

# **Moving Forward**

## **A 25-Year Transportation Vision For Marin County**

Jointly Produced by the:  
Marin County Congestion Management Agency  
Marin County Board of Supervisors  
Marin County Transit District

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## **Executive Summary: A Vision of the Future**

### **INTRODUCTION**

Today, over 90% of all trips originating in Marin County are made in autos on roads built to standards established decades ago. Our transportation network is being asked to do more and more all the time as our demand to travel increases. This comes as no surprise to people who live here. Over 90% of those responding to a recent survey agree that traffic congestion in Marin County is a moderate or major problem.

In the past, we have been able to keep up with the demand for travel by widening roads and making better use of existing systems. However, the continued widening of roadways is costly, and may harm our environment and the character of our communities. Widening roads alone can no longer keep up with growing demand. Looking into the future, one thing is clear — to manage congestion, we will have to provide a richness of choices that will enable people to travel differently, creating a sustainable transportation system that promotes mobility and maintains the quality of life we enjoy in Marin County.

Building on current projects to address congestion and provide more transportation choices, this document, *Moving Forward: A 25 Year Transportation Vision for Marin County*, represents the next step towards making significant and lasting change in our transportation system. It represents a synthesis of over three years of study and provides a vision for a multi-modal future, where all modes of transportation combine to manage and minimize congestion in the County.

The transportation vision presented in *Moving Forward* is not constrained by existing funding, but it is designed to be reasonably achievable if we all work together.

**To manage congestion in Marin County, we need a sustainable transportation system that promotes mobility and maintains Marin's quality of life.**



**From the common base of knowledge provided in this document, the people who live and work in Marin can move forward together in establishing priorities and a clear vision of the future.**

This document is intended to be a tool to help people who live or work in Marin County to envision a different kind of transportation system. From this common base of knowledge, we will all move forward together to determine priorities and a clearer vision for how we will shape the future.

This document is designed to bring a consistent frame of reference to everyone who travels in Marin County. It begins by diagnosing our transportation problems and envisions a set of solutions that combine to enhance our quality of life. Finally, it outlines financing strategies that can be used to realize our vision of the future.

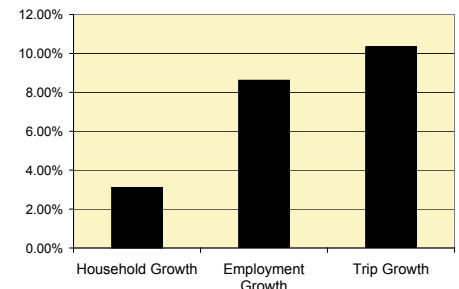
*Moving Forward* is designed as a fluid document and, as such, sets forth goals and objectives that may be changed or modified in response to economic, demographic, and other changes in our society. This document does not establish any mandatory requirements or goals; instead, it provides a framework for future decisions regarding transportation investments and improvements in Marin County.

This document represents a unique collaboration between the public, staff and elected officials. The Vision process began over three years ago, as a culmination of community-led master plans focused on individual transportation modes. To develop the Vision, a recent series of six open house style workshops were attended by nearly 200 Marin County residents. In addition, over 1,000 individual comments were received. The result is the first Transportation Vision for Marin County, a vision developed by and for the people who live, work, and travel in Marin County.

## THE CAUSES OF CONGESTION

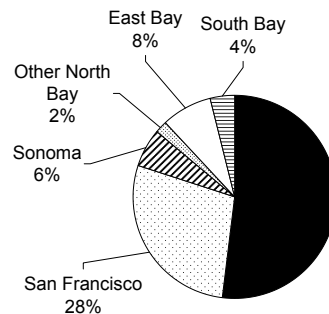
We all know that there is congestion in Marin County, but not many of us have taken the time to think of where it comes from. A detailed study, done by the Marin Congestion Management Agency, has found that our congestion has many causes:

- **Marin County residents are making more trips.** People who live in the County made over 750,000 daily trips in 1998, up by more than 10% in less than a decade. This growth in trip making outpaced the growth in either employment or households in Marin County. The number of trips per capita continues to grow as Marin County residents become more mobile in pursuit of jobs, education, shopping and the activities of daily life.

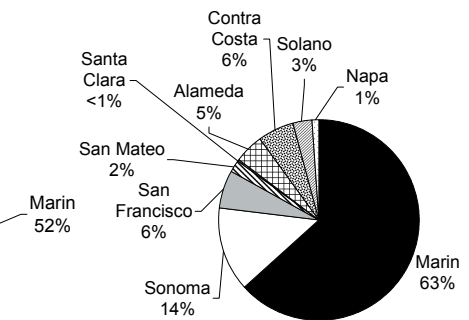


**Growth in Marin County,  
1990-1998**

- **More trips are being made inside the County.** Only a decade ago, Marin County could be thought of as a “bedroom community” with most commute trips being made from Marin County to jobs in San Francisco. These trips have been well-served by transit, with over 25% of the Marin-San Francisco commute trips made on alternative modes such as buses and ferries. However, over time, more and more residents of Marin are working at jobs within the County. Currently, over half of Marin residents making a commute trip travel to jobs within Marin County. Over the entire day, more than 70% of all trips that begin in Marin County end in the County. These trips are dispersed throughout the County and have the fewest number of transportation choices. Additionally, nearly 40% of people who work at jobs in Marin County live outside the County and must commute into Marin for work. The majority, approximately 14%, are Sonoma County residents who travel south to jobs in Marin County.

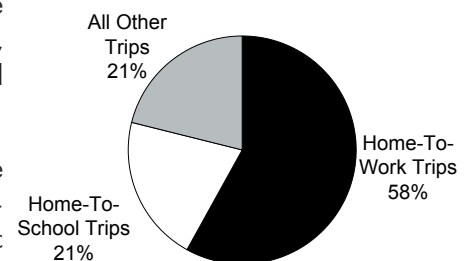


**Work Locations  
of Marin Residents**



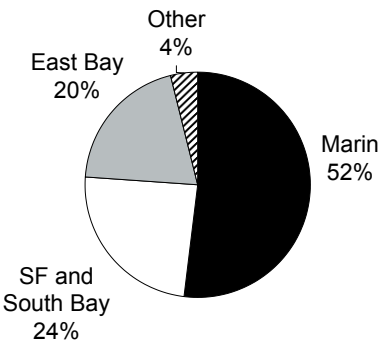
**Home Communities  
of Marin Workers**

- **Peak period trips are made for many purposes.** While peak period congestion is often associated with work-related commute trips, there are many other components that may push traffic “over the top.” One important factor is school travel, which accounts for 21% of morning peak period trips. Every Marin County resident can relate to the fact that congestion is much less severe during school holidays and breaks, both locally around schools themselves and even on Highway 101. This is due to both the



**Trip Purposes for  
Trips Generated  
in Marin County  
–AM Peak Trips**

absence of school trips and a reduction in work trips as some parents take time off work for family vacations during school holidays.



**Destinations of Trips Entering Marin County from Sonoma County on Highway 101 – AM Peak Trips**

■ **Marin County’s position in the Bay Area makes it a magnet for regional travel.**

Being centrally located in a major metropolitan area has many advantages for Marin County residents. It also makes it possible for people who live outside the County to come to Marin to access jobs. Currently, about 50% of the trips entering the County from the north on Highway 101 during the morning peak are destined for jobs within Marin County. Nearly 80% of those entering from the east on Highway 580 are also headed for Marin County destinations. While trips traveling *through* the County en route to other places do contribute to congestion in Marin County, and represent a significant percentage of traffic on Highway 101 (about 20% of the total AM peak hour traffic volume), these trips nevertheless represent a relatively small share (8% of all AM peak hour trips) of the traffic on the entire County roadway system.

■ **The scenic beauty of Marin County attracts recreational trips.**

Congestion in Marin County is not limited to the peak commute periods. An important destination for regional and national parks, and a home to many important tourist destinations, Marin County attracts recreational trips from the entire Bay Area and beyond. Traffic on the Golden Gate Bridge on Sunday afternoons is often as congested as some weekday commutes, as visitors enjoy the County’s many recreational opportunities.

■ **There are few alternatives for travel within Marin County.**

For trips within the County, there are few options other than driving. Our local transit system is not designed to be competitive with the automobile and our bicycle and pedestrian facilities are not continuous or easy to navigate. The “Yellow School Bus” has nearly become a thing of the past. Trips are no longer as concentrated as they were in the days when most Marin residents traveled to San Francisco every day. This dispersed travel pattern provides many challenges to transportation planners. Our “love affair with the car” may simply be the result of too few reasonable alternatives.

**THE VISION FOR A BETTER FUTURE**

Most of the factors that contribute to our congestion problems also contribute in a positive way to the quality of life in Marin County. Marin County residents enjoy working and living in the County. We have become a more mobile County, and we enjoy our freedom of movement. The increase in jobs in the County has meant that more people can work closer to home,

spending more time with their families, and doing things they enjoy. Employment opportunities in the County translate into economic vitality, making it possible for the County and its cities to invest in improved public services to meet the needs of our population.

In fact, Marin County residents enjoy living in the County for some of the same reasons that our visitors keep coming here. Over 75% of Marin County residents in a recent poll said that they were either very or extremely satisfied with the quality of life in the County.

Even with that level of satisfaction, Marin County residents can see that their quality of life will erode if we are unable to get our congestion problems under control. To achieve this goal, elected officials, citizens and experts have studied each of the transportation modes to better understand what they have to offer to our future. *Moving Forward* brings all of these studies together into a single document that defines a very different future for Marin County.

- **Increasing travel choices is the only way to manage congestion and improve mobility.** There is no single mode or single project that can solve all of our congestion problems. Each mode, from commuter rail to bicycles to local streets and road projects has an important role to play in improving our lives. *Moving Forward* includes plans for commuter rail; local and express buses; services focused on school children, the elderly and disabled, and cyclists and pedestrians; as well as a plan for improving our highways and roads. While no single project will serve everyone, having a wide range of choices will let people make travel decisions based on the best mode for their trip, rather than continuing dependence on the auto simply because there is no alternative. Even a 10% reduction in demand for automobile travel can significantly reduce congestion on roads and highways.
- **All modes will be linked together in a seamless, comprehensive transportation network.** New rail stations will become hubs for transportation improvements and will provide places for all transit modes to come together. Bicycle and pedestrian travel will increase as provisions for walking and biking are included in other modes. Train stations will be well served by

**No single mode or project can solve all our congestion problems.**

**Each mode – from commuter rail to bicycles to local streets and road projects – has an important role to play in improving our lives.**

**If all of the projects included in this document are implemented, transit ridership could increase by over 5,000,000 annual riders, bicycle and pedestrian trips may double, and over 370,000 hours currently spent in traffic delays each year could be put to more productive use!**



local and regional buses, and at least one train/ferry connection will be completed. Space will be provided for bikes in stations as well as on-board trains and racks on buses. Building each project as part of an overall system will get the most out of the overall network. If all of the projects included in this document are implemented, transit ridership may increase by over 5,000,000 annual riders, bicycle and pedestrian trips could double, and over 370,000 hours currently spent in traffic delays each year could be put to more productive use!

- **Local trips will be served by a variety of new and expanded options, improving mobility for all Marin County residents.** A variety of improvements are planned to serve the diversity of markets in Marin County, including commuters, school children, senior citizens and people who are unable to drive. These local projects are more directly controlled by Marin County, as we turn our Vision into a reality.
- **The increasing demand for commute trips within the County will be served by a major increase in local bus and shuttle transit, a major school transportation initiative, and an emphasis on streets and roads.** Virtually every trip begins or ends on a local street. *Moving Forward* emphasizes projects on local streets and roads, ensuring that our maintenance backlog is managed effectively. Major increases in services to schools, both through the Safe Routes to Schools program and new “school pool” services from our local transit plan could combine to reduce auto travel to schools by at least 15%. Local bus and shuttle transit services will be completely rethought to create a competitive service that can capture choice riders while serving those with mobility needs. Our bicycle and pedestrian infrastructure will be greatly improved including completion of major infrastructure for north-south and east-west bicycle travel.
- **Improvements to the local bus and shuttle transit system are a critical component of *Moving Forward*, providing the “glue” that links all modes.** If planned improvements to local bus and shuttle transit services are realized, the projected number of daily transit riders in 2020 may be more than double current estimates based on the existing local bus system. Two new bus transit junctions are expected to be created along with improvements to the existing bus transit hub in San Rafael, providing a high level of passenger amenities such as real-time transit information. These hubs will provide convenient transfer points, allowing passengers to seamlessly travel from their local residence to

any point within the County. Hubs will be served by all types of bus transit trips including a new County Express route serving the residential and employment concentrations along Highway 101. Local shuttles will serve short trips and will be designed to be friendly to senior and youth riders who currently have fewer options. New intercommunity service will link cities and towns providing an option where there is almost no service today. These improvements will also enhance mobility and job access for lower income residents who may not have access to a car.

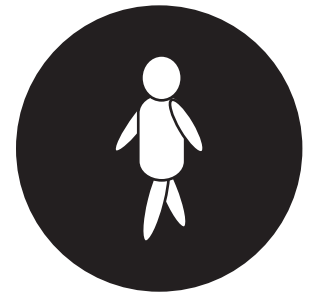
Specialized services will be added or improved because transit services can not be limited to “big bus” service. Local shuttles and flexible services in less dense parts of the County will ensure that all Marin County residents have mobility options. Our paratransit system, which provides needed mobility to persons with disabilities and seniors will be expanded, so that everyone has opportunities for mobility.

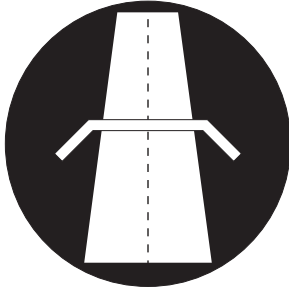
- **A major school initiative will combine Safe Routes to Schools with new school oriented transit service.**

Safe Routes to Schools provides a proven program that helps students and parents promote safe biking and walking pathways to school. This program combines the implementation of actual capital improvements with safety, health and environmentally focused education, and promotes both healthy lifestyles and a reduction of school-related traffic. In the schools that have already received Safe Routes training, driving trips to school have fallen by 15%. This program will be enhanced by a “School Pool” program that will coordinate ridesharing arrangements and increase carpooling, as well as by “School Tripper” bus and shuttle services to schools throughout the County. These programs will combine to have a substantial impact on one of the most significant sources of congestion in the County.

- **Bicycle and pedestrian facilities will be improved throughout the County.**

Bicycle and pedestrian links to all of the major capital projects are included, making it possible to access new transportation alternatives without a car. Bicycle and pedestrian travel in Marin could increase to up to 20% of all trips, and bicycle travel could more than double its share of commute trips with completion of several key projects including major investments in a North-South and an East-West bikeway. These major bicycle and pedestrian corridors are intended to attract a full range of cyclists from commuters who enjoy the fast, flat commute, to recreational cyclists, to those that are connecting to transit services. Pedestrian access will also be improved in these key corridors.





These projects not only provide transportation benefits, but also provide health benefits by creating new opportunities for physical activity and outdoor recreation.

- **Interchange projects will help relieve local congestion.** The plan addresses a number of critical safety and congestion bottlenecks in the County including:

- U.S. 101/Atherton Avenue
- U.S. 101/State Route 37
- U.S. 101/Lucas Valley Road
- I-580/U.S. 101
- U.S. 101/Sir Francis Drake Blvd. (*Greenbrae Interchange*)
- U.S. 101/Tamalpais Drive
- U.S. 101/Tiburon Boulevard
- U.S. 101/Sausalito (*Alexander Avenue*)

Resolving these interchange problems will provide substantial relief to the local arterials that approach the Highway, potentially eliminating over 1,000 person hours of delay each day. In addition, a major emphasis on the maintenance of our local streets and roads will provide the “smooth sailing” that is needed to operate not only cars, but also transit vehicles and bicycles. Pedestrian improvements including sidewalk enhancements will improve the environment for walking, making it safer and more pleasant.

- **Supportive programs and public-private partnerships work together with these major capital investments to make the entire system work better.** Not every transportation project requires a major capital investment. All projects will be enhanced by a comprehensive Transportation Demand Management program that will enlist the support of Marin County employers to reduce peak period travel demand. At employment sites that have developed comprehensive TDM programs, drive alone trips to work sites have been reduced by up to 15%.

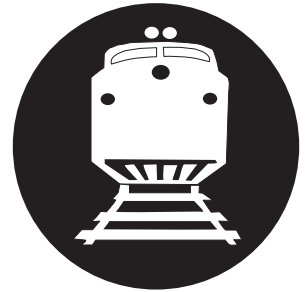
The way we live has a substantial impact on our demand for travel. New transit services can become the focal point for transit-oriented development, allowing us to concentrate anticipated growth into areas that can be well served by transit. In well designed transit-oriented development, residents and employees can have full mobility with many fewer car trips.

- **Regional and interregional trips will be served by completion of the HOV system on Highway 101, the implementation of a new commuter rail line, increased express bus service and increased ferry service.** Highway 101 continues to be the backbone of travel in the urbanized parts of Marin County, and a great deal of attention must



be given to the burden that freeway congestion places, not just on the highway, but on many local trips. Planning for many of these regional projects is already underway. Final plans for major regional capital projects can be made only after extensive environmental analysis and substantial public involvement. Key projects being studied include:

- **A new commuter rail service could carry over 5,000 daily riders.** The Sonoma-Marín Area Rail Transit (SMART) system, proposed from Cloverdale to San Rafael with a planned connection to a ferry terminal, will serve trips inside the County, as well as travel between Sonoma, Marin and San Francisco Counties. Service will be provided every 30 minutes during peak periods, carrying an estimated 5,100 riders per day. During the morning peak period alone, SMART could remove 1,900 trips from Highway 101.
- **Rail stations will become intermodal hubs, with convenient service from local and express buses, and with at least one major ferry link.** Bicycle and pedestrian access will be a part of every station plan, taking advantage of the implementation of the North-South Bikeway which will link all of the communities along the Highway 101 corridor, and will make bicycle travel substantially more convenient.
- **The completion of our High Occupancy Vehicle (HOV) system will allow for faster and more effective express bus service.** The Marin-Sonoma Narrows in Northern Marin and Southern Sonoma Counties is the “missing link” in our regional diamond lane system. With the gap closure project in San Rafael already under construction, this remains a critical bottleneck which prevents bus transit from gaining any time advantage over the auto. The Narrows project will provide capacity for all freeway users by putting higher occupancy vehicles in the diamond lane. It is estimated that nearly 500 person hours of delay may be saved every day by completing this project.
- **Express buses within the County and entering the County from all directions will take full advantage of our HOV investment.** A refined express bus plan will be designed to complement, not compete, with the rail service, providing direct links between higher density residential areas and higher density employment sites without requiring a transfer. It is estimated that at least 1,850 new riders will use express buses, even after SMART rail is implemented.







- **Increased ferry service is expected to help keep our interregional trips on transit.** The Water Transit Authority recently completed a plan for expanding the Bay Area's ferry network. The plan recommends significant expansion in North Bay ferry service, including study of additional locations for a North Bay ferry terminal, providing improved services to Marin County. A new terminal is expected to provide the critical link between the proposed SMART rail system and ferry services. The Water Transit Authority is exploring opportunities to ring the bay with expanded ferry services with the North Bay serving as a major node. An estimated 14,400 daily riders will use Golden Gate Corridor ferries to travel to San Francisco in 2025.

## TURNING THE VISION INTO REALITY

If we are to maintain our high quality of life in Marin County, we must work together to make this vision a reality. Existing transportation funds will not provide the level of investment that is needed to manage congestion in the County. In fact, existing funds will not even be sufficient to fully maintain the transportation system that we already have.

The total cost of all the projects described in this document is at least \$1.6 billion dollars. Existing revenue can cover only \$367 million, leaving a gap of over \$1.2 billion over the next 25 years if all the projects outlined in this vision are to be implemented.

As the first step towards funding our vision, the County's numerous stakeholders must work together to devise a detailed implementation plan that will prioritize projects, specify funding amounts, provide a strategy for the phased implementation of projects, and establish performance measures for all investments. Once we achieve regional consensus on an implementation plan, we can move forward in partnership with regional, state and federal agencies to generate the funds necessary to implement our transportation vision for Marin County.

It is clear that we will not be able to move forward on all projects at once. But while we must prioritize and phase our investments, we must not lose sight of the important role that

**Just as there is a local component to our congestion problem, there must be a local component to financing its solution.**

each mode will play in our future. In a vision like this, the overall benefit is many times greater than the sum of the individual benefits from each investment. Only by providing a range of choices will Marin County residents finally be able to enjoy their county without the uncertainty and frustration caused by constant and growing congestion.

While it is impossible to know whether we will be able to fully realize our dream in just 25 years, it is clear that we will never get there unless we start. The 25-year vision for Marin's transportation system is the first step in developing a comprehensive transportation plan that supports our overall goals for the County's future. Building on work that has already been undertaken, the next step will be to agree on what our near-term transportation future should look like, and to identify projects and programs whose implementation will be most critical in realizing our vision for the future. Where we go from here is up to all of us.

## Chapter 1 Our Traffic Nightmare

A recent Texas Institute of Transportation Study<sup>1</sup> determined that traffic congestion in the Bay Area is the second worst in the nation – rapidly closing in on Los Angeles for the dubious distinction of the most time spent in traffic of any region in the country. The study estimates that throughout the Bay Area over \$3 billion is lost each year in time and fuel consumed in traffic jams. This information comes as no surprise to residents and workers in Marin County who have seen congestion increase year after year. And as congestion has worsened, so have negative impacts on our environment and our overall quality of life.

But where does all that congestion come from? And, more importantly, what can we do about it? *Moving Forward* evaluates our travel patterns and provides a blueprint of realistic and implementable solutions to transform our traffic nightmare into a dream of enhanced mobility, improved quality of life, and a healthier environment.

**Traffic congestion in the Bay Area is the second worst in the nation – and growing.**

### **A LOCAL PROBLEM WITH A REGIONAL COMPONENT**

The Marin County Congestion Management Agency, working closely with the County Board of Supervisors, has recently completed a three-year study looking at traffic patterns within and through Marin County. The results of the study show dramatic changes in travel habits over the past decade and some surprising challenges for the future. The study contests commonly held beliefs that our congestion is largely the impact of growth, or the impact of commuters passing through Marin County on their way to jobs in San Francisco. The data shows that our congestion is largely a local problem with a regional component.

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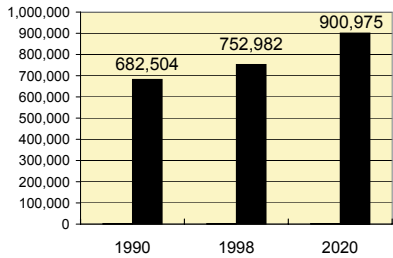
<sup>1</sup> Texas Transportation Institute, 2001 Urban Mobility Study, 2001

## TRIP GENERATION IN MARIN COUNTY

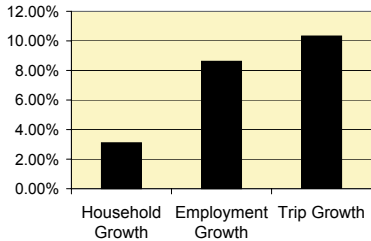
Marin County residents are "on the move." People who live in the County made over 750,000 trips in 1998, up by more than 10% in less than a decade. Almost 70% of those trips were made entirely within Marin County.

The growth in trip making is outpacing growth in either employment or residents in Marin County. While the number of trips made in Marin County grew by about 10% between 1990 and 1998, the number of Marin County households grew by only 3% and the number of jobs in Marin County grew by about 8.5%. In fact, during this period, Marin County experienced slower household growth than any other county in the Bay Area outside of San Francisco, while experiencing rapidly increasing congestion.

This increase in trip generation, with only slight growth in the number of households and moderate growth in the number of jobs in the County, can only be attributed to one thing – we are each making more trips. The increase in congestion experienced in the County is a direct result of our increased tripmaking.



**Trips made by Marin  
County Residents,  
1990-2020 (projected)**



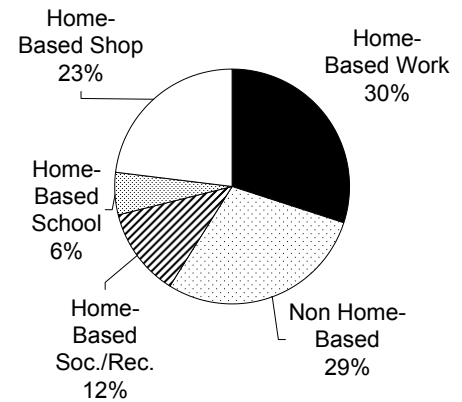
**Growth in Marin County,  
1990-1998**

## Why We Travel

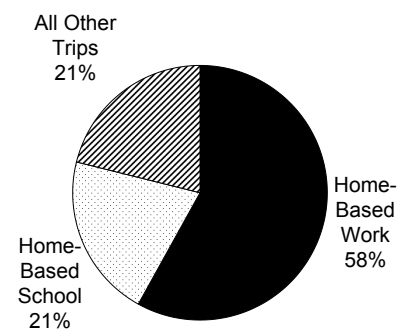
Residents of Marin County travel for many purposes, including work, school, shopping and social trips. Traffic engineers classify most of those trips as "home-based trips" meaning that they either begin or end at home. However, a growing number of trips are classified as "non home-based," meaning that they are made during the day as part of a chain of trips. This may involve running a series of errands or traveling between work and other non-home destinations.

Looking at all of the trips generated throughout the day by residents of Marin, about 30% are trips between home and work, and about 30% are for trips that are not home-based. About another quarter of all trips are between home and shopping destinations and nearly 13% are for trips between home and social or recreational destinations. Only 6% of all trips are trips between home and school.

While trips are made throughout the day, congestion in Marin County is at its worst from six to nine in the morning and from four to six in the evening. Congestion county-wide is at its highest in the morning, when almost two-thirds of all trips are from home to work, and 21% of all trips are between home and school. The impact of school trips in the morning peak is dramatic – while school trips make up only 6% of all trips made in the County, they make up over 20% of the trips in the morning peak. In part, this explains why traffic is less congested in Marin County during school breaks – when the schools are closed, school trips (as well as some work trips) are eliminated.



**Trip Purposes for Trips  
Generated in Marin  
County – Daily Trips**



**Trip Purposes for Trips  
Generated in Marin  
County – AM Peak Trips  
All Roads Combined**

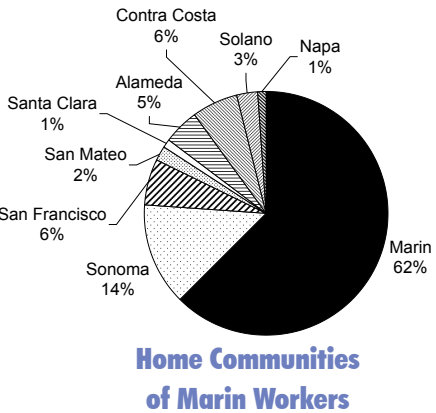
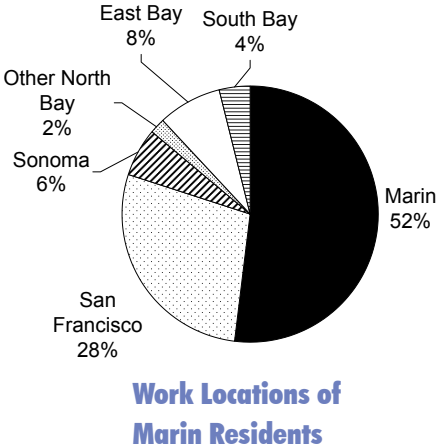
### Where is Everyone Going?

Marin County is not only a very desirable place to live and recreate, but is also an important part of the Bay Area's economic engine. Over the past decade, commute patterns in the County have changed dramatically in response to new job creation in the County and an increase in the number of workers per household.

It is not too surprising that over 80% of all trips that begin in Marin County end within the County. The vast majority of shopping and recreational trips, as well as almost all school trips are made entirely within Marin. But what about work trips? A common assumption is that people who live in Marin County work elsewhere, especially in San Francisco. But today, over half of all work trips made by Marin County residents are to jobs here in the County.<sup>2</sup> And, while more than a quarter of Marin County's work trips are still destined for San Francisco, the Marin-San Francisco commute is well served by transit. While only about 11% of all commute trips originating in Marin County are made on transit, over 25% of Marin-San Francisco commute trips are made via transit, minimizing the impact of that commute on our roads.

An increasing number of jobs in Marin County helps to reduce the number of Marin residents who commute outside the County for work. But those jobs also attract workers who live elsewhere. Nearly 40% of Marin County workers live outside the County. The majority, approximately 14%, are Sonoma County residents who travel south to jobs in Marin. The limited supply of affordable housing in Marin County is a significant

<sup>2</sup> Within the San Francisco Bay Area, Marin County still has one of the lowest percentages of commuters who live and work in their home county. Highest in the Bay Area is San Francisco, with nearly 70% of commuters living and working in the county, and lowest is Solano County, with only about 40% of its commuters working in their home county.



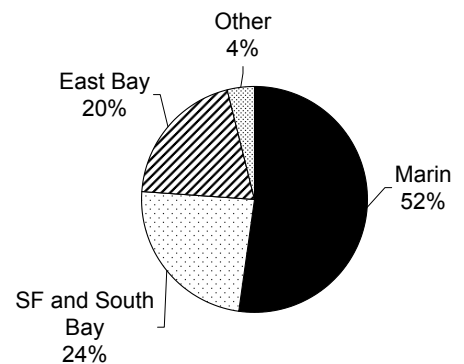
factor in these commute patterns. Many of the workers who travel to Marin from neighboring counties do so because they cannot afford to live in Marin, or because housing is substantially cheaper elsewhere.

A growing trend that will influence future transportation needs is the northbound commute. While only 6% of work trips are currently headed to Sonoma County, rapid job growth there as well as in Solano County is attracting an increasing share of Marin County residents, and may also reduce the number of Sonoma and Solano County workers who must travel outside their home counties for work.

Looking at all trips made in the morning peak, over 70% of all trips that begin in Marin County have destinations within the County. The high number of local school trips being made in the morning combine with local work trips to create the majority of the congestion we all experience.

## THE REGIONAL COMPONENT

Not all trips made to and through the County originate here. Marin County is in an important position in the regional transportation system, as well as being a destination in its own right. Historically, Marin County residents have looked to Sonoma County as the source of their congestion, assuming that Sonoma residents traveling to jobs in San Francisco would drive through Marin, creating gridlock in their wake. In fact, over half of the morning peak period traffic entering Marin County from the north on Highway 101 is destined for Marin County. Less than one-fourth of all trips entering Marin on this route are actually destined for San Francisco or points south. A growing travel pattern has been trips generated in Sonoma County and other points north that travel through Marin County to the East Bay. This market is almost as big as



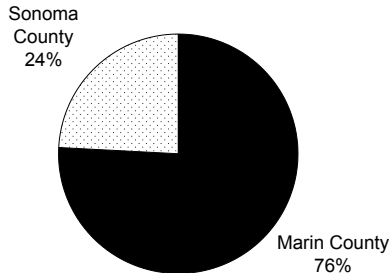
**Destinations of  
Trips Entering Marin  
County from Sonoma  
County on Highway  
101 – AM Peak**

the Sonoma-San Francisco market. These trips travel through Marin County as far as I-580, adding to local congestion in that area.

Another common belief is that trips beginning in the East Bay cut through Marin County to access the Golden Gate Bridge into San Francisco. Extensive data collection shows that this is not the case. In fact, there was no measurable "cut through" traffic on this route in the AM peak, even with Bay Bridge volumes at record highs. Travel over the Richmond-San Rafael Bridge remains popular, but over three quarters of all trips entering Marin County in the morning are destined for locations within the County. Even during the afternoon commute, when San Francisco's Bay Bridge approaches experience near gridlock conditions for several hours, only 2% of the eastbound trips on I-580 originate in San Francisco. The vast majority (78%) of eastbound evening I-580 trips begin in Marin County, as workers employed here head home to the East Bay.

While this may seem unbelievable, it is completely consistent with counts taken on the Golden Gate Bridge. All day traffic volumes across the Bridge have not appreciably changed in over a decade. The increase in trips generated in Marin County are not being made over the Golden Gate Bridge, they are being retained right here!

This is not to suggest that congestion patterns at the Bridge have remained the same. In fact, the number of vehicles on the Bridge during peak periods has increased. This has caused the morning and evening peak periods, during which congestion is most severe, to spread out over more hours of the day. And, weekend travel has increased, so that Sunday afternoon traffic exceeds some weekdays, creating extreme pressure in Southern Marin, on Highway 1, and on other highway approaches.



**Destinations of Trips  
Entering Marin County  
from the East on Highway  
580 – AM Peak**

**Volumes on the Golden  
Gate Bridge have not  
appreciably changed in  
over a decade.**

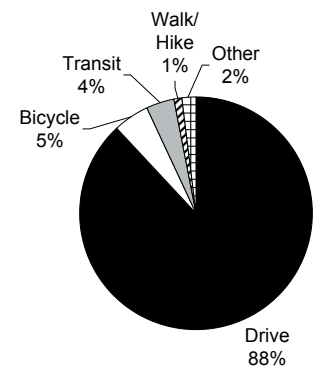


## THE RECREATIONAL COMPONENT

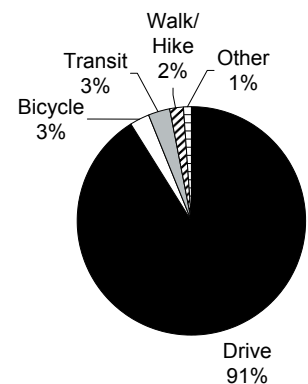
Marin County is unique because it is home to a large number of natural attractions that are of regional and national significance. These important recreational destinations include the Golden Gate National Recreation Area, Mt. Tamalpais State Park, Muir Woods National Monument, Point Reyes National Seashore, Samuel P. Taylor State Park, and Tomales Bay State Park. These are certainly treasures for Marin and are often a main reason that residents cite for living in Marin.

The drawback of hosting such important recreational uses is the traffic generated by visitors to these sites. This traffic is exacerbated by the limited number of access points on narrow roadways, and the fact that many visitors must travel through residential areas of Marin to access the various parks. Congestion on weekends in many areas of the County rivals and even exceeds weekday levels. Additionally, recreational travel demand is more difficult to serve with alternatives compared to commuter travel.

Similar to travel generally, Marin residents are also a significant part of traffic generated by the recreation areas. Recent data collected for the Marin Headlands and Fort Baker (GGNRA) showed that 16% of visitors were Marin County residents. A quarter originate in San Francisco. Overall, two-thirds of visitors are from the Bay Area. Data collected for Muir Woods, Muir Beach, Stinson Beach, Mt. Tamalpais, and the Tennessee Valley during all four seasons reveals a far more local recreational pattern, with 63% of visitors to these areas living in Marin County. Muir Woods was the only one of these destinations where most visitors began their trip outside the County.



**Mode of travel for visitors to Marin Headlands/Fort Baker in summer**



**Mode of travel for combined visitors to Muir Woods, Muir Beach, Stinson Beach, Mt. Tamalpais and Tennessee Valley**

## CHANGING DEMOGRAPHICS AFFECT MOBILITY NEEDS

The transportation vision presented here seeks to address current congestion problems, while also looking to the future mobility needs of the County. Several key changes will influence the way we travel in the future:

- Marin County is a "graying county," with the average age of County residents on the rise. The Association of Bay Area Governments (ABAG) estimates that by 2020, over 35% of our population will be over age 65. The fastest growing age groups in the County are 65-85 and 85+. The needs of older residents for a lifetime of mobility must be addressed in a way that also addresses our peak commute needs.
- The need to drive children to school and park at local schools while dropping students off creates the noticeable increase in congestion on school days. School congestion affects both regional and local routes, with a "ripple effect" throughout our neighborhoods. Yet, traditional solutions to school congestion, such as "yellow school bus" transportation are not readily available to us today. There are few school buses available to our students and those that are available are often quite costly.
- Sonoma County and Solano County are developing local job bases that will have a number of impacts on our congestion problem. While fewer Sonoma and Solano residents may need to come to and through Marin County to work, their jobs will attract Marin residents north, creating a "reverse commute" that may ultimately be problematic.

Our transportation vision must consider these changing demographics and economic trends, providing solutions that offer a "lifetime of mobility" for residents of all ages. Consequently, *Moving Forward* emphasizes multi-modal solutions that provide new alternatives for travel which work together to create a comprehensive transportation system.

**Our transportation vision must consider changing demographic and economic trends, providing solutions that offer a "lifetime of mobility" for residents of all ages.**

## **TOWARDS A MULTIMODAL FUTURE**

The statistics presented in this chapter lead to some surprising conclusions. Rather than blaming our congestion problems on excessive growth or "outsiders" traveling through Marin County, we must recognize that the sources of our congestion are primarily local. The County's low growth rate is expected to continue over the next 20 years, producing the lowest population and employment growth of any county in the Bay Area, with the exception of San Francisco. Despite the slow growth in population, congestion is projected to grow at three times the rate of population growth over the next 20 years.

And while there is a definite regional component to Marin County's congestion problems, most of the traffic coming to Marin County is destined for locations within the County, rather than cutting through the County on the way to somewhere else. The simple fact is that Marin County residents are very mobile — each person is taking more trips for a wide range of trip purposes. As each person's travel demand increases, more and more local trips are being made, creating more congestion on arterial and other routes, as well as adding more trips on the highway. We see this in "peak spreading," where congested periods on the highway and on major arterial routes extend for more hours every day and are present on weekends as well as on weekdays. We see this also in our school related traffic, where congestion on non-school days is appreciably lighter than on school days, when school trips comprise 21% of our morning commute traffic.

As long as Marin County remains an attractive part of a vital Bay Area, there will be congestion — unless we do something about the way each of us travels.

**Congestion is projected to grow at three times the rate of population growth over the coming 20 years.**

## **Chapter 2 Towards a Multi-Modal Future**

Just as there is no single cause of our congestion problem, there is no single solution that can address all of Marin County's mobility needs. *Moving Forward* is designed to improve mobility for all residents and employees in the County by creating a variety of travel options that each contribute to congestion relief.

The recommended solutions are specifically targeted to the character of Marin County and to the local areas they serve. Continually building new roads and expanding highways is no longer a desirable or feasible solution. Alternatively, reducing our demand for automobile travel by as little as 10%, by providing competitive alternatives for some trips, would significantly reduce congestion. Thus, the solutions contained in this document are focused on providing alternatives to single occupancy auto travel while maintaining and improving our existing infrastructure and improving the quality of life enjoyed by Marin County residents.

**Reducing our demand for automobile travel by as little as 10% would significantly reduce congestion.**

### **THE MASTER PLANNING PROCESS**

For the past three years, Marin County residents, workers, businesses and public officials have embarked on a master planning process that looked at the sources of our congestion problems, and identified potential solutions. Several comprehensive studies have been completed, each designed to take best advantage of a particular mode — including public transit alternatives, bike and pedestrian improvements, and enhancements to local roads and highways. Chapter 3 combines these plans with other projects that build on the best elements of each mode, creating an overall transportation vision for Marin County.

In developing this document, a number of goals were identified:

### **Goals of Moving Forward: A 25-Year Transportation Vision for Marin County<sup>1</sup>**

- Create a multi-modal transportation system, emphasizing alternatives to single-occupant driving.
- Reduce overall congestion, not just on Highway 101 but also on the roads that provide connections and alternatives to freeway travel.
- Maximize mobility for all residents of Marin County including seniors, youth and disadvantaged residents.
- Maintain the quality of life enjoyed in Marin County.
- Maintain flexibility to allow for different needs in different parts of the County and to respond to changing conditions, including changes in funding.

With these goals in mind, this transportation vision was developed to:

- Maintain and expand on our existing services and infrastructure.
- Include a variety of transportation choices.
- Directly address our current and emerging congestion problems.
- Support mobility for all residents of the County.
- Support environmental quality and regional land use plans.

The following sections summarize the findings of several comprehensive Master Plans that have been completed, as well as additional studies that have either been completed or are on-going. Plans, studies and programs are presented according to their geographic scope and transportation mode. Those that primarily serve travel within Marin County are presented under “Traveling within Marin – Our Local Multi-Modal Fu-

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<sup>1</sup> These goals represent a summary of the goals approved by the Joint Committee of the Board of Supervisors, CMA and Transit District. The complete list of approved goals can be found in Appendix A.

ture.” Those that primarily serve travel between Marin and other counties are presented under “Traveling to and from Marin – The Regional Picture.” These two categories reflect the fact that our local transportation system must be designed to support and connect to regional projects, providing an enhanced network for all types of trips. Regional investments often require long lead times for planning and may attract their own dedicated funding sources, while local projects are more directly influenced by internal decisions and local priorities.

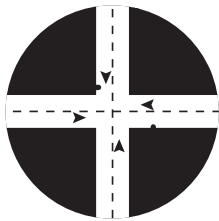
Specific benefits and services provided to each community in the County from both local and regional projects are presented in Chapter 3. Costs and funding opportunities for each element of the transportation vision are provided in Chapter 4.

Although this chapter categorizes potential projects as being either local or regional in nature, it is important to note that local and regional transportation networks are inextricably linked – the local transportation network provides access to and from the regional network, and decisions made on the local network may significantly affect a regional project's impact on Marin County. Ideally, local and regional projects function together to provide a seamless transportation system throughout Marin County and beyond.

## TRAVELING WITHIN MARIN – OUR LOCAL MULTI-MODAL FUTURE

The following projects and programs focus on serving local travel needs within Marin County. These include travel between and within communities, as well as local access to regional transportation networks.

### Local Streets and Roads – Primary Roadway Network



**Nearly every trip  
begins or ends on  
a local road.**

Nearly every trip begins or ends on a local road. Pedestrians, bicyclists, bus passengers and drivers of all types depend on a well-maintained and effective local roadway network that serves travel both within and between communities. To prepare a plan for improving local streets and roads in Marin County, Department of Public Works managers from each city and from the County worked together to compile a list of needed improvements. The list includes numerous paving and drainage projects, as well as intersection improvements, signal timing and other system strategies to improve overall traffic flow. Their plans were discussed with the public and refined in an all-day workshop dedicated to this topic.

Their plans focus on “hot spots” where congestion can be relieved by improving road maintenance or system management. These investments preserve our existing infrastructure and allow all modes to work better. Figure 2-1 shows the primary road network where improvements will be directed.

### Interchange Program



Highway interchanges are critical junctures where local and regional roadway systems intersect. By reducing congestion and improving safety at key interchanges, future interchange improvement projects can increase mobility on both local and regional roadways. Marin’s Congestion Management Agency in partnership with Caltrans and local stakeholders is studying improve-





**Figure 2-1 Primary Road Network**



ments to several key highway interchanges where safety and congestion are a particular concern. Seven interchanges have been identified as high priorities for future projects. The high priority interchanges are:

- U.S. 101/Atherton Avenue
- U.S. 101/State Route 37
- U.S. 101/Lucas Valley Road
- I-580/U.S. 101
- U.S. 101/Sir Francis Drake Boulevard (Greenbrae Interchange)
- U.S. 101/Tamalpais Drive
- U.S. 101/Tiburon Boulevard
- U.S. 101/Sausalito (Alexander Avenue)

Many of these interchange projects are still being studied or designed. All are intended to improve safety and relieve congestion at key choke points along the highway. Interchange improvements offer significant benefits to local arterials that take cars to and from the highway, as back-ups on Highway 101 reflect back on local roads.

### ***Marin Bus Transit Futures: Improving Local Transit Choices***

*Marin Bus Transit Futures* is a comprehensive long-range effort to provide a vision and practical implementation strategies for improving the range of public transportation choices for local Marin County trips. The goals of the local bus master plan are to enhance local mobility, create more livable communities and provide County residents and workers with an alternative to the single-occupant vehicle.

The service element of *Marin Bus Transit Futures* took shape after extensive public outreach and data collection efforts. The Plan has the following features, which are illustrated on the map in Figure 2-2:

- **Local Express Bus** - Frequent (15-minute peak) service along the Highway 101 Corridor, linking major residential and activity



**The goals of the local bus master plan are to enhance local mobility, create more livable communities and provide residents and employees a viable alternative to the auto for Marin County trips.**

In addition to providing congestion relief, the plan provides mobility for those that cannot or choose not to drive, including youth, seniors, and lower income residents.

centers. (This is a separate service from the Marin-Sonoma Express Bus, discussed later in this chapter.)

- **Intercommunity Service** - An expanded system of intercommunity routes to provide an attractive local transit network for direct travel between Marin County communities.
- **Tailored Local Community Service Routes** - An array of local services tailored to meet the different needs of Marin communities from local fixed route shuttles, to community service routes tailored to seniors, to contract taxis in lower density areas. Implementation of this plan would allow for continuation and expansion of demonstration shuttles in Southern Marin County, West Marin and Novato, while adding new tailored services in other communities.
- **School Tripper Service and School Pool Program** - While Marin County Transit would not provide “yellow school bus service,” it would offer supplemental “School Tripper” shuttles and buses that would serve a similar function by linking residential areas to local schools. Although not contained in the Plan, a free youth bus pass will be implemented on a trial basis in February 2003. The “School Pool” program would provide ridematching assistance to promote carpooling to schools. These programs would supplement the Safe Routes to Schools efforts to reduce congestion around schools, specifically targeting those areas where walking and biking is a less practical option.
- **Intermodal Connections** - New service would link major bus transfer points to ferry terminals and to proposed rail stations, ensuring a seamless intermodal connection at all major transfer locations.
- **Paratransit** - Especially designed to meet the needs of seniors and persons with disabilities, this would expand on the current services offered in response to the Americans With Disabilities Act. Expanded paratransit service will also be needed to serve Marin's growing senior population.
- **Increasing the number of bus transit junctions from one in San Rafael to three at critical intermodal points** – For intercommunity and local services, three bus transit junctions would be developed for timed transfers with enhanced passenger amenities and information, including electronic message signs announcing when the next bus will be arriving. The current junction in San Rafael would be improved, with new junctions added in Novato and Southern Marin.
- **Improved access and stop amenities** – Improved freeway bus pads and pedestrian and bicycle access would enable convenient connections between regional and intercommunity bus transit services. Improvements are expected at virtually all pad bus stops in the Highway 101 Corridor.



- **New and expanded bus fleet** – A substantial increase in the number of buses needed would be met by a diverse bus fleet that includes alternative fuels and vehicle sizes that match the service need with the service fleet.
- **Use of alternative fuels** – Although Golden Gate Transit’s current policy is to continue using clean diesel vehicles, there may be opportunities to purchase new clean fuel vehicles which run on no or extremely low emission fuels. Of the various alternative fuel technologies available, the most promising is hydrogen fuel cells.

When fully implemented, *Marin Bus Transit Futures* could more than double the existing local bus transit daily ridership of 13,200 to an estimated total of approximately 35,000 daily bus transit riders by 2020. The Plan provides real congestion relief by providing a viable bus transit option to local (internal to Marin County) commuters, which constitute over half of the work trips made by Marin County residents. In addition to providing congestion relief, the Plan improves mobility for those who cannot or choose not to drive.

## **The Future of Golden Gate Transit**

The Marin Bus Transit Futures Plan builds on the existing local bus service provided by Golden Gate Transit, a division of the Golden Gate Bridge, Highway and Transportation District (GGBHTD). Although Golden Gate Transit is focused on providing commute service between Marin and San Francisco, it also provides local bus service in Marin through a funding agreement with the Marin County Transit District. Golden Gate Transit currently is facing a major financial crisis which has necessitated an increase in bridge tolls, as well as cutbacks in bus and ferry services and elimination of some local bus routes. Golden Gate Transit is targeting underutilized and inefficient services for reduction or elimination within the framework of the GGBHTD’s transit service priorities, which are (in order of priority):

1. Transbay bus and ferry commute services that directly reduce peak-hour traffic on the Golden Gate Bridge.

2. Weekday and weekend transbay services that help reduce traffic throughout the day on the Golden Gate Bridge and in the Highway 101 corridor.
3. Intercounty bus service not directly related to the Golden Gate Bridge corridor and local bus services provided under funding agreement with Marin County.

An initial round of service cuts will take effect in March 2003, and additional cuts will be proposed for implementation in Fall 2003. More detailed information can be obtained from Golden Gate Transit's website at [www.goldengatetransit.org](http://www.goldengatetransit.org).

Because local bus service within Marin County is the GGBHTD's lowest priority, the current financial crisis may impact our ability to implement the recommendations of the *Marin Bus Transit Futures Plan*. Rather than expanding local bus service, short-term objectives may need to focus on maintaining the quality of existing service in order to facilitate service expansions in the long term. The Marin County Transit District is working in active partnership with Golden Gate Transit to propose alternatives that meet Golden Gate's financial needs while maintaining mobility in Marin County.

## Transportation Demand Management (TDM)

Transportation Demand Management strategies, included in *Marin Bus Transit Futures*, manage the "demand" side of transportation needs by shifting trips outside of peak periods and encouraging the use of higher occupancy modes for work commute trips. Although TDM strategies are implemented at a local level (within Marin County), they affect people traveling within Marin, as well as people who travel to Marin from other areas. Because TDM strategies are focused on reducing commute trips, they require the development of public-private partnerships in which employers work closely with the County to develop and implement strategies to reduce the number of drive-alone trips. Examples of TDM strategies include vanpool and carpool matching, telecommuting centers, employer

### TDM Strategies:

- **Vanpool and carpool matching**
- **Telecommuting centers**
- **Employer shuttles to regional transit services**
- **Employer transit passes**
- **Guaranteed Ride Home programs**
- **Subsidized vanpools**
- **On-site cafeterias and child-care facilities for employees**
- **Flexible work hours**
- **Public education to foster awareness of transportation alternatives**
- **Parking cash-out programs**



shuttles to regional transit services, employer transit passes, Guaranteed Ride Home programs, subsidized vanpools, and parking cash-out programs. Other strategies such as on-site cafeterias and child-care facilities can reduce the number of mid-day trips made by workers. Employers with comprehensive TDM plans in place have been able to reduce drive-alone trips by as much as 15%. TDM strategies can also be used to reduce school commute trips, a significant source of traffic congestion in Marin County.

*Marin Bus Transit Futures* developed a preliminary TDM concept which recommends creating the Marin Office of Mobility Management, which would work closely with Marin employers to maximize the use of alternative modes for work trips in Marin County. This concept will be further developed with additional study, allowing Marin County to be a national leader in TDM activities and the use of public-private partnerships to create innovative transportation solutions.

## **Transportation Systems Management**

Transportation Systems Management (TSM) can optimize the utilization of transportation investments and is thus an important part of transportation planning. TSM strategies have been incorporated into the Transportation Master Plans and will continue to play a role in future planning efforts. TSM strategies include a range of programs and activities aimed at relieving bottlenecks and interruptions, coordinating the operations of different types of transportation systems, and improving access to information. For roadway systems, these may include signalization improvements at intersections, the addition of carpool lanes, metering lights at freeway on-ramps, real-time traffic information, rapid clearing of traffic incidents, improvements to sidewalks and pedestrian safety facilities, and the addition or maintenance of bicycle lanes. TSM strategies more specific to transit systems include universal

fare cards that can be used on multiple systems, technologies that provide real-time information on bus or train locations, and web sites or information kiosks that provide transit trip planning assistance.

As new technologies are developed, the range of TSM strategies will continue to expand. Intelligent Transportation Systems research, which uses information systems technologies to alleviate congestion, is producing new ways to better utilize our existing infrastructure. As we plan our transportation investments for the next 25 years, we need to consider ways to take advantage of new technologies that will enable our investments to serve us far into the future.

### ***Marin County Unincorporated Area Bicycle and Pedestrian Master Plan***

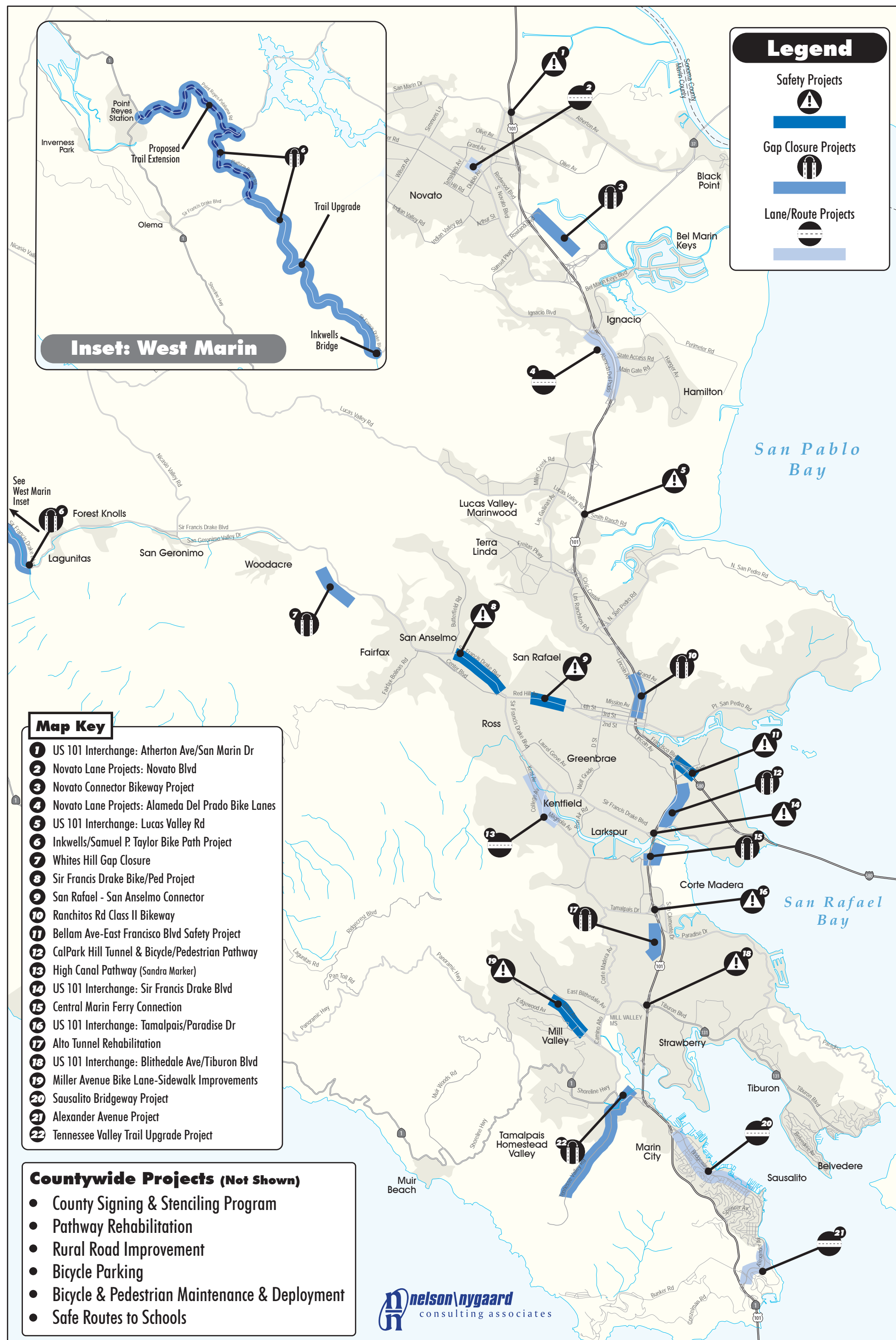
The *Marin County Unincorporated Area Bicycle and Pedestrian Master Plan* provides a blueprint for making bicycling and walking an integral part of daily life in Marin County. The 20-Year Plan calls for the completion of a countywide network of primary and secondary bikeways. It also calls for the completion of pedestrian improvements, both independently and in conjunction with bicycle improvements. The long-term system is intended to connect all of the major destinations in the County, as well as provide continuous connections between communities. Along with specific physical projects, the Plan provides bicycle and pedestrian facility design standards and guidelines and provides recommendations for education, marketing, and other programs that will ultimately be implemented by public or private groups.

While many local projects are included in the Plan, its focus is on connecting the cities and communities in the County, making biking and walking a viable alternative to the auto for shorter trips. Some of the most critical regional bike and pedestrian links, shown on Figure 2-3, include the continuous Class I North-



**Every short trip that can be made by bicycle or walking avoids another “cold start,” improving the health of the traveler and everyone in the community.**







South Bikeway, providing an unbroken path from the Sonoma/Marin County line through Marin County to San Rafael, as well as a new connection from Central Marin County to the Larkspur Ferry terminal, and the opening of abandoned rail tunnels to bicycle use. Projects in West Marin will help to complete the East-West Bikeway across the County.

The Plan promotes inter-modal connections by providing direct and convenient bicycle and pedestrian-ways to major transit stops. If fully implemented, the Plan would include significant investment in bicycle facilities at transit nodes, including both bus transfer points and rail and ferry terminals.

The *Bicycle and Pedestrian Master Plan* is supplemented by individual local bicycle and pedestrian plans, prepared by each city in the County. It is also supplemented by an expanded Safe Routes to Schools Program that was not incorporated into the original Plan. The Safe Routes to Schools Program is especially critical because it directly addresses one of the most significant congestion problems in Marin County. This program has been proven to reduce auto use at schools already enrolled in Safe Routes to Schools. Auto trip reductions of 15% were recorded at schools receiving Safe Routes training in 2000-2001.<sup>2</sup>

Safe Routes to Schools is an on-going program that provides training to a different group of students and their parents each year. This document plans for an expansion of the educational component of the Safe Routes Program, while also expanding the availability of engineering and construction funds for improvements to bicycle and pedestrian safety around schools, further reducing auto congestion in these areas.

The *Bicycle and Pedestrian Master Plan's* goal is to increase the bicycle and walk mode share for utilitar-

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<sup>2</sup> Based on 2001 Safe Routes to Schools annual survey.

ian trips from today's estimated 7% to 20% by the year 2020. While most of those trips would occur outside of the peak commute period, increasing bicycle and pedestrian trips offers numerous benefits including:

- Improved safety for cyclists and pedestrians.
- Increased opportunities for exercise, promoting health and well-being.
- A significant reduction in local traffic, particularly around schools.
- Substantially increased bike-to-transit and walk-to-transit trips, helping to increase the viability of transit, bicycling and walking as legitimate transportation options.
- Reduction of "cold start" short auto trips, thereby improving our air quality.

Increasing Marin's commitment to walking and cycling goes beyond improving the multi-modal transportation network to reflect the environmental values of County residents. The Plan offers Marin a viable strategy to mitigate the environmental impacts caused by motor vehicles, including air quality, energy consumption, noise, and use of land for roadways and parking lots.

### ***Marin County Welfare-to-Work Transportation Plan***

In the first half of 2002, the Metropolitan Transportation Commission (MTC) developed the *Marin County Welfare-to-Work Transportation Plan* to meet the needs of CalWORKs clients in Marin County. The Plan was completed at the end of June 2002 and the first steps have been taken towards securing funding to implement the Plan's short-term recommendations. The primary transportation challenges faced by CalWORKs clients are relying on local Golden Gate Transit (GGT) bus service to travel to work, job interviews, and training programs, and conducting linked trips to transport their children to day care and school. Given the land use patterns in the County, and the heavy auto-reliance of

most residents, many CalWORKs clients have partial access to a car, but often experience problems with insurance and registration costs, and drive cars that are poorly maintained.

To address these transportation gaps, the Plan recommends a number of short- and long-term strategies. These include, in the short-term: creating an Adult Dial-A-Ride service and a Childcare shuttle, and establishing a Mobility Manager position at Health and Human Services to coordinate these services. In the long term, the recommended strategies include making permanent and possibly enhancing the pilot transfer policy on GGT buses; expanding the hours of GGT Route 1 weekday service and GGT Routes 20/35 service frequency; creating a monthly pass on GGT; developing multi-lingual transit information materials; and developing a Car Loan Program and a Vehicle Clearinghouse for the sale of refurbished cars. Welfare to Work needs will be reviewed in the context of Golden Gate Transit's service reductions, which may threaten existing services in the short term.

## **TRAVELING TO AND FROM MARIN – THE REGIONAL PICTURE**

The regional transportation network connects Marin County to San Francisco, the East Bay, Sonoma and Solano counties and points beyond. Regional travel, which contributes to congestion experienced within Marin County but is also adversely impacted by congestion from local trips, can be improved by increasing the number of transportation options available for longer distance trips. Furthermore, strategic investments aimed at improving the function and capacity of existing regional roadways, particularly for bus transit and other high occupancy vehicles, may also be an effective means of managing congestion.



**While we cannot build our way out of congestion, we can make spot improvements that will help the existing highway system move people more efficiently.**

## Highway System Improvements

Marin's Congestion Management Agency regularly prepares a Congestion Management Program that prioritizes highway projects. The most recent CMP was adopted in 2001. For the past decade, much of the attention and funding in the Plan has been focused on the "gap closure" project — completing the HOV lane system through San Rafael. This project is now being constructed, allowing the County to develop new priorities.

The highest priority projects for highway improvements are intended to provide "spot relief" for major bottlenecks in the highway system. While it is widely recognized that we cannot build our way out of congestion, we can make strategic investments that will help the highway system move people more efficiently. Critical bottlenecks occur in the Marin-Sonoma Narrows area and at specific interchanges throughout the County. In addition, accidents and incidents are often concentrated in these "choke points" where the system slows down dramatically due to spot congestion.

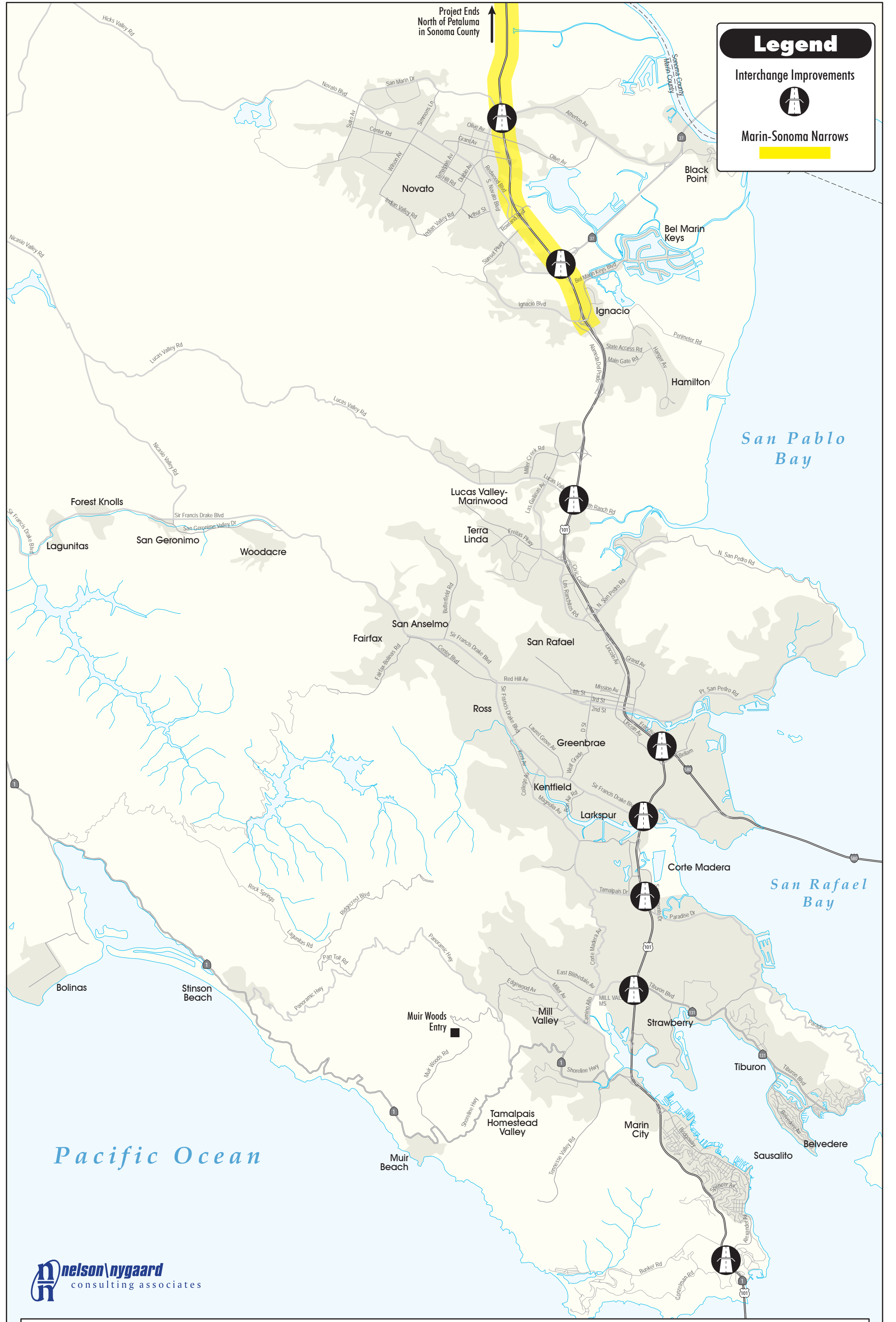
The benefits of highway improvements can be measured in reduced delay. The following projects combine to eliminate an estimated 1,000 vehicle hours of delay every day.<sup>3</sup> This will result in improved travel speeds and reduced commute time, as well as a more reliable highway system.

### Marin-Sonoma Narrows

Caltrans is currently studying alternatives for improving the Marin-Sonoma Narrows area by completing the HOV lane system on U.S. Highway 101 throughout the County. This project will have the special benefit of

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<sup>3</sup> Vehicle hours of delay are calculated by the Congestion Management Agency and measure the total delay experienced by all vehicles on a particular roadway segment during the peak hour of a typical weekday.



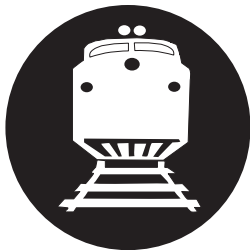
making transit service in this area more competitive by improving travel times, while at the same time encouraging carpool and vanpool services. The location of the project study area is shown in Figure 2-4.

More specifically, the Marin-Sonoma Narrows project will provide 17 miles of HOV lanes on Highway 101 from Ignacio to the Old Redwood Highway interchange in Petaluma.

The construction of a new interchange in Novato (in the area between Atherton Avenue and the landfill) and HOV on- and off-ramps are also included in the proposed project and will be studied further. Now that preliminary project studies have been completed, the next step will be to undertake a more thorough environmental review. This will include an extensive analysis of environmental impacts, as well as project alternatives. A number of alternatives will be considered, including those that will limit the construction "footprint" by keeping the project within the existing highway right-of-way to the extent possible. More detailed information and project updates can be obtained from the Caltrans website at [www.dot.ca.gov/dist4/msn](http://www.dot.ca.gov/dist4/msn).

### **State Route 37**

In 1998, the Metropolitan Transportation Commission (MTC), in cooperation with other transportation and resource agencies, completed the North Bay Corridor Study, which examined future transportation needs, enhancement of wetlands and habitats, and opportunities for recreational trails in the Route 37, 12, 116, and 121 corridors. The study recommended that safety improvements be made along most of the roadway. Accordingly, MTC's Regional Transportation Plan (RTP) includes a Track 1 project to create a traveler information system along Route 37 that will provide information on travel conditions, enabling travelers to



**Projected to initially carry over 5,100 riders a day, SMART will meet the needs of many commuters to employment destinations in both Marin and Sonoma Counties, as well as commuters to San Francisco.**

choose alternative routes when roadway congestion is severe.<sup>4</sup> The system will also provide future incident management capability. Safety improvements may also be made to the U.S. 101/ Route 37 interchange.

The RTP also includes a Track 2 project (which does not have any identified funding source) to widen Route 37 to four lanes with environmental mitigation. This is a long-term project aimed at facilitating east-west travel in the North Bay.

### **SMART Commuter Rail for Sonoma and Marin Counties**

The Sonoma-Marin Area Rail Transit (SMART) project seeks to directly address the demand for intercounty trips between Sonoma and Marin. Most commuters coming into Marin County from the north are traveling to jobs within Marin. These trips can best be served by regional transit and other solutions that move people from single-occupant cars to higher occupancy modes.

The SMART commuter rail system would operate from Cloverdale in Sonoma County to San Rafael, with an extension to a ferry terminal. Potential ferry connections could be made in either southern Marin at the Larkspur Landing ferry terminal or San Quentin (a potential ferry terminal location), or in northern Marin at Port Sonoma (also a potential ferry terminal location). Trains would operate along the publicly owned Northwestern Pacific (NWP) rail corridor that lies next to Highway 101, which would also be used to accommodate the North-South Bikeway. Figure 2-5 shows the current plans for SMART in Marin County. Marin County stations would be sited in Novato (two locations) and San Rafael (two stations) close to the Civic Center area and downtown. Each of these sta-

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<sup>4</sup> See Chapter 4 for a description of the RTP process.



**Legend**

**Commuter Rail Station**

**SMART Rail Alignment**

**SMART Ferry Connection Options**

**Existing Ferry Route**

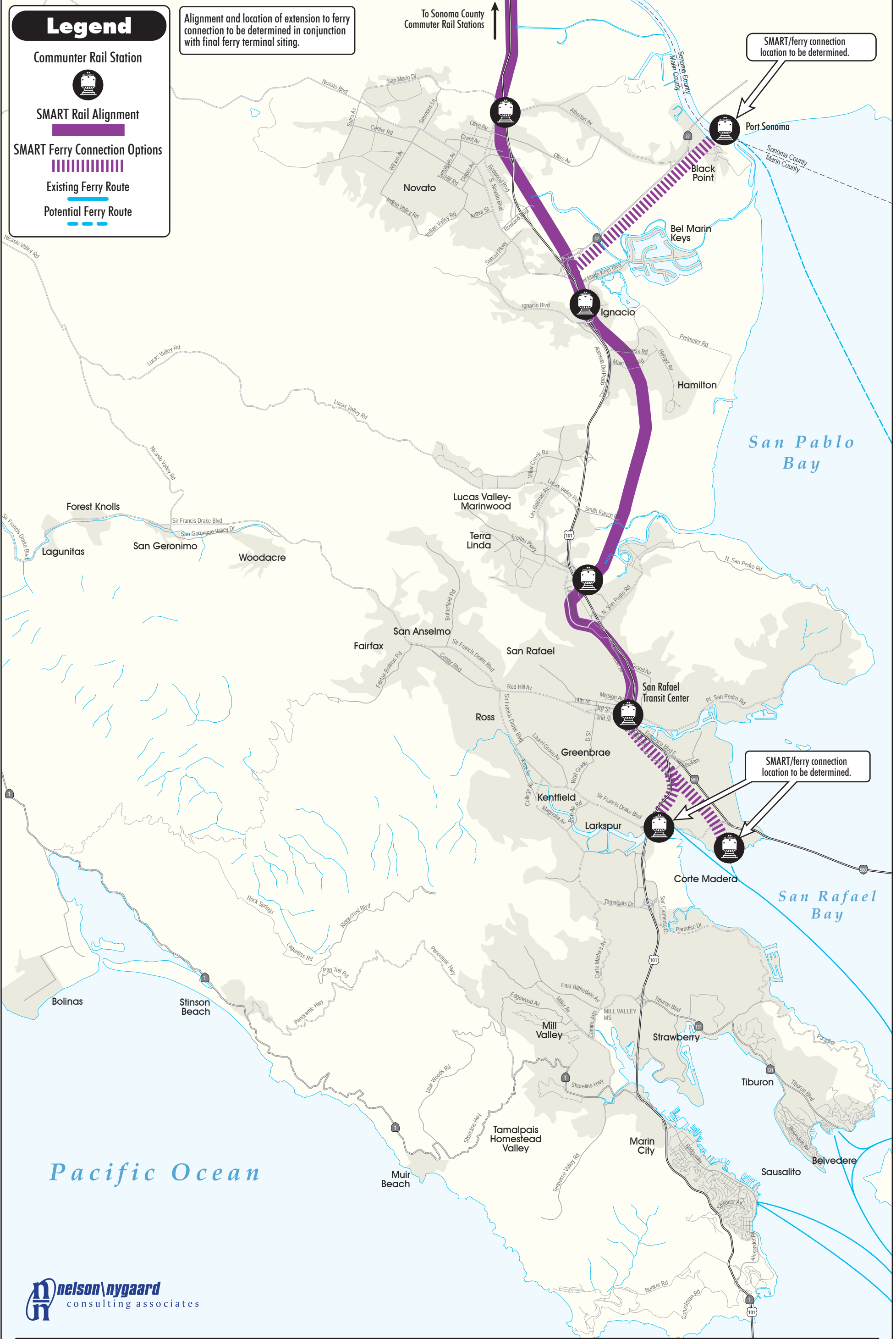
**Potential Ferry Route**

Alignment and location of extension to ferry connection to be determined in conjunction with final ferry terminal siting.

To Sonoma County  
Commuter Rail Stations

SMART/ferry connection  
location to be determined.

SMART/ferry connection  
location to be determined.



**Figure 2-5: SMART Rail in Marin County**



tions would provide multi-modal transfer opportunities with extensive bus and shuttle services, bicycle facilities and pedestrian access. The connection to a ferry terminal will allow riders to make a seamless trip into San Francisco.

A key advantage to the SMART system plan is that it provides an expandable, high capacity transit solution on a separate right of way that is already in public ownership. The project has begun its environmental review process, during which environmental impacts and project alternatives will be considered in detail, and the three alternatives for a ferry service extension will be studied to determine which option is best. Service could be provided within four years following environmental approval, assuming funding is in place.

With service every 30 minutes during the most congested times of day, it is estimated that SMART will initially carry 5,100 daily riders. This may remove an estimated 1,900 auto trips from Highway 101 during the morning commute from 6AM to 9AM.

### ***Marin/Sonoma Express Bus Study***

Even with rail implementation, there will be some inter-county markets that are better served by express buses. Currently, Golden Gate Transit serves over 30,000 daily riders on its basic and express bus service between Marin and Sonoma counties. Given the major changes in travel patterns, including a much higher proportion of commute trips staying within the North Bay, a Master Plan was developed for an enhanced express bus service within Sonoma and Marin Counties.

The recommended system would restructure existing express bus service and add new routes to more than double current service levels. After completion of the HOV lane system, including the completion of HOV lanes through the Marin-Sonoma Narrows, buses would take advantage of faster travel times on Highway 101,

**An estimated 1,900 auto trips could be removed from Highway 101 during the morning commute, providing congestion relief along the entire U.S. 101 corridor.**



**Given the increase in commute travel completely within the North Bay, creative solutions are needed to serve this travel market.**

and would be restructured to create more than a dozen point-to-point express bus routes serving major employment centers in Marin County. Figure 2-6 shows the proposed express bus system for the North Bay.

The changes proposed in the *Express Bus Study* could increase express bus ridership by 1,850 daily riders, even with SMART Rail in place, eliminating over 600 cars from Highway 101 in the peak direction during the peak period. Implementing the Study recommendations would also leverage a large investment in HOV lanes, and would provide additional transit options to those currently commuting by car.

In addition to the *Marin/Sonoma Express Bus Study*, Golden Gate Transit has also conducted several studies for improving commute-oriented bus service and providing service to currently underserved bus transit markets. Three new commute bus routes to San Francisco serving Bel Marin Keys, Hamilton and East Corte Madera would cover existing service gaps and serve latent demand for commuter bus services. As part of the Metropolitan Transportation Commission's Regional Express Bus Program, Golden Gate Transit proposed expanding service on Route 75 which provides commute service between Sonoma and Marin. Any expansion in Golden Gate service in the near-term will be subject to review as that agency evaluates its financial condition.

**Marin-Sonoma Express Bus Origins  
in Sonoma County not shown:**

- North Santa Rosa
- East Santa Rosa
- Rohnert Park
- Cotati
- Petaluma

**Legend**

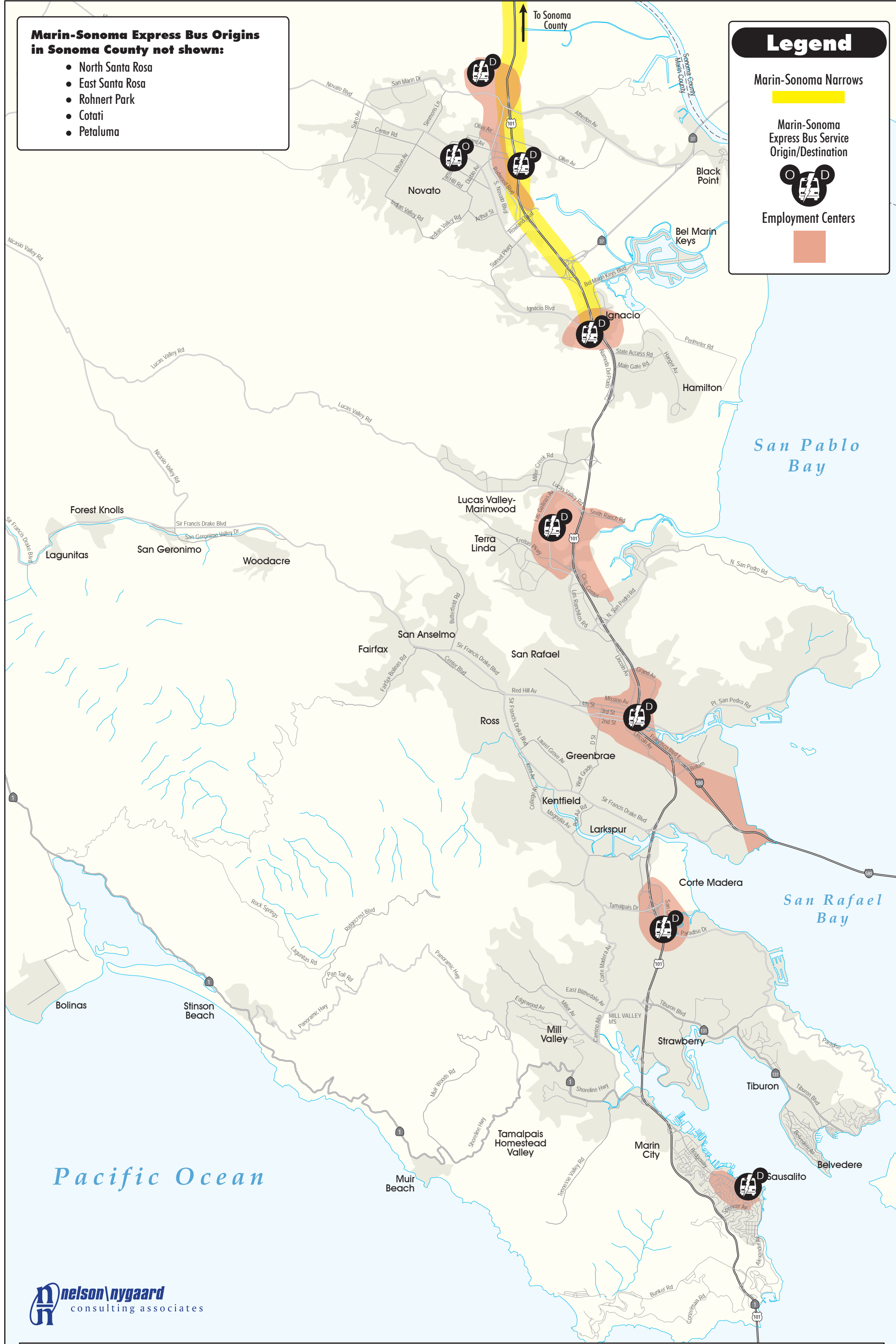
Marin-Sonoma Narrows



Marin-Sonoma  
Express Bus Service  
Origin/Destination



Employment Centers



**Figure 2-6: Marin-Sonoma Proposed Express Bus Service**

## **The Bay Area Water Transit Authority - New and Expanded Ferry Service for the North Bay**

The Bay Area Water Transit Authority (WTA) was created through Governor Gray Davis' Transportation Congestion Relief Program. The WTA recently released its Implementation and Operations Plan, which presents a strategy for expanding Bay Area water transit to serve an increasing demand for regional travel. The Plan's primary objective is to design a water-transit system that takes people out of cars, rather than simply drawing riders away from other transit modes. To do this, the Plan proposes expanding existing ferry routes, creating seven new ferry routes, and further studying four additional routes. It will also provide regional coordination for all ferry services. The Plan, as well as additional information and future updates, can be obtained from the WTA website at [www.watertransit.org](http://www.watertransit.org).



In the North Bay, the Plan calls for increasing service from existing ferry terminals at Sausalito, Tiburon and Larkspur. The WTA is continuing to study a new ferry terminal site in Port Sonoma (near State Route 37) that would serve San Francisco bound commuters from Marin, Sonoma and Napa counties. Further studies of the potential Port Sonoma site will include more detailed ridership projections, conceptual site design, a site-specific EIR, and a cost-effectiveness analysis. A future route could also originate at San Quentin, which is being considered for reuse by Marin County should the state decide to close the prison.<sup>5</sup> The WTA will continue to work with the county and GGBHTD on studying this site.

Once the plan for expanded ferry service is implemented, ridership on Golden Gate Corridor ferries

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<sup>5</sup> The Marin County Board of Supervisors convened a planning committee to examine various reuse options for the San Quentin prison site. The committee's recommendations will be included in the Countywide Plan update, and should be completed in Spring 2003.

is projected to grow by approximately 80% to over 14,400 daily riders in 2025. Regionwide, the Plan estimates that water-transit patronage will grow about 12% annually and will draw most of its riders from automobiles.

Once funding is in place, new ferry vessels can be deployed within three years that are ten times cleaner (with regard to air quality) than existing ferries. Furthermore, the WTA is studying zero-emissions ferries that use hydrogen fuel cell technology.

### **Reducing Congestion in the Richmond-San Rafael Bridge Corridor**

The Richmond-San Rafael Bridge is the primary connection between Marin and Sonoma counties and the East Bay. Nearly all westbound traffic on the bridge is destined for either Marin (76%) or Sonoma (24%), and approximately 8% of Marin residents travel to the East Bay for work. Because nearly all westbound traffic on the Richmond-San Rafael Bridge eventually ends up on Highway 101, congestion on Highway 101 is a significant contributor to congestion on the bridge. A number of the projects included in this transportation vision are specifically designed to help manage congestion in the Highway 101 Corridor, and, in turn, will help manage congestion across the Richmond-San Rafael Bridge. Additionally, Golden Gate Transit has studied expanding service on Route 40 which travels between the San Rafael Transit Center and the East Bay via the Richmond-San Rafael Bridge.

### **National Park Access Studies**

A number of projects are being developed to improve access to Marin's recreational areas and reduce related congestion. The studies include participation of Federal, State and local agencies and are being coordinated by both Marin County and the National Park Service.

- **Marin Headlands and Fort Baker Transportation Management Study** – This is a comprehensive study of alternative transportation options for the Marin Headlands and Fort Baker. Included within the Study are proposals for internal shuttles, park-and-ride shuttles, and transit improvements as well as infrastructure maintenance and maintenance of historic roads. The study is currently in its environmental assessment phase, evaluating a variety of alternatives ranging from minimal improvements to major enhancements in alternative access opportunities.
- **GGNRA Ferry Access Study** – This study is considering the provision of a ferry terminal and service at Horseshoe Bay in Fort Baker. The Water Transit Authority will continue to work with the Park Service in studying park-related ferry service.
- **Transportation Demand Management Program** – The National Park Service is developing a Transportation Demand Management Program that will reduce commute traffic generated by tenants and employees located within park facilities.
- **Marin Parklands Visitor Access Program** – A Parklands Task Force, comprised of the National Parks Service, Golden Gate National Recreation Area, the County of Marin, the Golden Gate Bridge and Highway Transportation District, Caltrans, and the Metropolitan Transportation Commission, has been meeting for over three years to develop transportation solutions for access to Muir Woods National Monument and other parkland destinations in Southern and Western Marin. Studies have shown that scheduled admission and shuttle service to Muir Woods and improved modal choice to all parklands destinations could minimize traffic impacts on parklands, congestion on local roads, environmental degradation of the parklands and affected gateway communities, as well as the seasonally recurring back-ups on State Route 1 and Highway 101. Because of its potential benefits, the Board of Supervisors has identified this Program as a top transportation planning priority in Marin County.

Currently, there are several parklands transportation planning efforts underway to address traffic problems in Southern Marin. The two main planning efforts are the:

- **Southern Marin Parklands Comprehensive Transportation Management Plan (CTMP)** – This is a large-scale planning effort intended to quantify current and future demand for park visitation and to identify broader strategies for reducing the number of vehicles accessing the parklands along Shoreline Highway. The main strategy being studied is a satellite parking intercept facility, reservation, and shuttle bus system in the vicinity of the Manzanita Park-and-Ride Lot. The recent County acquisition of the former Felton property provides an important component of any potential expansion

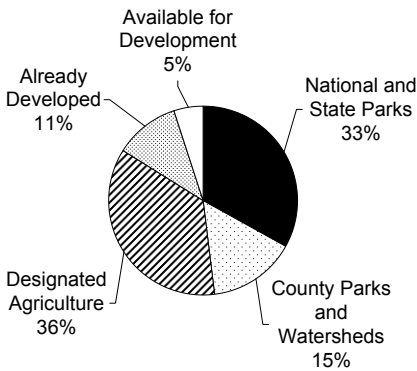
plans for commuter parking and recreational visitor parking at the Manzanita Park-and-Ride Lot.

- **Tamalpais Transportation Improvement Project (TTI)** – This involves two related construction projects designed to improve congestion, safety and circulation in, around and through the Tamalpais Valley, and provide alternative transportation access to the parklands. The two TTI projects are the Tennessee Valley Trail upgrade project to improve trail access for all users from the Mill Valley-Sausalito Bike Path to the GGNRA trailhead at the end of Tennessee Valley Road; and the Coyote Creek Bridge replacement project on Shoreline Highway to improve alternative access under the bridge and across the creek, as well as vehicle access across the bridge.

### BEYOND TRANSPORTATION SOLUTIONS – LAND USE STRATEGIES

Not all solutions to our congestion problems involve the transportation system itself. The way we live has a greater effect on our transportation system than any single project we could consider. As people move farther from their jobs, for example, vehicle miles traveled increases. In many communities it is not possible to shop, work or go to school on foot or bike. Land use has a major impact on the amount and way we travel.

**Marin County has more “protected land” than any other county in the Bay Area.**



While it is true that new development results in more trips, the impact of those additional trips on our environment and quality of life depends on the type and location of new development. The impact of these trips on the transportation system is especially significant when development occurs in “greenfields” - areas where there is currently no development. Marin County has more “protected land” than any other county in the Bay Area, with 33% of the County protected as State and National Parks, another 15% preserved as County parks and watersheds, and 36% of the County’s land area designated for agricultural resources. Eleven percent of the County’s land area is already developed. This leaves only 5% of the total County land area available for new development, most of which is



highly constrained by environmental factors.

Preserving and protecting our open space is not just a transportation issue - it is a major contributor to the quality of life enjoyed in Marin County.

While it is important to carefully consider the impacts of new development, not all types of development contribute equally to congestion. “Smart growth” concepts are being considered throughout the Bay Area. Smart growth concentrates development in areas that can be more easily served by alternative modes, encouraging transit, bicycle and pedestrian travel. To further reduce auto impacts, smart growth developments include multiple uses, allowing people to walk to shopping, errands and other trips, and to take transit for longer trips. With growth pressures throughout California, severe restrictions on growth in Marin County will increase pressure to develop in adjacent counties, sending more traffic from outside the County onto our roads. However, if development is done carefully under smart growth concepts, growth will not increase traffic congestion but will instead improve the viability of transit and other alternative transportation modes.

## **EVALUATING THE MODAL MASTER PLAN PROJECTS**

The projects included in the Master Plans are not intended to be mutually exclusive. In fact, given enough resources, they all contribute to an optimal transportation system. However, not all projects can be developed at the same time due to a lack of sufficient funding.

Figure 2-7 shows how the local and regional plans and projects described previously address the goals of *Moving Forward* stated at the beginning of this chapter. The funding needs for each element are included in the table and will be discussed in more detail in Chapter 4. The following matrix is not intended to



develop a priority ranking, but rather to show how all of the potential projects address an important part of our congestion picture.

Figure 2-7 Project Benefits Matrix

Mode	Market/Project	Estimated Total (\$M)* Funding Need Over 25 Years	Maximize Alternative to Driving Alone	Reduce Highway 101 Congestion	Reduce Local Congestion	Maximize Mobility for Seniors, Youth and Disadvantaged Residents	Maintain Environmental Quality of Life	Maintain Flexibility	Overall Benefit
Local Projects									
Hwy	Highway Interchanges	\$236.0	LOW Some help to transit operations, but primarily for traffic.	HIGH May save approximately 1,050 daily person hours of delay.	HIGH Reduces spillover congestion on local streets.	LOW Primary benefit is to drivers.	MED Reduces stopped and delayed traffic, but may have other impacts to be studied.	LOW Fixed capital investment.	MED
Loc. Bus	Transit Junctions/Pads/ Stops, Technology and Admin. (incl. TSM)	\$31.0	HIGH Capital investment required to generate an estimated 16,000 new transit riders.	HIGH Capital investment may allow elimination of over 1,000 daily trips on Hwy 101 with enhanced service.	HIGH Capital investment may increase overall transit ridership.	HIGH Local transit is primary option for dependant riders.	HIGH Increases transit use with minimal impacts.	HIGH Can be altered over time.	HIGH
Loc. Bus	Intercommunity Transit	\$129.0	HIGH Could serve 13,500 daily riders.	MED May reduce Hwy 101 traffic by approximately 2,250 daily trips, approx. 560 peak.	HIGH May reduce local traffic by over 6,000 daily trips; approx 1,500 peak trips Countywide.	HIGH Local transit is primary option for dependant riders.	HIGH Increases transit use with minimal impacts.	HIGH Can be altered over time.	HIGH
Loc. Bus	Local Express Bus (Hwy 101)	\$21.0	HIGH Could serve 3,700 daily riders.	MED May reduce Hwy 101 traffic by approximately 900 daily trips, 250 in peak.	LOW Primary focus is highway trips, some local improvement for access.	HIGH Local transit is primary option for dependant riders.	HIGH Increases transit use with minimal impacts.	HIGH Can be altered over time.	HIGH
Streets	Local Streets and Roads (incl. TSM)	\$414.0	LOW Good roads help alt. modes, but primary benefit to autos.	LOW Projects have local focus.	HIGH Local road projects key to reducing local congestion.	LOW Primary benefit is to drivers.	MED Improving efficiency of local roads improves quality of life.	MED Local roads are the backbone of all modes.	MED
Loc. Bus	Community Service Routes	\$12.0	HIGH May attract over 3,000 daily riders.	LOW Primary benefit is to local trips.	MED Reduces local congestion by providing local transit options.	HIGH Local transit is primary option for dependant riders.	HIGH Increases transit use with minimal impacts.	HIGH Can be altered over time.	HIGH
Loc. Bus	School Tripper Bus Service	\$17.0	HIGH May attract 3,000 daily riders.	MED Directly addresses 21% of peak travel that is school trips. May remove about 500 peak hour trips from highway.	HIGH Significant reduction in congestion around key school sites.	HIGH Focus is on youth riders.	HIGH Increases transit use with minimal impacts.	HIGH Can be altered over time.	HIGH
Bike/ Ped	Safe Routes to Schools	\$25.0	HIGH Reduces auto trips by 15% at schools with program in place.	MED Directly addresses 21% of peak travel that is school trips.	HIGH Significant reduction in congestion around key school sites.	HIGH Focus is on youth.	HIGH Increases transit use with minimal impacts.	HIGH Program focuses on available and reasonable alternatives.	HIGH
Loc. Bus	Paratransit	\$70.0	MED Carries 600 daily trips; most paratransit riders don't drive but could get rides.	LOW Most paratransit riders do not drive on highway.	LOW Most paratransit trips are off-peak and don't have significant congestion impact.	HIGH Primary mobility for most dependant group. Particularly important for Marin's growing senior population.	MED Moderate increase in transit use with minimal impacts.	HIGH ADA Mandated Program could expand to meet other needs.	MED
Bike/ Ped	Countywide & Local Bicycle/ Pedestrian Improvements	\$70.9	MED Bike/Pedestrian trips could total 20% of all trips in County, but these are primarily off-peak.	LOW Most bike commutes are short and local. However, bike commutes could increase to between 2% and 10% of total.	MED Most bike/pedestrian trips are off-peak, but could have a significant local impact.	HIGH Healthful alternative for those who can bike or walk.	HIGH Minimal impacts for improved safety. Promotes healthful activity.	HIGH Biking and walking can be done anywhere safe options exist.	MED

\*Current dollar estimates for unfunded needs are from existing plans.

Figure 2-7 Project Benefits Matrix (continued)

Mode	Market/Project	Estimated Total (\$M)* Funding Need Over 25 Years	Maximize Alternative to Driving Alone	Reduce Highway 101 Congestion	Reduce Local Congestion	Maximize Mobility for Seniors, Youth and Disadvantaged Residents	Maintain Environmental Quality of Life	Maintain Flexibility	Overall Benefit
Land Use	Land Use	TBD	<b>MED</b> Transit oriented development proven to increase ridership. Low density development may reduce trips, but difficult to serve by transit.	<b>MED</b> Potential to increase transit ridership through concentrated development. Reducing overall development may reduce future trips, but would be more difficult to serve by transit.	<b>MED</b> Potential to increase transit ridership through concentrated development. Reducing overall development may reduce future trips, but would be more difficult to serve.	<b>LOW</b> Some potential improvements through concentrated and mixed-use developments which encourage mobility.	<b>HIGH</b> Smart growth principles enhance quality of life.	<b>LOW</b> Limits development options.	<b>MED</b>
Loc. Bus	TDM	\$10.0	<b>HIGH</b> TDM provides low cost incentives for alternative modes. Up to 15% reduction in peak commutes to major employers expected.	<b>MED</b> 15% reduction in peak commutes to major employers could be achieved.	<b>MED</b> May result in higher alternative mode use which can relieve local congestion.	<b>LOW</b> TDM focuses on commute trips.	<b>HIGH</b> Does not require investment in new fixed facilities with potential negative impacts.	<b>HIGH</b> TDM is extremely flexible, stressing use of all reasonable alternatives.	<b>HIGH</b>
<b>Regional Projects</b>									
Hwy	Narrows	\$300.0	<b>HIGH</b> Improves all high capacity modes.	<b>HIGH</b> Relieves key bottleneck; may save an estimated 492 daily person hours in delay.	<b>MED</b> Relieves congestion on freeway access routes in Novato.	<b>LOW</b> Provides no new alt., but allows transit to be more efficient	<b>LOW</b> Environmental impact on-going. Keeps traffic moving which has positive effect on air quality. May have other impacts	<b>MED</b> Allows for future bus improvements through Narrows.	<b>MED</b>
Rail	Commuter Rail	\$115.2	<b>HIGH</b> Provides new alternative; projected 5,100 daily riders initially.	<b>HIGH</b> May take 1,900 trips off Hwy 101 in morning peak	<b>MED</b> Changes travel patterns around stations, reduces overall driving trips.	<b>MED</b> Provides new transit option, but primary focus is commuters.	<b>MED</b> Environmental impact assessment on-going. Reduces auto travel, but may have other impacts.	<b>HIGH</b> Future phases already planned, service levels can vary.	<b>HIGH</b>
Xbus	Marin-Sonoma Express Bus	\$78.8	<b>HIGH</b> Projected 1,850 new daily express bus riders.	<b>MED</b> May take 610 trips off Hwy 101 in morning peak	<b>MED</b> Changes travel patterns around stops; reduces overall driving trips	<b>MED</b> Provides new transit option, but primary focus is commuters.	<b>MED</b> No environmental impact assessment. Reduces auto travel; but may have other impacts.	<b>HIGH</b> Routes and service levels can change over time.	<b>MED</b>
Ferry	Ferry	\$67.9 <sup>1</sup>	<b>HIGH</b> Projected 14,400 daily Golden Gate Corridor ferry riders.	<b>HIGH</b> Proven mode, but potential still being studied.	<b>MED</b> Changes travel patterns around terminals; reduces overall driving trips.	<b>MED</b> Provides new transit option, but primary focus is commuters.	<b>MED</b> Environmental impact assessment on-going. Reduces auto travel, but may have other impacts.	<b>MED</b> Tied to landside infrastructure, but routes and services can vary.	<b>MED</b>
Loc Bus	Intermodal Connections	\$10.0	<b>HIGH</b> Projected to carry 1,400 daily riders, reducing auto connections to regional transit.	<b>MED</b> May eliminate about 600 daily auto trips from Hwy 101 in morning peak.	<b>HIGH</b> Reduces auto access needs at local stations	<b>MED</b> Provides new transit option, but primary focus is commuters.	<b>HIGH</b> Improves environment around station area. Reduces cold starts by eliminating auto connections.	<b>HIGH</b> Routes and service levels can change over time.	<b>HIGH</b>

\*Current dollar estimates for unfunded needs are from existing plans.

<sup>1</sup>Estimated total funding need for Golden Gate Corridor ferry service for 2005-2014.

## Chapter 3 The Transportation Vision

Each of the master plans and other local and regional programs outlined in Chapter 2 presents one element of a multi-modal future for Marin County. This chapter combines those studies and other ideas for an improved transportation system in Marin County and shows how mobility can be improved throughout the County.

This "transportation vision" is not constrained by existing transportation funding. In the final chapter of this plan, the costs and possible funding sources for making this vision a reality are considered. The purpose of *Moving Forward* is to act as a blueprint that will guide development of a detailed implementation or expenditure plan that establishes priorities against a framework of financial opportunities and constraints.

Using the goals and principles outlined in Chapter 2, this section outlines the transportation vision for the County. For purposes of analysis and presentation, the plan is described in the following sub-areas:

- Countywide Programs
- U.S. 101 Corridor
- North Marin
- Central Marin
- South Marin
- Ross Valley
- West Marin

### COUNTYWIDE PROGRAMS

Some proposed projects or programs are not targeted at a specific area but are designed to be implemented countywide. These programs, many of which were described in Chapter 2, are essential for improving transportation in Marin County and include:

**Improvements in all modes can be combined to optimize our overall transportation system.**

**The purpose of *Moving Forward* is to act as a blueprint that will guide development of a detailed implementation or expenditure plan.**

- Transportation Demand Management Strategies
- Transportation Systems Management
- Safe Routes to Schools Program and other school initiatives
- Bicycle and Pedestrian Programs including:
  - Bicycle Parking
  - Maintenance and Development
  - Pathway Rehabilitation
  - Rural Road Improvement
  - Signing and Stenciling
- Land Use Strategies including:
  - Preserving and protecting open space
  - Smart Growth
- Paratransit
- Local Streets and Roads Rehabilitation and Maintenance

These countywide programs offer a number of critical strategies for reducing congestion. They are designed to enhance individual capital projects in specific areas of the County, ensuring that the greatest benefit is achieved from each capital investment. These programs benefit from several important implementation strategies including the following:

### ***Targeting Transportation Demand Management Efforts to Employers Served by Increased Transit Service***

Coordinating and timing Transportation Demand Management (TDM) strategies with transit improvements will enhance the effectiveness of both measures. TDM efforts to encourage the use of alternative modes can only be effective to the extent that alternatives exist. The local bus transit plan outlined a strategy for a coordinated transit-TDM effort. This strategy will ultimately improve the effectiveness of transit improvements, as well as TDM programs.

### ***Focusing Bicycle/Pedestrian Improvements to Transit Hubs***

Increased bicycle use and transit patronage can be synergistic. Bicycle parking, improved bicycle and pedestrian connections, and other programs will be focused on improving access to the expanded transit services envisioned in this document.

**These implementation strategies increase the effectiveness of investments in individual modes.**

### ***Coordinating Bicycle and Pedestrian Planning with the Safe Routes to Schools Program***

This has already proven to be a positive strategy in Marin County. As the Safe Routes to Schools Program expands, local and county bicycle and pedestrian planning needs to be integrated along with local roads and transit projects. Successful implementation of the Safe Routes to Schools Program requires coordination among local, county and school officials and effective engagement of the many stakeholders involved.

### ***Combining Land Use Strategies with Transit Investments***

Accommodating Marin's development needs in areas receiving major transit investments will increase the number of trips that can be made on transit and will improve the cost effectiveness of transit investments. This "smart growth" strategy is not designed to encourage development, but rather to focus development to appropriate locations.

Smart growth strategies include policies and incentives to discourage "sprawl" and instead concentrate mixed-use, higher intensity development in areas that can be more easily served by alternative modes, encouraging transit, bicycle and pedestrian travel. To further reduce auto impacts, smart growth developments include multiple uses, allowing people to walk to shopping, errands and other short trips, and to take transit for longer trips. More specifically, smart growth strategies may include financial incentives in the form of reduced development fees or grants, reduced parking requirements, density bonuses, minimum density requirements, or design requirements. Broader smart growth strategies may include coordinated land use planning between individual cities, Marin County and Sonoma County to ensure a comprehensive approach to the siting and design of new development.

The following sections summarize the transportation vision investments that are targeted to specific areas of the County.

**Highway 101 is the transportation spine in most of Marin County. Freeway conditions affect local routes as well as freeway trips.**

**The vision for the Highway 101 Corridor is one of spot relief and increased options.**

## U.S. HIGHWAY 101 CORRIDOR

Geography, development and travel patterns make U.S. Highway 101 the transportation spine of Marin County. It is also one of the most congested highways in the region, with the commute between Novato and San Rafael on U.S. Highway 101 ranking eighth worst in the Bay Area (2001). Because there are few alternatives to the freeway for both trips within the County and trips to destinations outside of Marin County, it is a primary focus of transportation improvements. The Highway 101 corridor impacts all of the local roads connecting with the highway, as congestion on the highway often spills over onto local streets. For this reason, solving congestion problems on this major artery is critical to improved mobility throughout the County. *Moving Forward* proposes a series of improvements along the corridor that will greatly expand travel choices. These projects, shown on Figure 3-1, are primarily designed to enhance regional travel. More specific benefits to communities along the corridor are presented later in this chapter.

The projects slated to address longer distance travel on the U.S. Highway 101 Corridor are:

- Marin-Sonoma Narrows HOV Lanes
- SMART Commuter Rail
- Marin-Sonoma Express Bus
- Local Express Bus Routes
- North-South Bikeway
- New and Expanded Ferry Service

All of these projects combined outline a vision of choice and increased mobility in the U.S. 101 Corridor. Sonoma to Marin commutes and some North Marin to Central Marin commutes will be served by express buses, commuter rail and increases in carpools and vanpools. Travel at all times will be improved with the elimination of bottlenecks between Marin and Sonoma Counties, and multi-modal focused interchange improvements will help reduce congestion on both the highway and local roads. The North-South bikeway will serve as a recreational



jewel and commuter resource (especially in terms of access to buses and rail stations serving the corridor) that could greatly expand bicycle use. Improved bus pads will make Highway 101 transit services safer and more comfortable. These improvements are projected to remove nearly 3,400 vehicle trips off of U.S. Highway 101 during peak periods, the equivalent of adding the capacity of one and a half freeway lanes. In addition, nearly 500 person hours of delay may be eliminated as a result of decreased congestion on Highway 101 through the Narrows.

### **Implementation Challenges**

The variety of services anticipated for the U.S. 101 Corridor present a number of implementation issues. Planned properly, these projects will enhance and complement each other. To maximize the benefits to all travelers, the following issues will require consideration as implementation moves forward.

#### ***Emphasizing Pedestrian Safety and Access to Highway 101 Bus Pads***

Current and future express bus users must interface with Highway 101 bus pads which are not easy to access for pedestrians, park and riders, or bicyclists. In most cases, sidewalks, which are essential for safe access, are not provided in the area around bus pads. Making travel in the U.S. 101 Corridor more multi-modal requires improving these interfaces. These issues have been highlighted in each of the Master Plans. The implementation challenge is to prioritize bicycle and pedestrian safety and comfort, while reducing vehicle delay and increasing safety in highway projects.

#### ***Sharing Right-of-Way between SMART Rail and the North-South Bikeway***

Both the commuter rail and North-South Bikeway projects are important parts of the overall vision for improving transportation for many Marin residents. Both projects generally follow the former Northwestern Pacific right-of-way. The need for setbacks between a bicycle path and a working railroad makes placement of the bikeway a particular challenge when integrating it with rail

service. SMART remains committed to identifying the routing for this critical bicycle and pedestrian link, which will be developed along with the rail service and will improve local communities' access to stations. Providing bicycle and pedestrian facilities at train stations and accommodating bikes on trains strengthens this implementation strategy. SMART is currently undertaking an environmental review process, and development of the North-South Bikeway in conjunction with the development of SMART is a priority.

### ***Considering Express Bus Operations in the Marin-Sonoma Narrows Design***

The *Express Bus Study* examined the use of HOV lanes completed with the Marin-Sonoma Narrows project. To maximize the use of express bus services, direct access should be provided for buses to enter and exit the HOV facility via special ramps connecting to park-and-ride lots. An implementation challenge for the Marin-Sonoma Narrows design team is to provide HOV facilities in a way that maximizes transit access.

### ***Seamless Intermodal Connections***

Rail, ferry, local bus and express bus connectivity is critical to maximize the use of alternative modes. As new transit hubs are developed, the need for closer coordination with rail and ferry facilities becomes even more critical. This implementation strategy should be considered in the evaluation of fixed facilities for any mode.

### ***Implementing Express Bus and SMART Rail So That They Complement, Not Compete***

The *Express Bus Study* and SMART Rail each intend to serve commuters in the Highway 101 corridor destined for employment sites in Marin and Sonoma Counties. Planned correctly, these services can serve different markets, rather than compete for the same one. The current Master Plans outline the opportunity for complementary services. Commuter rail will provide fast, traffic free service but will often require a shuttle transfer to connect riders with job sites away from the stations. The preferred strategy of the express buses is a network of routes which

directly link residential areas with Marin and Sonoma County employment sites that are not directly connected by rail. This will appeal to commuters for whom direct service patterns (and the avoidance of transfers) are paramount. Others will prefer the general appeal of rail service in its speed, frequency and simplicity of routes.

The implementation challenge is to develop these two systems in a way that increases overall use of transit in the corridor by complementary, rather than competitive, means.

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**Marin-Sonoma Express Bus Origins in Sonoma County not shown:**

- North Santa Rosa
- East Santa Rosa
- Rohnert Park
- Cotati
- Petaluma

**Projects Not Shown:**

- Paratransit programs
- Individual shuttle routes
- Safe Routes to Schools
- Additional bicycle/pedestrian enhancements
- Transportation Demand Management strategies

Note: Transit routes and specific project locations to be refined through environmental studies and local input.

SMART/ferry connection location to be determined.

Location to be determined.

SMART/ferry connection location to be determined.

Location to be determined.

**Legend**

**Major Bicycle/  
Pedestrian Projects**

Major Bicycle/Pedestrian Projects

**Local Express Bus**

Local Express Bus

**Marin-Sonoma Narrows**

Marin-Sonoma Narrows

**SMART Rail Alignment**

SMART Rail Alignment

**SMART Ferry Connection Options**

SMART Ferry Connection Options

**Existing Ferry Service**

Existing Ferry Service

**Potential Ferry Service**

Potential Ferry Service

**Modernized Bus Pads**

Modernized Bus Pads

**Major Transit Centers**

**SMART Rail Station**

SMART Rail Station

**Intermodal Hub**

Intermodal Hub

**Bus Transfer Hub**

Bus Transfer Hub

**Marin-Sonoma Express Bus Service Origin/Destination**

Marin-Sonoma Express Bus Service Origin/Destination

**Interchange Improvements**

Interchange Improvements

Interchange Improvements

**Figure 3-1:U.S. Highway 101 Transportation Vision**

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## **NORTHERN MARIN**

North Marin includes both residential areas and dense employment corridors. It is the part of the County most dependent on travel to/from Sonoma County to the north.

Figure 3-2 illustrates the projects that would benefit the communities of Northern Marin.

Transportation in 2020 in Northern Marin would be changed in a number of ways. Commuters to the area from the north would have four express bus routes serving the four primary employment areas of Northern Marin (the Fireman's Fund area north of downtown Novato at San Marin Drive, central Novato, Hamilton Field and the Bel Marin Keys employment area). Shuttles would connect these areas with other modes as well. Commuters leaving Northern Marin would have access to two commuter rail stations, express buses, and an express shuttle or rail connection to ferry service in Central Marin or Port Sonoma.

An important component of express bus service will be the construction of an HOV on-ramp along the Marin-Sonoma Narrows portion of U.S. 101 either at Atherton Avenue or Rowland Boulevard. This on-ramp will enable buses, carpools and vanpools to avoid backups and quickly access HOV lanes on U.S. 101 from local streets. The Marin-Sonoma Narrows project will also include construction of an additional Highway 101 interchange in the area between Atherton Avenue and the landfill. An exact location will be determined after further study.

All day local bus service running every 30 minutes will connect Novato with Marin County communities south to Sausalito. Southwest Novato, Hamilton, Ignacio and Black Point will each be served by new fixed route transit lines operating all day, every 30 minutes. The new routes will have timed transfers at a new primary transit junction in Northern Marin County.

Bicycle safety and access to new transit services will be improved with bike lanes in Novato, a gap closure project between Ignacio/Bel Marin Keys and Novato, and a new bike lane to help

**Enhanced local and regional mobility is key in Northern Marin.**



connect Ignacio, Hamilton and Marinwood. Bicycle/Pedestrian and Highway Interchange improvements at Atherton Avenue and Highway 101 will improve safety, relieve congestion and help connect communities east of the freeway with those west of Highway 101. Targeted bus and shuttle transit service will improve access to schools in Northern Marin and community service/shuttle routes will improve mobility for seniors and for local trips. The key implementation challenges for projects in this area are highlighted below:

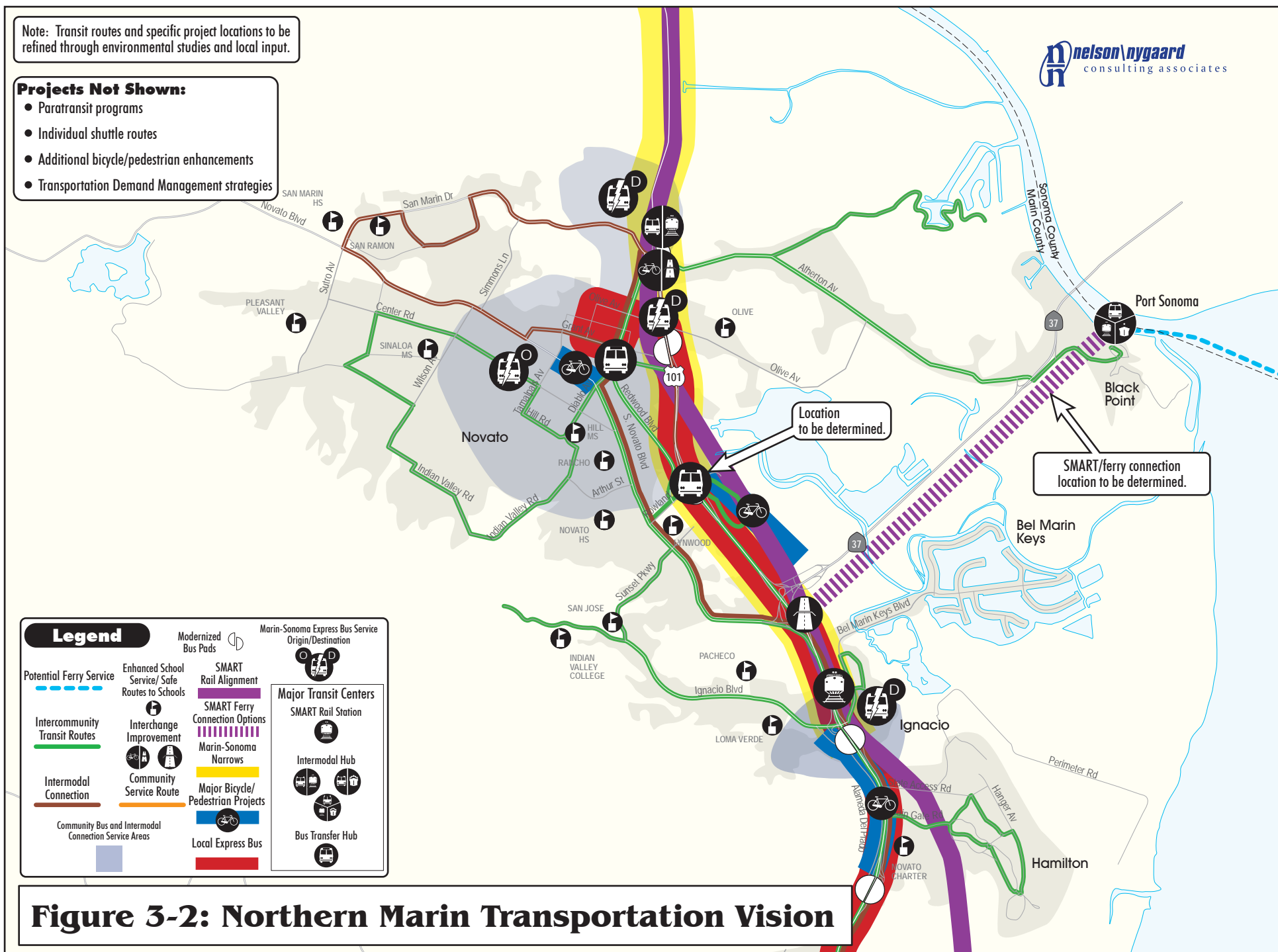
- Coordinate the location of the SMART rail station in northern Novato with the planned Transit Center.
- Coordinate highway and bicycle/pedestrian improvements at the Atherton Avenue/San Marin Drive and U.S. 101 interchange without compromising the existing bus pad.
- Optimize the U.S. 101 Express Bus service originating in northern Novato and serving Southern Marin envisioned in both the Marin-Sonoma Express Bus Study and Marin Bus Transit Futures.
- Coordinate SMART Rail Plans with the Novato Connector Bikeway Gap Closure Project.
- Continue to serve the local transportation needs of Northern Marin residents, particularly seniors, with services such as the EZ Rider Shuttle.
- Coordinate shuttle services with other transit services, such as SMART Rail and the ferry.
- Provide a ferry connection from Port Sonoma to San Francisco in order to reduce the number of trips from Sonoma County and Northern Marin through Central and Southern Marin.

**Note:** Transit routes and specific project locations to be refined through environmental studies and local input.



### Projects Not Shown:

- Paratransit programs
- Individual shuttle routes
- Additional bicycle/pedestrian enhancements
- Transportation Demand Management strategies



### Figure 3-2: Northern Marin Transportation Vision

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## **CENTRAL MARIN**

The majority of Marin's residents and jobs are concentrated in Central Marin. Congestion is heavy not only because of locally generated trips, but also because Central Marin is the access point for transportation to and from West Marin and Ross Valley communities, as well as to the East Bay via the Richmond-San Rafael Bridge and to San Francisco via the Larkspur Ferry Terminal and Golden Gate Transit hub.

Figure 3-3 shows the projects that would benefit the communities of Central Marin.

Because Central Marin is home to the primary junction between east-west and north-south roadways in the County, key interchange improvements are a critical part of the transportation vision for this area. Sir Francis Drake Boulevard, which is the main arterial serving the Ross Valley and West Marin communities, intersects Highway 101 at the Greenbrae Interchange. Cross traffic to the Larkspur Ferry Terminal and the East Bay via I-580 also passes through this area, making the Greenbrae Interchange one of the most congested in the County. The Congestion Management Agency, Caltrans, and the cities of Larkspur and Corte Madera are working together to develop options for relieving this bottleneck. Improving the connection between westbound I-580 and southbound Highway 101 is also being studied as another means to keep highway traffic off of local streets. The county is currently working with Caltrans to develop a Project Study Report for this area as a first step in gauging federal and state support for a project to address this problematic connection.

**Central Marin  
will benefit from  
investments that  
improve mobility,  
choice, connectivity  
and safety.**

As the center of residential and employment activity, Central Marin is expected to receive significant transportation investment that will improve mobility, choice, connectivity and safety. The activity center of the Terra Linda/North San Rafael area (including the Civic Center) will be served by a new commuter rail station and four express bus routes from Sonoma County. Similar service will be provided to the employment sites in and around downtown San Rafael. The San Rafael Transit Center will offer

connectivity with the proposed SMART rail station in downtown San Rafael. The transit center will be enhanced with advanced technology informing passengers of bus arrival times and other information. New bus transit routes will operate all day every 30 minutes, connecting:

- Mill Valley – San Rafael – Sausalito
- Greenbrae – Corte Madera – Strawberry – Marin City
- Two-way loop service for San Rafael – San Anselmo – Ross – Kentfield – Greenbrae – Larkspur – Canal
- Canal – San Rafael – Santa Venetia
- Canal – Northgate – Kaiser Hospital

New transit routes will run every hour between:

- Larkspur ferry terminal and Woodacre via Sir Francis Drake Boulevard
- Downtown San Rafael and Pt. Reyes Station

Four bicycle gap closure projects will connect Central Marin communities with convenient, safe bicycle/pedestrian routes:

- San Rafael – Larkspur gap closure
- Corte Madera – Larkspur gap closure
- Puerto Suello gap closure
- Mill Valley – Corte Madera gap closure

Bike safety will be improved and congestion reduced with improvements to the U.S. 101 Interchanges at Lucas Valley Road, Sir Francis Drake Boulevard, and Tamalpais /Paradise Drive. Numerous schools will be served with School Tripper buses, the School Pool ridesharing program and the Safe Routes to Schools program. Community bus and shuttle service routes will serve local travel primarily for seniors and youth in Terra Linda, Santa Venetia, Central San Rafael, Fairfax/San Anselmo, and Corte Madera.

The primary implementation challenges for Central Marin projects include:

- Improving the Greenbrae Interchange (where Sir Francis Drake Boulevard intersects Highway 101) in order to relieve congestion on highways and local streets and roads.
- Identifying a site for rail/ferry connectivity, relieving demand for expanded auto access at Larkspur.
- Improving the connection between westbound I-580 to Highway 101 in order to reduce traffic on local streets, such as Sir Francis Drake Boulevard.
- Coordinating a number of bike/pedestrian safety projects, highway interchange projects and bus pad modernization projects which are co-located.
- Providing a clear pedestrian connection between the San Rafael bus plaza and the proposed downtown rail station which will depend heavily on transit access.
- Planning bike/pedestrian gap closure projects without compromising implementation of Commuter Rail on the former NWP right-of-way.

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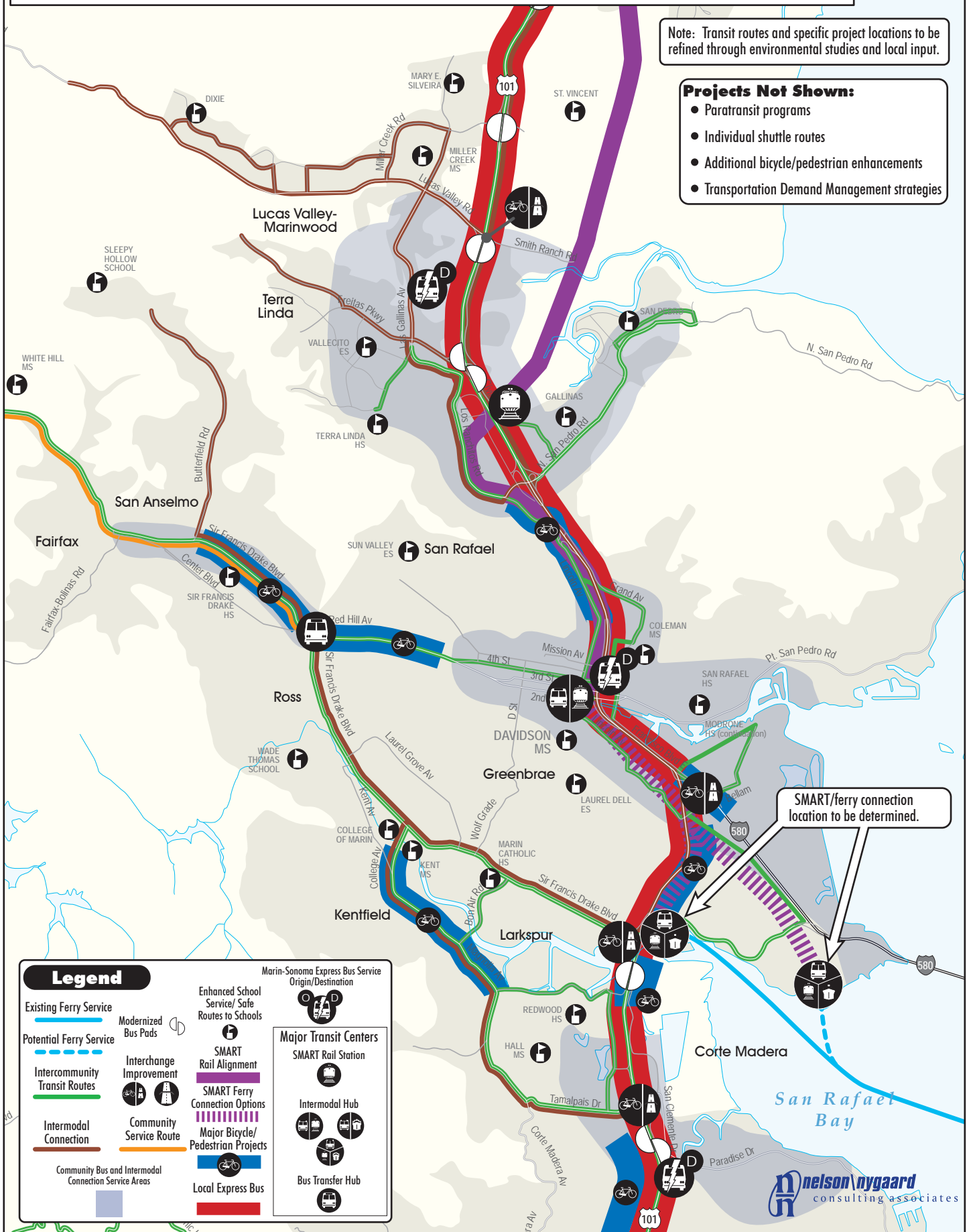


# Figure 3-3: Central Marin Transportation Vision

Note: Transit routes and specific project locations to be refined through environmental studies and local input.

## Projects Not Shown:

- Paratransit programs
- Individual shuttle routes
- Additional bicycle/pedestrian enhancements
- Transportation Demand Management strategies



## Legend

- |   |                         |   |                       |
|---|-------------------------|---|-----------------------|
| Existing Ferry Service                                | Modernized Bus Pads     | Enhanced School Service/ Safe Routes to Schools | Major Transit Centers |
| Potential Ferry Service                               | Interchange Improvement | SMART Rail Alignment                            | SMART Rail Station    |
| Intercommunity Transit Routes                         | Community Service Route | SMART Ferry Connection Options                  | Intermodal Hub        |
| Intermodal Connection                                 |                         | Major Bicycle/ Pedestrian Projects              | Bus Transfer Hub      |
| Community Bus and Intermodal Connection Service Areas |                         | Local Express Bus                               |                       |

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## **SOUTHERN MARIN**

Southern Marin acts as a gateway to the North Bay from San Francisco and the Peninsula and is the primary access to many of Marin's recreational areas. It is more residential in nature than Northern and Central Marin with fewer concentrations of employment. Southern Marin residents are more likely to commute into San Francisco than are other residents of the County. They tend to be more impacted by conditions on the Golden Gate Bridge and by visitor travel, especially on weekends. Southern Marin also has one of the greatest income disparities among its residents – this subarea is home to some of the highest and lowest income households in the County.

Figure 3-4 illustrates the transportation improvements envisioned for Southern Marin. The local bus transit plan includes the development of a Southern Marin Transit Junction which will be a focus of new and better coordinated transit service. The three potential sites for this junction — Manzanita, Marin City and Strawberry — are still being studied. Once the junction site is selected, significant improvements to local services can be made for travel within the area and to destinations countywide. An intercommunity bus transit route will provide all day service from Sausalito to Novato. One leg will serve Mill Valley via Blithedale and Miller Avenue to the proposed Southern Marin Transit Junction. The other leg will serve the Southern Marin Transit Junction and then proceed to Sausalito. Another route will serve Marin City, eastern Mill Valley / Strawberry and then connect to Larkspur, Kentfield and Greenbrae. A less frequent route will connect the Southern Marin Transit Junction with Bolinas.

In addition to core bus transit service, express bus service will connect Sausalito with Novato. Local services will connect Southern Marin with the proposed SMART rail project as well as enhanced ferry connections in Larkspur. Community service routes, which could include local shuttles, will improve mobility for seniors, low-income households, and youth in the area. A number of schools in South Marin are slated for enhanced school service as well.

**Connectivity between communities is critical to Southern Marin.**

**Both visitors to and residents of Southern Marin will benefit from various plans to improve access to parks and relieve related congestion.**

The Bridgeway project will provide critical bike lanes from downtown Sausalito to the Gate 6 road intersection and connect with the Mill Valley-Sausalito Bike Path. Bicycle safety will be improved on Alexander Avenue from Sausalito to the Golden Gate Bridge, the most heavily used bicycle and pedestrian corridor in the county. Bicycle safety and congestion will be addressed with improvements at the Blithedale Avenue/Tiburon Boulevard/U.S. 101 Interchange. The Tennessee Valley Trail upgrade project will improve bicycle and pedestrian access to the trailhead at the end of Tennessee Valley Road from the Mill Valley-Sausalito Bike Path.

As the gateway to many of the recreational areas in Marin, Southern Marin will benefit from the various plans to improve access to parks and relieve related congestion. The Southern Marin Parklands Comprehensive Transportation Management Plan (CTMP) is a large-scale planning effort intended to quantify current and future demand for park visitation and to identify broader strategies for reducing the number of vehicles accessing the parklands along Shoreline Highway. The main strategy being studied is a satellite parking intercept facility, reservation, and shuttle bus system in the vicinity of the Manzanita Park-and-Ride Lot. The Tamalpais Transportation Improvements Project (TTI) is focused on two related construction projects designed to improve congestion, safety and circulation in, around and through the Tamalpais Valley, and provide alternative transportation access to the parklands.

Key implementation challenges include:

- Locating a new transit junction at either Manzanita, Marin City or Strawberry to best coordinate with new and existing transit routes and optimize bicycle and pedestrian access.
- Coordinating services controlled by the County with the Park Service plans for visitor shuttles and access enhancements.
- Integrating the Parklands Plans into countywide planning efforts.

- Meeting the transportation needs of local residents as well as the needs of different types of park and recreation area users.
- Serving the intracommunity transportation needs of Southern Marin residents through local shuttles.

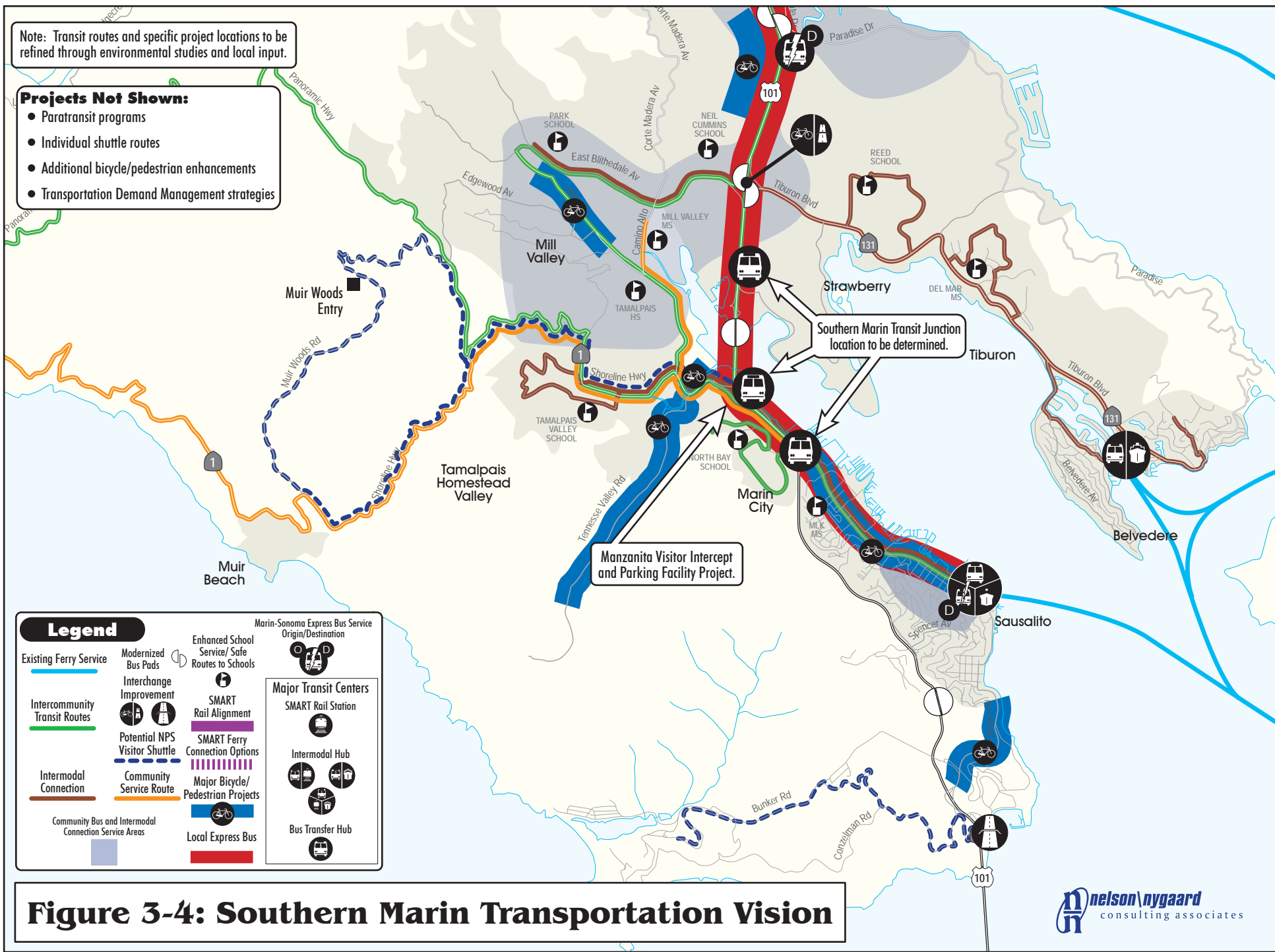
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Note: Transit routes and specific project locations to be refined through environmental studies and local input.

### Projects Not Shown:

- Paratransit programs
- Individual shuttle routes
- Additional bicycle/pedestrian enhancements
- Transportation Demand Management strategies



**Figure 3-4: Southern Marin Transportation Vision**

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## **ROSS VALLEY**

Ross Valley extends from Fairfax east along Sir Francis Drake Boulevard to Greenbrae and Larkspur. As a link between West Marin and Central and Southern Marin, this area presents both opportunities and challenges for improved east-west connectivity for all modes of travel. Congestion on Sir Francis Drake Boulevard, which is the main east-west arterial serving the Ross Valley and on into West Marin, is this area's most critical transportation issue. Sir Francis Drake Boulevard is analogous to Highway 101 in that it is the transportation spine of the Ross Valley, and it is consequently the focus of transportation improvements in this area.

The projects described in this document are just the beginning of efforts to address mobility and safety on Sir Francis Drake Boulevard. Representatives from Ross Valley communities are convening to discuss comprehensive, intercommunity strategies and projects aimed at reducing congestion on this key arterial.

Figure 3-5 shows some of the services and improvements that have already been envisioned for Ross Valley. Primarily a residential area with neighborhood activity centers located in Fairfax and San Anselmo, Ross Valley has a significant number of school-age children. School Tripper shuttles and buses and the School Pool ridesharing program will work together with an enhanced Safe Routes to Schools program to reduce school-related traffic, a key component of congestion on Sir Francis Drake Boulevard. As outlined in Marin Bus Transit Futures, new intercommunity bus services will provide service with 30-minute frequencies between Fairfax and the Larkspur Ferry Terminal via Sir Francis Drake Boulevard. A bi-directional intercommunity bus service running on 30-minute intervals will connect San Anselmo, which is a secondary bus transit center, with locations in Central Marin. Primary east-west bus service will travel from the San Rafael Transit Center through San Anselmo and Fairfax on to Samuel P. Taylor State Park and Pt. Reyes Station.

**Addressing congestion on Sir Francis Drake Boulevard is a key issue in Ross Valley.**

Commute-oriented minibuses with regularly scheduled stops will provide service to hillside areas. Route deviations will offer enhanced flexibility and access to lower density areas that do not support traditional transit service. An intercommunity shuttle service could provide a similar type of service during midday and weekends.

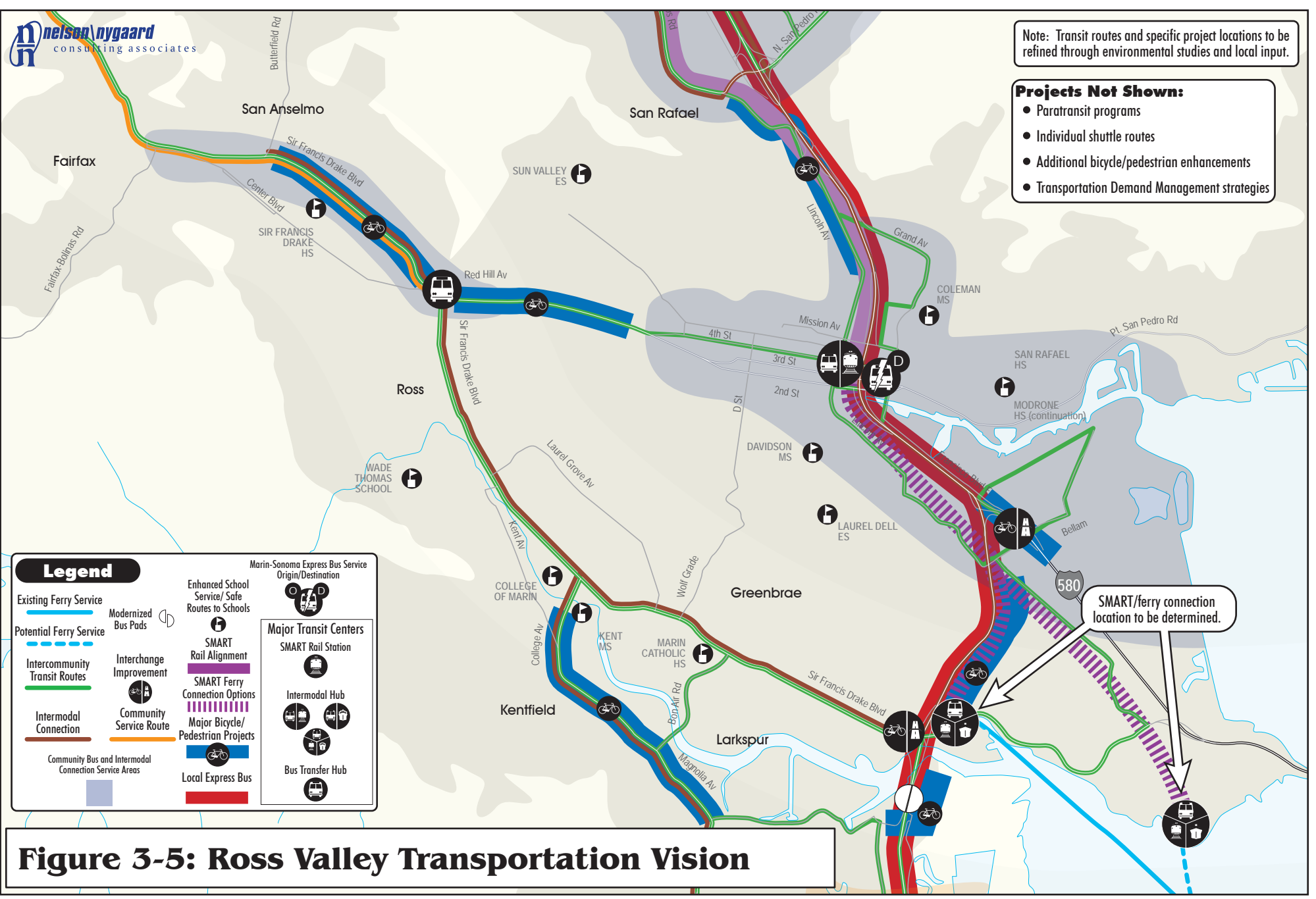
Bicycle and pedestrian projects in Ross Valley also are focused on enhancing east-west connections and intercommunity travel. The Sir Francis Drake Bicycle/Pedestrian Project, focused on the portion of Sir Francis Drake Boulevard through San Anselmo, includes safety improvements of key intersections and the development of a bike route on the north side of Sir Francis Drake, or on a parallel roadway, between the Hub and Butterfield Road. The connection between San Anselmo and San Rafael via Greenfield Avenue will be studied for potential safety improvements. These projects work in conjunction with bicycle and pedestrian gap closure and safety projects in West and Central Marin to create an East-West Bikeway through the County.

The transportation vision for Ross Valley provides an opportunity for improved east-west connectivity across the County, and for better connections, particularly for alternative travel modes, between communities in Ross Valley, Central, Southern and West Marin. There are several key implementation challenges, however, that will need to be addressed:

- Improving coordination between communities in Ross Valley so that individual transportation projects are complementary and work toward the same overall purpose.
- Addressing competing demands for travel on Sir Francis Drake Boulevard given the physical and topographic constraints in the area.
- Addressing the transportation needs of youth and seniors in innovative ways that best fit the characteristics of the Ross Valley community.
- Using fuel and size-appropriate transit vehicles suited to hilly terrain, narrower streets and lower densities.

Note: Transit routes and specific project locations to be refined through environmental studies and local input.

- Projects Not Shown:**
- Paratransit programs
  - Individual shuttle routes
  - Additional bicycle/pedestrian enhancements
  - Transportation Demand Management strategies



**Figure 3-5: Ross Valley Transportation Vision**

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## **WEST MARIN**

West Marin includes more than 50% of the County's land area but less than 5% of its population (12,000). However, the area is home to many major recreational destination with six parks and beaches of state or national significance.

Figure 3-6 shows services envisioned for West Marin. *Marin Bus Transit Futures* outlines two new routes with hourly service, offered seven days a week. One connecting Point Reyes Station and downtown San Rafael; the other linking Bolinas, Stinson Beach and the Southern Marin Transit Junction. Demand response bus routes would serve Inverness to Bolinas and Forest Knolls, San Geronimo and Woodacre.

The West Marin Stagecoach, a pilot transit project which has received funding for one year, was initiated in Spring 2002. This transportation vision would continue and expand existing shuttles to create an enhanced local network of services.

Bicycle and pedestrian projects in West Marin will help complete the East-West Bikeway across the County. The White's Hill Gap Closure bicycle and pedestrian project could entail reuse of a closed rail tunnel that would provide a level, direct connection between Fairfax and the San Geronimo Valley.

The primary implementation challenges in this section of the County are:

- Developing unique alternatives suited to the lower density activity in West Marin.
- Coordinating with existing and proposed visitor services anticipated on National Park lands.

**West Marin will benefit from intercommunity bus and shuttle services, as well as from completion of the East-West Bikeway.**



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Note: Transit routes and specific project locations to be refined through environmental studies and local input.

- Projects Not Shown:**
- Paratransit programs
  - Individual shuttle routes
  - Additional bicycle/pedestrian enhancements
  - Transportation Demand Management strategies



**Figure 3-6: West Marin Transportation Vision**

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## **THE BENEFITS OF MOVING FORWARD**

*Moving Forward* provides for an integrated multi-modal transportation system that reduces congestion by increasing transportation choices for all people in Marin County. Figure 3-7 summarizes many of the benefits by mode and by location in the County. The vision focuses on responding to today's travel demands.

- The improvements to the Highway 101 corridor allow commuters to choose from express buses, commuter rail, carpooling, bicycling, or expanded ferry service, each of which will benefit users and all travelers by relieving a congested freeway. These services will focus on both trips within the County and the vital exchange between Marin and Sonoma counties.
- Extensive new local bus and shuttle transit service will focus on trips that take place entirely within Marin, serving the dominant type of travel in the County and the type of trip which currently has the least viable alternatives to driving.
- Extensive community service bus or shuttle routes will provide for Marin's growing population of seniors as well as youth and other transit-dependent riders.
- New creative alternatives to standard "big bus" transit will ensure that this service is accessible to all.
- New and expanded ferry service will provide additional transit options for travel from the North Bay to San Francisco, providing additional congestion relief to the Highway 101 corridor.
- New train stations will serve as a focus for smart growth options and for the seamless coordination of modes.
- Completion of the HOV network will create the opportunity for high quality express bus service and an incentive for carpooling, providing a time advantage over driving alone.
- Transit will be easier to use thanks to new transit junctions with passenger amenities and renovated bus pads that are friendlier and safer to access.
- Bicycle use and walking will serve more trips, reducing pollution and congestion from vehicle trips and promot-

***Moving Forward  
offers more choices  
and less congestion.***

ing the physical health of the community as projects big and small make cycling or walking a convenient, safe, and easy option for both work and recreational trips.

- Paratransit services will improve mobility for elders and the disabled.
- Getting children to schools will generate less congestion, as walking, cycling, buses and carpools grow as viable options.
- Our local roadway network – the basic building block of our transportation network – will be enhanced and maintained throughout the County. Roads will serve a variety of users from local auto trips to bicyclists, pedestrians and transit users.

Realizing this vision will not be simple. How we get from here to there is discussed in our next chapter.

Figure 3-7 Highlights of Improvements from Moving Forward by Community

	Population	Local Transit	School Services	Regional Transit	Bicycle/Pedestrian	Auto
Belvedere	2,130	<ul style="list-style-type: none"><li>• Late night subsidized taxi service</li><li>• Intermodal connection to Hwy 101/Tiburon Blvd. bus pads</li></ul>	<ul style="list-style-type: none"><li>• Safe Routes to Schools</li><li>• School Pools</li></ul>	<ul style="list-style-type: none"><li>• Ferry shuttle bus route at peak periods</li><li>• Expanded ferry service to San Francisco</li></ul>	<ul style="list-style-type: none"><li>• Safer connection west of 101 from Tiburon Interchange Project</li></ul>	<ul style="list-style-type: none"><li>• Congestion relief at Tiburon Blvd/101 Interchange</li><li>• Street repairs, drainage improvements, utility undergrounding, and pedestrian safety and accessibility improvements</li></ul>
Corte Madera	9,100	<ul style="list-style-type: none"><li>• Intercommunity service linking Corte Madera and other communities in 101 corridor between Novato and Sausalito</li><li>• Intercommunity routes connecting to Greenbrae, San Rafael, Larkspur, Kentfield, Ross and San Anselmo</li><li>• Community service routes for seniors</li></ul>	<ul style="list-style-type: none"><li>• Safe Routes to Schools</li><li>• School Pools</li><li>• School Tripper buses and shuttles to middle and high schools</li></ul>	<ul style="list-style-type: none"><li>• Express bus service from Novato</li><li>• Modernized bus pad at Tamalpais Dr/ Paradise Dr and 101</li></ul>	<ul style="list-style-type: none"><li>• Improved safety at the Tamalpais Dr/101 Interchange</li><li>• Alto Tunnel Rehabilitation</li><li>• Central Marin Ferry Connection</li></ul>	<ul style="list-style-type: none"><li>• Congestion relief at Tamalpais Dr/Paradise Dr and Hwy 101 Interchange</li><li>• Street repairs, drainage improvements, bridge repairs, traffic safety improvements, utility undergrounding, and pedestrian safety and accessibility improvements</li></ul>
Fairfax	7,320	<ul style="list-style-type: none"><li>• Intercommunity route linking Fairfax with communities along Sir Francis Drake Blvd corridor from Pt. Reyes Station to San Rafael</li><li>• Community service routes for seniors</li><li>• Late night subsidized taxi service</li></ul>	<ul style="list-style-type: none"><li>• Safe Routes to Schools</li><li>• School Pools</li><li>• School Tripper buses and shuttles to middle and high schools</li></ul>	<ul style="list-style-type: none"><li>• Ferry shuttle bus route at peak periods</li></ul>	<ul style="list-style-type: none"><li>• White’s Hill Gap Closure connects Fairfax to Woodacre and West Marin</li></ul>	<ul style="list-style-type: none"><li>• Street repairs and maintenance, bridge repairs, traffic safety and pedestrian safety and accessibility</li><li>• Safety improvements and congestion relief measures along Sir Francis Drake Blvd will be further studied.</li></ul>
Larkspur	12,000	<ul style="list-style-type: none"><li>• Intercommunity route connecting Larkspur with Greenbrae, Kentfield, Corte Madera and Mill Valley</li><li>• Two intercommunity routes connecting with Kentfield, Greenbrae, Ross, San Anselmo, and San Rafael</li><li>• Intercommunity route from ferry terminal serving communities along Sir Francis Drake Blvd to Woodacre</li></ul>	<ul style="list-style-type: none"><li>• Safe Routes to Schools</li><li>• School Pools</li><li>• School Tripper buses and shuttles to middle and high schools</li></ul>	<ul style="list-style-type: none"><li>• Commuter rail linked to final location of ferry terminal</li><li>• Expanded ferry service to San Francisco</li></ul>	<ul style="list-style-type: none"><li>• Gap closure between Larkspur and San Rafael</li><li>• Central Marin ferry connection</li><li>• CalPark Hill Tunnel and Bike/Ped Pathway</li><li>• High Canal (Sandra Marker) Pathway</li><li>• Safety improved at Sir Francis Drake Blvd/101 Interchange</li></ul>	<ul style="list-style-type: none"><li>• Congestion relief at Sir Francis Drake Blvd/101 Interchange</li><li>• Street repairs, drainage improvements, bridge repair, traffic safety improvements, utility undergrounding</li><li>• Improved connection from westbound I-580 to Hwy 101 will help reduce congestion on local roads</li></ul>
Mill Valley	13,600	<ul style="list-style-type: none"><li>• Intercommunity service linking Mill Valley and other communities in 101 corridor between Novato and Sausalito</li><li>• Intercommunity route on Blithedale and Miller Avenue</li><li>• Late night subsidized taxi service</li><li>• Community service routes for seniors</li><li>• Intercommunity routes to West Marin</li></ul>	<ul style="list-style-type: none"><li>• Safe Routes to Schools</li><li>• School Pools</li><li>• School Tripper buses and shuttles to middle and high schools</li></ul>	<ul style="list-style-type: none"><li>• New Transit Junction with advanced technology (location TBD)</li><li>• Potential NPS visitor shuttle from Manzanita park-and-ride to Muir Beach</li><li>• Modernized bus pad at Tiburon Blvd/101 Interchange</li></ul>	<ul style="list-style-type: none"><li>• Improvements on Miller Avenue</li><li>• Flat, safe linkage to Corte Madera</li></ul>	<ul style="list-style-type: none"><li>• Congestion relief at Tiburon Blvd/101 Interchange</li><li>• Street repairs, slide prevention, storm drain repairs, utility improvements, traffic safety improvements</li></ul>
Novato	47,630	<ul style="list-style-type: none"><li>• Intercommunity route serving area south of Novato Blvd connecting to Downtown Novato</li><li>• Intercommunity route connecting Novato east of 101 to Downtown Novato</li><li>• Intercommunity routes connecting Ignacio, Hamilton and the Bel Marin Keys employment area to the transit junction at Hwy 101 &amp; Rowland Blvd.</li><li>• Late night subsidized taxi service</li><li>• Community service routes for seniors</li></ul>	<ul style="list-style-type: none"><li>• Safe Routes to Schools</li><li>• School Pools</li><li>• School Tripper buses and shuttles to middle and high schools</li></ul>	<ul style="list-style-type: none"><li>• Commuter rail stations at the Fireman’s Fund Area and Bel Marin Keys employment area</li><li>• Employment areas further served by shuttles form junctions and rail stations</li><li>• New Transit Junction with advanced technology (location TBD)</li><li>• Express bus service to Novato employment areas from Sonoma</li><li>• Express Bus service to San Rafael/Corte Madera/ Sausalito</li><li>• New bus on-ramp at either Atherton Ave. or Rowland Blvd.</li><li>• Potential new ferry terminal at Port Sonoma and ferry/rail intermodal connection</li><li>• Modernized bus pads along Hwy 101</li></ul>	<ul style="list-style-type: none"><li>• Safety improved at San Marin Dr/Atherton Ave/101 Interchange</li><li>• Novato Connector Bikeway Project</li><li>• Alameda Del Prado bike lanes</li></ul>	<ul style="list-style-type: none"><li>• Marin-Sonoma Narrows will ease congestion on U.S. 101 and provide HOV lanes for carpools &amp; buses</li><li>• Congestion relief at San Marin Dr/Atherton Ave 101 Interchange</li><li>• Street resurfacing and rehab, storm drain improvements, sidewalk improvements/access ramps, utility undergrounding</li><li>• As part of Marin-Sonoma Narrows, potential new interchange in the area between Atherton Ave and the landfill</li><li>• Interchange improvements at Hwy 101/Rte 37</li><li>• New traveler information system along Rte 37</li></ul>
Ross	2,330	<ul style="list-style-type: none"><li>• Intercommunity route along Sir Francis Drake Blvd connecting Ross to communities from Woodacre to the Larkspur ferry terminal</li><li>• Two intercommunity routes connecting with Kentfield, Larkspur, Greenbrae, San Anselmo, and San Rafael</li><li>• Late night subsidized taxi service</li></ul>	<ul style="list-style-type: none"><li>• Safe Routes To Schools</li><li>• School Pools</li><li>• School Tripper buses and shuttles to middle and high schools</li></ul>	<ul style="list-style-type: none"><li>• Ferry shuttle bus route at peak periods</li></ul>	<ul style="list-style-type: none"><li>• Sir Francis Drake Blvd bike/ped improvements</li></ul>	<ul style="list-style-type: none"><li>• Safety improvements and congestion relief measures along Sir Francis Drake Blvd will be studied further</li></ul>
San Anselmo	12,380	<ul style="list-style-type: none"><li>• Intercommunity route along Sir Francis Drake Blvd connecting San Anselmo to communities from Woodacre to the Larkspur ferry terminal</li><li>• Two intercommunity routes connecting with Kentfield, Larkspur, Greenbrae, Ross, and San Rafael</li><li>• Late night subsidized taxi service</li><li>• Community service routes for seniors</li></ul>	<ul style="list-style-type: none"><li>• Safe Routes to Schools</li><li>• School Pools</li><li>• School Tripper buses and shuttles to middle and high schools</li></ul>	<ul style="list-style-type: none"><li>• Ferry shuttle bus route at peak periods</li></ul>	<ul style="list-style-type: none"><li>• Improvements to bike/ped circulation across and along Sir Francis Drake Blvd corridor</li><li>• Improved connection to San Rafael</li></ul>	<ul style="list-style-type: none"><li>• Various local roadway improvements throughout the town</li><li>• Safety improvements and congestion relief measures along Sir Francis Drake Blvd will be studied further</li></ul>

Note: Population figures from the 2000 U.S. Census

Figure 3-7 Highlights of Improvements from Moving Forward by Community (continued)

Population		Local Transit	School Services	Regional Transit	Bicycle/Pedestrian	Auto
San Rafael		56,060 <ul style="list-style-type: none"><li>• Six New Intercommunity Routes:<ul style="list-style-type: none"><li>- Novato-Mill Valley-Sausalito (101 corridor)</li><li>- Canal-San Anselmo-Corte Madera-Larkspur Ferry (2 routes)</li><li>- Canal-Civic Center-Venetia</li><li>- Late night subsidized taxi service</li><li>- Canal-Northgate-Kaiser</li><li>- Downtown San Rafael-Pt. Reyes Station</li></ul></li><li>• Late night subsidized taxi service</li><li>• Community service routes for seniors</li></ul>	<ul style="list-style-type: none"><li>• Safe Routes to Schools</li><li>• School Pools</li><li>• School Tripper buses and shuttles to middle and high schools</li></ul>	<ul style="list-style-type: none"><li>• Commuter rail stations at Civic Center and downtown</li><li>• Express bus service from North and East Santa Rosa, Rohnert Park, Cotati, Petaluma and Novato</li><li>• Employment areas further served by shuttles from junctions and rail stations</li><li>• Addition of advanced technology to San Rafael Transit Center</li></ul>	<ul style="list-style-type: none"><li>• Gap closure between San Rafael and Larkspur ferry terminal</li><li>• Ranchitos Rd. Class II Bikeway</li><li>• Gap closure between downtown and northern San Rafael</li><li>• Improved connection to San Anselmo</li><li>• Improved safety in the Bellam and Francisco corridors</li><li>• Safety improved at Lucas Valley Rd/101 Interchange</li><li>• Ravelitos Rd Class II Bikeway</li></ul>	<ul style="list-style-type: none"><li>• Congestion relief at I-580/101 Interchange</li><li>• Congestion relief at Lucas Valley Rd/101 Interchange</li><li>• Street repairs and improvement, drainage improvements, traffic safety and operational improvements, utility undergrounding, and pedestrian safety and accessibility improvements</li></ul>
Sausalito		7,330 <ul style="list-style-type: none"><li>• Intercommunity service linking Sausalito to other communities in 101 corridor up to Novato</li><li>• Late night subsidized taxi service</li></ul>	<ul style="list-style-type: none"><li>• Safe Routes to Schools</li><li>• School Pools</li><li>• School Tripper buses and shuttles to middle and high schools</li></ul>	<ul style="list-style-type: none"><li>• Express bus service from Novato</li><li>• Expanded ferry service to San Francisco</li></ul>	<ul style="list-style-type: none"><li>• Bike lines on Bridgeway from downtown to Gate 6 Rd and connecting to the Mill Valley-Sausalito Bik Path</li><li>• Better connection from Alexander Ave to Golden Gate Bridge</li></ul>	<ul style="list-style-type: none"><li>• Interchange improvements at Alexander Avenue and U.S. 101</li><li>• Street repair, traffic safety improvements, drainage improvements/flood control, bridge repairs, utility underground districts, and pedestrian safety/accessibility</li></ul>
Tiburon		8,670 <ul style="list-style-type: none"><li>• Late night subsidized taxi service</li></ul>	<ul style="list-style-type: none"><li>• Safe Routes to Schools</li><li>• School Pools</li><li>• School Tripper buses and shuttles to middle and high schools</li></ul>	<ul style="list-style-type: none"><li>• Ferry shuttle bus route during peak periods</li><li>• Expanded ferry service to San Francisco</li></ul>	<ul style="list-style-type: none"><li>• Safer connection West of 101 from Tiburon Interchange Project</li></ul>	<ul style="list-style-type: none"><li>• Congestion relief at Tiburon Blvd/101 Interchange</li><li>• Street repairs, drainage improvements, traffic safety improvements, utility undergrounding, and pedestrian safety and accessibility improvements</li></ul>
Unincorporated Communities						
<b>Northern Marin:</b> Black Point		1,140 <ul style="list-style-type: none"><li>• Intercommunity service connecting Southwest Novato, Hamilton, Iganacio and Black Point</li><li>• Late night subsidized taxi service</li><li>• Community service routes for seniors</li></ul>	<ul style="list-style-type: none"><li>• Safe Routes to Schools</li><li>• School Pools</li></ul>	<ul style="list-style-type: none"><li>• Potential new ferry terminal at Port Sonoma and ferry/rail intermodal connection</li></ul>	<ul style="list-style-type: none"><li>• Improved safety at the Atherton Ave/101 interchange</li></ul>	<ul style="list-style-type: none"><li>• Marin-Sonoma Narrows will ease congestion on U.S. 101 and provide HOV lanes for carpools and buses</li><li>• Congestion relief at San Marin Dr/Atherton Ave/101 Interchange</li><li>• Interchange improvements at Hwy. 101/Rte. 37 Interchange</li><li>• New traveler information system along Rte. 37</li></ul>
<b>Central Marin:</b> Lucas Valley-Marinwood Terra Linda		6,360 <ul style="list-style-type: none"><li>• Intercommunity service connecting the San Rafael Transit Center to the Northgate Shopping Center and Kaiser Hospital</li><li>• Late night subsidized taxi service</li><li>• Community service routes for seniors</li></ul>	<ul style="list-style-type: none"><li>• Safe Routes to Schools</li><li>• School Tripper buses and shuttles to middle and high schools</li><li>• School Pools</li></ul>	<ul style="list-style-type: none"><li>• Ferry shuttle bus route at peak periods</li><li>• New commuter rail station serving the Terra Linda/ North San Rafael area</li><li>• Express bus from North and East Santa Rosa, Rohnert Park, Cotati, Petaluma and Novato</li></ul>	<ul style="list-style-type: none"><li>• Improved safety at the Lucas Valley Rd/101 interchange</li></ul>	<ul style="list-style-type: none"><li>• Repairs and improvements to major roadways</li></ul>
<b>Southern Marin:</b> Marin City Strawberry Tamalpais/Homestead Valley		15,990 <ul style="list-style-type: none"><li>• Development of a Southern Marin Bus Transit Junction at either Marin City, Strawberry or Manzanita</li><li>• Intercommunity service between Greenbrae-Corte Madera-Strawberry-Marin City and between the new Southern Marin Bus Transit Junction and Bolinas</li><li>• Late night subsidized taxi service</li></ul>	<ul style="list-style-type: none"><li>• Safe Routes to Schools</li><li>• School Tripper buses and shuttles to middle and high schools</li><li>• School Pools</li></ul>	<ul style="list-style-type: none"><li>• Potential location of Southern Marin Transit Junction at Marin City, Strawberry or Manzanita</li><li>• Manzanita Park-and-Ride facility and potential NPS visitor shuttle to Muir Beach</li></ul>	<ul style="list-style-type: none"><li>• Tennessee Valley Trail Upgrade Project</li></ul>	<ul style="list-style-type: none"><li>• Repairs and improvements to major roadways</li><li>• Congestion relief at Tiburon Blvd/101 interchange</li><li>• Coyote Creek Bridge Replacement Project</li></ul>
<b>Ross Valley:</b> Kentfield Greenbrae		6,350 <ul style="list-style-type: none"><li>• Intercommunity service between Greenbrae-Corte Madera-Strawberry Village-Marin City</li><li>• Intercommunity service between San Rafael, San Anselmo, Ross, Kentfield, Greenbrae, Larkspur, and Canal</li><li>• Late night subsidized taxi service</li></ul>	<ul style="list-style-type: none"><li>• Safe Routes to Schools</li><li>• School Tripper buses and shuttles to middle and high schools</li><li>• School Pools</li></ul>	<ul style="list-style-type: none"><li>• Ferry shuttle bus route at peak periods</li></ul>	<ul style="list-style-type: none"><li>• Improved safety at the Sir Francis Drake Blvd/101 interchange</li><li>• Extension of the Sandra Marker Pathway north with bike lanes along Magnolia Ave</li></ul>	<ul style="list-style-type: none"><li>• Improvements to the Sir Francis Drake Blvd/101 Interchange and the I-580/101 interchange will help relieve congestion on local streets and improve safety at these critical interchanges</li></ul>
<b>West Marin:</b> Muir Beach      Stinson Beach Bolinas          Woodacre San Geronimo    Nicasio Forest Knolls    Lagunitas Olema            Pt. Reyes Station Inverness Park   Inverness		12,000 <ul style="list-style-type: none"><li>• Intercommunity service between Downtown San Rafael and Pt. Reyes Station and between Bolinas, Stinson Beach and the Southern Marin Transit Junction</li><li>• Continued intercommunity shuttle service (West Marin Stagecoach)</li><li>• Demand response service for Inverness, Pt. Reyes and the San Geronimo Valley</li></ul>	<ul style="list-style-type: none"><li>• Safe Routes to Schools</li><li>• School Pools</li></ul>	<ul style="list-style-type: none"><li>• Bus service between the Larkspur ferry terminal and Woodacre via Sir Francis Drake Blvd</li><li>• NPS visitor shuttle to Pt. Reyes National Seashore</li></ul>	<ul style="list-style-type: none"><li>• The White’s Hill Gap Closure and Inkwells/Samuel P. Taylor Bike &amp; Ped Path projects will help complete the County’s East-West Bikeway</li></ul>	<ul style="list-style-type: none"><li>• Repairs and improvements to major roadways</li><li>• Safety improvements and congestion relief measures along Sir Francis Drake Blvd through Ross Valley will be further studied</li></ul>
Total Incorporated		178,550				
Unincorporated Areas		68,740				
Total Marin County		247,290				



## Chapter 4 Turning the Vision into Reality

Moving Forward is intended to act as a blueprint that will guide development of a more detailed and financially constrained transportation plan. Because existing and projected future funding will not be able to finance all of the projects presented here, future plans will need to prioritize and phase projects. This chapter presents an overview of current and potential funding sources that can help us turn our vision into reality.

### WHERE DOES THE TRANSPORTATION MONEY COME FROM?

Transportation projects in California are funded by a complex "maze" of regional, state, federal and local sources. Most of the existing transportation funds are spent maintaining and operating existing transportation infrastructure. Statewide, California spends approximately \$15 billion annually on transportation. The existing sources of funding for transportation in California are summarized in Figure 4-1.

**Most existing transportation funding is spent maintaining and operating existing transportation infrastructure.**

While these sources once were sufficient to create the transportation services and infrastructure we benefit from today, they are unlikely to provide enough revenue to deliver a significant portion of the projects outlined in this document. In fact, existing revenue streams will not be sufficient to adequately maintain our current system. This is because of several long-term trends in transportation finance:

- Taxes on gasoline, which are charged as "cents per gallon" rather than as a percent of the price of gasoline, have lost their buying power because they do not increase with inflation. Nominal increases, which are politically unpopular, have not kept pace.

Figure 4-1 Principal Transportation Revenue Sources in California

	Percent of State Transportation Revenues	Use/Description
Federal Gas Tax	20%	Primarily supports highway maintenance and expansion, about 15% used for mass transit support.
State Gas Tax	20%	Supports and expands interstate and highway system, funds local streets and roads with a small portion going to construction and maintenance of mass transit guideways.
Locally Enacted Sales Taxes	15%	Marin does not have access to this source because it has not passed a self-help sales tax.
State Registration/Weight/License Fees	12%	Used primarily for state highways and the DMV.
Retail Sales Tax on Gasoline	8%	Currently funds projects under governor's Transportation Congestion Relief Program (TCRP). Beginning in 2009 these funds will support local streets and roads, highways and transit unless a fiscal emergency exists.
Transit Fares	6%	Pays for a portion of transit operating expenses.
Retail Sales Tax – Local Transportation Fund	6%	One-quarter cent of state sales tax is used for transportation purposes, primarily transit.
State General Funds	5%	Three propositions since 1990 authorized general obligation bonds for transit projects and bridge and highway seismic safety projects.
Local General Funds and Property Taxes	5%	Often used for local streets and roads.
Tolls	2%	More significant in Marin where Golden Gate Bridge tolls fund transit services.
Federal General Funds	1%	Support transit under a variety of programs.

Source: Wachs, Martin et. al. Financing Transportation in California: Strategies For Change. 2001. Institute of Transportation Studies, University of California, Berkeley.

- Property tax, which was a traditional source of funding for local streets and roads projects, has been severely restricted by Proposition 13 in California, resulting in deferred maintenance and the deterioration of our local infrastructure.
- The cost of delivering projects has increased far faster than the general rate of inflation.

**Existing revenue sources can not keep pace with the increasing demands of a growing state.**

In 1999, the California Transportation Commission estimated that existing transportation revenues may be unable to fund as much as \$100 billion worth of needed projects statewide over the next ten years. Within the San Francisco Bay Area, the Metropolitan Transportation Commission identified \$33 billion worth of unfunded potential transportation needs in its 1999 *Bay Area Blueprint for the 21<sup>st</sup> Century*. This has only gotten worse as governments at all levels feel the effects of recession. Simply maintaining our existing system will be a significant challenge under current economic conditions.

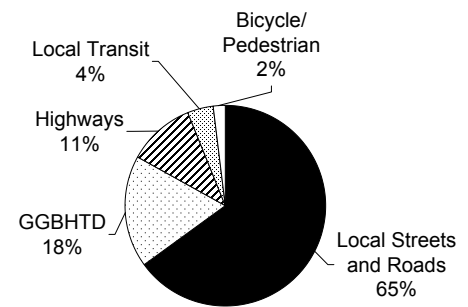
## THE PROMISE OF PROPOSITION 42

One significant potential improvement to the State's transportation funding picture occurred with the passage of Proposition 42 in March 2002. Proposition 42 designates funds collected from gasoline sales under the statewide retail sales tax for transportation purposes. The retail sales tax on gasoline is different and independent of the State and Federal cents per gallon excise taxes on gasoline. Until 2000, the revenue generated from the sales tax on gasoline was considered part of the State General Fund, along with the sales tax collected on other goods. While this revenue could be allocated to transportation projects, there was no guarantee that these funds would be spent in any particular way. Beginning in 2000, Governor Gray Davis began a program known as the Traffic Congestion Relief Program (TCRP) that allocated the sales tax on gasoline to transportation projects selected by the Governor. The TCRP program committed all of the state-wide gasoline sales tax proceeds through 2008. Marin County received a significant share of these funds for the SMART Rail program (\$37 million) and the Marin-Sonoma Narrows (\$21 million). This program is currently in significant jeopardy as the governor and the legislature attempt to reduce an overall state budget deficit.

Proposition 42 would allocate the retail sales tax on gasoline to transportation projects, in perpetuity, beyond the 2008 TCRP deadline unless a fiscal emergency exists. Funds would be allocated to transportation projects through a variety of existing allocation mechanisms. Prop 42 revenues for Marin County were estimated to be about \$9 million annually.<sup>1</sup> However, much of Prop 42's revenues would be

**Proposition 42, passed by state voters in March 2002, would generate \$9 million per year for Marin's transportation projects**

**Spending Priorities for Proposition 42 Funds Using Current Strategies**



<sup>1</sup> Amount includes an estimated \$3.8 million for local streets and roads, \$3.8 million for new State Transportation Improvement Program (STIP) projects, and \$1.7 million for Golden Gate Transit and other transit operating funds.

dedicated to maintaining the existing roadway network.<sup>2</sup> It is expected that \$6 million per year would support maintenance of the County's local street and road network. While this is very important to Marin County, Proposition 42 does not offer significant opportunity for developing new multi-modal transportation solutions.

Proposition 42 would be implemented only if the state budget crisis has abated and state revenues are increasing. Legislative action could delay or suspend implementation of Proposition 42 if the state's fiscal crisis continues.

### **REAUTHORIZATION OF THE FEDERAL TRANSPORTATION EQUITY ACT FOR THE 21ST CENTURY (TEA-21)**

The Transportation Equity Act for the 21st Century established the current priorities for distribution of federal surface transportation funds to states, regions and counties. In 2003, Congress is expected to reauthorize TEA-21, which will reestablish federal programs and funding for surface transportation. The U.S. Department of Transportation (DOT) is engaging in a collaborative approach with government, industry and other stakeholders to develop new proposals for surface transportation programs that build on the experience of TEA-21. The DOT is continuing to encourage locally developed, intermodal solutions to transportation problems throughout the country, and representatives from Marin County and the San Francisco Bay Area Region are working to ensure that local transportation needs will be met by the new legislation. The reauthorization of TEA-21 also presents an opportunity for local governments to request specific funding

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<sup>2</sup> Amount includes an estimated \$3.8 million for local streets and roads, plus \$2.8 million from additional Prop 42 STIP funds that would be dedicated to streets and roads.

earmarks for projects of regional significance. Thus, TEA-21 reauthorization, along with new federal funding appropriations, may help fund some of the regional projects included in our transportation vision.

## **MARIN'S PARTNERS IN TRANSPORTATION FINANCING AND PLANNING**

Marin County cannot finance and implement its transportation vision alone. Congress, the Federal Department of Transportation, the California Legislature and Governor, the California Transportation Commission, and Caltrans, are all important partners in the funding of transportation projects in Marin County. In addition to these, the most critical are:

### **Metropolitan Transportation Commission (MTC)**

The majority of financing available for new projects is allocated at the regional level by the nine-county Bay Area's Metropolitan Transportation Commission (MTC).

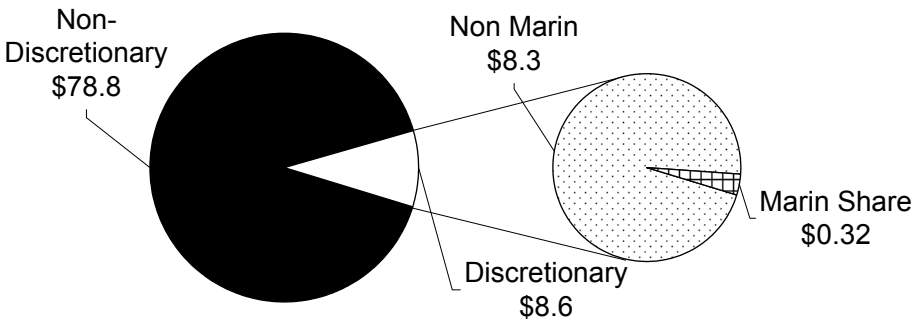
Every three years, the MTC completes a Regional Transportation Plan (RTP) which outlines funding priorities for transportation projects for a 25-year planning period. The MTC completed its last RTP in December 2001. The Plan estimated that \$87.4 billion would be available for transportation in the nine-county Bay Area over the next 25 years. However, about 80% (\$70 billion) of those funds are required to maintain and operate the current transportation system. Furthermore, all but 10% (\$8.6 billion) of these funds have already been "spoken for," having been committed by law, ballot measures, or recent MTC programming actions. Thus, the RTP allocates the remaining \$8.6 billion for transportation system expansion, which MTC calls the region's "discretionary," or "Track 1" funds. Of that amount, \$323 million is

planned for projects in Marin, including \$100 million for the Marin-Sonoma Narrows project. This represents 3.9% of the discretionary funds in the region, an amount roughly equivalent to Marin's 3.7% of the Bay Area's population.

**25 Years of Regional Transportation Spending,  
Discretionary v. Non-Discretionary**

MTC, working with its partner agencies, establishes the priorities for the spending of discretionary funds that are available for transportation system expansion.

MTC programs nearly half of these funds to regional programs and projects for the benefit of the entire region. Forty percent of all funds coming to the region, along with



*\*Numbers are in billions.*

varying levels of Interregional Transportation Improvement Program (ITIP) state funds, are available to be programmed by counties and county agencies for local priorities. Of course, the regional and joint regional funds can be allocated to projects that are significant to Marin County. An example is the \$100 million of Track 1 regional funds planned for the Marin-Sonoma Narrows project.

It is important to note that the RTP is a broad planning document and not an actual "programming" of funds.<sup>3</sup> The programming of funds at MTC occurs via the Regional Transportation Improvement Program (RTIP) and

<sup>3</sup> Programming is transportation lexicon that refers to the linking of projects with funding under a set schedule. To increase understanding of the jargon and acronym filled realm of transportation financing in the Bay Area, readers are strongly encouraged to reference MTC's "Moving Costs: A Transportation Funding Guide for the San Francisco Bay Area", available at: [http://www.mtc.ca.gov/publications/funding\\_guide/fund\\_guide-hm/funding\\_guide01.htm](http://www.mtc.ca.gov/publications/funding_guide/fund_guide-hm/funding_guide01.htm)

**Figure 4-2      How MTC Divides and Uses Discretionary (Track 1) Funds**

<b>Regional Programs (MTC)</b>	<b>County Priorities (Congestion Management Agencies)</b>	<b>Joint Regional/ County Selection (Caltrans, MTC and CMAs)</b>
\$4 billion	\$3.5 billion	\$1.1 billion
<ul style="list-style-type: none"> <li>■ System Management and Operations</li> <li>■ Streets and Roads Maintenance</li> <li>■ Transit Capital Rehabilitation</li> <li>■ Transportation For Livable Communities (TLC) / Housing Incentive Program (HIP)</li> <li>■ Regional Transit Expansion Program</li> </ul>	<ul style="list-style-type: none"> <li>■ Maintenance</li> <li>■ Operation</li> <li>■ Expansion</li> <li>■ TLC/HIP (county share)</li> <li>■ Bike/Pedestrian</li> </ul>	<ul style="list-style-type: none"> <li>■ Interregional Transportation Improvement Program (ITIP)</li> </ul>

the federally required Transportation Improvement Program (TIP). These are updated every two years.

Because plans are frequently updated, Marin County can influence the amount of discretionary funds it receives. Regional plans typically rank local projects on a number of criteria such as whether or not funds are already earmarked for the project, whether or not dedicated local funding exists, the availability of funding for operations (in the case of transit projects), the project's cost effectiveness, and the project's readiness to move forward. In most cases, projects with significant local funding are most likely to receive any new allocations of federal or state funds to the region. While projects without such "local matches" may be included in regional transportation plans, they are usually not considered top candidates for funding.

**Projects with significant local funding are most likely to receive any new allocations of federal or state funds to the region.**



## Golden Gate Bridge, Highway and Transportation District

Along with the MTC, the Golden Gate Bridge Highway and Transportation District (GGBHTD) has an important influence on transportation planning and funding in Marin. The District controls toll revenue from the Golden Gate Bridge which it uses for bridge maintenance and to subsidize both its ferry and bus transit services. With regard to transit, the District's general priority is to reduce congestion on the Golden Gate Bridge by serving regional travel needs between Marin and Sonoma counties and San Francisco. For fiscal year 2002, 49%, or \$86 million of GGBHTD's budget, is dedicated to the operation of, and capital investment in, its bus and ferry services. Of the \$77 million operating budget, transit fares generate \$23 million or 30% of the cost of operating the bus and ferry systems. Bridge tolls provide \$33 million or 42%, and State and regional grants, rents, concessions and advertising make up the remainder.

High costs for bridge seismic retrofit, increased security and insurance costs – combined with reductions in revenue – have resulted in an exceptional budget shortfall for the Bridge District. The District must reduce its annual expenditures by approximately \$25 million per year within the next six months in order to balance revenues and expenses. To help cover the shortfall, the District has increased bridge tolls to \$5. GGBHTD also plans to increase transit fares and is implementing bus and ferry service reductions.

Golden Gate Transit is targeting underutilized and inefficient services for reduction or elimination within the framework of the GGBHTD's transit service priorities, which are (in order of priority):

1. Transbay bus and ferry commute services that directly reduce peak-hour traffic on the Golden Gate Bridge.

2. Weekday and weekend transbay services that help reduce traffic throughout the day on the Golden Gate Bridge and in the Highway 101 corridor.
3. Intercounty bus service not directly related to the Golden Gate Bridge corridor and local bus services provided under funding agreement with Marin County.

An initial round of service cuts will take effect in March 2003, and additional cuts will be proposed for implementation in Fall 2003. More detailed information can be obtained from Golden Gate Transit's website at [www.goldengatetransit.org](http://www.goldengatetransit.org). Marin County Transit District is working closely with GGBHTD to minimize the impact of these reductions on local mobility.

Golden Gate Transit, GGBHTD's bus service, is the "contract operator" for local transit services in Marin County under an agreement with the Marin County Transit District. GGT provides local bus service to Marin County in two ways. First, a significant number of local trips are carried on GGT's basic commuter routes. MCTD contributes 95% of its Transit Development Act revenues to GGT to support the local service aspect of GGT's Basic, Commuter and Ferry Feeder services. In fiscal year 2000, this amount totaled approximately \$8 million. MCTD also contracts with GGT for operation of several Local Service Routes. Because GGT is able to use residual drivers and buses from its peak period commute services to operate these routes, GGT charges MCTD only for the added marginal cost of providing these services as opposed to the fully allocated costs. MCTD funds these services using fare revenues and the remaining 5% of its TDA revenues. In fiscal year 2000, MCTD paid \$1.6 million for these additional Local Service Routes.

## **SMART Transit District**

The state legislature recently enacted new legislation to create the SMART Regional Rail District. The District is governed by representatives from cities, the Sonoma and Marin County boards of supervisors, and the Golden Gate Bridge Highway and Transportation District. This legislation will result in the transfer of all related assets, including the rail right-of-way to SMART.

The newly created SMART District will continue its environmental analysis and is currently moving forward on station planning activities. Current planning and design tasks are funded largely through the Governor's Transportation Congestion Relief Program (TCRP) and Rail Bond (Proposition 116) funds. Funding under TCRP may be in jeopardy in the current state budget.

The SMART legislation allows the District to seek its own sales tax and/or other revenue sources. A SMART sales tax would require a combined two-thirds vote in Marin and Sonoma counties. Sales tax funds would be used for operating and capital costs and could also be used to help complete the North-South Bikeway and to facilitate smart growth development within the rail corridor. The District has not made any decisions about future funding, pending the results of current studies.

## **Water Transit Authority**

The WTA envisions an expanded water transit system funded from new transportation dollars that do not compete with existing programs. The WTA has identified a variety of new local, regional, state and federal sources, working in partnership with local connecting transit agencies. The WTA expects that the majority of funds for an expanded water transit system will come from an increase in tolls on the Bay Area's state-owned

bridges, or from some other regional source. It is expected that local sources will supply about 25% of needed funds. No local matching sources has been identified in Marin County.

## **Sonoma County**

As discussed in Chapter 1, transportation linkages between Marin and Sonoma Counties are critical to both counties. Currently, about half of trips entering Marin County from Sonoma County are destined for jobs within Marin. As employment opportunities in Sonoma County increase, more Sonoma County residents will be able to work closer to home, and there will be a growing "reverse commute" trend from Marin County residences to jobs in Sonoma County. The implementation of four high profile transportation improvements: the Marin-Sonoma Narrows HOV lanes, SMART Commuter Rail, the Express Buses and the North-South Bikeway address this transportation market. Funding plans for each of these projects will depend on a variety of sources and the partnership of the two counties. Both Marin and Sonoma County's Congestion Management Agencies have been meeting jointly to discuss transportation issues of mutual interest.

**While Marin County must advocate for new state and federal funding for transportation projects, it cannot implement this plan without additional local resources.**

## **POTENTIAL FUNDING SOURCES FOR UPGRADING AND EXPANDING TRANSPORTATION SERVICE**

Because existing transportation funding sources are primarily designed to address today's transportation infrastructure, new funding sources need to be developed to implement the vision outlined in this document.

**Statewide, approximately 15% of transportation spending comes from local sales taxes.**

Marin County should be a part of regional and state-wide efforts to increase funding for transportation. However, it is clear that Marin County must raise local funds to leverage outside discretionary sources if it is

ever to implement its transportation vision. Without a “local match,” Marin County will not be competitive in pursuing discretionary funds from other sources. Figure 4-3 discusses the options for generating local transportation revenue.

**Figure 4-3 Potential Revenue Sources For Marin Transportation Authorized Inside of Marin**

Revenue Source	Revenue Potential	Approvals Required	Evaluation of Potential
County Sales Tax	High	Board of Supervisors; Marin Voters (50% if general; 67% if dedicated to transportation)	Discussed in detail below. Is disconnected from use of transportation system. Easy to administer and collect with medium revenue stability.
County Gas Tax	Medium	Board of Supervisors; Marin voters (67%)	Serves as disincentive for driving as well as revenue generator. However, a County gas tax may encourage purchasing gasoline in neighboring jurisdictions (although regional differences in gas prices already exist).
Parcel Tax	Low	Board of Supervisors; Marin voters (67%)	A stable source used by cities and counties throughout California. Traditionally this source has been used for schools and emergency response services.
Utility Tax	Uncertain	Marin voters (67%) if dedicated to transportation	Utility tax disconnected from transportation but is a stable and easy to collect source.
Business Taxes (Payroll)	Low	Board of Supervisors and Marin Voters (50% if general; 67% if dedicated to transportation)	To the extent that Marin jobs generate transportation demand, there is a connection between this tax and improving transportation.
Traffic Mitigation Fee Ordinance	Medium	City Councils	Several cities as well as the County have already adopted fee ordinances that enable local governments to collect fair-share participation fees for needed public transportation improvements from new development projects that generate traffic. State law requires local governments to demonstrate a nexus between the transportation impacts of a project and the fee assessed. This is not a stable source due to the uneven pace of development.
Public-Private Partnerships	Low	None; voluntary participation from private businesses	Private businesses whose employees benefit from the implementation of transportation demand management (TDM) strategies may be willing to help finance countywide TDM programs.

## **The Need for a Self-Help Sales Tax**

Traditionally, Marin County has envisioned using a self-help local sales tax as the primary way to generate local funds for transportation. Sales taxes are popular because they generate relatively large amounts of revenue while having minimal impact on an individual resident or family. Transportation sales tax funds can be spent on any transportation purpose, including leveraging outside sources. The projects that will be funded by a local sales tax must be defined in an Expenditure Plan that is approved by statute and is intentionally difficult to change, ensuring the voters that their money will be spent on local priorities. Although sales taxes are known to be regressive, meaning that lower-income households pay a higher proportion of their income in sales taxes than wealthier households, sales taxes are not levied on either grocery purchases or rent, which mitigates this impact. A well crafted transportation sales tax can provide significant benefits to lower-income households by funding transit and other improvements that benefit those who do not own or choose not to drive cars.

A half-cent sales tax would generate \$19 million in Marin County in its first year (assuming a tax beginning in 2004). Sales tax revenues rise and fall with economic activity, which is generally expected to slightly outpace inflation and population growth over the long term. The flexibility of a sales tax also extends to the timing of its expenditure. Marin could expend revenue as it is generated (known as "pay-as-you go"); or it could use "debt financing" to accelerate expenditure through borrowing, using the sales tax revenue stream to repay the debt.

Becoming a self-help county would expand Marin's role in planning and implementing transportation projects. A County Transportation Authority would be created to oversee implementation of the voter-approved ex-

**Counties that have local transportation sales tax revenues are generally able to attract \$2 or \$3 dollars of outside funds for every \$1 they spend in local money by using their own funds as the "leverage" for matching grants.**

penditure plan, and a citizen's "watchdog" committee would be formed to monitor the Transportation Authority. Currently, a two-thirds supermajority vote is required to pass a transportation sales tax. There is some discussion at the state level about reducing this high threshold, perhaps in 2004. Any change to this requirement would require a vote of the people throughout the state.

### **ATTRACTING FUNDING OUTSIDE OF MARIN**

It is possible that regional, State and Federal policies will increase funds available for transportation projects in Marin County. However, with the recent passage of Proposition 42 and the current fiscal and economic climates, passage of additional revenue generating measures is unlikely to happen in the very short term. Transportation projects could be funded by sources generated in the region, including increased bridge tolls or a regional gas tax. These sources and their prospects for helping transportation funding in Marin are summarized in Figure 4-4.

### **Getting a Bigger Slice of the Funding Pie**

Even if new regional, State, or Federal funds become available, Marin County must position itself to get its fair share from new sources. The ability to attract discretionary funding at all levels hinges on the development of a local funding source within the County. Counties that have local transportation sales tax revenues are generally able to attract \$2 or \$3 dollars of outside funds for every \$1 they spend in local money by using their own funds as the "leverage" for matching grants. Marin needs this additional leveraged funding in order to implement our transportation vision.

Our ability to attract outside funds will also depend on having plans in place that describe our own priorities. *Moving Forward* represents the first step in developing



a multi-modal vision for Marin County. Additional steps will prioritize the projects in this transportation vision, putting Marin County in an ideal position with "funding ready" projects that represent a local consensus. Having consensus in place signals to funding agencies that issues have been considered locally and that priorities have been established.

**Figure 4-4 Potential Sources For Marin Transportation  
Authorized Outside of Marin**

Revenue Source	Approvals Required	Discussion of Prospects
<b>Increased State Gas Tax</b>	State legislature (67%); increases often put on state ballot	Policymakers must convince the electorate that inflation is eroding the buying power of the gas tax in order to increase this transportation user fee. Note that a state constitutional amendment would be required to expand the use of gas taxes beyond road and highway maintenance and construction and construction and maintenance of mass transit guideways. Since this Plan focuses heavily on transit, this limitation is problematic.
<b>State General Funds (typically via General Obligation Bonds)</b>	State Legislature and State Voters (50%)	While general funds are a problematic source in that they have no connection to the use of the transportation system, voters have been willing to approve the issuance of general obligation bonds for transportation purposes.
<b>Regional Gas Tax</b>	MTC, Bay Area Voters (67%)	The MTC could place this on the ballot in the future. As a transportation user fee, this is an ideal funding source.
<b>Increased Bridge Tolls</b>	State Legislature, possibly Voters; for Golden Gate, approval of GGBHTD Board	There is a State legislative movement to increase tolls to fund regional transit, especially ferries. However, escalating seismic safety costs are likely to mean that toll increases must be directed toward bridge retrofit. Using bridge tolls for transit is generally fair only when it improves transit in the corridor being tolled. Therefore, even an increase in the Golden Gate Bridge Toll would be expected to be used to improve transit connections between Marin and San Francisco.
<b>U.S. Highway 101 Tolls (Potential HOT lanes)</b>	Complicated approval scenario including State and Federal government	Politically unpopular but can be very fair and efficient. Tolling the 101 Corridor not only has a revenue generating benefit, but it would contribute to congestion reduction by discouraging SOV trips in the corridor. An alternative to full tolling of 101 is a High-Occupancy-Toll lane that could retain the free lanes and allow SOV users in the HOV lane if they pay a toll (although revenue potential is reduced). Tolls in the corridor would be an appropriate source for the myriad of projects serving north-south travel (See Figure 3-1).

## How Do We Get There From Here?

Figure 4-5 summarizes the funding already attracted by various projects as well as issues related to future funding. At least \$1.6 billion must be generated if all the projects outlined here are to be implemented. Existing revenue can contribute only \$367 million, leaving a gap of at least \$1.2 billion, in addition to funding for projects not yet quantified.

The vision outlined in Chapter 3 is not one that can be implemented all at once. One of the biggest steps we can take toward implementing the vision in Marin County is the passage of a self-help sales tax. However, even a sales tax will not generate nearly enough revenue to fully implement our vision. Marin will also need to be competitive in attempts to secure outside funds. The following conditions are vital to Marin's success in doing so:

- **Subregional cooperation and consensus on desired projects and means of financing them.** As its sister county, Marin must work closely with Sonoma to align funding and project priorities. Marin must also work cooperatively with other key subregional partners, including GGBHTD, the SMART Transit District, the Water Transit Authority, and the National Park Service, to bring a single voice to regional and State funding processes.
- **Local cooperation regarding funding priorities in Marin County.** Discord among Marin communities and stakeholders will jeopardize Marin as it seeks to attract outside funding.
- **Locally generated matching funds.** As emphasized in this section, local contributions (now over 15% of statewide funding for transportation) are essential to attracting discretionary funds.

To begin implementing our vision, it will be necessary to establish priorities for funding. The process for developing a constrained expenditure plan includes the following broad steps:

1. **Establish Goals of Funding Plan.** Goals are essential for guiding difficult choices. Chapter 1 presents a summary of the goals established so far.

2. **Establish Performance Measurement Indicators.** The projects being considered span all modes of travel and vary widely in both implementation and maintenance costs. Also, benefits of projects in a multi-modal plan are hard to disaggregate because they are often synergistic (e.g., local shuttles are more effective in conjunction with rail). Therefore, traditional performance measures of things like cost-effectiveness may not be able to accurately assess project benefits. However, performance measurement indicators are an important tool in guiding decision making.
3. **Make Hard Choices by Prioritizing Projects.** While indicators will provide important guidance, hard choices are required.
4. **Carefully Phase Projects to Maximize Early Benefits.** Many of the projects being considered will take years to fully implement. By carefully phasing individual projects and by coordinating the implementation of interrelated projects, the public will be able to benefit from projects early on, rather than having to wait for a project's completion.

Not only must Marin County make hard choices and set priorities, but the priorities must be amenable to local cities, stakeholder groups, and the voters of Marin. Obtaining this level of support is a daunting task. It becomes possible when stakeholders with a particular interest and localities recognize that compromise is necessary, and that current funding constraints mean that each group cannot get all that it wants.

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Figure 4-5 Funding Attracted and Issues Summary

Mode	Market/Project	Funding Need Over 25 Years (\$M)*	Funding Attracted	Funding Potential / Issues
<b>Local Projects</b>				
Hwy	Highway Interchanges	\$236.0	Funding has been available for planning studies of a number of the interchange projects.	Some level of interchange improvements could be funded with existing sources. To accomplish the entire interchange program within the planning period, additional local funds will be required.
Loc. Bus	Transit Junctions/Pads/Stops, Technology and Admin.	\$31.0	Entire local transit plan estimated to receive \$32 million in regional funds.	Capital expenditures can attract outside funds, however programs are competitive and more likely to fund bus purchases. Implementing local transit plan is heavily dependent upon increase in local funds.
Loc. Bus	Intercommunity Transit	\$129.0	Entire local transit plan estimated to receive \$32 million in regional funds.	Required bus purchases could attract outside funds. However, programs are competitive and still would require a local match. Implementing local transit plan is heavily dependent upon increase in local funds.
Loc. Bus	Local Express Bus (Hwy 101)	\$21.0	Entire local transit plan estimated to receive \$32 million in regional funds.	Required bus purchases could attract outside funds. However, programs are competitive and still would require a local match. Implementing local transit plan is heavily dependent upon increase in local funds.
Streets	Local Streets and Roads (Includes TSM projects)	\$414.0	Under the rules of Prop 42 and Marin’s current agreement on allocating STIP funds, local streets and roads will receive about \$9 million annually. Also, estimated to receive \$48 million in regional funds.†	Passage of Proposition 42 goes far in meeting these needs and makes the likelihood of new sources of funding for local streets and roads unlikely.
Loc. Bus	Community Service Routes	\$12.0	Entire local transit plan estimated to receive \$32 million in regional funds.	Required bus purchases could attract outside funds. However, programs are competitive and still would require a local match. Implementing local transit plan is heavily dependent upon increase in local funds.
Loc. Bus	School Pool Bus Service	\$17.0	Entire local transit plan estimated to receive \$32 million in regional funds.	Required bus purchases could attract outside funds. However, programs are competitive and still would require a local match. Implementing local transit plan is heavily dependent upon increase in local funds. It is uncertain whether this service could obtain the growing sources for Safe Routes to School Programs.
Bike/Ped	Safe Routes to School	\$25.0	Current pilot programs are being funded through Caltrans grants.	Success of pilot program, popularity, and renewal of a Caltrans grant program mean Safe Routes to Schools could be successful in attracting outside funds. Nevertheless, implementing Safe Routes to Schools throughout Marin County will require local funding support.
Loc. Bus	Paratransit	\$70.0	Entire local transit plan estimated to receive \$32 million in regional funds.	Required bus purchases could attract outside funds. Paratransit has additional potential funding sources beyond those for transit. However, programs are competitive and still would require a local match. Implementing local transit plan is heavily dependent upon increase in local funds.
Bike/Ped	Countywide and Local Bicycle/ Pedestrian Improvements	\$70.9	Currently committed \$6.1 million in state (TDA Article 3) and \$1 million in federal (TEA-21) funds.	Implementing full bike/ped plans will require local funds. However, high profile projects can attract earmarks or allocations from outside funds such as was recently achieved with the Cal Park Tunnel project.
Land Use	Land Use	TBD	Foundations, non-profits and small government programs currently fund development rights purchases for preservation or facilitating smart development.	MTC’s Transportation for Livable Communities (TLC) and Housing Incentive Program (HIP) are available to support smart development. However, most transportation funding sources cannot be used for land use components. Therefore, an extensive land use program will require locally generated funds.
Loc. Bus	TDM	\$10.0	Anticipated to receive \$2.5 million through the Regional Transportation Plan.	While local funding is needed for an extensive program, local employers can be an additional source of funds for TDM programs.
<b>Regional Projects</b>				
Hwy	Narrows	\$300	Project expected to receive \$100 million in interregional funds and \$21 million under the governor’s Traffic Congestion Relief Program (TCRP).†	Some local match required despite large proportion covered by regional funds. Reauthorization of TEA-21 may provide additional federal funds.
Rail	Commuter Rail	\$115.2	Attracted a \$28 million earmark from State Proposition 116 and a \$37 million earmark under the TCRP; two-thirds of Marin-Sonoma voters in the SMART Rail District could approve a sales tax to fund operating and capital costs.†	Large funding need, competition for limited transit capital funding and few sources for operating deficits means this project may require significant local funds. Reauthorization of TEA-21 may provide new federal funds.
Xbus	Express Bus	\$78.8	Other than fares from riders, no current funds have been allocated to expended express bus service. Expanded water transit system will be funded by new transportation dollars and will not compete with existing programs.	Similar issues to commuter rail, however, because up to \$50 million of the Express Bus Plan capital program costs are associated with park-and-ride and interchange improvements, these costs would be eligible for conventional highway funding.
Ferry	Ferry	\$67.9 <sup>1</sup>	State funds are covering the costs of planning studies. The expanded water transit system will be funded by new transportation dollars and will not compete with existing programs.	An expanded system would primarily be funded by an increase in tolls on the Bay Area’s state-owned bridges, or from some other new regional source. It is expected that local sources would supply about 25% of needed funds regionwide.
Loc Bus	Intermodal Connections	\$10.0	Entire local transit plan estimated to receive \$32 million in regional funds.	Local funds will be necessary for capital and operating costs, however these types of services can sometimes attract funds from employers benefiting from the shuttles.

\*Current dollar estimates for unfunded needs are from existing plans.

† The future of TCRP funding is uncertain given the state’s current fiscal situation.

<sup>1</sup>Estimated total funding need for Golden Gate Corridor Ferry Service for 2005-2014.