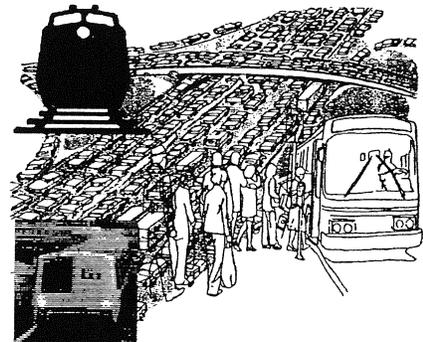


Chapter 15



Pricing





XV. PRICING

A. BACKGROUND

The automobile is by far the most popular mode of travel in San Mateo County, comprising 94 percent of work trips and 97 percent of all trips. A major reason for the dominance of automobile travel is that it is relatively inexpensive, both in terms of monetary as well as time costs, compared to other means of transportation. Economically speaking, automobile travel is underpriced, with individual drivers bearing a fraction of the total costs they impose on society, including the costs of traffic delays, public infrastructure, parking, and noise and air quality impacts. The economically suboptimal result is an excessive amount of automobile trips and severe traffic congestion during peak commute periods. Many studies have concluded that the only way to significantly reduce automobile travel over the long term is to raise the relative costs of automobile use.

Congestion pricing is generally considered the most effective way of reducing automobile use by raising its costs. Fundamentally, congestion pricing seeks to bring the private costs of automobile use in line with their true social costs, and to make the overall costs of the automobile and other transportation modes more equitable.

While congestion pricing holds the most promise for reducing automobile travel, it remains highly unpopular for the very reason it is so effective: where congestion is most severe, it dramatically increases costs borne by individual drivers. Since an overwhelming majority of people rely on the automobile, there is a powerful political constituency against increased automobile costs. In addition, in order for congestion pricing to be most effective, it needs to be implemented at the regional level, which would also be politically difficult to accomplish.

There are other less politically challenging ways of increasing the relative costs of automobile use. They involve making modest increases in the costs of automobile travel that, while not bringing automobile travel costs directly in line with total social costs, would still have a significant impact on automobile use. These include parking cash-out programs, commute subsidies, and modest increases in gas taxes. These techniques are recommended as part of the *Countywide Transportation Plan* policy framework and described in further detail below.

B. ISSUES

1. Parking Cash-Out Programs

Subsidized parking, and particularly free parking, is a powerful incentive for automobile travel. Studies of employers with and without subsidized parking have shown that employer paid parking increases the number of cars driven to work by an average of 19 cars per 100 employees, and increases solo driving about 25 percent (K. T. Analytics).

In addition, free parking is widespread, being offered to approximately 90 percent of the non-farm labor force in the U.S. One reason for the abundance of subsidized parking is that it receives favorable treatment under state and federal tax codes. Specifically, subsidized parking is treated as a fringe benefit not subject to payroll and income taxes. Another reason for the proliferation of subsidized parking is that zoning regulations often require minimum amounts of parking that exceed actual demand. Given the substantial impacts of subsidized parking on automobile use as well as its pervasiveness, placing restrictions on its use promises to be an effective way of reducing automobile travel.

Parking cash-out programs are aimed at reducing the amount of subsidized parking. They allow employees to forfeit their parking subsidies in exchange for cash payments equivalent to the value of the parking subsidy. Employees may use the cash to pay for alternative commute modes such as public transit or carpooling, which may result in an overall personal savings on commute costs. Parking cash-out programs thus promote greater equity among the various travel modes by reducing the advantage parking subsidies give to automobile use.

Experience with cash-out programs has demonstrated their potential effectiveness. For example, a study by Shoup (1992) of eight Southern California firms with cash-out programs found that the average percentage of employees who drove to work alone declined from 76 percent to 63 percent, while the number who carooled nearly doubled, and the number who took transit or walked increased by 50 percent.

Since 1992, California's parking cash-out law has required employers of 50 or more persons in regions that do not meet all of the State's clean air standards to offer their employees the option of a parking subsidy or an equivalent cash payment. Currently, the law applies only to parking spaces employers lease from

a third party in order to enable employers to pay for cash disbursements by reducing the amount of leased parking spaces.

Until recently, the California parking cash-out law was contradicted by the federal tax code, which provided that if an employer offered commuters the option of choosing cash in lieu of a parking subsidy, it would lose its parking tax exemption and all subsidized parking would be treated as compensation subject to income and payroll taxes. For this reason, California employers strongly rejected cash-out programs and the State did not enforce the law. However, the federal 1997 Tax Relief Act, which went into effect January 1, 1998, allows employers to offer the choice of a tax-exempt parking subsidy or taxable cash payment in lieu of parking without sacrificing the tax exempt status for parking.

While the recent changes in the federal tax code should facilitate the initiation of more cash-out programs, there are several additional ways to encourage more extensive use of the parking cash-out concept. One is for the County to adopt more strict parking cash-out requirements than provided for by state law. In particular, the business size to which the parking cash-out law applies should be reduced. This makes sense in light of the fact that smaller employers (i.e., with less than 50 employees) are more likely to lease parking than large employers. In the future, County cash-out programs could be strengthened further by requiring them for employers that own their parking spaces as well as those who lease them.

Another way to further promote the use of parking cash-out programs is for jurisdictions in San Mateo County to relax zoning requirements for parking for employers that participate in a cash-out program. New parking requirements should be based on a countywide study of the specific parking needs of employers with cash-out programs. Such a study should be conducted once a sufficient amount of San Mateo County employers have established parking cash-out programs.

Parking cash-out programs would also be served by making further amendments to the state and federal tax codes. Under existing tax laws, subsidized parking is considered a tax-exempt fringe benefit, while cash payments made in conjunction with a cash-out program are fully taxable and subject to payroll and income taxes. Thus, subsidized parking still receives more favorable tax treatment than cash payments in lieu of parking.

In order to promote greater equity between subsidized parking and cash payments, and thereby make parking cash-out programs more attractive, cash payments should be treated as a tax-exempt fringe benefit. To offset the resulting revenue loss, the permitted tax exemption for parking (currently limited to \$170 per parking space per month) could be reduced. While the County has limited control over the federal and state tax codes, it should encourage its representatives in Washington and Sacramento to advocate for these changes.

2. Commute Subsidies

While not as effective as parking cash-out programs, commute subsidies are another way to bridge the gap between the costs of automobile travel and other commute modes. Commute subsidies are payments that serve as an incentive for travel modes other than the single-occupancy vehicle, such as transit, ridesharing, bicycling and walking.

Some commute subsidies qualify for tax exemption as a fringe benefit under state and federal tax laws, and thus are not subject to employer payroll or employee income taxes. Specifically, transit or vanpool subsidies of up to \$65 per month are exempt from federal taxes, and ridesharing subsidies are totally exempt from state taxes. In addition, a new federal law passed in June 1998 as part of the federal TEA-21 transportation funding legislation allows employers to create set-aside accounts for the pre-tax purchase of transit passes, with an employee income tax deduction of up to \$65 per month per employee. The State also provides for such a deduction, but with no limits on the dollar amount.

The County should continue to encourage employers to offer commuter subsidies. In addition, to make commute subsidies more attractive, the County could advocate for increases in the applicable tax exemption or deduction limits, and favorable tax status for a wider variety of subsidies.

It was recommended above that cash payments in connection with parking cash-out programs should be tax exempt. However, this may be difficult to accomplish in the short term. In the meantime, tax exempt commute subsidies could be used in conjunction with cash-out programs as a substitute for a portion of the cash payment in order to make the cash option more attractive from a tax perspective.

3. Gasoline Taxes

Another major reason the cost of automobile travel is so low is that gasoline prices are relatively inexpensive. Gas prices in the United States are among the lowest in the world. Moreover, real fuel costs have actually declined during the last two decades. Currently, federal and state gas taxes in California stand at only 36 cents per gallon.

The research indicates increased gas taxes would be an effective way of reducing automobile use. The long-run price elasticity of gas price with respect to automobile travel has been estimated at -0.50 (Moore and Thorsnes, 1994). This means that a 5 percent increase in the price of gasoline would result in a 2.50 percent drop in vehicle miles traveled, a significant reduction considering the dominance of automobile travel. Assuming a gas price of \$1.50 per gallon, a 5 percent increase in gas prices would require approximately an 8-cent increase in total fuel taxes.

In 1997, the State Legislature passed AB 595, which gives the Metropolitan Transportation Commission (MTC) the authority to place a regional 10-cent gas tax on the ballot in Bay Area counties. Two-thirds majority approval would still be required in each of the Bay Area's nine counties in order for the gas tax to be enacted. San Mateo County jurisdictions should support and promote the passage of the gas tax measure.

C. POLICIES

15.1 Congestion Pricing

Support and encourage regional efforts to adopt and implement equitable congestion pricing programs to reduce automobile travel.

15.2 Cash-Out Programs

- a. Encourage the public and private sector to adopt parking cash-out programs.
- b. Advocate changes to federal and State tax codes that make cash-out programs more financially attractive to employers by making

cash payments to employees a tax-exempt fringe benefit rather than a benefit subject to payroll and income taxes.

- c. Encourage employers to reduce the number of employee parking spaces if transit services (e.g.: shuttles) are well provided.

15.3 Commute Subsidies

Encourage employers to offer commute subsidies for transit, carpools, vanpools, and bicycling.

15.4 Regional Gas Tax

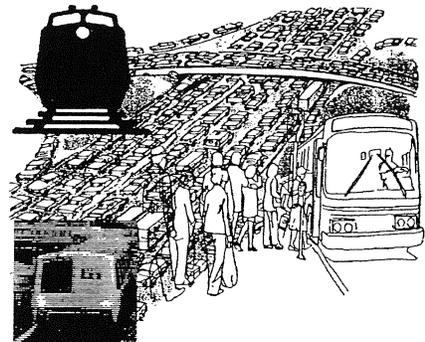
Support and promote the adoption of regional gas taxes.

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Chapter 16



Pedestrians



XVI. PEDESTRIANS

A. BACKGROUND

1. Changes in Pedestrian Travel over the Years

Before the advent of trains, streetcars, and automobiles, walking was the main transportation mode for most commuters. Because walking trips are inherently limited to a few miles, cities were smaller and much more compact, and housing was closely interspersed with industrial and commercial areas. Private horse-drawn carriages were not affordable for most, and so it was only the relatively wealthy who could afford to live outside the dense urban core and avoid walking.

Toward the end of the nineteenth century, the compact, walking city was transformed by new technologies that allowed housing to be located farther away from industry and commerce. Streetcars, for example, connected a city's central business district with new neighborhoods on formerly agricultural land. Walking was still an important part of these neighborhoods, however, for it provided the link between one's home and the streetcar line. Likewise, patrons of other transportation modes, such as trains, horse cars, and cable cars, relied primarily on walking to reach the actual transit vehicles.

The importance of walking during this period was reflected in urban design. Wide sidewalks were common, and stores took advantage of pedestrian traffic with ground-level window displays. Grand city parks were designed with pedestrians in mind. Walking was an important part not only of transportation but also of social life and recreation.

The importance of walking diminished as automobiles became widespread. Automobiles provided a single, high-speed transportation mode from home to workplace, and allowed commuters to live much farther from the central city than was ever possible before. As automobiles become affordable to a large segment of society, people increasingly chose to live in low-density suburbs designed for the automobile.

Automobiles had significant impacts on urban design. Stores were moved back from the street to make space for parking. Entire neighborhoods were demolished to make room for freeways, which were often built without provision for pedestrians. Sidewalks were narrowed to increase roadway capacity. Homes and businesses were oriented around the garage and the parking lot

rather than the street entry. By accommodating the car driver's desire for higher speeds and more space, these changes diminished the safety, ease, and pleasure of walking.

Development in San Mateo County over the past fifty years has been especially auto-oriented. While small remnants of compact, pedestrian-friendly development remain (mainly around Caltrain stations), the vast majority of the County's developed land is characterized by wide, high-speed arterial roadways, single-use districts accessible only by car, and urban design that focuses on accommodating the needs of car drivers.

2. Profile of Pedestrians

According to the 1990 Census, 8,858 San Mateo County workers 16 years and over walked as their primary means of transportation to work. According to the Travel Demand Forecasting Model, 9,497 County residents rode Caltrain to work in 1990. In a 1999 survey by RIDES for Bay Area Commuters, 2.4 percent of County residents walked as their primary commute mode, more than Caltrain riders (2.2 percent) and bicyclists (0.7 percent). This was also more than the Bay Area-wide walking rate, which was 2.0 percent. These statistics do not include walking as a secondary mode, i.e., at the beginning or end of a transit trip. Walking composed 7.0 percent of secondary commute modes in the Bay Area, according to the 1999 RIDES study. Many residents also walk for recreation or for short errands, although no data on this type of walking has been collected.

While most County residents rely on the automobile for their daily transportation needs, some residents have no other option but to walk. Children often walk to and from school, if the school is nearby, or to a bus stop. Elderly residents with impaired vision or other ailments may not be able to drive, but still desire to independently fulfill their shopping or recreational needs by walking. Persons with disabilities represent another group for whom walking, or walking combined with transit, may be the only mobility option.

According to a 1999 study by the Surface Transportation Policy Project, San Mateo County had the third highest "Pedestrian Danger Index" among California counties with greater than 100,000 population. This index weighs the number of pedestrian incidents (fatalities and injuries) against the level of pedestrian activity. Only Los Angeles and Santa Clara counties were more dangerous for pedestrians. The Surface Transportation Policy Project is a national coalition of

over 200 organizations working to promote transportation policies that protect neighborhoods, provide better travel choices and promote social equity.

3. **Existing Conditions**

a. **Description of Pedestrian Network—Existing Conditions**

The physical spaces and devices used to complete walking trips can be thought of as a “pedestrian network,” much like the network of signs, roads and freeways used by automobiles. This section describes the elements of this network and explains how land use decisions and practices affect the quality of the network.

The most important and prevalent element of the pedestrian network is sidewalks. In general, the volume of pedestrian traffic determines sidewalk width. Hence, downtown shopping areas generally have wider sidewalks than single-family residential areas, and many industrial and office-park areas do not have sidewalks at all. In urbanized areas, sidewalks are common and represent the bulk of the pedestrian network. Many residential streets have curb-and-gutter designs, without sidewalks. On such streets, the roadway shoulder necessarily becomes a space for walking, although it is also used for automobile parking.

Dedicated pedestrian walkways form another part of the pedestrian network, although they are not widespread. These include freeway overpasses, railroad underpasses, and off-street, at-grade paths. In some areas of the County, particularly North Fair Oaks and San Bruno, undeveloped portions of the Caltrain right-of-way function as informal, albeit illegal, pedestrian routes.

Most walking trips involve crossing a vehicular roadway. Therefore, crossing signals, marked crosswalks, and signs alerting automobiles of pedestrians are an important part of the pedestrian network. For school children, human crossing guards give added protection against car traffic. At high-volume roadway crossings, audible signals for the visually impaired also make up part of the pedestrian network. Another provision for persons with disabilities is the curb cut, a portion of the sidewalk that slopes to the level of the roadway to facilitate crossing.

Land use has a tremendous influence on the quality of the pedestrian network. Many areas have no nearby destinations for pedestrians, such as parks or local markets, but instead are zoned so as to encourage the use of an automobile for every trip. Such areas not only contribute to regional congestion and air pollution, but also isolate those residents who cannot drive. Although much of San Mateo County fits this description, there are examples of pedestrian-friendly neighborhoods and spaces.

b. Neighborhoods

In general, the County's oldest residential neighborhoods are well suited for walking. Such neighborhoods are generally located close to El Camino Real and the Caltrain line, where commercial activities, public buildings and parks are concentrated. Although El Camino can present a noisy, dangerous barrier to pedestrian movement, it also serves as a destination for those living on nearby residential streets. The residential areas that surround the downtowns of Burlingame, San Mateo, San Carlos, and Menlo Park offer low-traffic, tree-lined streets that invite walking.

c. Shopping Districts and Malls

It is no surprise that commercial areas that developed before the automobile became widespread are better suited to walking. Such areas have buildings that are located right at the street to invite the pedestrian to look in display windows, and to provide a sense of shelter and protection. They offer trees for beauty and shade, as well as other amenities such as benches, pay phones, and lighting. Their streets are narrow and encourage cars to slow down.

In contrast, commercial areas oriented to the automobile are not ideal for walking. Shopping malls, for example, are generally surrounded by large expanses of parking lot, which the pedestrian must cross in order to reach the mall itself, stepping in oil stains and avoiding moving cars. It is rare to find a shopping mall with a direct entrance from a public street.

d. Schools

Because schools in San Mateo County are generally located in low-density residential areas, traffic concerns are somewhat mitigated. Crosswalks, crossing guards, warning signs and speed limits also mitigate traffic impacts. Although most schools have adequate sidewalks to allow pedestrian access, some do not.

e. Bus Stops

Bus stops are generally accessible by sidewalk. However, pedestrian amenities such as lighting, benches and shelters are often inadequate.

f. Caltrain Stations and Right-of-way

Caltrain is currently improving pedestrian access and safety at many of its stations in the County. Improvements include warning devices, crossing surfaces, and new boarding platforms. The Belmont-San Carlos grade separation project was recently completed. The project incorporated dedicated pedestrian/bicycle underpasses, ramps and elevators to the station platforms, and benches and shelters.

Despite these improvements, the Caltrain tracks often hinder pedestrian travel in other locations. Many portions of the right-of-way are not fenced, and encourage pedestrians to cross the tracks in an unsafe manner. Some portions are fenced, but do not have pedestrian tunnels or overpasses to facilitate crossing. This makes trips to destinations on the other side of the tracks much longer, and discourages walking.

g. BART Stations

The Nevin Way project, a dedicated walkway between El Camino Real and the Colma BART station, will improve pedestrian access. The BART SFO extension includes a bike path that may also serve as a pedestrian way. BART has station design standards that require full accessibility for persons with disabilities. Since all BART tracks are grade separated, they do not usually act as barriers to pedestrian movement.

h. Commercial/Industrial Areas

Most large corporations in San Mateo County are located near Highway 101, in facilities with poor pedestrian access. They are typically set back far from the street, surrounded by parking, and located far from residential areas. Consequently, they attract large numbers of private auto trips.

i. Improvement Plans and Programs

Although there are no plans or programs that focus specifically on pedestrian improvements in the County, there are several established transportation funding programs that can fund such improvements. These include Measure A, Transportation Development Act, Transportation Fund for Clean Air, Bay Area Transportation Choices, TEA-21 Surface Transportation Program, Federal Enhancement Funds, and Transportation for Liveable Communities. In addition, the state legislature recently passed a bill (AB 1475) to provide \$40 million over two years for projects to improve pedestrian access to schools. C/CAG's Transportation Oriented Development program encourages multi-use, high-density development located close to transit, and therefore encourages planners and designers to account for the pedestrian within the specific project. In addition, C/CAG recently designated several pedestrian improvement projects as being eligible for \$2.734 million in Transportation Enhancement Activities funds. But there has been no attempt to create a comprehensive program to improve the County's pedestrian network.

B. ISSUES

1. Strategy for Improving Pedestrian Facilities

As demonstrated above, there are many opportunities to improve the County's pedestrian network and encourage walking. These opportunities can be put into four general categories: land use, parking lot design and placement, traffic calming, and pedestrian safety.

a. Land Use and Urban Design

Land use (zoning and development review) decisions have tremendous influence on the quality of the pedestrian network. By providing pedestrian destinations within, or near, residential areas, such as parks, small markets, and retail and office space, planners can encourage more walking and discourage the use of an automobile for every trip. Multi-use districts, where housing is interspersed with businesses, also encourage walking by creating more potential short-distance commutes. Zoning and development decisions also present opportunities to require urban design practices that foster walking, such as pedestrian amenities, landscaping, appropriate building scale and architectural interest.

b. Parking Lot Design and Placement

Pedestrians generally feel uncomfortable walking on streets where buildings are set far back from the street, with parking lots in between. This means that on one side, cars pass quickly by in the roadway, while on the other side, there is nothing to see but parked cars. This creates a desolate, uninteresting streetscape where one feels exposed. Instead, parking lots should be placed behind buildings, away from the street. This makes it possible to locate buildings at the street, a practice that encourages walking by making buildings more accessible and providing a sense of shelter and architectural interest.

c. Traffic Calming

Drivers tend to travel faster when they are on a wide, unobstructed roadway. To discourage high auto speeds that make walking less safe, planners have devised several ways to remove the perception of a wide-open road and thereby "calm" traffic. These include: narrowing the roadway by widening sidewalks or creating parking areas along the sides of the road, adding "rough" pavement which encourages lower speeds, adding bumps, curves, or islands, and many other methods.

d. Pedestrian Safety

Research indicates that pedestrian safety is a serious problem in San Mateo County. Crosswalks, crossing signals, dedicated walkways, new sidewalks, and other such improvements are essential to make the pedestrian network safer. Cities need to identify places where such improvements are necessary to reduce clear danger to pedestrians. This will not only benefit those who currently walk, but will encourage additional walking trips, leading to congestion and air quality benefits. The following are of particular concern for pedestrian safety:

- (1) Caltrain right-of-way grade separations (i.e., tunnels, overpasses) for dedicated pedestrian and bicycle use
- (2) Freeway overpasses for dedicated pedestrian use, overpass sidewalks separated from auto traffic by railing or landscaping
- (3) Improved freeway on/off ramp design, safer crossings
- (4) Center "safe zone" on wide, high-volume roadway crossings
- (5) Incomplete/no sidewalks, close gaps in sidewalk network (especially near schools)

C. PEDESTRIAN POLICIES

16.1 Market Share

Increase the percentage of people walking to work from 2.4 percent to five percent.

16.2 Land Use and Urban Design

Encourage cities to promote land use patterns and developments that make walking a viable and inviting mode of transportation. Allow appropriate mixed uses. Locate walkable destinations such as parks and markets within and near residential areas. Design residential and

commercial districts with human-scaled, interesting buildings, low traffic speeds, landscaping, and pedestrian amenities such as benches.

16.3 Parking Lots

Encourage cities to locate parking lots behind businesses, rather than at the street. Design parking lots with safe, attractive, and clearly marked pedestrian routes.

16.4 Safety

Encourage cities to identify locations where pedestrian movement is dangerous, and make appropriate improvements. Focus on the following areas: wide, high-speed roadway crossings; freeway on/off ramps; unsafe/inadequate railroad crossings.

16.5 Traffic Calming

In areas with high levels of pedestrian traffic, encourage cities to use narrow streets, rough pavement, speed bumps, islands, and other similar methods to slow automobiles.

16.6 Priorities

Prioritize funding for pedestrian improvements as follows:

- a. Safety increases.
- b. Mobility needs of walking-dependent populations (school children, elderly, people with disabilities, etc.).
- c. Walking as a commute mode (land use decisions, better urban design, close “gaps” in pedestrian network).
- d. Number of walkers who will benefit by the improvement.

- e. Recreational pathways.

16.7 Specialists

In each city and the County, train at least one individual in pedestrian issues. This person should review proposed projects and make recommendations and conditions of approval for improving the projects' pedestrian access and amenities.

16.8 Job Location

Encourage cities to place jobs in locations that stimulate walking. Evaluate and update land use designations to promote job growth within walking distance of transit stations and multi-family housing.

16.9 Traffic Mitigation

Encourage cities to implement C/CAG pedestrian-oriented traffic mitigations.

16.10 Pedestrian Studies

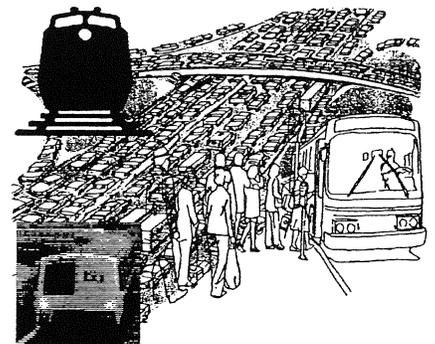
Encourage cities and land use agencies to do pedestrian studies for their jurisdictions.

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Chapter 17



Financial





XVII. FINANCIAL POLICIES

17.1 Shortfall

Reduce projected shortfalls for major capital improvement programs.

17.2 Caltrain Shortfalls

Over the next ten years, fully fund San Mateo County's share of the Caltrain shortfalls with unprogrammed Measure A funds for Caltrain and Measure A funds for the SFO AirTrain.

17.3 TA Strategic Plan Road Shortfall

Over the next ten years, use the maximum amount of State Transportation Improvement Program (STIP) funds to reduce the shortfall for Strategic Plan roadway projects from \$435.6 million (65 percent of total cost) to \$370.4 million (55 percent of total cost).

17.4 Other Funding Sources

Seek other funding sources for reducing shortfalls.

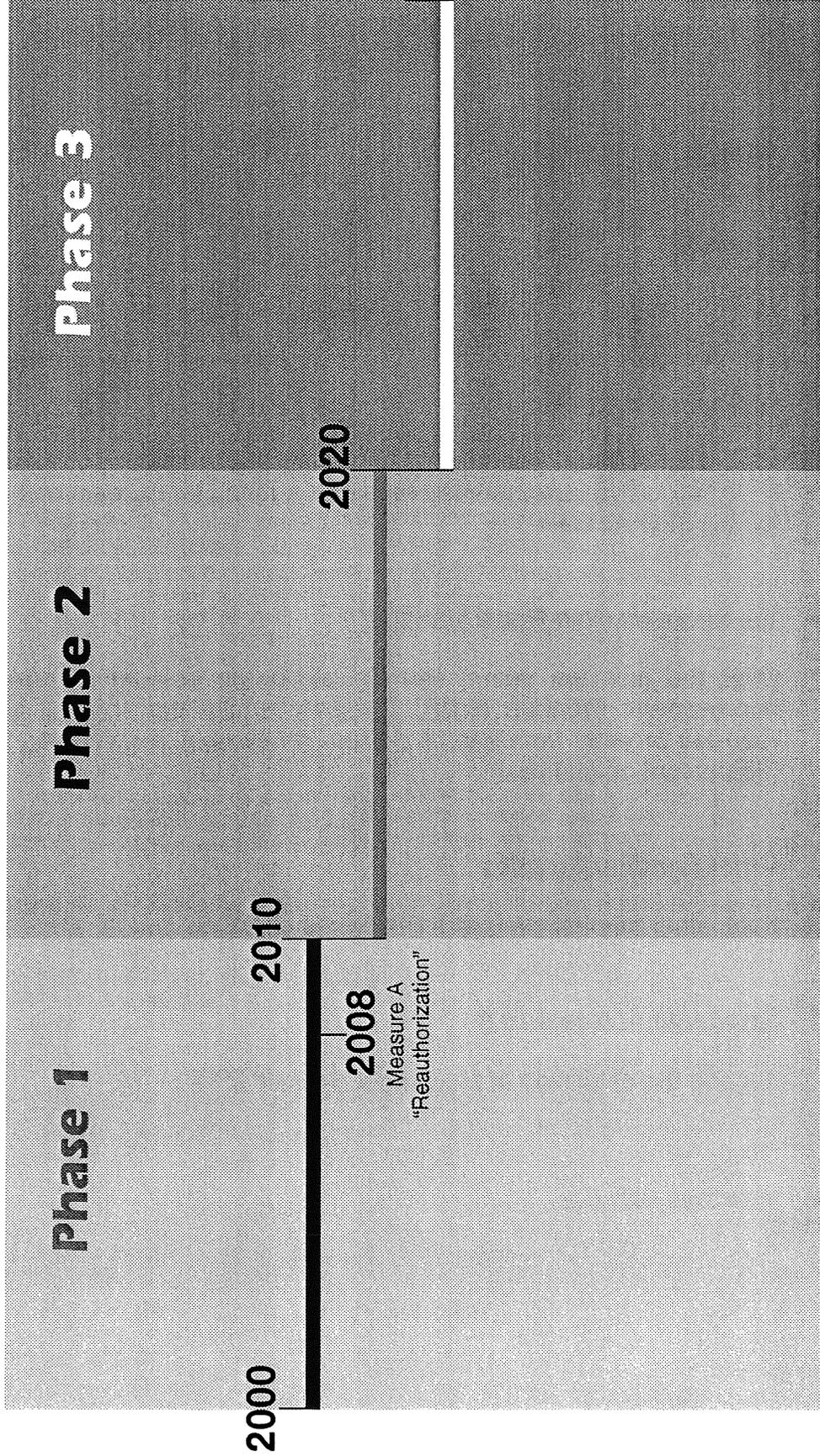
17.5 Extension of Measure A

Support the extension of Measure A beyond 2008.

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San Mateo County Countywide Transportation Plan

Planning Periods



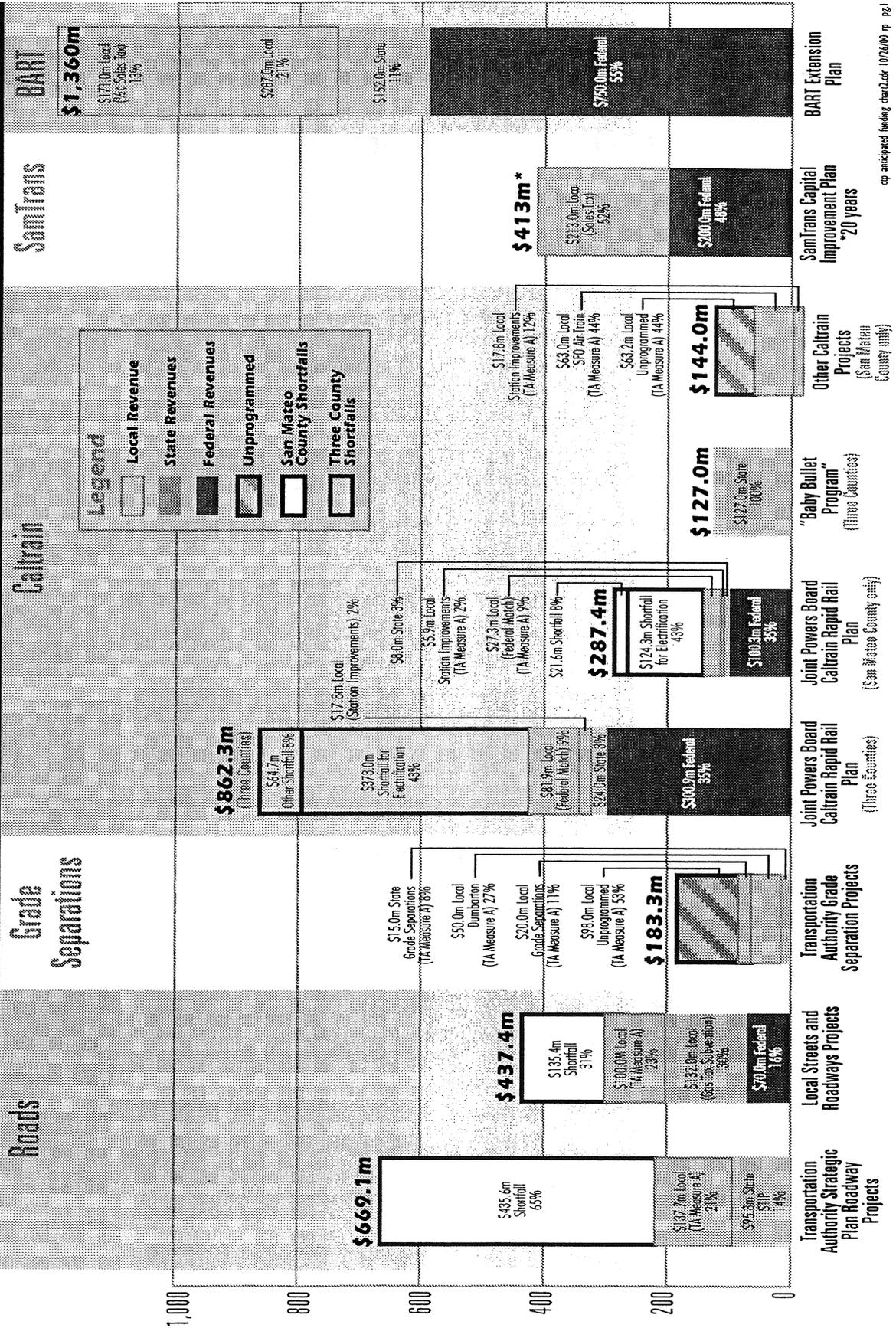
Short-Term Planning Period 2000 - 2010

1	What are costs of adopted major CIP's?
2	What are the anticipated revenues and funding sources?
3	Are those anticipated funding levels realistic? (Not for STIP)
4	Are there shortfalls?
5	How should STIP and Measure A funds then be alloted?
6	How should CIP's be adjusted?

Exhibit 17.3

Countywide Transportation Plans

Anticipated Funding Sources for Major Capital Improvement Programs 2000 - 2010



cp anticipated funding chart.doc 10/26/00 pp. 1

Exhibit 17.4

Peninsula Transportation Plan

Anticipated Funding Sources for Major Capital Improvement Programs 2000 - 2010

(in millions)

Programs	Cost			Revenue			Shortfall		Unprogrammed
	Local	State	Federal	Total	Shortfall	Unprogrammed			
Transportation Authority Strategic Plan Roadway Projects	669.1 (1.00)	95.8 (0.14)	0.0 (0.00)	233.5 (0.35)	435.6 (0.65)	0.0 (0.00)	435.6 (0.65)	0.0 (0.00)	
Local Streets and Roadways Projects	437.4 (1.00)	132.0 (0.30)	70.0 (0.16)	302.0 (0.69)	135.4 (0.31)	0.0 (0.00)	135.4 (0.31)	0.0 (0.00)	
Transportation Authority Grade Separation Projects	183.3 ¹ (1.00)	15.0 (0.08)	0.0 (0.00)	183.3 (1.00)	0.0 (0.00)	98.0 (0.53)	0.0 (0.00)	98.0 (0.53)	
Joint Powers Board Caltrain Rapid Rail Plan (Three Counties)	862.3 ² (1.00)	24.0 (0.03)	300.9 (0.35)	424.6 (0.50)	437.7 (0.50)	0.0 (0.00)	437.7 (0.50)	0.0 (0.00)	
Joint Powers Board Caltrain Rapid Rail Plan (San Mateo County only)	287.4 (1.00)	8.0 (0.03)	100.3 (0.35)	141.5 (0.50)	145.9 (0.50)	0.0 (0.00)	145.9 (0.50)	0.0 (0.00)	
"Baby Bullet Program" (Three Counties)	127.0 (1.00)	127.0 (1.00)	0.0 (0.00)	127.0 (1.00)	0.0 (0.00)	0.0 (0.00)	0.0 (0.00)	0.0 (0.00)	
Other Caltrain Projects (San Mateo County only)	144.0 ³ (1.00)	0.0 (0.00)	0.0 (0.00)	144.0 (1.00)	0.0 (0.00)	63.2 (0.44)	0.0 (0.00)	63.2 (0.44)	
SamTrans Capital Improvement Plan *20 years	413.0 (1.00)	0.0 (0.00)	200.0 (0.48)	413.0 (1.00)	0.0 (0.00)	0.0 (0.00)	0.0 (0.00)	0.0 (0.00)	
BART Extension Plan	1,360.0 (1.00)	152.0 (0.11)	750.0 (0.55)	1,360.0 (1.00)	0.0 (0.00)	0.0 (0.00)	0.0 (0.00)	0.0 (0.00)	
Total Cost (includes three County costs for Caltrain)	4,196.1 (1.00)	545.8 (0.13)	1,320.9 (0.31)	3,187.4 (0.76)	1,008.7 (0.24)	161.2 (0.04)	1,008.7 (0.24)	161.2 (0.04)	
Total Cost (includes San Mateo County only costs for Caltrain)	3,621.2 (1.00)	529.8 (0.15)	1,120.3 (0.31)	2,904.3 (0.80)	716.9 (0.20)	161.2 (0.05)	716.9 (0.20)	161.2 (0.05)	

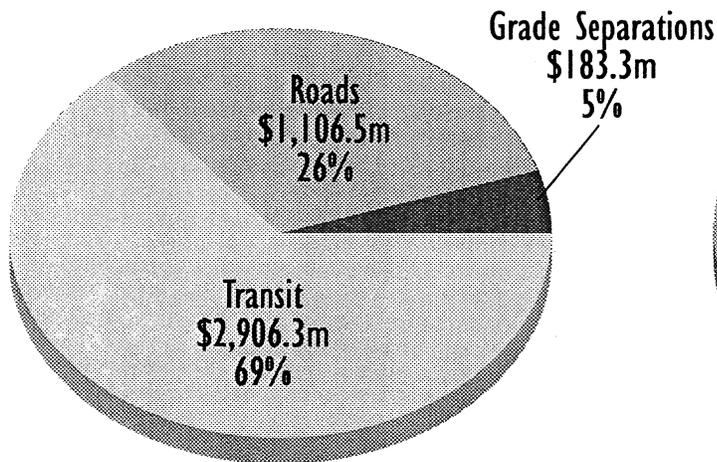
¹ Includes Dumbarton @ \$60.0m

² Includes Station Improvements @ \$75.0m, and SFO Airtrain @ \$63.0m

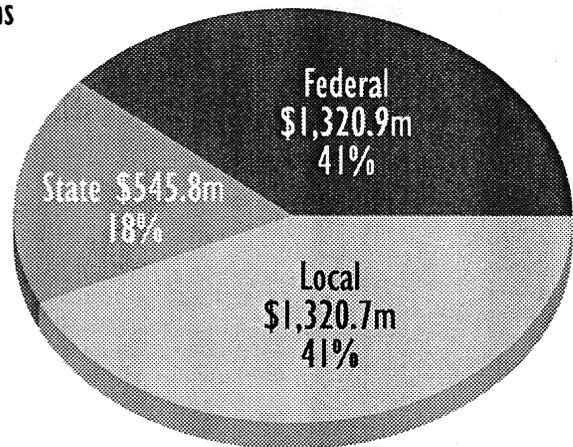
³ Includes Downtown Extension FEIR @ \$0.56m

Countywide Transportation Plan

**Estimated Total Costs
of Major Capital Improvement Programs
and Anticipated Revenue Sources 2000 - 2010
(Includes Three County Costs for CalTrain)**



**Capital
Improvement Plans
\$4,196.1m**

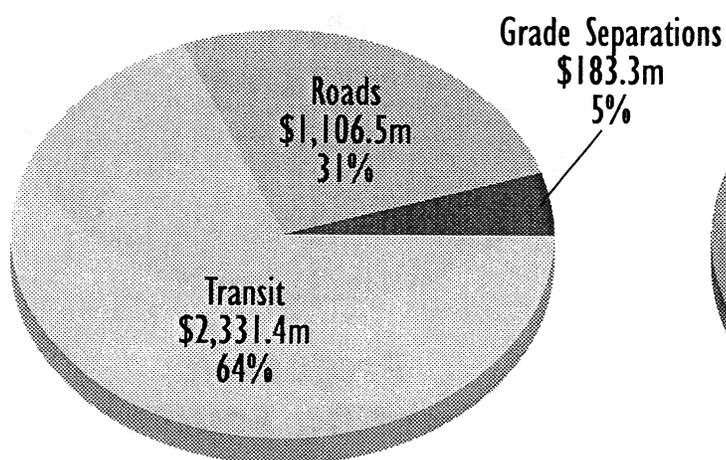


**Anticipated
Funding Sources
\$3,187.4m**

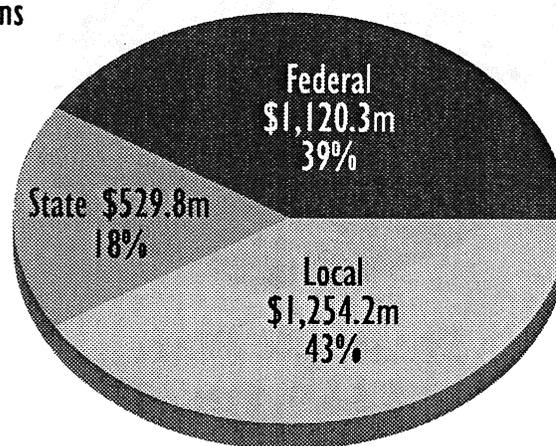
Shortfall	
\$4,196.1m	Capital Improvement Plans
- 3,187.4m	Anticipated Funding Sources
\$1,008.7m	

Countywide Transportation Plan

**Estimated Total Costs
of Major Capital Improvement Programs
and Anticipated Revenue Sources 2000 - 2010
(Includes San Mateo County Only
Costs for CalTrain)**



**Capital
Improvement Plans
\$3,621.2m**

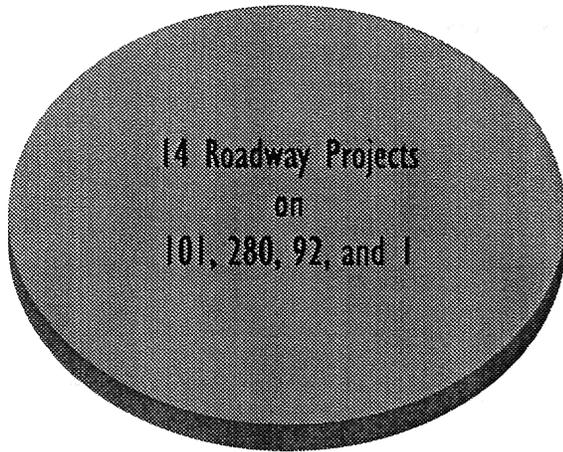


**Anticipated
Funding Sources
\$2,904.3m**

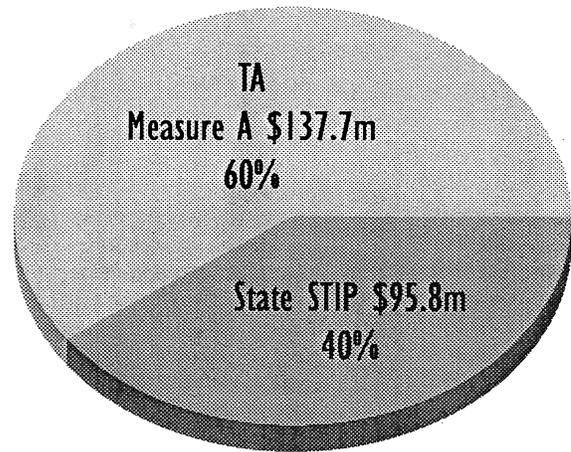
Shortfall	
\$3,621.2m	Capital Improvement Plans
- 2,904.3m	Anticipated Funding Sources
\$ 716.9m	

Countywide Transportation Plan

**Transportation Authority Strategic Plan
Inter-State and State Roadway Projects
2000 - 2010**



**Strategic Plan
\$669.1 m**



**Projected
Funding Sources
\$233.5**

<u>Shortfall</u>	
\$669.1m	Strategic Plan
- 233.5m	Projected Funding Sources
<hr/>	
\$435.6m	

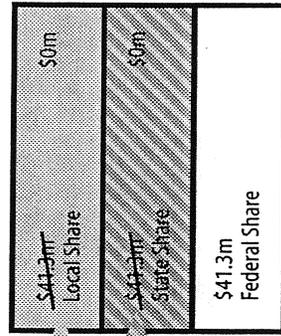
Exhibit 17.9

Countywide Transportation Plan

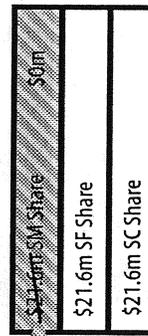
Possible Allocation of Measure A (Local) and STIP (State) Revenue to Reduce Shortfalls

Alternative 1: Maximum STIP Investment in Caltrain

Revenues (Potential)

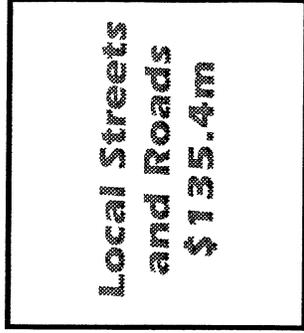
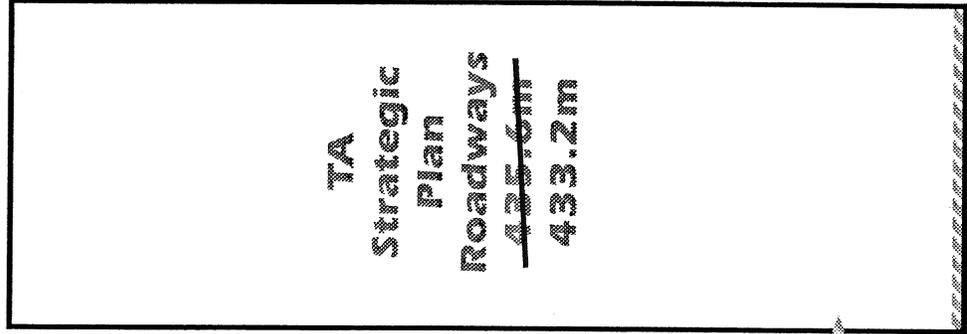


Caltrain Electrification \$124m



Caltrain Other \$64.7m

Shortfalls



\$2.4m

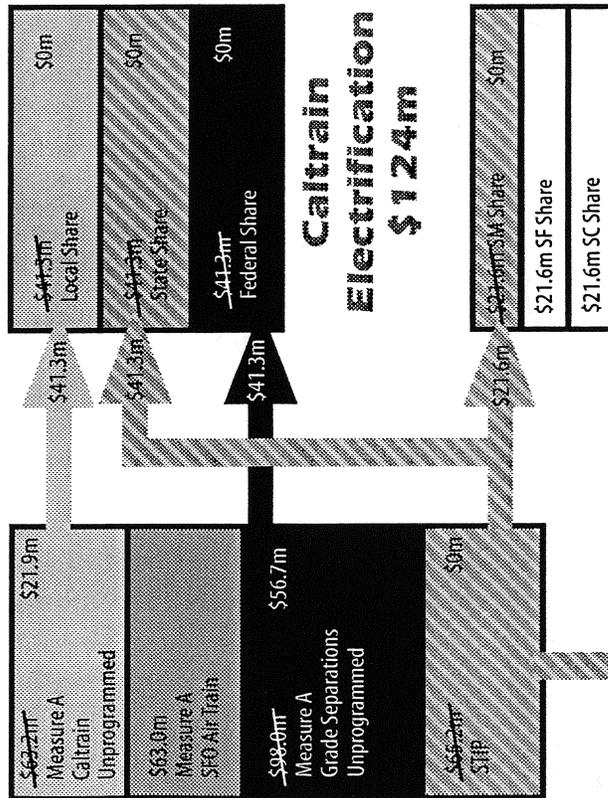
Exhibit 17.10

Countywide Transportation Plan

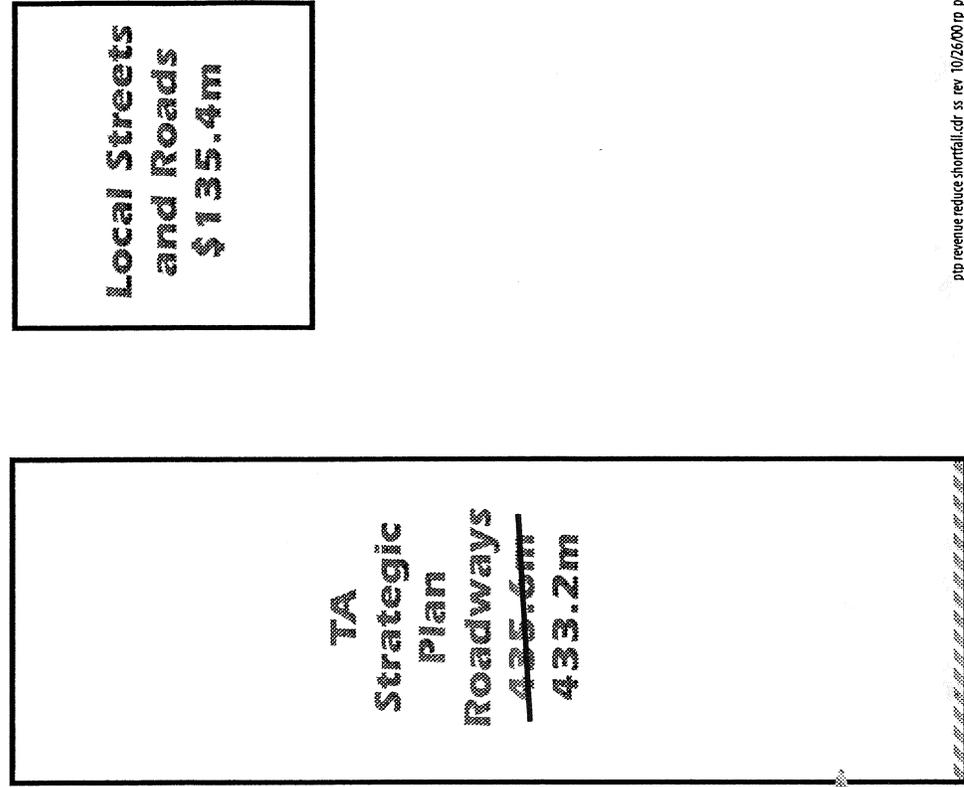
Possible Allocation of Measure A (Local) and STIP (State) Revenue to Reduce Shortfalls

Alternative 1a: Maximum STIP Investment in Caltrain/Local Funding of Federal Share

Revenues (Potential)



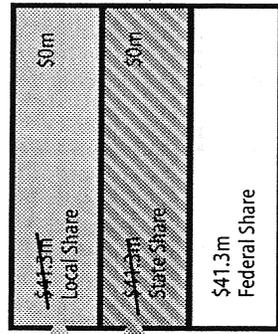
Shortfalls



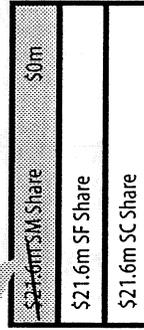
Countywide Transportation Plan

Possible Allocation of Measure A (Local) and STIP (State) Revenue to Reduce Shortfalls
Alternative 2: $\frac{2}{3}$ STIP Investment in Caltrain, $\frac{1}{3}$ STIP Investment in Roads

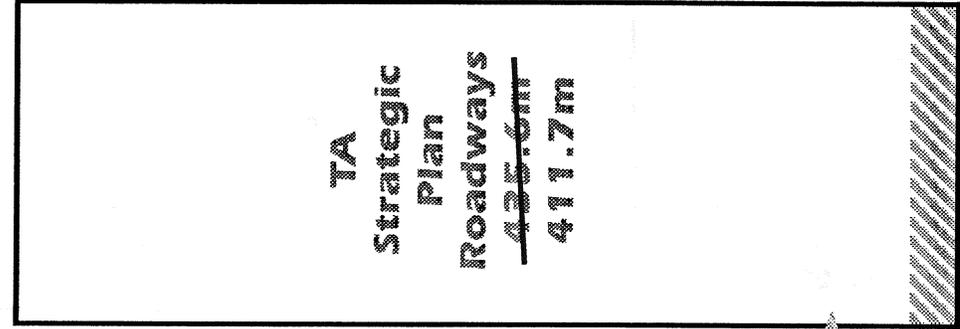
Revenues (Potential)



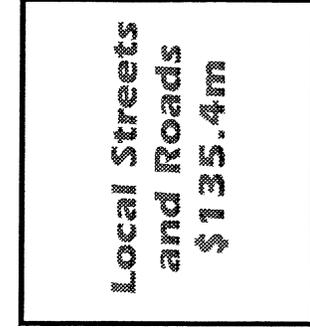
Caltrain Electrification \$124m



Caltrain Other \$64.7m



Shortfalls

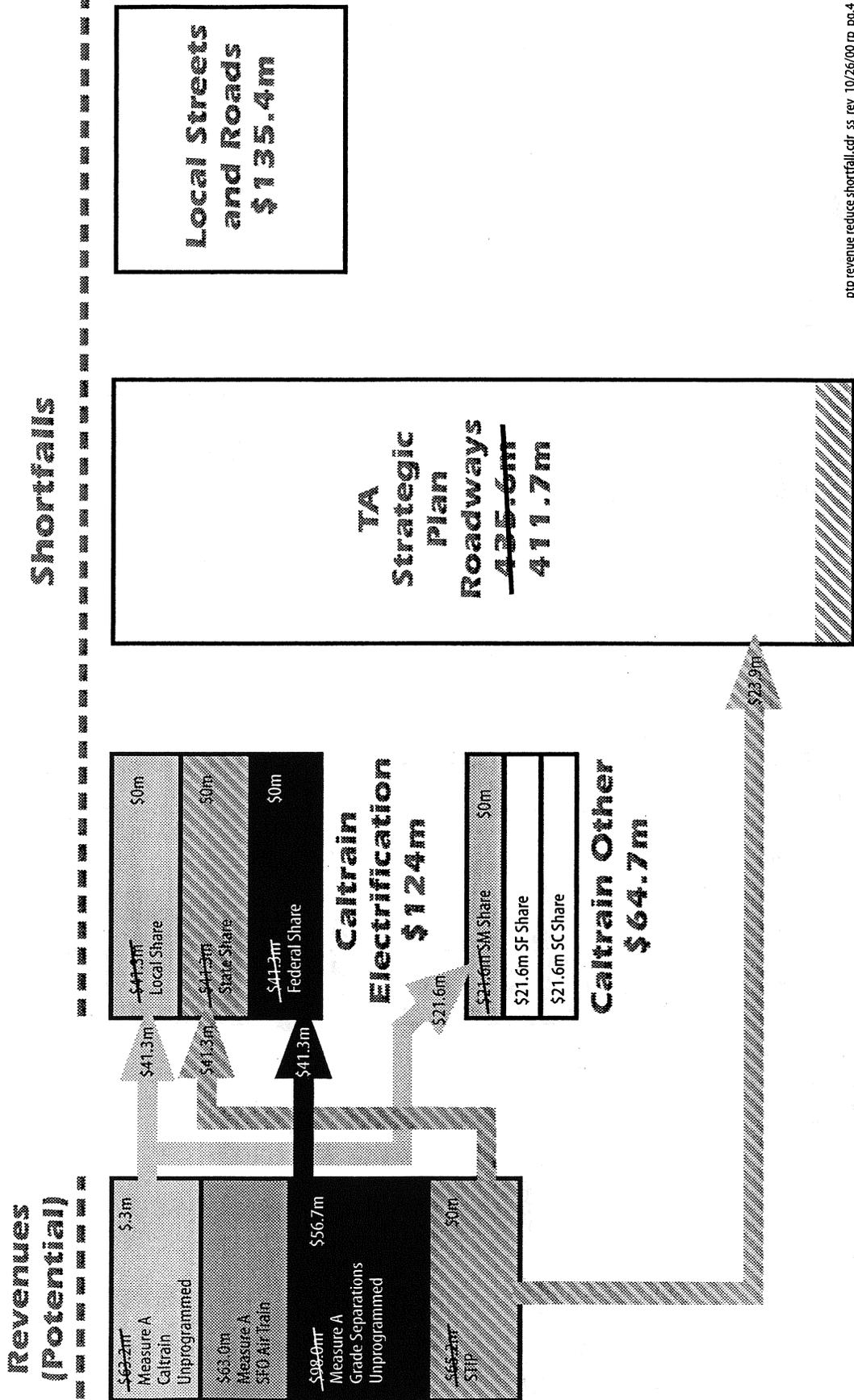


\$23.9m

Countywide Transportation Plan

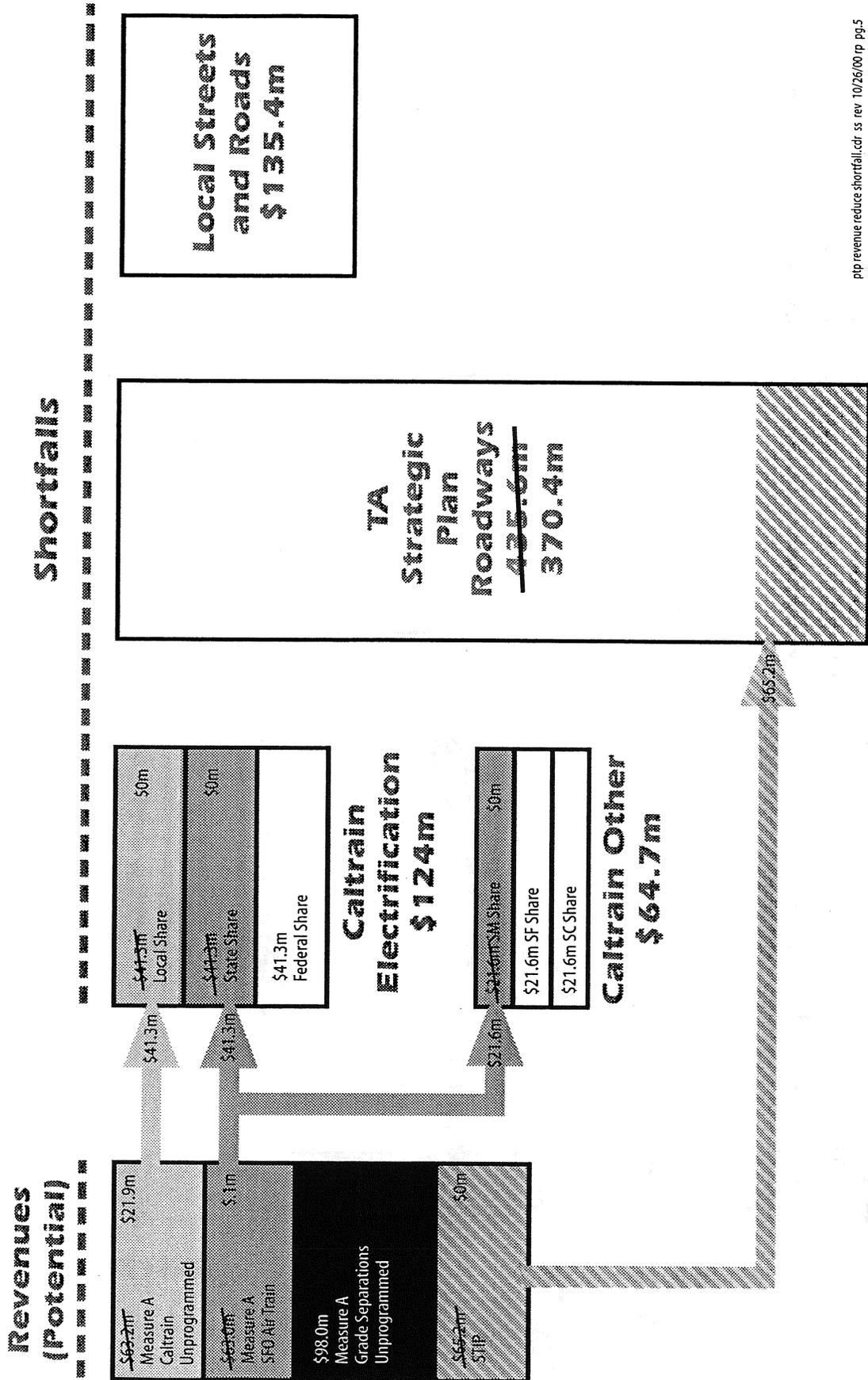
Possible Allocation of Measure A (Local) and STIP (State) Revenue to Reduce Shortfalls

Alternative 2a: $\frac{2}{3}$ STIP Investment in Caltrain, $\frac{1}{3}$ STIP Investment in Roads/Local Funding of Federal Share



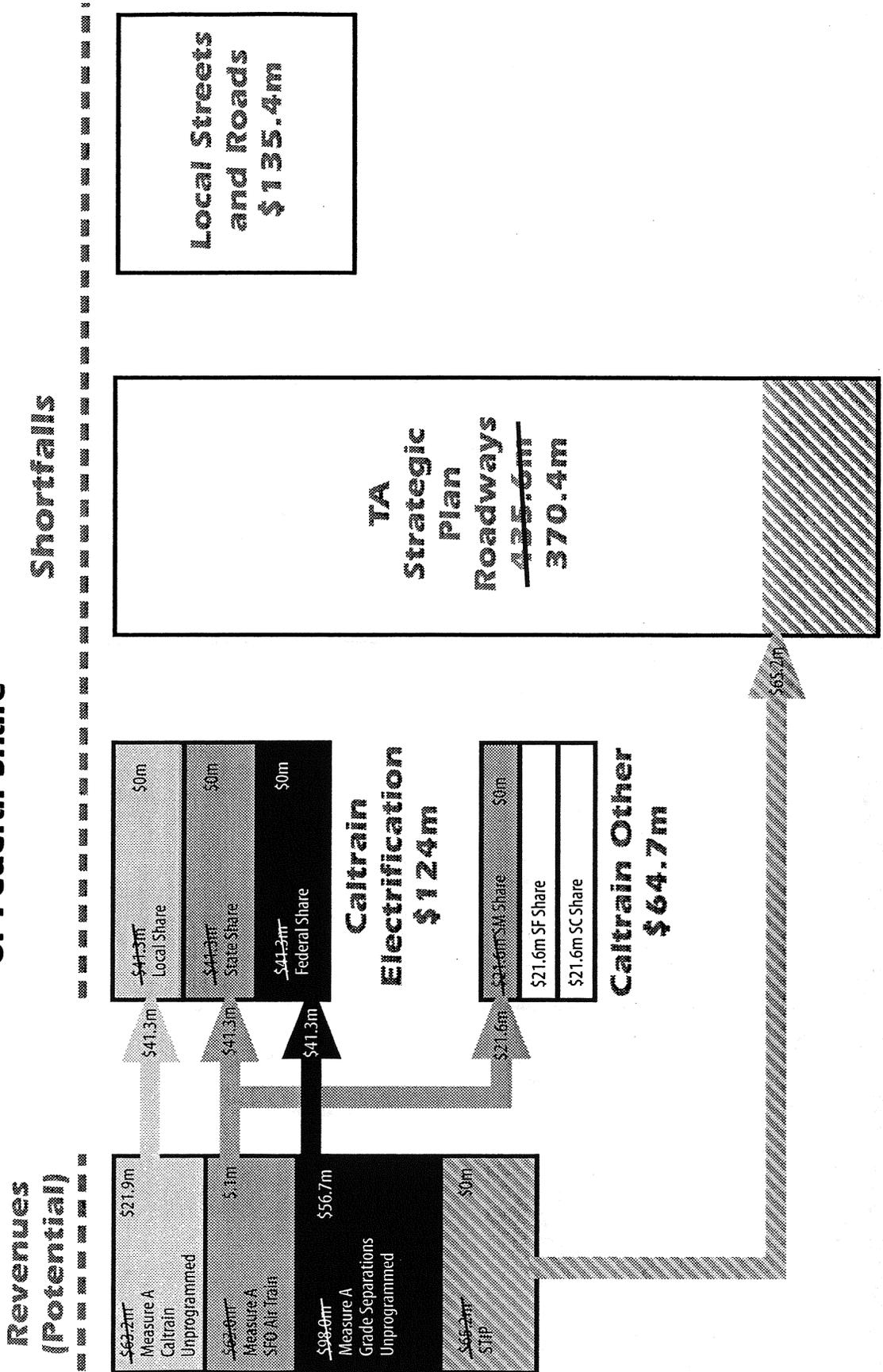
Countywide Transportation Plan

**Possible Allocation of Measure A (Local) and STIP (State) Revenue to Reduce Shortfalls
Alternative 3: Maximum STIP Investment in Roads**



Countywide Transportation Plan

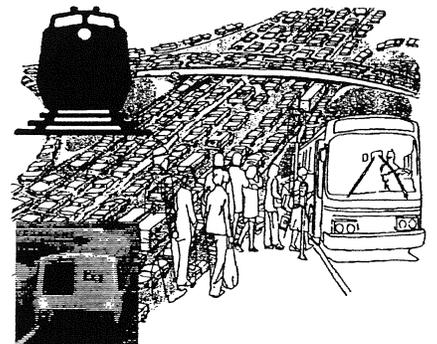
**Possible Allocation of Measure A (Local) and STIP (State) Revenue to Reduce Shortfalls
Alternative 3a: Maximum STIP Investment in Roads/Local Funding
of Federal Share**



Appendix A



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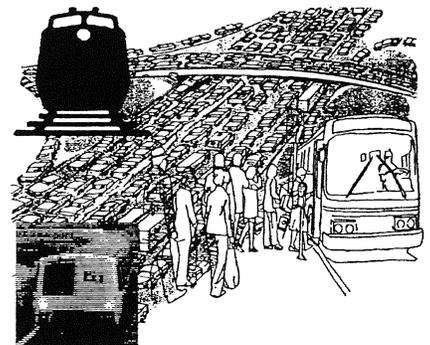
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Glossary of Acronyms





GLOSSARY OF ACRONYMS

- ABAG** Association of Bay Area Governments – Agency responsible for preparing a regional land use plan, determining regional and jurisdictional housing needs, projecting future population and employment, and providing other planning data to member jurisdictions throughout the nine-county bay region.
- ADA** Americans with Disabilities Act – Federal law that prohibits discrimination on the basis of disability in employment, requires certain programs to be provided to the disabled by governments and private firms, and requires commercial facilities to be handicapped accessible.
- ARTS** San Francisco Airport Light Rail Transit System – An independent light rail system serving the Airport’s central passenger facilities.
- BAAQMD** Bay Area Air Quality Management District – Regional government agency that regulates sources of air pollution within the nine San Francisco Bay Area counties.
- BAC** Bay Area Council – A business-sponsored public policy organization concerned with issues in the nine-county Bay Area.
- BART** Bay Area Rapid Transit – Public heavy rail transit serving San Francisco, Alameda, Contra Costa, and San Mateo Counties.
- CAA** Clean Air Act – Federal law that established national ambient air quality standards for six criteria air pollutants: sulfur dioxide, nitrogen dioxide, carbon monoxide, ozone, lead, and particulate matter.
- CalTrans** California Department of Transportation – State transportation agency that is responsible for developing and maintaining the State highway system.
- Caltrain** A heavy-rail commuter railroad system that operates along the urban corridor between San Jose and San Francisco. The Caltrain system includes fourteen stations in San Mateo County.
- C/CAG** City/County Association of Governments of San Mateo County – Regional agency with representatives from all of the cities in San Mateo County that addresses and resolves issues that cross municipal boundaries.

GLOSSARY OF ACRONYMS

- CEQA** California Environmental Quality Act – State law requiring public agency decision makers to document and consider the environmental impacts of a project as part of the approval process.
- CMAQ** Congestion Mitigation and Air Quality Funding Program – Federal transportation funding program established by the Intermodal Surface Transportation Act and administered by the MTC, intended to provide funding for projects that implement the 1990 Federal Clean Air Act. Projects to add capacity for single-occupant vehicles are not eligible.
- CMP** Congestion Management Program – Program designed to promote countywide cooperation in solving transportation problems, and to improve the process of land use impact review as it relates to air quality and transportation. This seven-year program is managed by the Congestion Management Agency (C/CAG in San Mateo County) and is required for all urbanized counties in California.
- CTC** California Transportation Commission – Eleven-member commission that approves and adopts the State Transportation Implementation Program.
- CTP** Countywide Transportation Plan – Twenty-year, comprehensive long-range plan prepared and approved for San Mateo County by C/CAG. The CTP is used to analyze and coordinate transportation planning for all modes of travel on a countywide basis.
- EIR** Environmental Impact Report – Detailed statement prepared in accordance with CEQA that describes and analyzes the significant environmental effects of a project and discusses ways to mitigate or avoid the effects.
- EIS** Environmental Impact Statement – Detailed statement prepared in accordance with NEPA that describes and analyzes the significant environmental effects of a project and discusses ways to mitigate or avoid the effects.
- HOV** High Occupancy Vehicle – Vehicles containing two or more occupants.
- HOT** High Occupancy Toll – Single-occupant vehicle use of HOV lanes for a fee.

GLOSSARY OF ACRONYMS

- ISTEA** Intermodal Surface Transportation Efficiency Act of 1991 – Federal legislation that allows transit to compete against highway programs for funds formerly designated for highway projects. ISTEA was effective from fiscal year 1991 through fiscal year 1997, at which time it was replaced by the Transportation Efficiency Act of the 21st Century (TEA-21).
- ITS** Intelligent Transportation Systems – A system that collects information on roadway conditions using cameras or sensors and relays it to a traffic control center, which can adjust signal timing and inform commuters of roadway conditions.
- JPB** Peninsula Corridor Joint Powers Board – Agency responsible for the management of Caltrain. The board is composed of two representatives each from San Mateo, San Francisco, and Santa Clara Counties.
- LOS** Level of Service – Measure of the relative performance of a roadway system, scaled from LOS A, representing a free-flow operation with little to no delay to LOS F, representing an unstable flow with substantial delays.
- LUIS** Land Use Information System – Demographic data collected from every city in the County for input into the travel demand forecasting model used for the Countywide Transportation Plan.
- MTC** Metropolitan Transportation Commission – Regional agency responsible for coordinating regional transportation planning and financing in the nine Bay Area counties.
- MTSMA** Multi-City TSM Agency – Agency formed to coordinate transportation system management efforts among the following eight member cities: Brisbane, Colma, Daly City, Half Moon Bay, Millbrae, Pacifica, South San Francisco, and San Bruno.
- MUNI** San Francisco Municipal Railway – Public transit system for the City of San Francisco, consisting of subway-surface light-rail vehicles, electric trolley buses, diesel buses, and cable cars.
- NEPA** National Environmental Policy Act – Federal law that established national goals and policies for the protection of the environment. NEPA

GLOSSARY OF ACRONYMS

requires all federal agencies to give appropriate consideration and document the environmental effects of their decision making.

- RTIP** Regional Transportation Improvement Program – List (prepared by MTC) that proposes projects to be State funded through the STIP program.
- RTP** Regional Transportation Plan – Twenty-year Bay Area plan that emphasizes an integrated metropolitan transportation system and transportation systems management. This federal and State funded plan is adopted by MTC and updated every two years.
- SAMCEDA** San Mateo County Economic Development Association – Business organization that works to influence public policy in order to promote economic vitality in San Mateo County.
- SamTrans** San Mateo County Transit District – Special purpose district governed by a nine-member board of directors that provides fixed-bus routes, special service buses, and paratransit service in San Mateo County.
- SMCTA** San Mateo County Transportation Authority – Agency formed in 1988 to administer funds collected by a half-cent sales tax for transportation projects approved by voters (Measure A).
- STIP** State Transportation Implementation Program – State transportation funding program adopted by the California Transportation Commission that lists projects to be funded for the succeeding five years.
- STP** Surface Transportation Program – Federal program established by ISTEA whose funding is allocated by the MTC for the purpose of transit capital, bicycle projects, and bridge replacement and rehabilitation.
- TAZ** Traffic Analysis Zone – Small geographical areas of analysis used in travel demand forecasting models.
- TDM** Transportation Demand Management – Techniques designed to reduce demand for single-occupant vehicle trips.
- TEA-21** Transportation Efficiency Act for the 21st Century – Federal legislation that allows transit to compete against highway programs for funds

GLOSSARY OF ACRONYMS

formerly designated for highway projects. TEA-21 replaces ISTEA, and is effective from fiscal year 1998 through fiscal year 2004.

- TIP** Transportation Improvement Program – Federal program approved and adopted by the Federal Department of Transportation (DOT) that lists projects to be funded based on available funding.
- TOT** Transient Occupancy Tax – Local tax collected on revenues generated by hotel or motel room rentals.
- TOD** Transit Orientated Development – Development of relatively high-density housing and/or employment areas in close proximity with public transit.
- TSM** Transportation System Management – Techniques designed to increase the capacity of transportation system supply by improving the efficiency of the existing transportation network.
- V/C Ratio** Volume to Capacity Ratio – Measure of the volume of traffic on a roadway divided by the roadway capacity.
- VMT** Vehicle Miles Traveled – The total automobile miles traveled.
- VHT** Vehicle Hours Traveled – The total number of hours traveled in automobiles.
- VTA** Santa Clara Valley Transportation Authority – An independent special district responsible for bus and light rail operations, congestion management, specific highway improvement projects, and countywide transportation planning in Santa Clara County.

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