# ADA SELF EVALUATION AND TRANSITION PLAN

City of South Gate

## Volume 3

Right of Way Barriers Assessment Report

## LIST OF APPENDICES

The following is a list of appendices attached to Volume 3 of the City of South Gate ADA Self Evaluation and Transition Plan:

Appendix C-1	Right of Way	Barrier Photo	<b>Report-Sidewalks</b>
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Appendix C-2 Right of Way Barrier Photo Report- Curb Ramps

Appendix C-3 Right of Way Barrier Photo Report- Transit Stops

**Appendix C-4** Right of Way Barrier Photo Report- Signalized Intersections

**Appendix C-5** Right of Way Barrier GIS Generated maps

### VOLUME 3

## Public Right of Way Barrier Assessment Report

#### 1.0 Introduction to the Volume

This section includes a review of physical barriers of sidewalks, curb ramps, transit stop, and signalized intersections. Accessibility requirements of these public right-of-way elements are found in part in the California Code of Regulations, Title 24, Part 2 (the California Building Code), the ADA Standards for Accessible Design, (which is composed of the 28 CFR part 35.151 and the Americans with Disabilities Accessibility Guidelines), and the Public Right-of-Way Accessibility Guidelines (PROWAG). Although the PROWAG is not adopted by the US Department of Justice as of the date of this report, the requirements set forth in the PROWAG are used as a best-practices reference manual.

#### 2.0 Right of Way Priorities

Please note that while the ADA code requires sidewalk cross slopes to be less than 2%, the assessment of the City of South Gate sidewalks has found that over 80% of City sidewalks fall into the range of 2%-5% cross slope. It would be economically infeasible to try to update all sidewalks in this category in Priority 1. Therefore, In order to implement a logical and economically feasible plan for reaching code compliance, and to implement maximum safety considerations, Owen has placed sidewalks with serve cross slopes of greater than 5% in Priority 1, and sidewalks with a cross slope in the 2-4.9% range in Priority 2.

Barriers were assigned levels of priority using the following criteria:

#### Phase 1 (Highest Priority): Based on Requests, Severity, and Location

- Requests from Qualified persons with disabilities. Generally, requests come from residents
  with disabilities who wish to get to and from their home or work place to transportation, school,
  medical facilities or other areas to accommodate their activities of daily living. The City will
  evaluate requests and proceed with necessary improvements to ensure access.
- **Curb Ramps** on Major Streets.
- Vertical Displacements on Major Streets.
- Obstructions less than 4' clear on Major Streets.
- **Sidewalks with greater than 5% cross slopes** on Major Streets, Collectors, and Residential Streets.
- Traffic Signals with high pedestrian use.
- **Bus Stops and Shelters** in high bus use / pedestrian areas.

#### Phase 2 (Medium Priority): Based on Medium Severity obstructions and Location

- **Vertical Displacements** on collectors and residential streets.
- **Driveways** on Major Streets.
- **Traffic Signals and Bus Stops** not in Phase 1.
- **Obstructions less than 4' clear** on collectors and residential streets.
- **Sidewalks with 2%-4.9% cross slopes** on Major Streets, Collectors, and Residential Streets.

#### **Phase 3 (Third Priority):**

- Within the City right-of-way locations that do not fall into any of the above groups.
- Tripping Hazards on collectors and residential streets.

#### 3.0 Common Issues at Public Right of Way

Common barriers to PROWAG (Pedestrian Right-of-Way Accessibility Guidelines) surveyed by Owen Group field teams are as follows:

#### 3.1 Sidewalk Cross Slope

Sidewalk cross slope is the primary barrier to pedestrian path-of-travel. California Building Code maintains that a pedestrian path-of-travel must be level, with a firm and slip resistant surface. The term "level" refers to the cross slope (the slope perpendicular to the path-of-travel) of the sidewalk route. There is an allowable 2.0% tolerance. Studies have shown that ongoing cross slopes that exceed the 2.0% barrier can become cumbersome to wheel-chair bound persons. Sustained cross slope makes it difficult to maintain the path-of-travel.

Owen Group surveyors utilize 2 ft laser levels to measure and record cross slope changes. GPS coordinates are recorded every time the cross slope changes between three (3) categories: 0-2%, 2-5% and +5%. Pictures are NOT taken for changes in cross slope.

#### 3.2 Tree Roots at Sidewalks

Tree roots tend to grow under sidewalk access routes and push the concrete slabs, creating vertical displacements that prevent access to wheelchairs and/or can cause tripping hazards to those who are visually impaired. Additionally, roots can lift one side of the sidewalk, creating a cross slope barrier that exceeds 2.0% and create a vertical displacement.

Owen Group surveyors record each instance of tree roots affecting the path of travel. GPS coordinates are recorded at every occurrence where a tree currently impairs the path of travel or will become a future issue. Pictures are taken for each occurrence.



#### 3.3 Vertical Displacements (Tripping Hazards)

Vertical displacements in the path of travel can impede the access routes. Not only are they difficult for wheelchair bound citizens to push their wheels over but they can form tripping hazards for the visually impaired and the average pedestrian. Vertical displacements are compliant up to  $\frac{1}{4}$  inch. From  $\frac{1}{4}$  inch to  $\frac{1}{2}$  inch bevelment is allowed up to 50% grade. Any vertical displacement, greater than  $\frac{1}{2}$  inch, is noncompliant.

Owen group surveyors use a standard tape measure to record the height of all vertical displacements in the path of travel. Any lip greater than ¼ inch is recorded regardless of compliant bevelment. Vertical lifts greater than 1 inch are given a priority of 1 (1 being the highest priority reserved for safety issues) as these are tripping hazards and can compromise the safety of pedestrians and potentially lead to lawsuit. Pictures are taken for every vertical displacement occurrence.

#### 3.4 Driveway

Driveways present another commonly found barrier to the path-of-travel. California Building Code states that the cross slope of an access route must not exceed 2.0% grade. If a driveway crosses the path of travel there must remain a minimum access width of 4 ft with a grade of less than 2.0% cross slope.

Owen Group surveyors record each occurrence of a noncompliant driveway. If driveways have a slope greater than 2% grade and is the only path in the pedestrian right-of-way than it is noncompliant. Essentially, a level passing lane must be provided for the entire length of the driveway. Pictures are taken for each noncompliant occurrence.

#### **Compliant Example:**



#### Noncompliant example:



#### 3.5 General Obstructions

Another common barrier to pedestrian access is general obstructions to the minimum 4 ft wide access path. To allow the full width of a wheelchair to travel a pedestrian access route, the California Building Code states that a minimum 4 ft wide and 80 inch high access path must be maintained. This can be obstructed by overgrown foliage, utility poles, fire hydrants, traffic signs and signals, and various other permanent and temporary objects.

Owen surveyors record each occurrence of an object (whether temporary or permanent) that impedes the required minimum access route width of 4 ft. Common occurrences include but are not limited to Fire Hydrants, Utility Poles, Traffic Signs, Parked Cars, Tension Cables, Street Lamp Posts, and Utility Control Boxes. Pictures are taken for each occurrence.

#### 3.6 Curb Ramp Assessment

Curb Ramps are a very common barrier to access. If the slope is too steep, it can be impassable to those who are wheelchair bound. Similarly, there must be a landing area at the top of the ramp that

is level (Cross Slope and Running Slope less than 2.0% grade) firm and slip resistant that is minimum 4 ft x 4 ft. Additionally the ramp must maintain a width of 4 ft wide to allow the full width of a wheelchair to pass. Another common element that is not found on older ramps is the lack of a visually contrasting truncated dome mat. These are used for visually impaired detection of a surface transition between the sidewalk and the street.

Owen Group surveyors record every curb ramp occurrence and analyze its compliance. Compliance is determined by top landing width, running slope, cross slope, gutter slope, truncated domes and ramp width. Pictures are taken for each curb ramp.

#### 3.7 Signalized Intersection Assessment

Although signalized intersections have numerous requirements as part of the Manual on Uniform Traffic Control Devices (MUTCD) that were not part of this assessment, Owen surveyors assessed intersections for the following items: a minimum of 48" level landing space at the base of each curb ramp, crosswalk striping must be clearly marked and not faded, and use of ADA compliant push bottoms.

#### 3.8 Transit Stop Assessment

To comply with ADA standards, the paved waiting area for the bus's front door loading and unloading area must be a minimum of five feet wide by eight feet deep. This level pad, referred to as the "boarding and alighted space" must by clear of obstructions, and must have a cross slope of less than 2% in all directions.

Another requirement is to provide a wheelchair space of 30"by 48" next to a bench, if provided. If the bench is under a shelter, then the wheelchair space must also be provided under the shelter.