

San Francisco Countywide Transportation Plan



SFCTA logo

Executive Summary

December 2000

San Francisco County Transportation Authority
100 Van Ness Avenue, 25th Floor
San Francisco, CA 94102
Website: www.ci.sf.ca.us/sfcta
Phone: 415-522-4800
Fax: 415-522-4829



Executive Summary

INTRODUCTION

Transportation is one of the most critical and controversial issues in San Francisco - it is key to our economic well-being and celebrated quality of life, and yet it continues to rank as one of the City's most serious problems. Not surprisingly, transportation problems are in the headlines almost every day. Traffic congestion, unreliable transit, shortage of parking and unsafe streets are all concerns of San Francisco residents, workers and visitors.

San Francisco has an impressive multimodal transportation system compared to that of other American cities. Unfortunately, its performance level is less than acceptable. Mobility in San Francisco should be efficient, convenient and safe. However, the fact remains that it is a major challenge to get to any destination in San Francisco on time, no matter what mode of transportation is used. It is disheartening to hear that many people whether walking, bicycling, riding transit or driving, feel unsafe.



The City's growing transportation problems should not come as a surprise. While San Francisco has been experiencing significant job and population growth over the last several decades, there has been too little investment in improving the City's transportation system. Under these conditions the growing severity of transportation problems was inevitable.

Moving forward, it is imperative that we compensate for the years in which we have neglected and underfunded our transportation system and invest in its improvement. If we do not, our City will not only be inconvenienced, but suffer economically, socially and





SFCTA logo

**ABOUT THE
TRANSPORTATION AUTHORITY**

In November 1989, San Francisco voters approved Proposition B, authorizing a new one-half cent sales tax for transportation purposes. The Proposition, which was expected to generate nearly one billion dollars over 20 years, included a detailed expenditure plan, and required creation of the San Francisco County Transportation Authority to administer the tax.

The Authority was designated as the Congestion Management Agency (CMA) for San Francisco in 1990. In this role, the Authority has been able to leverage up to five dollars in state and federal transportation dollars for each dollar in Proposition B sales tax revenues. The Authority also tracks transportation system performance to ensure that San Francisco gets good value for its transportation investments and prepares a long-range transportation plan to guide San Francisco's future transportation investment decisions.

In 1992, the Authority was designated Program Manager for the Transportation Fund for Clean Air (TFCA). In this role, the Authority approves funding for transportation projects that directly benefit air quality.

From restoration of historic streetcars to construction of the new Embarcadero Roadway, from wheelchair ramps to bike lanes, from street resurfacing to new Muni buses, the Authority plans and funds projects that contribute to improving mobility for San Franciscans every day.

environmentally. This document, the first long-range transportation analysis prepared by the San Francisco County Transportation Authority, recognizes the challenge of charting a different course to an improved future and recommends an approach San Francisco may follow to improve mobility rather than limit it.

CTP Purpose

The purpose of the San Francisco Countywide Transportation Plan (CTP) is to provide an approach to planning transportation improvements by analyzing transportation needs and resources over the next 30 years. The plan's goal is to identify an approach that focuses on enhancing the City's livability and economy in a manner that is equitable to all.

In 1997, the Transportation Authority directed staff to prepare a long-term transportation plan for San Francisco. The City's General Plan establishes the overall planning policy framework for San Francisco, including transportation planning. However, it does not prioritize transportation policies or identify, in a financially constrained context, transportation improvement recommendations. The CTP fills this gap by proposing priorities and including a detailed financial analysis.

San Francisco's CTP is different from many other county transportation plans. It is designed to provide information on long-term transportation needs and resources for use by the Authority and other City agencies in making future funding decisions, rather than being the vehicle that 'makes' these decisions. In other words, the CTP does not actually program funds but rather provides information to help guide future programming decisions. By providing transportation planning and financial information, it is designed to dovetail with other San Francisco and regional planning efforts, including departmental capital improvement plans and regional transit agency plans, to help guide future decisions.

Main Finding and CTP Recommendations

As outlined above, the purpose of this CTP is to analyze San Francisco's long-term transportation needs and resources with the objective of providing information to guide future investment decisions and policy-making.

The CTP's main finding is that San Francisco is and will be faced with critical transportation maintenance and expansion needs. Yet, there is not enough funding to simply maintain our existing system. The CTP serves as an essential tool to manage limited funds wisely and take the next steps to identify additional funding necessary to support the required improvements.

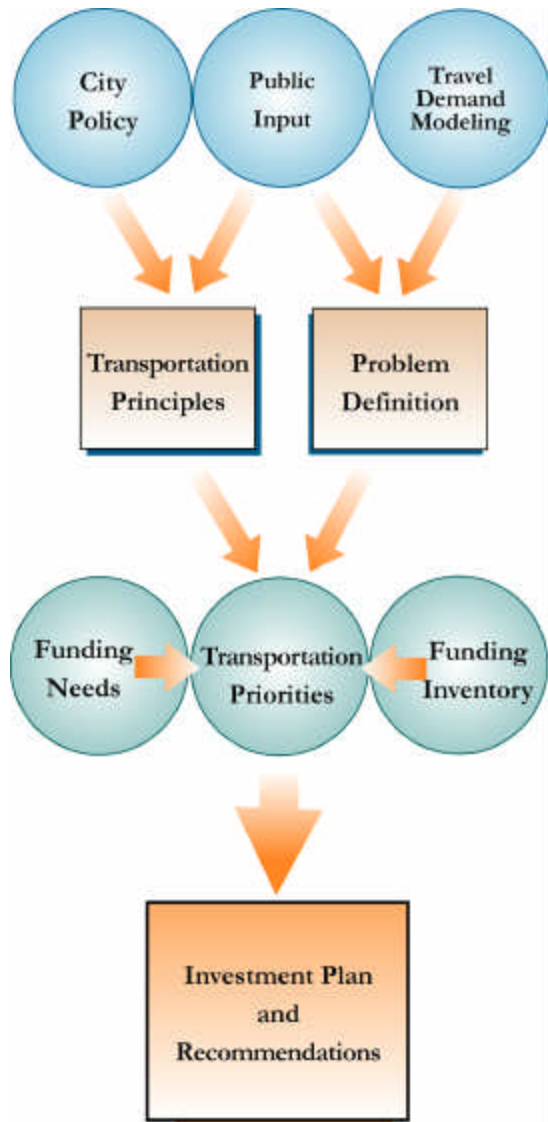
The CTP recommendations are as follows:

- **Proposed Investment Plan** - The CTP's investment plan presents a proposed guide to investing transportation funds assumed to be available to San Francisco during the next 30 years. Importantly, this plan only includes funding that can reasonably be assumed to be available. Given San Francisco's huge rehabilitation needs, there are very limited funds available for new projects and therefore the CTP focuses on maintenance and rehabilitation of the existing system, particularly on Muni given San Francisco's Transit First Policy.
- **Planning Initiatives** - The CTP identifies the following seven planning initiatives as priority next steps following adoption of the CTP:
 1. Muni Strategic Expansion Plan;
 2. Transit Preferential Corridor Strategic Plan;
 3. Supercorridor Feasibility Study
 4. San Francisco Caltrain Implementation and Financing Plan;
 5. Activity Center Plans;
 6. San Francisco and Regional Planning Partnership; and
 7. New Revenue Plan.

Given the obvious huge short-fall between what we must invest in - rehabilitating our existing transportation system - and what we would like to invest in - expanding transportation systems to truly improve transportation conditions, these next steps are focused on identifying cost effective and short-term improvements to better transportation conditions, such as implementing transit priority measures; continuing long-term planning and prioritization of capital intensive projects to seize funding opportunities as they arise; working with partner agencies to encourage land use initiatives that change travel behavior; and lastly, identifying more funding to implement all the transportation improvement actions included in the CTP.



CTP PLANNING PROCESS



CTP Planning Process

This CTP is the first long-term analysis of San Francisco's transportation needs. As such, this effort required us to assess the baseline conditions and develop an entirely new set of analysis tools. This provided an opportunity to take a fresh look at San Francisco's transportation needs and desires as well as new ways of looking at solving problems.

As outlined above, the CTP produced a proposed investment plan, recommendations for further studies and a call for improved regional transportation planning and increased funding. These products were developed using three sources of input. They are the transportation principles, capital funding assumptions, and transportation capital needs.

Input 1: San Francisco Transportation Principles

The most important input to the CTP was the transportation principles that guided plan development. The principles were developed by considering existing and future transportation problems as well as the transportation policies in San Francisco's General Plan and Charter. Existing and future transportation problems were identified in the public input process and in the plan's analytical transportation analysis.

The first step in this process was an ambitious public outreach program. As part of this program, Authority staff met with thousands of San Francisco residents, employers and visitors in a series of formal meetings and informal presentations to obtain their thoughts on operations of the existing transportation system and ideas for improvements. This public outreach effort was an extensive and critical part of the process.

The public raised three main points about transportation in San Francisco. One, Muni service is unreliable - improving reliability is a critical need. Two, transportation conditions are reducing the City's quality of life - neighborhoods should be protected from the negative environmental impacts of traffic by introducing traffic calming measures, improving alternative transportation such as bicycles and transit, and by reducing the need to travel by automobile. Three, it is getting harder and harder to travel around the city safely - transportation conditions for all types of travel need to be improved.

The second step in evaluating transportation problems consisted of using a computerized transportation forecasting model to analytically evaluate existing and future transportation conditions. Results

TRANSIT FIRST POLICY Charter Amendment Adopted by San Francisco Voters in November 1999

- 1** To ensure quality of life and economic health in San Francisco, the primary objective of the transportation system must be the safe and efficient movement of people and goods.
- 2** Public transit, including taxis and vanpools, is an economically and environmentally sound alternative to transportation by individual automobiles. Within San Francisco, travel by public transit, by bicycle and on foot must be an attractive alternative to travel by private automobile.
- 3** Decisions regarding the use of limited public street and sidewalk space shall encourage the use of public rights of way by pedestrians, bicyclists, and public transit, and shall strive to reduce traffic and improve public health and safety.
- 4** Transit priority improvements, such as designated transit lanes and streets and improved signalization, shall be made to expedite the movement of public transit vehicles (including taxis and vanpools) and to improve pedestrian safety.
- 5** Pedestrian areas shall be enhanced wherever possible to improve the safety and comfort of pedestrians and to encourage travel by foot.
- 6** Bicycling shall be promoted by encouraging safe streets for riding, convenient access to transit, bicycle lanes, and secure bicycle parking.
- 7** Parking policies for areas well served by public transit shall be designed to encourage travel by public transit and alternative transportation.
- 8** New transportation investment should be allocated to meet the demand for public transit generated by new public and private commercial and residential developments.
- 9** The ability of the City and County to reduce traffic congestion depends on the adequacy of regional public transportation. The City and County shall promote the use of regional mass transit and the continued development of an integrated, reliable regional public transportation system.
- 10** The City and County shall encourage innovative solutions to meet public transportation needs wherever possible and where the provision of such service will not adversely affect the service provided by the Municipal Railway.

of this modeling effort indicate that if nothing is done, transportation conditions will continue to worsen. Specifically, congestion will increase on City streets and highways, surface transit service will become more unreliable as it is caught in street congestion, and regional travel to and from San Francisco will continue to increase resulting in more automobile dependency.

Ultimately, the public input and transportation forecasts were integrated with San Francisco's adopted transportation policies, (most importantly, the Transit First Policy, adopted by San Francisco voters as part of Proposition E in 1999) to develop a vision and eleven principles for improving San Francisco's transportation system: the San Francisco Transportation Principles.



SAN FRANCISCO TRANSPORTATION PRINCIPLES

Vision :

San Francisco's transportation system shall be safe, efficient, equitable, and environmentally sustainable and contribute to improving the city's economy while protecting its celebrated quality of life.

Principles:

- 1** We and our visitors should be able to travel around the City without using a car.
- 2** While San Francisco's transportation system should emphasize use of alternatives to the single-occupant automobile, we should be able to use a car when transit or automobile alternatives are not viable.
- 3** Our streets should be safe and pleasant to walk and bicycle upon.
- 4** Our neighborhoods should be livable and protected from the adverse impacts of transportation including noise, air pollution, and traffic congestion.
- 5** Our regional transit system should be good enough to attract the majority of trips made by local visitors to San Francisco and trips made by San Franciscans traveling outside the City.
- 6** Our local and regional transit systems should be given priority in conflicts with private transportation.
- 7** Our city departments and regional agencies should work together to solve transportation problems and coordinate land use and transportation improvement decisions.
- 8** Our transportation system should serve all neighborhoods and populations equitably including the economically disadvantaged, children, elderly and disabled.
- 9** Our transportation system should serve changing lifestyles and ways of doing business, especially changes in goods distribution and changes caused by information technology.
- 10** Our transportation system should promote efficient and safe intermodal movement of goods to businesses.
- 11** Addressing transportation problems in a city as complex and diverse as San Francisco will require citizens and businesses to develop sub-area and multi-modal corridor plans that address transportation, land use, economic development and other issues comprehensively.



The CTP's San Francisco Transportation Principles were used to help develop a prioritization scheme for transportation improvements and to identify areas that would benefit from more planning and analysis. Progress towards attaining the goals supported by the principles will be measured regularly through the Congestion Management Program (CMP), updates to this CTP and other Transportation Authority planning studies.

Input 2: Capital Improvement Needs Inventory

The second input to the CTP was the capital improvement needs inventory. Capital improvements are physical enhancements to our transportation system, including transit vehicles, roadway paving, bicycle facilities, traffic signals and sidewalk curb cuts. The inventory includes all the improvement projects identified during the CTP development process. It includes projects from department and agency Capital Improvement Programs (CIPs) as well as projects identified in the public input process and technical analyses. The following specific sources were used to develop the inventory:

- Public Input
- Muni Strategic Plan and CIP
- Department of Public Works CIP
- Department of Parking and Traffic CIP
- BART Strategic Plan and CIP
- Caltrain Strategic Plan, Rapid Rail Plan and CIP
- Technical Working Group

The most interesting finding from development of the project inventory was the huge magnitude of San Francisco's rehabilitation and replacement needs. The City's transit and roadway systems need a significant amount of money to recover from years of deferred maintenance and lack of capital investments.

Rehabilitation and maintenance is a critical part of keeping the transportation system functioning properly. One cause of Muni's problems was a systematic disinvestment in rehabilitation that revealed itself in service deterioration years later. Muni is only now catching up with its most critical rehabilitation needs.

Once this inventory of capital projects was developed, projects were categorized into four components of the CTP:

1. Maintain and Sustain Existing System
2. Priority San Francisco Enhancements
3. Regional and San Francisco Expansion
4. Market-Based and Innovative Actions

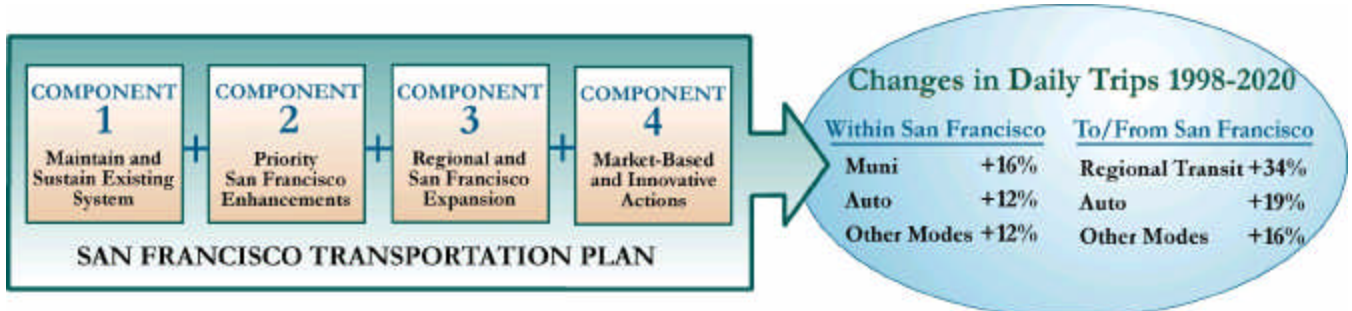


Exhibit E-1 Components 1 and 2 Costs For the 30-Year Period, FY 01-30 (in 2001 dollars)			
Program	Component 1 Cost (\$, millions)	Component 2 Cost (\$, millions)	Total Cost (\$, millions)
San Francisco Muni Transit	\$3,806	\$795	\$4,601
Regional Transit (SF Share)	54	0	55
San Francisco Paratransit	600	0	600
Local Streets and Roads	1,262	289	1,551
Regional Highways (SF Share)	0	0	0
Bicycle	2	50	52
Pedestrian	44	60	104
Transportation Management and Planning	35	0	35
TOTAL, Expenditures	\$5,804	\$1,194	\$6,998

These four components, described below, are not alternatives for improving the transportation system, but rather four parts of one plan. The purpose of developing the components was to classify specific transportation improvement actions into groups of similar projects. See Exhibit E-1 for transportation improvement costs for components 1 and 2 by program.

1. Maintain and Sustain Existing System

This component includes actions necessary to keep the existing transportation system operating, including replacing and renovating Muni vehicles and physical infrastructure, rehabilitating regional transit systems, maintaining San Francisco's Paratransit Program, and resurfacing streets. This Component also includes Phase 1 of the Third Street Light Rail Project and funding for bike and pedestrian improvements. Total cost for the transportation improvement actions in the Maintain and Sustain Existing System Component is \$5.8 billion.



2. Priority San Francisco Enhancements

This component consists of the New Central Subway to Chinatown (Phase 2 of the Third Street Light Rail Project), increased Muni service and planning for rail transit, transit preferential streets, and bicycle corridors. It also includes funding for bike, pedestrian and traffic calming improvements. The total cost for the Priority San Francisco Enhancements Component is \$1.2 billion.

3. Regional and San Francisco Expansion

This component includes Muni rail extensions within the City (e.g., Geary, Chintown/ North Beach and Van Ness Corridors) and major improvement projects to the regional transportation network (e.g., BART's system capacity expansion and 30th Street Station projects, Caltrain's electrification and downtown extension projects, and the San Francisco Bay Crossing project). For the Regional and San Francisco Expansion

Component the total cost is \$1.9+ billion. This is a very low estimate since cost information for many of the actions included in this component is not available. Additionally, the total cost for regional projects only reflects San Francisco's estimated share.



4. Market-Based and Innovative Actions

This component includes supercorridors, car replacement programs and a new approach to raising transportation revenues. The CTP does not include cost information for these actions since more planning work is required to estimate their costs. Additionally, funding from the CTP is not necessary for this Component since the improvement actions are market-based, designed to be self-funded.

Input 3: Funding Inventory

The final input into the CTP was an analysis of all the funding expected to be available for transportation capital projects in San Francisco during the next 30 years. The 30-year time frame was selected because this coincides with reauthorization of San Francisco's half-cent transportation sales tax program. The existing program runs until 2010 and a reauthorized 20-year program would extend until 2030.

Transportation programs and projects in San Francisco are funded from a mix of federal, state, and local funds. While transportation funds are divided into a myriad of funding programs, the Authority, as the CMA and administrator of the half-cent transportation sales tax, influences nearly all transportation funding in San Francisco.

Federal, state, and local revenues were estimated based on the historical trends for those sources and assumed reauthorization of San Francisco's half-cent transportation sales tax through 2030. Under these assumptions, the revenue that would be available during the next 30 years is \$5.4 billion. Exhibit E-2 summarizes the available funding by source.

Exhibit E-2 Sources of Funds For the 30-Year Period, FY 01-30 (in 2001 dollars)	
Fund Source	Total (\$, millions)
Federal	\$2,257
State	534
Proposition B Countywide Half Cent Sales Tax for Transportation	636
Countywide Half Cent Sales Tax Reauthorization	1,589
Other Local	438
TOTAL, Sources	\$5,453

CTP RECOMMENDATIONS

The San Francisco Transportation Principles, the Capital Improvement Needs Inventory and the Funding Inventory were used to develop the CTP's recommendations. The process consisted of using the transportation principles to prioritize capital needs constrained by the expected funding for the next 30 years.

It was clear at the outset that there was not enough funding to even fully maintain and sustain the existing transportation system. Thus, it was important for the CTP to develop two outputs, a proposed investment plan, and planning recommendations that seek to improve the efficiency and cost effectiveness of improvements, increase funding, and consider improvements that would pay for themselves with user fees.

Output 1: Proposed Investment Plan

The CTP's proposed investment plan is based on the notion that it is critical to maintain what you have before you expand. This is especially important in San Francisco because many of the City's most pressing transportation problems are a direct result of systematic capital disinvestment in the transportation system over an extended period of years. Muni reliability, perhaps the most cited problem in the CTP's public input process, is a direct function of the availability of working vehicles and well-maintained infrastructure. To improve reliability, Muni needs well-maintained vehicles and infrastructure - essentially maintenance of its existing system.

As outlined above, under the best possible funding scenario there is not enough money available from federal, state and local sources to fully fund the CTP's Maintain and Sustain Component. Therefore, additional prioritization within the Component was necessary. Given San Francisco's Transit First Policy, priority was to focus rehabilitation funds on Muni since it carries, by far, the largest number of passengers of any transit system in the region and it is in the most need of rehabilitation funds. Additional funding was included for roadway maintenance since San Francisco has a critical backlog of street paving needs and there are few sources of funding available for these projects.

While there is not enough funding available to fully fund the CTP's Maintain and Sustain Component, the CTP does identify funding for several projects that fall into the CTP's Priority San Francisco Enhancements Component. The recommended improvements in this Component include projects with significant policy support (e.g., the Central Subway to Chinatown) and a series of inexpensive and cost effective programs designed to improve neighborhood liv-

**\$1.1 Billion
Shortfall**



**\$5.8 Billion needed
to maintain and sustain the
existing transportation system
in San Francisco**



ability, safety and transit service, and reduce local congestion (specifically, increased funding for pedestrian, bicycle and transit priority programs).

The largest shortfall in funding exists for the CTP's San Francisco and Regional Expansion Component. Essentially, there is not enough funding expected for the next 30 years, under the current funding assumptions, to complete any of the projects included in this Component. This is a very important finding because most of these projects are much needed improvements to our transportation system with significant policy and public support. One of the CTP's key recommendations is for the region to embark on an improved planning process to better define the scope of these projects, set priorities for the projects and develop a funding program for their implementation.

The CTP's fourth Component, Market-Based and Innovative Actions, are all designed to be self-financing and therefore could be implemented following the appropriate planning processes. Funding from the CTP is not necessary to move these actions forward. The CTP recommends evaluating these actions in a variety of studies during the next several years to determine their feasibility. If these projects could not be self-financing they would not be implemented.

Exhibit E-3 summarizes funding availability for each category versus the funding needs for Components 1 and 2. As cost estimates are not available for many projects in Component 3, and no funding has been identified for Component 3 projects, that Component is not included in the summary.



Exhibit E-3				
Components 1 and 2 Program Costs and Funding				
For the 30-Year Period, FY 01-30 (in 2001 dollars)				
Program	Component 1		Component 2	
	Cost (\$, millions)	Funding (\$, millions)	Cost (\$, millions)	Funding (\$, millions)
San Francisco Muni Transit	\$3,806	\$3,577	\$796	\$637
Regional Transit (SF Share)	55	0	0	0
San Francisco Paratransit	600	388	0	0
Local Streets and Roads	1,262	717	289	33
Regional Highways (SF Share)	0	0	0	0
Bicycle	2	2	50	26
Pedestrian	44	25	60	13
Transportation Management and Planning	35	35	0	0
TOTAL, Expenditures	\$5,804	\$4,743	\$1,194	\$710

Output 2: Planning Initiatives

The CTP's main finding is that there is not nearly enough funding available to make all the improvements we would like to see made to the transportation system. There are two ways to address this problem. First, we can look for less expensive ways to solve transportation problems. These less expensive solutions often can be implemented more quickly than major transportation projects (for example, transit priority improvements). Second, find more money. The CTP recommends that San Francisco pursue both these strategies and continue to plan and prioritize long-term projects by completing the initiatives outlined below.



Muni Strategic Expansion Plan

The CTP recommends that the Authority work with Muni to evaluate the potential of expanding the proposed Central Subway from its current terminus at Clay Street to include the North Beach line and Geary Subway (to Laguna Street). The study will also consider other long-term Muni expansion projects and funding for these projects.

One purpose of this feasibility assessment will be to determine if constructing the entire proposed Muni subway network at the same time would reduce costs, accelerate the timetable and minimize construction disruptions. This effort should not delay Muni's current activities of moving the Central Subway Project forward.



Transit Preferential Corridor Strategic Plan

The CTP recommends that the Authority work with Muni, DPT and the Planning Department to develop a San Francisco Preferential Corridor Strategic Plan. This plan would outline a program for full implementation of a transit priority network in San Francisco. The CTP outlines a process for analyzing the City's transit priority corridors, prioritizing corridors for improvements, and defining the necessary improvements. Furthermore, the CTP recommends funding for these improvements in Component 2.

The objective of this study will be to identify a high priority corridor and implement these low-cost but highly effective projects quickly, in order to significantly improve Muni service and increase public support for implementation of transit priority on other corridors.

Supercorridor Feasibility Study

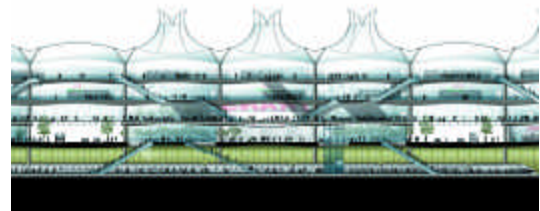
The CTP recommends that the Authority prepare a feasibility study of the "Supercorridor" idea to provide information and facilitate a well-informed decision about whether or not this action should be pursued.

Supercorridors are underground roadways paid for by tolls. They are designed to take through traffic off surface streets so that the surface street space can be used to provide dedicated transit lanes, widen pedestrian areas and construct bike lanes. Of the range of market-based actions identified in the CTP, this proposal has the ability to leverage the largest amount of private money for improving San Francisco's transportation system and therefore warrants careful consideration.



San Francisco Caltrain Implementation and Financing Plan

The CTP recommends that the Authority work with the Mayor's Office, City agencies and Caltrain to improve and expand Caltrain operations in the City as outlined in Proposition H. Proposition H was approved by San Francisco voters in 1999. An implementation and financing plan, focused on converting the Caltrain line from diesel to electric propulsion compatible with high speed rail and extending the Caltrain rail line to a regional transit station near downtown, should be developed. As part of the extension, a new or rebuilt terminal on the present site of the Transbay Transit Terminal, serving Caltrain, regional and intercity bus lines, Muni, and high speed rail with a convenient connection to BART and Muni Metro, will also be included in the plan.





Activity Center Plans

The CTP recommends that the Authority support the development and implementation of Activity Center Plans to better link transportation and land use in defined geographic areas throughout San Francisco. These plans - currently being carried out by the Planning Department under their "Better Neighborhoods 2002" program - have the potential to improve neighborhood livability, increase pedestrian safety, reduce local congestion, and support transportation alternatives. As such, they are an excellent investment in our City's future.

The CTP supports this planning effort through development of a transportation forecasting model which can be used to identify effective improvements to include in the Activity Center Plans; and by recommending funding for the pedestrian, bicycle and transit priority programs in the CTP Component 2 to implement improvements identified in these plans.



San Francisco and Regional Planning Partnership

The CTP recommends that the Authority begin efforts to create a more effective Regional Planning Partnership. As outlined above, under current funding assumptions there is no funding available for major expansion of San Francisco's or the region's transit system. This partnership will help prioritize projects and programs, develop a funding plan for regional projects, and establish coordinated advocacy positions for additional funding. An important objective of this partnership will be to advocate solutions that include funding for capital projects and their maintenance and operation needs - rather than leaving to be addressed after the project is constructed.



New Revenue Plan

The CTP recommends that the Authority work with other local and regional agencies to develop a New Revenue Plan to address the critical shortfall in funding for transportation improvements. The focus of this plan will be on identifying new funding sources and increasing existing sources of funds. Market-based measures should be considered in this analysis.

FUTURE TRANSPORTATION CONDITIONS

Preparation of the CTP was constrained by the fact that, given the expected huge shortfall in transportation funding even for maintaining our existing transportation system, there was not a significant amount of money left for expansion projects. This meant that one of the elements of a typical plan - evaluation of alternatives - in this case, had limited value. How could we evaluate not spending the money needed to keep the existing system operating?

Given the CTP's constraints, a somewhat different approach was used to evaluate future transportation conditions. The CTP evaluates two improvement scenarios: first, with implementation of CTP Components 1 and 2; and, second, with implementation of all four CTP Components. Exhibit E-4, E-5 and E-6 present the major output data comparing existing to future conditions under the 1998 baseline versus full implementation of all four components of the CTP.



Exhibit E-4 Daily Person Trips by Mode Within San Francisco			
MODE	1998 Conditions	Future Conditions	Difference
Auto	775,400	871,000	+95,600 (12%)
Transit	588,700	682,300	+93,600 (16%)
Other	503,200	564,000	+60,800 (12%)
Total	1,867,300	2,117,300	+250,000 (13%)

Exhibit E-5 Daily Person Trips by Mode To/From San Francisco			
MODE	1998 Conditions	Future Conditions	Difference
Auto	980,700	1,166,100	+185,400 (19%)
Transit	216,200	288,800	+72,600 (34%)
Other	8,000	9,300	+1,300 (16%)
Total	1,204,900	1,464,200	+259,300 (22%)

Daily Person Trips by Mode Within and To/From San Francisco

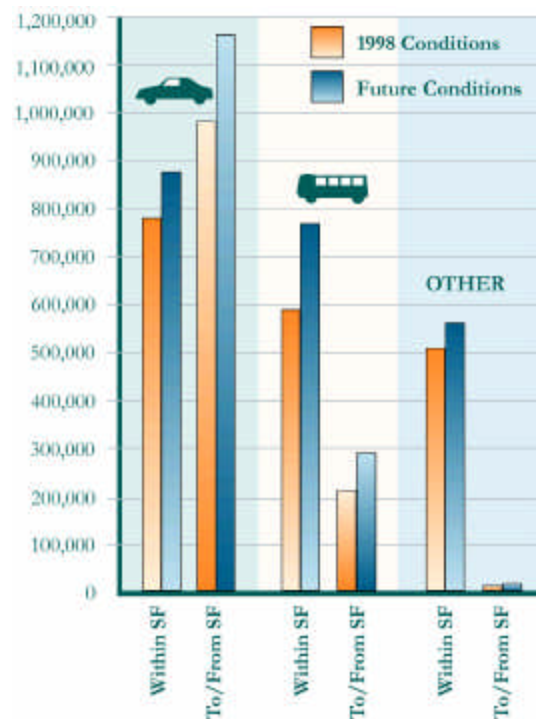




Exhibit E-6 AM Peak Period Travel Data			
	1998 Conditions	2020 Conditions	Difference
Vehicle Miles Traveled	417,700	495,800	+78,100 (19%)
Vehicle Hours Traveled	14,500	17,900	+3,400 (23%)
Muni Transit Trips	231,400	280,400	+49,000 (21%)
Regional Transit Trips into SF	66,200	93,900	+27,700 (42%)
Regional Transit Trips out of SF	26,100	37,800	+11,700 (45%)

As shown in Exhibit E-6, full implementation of all four CTP components would result in a 21% increase in Muni transit trips (49,000 trips), and a 43% increase in regional transit trips (39,400 trips) during the AM peak period. These increases will result a one percent increase in mode share for transit.

It is important to keep in mind that computerized transportation forecasting models have inherent limitations. While models help us understand how demographic changes and transportation investments impact transportation conditions, models only partially represent reality. For example, in this case, the model is unable to account for conceptual actions that are not geographically defined. Given the limitations in both the model's accuracy and application, the Authority staff believes that implementation of all the CTP recommendations would, in reality, result a greater shift in mode split in favor of transit and other alternative modes of travel.

For future purposes, the Authority has developed a San Francisco transportation model as part of the CTP development process so that the impacts of local projects can be assessed more accurately. This local model will be used in the future for local planning studies, including Corridor Plans and Activity Center Plans and CTP updates.

A FINAL WORD

This plan presents a transportation scenario not unlike many other plans; namely, transportation conditions are bad, getting worse, and there is not enough money to really do much about it. Under such a scenario we are faced with two options, continuing down the same road or proposing a new approach.

Continuing down the same road is not an option if we want to protect San Francisco's livability and economic growth. But, choosing a new path will be politically difficult and requires trying things that may not work. Therefore, CTP recommends some non-traditional ideas, which if implemented, could lead us to a different future. Interestingly, these ideas call for change at all levels of transportation planning, starting at the neighborhood level, moving through the city level and then on to the regional level.

On the neighborhood level, the Activity Center Planning process will enable San Francisco to plan a more integrated transportation and land development pattern. Activity Center Planning will identify improvements such as traffic calming measures, support for vehicle substitution programs like carsharing, implementation of bicycle routes and transportation coordinated land use changes. These neighborhood-level changes will generate entirely new behaviors - behaviors based less on driving and more on walking, bicycling and transit use.



The impact of these neighborhood changes is impossible to precisely evaluate in large area transportation models, but they can significantly improve local transportation conditions and, as they are replicated throughout San Francisco, improve the entire City's transportation system. These changes will cause a gradual shift in behavior that will improve transportation conditions and neighborhood livability.





Given San Francisco's huge shortfall in funding all the needed transportation improvements, developing plans for our neighborhoods and commercial centers that focus on changing behavior to support new ways of getting around makes great sense. Nor is this a novel approach: cities from Portland to Munich, Seattle to Zurich, and even Los Angeles have started moving in this direction. The CTP recommends that San Francisco join this group of enlightened cities and move forward on the path towards a more livable and accessible city.



At the City level, the CTP focuses on connecting San Francisco's neighborhoods and centers by improving movement options on our transportation corridors. The objective will be to move transit, bicycles, pedestrians, taxis, automobiles and trucks safely and efficiently through our city with minimum impact on neighborhood livability. San Francisco's most important transportation policy is its Transit First Policy and therefore the CTP recommends developing a strategic plan to implement transit preferential streets on corridors throughout the city. As part of implementing transit priority improvements, other changes to our streets can be made to increase pedestrian safety, improve bicycling and reduce the impact of goods delivery on transportation conditions.

Another corridor recommendation is to study a new idea for transportation - using the private sector to construct underground toll-funded roadways. Putting cars and trucks underground would free surface space to be used for transit, bicycles and improving neighborhood livability. Clearly this is a controversial idea, but given the need for bold new approaches for improving transportation it bears fair consideration.



Finally, on the regional level the CTP recommends that San Francisco become more active in regional planning and policy-making. One of the Bay Area's biggest challenges is to better coordinate our regional transportation investments with development patterns. Put simply, major new public transit system investments should be focused on areas with land use development that supports substantial transit ridership. Making huge capital investments in areas with limited ridership potential is irrational public policy. Certainly, people throughout the Bay Area deserve good transit service, but there is a range of transportation investment options and - for the good of the whole region - it is best to select the most cost effective option for each market.

An important step in improving regional transportation is enabling people to transfer effortlessly between Bay Area's transit systems. Without well-coordinated systems, individual transit operators compete with one another for funding and seek to grow themselves rather than asking passengers to transfer. Transferring between sys-

tems is an easy and common process in well-run systems throughout the United States and the rest of the world. Why not here? Better coordinating our regional transit systems has the potential to significantly improve the cost effectiveness of the Bay Area's transit capital investments and free funding for critical new regional transit improvements.

A second critical regional issue is land use planning. Communities throughout the Bay Area - including San Francisco - must begin planning to reduce transportation impacts in a manner acceptable to their community. If a majority of Bay Area communities focused on locating employment and housing near transit, balancing jobs and housing, and supporting alternative transportation modes in their Specific and General Plans, they could significantly improve the region's transportation system. Communities that take these types of actions should be rewarded with preferences for regional transportation funding.

Taking this approach to regional planning demands hard work and careful thinking - to say nothing of strong political fortitude. Improving regional planning will allow the Bay Area's cities and counties to work together more effectively in planning development and allocating transportation capital dollars to improve the Bay Area's transportation system.

In summary, the CTP outlines several innovative approaches to improving San Francisco's transportation system. From changing land uses and supporting alternative transportation on the neighborhood level in Activity Center Planning, to connecting city neighborhoods with inexpensive transit priority corridors, to coordinating land use and major transportation investments at the regional level, this CTP lays out an ambitious new path for San Francisco and the region.



Transportation Authority:

Michael Yaki (Chair)
Gavin Newsom (Vice Chair)
Tom Ammiano
Alicia Becerril
Sue Bierman
Amos Brown
Leslie Katz
Barabara Kaufman
Mark Leno
Mabel Teng
Leland Yee

Andrew B. Nash, P.E. (Executive Director)

Planning Participants:

San Francisco Citizens
TA Citizens' Advisory Committee
TA Technical Working Group

Consultants:

Wilbur Smith Associates
Dowling Associates
3D Visions
SMWM
Nancy Whelan Consulting

Photographs:

BART
Friends of the Urban Forest
GGBHT
Port of San Francisco
San Francisco Department of Parking and Traffic
San Francisco Department of Public Works
San Francisco Planning Department
Tree Corps

For permission to reproduce the photographs in the CTP, please contact the TA at 415-522-4800.