



“Just Do It!”  
Overcoming the Barriers to  
TOD on the Peninsula



November 14, 2007

## By 2035 the Bay Area will Have:

1.8 million new jobs

1.9 million additional people

Where Will Everybody Live and Work?



Source: Strategic Economics, Bay Area Council, Bay Area Economic Forum, ABAG

# Why TOD? Why the Peninsula?



# TOD: What is it?

**Synergism between land use and transit that reduces auto dependency, increases transit ridership, and delivers:**

- Walkability and Vibrancy
- Expanded Mobility, Shopping and Housing Choices.
- Regional Connectivity
- Financial Return and Value Recapture.
- “low cost” ridership (i.e. park and ride should not be the default)



# TOD = A Walkable Neighborhood

People within a half-mile radius are 5 times as likely to walk to a major transit stop than others. Those who live further from a transit node are less likely to bother with the train or bus.



# Development Around Transit

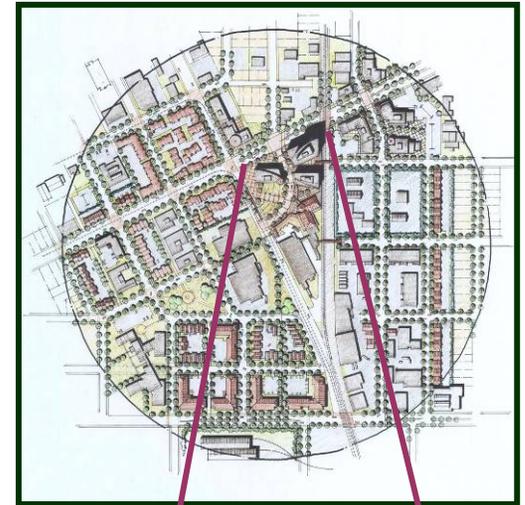
Two types of projects:

## Transit-Oriented Development

- Area within a 5 minute walk
- Transit Villages/Town Centers /urban infill/greenfield

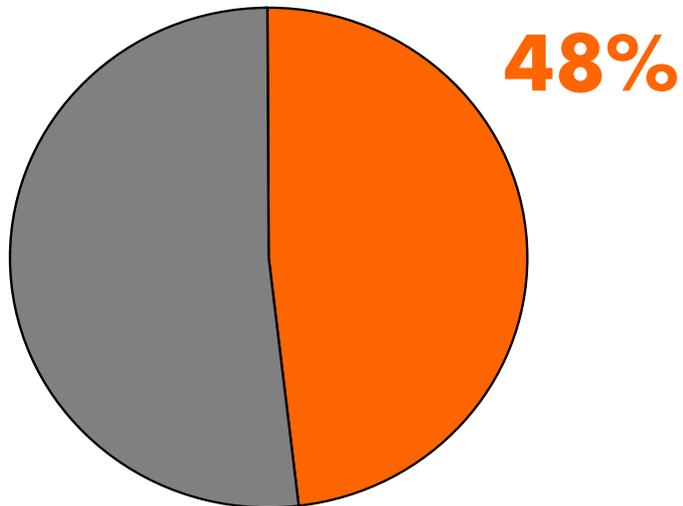
## Joint Development

- On publicly owned land
- Primarily with rail systems

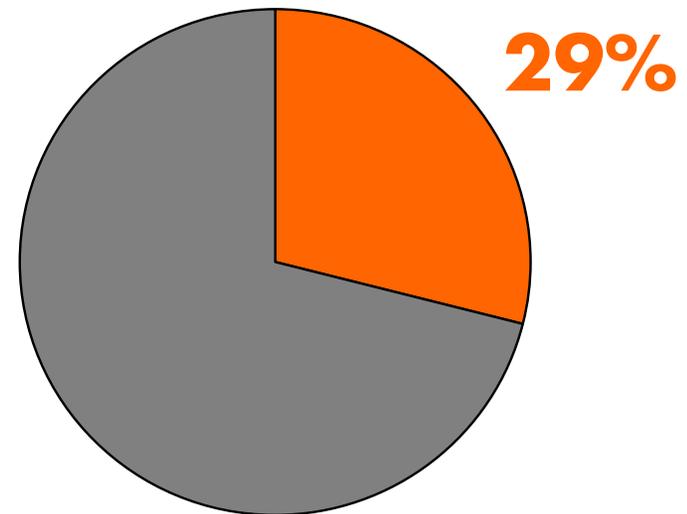


# Share of Income Spent on Housing

Bay Area

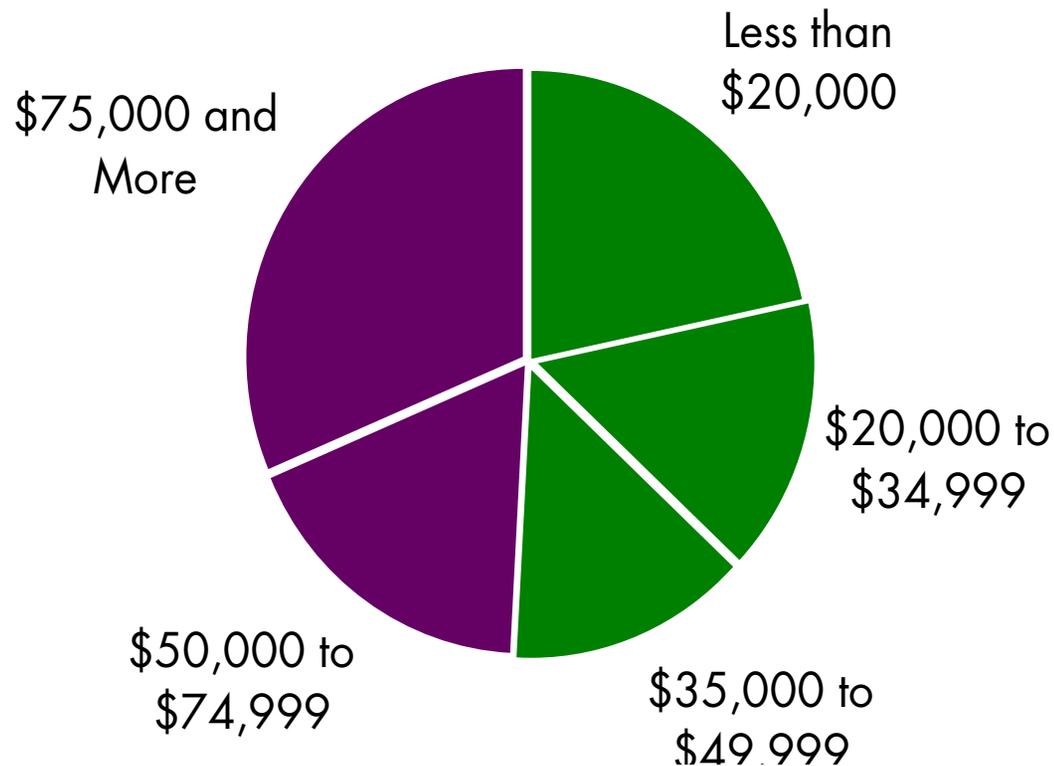


Nation



Source: Strategic Economics, Bay Area Council, Bay Area Economic Forum, ABAG

# By 2030 There will be Demand for 70,000 Housing Units in San Mateo County



# Lower Income Households Burdened Most by Unsustainable Housing + Transportation Costs

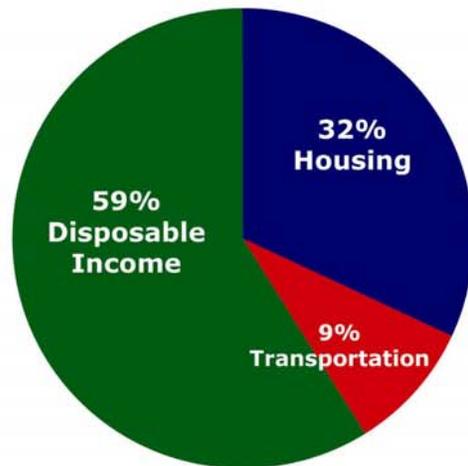
Percentage of Income Spent on Housing and Transportation in the Bay Area

Household Income	<\$20,000	\$20,000 to \$34,999	\$35,000 to \$49,999	\$50,000 to \$74,999	\$75,000 to \$99,999	\$100,000 to \$250,000
Housing	65%	39%	30%	25%	21%	17%
Transportation	54%	32%	23%	17%	13%	8%
<b>Combined Housing and Transportation</b>	<b>119%</b>	<b>71%</b>	<b>53%</b>	<b>42%</b>	<b>34%</b>	<b>25%</b>

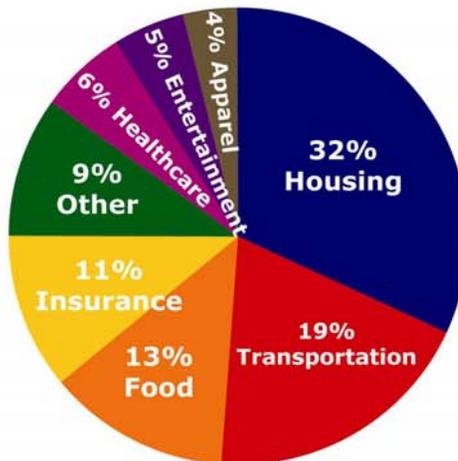
Source: Center for Neighborhood Technology and Virginia Tech University, *Housing & Transportation Cost Trade-offs and Burdens of Working Households in 28 Metro Areas*, Center for Housing Policy, 2006.

# Transportation Costs Play A Key Role In Making Housing More Affordable

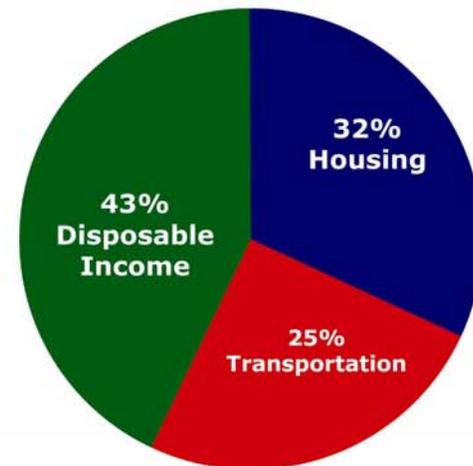
Location Efficient Environment



Average American Family



Auto Dependent Exurbs

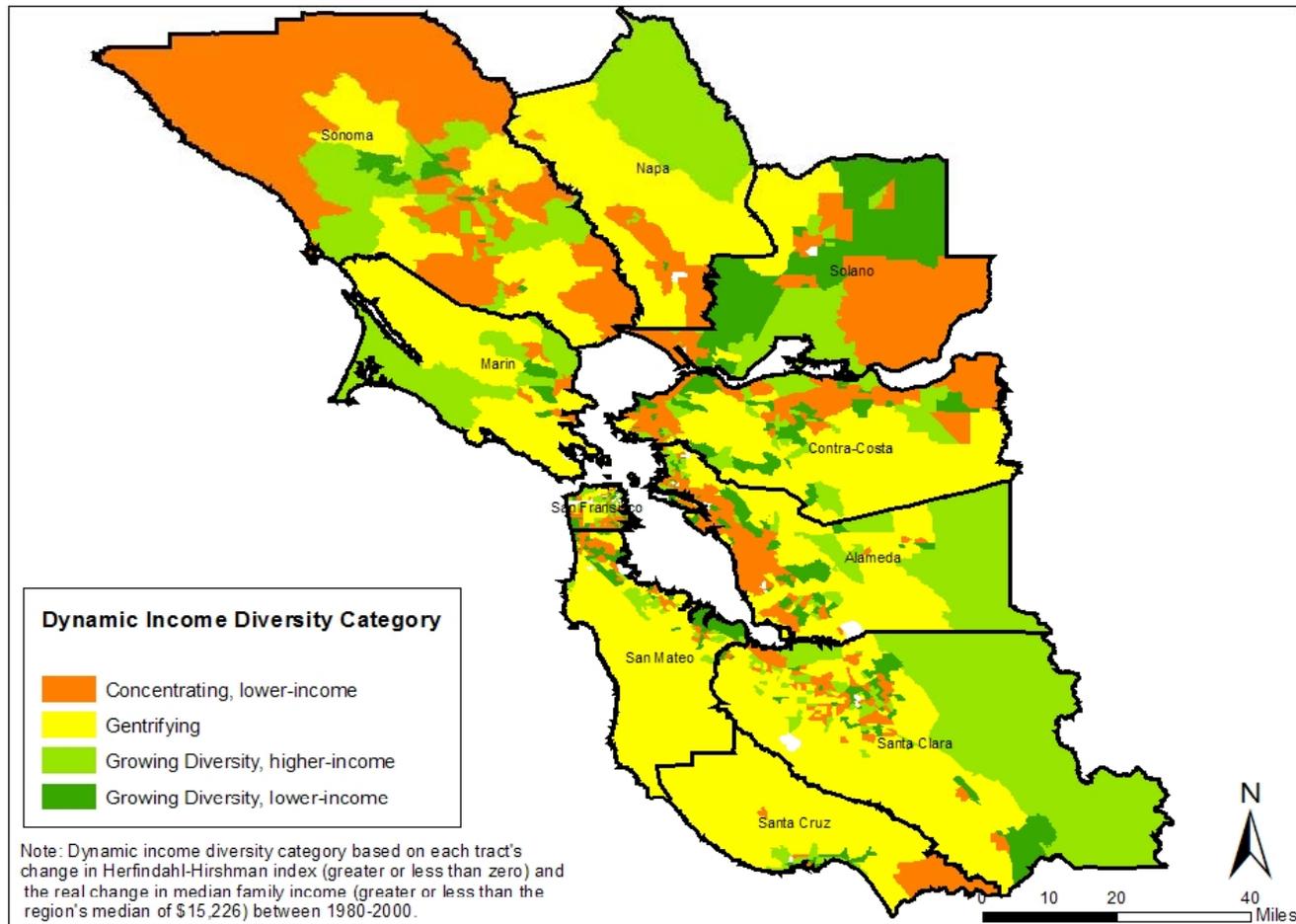


Source: Center for TOD Housing + Transportation Affordability Index, 2004 Bureau of Labor Statistics

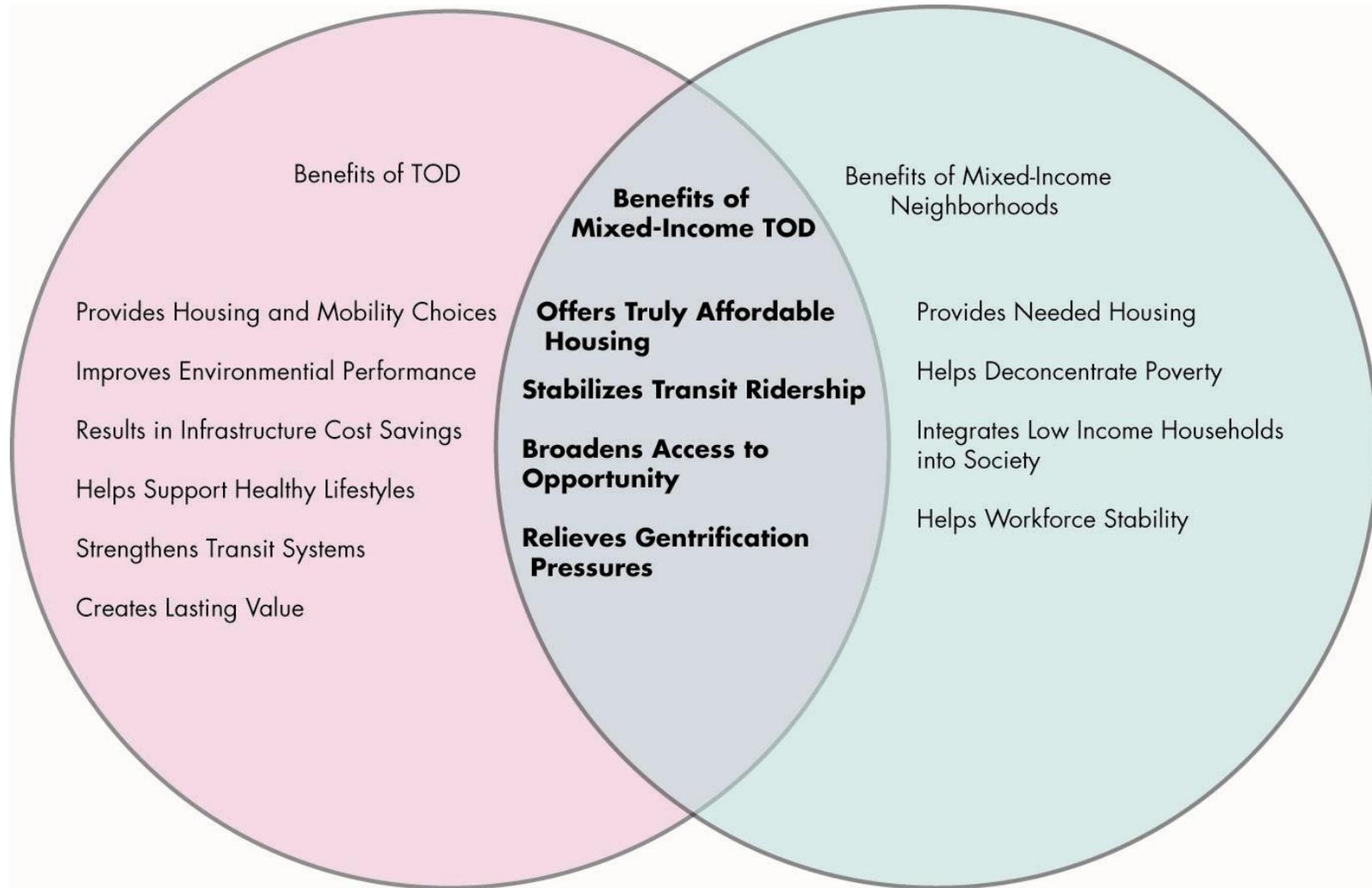
**Benefits of Mixed-Income TOD**

# Declining Neighborhood Income Diversity

Tract-Level Income Diversity Category, 1980-2000



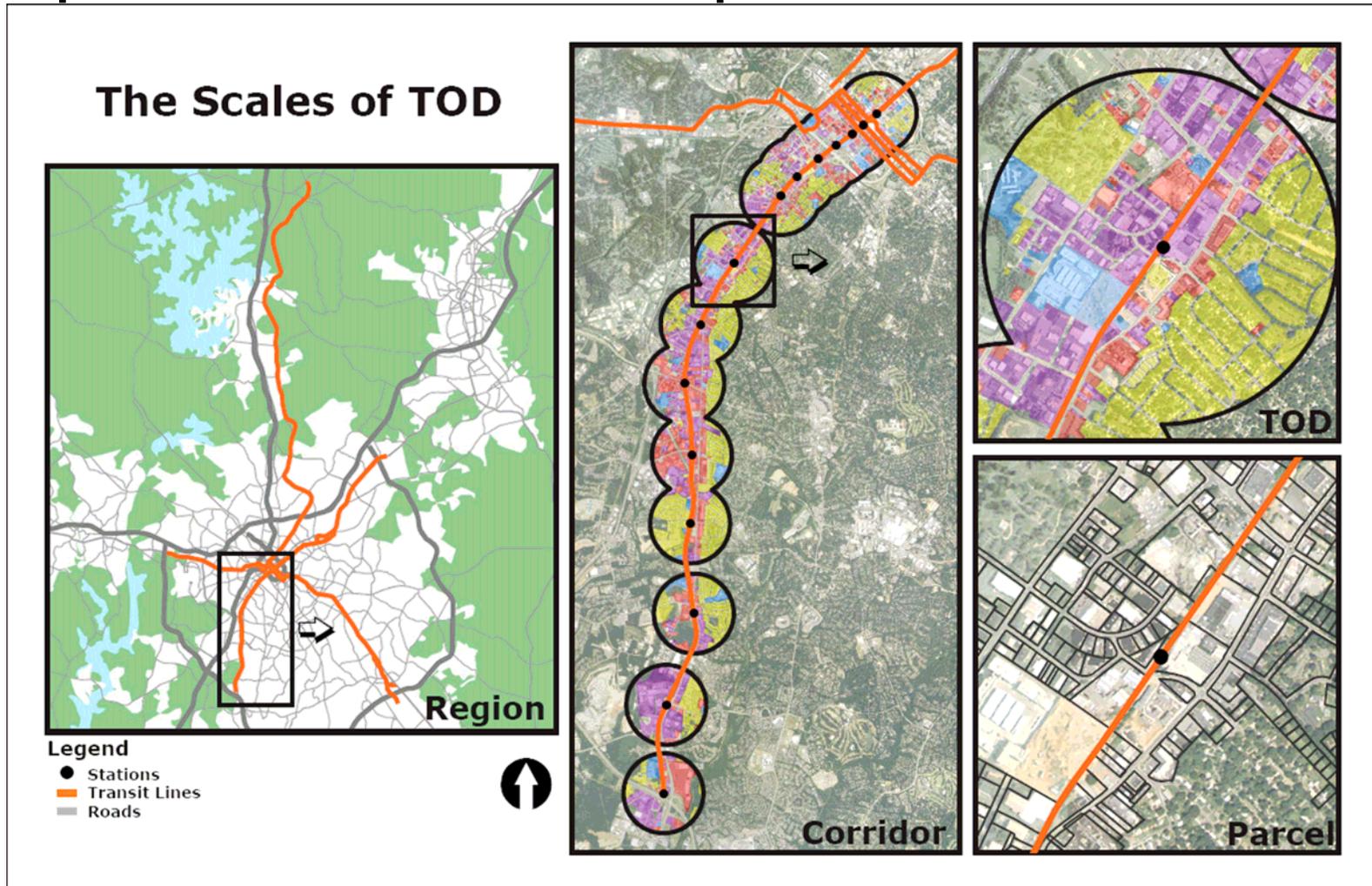
# Benefits of Mixed-Income TOD



# National Challenges to TOD

- No Common Definition or Agreement on Goals and Outcomes.
- Tension between Place-Making and Transit-System Needs.
- Complexity, Time, Uncertainty, Costs.
- Transit Alone Does Not Drive Local Real Estate Investments.

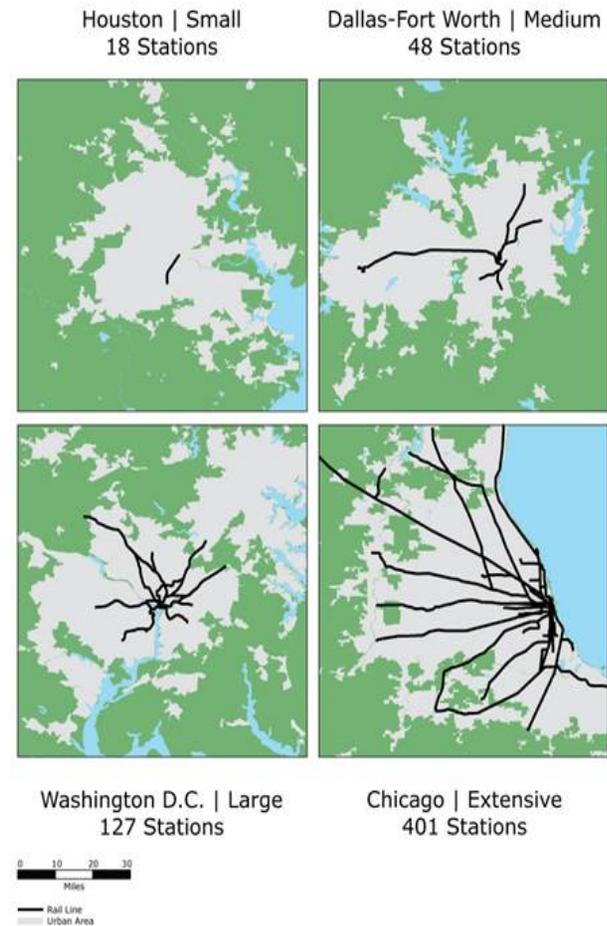
# Planning for TOD is a “Top Down/Bottom Up Process” Process



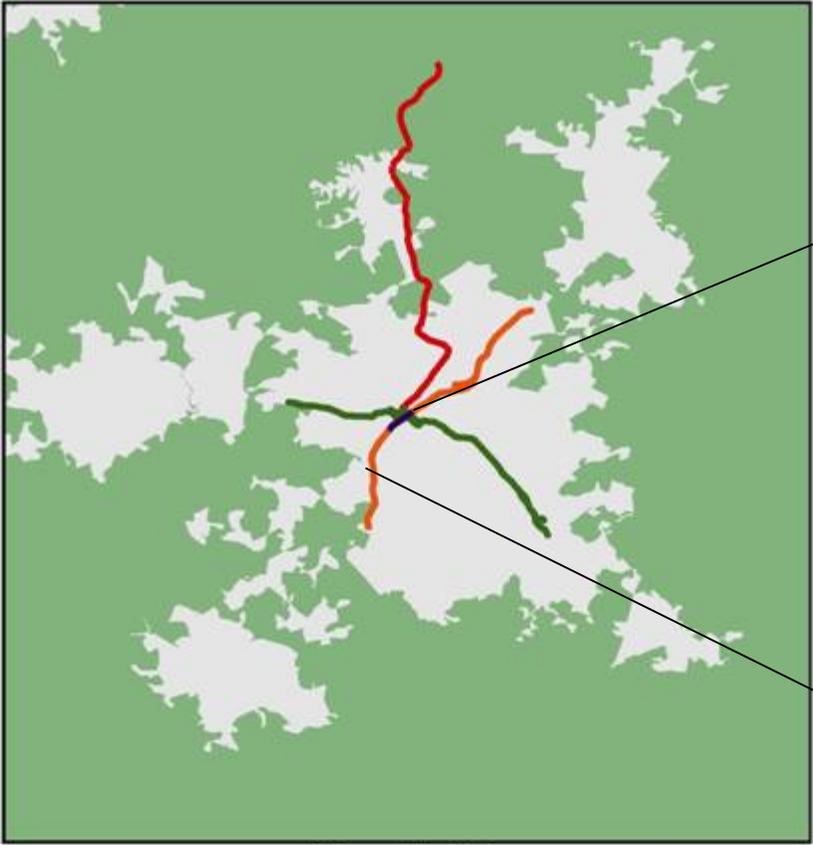
# System Size Matters

<b>System Size Classifications</b>	
Extensive Systems	201 or more stations
Large Systems	70 – 200 stations
Medium Systems	25 to 69 stations
Small Systems	1 to 24 stations

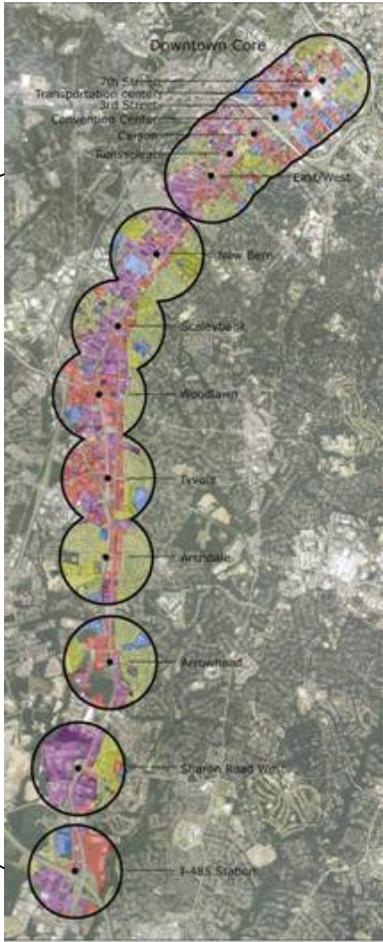
Four Transit Systems Shown at the Same Geographic Scale



# Regions Are Networks of Corridors



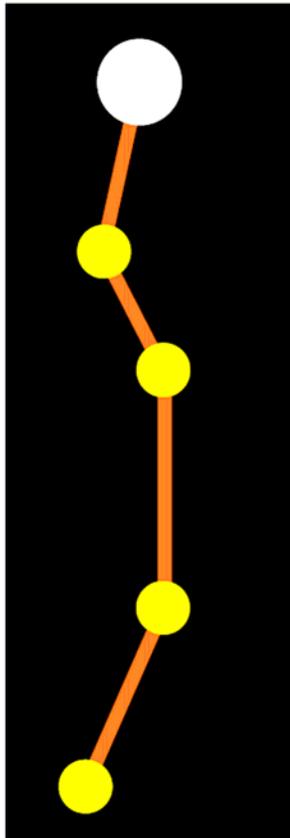
Charlotte



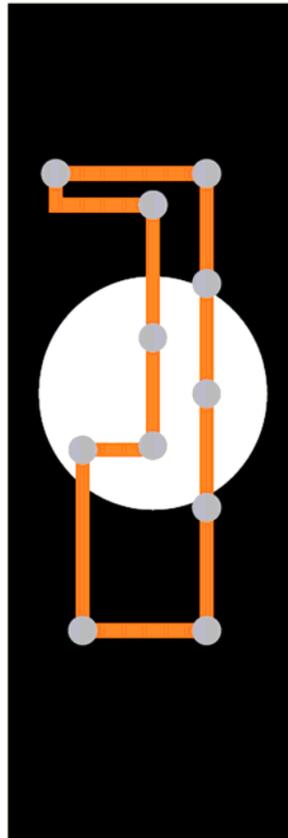
# Four Corridor Types

## Corridor Typology

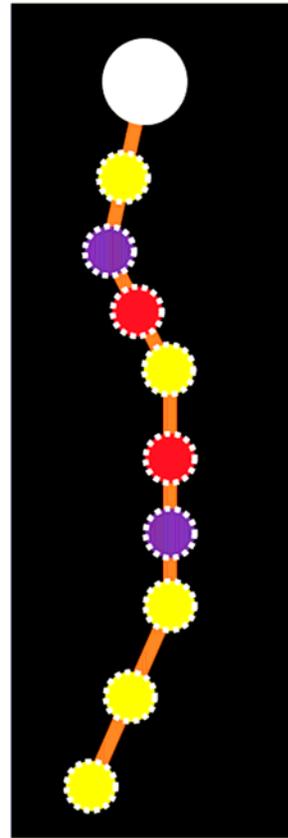
Commuter



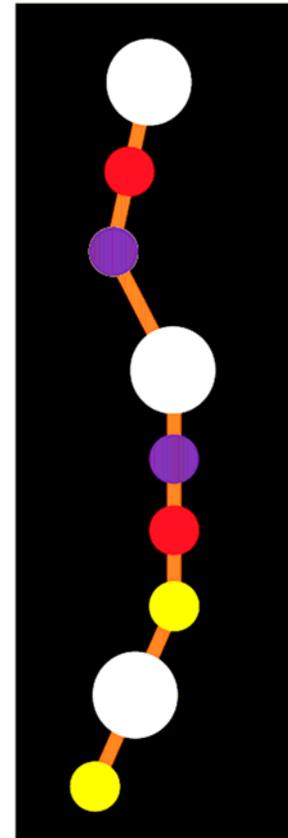
District Circulator



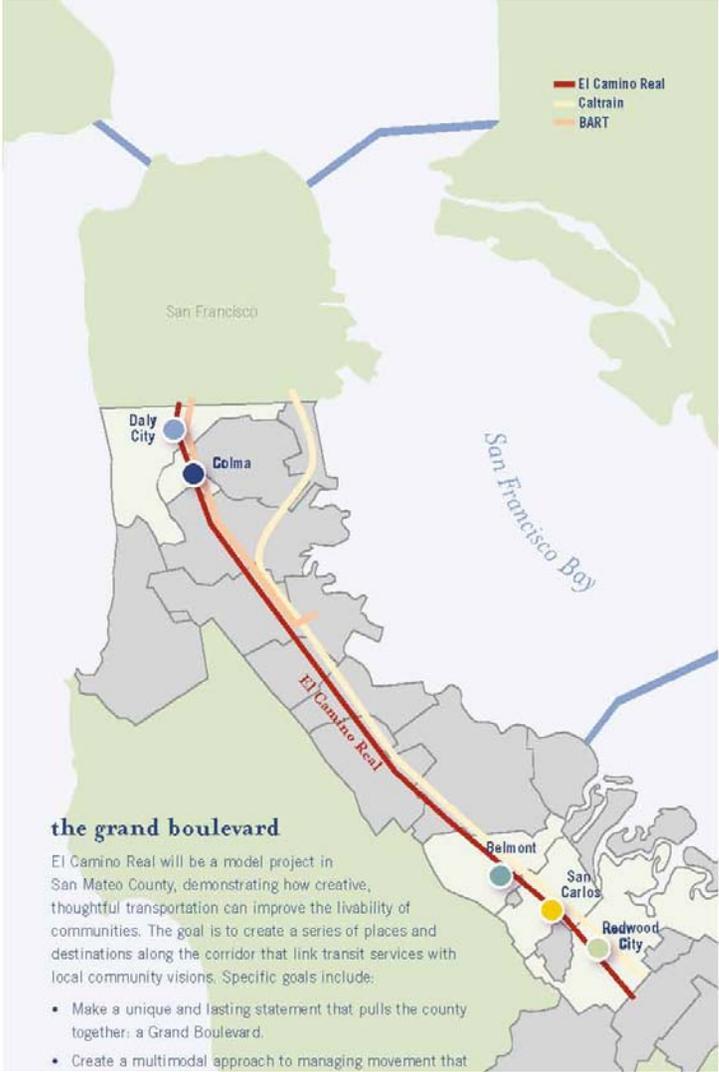
Planned Growth



Destination Connection



# Caltrain, BART, and El Camino Function as One Transit Corridor in the Bay Area



# San Mateo County Transit-Oriented Development Opportunity Study



## Purpose:

Assess opportunities and constraints and develop action plans for TOD implementation at station areas in San Mateo County.

## Phase I

Existing Conditions, Preliminary Market Analysis, Assessment of Opportunities and Constraints.



## Phase II

Implementation strategies to facilitate TOD at five station areas. Ridership projections for Caltrain and BART.

# Study Area



½ Mile Area surrounding 18 rail stations

- 4 BART Stations
- 13 Caltrain Stations
- 1 Intermodal Station (Millbrae)



Includes 13 cities and unincorporated areas of San Mateo County



# Phase I: Existing Conditions

Population in all station areas total approximately 113,000

Median income household:

Station Areas: \$39,000 to \$101,500

San Mateo County - \$75,000

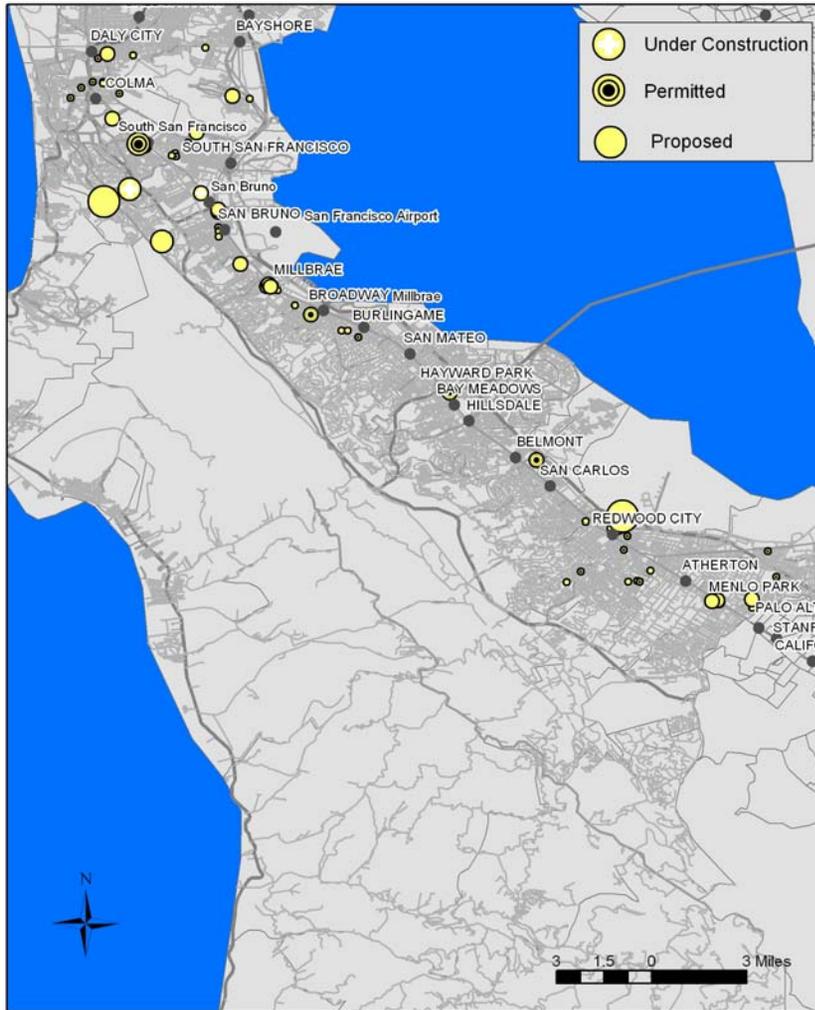
## Predominant Land Use

*Residential uses:* Atherton, Belmont, Broadway, Daly City and San Carlos

*Commercial/industrial uses:* Hayward Park, Hillsdale, Redwood City, San Bruno BART, San Bruno Caltrain, and South San Francisco Caltrain

*Balanced:* Burlingame, Menlo Park, Millbrae and San Mateo

# Phase I: Strong Market Demand for TOD In all station areas by 2030:



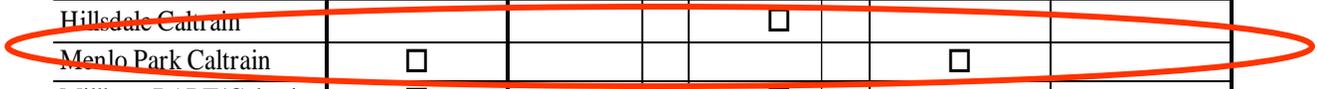
- Demand for an additional 13,400 dwelling units
- Demand for higher-density housing
- Increase in households headed by persons 65+ year old
- Increase in households without children
- Demand for an additional 24.4 million square feet of office space

# Phase I: Issues and Constraints by Station Area

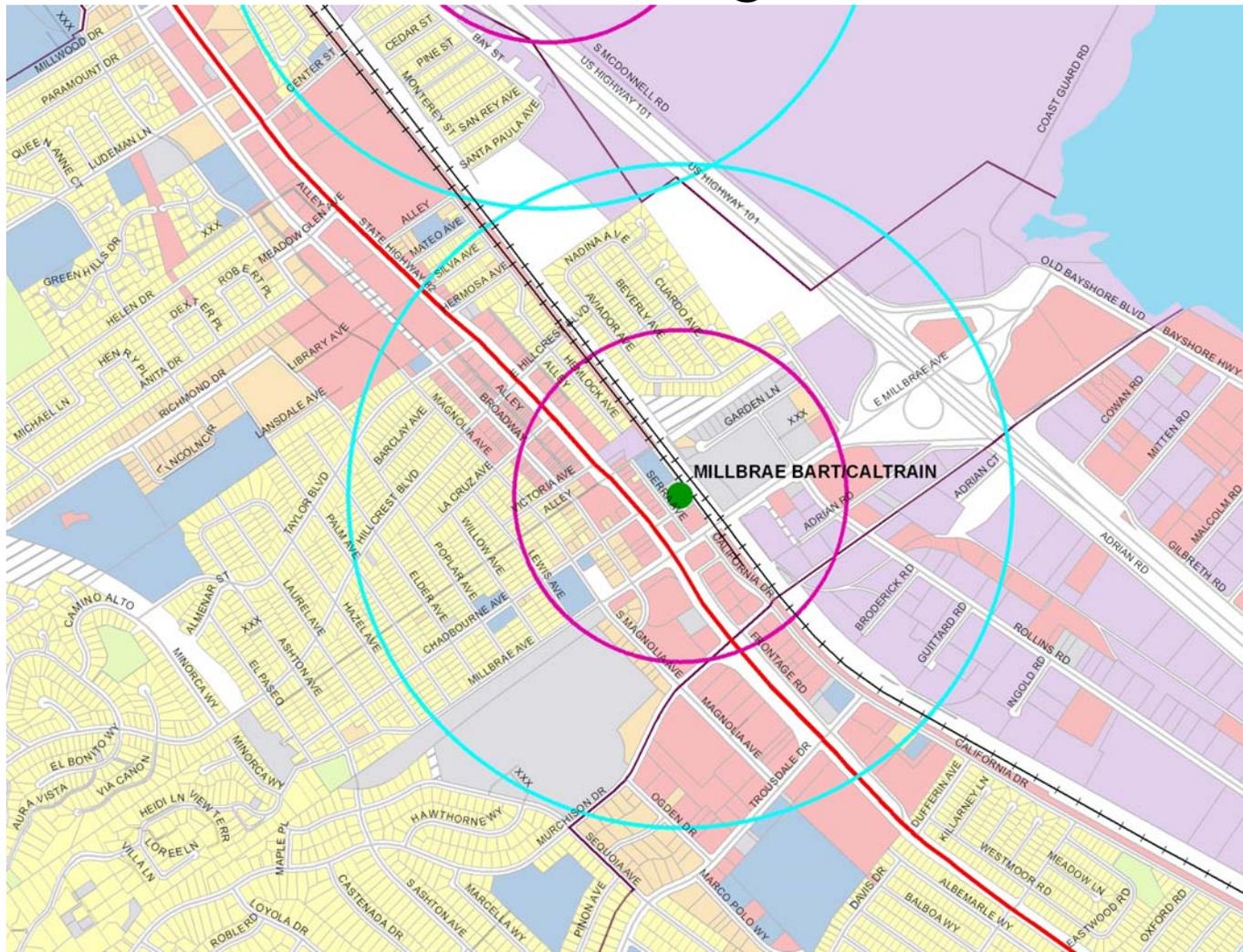
Station Area	Zoning Ordinances and Policies	Station Access	Visibility-Connectivity with Existing Activity Centers	Site Availability or Ease of Assembly	Environmental Issues or Conditions
Atherton Caltrain	■	□	■	■	
Bayshore Caltrain	□	□	■	□	■
Belmont Caltrain	□		□	□	
Broadway Caltrain	□	□		■	
Burlingame Caltrain	□	□		■	
Colma BART	□		□		
Daly City BART	N/A	□	□	□	
Hayward Park Caltrain		□	□		
Hilledale Caltrain			□		
Menlo Park Caltrain	□			□	
Millbrae BART/Caltrain	□		□		■
Redwood City Caltrain			□	□	
San Bruno BART	□		□		■
San Bruno Caltrain	□	□		□	■
San Carlos Caltrain	□			□	
San Mateo Caltrain		□	□	■	
So. San Francisco BART	□			□	
So. San Francisco Caltrain	□	□	□		

■ = Fixed Constraints

□ = Remediable Constraints



# Phase I: Small Parcels Comprise the Biggest Challenge



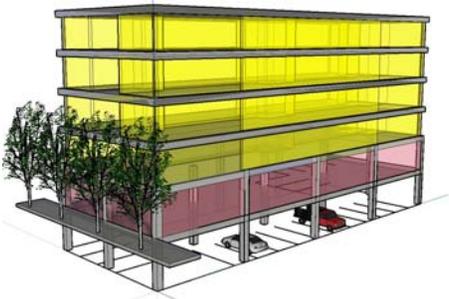
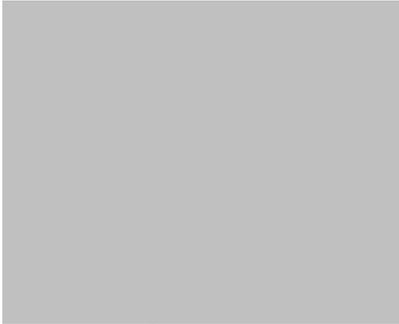
# Phase II: Focus Areas for Implementing TOD

1. Encouraging TOD on Small Parcels
  - Milbrae, South San Francisco, San Bruno
2. Promoting Alternative transportation Modes
  - Belmont South San Francisco
3. Public Outreach
  - Belmont

# Encouraging TOD on Smaller Parcels

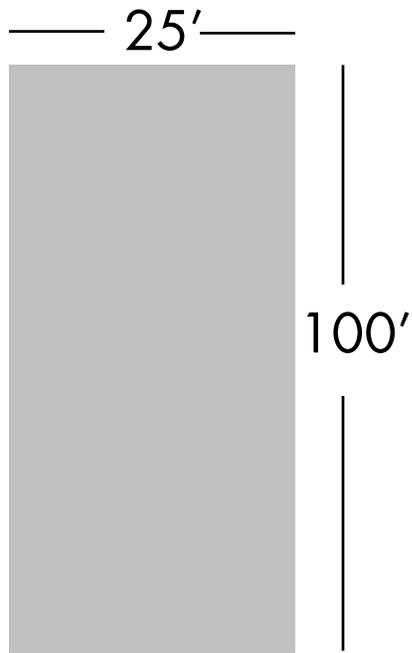
## Methodology:

- Conceptual development programs for typical parcel size in 3 station areas
- Financial feasibility analysis of development to evaluate parcel size, mixed use vs. residential, affordable housing policy
- Developer interviews to understand existing context of infill and land assembly
- Policy Scan



# Very Small Lots have Large Physical Constraints:

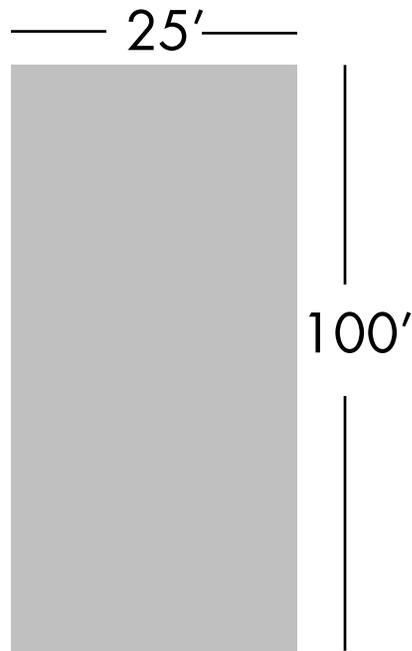
## Parking is Challenging



- Underground Parking is **NOT** Physically Feasible on a 25' x 100' lot
- Surface Parking Severely Restricts the Ability to Build on the Site
- Podium Parking Prohibits Ground Floor Commercial Uses but Maximizes the Lot's Development Potential

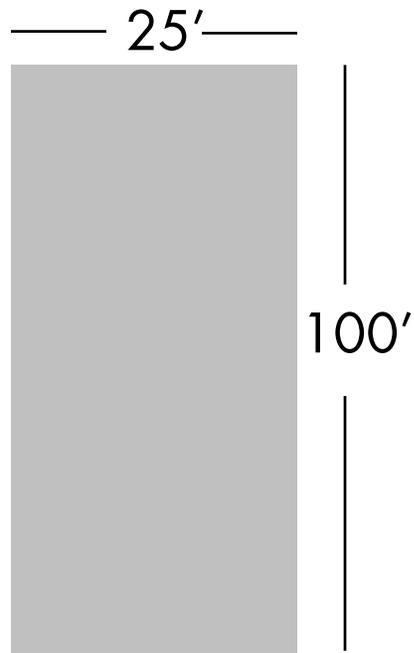
# Very Small Lots have Large Physical Constraints:

Development is Limited to a Single Use



- Because Podium Parking Eliminates the Potential to Develop the Ground Floor, the Development Can Only Support Uses on Upper Floors

# Development on a Very Small Lot CAN be Physically and Financially Viable



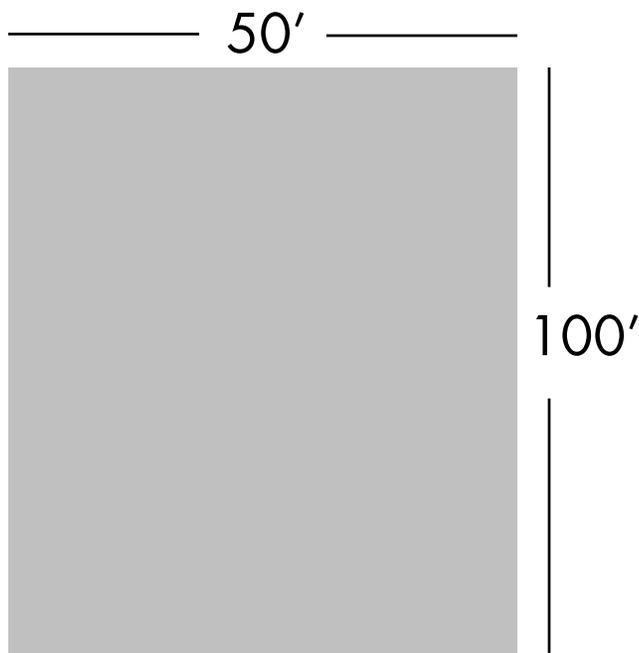
**Residual Land Value**

**Per Square Foot**

**\$94**

# As Lot Size Increases, Developers have more Options:

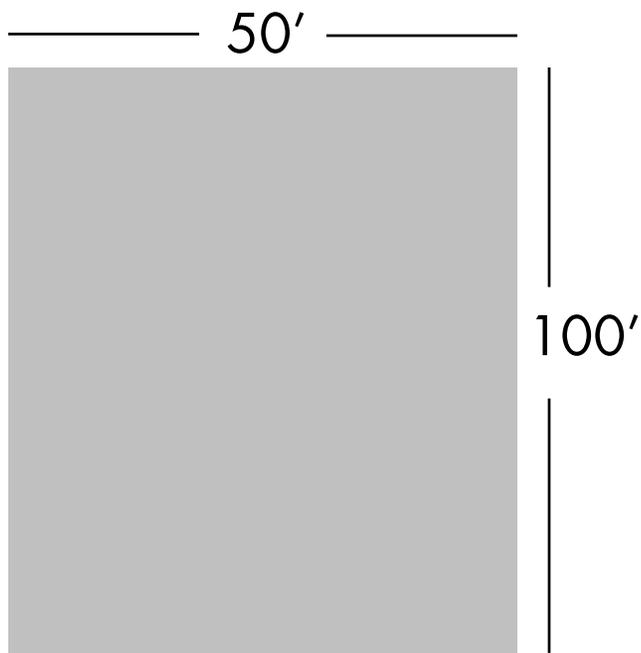
## Parking Remains Challenging



- Underground Parking is *still* not Physically Feasible on a 50' x 100' lot
- *But* Podium Parking CAN Coexist with Ground Floor Commercial Uses

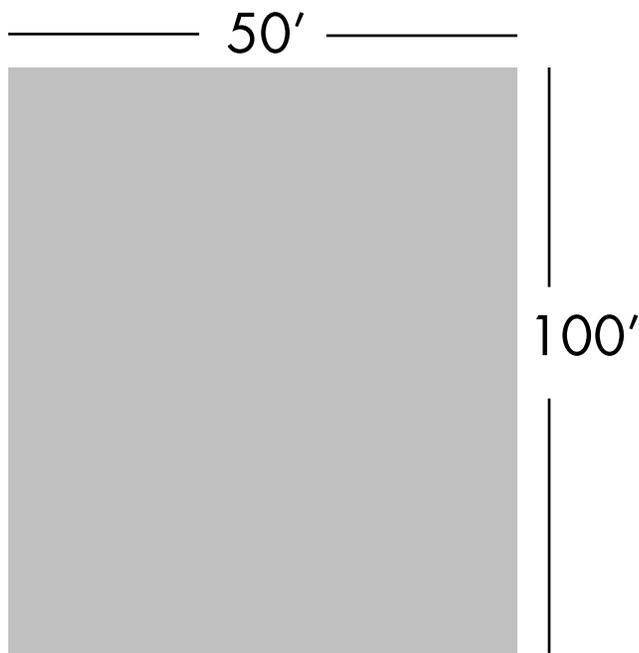
# As Lot Size Increases, Developers have more Options:

## A Mix of Uses is Possible



- Because the Site is Large Enough to Include Podium Parking in the Rear and Ground Floor Commercial in the Front, Developers have more Flexibility with the Development Program

# Development on a Lot this Size is Physically and Financially Feasible

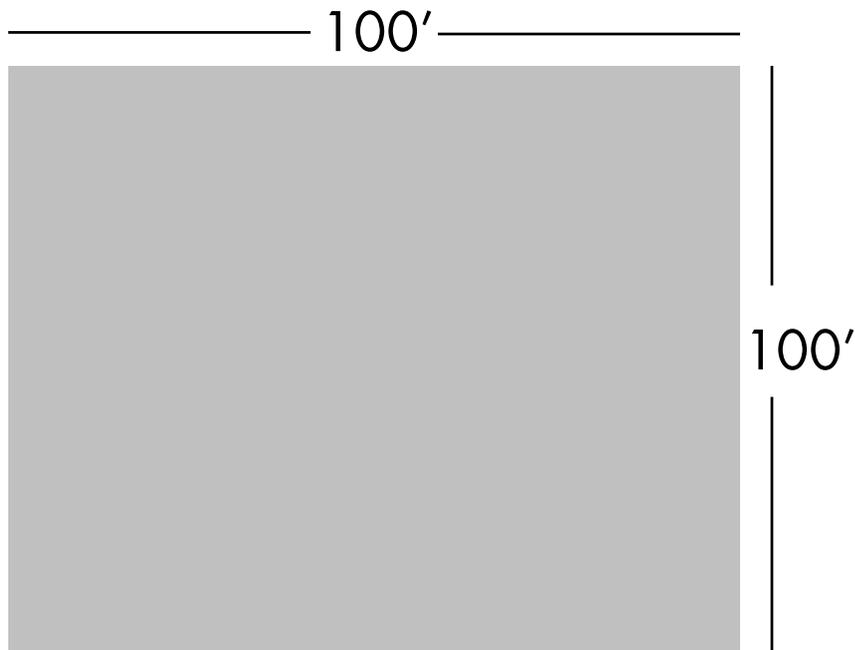


**Residual Land Value Per  
Square Foot**

**\$46 - 104**

# As Lot Size Continues to Increase, Development Potential Broadens Even Further:

## Parking Options Expand

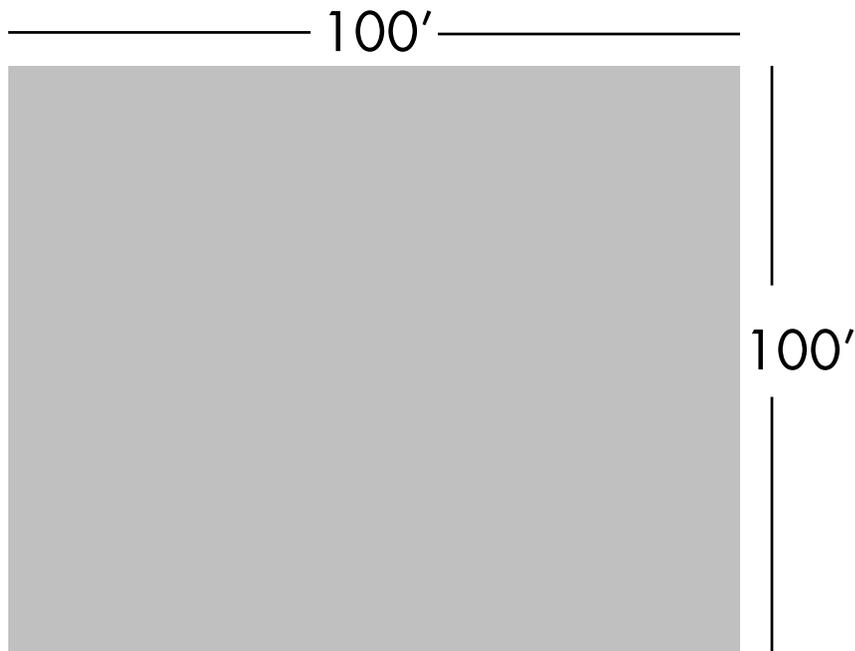


- ◆ Underground Parking IS Physically Feasible

- ◆ Parking Can be DOUBLED by Building One Level of Podium Parking on top of a Level of Underground Parking

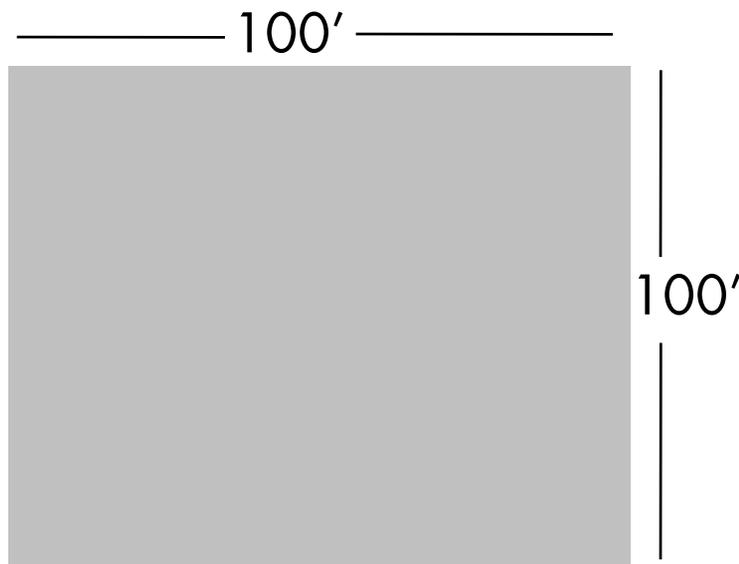
# As Lot Size Continues to Increase, Development Potential Broadens Even Further:

## A Mix of Uses is Possible



- Because the Site is Large Enough to Include Podium Parking in the Rear and Ground Floor Commercial in the Front, Developers have more Flexibility with the Development Program

# Development on a Lot this Size is Physically and Financially Feasible and Optimizes Each Use



**Residual Land Value Per  
Square Foot**

**\$46 - 203**

# Key Findings

- ◆ Parking poses a significant financial and spatial challenge to small lot development
- ◆ Maximizing the number of residential units on the site maximizes land value
- ◆ Mixed-use development is increasingly feasible as lot size increases (particularly if underground parking is achievable)
- ◆ Larger or combined lots increase potential for density and development profits



# How do Inclusionary Housing Policies Impact the Development Feasibility of Small Lots?

# Feasibility of Development Program

Development Program	25' x 100'	50' x 100'	100' x 100'
15% Inclusionary Housing	Infeasible	Infeasible	<b>Maybe</b>
20% Inclusionary Housing	Infeasible	Infeasible	Infeasible
In-Lieu Fee of \$43,167 per Unit, Applied to All Units	Infeasible	Infeasible	<b>Feasible</b>
In-Lieu Fee of \$150,000/unit Applied to 15% of Units	Infeasible	Infeasible	<b>Feasible</b>

# Key Findings - Inclusionary Policies

- ◆ A project's ability to incorporate an inclusionary requirement depends on whether it can disperse the cost over many units
- ◆ The only lot size in this analysis that could incorporate an inclusionary requirement and remain financially feasible was the largest lot size
- ◆ In-lieu fee requirements were more achievable in this analysis than a standard 15% or 20% inclusionary housing requirement

# 25' x 100' Lot



# 50' x 150' Lot



# 50' x 150' Lot



40' x 200' Lot



# Encouraging TOD on Smaller Parcels

## Summary Findings

- On-site parking requirements not cost-effective or difficult to meet
- Cost per square foot is higher due to fixed costs of development
- Private land assembly requires multiple negotiations, sometimes land owners not interested in selling or developing, or land banking too costly
- Developers are often local entrepreneurs with limited experience and/or resources
- Inclusionary housing policies are problematic

# TOD Strategies

1. Streamline the Entitlements Process with Good Planning

# TOD Strategies

2. Ease Parking and Affordable Housing Requirements for Individual Projects by Using a “District” Approach.

# TOD Strategies

3. Assist with Land Assembly.

# TOD Strategies

4. Balance Parking Supply and Demand.

# TOD Strategies

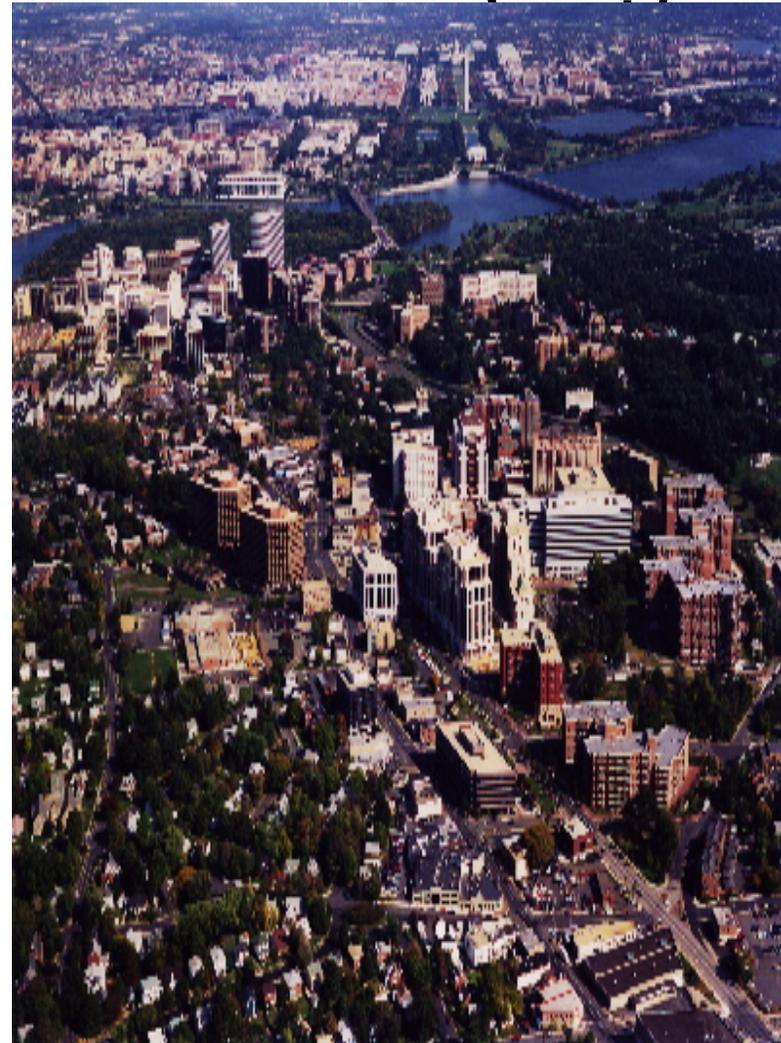
5. Improve Access.

# TOD Strategies

6. Maintain Communication with Community Members and Developers.

# Some Final Inspiration: Rosslyn-Ballston Transit Corridor (Virginia)

- Used Metrorail as catalyst for redevelopment of commercial spine
- Concentrated density and promoted mixed-use at five stations
- Preserved and reinvested in adjacent residential neighborhoods



# Rosslyn-Ballston: Results

- 73.3% of patrons walk to transit; over 58,000 trips daily;
- 38 % of residents near stations take transit to work.
- Average County HH income is \$63,000
- 12% of Arlington County households don't own cars; regional average is 4% carless
- The R-B Corridor produces 32.8% of the County's real estate tax revenue from 7.6% of it's land area, allowing Arlington to have the lowest property tax of any major jurisdiction in Northern Virginia



# **So Just Do It (TOD)**

## **San Mateo County!**