

County of Sacramento Department of Transportation

ADA Transition Plan and Pedestrian Master Plan

**Regional Transit (RT) District
Priority Survey**

Final Report

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Table of Contents

Section	Page Number
1. Introduction	1
2. Descriptions of the RT Routes	
2.1 Route #1 – Beltline	2
Figure 1 Map of Route #1	
2.2 Route #23 - El Camino	3
Figure 2 Map of Route #23	
2.3 Route #51 – Broadway-Stockton	4
Figure 3 Map of Route #51	
3. Overview of Americans with Disabilities Act (ADA) and California Title 24 Disabled Access Requirements	5
4. Current County Policies and Priorities	6
5. Prioritization Options for the RT Survey	8
6. Summary of Findings of Field Surveying	16
7. Recommended Disabled Access Improvement Projects	19

Attachments:

1. Sample Accessibility Reports from the ADA Database
2. Priority Assessment Questionnaire and Rating Form

1. Introduction

This report describes the survey process and the assessment of disabled access along Regional Transit (RT) Routes 1, 23, and 51 within the County of Sacramento. The general purpose of this survey effort is threefold:

- (1) to provide detailed data inventory for conditions related to disabled access along the streets, roadways, sidewalks, and intersections that abut the transit routes,
- (2) to provide an evaluation of potential architectural barriers to full accessibility for persons with disabilities who may use the public right-of-way for accessing the regional transit system or for other purposes, and to recommend projects that will increase accessibility, in compliance with applicable codes and standards, and
- (3) to serve as a test case and demonstration of the surveying, inventorying, and presentation techniques to be utilized in the County's ADA Transition Plan.

This project has been undertaken as a part of the larger ADA Transition Plan and Pedestrian Master Plan project begun by the County and its team of consultants in March, 2002. While the overall project will involve a wide variety of assessments related to all pedestrian activity within the public right-of-way, this particular RT Priority Survey focuses only on the access needs of persons with disabilities and compliance with both the programmatic and technical requirements of the Americans with Disabilities Act (ADA).

The project has as its goal to recommend specific accessibility-related physical improvements that might be made to the public right-of-way along the selected transit routes. The intent is to utilize funds secured by grants obtained by the County of Sacramento and the Physical Access Subcommittee of the Disability Advisory Committee to design and construct improvements during the fiscal year 2002-2003. In order to determine which improvements are both the most critical and the most cost-effective, a first draft of this report was prepared to recommend barrier removal priorities and obtain feedback from the local disability community. The draft report was reviewed by both the Department of Transportation and the Physical Access Subcommittee over a period of several months, and several revisions to the original draft were recommended. This final report reflects those recommendations.

2. Descriptions of the RT Routes

2.1 Route #1 - Beltline

This route runs from the Sacramento city limits and the Watt/I-80 light rail station northeast along Auburn Blvd., turns east along Greenback Lane to the Sunrise Mall Transit Center, turns south along Sunrise Blvd., turns southwest along Trinity River Drive and Coloma Road, and ends a short distance along Folsom Blvd. at Mather Field Road and the Mather/Mills light rail station. Parts of the route along the northwest portion of Auburn Blvd., Greenback Lane, and the north portion of Sunrise Blvd. run through the City of Citrus Heights.

The data for the Citrus Heights section is presented separately in the ADA survey database, but no recommendations for improvements are made for this area.

The first street segment for this route runs along Auburn Blvd., from Watt Avenue to Manzanita Avenue. The land uses are generally mixed multi-family residential, office, and commercial. Del Paso Park (City of Sacramento) is situated on the north. American River College also abuts this route. The portion of the route just south of Citrus Heights has mixed commercial uses, with a few large shopping complexes along the route.

The second street segment running south from Citrus Heights along Sunrise Blvd. passes through dense commercial uses until it reaches the American River Parkway, along which it is generally undeveloped. The route turns into mainly single-family neighborhoods, with sparse commercial uses, along Trinity River Drive and Coloma Road. As Coloma Road reaches Folsom Blvd., uses are strip commercial on the north side, with the Regional Transit light-rail system running along the south side.

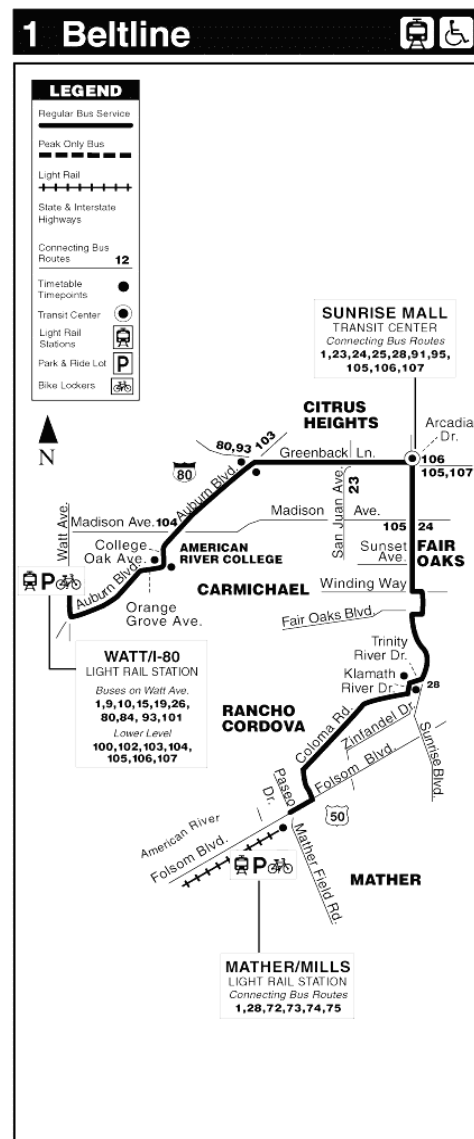
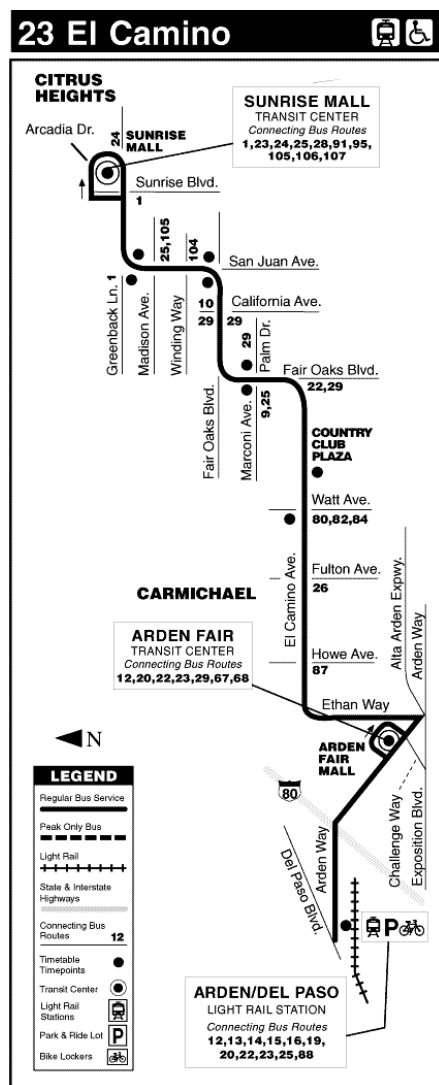


Figure 1: Route #1 Transit Map
(Source: Sacramento Co. R.T. Dist.)

2. Descriptions of the RT Routes

2.2 Route #23 – El Camino

This bus route runs east from the Arden / Del Paso Light Rail Station along Arden Way to Arden Fair Mall. This portion of the route is within the Sacramento city limits and is not included in this survey. The route runs north into the County of Sacramento along Ethan Way, and then turns east along El Camino Avenue. The route turns north and then east along Fair Oaks Blvd and north along San Juan Avenue. It then turns east along Greenback Lane and terminates by circling Sunrise Mall. The portion of the route along the north portion of San Juan Avenue and all of Greenback Lane runs through the City of Citrus Heights.



The data for the Citrus Heights portion of this route is presented separately in this survey and report, and no recommendations for improvements are made for this area.

The western part of the County route along El Camino Avenue passes through commercial and medium density residential areas along a divided street. There are relatively few street crossings along this portion due to the presence of a median or center turn lane. Curb ramps are generally provided at both major crossings and minor street intersections, and most are generally complying.

The center portion of the route runs through central Carmichael, with heavier commercial and office usage, as well as public uses.

The eastern portion of the route becomes less developed, running generally through single-family neighborhoods. The streets are generally not divided. Sidewalks are not present in some areas, and the presence of complying curb ramps at intersections becomes more sporadic.

Figure 2: Route #23 Transit Map
(Source: Sacramento Co. R.T. Dist.)

3. Overview of ADA and California Title 24 Disabled Access Requirements

The Americans with Disabilities Act (ADA), enacted on July 26, 1990, provides comprehensive civil rights protections to persons with disabilities in the areas of employment, state and local government services, access to public accommodations, transportation, and telecommunications. The ADA is divided into five parts, covering the following areas:

Title I: EMPLOYMENT: Employers, including government agencies, must ensure that their practices do not discriminate against persons with disabilities in the application, hiring, or discharge of employees, or in other conditions and rights of employment.

Title II: PUBLIC SERVICE: This title prohibits state and local governments from discriminating against persons with disabilities or from excluding participation in or denying benefits of programs, services, or activities to persons with disabilities. It is under this Title that a government entity such as Sacramento County has the legal obligation to provide accessibility to all of its programs and services.

Title III: PUBLIC ACCOMMODATIONS: Title III requires places of public accommodation to be accessible to and usable by persons with disabilities. The term "public accommodation" is often misinterpreted as applying to public agencies, but the term actually refers to any privately funded and operated facility serving the public.

Title IV: TELECOMMUNICATIONS:

Title V: MISCELLANEOUS PROVISIONS

Under Title II, if a public entity has responsibility or authority over streets, roads, or walkways, it must prepare a transition plan and include a schedule for providing curb ramps or other sloped areas where pedestrian walkways cross curbs, giving priority to walkways serving entities covered by the ADA, including State and local government offices and facilities, transportation facilities, places of public accommodation, and employers, followed by walkways serving other areas. The transition plan must identify physical barriers in the public entity's facilities that limit the accessibility of its programs or activities to individuals with disabilities. The transition plan must describe the methods that will be used to make the facilities accessible; and it must specify the schedule for taking the steps necessary to achieve compliance with the ADA. Each of the entity's facilities or site areas must be evaluated based on the most stringent requirements of the ADA Accessibility Guidelines dated July 26, 1991, or California Title 24, dated July 1, 2001.

Title II of the ADA requires that a public entity, including a county government, provide program accessibility to all facilities, including those facilities that may be located within the public right-of-way. "Facilities", as defined by the ADA, includes any part of the built environment that is used by the public. This definition not only include buildings and structures, but also includes streets, sidewalks, and curb ramps forming a continuous path of travel. The activity of using the public right-of-way may be considered a program in two different ways: (1) streets, sidewalks, and curb ramps may be part of a continuous path of travel between activities, or "programs", at various public and private facilities located on adjacent properties, such as parks, schools, public offices, or transit facilities, or (2) streets, sidewalks, and curb ramps may themselves represent a "program" of public pedestrian activities that are essential to the usage and enjoyment of the public entity's built environment.

4. Current County Policies and Priorities

The current County policies and priorities, as established by the County of Sacramento through its Disability Advisory Committee and the Physical Access Subcommittee, are summarized below. The descriptions given are intended to be in outline form. For more details, the "Interim Policy on Street and Sidewalk Access Improvement Priorities, January 2001" should be reviewed.

Current priorities are generally divided into two separate elements: location and quality. "Location Priorities" are generally based upon the proximity to specific land uses. "Quality Priorities" are generally based upon the nature of the existing improvement and the extent to which it may create a barrier.

4.1 Location Priorities:

The following list is based on current County policy and is also consistent with the requirements of the ADA [as outlined in 28 CFR, Part 35 section 35.150 (c), (d) and 35.151 (e)]. The list is not necessarily inclusive and is not limited to just those buildings and facilities listed below:

Priority Level 1:

1. State, county, and local government buildings located within County of Sacramento;
2. Public hospitals, health clinics/offices, medical clinics/offices, mental health clinics/offices and therapy centers;
3. Public housing projects and public homeless shelters;
4. Police and/or Sheriff neighborhood service centers;
5. CalWorks offices, Sacramento Employment Training Agency facilities;
6. County parks;
7. Public schools, including in the following order, but not limited to: community colleges, high school, junior high and elementary school programs with magnet programs for children with disabilities; and all other schools;
8. State and local government offices with high public traffic, beginning with, but not limited to: transportation hubs and major corridors and routes; Department of Motor Vehicles offices; state parks, and prisons.

Priority Level 2

Areas of public accommodation, which are privately owned, including but not limited to:

1. Hospitals, health clinics/offices, medical clinics/offices, mental health clinics/offices, therapy centers, private doctors' offices
2. Senior facilities
3. Major shopping malls
4. Large housing complexes
5. Major employment sites
6. Supermarkets
7. Retail strip centers

8. Small apartment facilities, duplexes
9. Service sites of disability organizations
10. Rehabilitation facilities

Priority Level 3

1. Residential areas
2. Intersections that are not included in any of the above groups

4.2 Quality Priorities

The following priority list is also based upon current County policy. This policy currently focuses primarily on curb ramps. County policy also includes a numerical ranking system that evaluates the various factors described below, but for simplicity, that system is not described herein. The current ranking system could also be used to evaluate potential improvements.

1. Reconstructing curb ramps at locations where existing curb ramps have an unsafe condition that may impede a path of travel, such as vertical displacement of the curb ramp, broken or cracked concrete, deteriorated conditions, etc.
2. Installing new curb ramp(s) at locations where there is no curb ramp(s) to provide accessibility.
3. Where only one curb ramp exists at a corner, constructing an additional curb ramp at the same return, provided that conditions allow it and traffic controls allow for a safe path of travel.
4. Constructing or reconstructing a curb ramp at a location with difficult physical conditions, such as major utility conflicts, physical barriers, or other constraints.
5. Reconstructing an existing curb ramp when it does not meet current federal and state accessibility standards (i.e. color contrast, scoring lines, detectable warnings, slope, etc.).

It should be noted that current County policy also includes additional numerical "points" based upon pedestrian usage and mobility factors. Also, evaluation factors for existing light signals for the purpose of installing audible signals are included.

5. Prioritization Options for the RT Survey

A number of potential barrier removal items are possible for implementation, based upon the results of the RT Priority Survey. This section gives an overview more detailed description of the most prominent and critical potential barriers to persons with disabilities and gives a perspective of what issues are important in prioritizing their removal. This section is intended to be general in nature in an attempt to facilitate a dialogue with respect to the major issues affecting accessibility along the specified transit routes, and specific barriers described below may or may not actually exist along these routes. These particular barriers are divided into several different categories of improvements.

5.1 Potential street and sidewalk barriers:

(1) Lack of sidewalk along 1 or 2 sides of the street: Sidewalks delineate the pedestrian route as being clearly separate from the vehicle right-of-way. They improve safety for all pedestrians and provide a smooth and even rolling surface for mobility aids, a clear detectable route for blind and visually-impaired pedestrians, and a level of comfort for all pedestrians. The lack of sidewalks limits the use of the public right-of-way to a wide segment of the pedestrian population, not just persons with disabilities. For the Regional Transit routes, this condition is critical because access to bus stops usually depends on the accessibility of the sidewalk.

(2) Sidewalks less than 60" wide: A 60" width is necessary for two people in wheelchairs to pass each other, or for a person in a wheelchair to make a 180 degree turn. This is an important issue for commercial areas with more pedestrians and for superblocks or other streets with long distances between corners or driveways. It could be a priority to widen sidewalks to at least 60" in commercial areas, or minimally to provide 60" wide passing areas no more than 200' apart.

(3) Sidewalk less than 48": The minimum width for any sidewalk is 48", which is the width required for a person in a wheelchair and a person walking to pass each other. If a sidewalk is less than 48", it could be a priority to widen the sidewalk, or at least to add passing areas at regular intervals, for example, every 100 feet to 200 feet.

(4) Sidewalk less than 36" wide, including obstruction limiting width to less than 36": A minimum 36" width is allowed at "pinch" points, given that there is passing space on either side of the obstruction. If a segment of sidewalk is less than 36" or if an obstruction reduces the width to less than 36", it should not be considered accessible. This condition should be given a very high priority to either (1) widen the sidewalk along its narrow length or at an obstruction, or if not possible, (2) install signs at each corner leading to the obstruction to warn wheelchair users that the sidewalk may be impassible.

(5) Poor sidewalk condition, or gaps & changes in height greater than ½": A uniform code requirement is that changes in level greater than ½" must not be vertical. Abrupt changes may be difficult or impossible for a person in a wheelchair to cross, and they could do damage to the wheelchair. This condition is also an issue for people using wheeled devices such as walkers or

strollers. Horizontal gaps greater than ½” create hazards for wheels, canes, and high heels for all pedestrians. Uneven or poor conditions along the sidewalk may make it impassible for someone in a wheelchair, but they also pose trip hazards and other dangers for all pedestrians. The extent to which sidewalk improvements could and should be a priority for the RT survey is unclear.

(6) Grates or utility boxes in the pedestrian path of travel: Grates in the pedestrian path are generally discouraged, but if absolutely necessary, should not have slots greater than ½” wide in the direction of travel. Slots that run in the direction of travel create a hazard for wheelchairs, as well as strollers and other wheeled conveyances used on the sidewalk. Grates and utility boxes are prone to differential settling and are not always integral to the sidewalk, especially when maintenance or other work is done after sidewalk installation. The extent to which utility improvements could and should be a priority for the RT survey is unclear.

(7) Driveway or other prominent cross-slopes exceeding 3%-4%: Excessive cross-slopes direct wheelchair users and visually impaired persons along a level path, down the slope. This usually means they are directed toward the street, which can be a significant hazard. An abrupt change of slope can also be a hazard for people with low-vision and wheelchair users, and could be a trip hazard for non-disabled pedestrians who don’t notice the change. Driveways should be designed and built so they leave a 48” wide level pedestrian path at the top of the slope within the pedestrian right-of-way. Accessible driveway entrances and ramps usually require significant resources from either the public or private sector, or both, and while the negative effect of excessive driveway slopes is not intended to be minimized, it is probable that these barriers would not be a high priority for the RT survey.

(8) Unmarked mid-block crossings: Some locations are clearly used by pedestrians as crossings, although there may be no features designed for crossings. These conditions may occur at superblocks, where the distance between corners is great. They may also occur where facilities across a street in the middle of the block get significant pedestrian flow between them, such as a popular lunch spot across and an office complex. This is a safety issue for all pedestrians and motorists, where people are regularly crossing without notice or warning to passing vehicles. It is a disability issue in that unmarked crossings do not generally have curb cuts or median cuts that would allow a disabled person to cross, so they have to go a further distance to the corner crossing. It is probable that a few designated mid-block crossing locations could be a high priority for upgrading, but providing new crossings is unlikely as part of the RT survey, since pedestrian signals would most likely also need to be installed, usually at significant cost.

(9) Protruding objects below 80” high: Objects that project into the pedestrian route at a height below 80” pose a hazard to people with low vision. Objects with the leading edge below 27” are in the standard sweep of a cane, and these are usually detectable. Other objects should be removed or relocated, and tree limbs must be trimmed. The extent to which such objects could be removed as part of the RT survey is likely a low priority, since ongoing maintenance is most likely required to reduce or remove these hazards.

(10) Drop-offs along inside edge of sidewalk: Drop-offs from the edge of the sidewalk should not exceed 4", except along the street side with a square curb. A drop-off to the street is expected, and exempt from the requirement to protect drop-offs. Drop-offs along the inside edge of the sidewalk or at the top of curb ramps should be protected by a curb or railing. This is a potentially hazardous condition that could be given a high priority adjacent to bus stops included in the RT survey.

5.2 Potential transit path of travel and transit stop barriers:

(1) No accessible path of travel from bus stop to nearest corner: A bus stop is not really accessible if there is no accessible path to it. If the bus stop is itself accessible, someone may get off the bus expecting the sidewalk to be accessible. A person may also expect to be able to get to another stop around the corner. Sidewalks between bus stops near an intersection should be given a very high priority, since they serve as part of a transit transfer facility. Refer to Section 5.1 for specific barrier removal items that may be involved in making the path of travel accessible.

(2) No bus shelter: This is an issue for all bus riders, especially those that have some sensitivity to the elements. Some disabilities cause sensitivity to extreme temperatures, so shade or protection from rain may be needed while they wait for the bus, though the issue may be more universal for elderly people. While it is not practical to put a shelter at every bus stop, a standard policy could be adopted and followed to provide shelters at regular intervals or standard locations to allow people who need them to anticipate their location(s) or to plan their route accordingly. The County Department of Transportation does not have the authority to install bus shelters. The item is included only for possible future consideration by the Regional Transit District.

(3) No 96" x 60" minimum clear space at bus stop: A space 60" wide by 96" deep is the minimum space required for a person using a wheelchair to get off and on a bus. Bus lifts are designed with this dimension in mind, so if the space is not provided, the lift or other mechanism will not work. This would make the bus zone inaccessible, and could create a hazard if loading or unloading was attempted. It is probable that assuring a complying bus loading clear space is present at each bus stop would be a high priority for the RT survey.

(4) Cross-slope at bus stop exceeds 3%-4%: Excessive cross-slopes direct wheelchair users and visually impaired persons down the slope. Bus lifts are designed to load from, and unload to, a space with minimal cross-slope. Excessive cross-slope could make it impossible to use a lift effectively and could create a hazard if the cross-slope is not detected. It is probable that complying cross slope at each bus stop would be a high priority for the RT survey.

(5) No or non-complying bus stop sign: The absence of a bus stop sign is the same disadvantage for everyone, except for those that have prior knowledge of the stop from either verbal or auditory information. A sign tells people that there is a bus stop at that location, and provides route information so they know that the bus they are looking for will stop there. Sign standards provide guidelines for visibility to insure that a high percentage of people, including those with

visual impairments, will be able to read the sign. A non-standard sign poses a barrier for many people, including some whom would not consider themselves disabled. The County Department of Transportation does not have the authority to install signage for bus stops. The item is included only for possible future consideration by the Regional Transit District.

5.3 Potential street crossing barriers:

(1) No marked crosswalk (for all but single-family residential areas): Marked crossings signal motorists that pedestrians may be present and provide a degree of protection for pedestrians crossing heavily traveled vehicular areas. This condition is an issue for all pedestrians, but it takes on greater importance for those with mobility impairments or people with visual impairments. Anyone who is short or sits low in their wheelchair is difficult for motorists to see. People with low vision have less ability to detect and avoid on-coming traffic. While most accessibility codes do not specifically require a striped crosswalk at intersections, County policy requires crosswalks at signalized intersections. The extent to which marked crosswalks should be provided at stop-sign-controlled intersections is not clear. It should be noted that it is generally considered improper traffic planning to provide marked crosswalks at uncontrolled intersections, since it may give the pedestrian a false sense of security. Therefore, providing complying crosswalks at all signalized intersections, except those in low-density residential areas, would most likely be a high priority for the RT survey.

(2) Curb ramp not within marked crosswalk: Motorists are generally looking for pedestrians within the crosswalks. If a person using a curb ramp enters the street out of the crosswalk, there is a potential hazard because of reduced visibility to motorists. All accessibility codes and standards require that a curb ramp should be wholly contained within the crosswalk. This barrier can usually be resolved by re-striping the crosswalk, a relatively low-cost repair, as opposed to replacing a curb ramp. Crosswalk placement standards must still be met so that crosswalks are not beyond the point where motorists would generally expect them.

(3) Cross-slope of crosswalk exceeds 3%-4%: Excessive cross-slopes direct wheelchair users and visually impaired persons along a level path, down the slope. At crosswalks, this usually means that they are directed toward the traffic or into an intersection, which can be a significant hazard. An abrupt change of slope can also be a hazard for people with low-vision and wheelchair users, and it could be a trip hazard for non-disabled pedestrians who don't notice the change. Despite the seriousness of the problems, it would most likely be difficult to rectify cross-slope in the street, since the work could require significant amounts of pavement removal and replacement.

(4) No audible signals at large, signalized intersections: Audible signals provide information in an alternate format for people who are blind or have low vision. The audible signal informs people that the light has changed and which direction is green. Without an audible signal, people with low vision have to rely on other cues, such as traffic sounds or other pedestrians. This issue is especially critical at a large intersection, where the signal interval time may not allow for delay or hesitation, and the light could change again before the person has crossed. It would likely be a

high priority to provide audible signals at major signalized street crossings where visual information is provided, i.e. walk / don't walk signals.

(5) No audible signals at small, signalized intersections: This issue is similar to that for large intersections, except that at smaller intersections, there is usually more time allowed in relation to the time it takes to cross. It is still the same issue that people with low vision are not provided information that is provided to others, that is when to walk or not walk, in an alternate format that is accessible to them. However, the wider the intersection, the longer it takes someone to cross, and the longer they are at risk. The degree to which audible signals can be installed at minor street crossings where visual information is provided may be lower in priority than other less costly priorities.

(6) No pedestrian push buttons at signalized crossing: Pedestrian buttons may initiate the cycle at on-demand intersections where cross-traffic is sparse. They may also create longer signal times to allow adequate pedestrian crossing time. Intersections without pedestrian crossing buttons may have longer wait times, but should provide adequate time for pedestrians to cross. The absence of pedestrian push buttons may create similar problems for all pedestrians, although it may have greater negative impact for people with disabilities.

(7) Pedestrian push button at inaccessible location: If a pedestrian push button is provided but it is not accessible, then a significant percentage of the population cannot use the system. Where a feature or element is provided to enhance pedestrian access, it should be designed and installed to enhance access for all pedestrians. Where push buttons lengthen the time for the crossing or trigger the crossing signal that would otherwise not change, a crossing barrier would be created and high priority should be given to resolution in the RT survey.

(8) Pedestrian push button mounted too high: Reach ranges have been established and are used in the codes to establish acceptable mounting heights for buttons and other operational parts related to a person in a wheelchair approaching from the front or side. State code establishes a maximum height of 48", regardless of the direction of approach. This issue is similar to having a button at an inaccessible location, though some disabled persons will still be able to use a high button depending on how high it is mounted.

(9) Pedestrian push button less than 2" diameter: Push button size requirements allow someone with limited finger strength or dexterity to operate the button. Smaller buttons will prohibit those people from using the button. This issue is similar in significance and magnitude to having a button mounted too high. It will limit some peoples' ability to use it, but does not create the same barrier as a button in an inaccessible location.

(10) Ped push button with no locator tone: A locator tone can be provided to help a person with low vision find the button. This is similar to the issue of having the button in an inaccessible location, though more critical if the button is in a non-standard location. Because people with low vision are more dependent on the signal crossing system to be able to safely cross the street,

this issue may be of higher importance than having the buttons at an accessible location. It is currently County policy to install locator tones only at non-standardized intersections.

(11) Pedestrian push button not parallel to crosswalk: The location and orientation of the push button indicates the direction it serves, especially useful for people with low vision. Buttons that are not oriented properly could pose a safety hazard for people with low vision depending on the orientation to know which way to go. Re-orienting these buttons would most likely be a high priority.

(12) Crossing timing intervals: Traffic engineers set the time interval for crossing a street within the equipment at each intersection. It is important that enough time be allowed for slower pedestrians to clear the crosswalk before the light changes. It may be a priority to increase the timing of marked crossings so that people with visual impairments and other disabilities, as well as elderly pedestrians, have more time to cross. However, it must be understood that such crossing times are related to the overall flow of traffic, and at some locations, longer crossing times may not be feasible.

(13) Crooked or irregular crossings: Some crossings are not exactly straight due to the presence of safety islands or the eccentricity of the corners. Such crooked or irregular crosswalks make it more difficult for some persons with disabilities, including those who are blind or have low vision or use wheelchairs, to cross safely. Tactile guidestrips help direct people who are blind or have low vision across streets where the crosswalk alignment is not straight. It is always preferable to have a straight crosswalk, but some conditions do not allow it. This problem would appear to be a high priority, and potential alternatives would be to straighten the crosswalk or install tactile guidestrips as part of the RT survey improvements.

5.4 Potential corner and curb ramp barriers:

(1) No sidewalk at corner: This condition creates a hazard for people crossing to that corner. If crossing is allowed, it should be a sidewalk or other safe zone at the corner. If there is no sidewalk connecting the corner, then the corner only serves as a rest zone while waiting to cross in the other direction. If it is possible to get to the same corner going the crossing in the other two directions, then this is an alternate path of travel and may not be significant. If it connects to a bus zone, then it may be significant. Other conditions need to be considered to properly analyze and prioritize this issue.

(2) Sidewalk at corner less than 36" wide, or obstruction limiting width to less than 36": If this condition exists at the corner, it may not be possible to install a curb ramp. The minimum width for any sidewalk is 48", which is the width required for a person in a wheelchair and a person walking to pass each other. A minimum 36" width is allowed at "pinch" points, given that there is passing space on either side of the obstruction. Having a pinch point at the corner could create a situation where someone is blocked at the street from getting onto the sidewalk, unable to get out of danger. This issue is probably very high in significance, and at the very least, there should be signs installed at the other corners to warn of the hazard.

(3) Poor corner sidewalk condition, or gaps & changes in height greater than ½": A uniform code requirement is that changes in level greater than ½" must not be vertical. Abrupt changes may be difficult or impossible for a person in a wheelchair to cross, and could do damage to the wheelchair. This is also an issue for non-disabled people using wheeled devices such as roller skates or strollers. Horizontal gaps greater than ½" create hazards for wheels, canes, and high heels for all pedestrians. Uneven or poor conditions along the sidewalk may make it impassible for someone in a wheelchair, but also pose trip hazards and other dangers for all pedestrians. Such conditions present at corner and curb ramp should be corrected as a high priority.

(4) No curb ramp at corner: If there is no curb ramp at a corner, the sidewalk is not accessible for wheelchair users, nor is the crossing leading to it. The ADA is specific that a curb ramp must be provided at a corner. It should be the high priority to provide at least one curb ramp at each corner, and two curb ramps at areas with high pedestrian traffic.

(5) Only one side-facing curb ramp at corner: It is preferable to have a curb ramp for each direction of travel from the sidewalk to a crossing. A person using the curb ramp would then generally be entering the street where traffic has stopped. If crossing is allowed in two directions, but a curb ramp is provided in only one direction, then a person in a wheelchair must go into an active traffic lane to get to the crossing in the other direction. It is unlikely that the curb ramp would be fully contained in the crosswalk for the other direction. This is especially hazardous when a vehicle is making a right turn and someone is travelling in the street around the corner. Adding a curb ramp where this condition exists would most likely be a high priority.

(6) Only one diagonal curb ramp at corner: If curb ramps are provided for each direction of crossing, then they lead in the direction of crossing and to the street where traffic is generally stopped. Corner curb ramps lead toward the active traffic lanes and require the user to make a turn at the bottom of the ramp as soon as they enter the street to stay in the crosswalk area. Motorists travelling in the curb lane may think the person is about to go in front of them, or they may not notice that they are there, though if the crosswalk complies it should be relatively safe. This can also be a visibility problem for motorists making a right turn. This condition is especially hazardous along busy streets with commercial traffic, and where there is no parking along the curb to direct vehicles away from the corner. Replacing corner curb ramps with two directional ramps would most likely be a priority for certain street types, but it would be less of a priority than those locations where either no curb ramp exists or where one curb ramp is not centered at the corner.

(7) Curb ramp main slope exceeds 10%: The standard maximum slope for ramps is 8.3%. Some codes previously allowed for 10% slopes for existing curb ramps, and it is generally used as an absolute maximum for cases of hardship. Slopes over 10% could be hazardous for people in wheelchairs, so repair of this condition should most likely be given a high priority.

(8) Curb ramp cross-slope exceeds 3%-4%: Excessive cross-slopes direct wheelchair users and visually impaired persons along a level path, down the slope. This condition can be a hazard at a curb ramp because of its use as a transition to the street.

(9) No level landing on sidewalk at curb ramp: A level landing is needed to be able to change direction easily with a wheelchair. This condition is especially problematic at corner and perpendicular curb ramps where it is necessary to turn at the top of the ramp to continue travel along the sidewalk. It is also important to maintain an accessible level pedestrian route along the sidewalk at curb ramps as with driveways.

(10) No truncated domes on curb ramp: Truncated domes provide a detectable warning for people with low vision to indicate an adjacent hazard, usually a vehicle route. Studies indicate that grooved borders are not generally detectable by people using canes, while truncated domes appear to be very effective. The addition of truncated domes on existing curb ramps would probably be a high priority where their location would make their detection difficult for persons with visual impairments.

(11) No truncated domes where curb ramp slope is less than 1:15 (6.67%): State code requires truncated domes for ramps less steep than 6.67%, assuming that steeper slopes will be detectable for people with low vision. This standard could be used to increase the priority for adding truncated domes to existing curb ramps where the potential hazard for people with low vision is more significant.

(12) Gutter slope in street exceeds 7%: Gutters generally slope back toward the curb to direct water into storm drains. A 5% slope is allowed, which is in the opposite direction of the curb ramp slope. For existing curb ramps, a steeper slope of up to 7% may be acceptable, since the cost of re-grading in the street can be significant. If the slope is any steeper, it could create a trap where the back end of a wheelchair would scrape the curb ramp as the front is lifted up by the gutter. This is similar to when the rear end of a vehicle scrapes the driveway as it pulls onto a road with a high crown. At the very least, it could cause damage to the wheelchair, and at worst, it could cause the wheelchair to get stuck.

(13) Curb ramp lip height exceeds ¼" - ½": ADA guidelines require a smooth transition at the lip or bottom of the curb ramp. State code favors a ½" beveled lip as a detectable transition from the street. All codes agree that a change in elevation of more than ½" must be ramped at no more than 8.3%. If the lip exceeds ½", it could pose a barrier for someone trying to move out of the street and onto the sidewalk. Grinding an excessively high lip is not a significant cost. This condition is a potential hazard that should most likely receive a high priority.

(14) Curb ramp width less than 48": The minimum width for any sidewalk is 48", which is the width required for a person in a wheelchair and a person walking to pass each other. Given that a person walking would generally not have to use the curb ramp, this issue may be a fairly low priority, as long as the curb ramp is at least 36" wide.

6. Summary of Findings of Field Surveying

Field surveying along the selected transit routes took place from June - August, 2002. A total of 16 surveyors and 2 supervisors participated in the data collection efforts. Data were collected by teams of two surveyors each, using hand-held computers (PDA's), and all data were maintained in a Microsoft Access database specifically developed for this project. A more detailed description of the inventory methods and procedures is contained in previous reports as part of the overall ADA Transition Plan and Pedestrian Master Plan project, and copies are available upon request.

The survey effort for the selected RT routes included a total of approximately 240 street segments (a street from one distinct intersection or other physical division to the next), 282 intersections, 1,110 street corners, and 530 existing curb ramps. Data collected is stored in a computerized database maintained by the County of Sacramento, Department of Transportation. The database may be viewed during normal business hours at the Department's offices.

Reports giving the detailed dimensions, gradients, and other conditions for each roadway segment are one page, and reports for each intersection are three pages. Therefore, a complete set of reports for the entire RT priority survey totals approximately 1,100 pages. For this reason, the entire report of data is not included with this report, but sample formats are included in Attachment 1.

A summary of the data gathered, giving approximate percentages of various conditions discovered, is as follows:

Number of Intersections Surveyed:	282
Number of Locations for Intersections Surveyed:	
1. Regional Transit (RT) routes:	282
Route 1 (County only):	81
Route 1 (City of Citrus Heights):	43
Route 23 (County only):	136
Route 23 (City of Citrus Heights):	14
Route 51 (County only):	8
2. Locations serving government programs/services:	282
3. Locations serving public accommodations:	202
4. Locations serving single-family residential or other areas:	80

County of Sacramento Department of Transportation
Regional Transit (RT) District Priority Survey

January 21, 2003

Number of Corners Surveyed:	1,110	<u>Percent:</u>
1. No. of corners with curbs:	897	81%
No. of corners without curbs:	213	19%
2. No. of corners with sidewalks:	303	27%
No. of corners without sidewalks:	807	73%
3. No. of corners with push buttons:	261	24%
No. of corners without push buttons:	849	76%
4. No. of corners with islands:	40	4%
No. of corners without islands:	1,070	96%
5. No. of corners with no curb ramps:	673	61%
No. of corners with 1 curb ramp:	332	30%
No. of corners with 2 curb ramps:	96	9%
 Number of Curb Ramps Surveyed:	 530	
Barriers Discovered:		<u>Percent:</u>
1. No. of curb ramps with main slope > 10%:	136	26%
2. No. of curb ramps with cross slope > 3%:	127	24%
3. No. of curb ramps with gutter slope > 7%:	337	64%
4. No. of curb ramps with lip > 1/2":	75	14%
5. No. of curb ramps with width < 36":	2	0%
6. No. of curb ramps with no level landing at top:	122	23%
7. No. of curb ramps with detectable warnings:	33	6%
8. No. of curb ramps with grooved border:	487	92%
 Number of Crosswalks Surveyed:	 184	 <u>Percent:</u>
1. No. of intersections with at least 1 crosswalk:	62	22%
No. of intersections with no crosswalks	220	78%
2. No. of crosswalks at least 96" wide:	103	56%
No. of crosswalks less than 96" wide:	81	44%
3. No. of crosswalks with crooked alignments:	34	18%
No. of crosswalks with tactile guidestrips:	8	4%
4. No. of crosswalks with yellow paint:	10	5%
No. of crosswalks with white paint:	170	92%

**County of Sacramento Department of Transportation
Regional Transit (RT) District Priority Survey**

January 21, 2003

Number of Push Buttons Surveyed:	330	<u>Percent:</u>
1. No. of push buttons with parallel alignment:	137	42%
No. of push buttons without parallel alignment:	193	58%
2. No. of push buttons with diameter of 2":	131	40%
No. of push buttons with diameter of 1/2":	199	60%
3. No. of push buttons at accessible locations:	293	89%
No. of push buttons at inaccessible locations:	37	11%
4. No. of push buttons greater than 54":	9	3%
No. of push buttons 48" high or lower:	280	85%
5. No. of intersections with audible signals	18	5%
 Number of Roadway Segments Surveyed:	 262	 <u>Percent:</u>
1. No. of roadway segments with no sidewalks:	36	14%
No. of roadway segments with sidewalks on one side:	73	28%
No. of roadway segments with sidewalks on both sides:	153	58%
No. of roadway segments with discontinuous sidewalks:	55	21%
2. No. of sidewalk segments < 48":	383	73%
3. No. of sidewalk segments with level changes >1/2":	256	49%
4. No. of sidewalk segments with fixed obstructions present:	139	27%
No. of sidewalk segments with non-fixed obstructions present:	45	9%
 Number of Bus Stops Surveyed:	 190	 <u>Percent:</u>
1. No. of bus stops with shelters present:	11	6%
No. of bus stops with shelter size < 30" x 42":	0	0%
2. No. of bus stops with cross slope > 3%:	73	40%

7. Recommended Disabled Access Improvement Projects

Listed in this section are the Consultants' recommendations for the most critical and feasible disabled access improvements for the selected RT routes. These recommendations are based both upon the data collected as part of the inventory efforts and upon priorities established by the County and the local disability community. Recommendations provided from the Department of Transportation's and the Physical Access Subcommittee's review of the first draft have also been considered in the determination and prioritization of potential projects. The improvements are given on the pages that follow in the recommended order of priority, based upon the number and extent of Priority Level 1 uses (for description, see page 6) and transit routes at each location.

The cost figures are based upon schematic unit costs provided by Burrell Engineering, Inc. and the Department of Transportation. These costs are solely construction costs and do not include soft costs such as design, plan check and permitting, or inspection during construction. The costs are also based upon an anticipated construction budget of \$500,000 - \$600,000, although this budget could vary slightly upon final determination of the availability of funds.

Summary of Total Costs for Specific Recommended Improvements

(See detailed project scopes and cost breakdowns on the following pages):

Route #1 (Segment 1): Auburn Blvd. from Watt Ave. to Manzanita Ave.	\$194,000
Route #1 (Segment 2): Sunrise Blvd./Madison Ave. to Coloma Rd./Folsom Blvd.	\$102,000
Route #23: Ethan Way/El Camino Ave. to San Juan Ave./Madison Ave.	\$294,400
Route #51: Florin (No recommendations included in this report; improvements to be part of the Florin Beautification Project)	\$ <u>0</u>
Total Projected Costs:	\$590,400

County of Sacramento Department of Transportation
Regional Transit (RT) District Priority Survey

January 21, 2003

Recommended improvement projects are listed below in the Consultant's order of priority, based upon the number and extent of Priority Level 1 uses (for description, see page 6) and transit routes at each location.

<u>Priority No.</u>	<u>Route No.</u>	<u>Location</u>	<u>Barrier Removal Item</u>	<u>Unit Cost</u>	<u>Units</u>	<u>Total Cost</u>
1	23	El Camino Ave. & Eastern Ave.	(Note: Intersection and street segment serve Pr. 1 transit uses and El Camino High School.)			
.1		NE, NW, & SW corners	Install pair of parallel curb ramps.	\$4000	6 ea.	\$24000
.2		SE corner	Regrade and repave with concrete; install truncated domes at flush transition to streets.	6000	1 ea.	6000
.3			Install new 2" push buttons with audible signals & locator tones.	1000	6 ea.	6000
.4			Review signal timing.	300	1 ea.	300
.5			Restripe crosswalks.	2500	1 int.	2500
.6		South side, El Camino Ave.	Install concrete bus pad.	1500	1 ea.	1500
.7		South side, El Camino Ave.	Construct new concrete sidewalk to meet existing at mid-block crossing.	120	70 lin. ft.	8400
.8		South side, El Camino Ave.	Install new parallel curb ramp.	4000	1 ea.	4000
.9		North side, El Camino Ave.	Reconstruct parallel curb ramp.	4000	1 ea.	4000
.10		Mid-block cross.	Review signal timing.	100	1 ea.	100
.11		Mid-block crossing.	Install new 2" push buttons with audible signals & locator tones.	1000	2 ea.	<u>2000</u>
1			Total Cost, these Items:			\$58,800

County of Sacramento Department of Transportation
Regional Transit (RT) District Priority Survey

January 21, 2003

<u>Priority No.</u>	<u>Route No.</u>	<u>Location</u>	<u>Barrier Removal Item</u>	<u>Unit Cost</u>	<u>Units</u>	<u>Total Cost</u>
2	1	College Oak Drive & Orange Grove Avenue	(Note: Intersection serves Pr. 1 transit uses & American River College.)			
.1			Install pair of parallel curb ramps at each corner.	\$4000	8 ea.	\$32000
.2			Relocate pull boxes for traffic signals at each corner.	500	4 ea.	2000
.3			Install new 2" push buttons with audible signals & locator tones.	1000	8 ea.	8000
.4			Review signal timing.	300	1 ea.	300
.5			Straighten and restripe crosswalks and remove broken tactile guidestrips.	2500	1 int.	<u>2500</u>
2			Total Cost, these Items:			\$44,800
3	23	El Camino Ave. & Howe Ave.	(Note: Intersection and street segment serve Pr. 1 transit uses, Howe Ave. Elem School, Howe Park.)			
.1			Install pair of parallel curb ramps at each corner, except NE.	\$4000	6 ea.	\$24000
.2			Relocate pull boxes for traffic signals at ea. corner.	500	4 ea.	2000
.3			Install new 2" push buttons with audible signals & locator tones.	1000	8 ea.	8000
.4			Review signal timing.	300	1 ea.	300
.5		NE corner	Reconstruct island & cut-through with detectable warnings.	5000	1 ea.	5000
.6			Restripe crosswalks.	2500	1 int.	2500
.7		Howe Ave. sidewalk SE of intersection, to school	Widen sidewalk to 48" around two poles.	1500	1 ea.	1500
.8		Howe Ave., sidewalk south of school at start of park	Repair slope and drop-off and repave; remove bollards in sidewalk.	2500	1 ea.	<u>2500</u>
3			Total Cost, these Items:			\$45,800

County of Sacramento Department of Transportation
Regional Transit (RT) District Priority Survey

January 21, 2003

<u>Priority No.</u>	<u>Route No.</u>	<u>Location</u>	<u>Barrier Removal Item</u>	<u>Unit Cost</u>	<u>Units</u>	<u>Total Cost</u>
4	1	Orange Grove Avenue at Orange Grove Adult School	(Note: Crossing and street segment serves Pr. 1 transit uses & Orange Grove Adult School.)			
.1		Mid-block crosswalk, west side of school front	Install pedestrian-activated traffic signal.	\$30000	1 ea.	\$30000
.2			Stripe new crosswalk.	1000	1 ea.	1000
.3			Install new 2" push buttons with audible signals and locator tones.	1000	2 ea.	2000
.4		South side of Orange Grove Ave., front of school	Construct new concrete sidewalk with curb behind, including parallel curb ramp at crosswalk.	50	200 lin. ft.	10000
.5		North side of Orange Grove Ave.	Construct new concrete sidewalk, from bus stop to crosswalk and attaching to existing, including parallel curb ramp at crosswalk.	50	300 lin. ft.	15000
.6		North side of Orange Grove Ave., northwest side of school	Construct new retaining wall at rear of sidewalk, from bus stop to crosswalk and beyond, as required.	80	100 lin. ft.	<u>8000</u>
4			Total Cost, these Items:			\$66,000
5	23	El Camino Ave. & Watt Ave.	(Note: Intersection serves Pr. 1 transit uses, post ofc., & major shopping center			
.1			Install pair of parallel curb ramps at each corner, except NW, only one.	4000	7 ea.	28000
.2			Relocate pull boxes for traffic signals at each corner.	500	4 ea.	2000
.3			Install new 2" push buttons with audible signals & locator tones.	1000	8 ea.	8000
.4			Review signal timing.	300	1 ea.	300
.6			Remove broken tactile guidestrips, repair holes, & restripe crosswalks.	4000	1 int.	<u>4000</u>
5			Total Cost, these Items:			\$42,300

County of Sacramento Department of Transportation
Regional Transit (RT) District Priority Survey

January 21, 2003

<u>Priority</u> <u>No.</u>	<u>Route</u> <u>No.</u>	<u>Location</u>	<u>Barrier Removal Item</u>	<u>Unit</u> <u>Cost</u>	<u>Units</u>	<u>Total</u> <u>Cost</u>
6	1	Coloma Rd. at Mills Middle School near Chase Ave.	(Note: Bus stop, mid-block crossing, and intersection serve public school.)			
.1		North side	Install concrete bus pad.	\$1500	1 ea.	\$1500
.2		North side	Construct new concrete sidewalk to meet existing and school entry.	110	60 lin. ft.	6600
.3		North side	Reconstruct parallel curb ramp.	4000	1 ea.	4000
.4		Mid-block crossing	Install new 2" push buttons with audible signals & locator tones.	1000	2 ea.	2000
.5		Mid-block cross.	Review signal timing.	300	1 ea.	300
.6		Coloma Rd. & Chase Ave.	Install parallel curb ramp at each corner.	4000	2 ea.	<u>8000</u>
6			Total Cost, these Items:			\$22,400
7	23	Fair Oaks Blvd. & Grant Avenue	(Note: Intersection serves Pr. 1 transit use & Carmichael Park.)			
.1			Install pair of parallel curb ramps at each corner.	\$4000	6 ea.	\$24000
.2		NW corner	Construct concrete sidewalk to meet existing.	5000	1 ea.	5000
.3			Install new 2" push buttons with audible signals & locator tones.	1000	6 ea.	6000
.5			Review signal timing.	300	1 ea.	300
.6			Restripe crosswalks.	2500	1 int.	2500
.7		West side, Fair Oaks Blvd., front of park	Repair sidewalk and remove obstacles along entire length where occurs.	5000	1 ea.	<u>5000</u>
7			Total Cost, these Items:			\$42,800
8	23	Fair Oaks Blvd. & Landis Avenue	(Note: Intersection serves Pr. 1 transit uses and Carmichael Post Office.)			
.1		SW corner	Install curb ramp at corner.	\$4000	1 ea.	\$4000
.2		SW to NW corner	Stripe crosswalk.	500	1 ea.	<u>500</u>
8			Total Cost, these Items:			\$4,500

County of Sacramento Department of Transportation
Regional Transit (RT) District Priority Survey

January 21, 2003

<u>Priority No.</u>	<u>Route No.</u>	<u>Location</u>	<u>Barrier Removal Item</u>	<u>Unit Cost</u>	<u>Units</u>	<u>Total Cost</u>
9	1	Auburn Blvd. & Orange Grove Avenue	(Note: Intersection serves American River College & various public uses.)			
.1		NE,SW,NW corners	Install pair of parallel curb ramps at 3 corners.	\$4000	6 ea.	\$24000
.2		NE,SW,NW corners	Relocate pull boxes for traffic signals.	500	3 ea.	1500
.3		NE & SW corners	Reconstruct islands at 2 corners.	3000	2 ea.	6000
.4		SE corners	Install safety curbs around electrical cabinet on ramp pan.	500	1 ea.	500
.5			Install new 2" push buttons with audible signals & locator tones.	1000	6 ea.	6000
.6			Review signal timing.	300	1 ea.	300
.7			Restripe crosswalks.	2500	1 int.	<u>2500</u>
9			Total Cost, these Items:			\$40,800
10	23	El Camino Avenue & Walnut Avenue	(Note: Intersection serves Pr. 1 transit use & various public uses.)			
.1			Install pair of parallel curb ramps at each corner.	\$4000	8 ea.	\$32000
.2			Relocate pull boxes for traffic signals at each corner.	500	4 ea.	2000
.3			Install new 2" push buttons with audible signals & locator tones.	1000	8 ea.	8000
.4			Review signal timing.	300	1 ea.	300
.5			Restripe crosswalks.	2500	1 int.	2500
.6		SW corner	Construct concrete sidewalk to meet existing.	110	60 lin ft.	<u>6600</u>
10			Total Cost, these Items:			\$51,400

County of Sacramento Department of Transportation
Regional Transit (RT) District Priority Survey

January 21, 2003

<u>Priority No.</u>	<u>Route No.</u>	<u>Location</u>	<u>Barrier Removal Item</u>	<u>Unit Cost</u>	<u>Units</u>	<u>Total Cost</u>
11	1	Coloma Rd. & Folsom Blvd.	(Note: Intersection serves Pr. 1 transit use & various public uses.)			
.1		NE & NW corners	Install pair of parallel curb ramps at each corner.	\$4000	4 ea.	\$16000
.2		SE & SW corners	Install parallel curb ramp at each corner.	4000	2 ea.	8000
.2			Relocate pull boxes for traffic signals at each corner.	500	4 ea.	2000
.3			Install new 2" push buttons with audible signals & locator tones.	1000	6 ea.	6000
.4			Review signal timing.	300	1 ea.	300
.5			Restripe crosswalks.	2500	1 int.	<u>2500</u>
11			Total Cost, these Items:			\$34,800
12	1	Auburn Blvd. at Harry Renfree Field near Winding Way	(Note: Street segment serves large public use recreational facility.)			
.1		West side	Install concrete bus pad.	\$1500	1 ea.	\$1500
.2		West side	Construct new concrete sidewalk to park entry.	110	70 lin. ft.	<u>7700</u>
12			Total Cost, these Items:			\$9,200
13	1	Auburn Blvd. at Heritage Oaks Hospital near I-80 on-ramp	(Note: Intersection serves Pr. 1 transit uses, public use park and hospital.)			
.1		West side	Construct new concrete sidewalk to park entry at SW corner.	\$110	40 lin. ft.	\$4400
.2		West side	Construct new parallel curb ramp connecting to crosswalk.	4000	1 ea.	4000
.3		Both sides	Install new 2" push buttons with audible signals & locator tones.	1000	2	<u>2000</u>
13			Total Cost, these Items:			\$10,400

County of Sacramento Department of Transportation
Regional Transit (RT) District Priority Survey

January 21, 2003

<u>Priority No.</u>	<u>Route No.</u>	<u>Location</u>	<u>Barrier Removal Item</u>	<u>Unit Cost</u>	<u>Units</u>	<u>Total Cost</u>
14	23	El Camino Avenue & Garfield Ave.	(Note: Intersection serves Pr. 1 transit use & various public uses.)			
.1			Install pair of parallel curb ramps at each corner.	\$4000	8 ea.	\$32000
.2			Relocate pull boxes for traffic signals at ea. corner.	500	4 ea.	2000
.3			Install new 2" push buttons with audible signals & locator tones.	1000	8 ea.	8000
.4			Review signal timing.	300	1 ea.	300
.5			Restripe crosswalks.	2500	1 int.	2500
14			Total Cost, these Items:			\$44,800
15	1	Sunrise Blvd. & Madison Avenue	(Note: Intersection serves Pr. 1 transit uses at Sunrise Transit Mall & public uses in Sunrise Marketplace.)			
.1			Install pair of parallel curb ramps at each corner.	\$4000	8 ea.	\$32000
.2			Relocate pull boxes for traffic signals at ea. corner.	500	4 ea.	2000
.3			Install new 2" push buttons with audible signals & locator tones.	1000	8 ea.	8000
.4			Review signal timing.	300	1 ea.	300
.5			Restripe crosswalks.	2500	1 int.	2500
15			Total Cost, these Items:			\$44,800
16	1	Auburn Blvd. & Manzanita Avenue	(Note: Intersection serves Pr. 1 transit use & various public uses.)			
.1		NE corner	Install parallel curb ramp.	\$4000	1 ea.	\$4000
.2		SE corner	Install pair of parallel curb ramps.	4000	2 ea.	8000
.3		NE & SE corners	Relocate pull boxes for traffic signals.	500	2 ea.	1000
.4			Install new 2" push buttons with audible signals & locator tones.	1000	6 ea.	6000
.5			Review signal timing.	300	1 ea.	300
.6			Restripe crosswalks.	2500	1 int.	2500
16			Total Cost, these Items:			\$21,800

Attachment 1: (If this is electronic format, this is a separate Word file)

Sample Accessibility Reports from the ADA Database

Attachment 2:

Priority Assessment Questionnaire and Rating Form

County of Sacramento Department of Transportation
Regional Transit (RT) District Priority Survey

January 21, 2003

Priority Assessment Questionnaire and Rating Form

The table given below has three columns with the first one stating the barrier removal category/item. The second column is provided so that you can rank your priorities. Note: A 5-point rating system is recommended. 5 pts. = high priority, 1 pt. = low priority. The third column is provided in case the reviewer has any comments.

Reviewer's Name (Optional): _____

Barrier Removal Categories / Items	Pts. (1-5)	Reviewer Comments
---	-------------------	--------------------------

1. Street and sidewalk barriers:

- (1) No sidewalk on street
- (2) Sidewalk less than 36" wide, including obstruction limiting width to less than 36"
- (3) Very poor sidewalk condition, or with gaps & changes in height greater than ½"
- (4) Driveway or other prominent cross-slopes exceeding 3%-4%
- (5) Unmarked mid-block crossings
- (6) Other:
- (7) Other:

2. Transit path and transit stop barriers:

- (1) No accessible path of travel from stop to nearest corner
- (2) No 96" x 60" minimum clear space at stop
- (3) Cross-slope at bus stop exceeds 3%-4%
- (4) No bus shelter
- (5) Bus shelter less than 30" x 42" clear space
- (6) No or non-complying bus stop sign
- (7) Other:
- (8) Other:

3. Street crossing barriers:

- (1) No marked crosswalk (for all but single-family residential areas)
- (2) Curb ramp not within marked crosswalk
- (3) Cross-slope of crosswalk exceeds 3%-4%
- (4) No audible signals at large intersections
- (5) No audible signals at small intersections

County of Sacramento Department of Transportation
Regional Transit (RT) District Priority Survey

January 21, 2003

- (6) No pedestrian push buttons at crossing
- (7) Ped. push button at inaccessible location
- 3. Street crossing barriers (continued):
 - (8) Ped. push button mounted too high
 - (9) Ped. push button less than 2" diameter
 - (10) Ped push button with no locator tone
 - (11) Ped push button not parallel to crosswalk
 - (12) Crossing timing interval too short
 - (13) No safety islands or medians at large Intersections
 - (14) No ped signals at mid-block crossing
 - (15) No tactile guidestrip at crooked, irregular, or hazardous crossing
 - (16) Other:
 - (17) Other:
- 4. Corner and curb ramp barriers:
 - (1) No sidewalk at corner
 - (2) Sidewalk at corner less than 36" wide, or obstruction limiting width to less than 36"
 - (3) Very poor corner sidewalk condition, or gaps & changes in height greater than ½"
 - (4) No curb ramp at corner
 - (5) Only one side-facing curb ramp at corner
 - (6) Only one diagonal curb ramp at corner
 - (7) Curb ramp main slope exceeds 10%
 - (8) Curb ramp cross-slope exceeds 3%-4%
 - (9) No level landing on sidewalk at curb ramp
 - (10) No truncated domes on curb ramp
 - (11) No truncated domes where curb ramp slope is less than 1: 15 (6.67%)
 - (12) Gutter slope in street exceeds 5%
 - (13) Curb ramp lip height exceeds ¼" - ½"
 - (14) Curb ramp width less than 48"
 - (15) Other:
 - (16) Other:

Other barrier priorities or comments: