



**Institute of Urban and Regional Development (IURD)  
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THE FLORIDA STATE UNIVERSITY

## **Measuring Transit-Land Use Synergies Through Housing Price Models: Evidence from San Diego, CA**

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## Optimal Context for Transit Impacts

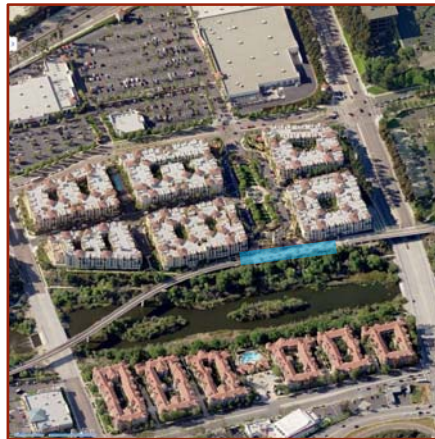
- situating transit stations in the right context can:
    - enhance/broaden the ability of transit to lower generalized travel costs
    - appeal to the preferences of the transit user market segment
  - what is the right context?
    - 3 studies that indicate that transit has greater impacts for:
      - condos as compared to single family homes
      - for condos in pedestrian friendly neighborhoods
      - single family homes that are zoned for higher densities
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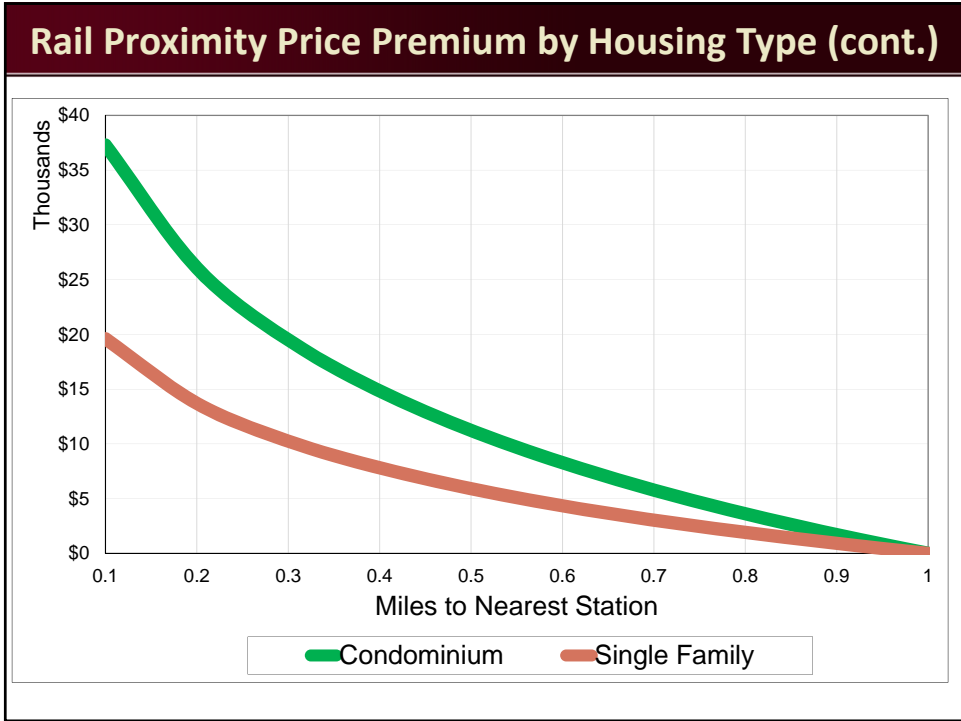
## Station Area Housing Types

Single Family Homes



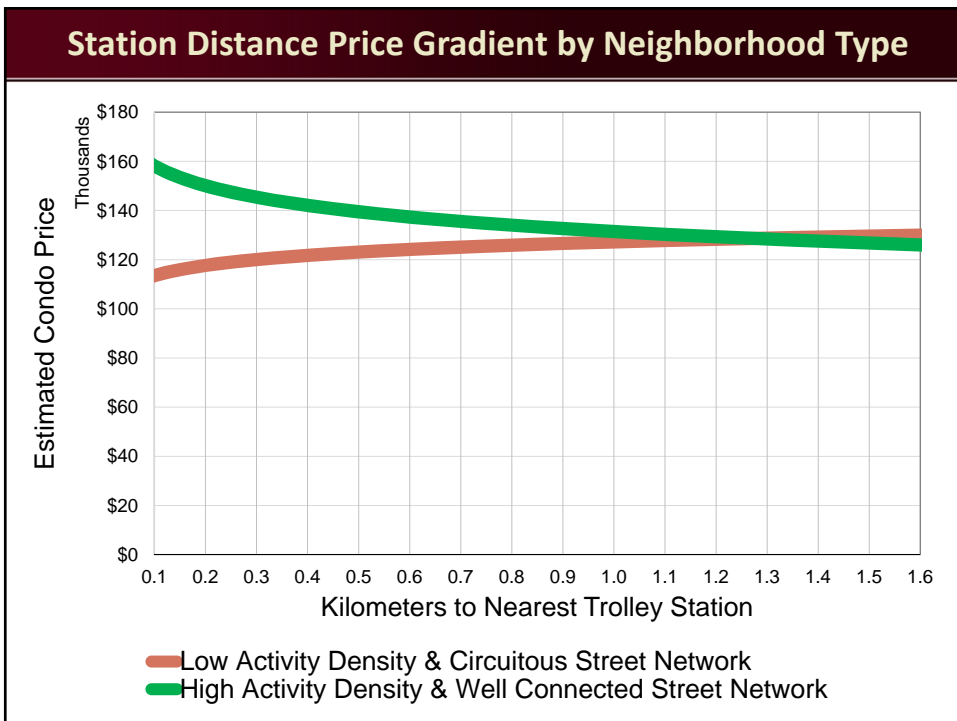
Condos/Apartments





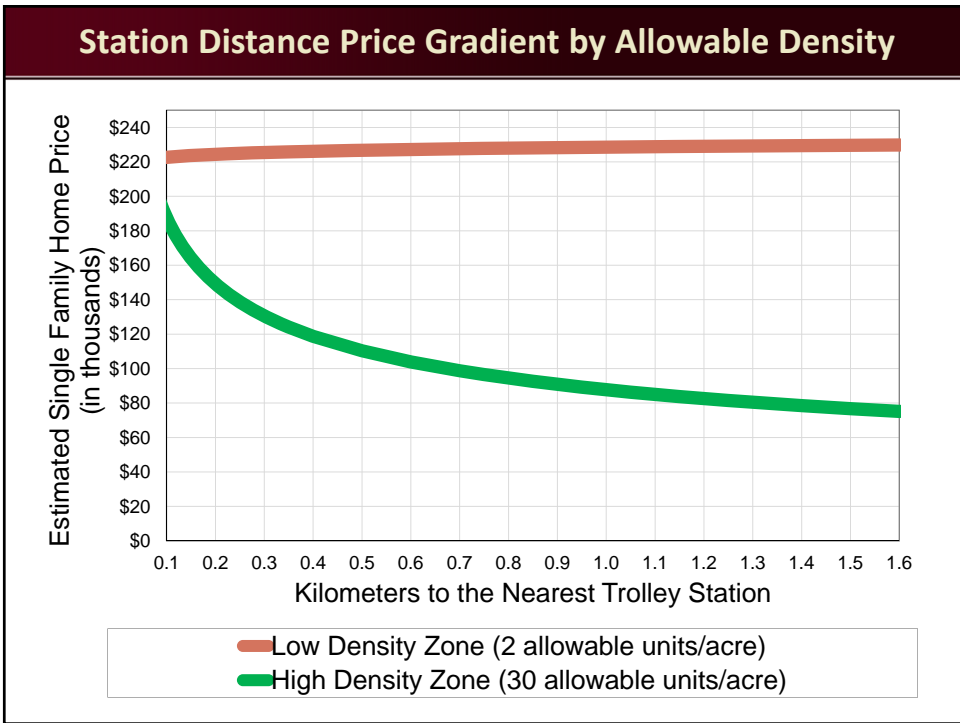
### Rail Proximity Price Premium by Housing Type (cont.)

	Estimated Prices by Station Distance (2000 \$)		Rail Proximity Premium	
	1/4 Mile	1 Mile		
Condominium	\$158 K	\$136 K	<b>\$22 K</b>	<b>16.6 %</b>
Single Family Home	\$217 K	\$205 K	<b>\$12 K</b>	<b>5.7 %</b>



### Rail Proximity Price Premium by Neighborhood Type

Pedestrian Quality	Estimated Condo Prices by Station Distance (2000 \$)			Rail Proximity Premium	
	1/4 Mile	1 Mile			
good	\$142 K	\$127 K		\$15 K	12 %
average	\$135 K	\$128 K		\$7 K	5 %
poor	\$122 K	\$131 K		-\$9 K	-7 %



## Rail Proximity Price Premium by Allowable Density

Allowable Density	Estimated SF Home Prices by Station Distance (2000 \$)		Rail Proximity Premium	
	1/4 Mile	1 Mile		
High (30 units/acre)	\$119 K	\$75 K	<b>\$44 K</b>	<b>59 %</b>
Low (2 units/acre)	\$226 K	\$230 K	<b>-\$4 K</b>	<b>-2 %</b>

## Conclusions

- There does appear to be a synergy between rail investment and land use planning
  - i.e., higher prices indicate the whole of TOD is greater than the sum of its parts
- These findings provide a stronger impetus for station area planning that can better leverage rail investments
- more importantly, it can be used in choosing proper locations for new stations
  - where the proper context already exists
  - where the proper context can REALISTICALLY be created



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**Thank you!**

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## Study Citations

**Duncan, M.** (2011) The Synergistic Influence of Rail Stations and Zoning on Home Prices. *Environment and Planning A*, Vol. 43, No. 9, pp. 2125-2142.  
<http://www.envplan.com/abstract.cgi?id=a43406>

**Duncan, M.** (2011). The Impact of Transit-Oriented Development on Housing Prices in San Diego, CA. *Urban Studies*, Vol. 48, No. 1, pp. 101-127.  
<http://usj.sagepub.com/content/48/1/101.abstract>

**Duncan, M.** (2008). Comparing Rail Transit Capitalization Benefits for Single Family and Condominium Units in San Diego, CA. *Transportation Research Record*, 2067, pp. 120-130.  
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