular, with boundaries like highways, rail, rivers, & land use breaks

In general a project, by itself, should not greatly affect overall demand or supply in its trade area (big projects need big trade areas)

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# Trade Area Identification



# Trade Area Identification

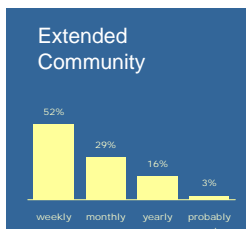


## Market Demand Analysis

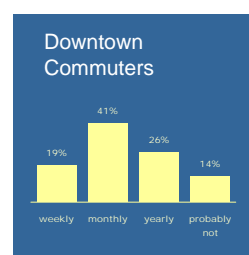
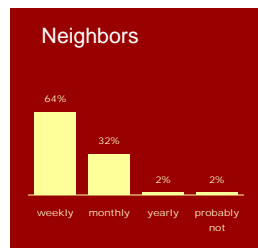
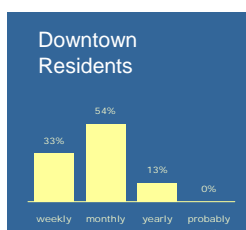
- Residential – demand is a function of future household growth and their income levels, organized by their rent and price levels
- Retail - demand is also a function of growth in trade area households, converted into typical spending patterns across retail categories, then translated into square feet based on average price per s.f.
- Office - demand is a function of employment growth, using assumptions about likelihood of using office space by each industry sector
- **Unusual land uses may require primary (survey and/or focus group) research to quantify demand**

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## Attendance Intent/Frequency – by Segment

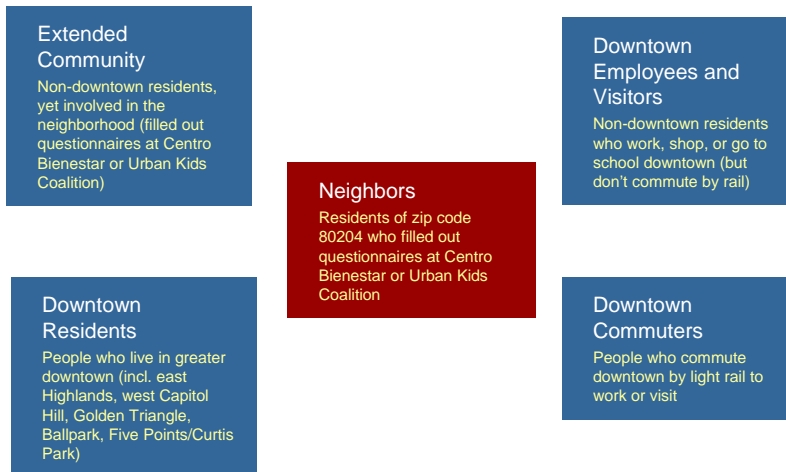


If a Mercado with many of the features you selected came to 10th and Osage every week next year, about how often do you think you might visit? (check one)



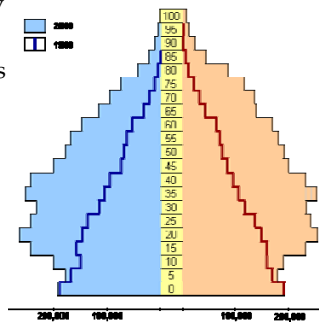
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## Market Segments – 10<sup>th</sup> & Osage Mercado (Survey Approach)



## Residential – National Trends

- Nationally, tremendous shifts occurring in demographics
- Single adults will be the new majority household in the U.S.
  - In 1900, married couples with kids comprised the majority
  - Currently, 25% of all households, projected to decrease to 20% of all households by 2010
- More older and smaller households want smaller homes with more convenience – transportation, entertainment, culture, shopping
- “Echo” boom



Source: Center for Transit-Oriented Development

## Residential - in Mixed Use/TOD

- In the Denver area, recent mixed-use development led by upscale residential housing
- Corresponds to changing demographics and changes occurring in national markets
- Best mixed use sites often have challenges

*Creating a new identity*

*Costs are high*

*Upscale housing has been an easier, popular option*



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## Residential - Affordability

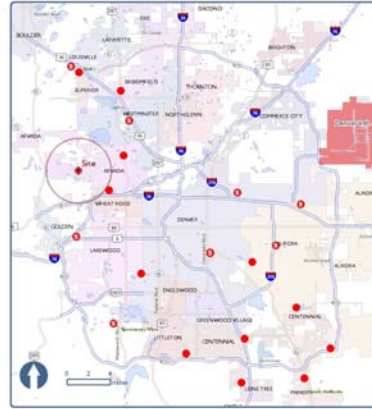
- Affordable housing is / will be an issue regionally
- Single person households have only wage earner
- Half the U.S. population will be non-white by 2050 with a 1/3<sup>rd</sup> of that from immigration
- Immigrant and minority households
  - o Tend to have lower incomes
  - o Tend to own fewer cars
  - o Use transit more



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## Retail Market

- Retail Demand –
  - o Household growth and incomes, spending patterns and where people shop
- Rules of Thumb
  - o Roughly 5-mile radius for regional retail, 3-mile radius for community retail (big box), 1-2 mile for neighborhood retail (grocery)



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## Retail

- Most station area retail: convenience-oriented
- Some larger-scale retail; customers coming from outside the TOD
- Retailers, have location criteria, market and parking requirements, relationships etc.
- Popular option at larger sites for its ability to generate tax increment financing (TIF) which can pay for initial capital investments for site cleanup, infrastructure, etc.
- Grocery Stores



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## Office



Gates Office Building near Denver Union Station

- Major employers like to be easily accessible to labor pool
- Formerly, workers followed employers
- Now, employers follow workers
- Denver / Boulder regional office market has been weak recently
- Market is slowly recovering
- Major office at TOD would compete with existing office centers at DTC, Downtown, etc.

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## Other Uses to Create the Place



- Event Retail / Social Retail
- Entertainment: 24/7 environment
  - Movie theater
  - *"art houses"*
  - Skating
  - Bowling
  - Farmer's markets
  - Concerts
  - Conference facilities
- Hotel
- Civic
- "Amenities" don't always generate direct revenue

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## Denver TOD Station Area Planning Process

- TOD Strategic Plan.....set the stage
- Planners / designers / transportation specialists / economists
- Planning is a multi-month process including:
  - Community engagement
  - Two focus group meetings
  - Two public meetings
  - Ongoing stakeholder meetings
- Coordinate with zoning code update
- Coordinate with infrastructure / transportation needs
- Market and economic study ongoing throughout process
  - Regional demand for TOD
  - Station area demand based on DRCOG growth rates and ½ mile walksheds
  - Sets land use parameters
- Land Use and transportation recommendations with implementation strategies

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## TOD Feasibility – Time and Money

- Time
  - Can take several years before construction: interest carry
  - Predevelopment – Architecture, Market, Testing
  - Zoning & Entitlements
  - Community Acceptance
- Land Costs
  - Land speculation
  - Challenging environmental issues
  - Infrastructure provision
  - Mixed use phasing challenges
- Construction Costs



Sugar Building at 16<sup>th</sup> & Blake from  
Denver Infill.com

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## TOD Feasibility – Timing of Development

- Urban Locations
  - Land speculation
  - Multiple owners; small parcels
  - Challenging environmental issues
  - Infrastructure provision
  - Community acceptance
  - Structured parking \$20,000 / space feasible at very high land prices
  - Reduction in parking concerns – no agreement
  
- Suburban Locations
  - Creating a “place”
  - How far ahead of the line?
  - No infrastructure
  - What comes first?
    - *Start with something*



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## Financing Example



22 city blocks of stores, entertainment, office space, residences  
 1,300 homes for sale or rent  
 Century Theatres 16 screen Cineplex  
 Whole Foods Market grocery store  
 900,000 square feet of Class A office space  
 45 stores to start, 175 total  
 9 acres of parks, plazas, green spaces  
 9,000 parking spaces (free garage & surface)

Source: ULI DRCOG TODay workshop,  
 Belmar website

- Belmar
- Total Land & Infrastructure = \$186 million
- Public Finance Package = \$120 million
- Private Investment = \$66 million

*\$93 million of total costs for structured parking*

Public Finance Package includes:  
 ○ Tax Increment Financing  
 ○ Public Improvement Fee  
 ○ Offsite TIF Revenue  
 ○ Lodgers Tax

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## Summary

- Markets / land uses can be a challenge, especially for new projects on new lines
- Need to consider the market both locally and regionally
- Recent developments follow national trends
- Land uses should be market driven
- Amenities necessary, but don't always generate direct revenue
- Large mixed use development expensive with very high initial capital costs

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## Questions?

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