



Fresno PTIS
Executive Summary



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Background

Following the planning process established during the San Joaquin Blueprint Study, Fresno's Public Transportation Infrastructure Study (PTIS) began in earnest at the end of 2008 in an effort to identify strategies for transportation investments and land use policies that would result in measurable reductions in vehicle miles travelled (VMT) and improve mobility choices for greater Fresno County residents. Improving transportation choices for Fresno County and City residents means taking transit, bicycling and walking more attractive than driving alone for every trip. And, less reliance on the automobile translates to air quality improvements, setting achievable benchmarks for reducing greenhouse gases.

With Fresno County's population expected to grow from the current 954,000 people to 1.5 million people by 2035, the topics of growth management, transit and land development policies are timely for Fresno for proactive planning that may stem the tide of Fresno County's past trends:

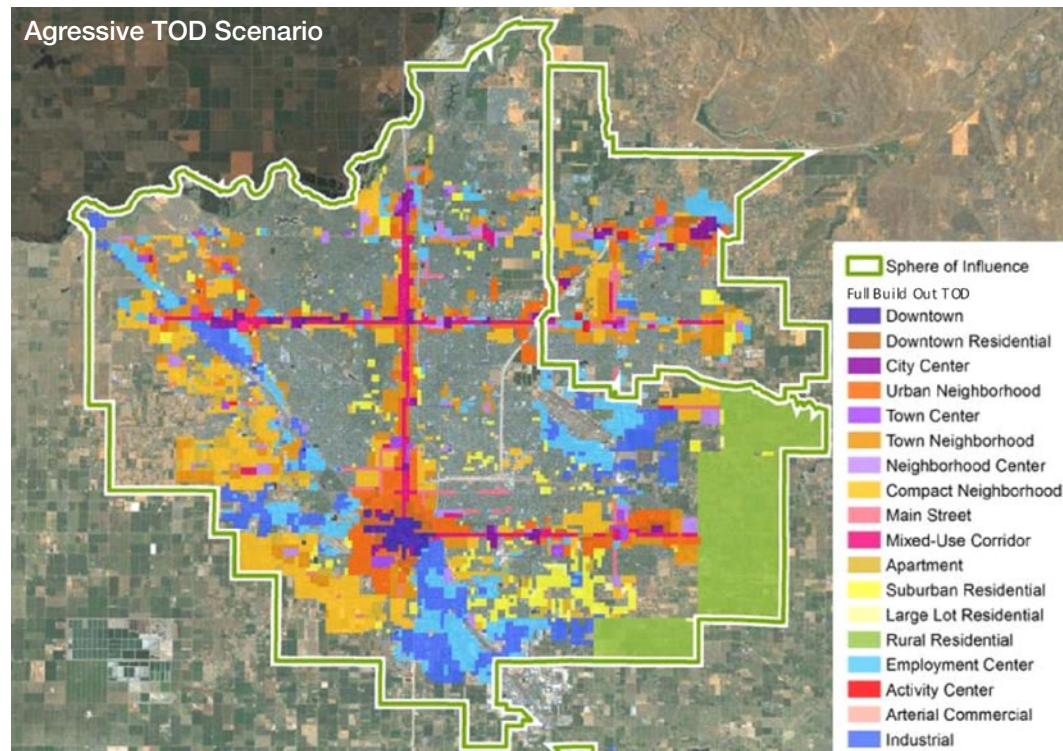
- Very little traffic congestion makes driving an automobile very attractive for those who can afford them.
- Low density development is occurring on Fresno's urban fringe where transit services don't exist now and will likely not exist in the future, ensuring automobile dependency.
- Development encroachment on farmland is an ongoing concern due to the high demand for agricultural products from this region.
- The San Joaquin Valley is the 5th most polluted airshed in the US.
- 82% of FAX riders take the bus because they either don't drive or cannot afford a car. This rate is about double the transit dependency rate found in other cities of a similar size. Due to a number of factors the demand for Transit Oriented Development is lower in Fresno than other US cities of similar size, making it a challenge to build, finance and market these projects.

The Study Process

The PTIS Study followed a four-step process over two years:

1. **Research on Existing and Future Conditions** – travel patterns, travel demand, current land use development trends, and a needs analysis. We determined where people are traveling to and from, and by which modes of transportation. We identified the current transit providers in the region, the significant trip generators and transit travel demand by market sector:
 - a. Commuters by necessity
 - b. Commuters by choice
 - c. Intra-City vs Inter-County Commute Patterns
 - d. Discretionary Riders (includes recreational, shopping and entertainment destinations)
 - e. Institutional Riders (includes seniors, college students and the disabled)

Today, the largest mode share in the San Joaquin Valley outside of driving alone to work (75%) is carpooling (20% to 29%). Transit represents between 3% and 6% of regional commute trips by county. Although there doesn't appear to be sufficient travel demand to support commuter express buses now, it is estimated that by the year 2030 there will be enough travel demand along highway 99 to warrant an investment in express commuter buses to Sacramento and the northern Bay Area.²



¹ Based on a 2009 FAX rider survey.

² Summary of Transit Market Findings, Strategic Economics, July 1 2009.

³ Ibid.

⁴ The Southeast Growth Area is an area of 9,000 square acres located at the eastern edge of the current Fresno metro area, planned for 41,000 households, 36,000 jobs and a population of 119,000.

The Cities of Fresno and Clovis are not major destinations for any given rural city or place. While nearly 80 percent of nonfarm jobs are located in Fresno and Clovis, Fresno County's rural cities and places are not generally "bedroom communities" to Fresno/Clovis. Generally, no more than one-third of the workforce in any given rural city commutes to Fresno or Clovis, making express bus or commuter rail service economically nonviable.³

2. **Land Use Alternatives Analysis** – Lists of projects and estimated costs for transportation improvements already programmed in Fresno



were analyzed for the short term (5 year plan or "No Build Scenario") and the long term (20 year plan or "TSM Scenario") to see what improvements the current trends in growth and investment would bring for Fresno's future. Modeling results confirmed that Fresno's current and planned transit investments would result in declining transit usage in the future if significant changes were not made to redirect a significant portion of new growth to designated transit corridors where high service levels could be provided and maintained in a cost-effective way.

Next, we wanted to determine the transportation impacts (the changes in transit use, walking and bicycling) of three different land use scenarios of increasing density and mix in the year 2035:

- a. The "Build" or "COG Trend" scenario – describes the current low-density fringe growth development pattern with separated zoning for housing and jobs continued into the future.
- b. The "Constrained" Scenario – assumes that TOD housing demand remains constrained as it is today, and assumes that the South East Growth Area (SEGA) is built, absorbing a significant amount of the new growth. Bus Rapid Transit (BRT)⁴ service on Ventura/Kings Canyon to downtown is extended out another 2 ½ miles to meet the new growth in SEGA.

- c. The "Full Build-Out TOD" or "Aggressive Growth" Scenario – assumes that new development patterns emerge due to new employers being attracted to the Fresno area, likely because the high speed rail station has been built, and TOD housing demand is no longer constrained, and SEGA is not built or develops much more slowly.

The PTIS Study used sophisticated land use modeling techniques to "paint" future land use patterns into existing Traffic Analysis Zones (TAZ's) in the proposed high capacity transit corridors. The trips that were generated by the land uses were then fed into the COG Regional Travel model.

The Full Build-Out TOD Scenario was shown to be the most efficient at reducing vehicle miles traveled, increasing transit and walk/bike trips, and reducing greenhouse gas emissions. However, achieving this level of urban

What we discovered was that as density and mix of land uses grew (bringing more housing, jobs and shopping in close proximity to each other) the more people tended to take transit, walk or bicycle in the transit corridors.

density and mix of uses would not be supported with Fresno's existing employment base and demographics. A catalyst would be needed to spur job growth, and in particular white collar jobs that attract young urban professionals who would want to live in a TOD product. The other population segment that should be courted to come to Fresno are the seniors of today and the baby-boomers of tomorrow who would also enjoy living in a TOD-style development with lots of destinations in walking distance, a warm climate, and a quality regional medical facility located nearby.

Comparing Land Use Scenarios

	COG Trends	Constrained TOD	Aggressive TOD
% of new growth moved to transit corridors	38%	42%	52%
Density in 1 mile of transit corridors	10.6 du/ac	12.3 du/ac	14.9 du/ac
Transit Mode Share of all trips for region	.93%	1.22%	1.45%
Transit Mode Share for all trips within 1 mile of 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%

1. **Alternative Transportation Investments** – a significant part of the PTIS Study is the assessment of transportation technologies and determining which choices would be right for Fresno. Separate studies were conducted on the following technology options for Fresno:
 - a. A BRT Feasibility Study and Federal Transit Administration (FTA) Very Small Starts (VSS) application for funding for BRT on Blackstone Avenue and Ventura/Kings Canyon.
 - b. A Streetcar Feasibility Study for Downtown Fresno, which was coordinated with and integrated into the Fulton Corridor Specific Plan being prepared by the City of Fresno.
 - c. A test case application of Personal Rapid Transit (PRT) operating at the CSU Fresno campus.
 - d. An assessment of an expanded BRT system for the future to include a third BRT corridor operating on Shaw Avenue serving CSU Fresno and connecting to Clovis.
 - e. An assessment of the feasibility of upgrading BRT on Blackstone and Ventura/Kings Canyon to Light Rail Transit (LRT) by the year 2025.

2. **Study Conclusions and Recommendations** – based on what we learned from the previous steps the PTIS Study makes recommendations for investments, the timing of those investments, and funding sources augmenting Measure C sales tax revenue to pay for them. In addition, the PTIS study makes policy recommendations that will be important to be adopted by City and County elected officials and planning administrators in order to shape future growth in such a way that it supports the transit investments.

Transit Investment Recommendations:

- a. Continue to pursue funding to build BRT on Blackstone and Ventura/Kings Canyon.
- b. Consider adding a third BRT corridor on Shaw Avenue from a future Park & Ride lot on Highway 99, connecting to CSU Fresno and east to Clovis.
- c. If forecast population and job densities have been reached in the transit corridors and downtown by the year 2025, look at upgrading BRT on Blackstone and Ventura/Kings Canyon to LRT with a fixed guideway and new LRT stations.
- d. If or when high speed rail becomes a reality – the project is under construction and new development projects are coming to the downtown area - apply for federal funding for federal funding for the streetcar project as a complement to the planned development projects.
- e. Although Personal Rapid Transit (PRT) is not economically viable in Fresno at the present time, place types have been identified that may work for PRT technology in the future, including:
 - Major activity center(s)
 - Very large institutional or corporate campuses
 - A downtown with widespread venues

- Remote parking for major employers and regular events
 - Connecting major travel modes (e.g. rail to rail)
- f. Continue the existing demand-responsive service currently provided in the smaller towns until the demand for transit warrants fixed route service.
 - g. An expansion of the vanpool program is recommended for other employment destinations due to the success of the existing farm worker vanpools.
 - h. Expansion of the Valley Rides carpool matching database and promotion campaign is recommended to serve the demand for carpools.
 - i. At some future date when intra-County commuting to the downtown has grown to the point that express bus service is warranted, begin express commuter service along Highway 99 from Kingsburg, Selma, and Fowler and construct park and ride lots to serve them.

Draft Policy Recommendations:

Policy recommendations were made by the consulting team on the PTIS study for implementation by the City of Fresno, Fresno County, and the cities and towns of greater Fresno County to meet the study objectives. The recommendations fall under six broad categories:

1. Increase the number of people and businesses in Downtown Fresno and in close proximity to designated high-capacity Transit Corridors, with a priority on making downtown more attractive to pedestrians.
2. Plan for and build TOD housing developments for a mix of middle and lower incomes, and families.
3. Grow the transit, bicycle and pedestrian mode shares by making it more attractive to use alternate modes.
4. Decrease the drive alone mode share and reduce vehicle miles travelled (VMT) with Travel Demand Management (TDM) programs and policies.
5. Attract residents to Fresno who would be willing to live in market priced TOD-style development, including young urban professionals, seniors, and future high speed rail commuters.
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6. Cross jurisdictional and departmental boundaries with processes to link local and regional transportation and land use planning decisions.
7. Restrict the growth of new development on the urban fringes and into farmlands with incentives, disincentives, and growth boundaries.

Next Steps

A two day conference is being planned at the Fresno Art Museum on March 2nd and 3rd of 2011 to present “Tools and Strategies to Achieve Smart Growth in Fresno”. The conference will culminate in a roundtable discussion on “What Will Work for Fresno?” to refine the draft policy objectives. The study is scheduled to be finalized by May 2011