

Review of Options to Improve Transportation in Santa Cruz County

Background

In the 2002 United Way survey, Santa Cruz County residents ranked traffic as the number one issue that detracts from the quality of life in this county. Despite efforts to encourage people to use alternative transportation, the automobile continues to be the primary mode of transportation in this county and many residents feel that local officials have failed to provide the leadership required to improve transportation. An example of this lack of leadership is the failure to widen Highway 1 (Hwy 1). County residents are demanding that transportation be improved and that after 50 years of service the current Hwy 1 must be widened.

There are several government agencies in Santa Cruz County responsible for transportation including:

- Santa Cruz County Regional Transportation Commission (Transportation Commission)
- Santa Cruz Metro Transit District (METRO)
- Santa Cruz County Public Works Department
- Public Works Departments of the cities of Capitola, Santa Cruz, Scotts Valley, and Watsonville
- UCSC Planning Department
- California Department of Transportation (CalTrans)

These organizations are involved in defining transportation policy, pursuing and allocating funds, operating the bus service and constructing and maintaining local roads. The major transportation policy and funding decisions are the jurisdiction of the Santa Cruz County Regional Transportation Commission.

The Transportation Commission was created in 1972 by state law and serves as the regional transportation planning agency for the County of Santa Cruz. The commission has twelve members: five members of the Santa Cruz County Board of Supervisors, one member from each of the incorporated cities (Capitola, Santa Cruz, Scotts Valley and Watsonville) in the county, and three members appointed by the Santa Cruz Metropolitan Transit District Board. The State Department of Transportation (CalTrans) serves as a non-voting member of the Commission. The purpose of the commission is to:

1. *Set priorities for major capital improvements to our transportation infrastructure, including highways, major roads, rail and alternative transportation facilities.*
2. *Pursue and allocate funding for all elements of our transportation system.*

3. *Adopt policies to improve mobility, access and air quality.*
4. *Plan for future projects and programs to improve the regional transportation system while improving the region's quality of life.*
5. *Inform businesses and the public about alternatives to driving alone and the need to better manage our existing transportation system.*
6. *Conduct programs to encourage the use of alternative transportation modes.*

Source: Santa Cruz County Regional Transportation Commission web site (www.sccrtc.org).

The commission generally meets the first Thursday of each month in the County Board of Supervisors Chambers and has several committees that meet throughout the month. The commission has a staff of 15 people including administrators, policy analysts, and engineers. The commission maintains an extensive web site at: www.sccrtc.org.

Scope

The Grand Jury focused its investigation on the following transportation topics:

- A. Highway 1 Corridor
- B. Highway 17 Corridor
- C. Passenger Rail Service
- D. Express Bus Service
- E. UCSC and Harvey West
- F. 41st Avenue and Highway 1 Intersection
- G. Transportation Commission Membership

Fieldwork

During the course of the investigation, the Grand Jury:

1. Conducted eight interviews with transportation officials in the county.
2. Reviewed numerous public studies, reports and surveys.
3. Reviewed numerous web sites and newspaper articles.
4. Conducted driving surveys of roads and Park and Ride facilities.

A complete list of sources and field work is in Appendix A.

A. Highway 1 Corridor

Introduction

The most significant transportation issue in Santa Cruz County is congestion on Hwy 1. After many years of debate, the Transportation Commission is moving forward with multiple projects to widen Hwy 1. The first project, known as the Hwy 1/17 Merge Lanes project, will improve the Fish Hook by adding additional merge lanes to the intersection and a third lane in each direction on Hwy 1 from the Fish Hook to Morrissey Boulevard. This project is approved, funded and construction will begin in the fall of 2004. The remaining Hwy 1 Widening Projects are expected to be funded by the proposed half cent sales tax increase that will be on a ballot measure in the November 2004 election.

Findings

1. Widening of Hwy 1 has been a topic of discussion before the Transportation Commission since 1986.
2. In a 1999 Transportation Commission survey of county residents, 72 percent of those surveyed supported widening Hwy 1.
3. In the 2002 United Way Community Assessment Project, Santa Cruz County residents ranked traffic as the number one issue that takes away from the quality of life in this county.
4. The Transportation Commission has ranked the Hwy 1 Widening Project as the number one priority for the commission.
5. Construction on the current Hwy 1 was started in the 1950s and was completed in the early 1960s.
6. The population of Santa Cruz County in 1950 was 66,534 and by 2000, increased by 284% to 255,602, almost 4 times the number of people.
7. Hwy 1 and Hwy 17 experience average daily traffic volumes of 110,000 and 66,000 vehicles respectively. This traffic includes trips originating or ending in the county, not just trips within the county.
8. Under the current proposals construction on the first phase of widening Hwy 1 (aka Hwy 1/17 Merge Lanes) will start in 2004, 50 years after the start of construction on the current Hwy 1.
9. Elected officials in the City of Santa Cruz consider the Mission Street Widening Project a success.

10. The Water Street/Soquel Avenue/Soquel Drive corridor extends from Mission Street in Santa Cruz to Aptos Village and parallels Hwy 1. The lane configuration varies from 2 to 4 lanes in numerous places along the route, has numerous stop lights and stop signs, has right lanes that force the driver to make a right turn, and a confusing intersection at Morrissey Boulevard, Soquel Avenue, and Water Street which is called the “Weave.” The City of Santa Cruz and the County of Santa Cruz have made improvements in numerous sections on this corridor in the last few years.
11. Santa Cruz County and the cities in the county have a backlog of hundreds of unfunded transportation projects.
12. The Transportation Commission currently plans to put a measure on the November 2004 ballot to approve a 30-year, half cent sales tax increase to support transportation projects in Santa Cruz County.
13. The half cent sales tax increase is expected to generate over \$1 billion in revenue over 30 years, \$506 million for the Hwy 1 Widening Project debt service and \$580 million for other transportation projects.
14. For the first 12 to 15 years of the sales tax increase, the current proposal is to apply 90% of the sales tax increase to pay the debt for the Hwy 1 Widening Projects. The remaining funds will be used for other transportation projects in the County.
15. The Transportation Commission is debating an alternative proposal to end the half cent sales tax increase after 15 years when the debt for the Hwy 1 Widening Project will be paid, instead of the proposed 30 years.
16. The current schedule and cost estimates for the Hwy 1 Widening Projects using the Accelerated Schedule from the Transportation Commission are:

	Hwy 1/17 Merge Lanes	Hwy 1 Widening HOV Lanes	Hwy 1 Widening Extension to Larkin Valley/San Andreas Roads
Cost Estimate	\$52 M Fully Funded	\$263 M Not Funded	\$89 M Not Funded
Construction Begins	Spring 2004	2007	TBD
Construction Complete	2006	2010-11	2015-16

17. Successful ballot initiatives to raise taxes for transportation projects, like Measure K in San Joaquin County, Measure B in Alameda County and Measure A in Santa Clara County required extensive voter education campaigns. Currently, there is confusion among residents of this county concerning the Hwy 1 Widening Projects and organizations opposing the project have begun campaigning against it.

Conclusions

1. Hwy 1 is the only major corridor between the cities of Santa Cruz and Watsonville and congestion on Hwy 1 has negatively impacted the quality of life for a large percentage of county residents for almost two decades. Traffic on this corridor includes south bound trips that continue on to Watsonville and Monterey County and north bound trips that continue on to Santa Clara County.
2. Drivers would use the Mission Street/Water Street/Soquel Avenue/Soquel Drive corridor as an alternative to Hwy 1, if the route was more convenient, had fewer stops, and had two lanes in each direction with left turn lanes.
3. Today, more funding is needed for the backlog of transportation projects in Santa Cruz County.
4. The half cent sales tax increase, if approved, will generate an enormous amount of money (\$1.1 billion over 30 years) for transportation projects which could be used to fund the backlog of projects in the county. The ballot measure is significant and will require extensive voter education to be successful.

Recommendations

1. The Hwy 1 Widening Projects should continue to be the Transportation Commission's highest priority project.
2. The City of Santa Cruz and the County of Santa Cruz should improve Water Street/Soquel Avenue/Soquel Drive. The improvements should include expanding the streets to be two lanes in each direction with left hand turn lanes where possible, no stop signs, limited stop lights and eliminate right lanes that force the driver to make a right turn. The improvements on Water Street/Soquel Avenue/Soquel Drive should be from the intersection of Mission Street/Chestnut Street to Aptos Village. The improvements to this corridor should be started as soon as possible to help alleviate additional congestion during the Hwy 1 Widening Project. The City of Santa Cruz should approve and fund the project to improve the "Weave" intersection on Soquel/Water Street before construction begins on Hwy 1. The City should promote Soquel Avenue as an alternative to Hwy 1.
3. The ballot measure sponsored by the Transportation Commission should keep the half cent sales tax increase for the full 30 years and use all of the funds for transportation projects in the county.
4. The Transportation Commission should immediately begin to educate the public on the Hwy 1 Widening Projects and the proposed half cent sales tax increase.

Responses Required

Entity	Findings	Recommendations	Respond Within
Santa Cruz County Regional Transportation Commission	1-17	1-4	90 Days (Sept. 30, 2003)
Santa Cruz City Council	9-10	2	60 Days (Sept. 2, 2003)
County Board of Supervisors	10	2	60 Days (Sept. 2, 2003)

B. Highway 17 Corridor

Introduction

The Hwy 17 corridor is the major commuter route to the Santa Clara Valley during the week and the tourist route to the Santa Cruz area on the weekends. Hwy 17's route through the Santa Cruz Mountains presents many challenges to CalTrans and local transportation officials but because of the volume of traffic, improving Hwy 17 must be a priority for CalTrans and local transportation officials.

Findings

1. 66,000 vehicles per day travel on Hwy 17 and 110,000 vehicles per day travel on Hwy 1.
2. According to the 2000 U.S. Census, 20% of Santa Cruz County commuters commute to a job outside of Santa Cruz County.
3. Most of those who commute to Santa Clara County commute over Hwy 17. The primary modes of commuting over Hwy 17 are single occupancy vehicles, car pools, and the Hwy 17 Express Bus Service. Other alternative modes of commuting like biking, walking, commuter train, and light-rail are either impractical or do not exist.
4. Prior to seeking funding for major transportation projects, government agencies are required by the state of California's Inter-modal Surface Transportation Efficiency Act of 1991 (ISTEA) to conduct a Major Transportation Investment Study (MTIS). In 1998, the Transportation Commission released the Major Transportation Investment Study (MTIS) for the Watsonville to Santa Cruz Corridor. The MTIS evaluated several transportation alternatives in the corridor including rail transit, bus service expansion and widening Hwy 1. The Transportation Commission selected the Hwy 1 Widening Project as the preferred alternative to improve transportation in the Watsonville to Santa Cruz corridor.
5. In the mid 1990s, the Transportation Commission conducted an operational study to improve Hwy 17. This study looked at improving Hwy 17 with enhancements to the road including additional turn outs and left turn lanes, truck climbing lanes, improved enforcement by the CHP, and enhancements to the bus service. This study was not as extensive as an MTIS study.
6. In the early 1990s, the Transportation Commission conducted a study of rail service between Santa Cruz and San Jose. The study estimated that building train service to San Jose would cost from \$370 million to \$640 million. At that time, the Transportation Commission determined that the project was too costly. Previous estimates to reestablish rail service were \$55,000 in 1940 when the rail line was destroyed by mud slides and \$50 million in 1971.
7. Federal and State grants are available to fund capital projects for rail service. These grants can cover up to 50% of the cost of a rail project.

8. The Transportation Commission is proposing a half cent sales tax increase over 30 years that will generate \$1.1 billion for transportation projects. The Hwy 1 Widening Project debt service will use \$508 million of the \$1.1 billion revenue from the sales tax increase.
9. The 2001 Santa Cruz County Regional Transportation Plan list of goals states “Support Park and Ride lot development where appropriate, including links with express bus service to key employment and education centers and other alternative transportation modes.”
10. The Scotts Valley Park and Ride facility is poorly located in the middle of Scotts Valley which is inconvenient for Santa Cruz commuters wanting to pick up passengers. As a result, residents in and near Scotts Valley have a hard time joining car pools from Santa Cruz and mid-county.
11. Many commuters find the Hwy 17 Express Bus Service inconvenient and some trips can take as long as two hours door to door. In spite of this, the Hwy 17 Express Bus ridership is greater than the industry standard for similar commuter bus services because there are no alternatives for people without cars.
12. The Transportation Commission has a Bicycle Committee and an Elderly and Disabled Transportation Advisory Committee. The Bicycle Committee reviews proposed bike projects and legislation, provides input on existing roadway/bikeway conditions and promotes cycling projects and programs. The Elderly & Disabled Transportation Advisory Committee is a group of transportation providers, social service agencies and members of the public who meet to determine planning, funding and policy for specialized transportation to serve Santa Cruz County's seniors and people with physical and/or economic disabilities.

Conclusions

1. A significant number of Santa Cruz County residents commute to Santa Clara Valley over Hwy 17 and improving this corridor should be a priority for local transportation officials.
2. The commute alternatives from Santa Cruz County to Santa Clara Valley are limited.
3. The Scotts Valley Park and Ride lot is poorly located for maximum participation.
4. Even though the Hwy 17 Express Bus Service is inconvenient, it is heavily used because there are no other alternatives for people without a car.
5. Given that there are State and Federal grants available for rail projects that cover up to 50% of the cost and the cost could also be shared with Santa Clara County, passenger rail service could be a financially viable alternative on the Hwy 17 corridor.

6. The government agencies in Santa Cruz County have spent significantly more time, effort and money improving the commute along the UCSC – Watsonville corridor than they have on the Hwy 17 corridor.

Recommendations

1. The Transportation Commission should conduct a Major Transportation Investment Study of the Santa Cruz County to Santa Clara Valley corridor, similar to the 1998 MTIS of the Santa Cruz to Watsonville corridor. The study should look at alternatives for improving both commuting and general transportation in the corridor. One of the alternatives to be studied should be commuter train service between Santa Cruz County and Santa Clara County.
2. The City of Scotts Valley should install a Park & Ride near Hwy 17.
3. The Hwy 17 Express Bus service should coordinate schedules with the Santa Clara Valley Transit Authority (VTA) to reduce the overall commute time for people who use the Hwy 17 Express Bus.
4. The Transportation Commission should form a Commuter Committee, similar to the Bicycle and the Elderly and Disabled Transportation Advisory Committees, to focus on improving commuting to Santa Clara Valley and within the county, and to improve local road conditions.

Responses Required

Entity	Findings	Recommendations	Respond Within
Santa Cruz County Regional Transportation Commission	1-10,12	1,4	90 Days (Sept. 30, 2003)
Santa Cruz Metro District	11	3	90 Days (Sept.30, 2003)
City of Scotts Valley	9-10	2	60 Days (Sept. 2, 2003)

C. Passenger Rail Service

Introduction

For over 80 years, passenger train service was available in Santa Cruz County with a route to the north through the Santa Cruz Mountains and from the south along the coast on the Santa Cruz Branch Rail Line. The Santa Cruz Mountain route was destroyed by mud slides in 1940 and passenger service ended on the southern route with the end of the Sun Tan Special in 1959. Freight service still continues on the Santa Cruz Branch Rail Line. This section of the report will examine the current alternatives for passenger rail service using the Santa Cruz Branch Rail Line.

Findings

1. A 1999 Transportation Commission survey of Santa Cruz County residents found that 70 percent of those surveyed supported rail service in the county.
2. The Transportation Authority of Monterey County (TAMC) is working with CalTrain and Amtrak to offer passenger rail service in Monterey County with stops in Salinas, Monterey, Castroville, and Pajaro. The current plan is to offer three types of train service – commuter service operated by CalTrain, passenger service operated by Amtrak and intercity Service operated by TAMC. Under the current proposal, CalTrain commuter service could start as soon as 2007. The CalTrain commuter service would stop in Salinas, Pajaro, and Gilroy and continue north to San Francisco. TAMC expects 1,000 passengers per day will use CalTrain to commute from Monterey Bay to Santa Clara County. TAMC also estimates that 300 to 400 of those passengers will depart from the Pajaro train station and 80% of the Pajaro passengers will be from Santa Cruz County. The startup costs for the extension of CalTrain service to Salinas are estimated to be \$32 to \$46 million with a significant portion of the capital funds coming from State and Federal grants. TAMC is purchasing the Monterey Branch Line from Union Pacific and expects to complete that acquisition by the end of 2003. TAMC is working with Amtrak and the state's Coast Rail Coordinating Council (CRCC) to add a new daily train between San Francisco and Los Angeles with stops in Monterey County. The final proposed train service establishes inter-city rail service between San Francisco and Monterey County. The service would have 2-3 trains daily with an anticipated fare of \$25 for a round trip. This service is expected to start operating two years after the CalTrain commuter services starts.
3. The Transportation Commission is in the process of purchasing the Santa Cruz Branch Line from Union Pacific to preserve it for future transportation uses which could include passenger rail service, recreational rail service and a bike trail. In 2000, the Transportation Commission allocated \$10 million for the acquisition of the Santa Cruz Branch Line. The Transportation Commission is also applying for \$11 million in Proposition 116 funds to acquire the rail line. Proposition 116 was passed in 1990 and authorized a \$1.9 billion bond for rail projects. Applications for Proposition 116 funds must include a proposal for passenger rail service. To meet the application requirements,

the Transportation Commission is considering a recreational rail service from Capitola Village to Seascape on the weekends. This service would be operated by a private company and not receive funding from the county. Two private recreational rail companies have expressed an interest in providing the service. If the Transportation Commission does not use the Proposition 116 funds by 2010, they will lose the funds to another county.

4. The Altamont Commuter Express (ACE) is a commuter train service from Stockton to San Jose. ACE was created using \$117 million of startup capital with 51% of the capital coming from Federal and State Grants. In May of 1997, San Joaquin Railroad Commission (SJRRRC), the Alameda County Congestion Management Agency (ACCMA), and the Santa Clara Valley Transportation Authority (VTA) created the ACE Joint Powers of Authority (JPA). ACE started train service on Oct. 19, 1998 with two trains and today operates three trains running from Stockton to San Jose. In Fiscal Year 2001, the ACE carried an average 1,800 to 2,000 passengers per day and passenger revenues covered 51% of the \$8.3 million in operating expenses.
5. Prior to the start of the ACE train service, residents living near the train track publicly stated concerns about potential noise problems. After the start of the train service, the residents found the train noise to be negligible.
6. The Transportation Commission has conducted at least two studies that looked at rail service along the Hwy 1 corridor – the 1998 MTIS for the Watsonville to Santa Cruz Corridor and the 1998 Around the Bay Rail Study.
7. The 1998 Major Transportation Investment Study on Alternatives for the Watsonville to UCSC corridor included passenger train service in three of the alternatives in the study. The least expensive rail alternative was a light-rail train service from Watsonville to Harvey West that included 18 train stations from Watsonville to Santa Cruz. The study estimated that this service would cost \$292 million to implement. Transportation officials in Santa Cruz County believe that the consultants should have evaluated other rail alternatives more appropriate for Santa Cruz County.
8. The 1998 Around the Bay Rail Study looked at proposals to combine the independent efforts of Santa Cruz County and Monterey County to bring rail service to the Monterey Bay area. At the time of the study, each county was pursuing intercity passenger rail from San Francisco/San Jose to Santa Cruz and Monterey. Santa Cruz County desired a seasonal weekend passenger rail service that linked to the San Francisco Bay area through existing CalTrain, Capitol Corridor and/or ACE train services. Monterey County desired an extended weekend train service that linked to the San Francisco Bay Area by direct service from CalTrain's San Francisco station. The study recommended that the two counties work together on a combined passenger rail project and create a Joint Powers Authority to run a passenger train service.
9. Santa Cruz County has not implemented the recommendations of the Around the Bay Rail Study.

10. The ACE train service and the CalTrain Extension to Salinas projects are two recent examples of passenger rail projects in the Bay Area. The ACE train is in operation and the CalTrain Extension to Salinas is being implemented by Monterey County and CalTrain. The actual and estimated costs for these projects are:

	Altamont Commuter Express (Actual)	CalTrain Extension to Salinas (Estimate)
Rail Line (miles)	75	25
Stations	9	3
Startup Capital	\$117 M	\$32-\$46 M
State/Federal Funding	54%	TBD
Annual Operating Costs	\$8.5 M	TBD

11. A project to extend train service from Pajaro to the City of Santa Cruz would be similar to the ACE and CalTrain Extension to Salinas project. All three of these projects have similar issues related to cost of upgrading the rail line, acquiring the rail line, building the train stations, acquiring trains and operating the train service.
12. The Transportation Commission conducted several train demonstrations using the Santa Cruz Branch Line in 1996. The ACE train service has offered to lend Santa Cruz County trains for demonstrations.
13. The Transportation Commission has a Bicycle Committee and an Elderly and Disabled Transportation Advisory Committee.

Conclusions

1. ACE was able to quickly create a successful train service that serves close to 2,000 people a day.
2. Monterey County is leading the Monterey Bay area with commute alternatives that will benefit residents of both Monterey and Santa Cruz counties. Monterey County is funding most of the project.
3. Train service could be implemented based on the proposals in the 1998 Around the Bay Rail Study.
4. The 1998 MTIS Study's cost estimate for a stand-alone light-rail service in Santa Cruz County was an order of magnitude (10 times) higher than the actual and estimated costs for building an intercity rail service in the area that has a limited number of stops in the county and is connected to other train services in the San Francisco Bay Area (i.e. CalTrain, ACE and the Capitol Corridor). The actual costs for building and operating an intercity train service in Santa Cruz County that is connected to rail services in the San Francisco Bay Area are closer to the costs associated with the ACE and CalTrain Extension to Salinas projects.

5. All passenger rail projects on the Santa Cruz Branch Line would have some common tasks including acquisition of the rail line, improving the rail line to passenger rail service levels, building train stations and acquiring/leasing trains. So rather than making a commitment to a particular train service, a commitment could be made to passenger rail service and to making the improvements required for any type of passenger rail service.
6. The interest and support level in the Santa Cruz County for rail service is as high as support for the Hwy 1 Widening Projects and should be a priority for the Transportation Commission.

Recommendations

1. The Transportation Commission should financially support the efforts of Monterey County and CalTrain to bring commuter train service to Pajaro.
2. When CalTrain commuter service begins at the Pajaro station, the METRO should offer Express Bus service from multiple locations in the county including Santa Cruz, Capitola and Aptos to the train station in Pajaro.
3. The Transportation Commission should work with TAMC and CalTrain to implement the recommendations of the 1998 Around the Bay Rail Study.
4. The Transportation Commission should begin to perform the tasks common to any passenger rail service including acquisition of the rail line, improving the rail line to passenger rail service levels, building train stations and acquiring/leasing trains.
5. This service should have a limited number of stations and the proposed stations should be Santa Cruz (Harvey West), Mid-County Area and South County Area. The stations should also serve as Park and Ride facilities.
6. The Transportation Commission should work with the TAMC, CalTrain, and ACE to determine which passenger train services could be implemented based on rider interest, economics, availability of trains and existing projects currently underway. Priority should be given to working with TAMC and CalTrain to bring CalTrain service to Santa Cruz on a daily basis. This project could piggyback on the work of TAMC and CalTrain to bring CalTrain service to Pajaro.
7. The Transportation Commission should create a rail set-aside fund dedicated to rail projects in the county. A portion of the revenue from the half cent increase sales tax increase should be put into the rail set-aside fund. This portion should be at least 5% or \$50 million over the 30 year life-time of the sales tax increase. The rail set-aside fund, combined with matching Federal and State grants, could generate \$100 million for rail projects in Santa Cruz County. The rail set-aside fund should be included in the 2004 ballot measure for the half sales tax increase.

8. The Transportation Commission should conduct additional train service demonstrations within the next 12 months. The demonstrations could be conducted using equipment borrowed from existing commuter train services like CalTrain or ACE.
9. The Transportation Commission should create a Passenger Rail committee similar to the Bicycle and Elderly and Disabled Transportation Advisory Committees. This committee should examine how Santa Cruz County can support CalTrain service to Pajaro and how to extend passenger train service to Santa Cruz County.

Responses Required

Entity	Findings	Recommendations	Respond Within
Santa Cruz County Regional Transportation Commission	1-13	1-9	90 Days (Sept. 30, 2003)
Santa Cruz Metro District	2	2	90 Days (Sept. 30, 2003)

D. Express Bus Service

Introduction

The METRO bus service is always looking for ways to improve service and increase ridership. More efficient trips would make the bus service appealing to a larger group of riders. This section looks at alternatives for improving Express Bus service.

Findings

1. The METRO operates bus service throughout the county, as well as administers Paratransit service for those with disabilities.
2. According to the Transportation Commission's 2001 Regional Transportation Plan, "Nearly one third (32 percent) of Santa Cruz County residents – notably children, the elderly, disabled, and low income individuals and families who cannot afford a car (including college students) do not drive a personal vehicle."
3. In a survey of interest in alternative transportation, 15.1% of respondents said they would use the bus if it was more frequent and convenient.
4. The METRO currently has a route (#91) that runs between Santa Cruz and Watsonville and stops at the major shopping areas and educational institutions.
5. There are several factors that determine the duration of a bus trip including, the number of stops, traffic congestion, and the duration of the stops. More stops on a bus route lengthen the duration of a bus trip. Also, the process of boarding a bus and paying the fare extends the time of the stop. These factors combine to make trips on the bus very long and inconvenient for riders.
6. The city of Curitiba, Brazil, has created a hybrid system that combines the features of rapid transit with buses. Curitiba has built bus stops that are similar to rapid transit stops. Customers pay their fee before boarding the bus and the bus stop platform is level with the floor of the bus. This allows people in wheel chairs to wheel straight on to the bus without having to have the bus kneel down for boarding. This greatly reduces the amount of time at a stop.
7. Most residents in the county use single-occupant vehicles as their primary mode of transportation.
8. The county has a limited number of Park and Ride lots that are primarily used for commuting to work.
9. The Hwy 1 corridor between Santa Cruz and Watsonville is the most traveled corridor in the county.

10. Congestion on Hwy 1 is occurring at various times during the day, not just at commute times.

Conclusions

1. The roads in the county, particularly Hwy 1 are congested and increased use of the METRO Bus Service would decrease congestion.
2. To reach a new segment of ridership, the METRO could create Express Bus Service similar to the Curitiba system that has fewer stops and quicker stops. Curitiba style bus stops could be used as train stops in the future.
3. The Express Bus Service route could be along UCSC – Santa Cruz – Capitola Mall – Cabrillo College – Watsonville corridor with Park and Ride lots along the route. Passengers could walk, bike, ride a feeder bus or drive to the Park and Ride lot.

Recommendations

1. The METRO should create new Express Bus Service or modify existing Express Bus Service, similar to the Curitiba system in Brazil. This would involve building Curitiba style bus stops and running a service with limited, shorter bus stops.
2. The first route the METRO should consider for the Curitiba style of service should be the UCSC – Santa Cruz – Capitola Mall – Cabrillo College – Watsonville Corridor.
3. These new stops should also serve Park and Ride lots located between major destination stops. The METRO should create Park and Ride lots located between the major destination stops so that car drivers do not enter congested areas.

Responses Required

Entity	Findings	Recommendations	Respond Within
Santa Cruz County Regional Transportation Commission	1-9	1-3	90 Days (Sept. 30, 2003)
Santa Cruz Metro District	1-9	1-3	90 Days (Sept. 30, 2003)

E. University of California Santa Cruz and Harvey West Area

Introduction

UCSC is the largest destination for people traveling in the county. The University is always working to improve transportation to and on the campus and to limit the use of single-occupant vehicles. The Harvey West area is a mixed use area of the City of Santa Cruz that is conveniently located near major transportation routes. For nearly 40 years the City, County and University have discussed an eastern access route to the University through the Harvey West area. In spite of the UCSC's effort, University traffic still has a major impact on parking, traffic congestion and noise on the westside of Santa Cruz.

Findings

1. The Hwy 1 corridor from the westside of Santa Cruz to Watsonville has been improved or is in the process of being improved. CalTrans has completed the Hwy 1/Mission Street widening project. The Transportation Commission has approved and funded the Hwy 1/17 Merge Lane project to improve the Fish Hook area. The Hwy 1 Widening Project is the top priority project for the Transportation Commission. The only area along the Hwy 1 corridor that does not have an approved improvement project is the section of Hwy 1 from Chestnut Street to the Fish Hook in the City of Santa Cruz. The Transportation Commission has the Hwy 1/9 Intersection Project on its list of unfunded projects.
2. The Hwy 1/9 Intersection is a bottleneck for people driving to businesses located in Harvey West and up Hwy 9 to the San Lorenzo Valley. Also, the Hwy 1 bridge across the San Lorenzo River is narrow and a congestion point. The Hwy 1/9 Intersection Project would improve the intersection and the bridge.
3. The State of California owns land near this intersection that could be used as an off-ramp from Hwy 1 North to Hwy 9 North.
4. The Metro Transit District office and the future bus depot are located in the Harvey West area.
5. The Harvey West area is a mix of residential, retail, light-industrial, and commercial property. The City of Santa Cruz has identified the Harvey West area for future development and is proposing an Art Center in the old Salz Tannery building along the San Lorenzo River.
6. The Santa Cruz Big Trees Branch Rail Line extends from the Beach Boardwalk, through Harvey West to Felton.
7. An eastern access route to UCSC has been proposed through the Harvey West area for over forty years. The City of Santa Cruz and UCSC have signed an agreement on transportation issues. One of the clauses of the agreement states that UCSC will not unilaterally pursue an eastern access route until the next general plan for the City of Santa

Cruz is developed which is expected to be in the 2012 to 2015 timeframe. The agreement also states that if UCSC pursues an eastern access route, the proposal must be put to vote of the residents of the City of Santa Cruz. A 1992 study found that an eastern access route to the University would reduce traffic on High Street by 47%.

8. Building an eastern access route to the University would require an easement through the Pogonip. The Cowell Foundation owned the Pogonip land and sold the land to the City of Santa Cruz in 1989. At the request of the University, an option was incorporated in the Purchase and Sale Agreement between the City and the Cowell Foundation, which allowed the University to build an eastern access route to UCSC over the Pogonip property. The agreement mandated that the option expire on January 1, 1999.
9. The Pogonip does not have a well defined entrance. To use the Pogonip, people must walk, ride a bike, or drive to and park at the end of a residential street. There is inadequate parking serving the Pogonip and it is not handicap accessible.
10. UCSC owns a piece of land known as Inclusion Area A, which adjoins the Moore Creek Preserve portion of the City of Santa Cruz Green Belt. The University has long range plans to develop this area for housing and/or academic buildings.
11. Traffic entering UCSC uses Bay Street or High Street to approach the entrances.
12. The intersection of Bay Street and Mission Street is a congestion point for university traffic. Bay Street between High Street and King Street is two lanes in each direction and between King Street and Mission Street but narrows one lane in each direction between King Street and Mission Street. During peak traffic times, congestion on Bay Street negatively impacts all traffic including the Metro Buses. The intersection of High Street and Bay Street does not have left turn lanes on High Street. Cars often pass other cars waiting to make a left turn which sometimes results in an accident.
13. UCSC has numerous programs to reduce the number of single occupancy vehicle trips to the University including:
 - a. a student transit fee to pay for student bus passes.
 - b. high parking fees that fund alternative transportation to the university.
 - c. van pools.
 - d. freshman and sophomore students are not allowed to park on campus.
 - e. extensive traffic engineering studies.

Conclusions

1. The section of Hwy 1 from Chestnut Street to the Fish Hook is the only section of Hwy 1 that does not have an approved project for improvement. If not improved, congestion on this section will only get worse.
2. The Harvey West area has the potential to be a key multi-modal transportation hub in the City of Santa Cruz. A multi-modal facility that combined a train station, parking structure, Park and Ride facility and bus station could be built along the rail line in the

Harvey West area. This area could be made easily accessible to buses and cars via Hwy 1, Hwy 17, Hwy 9 and River Street. The state owned land near the Hwy 1/9 intersection could be used as an off-ramp to the Harvey West area.

3. Property in the Harvey West area could be redeveloped to better utilize the area for transportation, residential and commercial uses.
4. UCSC is doing an excellent job of providing alternative transportation to the campus. However, the University will continue to grow and traffic problems related to the University will only get worse unless something is done to improve access to the University. Improving the Bay Street/Mission Street and the High Street/Bay Street intersections and building an eastern access route to the University would significantly improve access to the University.
5. The size of the Santa Cruz Greenbelt could be preserved if the University traded Inclusion Area A for an easement through the Pogonip. If an Eastern Access to the University was built, a well defined entrance to the Pogonip with parking and handicap access could be built.

Recommendations

1. The section of Hwy 1 from Chestnut Street to the Fish Hook should be improved. Improvements should include: creating two left turn lanes on Hwy 1 South turning to Hwy 9 North; widening or replacing the Hwy 1 bridge over the San Lorenzo River; and lengthening the left turn lane on North River Street at Hwy 1, so that it accommodates enough vehicles to meet the demand.
2. A multi-modal transportation center should be created in the Harvey West area and incorporate the Metro buses, a Park and Ride with a parking structure, a tourist shuttle, and a passenger train station.
3. A new entrance to the University should be created by extending Encinal Street to Glenn Coolidge Drive, the main road on campus. This entrance should also include an improved entrance to the Pogonip with parking and handicap access. The University and the City of Santa Cruz should discuss trading Inclusion Area A for an easement to create an eastern access route to the University.
4. The intersection of Bay Street/Mission Street should be improved to have two left turn lanes from Bay Street to Mission Street south. The intersection of High Street and Bay Street should have left turns lanes.

Responses Required

Entity	Findings	Recommendations	Respond Within
Santa Cruz County Regional Transportation Commission	1-2	1-3	90 Days (Sept. 30, 2003)
Santa Cruz Metro District	3	3	90 Days (Sept. 30, 2003)
Sana Cruz City Council	1-9	1-4	60 Days (Sept. 2, 2003)

F. 41st Avenue and Highway 1 Intersection

Introduction

The Capitola Mall and the adjacent retail corridor is a popular driving destination and 41st Avenue is almost always congested.

Findings

1. The 41st Avenue and Hwy 1 intersection is often severely congested and it can take several minutes and multiple red lights for someone to drive south on 41st Avenue from Soquel Drive to the Capitola Mall. In the 1999 traffic count on 41st Avenue, 45,136 vehicles traveled on 41st Avenue below Gross Road in one day.
2. The three traffic signals at 41st Avenue and Highway 1 are controlled by CalTrans and not well coordinated.
3. 40th Avenue once extended from Gross Road to Clares Street but was blocked off to reduce traffic in the residential neighborhood.

Conclusions

1. Altering access to Gross Road and/or changing its traffic signal would relieve congestion on the 41st Avenue overpass. Traffic solutions in this problem area will require the cooperation of three jurisdictions: the Capitola, the County of Santa Cruz, and CalTrans.

Recommendations

1. The traffic signals at Gross Road and 41st Avenue should be modified to improve traffic flow across the bridge. This could be accomplished by eliminating turn signals on 41st Avenue, limiting access to Gross Road or opening 40th Avenue through to Clares Street.
2. The Transportation Commission must coordinate the improvements in the 41st Avenue/Hwy 1 intersection. The City of Capitola, County of Santa Cruz and CalTrans should be involved in this improvement project.

Responses Required

Entity	Findings	Recommendations	Respond Within
Santa Cruz County Regional Transportation Commission	1-2	1,2	90 Days (Sept. 30, 2003)
City Council of the City of Capitola	1-2	1,2	90 Days (Sept. 30, 2003)
County Board of Supervisors of the County of Santa Cruz	1-2	1,2	60 Days (Sept. 2, 2003)

G. Transportation Commission Membership

Introduction

The Transportation Commission is the local agency responsible for transportation planning in the county and the composition of its membership heavily impacts the policies set by the Commission. The composition of the Transportation Commission was recently changed.

Findings

1. In the past, the membership of the Transportation Commission was dominated by representatives from the City of Santa Cruz. At one point, five of the ten members lived in the City of Santa Cruz. Typically, the representatives from the City of Santa Cruz have opposed the widening of Hwy 1.
2. In 2001, the membership on the Transportation Commission was increased by two members to ensure all areas of the county are represented. The number of representatives from the County Board of Supervisors increased from four to five. Scotts Valley and Capitola now each have their own seat instead of sharing an alternating seat. The commission currently has twelve members: five members of the Santa Cruz County Board of Supervisors, one member for each of the cities in the county, and three members appointed by the Santa Cruz Metropolitan Transit District Board.
3. The majority of residents in Santa Cruz County live in unincorporated areas. (135,326 out of a total of 255,602)
4. The current geographic distribution of the members, based on the members residence, on the Transportation Commission is as follows:

Geographic Area	% of Population	# of Representatives by Members' Residence	% of Representation by Members' Residence
City of Capitola	4%	1	8%
City of Santa Cruz	21%	3	25%
City of Scotts Valley	4 %	2	17%
City of Watsonville	17%	3	25%
Unincorporated Areas	53%	3	25%

Conclusions

1. The recent adjustment to the Transportation Commission has equalized the representation between the four cities, but has diminished representation for those residents in the unincorporated areas. For instance Santa Cruz (54,593) and Watsonville (44,265) city residents each have one city council representative, one METRO representative and their supervisor for a total of three representatives. Only three of the members live in the unincorporated area of the county.

Recommendations

1. Membership on the Transportation Commission should be adjusted to give equitable representation to the residents in unincorporated areas. Representation on the commission could be balanced through the METRO and the Board of Supervisors appointments to the board. If this is not possible, additional legislation should be passed to adjust the commission membership.

Responses Required

Entity	Findings	Recommendations	Respond Within
Santa Cruz County Regional Transportation Commission	1-4	1	90 Days (Sept. 30, 2003)

Appendix A: Sources and Field Work

1. Reviewed the Santa Cruz County United Way 2002 Community Assessment Project.
2. Interviewed the Executive Director and the staff of the Santa Cruz Regional Transportation Commission (Transportation Commission).
3. Interviewed Board Members of the Transportation Commission.
4. Reviewed Transportation Commission Regional Transportation Plan.
5. Reviewed Transportation Commission documents on the Hwy 1 Widening Project.
6. Reviewed the Circulation Element of the Santa Cruz County General Plan.
7. Reviewed the Circulation Elements of the cities of Capitola, Santa Cruz, Scotts Valley and Watsonville.
8. Reviewed the 1998 Major Transportation Investment Study for the Watsonville to Santa Cruz Corridor.
9. Reviewed the 2000 U.S. Census data related to Santa Cruz County.
10. Interviewed members of the Campaign for Sensible Transportation
11. Surveyed Soquel Avenue and Water Street.
12. Reviewed articles in the *Santa Cruz Sentinel* and *Good Times*.
13. Interviewed the Executive Director and staff of the Altamont Commuter Express (ACE).
14. Reviewed budget and background information on the Altamont Commuter Express train.
15. Reviewed the Transportation Commission 1998 Around the Bay Rail Study.
16. Attended the May 1, 2003, Transportation Commission Public Hearing on Santa Cruz Branch Line Acquisition
17. Attended the March 30, 2003, TAMC Public meeting on the Pajaro Train Station.

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18. Interviewed the Executive Director and staff of the Santa Cruz Transit District (METRO).
19. Surveyed the Park and Ride lots in Santa Cruz County.
20. Interviewed the Mayor of Scotts Valley.
21. Interviewed the Director of Public Works and Traffic Engineer for the City of Santa Cruz.
22. Interviewed the Director and Staff of the UCSC Planning Dept.
23. Interviewed the Director of the Capitola Public Works Dept.