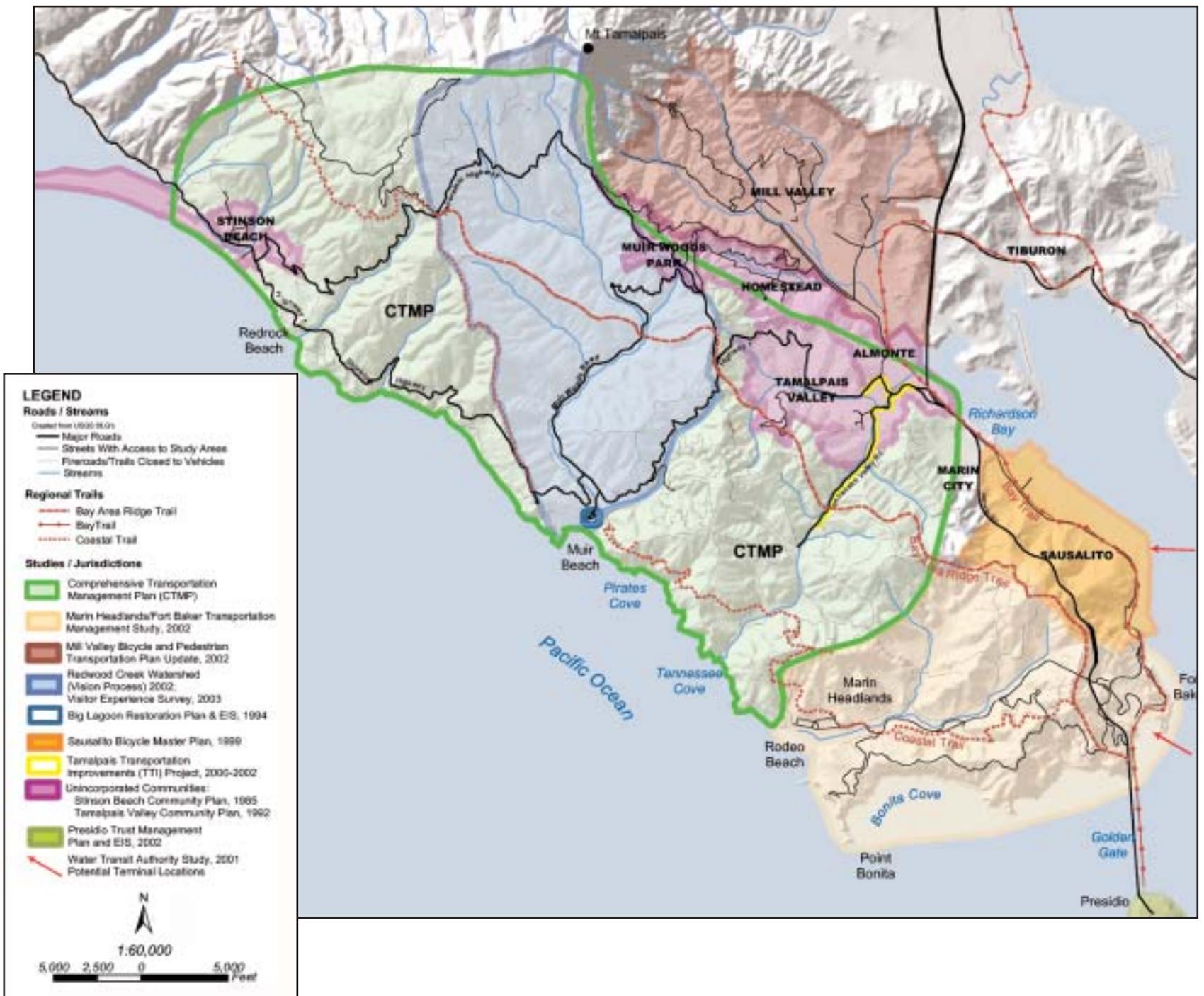




# overview

The Comprehensive Transportation Management Plan (CTMP) project brings together Marin County, the National Park Service, California State Parks, California Department of Transportation, other participating agencies, and the public to identify ways to reduce traffic impacts in gateway communities and park sites. Heavy volumes of traffic and parking impacts on roadways leading to National Park areas in Golden Gate National Recreation Area (Muir Woods National Monument, Tennessee Valley, Muir Beach and Stinson Beach), and Mt. Tamalpais State Park have resulted in a need to identify alternative access options to the parks other than continued reliance on automobile passenger travel. Concerns regarding traffic congestion, protection of parkland areas, the quality of the visitor experience, and impacts to area residents have highlighted the need for a comprehensive approach to solving recreational and non-recreational traffic and parking conflicts in the area.





## purpose and need

### NEEDS/ISSUES:

- On some days heavy traffic along parts of this corridor from both park visitation and residential and commercial development results in:
  - Long delays at particular intersections
  - Increased travel time to park and local destinations
  - Delays in emergency response
- Few non-car options are available for travel within study area
- During peak visitation periods, parking demand exceeds supply at park destinations
- Parking along road shoulders causes safety and environmental problems
- Segments of roads and bridges along creeks limit natural channel migration and floodplain function
- Erosion from certain roads and trails elevate sediment supply to local creeks and may degrade habitat of threatened fish species
- Some road maintenance practices are damaging roadside and riparian vegetation, and causing excessive erosion and sedimentation of streams
- Periods of heavy traffic and/or shoulder parking are changing the character of parklands and gateway communities

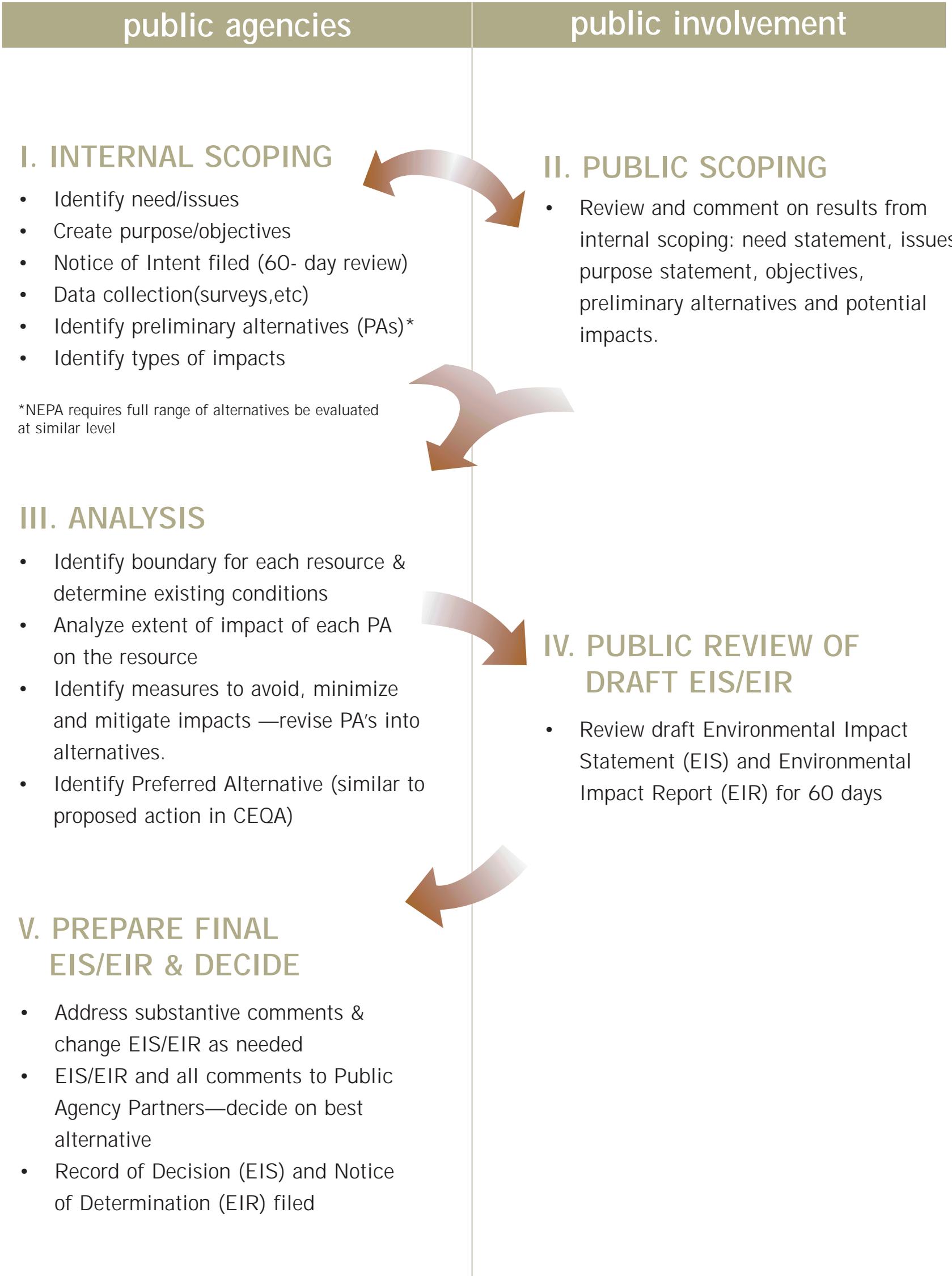


### PURPOSE/OBJECTIVES:

- Manage residential, commercial and park-generated congestion along this corridor in a sustainable manner to:
  - Improve egress and ingress for residents and emergency services
  - Improve visitor access and experience
- Ensure access for a variety of park visitors
- Provide sustainable balance of parking and alternative access options
- Ensure that cars are parked in designated areas
- Re-establish critical hydrologic functions where they are affected by elements of transportation infrastructure
- Reduce erosion and sedimentation from targeted roads and trails which provide primary access to park sites
- Improve road maintenance practices to reduce impacts on vegetation and streams
- Ensure that solutions are consistent with the character of parklands and gateway communities



# typical NEPA process





## what we heard

Since the Comprehensive Transportation Management Plan (CTMP) project began in 2000, the general public, including residents in the gateway communities of southern Marin County, provided input at various stages of the planning process. Four sets of public forums were provided:

- Public Scoping Meetings (6 meetings) in Fall 2002
- Presentations (3 meetings) in Summer 2003
- Presentation of draft preliminary alternatives (5 meetings) in Fall 2003 following the preliminary alternatives newsletter
- Public meeting hosted by Marin County in January 2004



Comments from these public meetings and presentations are summarized below in key categories. A compilation of individual public comments is available for reference.

### Plan Development Process

- Coordinate the CTMP project with other National Park Service and Marin County planning efforts like the Big Lagoon Restoration Project, Marin Headlands–Fort Baker Transportation Plan, and the Marin County General Plan.
- Improve public noticing and outreach efforts.
- Ensure that the planning process provides adequate opportunities for input from the general public.
- Ensure that concerns of the gateway communities, general public and park visitors are considered during the planning process.
- Be prepared to identify, evaluate and implement a smaller set of plans that would achieve some, if not all, of the goals of the CTMP if funding is limited.

### Traffic and Parking

- Do not charge parking fees at Muir Beach or Stinson Beach.
- Do not reduce the parking lot capacity at Stinson Beach.
- Do not build additional parking at Santos Meadow.
- Do not close Muir Woods Road and Frank Valley Road to traffic.
- Improve traffic conditions along the major roadways (Shoreline Highway and Panoramic Highway) so that residents are not trapped in their communities.
- Improve and expand traffic control and enforcement throughout the CTMP study area, especially at Stinson Beach during times of heavy visitation.
- Ensure that emergency access is available, especially in the most congested areas during times of heavy visitation: Stinson Beach, Muir Beach, and Muir Woods.
- Use fees as an incentive to reduce use of vehicles and to fund transit.



## what we heard

### Traffic and Parking *(continued)*

- Solutions to non-recreational traffic must be addressed.
- Recheck and expand parking data.
- Consider a parking lot location at Diaz Ridge.



### Visitor Demand Management

- Explore a reservation system for the Muir Woods National Monument.
- Do not accommodate personal auto and parking requirements of future peak summer visitor demand.
- Develop a carrying capacity for the parklands.
- Ensure latent and future demand is included in the analysis.



### Transit Intercept Facility (TIF)

- Do not build an unsightly parking garage/transit intercept facility at Manzanita in excess of community height restrictions.
- Build-in bicycle support facilities for trail linkages from the TIF to park sites.
- Ensure a well designed aesthetic facility with landscaping.
- Consider all surface parking
- Consider other locations as potential TIF sites.



### Environmental Impacts

- Ensure that all plans have minimal impacts and maximum benefits to the natural and cultural resources located within the study area.
- Ensure that the Muir Beach water wells are protected.
- Ensure that the parking lot at Muir Beach is redesigned in accord with the Big Lagoon Restoration Project.
- Develop a carrying capacity for the parklands.

### Transit

- Attempt to get San Francisco-based visitors on transit in San Francisco.
- Make the shuttle system attractive to visitors.
- Connect to the Sausalito Ferry.
- Build a shuttle system to provide alternative access for visitors to the parks.

### Trails

- Improve trails and bicycle access.

### Intelligent Transportation Systems (ITS)

- Build an early warning system for visitors that provides advance information on traffic congestion, parking and weather.



## elements considered but not proposed to be carried forward

The following elements were considered for inclusion in the preliminary range of alternatives to help relieve congestion in the study area. These four items are not proposed to be carried forward for further analysis.

- Closure of Frank Valley Road and Upper Muir Woods Road to through traffic (need multiple vehicle access routes in emergencies)
- Parking at Santos Meadow (conflict with other plans, uses and goals)
- Southern entry to Stinson Beach parking lot (concern for impact on adjacent residential community)
- Reduction in parking lot capacity at Stinson Beach (causes overflow parking into the community)



Some additional elements, that require additional discussion and study, will be carried forward for analysis as part of the preliminary range of alternatives to comply with the NEPA/CEQA process. Examples of such elements are:

- Charging for parking at all NPS sites in the study area
- Reservation system for Muir Woods National Monument

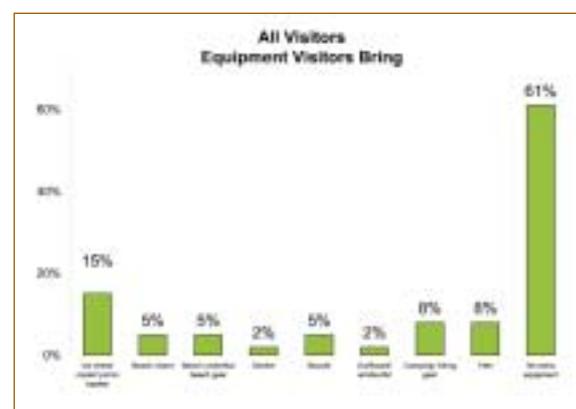
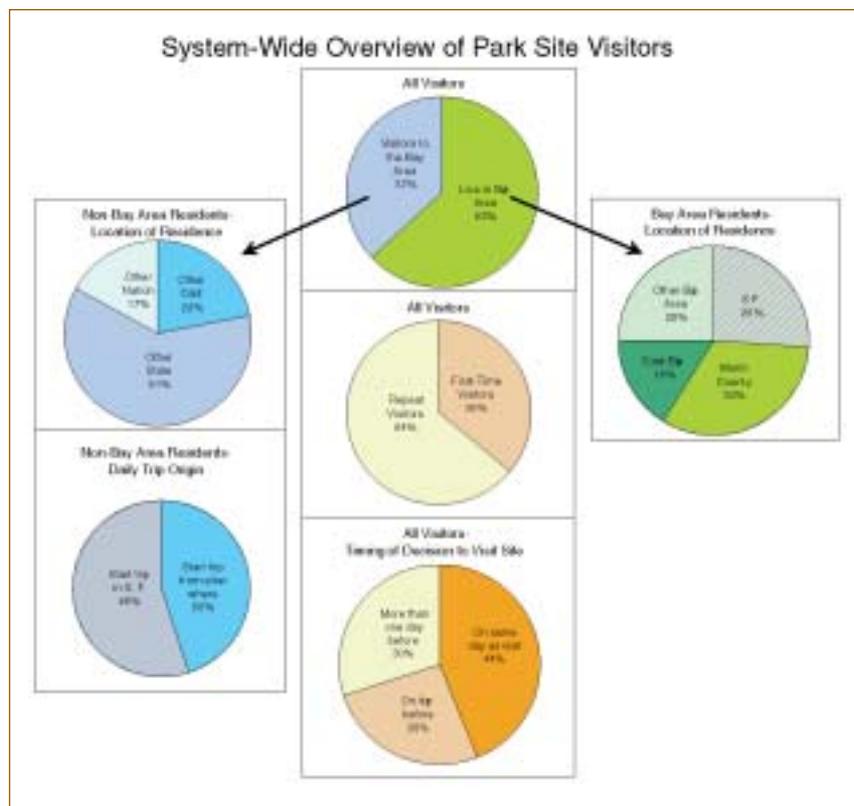


# visitor use survey results

The information presented here summarizes some of the key findings obtained from a visitor intercept survey that was conducted at the five park units within the study area. The results are based on 3,861 intercept surveys that were conducted during 2001 and 2002.

## SYSTEM-WIDE OVERVIEW

- 63% of all visitors to the study area are Bay Area residents.
- Of the 63% above, 26% live in San Francisco, 33% live in Marin County, and 16% live in the East Bay.
- 36% of all visitors are first-time visitors.
- 77% of visitors from outside the Bay Area make their own arrangements to visit the area.
- 44% of all visitors make their decision to visit the study area on the same day as the visit. 25% make their decision the day before.
- 63% of all trips to the site originate from home; 12% originate from someone else's home; and 19% originate from a hotel or motel.
- If all the visitors had to take a shuttle to the site, 47% would prefer to board the shuttle near the Route 101 exit at Manzanita, 10% would prefer to board on the Sausalito Ferry Dock, and 17% would prefer to board an express bus in downtown San Francisco.



\*For complete data visit the project website at [www.ctmpmarin.com](http://www.ctmpmarin.com)



# visitor use survey results

## when did the visitor decide to come to this site?

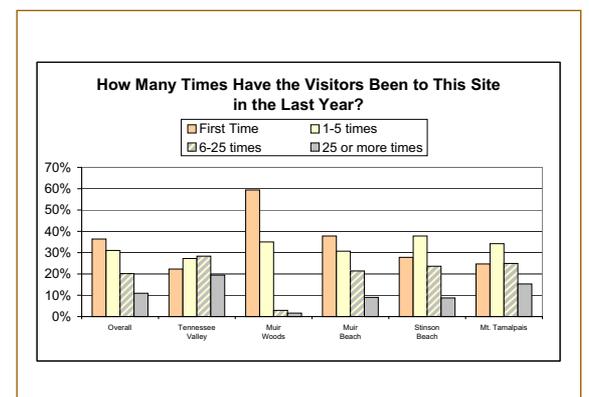
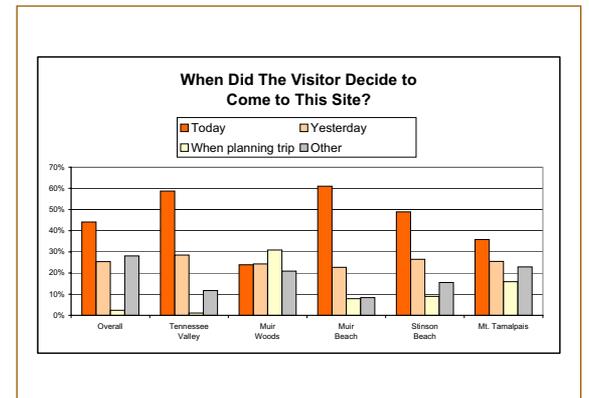
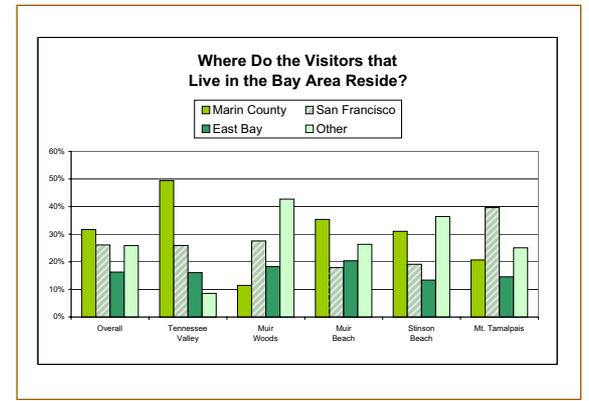
- The majority of visitors decide to travel to the park sites either on the same day or the day before their visit.
- 31% of visitors to Muir Woods most often plan their visit in advance.

## where do the visitors that live in the bay area reside?

- Almost 50% of the Bay Area residents that visit Tennessee Valley live in Marin County, with 32% from Mill Valley/Tamalpias Valley.
- The largest proportion of Bay Area Residents (40%) that visit Mount Tamalpias live in San Francisco.
- Almost a third of Bay Area Residents (32%) that visit Stinson Beach live in Marin County, and 19% live in San Francisco.
- 27% of Muir Woods visitors live in San Francisco, 11% live in Marin County, and 11% live in Oakland and Berkeley.

## how many times have the visitors been to this site in the last year?

- 53% of the visitors to Muir Woods are first time visitors and 41% have been there between 2 and 5 times in the last year.
- 28% of the visitors to Tennessee Valley have been there at least 6 times in the last year and 19% have been there over 25 times in the last year, 4% over 100 times in the last year.
- Over 40% of visitors to Muir Beach and over 35% of visitors to Stinson Beach have visited these sites at least 6 times in the last year.



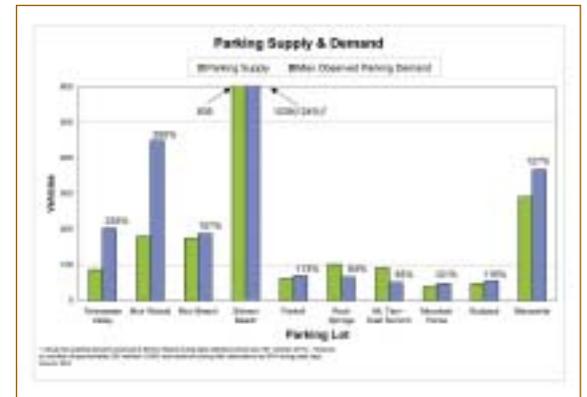


# existing traffic and parking concerns

## PARKING UTILIZATION

### Parking Supply & Demand

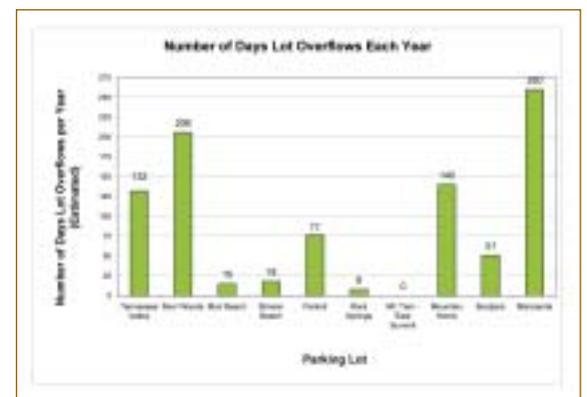
- Direct observations have shown that the parking demand at eight of the 10 parking lots within the study area exceed the parking supply during peak demand periods.
- Direct observations have shown that the parking demand at Tennessee Valley and Muir Woods is often over twice the available supply during peak visitation periods.



Parking Supply Demand

### Number of Days Parking Lots Overflow Each Year

- Tennessee Valley and Mountain Home overflow on most weekends during the peak and shoulder seasons.
- Muir Woods overflows most days during the peak season and most weekend days during the shoulder season.
- Manzanita overflows most weekdays throughout the year.
- Although the Stinson Beach parking only overflows about 18 days per year, depending on weather, the overflow causes major traffic congestion and safety problems.
- Muir Beach overflows approximately 15 days a year on average.



Number of Days Parking Lots Overflow Each Year

## ACCESS AND EGRESS PATTERNS

### Access and Egress Patterns

- During peak season about 50% of the traffic enters the study area from Tam Valley, on Shoreline Highway, while 24% enters from Mill Valley, on Sequoia Valley Road, and 24% enter from the north of Stinson Beach on Shoreline Highway.



Access and Egress Patterns



# existing traffic and parking concerns

The consultant team conducted a wide variety of traffic and parking studies during 2001 and 2002. The team also interviewed the various State and NPS managers to identify their concerns relating to the operation of the park units within the study area. The information presented at this station summarizes some of the key findings obtained from these efforts.

## PARK VISITATION

### Muir Woods Visitation by Month

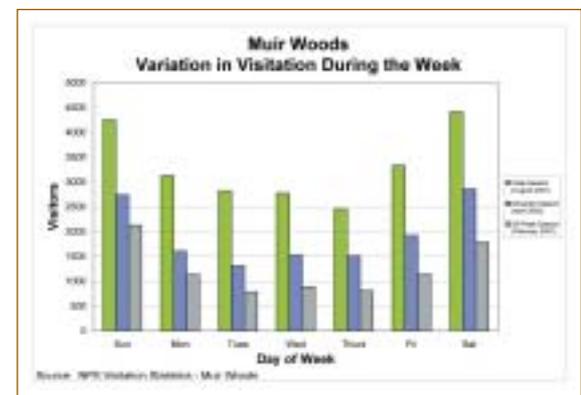
- The peak season is June through August.
- The shoulder season (April, May, September and October) also have high visitation, particularly on weekends.



Muir Woods Visitation by Month

### Muir Woods Variation in Visitation During the Week

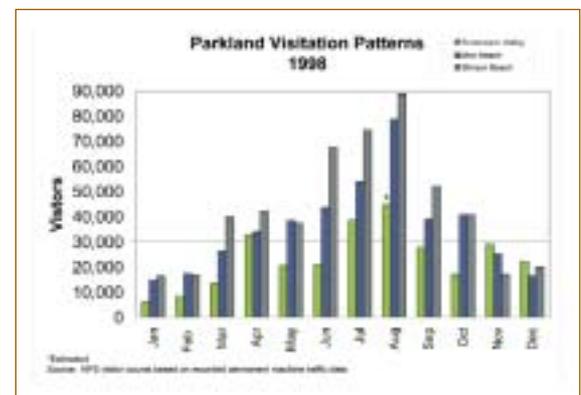
- Daily visitation patterns are consistent throughout the year with weekends receiving greater visitation than on weekdays.



Muir Woods Variation in Visitation During the Week

### Stinson Beach, Tennessee Valley and Muir Beach Visitation Pattern

- Visitation at Stinson Beach is highly weather dependent. Summer of 1998 was exceptionally warm and sunny.
- Tennessee Valley and Muir Beach are used heavily throughout the year.



Stinson Beach, Muir Beach Tennessee Valley Visitation

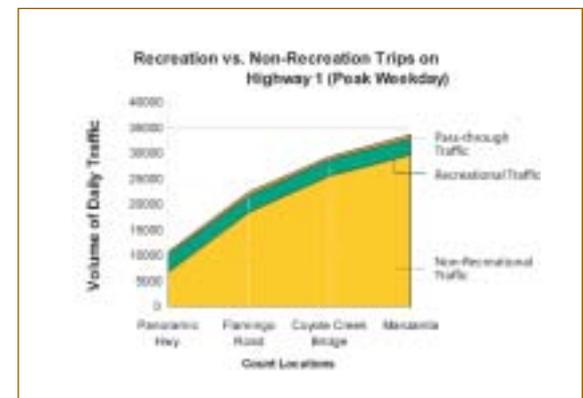


# existing traffic and parking concerns

## PARK VISITATION *(continued)*

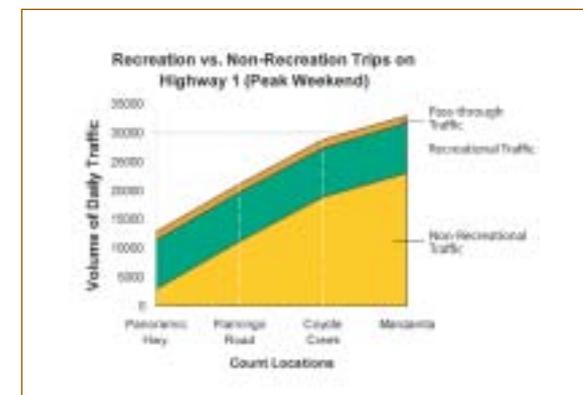
### Peak Season Weekday Trip Purpose

- Weekday local traffic (non-recreational) trips account for 88% of all trips at the Highway 1/Manzanita area, and 64% of all trips at the Highway 1/Panoramic Highway intersection. Pass through traffic on Highway 1 accounts for the remaining trips.
- Weekday recreational traffic accounts for 10% of all trips at the Highway 1/Manzanita area, and 30% of all trips at the Highway 1/Panoramic Highway intersection. Pass through traffic on Highway 1 accounts for the remaining trips.



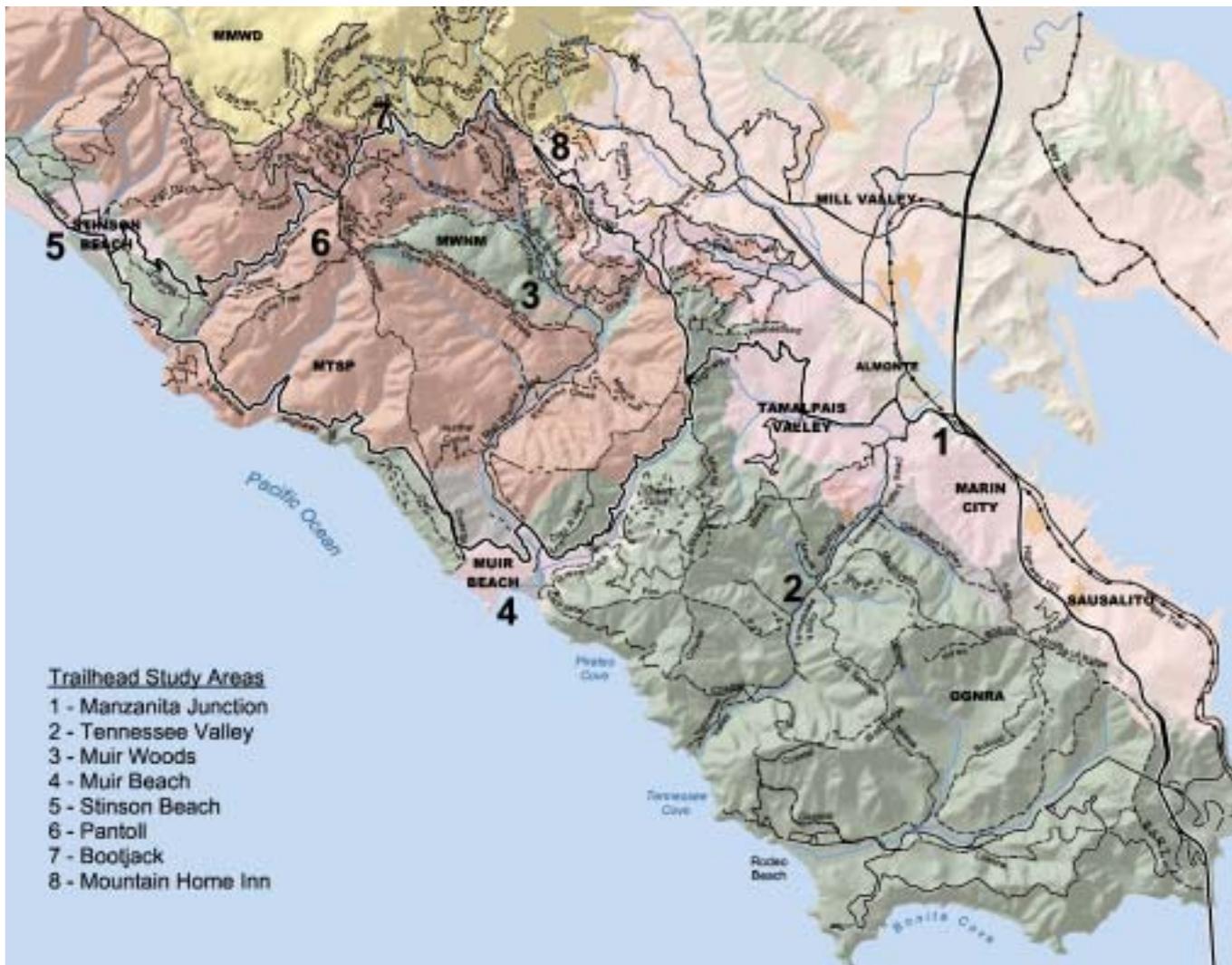
### Peak Season Weekend trip Purpose

- Weekend local traffic (non-recreational) trips account for 65% of all trips at the Highway 1/Manzanita area, and 23% of all trips at the Highway 1/Panoramic Highway intersection. Pass-through traffic on Highway 1 accounts for the remaining trips.
- Weekend recreational trips account for 26% of all trips at Highway 1/Manzanita area, and 67% of all trips at the Highway 1/Panoramic Highway intersection. Pass through traffic on Highway 1 accounts for the remaining trips.





## existing trail system



Trails provide a unique opportunity to reduce congestion within the CTMP Study Area. Currently there is an unsurpassed variety of trails that provide access into the Parklands of Southwestern Marin. The maps on these boards illustrate the major trails leading to and from key destination points in the CTMP study area. The CTMP Study seeks to understand what role trails could provide in making regional transportation linkages to reduce reliance on cars. Please help us identify which trails alignments could be better utilized to reduce congestion in the study area and provide better regional recreational access to the parklands, without degrading the environment.

### TRAILS, PROBLEMS AND DEFICIENCIES

#### System-Wide

- Existing transit service provides very limited opportunity for one-way hiking or biking with transit providing a role as the mode for the return trip.
- Several major trails are missing key segments or lacking key links to other nearby trails.
- The mix of bicycles and cars on roads with narrow shoulders, such as Panoramic and Highway 1, is a safety issue.
- Information about trails and appropriate trail use in adjacent jurisdictions is generally not available at trailheads.
- Take-along maps with appropriate trail uses and rules are generally not available.
- Trails crossing Highway 1 and Panoramic are typically not signed or striped. (Mountain Home Inn is a notable exception and an example of proper signage and striping.)