

**Growing with Transit:
Creating Transit Supportive Development
in an Automobile Centered World**



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Master in City Planning
The Tren Urbano Project 1999**

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Presentation Goals

- Problem Statement
- Mission of the Thesis
- Land Use and its Effect Upon Transit
- Defining Transit Supportive Development
- Testing the Framework
- Application at Martinez Nadal
- Next Steps



The First Steps: Problem Statement

- Influencing transit ridership on Tren Urbano will require special attention to land use. Increasing ridership means growing in ways that will help to support the system.
- There is a lack of helpful guidance in the literature to guide how this growth should occur.



Mission

This thesis seeks to provide a framework to guide the development of transit supportive development around transit stations in San Juan.



Land Use Can Affect Transit Ridership Levels



The Three D's

- Density

- Diversity

- Design for Multi-modal Use

So what is transit supportive development?





**The literature offers few sources that
provide a framework for
approaching development which
supports transit use**

Peter Calthorpe's *the Next American Metropolis* offers a model called TOD
(Transit-Oriented Development)



Weaknesses of TOD framework

- Blind to market realities and private interests
 - new and different
 - amenities and design
 - density and location
- Scheme for greenfield development
- Upper scale, not reflective of community needs

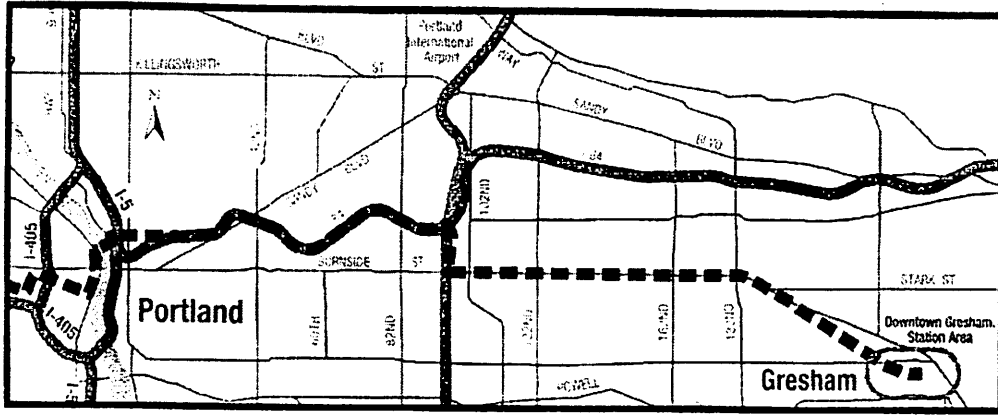
Framework for Transit Supportive Development

<p>Density</p> <p><i>efficient above average responsive</i></p>	<p>Does development around the station make the most efficient use of land around the station that the market would allow?</p>	<p>Does the project allow for the development of more intense density in the future?</p>
<p>Diversity</p> <p><i>fine grained responsive maximize activity</i></p>	<p>Are land uses mixed at the finest grain possible given the current market conditions? Does the activity mix respond to community needs and desires as well as to the requirements of the market? Does the project seek to maximize activity at all times of day?</p>	<p>Does the project allow for the continued proliferation of uses in the area?</p>
<p>Design for multimodal use</p> <p><i>compact integrated linked</i></p>	<p>Does the development encourage compact rather than spread out patterns and reduce surface level parking? Are continuous , direct and pleasant multimodal routes provided from the station to and from important destinations in the area? Do buildings fit in with the station and complement it?</p>	<p>Is the groundwork set for allowing multimodal access to future development in the area?</p>

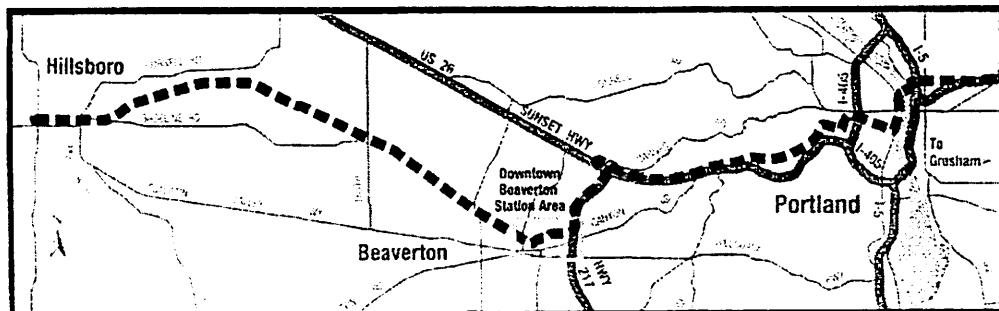
Testing the Framework: Case Studies

- The Round at Beaverton Central
- The Gresham Central Apartments

-access to information
-policy support for transit supportive projects
-not exempt from the market realities
-one successful project, one failure both in the same metropolitan area



EASTSIDE MAX CORRIDOR



WESTSIDE MAX CORRIDOR



Martínez Nadal Station Area

- Regional Access
- Opening Day Festivities
- Available land owned by PRHTA
 - park and ride facilities
 - joint development opportunities
- Nearby resources
 - Metropolitan Hospital & professional park
 - Office development
 - Alameda Towers
 - Las Lomas neighborhood



Martinez Nadal Station Area

■ DENSITY

- row houses at 20 units per acre
- high rise housing at 100 units per acre
- office and entertainment at FAR of 4

■ DIVERSITY

- housing
- office
- movie theater
- retail

■ DESIGN

- identify pedestrian destinations and walking distance
- provide network of pedestrian linkages and design details



Lessons

- Connectivity

- Time

- Public Investment

The Improved Framework



- Densities of every project should be high enough to promote the **efficient use** of developable land available at the station and along the alignment
- Each project should increase the **diversity** of uses in the station area and along the entire alignment
- There should be a **functional link** between development and transit. Pedestrian connections should be provided between the station and development around it that is: direct, interesting and safe.



Transit Supportive Development

- Tren Urbano as educator
 - lenders
 - the public
- Regional perspective
- Joint development (shared control)
- Road improvements



Next Steps

- * before and after study
- * further research to evaluate this framework
- * implementation techniques
- * full plan at Martinez Nadal

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(untl August 31st, 1999)

- (C) Thruway Arch
- (D) Transit Plaza
- (E) Culvert Structure

Work P/c - New approach - Bn

1946 to 1948

1946 to 1948

1946 to 1948

1946 to 1948