

# CODENEXT ZONING CODE CAPACITY ANALYSIS CITY COUNCIL PRESENTATION

Fregonese Associates – September 6, 2017



# HOUSING CAPACITY ANALYSIS – SEPTEMBER 2017

## **Goals:**

1. Compare Housing and Jobs Capacity under:
  - Existing Zoning
  - CodeNEXT Draft 1
  - CodeNEXT Draft 2
2. Explore Housing Match to Strategic Housing Blueprint
3. Early Indicators
4. Highlight key areas for future exploration

# BASIC PROCESS

## Use Buildings Calibrated to Austin Market

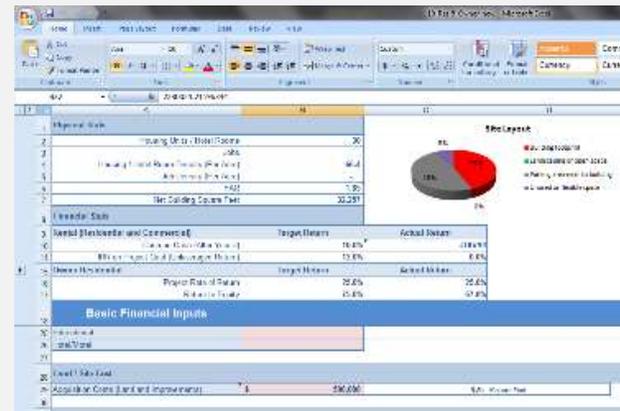
Total of 81 Buildings used in Analysis

### Physical Form

- Height
- Unit sizes
- Parking configurations

### Financial Reality

- Rents / sales prices
- Construction costs
- Land costs



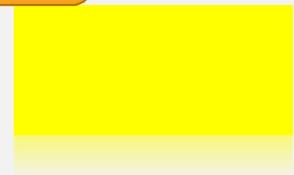
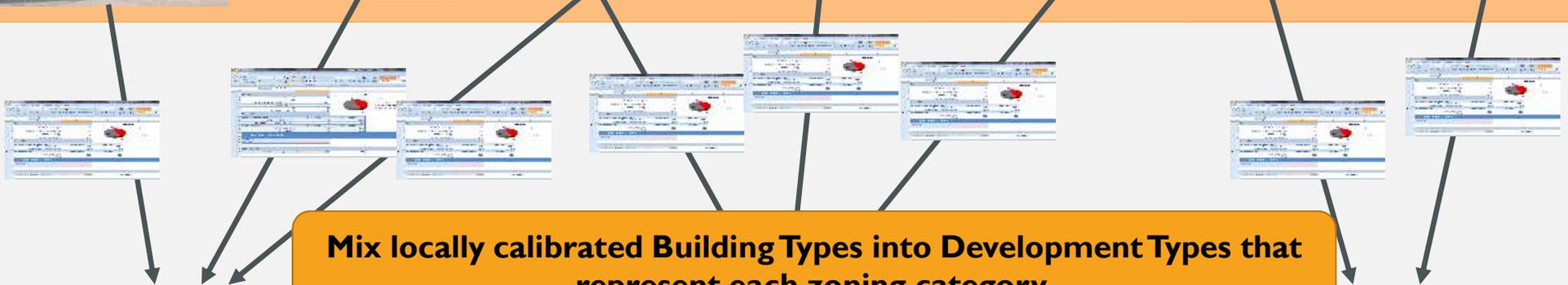
Feasible?



# EACH ZONING DISTRICT CALIBRATED WITH BUILDINGS

For Existing Zoning, CodeNext 1, CodeNext 2

*Building Library*



# OVERLAYS FOR DIFFERENT CODES INCLUDED

## Legend

- Capitol View Corridors Overlay
- University Neighborhood Overlay (UNO) Parcels
- CBD-CURE
- DMU-CURE
- Waterfront Overlay Parcels
- Barton Spings Zone (BSZ) Overlay Parcels
- Hill Country Roadways Ordinance
- PUD
- Planned Development Area (PDA) Parcels

## Regulating Plan Subdistrict Parcels

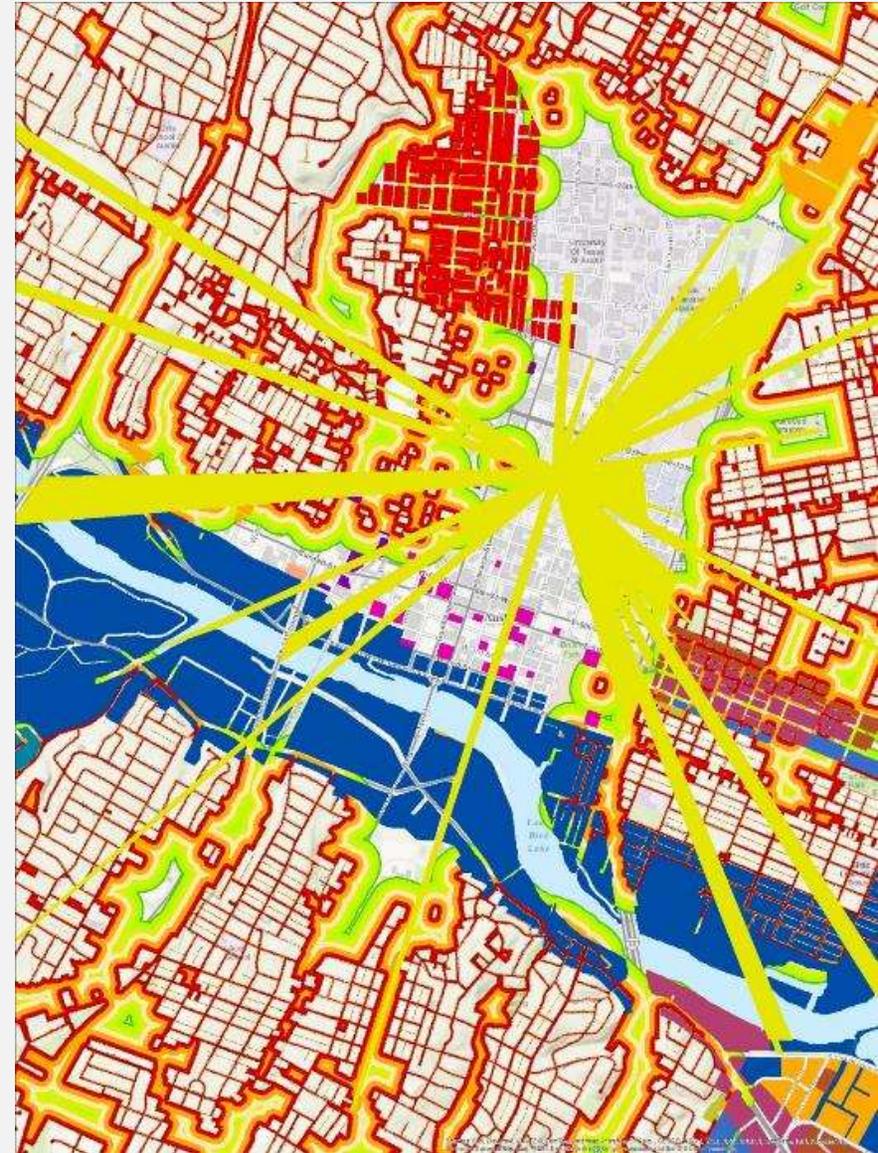
- LI
- TODCMU
- TODLDR
- TODMDR
- TODMU

## Projects Under 20K Sq Ft

- ▨ No Structure
- 30' or 2 Stories
- 40' or 3 Stories
- Up to 50'
- Up to 60'
- Up to 85'
- Up to 110'
- Up to 120'

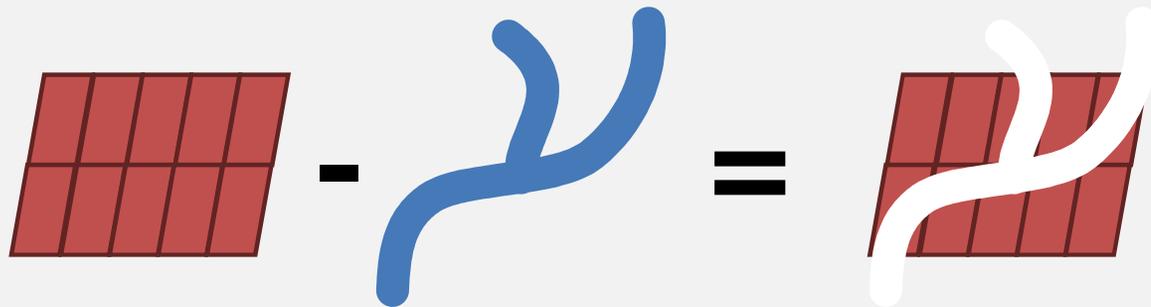
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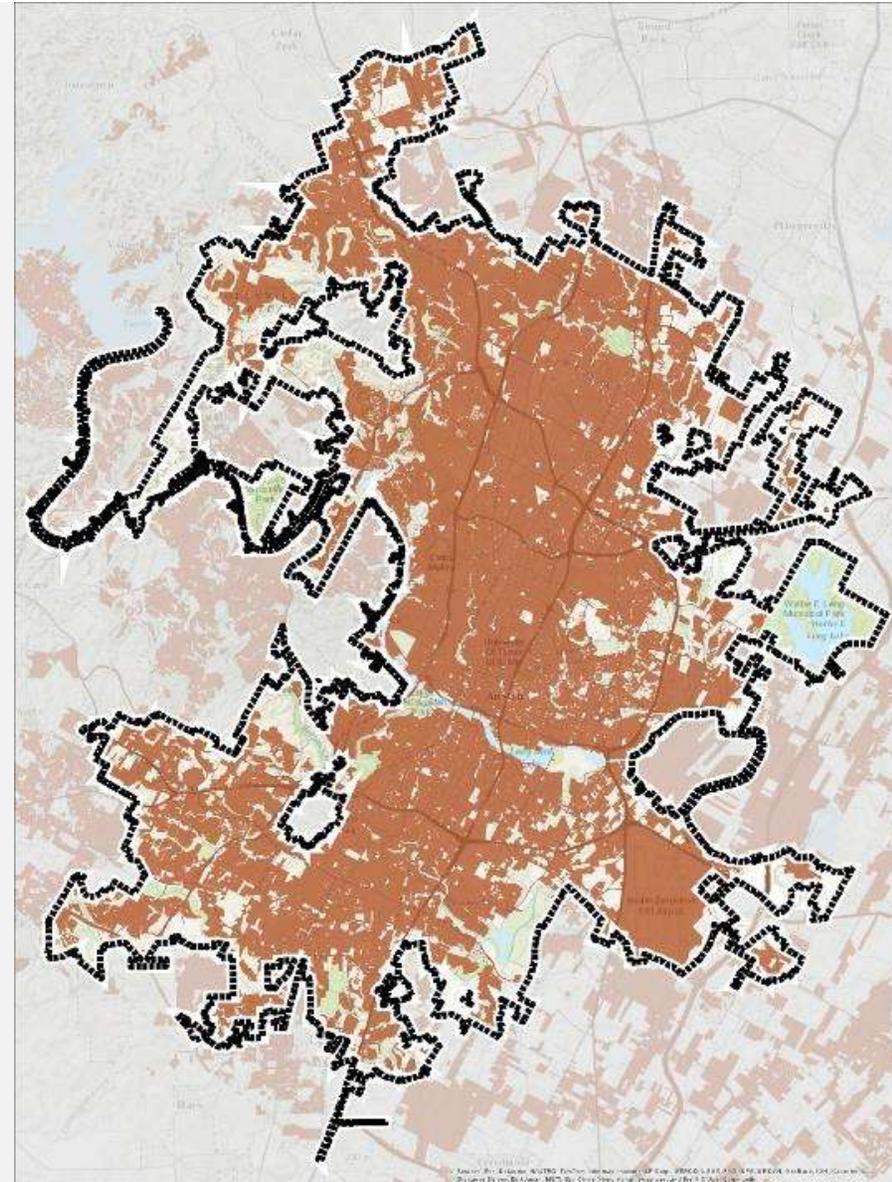
# CONSTRUCT BUILDABLE LANDS LAYER - 2013

- Buildable Lands =
- Land Supply – Constraints (Environmental & Policy)



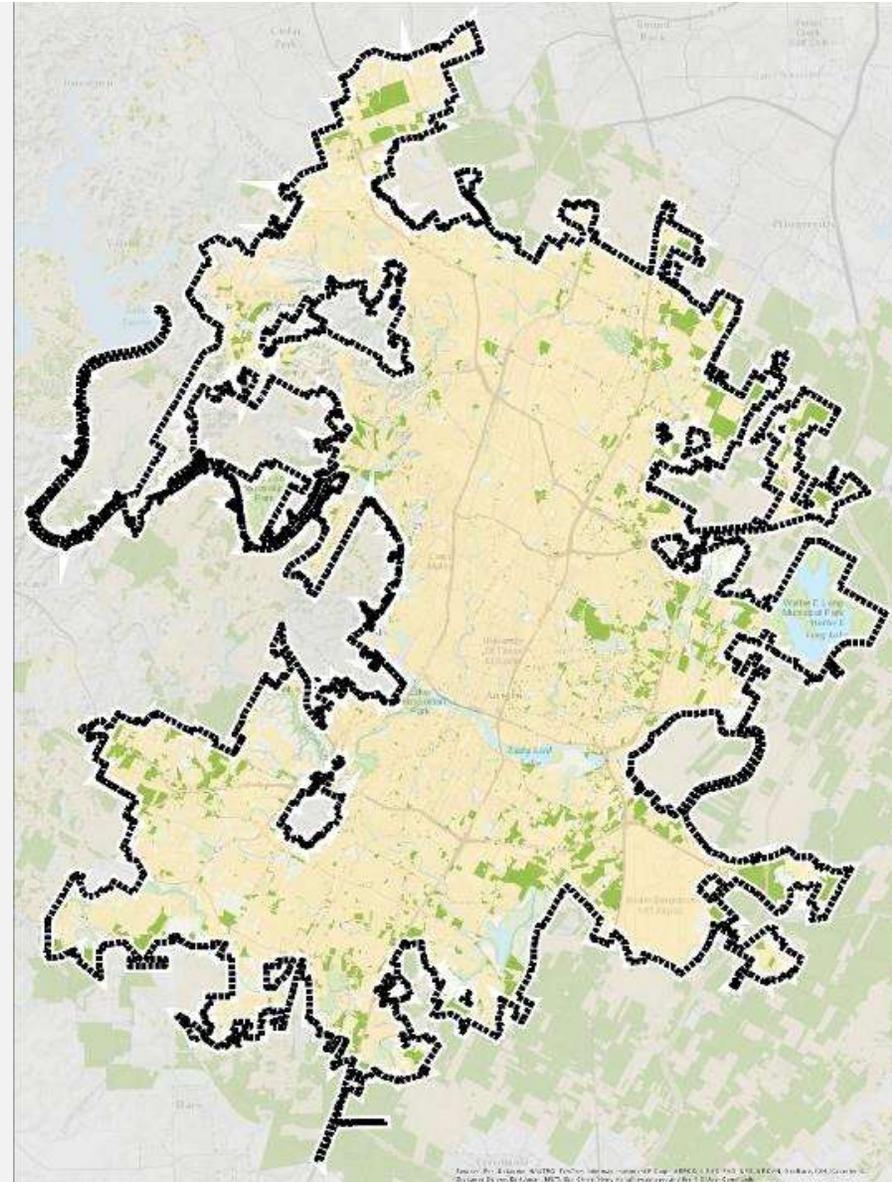
# BUILT PARCELS

- 114,063 developed acres
- 178 square miles



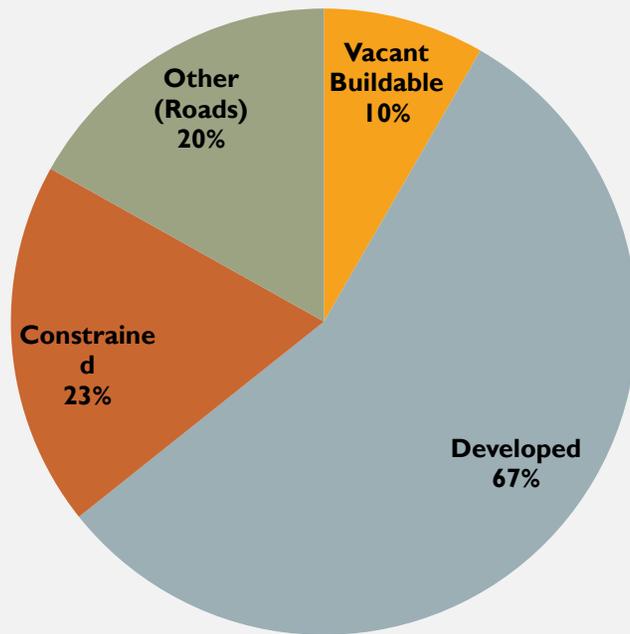
# VACANT PARCELS

- 14,560 remaining vacant acres
  - 23 square miles
- 13% of the current developed area

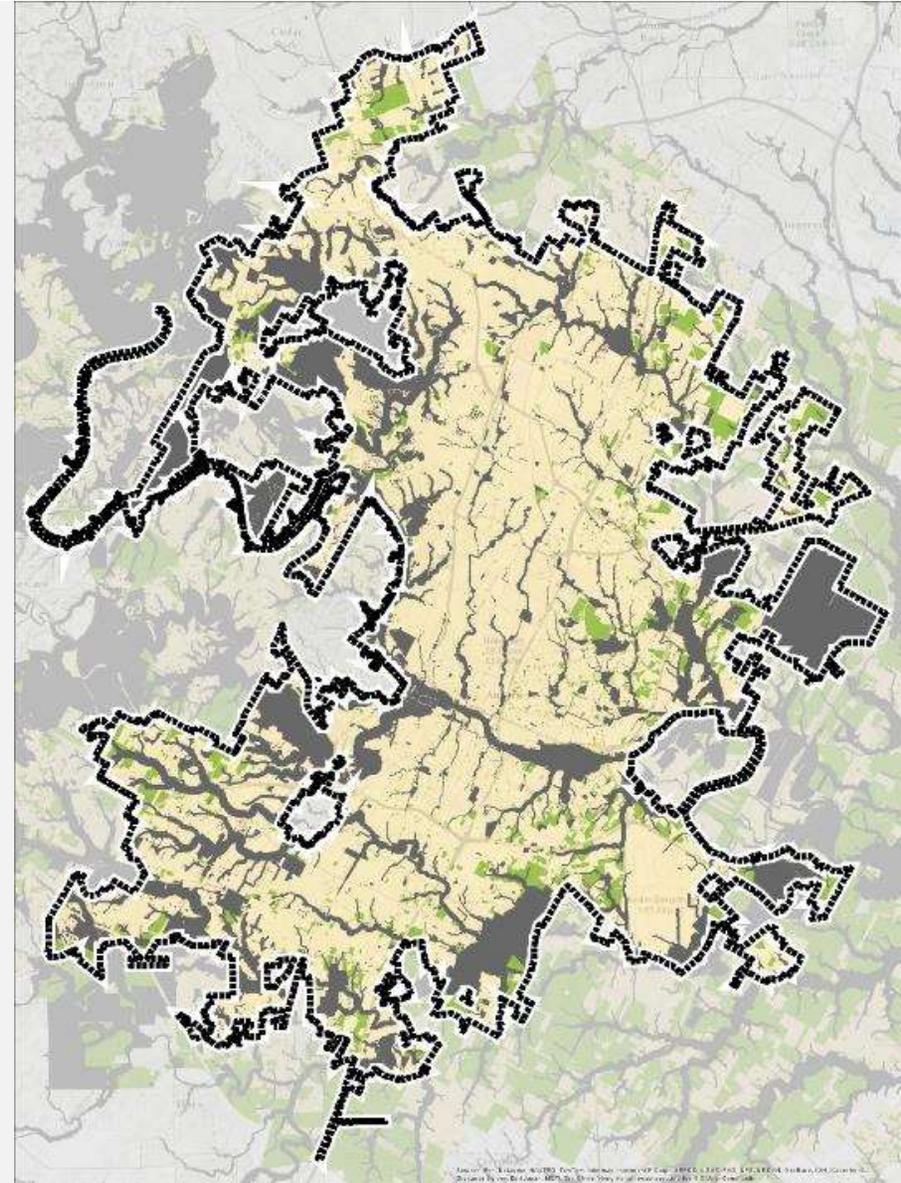




# VACANT & UNCONSTRAINED



- 14,560 acres of vacant, buildable land in city boundary
- ~3,500 of the vacant acres are constrained
  - 19% of vacant & ag land



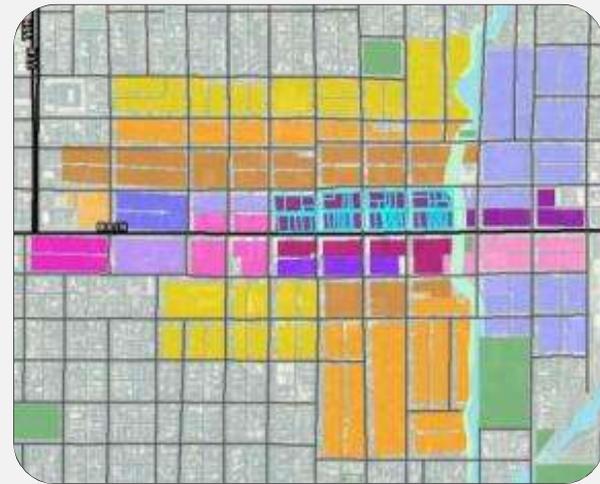
# WHAT'S DIFFERENT?

## 2015 – Existing Zoning Model

- 11,500 parcels analyzed
- **Major Driver:** “Attractiveness” Index

## August 2017 Updated Model

- 5,710 parcels analyzed
- **Major Driver:** “Tipping point” analysis



Scenario  
Development

Where is growth expected to occur? Which parcels?

AUGUST 2017 - UPDATED MODEL

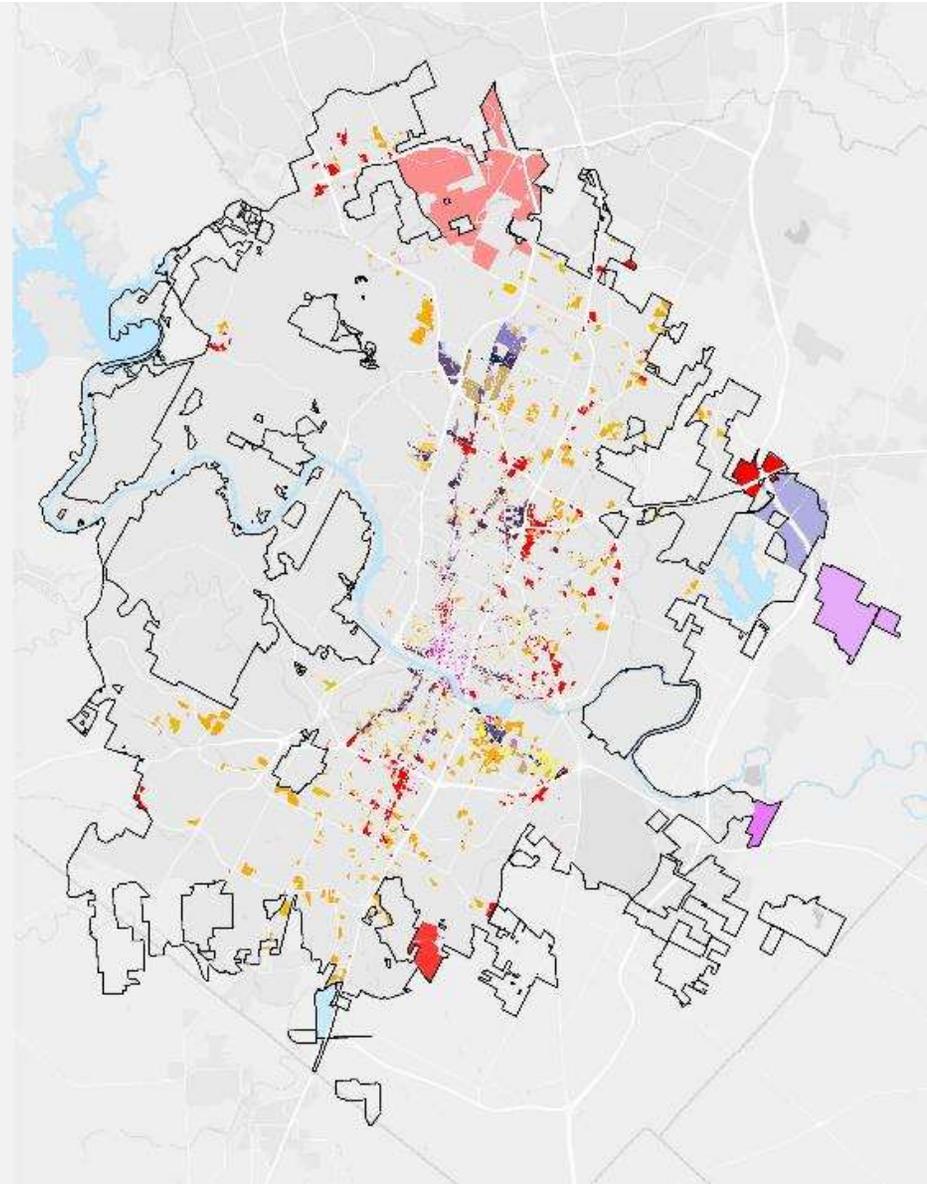
## AUGUST 2017 - UPDATED MODEL

5,710 parcels analyzed

➤ **Major Driver:** “Tipping point”  
analysis

- Parcels with near-medium term development potential
- Evaluate zoning frameworks with wider range of indicators

Final results expected with mid-  
September Draft 2 roll out



## AUGUST 2017 - UPDATED MODEL

**Step 1:** Remove recently developed parcels based on permits

- Ensure recently developed land is no longer “vacant” in dataset
- Permit data recent through May 2017

Data source: City’s 2014 land database inventory; Development Services permit database – May 2017

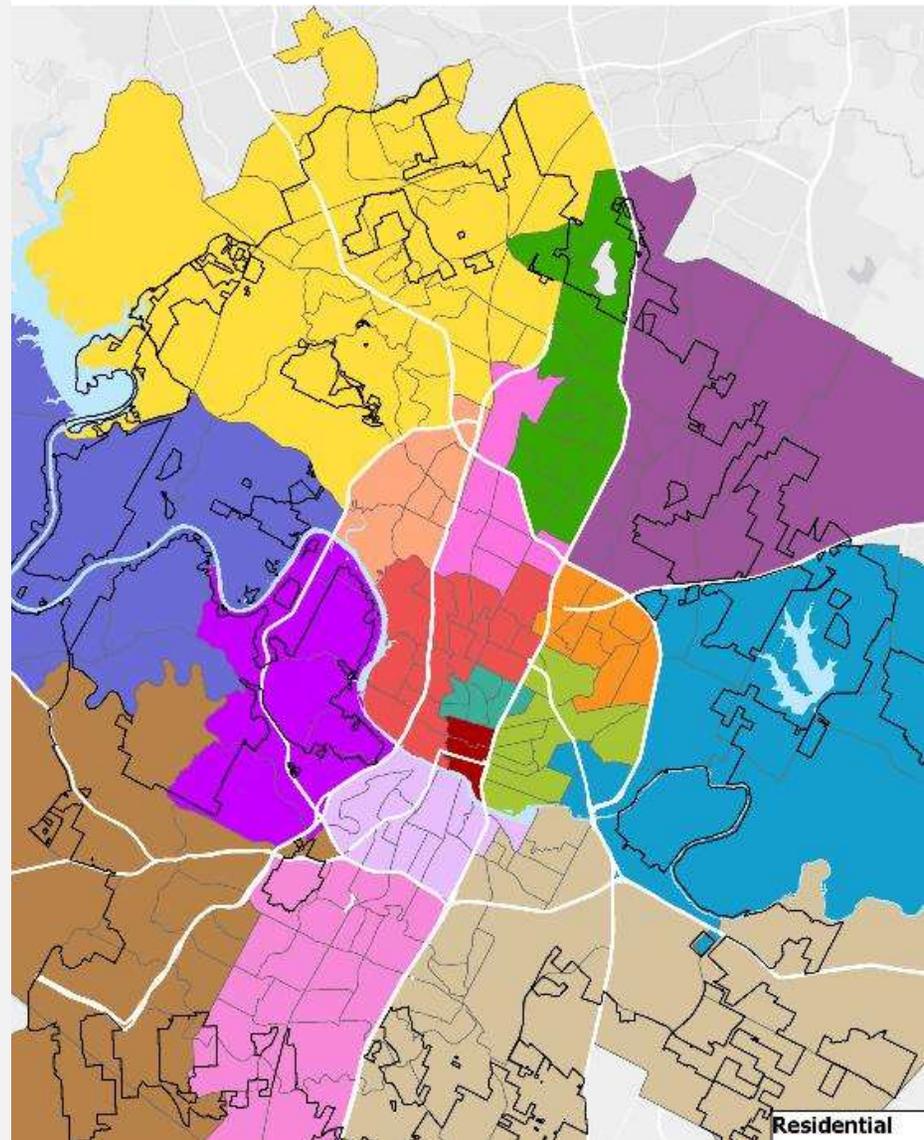


**Example:** New Mixed Use Development on E 5th St

## AUGUST 2017 - UPDATED MODEL

### **Step 2:** Calculate average rents by Austin submarkets to understand building feasibility

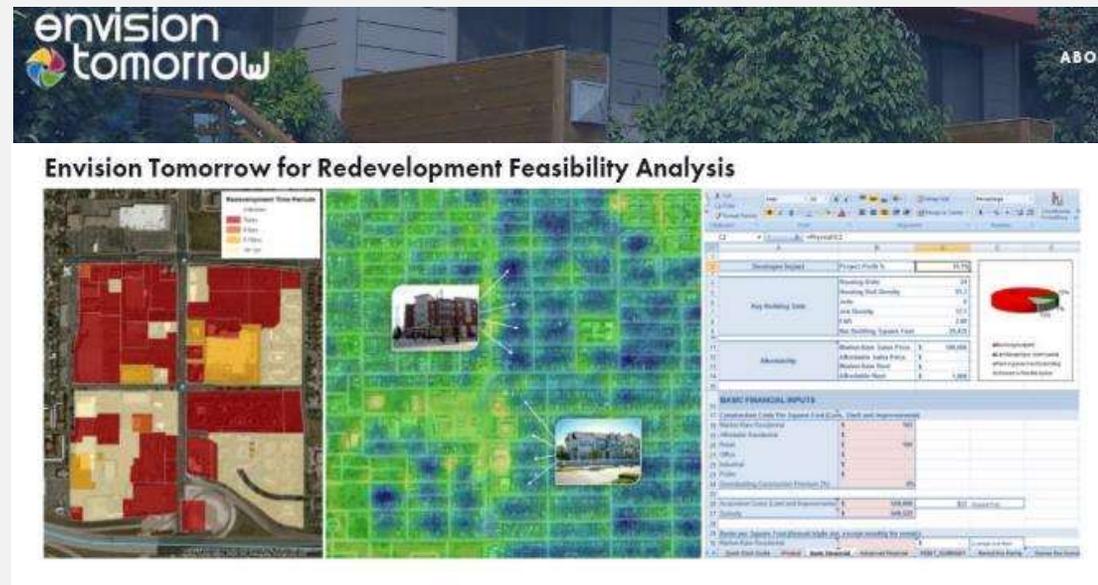
- Aggregated from Census Tract average rents – CoStar data
- Austin submarkets more easily understood geography for analysis
- Data Source: ApartmentTrends.com
- <http://www.apartmenttrends.com/html/maps/areaaus.cfm>



# AUGUST 2017 - UPDATED MODEL

## Step 3: Run Envision Tomorrow Development Feasibility Tool

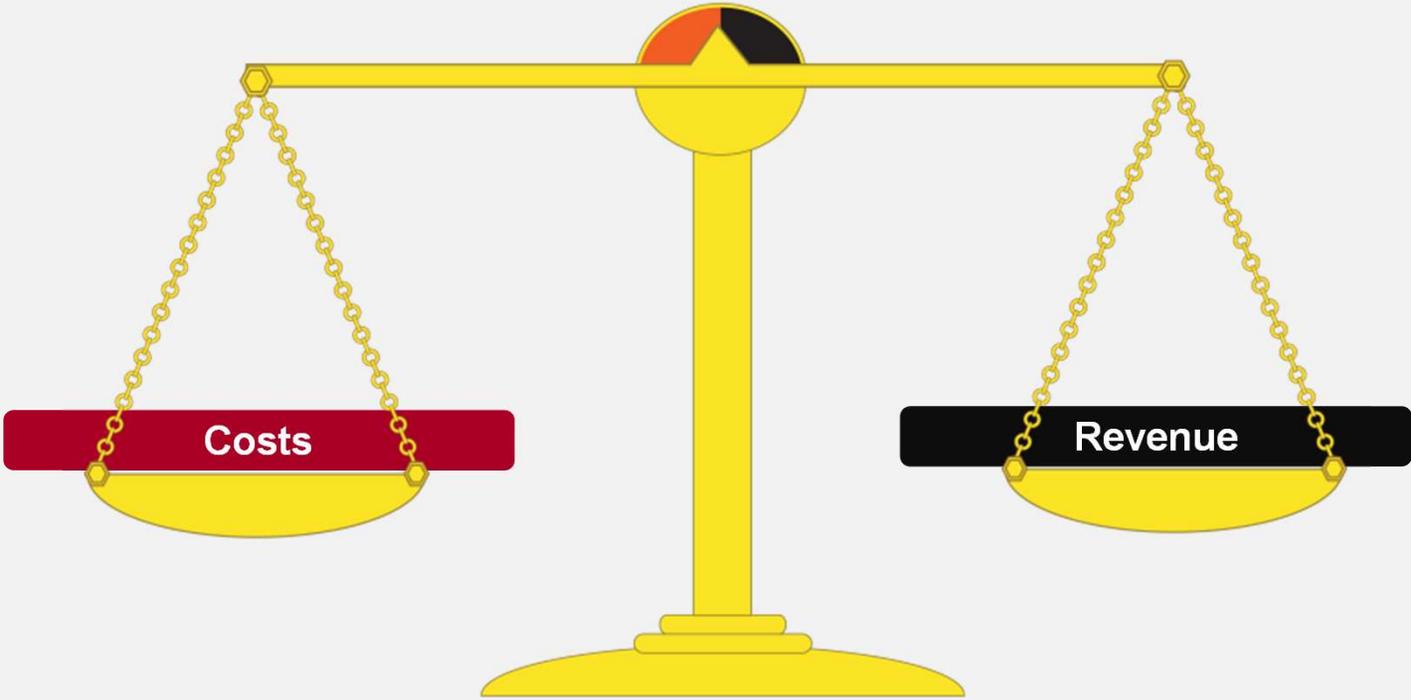
- “Achievable rent” determined for **every parcel in Austin**
- Analysis done for 7 common building types in Austin:
  - SF Home
  - Duplex
  - Rowhouse
  - Multiplex
  - Low Rise Apartment (3 stories)
  - Mid Rise Apartment (4 stories)
  - Main Street Mixed Use (4-over-1)



# TIPPING POINT

Not Feasible

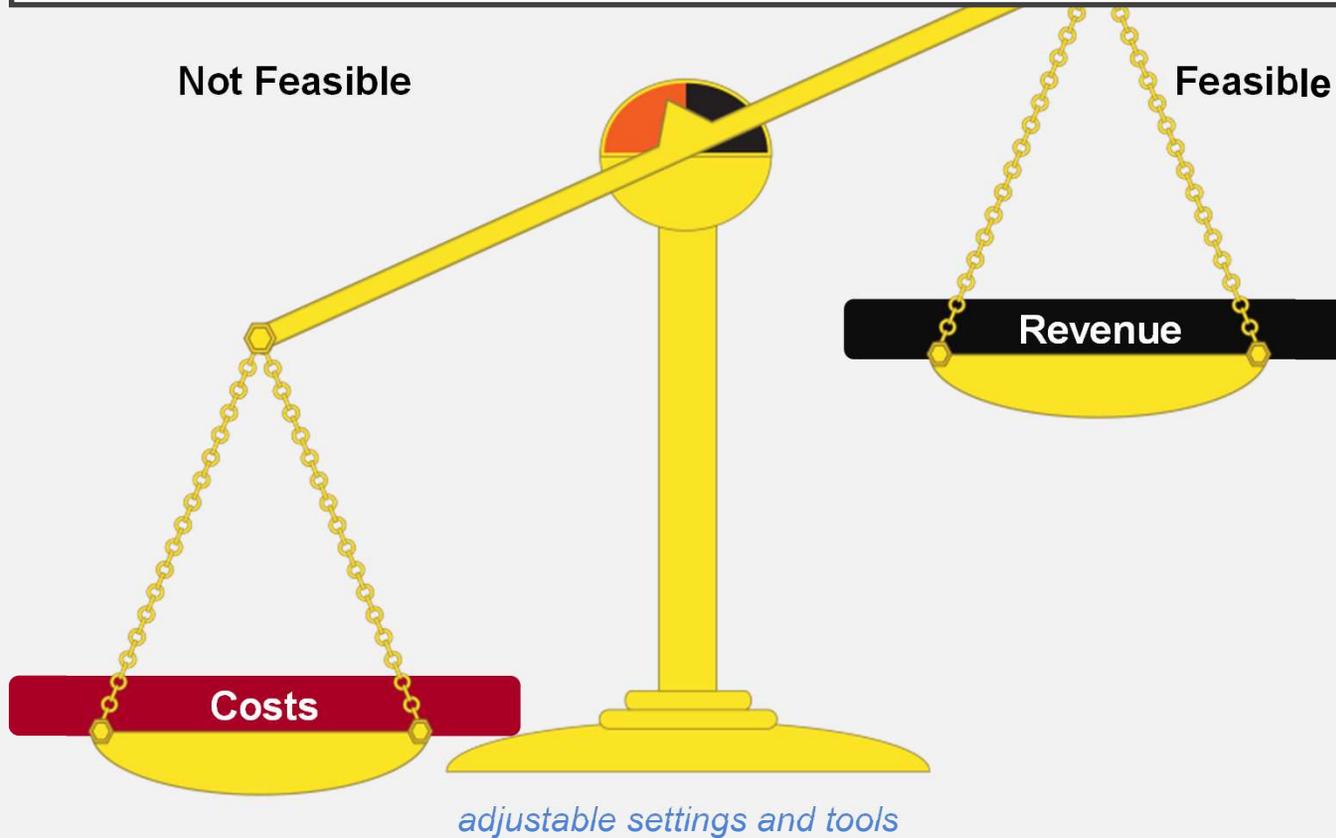
Feasible



*adjustable settings and tools*

Building form      Costs            Revenues      Gap tools

# TIPPING POINT



Building form

Costs



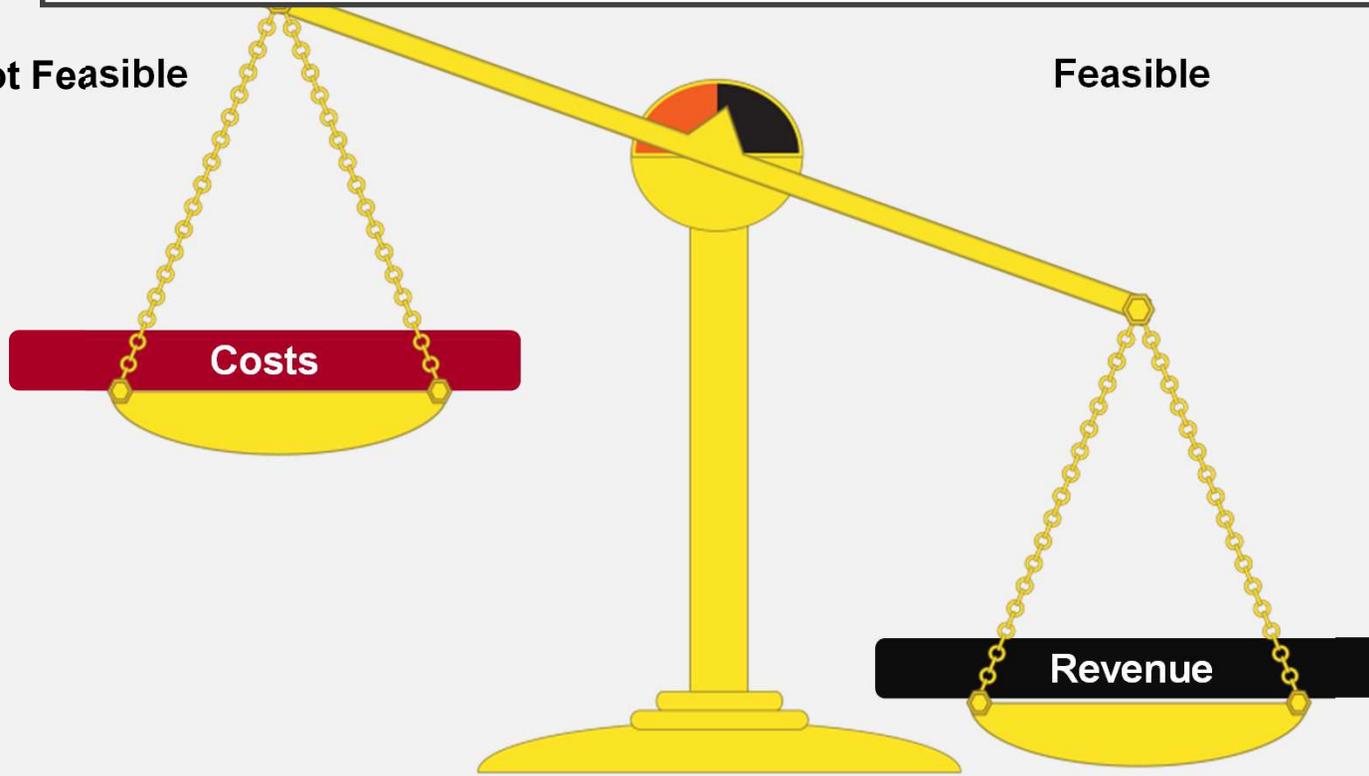
Revenues

Gap tools

# TIPPING POINT

Not Feasible

Feasible



*adjustable settings and tools*

Building form

Costs



Revenues

Gap tools



affordable

### Building form



Height



Set back



Landscaping



Parking Ratios

### Costs



\$\$\$ Hard



\$ Soft



\$\$\$ Taxes



\$\$ Fees

### Revenues



\$\$\$ Rent 1



\$ Rent 2



\$\$\$ Rent 3



\$\$ Parking

tuck under



Parking

structured

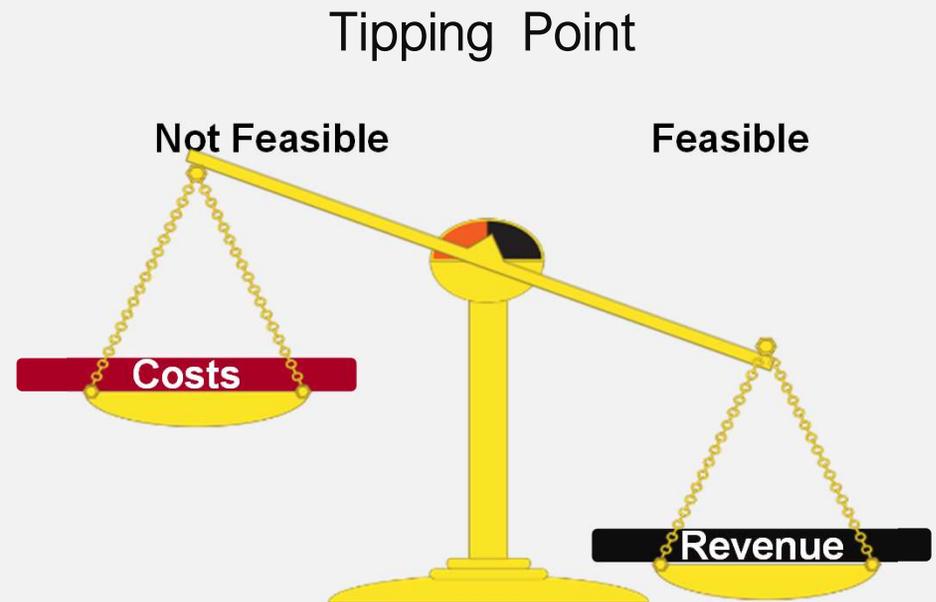
surface

## AUGUST 2017 - UPDATED MODEL

**Step 4:** Determine Market Feasibility Ratio on every parcel by building type

$$\text{Market Ratio} = \frac{\text{Achievable Rent}}{\text{Submarket Average Rent}}$$

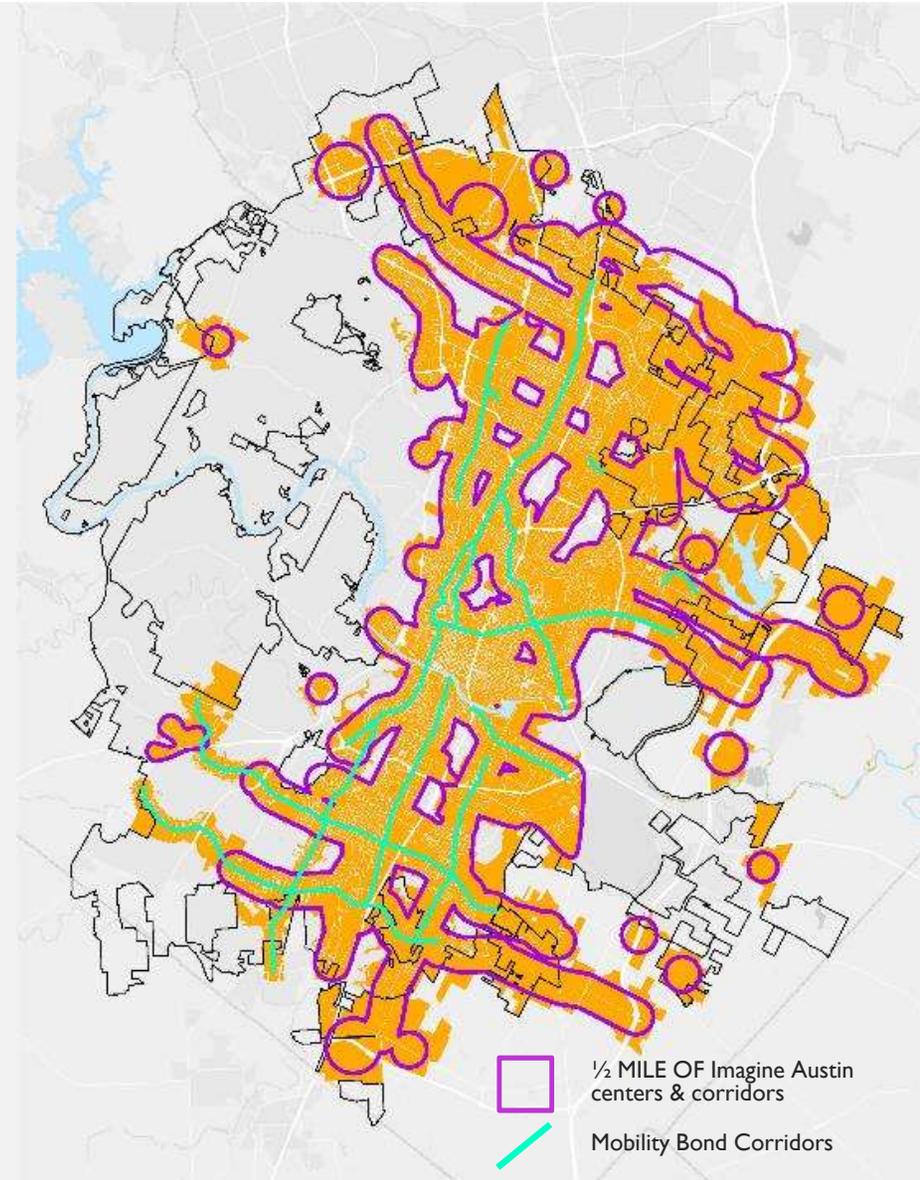
- Parcel is “market feasible” *today* when ratio = 1
  - Ratio  $\geq 1$  means achievable rent is equal to or above submarket rents
  - Building is feasible when it is able to achieve rents equal to market



## AUGUST 2017 - UPDATED MODEL

**Step 5:** Determine parcels with high potential for (re)development

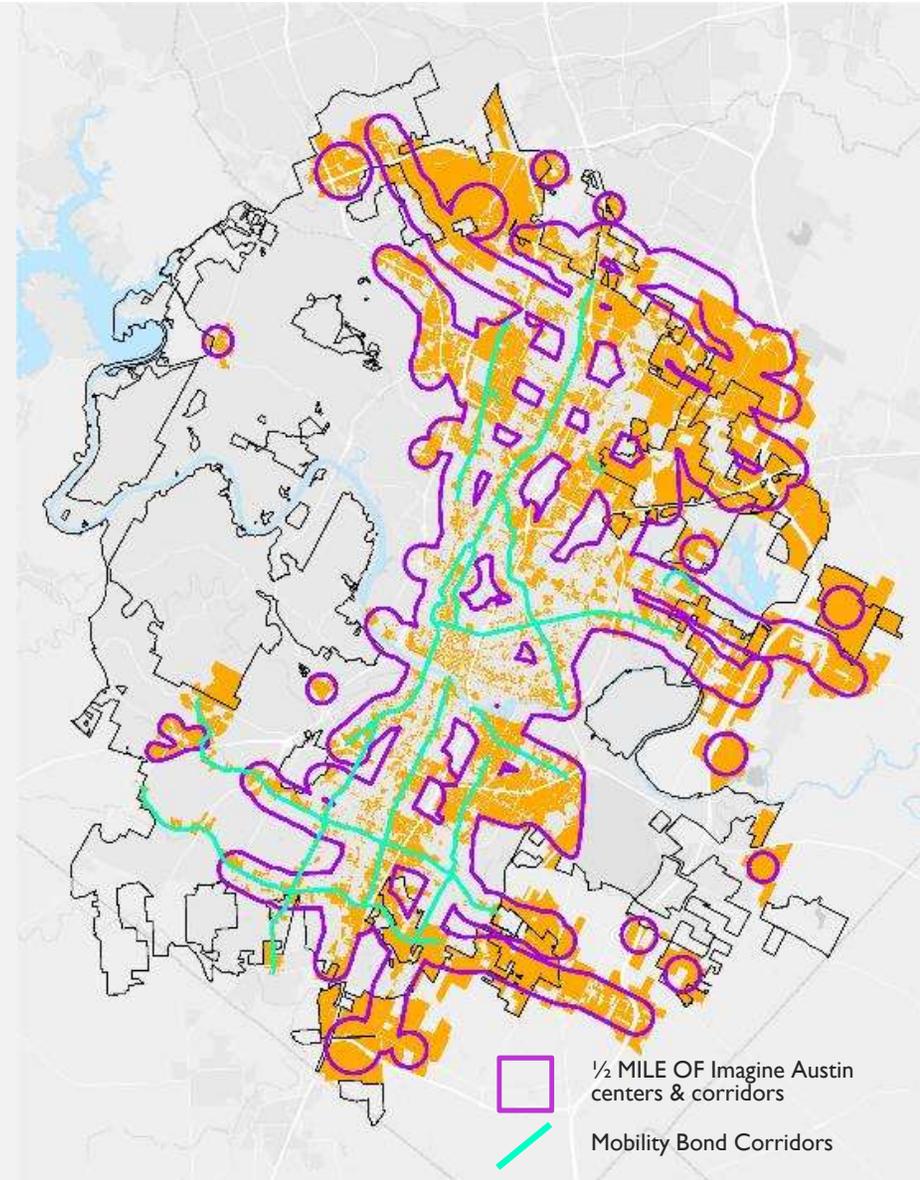
- Included:
  - Parcels within  $\frac{1}{2}$  mile of **Imagine Austin centers & corridors**
  - Parcels within  $\frac{1}{4}$  mile of **mobility bond corridors**
  - **PUDs**



## AUGUST 2017 - UPDATED MODEL

### Step 5: Determine parcels with high potential for (re)development

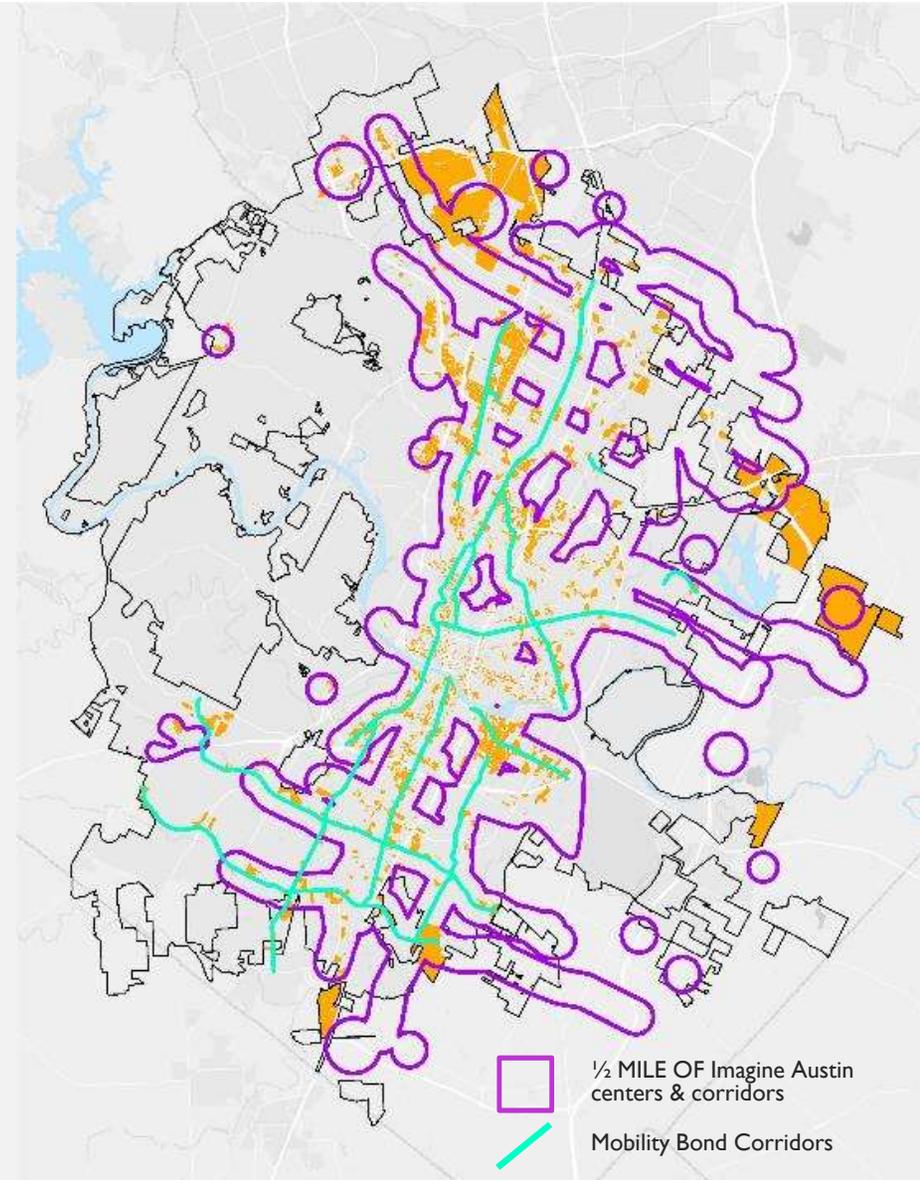
- Removed:
  - Stable single family
  - Public lands, open space, educational, roads/utilities, environmentally constrained land
  - Historic districts
  - Developed parcels < 10,000 sqft
  - Parcels developed after 2010



## AUGUST 2017 - UPDATED MODEL

**Step 5:** Determine parcels with high potential for (re)development

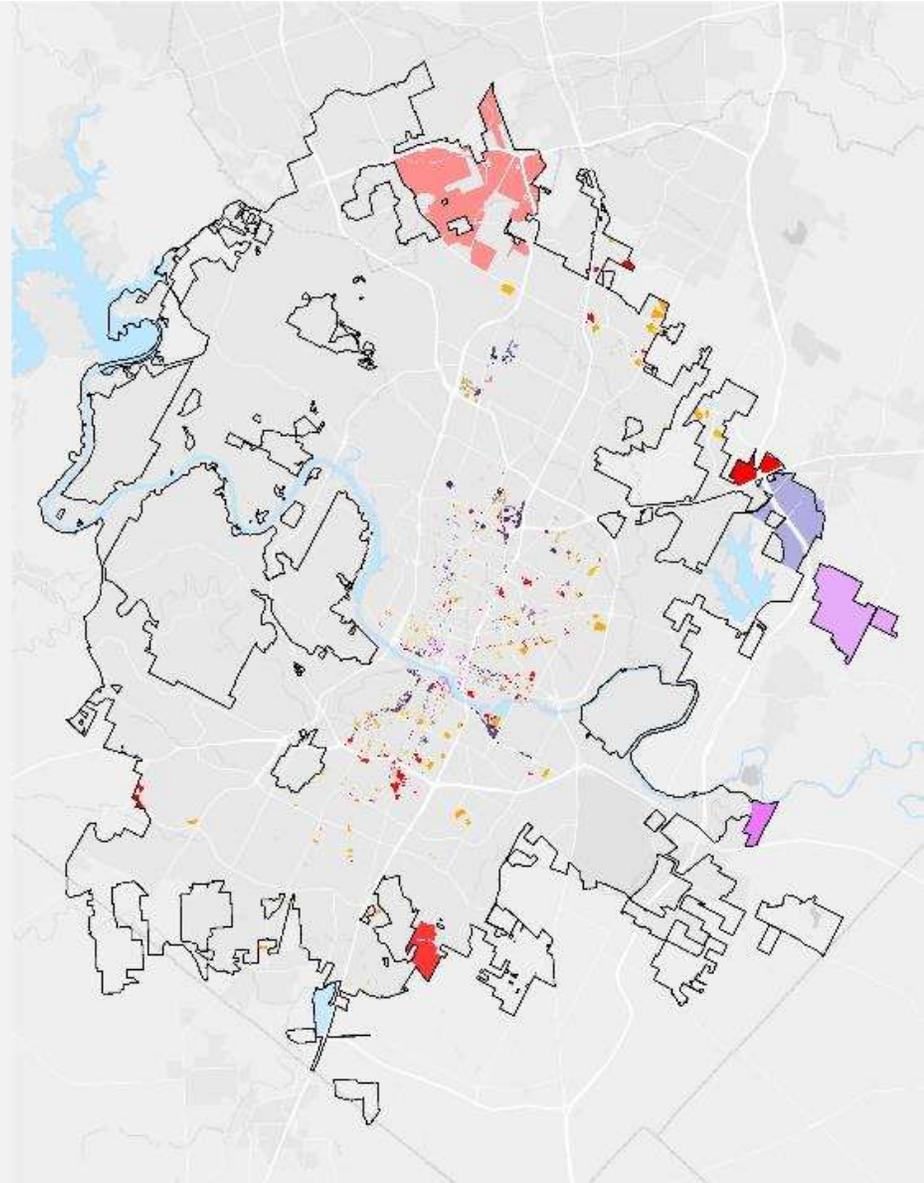
- Removed:
  - Parcels with market feasibility ratio less than 0.75
  - 0.75 and above captures parcels with longer term potential (i.e., beyond 10 years)



## AUGUST 2017 - UPDATED MODEL

### Critiques

- 1) Expand beyond Centers and Corridors
- 2) Allow mixed use on commercial parcels
- 3) Limit redevelopment ratio to 1 or better (market feasible)
- 4) Remove Robinson Ranch PUD



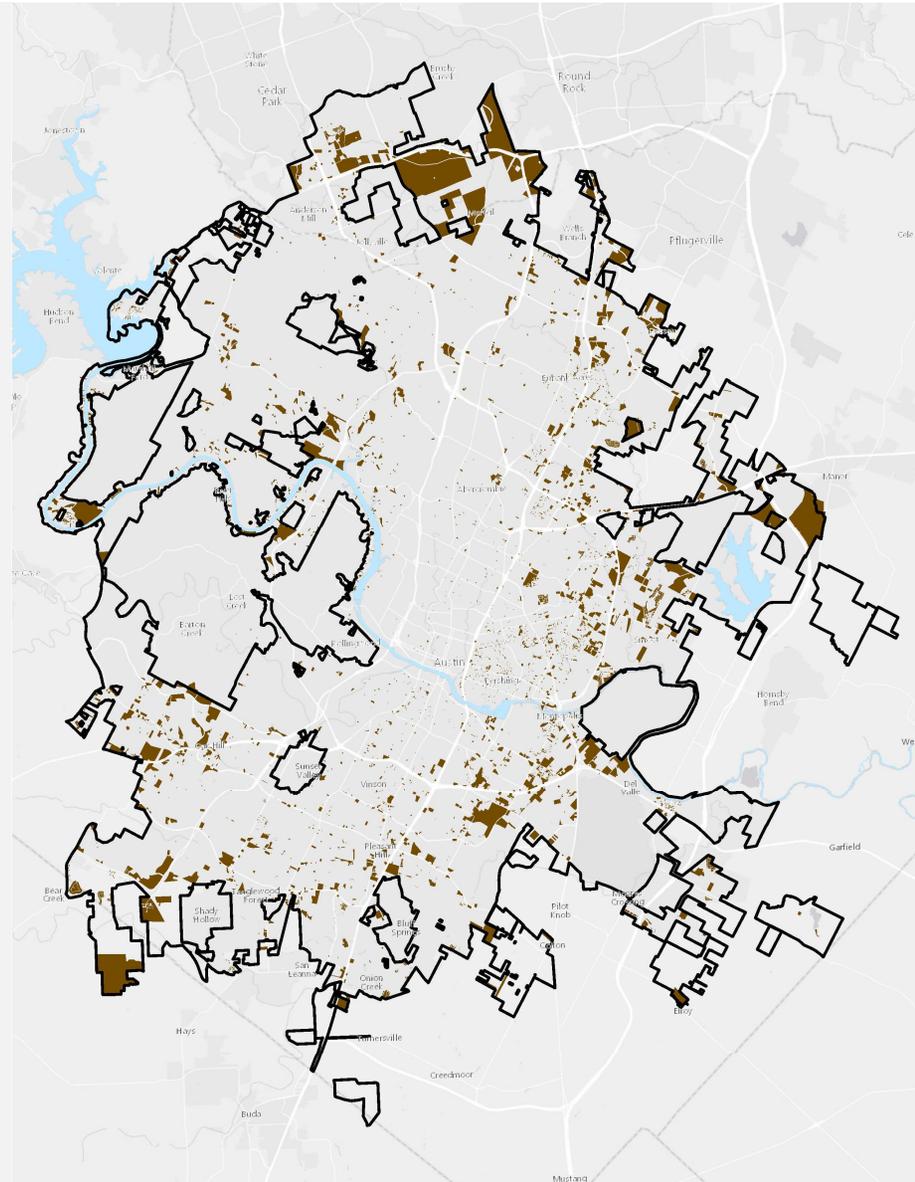
# HOUSING CAPACITY ANALYSIS – SEPTEMBER 2017

## Updated Buildable Lands

- Start with Vacant Land



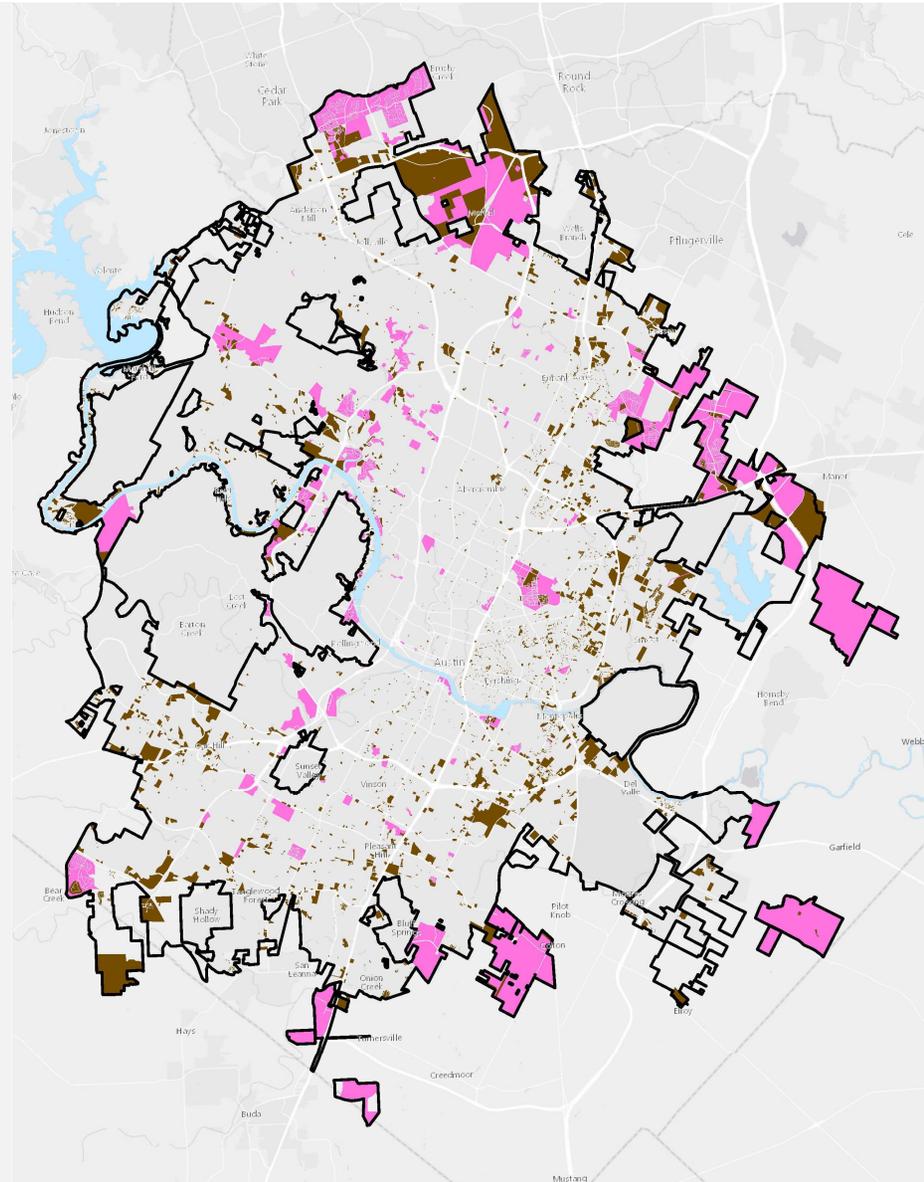
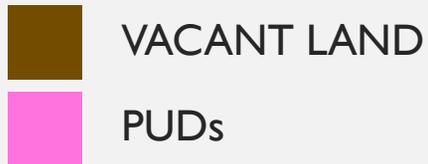
VACANT LAND



# HOUSING CAPACITY ANALYSIS – SEPTEMBER 2017

## Updated Buildable Lands

- Start with Vacant Land
- Include PUDs



# HOUSING CAPACITY ANALYSIS – SEPTEMBER 2017

## Updated Buildable Lands

- Start with Vacant Land
- Include PUDs
- Remove Robinson Ranch PUD
  - ~24,000 HU in previous analyses



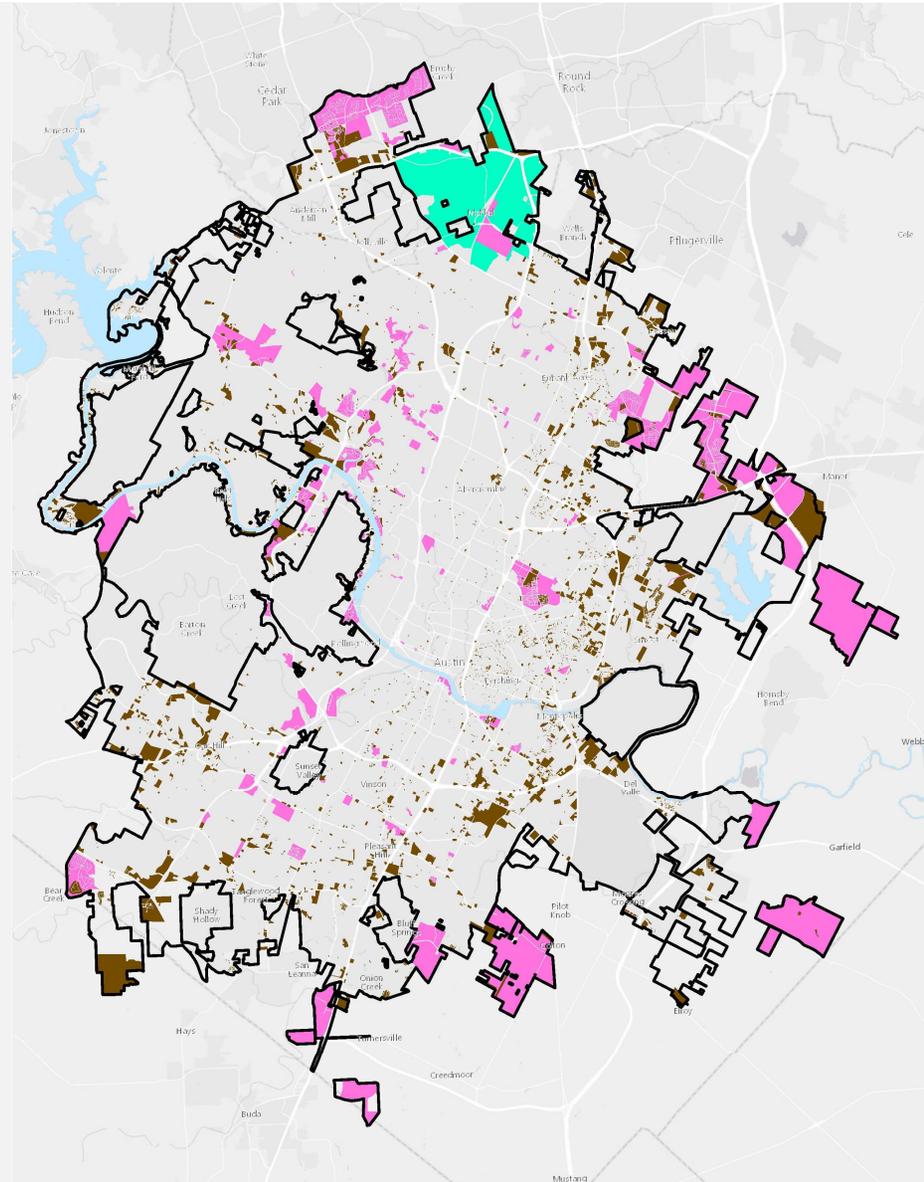
VACANT LAND



Robinson Ranch PUD



PUDs



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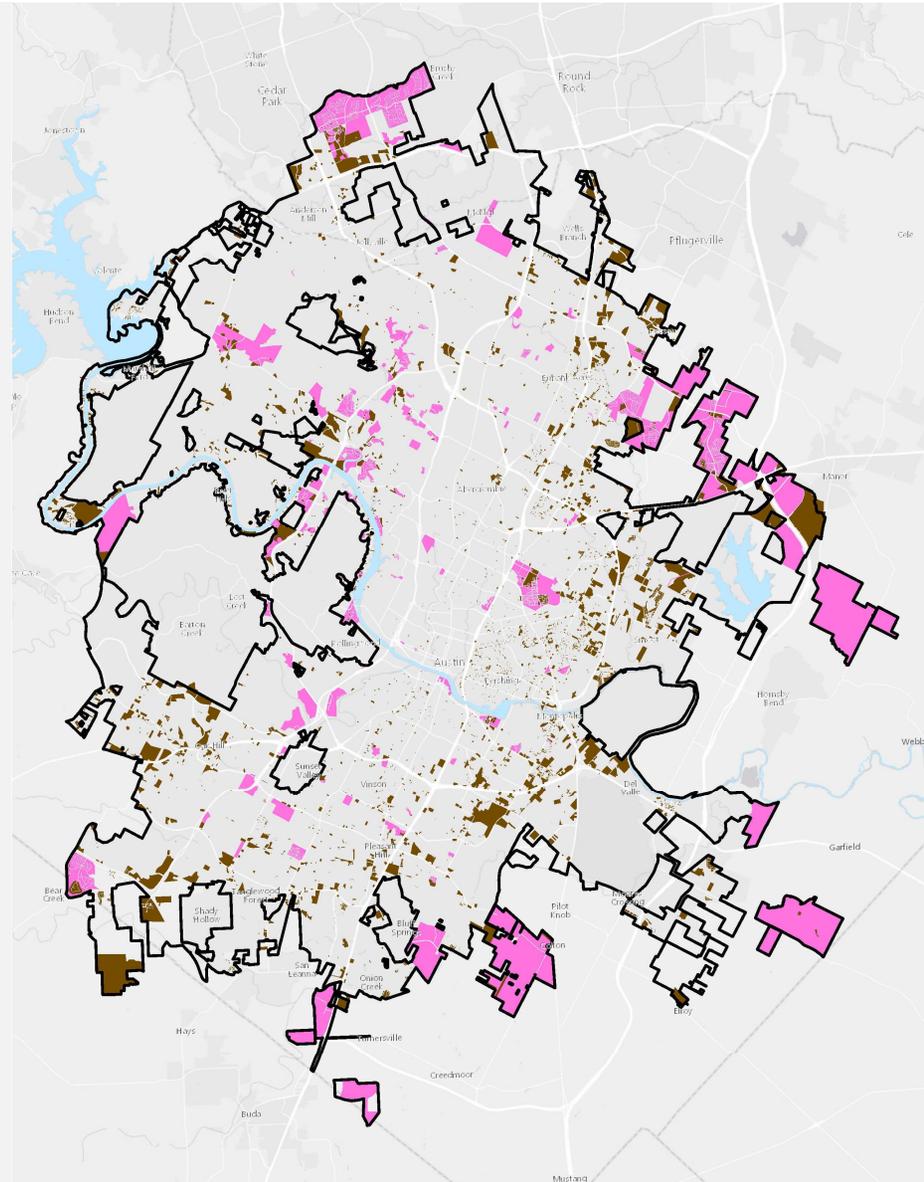
VACANT LAND



Robinson Ranch PUD



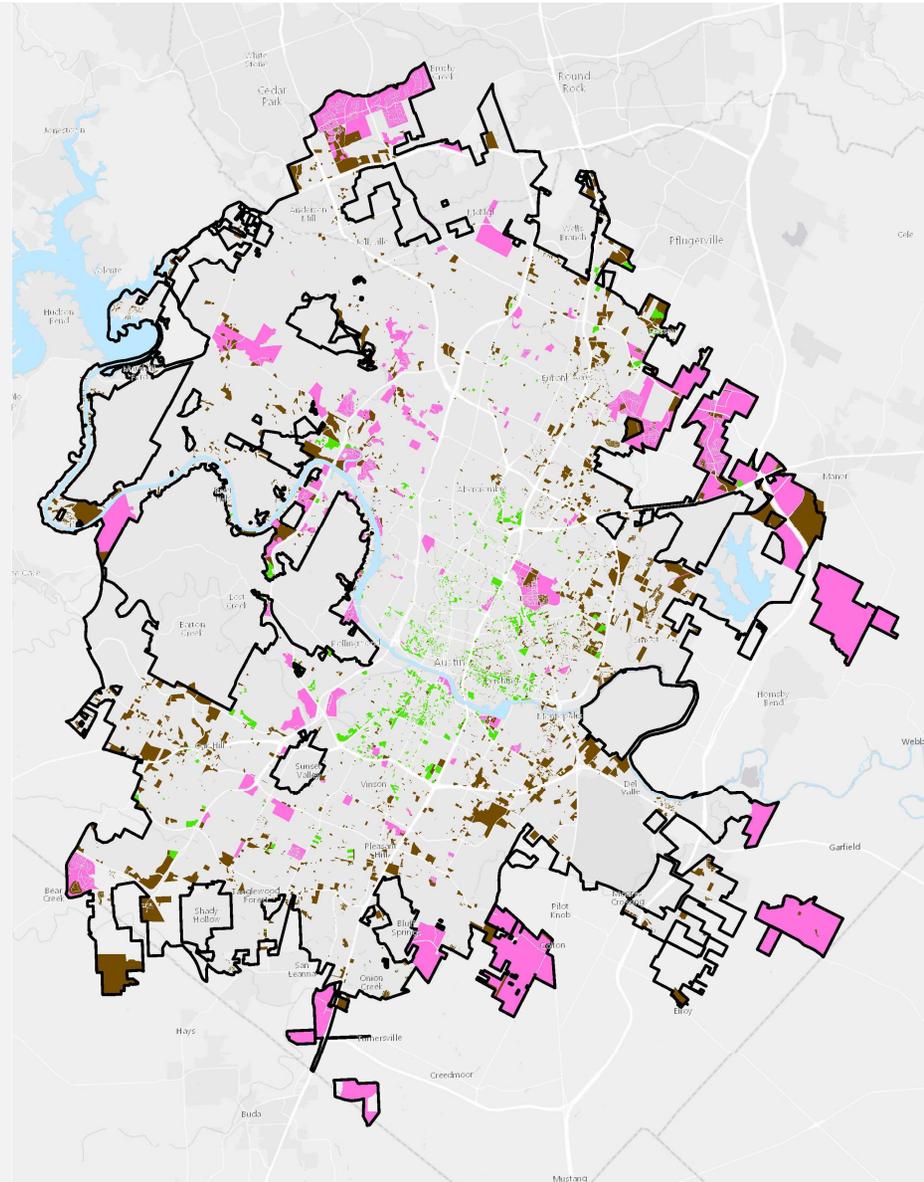
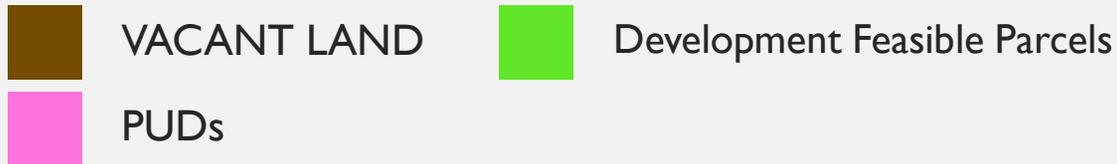
PUDs



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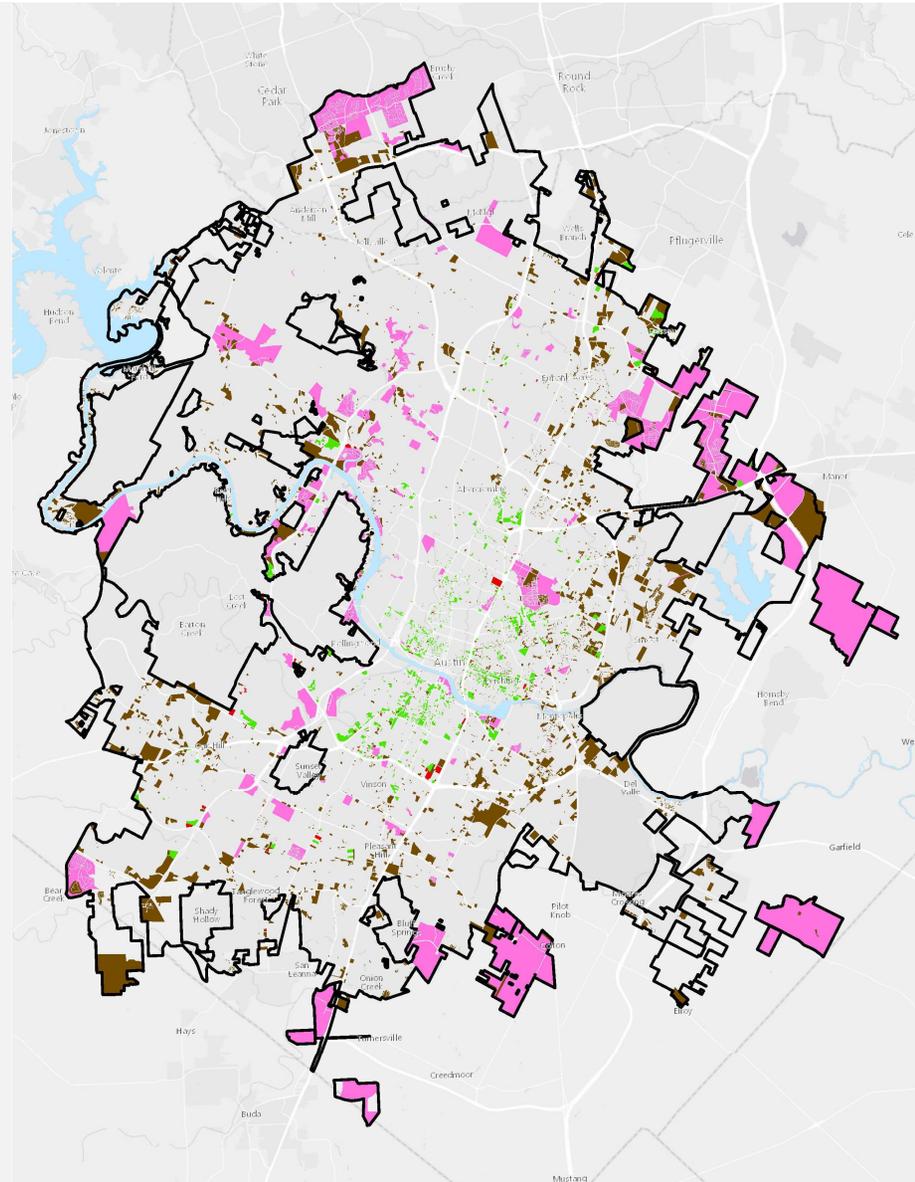
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  - ~24,000 HU in previous analyses
- Include all parcels with a Market Ratio  $\geq 1$



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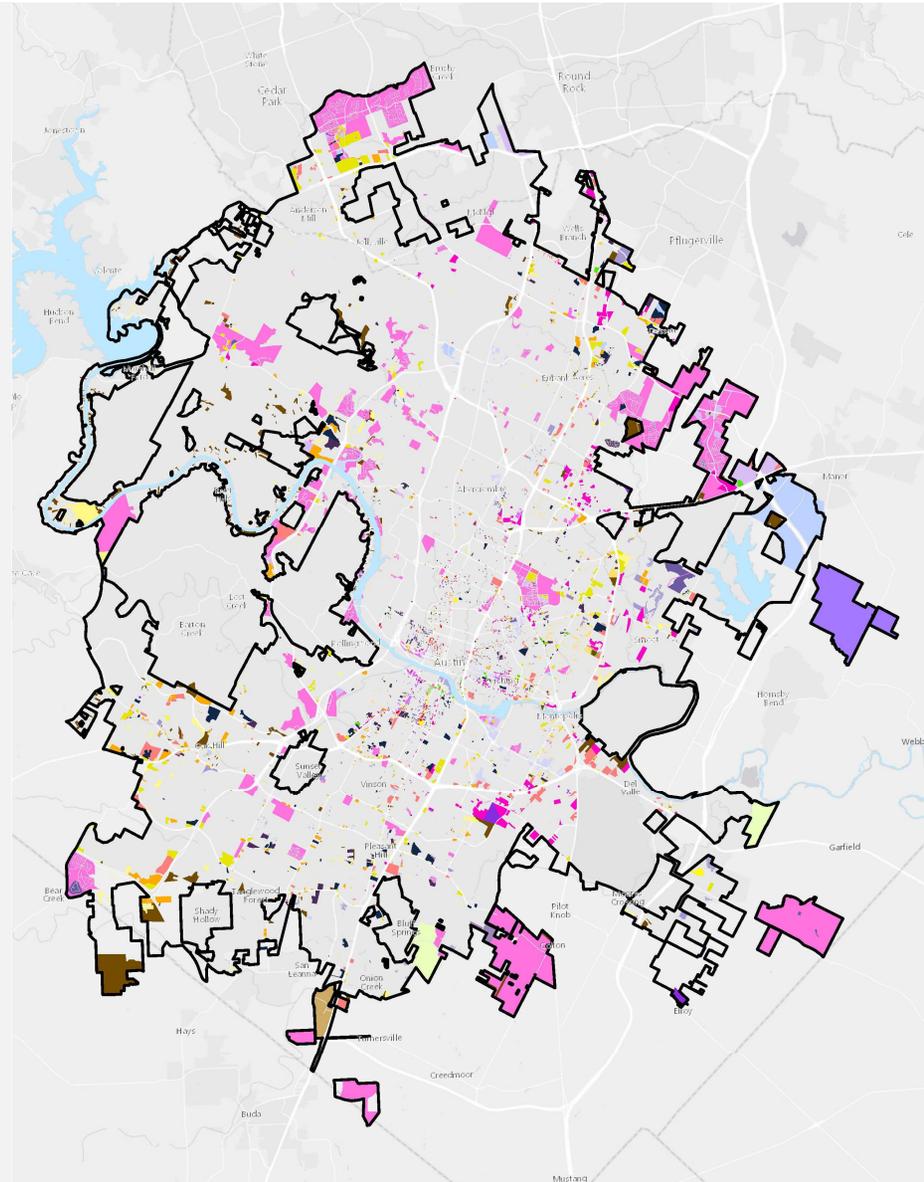
- Start with Vacant Land
- Include PUDs
- Remove Robinson Ranch PUD
  - ~24,000 HU in previous analyses
- Include all parcels with a Market Ratio  $\geq 1$ 
  - Draft 2 Analysis Includes Commercial Lands now assigned MU Zones



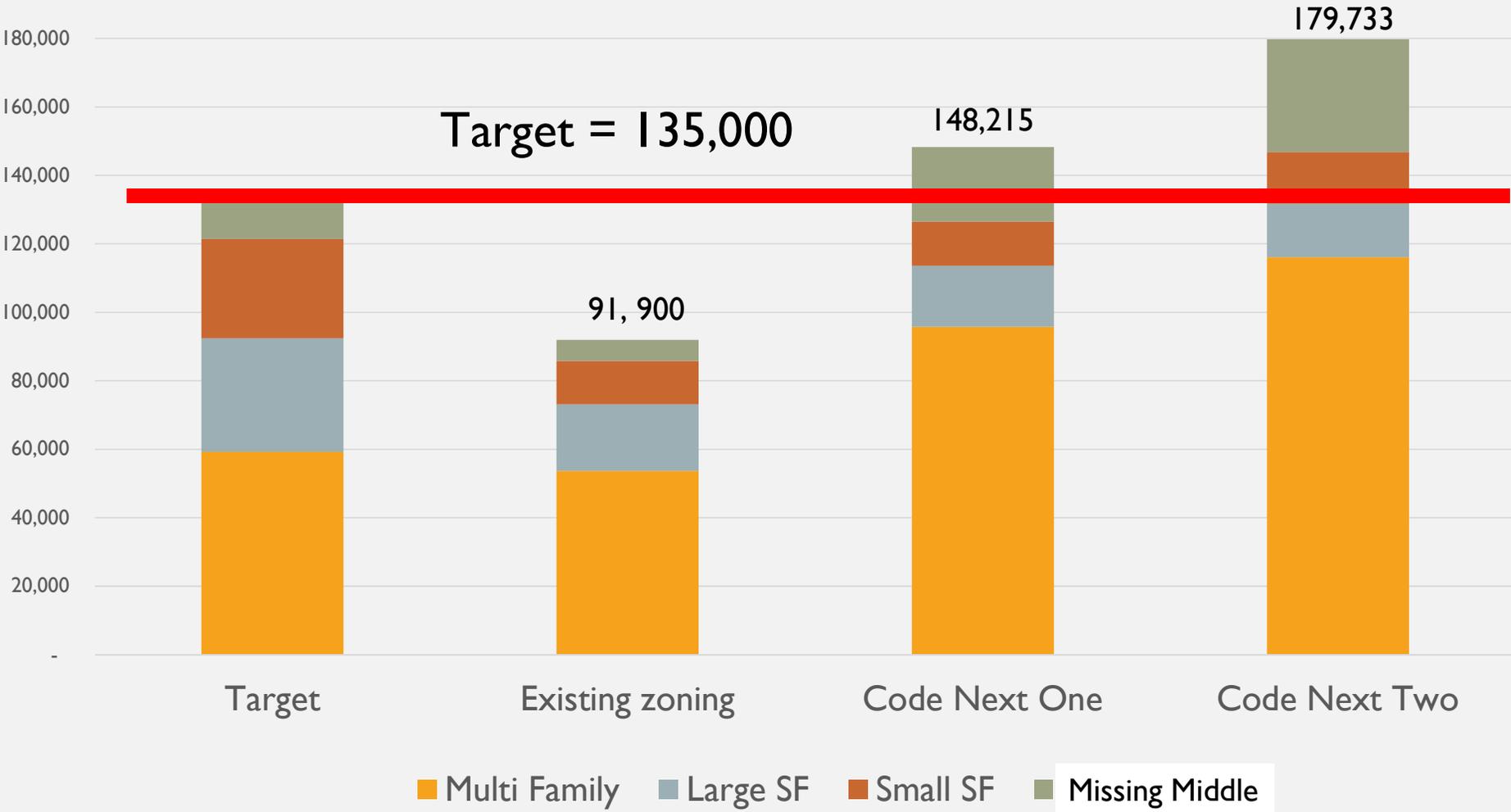
# HOUSING CAPACITY ANALYSIS – SEPTEMBER 2017

## Assign New Zones

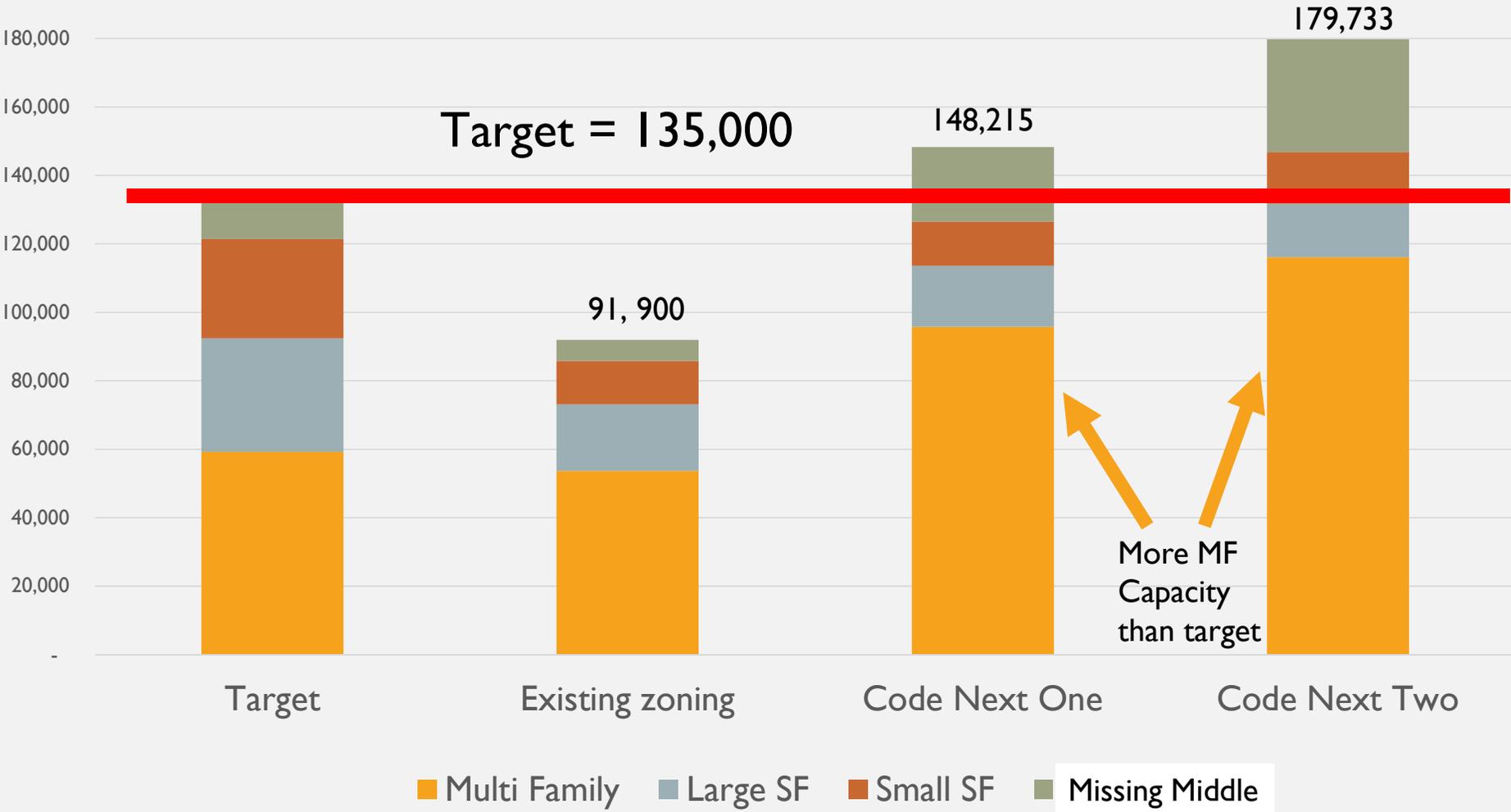
- Calibrate Envision Tomorrow to calculate based on new zoning standards and map



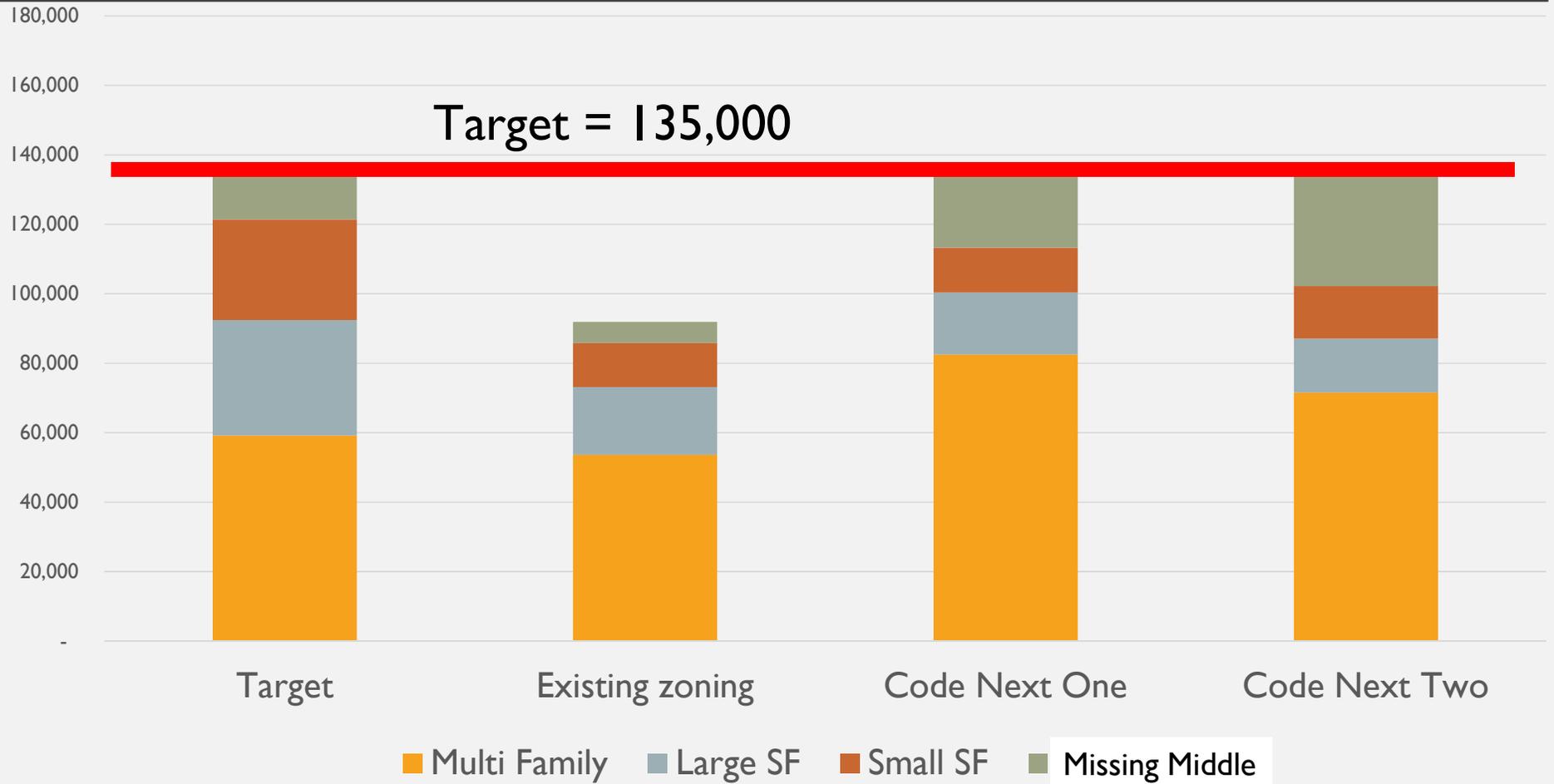
# HOUSING ESTIMATES BY TYPE



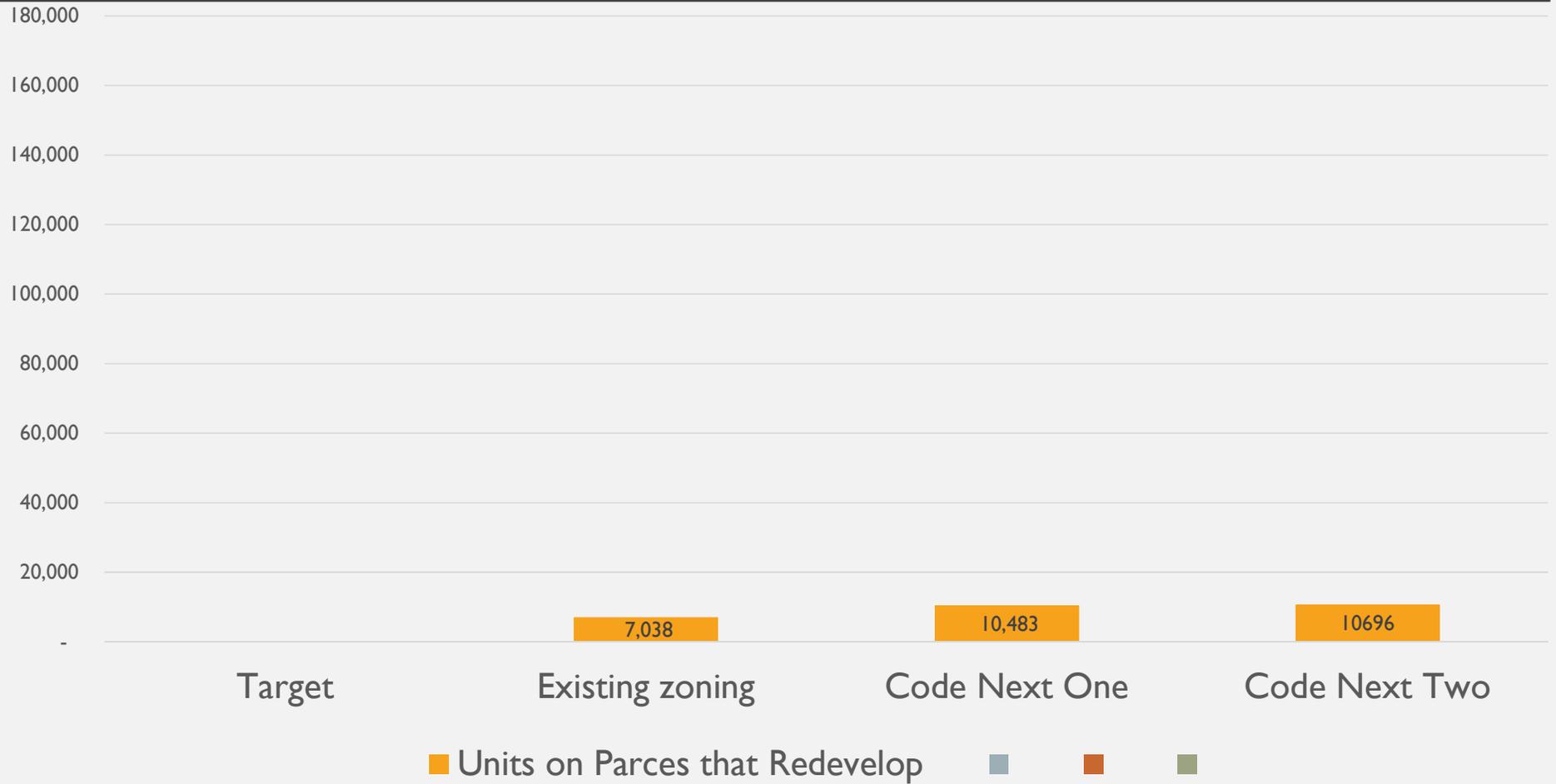
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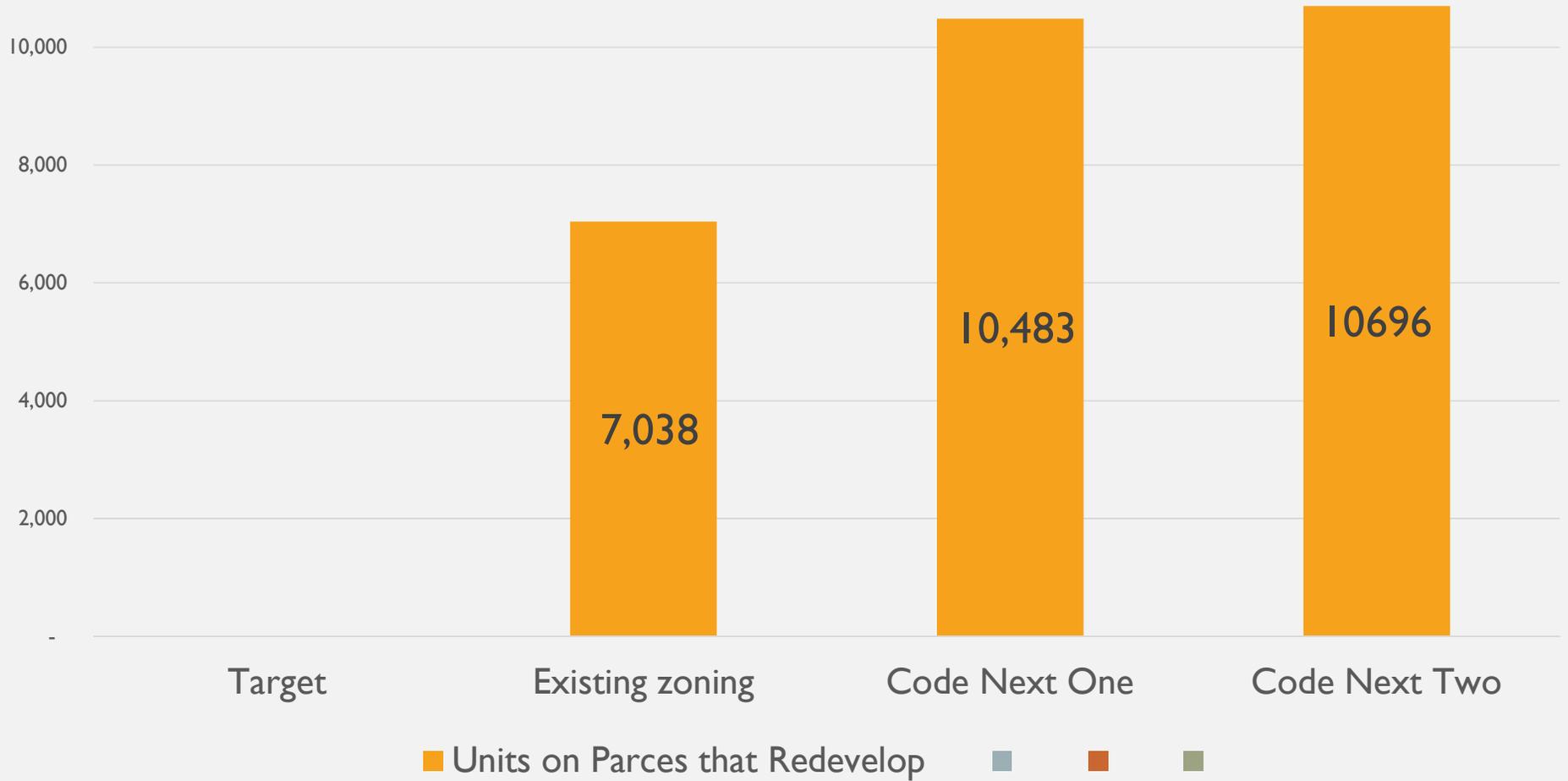
# HOUSING ESTIMATES BY TYPE EXCESS MF CAPACITY ELIMINATED



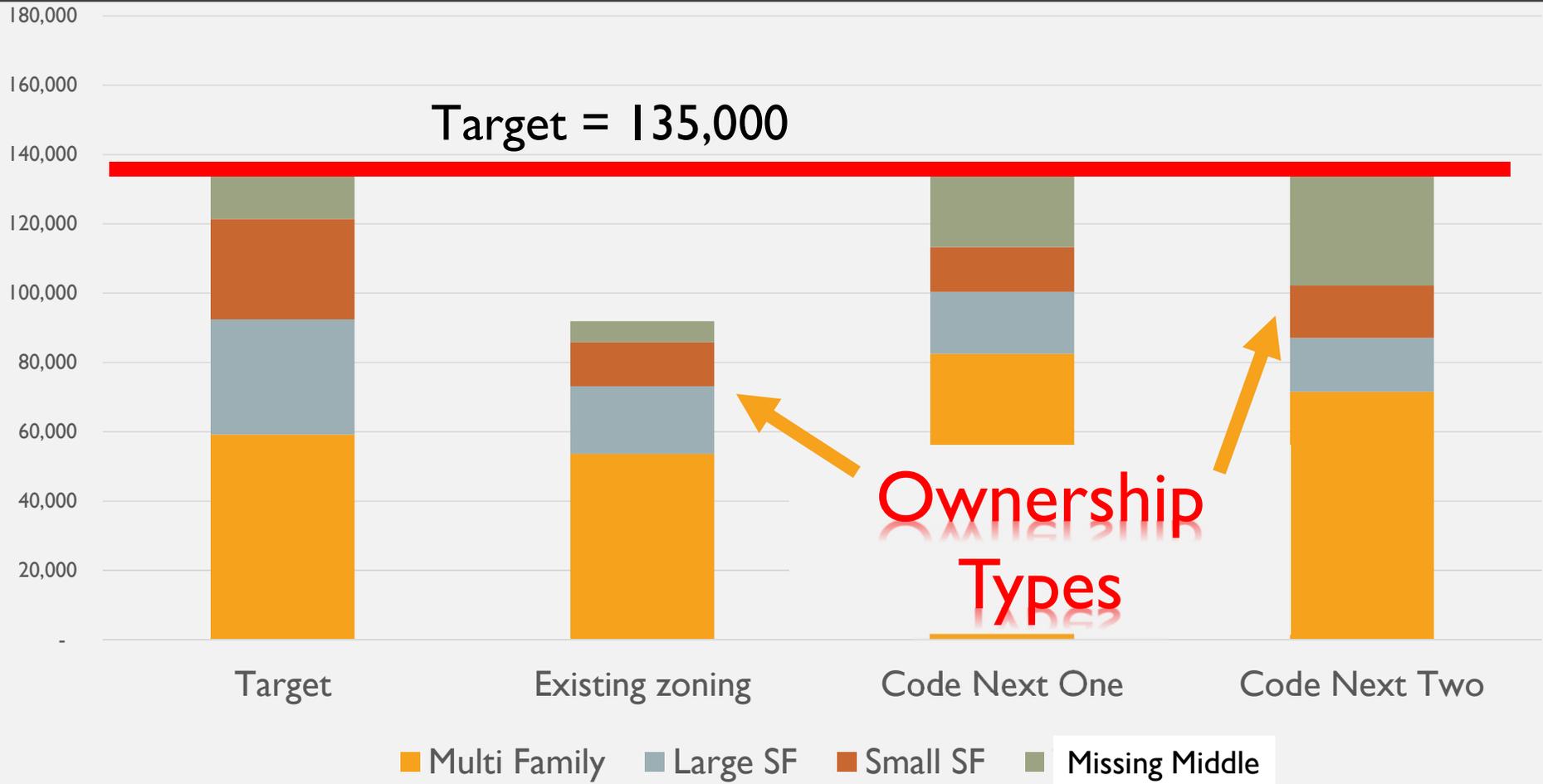
# UNITS ON PARCELS THAT REDEVELOP



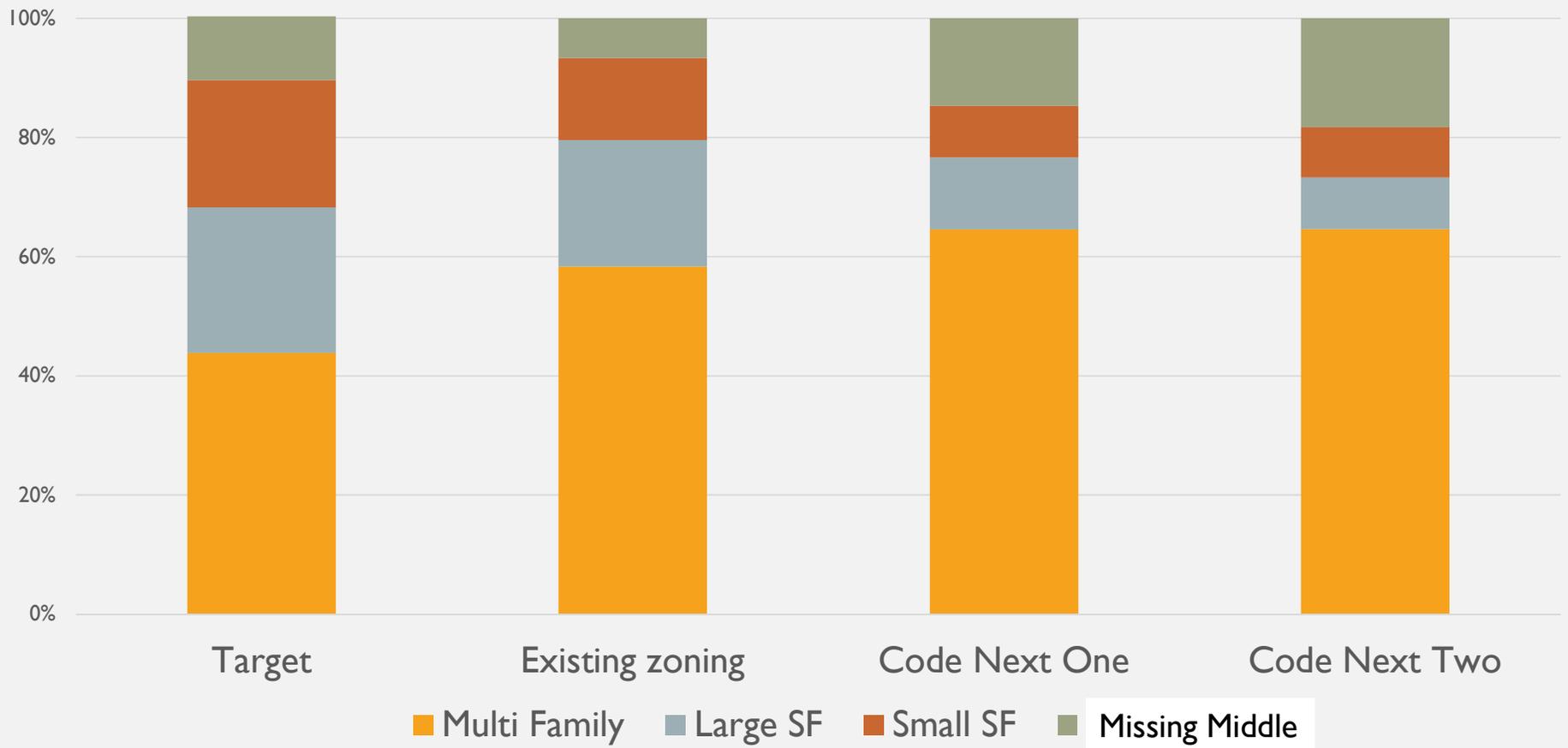
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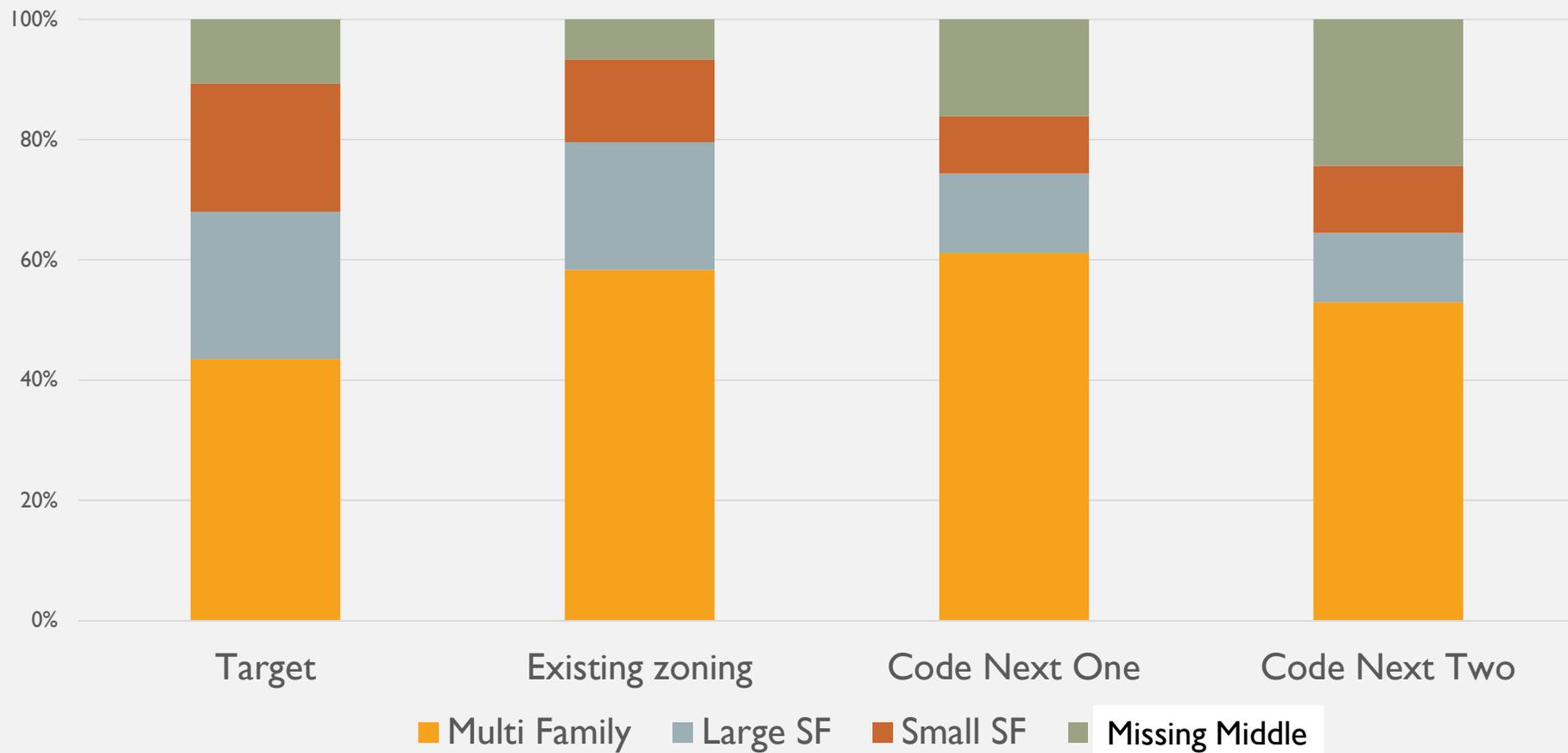
# HOUSING ESTIMATES BY TYPE EXCESS MF CAPACITY ELIMINATED



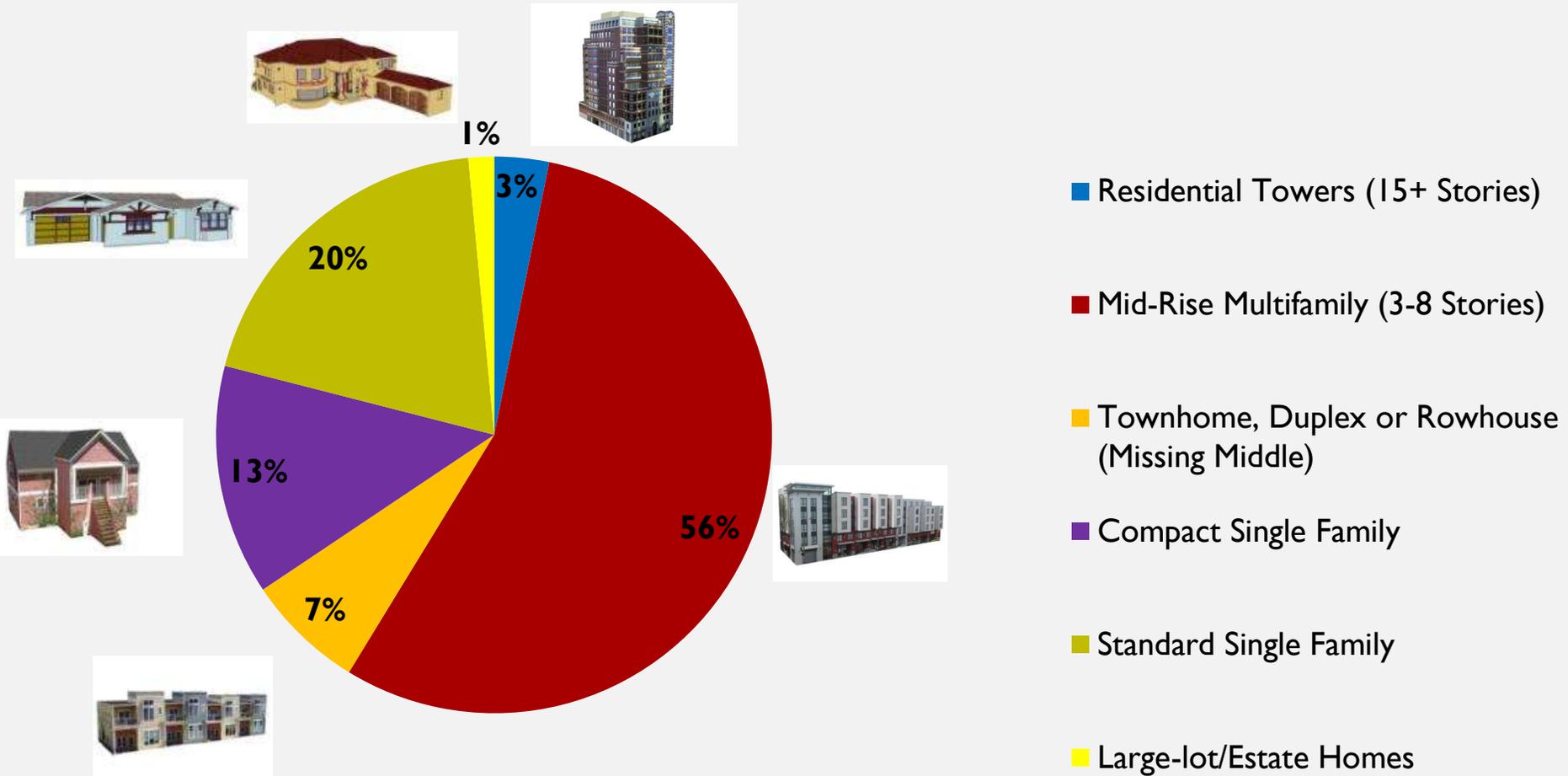
# HOUSING ESTIMATES BY TYPE PERCENT MIX



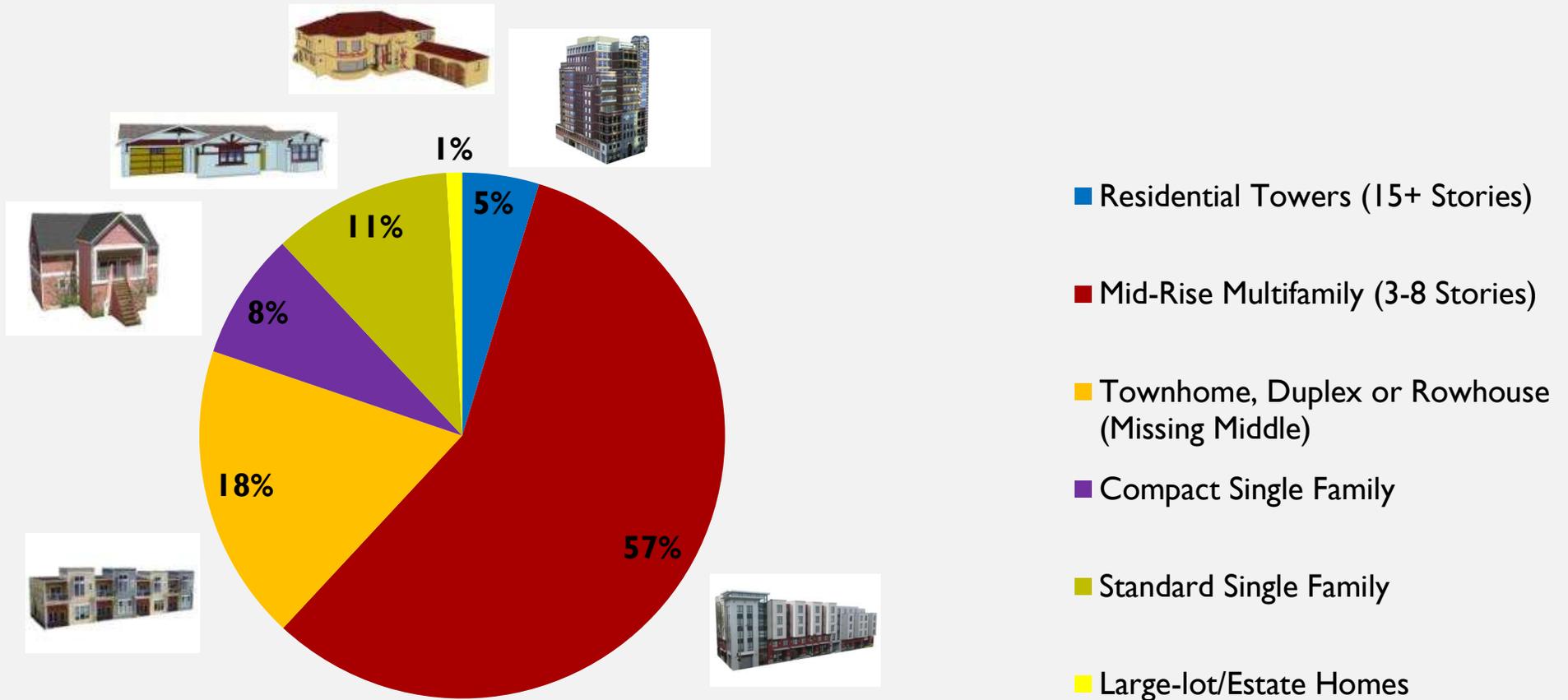
HOUSING ESTIMATES BY TYPE  
PERCENT MIX  
EXCESS MF CAPACITY ELIMINATED



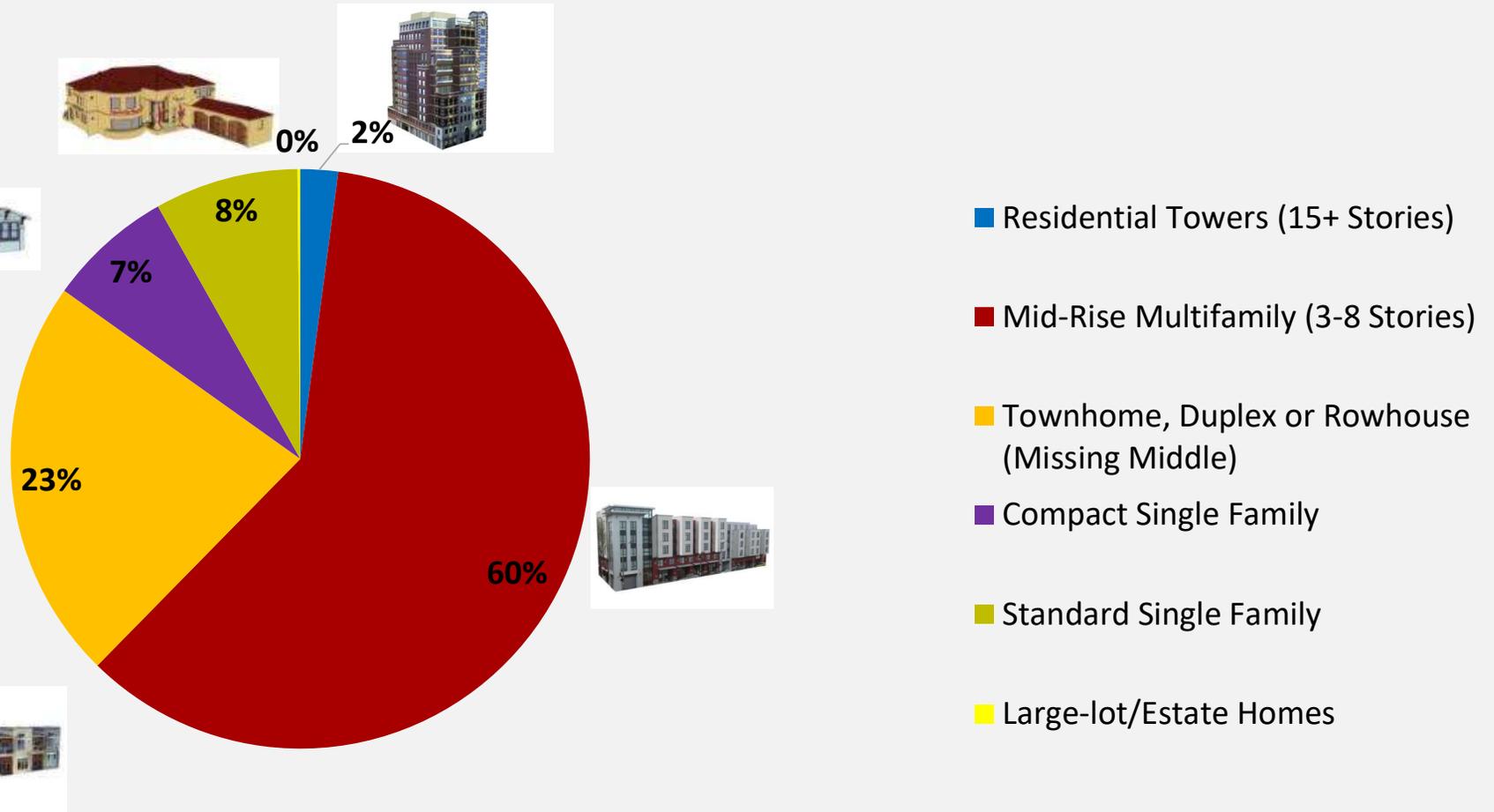
# EXISTING ZONING – CAPACITY BY BUILDING TYPE



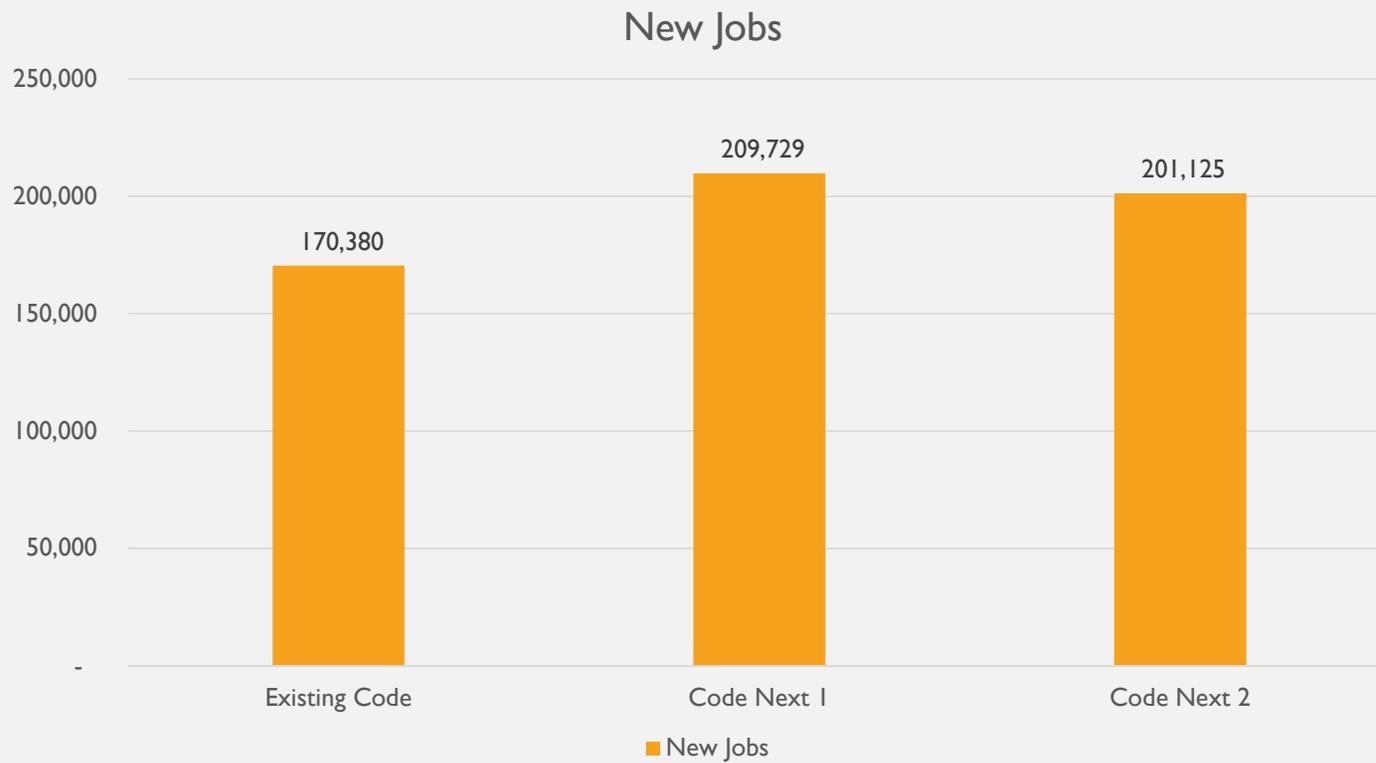
# CODENEXT DRAFT I - CAPACITY BY BUILDING TYPE



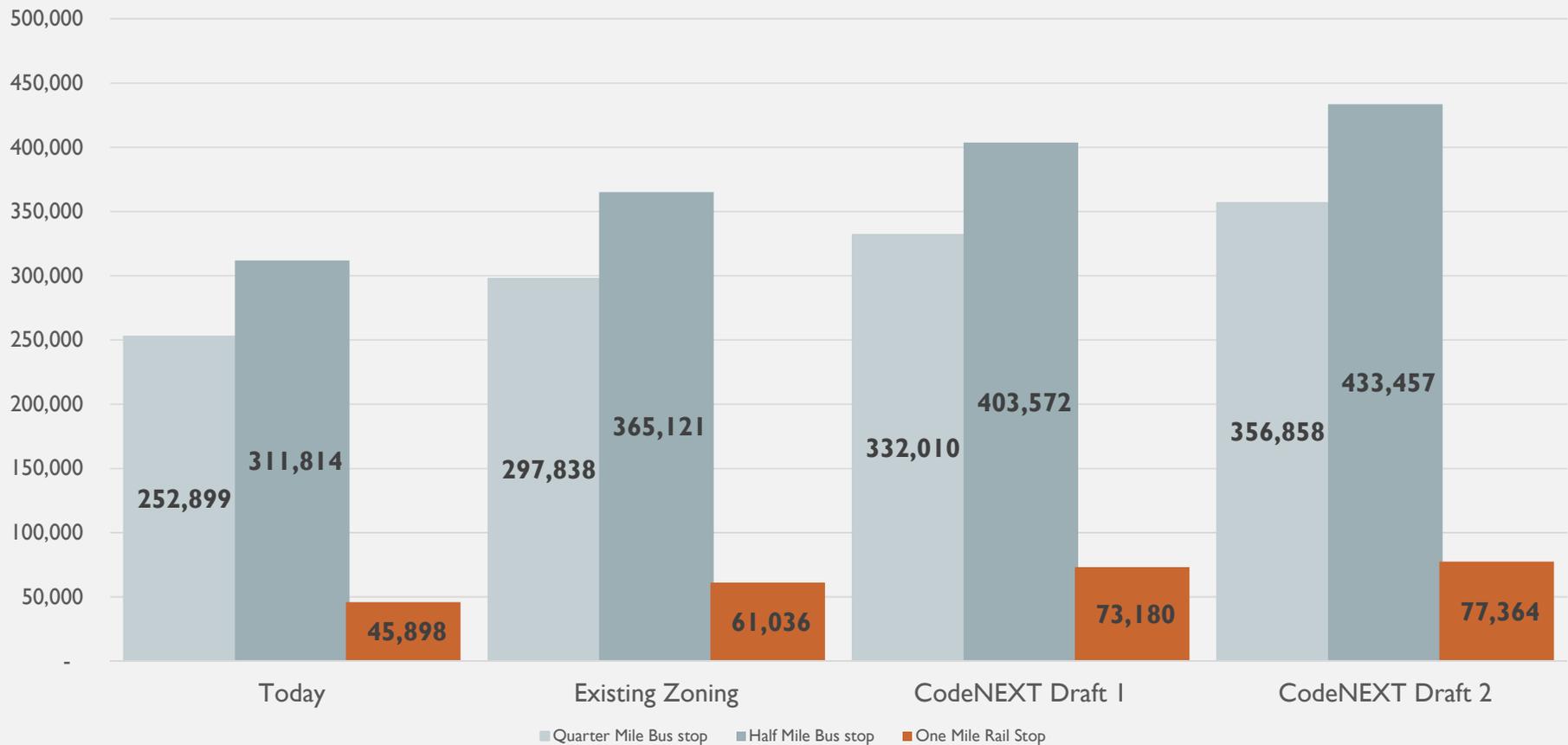
# CODENEXT DRAFT 2 - CAPACITY BY BUILDING TYPE



# NEW EMPLOYMENT

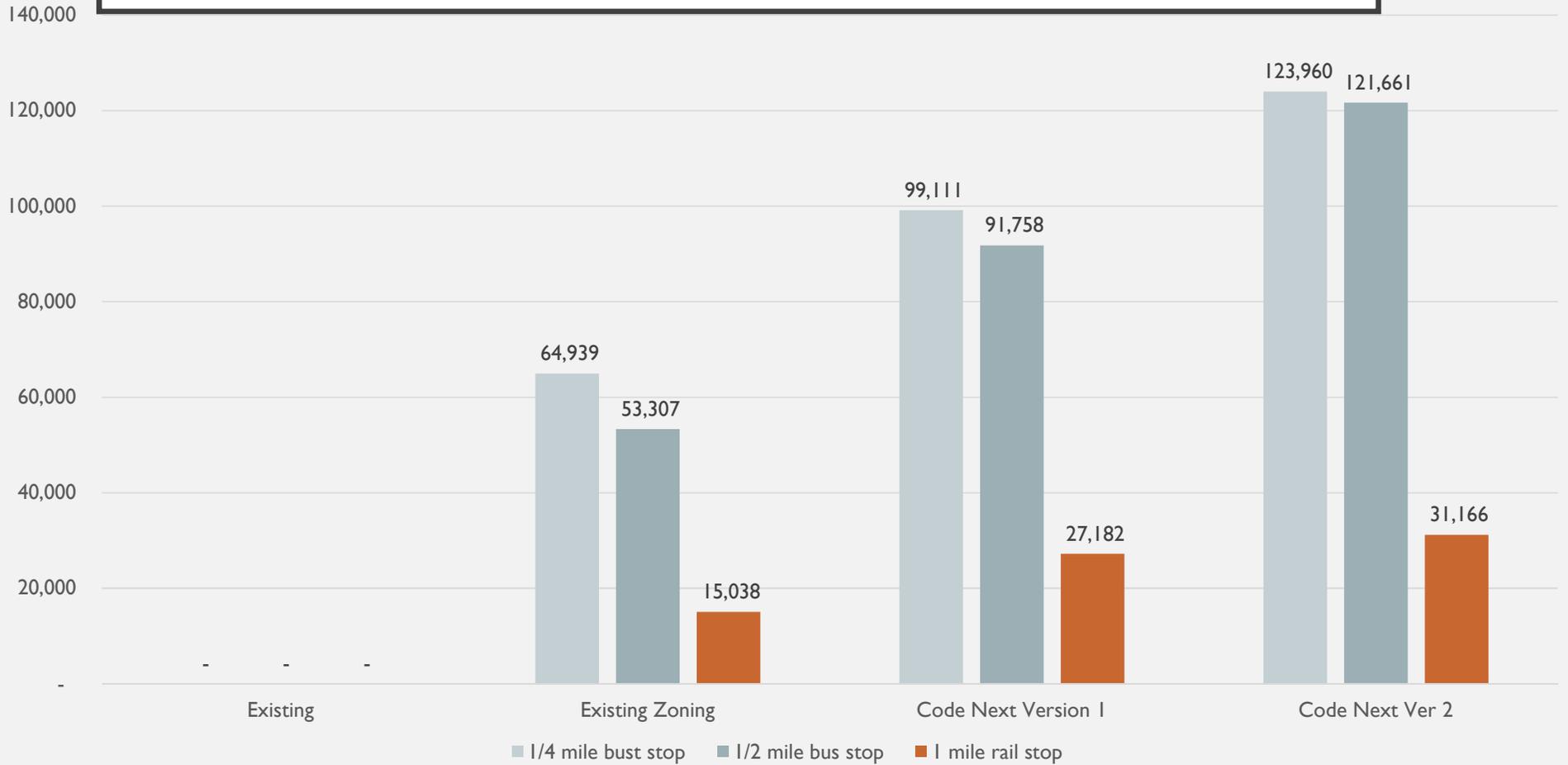


# TRANSIT - HOUSING

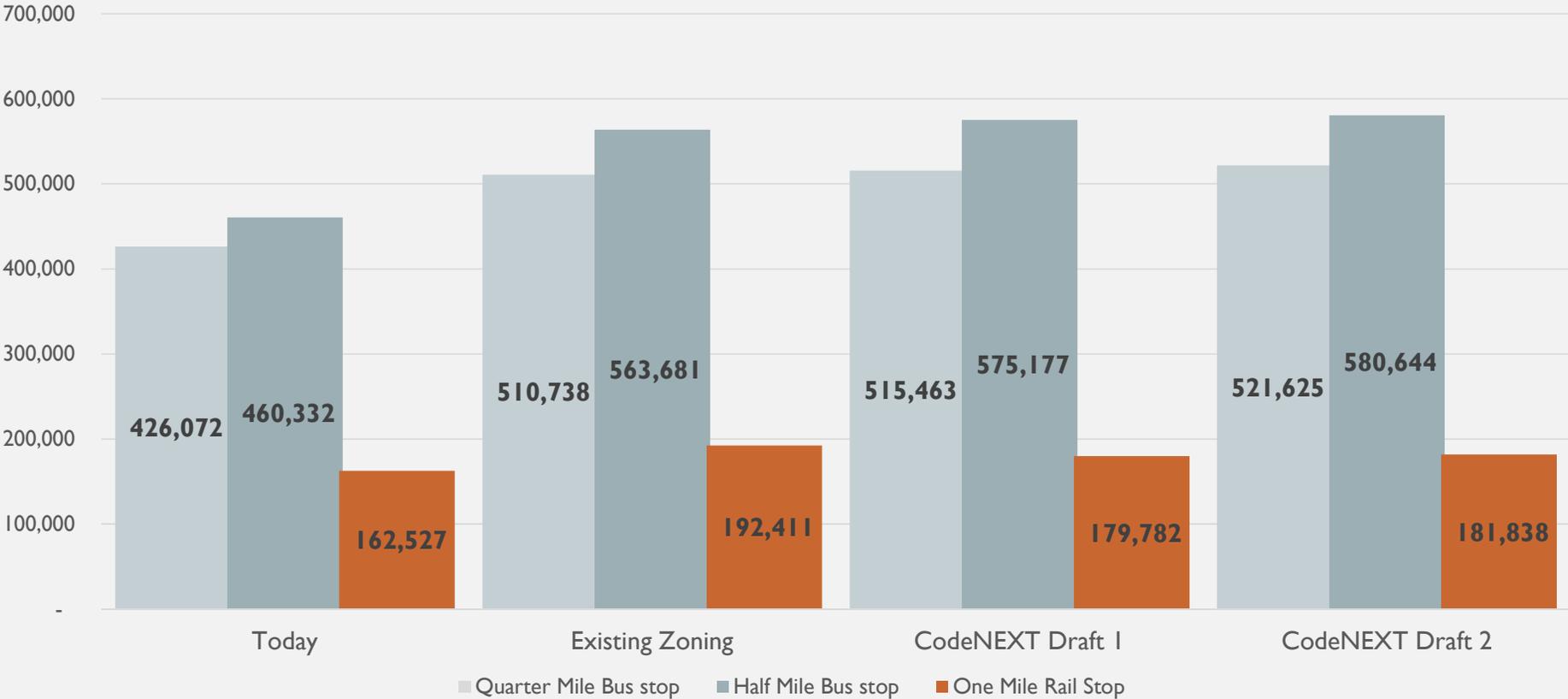


# TRANSIT – HOUSING DELTA

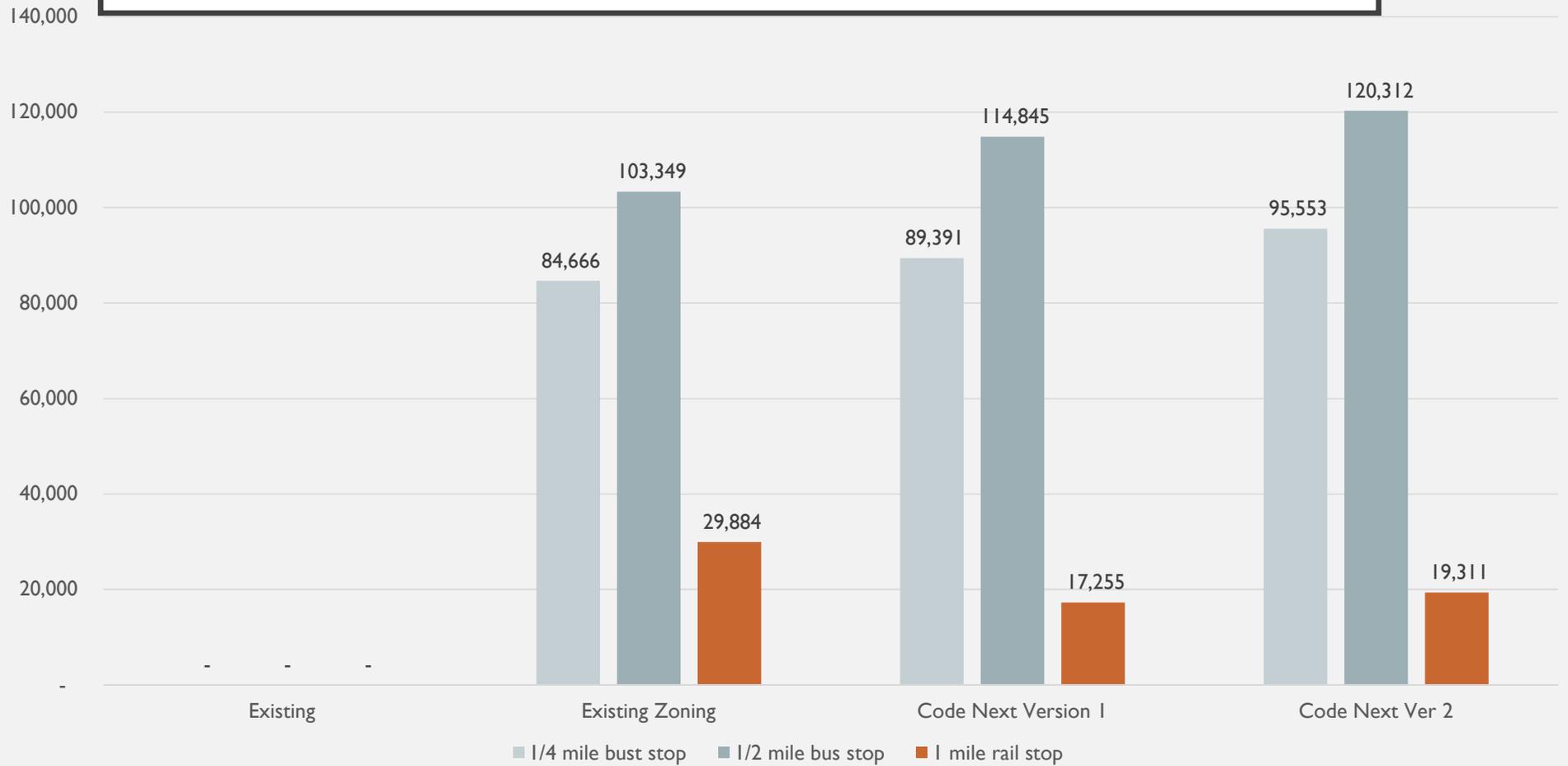
Chart Title



# TRANSIT - EMPLOYMENT



# TRANSIT – EMPLOYMENT DELTA



## LEFT TO DO

- Update housing costs
- Estimate of ADU's
- Estimate and feasibility of infill in R Zones
- Estimate of affordable units
- Estimate of units by rent or cost (affordability of entire housing stock)
- More Economic Indicators
- Taxes and income
- Remaining indicators