

AGENDA: March 17, 2005

TO: Regional Transportation Commission–Policy Workshop
FROM: Grace Blakeslee, Transportation Planner
RE: SAFE Call Box Program Accessibility Improvements and Digital Upgrade

RECOMMENDATION

E&DTAC and staff recommend that the Regional Transportation Commission/Service Authority for Freeway Emergencies (SAFE):

1. Direct staff to prepare a request for proposals (RFP) to add TTYs (teletypewriters) to the Santa Cruz County call box system in order to improve accessibility for deaf and hard of hearing call box users and;
2. Direct staff to include the conversion to digital call boxes in the RFP.

Staff recommends that the Regional Transportation Commission/Service Authority for Freeway Emergencies (SAFE):

3. Direct staff to include a site survey and improvements to make the system fully accessible for the mobility impaired in the RFP and;
 4. Direct staff to work with the Metropolitan Transportation Commission on a joint RFP and procurement process.
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BACKGROUND

Acting as the Service Authority for Freeway Emergencies (SAFE) for Santa Cruz County, the Regional Transportation Commission owns and operates a system of 124 solar powered, cellular telephone service call boxes in Santa Cruz County along Highways 1, 9, 17, 129, and 152. Motorists may use call boxes to request assistance or report incidents. The call box calls have been answered by the California Highway Patrol (CHP) dispatch center in Salinas in the past and will begin to be answered by a private call answering center March 31, 2005.

As the SAFE, the SCCRTC levies a \$1 annual fee on all registered vehicles in Santa Cruz County. The funds raised are used to develop and maintain a motorist aid system consisting primarily of roadside call boxes along state highways and freeways. The funds may also be used for other motorist aid components such as Freeway Service Patrol (FSP), changeable message signs, and related programs.

DISCUSSION

Accessibility

As a Government service, call boxes are subject to the Americans with Disabilities Act (ADA). The Federal Access Board issued the ADA Accessibility Guidelines (ADAAG) in 1990. The ADAAG do not address call boxes. The Federal Access Board has twice issued draft guidelines that include call boxes, but guidelines for call boxes have never been finalized. The timeline for finalizing the guidelines is unknown. This has made it difficult for the various county call box agencies throughout California to proceed on a coordinated path towards installing devices for the deaf and hard of hearing on call boxes. However, it is anticipated that the final guidelines will require teletypewriter (TTY) devices for call boxes. The latest draft guidelines addressing call boxes are included as Attachment 1.

SCCRTC Work Toward Accessibility Improvements

In 2003 and early 2004, staff worked with the Elderly and Disabled Transportation Advisory Committee (E&D TAC) and the local deaf and hard of hearing community to consider options for call box accessibility improvements. After obtaining input from potential deaf and hard of hearing users of call boxes, the E&D TAC recommended that the RTC issue a request for proposals to retrofit call boxes with TTYs. In order to achieve cost savings, the E&D TAC also recommended that the RFP include conversion to digital call boxes.

Since that time, our SAFE staff has been working with the Metropolitan Transportation Commission (MTC) SAFE staff in an effort to coordinate the technology for ADA improvements for the deaf and hard of hearing. MTC was leaning toward Yes/No technology improvements on the north side of Highway 1/17 to make call boxes more accessible to the deaf and hard of hearing users. Monterey has TTY technology installed in the majority of their call boxes.

The California Center for Law and the Deaf (CalCLAD), an advocacy group for the deaf and hard of hearing, supports adding TTYs to call boxes. In December 2004, CalCLAD communicated with call box programs around the State to investigate the work done by each SAFE toward ensuring the accessibility of call boxes to deaf and hard of hearing users. At the February 2005 CalSAFE meeting, CalCLAD representatives were in attendance to urge SAFEs to install TTY devices on all of their call boxes. CalCLAD is anxious to see SAFEs move ahead and will consider legal action to ensure that TTY devices are installed on call boxes.

In the mid 1990s, the RTC prepared a summary of all call box sites and improvements needed to make the call box system fully accessible, and some improvements were made. An updated survey and additional improvements are now needed. The Federal Access Board draft guidelines currently require a 60' x 60' pedestrian pad at sites accessible by a ramp or pathway. The proposed site survey would evaluate where small pads should be replaced with the larger pads and if other site improvements (i.e. site clean up, remove vegetation barriers, lowering the calls boxes) are needed to make call boxes accessible to

the mobility impaired. Actual site accessibility improvements would be based on the site survey findings.

Digital Conversion

In addition, conversion of call boxes from analog to digital cellular service is needed as cellular companies will no longer support analog technology after 2007. In order to achieve cost savings and ensure that system wide improvements will work together, the E&D TAC and staff recommend that the RFP for to add TTYs be done in combination with the digital conversion.

Requests for Proposals (RFP)

The Metropolitan Transportation Commission (MTC) for the San Francisco Bay Area will also be releasing an RFP to add TTYs, digital conversion and other ADA improvements to their call box system. Staff discussed the possibility of a joint RFP and procurement process with MTC staff. The joint process could ensure cost savings for both agencies, especially the RTC, because the proposals would be for a greater number of call boxes.

Staff recommends the following timeline for implementation of accessibility improvements and digital improvements for the Santa Cruz County call box system:

April 2005	Issue RFP
June 2005	Review Proposals
August 2005	Initiate Contract
November 2005	Initiate Construction

The cost for adding TTY devices to all call boxes, conversion from digital to analog, a mobility access site survey and site improvements are budgeted in the amount of \$340,000 in the Fiscal Year 04-05. The budgeted amount is based on 2003 TTY installation cost estimates from Comarco Wireless Technologies and US Comlink and digital conversion costs estimates from Comarco Wireless Technologies in the case that digital conversion is done in addition to accessibility improvements for deaf and hard of hearing users. As technology for TTY devices has continued to advance, current costs for TTY devices are expected to be lower than the 2003 estimates.

Staff recommends that the RTC approve the E&D TAC recommendation to issue an RFP to add TTYs to Santa Cruz County call boxes and to upgrade the call boxes to digital cellular technology. Staff recommends that the RTC approve the inclusion of an updated mobility access survey and necessary improvements in the RFP. Staff also recommends that the RTC direct staff to work with MTC on a joint RFP and procurement process.

SUMMARY

As the Service Authority for Freeway Emergencies (SAFE) for Santa Cruz County the Regional Transportation Commission owns and operates a system of 124 solar powered

cellular telephone service call boxes in Santa Cruz County along Highways 1, 9, 17, 129, and 152. The Metropolitan Transportation Commission is the SAFE for the San Francisco Bay Area, including the northern half of Highway 17. Just last month, MTC also agreed to pursue TTYs for its call boxes. The E&D TAC recommends adding TTYs to the call boxes. Staff recommends preparation of an RFP to add TTYs to the Santa Cruz County call box system and include digital upgrades, site survey and construction of needed improvements to make call boxes accessible to the mobility impaired. By combining these tasks achieve cost savings. Staff also recommends that the Regional Transportation Commission approve do a joint RFP and procurement process with the Metropolitan Transportation Commission.

Attachment 1: Draft Guidelines for Accessible Public Rights-of-Way

Attachment 1

Draft Guidelines for Accessible Public Rights of Way Released by The Federal Access Board on June 17, 2002

Section on Call Boxes

Call Boxes ([1102.16](#), [1110](#))

The draft guidelines address emergency call boxes that are provided at intervals on roadsides for stranded motorists to use to summon aid. Access requirements would apply where such devices are provided. Specifications address access for persons with mobility impairments and persons with sensory impairments, including those with hearing impairments.

The draft guidelines would require that operable parts be located within accessible reach ranges and meet operating characteristics in ADAAG sections 308 and 309.4. ADAAG specifies that controls be operable with one hand and not require tight grasping, pinching, twisting of the wrist, or more than 5 pounds of force to operate. The Board has received information demonstrating that a particular type of call box that initiates a signal through a lever pull requires up to 12 pounds of force to successfully initiate a signal. An exception has been included for lever pull systems.

Specifications also address the wheelchair space complying with ADAAG 304, edge protection at abrupt level changes in the call-box area as is otherwise specified for ramps in ADAAG section 405.9.2, and access at vehicle pull-over spaces. In addition, audible and visual indicators of an activated signal are required in compliance with ADAAG requirements for two-way communication systems in section 708. Handsets, where provided, must also meet specifications in ADAAG section 708. To accommodate persons with hearing impairments, including those who are deaf, the draft guidelines would require volume control and TTY access at call boxes that provide two-way voice communication.

1110 Call Boxes

1110.1 General. Call boxes shall comply with 1110.

1110.2 Operable Parts. Operable parts shall comply with 308 and 309.4. Where provided, labeling shall comply with 703.2 and 703.3.

EXCEPTION: Mechanically operated systems in which the signal is initiated by a lever pull shall be permitted to have an activating force of 12 lbf (53.4 N) maximum.

1110.3 Turning Space. A turning space complying with 304 shall be provided at the controls.

1110.4 Edge Protection. Edge protection complying with 405.9.2 shall be provided where the area at the call box is adjacent to an abrupt level change.

1110.5 Motor Vehicle Turnouts. Where provided, a motor vehicle turnout shall have a minimum paved area of 16 feet (4880 mm) wide minimum and 23 feet (7015 mm) long minimum and shall connect to the turning space at the call box with a pedestrian access route complying with [1103](#). Where shoulder texturing is used, it shall be discontinued at the turnout.

1110.6 Two-Way Communication. Where provided, two-way voice communication shall comply with 1110.6, 708.2 and 708.3.

1110.6.1 Volume Controls. Volume controls complying with 704.3 shall be provided.

1110.6.2 TTY. A TTY complying with 704.4 shall be provided.