

PTIS Project Update

October 2010



PTIS Project Objective

Recommend transit investments and land use strategies for urban and rural Fresno County to create a sustainable future.

Bus Rapid Transit FTA Application



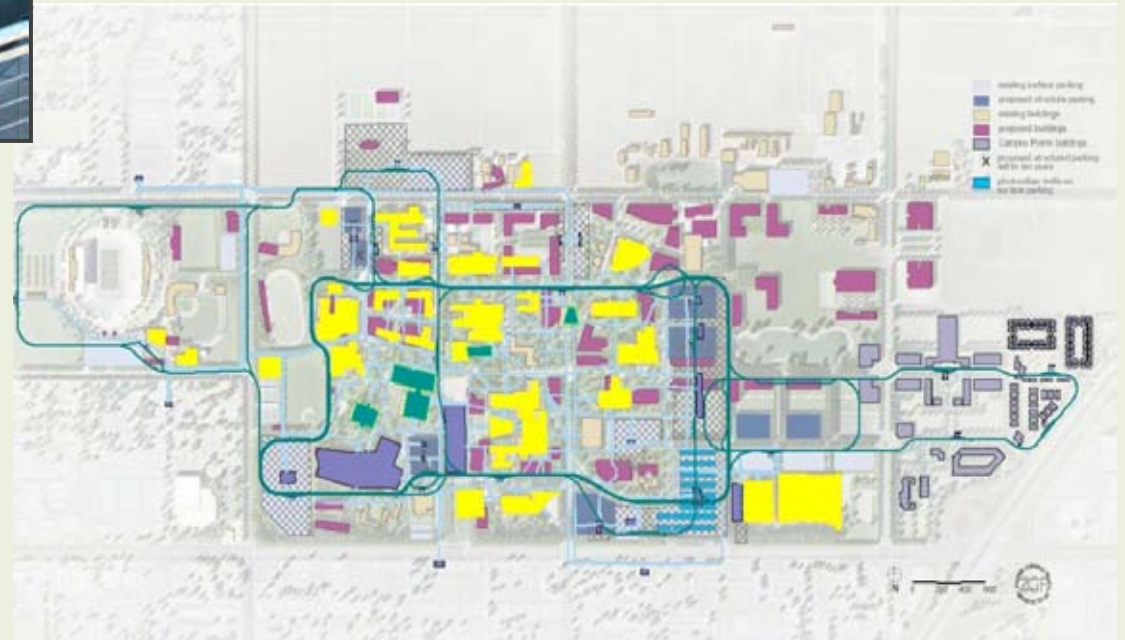
Submitted September 2010 for service on
Blackstone and Ventura/Kings Canyon



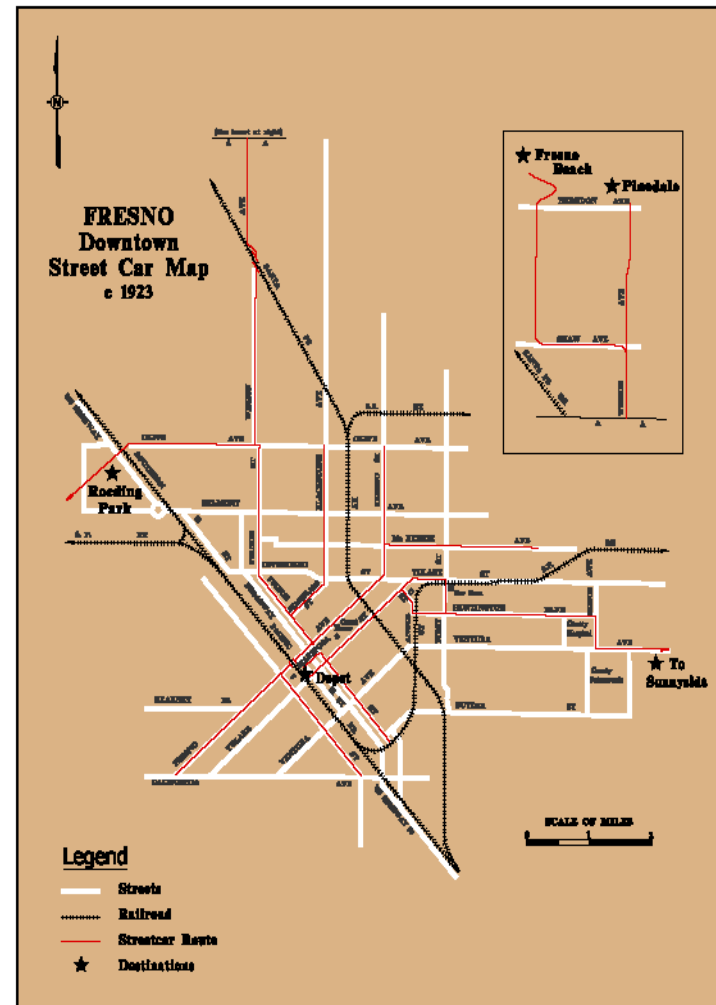
PRT Test Case - CSU Fresno Campus



PRT Cost Estimate: \$30m
to \$35m/mile to build +
\$4.3m/yr for O&M



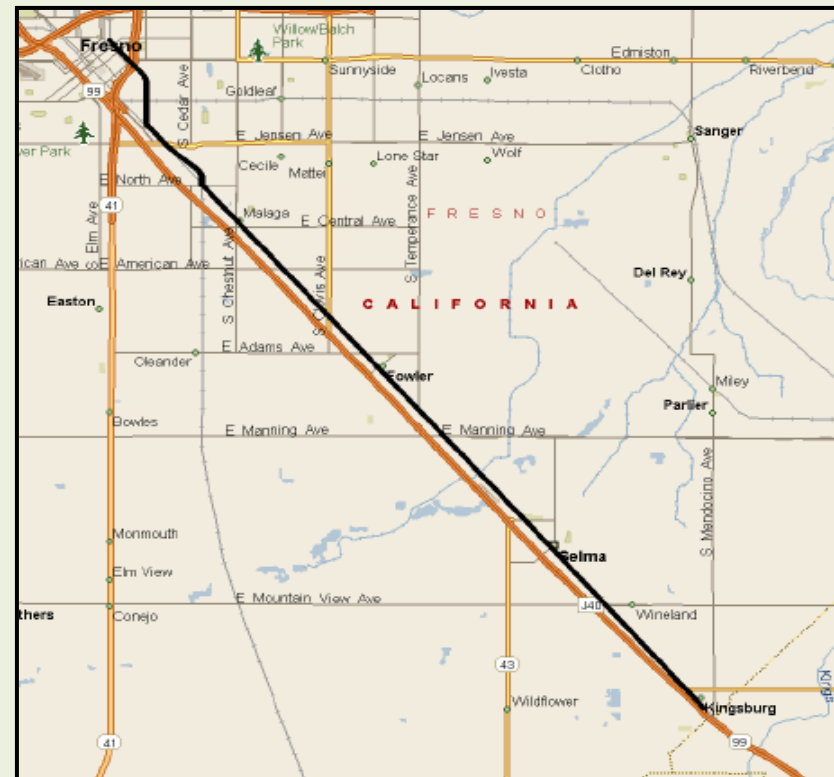
Downtown Fresno Streetcar Feasibility Study



Rural Fresno County Components



Selma Walkability and Bikeability Survey



Fresno to Kingsburg Transit Supportive Density Assessment

Extensive Public Outreach



>> Help choose a streetcar concept!

The concepts below were chosen as three choices for streetcar route alternatives in downtown Fresno. Improved transit downtown will help motivate new businesses, restaurants and shopping – and more housing. Which route do you think best serves downtown? Register your vote!



☐ Concept A



☐ Concept B



☐ Concept C

>> Vote on future housing types for transit corridors and downtown

A key to successful public transit is neighborhood design that brings large numbers of homes into a smaller amount of space – known as transit-oriented design. These homes can be apartments, condominiums or townhouses, and the designs can be very different from one community to another, as shown here. Vote for the transit-oriented design type that you like best for Fresno!

☐ Single Family Dwelling 6-10 dwelling units per acre



☐ Townhomes 15-30 dwelling units per acre



☐ Mixed Use Low Density 20-45 dwelling units per acre



☐ Mixed Use Medium Density 35-70 dwelling units per acre



Land Use and Transportation Scenarios - 2035

Fresno Existing Conditions

2010 Population: 502,000

2035 Population: 1.4 million

2.5 du/ac - Fresno County

7.8 du/ac - City of Fresno

91.6% car trips

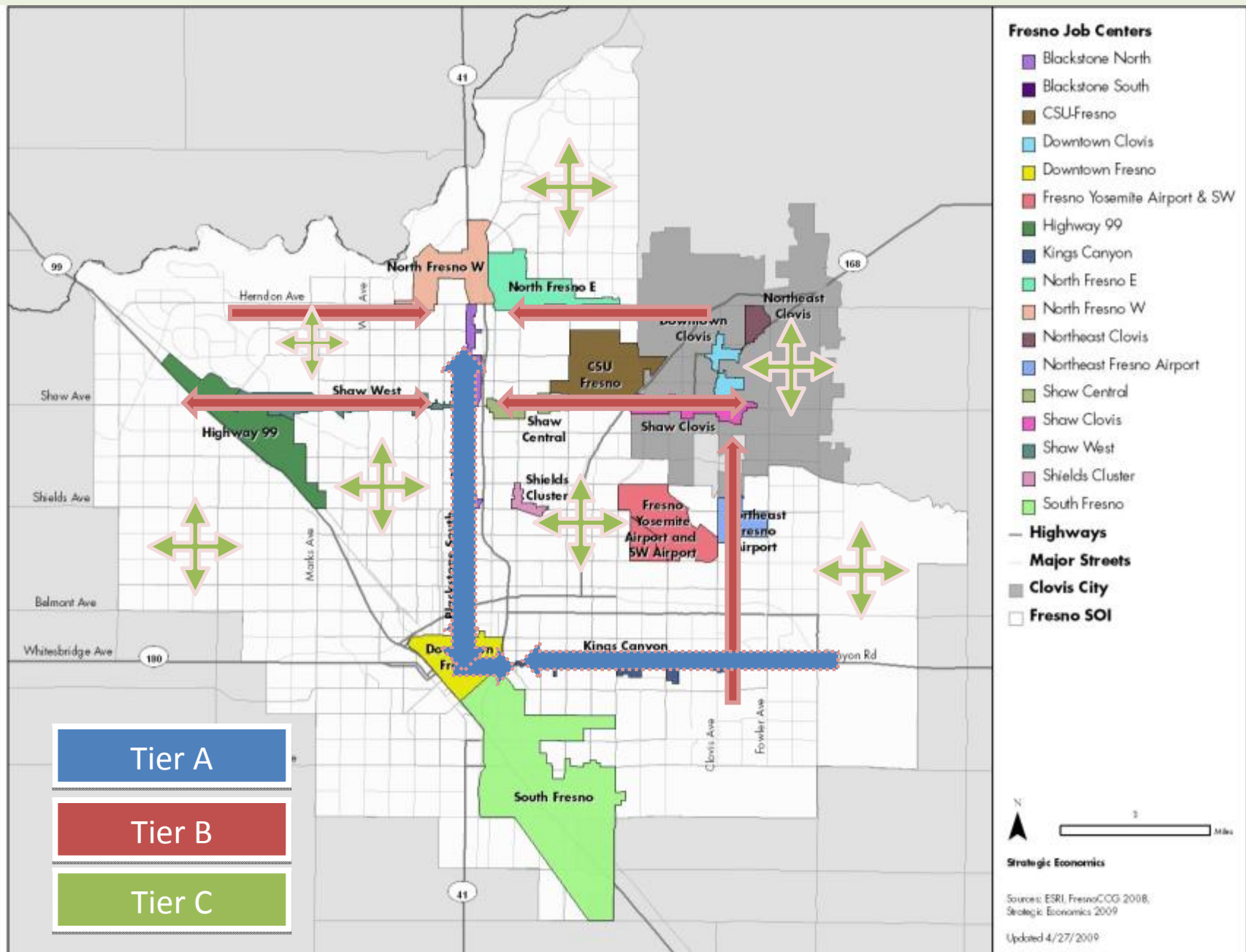
0.84% transit trips

7.6% walk/bike trips

Very little congestion

5th most polluted airshed in the US

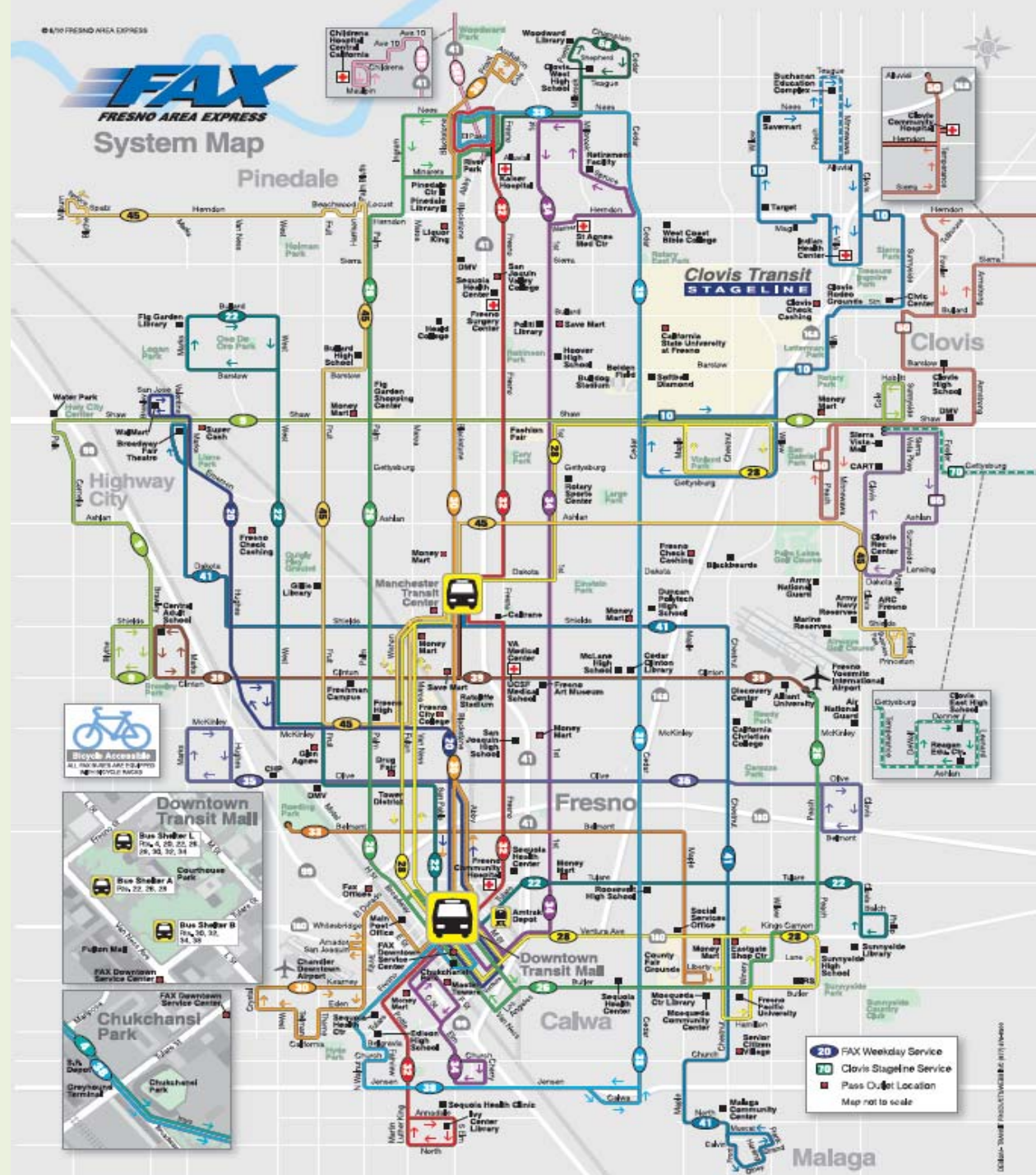
Recommended Transit Priorities (From the Economist)

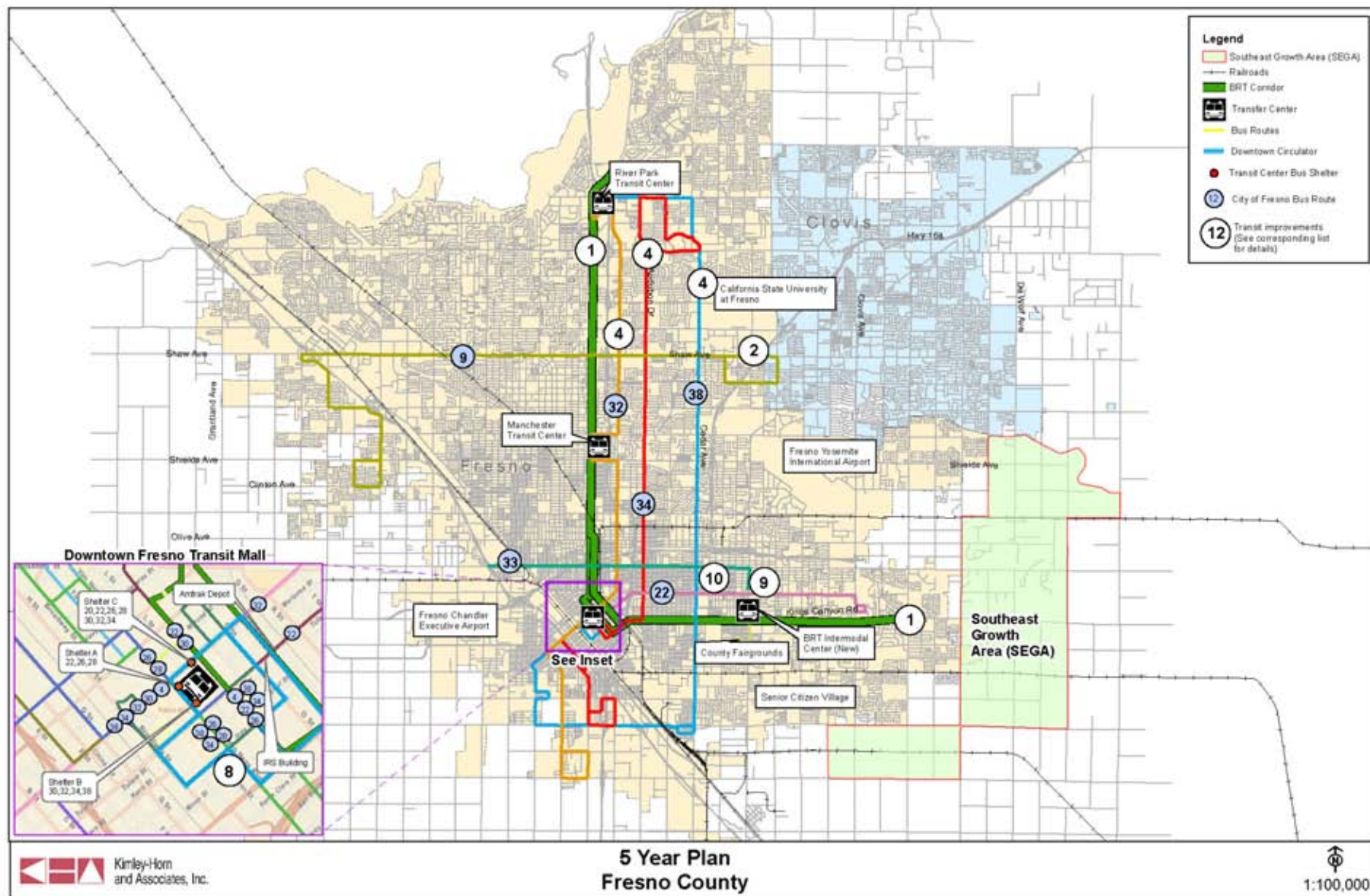


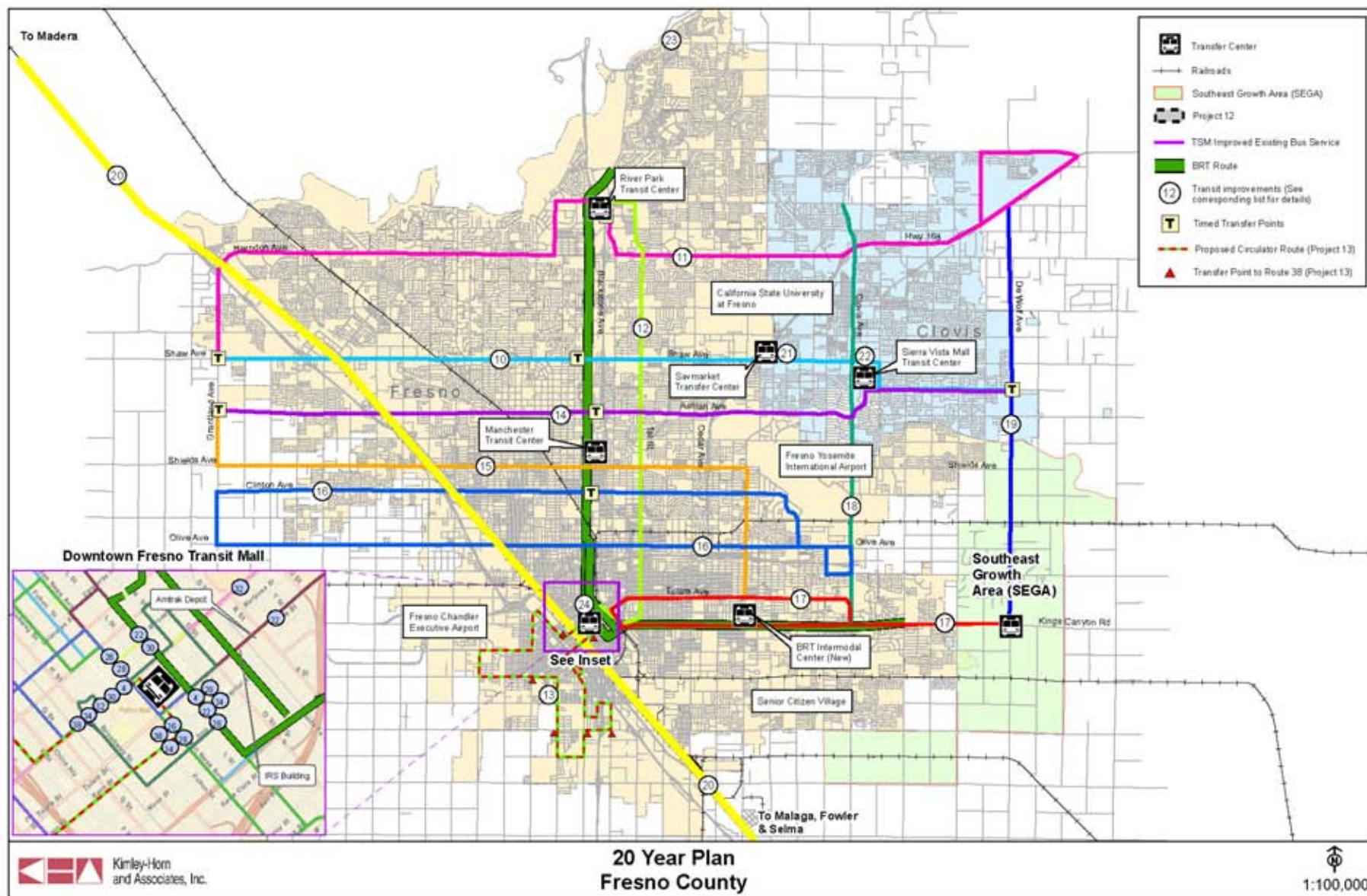
Development of 5 Transportation and Land Use Scenarios:

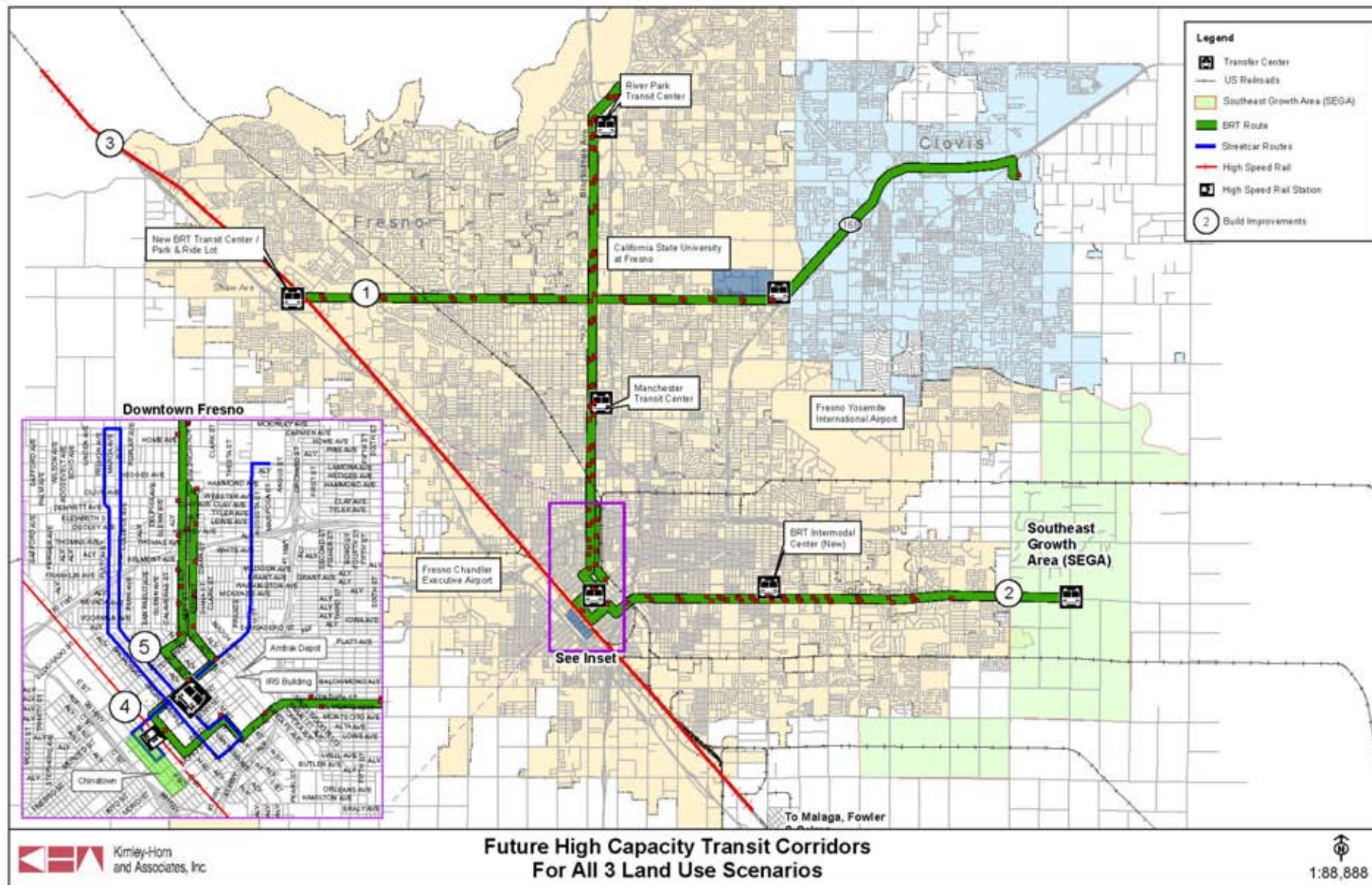
1. 5 Year Plan
2. 20 Year Plan
3. COG Trend Scenario
4. Constrained TOD Scenario
5. Aggressive TOD Scenario

Existing FAX
transit
system is the
baseline
included in
every future
transit
scenario.









Capital Cost of Transit Improvements

- 5 Year Plan including BRT on Blackstone/Ventura =\$46.8M*
- 5 Year + 20 Year Plans= \$251M *
- Add BRT on Shaw Ave = \$440M *

* Does not include the cost of operating service (wages, gas, maintenance, etc.)

Includes fleet replacement cost of \$150M twice over 25 years. Stated in 2010 dollars.

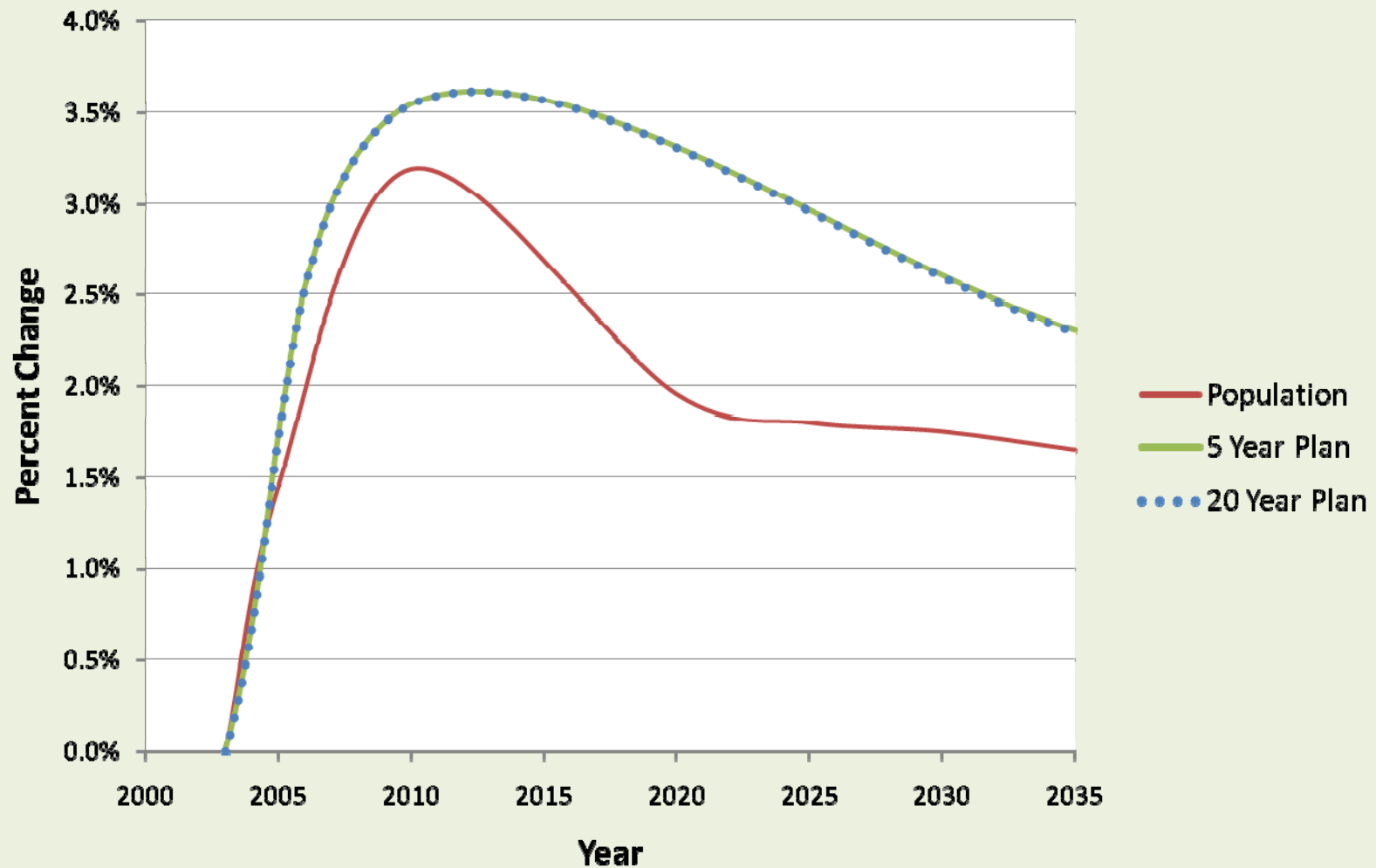
5 Year Plan vs 20 Year Plan Vehicle Miles Travelled

VMT doubles from 18 million trips in 2003 to 37 million trips in 2035.

VMT grows faster than the population under the current land use trends.

5 Year Plan vs 20 Year Plan

% Change in Population & VMT



Comparing the 3 Land Use Scenarios



Three Land Use Scenarios: 2035

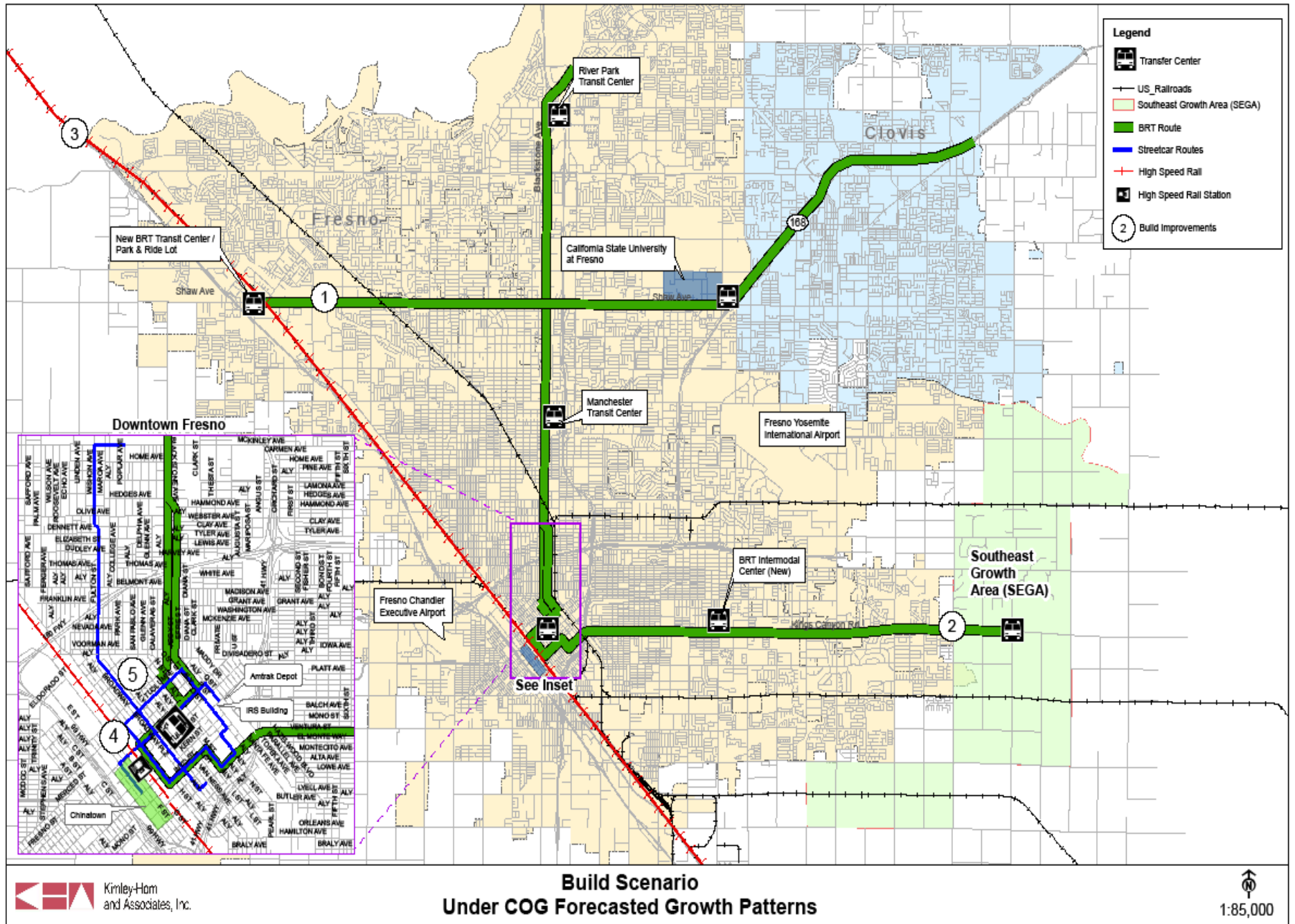
1. COG Trend Scenario

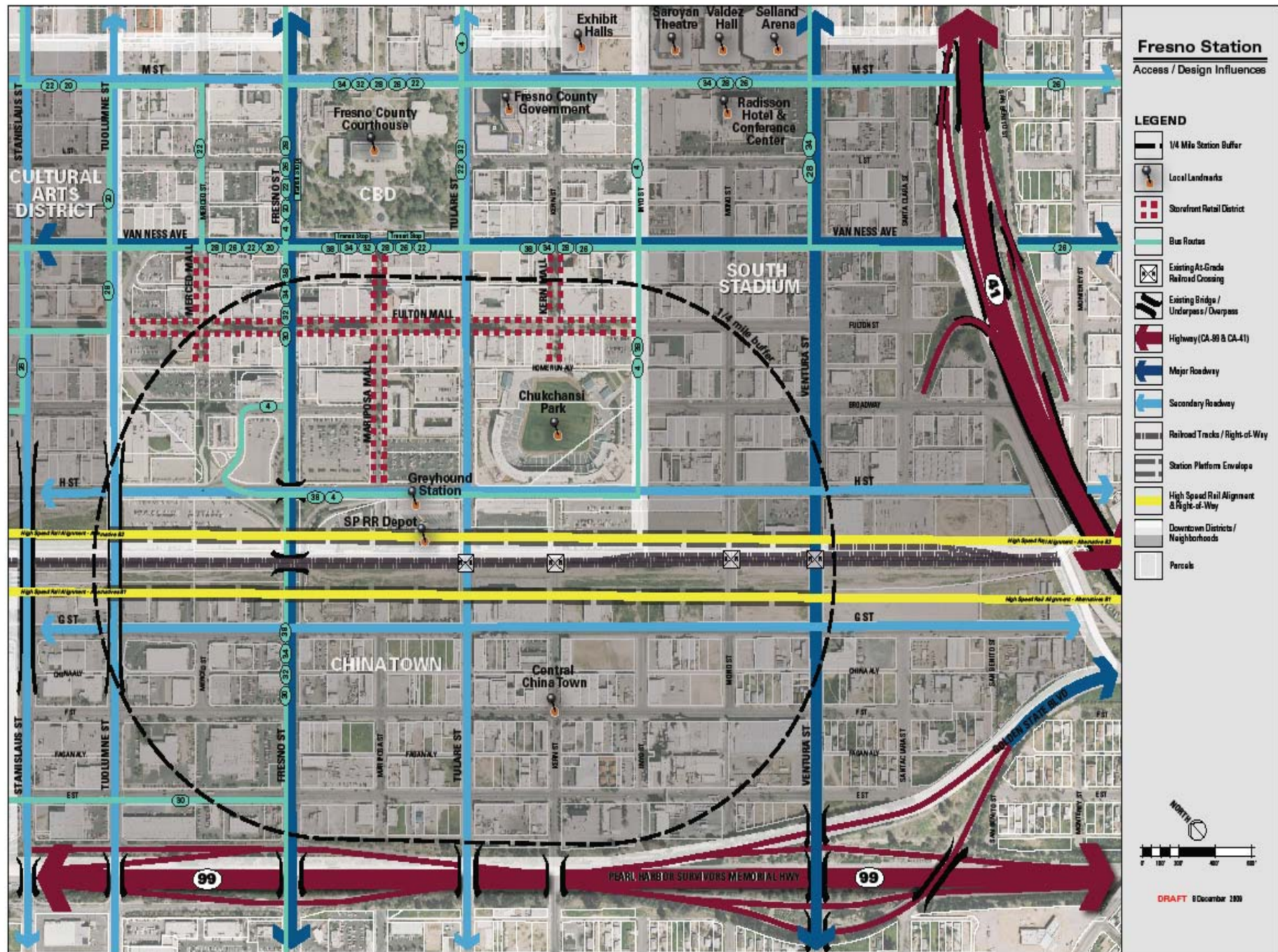
2. Constrained TOD Scenario

3. Aggressive TOD Scenario

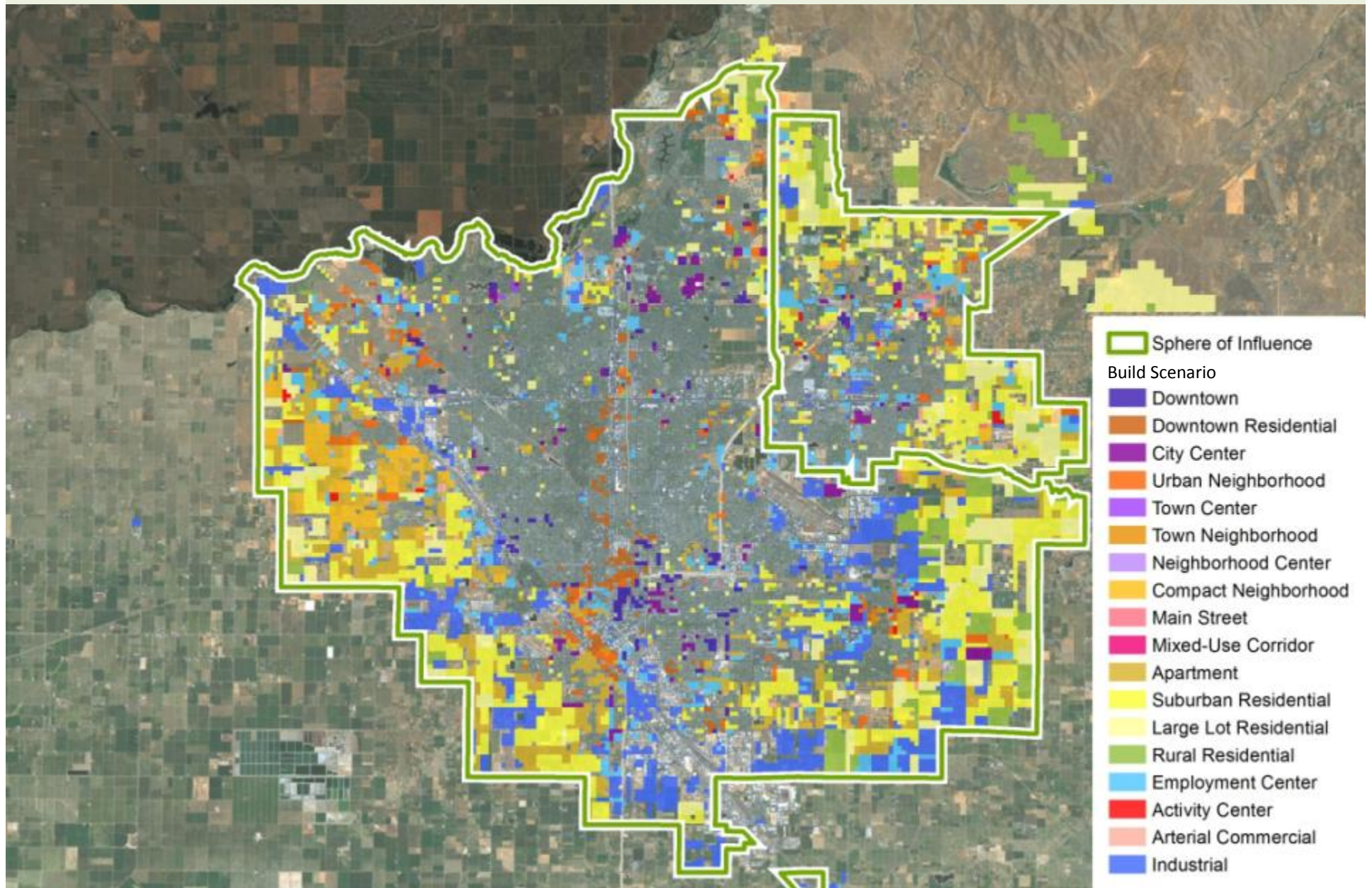
Our Question:

“What effect does development density and mix have on people’s travel behavior in specific transit corridors and downtown?”





COG Trend Scenario

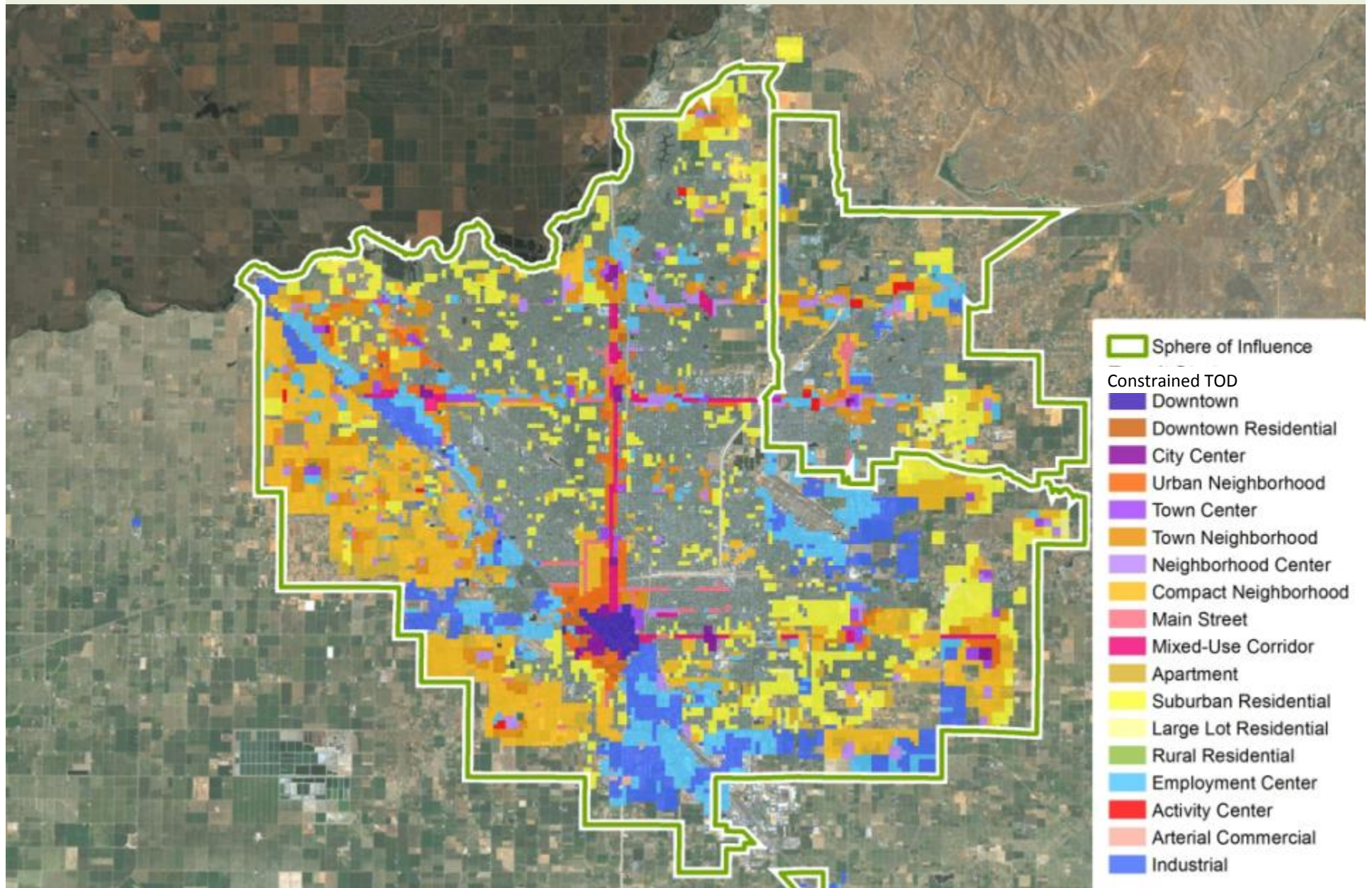


COG TREND SCENARIO:

**BASED ON ADOPTED ZONING
LOW DENSITY FRINGE GROWTH**

ASSUMES SEGA IS BUILT OUT

Constrained TOD Scenario



CONSTRAINED TOD SCENARIO:

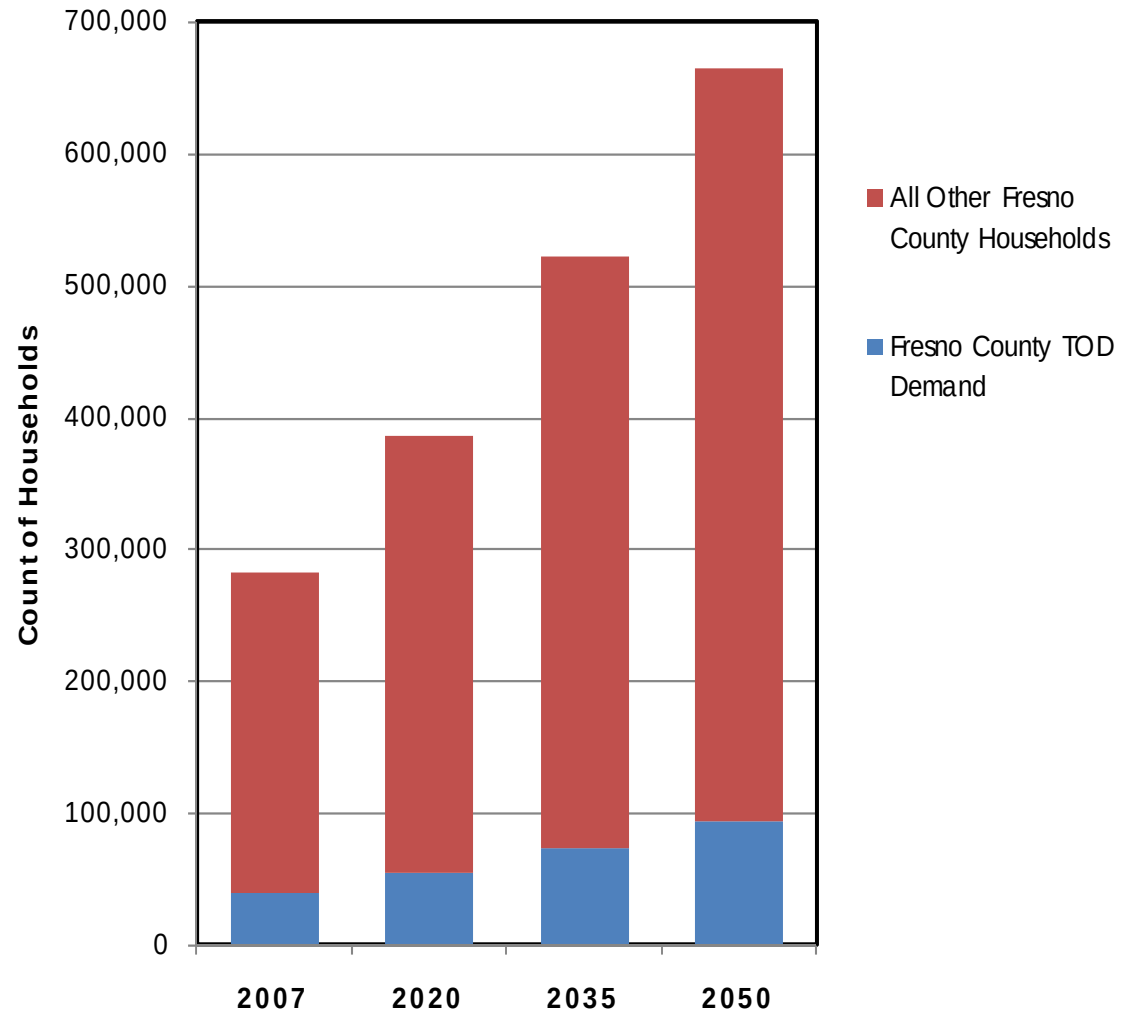
**TOD HOUSING IS MARKET
CONSTRAINED**

**ASSUMES SEGA IS BUILT OUT:
GROWTH ON THE FRINGES**

TOD Demand in Fresno County

14% of all
households

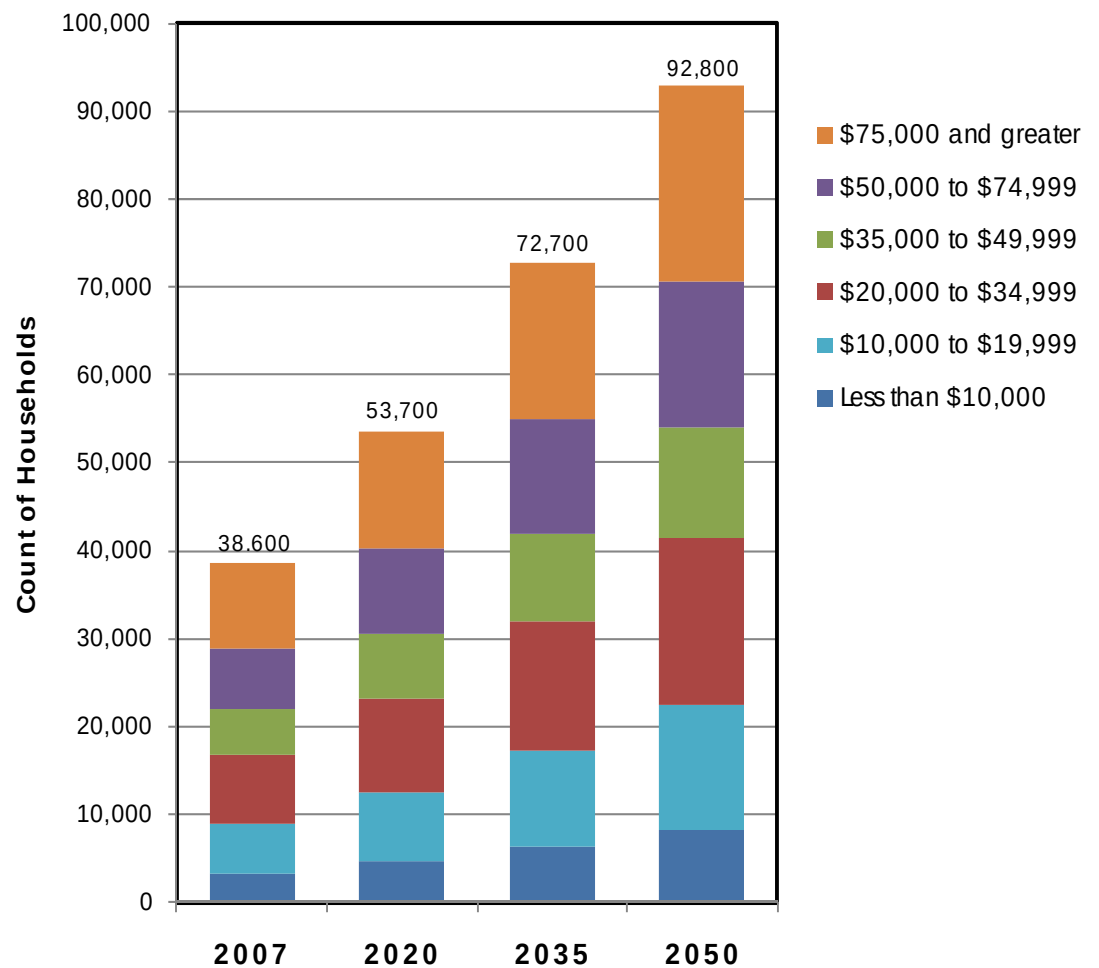
73,000
households
in 2035



Source: US Census ACS 2005-2007; California Department of Finance, 2010; Strategic Economics,

TOD Demand by Income

60% of TOD demand (43,000 units in 2035) is from households with low and very low incomes.

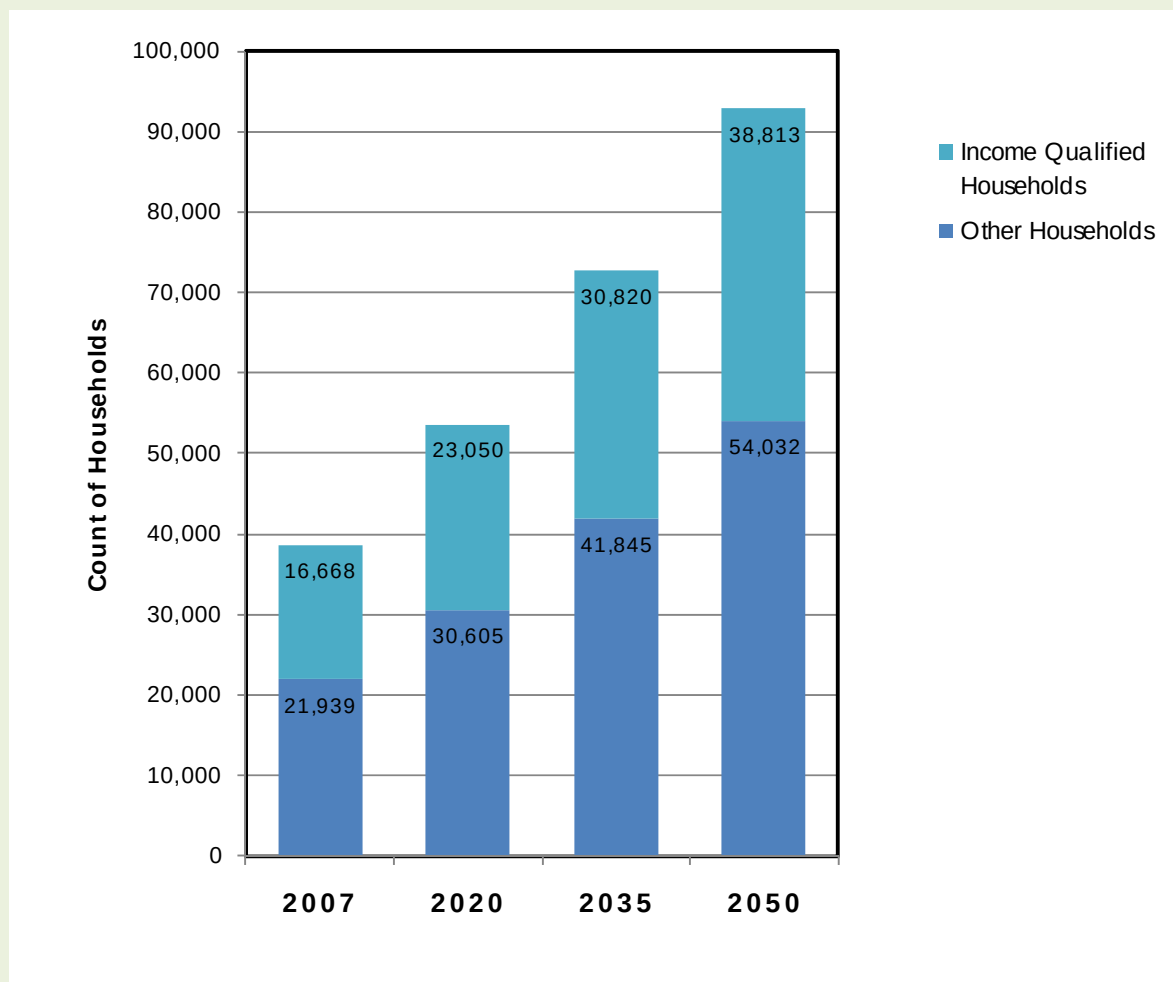


Source: US Census ACS 2005-2007; California Department of Finance, 2010; Strategic Economics, 2010

Market-rate multi-family housing likely to be targeted to higher income households

Only 40% of TOD households (30,000 in 2035) can afford newly built, market-rate higher density units.

Demand for Multifamily Units by Income



Source: US Census ACS 2005-2007; California Department of Finance, 2010; Strategic Economics,

Developer Perspective

Higher density housing types are more costly to build, and will take longer to realize. Rehabilitation and reuse can be a good short term strategy to provide additional units at lower cost.

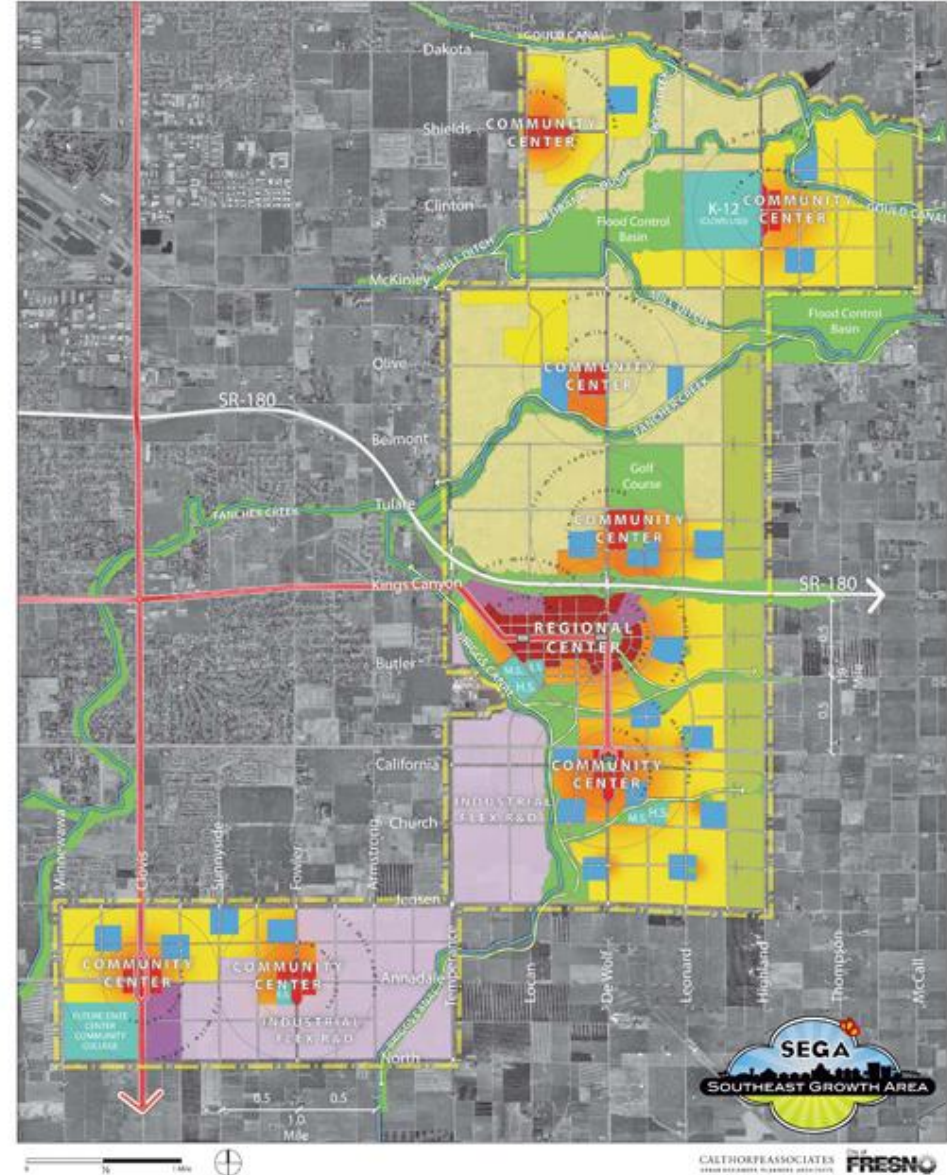


Feasibility Timeline

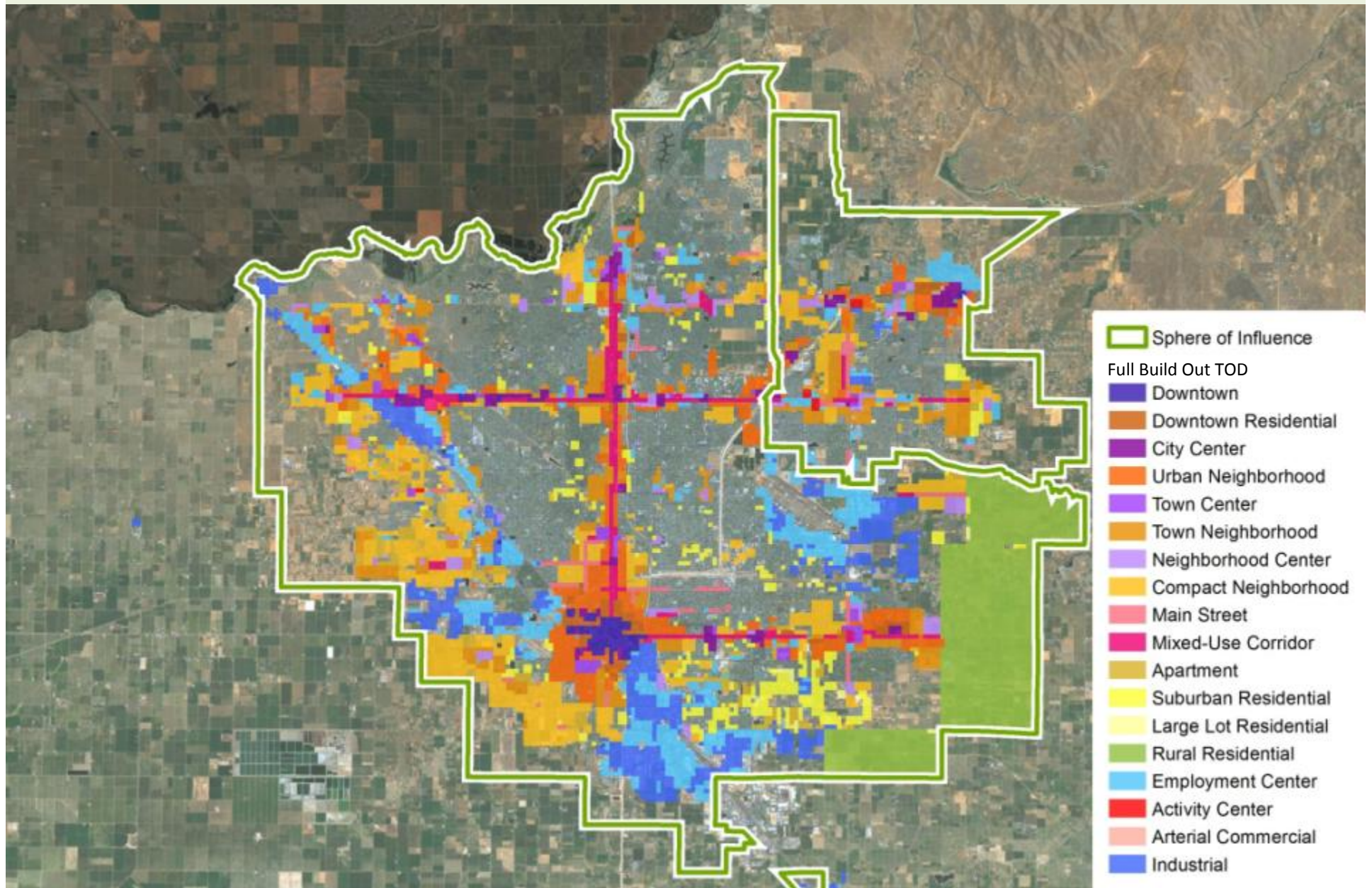
SEGA

- Planned for 55,000 people.
- Housing and jobs separated by 5 miles.
- Fringe growth.

SEGA Illustrative Plan



Aggressive TOD Scenario



AGGRESSIVE TOD SCENARIO:

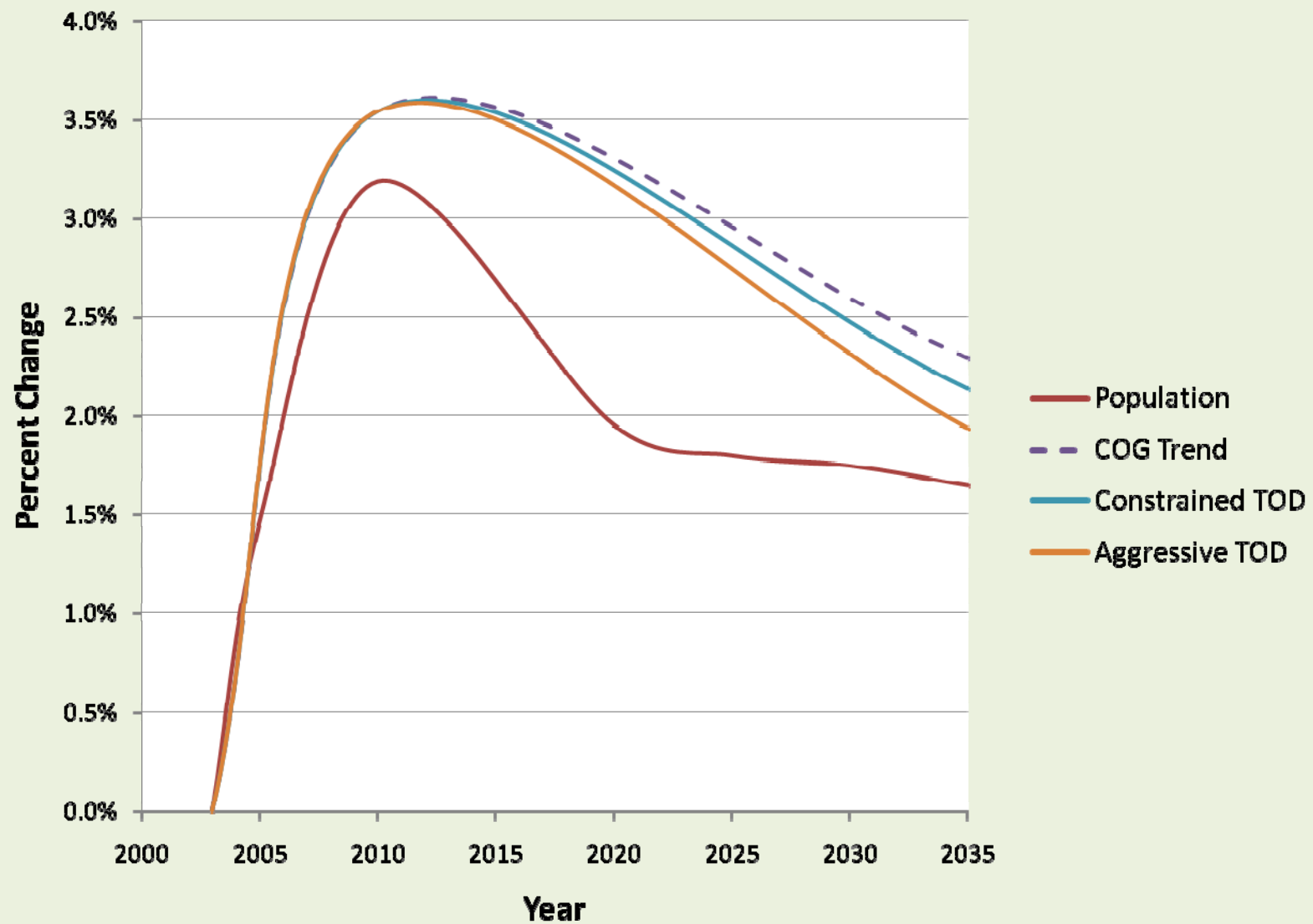
**TOD HOUSING IS MARKET NOT
CONSTRAINED**

**ASSUMES SEGA IS NOT BUILT:
GROWTH MOVES TO TRANSIT
CORRIDORS**

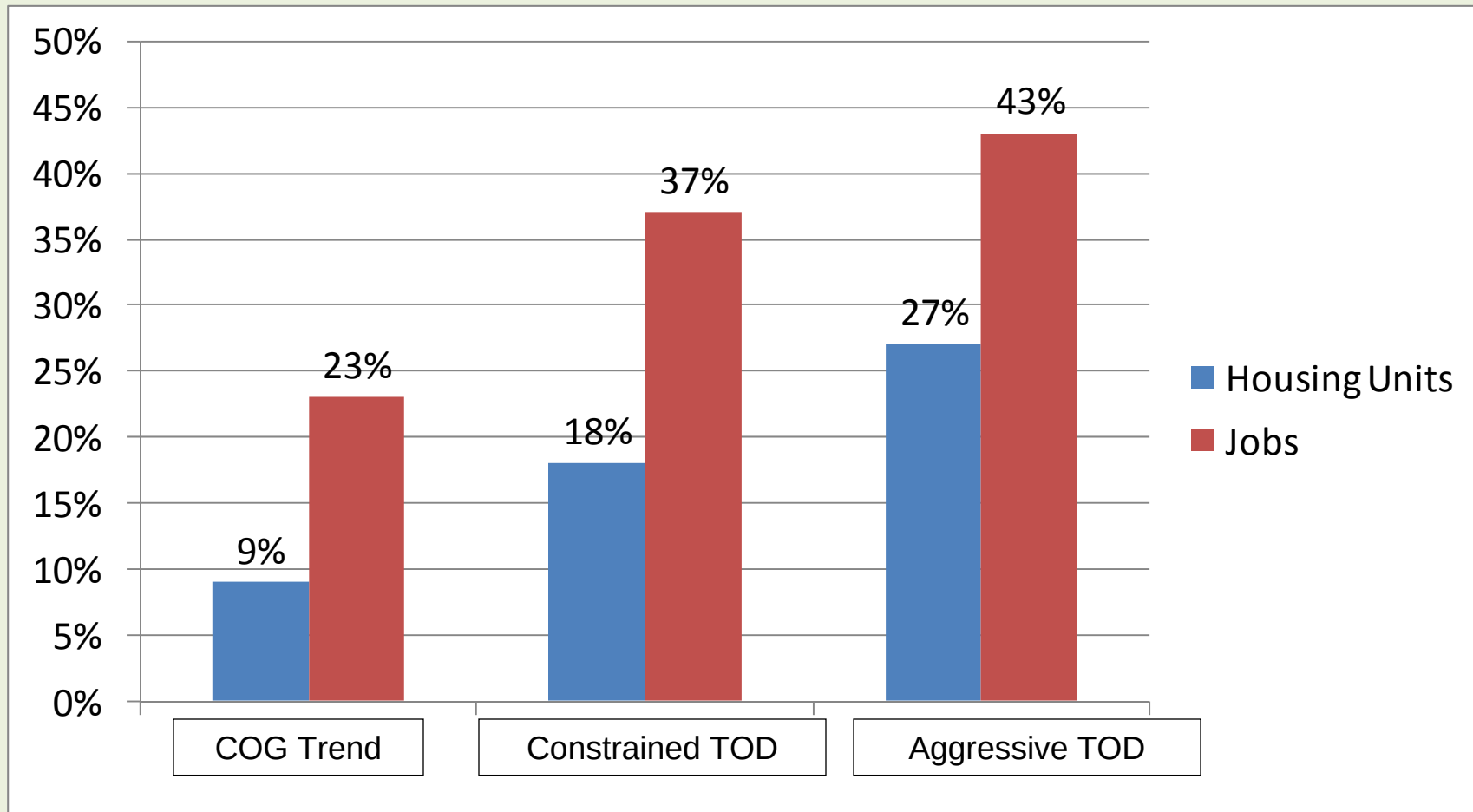
Comparing Scenarios

	COG Trend	Constrained TOD	Aggressive TOD
% of new growth	38%	42%	52%
Density in 1 mile	10.59 du/ac	12.32 du/ac	14.85 du/ac
Transit Mode Share of all trips for region	.93%	1.22%	1.45%
Transit Mode Share for all trips 1 mile corridors	1.7%	2.3%	2.5%
Transit Share to work in BRT Corridors	5.65%	7.64%	8.51%
GHG Reductions*	0.4%	6%	8%

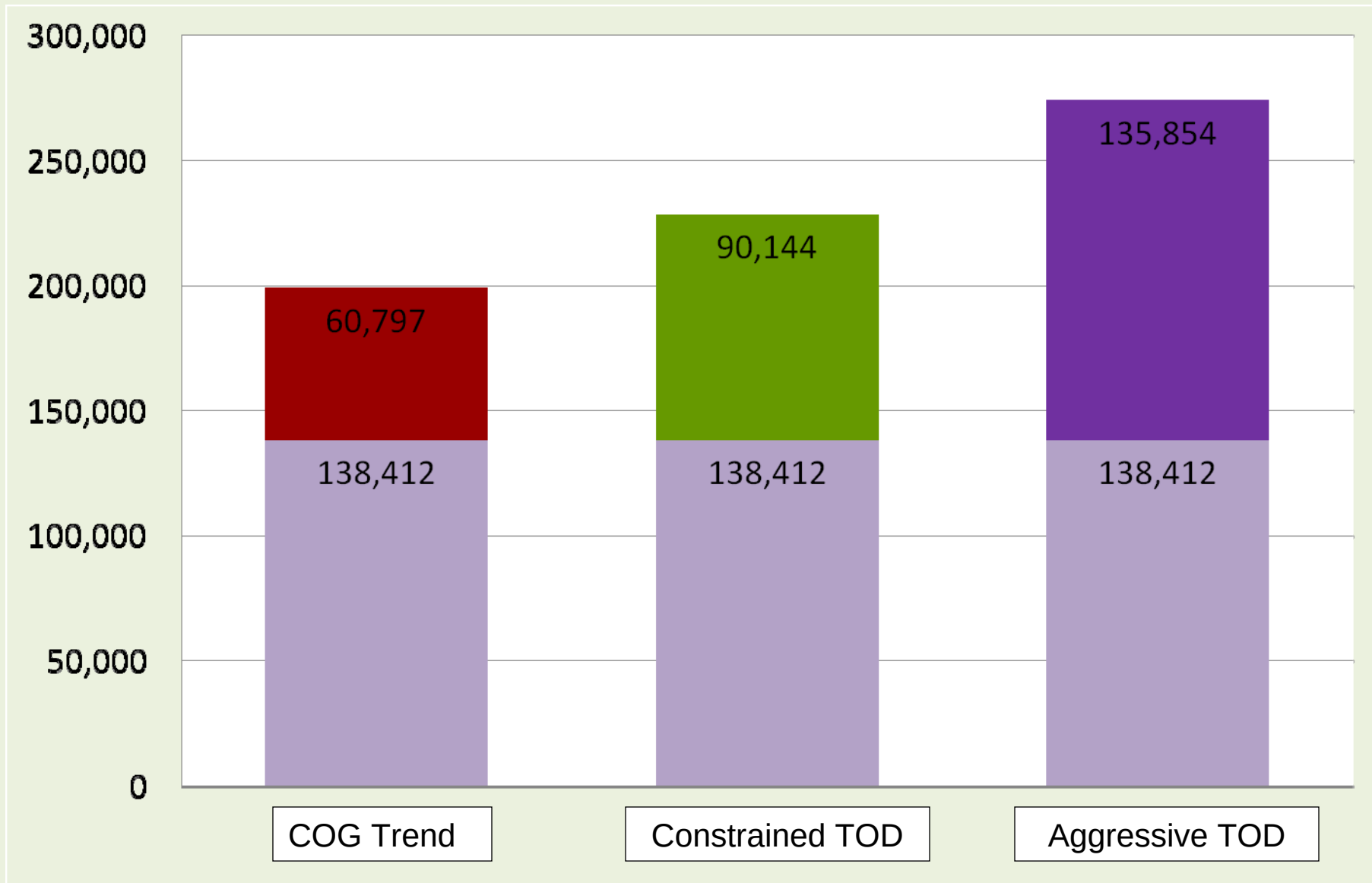
VMT Growth by Scenario



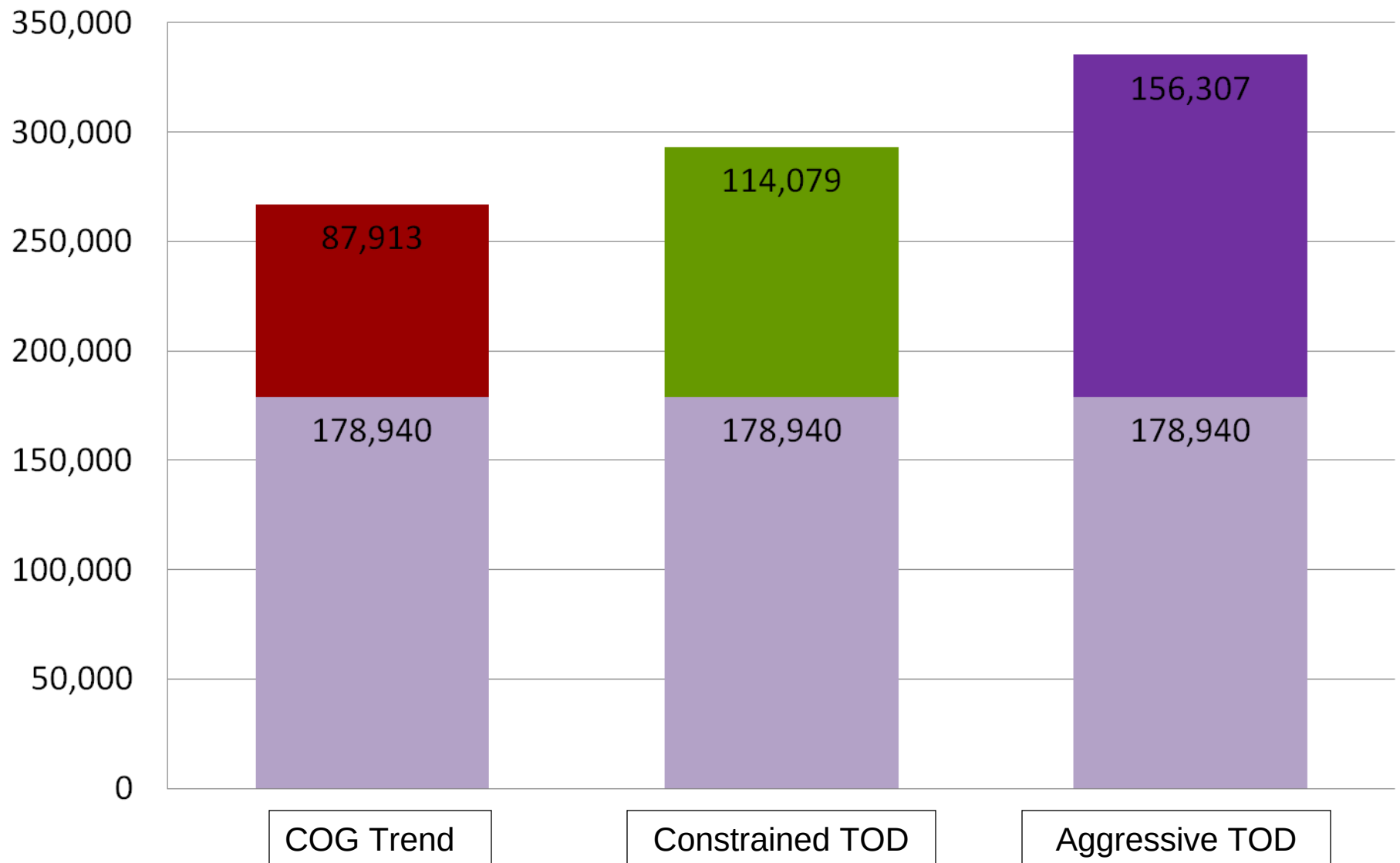
Percentage of housing units and jobs in mixed-use buildings



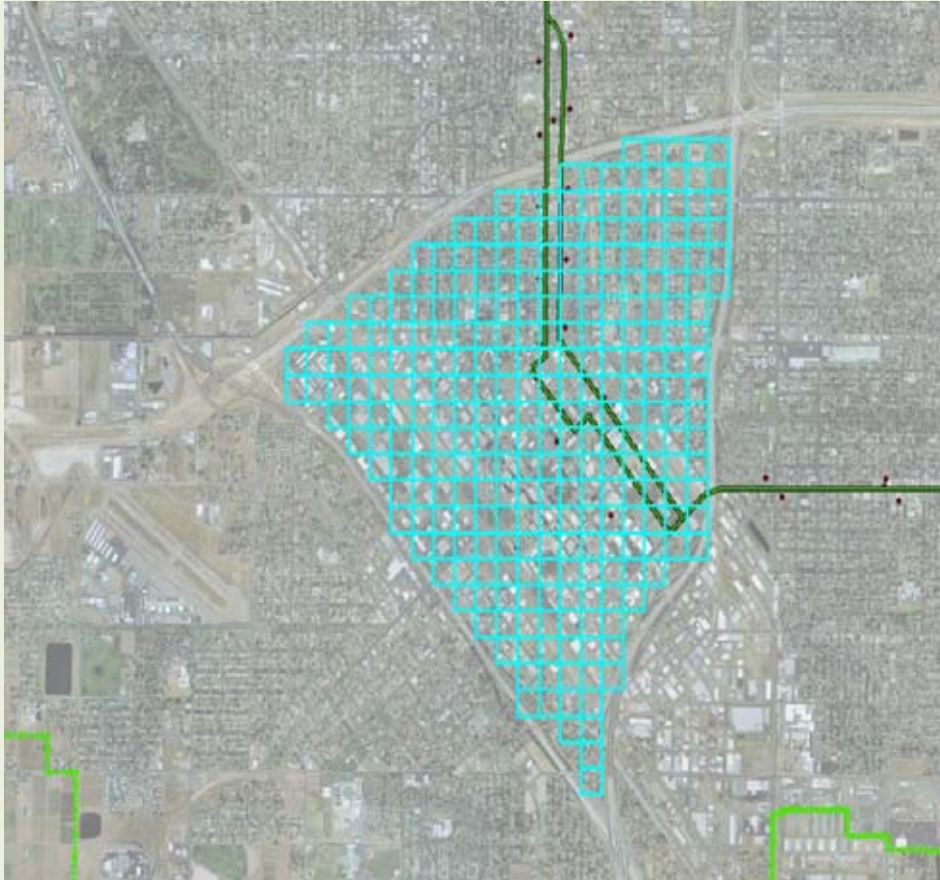
Housing - Within 1 ½ Miles of BRT and Streetcar



Employment - Within 1 ½ Mile of BRT and Streetcar



Downtown Fresno Grows: 2003 to 2035



- From 3,400 homes to 20,500 homes
- From 31,500 jobs to 70,000 jobs
- From 3.73% of work trips on transit to 8.5%

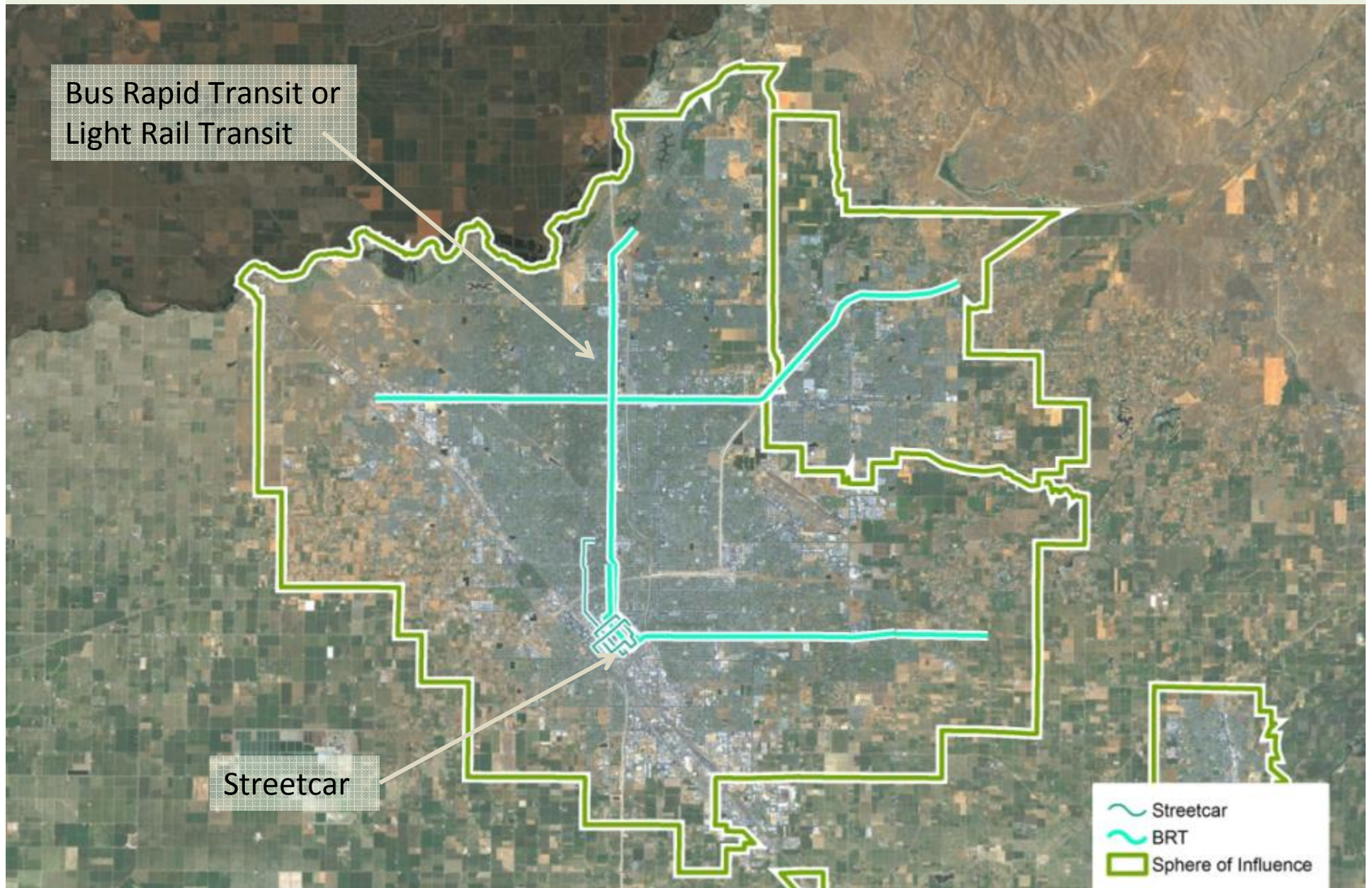
Fresno's Future vs Other Cities

US City (MSA)	Transit Mode Share Journey to Work
Portland	12%
Bay Area	9.4%
Dallas	1.7%
Minneapolis	4.4%
<u>Denver</u>	<u>4.3%</u>
Fresno/Clovis	4.24% (Aggressive TOD)

Conclusions

1. We can make a big difference in travel behavior in a few well-planned priority transit corridors.
2. Constrained TOD with dedicated lanes seems to be the most realistic scenario of what can be achieved.
3. Downtown Fresno needs to be the top priority for investment and redevelopment.

Top Priority Transit Corridors



Transit Technology Future

- BRT may be upgraded to LRT on Blackstone (constrained TOD scenario) if >12 du/ac density is achieved.
- BRT vehicles can be repositioned to Shaw Avenue to create the 3rd corridor.
- Streetcars and High Speed Rail are operating downtown and interfacing directly with LRT and BRT lines out to the suburbs.

**PRELIMINARY
POLICY
RECOMMENDATIONS**

1. Increase the number of people and businesses in close proximity to designated high-capacity transit corridors and downtown.
2. Plan for and build TOD housing developments that meet the needs of a mix of middle to lower incomes and families.
3. Restrict the growth of new development on the urban fringes and into farmlands with incentives, disincentives and urban growth boundaries.

5. Grow the transit, bicycle and pedestrian mode shares by making it more attractive to use alternate modes.
6. Decrease the automobile mode share and VMT by making it less attractive to drive a car in Fresno.
7. Attract new residents to Fresno who will more likely want to live in TOD-style market-priced development, including young urban professionals, seniors, and future high speed rail commuters.

8. Create processes that cross jurisdictional and departmental boundaries to link transportation and land use planning decisions together.

PTIS Next Steps

- Downtown Streetcar operating plan, cost estimates and economic impacts analysis
- Transit Technology recommendations, operating plan, investment phasing
- Refine Policy Recommendations
- Final Report to COG by January 2011

Discussion

www.FastTrackFresnoCounty.com

