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11-18-2016

# Realistic or Utopian? Coordinating Transit and Land Use to Achieve Equitable Transit-Oriented Development

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Carlton, Ian, "Realistic or Utopian? Coordinating Transit and Land Use to Achieve Equitable Transit-Oriented Development" (2016). *PSU Transportation Seminars*. 102.  
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# Realistic or Utopian?

Coordinating Transit and Land Use to Achieve  
Equitable Transit-Oriented Development

Ian Carlton

November 18, 2016

# Equitable Transit-Oriented Development



1. Market does not deliver TOD where we want it, let alone complicated E-TOD
2. Ineffective to deliver E-TOD within our predominant market-based system
3. Could modified/new real estate development institutions deliver E-TOD?

# E-TOD quantity, pitfalls, & success factors

## action guide

MIXED-INCOME  
TRANSIT-ORIENTED

**STRATEGIES + TOOLS**

Changing/Vulnerable Population • Low Land Capacity

**PRIMARY STRATEGY**

- Preserve TOD-appropriate affordable housing

**TOOLS LOCALLY CONTROLLED**

- "Project based" Section 8 preservation
- Subsidized housing redevelopment/renovation

**TOOLS THAT LEVERAGE PARTNERS**

- Target-property acquisition & rehabilitation funds

• Increase affordable homeownership opportunities

**TOOLS LOCALLY CONTROLLED**

- Linkage fees
- Limited equity housing co-ops
- First-right-of-refusal laws for tenants and nonprofits

**TOOLS THAT LEVERAGE PARTNERS**

- Limited equity cooperative
- Self-help programs
- TOD-targeted homeownership assistance
- Community land trusts

**SECONDARY**

- Preserve affordable development opp

**TOOLS LOCALLY CONTROLLED**

- "Project based" S
- Subsidized housing renovation

**TOOLS THAT LEV**

- Target-property a
- rehabilitation fun

• Promote transit populations

**TOOLS THAT ARE**

- Implement physic improvements


**TOOLS THAT LEV**

- Improve transit
- Provide greater a resources

To request clarification or seek guidance about Mixed-Income TOD, please email [info@mitod.org](mailto:info@mitod.org). To learn more about TOD, visit our website: [www.ctod.org](http://www.ctod.org)

## Developing and Implementing the City of Los Angeles' Transit Corridors Strategy

# Coordinated Action toward a Transit-Oriented Metropolitan Area



**PRRAC**  
Poverty & Race  
Research Action Council

**Authors:**  
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Center for Community Innovation, University of California at Berkeley  
Ian Carlton, Ph.D.  
Institute for Quality Communities, University of Oklahoma

Ian Carlton, Robert Cervero, Michael Rhodes  
October 1, 2012

## Equitable Transit Oriented Development

Examining the progress and continued challenges of affordable housing in opportunity and transit-rich areas

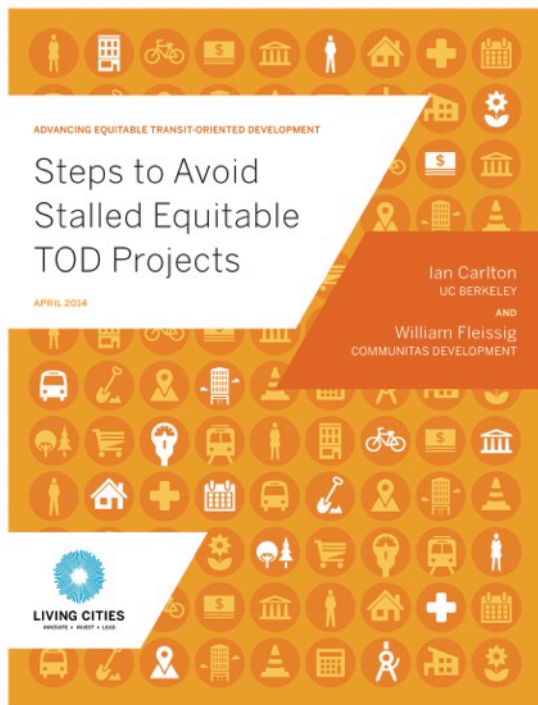
**Authors:**  
Miriam Zuk, Ph.D.  
Center for Community Innovation, University of California at Berkeley  
Ian Carlton, Ph.D.  
Institute for Quality Communities, University of Oklahoma

## Steps to Avoid Stalled Equitable TOD Projects

ADVANCING EQUITABLE TRANSIT-ORIENTED DEVELOPMENT

APRIL 2014

Ian Carlton  
UC BERKELEY  
AND  
William Fleissig  
COMMUNITAS DEVELOPMENT



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# Hamstrung by faith in (fear of) transit impacts

“We need inclusionary zoning or the equivalent at every one of these stations.”

– L.A. Housing stakeholder



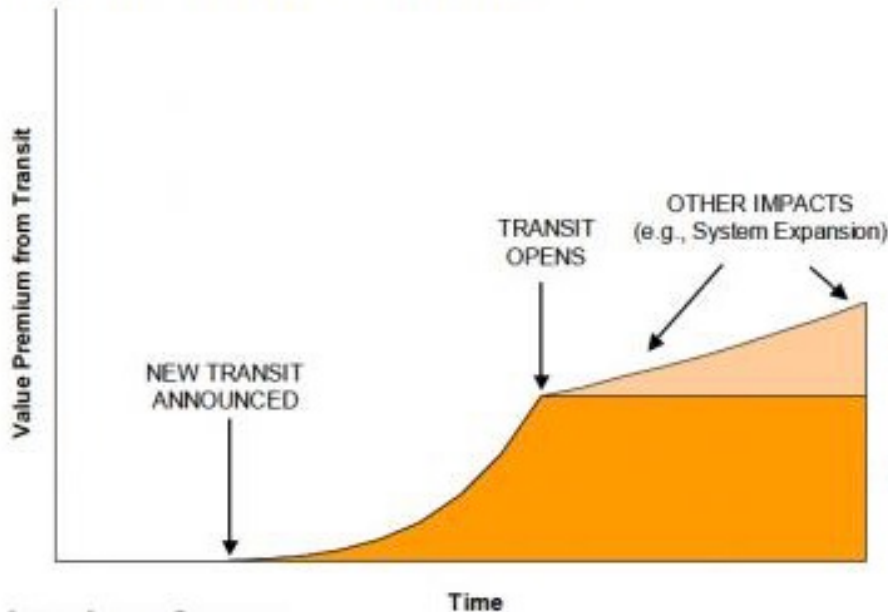
# Proximity to transit stations can impact prices and land values

- e.g., Chatman et al., 2012; Duncan, 2011; Rodriguez and Mojica, 2009; Hess and Almeida, 2007; Cervero and Duncan, 2002; Strand and Vågnes, 2001; Lewis-Workman and Brod, 1997; Cervero and Landis, 1997; Benjamin and Sirmans, 1996; Bajic, 1983



# Data is full of variation – presents averages

FIGURE 3-1: THE VALUE CURVE IN THEORY



Source: Strategic Economics.

## Demand impact can...

- ...be quite small
- ...be negative
- ...vary between submarkets
- ...be inadequate to influence development

# E-TODs stalled due to financial/market factors

Case study	Actual performance	Financial factors	Readiness factors	Offsite factors	Onsite factors	Other complicating factors	Total TOD Score	Expected outcome
Adams & Central, Los Angeles, CA	<i>Modest Stall</i>						73	<i>Modest Stall</i>
Quincy Center, Quincy, MA	<i>Prolonged Stall</i>						69	<i>Moderate Stall</i>
MacArthur Park Apartments, Los Angeles, CA	<i>Moderate Stall</i>						66	<i>Moderate Stall</i>
Denver Design District, Denver, CO	<i>Prolonged Stall</i>						44	<i>Prolonged Stall</i>
The Crossings, San Leandro, CA	<i>Prolonged Stall</i>						42	<i>Prolonged Stall</i>
Fruitvale Village, Oakland, CA	<i>Prolonged Stall</i>						33	<i>Prolonged Stall</i>
Market Creek, San Diego, CA	<i>Prolonged Stall</i>						19	<i>Prolonged Stall</i>

# Markets matter to E-TOD success



Avalon Bay's project in Walnut Creek, CA includes 20% affordable housing, public parks, ground floor retail, structured parking. The development relied on TIF proceeds and a complex site procurement contract with the Bay Area Rapid Transit District.



McCormack Baron Salazar's project at MacArthur Park in Los Angeles, CA includes 90 affordable apartments, ground floor retail, and commuter parking stalls for transit patrons. The development relied on 10 different financial sources, including several that partially funded the construction of retail space that was not supported by market rents.

# Hamstrung by erroneous view of real estate

“If we could just get the locals to zone TODs right, the developers would make a killing and pour into our market.”

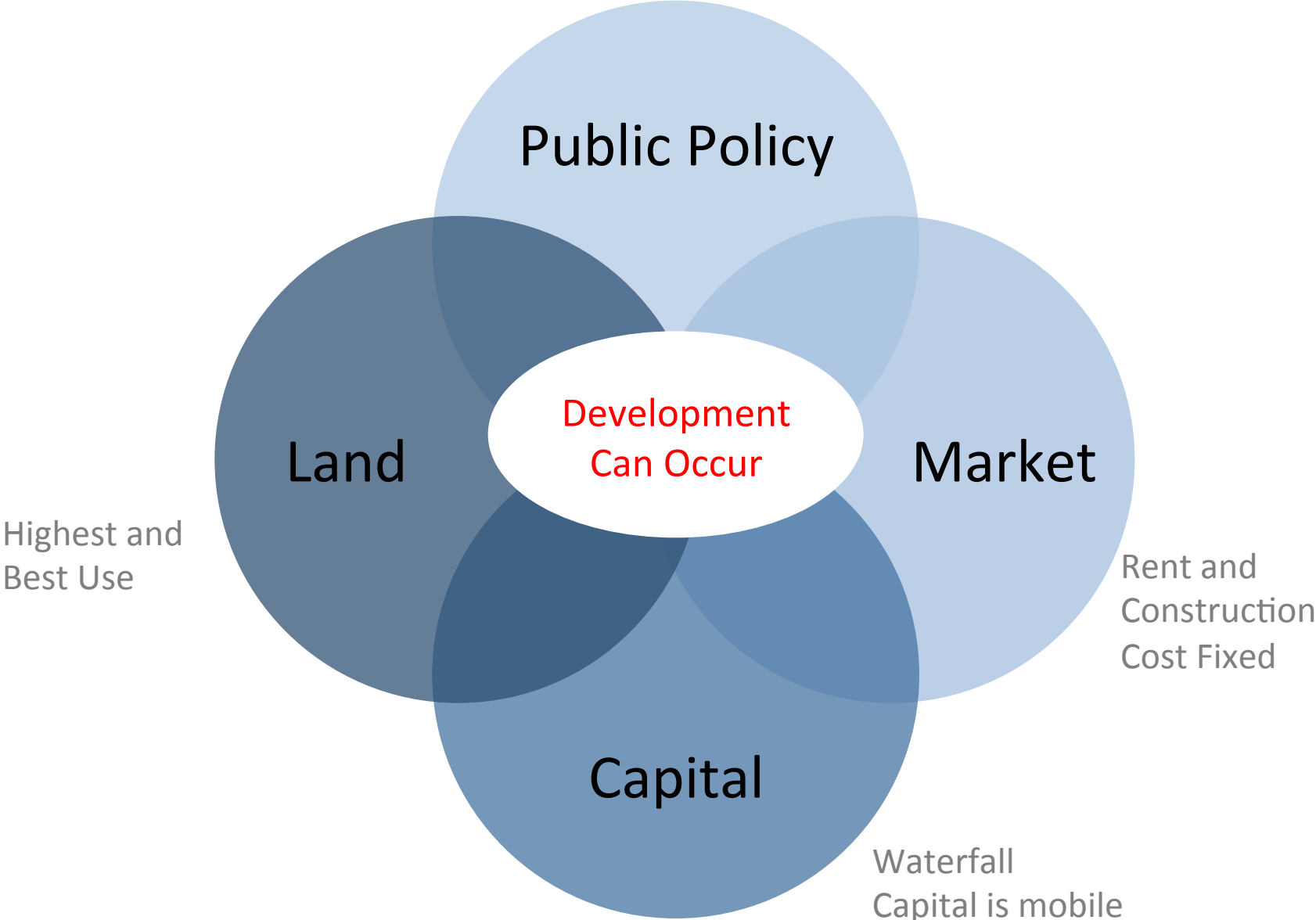
- Minneapolis transit planning stakeholder



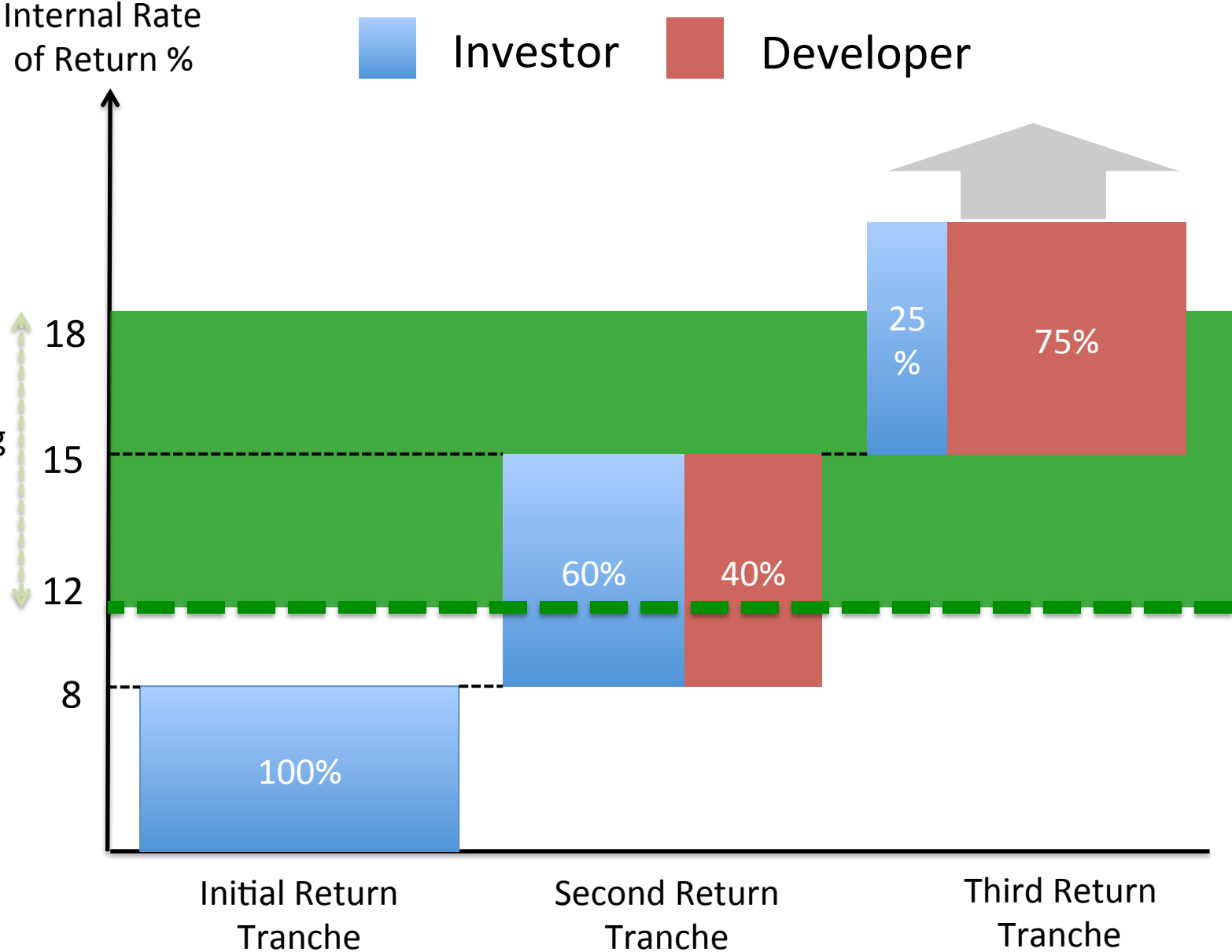
**“In our work we were repeatedly struck by the extreme lack of communication and mutual understanding between transit planners and private-sector real estate interests. [...] Research into the tools and decision-making processes within the real estate market would provide a valuable resource for planners.”**

*– Knight and Trygg, 1977 p. 207*

# Understanding the Economics of Development

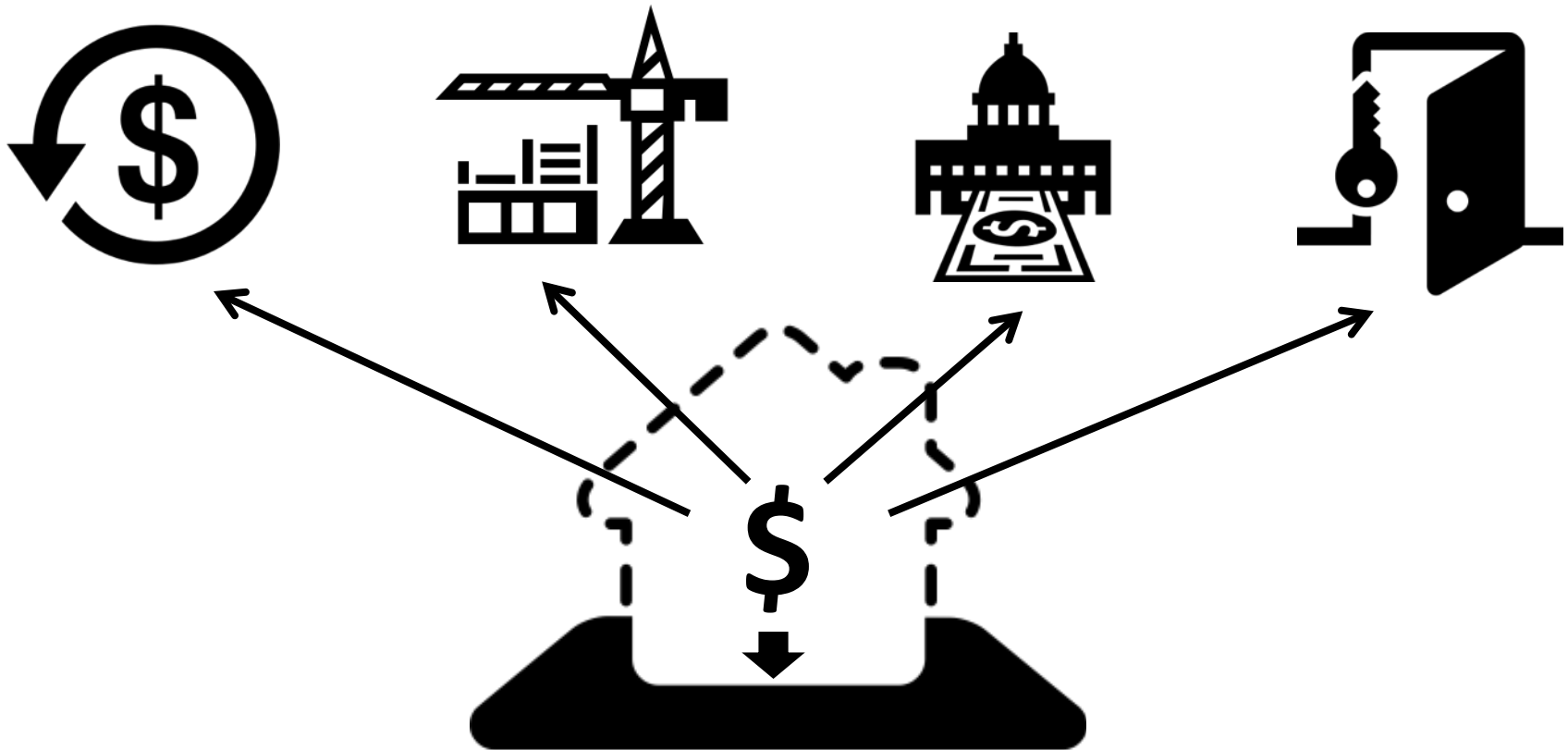


# Net Cash Flow Distributions (“Waterfall”)



## RLV = Developer Maximum Land Budget

Given a set of capital, construction, operating costs, and revenue assumptions

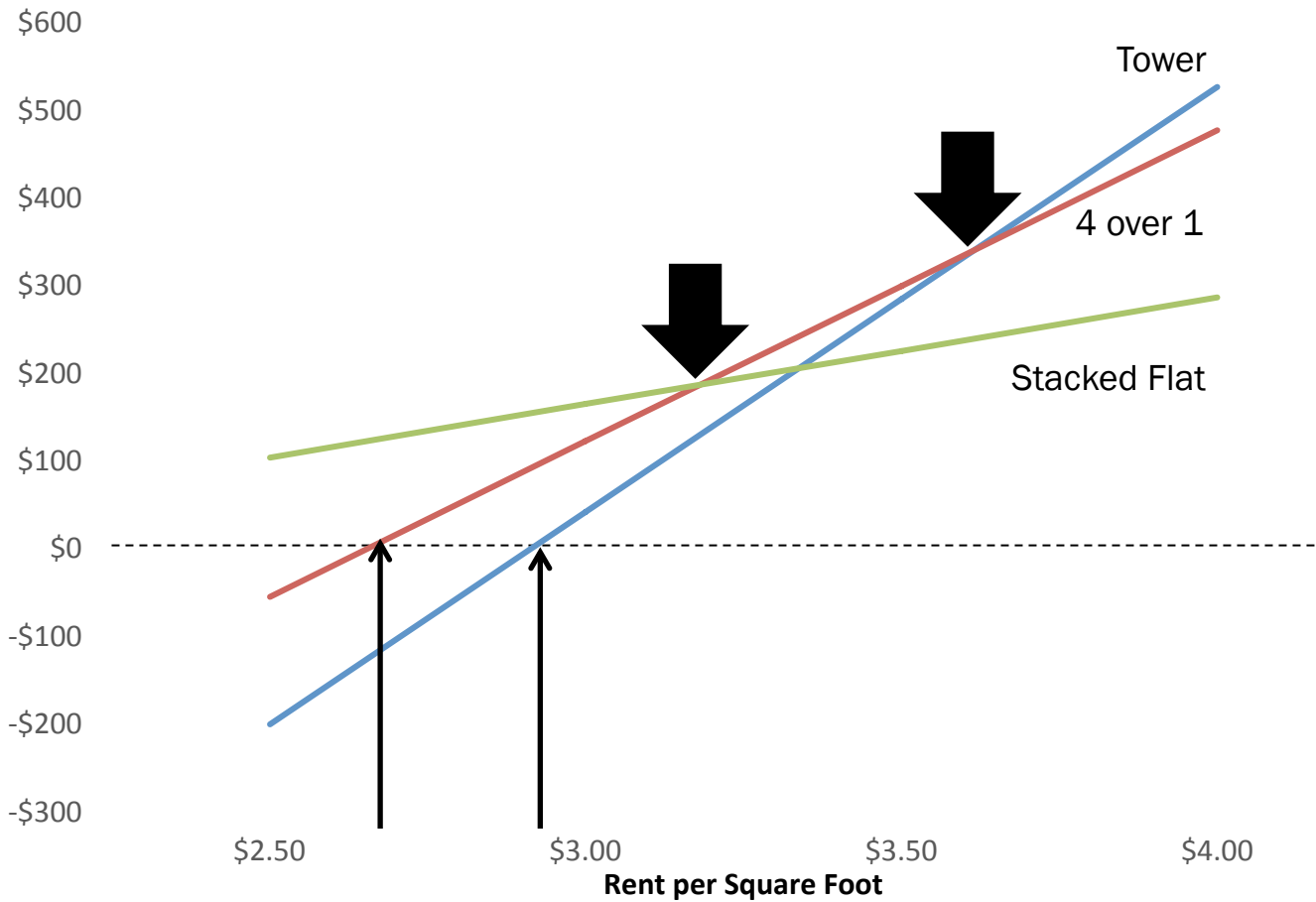




# Residual Land Values



### Residual Land Value by Construction Prototype



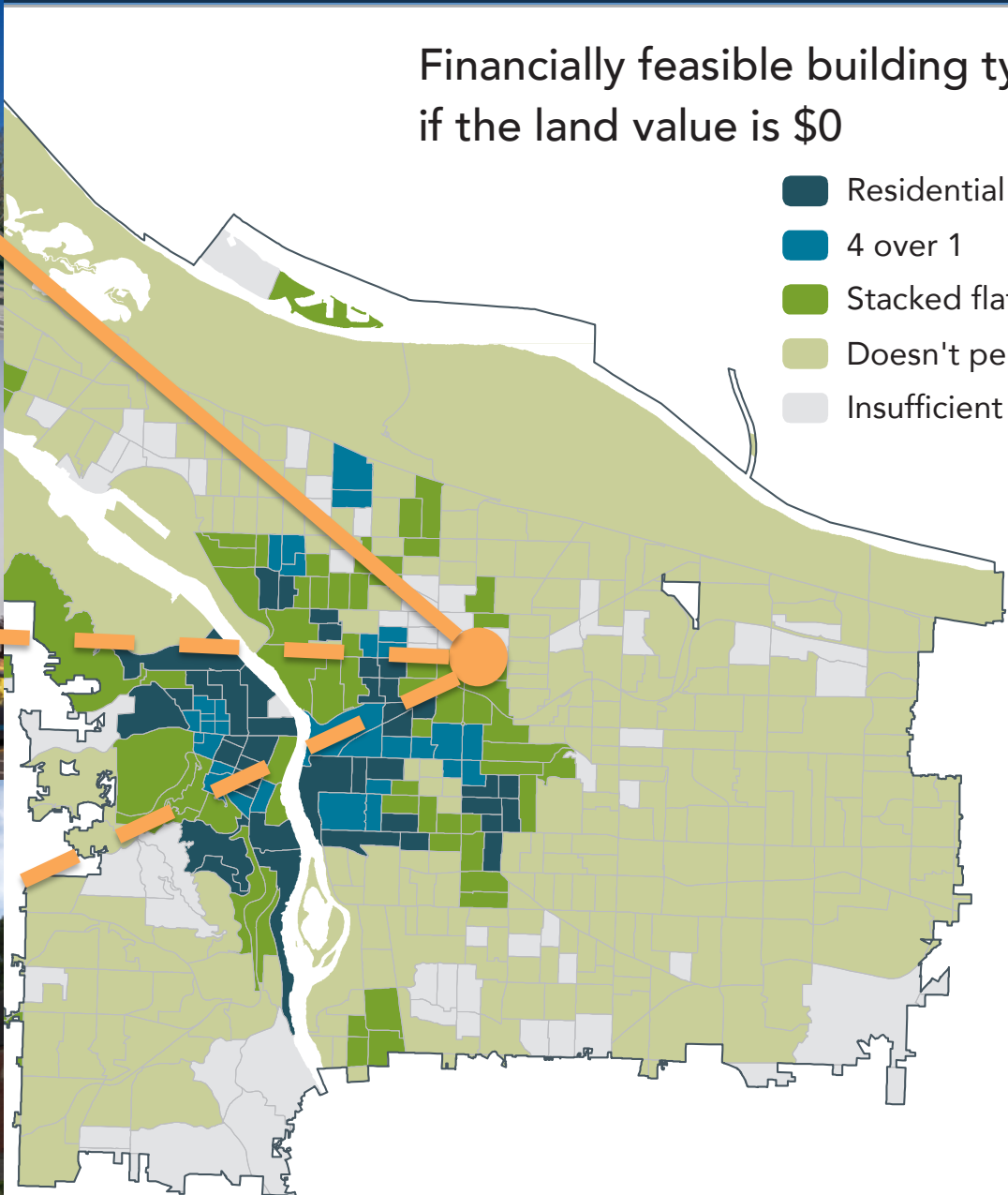
$RLV = \$ \text{ per gross square foot of land}$

# Housing Development Feasibility



Financially feasible building types  
if the land value is \$0

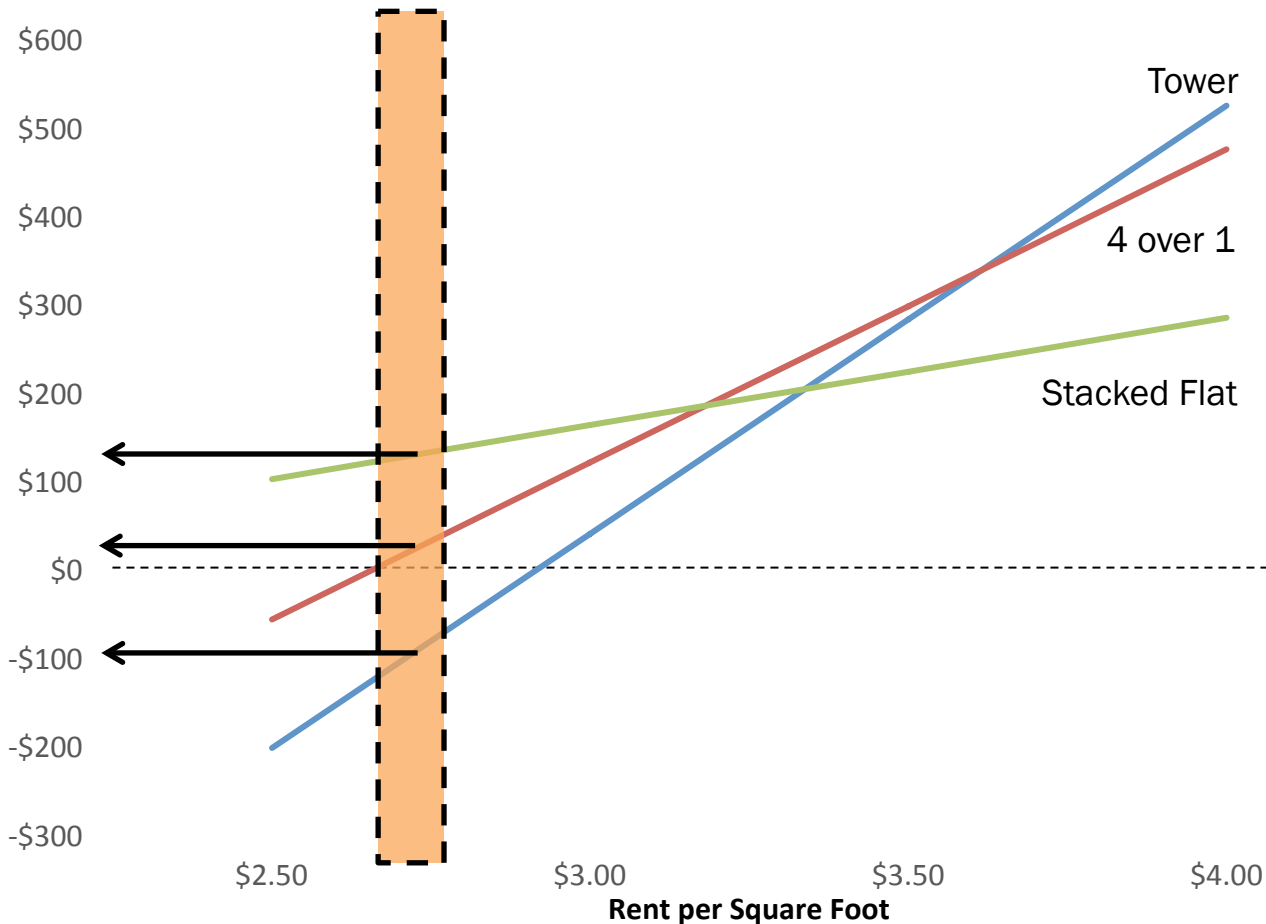
- Residential tower
- 4 over 1
- Stacked flats
- Doesn't pencil
- Insufficient data



# Residual Land Value



## Residual Land Value by Construction Prototype



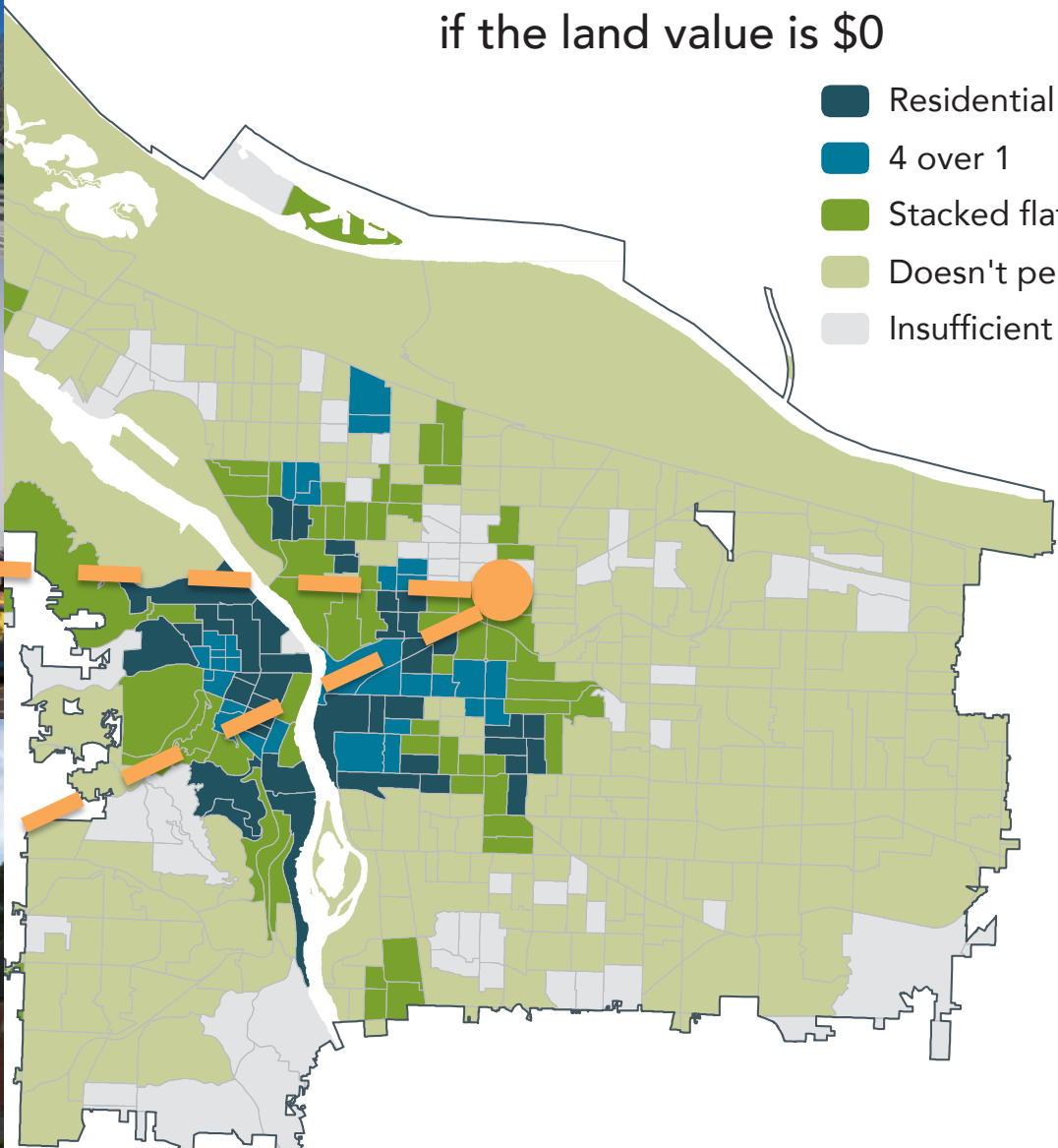
RLV = \$ per gross square foot of land

# What about E-TOD?



Financially feasible building types  
if the land value is \$0

- Residential tower
- 4 over 1
- Stacked flats
- Doesn't pencil
- Insufficient data



# Including Affordable Housing



Stacked Flats

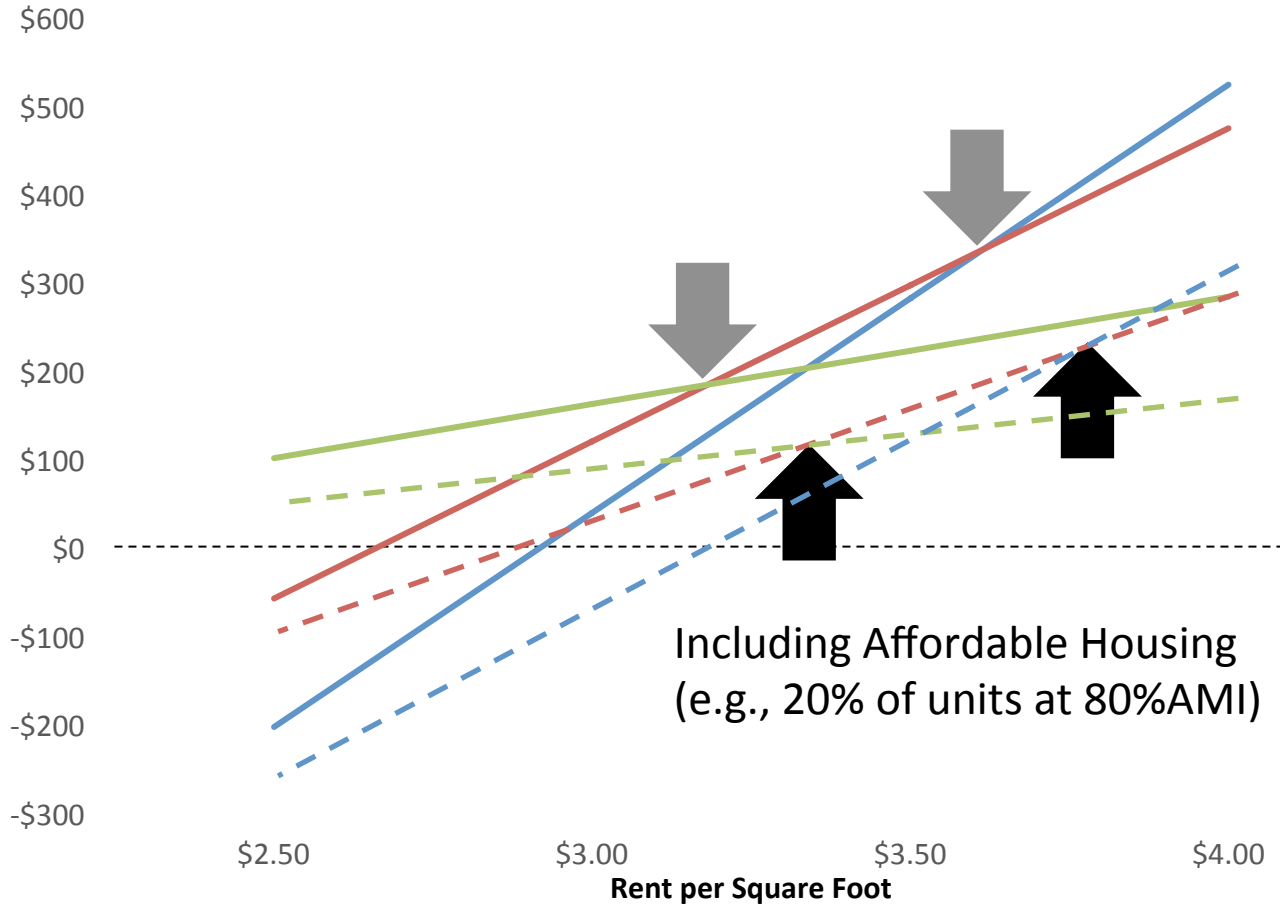


4 over 1 (podium)



Residential Tower

## Residual Land Value by Construction Prototype



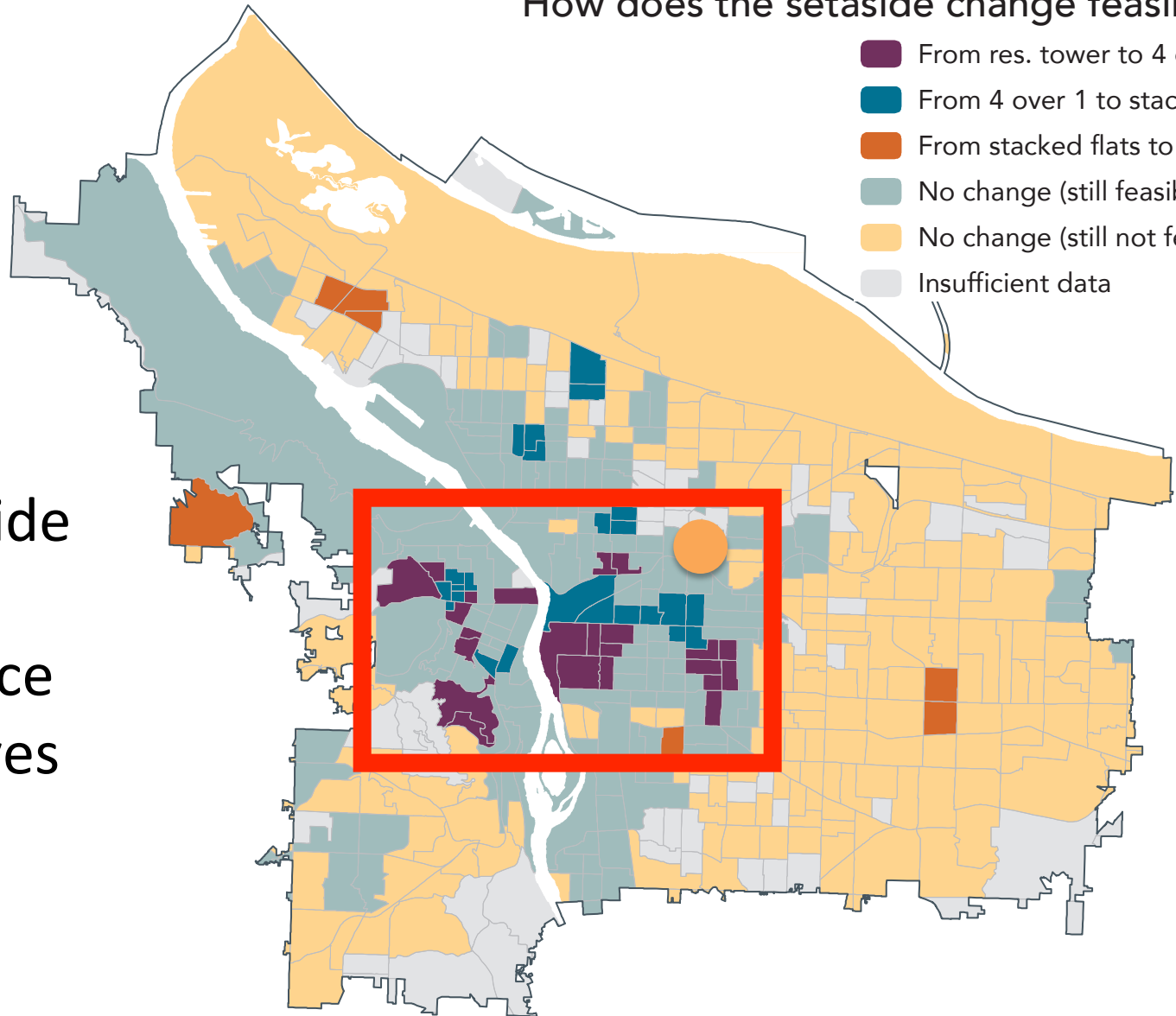
Including Affordable Housing  
(e.g., 20% of units at 80%AMI)

RLV = \$ per gross square foot of land

# The Impact of Affordable Units Without Incentives

How does the setaside change feasibility?

- From res. tower to 4 over 1
- From 4 over 1 to stacked flats
- From stacked flats to infeasible
- No change (still feasible)
- No change (still not feasible)
- Insufficient data



## IZ Policy

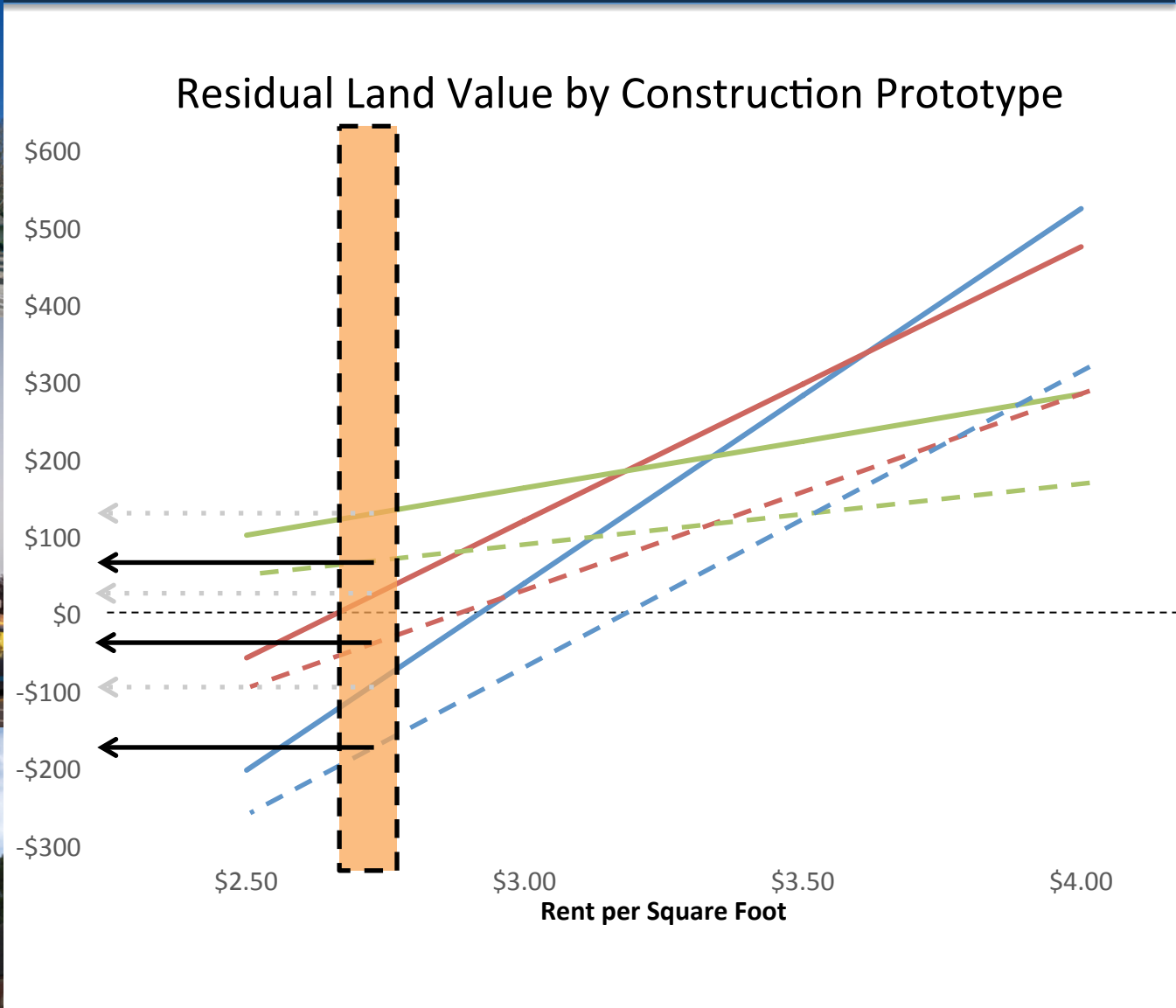
20% Set Aside

80% of MFI

\$0 Land Price

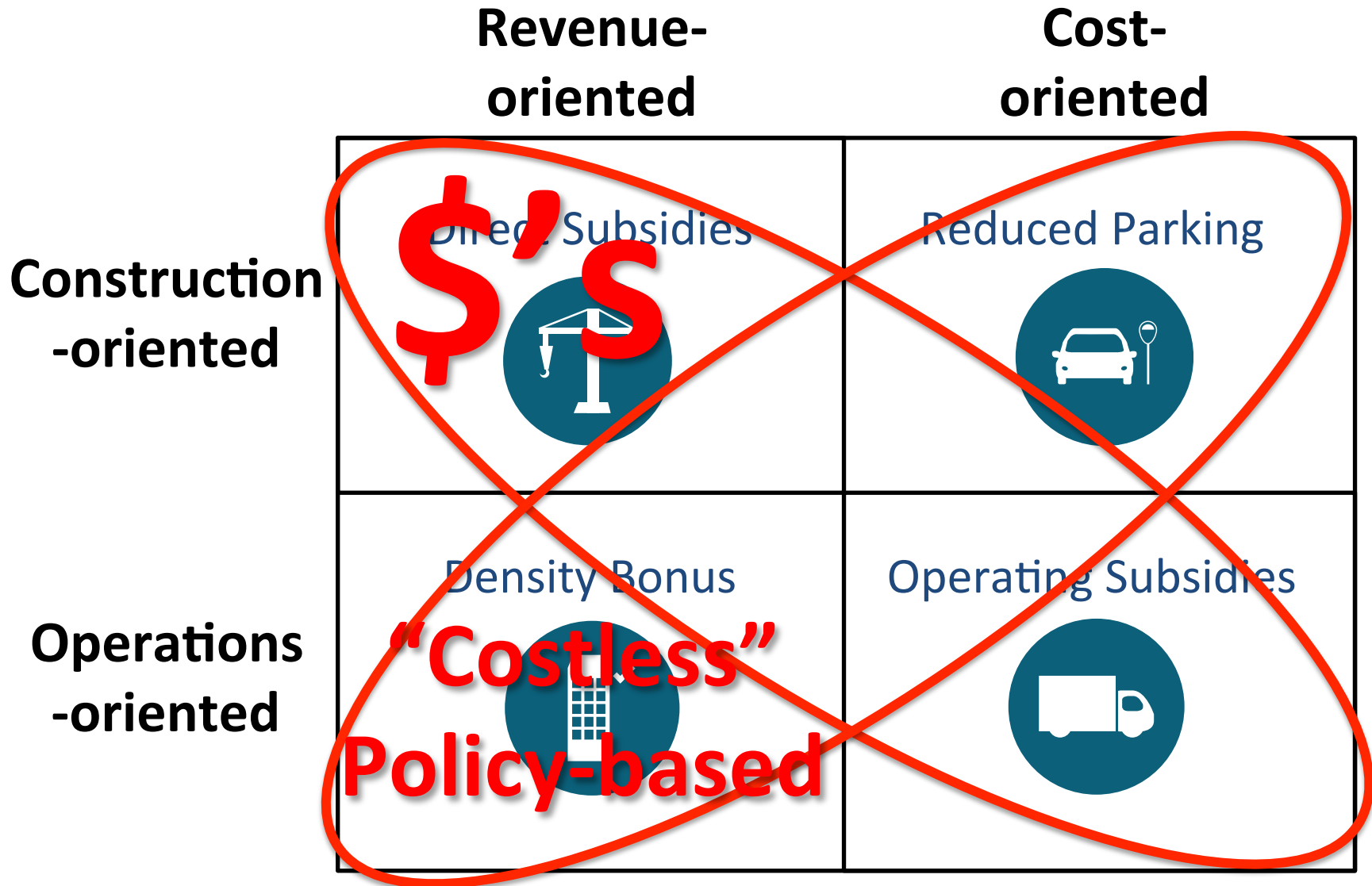
No Incentives

# Lower Residual Land Values



RLV = \$ per gross square foot of land

# Offsetting Financial Incentives





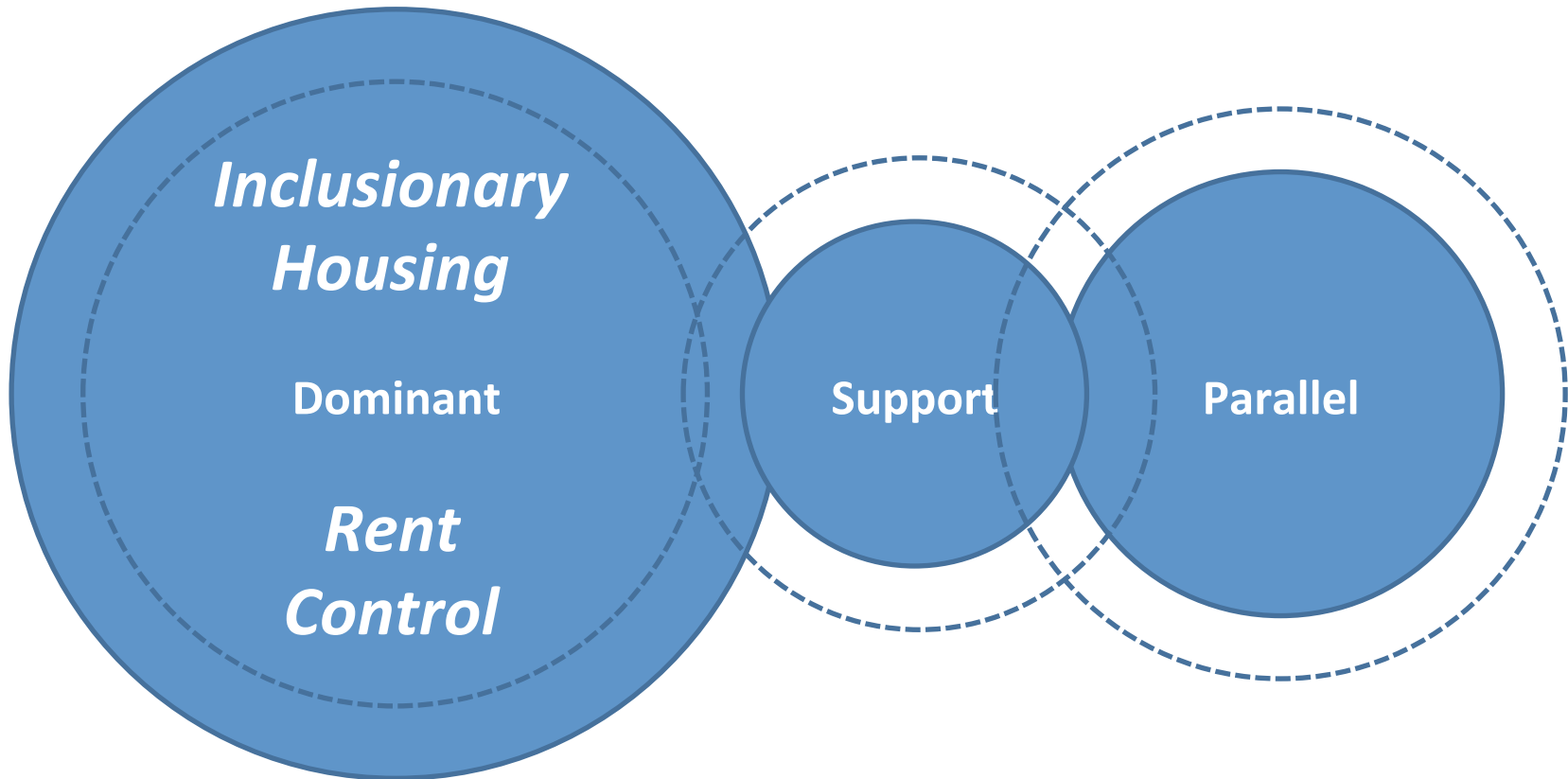
# Equitable Transit-Oriented Development



**“Institutions are the humanly devised constraints that structure political, economic and social interaction. [...] Together with the standard constraints of economics they define the choice set and therefore determine transaction and production costs and hence the profitability and feasibility of engaging in economic activity.”**

– Douglas North “Institutions” 1991

# Housing Production Systems & Policies

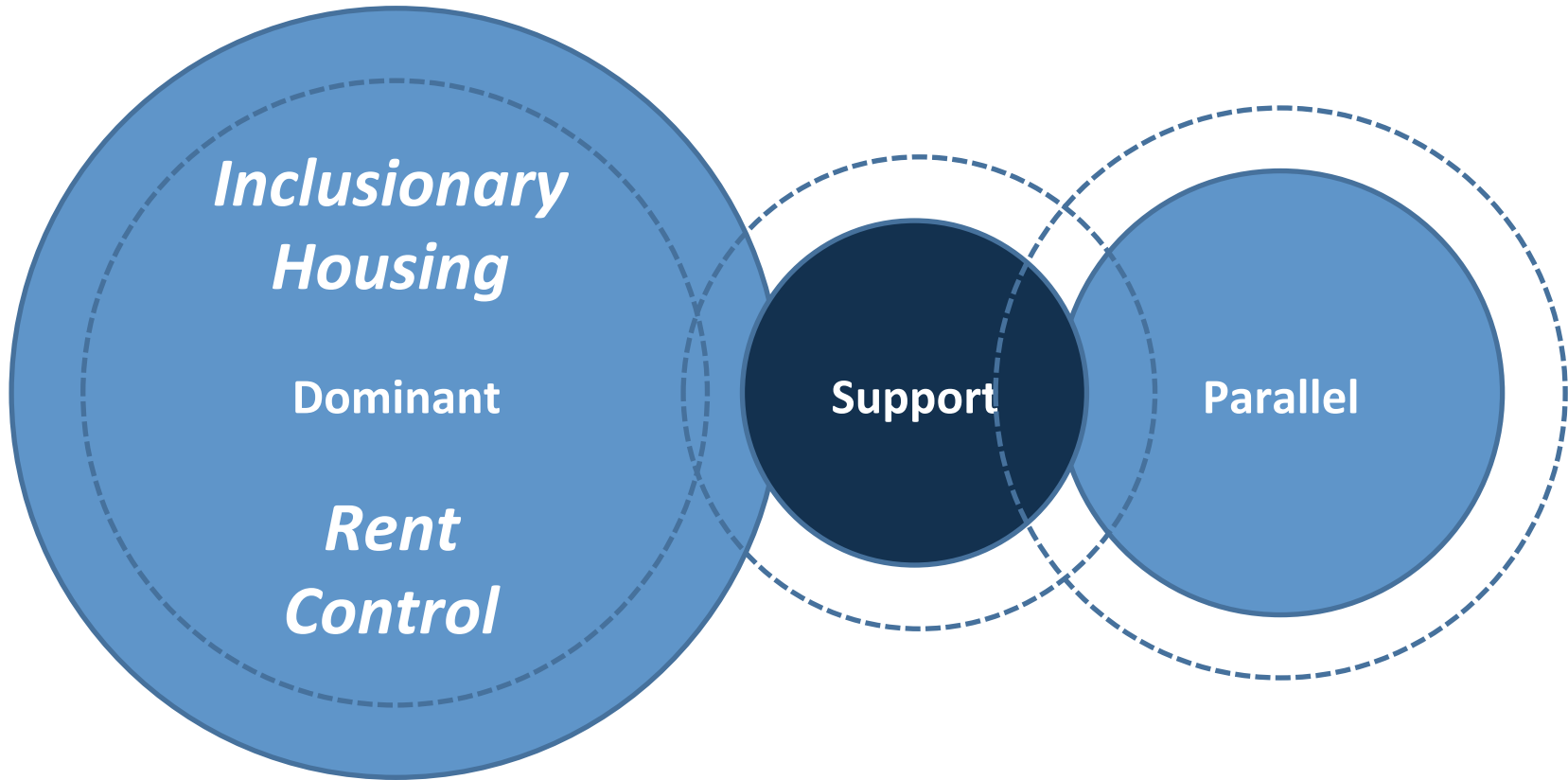


- Home builders
- Multifamily firms
- Infill developers

- PDC
- MULTE
- Metro TOD

- LIHTC
- Wyden's Middle-Income Housing Tax Credit

# Expand Support Systems for E-TOD?



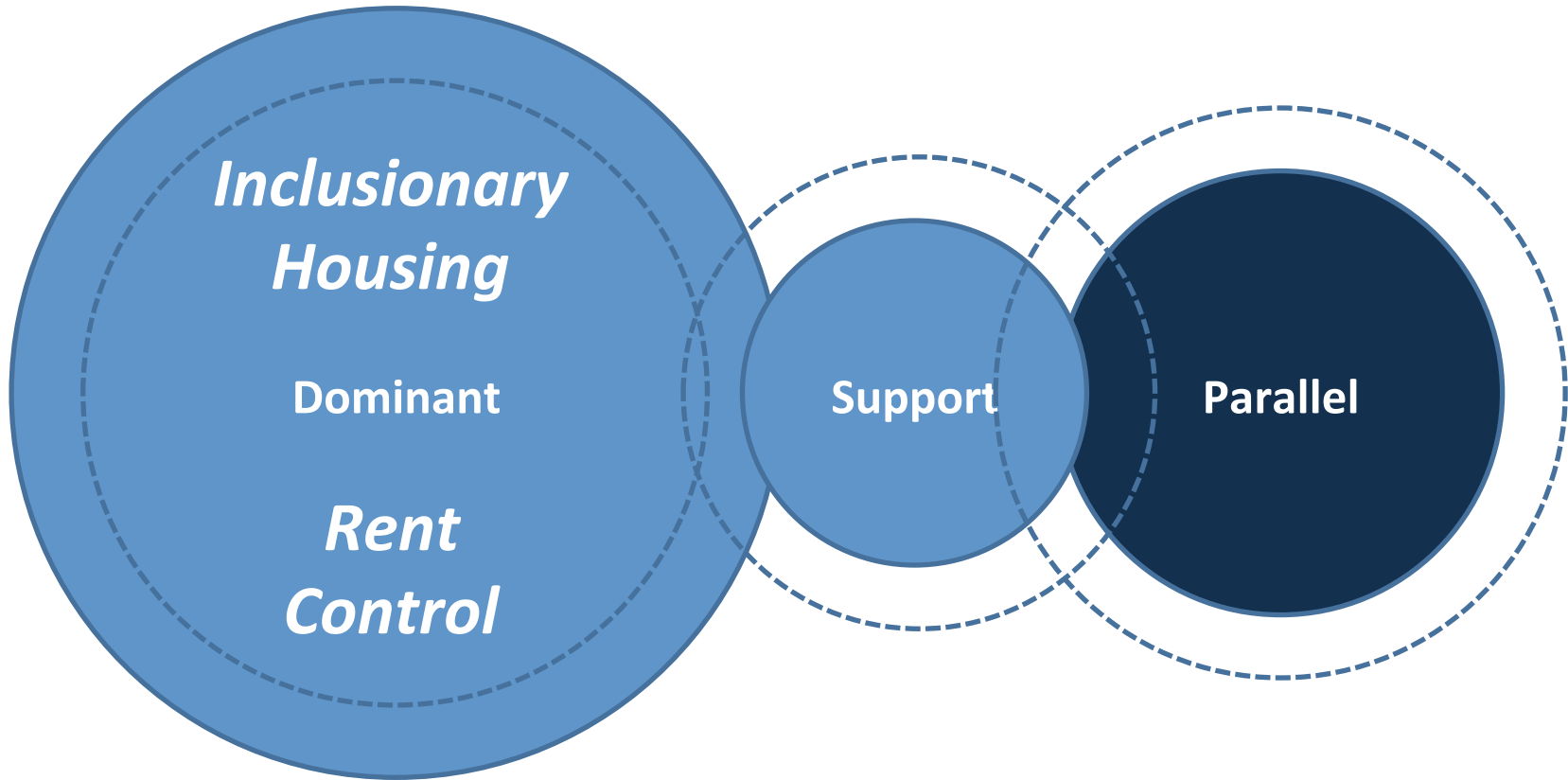
# Prioritize E-TOD in Measure 26-179?



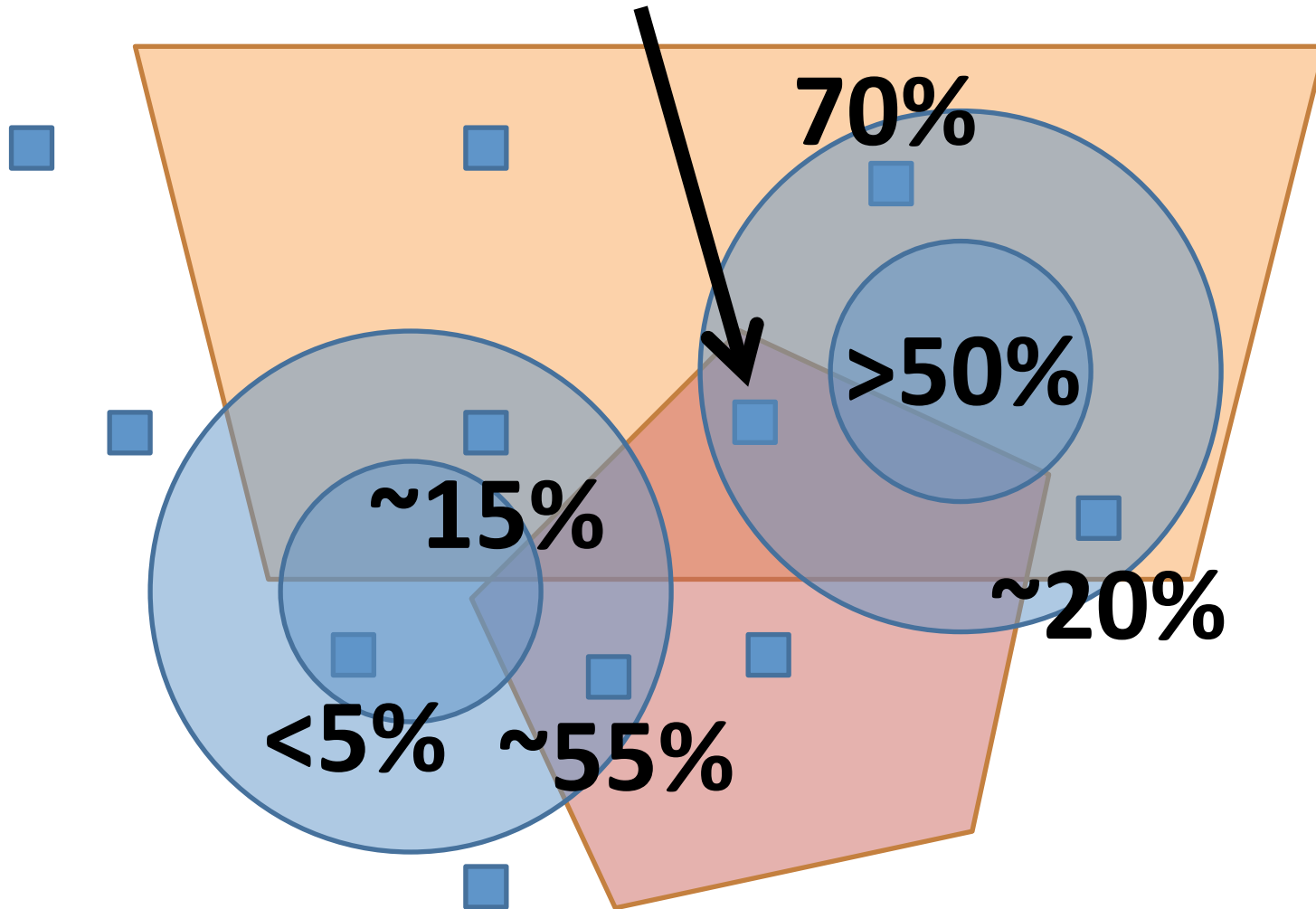
Beyond transportation and land use coordination already incorporated into other policies...

How will funding from the housing bond be targeted to efficient locations?

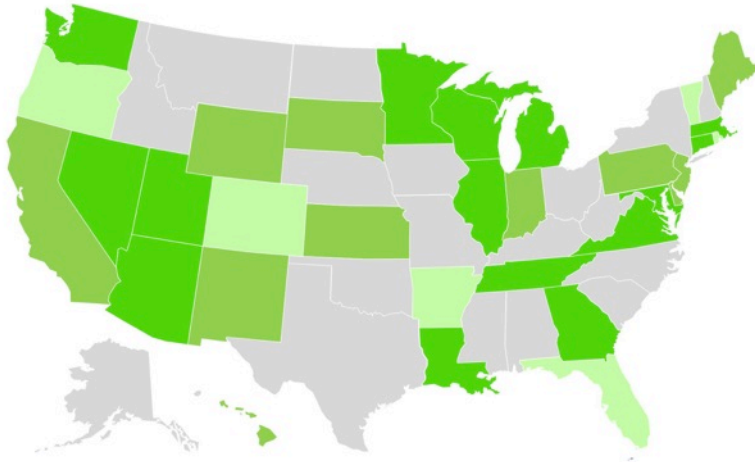
# Focus Parallel Systems on E-TOD?



**5 of 34,791 projects**



# Prioritize E-TOD in parallel systems?



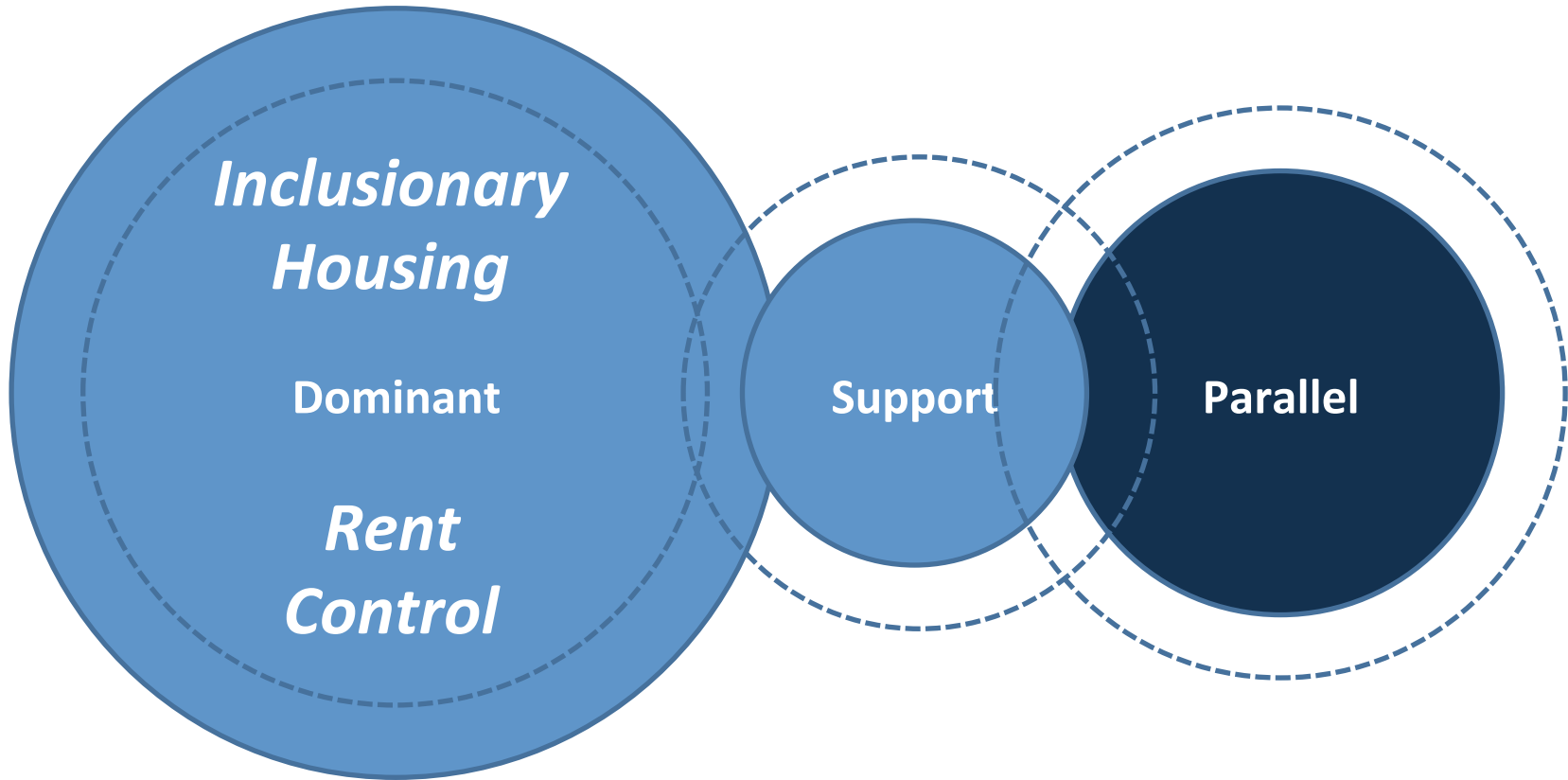
Nedwick et al "How Can the Low Income Housing Tax Credit Program Most Effectively be Used to Provide Affordable Rental Housing near Transit?" 2014

States can modify thresholds, set-asides, and weights in their LIHTC QAPs to encourage E-TOD projects, which has effectively influenced location choices.\*

\* Ellen et al. "Effect of QAP Incentives on the Location of LIHTC Properties" 2015

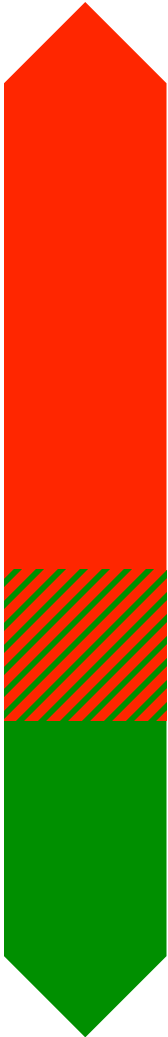


# Create New Parallel System Focused on E-TOD?



# Further integrate transit & land use (e.g., Asia)?

**Most Integrated**



Fund E-TOD operations in transit budgets

Fund E-TOD construction in transit budgets

-----  
Fund E-TOD land as part of transit projects

Reward agencies on ex-post E-TOD outcomes

Fund E-TOD planning as part of transit planning

-----  
Make E-TOD a consideration of transit plans

Make land use a consideration of transit plans

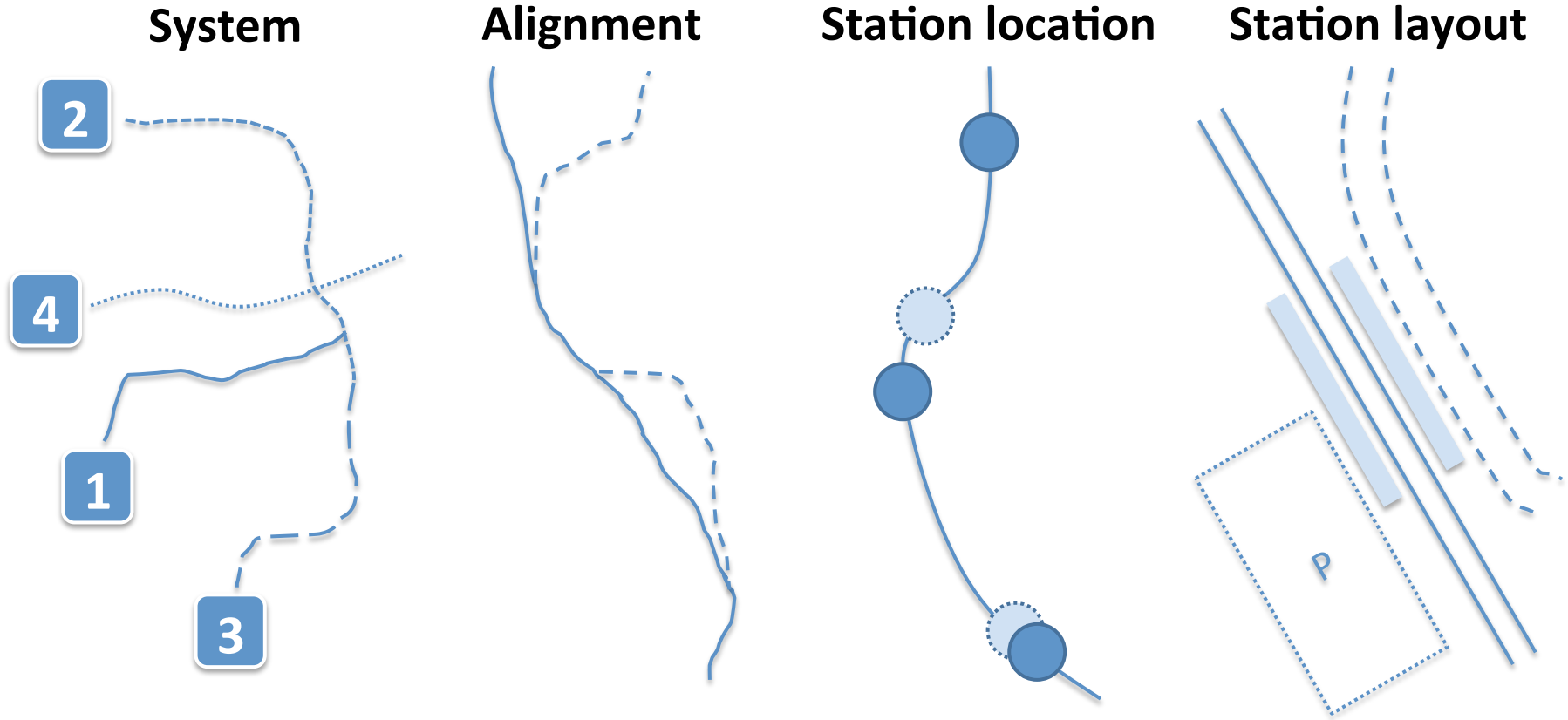
Parallel

Supportive

Accommodating

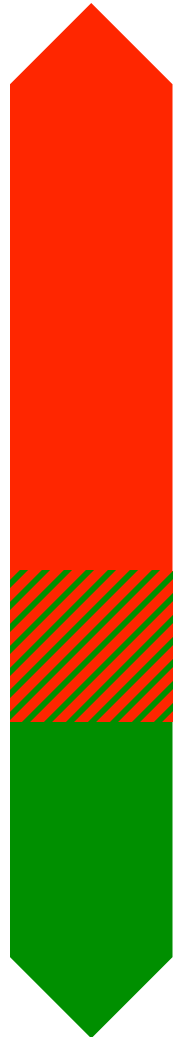
**Least Integrated**

# Transit planners' E-TOD consideration helpful?



# Further integrate transit & land use (e.g., Asia)

**Most Integrated**



Fund E-TOD operations in transit budgets

Fund E-TOD construction in transit budgets

Fund E-TOD land as part of transit projects

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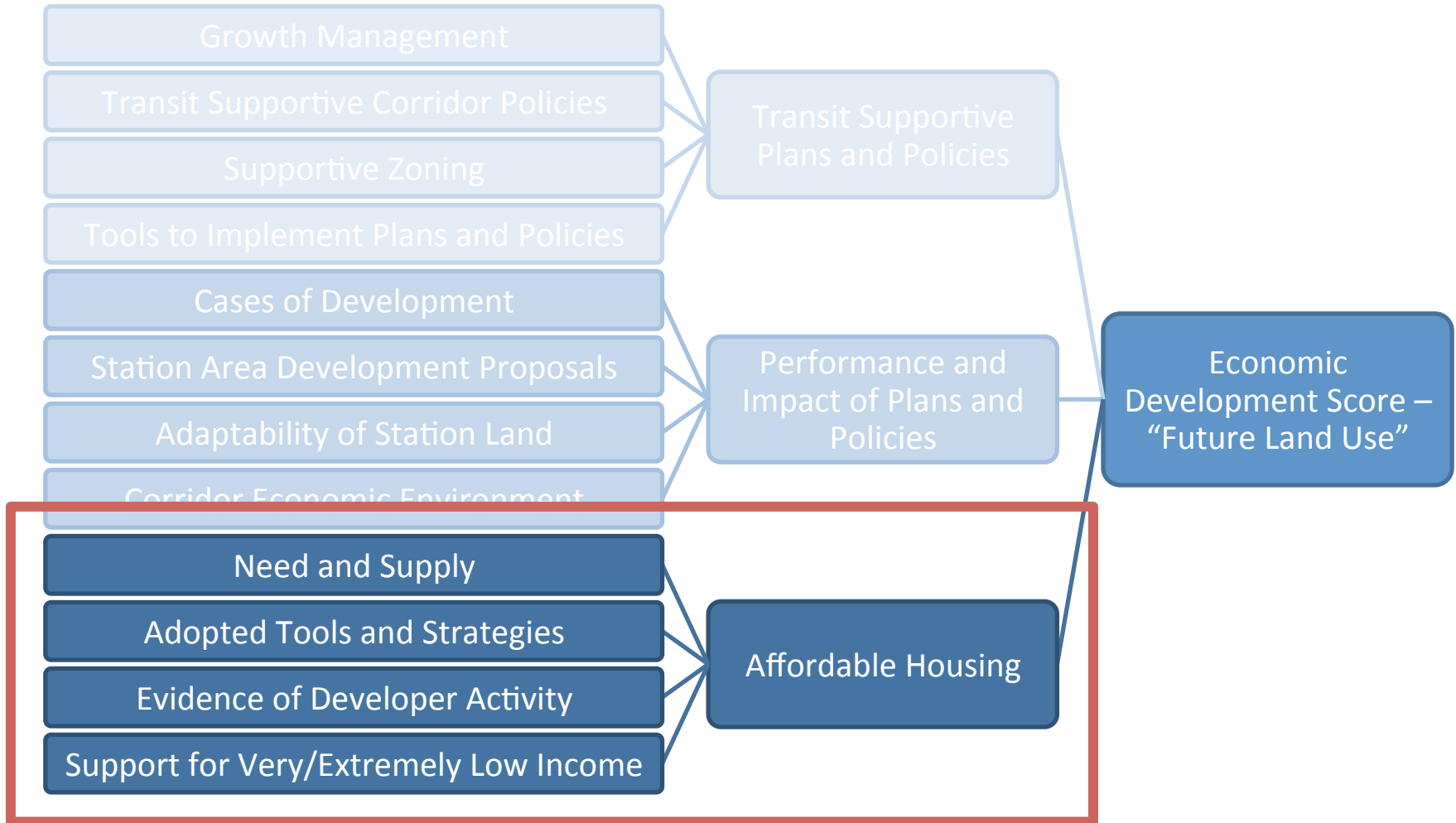
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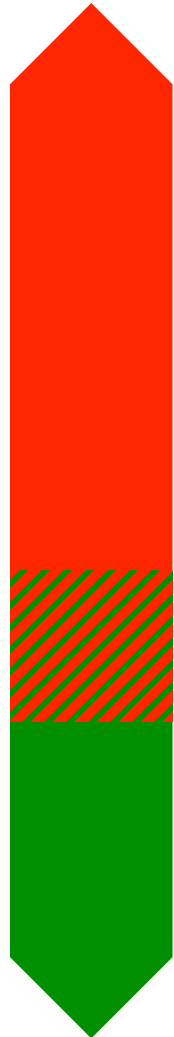
**Least Integrated**

# FTA project evaluations contemplate E-TOD



# Further integrate transit & land use (e.g., Asia)

**Most Integrated**



Fund E-TOD operations in transit budgets

Fund E-TOD construction in transit budgets

Fund E-TOD land as part of transit projects

Reward agencies on ex-post E-TOD outcomes

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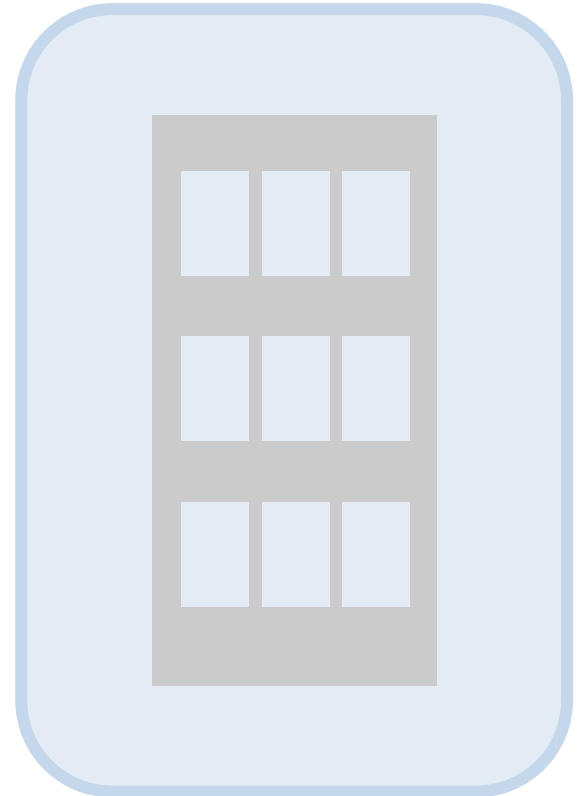
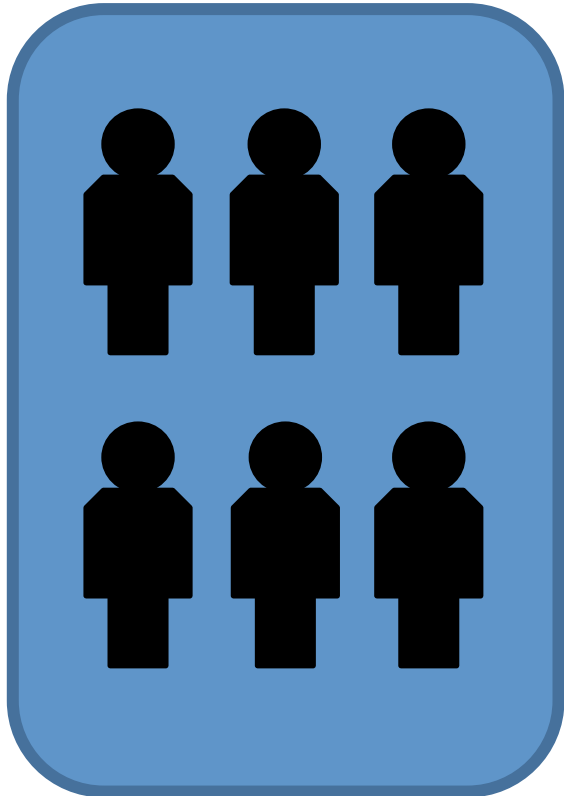
Parallel

Supportive

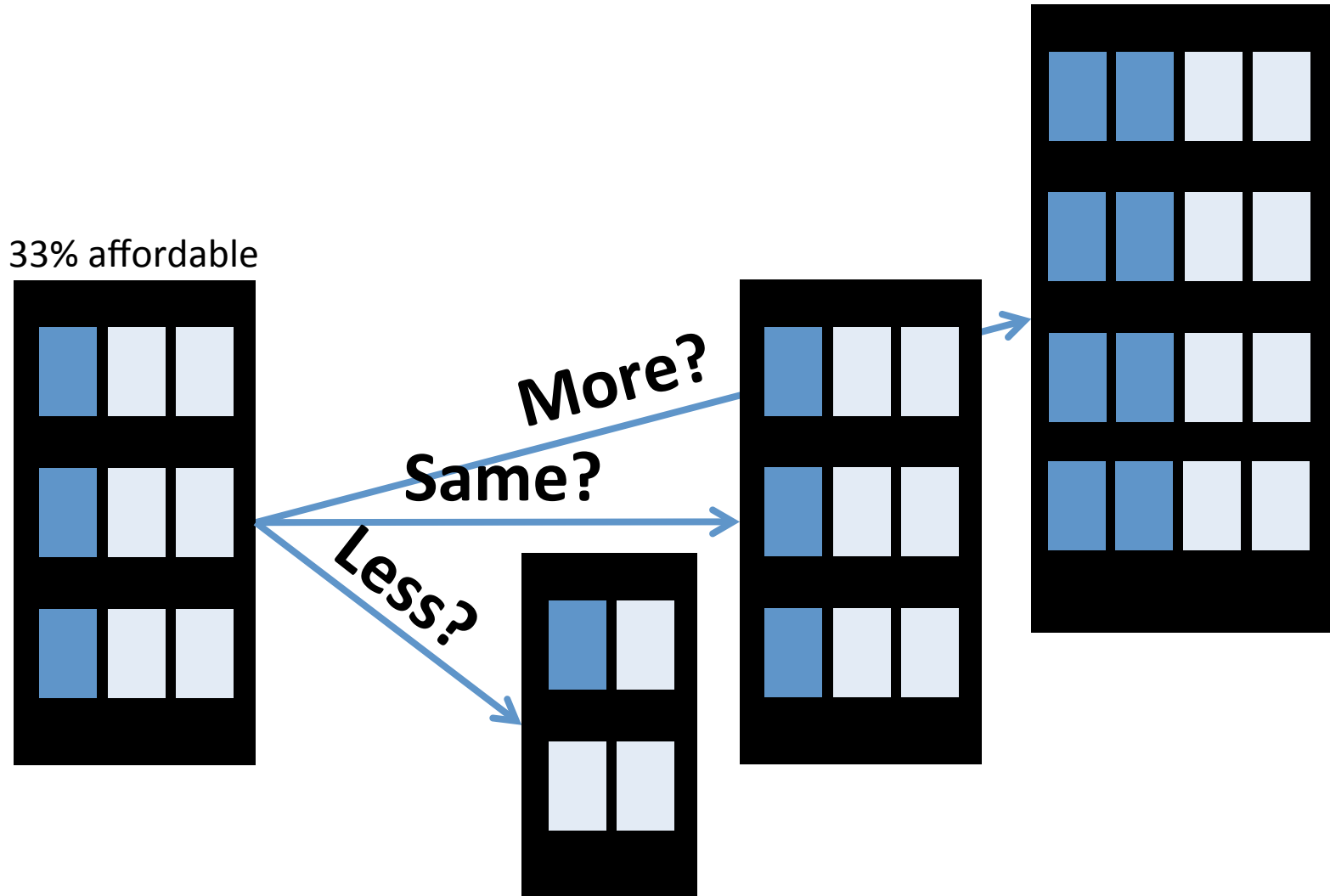
Accommodating

**Least Integrated**

# Ex-post evaluations do not consider (E)TOD



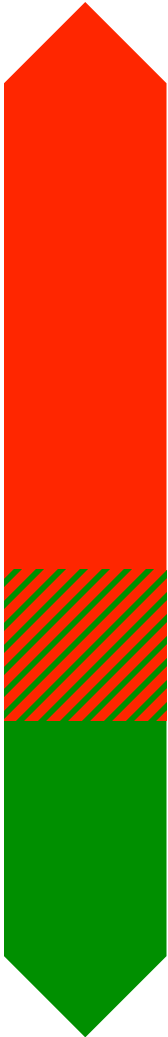
# Compare predictions vs. results





# Further integrate transit & land use (e.g., Asia)?

**Most Integrated**



Fund E-TOD operations in transit budgets

Fund E-TOD construction in transit budgets

---

Fund E-TOD land as part of transit projects

Reward agencies on ex-post E-TOD outcomes

Fund E-TOD planning as part of transit planning

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Make E-TOD a consideration of transit plans

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