

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

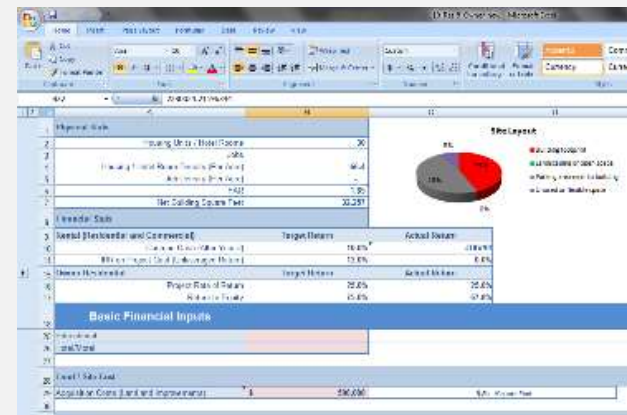
Total of 81 Buildings used in Analysis

Physical Form

- Height
- Unit sizes
- Parking configurations

Financial Reality

- Rents / sales prices
- Construction costs
- Land costs

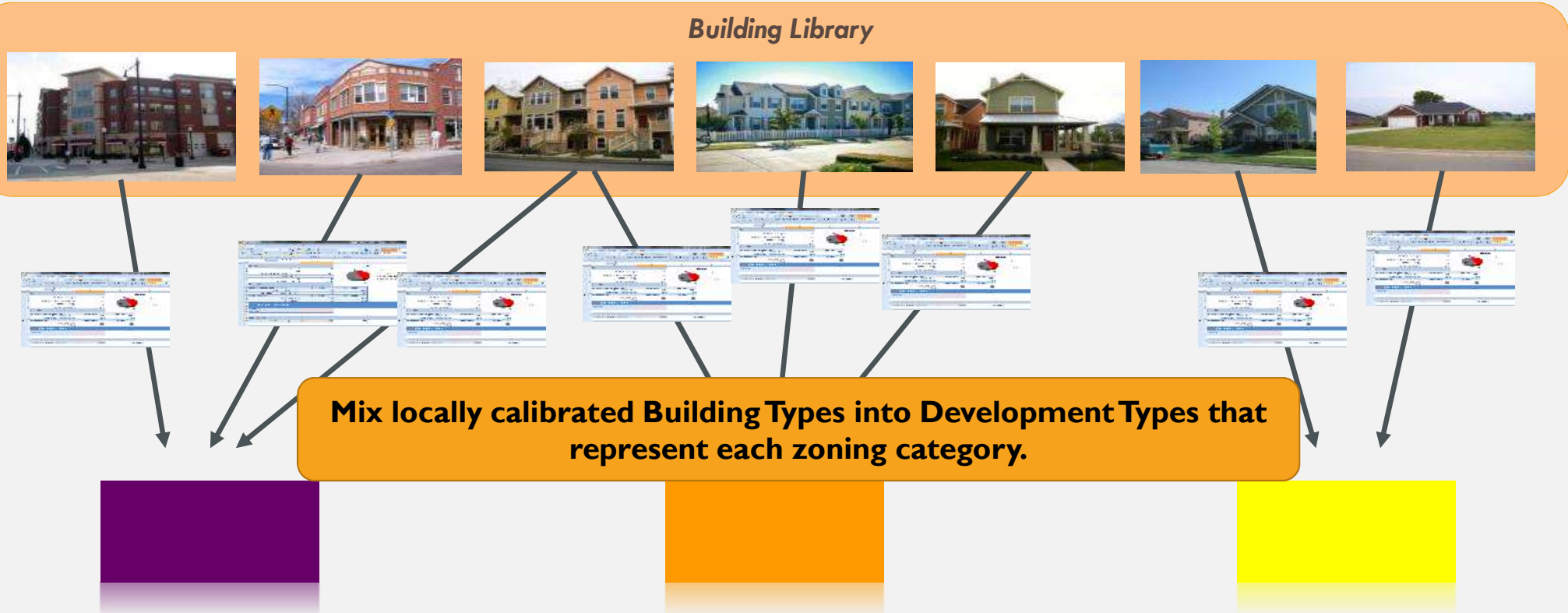


Feasible?



EACH ZONING DISTRICT CALIBRATED WITH BUILDINGS

For Existing Zoning, CodeNext 1, CodeNext 2



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

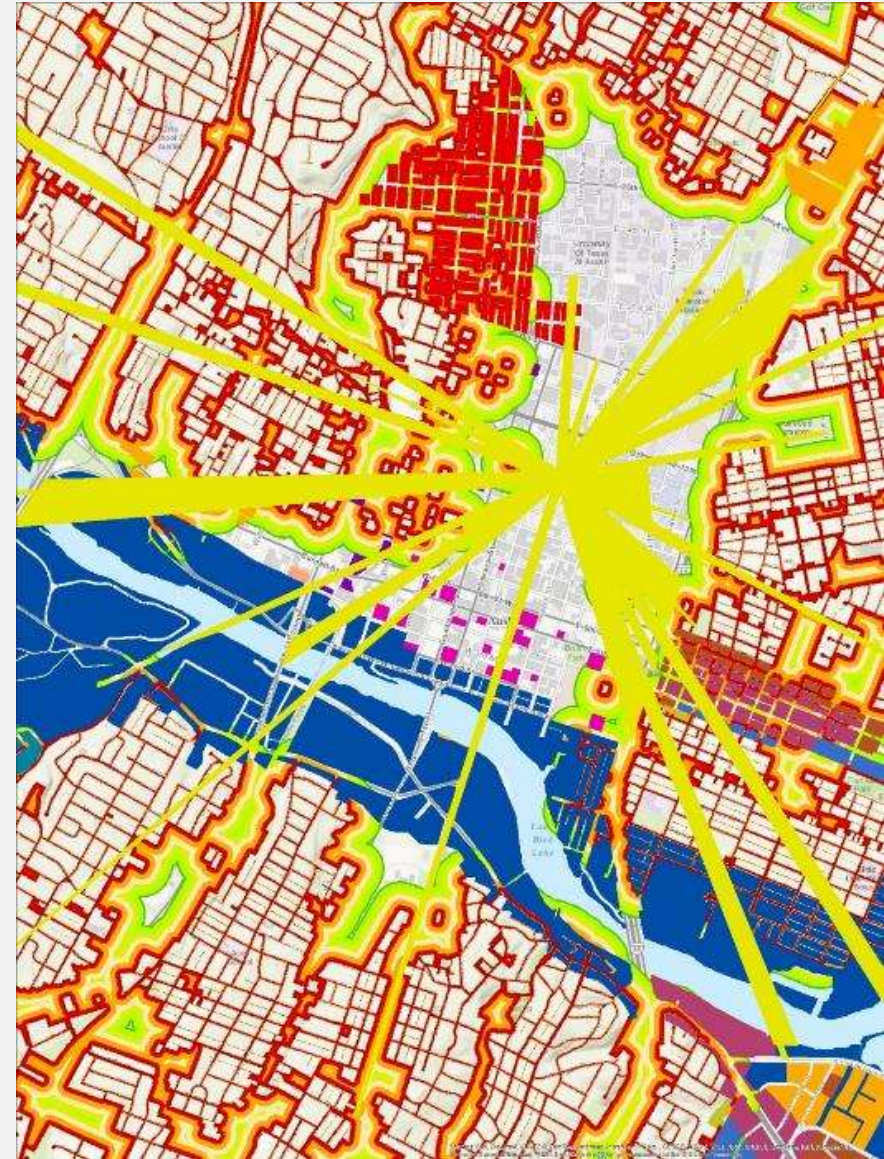
- LI
- TODCMU
- TODLDR
- TODMDR
- TODMU

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'

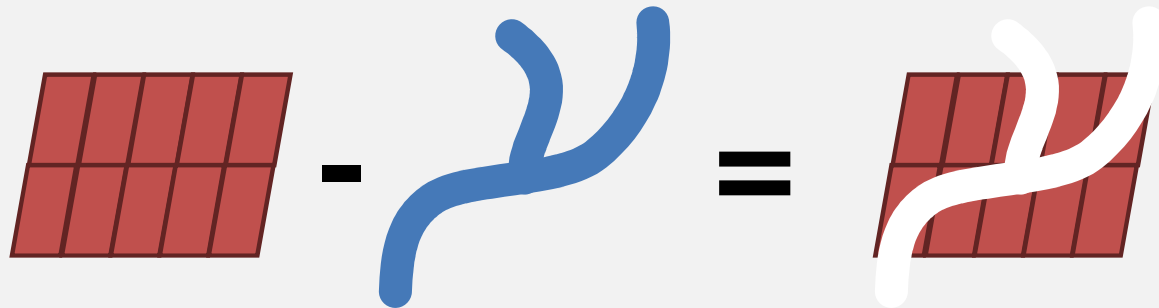
Projects over 20K Sq Ft

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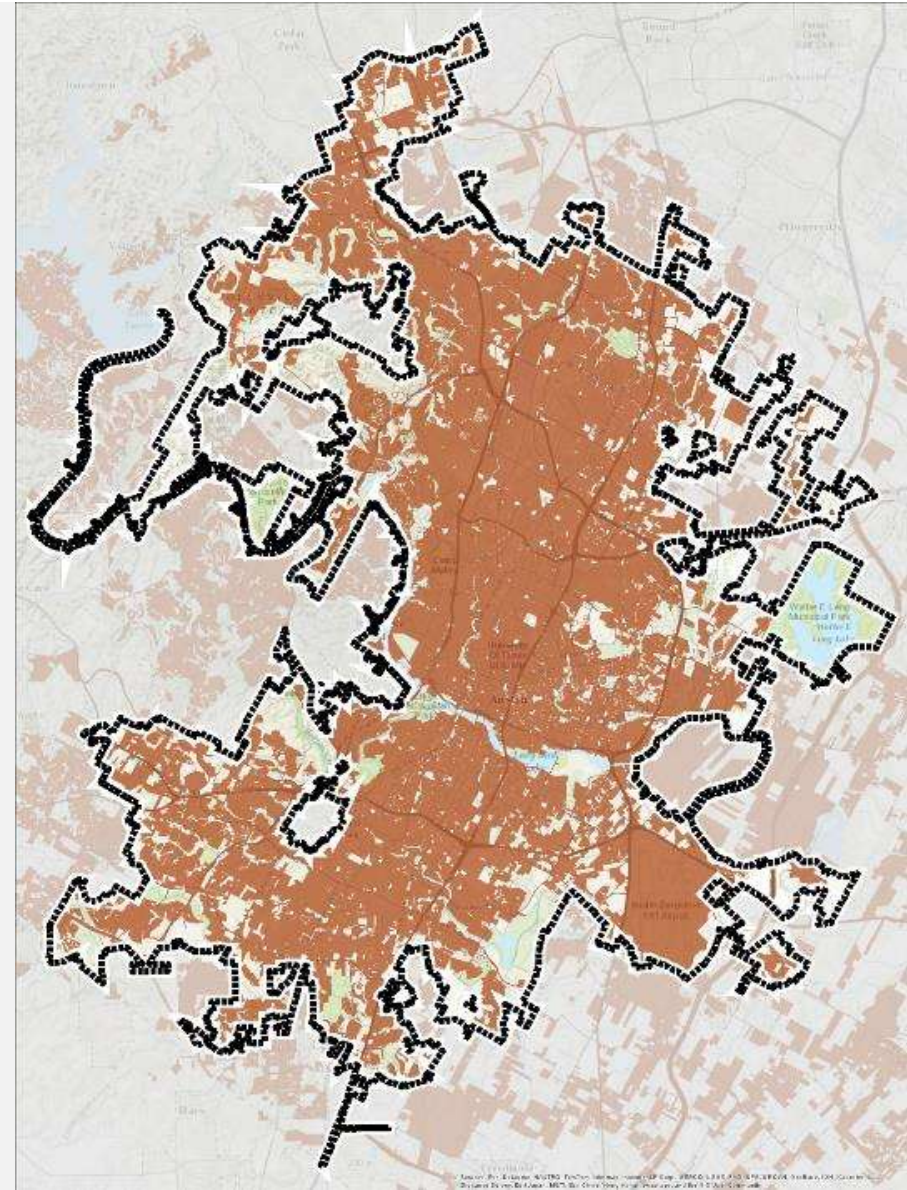
CONSTRUCT BUILDABLE LANDS LAYER - 2013

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



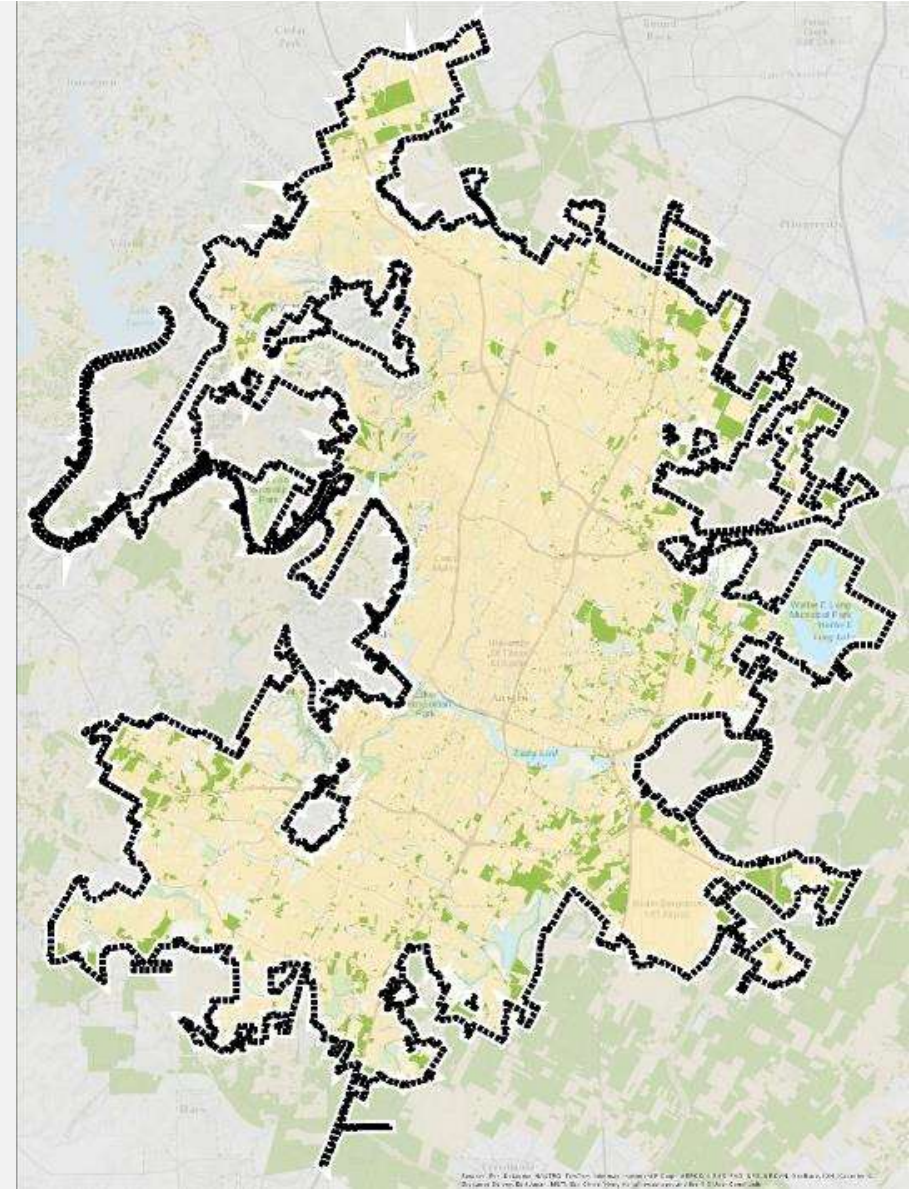
BUILT PARCELS

- 114,063 developed acres
- 178 square miles



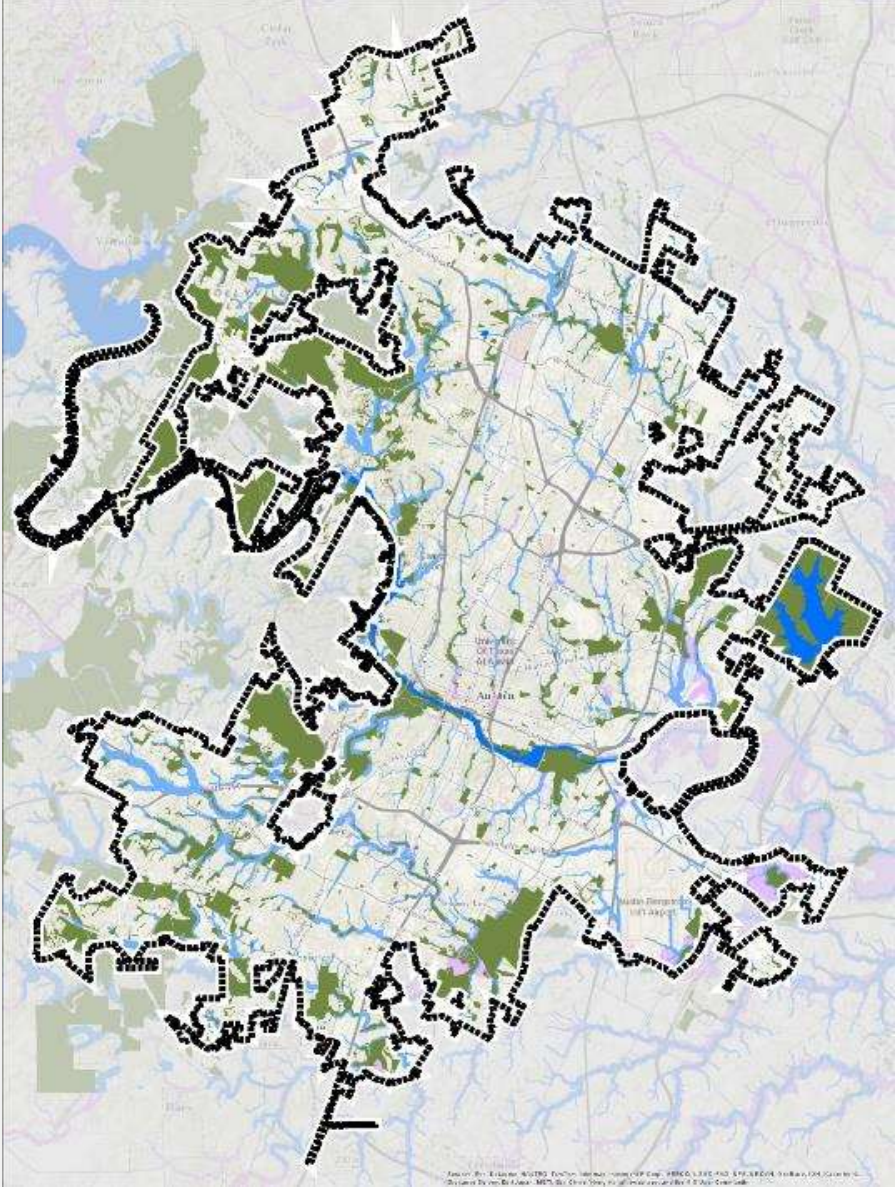
VACANT PARCELS

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

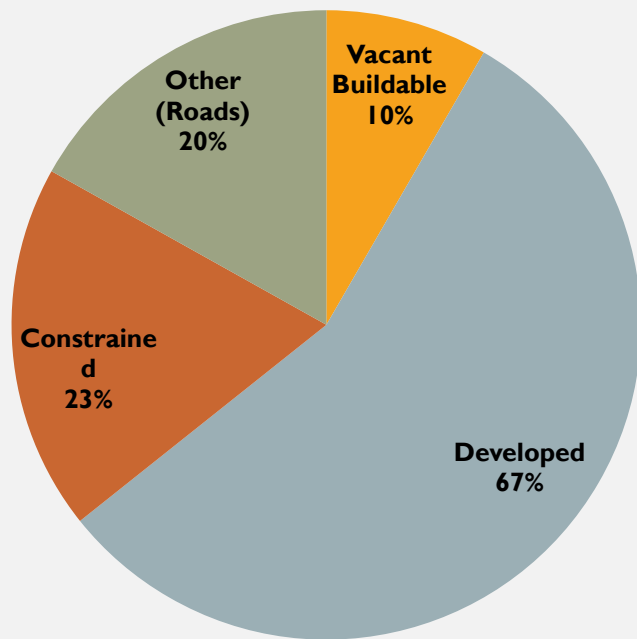


ENVIRONMENTAL CONSTRAINTS

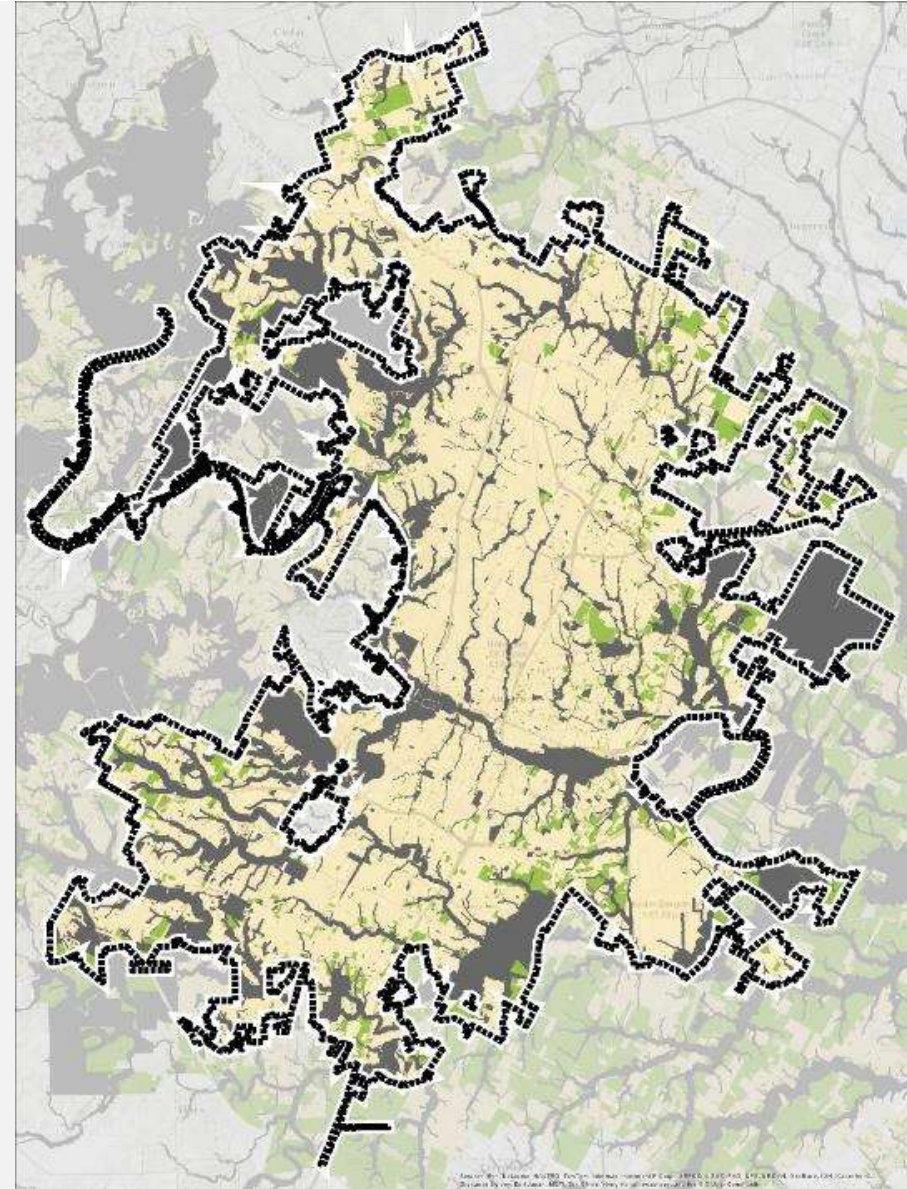
-  **Open Space and Parks**
-  **Open Water**
-  **Critical Water Quality Zones**
-  **Flood Zones**
-  **Steep Slopes**



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



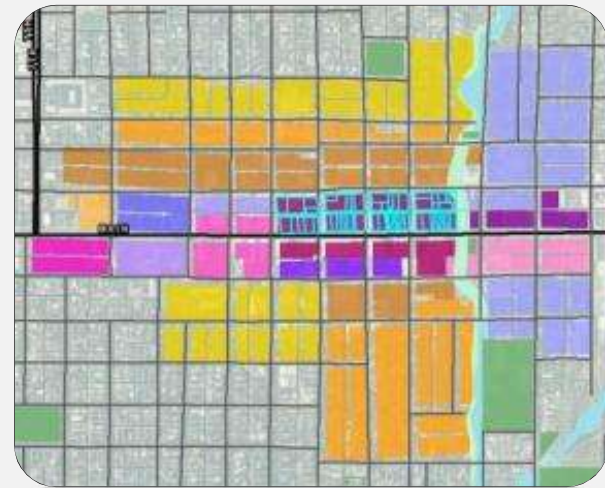
WHAT'S DIFFERENT?

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

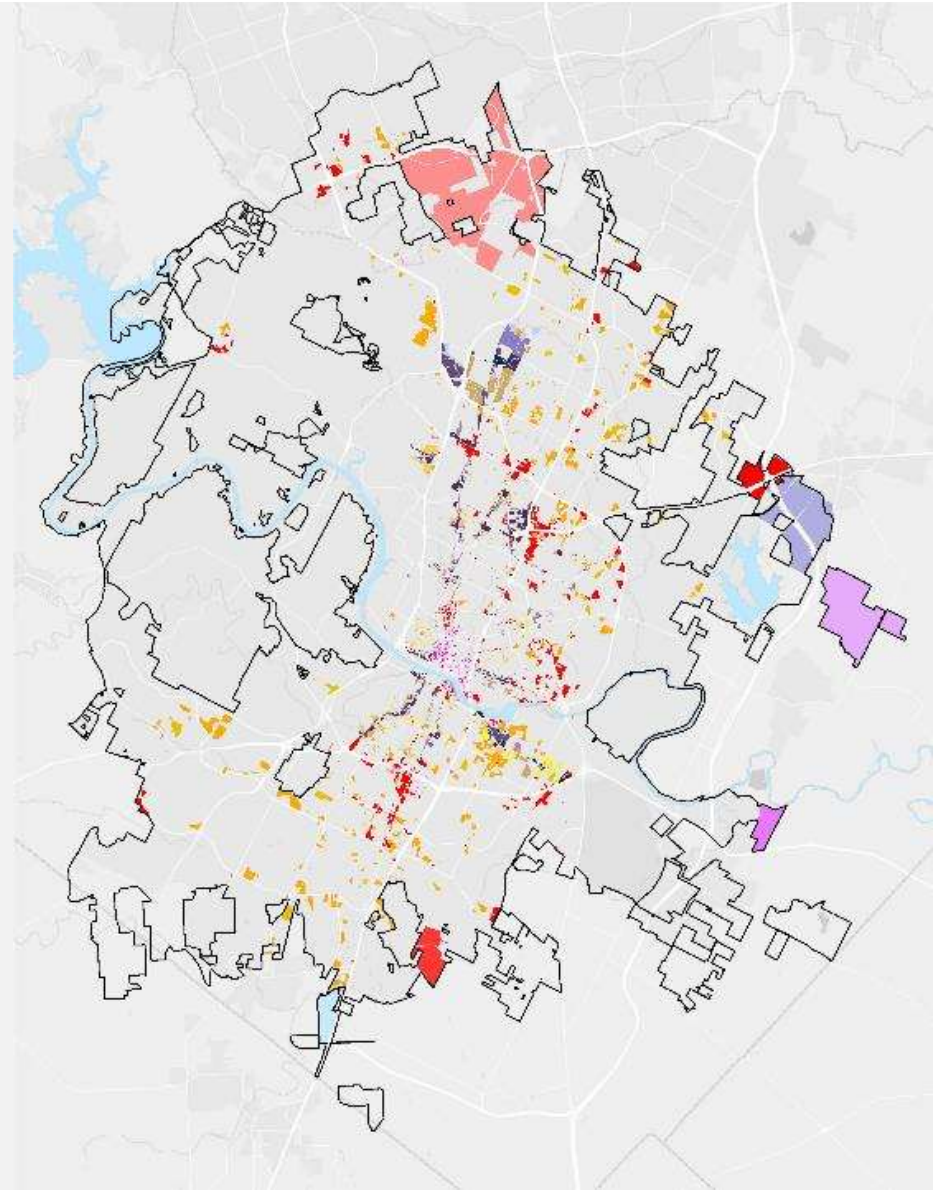
AUGUST 2017 - UPDATED MODEL

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

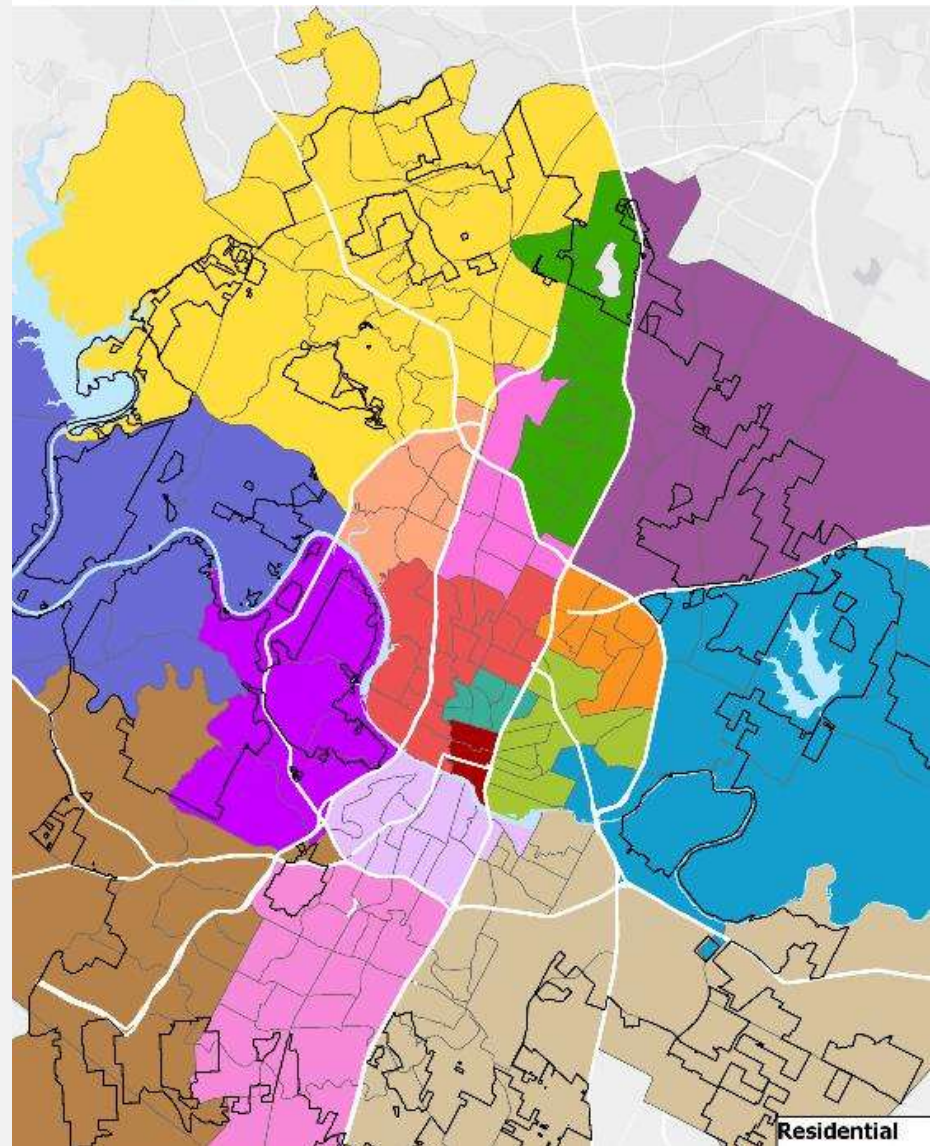


Example: New Mixed Use Development on E 5th St

AUGUST 2017 - UPDATED MODEL

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

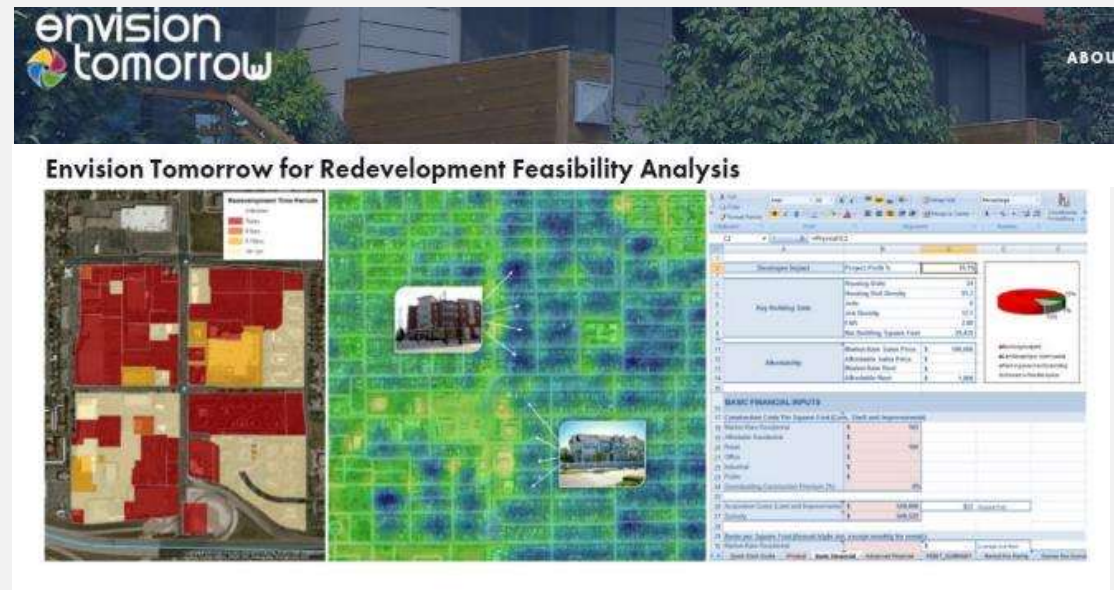
- Aggregated from Census Tract average rents – CoStar data
- Austin submarkets more easily understood geography for analysis
- Data Source: ApartmentTrends.com
 - <http://www.apartmenttrends.com/html/maps/areaaus.cfm>



AUGUST 2017 - UPDATED
MODEL

Step 3: Run Envision Tomorrow Development Feasibility Tool

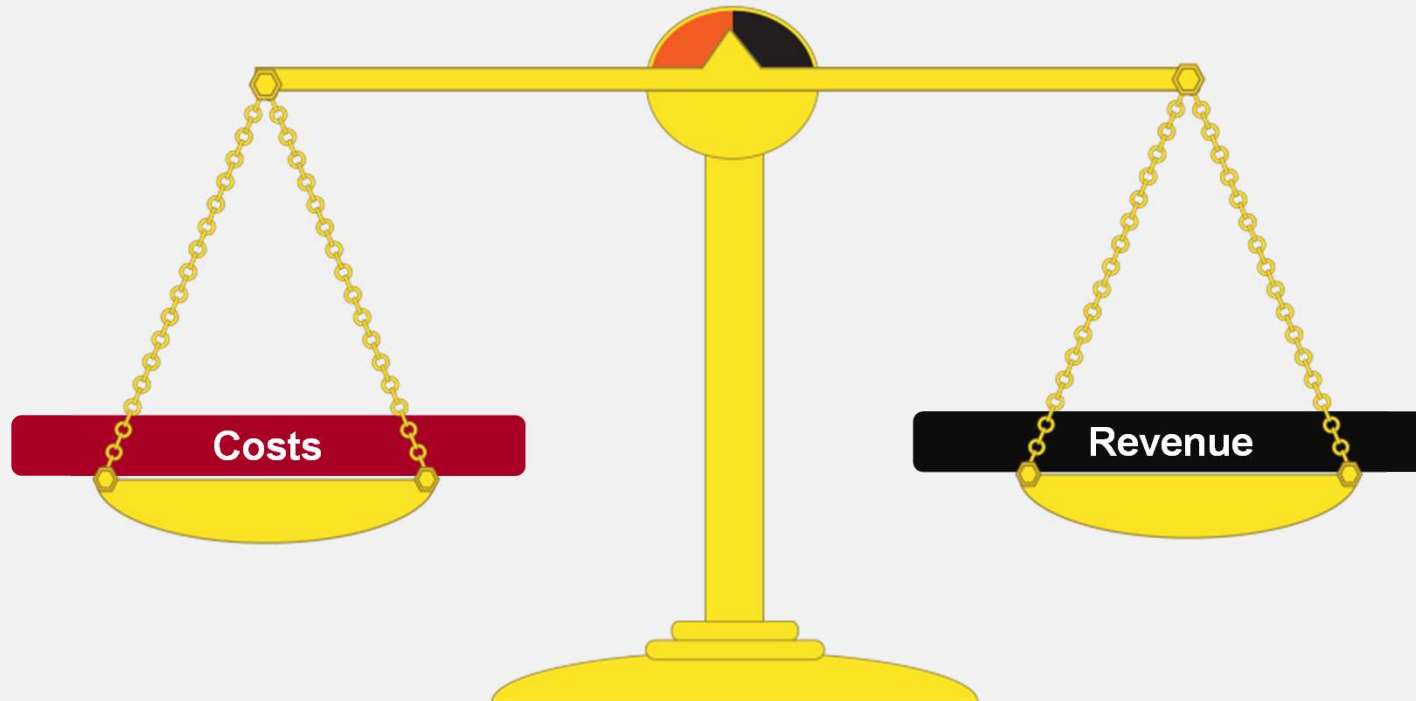
- “Achievable rent” determined for **every parcel in Austin**
- Analysis done for 7 common building types in Austin:
 - SF Home
 - Duplex
 - Rowhouse
 - Multiplex
 - Low Rise Apartment (3 stories)
 - Mid Rise Apartment (4 stories)
 - Main Street Mixed Use (4-over-1)



TIPPING POINT

Not Feasible

Feasible



adjustable settings and tools

Building form

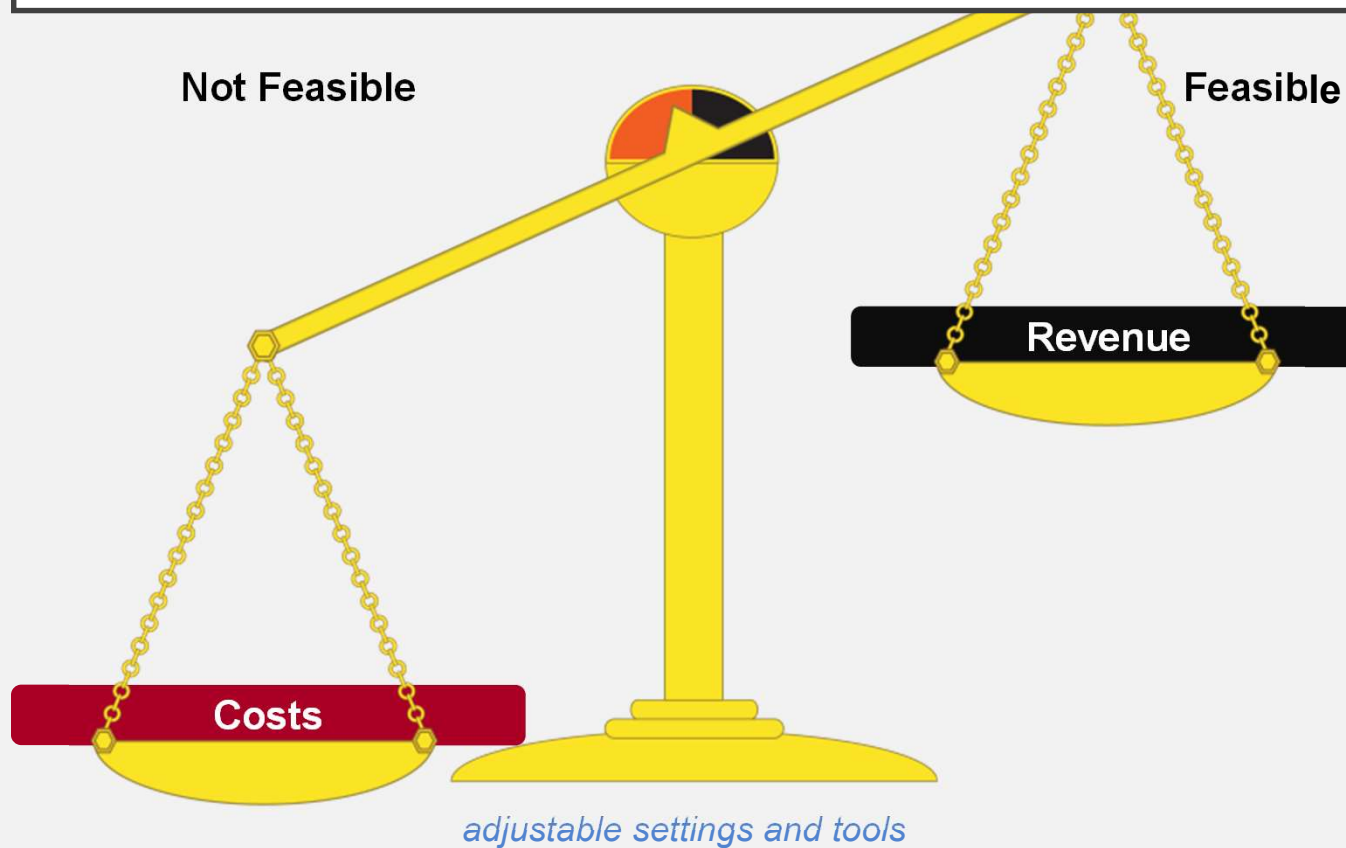
Costs



Revenues

Gap tools

TIPPING POINT



Building form

Costs



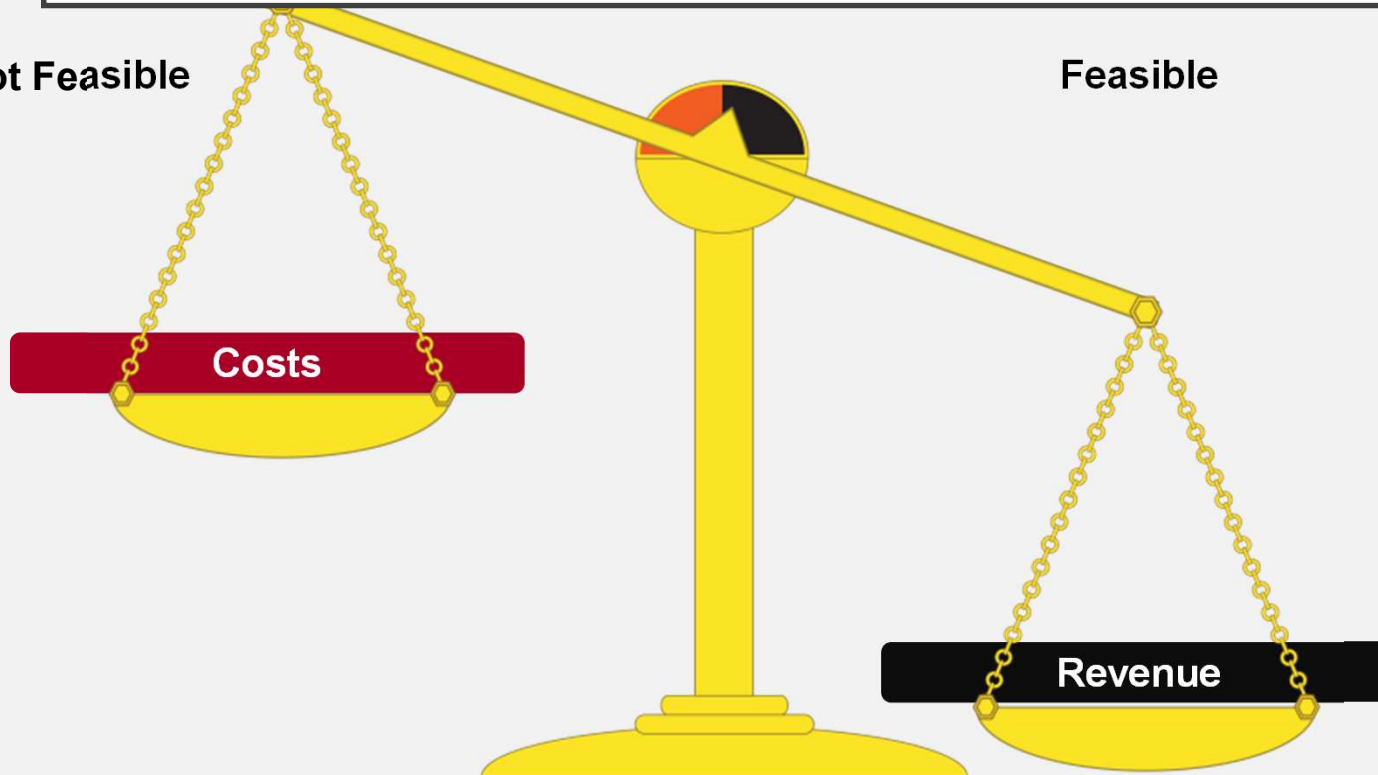
Revenues

Gap tools

TIPPING POINT

Not Feasible

Feasible



adjustable settings and tools

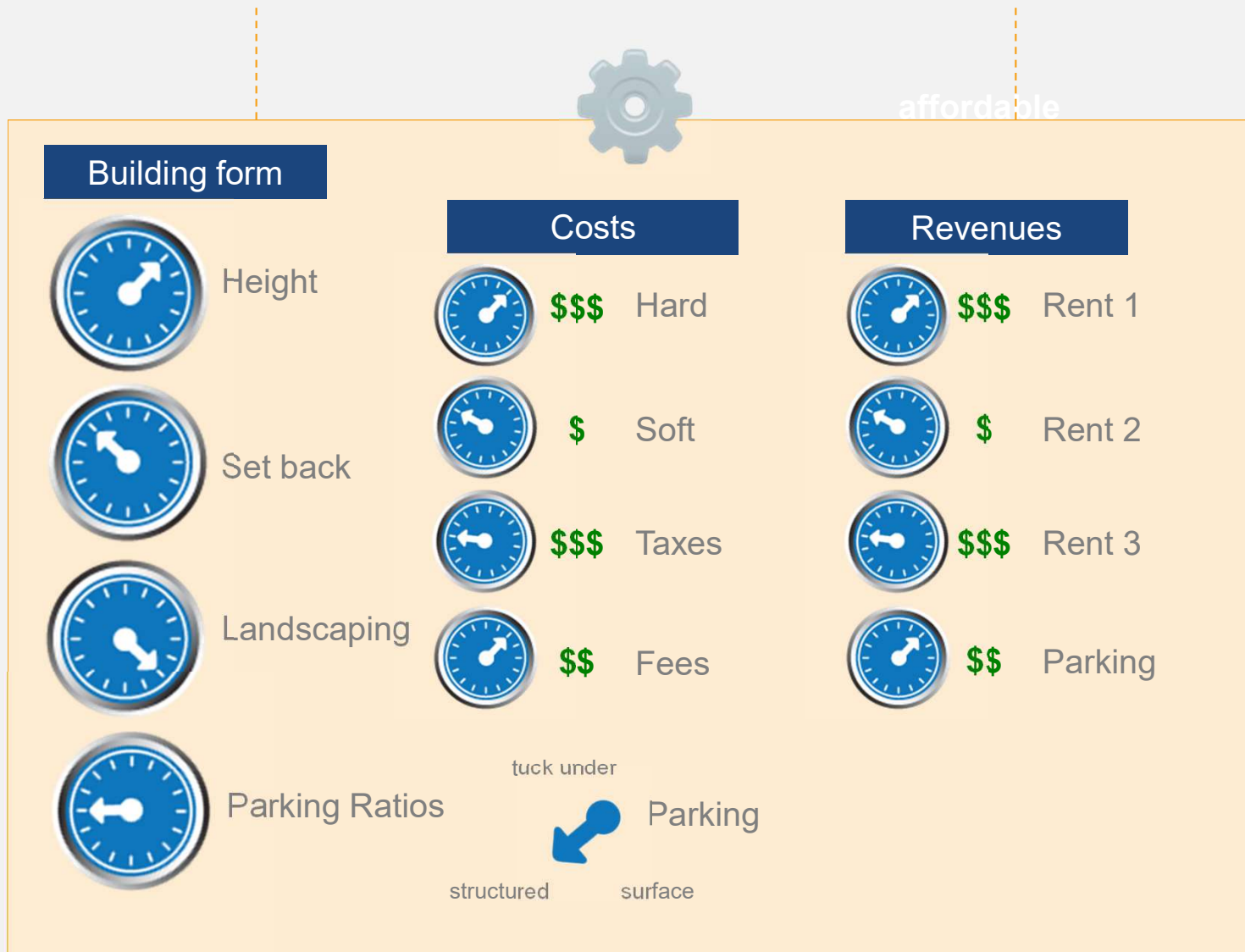
Building form

Costs



Revenues

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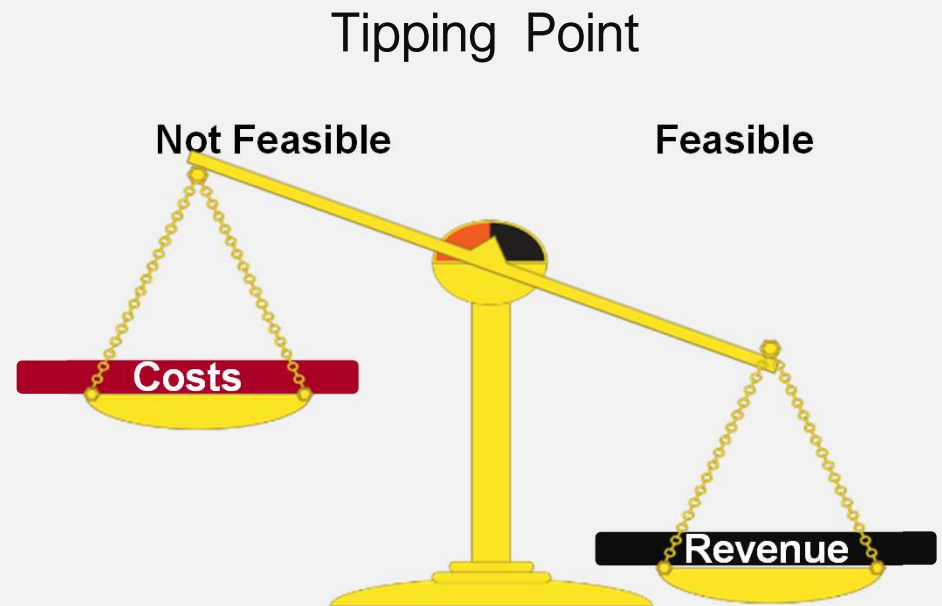


AUGUST 2017 - UPDATED MODEL

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

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

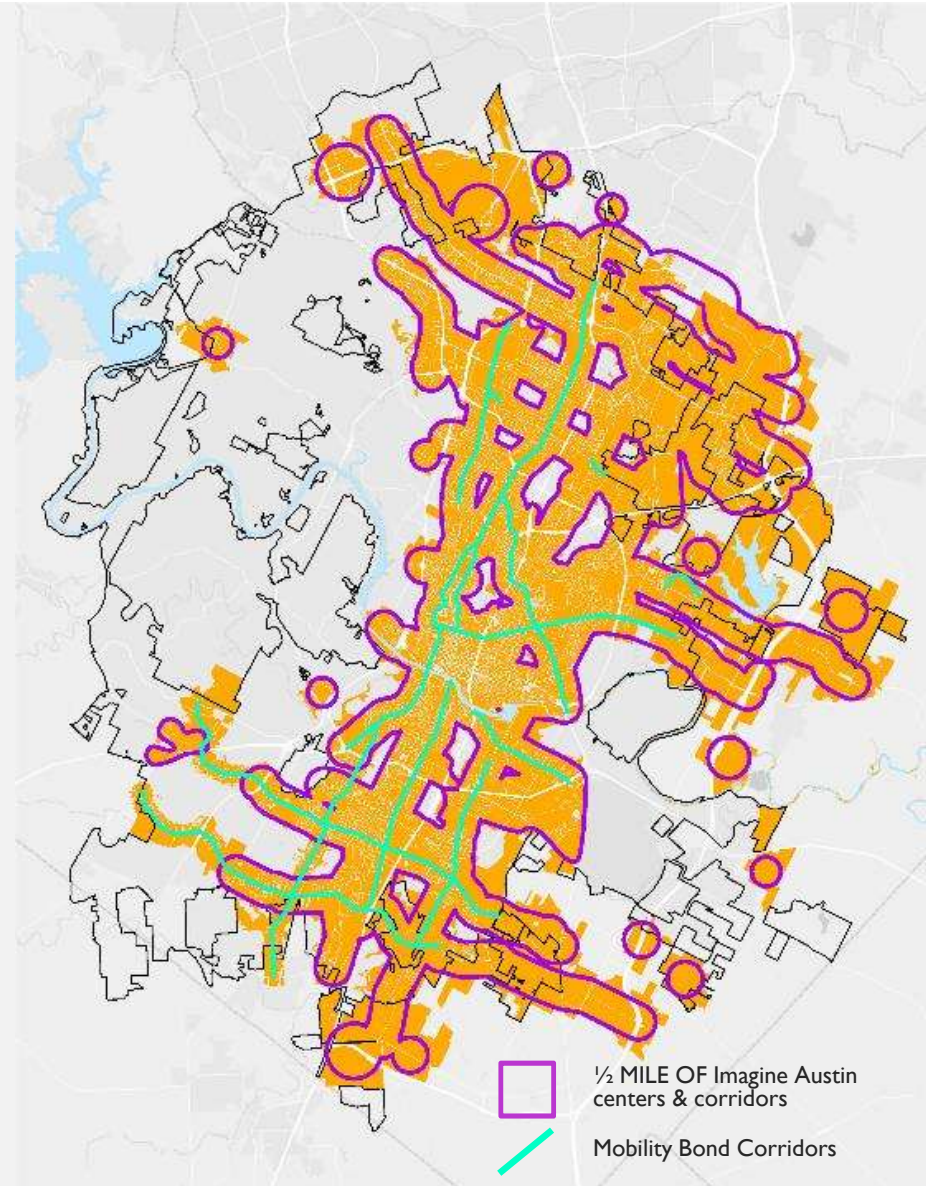
- Parcel is “market feasible” *today* when ratio = 1
 - Ratio ≥ 1 means achievable rent is equal to or above submarket rents
 - Building is feasible when it is able to achieve rents equal to market



AUGUST 2017 - UPDATED MODEL

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

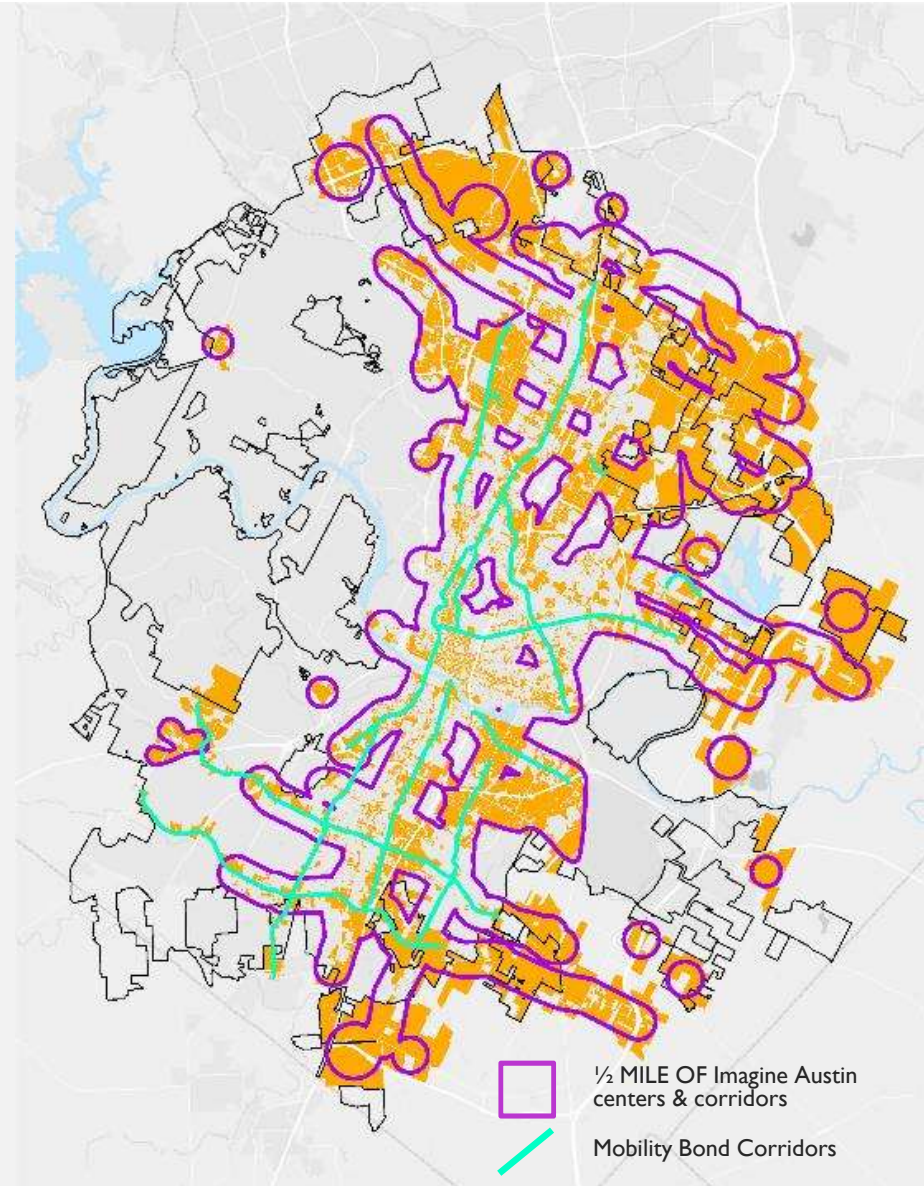
- Included:
 - Parcels within ½ mile of **Imagine Austin centers & corridors**
 - Parcels within ¼ mile of **mobility bond corridors**
 - **PUDs**



AUGUST 2017 - UPDATED MODEL

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

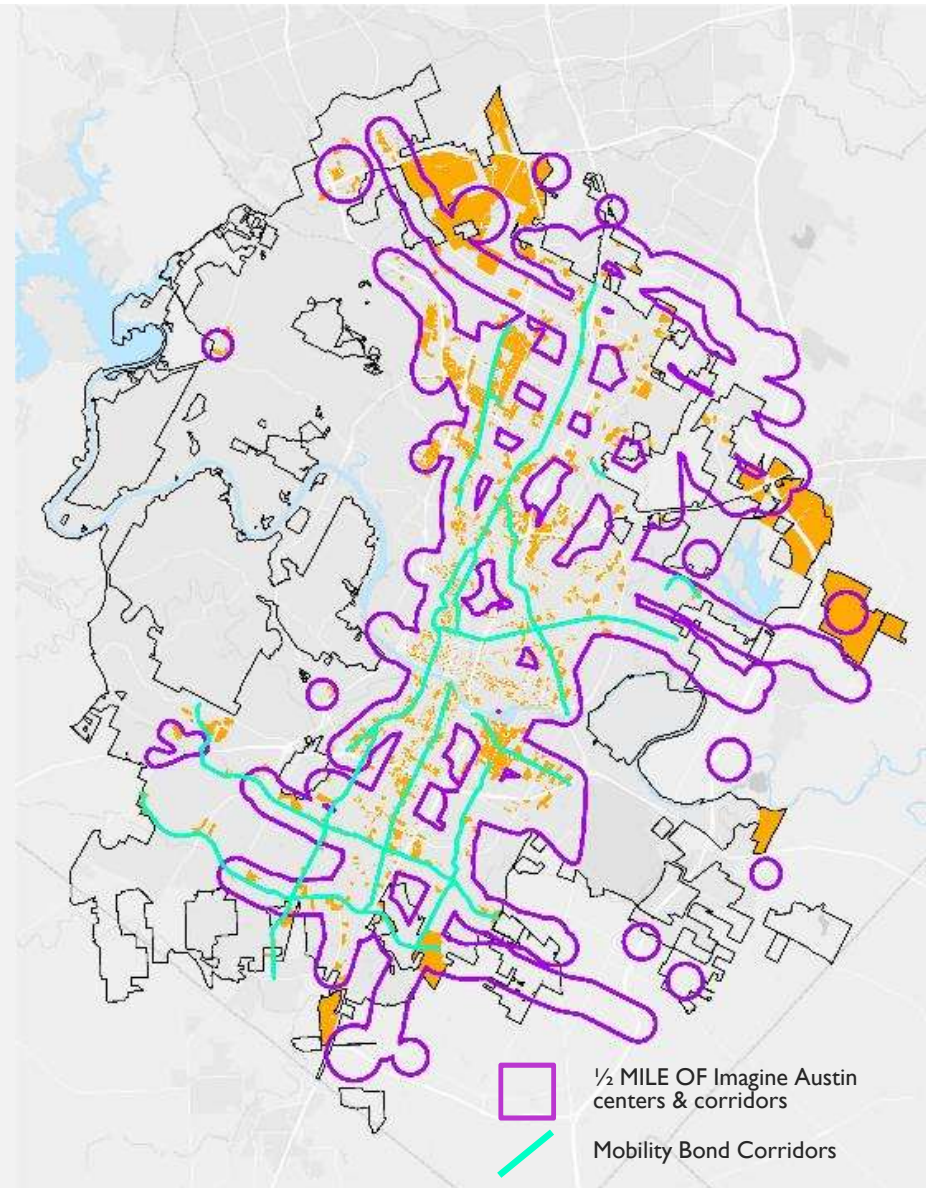
- Removed:
 - Stable single family
 - Public lands, open space, educational, roads/utilities, environmentally constrained land
 - Historic districts
 - Developed parcels < 10,000 sqft
 - Parcels developed after 2010



AUGUST 2017 - UPDATED MODEL

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

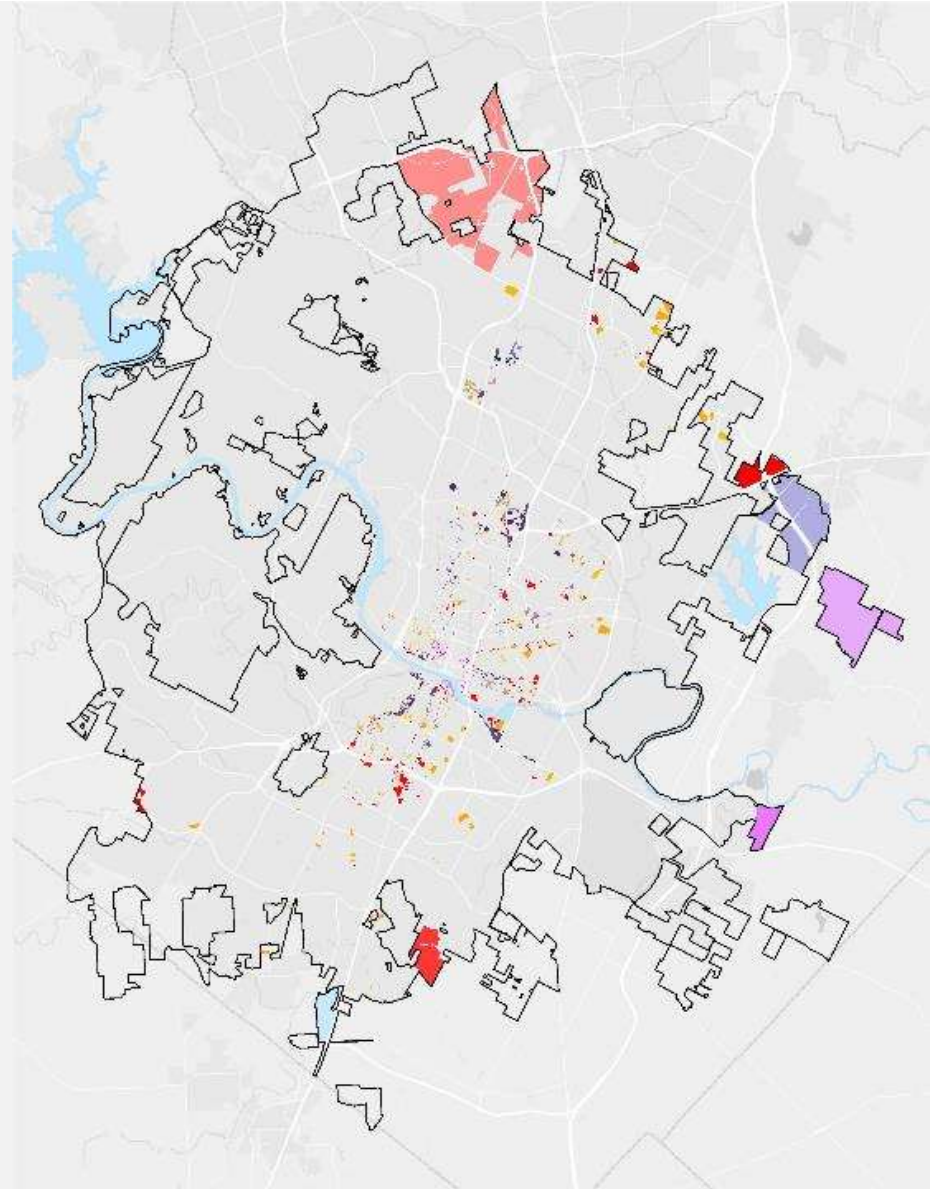
- Removed:
 - Parcels with market feasibility ratio less than 0.75
 - 0.75 and above captures parcels with longer term potential (i.e., beyond 10 years)



AUGUST 2017 - UPDATED MODEL

Critiques

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



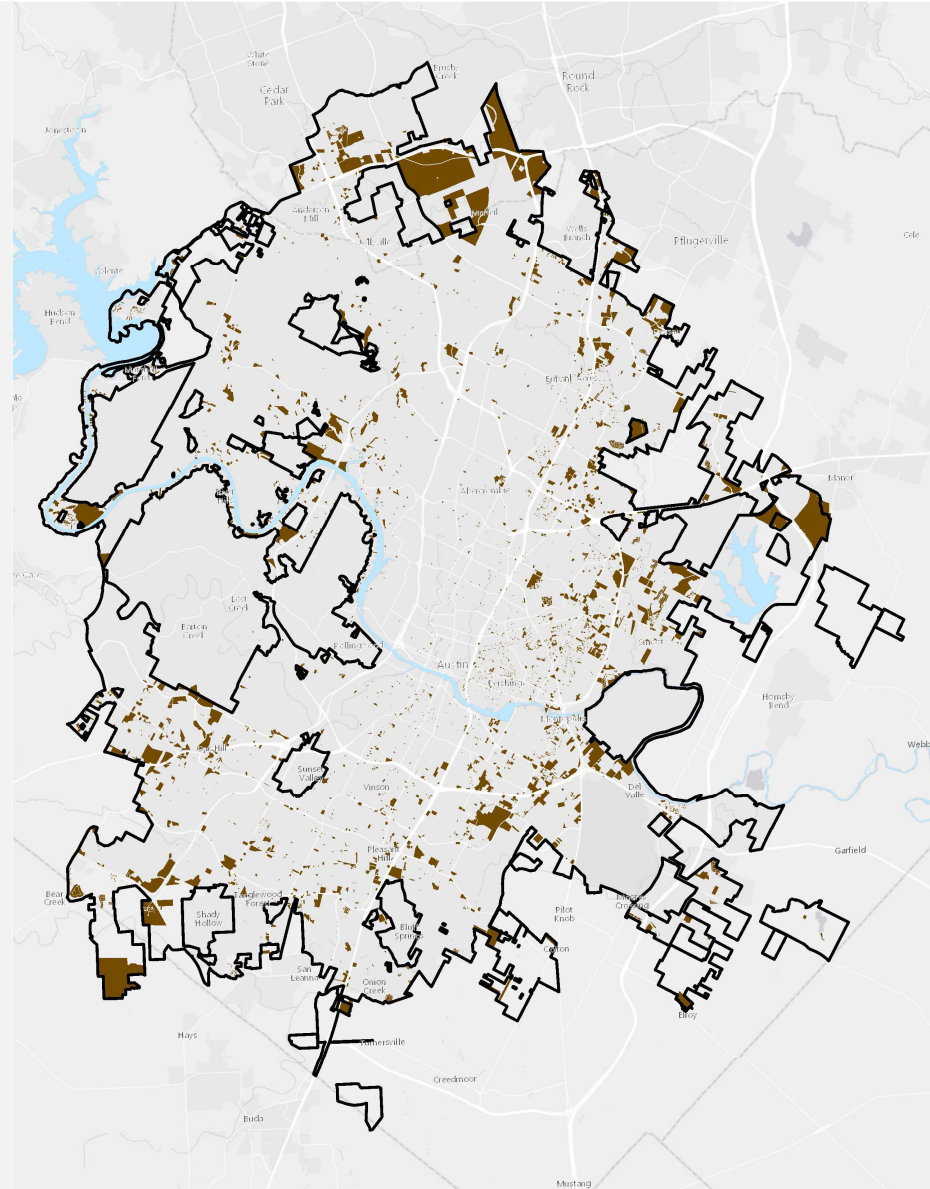
HOUSING CAPACITY ANALYSIS – SEPTEMBER 2017

Updated Buildable Lands

- Start with Vacant Land



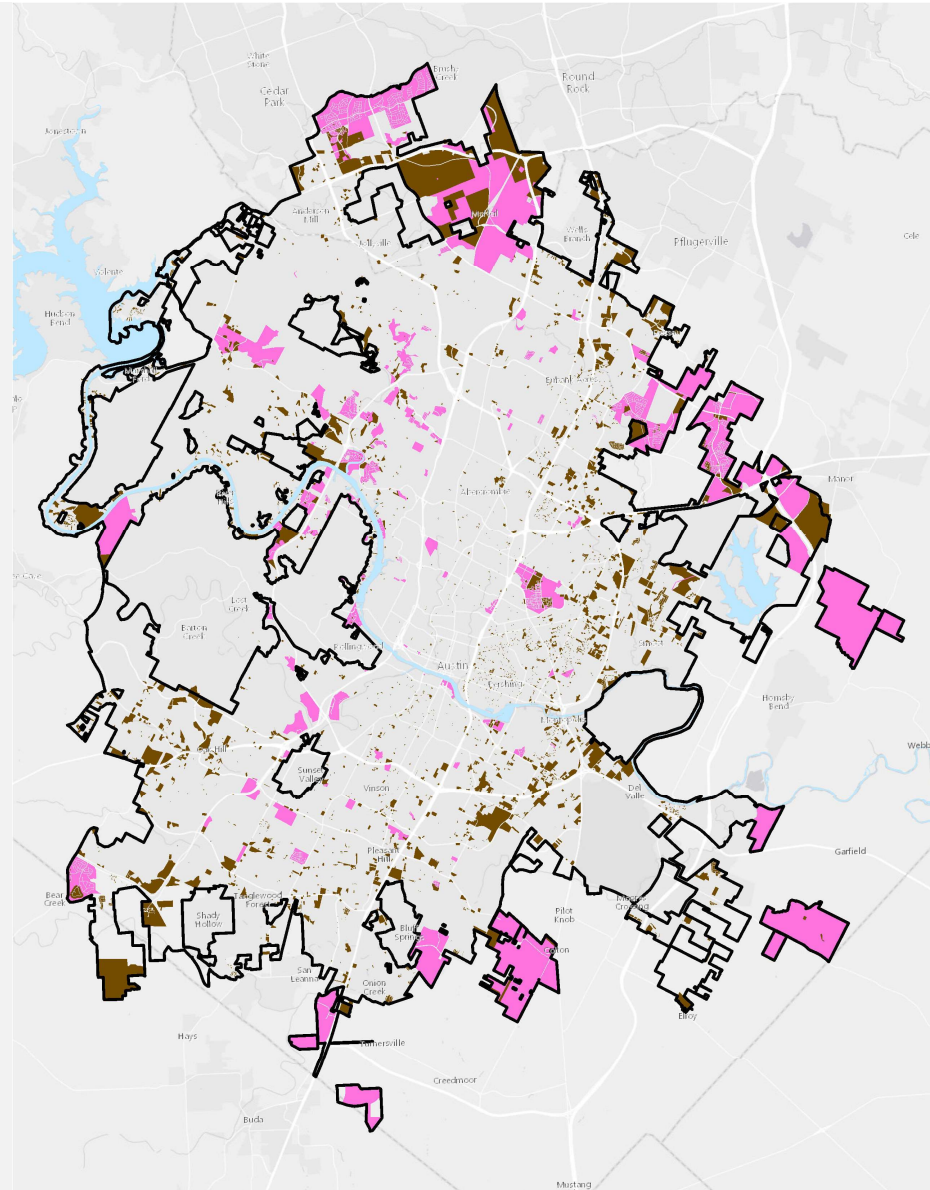
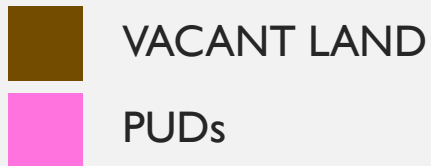
VACANT LAND



HOUSING CAPACITY ANALYSIS – SEPTEMBER 2017

Updated Buildable Lands

- Start with Vacant Land
- Include PUDs



HOUSING CAPACITY ANALYSIS – SEPTEMBER 2017

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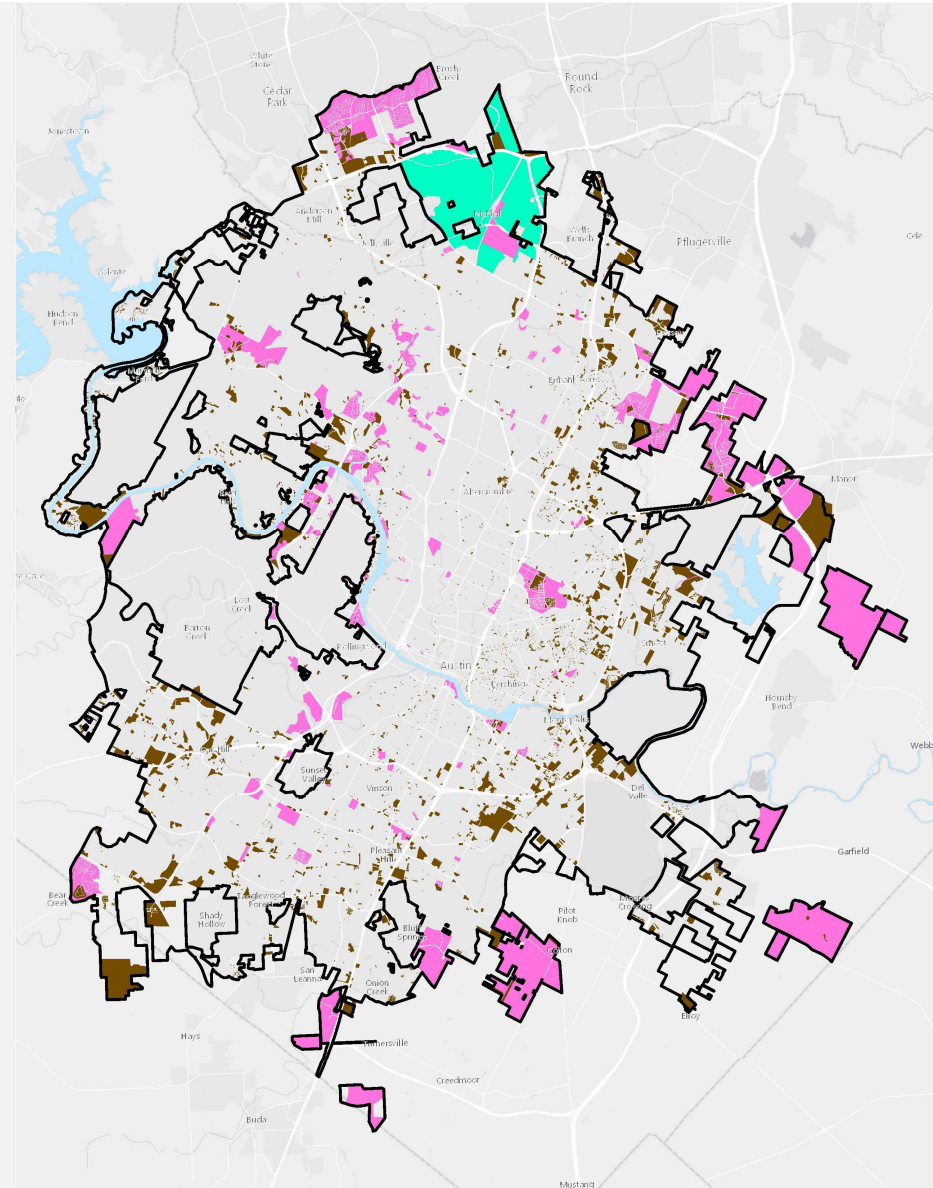
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- Remove Robinson Ranch PUD
 - ~24,000 HU in previous analyses



VACANT LAND

Robinson Ranch PUD

PUDs



HOUSING CAPACITY ANALYSIS – SEPTEMBER 2017

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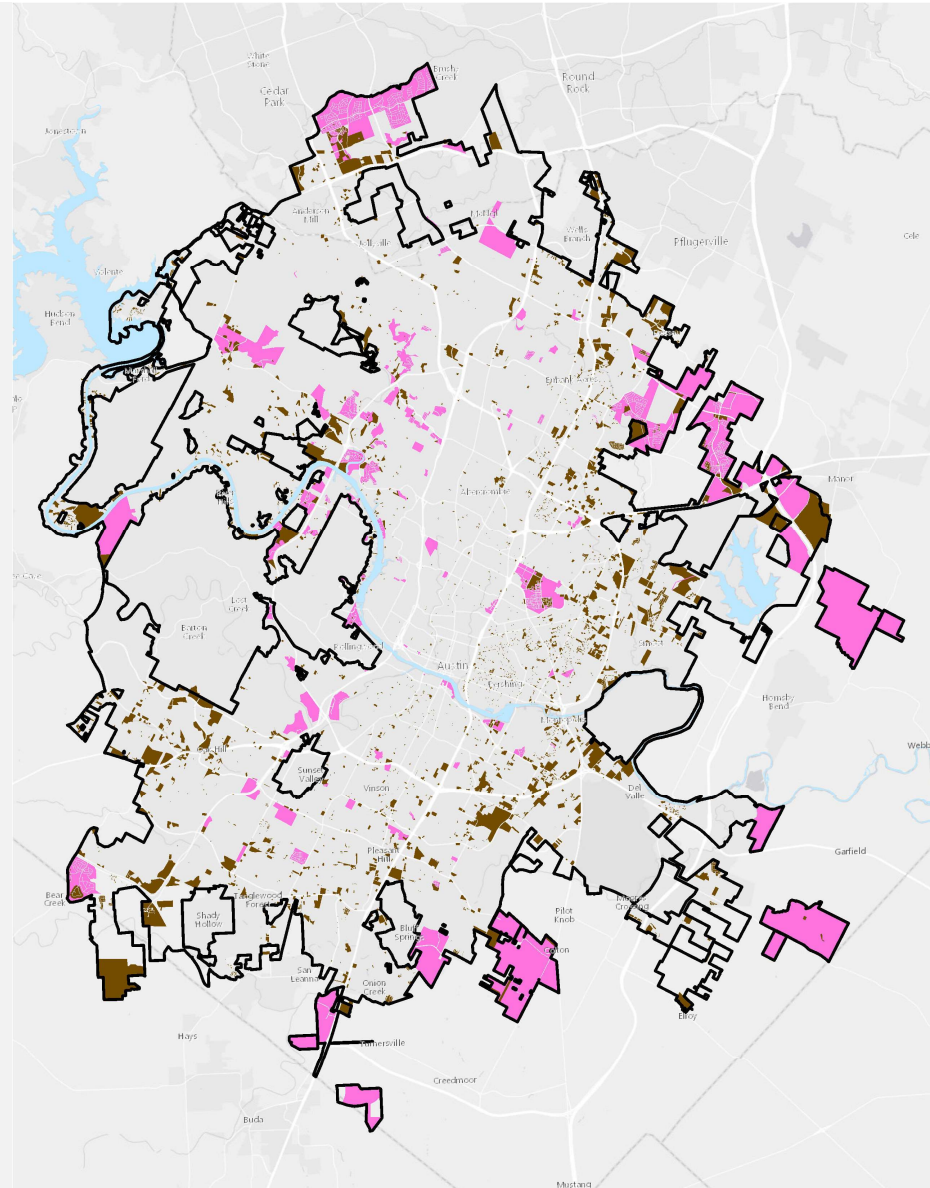
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VACANT LAND

Robinson Ranch PUD

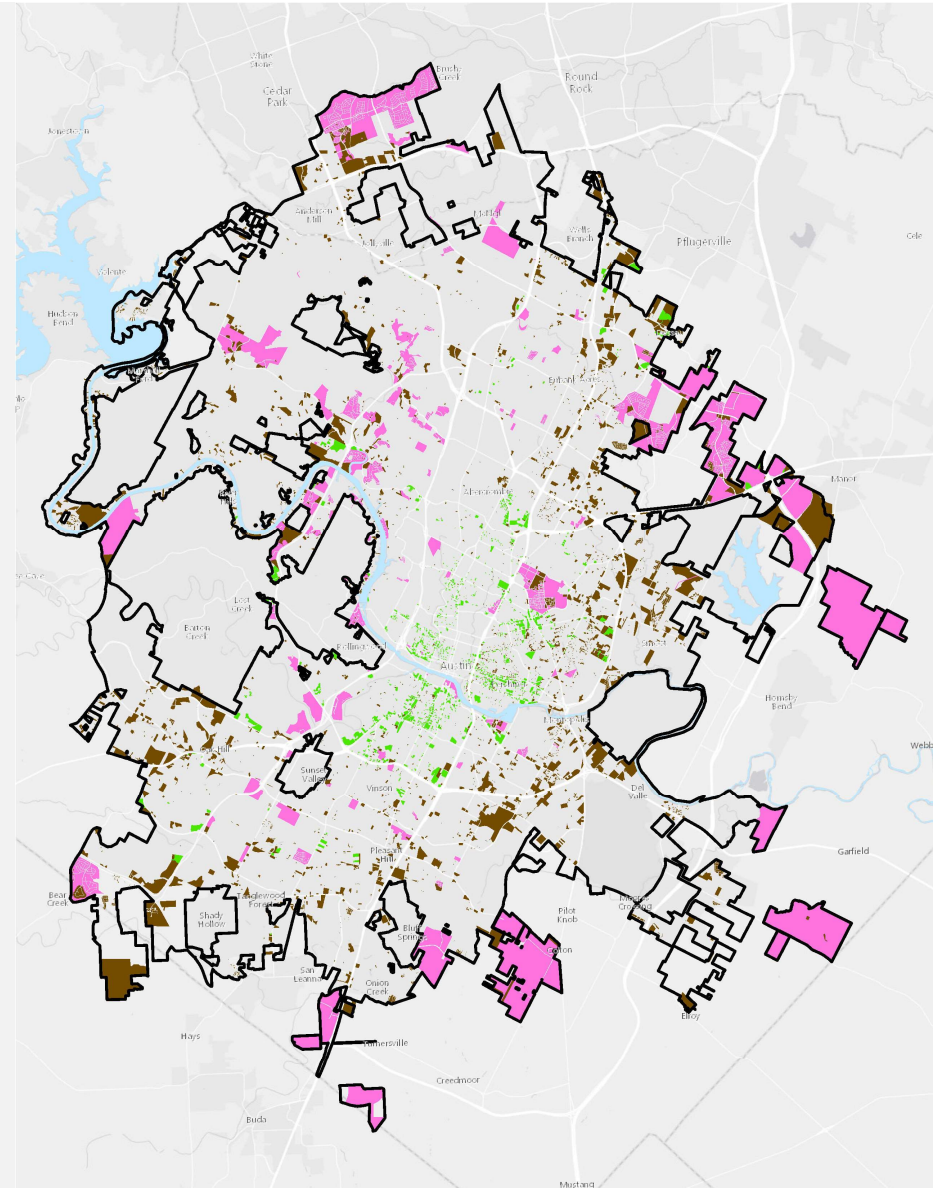
PUDs



HOUSING CAPACITY ANALYSIS – SEPTEMBER 2017

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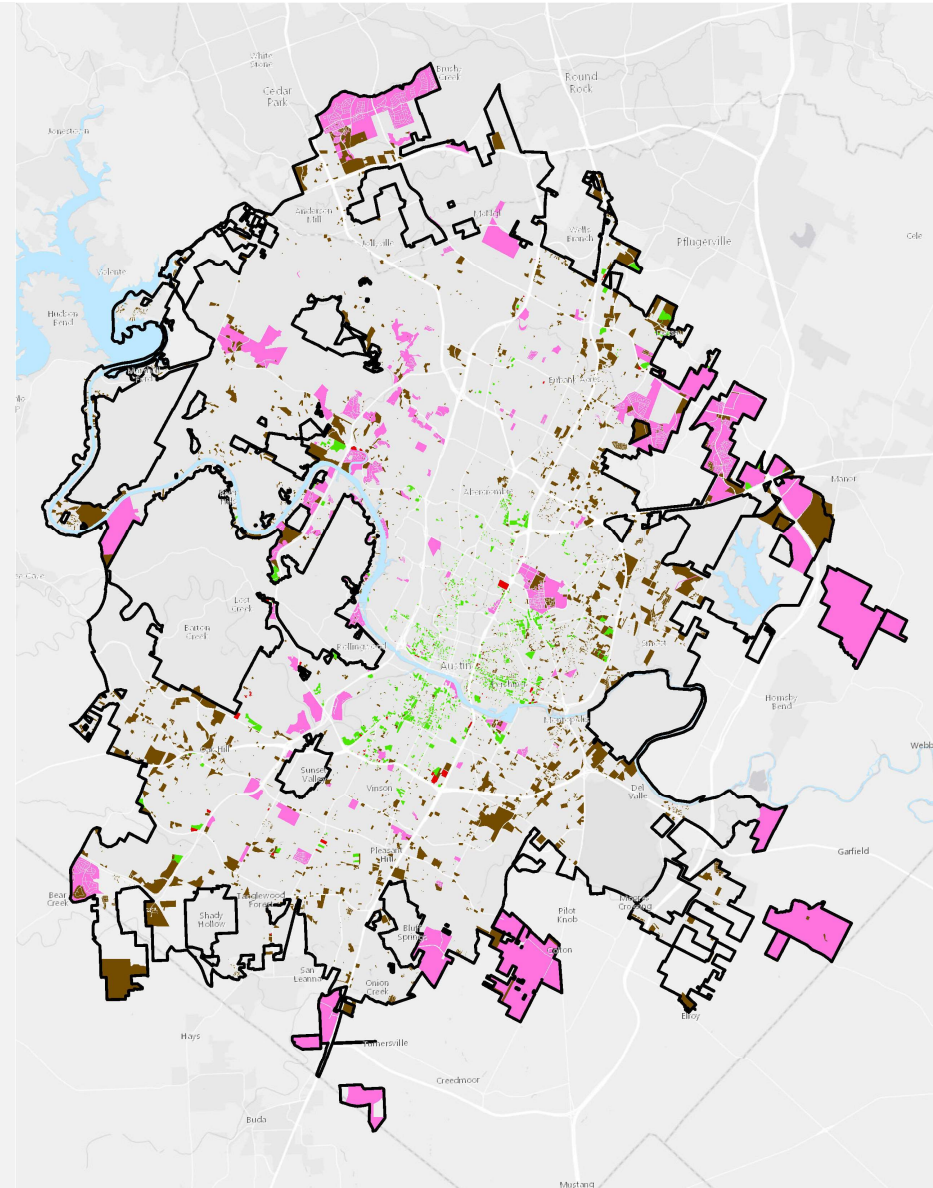
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- Include all parcels with a Market Ratio ≥ 1



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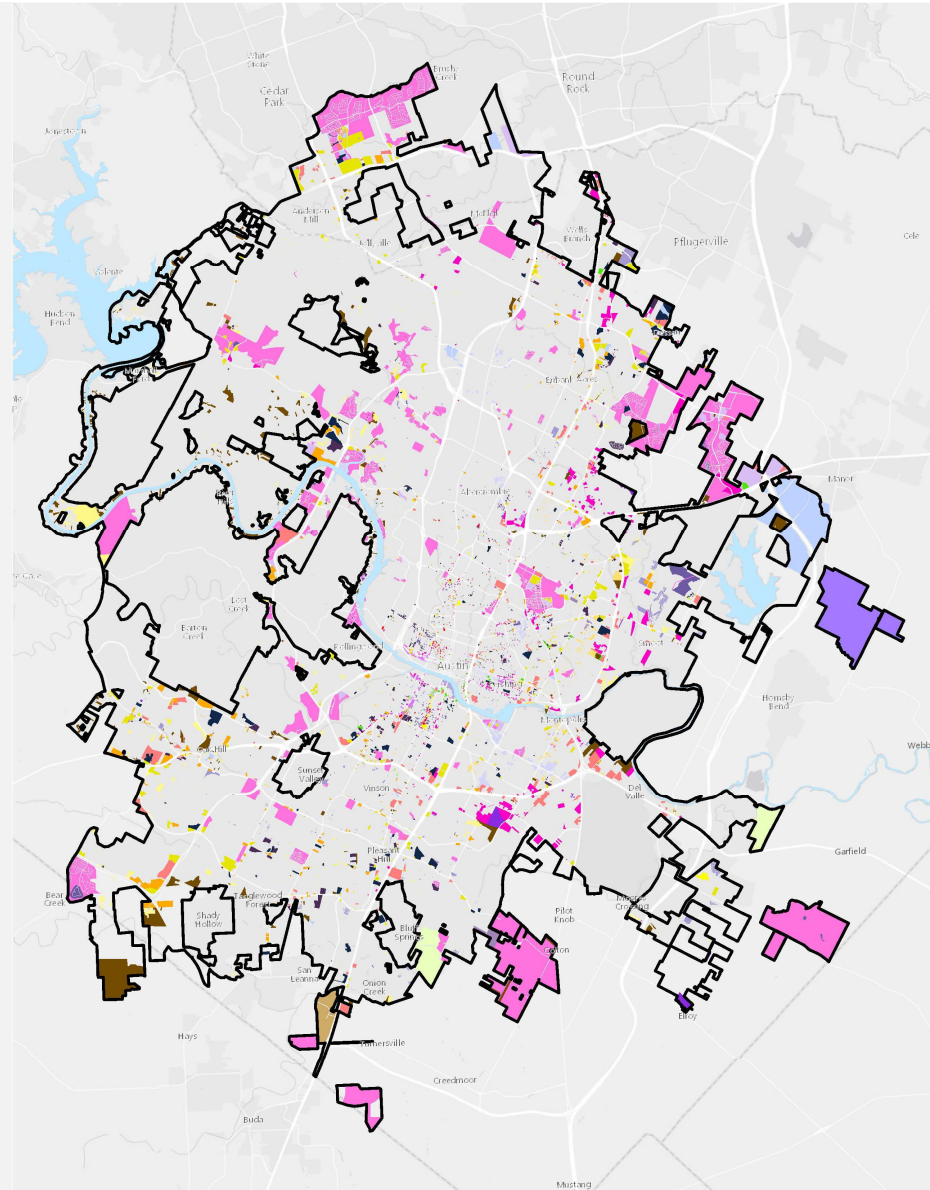
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- Include PUDs
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 - ~24,000 HU in previous analyses
- Include all parcels with a Market Ratio ≥ 1
 - Draft 2 Analysis Includes Commercial Lands now assigned MU Zones



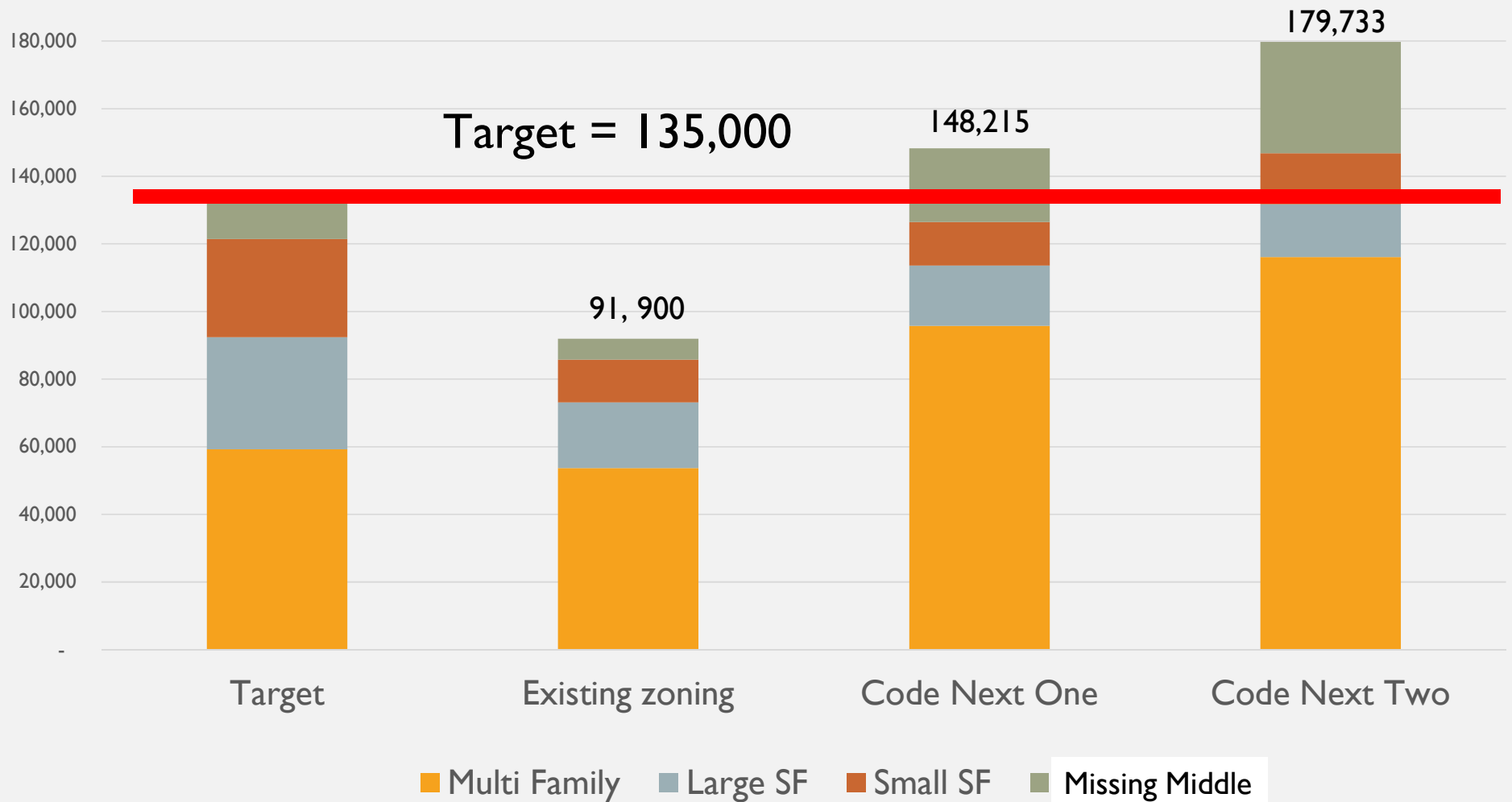
HOUSING CAPACITY ANALYSIS – SEPTEMBER 2017

Assign New Zones

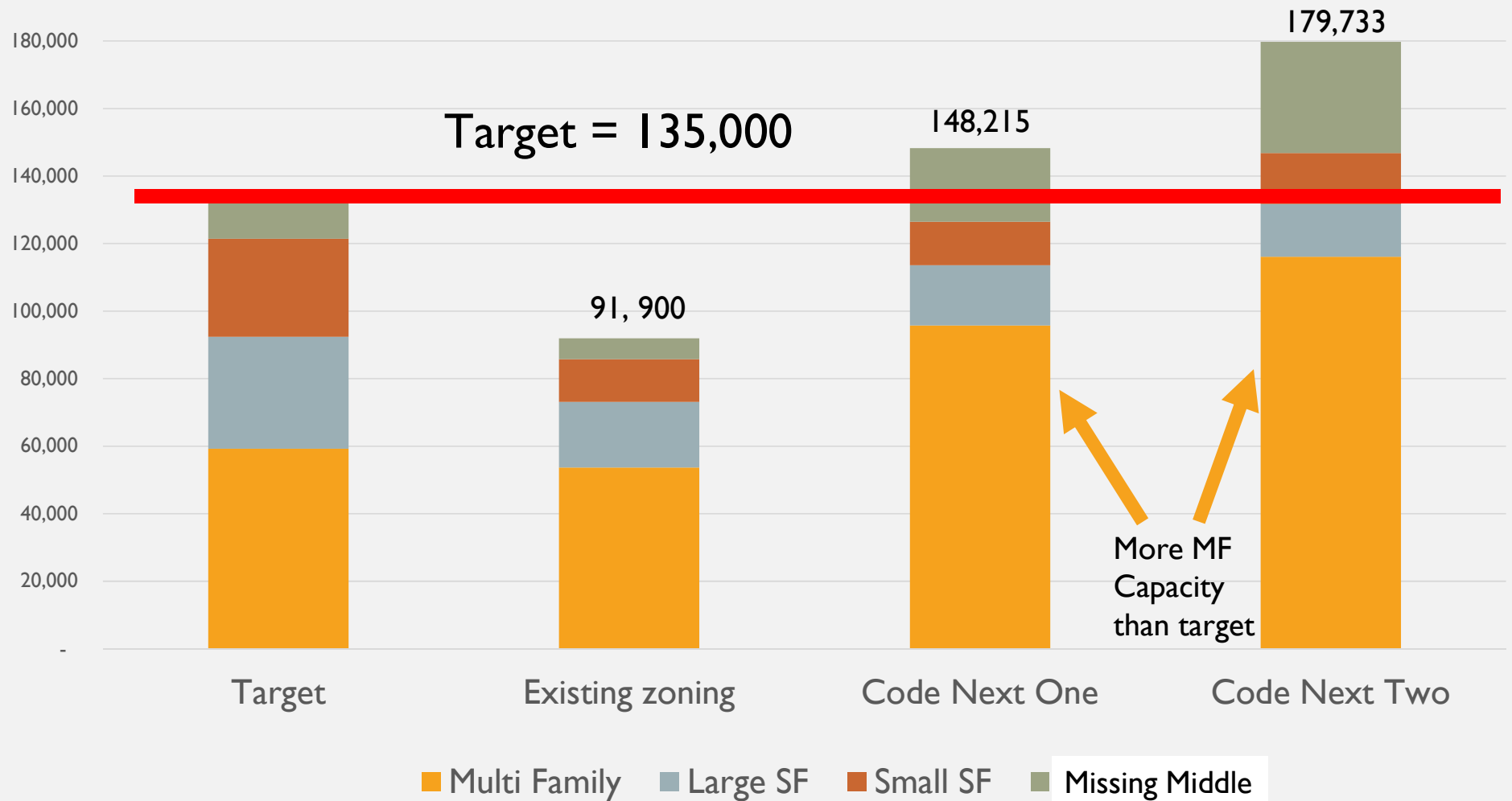
- Calibrate Envision Tomorrow to calculate based on new zoning standards and map



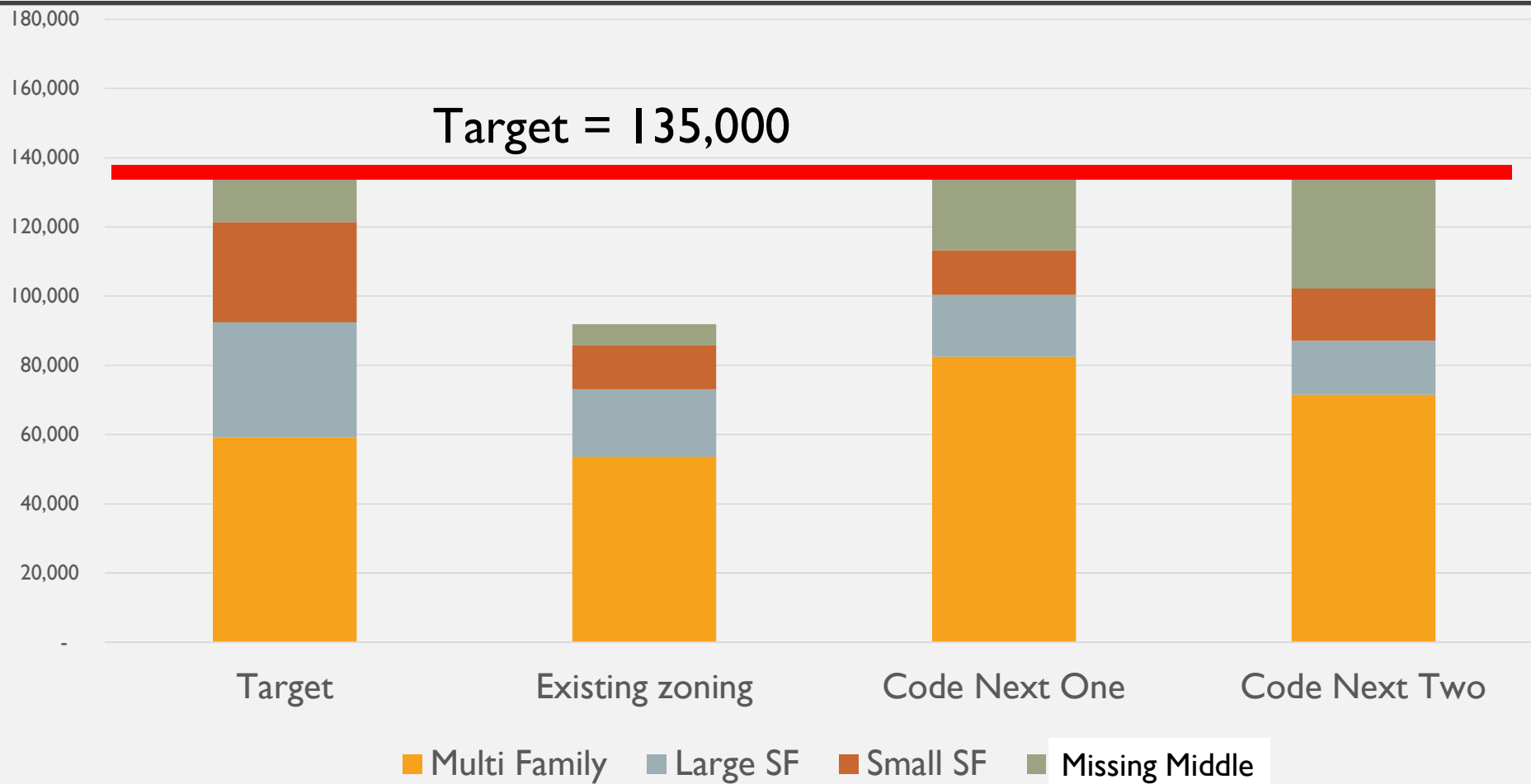
HOUSING ESTIMATES BY TYPE



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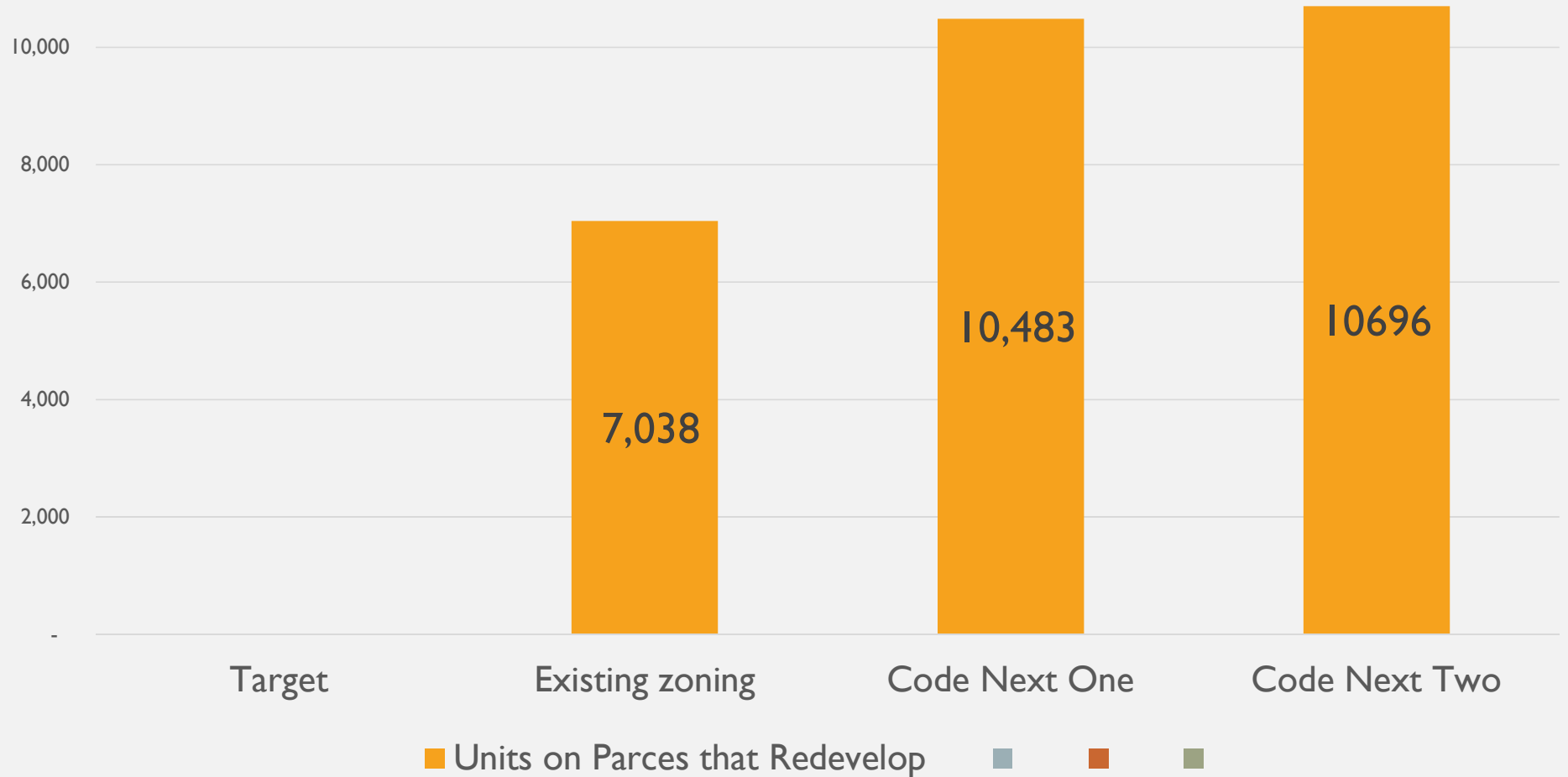
HOUSING ESTIMATES BY TYPE EXCESS MF CAPACITY ELIMINATED



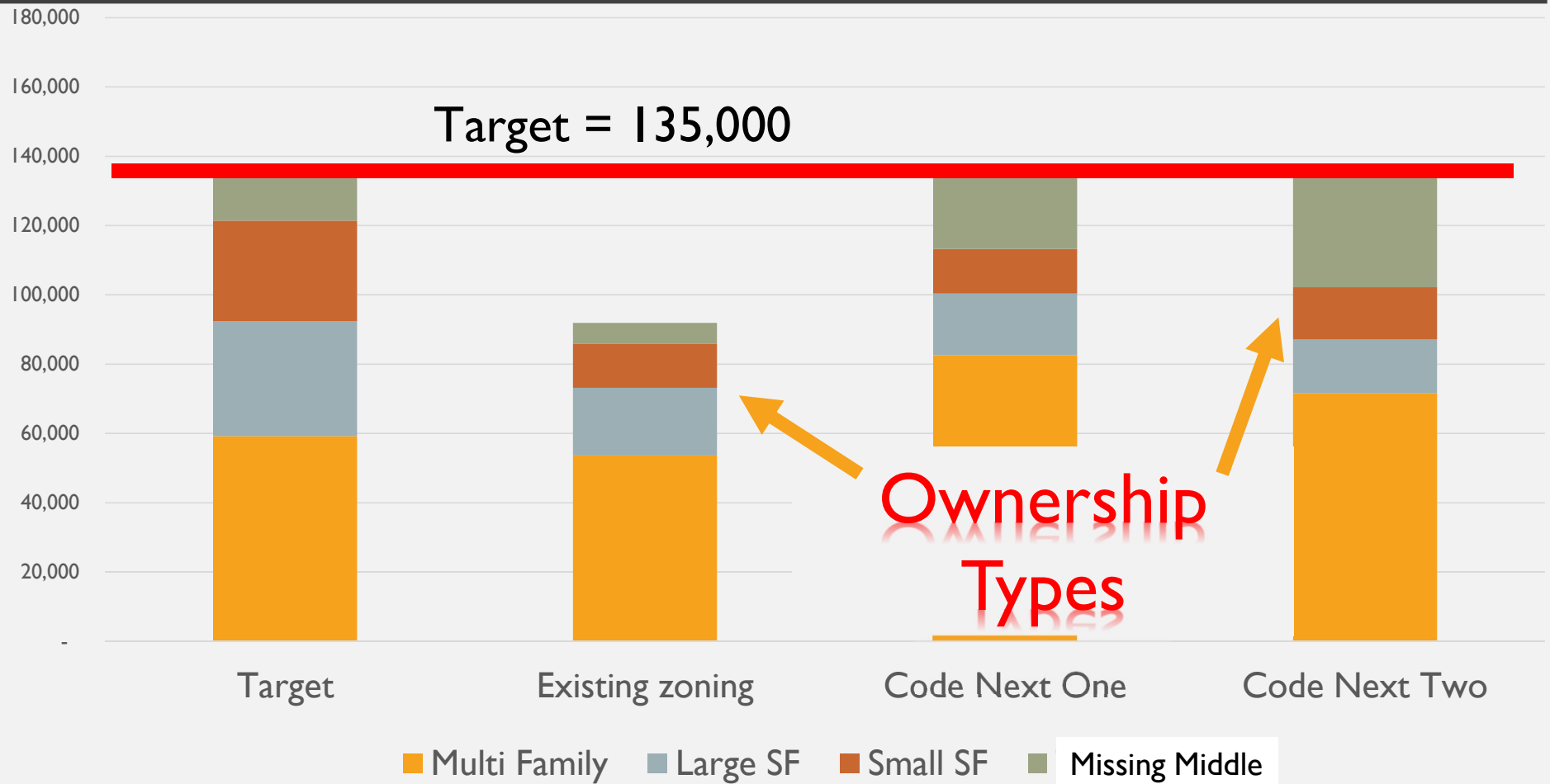
UNITS ON PARCELS THAT REDEVELOP



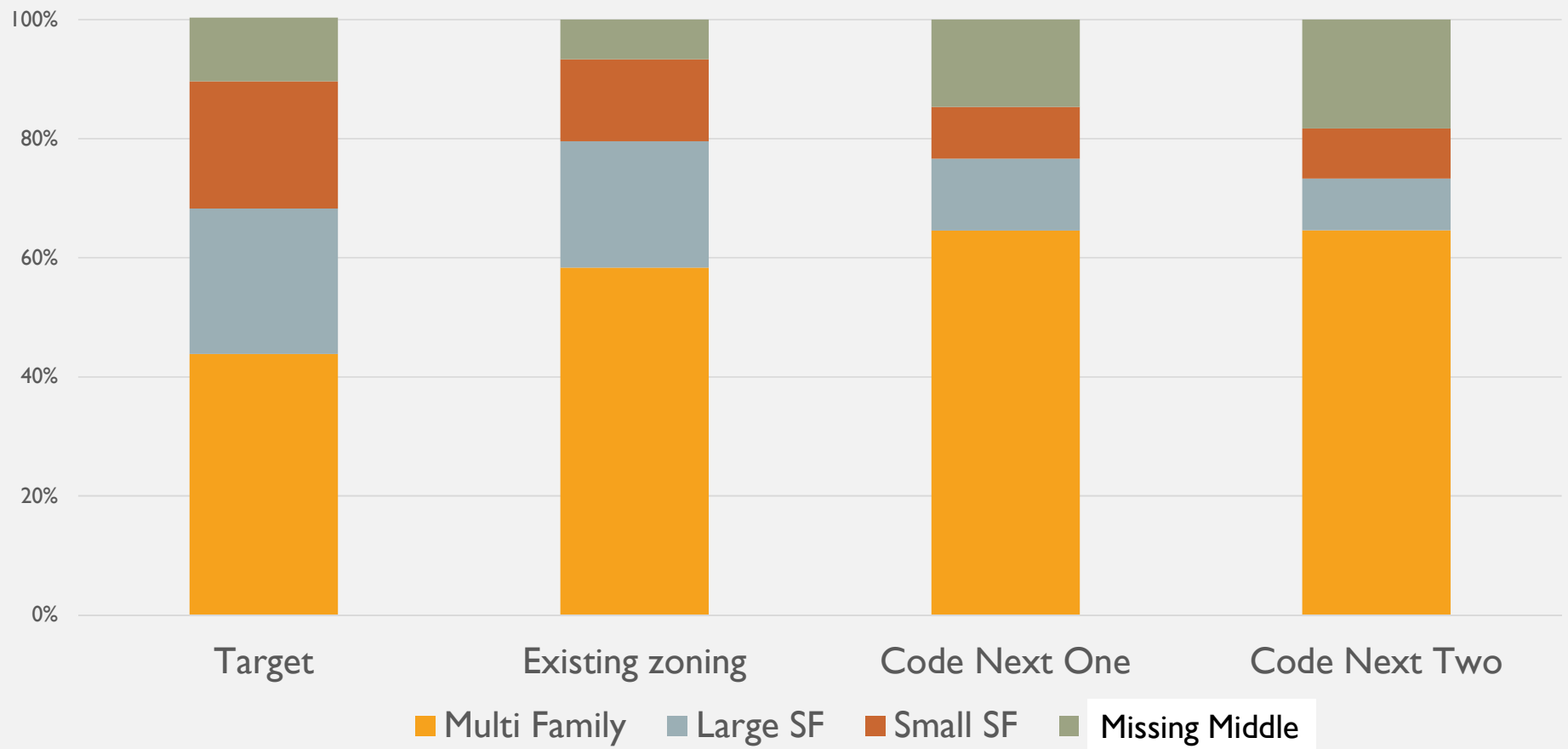
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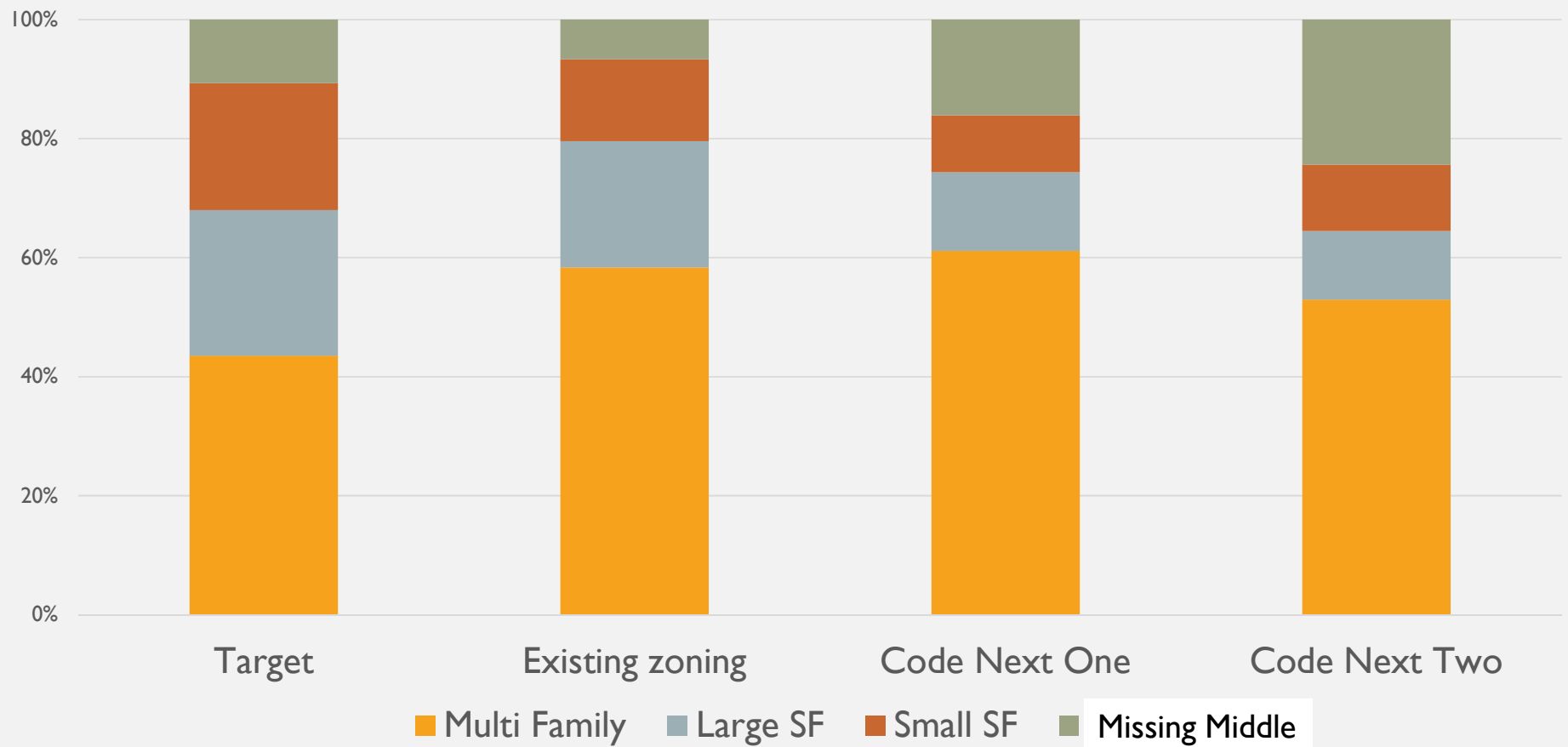
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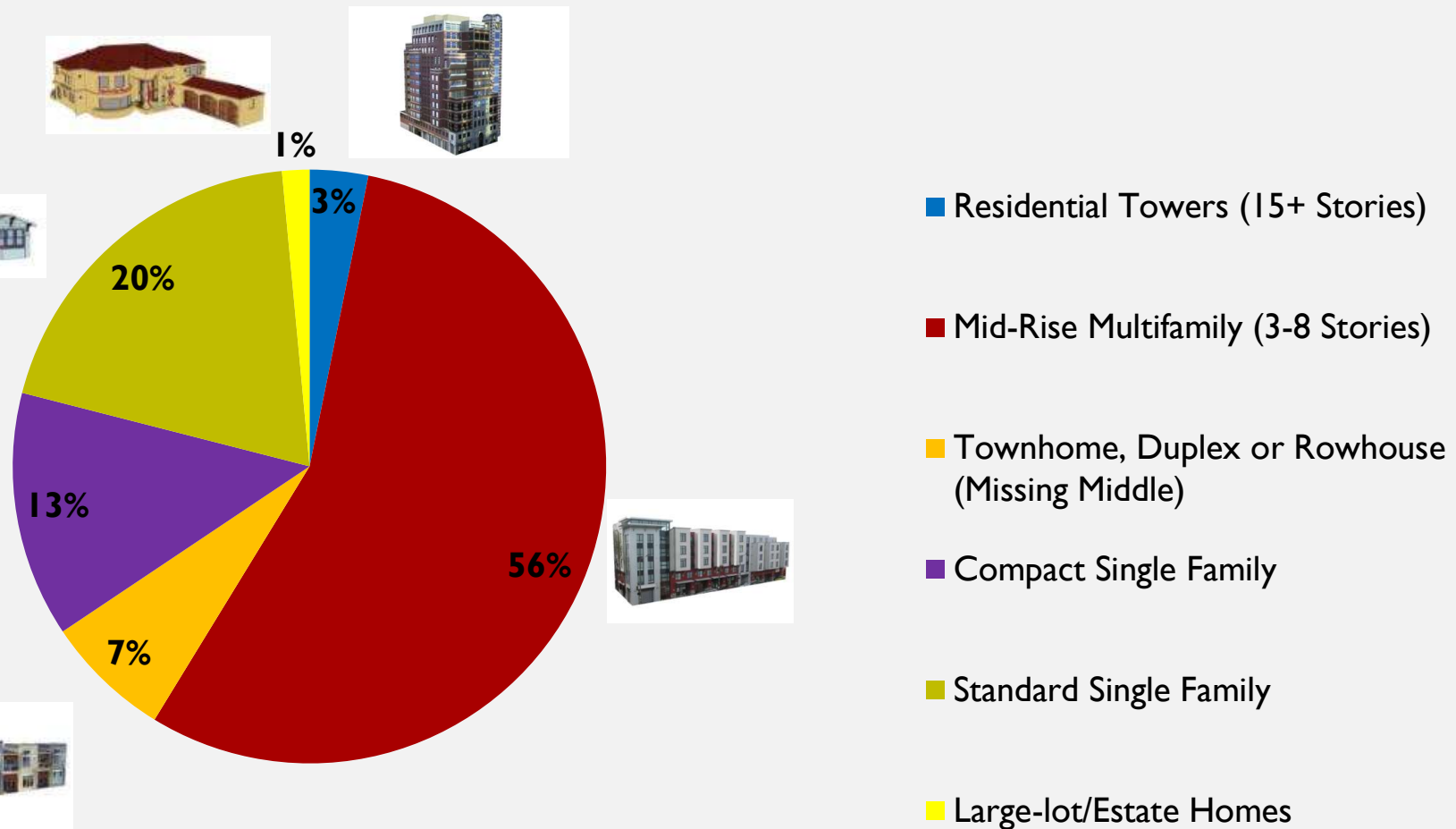
HOUSING ESTIMATES BY TYPE PERCENT MIX



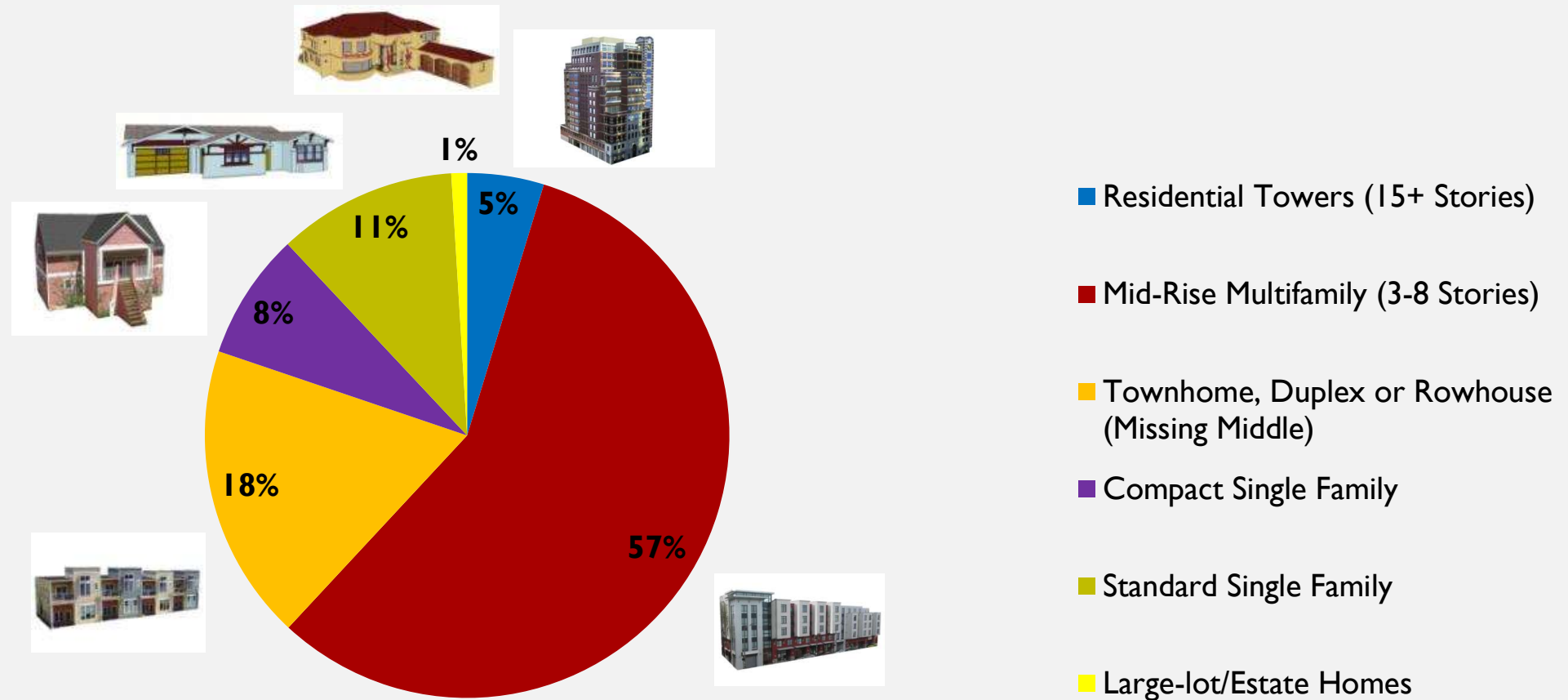
HOUSING ESTIMATES BY TYPE
PERCENT MIX
EXCESS MF CAPACITY ELIMINATED



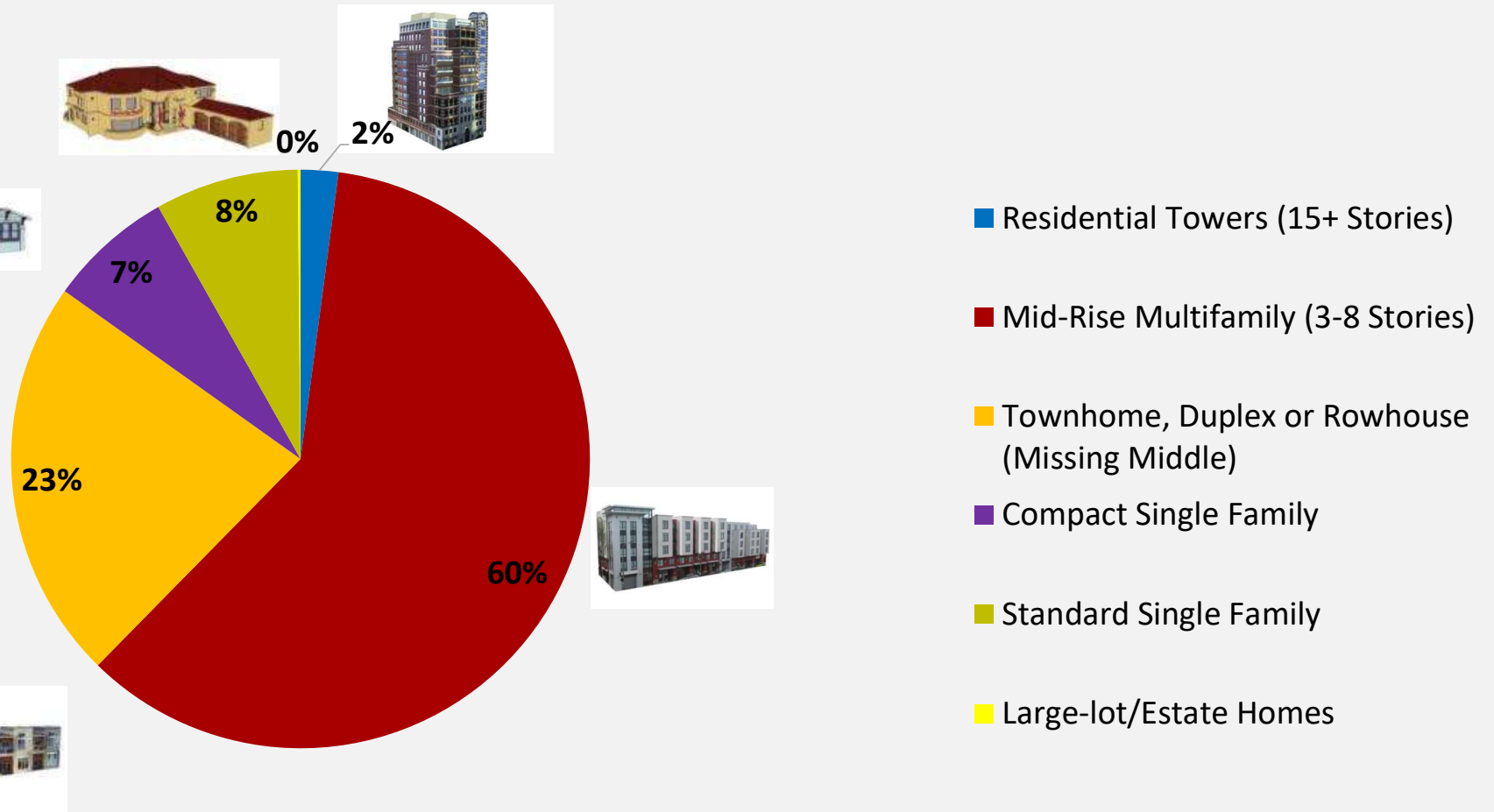
EXISTING ZONING – CAPACITY BY BUILDING TYPE



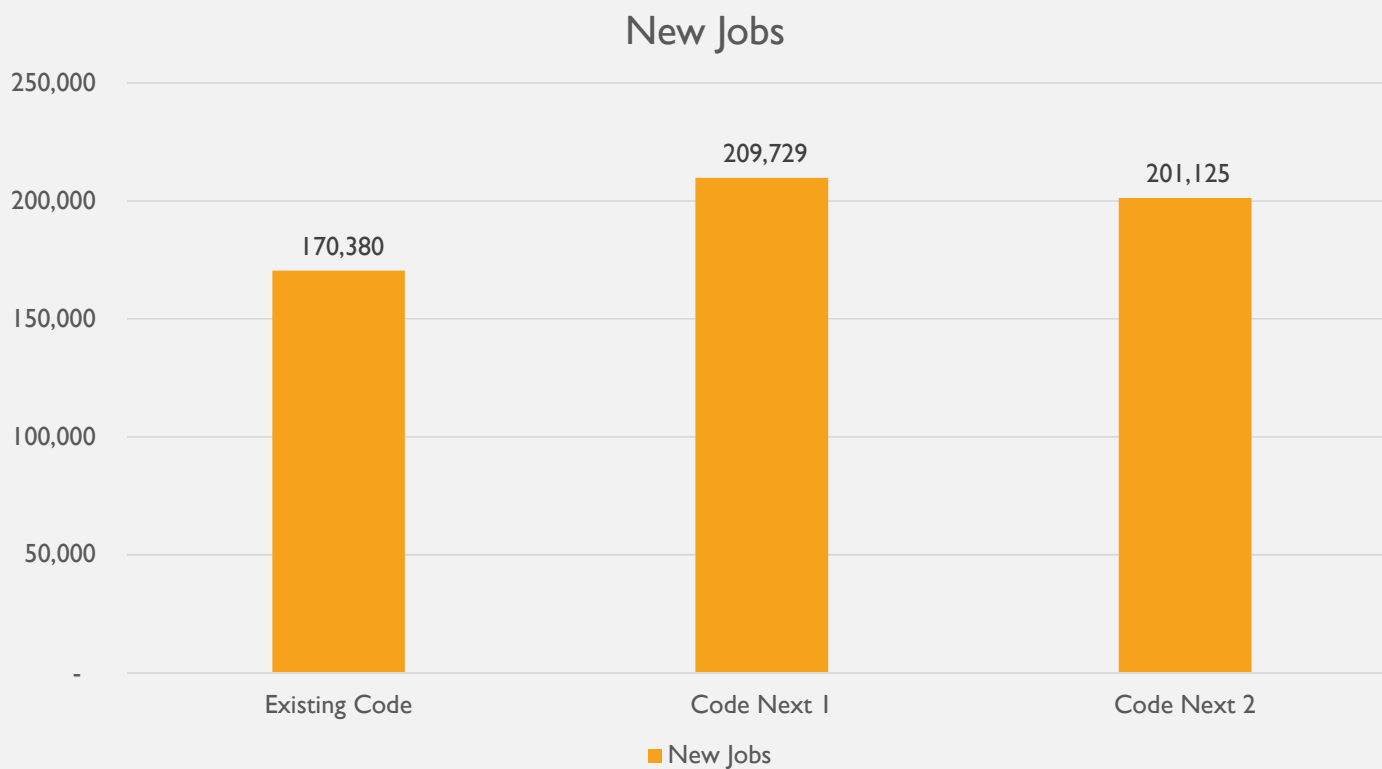
CODENEXT DRAFT I - CAPACITY BY BUILDING TYPE



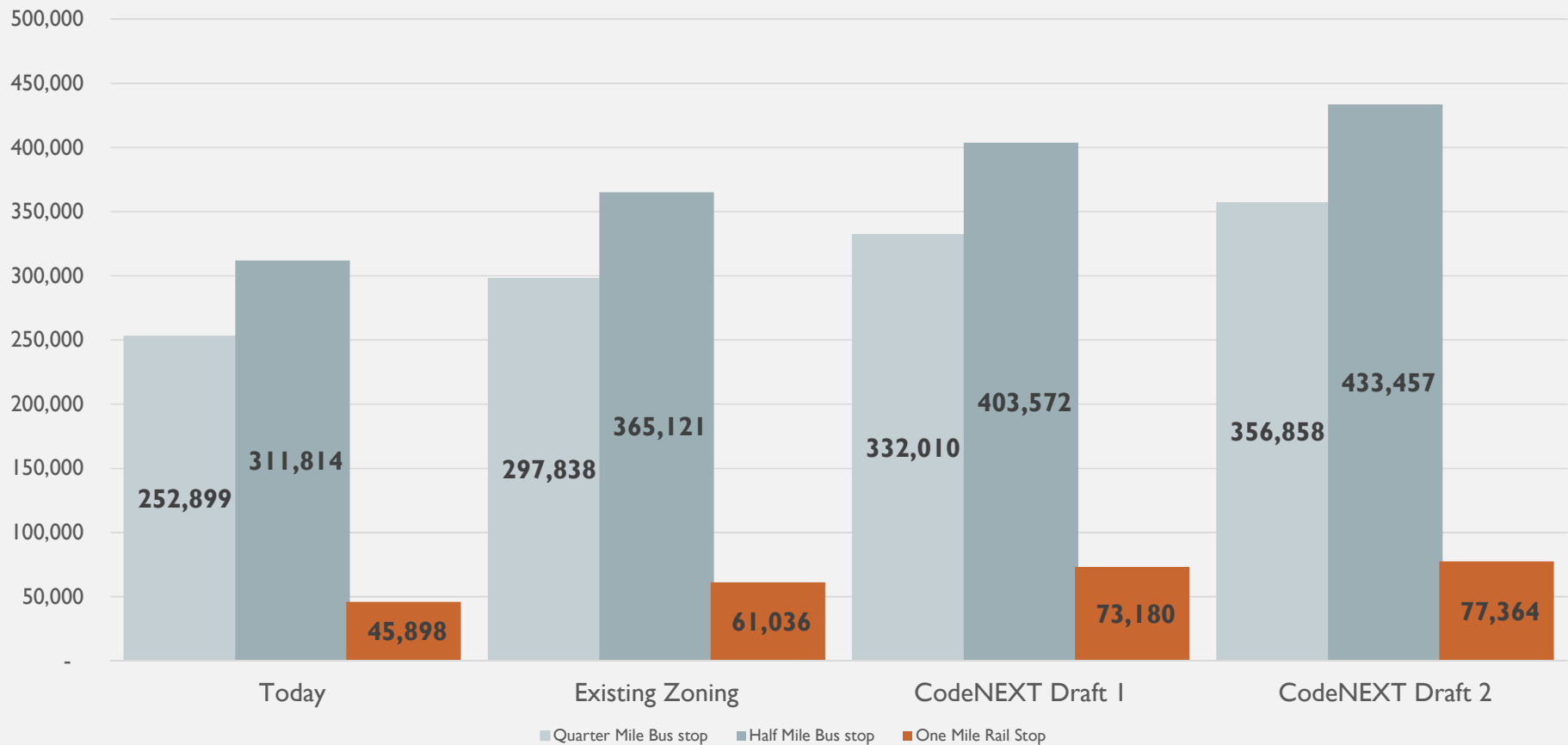
CODENEXT DRAFT 2 - CAPACITY BY BUILDING TYPE



NEW EMPLOYMENT

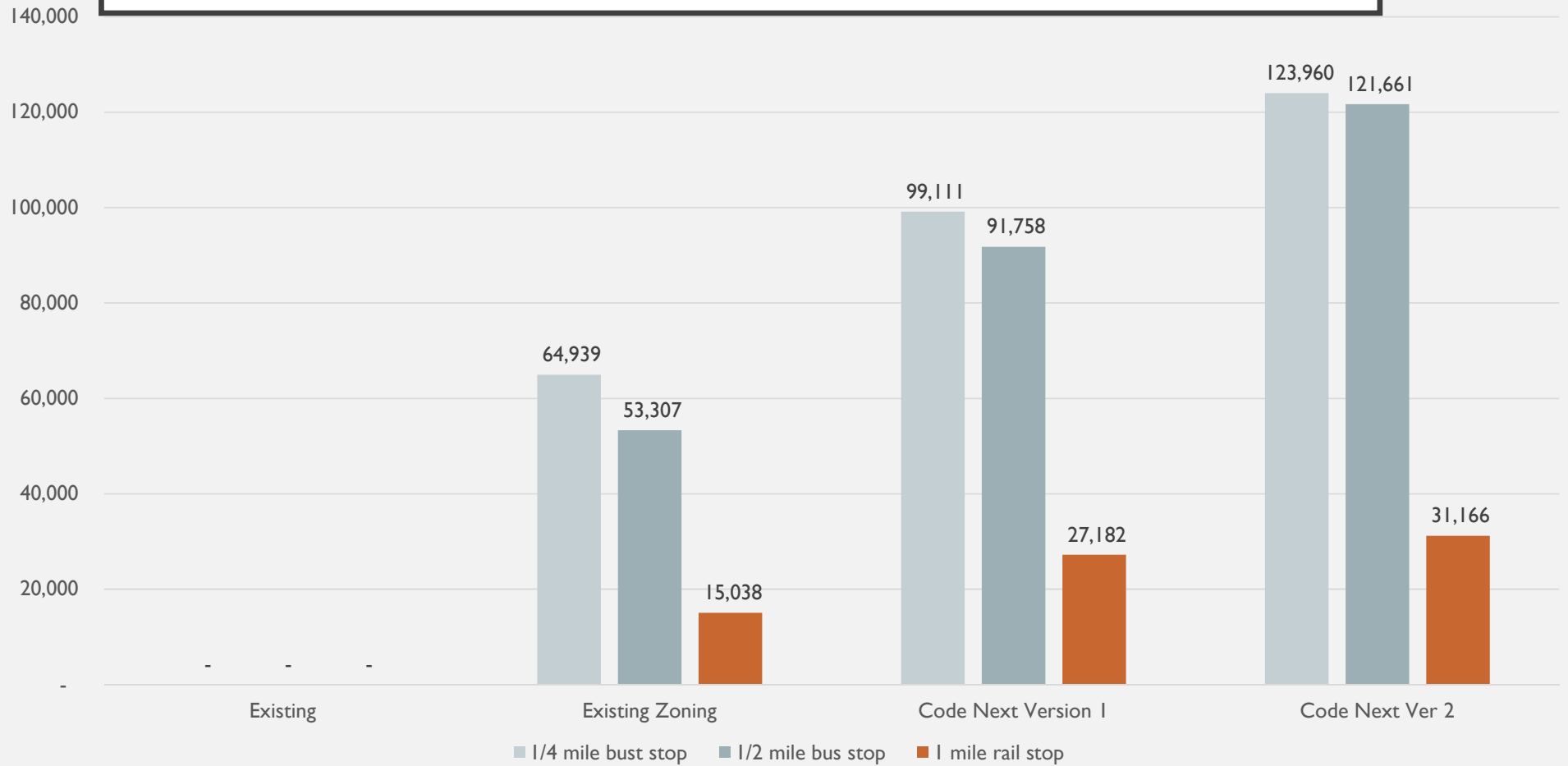


TRANSIT - HOUSING

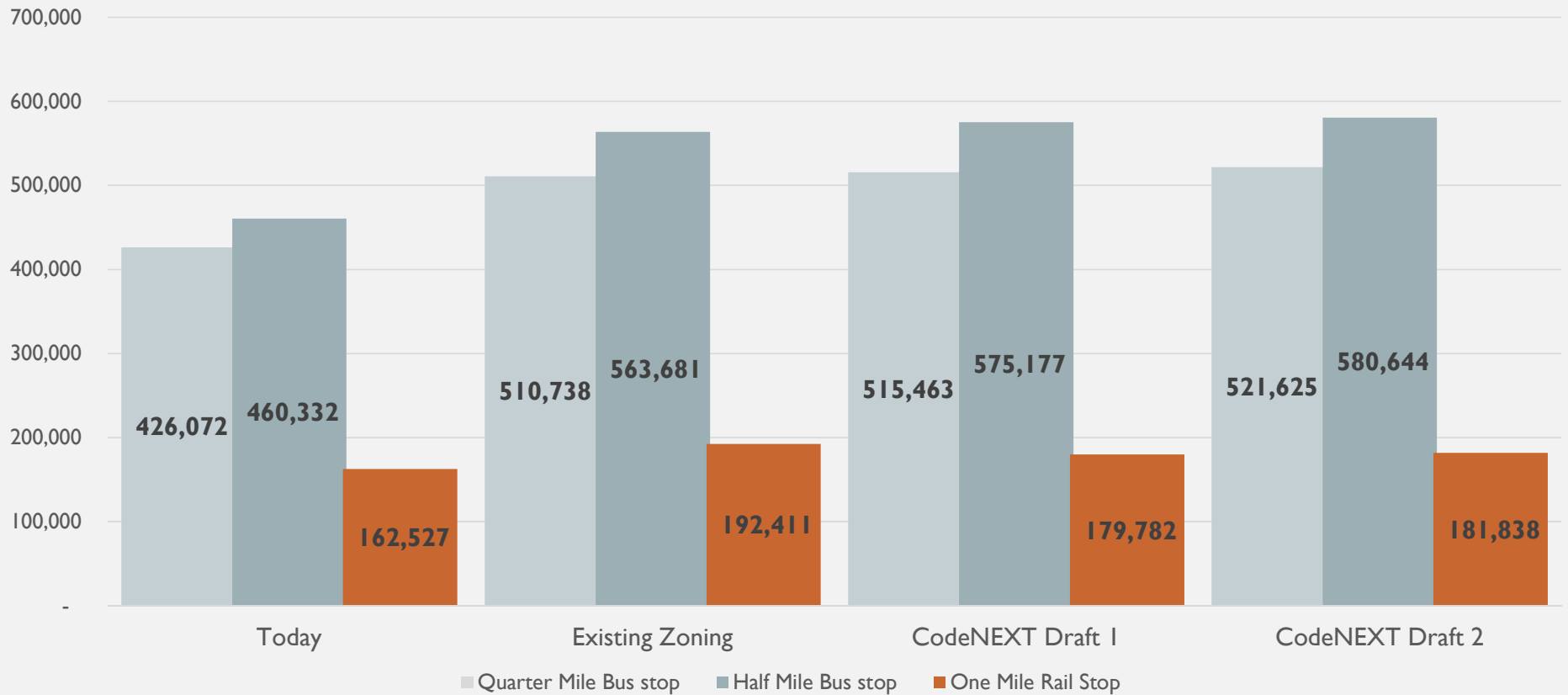


TRANSIT – HOUSING DELTA

Chart Title

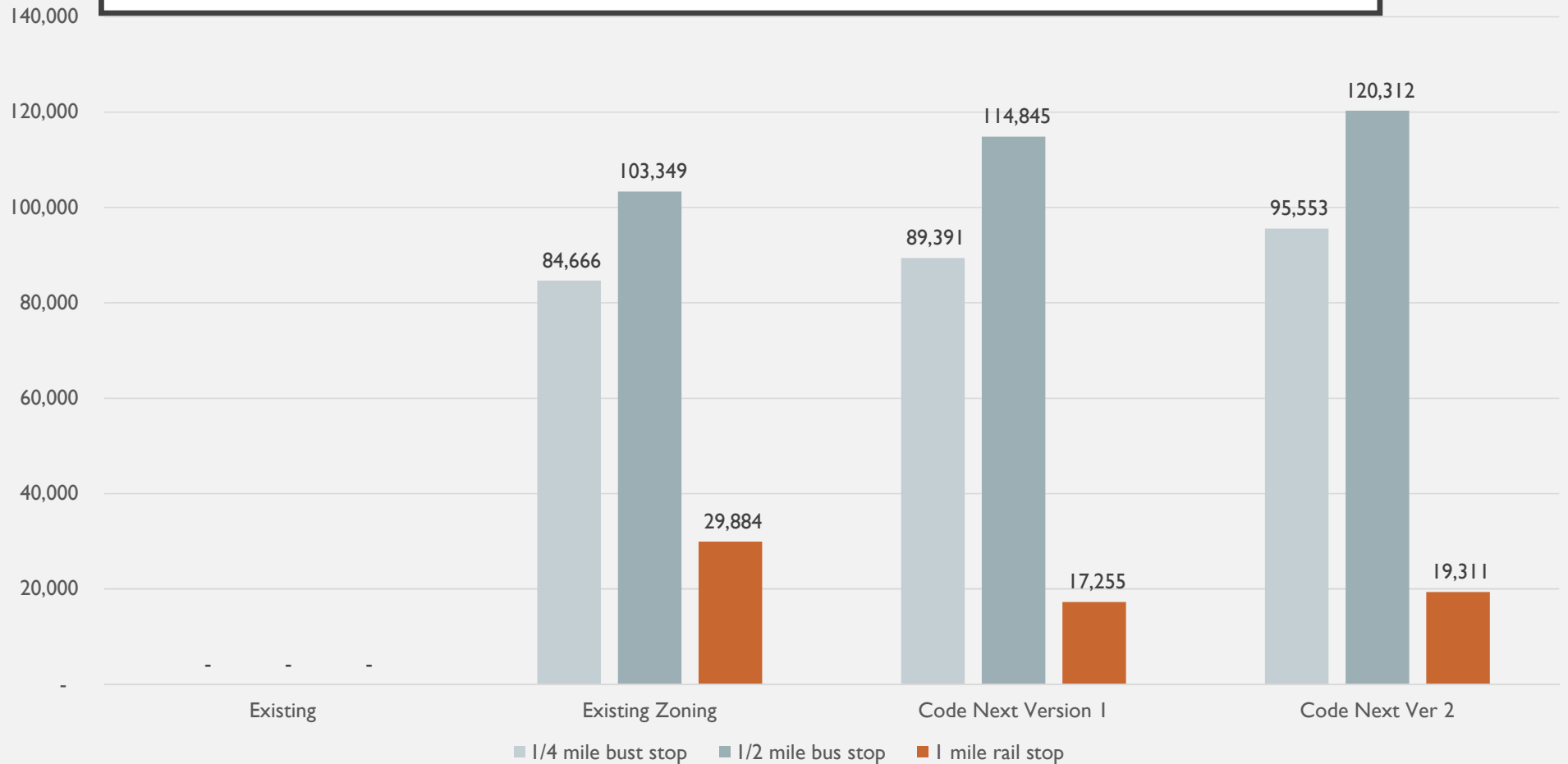


TRANSIT - EMPLOYMENT



TRANSIT – EMPLOYMENT DELTA

Chart Title



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