

# **Bus Stop Facilities ADA Transition Report**

City of Fresno, Department of Transportation  
SZS Consulting Group

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## CITY OF FRESNO TRANSPORTATION DEPARTMENT – FAX ADA TRANSITION PLAN

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# **CITY OF FRESNO TRANSPORTATION DEPARTMENT – FAX ADA TRANSITION PLAN**

## **1. OVERVIEW**

Fresno Area Express (FAX) provides bus service for the City of Fresno. The FAX fixed route transit system consists of 18 bus routes, a fleet of over 100 buses, and approximately 1,500 bus stops. FAX is housed within the City of Fresno Transportation Department. This ADA Transition Plan, required under the Americans with Disabilities Act (ADA), describes barriers to access for people with disabilities related to FAX programs, services, and activities (PSAs), and identifies remediation of those barriers.

Under the 1990 ADA legislation, every state and local government was required to either demonstrate that their facilities providing space for programs, services and activities were fully compliant to existing federal and state access requirements, or develop a plan where barriers to access existed, to document the existing barriers to access by preparing an ADA Self-evaluation and Transition Plan for physical facilities and the policies or practices that require revisions.

This document is intended to ensure that FAX remains in compliance with the ADA by scheduling the remediation of barriers to access over time until a point at which remediation is completed.

### **A. STATE AND FEDERAL STATUTES AND REGULATIONS**

Statutes and regulations intended to protect civil rights are contained not only in the Americans with Disabilities Act (ADA) but in California government code, civil code, health and safety code, vehicle code, and building code. In California, Government Code 4451-4460 requires facilities to be usable to and accessible by people with disabilities<sup>1</sup>, which is a far higher standard than the minimum requirements contained in building code.

Facilities are defined by the US Department of Justice (US DOJ), Federal Highway Administration (FHWA), US Department of Transportation (DOT), and the California Department of Transportation (Caltrans) as a physical location where programs, services, and activities are provided. A facility can be a sidewalk, a parking lot, a park, or a building. Facilities are required to be accessible to ensure that people with disabilities can take part in the programs, services, and activities provided.

Since 1981, the state of California has enforced accessibility requirements for the built environment. In 1989, the Division of State Architect (DSA) was required through

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<sup>1</sup> California Government Code 4450b. <http://www.leginfo.ca.gov/cgi-bin/displaycode?section=gov&group=04001-05000&file=4450-4461>

Government Code 4450 to complete the certification process to ensure that the state building code was at least as stringent as the federal ADA requirements.

In 2002, the state attorney general issued a ruling that cities and counties, under Government Code 4450, were only required to enforce the California Code of Regulations/Title 2 (CBC), not the ADA Standards. The attorney general could not have anticipated that DSA would not complete the certification process until 2013. The certification process neared completion in 2014, with the enforcement of the 2013 California Code of Regulations/Title 2 (CBC) Section 11A and 11B.

One common misperception is the notion that grandfathering of built elements that complied with prior code requirements is allowed in all circumstances. Building code (regulations) and civil rights laws (statutes) are different in their intent and application. Under state and federal civil rights laws, when a facility is not accessible to or usable by a person with a disability, the use of the facility can constitute discrimination against those individuals. Civil rights laws have no statute of limitation and the age of a building, lack of alterations since construction, or the date of any alteration before 1992 does not provide an exemption from liability for potentially discriminatory practices.

## **B. ADA TRANSITION PLANS**

According to the US Department of Justice, Civil Rights Division (US DOJ) that enforces the ADA<sup>2</sup>, at the time when the ADA Transition Plan project begins, the public entity is required to make their intent to comply with the ADA known through a public *Statement of Commitment*.

Where structural changes in facilities were undertaken to comply with the obligations established under the ADA, such changes should have been made within three years of the effective date, by 1995, but in any event as expeditiously as possible<sup>3</sup>. In the case that barrier removal was not completed by this date in the past, which is common throughout the country, the US DOJ regulations define steps that are required, as a minimum, to establish an ADA Transition Plan as summarized below:

### Transition Plan

(1) If structural changes to facilities will be undertaken to achieve program accessibility [*where physical barriers are identified and must be removed*], a public entity that employs 50 or more persons shall develop a transition plan setting forth the steps necessary to complete such changes. **A public entity shall provide an opportunity to interested persons, including individuals with disabilities or organizations representing individuals with disabilities, to participate in the development of the transition plan by submitting comments.** A copy of the transition plan shall be made available for public inspection.

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<sup>2</sup> THE AMERICANS WITH DISABILITIES ACT TITLE II TECHNICAL ASSISTANCE MANUAL COVERING STATE AND LOCAL GOVERNMENT PROGRAMS AND SERVICES: SECTION II-8.4000 NOTICE TO THE PUBLIC. SEE: <http://www.usdoj.gov/crt/ada/taman2.html#II-8.2000>

<sup>3</sup> Department of Justice, Office of the Attorney General 28 CFR PART 35 Nondiscrimination on the Basis of Disability in State and Local Government Services {35.150 Existing Facilities. See <http://www.ada.gov/reg2.html>

(2) If a public entity has responsibility or authority over streets, roads, or walkways, its transition plan shall include a schedule for providing curb ramps or other sloped areas where pedestrian walks cross curbs, giving priority to walkways serving entities covered by the Act, including State and local government offices and facilities, transportation, places of public accommodation, and employers, followed by walkways serving other areas.

(3) The plan shall, at a minimum --

- (i) Identify physical obstacles in the public entity's facilities that limit the accessibility of its programs or activities to individuals with disabilities;
- (ii) Describe in detail the methods that will be used to make the facilities accessible;
- (iii) Specify the schedule for taking the steps necessary to achieve compliance with this section and, if the period of the transition plan is longer than one year, identify steps that will be taken during each year of the transition period; and
- (iv) Indicate the official responsible for implementation of the plan.

(4) If a public entity has already complied with the transition plan requirement of a Federal agency regulation implementing section 504 of the Rehabilitation Act of 1973, then the requirements of this paragraph shall apply only to those policies and practices that were not included in the previous transition plan.

The important thing is to remember that the ADA Transition Plan is a living document that can change over time. Annual updates are recommended to inform the public of progress with barrier removal over time to remove all barriers to access while avoiding the creation of new barriers.

## **2. METHODOLOGY**

A physical assessment of each bus stop location has been performed for the City of Fresno Transportation Department. The field investigation of the Fresno Area Express (FAX) system began on January 13, 2016. Images of each physical element were captured in HD digital photographs with GPS coordinates captured at each location, while manual measurements were taken to establish as-built conditions and to facilitate the process of cost estimating.

The FAX system consists of bus stops that were constructed both before and since the enforcement of the Americans with Disabilities Act. Many barriers to access were identified at the bus stops.

This ADA Transition Plan report identifies barriers to access and provides solutions. The information on the physical access barriers and the accompanying self-evaluation document allow the coordination of programs, services, and activities (programs) provided by FAX. This will ensure that when the programs, services, and activities are viewed in their entirety, they are readily accessible to and usable by individuals with disabilities.

The goal is to create a *barrier-free* environment.

This concept is referred to as Program Access<sup>4</sup> and it allows an ADA Title II Entity, like the City of Fresno, to move a program to an accessible location or use other methods to make it accessible.

The basis of this process is to improve access for people with disabilities. The purpose of this report is to provide this information in a clear and usable format for designated City staff, other professionals, and laymen alike.

Physical barriers to access were identified and were documented in two ways:

- 1) Summary and Analysis: An analysis of the findings is provided in a narrative form, which described particular barriers identified in each record, to help ensure that the findings for atypical situations can be further explained. This information intends to provide a discussion on the functionality of physical elements. Background reasoning and research behind the identification of barriers are provided where universal design principles can play a role. This analysis was accompanied by digital photographs or diagrams, where applicable. Understanding the function of the building and its usage was essential in interpreting the findings held in this report.
- 2) Barrier Data Records: Individual barriers to access have been entered into the ADA Access Compliance database so that the technical information on each barrier has a barrier data record. These barrier data records include detailed information such as digital photographs of each barrier, code references that determine the barrier to access, as-built measurements, barrier severity ratings, budgetary cost estimates, recommended solutions for barrier removal, and a priority for remediation that is assigned in the final report. The information is formatted with two barriers on each report page.

To consolidate the barrier data, some of the more typical barriers found in multiple locations are grouped with a description of the locations in which they are found. For instance, this applies to barriers (multiple cross slopes) that have an accessible route that spans from the bus stop sign to the end of the area where amenities such as benches, signage, and trash receptacles are located.

This same area includes the bus stop area where the bus is designated to stop and pick up passengers (boarding and alighting area). In many locations, a non-compliant cross slope is identified in the entire length of the sidewalk or pathway, which is listed as a separate barrier that is often remediated first at a bus stop to make it possible for people with severe mobility impairments to use the bus stop more readily. In that case, the cost estimate for that work can be important to facilitate scheduling when considering budgetary constraints.

California Building Code (CBC) requirements are enforceable, but the minimum standards contained in the CBC may not ensure that transportation facilities are usable by and accessible to people with disabilities. Bus stops are located in the public rights-of-way (PROW), which is not governed by the CBC. Although bus stops as elements are

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<sup>4</sup> ADA Title II Technical Assistance Manual, Section 5.000 Program Accessibility. 28 CFR 35.149-35.150.

regulated by the CBC, the PROW containing sidewalks was covered by the original 1990 ADA Standards, but the 2010 update to those standards retained accessibility standards only for buildings, with the PROW standards separate in the Public Rights-of-Way Accessibility Guidelines (PROWAG) in 2011. This process was a result of the combination of the most stringent requirements.

It is important to note that the barriers identified in this report reflect the most stringent requirements from governing model codes, in places where model codes contain conflicting requirements.

## **A. STANDARDS AND REGULATIONS**

State regulations and statutes also prohibit discrimination. The following federal and state standards were also applied to this project:

- The *Americans with Disabilities Act/Architectural Barriers Act* (2010 ADAS) Accessibility Guidelines contain standards that replaced the ADAAG as of March 15, 2011.
- ADA standards for *Transportation Facilities* adopted by the US Department of Transportation.
- The Federal Highway Administration's California version of the *Manual on Uniform Traffic Control Devices* (CA MUTCD).
- The federal Access Board's Public Rights-of-Way Guidelines (PROWAG) adopted by the Federal Highway Administration (FHWA), and Caltrans
- 2013 and 2016 California Building Code

## **B. ASSOCIATED PHYSICAL SPACES**

This report provides information on FAX bus stops within the existing pedestrian facilities that serve the area. Many individual physical elements are part of the comprehensive whole that creates a pedestrian facility. The field assessment descriptions contained in this report include the sidewalk or pathway leading to each bus stop for 4 feet in each direction, as well as other physical elements contained within the bus stop area, including:

- Driveways
- Sidewalk or unimproved pathways
- Curb ramps or blended transitions
- Benches or other seating elements
- Bus shelters
- Trash receptacles and kiosks
- Signage



Each of these elements influences the usability of the bus stop. For instance, driveways in areas that were constructed before the passage of the ADA were typically problematic for pedestrians with mobility impairments as they were constructed with a cross slope between the property line and the roadway, but it was not necessarily thought of as a path of travel for severe mobility impairments. In instances where the cross slope exceeds 5.0%, research shows that wheelchairs or other mobility devices can tip over, which may result in injury.

The key to providing accessible facilities is to recognize that people with different disabilities have different needs. Universal design principles can play a role. Physical elements should be usable to everyone without having to resort to any adaptation or specialized design.

Each bus stop is required to have a pedestrian connection between the public streets and sidewalks and public buildings or facility entrances<sup>5</sup>, as required by the 1990 and 2010 ADA Standards and California Code of Regulations Title 24. In the City of Fresno, instances were identified where the sidewalk slope within a bus stop exceeded 5.0% along roadways with the same slope, which in other locations would be considered a ramp with many additional requirements in place to ensure access. Under state and federal model code, the slope in these areas is considered technically infeasible to reduce. This is due to natural geographic barriers (such as roadways located on mountains or hills) and bus stops that may need to remain in those locations if nearby areas are not less steep, allowing the relocation of these bus stops.

### **C. BARRIER SEVERITY RATINGS (BSR) AND REMEDIATION**

A barrier identification system was implemented to standardize the reporting process and ensure consistency while collecting data, creating reports, and scheduling remediation over time. Each barrier was assigned a rating that indicates how severely each barrier affects a person's ability to use the element. There are five severity ratings assigned to barriers:

- 1 – Necessary
- 2 – Recommended
- 3 – Hindrance
- 4 – Low Severity
- 5 – Technically Infeasible

The effect that the barrier has on a person using the element is important, but the date of construction also plays a role in determining barrier severity ratings. Facilities that are defined under the ADA as new construction are required to be fully compliant and the barrier severity rating assigned to those barriers is 1 – Necessary to Remove. That is a

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<sup>5</sup> 2010 ADA Standards for Accessible Design, Section 206.2.1 Site Arrival Points



legal requirement regardless of how minor a barrier may be in terms of how it affects the user.

Where barrier severity ratings are 4 – Low Severity, these barriers may not require remediation. When barriers are rated as a 5 – Technically Infeasible, they cannot be removed due to structural impracticability or other structural conditions that cannot be altered. Increasing the clear width of an interior stairway in an existing building, or reducing the sidewalk slope adjacent to the roadway where the slope corresponds with steep terrain, are examples of barriers that are technically infeasible to remediate.

Sidewalks constructed before 1992 were often constructed intentionally with a cross slope to encourage drainage. That cross slope is now legally defined as a code violation. Research shows that the effect that the cross slope of a walking surface between 2.1% and 2.9% is minor (low severity) and can be navigated by a person using a mobility assist device with extra effort, whereas a cross slope of 5.0% or more is known to cause a wheelchair or other mobility device to tip over, which may result in injury.

#### **D. SAFE HARBOR PROVISIONS**

One of the goals of this project is to ensure that the City of Fresno can make use of the *safe harbor* provision contained in the 2010 ADA Standards. This federal rule applies to provisions in the ADA Standards and applies on an element-by-element basis for elements that complied with the 1991 ADA Standards. The rule includes a general "safe harbor" under which physical elements in the City's facilities, that were built or altered in compliance with the 1991 Standards, would not be required to be brought into compliance with the 2010 Standards until the elements were subject to a planned alteration. A similar safe harbor applies to elements associated with the "path of travel" to an altered area.

#### **E. COST ESTIMATES**

This report contains budgetary cost estimates to facilitate the process of determining a reasonable barrier removal phasing schedule that corresponds to the financial constraints that the City of Fresno can forecast into the future. Cost estimates are provided for physical elements only as the cost of implementing a new policy or practice cannot be accurately assessed at this point in the process.

The actual cost estimates are calculated using the industry standard RS Means Construction Cost Estimating<sup>6</sup> system data. In some instances where a barrier location can have several different barriers to access, one or more of the barriers may have a cost estimate of \$0 dollars. This is an intentional reporting mechanism as it reflects the fact that the cost to remove that particular barrier is part of the cost of one or more barriers at that same location.

For instance, where a sidewalk at a bus stop is identified with a non-compliant cross slope, this will often also be repeated in the boarding and alighting space, the resting space for a wheelchair/mobility device under the shelter, and the accessible route between the resting space and boarding and alighting space. If the non-compliant cross slope in each of these overlapping areas was calculated and reported, the recommended barrier

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<sup>6</sup> <https://www.rsmeans.com/>

removal solutions could be reported with cost estimates that overlap and inflate the cost for remediation. The practice of entering cost estimates for such barriers of \$0 is intended to produce a more accurate budgetary cost estimate that does not include amounts that could exponentially increase the overall cost of barrier removal implementation plans.

## **F. RECOMMENDED BARRIER REMOVAL PRIORITIES**

The functions within the bus stop facilities were assigned a barrier removal priority. To prioritize barrier removal within facilities for implementation over time, the City must correlate programs, activities, and services that take place within the City bus stop facilities that serve people with disabilities. This process is on-going as part of the Self-evaluation and this report will be updated when those findings are complete. Barriers to access identified in the exterior and interior spaces have been prioritized according to the following criteria:

**Priority 1:** Bus stop locations on arterial and corollary roadways where state and local government agencies, higher education, primary schools, and medical facilities are located.

**Priority 2:** Bus stop locations on arterial and corollary roadways where libraries, parks, and recreation facilities are located.

**Priority 3:** Bus stop locations on roadways in residential, industrial, and rural areas.

Finalized barrier priorities can be influenced by demographics and other factors provided by the City of Fresno. These factors may include:

- Frequency of use by the general public;
- Number and type of programs, services, and activities that take place near the bus stop;
- Age of the bus stop (pre-1992 existing or new construction post-1992);
- Long-term Facility Planning Goals
  - Infrastructure improvement projects
  - Bus stop replacement as part of future Capital Improvement Plans (CIP) plans.

## **G. IMPLEMENTATION PLAN AND SCHEDULE**

As a US DOJ requirement for ADA Transition Plans, an Implementation Schedule was developed. This schedule was developed using the information on upcoming projects (CIP work), feedback from the public outreach process and facility priorities provided by designated FAX staff.

FAX provided an estimated budgetary allotment of \$500,000 to be allocated per year to ADA Transition Plan remediation. It is anticipated that additional barrier remediation will be completed over time through a combination of ADA Transition Plan barrier removal in-house, renovation projects, procurement of new equipment and elements, along with future alterations.

The implementation schedule was developed by identifying routes that experience the highest frequency of use by riders. These routes were scheduled for remediation before routes that did not experience the same high use frequency. Within each route, stops were prioritized, as noted in the Recommended Barrier Removal Priorities, and scheduling of Priority 1 locations took precedent over stops assigned Priority 2 & 3. Entire routes were scheduled for remediation before scheduling the next route categorized as high use. Below please find the order of high to low route ridership used for the process of creating an implementation schedule.

| Route<br>Prioritization |
|-------------------------|
| 1                       |
| 38                      |
| 9                       |
| 28                      |
| 34                      |
| 41                      |
| 32                      |
| 26                      |
| 22                      |
| 39                      |
| 35                      |
| 20                      |
| 45                      |
| 33                      |
| 3                       |
| 12                      |
| 58                      |

Annual budgetary constraints may allow for additional or less remediation work to be performed. This implementation schedule and the ADA Transition Plan should be considered living documents, requiring annual updates to ensure that when barriers to access are remediated, the City compiles documentation as evidence of that good faith effort to comply with the ADA.

Please refer to the appendix for the remediation timeline and schedule.

## **H. OFFICIAL RESPONSIBLE**

As part of an ADA Transition Plan, the US DOJ requires a public entity to designate an official, responsible person that the public can contact with questions. FAX has given that responsibility to Sandy Cetti, Capital Development Specialist and she can be reached by email at FAXOutreach@fresno.gov. For further assistance, please call (559) 621-RIDE (7433), Option 5.

## **I. GRIEVANCE PROCEDURE**

Following 28 C.F.R. § 35.107 the City has adopted and published a grievance procedure providing for prompt and equitable resolution of complaints alleging any action that would be prohibited by the DOJ regulations implementing Title II of the ADA. Title II states, in part, that “no otherwise qualified disabled individual shall, solely because of such disability, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination in programs, services or activities sponsored by a public entity.”

The City distributes the grievance procedure to all of its agencies, posts copies of it in conspicuous locations in each of its public buildings, and posts copies to its website in an accessible format. The City refreshes each posted copy and updates the contact information contained on it, as necessary. Copies are also provided to any person upon request. The City ADA grievance procedure is available in English, Spanish, Hmong, and Large Print here <https://www.fresno.gov/transportation/fax/contact-fax/>.

The right of a person to prompt and equitable resolution of any complaint filed under this procedure shall not be impaired by the person’s pursuit of other remedies such as the filing of an ADA complaint with the responsible federal or state agency.

These rules shall be construed to protect the substantive rights of the interest persons to provide timely notice of any impediment to access City programs, services or activities, and to assure that the City complies with the ADA.

## **J. ADA ACCESS COMPLIANCE DEFINITIONS**

The following definitions are intended for use in interpreting the information contained in this report.

**ACCESSIBLE ROUTE** is a continuous and unobstructed path of travel provided for people with disabilities within or coinciding with a pedestrian circulation route connecting all accessible elements and spaces within a building or site that can be negotiated by a person with a disability using a mobility assist device, and that is also safe for and usable by persons with other disabilities. Exterior accessible routes may include parking access aisles, curb ramps, crosswalks at vehicular ways, walks, ramps, and lifts. In comparison, the Pedestrian Access Route (PAR) is an accessible route within the public right-of-way.

**ACCESSIBLE ELEMENT** is a physical element meeting the requirements specified by CBC and 2010 ADAS (i.e., telephones, controls, drinking fountains, dispensers, card readers, etc.).

**ACCESSIBLE EXIT** is an exit, as defined in CBC and 2010 ADAS, does not contain stairs, steps or escalators.

**ACCESSIBLE MEANS OF EGRESS** is a path of travel, usable by a person with a disability (mobility, visual, etc.), that leads to a public way. An accessible means of egress is one that does not include stairs, steps or escalators. Areas of rescue assistance or evacuation elevators may be included as part of an accessible means of egress.

**ADDITION** is an expansion, extension or increase in the gross floor area of a building or facility.

**ALTERATION (PROW)** is a change to a facility in the public right-of-way that affects or could affect pedestrian access, circulation, or use. Alterations include, but are not limited to, resurfacing, rehabilitation, reconstruction, historic restoration, or changes or rearrangement of structural parts or elements of a facility.

**ARCHITECTURAL BARRIERS** are physical design features that restrict the full use of affected buildings and their related facilities by persons with disabilities.

**AREA OF RESCUE ASSISTANCE** is an area, which has direct access to an exit, where people who are unable to use stairs may remain temporarily in safety to await further instructions or assistance during emergency evacuation.

**ASSEMBLY AREA** is a room or space accommodating a group of individuals for recreational, educational, political, social or amusement purposes, or for the consumption of food and drink. A classroom or lecture hall is considered an assembly area.

**AUTOMATIC DOOR (ADOD)** is a sliding or swinging door equipped with a power-operated mechanism and controls that open and close the door automatically upon receipt of a momentary actuating signal. The switch that begins the automatic cycle may be a photoelectric device, floor mat or manual switch (see also "power-assisted door").

**BLENDED TRANSITION** is a continuation of a curb in a pedestrian way that provides a flush transition into the roadway for the purpose of providing a pedestrian access route. Running slope within a blended transition shall not to exceed 5.0%. Other curb ramp requirements apply (detectable warnings, etc.) (*PROW*) A raised pedestrian street crossing, depressed corner, or similar connection between the pedestrian access route at the level of the sidewalk and the level of the pedestrian street crossing that has a grade of 5 percent or less.

**BUILDING ENTRANCE ON AN ACCESSIBLE ROUTE** is an accessible entrance to a building that is connected by an accessible route to public transportation stops, to parking or passenger loading zones, or to public streets or sidewalks, if available.

**CIRCULATION PATH** is an exterior or interior way of passage from one place to another for pedestrians, including, but not limited to walks, hallways, courtyards, stairways and stair landings.

**CLEAR** is unobstructed.

**CLEAR FLOOR SPACE** is the minimum level unobstructed floor or ground space required to accommodate a single, stationary wheelchair and occupant.

**COMMON USE** is those interior and exterior rooms, spaces or elements that are made available for the use of a restricted group of people (for example, occupants of a homeless shelter, the occupants of an office building, or the guests of such occupants).

**CROSS SLOPE** is the slope (grade) that is perpendicular to the direction of travel.

**CURB CUT** is an interruption of a curb at a pedestrian way, which separates surfaces that are substantially at the same elevation for the purpose of providing an accessible route across an otherwise non-accessible curb.

**CURB LINE (PROW)** is a line at the face of the curb that marks the transition between the curb and the gutter, street, or highway.

**CURB RAMP** is a sloping pedestrian way intended for pedestrian traffic, which provides access between a walk or sidewalk and a surface located above or below an adjacent curb face.

**DETECTABLE WARNING** is a standardized surface or feature built into or applied to walking surfaces or other elements to warn visually impaired persons of hazards in the path of travel.

**EGRESS, MEANS OF** is an exit system that provides a continuous, unobstructed and undiminished path of exit travel from any occupied point in a building or structure to a public way. A means of egress comprises vertical and horizontal travel and may include intervening room spaces, doorways, hallways, corridors, passageways, balconies, ramps, stairs, enclosures, lobbies, horizontal exits, courts and yards.

**ELEMENT** is an architectural or mechanical component of a building, facility, space or site such as a telephone, ramp, door, drinking fountain, seating or water closet.

**EMPLOYEE WORK AREA** is an area used exclusively by employees as work areas, including work stations, mechanical rooms and closets, unless otherwise defined as a floor or portion of a floor not customarily occupied or an observation gallery used primarily for security purposes. Employee work areas do not include common use or public use areas.

**ENTRY** is any access point to a building or portion of a building or facility used for the purpose of entering. An entry includes the approach walk; the vertical access leading to the entry platform; the entry platform itself; vestibules, if provided; the entry door(s) or gate(s); and the hardware of the entry door(s) or gate(s).

**EQUIVALENT FACILITATION** is an alternate means of complying with the literal requirements of these standards and specifications that provides access consistent with the purpose of state and federal standards and specifications. This includes the use of designs, products or technologies as alternatives to those prescribed, resulting in substantially equivalent or greater accessibility and usability.



**FACILITIES** are defined as all or any portion of buildings, structures, site improvements, complexes, equipment, roads, walks, sidewalks, passageways, parking lots or other real or personal property located on the site. (PROW) All or any portion of buildings, structures, improvements, elements, and pedestrian or vehicular routes located on a site or within the public right-of-way.

**GRADE BREAK** is the line where two surface planes with different grades meet.

**GROUND FLOOR** is any occupiable floor less than one story above or below grade with direct access to grade. A building or facility always has at least one ground floor and may have more than one ground floor where a split-level entry has been provided or where a building is built into a hillside

**HISTORIC BUILDING** is a structure, in whole or in part, that is listed on or is eligible for listing on the National Register of Historic Places, established and maintained under the National Historic Preservation Act of 1966 (P.L. 89-665), or if the National Register of Historic Places ceases accepting nominations, is approved for listing on a register of historic places, or is a locally designated landmark protected by ordinance.

**INTERNATIONAL SYMBOL OF ACCESSIBILITY (ISA)** is that symbol adopted by Rehabilitation International's 11th World Congress for the purpose of indicating that buildings and facilities are accessible to persons with disabilities.



**LANDING** is a level area (except as otherwise provided), within or at the terminus of a stair, ramp, curb ramp or door.

**LAVATORY** is a plumbing fixture primarily intended for washing and laving as part of personal hygiene. Lavatories are generally located within toilet and bathing facilities but may be located separately in a guest room or hospital patient room or work area. See definition for "sink" below.

**LEVEL AREA** is a specified surface that does not have a slope in any direction exceeding ¼ inch (6.4 mm) in 1 foot (305 mm) from the horizontal (2.083-percent gradient).

**MARKED CROSSING** is a crosswalk or other identified marked path intended for pedestrian use in crossing a vehicular way. Best practices dictate that the marked crossing surface material shall have a minimum 70% contrast against the adjacent roadway surface.

**MAXIMUM EXTENT FEASIBLE** applies to the occasional case where the structural nature of an existing facility (pre-ADA) makes it virtually impossible to fully comply with applicable accessibility standards through a planned alteration. In these circumstances, alterations to improve accessibility are required by federal law to be performed to provide the maximum physical accessibility feasible. Any altered features of the facility that can be made accessible must be made accessible. If providing accessibility in conformance with the ADA Standards or CBC for individuals with some disabilities (e.g., those who use wheelchairs) would not be feasible, the facility must be made accessible to persons with other types of disabilities (e.g., those who use crutches, those who have impaired vision or hearing, or those who have other impairments).



**MEZZANINE OR MEZZANINE FLOOR** is that portion of a story that is an intermediate floor level placed within the story and having occupiable space above and below its floor.

**NOSE, NOSING** is that portion of a stair or stairway tread projecting beyond the face of the riser immediately below.

**OPEN RISER** is the airspace between a stair or stairway tread projecting beyond the face of the riser immediately below.

**OPERABLE PART** is a part of a piece of equipment or appliance used to insert or withdraw objects, or to activate, deactivate, or adjust the equipment or appliance (for example, coin slot, push button, handle).

**PATH OF TRAVEL** is a continuous, unobstructed way of pedestrian passage by means of which an altered area may be approached, entered and exited, and which connects the altered area with an exterior approach (including sidewalks, streets and parking areas), an entry to the facility, and other parts of the facility. For the purposes of this chapter, the term "path of travel" also includes restrooms, telephones and water fountains serving the altered area.

**PEDESTRIAN** is an individual who moves within walking areas with or without the use of walking-assistive devices such as crutches, leg braces, wheelchairs, etc.

**PEDESTRIAN ACCESS ROUTE (PAR)** is a continuous and unobstructed path of travel provided for pedestrians with disabilities within or coinciding with a pedestrian circulation path.

**PEDESTRIAN CIRCULATION PATH** is a prepared exterior or interior surface provided for pedestrian travel in the public right-of-way.

**PEDESTRIAN RAMP** is a sloped accessible route intended for pedestrian traffic and is differentiated from a curb ramp.

**PRIMARY ENTRY** is the principal entry through which people enter the building. A building may have more than one primary entry.

**PRIMARY ENTRY LEVEL** is the floor or level of the building on which the primary entry is located.

**PRIMARY FUNCTION** is defined as a major function for which the facility is intended, including all customer service areas and employee work areas, but does not include mechanical rooms, boiler rooms, supply storage rooms, floors or portions of a floor not customarily occupied, observation galleries used primarily for security purposes, employee lounges or locker rooms, janitorial closets, entrances, corridors, toilet facilities and bathing facilities, unless such areas are the major function of the facility.

**PUBLIC RIGHT-OF-WAY** is Public land or property, usually in interconnected corridors, that is acquired for or dedicated to transportation purposes.

**PUBLIC USE** spaces are interior or exterior rooms or spaces that are made available to the general public. Public use may be provided at a building or facility that is privately or publicly owned.

**PUBLIC USE AREAS** are those interior or exterior rooms or spaces that are made available to the general public. Public use may be provided at a privately or publicly owned building or facility.

**QUALIFIED HISTORIC FACILITY** is a facility that is listed in or eligible for listing in the National Register of Historic Places, or designated as historic under an appropriate state or local law.

**RAMP** See pedestrian ramp.

**RUNNING SLOPE** is the slope that is parallel to the direction of travel.

**SERVICE ENTRY** is an entry intended primarily for delivery of goods or services.

**SIDEWALK** is a surfaced pedestrian walkway contiguous to a street used by the public (as differentiated from the definition of "Walk". Running slope in sidewalks is not regulated by code but may be ameliorated through construction and the use of elevators and building entries at various levels.

**SIGNAGE** is displayed verbal, symbolic, tactile or pictorial information. A directional sign is a publicly displayed notice which indicates by use of words or symbols a recommended direction or route of travel.

**SINK** is a plumbing fixture primarily intended for cleaning of equipment or materials. Sinks are generally located in kitchens, laundries, classrooms, laboratories, janitor closets and similar spaces.

**SLEEPING ACCOMMODATIONS** are rooms in which people sleep. Examples include dormitory and hotel rooms, lodging houses, guest rooms or suites.

**SITE** is a parcel of land bounded by a property line or a designated portion of a public right-of-way.

**SITE IMPROVEMENT** is the landscaping, paving for pedestrian and vehicular ways, outdoor lighting, recreational facilities, among others that are added to a site.

**SLIP RESISTANCE** is the frictional force necessary to keep a shoe heel or crutch tip from slipping on a walking surface under conditions likely to be found on the surface at the time of approval. Slip resistance is the specified static coefficient of friction of the surface under design conditions.

**SPACE** is a definable area such as a room, toilet room, hall, assembly area, entry, storage room, alcove, courtyard or lobby.

**STORY** is that portion of a building between the upper surface of a floor and upper surface of the floor or roof next above. If such portion of the building does not include occupiable

space, it is not considered a story for purposes of building code (CBC). There may be more than one floor level within a story, as in the case of a mezzanine.

**STRUCTURALLY IMPRACTICABLE** is a definition for an exception where full compliance cannot be achieved in rare circumstances when the unique characteristics of terrain prevent the incorporation of accessibility features. This definition governs terrain, not buildings. This exemption does not apply to new construction. Where full compliance would be structurally impracticable, compliance is required to the extent that it is not structurally impracticable. In that case, any portion of the facility that can be made accessible shall be made accessible to the extent that it is not structurally impracticable. If providing accessibility in conformance with this section to individuals with certain disabilities (e.g., those who use wheelchairs) would be structurally impracticable, accessibility shall nonetheless be ensured to persons with other types of disabilities (e.g., those who use crutches or who have sight, hearing, or mental impairments) in accordance with this section. See 8 CFR §35.151(2)(a).

**TACTILE** is defined as an object that can be perceived using the sense of touch.

**TECHNICALLY INFEASIBLE** is defined as an alteration that has little likelihood of being accomplished because existing structural conditions would require removing or altering a load-bearing member that is an essential part of the structural frame. Site constraints may prohibit modifications or the addition of elements, spaces or features that are in full and strict compliance with the minimum requirements for new construction and are necessary to provide accessibility. An exception granted under these provisions cannot apply to new construction. PROWAG R202.3.1 Existing Physical Constraints: Where existing physical constraints make it impracticable for altered elements, spaces, or facilities to fully comply with the requirements for new construction, compliance is required to the extent practicable within the scope of the project. Existing physical constraints include, but are not limited to, underlying terrain, right-of-way availability, underground structures, adjacent developed facilities, drainage, or the presence of a notable natural or historic feature.

**TEXT TELEPHONE** is machinery or equipment that employs interactive graphic (i.e., typed) communications through the transmission of coded signals across the standard telephone network. Text telephones include telecommunications display devices or telecommunications devices for the deaf (TDDs), text typewriters (TTYs) or computers.

**TRANSIENT LODGING** is lodging except for an owner-occupied establishment renting not more than five rooms or inpatient medical care facilities, a building, facility, or portion thereof, which contains sleeping accommodations to be used for short-term stays, generally less than one month. Transient lodging intended for short-term stays is considered a public accommodation and includes an inn, hotel, congregate residence (including homeless shelters) or other place of public lodging such as university dormitories.

**UNISEX RESTROOM** is a sanitary facility containing one of each type of fixture (water closet, lavatory and optional bathing facility) with privacy lock and an occupied indicator.

**VEHICULAR OR PEDESTRIAN ARRIVAL POINTS** are public or resident parking areas, public transportation stops, passenger loading zones, and public streets or sidewalks. The

accessible route begins, by definition, at these points of arrival and ends at the building entrances.

**VEHICULAR WAY** is a route intended for vehicular traffic such as a driveway or parking lot. See US DOJ guidance<sup>7</sup> on limited exceptions to the provision of an accessible route where the vehicular way is the only route leading to a building.

**VERTICAL SURFACE DISCONTINUITIES** are vertical differences in level between two adjacent surfaces. The term “abrupt changes in level” was previously in use for this definition.

**WALK (WALKWAY)** is a surfaced pedestrian way not located contiguous to a street used by the public with a slope of less than 5.0%.

### 3. FINDINGS

Barrier data records follow this introduction and describe each barrier to access identified during the field investigation, in addition to providing an inventory of the amenities identified at each bus stop.

#### A. BUS STOPS

The barriers to access identified at bus stops and within the adjacent 4 feet of sidewalk or area were varied, although certain issues reoccurred. It is important to provide more than a lengthy list of issues in a report; the City’s ADA Transition Plan for the Public-Rights-of-Way (PROW) will have a significant effect on these bus stops. Below is a list of the common conditions identified at bus stops and an explanation of the issues and recommendations for remediation.

##### Common Conditions:

1. **Sidewalk Clear Width and Driveways:** The adjacent sidewalk was a common barrier that affected travel to each bus stop. In many instances, the existing sidewalk was not at least 48” wide. Also, driveways adjacent to, and at times bordering, the bus stops hindered or in some cases, prevented travel to the bus stop. These issues are part of the City’s PROW Transition Plan.
2. **Roadway Shoulder as Pedestrian Access Route:** In locations where no developed sidewalk and curb and gutter are provided, pedestrians travel within the roadway shoulder area. When a vertical curb is provided in these locations, as a detectable warning for the visually impaired, a curb ramp is required to allow pedestrians to reach the bus stop pad and board.



<sup>7</sup> US DOJ Guidance on the 2010 Standards p.80; ada.gov and 2010 ADA Standards Advisory 206.2.1 Site Arrival Points Exception 2

3. **Abrupt Changes in Level (trip hazards):** Sidewalks along the bus stops were higher than the curb which created an abrupt change in level. This condition posed as a potential trip hazard to pedestrians who entered or exited a bus.



4. **Boarding and Alighting Space:** This space was measured adjacent to the bus stop sign unless otherwise noted. In some instances, amenities blocked the space adjacent to the sign and a recommendation is to either move those amenities or to provide a larger paved boarding and alighting space. Some bus stops were identified with adequate boarding and alighting space but amenities were installed in a way that encroached into the minimum 60" wide space required for people using mobility assist devices to board (enter) and alight (exit) the bus.



5. **Boarding and Alighting Dimensions:** The space between the curb edge and the back of the existing sidewalk was not at least 96" deep, where the additional space appears to exist in the adjacent property.

- a. Recommendation: Relocate bus stops to locations with adequate space for required boarding and alighting or institute a City program to purchase ROW to allow boarding and alighting space to comply by encroaching into the adjacent property, where possible.



6. **Turning Space within Bus Shelters:** Bus stop shelters were not deep enough to accommodate mobility assist devices (wheelchairs) as protection from the elements (wind, rain, etc.). This appeared frequently, especially in bus stops considered "new construction" (post-ADA) which are required to be fully compliant. It was common to find 90" of depth where a minimum of 96" is required. The curb and gutter were not part of the path of travel and should not be included in the clear width required for a pedestrian access route within the public rights-of-way. This error may account for the common occurrence where 6" is missing from the required clear width. There may have been a misunderstanding of these requirements in the past. Recommendations:



- a. Where the space between the curb and the back of the shelter is not adequate to allow a required 60" turning circle, move the existing shelter to comply.
- b. Purchase bus shelters with a roof structure that provides at least 60" x 60" (60" turning circle) for rain or wind coverage under the shelter.



7. **Roadway Slope:** The roadway slope can create a counter slope effect that can hinder travel. The remediation of this issue has not been provided with a cost estimate, as alterations to the roadway are not included in this scope of work.



### Recommendations for Remediation:

1. **Accessible route to bus stops:** Many bus stop locations were identified between, or adjacent to, driveways. Consequently, people with mobility impairments were hindered or could be prevented from reaching bus stops or risk injury in doing so. Research shows that the tipping point for a person using a mobility assist device is a cross slope of 5.0%, which is less than the cross slope at many driveways. It is recommended to schedule the alterations at these driveways as a high priority in the City's PROW Transition Plan.



2. **Bus stops that lack space for boarding and alighting:**

- a. **Parking Lots:** Where boarding and alighting space is not compliant and the bus stop is located adjacent to a parking lot (where encroachment is possible), it is recommended to construct a retainer curb or some other physical measures should be taken to separate the potentially hazardous vehicular area and parking spaces from the boarding and alighting space.



- b. **Green Space:** Bus stops that are adjacent greenspace within parks, schools, or other public institutions with fences that border in the boarding or alighting space, should be instances where encroaching into the adjacent property is considered to provide compliant boarding and alighting space.



- c. **Fencing:** The surface of fencing can be rough with sharp edges or barbs (in the case of some chain link fencing). Caution should be taken in locations where the minimum 96" of space required is directly at a fence. Damage to skin, clothing, or personal belongings could become common.

At locations where chain-link fences of adjacent parks, schools, or other public institutions encroach into the adjacent property, moving the fence for the section required at boarding and alighting should be possible to provide compliant bus stops.



Fences at residential locations may be more difficult to move. A more cost-effective measure would be to move the bus stop to a location in front of a

residence with no fence, with an owner willing to allow encroachment onto an existing paved surface that is firm, stable, and slip-resistant.

3. **Median Locations:** Medians that were more than 96" wide posed a hazard to people who used wheelchairs, as there was still a high likelihood that they could roll off of the vertical curb and into traffic. Many locations were identified on medians and should be relocated to areas with adequate space.



In addition, a curb ramp is required at these locations with compliant detectable warnings, not only within the median but at a receiving curb ramp on the opposite side of the roadway. This will provide a connection to the existing sidewalk. Without the receiving ramp, pedestrians with mobility impairments may not be able to reach the bus stop or exit from it. The cost of providing both curb ramps (approximately \$5,000) should be taken into consideration when determining whether to leave the existing bus stop in place or to relocate it.

4. **Relocation:** The City will discuss relocation plans through the Public Outreach process which can be a helpful tool in the decision-making process. Discuss relocation plans with each residential or commercial property owner. They may be willing to allow encroachment if they understand that the bus stops would otherwise be moved, which may affect traffic flow to their businesses.

Where bus stops must be relocated, it is recommended to make the distance from the original stop as short as possible to minimize confusion for riders and to maintain uniform distancing between stops.

The barrier data records and Geographic Information Systems (GIS) map located at the end of the report provide more detailed information on the barriers described above.

## **B. FIXED ROUTE BUS AND PARATRANSIT SERVICE**

The US Department of Justice issued a final rule in 1992 implementing the transportation provisions of the Americans with Disabilities Act (ADA). The rule contains provisions on requirements for complementary paratransit services by public entities operating a fixed route system, and provisions of nondiscriminatory accessible transportation service. The Department has amended the Department's rule implementing section 504 of the Rehabilitation Act of 1973 in light of the ADA rule.

The federal rule is as follows:

Public entities operating fixed route bus, and rapid rail and light rail systems must provide comparable complementary paratransit service to individuals with disabilities who meet certain eligibility criteria to the extent that an undue financial burden is not imposed<sup>8</sup>. The disability community must be involved in developing the plans. Public entities must begin

<sup>8</sup> 49 CFR 37.121 to 37.155



implementing plans on January 26, 1992, and achieve full compliance by January 26, 1997.

Paratransit systems must be Demand Responsive Systems<sup>9</sup>. This means that any system of transporting individuals, including the provision of designated public transportation service by public entities and the provision of transportation service by private entities (including, but not limited to, specified public transportation service) is not a fixed route system. A paratransit system is required to provide an origin-to-destination, demand responsive service that is free of additional charge which “mirrors” its fixed-route service (in terms of service times and areas) for all users with certified para-transit needs. This service is intended to act as a “safety net”; it is only for people who do not have the functional capability to ride fixed-route buses.



FAX provides paratransit service known as Handy Ride and the entire paratransit fleet was assessed. Clients who use the service must reserve a ride, which may be provided by either cars (sedans) or buses (cutaways). Clients can subscribe to regularly scheduled pickup. An Inquiry/Complaint form in paper format is located on each vehicle. At present, four vehicle models are in service.

### **C. PHYSICAL BARRIERS WITHIN FAX FIXED ROUTE BUSES**

The FAX system provides bus service using multiple vehicle models. Each type of bus was physically assessed, and the function of the ramp and other access features were reviewed with FAX staff while in use. The buses are equipped with telescoping ramps. In July 2019, FAX conducted ADA community outreach with members of the Fresno Disability Advisory Committee (DAC), asking for feedback on features to incorporate into future bus procurements.

Compliance issues were identified and included the following:

- Accessible Operating Controls: Inside the buses, belts are used to secure wheelchairs that can be used by actuating a flat plate that is not fist operable, and the controls used to secure riders using wheelchairs were located on the floor below 15 inches high. Some drivers said that they secure all riders, but others mentioned that the riders secured themselves.

Recommended good practices include the following:

- Develop a policy of maintenance and verification for FAX vehicles to ensure that Automated Vehicle Annunciators (AVA's) are functional in bus vehicles in service. The absence or failure of AVAs on a fixed route bus presents a significant barrier for persons who are blind or have low vision.

<sup>9</sup> Title 49 Transportation, PART 37 Transportation Services for Individuals with Disabilities (ADA) Subpart A; Sec. 37.3 Definitions.(4)

## 4. APPENDIX

### A. BARRIER RECORDS

The barrier data records provide detailed information on each barrier to access identified in the transition plan. These records provide information on each barrier including: the actual code, requirement of the code, the identified deficiency known as the “as-built” description, a proposed remediation method, and a cost estimate. These barrier records provide vital information used to correct the barrier along with an estimated cost estimate used to create the implementation schedule for barrier remediation.

Due to the size and nature of the data collected, the barrier records are not directly attached to this report but are available upon request.

### B. BARRIER REFERENCE MAP

A Barrier Reference map was created using ArcGIS. This map contains each bus stop contained in the transition plan. This map also provides a visual overview of FAX bus stop locations with the barrier data records within a customized geo-database. FAX will make updates to the barrier reference map and barrier record data when maintenance or remediation projects are completed to maintain a real-time record of barrier remediation accomplished over time.

This Barrier Reference map can be found at the end of the barrier records and is available from FAX, upon request.

### C. FAX IMPLEMENTATION SCHEDULE

As described, FAX has developed an implementation schedule for barrier remediation of transit facilities. A timeline containing the year, estimated balance, and estimated allocation of funds is provided below. Upon request, FAX can provide additional detailed information about a specific stop.

| Year       | Estimated Balance | Estimated Allocation |
|------------|-------------------|----------------------|
| 2016- 2021 | \$9,268,903.00    | \$0.00               |
| 2022       | \$9,500,625.58    | \$499,005.88         |
| 2023       | \$9,226,660.19    | \$494,544.95         |
| 2024       | \$8,950,418.13    | \$545,816.63         |
| 2025       | \$8,614,716.54    | \$495,876.90         |
| 2026       | \$8,321,810.62    | \$498,102.47         |
| 2027       | \$8,019,300.86    | \$499,947.31         |

| Year | Estimated Balance | Estimated Allocation |
|------|-------------------|----------------------|
| 2028 | \$7,707,337.39    | \$498,172.26         |
| 2029 | \$7,389,394.26    | \$499,423.35         |
| 2030 | \$7,062,220.19    | \$498,477.41         |
| 2031 | \$6,727,836.35    | \$497,485.66         |
| 2032 | \$6,386,109.46    | \$499,084.96         |
| 2033 | \$6,034,200.11    | \$499,222.73         |
| 2034 | \$5,673,351.81    | \$498,986.54         |
| 2035 | \$5,303,724.40    | \$498,836.28         |
| 2036 | \$4,925,010.33    | \$498,410.09         |
| 2037 | \$4,537,265.25    | \$499,224.40         |
| 2038 | \$4,138,991.87    | \$498,664.74         |
| 2039 | \$3,731,335.31    | \$499,550.89         |
| 2040 | \$3,312,579.04    | \$497,292.11         |
| 2041 | \$2,885,669.10    | \$496,238.60         |
| 2042 | \$2,449,166.26    | \$498,415.91         |
| 2043 | \$1,999,519.10    | \$496,871.33         |
| 2044 | \$1,540,213.97    | \$498,105.48         |
| 2045 | \$1,068,161.20    | \$497,435.81         |
| 2046 | \$584,993.52      | \$500,416.59         |
| 2047 | \$86,691.35       | \$86,691.35          |