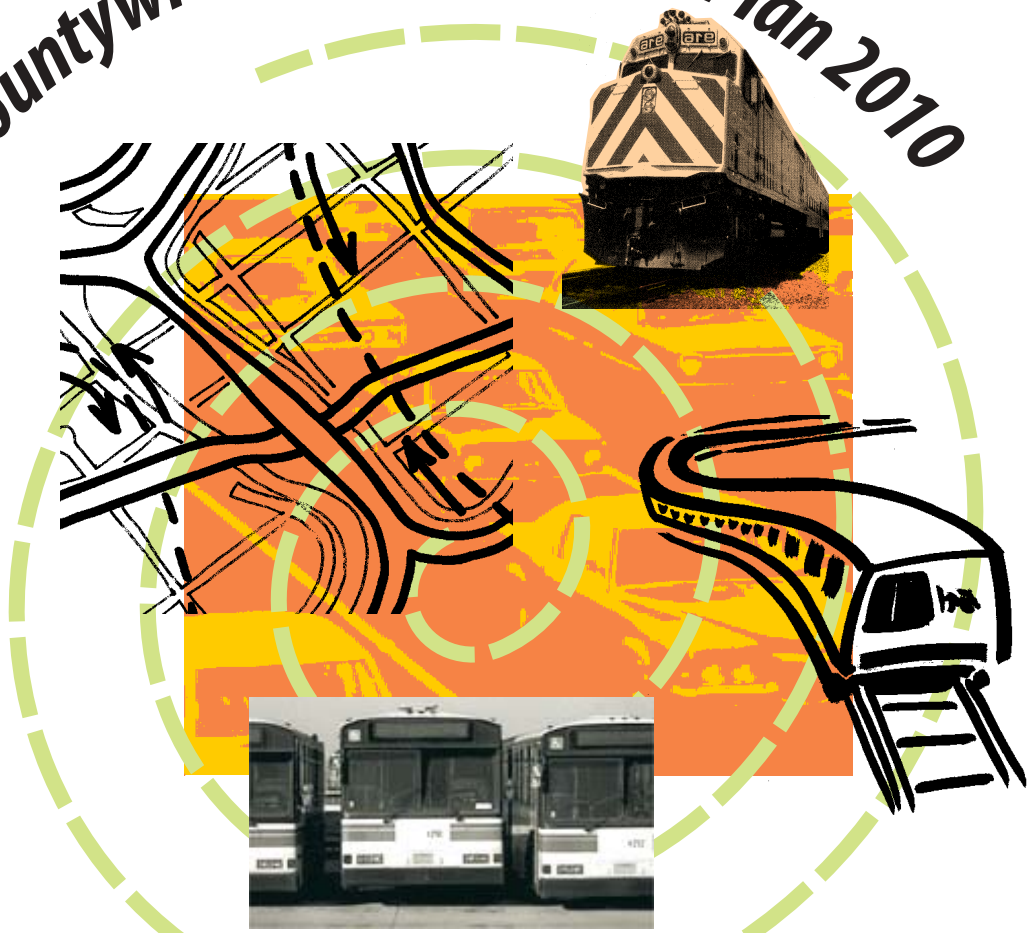
April 2001

Countywide Transportation Plan 2010



San Mateo County

City/County Association of Governments of San Mateo County (C/CAG)

Adopted January 18, 2001

In association with
The Cities of San Mateo County
San Mateo County Transit District (SamTrans)
San Mateo County Transportation Authority (TA)

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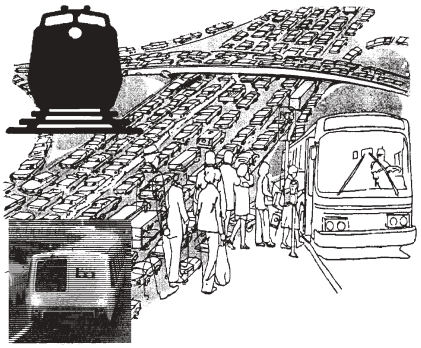
Chapter 1

Executive Summary



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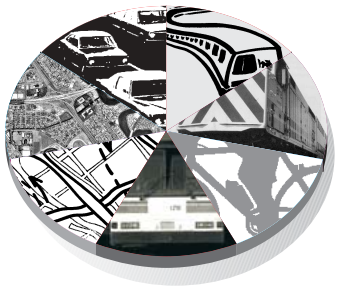
What is the CTP? The CTP is a plan...

...for **all** modes (roads, Caltrain, SamTrans, BART, bicycles)

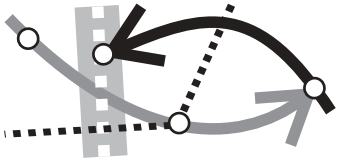


...that looks at all modes as **one** system.

...that advocates **policy**, not projects.

It is **not** a capital improvement program.

...whose policy is derived from understanding



the relational **interaction** between the modes.

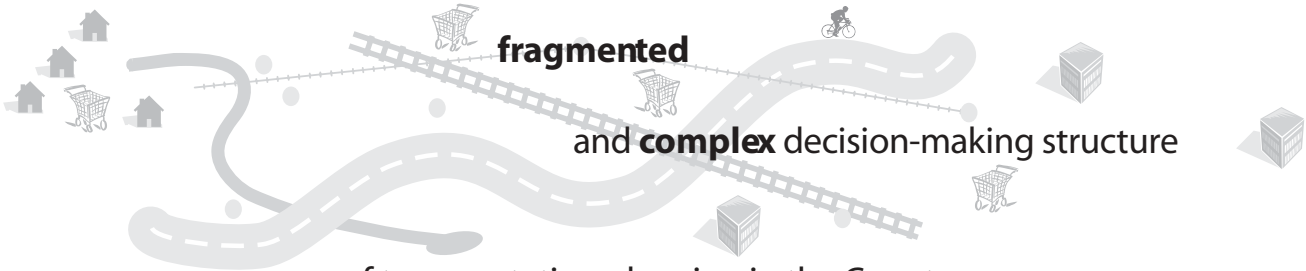
...that strives for **synergy** among the parts of the transportation system:

the whole is greater than the sum of the parts.

...that seeks to develop the parts of the system to the **optimal** size, ...rather than the maximum.

...that provides critical information to help make **informed** decisions.

...that recognizes the **decentralized**,



fragmented

and **complex** decision-making structure

of transportation planning in the County.

...that seeks to **coordinate** decision-making,

... relying on **cooperation** and not enforcement.

Goal:

Reduce Traffic Congestion in San Mateo County

Improve mobility.

Reduce congestion.

Increase access.

Improve air quality.

Increase economic vitality.

Improve the coordination of land use and transportation planning.

Increase reliability.

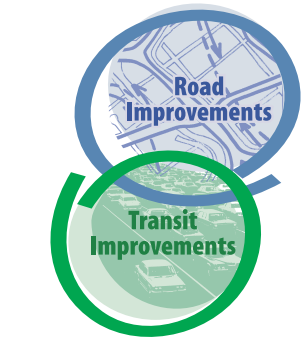
Increase safety.

Objectives:

Increase CAPACITY and PERFORMANCE (safety, reliability, convenience) of all transportation systems

Increase DEMAND for transit travel

Decrease DEMAND for automobile travel, especially single-occupant



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Strategy:

Attack Congestion on 5 Fronts !

Roads

Increase the EFFICIENCY of the EXISTING highway system. (Auxiliary lanes, interchange improvements, ramp metering)

Transit

Increase CAPACITY, SERVICE LEVELS, and SAFETY of transit systems. (Caltrain: track rehabilitation, station enhancements, faster and more trains, electrification) (SamTrans: feeder system to Caltrain and BART) (BART: model and analyze four scenarios to San Jose; test for cost-efficiency)

Land Use

Increase SUPPLY and DENSITY of housing and employment in transit corridors. (Transit Oriented Development)

Transportation Systems Management

Increase programs to reduce the demand for SINGLE OCCUPANT AUTOMOBILE travel. (Ridesharing, shuttles, telecommuting, ramp metering)

Pricing

Initiate modest pricing programs that cause a SHIFT from automobile to transit travel. (Eliminate free parking, pay for parking with a commute allowance in exchange)

Results:

Market Share - Auto vs Transit

(work trips)

	1990		2010 Projected		2010 Goal	
Drive Alone	519,906	(77.9)	598,153	(75.5)	475,487	(60.0)
Shared	97,979	(14.7)	106,815	(13.5)	158,496	(20.0)
Transit	49,813	(7.5)	87,510	(11.0)	158,496	(20.0)
Totals	667,681	(100.0)	792,478	(100.0)	792,478	(100.0)

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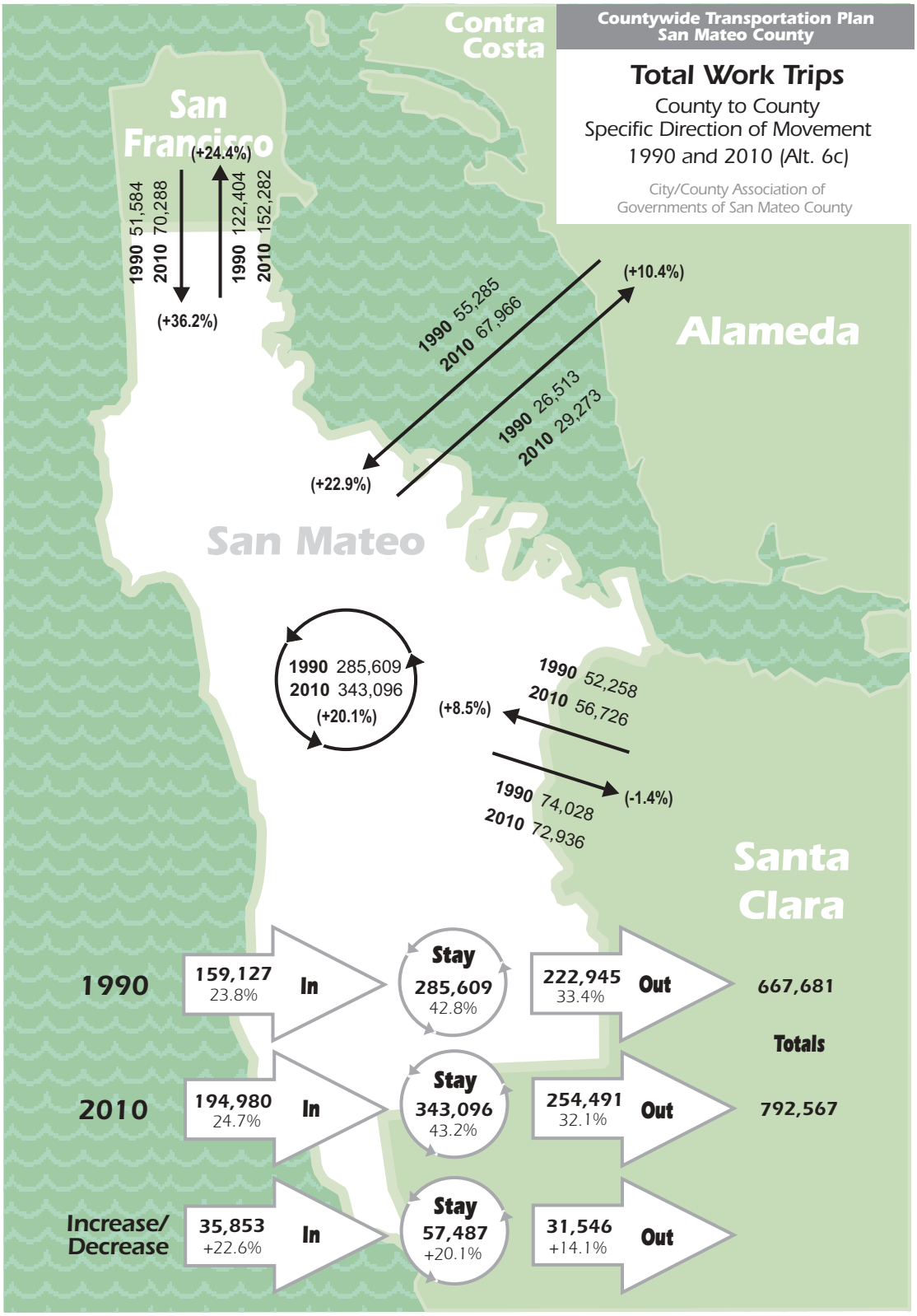
Commute Patterns

Exhibit 1.1



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Commute Patterns

Facts and Findings

Commuting

In 2010, in and out-commuting will continue to be high in San Mateo county.

Out Commuting

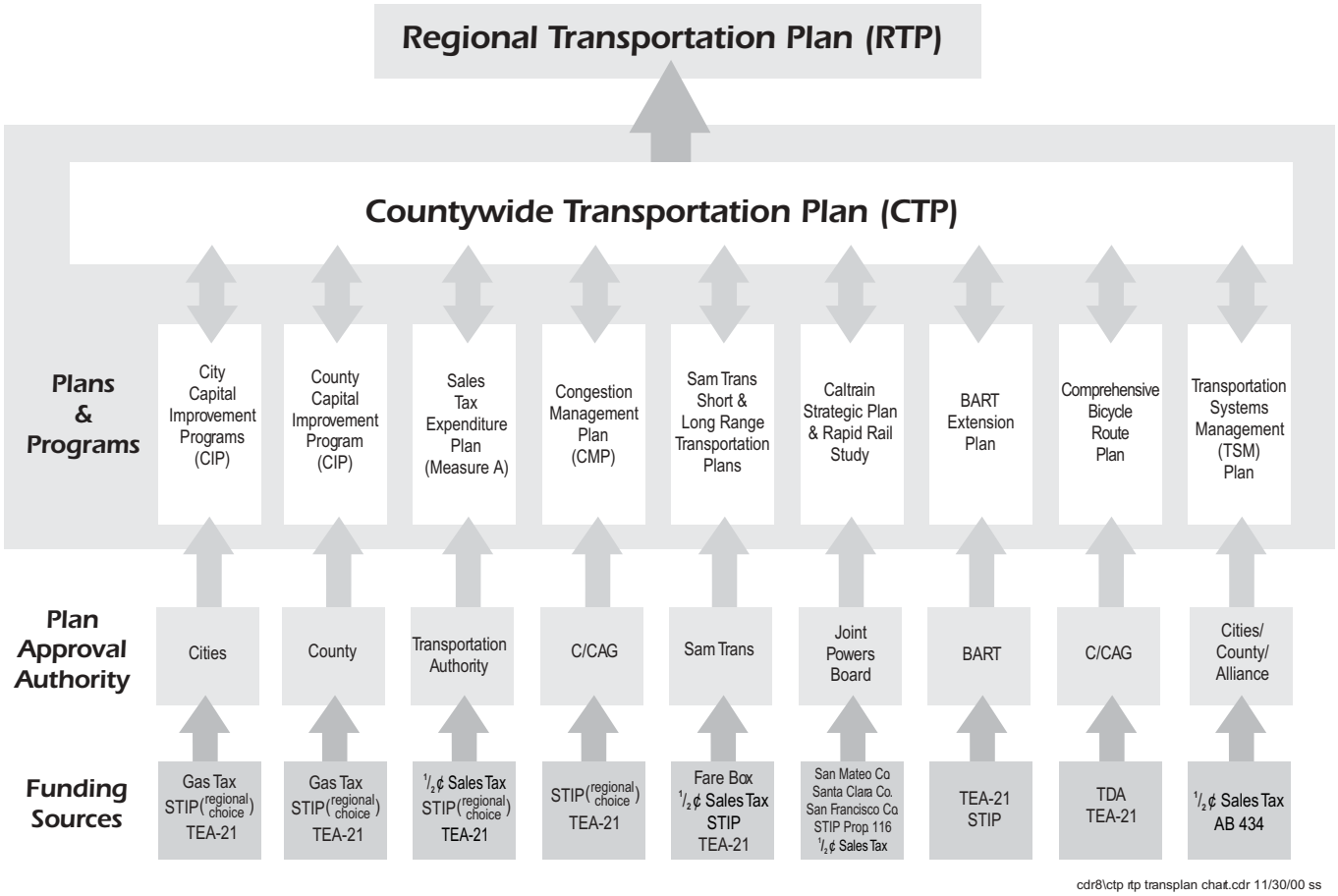
In 2010, as in 1990, a relatively high percentage (43%) of San Mateo County residents will commute to jobs in other counties. In 1990, this was the highest percentage of out-commuting for any county in the Bay Area.

In Commuting

In 2010, as in 1990, a relatively high percentage of workers (36%) in the County will be non- resident workers who commute in from other counties. In 1990, this was the second highest percentage of in-commuting for any county in the Bay Area.

Exhibit 1.2

Relationship of Transportation Plans



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Market Share

Exhibit 1.3

Market Share (Trips) - 2010

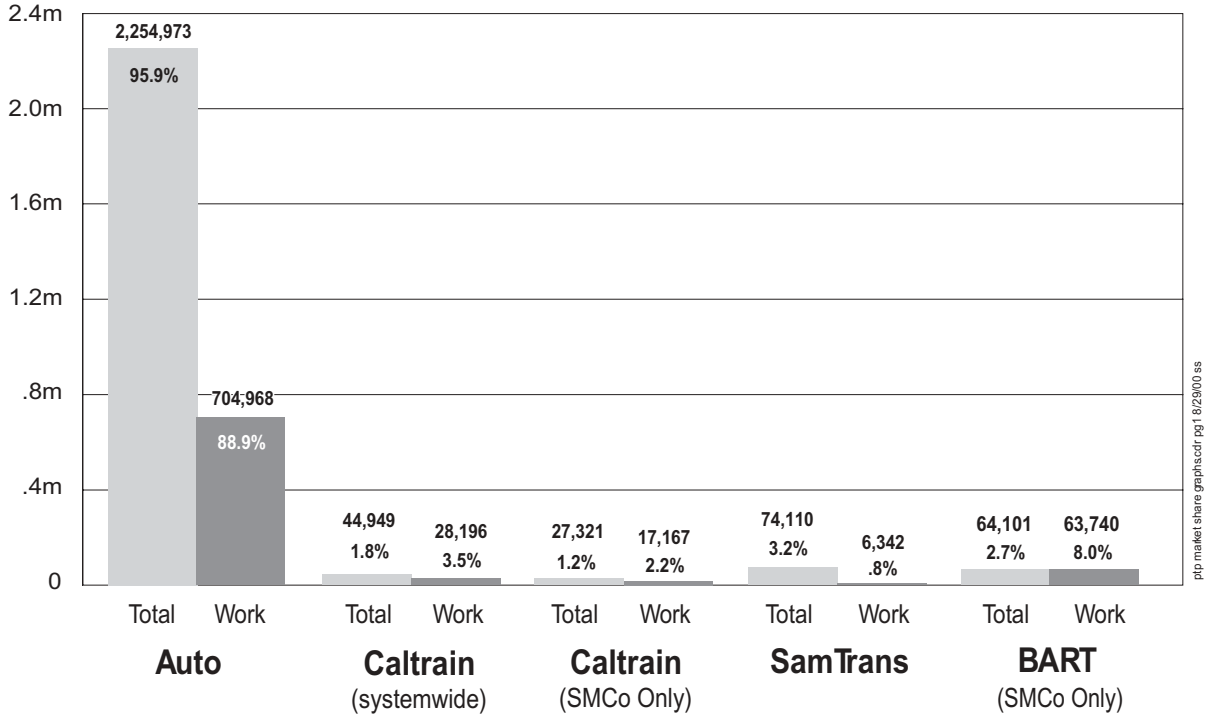
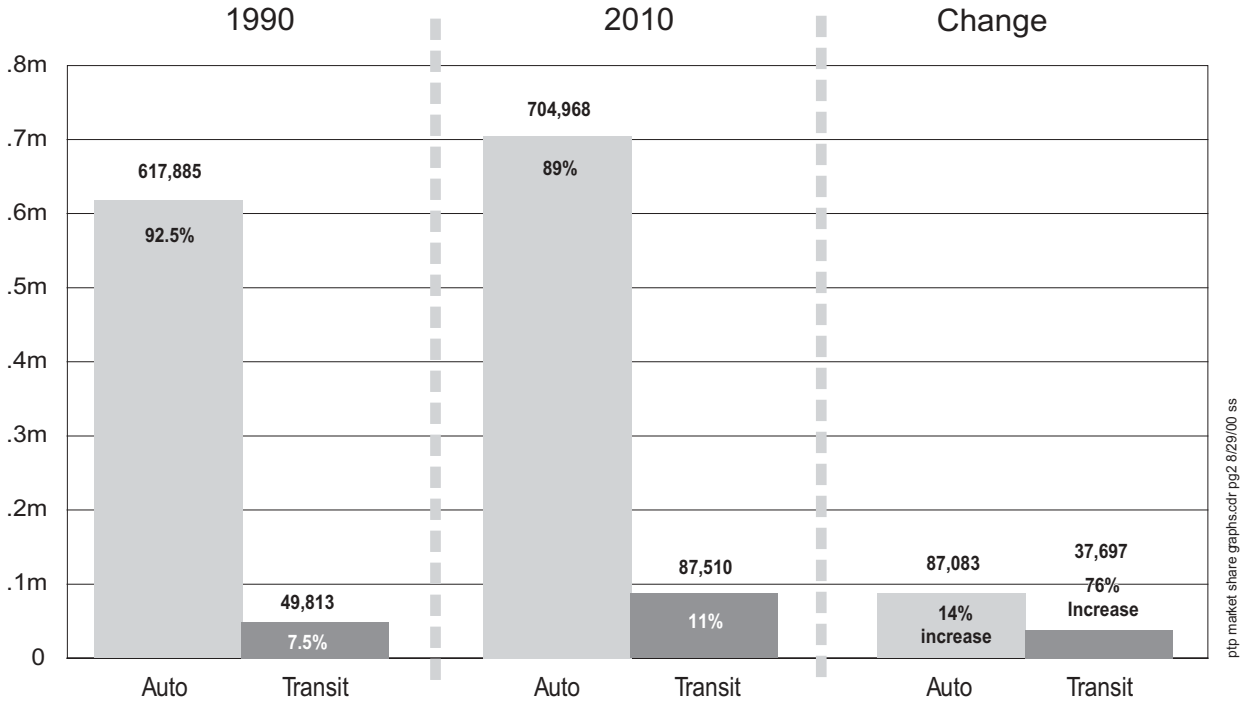


Exhibit 1.4

Projected Change Market Share 1990 - 2010 (Work Trips)



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Market Share

Exhibit 1.5

Change in Market Share Goal (Work Trips)

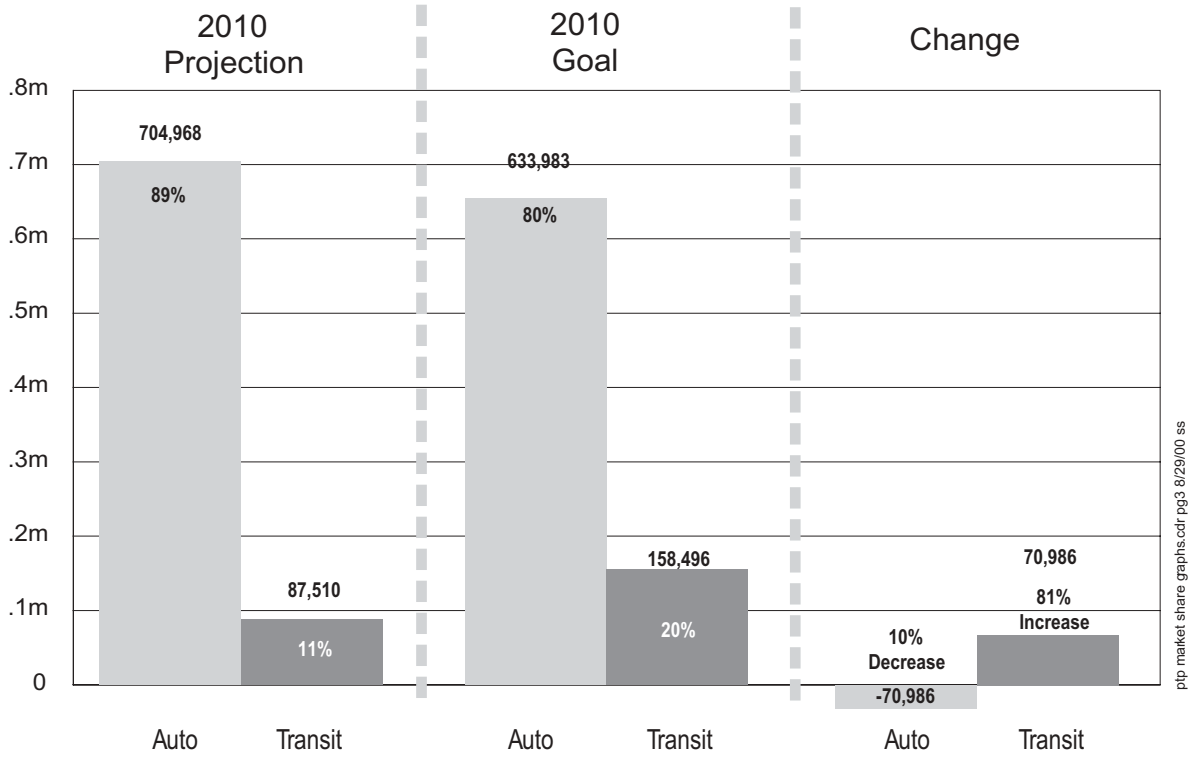

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Exhibit 1.6

Comparison of Transit Market Shares

United States Region	
1990	
New York	28%
Washington D.C.	14%
Chicago	14%
Bay Area	9%
Atlanta	5%
Los Angeles	5%

Bay Area County	
2010	
San Francisco	36%
San Mateo	11%
Alameda	10%
Contra Costa	10%
Marin	10%
Santa Clara	3%

ptp market share graphs.cdr pg4 8/29/00 ss

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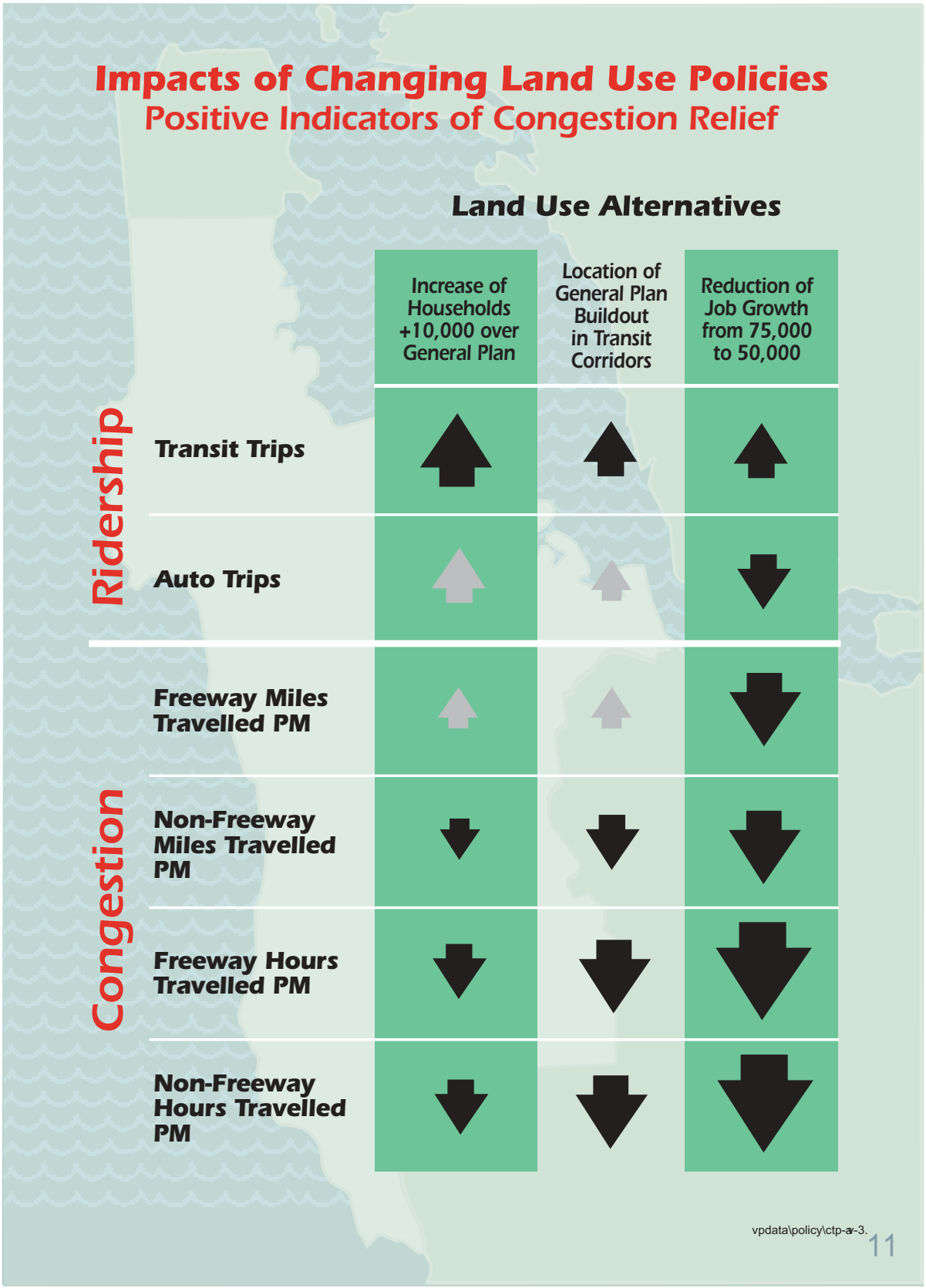
Exhibit 1.7



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Land Use

Major Findings

Land Use Impacts on Congestion

Land use patterns and densities have a significant effect on congestion.

Adding 10,000 more housing units than allowed by General Plans may increase the number of automobile trips; however, it potentially relieves congestion, because more people can live closer to their jobs.

Adding more housing units in transportation corridors may relieve congestion, because more people can live closer to their jobs and transit becomes a more attractive mode of transportation.

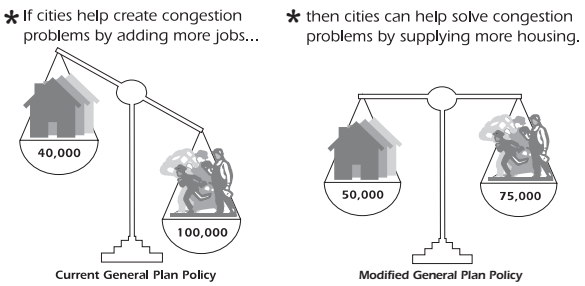
Reducing job growth in the County by 25,000 jobs significantly reduces congestion.

Housing Shortfall

In 2010, there will be a shortfall of 15,600 to 20,600 housing units in the County.

Ninety (90) percent of the shortfall will be for rental units. Ninety-five (95) percent of the shortfall will be for households with incomes less than $43,000 (1996 dollars).

Relieving Congestion through Jobs-Housing Balance



Key Policies

Integration of Land Use and Transportation Planning

Integrate land use and transportation planning.

Fiscal Land Use Planning

Promote new State property tax, sales tax, and revenue sharing legislation that would increase incentives for better land use planning.

Discourage land use planning in which decisions are primarily influenced by fiscal considerations.

Jobs/Housing Equation

Promote the creation of enough ownership and rental housing units at prices affordable to meet the needs of existing or potential households who work in the County.

Strongly encourage the creation of housing units in or near jurisdictions which have an excess of jobs.

Strongly encourage the creation of jobs in or near jurisdictions which have an excess of housing units.

Discourage creation of jobs in or near jurisdictions which have an excess of jobs over housing.

Transit Oriented Development

Promote high density residential, employment, and mixed-use development in transit corridors throughout the County.

Promote the redevelopment of city cores along and near the Caltrain and BART systems as not only retail but employment and housing centers.

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Exhibit 1.8

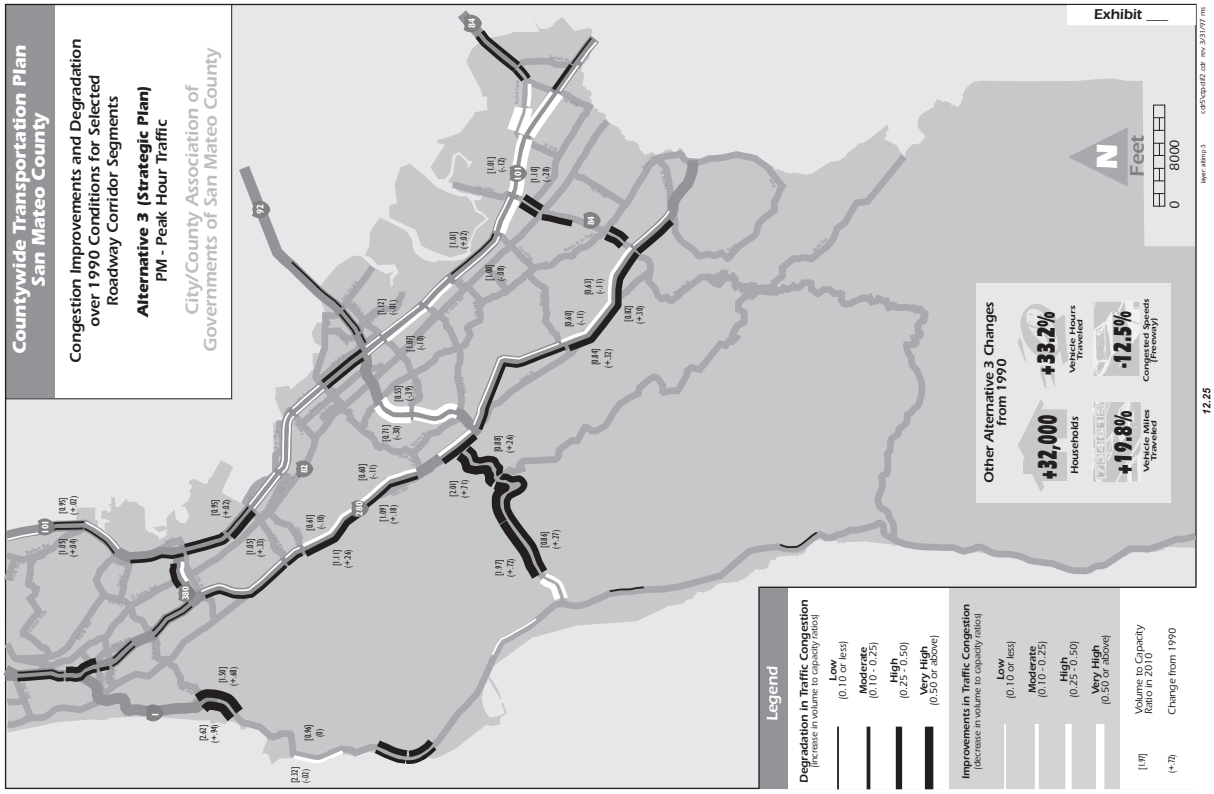
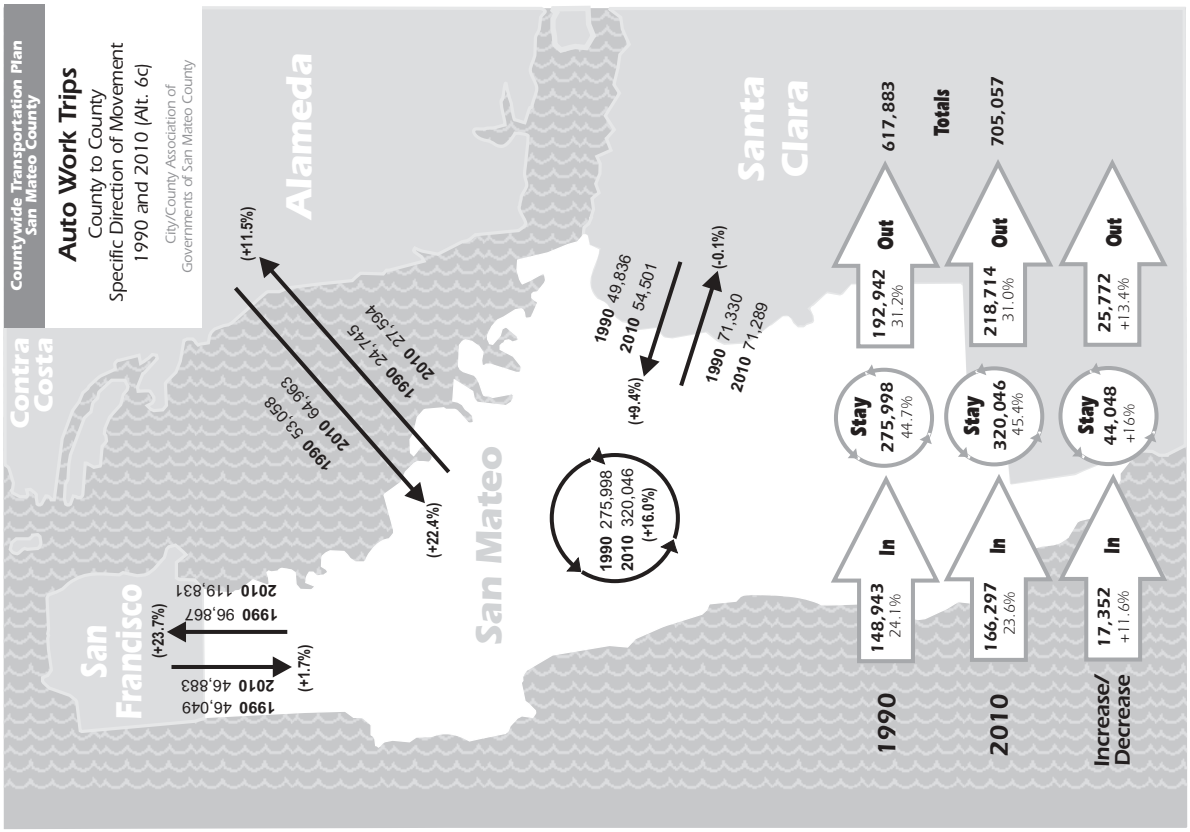


Exhibit 1.9



Roads

Major Findings

Total Automobile Trips

The automobile is currently the dominant mode of travel in the County (97 percent of all trips) and will remain the dominant mode of travel (95 percent of all trips) in 2010.

Automobile Work Trips

The automobile is currently the dominant mode of travel in the County for work trips (94 percent), but transit improvements (e.g.: BART SFO Extension, Caltrain improvements) will reduce its dominance to 89 percent of work trips.

Strategic Plan Projects

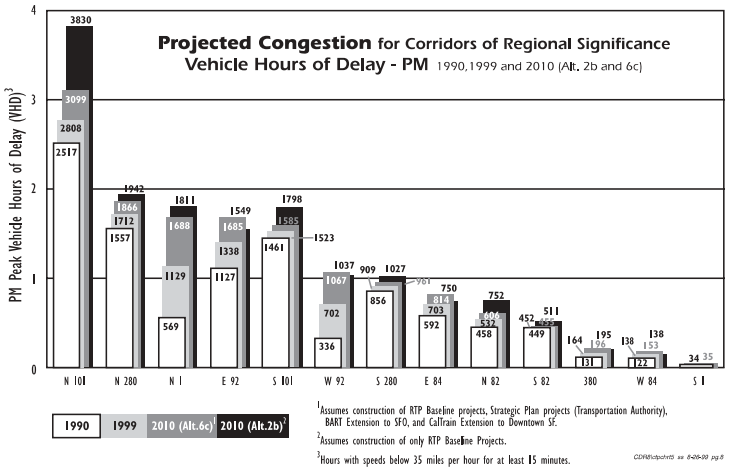
The Transportation Authority's Strategic Plan projects (e.g.: auxiliary lanes, interchange improvements) are significant highway improvements, because they make 2010 conditions on many segments of 101 better than those of 1990 and help relieve growing congestion on 101

Congested Corridors - Measured in Vehicle Hours of Delay

In 2010, the most congested corridors will be: N 101 (22% of all congestion), N 280 (13% of all congestion), N 1 (12% of all congestion), E 92 (12% of all congestion), and S 101 (11 percent of all congestion).

Congested Corridors - Measured in Volume to Capacity Ratios

In 2010, the most congested corridors will be: W 92, S 101, N 101, 380, and E 84.



Key Policies

Priorities for Types of Roadway Strategies and Improvements

Give priorities to improvement projects which are projected to be the most congested in 2010. Set the following priorities for addressing roadway congestion:

- Pursue strategies to reduce automobile travel demand (i.e.: TDM).
- Make operational and safety improvements to increase efficiencies of existing roadways.
- Make maintenance and rehabilitation improvements to improve conditions of existing roadways.
- Make capacity improvements.

Priorities for Location of Roadway Improvements

Give priority to improvement projects which are in the most congested corridors. Set the following priorities for making operational, safety, maintenance, rehabilitation, and capacity improvements in roadway segments:

- Existing segments at LOS F.
- Existing segments with high Vehicle Hours of Delay.
- Projected segments at LOS F.
- Projected segments with high Vehicle Hours of Delay.

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Exhibit 1.10

Change in Transit Market Share 2000 - 2010 Total Trips

Exhibit 1.11

Roles of Major Transit Modes

SamTrans	❖ **Short-distance** feeder service to CalTrain and BART stations ❖ **Short-distance** service from City to City ❖ **Short-distance** service to transit dependent populations within County
CalTrain	❖ **Long-distance** commuter service to SF and Silicon Valley
BART (to Millbrae)	❖ **Short-distance** commuter service to SF and SFIA
BART (to San Jose)	❖ **Long-distance** commuter service to SF, Silicon Valley, and East Bay
High Speed Rail	❖ **Long-distance** transit service between SF and LA. ❖ **Fast long-distance** commuter service to and from SF, Peninsula, and Silicon Valley.

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Transit

Major Findings

Projected Ridership

In 2000, total transit ridership is 119,347 trips per day.

In 2010, total projected transit ridership is 182,800 trips per day.

In 2010, total projected transit ridership is 4 percent of market share.

In 2010, projected work ridership is 11 percent of market share.

Projected Caltrain Ridership

Between 2000 and 2010, Caltrain ridership is projected to increase 12,513 (39 percent increase) from 32,513 to 44,950.

Caltrain market share among transit systems will decrease from 27 to 24 percent.

Ridership increases are due to a service level of 86 trains and 25 percent reduction in travel times.

Projected BART Ridership

Between 2000 and 2010, BART ridership is projected to increase 35,960 (129 percent increase) from 27,780 to 63,740.

BART market share among transit systems will increase from 23 to 35 percent.

Ridership increases are due to the BART SFO and Millbrae Extension.

90% of BART trips will be work trips.

Projected Sam Trans Ridership

Between 2000 and 2010, SamTrans ridership is projected to increase 14,980 (25 percent increase) from 59,130 to 74,110.

SamTrans market share among transit systems will decrease from 50 to 41 percent.

Key Policies

Performance Objectives for a Comprehensive Transit System

Market Share - Increase transit system market share in 2010 (i.e.: percentage of transit trips) from a projected 11 to 20 percent for work trips and from a projected 5 to 10 percent for all trips.

Capacity - Increase transit system capacities (i.e.: rolling stock, frequency, ridership).

Cost Effectiveness - Ensure cost effectiveness of transit system improvements and operations.

Performance - Increase transit system performance (i.e.: reliability, convenience, comfort, safety).

Transit Time - Decrease rail transit travel times by at least 25 percent. Decrease transit system travel times to 45 minutes between San Jose and San Francisco.

Access - Increase transit system access (i.e.: automobile, bus, bicycle).

Integration - Increase integration of transit system modes (i.e.: connections, linkages, transfers, passes).

Duplication - Avoid duplication within the transit system (i.e.: redundancy, competition).

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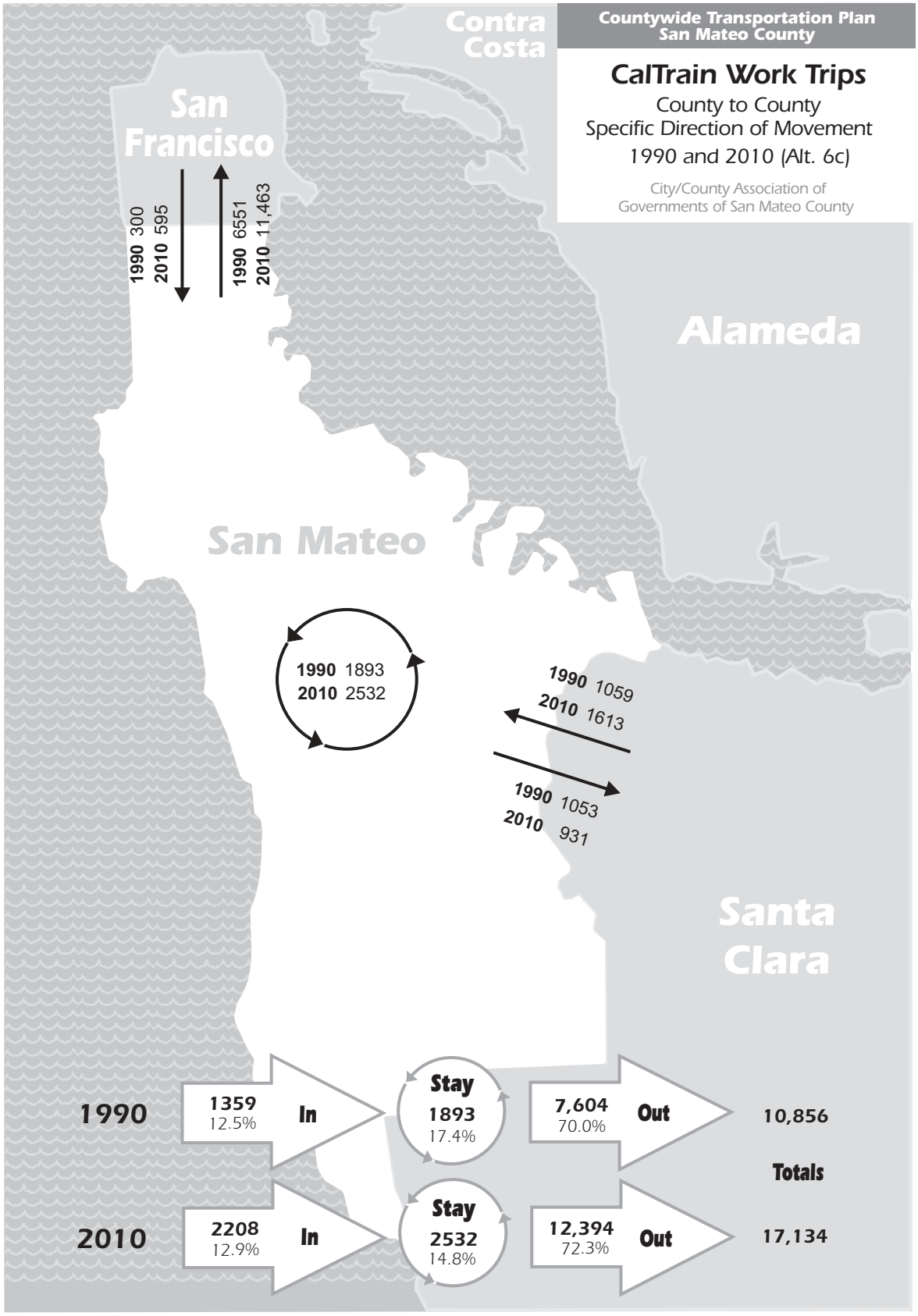
Exhibit 1.12



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Caltrain

Major Findings

Projected Ridership

In 2000, ridership is 32,437 trips per day. In 2010, maximum ridership could reach 52,000 trips per day (58 percent increase).

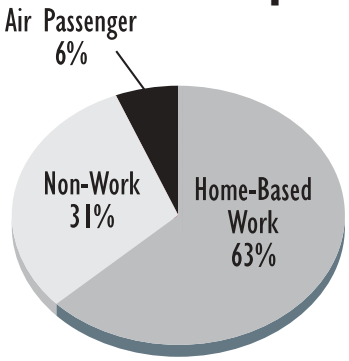
Effectiveness of Specific Improvements

The improvements which increase ridership the most are:

- Increasing daily trains from 60 to 86 generates 11,711 new riders at a cost of $_____ million.
- Building the San Francisco Downtown Extension generates 7,439 new riders at a cost of $800 millions or $107,541 per new rider.
- Reducing travel times by 25 percent generates 6,662 new riders at a cost of $533 millions or $80,006 per new rider.

Exhibit 1.13

Type of Caltrain Trip



County to County Work Trips

In 2010, the major linkages in County to County work trips will be from:

- San Mateo County to San Francisco County: 12,779 work trips, 43 percent market share, 46 percent increase over 1990, 40 percent of growth.
- Santa Clara County to Santa Clara County: 6,566 work trips, 22 percent market share, 71 percent increase over 1990, 32 percent of growth.

Key Policies

First-Class System

Develop Caltrain into a first-class rail system for the 21st Century.

Express Trains

Invest in increasing the number of express trains per day which reduce run times in order to maximize ridership.

Run Time Reductions

Fund capital improvements that result in faster run times.

Policy Resolution

Encourage the Joint Powers Board and the Transportation Authority to resolve policy differences for Caltrain improvements.

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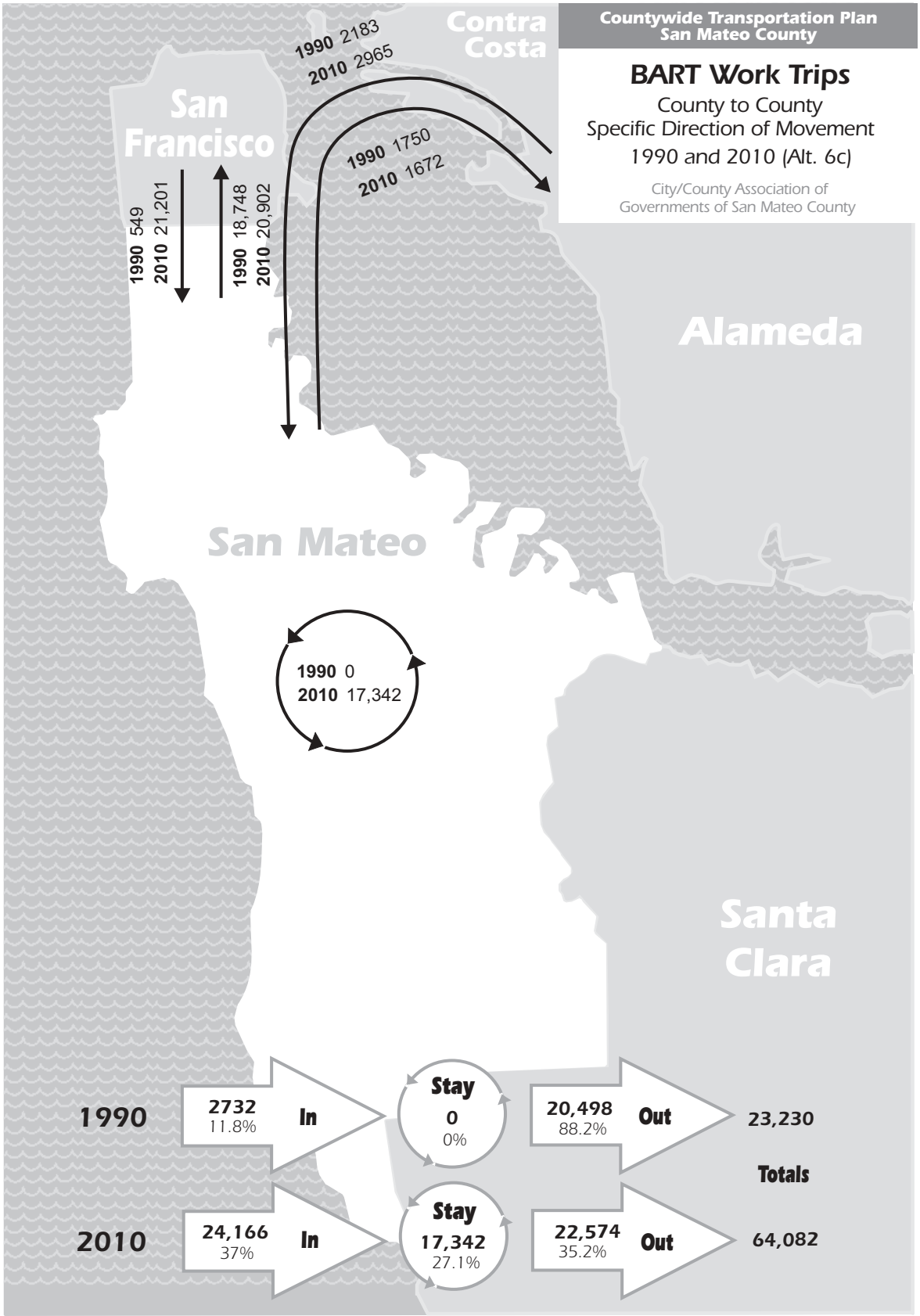
Exhibit 1.14



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BART

Major Findings

Projected Ridership

In 2000, ridership is 27,780 trips per day.

In 2010, after the BART SFO and Millbrae Extension is complete, projected ridership is 64,000 trips per day (100 percent increase).

Auto Work Trip Reduction

In 2010, the BART SFO and Millbrae Extension will reduce auto work trips by 27,240 (3.7 percent decrease).

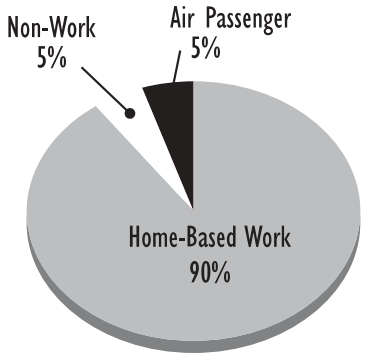
County to County Work Trips

2010, the major linkages in County to County work trips will be from:

- San Francisco to San Mateo County: 21,201 work trips, 33 percent market share, 3,760 percent increase over 1990, 50 percent of growth.

Exhibit 1.15

Type of BART Trip



- San Mateo to San Francisco County: 20,902 work trips, 33 percent market share, 11 percent increase over 1990, 5 percent of growth.
- San Mateo to San Mateo County: 17,342 work trips, 27 percent market share, 42 percent of growth.

Key Policies

Analysis of Potential Alternatives

During the next two years, analyze the feasibility of potential BART extensions south of Millbrae, forecast travel demand, estimate costs, conduct cost-benefit analyses, determine funding availability and length of time for implementation.

Justification for a BART Extension South of Millbrae

Consider a BART extension south of Millbrae only if analysis shows that:

- BART generates net new transit riders thereby increasing total transit trips, and
- The number of net new riders demonstrates its cost-effectiveness.

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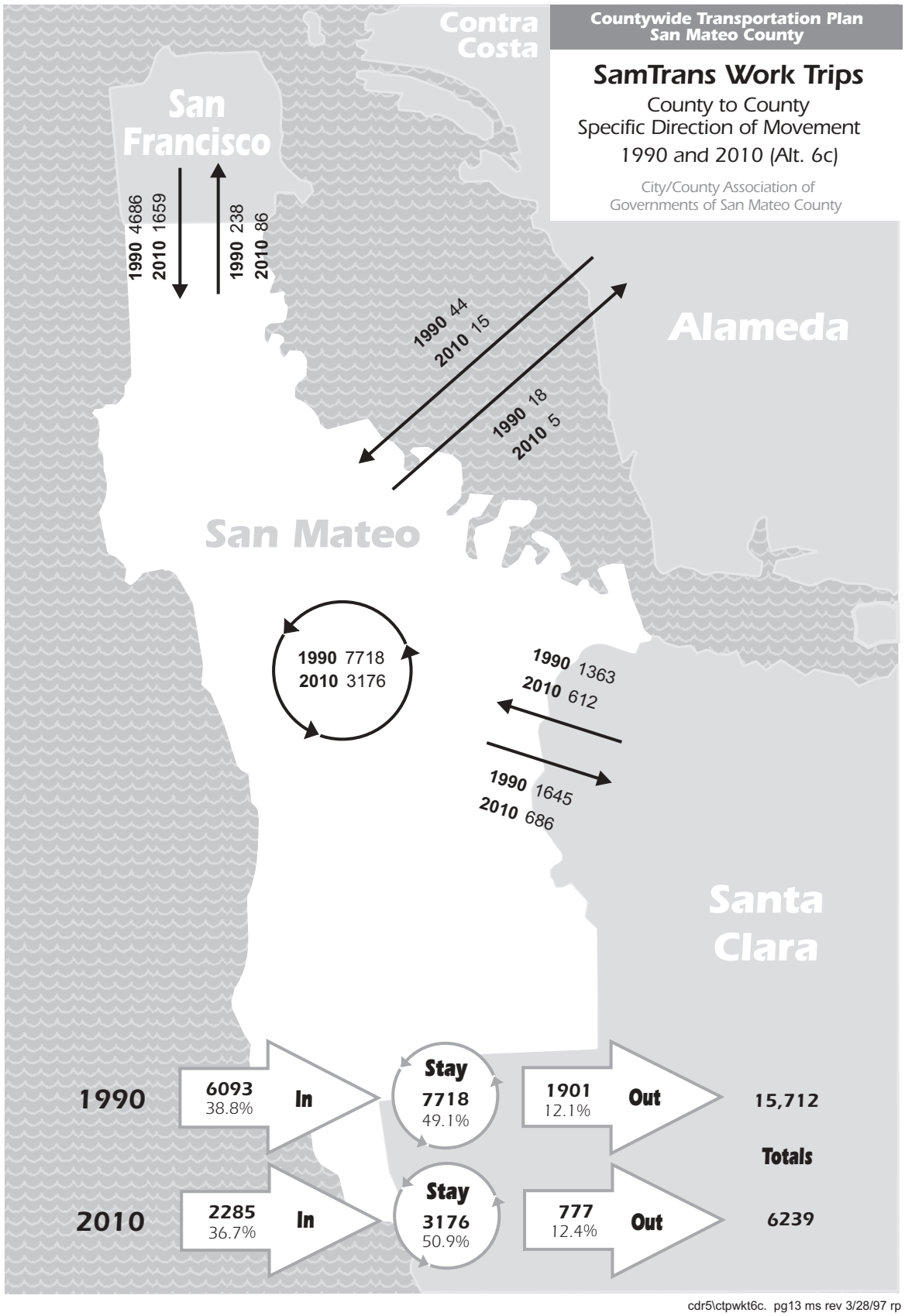
Exhibit 1.16



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SamTrans

Major Findings

Projected Ridership

In 2000, ridership is 59,130 trips per day (50% of transit ridership).

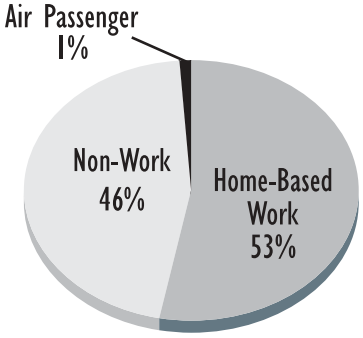
In 2010, projected ridership is 74,110 trips per day (41% of transit ridership)

SamTrans serves a large population who do not have the means or the ability to drive.

Of all transit modes, SamTrans has the highest percentage (46%) of non-work trips.

Exhibit 1.17

Type of SamTrans Trip



Key Policies

Feeder System

Provide "feeder" bus service to CalTrain and BART stations.

Transit Dependent Population

Provide bus service for the transit dependent population

High Speed Rail

Major Findings

If funded, high-speed rail would most likely not occur until after 2020.

There are many opportunities for CalTrain to coordinate its improvements with a high-speed rail system that would run in the same right-of-way.

Key Policies

Coordinated Planning

Ensure coordination of high-speed rail and CalTrain planning. Coordinate service frequency, capacity, station location and design, compatibility of technology, and financial agreements.

Coordination with CalTrain Improvements

Ensure that CalTrain improvements do not preclude or hinder potential development of high-speed rail in the CalTrain right-of-way and visa versa.

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Ferries

Major Findings

Projected Ridership

To date, travel demand for ferry travel is inconclusive and contradictory.

Locations

The two most likely terminals for ferry travel are South San Francisco (Oyster Point Marina) and Redwood City (Port of Redwood City).

Key Policies

Support future travel demand studies to determine the projected demand for ferry travel to and from San Mateo County.

Support cost-effective ferry service that does not duplicate or compete with other transit systems.

Bikeways

Major Findings

Projected Ridership

In 1990, ridership was 2,606 work trips per day (0.75% of market share).

In 2010, projected ridership is 17,077 work trips per day (1.5% of market share).

Existing System

Currently, the County does not have a extensive or well connected system of bikeways.

Most cities have system comprised of disconnected bike lanes and bike routes.

Menlo Park and Foster City have the most extensive bikeway systems.

Key Policies

Travel Demand

Increase the use of bicycles as a travel mode by developing a comprehensive bikeway system which effectively connects residential areas to employment centers, retail centers, transit stations, and institutions.

Integration

Develop a bikeway system which is fully integrated with other transit modes (i.e. connections to Caltrain, bicycle lockers).

Provide more incentives for integrating bicycle and transit modes.

Pedestrian

Major Findings

San Mateo County has a high "Pedestrian Danger Index" according to the Surface Transportation Policy Project.

Most employment centers in the County have poor pedestrian access.

Transit and freeway right-of-ways are often major impediments to safe pedestrian travel.

Key Policies

Land Use and Urban Design

Encourage cities to promote land use patterns and developments that make walking a viable and inviting mode of travel.

Safety

Encourage cities to identify locations where pedestrian movement is dangerous and make appropriate improvements.

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TSM

Major Findings

TSM techniques have minimal effects at reducing congestion when implemented individually. TSM techniques are much more effective when implemented through coordinated, regionwide programs.

Key Policies

Comprehensive Approach

Employ a comprehensive set of transportation system management techniques to increase the efficiency of the existing transportation network and reduce single-occupant automobile trips.

Transportation Systems Management Improvements

Support improvements such as: (1) expanded MTC sponsored Freeway Service Patrol on 101, 280, and 92, (2) ramp metering, (3) synchronized, interconnected traffic signals on major arterials, (4) park and ride lots, and (5) intelligent transportation systems.

Transportation Demand Management

Support programs and projects to reduce demand for travel by automobile such as: (1) ridesharing (carpools and vanpools), (2) HOV preferential parking, (3) flexible work hours, (4) telecommuting, and (5) transit oriented development.

Shuttles

Expand Caltrain and BART shuttle bus service to employment sites to meet demand.

Develop a stable reliable source of funding for shuttle bus services.

Encourage BAAQMD to increase 434 funds for shuttle bus services.

Expand and enhance outreach efforts to increase employer participation and financial support in shuttle bus services.

Encourage the consolidation of the management of shuttle bus services, including airport-hotel shuttles in areas with clustered hotels.

Commute Subsidies

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

Pricing

Major Findings

Effectiveness

Congestion pricing is generally considered the most effective way of reducing the demand for automobile travel, because it increases the individual costs of driving and makes transit more competitive.

Congestion pricing is politically extremely unpopular.

Key Policies

Congestion Pricing

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

Cash-Out Programs

Encourage the public and private sector to adopt parking cash-out programs.

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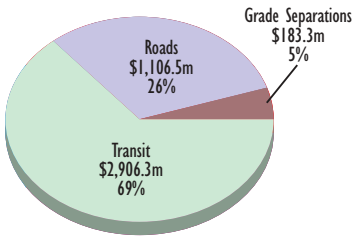
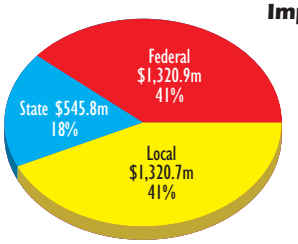
Exhibit 1.18

Estimated Total Costs of Major Capital Improvement Programs and Anticipated Revenue Sources 2000 - 2010

Three County Costs for CalTrain



Capital Improvement Plans $4,196.1m

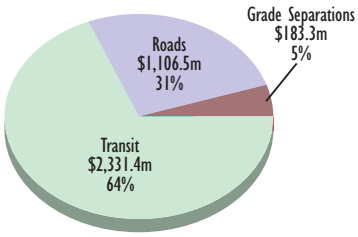


Anticipated Funding Sources $3,187.4m

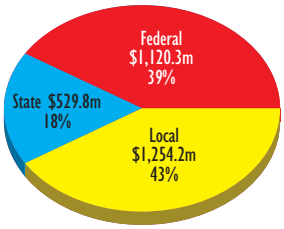
Shortfall

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

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	

Exhibit 1.19

Countywide Transportation Plan

Anticipated Funding Sources for Major Capital Improvement Programs 2000 - 2010

(in millions)

Programs	Cost	Revenue				Shortfall	Unprogrammed
		Local	State	Federal	Total		
Transportation Authority Strategic Plan Roadway Projects	669.1 (1.00)	137.7 (0.21)	95.8 (0.14)	0.0 (0.00)	233.5 (0.35)	435.6 (0.65)	0.0 (0.00)
Local Streets and Roadways Projects	437.4 (1.00)	100.0 (0.23)	132.0 (0.30)	70.0 (0.16)	302.0 (0.69)	135.4 (0.31)	0.0 (0.00)
Transportation Authority Grade Separation Projects	183.3[1] (1.00)	168.3 (0.92)	15.0 (0.08)	0.0 (0.00)	183.3 (1.00)	0.0 (0.00)	98.0 (0.53)
Joint Powers Board Caltrain Rapid Rail Plan (Three Counties)	862.3[3] (1.00)	99.7 (0.12)	24.0 (0.03)	300.9 (0.35)	424.6 (0.50)	437.7 (0.50)	0.0 (0.00)
Joint Powers Board Caltrain Rapid Rail Plan (San Mateo County only)	287.4 (1.00)	33.2 (0.12)	8.0 (0.03)	100.3 (0.35)	141.5 (0.50)	145.9 (0.50)	0.0 (0.00)
"Baby Bullet Program" (Three Counties)	127.0 (1.00)	0.0 (0.00)	127.0 (1.00)	0.0 (.0.00)	127.0 (1.00)	0.0 (0.00)	0.0 (0.00)
Other Caltrain Projects (San Mateo County only)	144.0[2] (1.00)	144.0 (1.00)	0.0 (0.00)	0.0 (0.00)	144.0 (1.00)	0.0 (0.00)	63.2 (0.44)
SamTrans Capital Improvement Plan *20 years	413.0 (1.00)	213.0 (0.52)	0.0 (0.00)	200.0 (0.48)	413.0 (1.00)	0.0 (0.00)	0.0 (0.00)
BART Extension Plan	1,360.0 (1.00)	458.0 (0.34)	152.0 (0.11)	750.0 (0.55)	1,360.0 (1.00)	0.0 (0.00)	0.0 (0.00)
Total Cost (includes three County costs for Caltrain)	4,196.1 (1.00)	1,320.7 (0.32)	545.8 (0.13)	1,320.9 (0.31)	3,187.4 (0.76)	1,008.7 (0.24)	161.2 (0.04)
Total Cost (includes San Mateo County only costs for Caltrain)	3,621.2 (1.00)	1,254.2 (0.35)	529.8 (0.15)	1,120.3 (0.31)	2,904.3 (0.80)	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

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Financial

Major Findings

Costs and Revenues of Major Capital Improvement Programs

The total cost of major capital improvement programs for San Mateo County total $3.6 billion. Anticipated funding sources for these programs total $2.9 billion. Thus, there is a shortfall of $717 million.

Shortfalls

Shortfalls will occur in three capital improvement programs: (1) Transportation Authority Strategic Plan Roadway Projects ($435.6 million), (2) Local Streets and Roads Projects ($135.4 million), and Joint Powers Board CalTrain Rapid Rail Plan ($141.9 million San Mateo County only).

Key Policies

CalTrain Shortfall

Over the next 10 years, fully fund San Mateo County's share of the CalTrain shortfall with unprogrammed Measure A funds for CalTrain and Measure A funds for the SFO AirTrain.

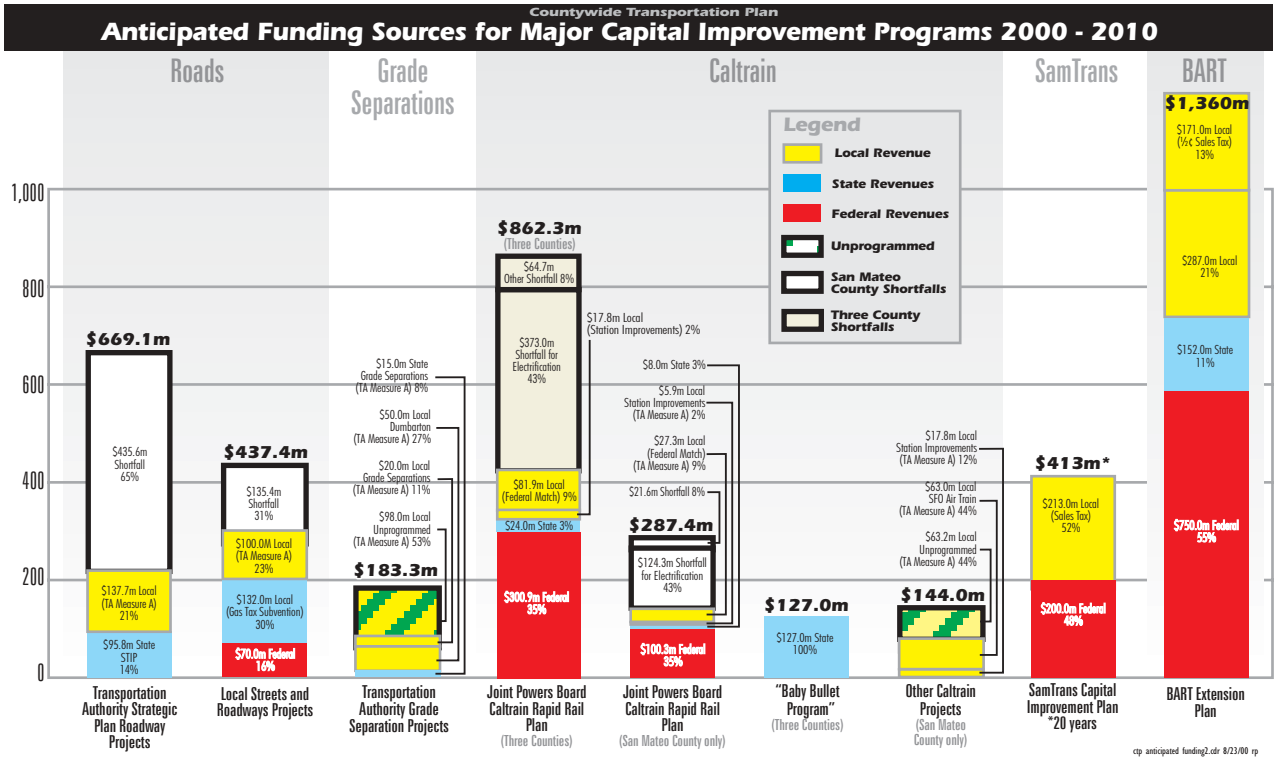
TA Strategic Plan Roadway Projects

Over the next 10 years, use State Transportation Improvement Program funds to reduce the shortfall of Strategic Plan roadway projects from $435.6 million (65% of total cost) to $370.4 million (55% of total cost).

Extension of Measure A

Support the extension of Measure A beyond 2008.

Exhibit 1.20



Effectiveness of Congestion Relief Policies

Exhibit 1.21

Ratings of Policies for Reducing Traffic Congestion

	Effectiveness	Costs		Political Will
		Individual	Societal	
ROADWAY IMPROVEMENTS				
Build new roads	2	0	3	1
Build auxiliary lanes	2	0	3	3
Build interchange improvements/grade separation projects	2	0	3	3
Build bicycle lanes	1	0	2	2
Increase road maintenance	1	0	1	3
TRANSIT IMPROVEMENTS				
Build transit system expansions	2	1	3	2
Improve service (i.e., reduced headways, shuttle bus improvements, run time reduction)	2	0	2	3
TRANSPORTATION SYSTEM MANAGEMENT (TSM)				
Rapidly remove accidents	3	0	1	3
Convert existing highway lanes into HOV lanes	2	0	1	1
Install ramp metering	2	0	1	2
Install intelligent transportation infrastructure (ITI) (e.g., coordinated signals, TV monitoring, electronic signs)	1	0	1	3
Build park and ride lots	1	0	1	2
Promote ridesharing	1	0	1	2
Encourage telecommuting	1	0	0	3
Promote staggered work hours	1	0	0	2
Provide preferential HOV parking	1	0	1	2
LAND USE				
Promote high-density, mixed-use development pattern	2	0	1	1
Increase land use densities near transit stations and corridors	2	0	1	2
Adopt development design standards that promote alternative modes of transportation	2	0	1	2
Enforce urban/rural boundary	2	0	1	2
Improve jobs-housing match	2	0	2	2
PRICING				
Develop comprehensive road user fee system	3	3	0	0
Charge peak-hour tolls on major limited access bridges and highways	3	3	0	1
Develop pay-for-permit system for access to high-intensity areas	2	3	0	0
Increase automobile license fees	2	2	0	1
Establish "Cash-Out" programs	2	1	1	1
TAXES				
Adopt parking tax	3	3	0	1
Increase fuel tax	2	3	0	2

Key: 3 = High; 2 = Moderate; 1 = Low; 0 = None

Source: Anthony Downs, Stuck in Traffic (1992); County of San Mateo Environmental Services Agency

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Key Entities for Implementing Policies

Exhibit 1.22

Key Entities for Implementing Traffic Congestion Reduction Policies*

	Cities/ County	C/CAG	Transportation Authority	SamTrans/ JPB/BART	Regional Agencies (MTC, ABAG, BAAQMD)	CalTrans	State/ Federal Government	Public and Private Employers
ROADWAY IMPROVEMENTS								
Build new roads		✔	✔		✔	✔	✔	
Build auxiliary lanes		✔	✔		✔	✔	✔	
Build interchange improvements/grade separation projects	✔	✔	✔		✔	✔	✔	
Build bicycle lanes	✔	✔	✔		✔	✔	✔	
Increase road maintenance	✔	✔	✔		✔	✔	✔	
TRANSIT IMPROVEMENTS								
Build transit system expansions				✔	✔		✔	
Improve service (i.e., reduced headways, shuttle bus improvements, run time reduction)				✔	✔		✔	
TRANSPORTATION SYSTEM MANAGEMENT (TSM)								
Rapidly remove accidents	✔		✔			✔		
Convert existing highway lanes into HOV lanes			✔		✔	✔		
Install ramp metering			✔		✔	✔		
Install intelligent transportation infrastructure (ITI) (e.g., coordinated signals, TV monitoring, electronic signs)	✔		✔		✔	✔		
Build park and ride lots			✔	✔		✔		
Promote ridesharing	✔							✔
Encourage telecommuting	✔							✔
Promote staggered work hours	✔							✔
Provide preferential HOV parking	✔							✔
LAND USE								
Promote high-density, mixed-use development pattern	✔							
Increase land use densities near transit stations and corridors	✔							
Adopt development design standards that promote alternative modes of transportation	✔							
Enforce urban/rural boundary	✔							
Improve jobs-housing match	✔							
PRICING								
Develop comprehensive road user fee system					✔	✔	✔	
Charge peak-hour tolls on major limited access bridges and highways					✔	✔	✔	
Develop pay-for-permit system for access to high-intensity areas	✔				✔			
Increase automobile license fees							✔	
Establish "Cash-Out" programs	✔				✔			✔
TAXES								
Adopt parking tax					✔			
Increase fuel tax					✔		✔	

*Implementing: Building, Funding, and/or Approving Projects and Programs

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