

OPTION 3A

PUBLIC TRANSIT

Summary

California's dependence on petroleum is projected to continue to increase over the next two decades. As the population of California increases and the number of people on the road increases, California must develop alternatives to mitigate the impacts of the growing population. Public transportation use decreases the number of vehicles on the road, reduces the use of petroleum fuels, and reduces pollution in California. Therefore, increasing the use of public transportation is a key component of attaining these goals.

The number of passenger trips on public transportation is declining in California and the number of bus revenue miles is not growing. These trends can be directly related to California's economic slow down. As revenues from government and tax sources declined and operating expenses grew, public transit agencies have reduced service levels and increased fare. Transit agencies are working to find a way to increase ridership and mitigate the impacts of stagnant revenues.

Introduction

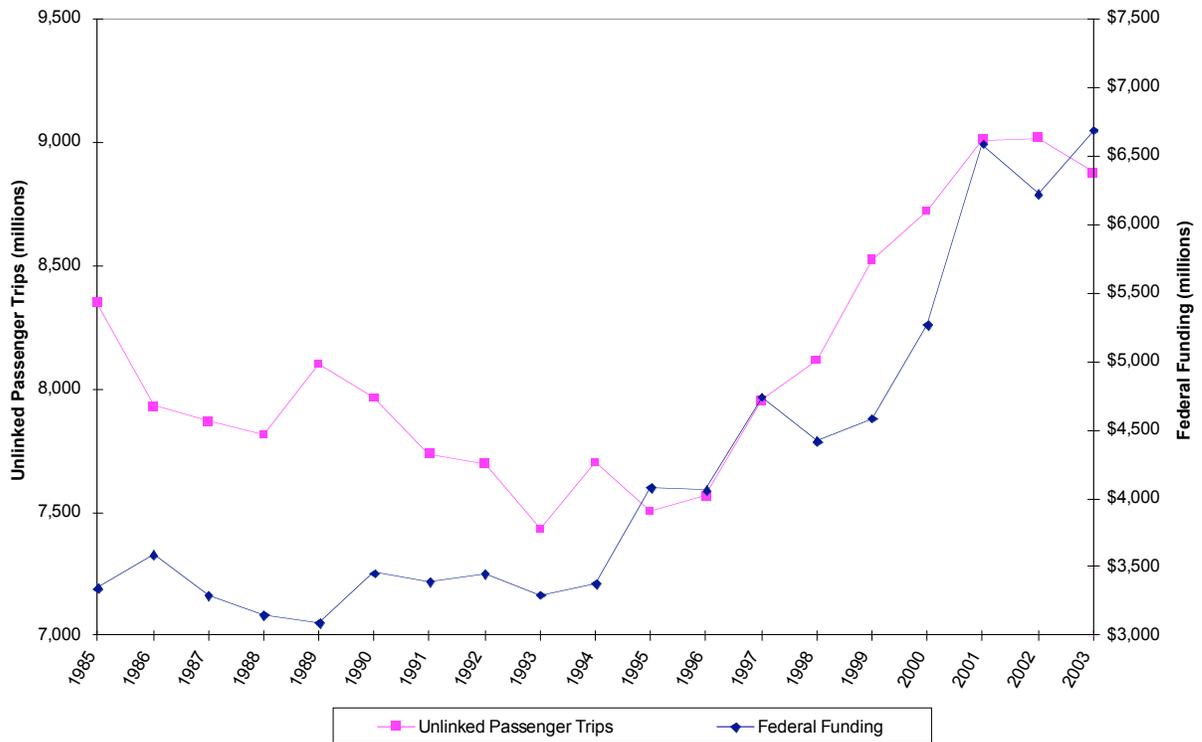
In an effort to stimulate the use of public transportation, the federal government has increased its funding of transit agencies nationwide. Figure 1 shows the increase in unlinked passenger trips and federal funding. The specific use of federal funding is dependent on the needs of the transit agency and community and represents only one source of transit agency funding. Between 1985 and 2003, the federal government increased funding by 100 percent. However, unlinked passenger trips, defined as the number of passengers who board public transportation vehicles, only increased 6.3 percent.¹ Passengers included in unlinked passenger trip numbers are counted each time they board transit vehicles regardless of the distance traveled.²

In 2003, bus service comprised nearly 60 percent of the passenger trips on national public transportation agencies receiving federal funding.³ Bus service is one of the most important and versatile segments of the public transportation system both nationally and in California. This evaluation discusses unlinked passenger trips and bus revenue miles for national and California transit agencies' bus systems and is organized into the following sections:

- Data Evaluation
- Uncertainties Associated with Data
- Identification and Discussion of Current Trends

- Future Trends and Recommendations to Increase Bus Passenger Trips in California

Figure 1
Federal Funding and National Unlinked Passenger Trips



Data Evaluation

Transit agencies who receive funds from the Federal Transit Administration Urbanized Area Formula Program must report selected transit data to the National Transit Database (NTD) program.⁴ Both national and California data were evaluated from the collected NTD program data. National information was obtained from the *2003 National Transit Summaries and Trends (NTST)* report.⁵ The California information on unlinked passenger trips and bus revenue miles was obtained from the California NTD profiles. Additionally, American Public Transportation Association (APTA) information was used as a secondary evaluation of unlinked passenger trips in California to verify the results.⁶

The national evaluation included data for a 13-year period from 1991 to 2003. As of 2003, 613 national transit agencies submitted data to the NTD program.

Information on 73 California transit agencies was available using NTD profile summary information. Because information for 14 transit agencies was not complete

for the entire five years evaluated, only 59 agencies were included in the trend evaluations.

Because the Los Angeles County Metropolitan Transportation Authority (MTA) data values comprised nearly a third of the total evaluated data, the resulting trends may be excessively impacted by the MTA data. Therefore, two evaluations were performed on the California specific NTD profile data, one including the MTA data and a second excluding the MTA data. The two evaluations were compared to confirm the trends observed were indicative of California unlinked passenger trips and bus revenue miles.

The nine years of APTA data was available for unlinked passenger trips only. Although data was collected for 27 transit agencies, only 15 transit agencies' data was complete and used for this evaluation.

Uncertainties Associated with Data

The information obtained from the NTD profiles is reported directly from the transit agencies and should, therefore, represent accurate data. However, because only transit agencies who receive federal funds are required to submit information to the NTD program, the data for this evaluation is comprised of only a portion of all transit agencies. In addition, transit agencies operating nine or fewer revenue vehicles may receive waivers for submitting information. In 2003, the California transit agencies obtaining a waiver from reporting detailed information were the City of Vacaville, Camarillo Area Transit (CAT), Davis Community Transit (DCT), the City of Benicia, and the Placer County Transit (PCT).⁷

The NTD profile evaluation also discusses data points that were questionable. These data points were deemed to be questionable because of inadequate responses by transit agencies to issues that arose during the validation process. Though these numbers have been identified as questionable, they have been included in this evaluation and only consisted of three data points for unlinked passenger trips and six data points for bus revenue miles. Because these nine data points make up a very small fraction of the evaluated data, the trends are minimally impacted.

It should also be noted, that because these agencies partially rely on federal funding as a source of revenue, trends will be impacted by changes in that funding stream. This fact would result in an overemphasis of federal funding as a cause of observed trends. However, since transit agencies have diverse revenue sources, impacts due to changes in federal funding would be diminished. In general, the transit agencies included in this evaluation are among the largest in California and are representative of California.

APTA data is derived primarily from member transit agencies and is supplemented with additional transit agency data. Because the organization's membership includes

only a subset of the total transit agencies in the nation, the data would reflect the composition of the organization and not necessarily the nation or California. The limited number of California transit agencies with APTA data, 15 agencies, introduces additional uncertainties. Although this number is only a fraction of the total agencies in California, a cursory evaluation indicates they would be a good representation of California as a whole because four of the five largest transit agencies are included.

Identification and Discussion of Current Trends

This section displays the results of both the California and the national data evaluations. As discussed earlier, two evaluations were performed on the California-specific NTD data: one including the Los Angeles MTA data and one without. These two evaluations were performed to determine if the MTA data exceedingly influenced the California trends.

California NTD Trends Including MTA Data

Figure 2 and Figure 3 show the unlinked passenger trips and bus revenue miles for the 60 California transit agencies evaluated, respectively. The California NTD data with the MTA included show an increase in both passenger trips and mileage until 2002. The data showed an annual growth rate of 2.24 percent from 1999 to 2002 for unlinked passenger trips in California. However, from 2002 to 2003 there was a drop in the unlinked passenger trips of 3.62 percent. From 1999 to 2003, the California transit agencies total bus revenue miles increased at an annual rate of 3.97 percent. It should be noted the rate of growth decreased significantly to 0.18 percent from 2002 to 2003.

Figure 2
Total Unlinked Passenger Trips for 60 California Transit Agencies

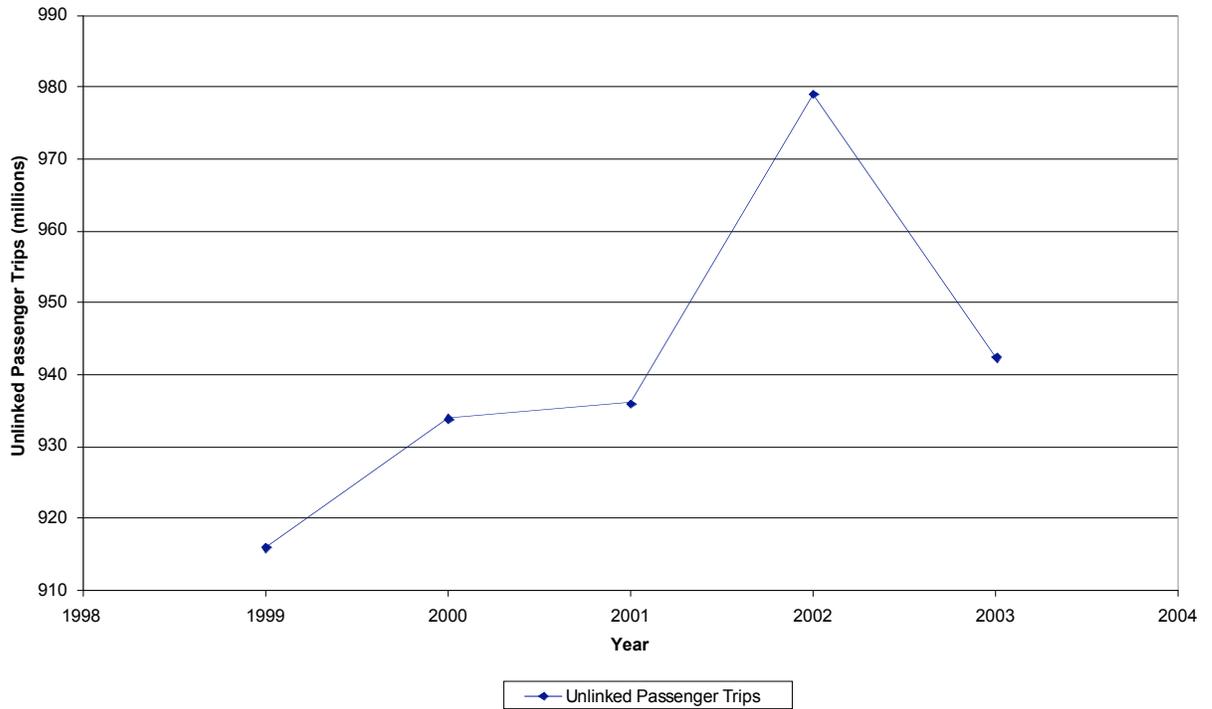
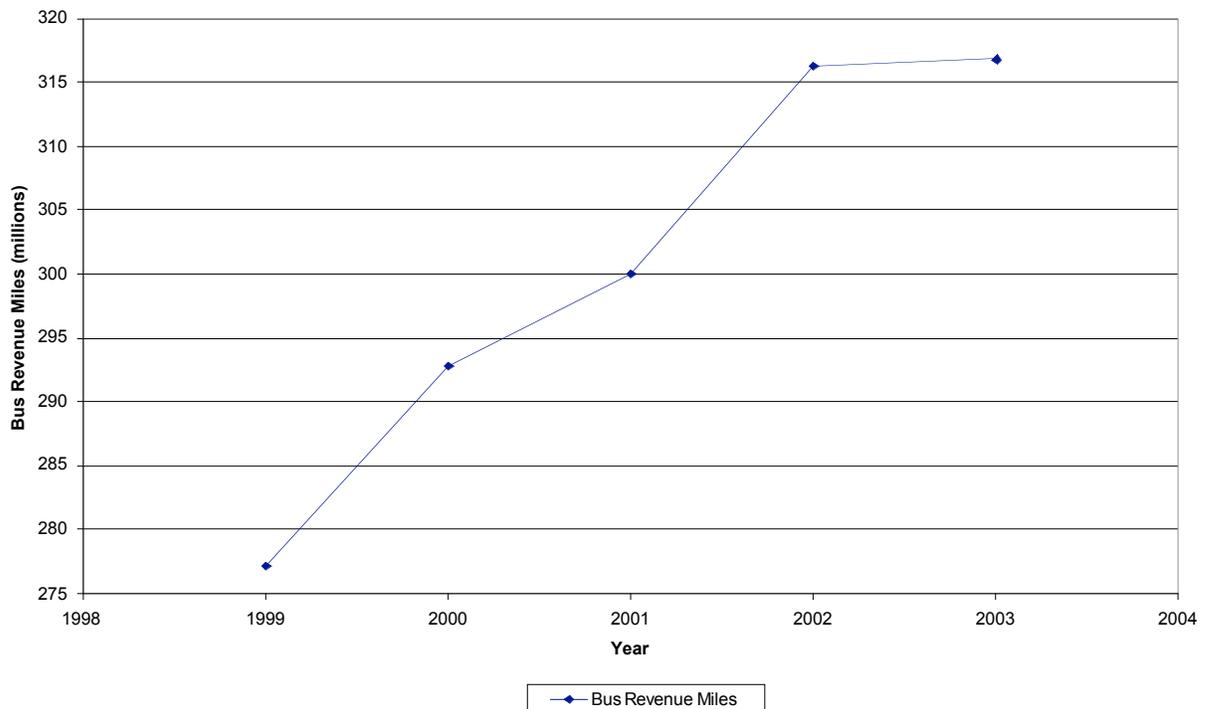


Figure 3
Total Bus Revenue Miles for 60 California Transit Agencies



California NTD Trends Excluding the MTA Data

Figure 4 and Figure 5 show the unlinked passenger trips and bus revenue miles for the 59 California transit agencies evaluated. An evaluation of the California NTD data, excluding the MTA data, shows an increase in unlinked passenger trips of 2.62 percent until 2002. The data then shows a decrease in unlinked passenger trips of 3.94 percent from 2002 to 2003. The data for bus revenue miles shows an annual growth rate of 3.42 percent from 1999 to 2003.

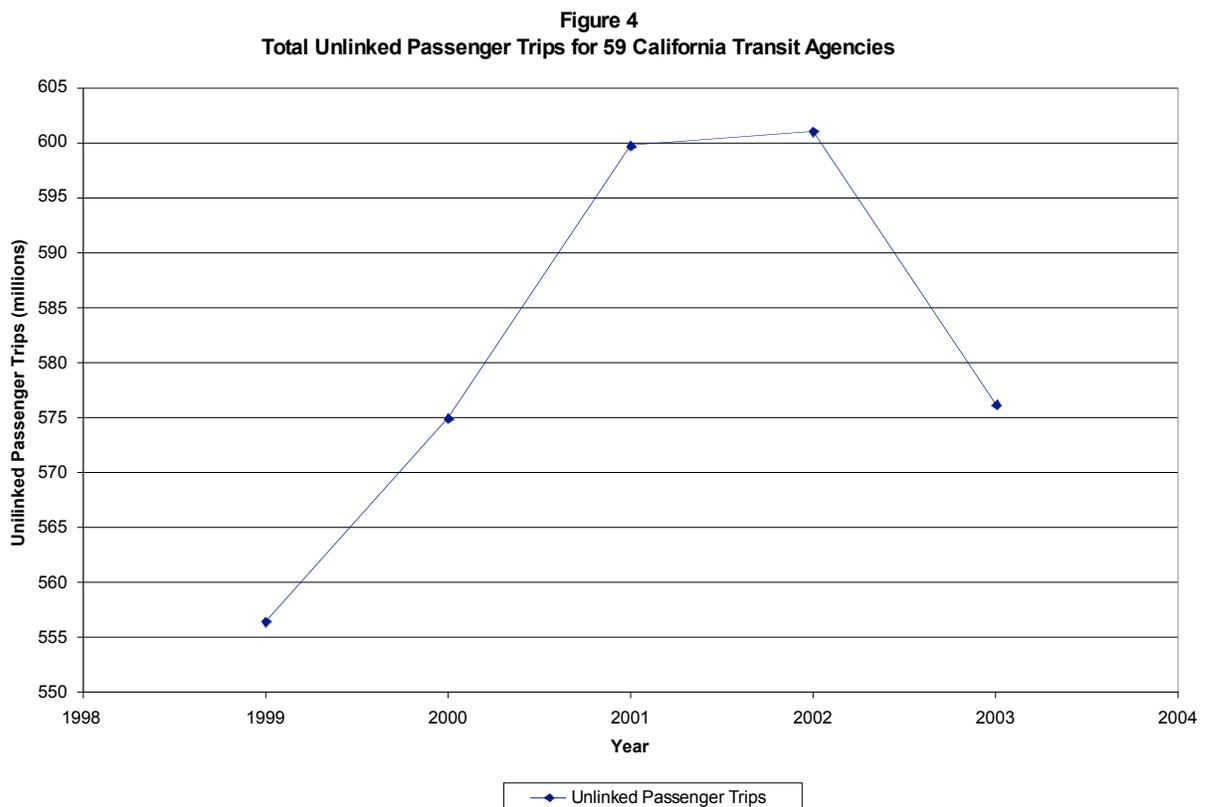
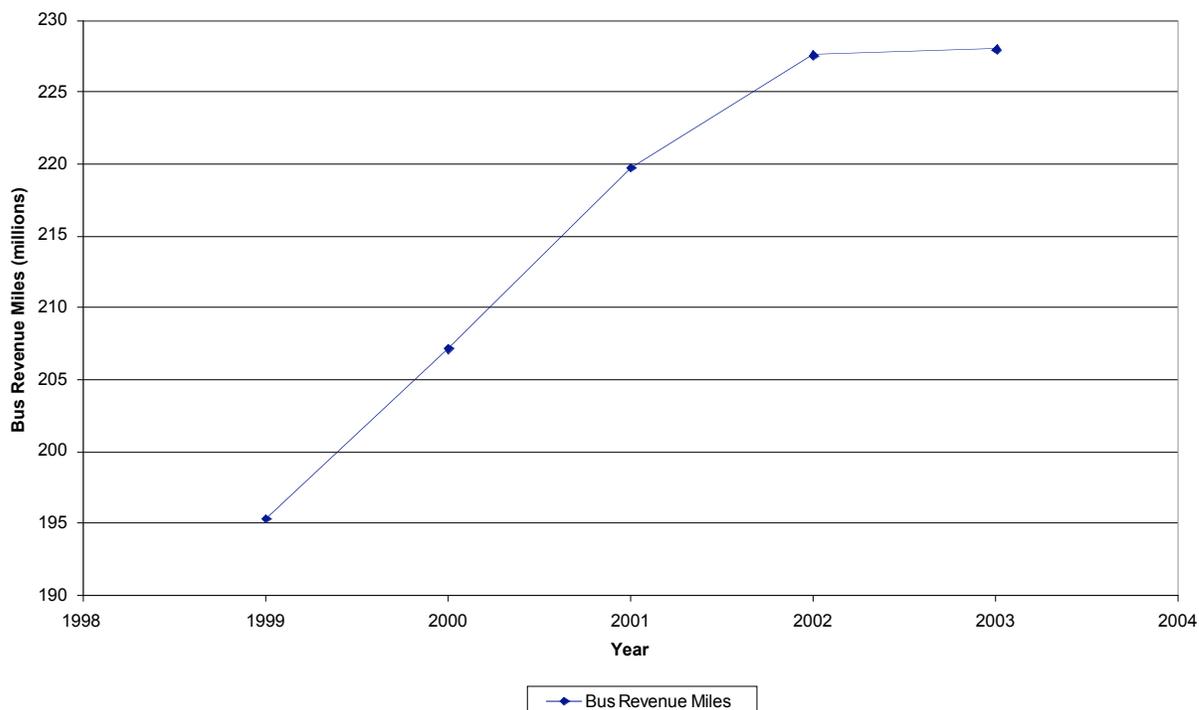


Figure 5
Total Bus Revenue Miles for 59 California Transit Agencies



The evaluation of the California NTD data, both excluding and including the MTA data, indicate similar results and do not indicate the MTA data greatly influenced the California trends observed. In recent years, both evaluations show the number of unlinked passenger trips decreasing and the number of bus revenue miles staying constant.

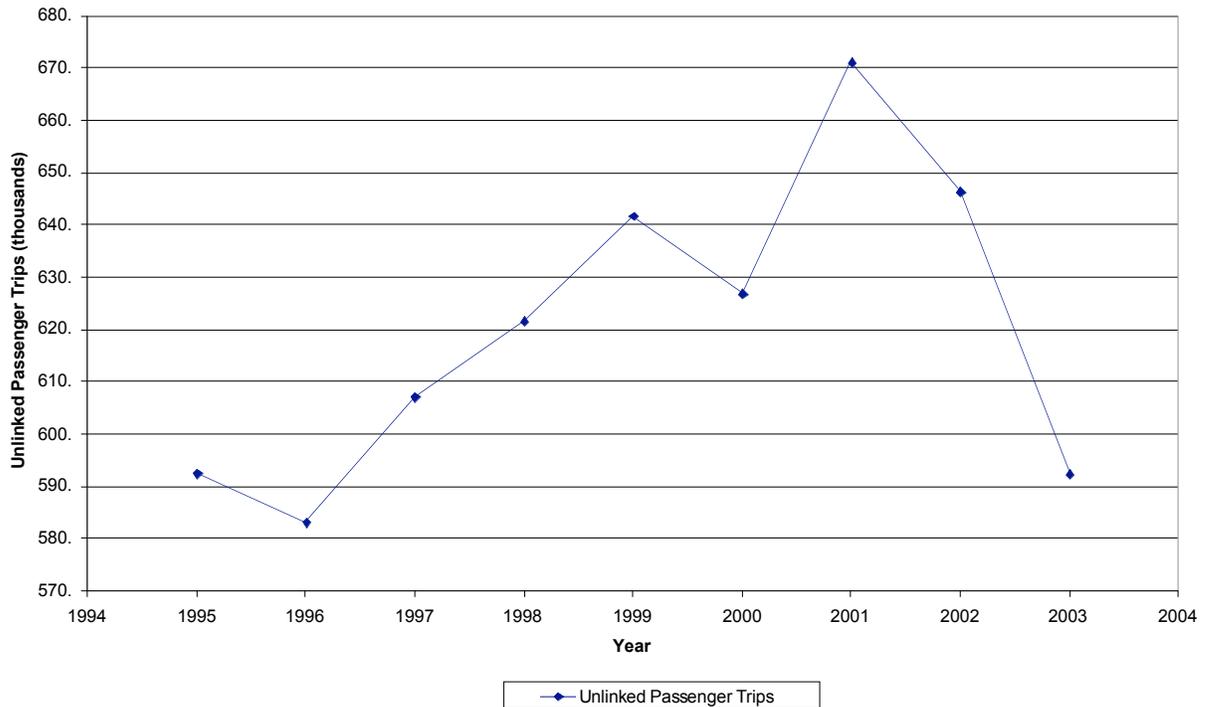
American Public Transportation Association Data for California Transit Agencies

Figure 6 shows the American Public Transportation Association passenger data from 1995 to 2003 for 15 California transit agencies. This information was obtained from the APTA Transit Ridership Reports for the fourth quarter of the respective year.⁸ Only passenger information for buses directly operated by transit agencies was included, information was not included from agencies who only contracted bus services. Of the 27 California transit agencies with APTA data, only 15 had complete data for the nine year period and were evaluated. These 15 transit agencies included four of the five largest California agencies.

The California-specific APTA data in Figure 6 also shows an increase in unlinked passenger trips and bus revenue miles as seen in the NTD data, but only until 2001. Between 1995 and 2001, the total unlinked passenger trips increased by

13.3 percent. In the two years following 2001, however, unlinked passenger trips decreased by 11.7 percent.

Figure 6
Unlinked Passenger Trips APTA Data for 15 California Transit Agencies



National Transit Summary and Trend Information

Figures 7 and 8 show information from the 2003 NTST report for a 13-year period and correlates well with the recent California data.

The NTST report shows an increase in unlinked passenger trips from 1996 to 2002 and then a decrease from 2002 to 2003. The average annual percent increase for the unlinked passenger trips from 1996 to 2002 was 2.65 percent. Between 2002 and 2003, the national unlinked passenger trips annually decreased by 2.30 percent. Interestingly, prior to 1996 the number of unlinked passenger trips decreased by 1.36 percent annually. However, unlike the California specific data, the national bus revenue mileage has increased at an average rate of 1.62 percent annually.

Figure 7
National Unlinked Passenger Trips

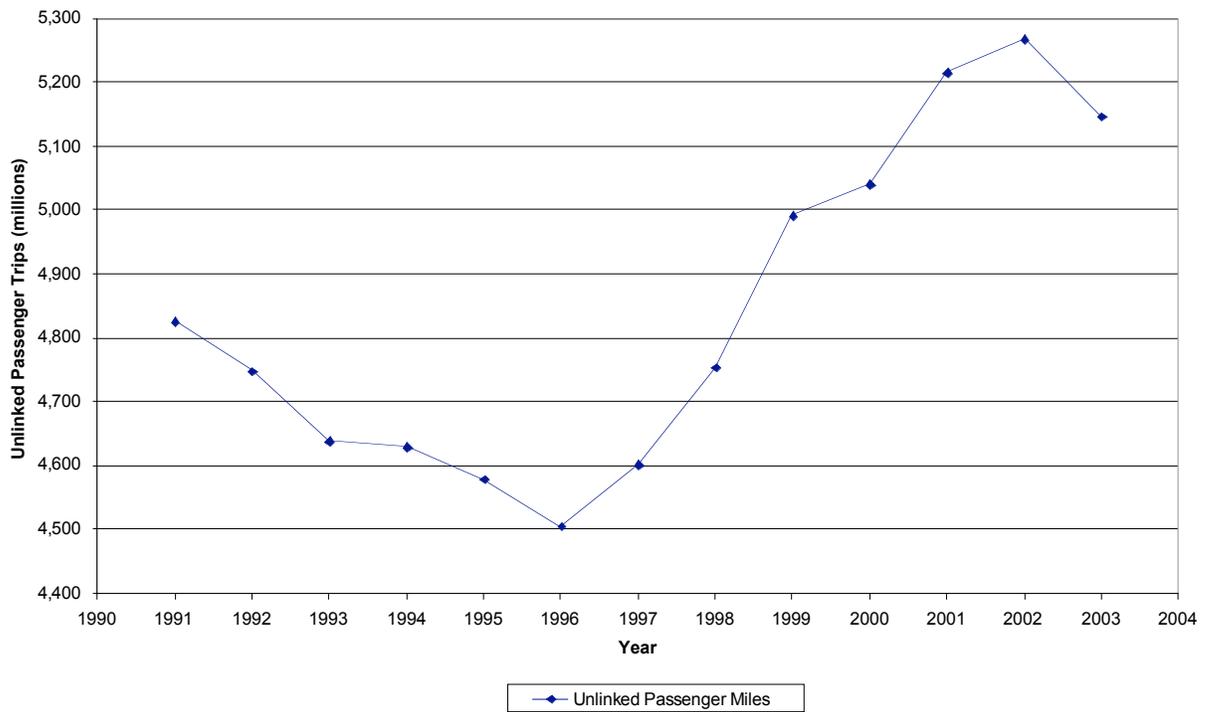
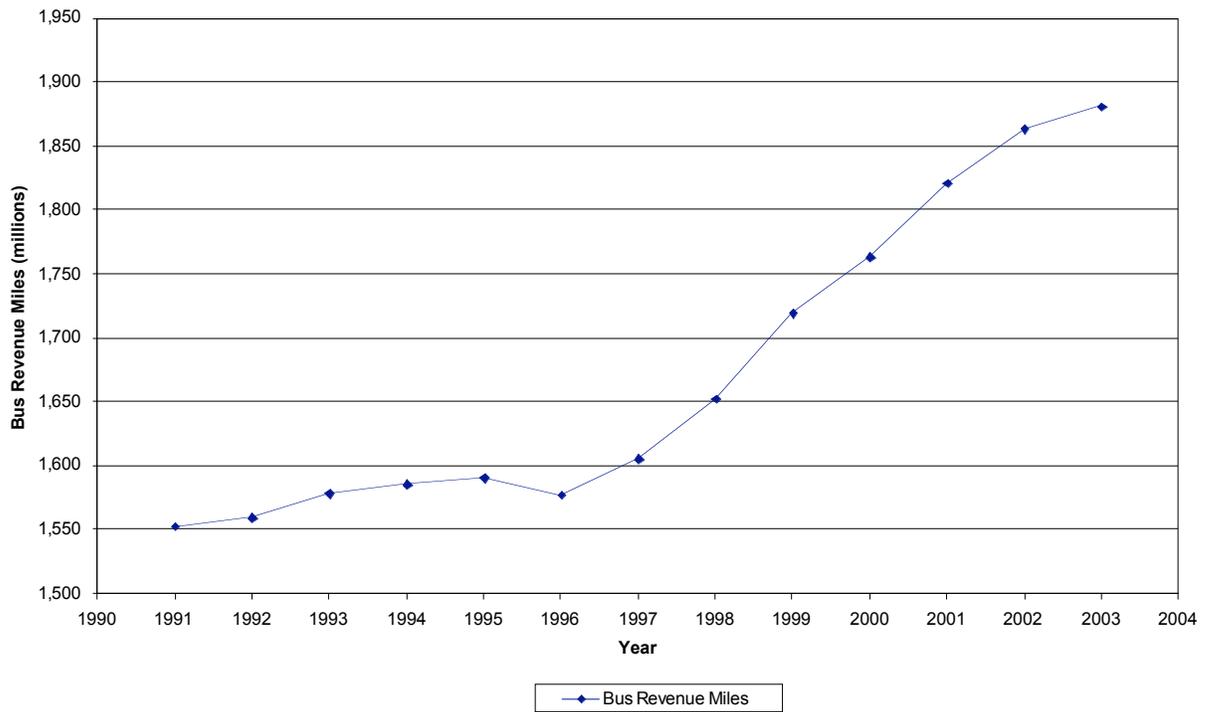


Figure 8
National Data for Bus Revenue Miles



Reasons for Current Trends

The decrease in the number of passenger trips and the flat bus revenue miles growth is directly related to the slowdown in the economy. These trends are referenced in the budgets of the largest California transit agencies.

A review of seven California transit agency budgets for Fiscal Year (FY) 2002 through 2004 indicates that transit agency revenues come primarily from governmental sources, taxpayer sources, and passenger fares. All three revenue sources were impacted by California's slow economy. The San Francisco Municipal Transportation Agency's (MUNI) FY 2004 budget states, "Offsetting [fare and parking rate] increases are reductions in almost all other revenue categories, driven by the effects of the continued economic downturn."⁹ The Santa Clara Valley Transportation Authority (VTA) reported ten consecutive quarters of declining receipts starting in the fourth quarter of FY/2000.¹⁰

Primarily in response to decreased revenues from government and tax sources, transit agencies have had to reduce services, decrease staff levels, and increase fares.

Transit agencies have had to reduce service levels to consolidate services to those routes providing the greatest amount of revenue and which need the most coverage. MTA reported it was decreasing the total bus service hours by 3 percent in FY 2004.¹¹ Alameda-Contra Costa Transit District (AC Transit) implemented service reductions in June 2003, December 2003, and June 2004.¹² In FY 2004, San Diego's Metropolitan Transit Development reduced service levels to save \$300,000 annually.¹³

Reducing working forces have also been used frequently to reduce overall expenditures. MTA, in its FY 2004 budget, decreased its staff level by 104 positions and froze all wages except those union members who have scheduled pay increases.¹⁴ For FY 2004 MUNI reduced its staff by 24.5 operating positions and 68 grant-funded positions.¹⁵

Transit agencies have increased fares to compensate for decreasing fare revenues. In Los Angeles, the MTA increased the monthly pass price from \$42 to \$52 starting January 1, 2004.¹⁶ In MUNI's FY 2004 budget, information showed the majority of their fares were increased 25 percent and the parking fees were increased 17 percent.¹⁷ In an effort to maintain the revenues from fares, AC Transit increased their fares in September of 2002 and 2003.¹⁸ VTA increased its fares mid-year 2004 and at the beginning of 2005.¹⁹

Future Trends and Recommendations to Increase Bus Passenger Trips in California

Until revenue sources return, California transit agencies will be under continued strain to maintain service levels, passenger levels, and fares. Decreases in revenue and increases in operating costs, particularly fuel costs, will continue to impact service levels and fares and, consequently, will continue to impact the number of passengers riding California transit agency buses.

Transit agencies are doing what they can to increase ridership. For example, in 2002, MTA was able to increase the number of passengers by 35 percent on a specific line by decreasing the travel times by 25 percent.²⁰ This success indicates it is possible to increase passenger trips in some areas by concentrating efforts on high volume routes and introducing express routes. This method alone is not enough, however. Additional steps need to be taken to ensure transit agencies in California can meet the growing demands.

Recommendations

To mitigate the adverse consequences of continued population growth and transportation challenges confronting California, as well as decrease California's dependency on petroleum fuels, lower pollution, and decrease congestion, the Energy Commission should:

1. Investigate potential dedicated funding sources for transit agencies to decrease the impacts of economic downturns on the transportation industry.
2. Perform research on the benefits to consolidating transit agencies to minimize the impacts of a slow economy on small transit agencies.
3. Work with the California Department of Transportation to evaluate the benefits of implementing Bus Only Lanes, priority bus right-of-ways, targeted express routes, guaranteed ride home programs, and general land use policies.
4. Perform additional research on transit agency plans to increase passengers, evaluate effectiveness, and work to disseminate the information to other transit agencies who may benefit from that knowledge.

Endnotes

¹ National Transit Database 2003 National Transit Summaries and Trends (NTST), pg. 3; 2003 NTST Table of Charts, pg 1.

² From APTA website. <http://www.apta.com/research/stats/ridershp/definitions.cfm>

³ 2003 NTST Table of Charts, pg. 61.

⁴ Transit Profile information obtained from the National Transit Database Program website.

<http://www.ntdprogram.com/NTD/ntdhome.nsf/Docs/NTDPublications?OpenDocument>

⁵ National Transit Database Program, *2003 National Transit Summaries and Trends*.

⁶ American Public Transportation Association, *Quarterly Transit Ridership* fourth quarter reports.

<http://www.apta.com/research/stats/ridershp/riderep/indexus.cfm>

⁷ 2003 NTD Program – Transit Profiles, Appendix B Transit Agencies Receiving Reporting Waivers (Approved by FTA), p. 1

[http://www.ntdprogram.com/NTD/Profiles.nsf/Docs/2003All/\\$File/2003AppB.pdf](http://www.ntdprogram.com/NTD/Profiles.nsf/Docs/2003All/$File/2003AppB.pdf)

⁸ APTA website. <http://www.apta.com/research/stats/ridershp/riderep/indexus.cfm>

⁹ San Francisco Municipal Transportation Agency, *FY2004 Operating Budget*, p. 12.

¹⁰ Santa Clara Valley Transportation Authority, Board Memorandum, *FY 2003-04 & FY 2004-05 Operating Budget*, p. 2.

¹¹ Los Angeles County Metropolitan Transportation Authority, *FY04 Adopted Budget*, p. I-2.

¹² AC Transit, FY 2004-2005 Budget information. http://www.actransit.org/pdf/aboutus_2004.pdf

¹³ San Diego's Metropolitan Transit Development Board of Director's Meeting, March 11, 2004, p. 3.

¹⁴ Los Angeles County Metropolitan Transportation Authority, *FY04 Adopted Budget*, p. I-1.

¹⁵ San Francisco Municipal Transportation Agency, *FY2004 Operating Budget*, p. 13.

¹⁶ Los Angeles County Metropolitan Transportation Authority, *FY04 Adopted Budget*, p. I-1.

¹⁷ San Francisco Municipal Transportation Agency, *FY2004 Operating Budget*, p. 16.

¹⁸ AC Transit, FY 2004-2005 Budget information. http://www.actransit.org/pdf/aboutus_2004.pdf

¹⁹ Santa Clara Valley Transportation Authority, Board Memorandum, *FY 2003-04 & FY 2004-05 Operating Budget*, p. 2.

²⁰ Los Angeles County Metropolitan Transportation Authority, *FY02 Budget Summary*, p. 1-21.