

**City and County of San Francisco
APS Safety & Access Tool**

Cover Sheet

Location of Intersection or Crosswalk:
Evaluator Name:
Date Evaluation Completed:

<p>Total score</p> <p align="center">=</p> <p>crosswalk worksheet score</p> <p align="center">+</p> <p>intersection worksheet score</p>
--

Directions to Evaluator:

- Score all crosswalks and select the highest scoring crosswalk. The following variables typically affect the crosswalk score most:
 - crosswalk width - max 5 points
 - skewed crosswalk -- max 7 points
 - leading pedestrian interval -- max 8 points
 - timed for crossing to median island -- max 8 points
 - off-peak traffic presence (max 6 points)
- Please check off the answers that best describe the circumstances at the crosswalk being studied and total up the scores as directed on the following pages.

Please refer to National Cooperative Highway Research Program (NCHRP) Project 3-62: *Guidelines for Accessible Pedestrian Signals 2006*. This set of guidelines explains in detail the meaning of each variable being evaluated. The San Francisco Safety & Access Tool was developed based on the original tool created for the NCHRP.

City and County of San Francisco
APS Safety & Access Tool

Revised April 27, 2007

Intersection Worksheet
<i>Location:</i>

Metric	Points (circle all that apply)	Comments
Configuration: (circle one)		
4-leg	0	
4-leg offset	3	
3-leg (T or Y)	3	
5-leg	8	
Midblock location	14	
Signalization (circle one)		
Pre-timed	0	
Actuated (semi or fully)	2	
Split Phasing	6	
Exclusive pedestrian phase	8	
Transit Facilities within a block (1/8 mile) of the intersection - all legs (circle one)		
No transit facilities	0	
Single bus route	1	
Multiple bus routes	3	
Transit mall/rail station	5	

Metric	Points (circle all that apply)	Comments
Distance to Program for Visually Impaired (circle one)		
>1300 ft	0	
<1300 ft	6	approx. 4 blocks
<650 ft	8	approx. 2 blocks
<300 ft	10	approx. 1 block
Distance to City Public Programs (circle one)		
>1300 ft	0	
<1300 ft	6	approx. 4 blocks
<650 ft	8	approx. 2 blocks
<300 ft	10	approx. 1 block
Distance to Other Major Pedestrian Attraction (circle one)		
>1300 ft	0	
<1300 ft	3	approx. 4 blocks
<650 ft	4	approx. 2 blocks
<300 ft	5	approx. 1 block
Intersection Worksheet Score:		

Crosswalk Worksheet

Location of Crosswalk:

Metric	Points
Crosswalk Length (circle one)	
<40 ft	0
40-59 ft	1
60-79 ft	2
80-99 ft	3
100-119 ft	4
>=120 ft	5
Speed Limit (circle one)	
<20 mph	0
25 mph	1
30 mph	2
35 mph	3
40 mph	4
>=45 mph	5
Approach/Crosswalk Geometrics (circle all that apply)	
Skewed crosswalk	7
Curb radius>25 ft (either corner)	1
Apex (Diagonal) curb ramp (either ramp)	2
Channelized right turn island	2
Islands or medians (Painted, raised or cut-through)	1
Transverse (cross) slope on crosswalk	1
Pedestrian Signal Control (circle all that apply)	
Timed for crossing to median island	8
Push button actuation required for WALK signal	8
Leading Pedestrian Interval (LPI) with parallel street green	8
Non-concurrent WALK interval	4
Vehicle Signal Control (circle all that apply)	
Protected right turn phase/right turn overlap (on parallel street)	7
Leading protected left-turn phase (on parallel street)	3
Right-turn-on-red permitted (on parallel street)	2
Channelized right turn lane under signal control	8

Metric	Points
Off-Peak Traffic Presence - at least 2 vehicles present on parallel street (circle one)	
Constant (>90% of cycles)	1
Heavy (70-80% of cycles)	2
Moderate (50-60% of cycles)	3
Light (30-40% of cycles)	4
Occasional (<30% of cycles)	5
None (i.e., no through lanes present to create surge noise - e.g., stem of T-intersection)	6
Distance to Alternative APS Crosswalk (circle one)	
<300 ft	0
<650 ft	2
<1300 ft change to >=650 ft	4
<2600 ft	0
>=2600 ft	0
Other Crosswalk level issues:	
Pedestrian pushbutton location - either corner (circle all that apply)	
Located >10 ft from curb	3
Located > 5 ft from curb	3
Requests for APS (circle one)	
No requests	0
1 or more individual requests	6

A. Crosswalk Worksheet Score	
B. Intersection Worksheet Score	
C. Total Crosswalk Score = (A + B)	

Location:

Sketch of Intersection: Label crosswalks as A, B, C, D, etc.

Key Definitions

1. Facilities that Serve the Blind:

The following are facilities or programs in San Francisco that serve the blind and visually impaired. This list should be referred to when scoring intersections for APS.

Blind San Franciscans, Inc. 1591 Jackson Street, Suite 8, San Francisco, CA 94109 (415) 563-4896	Lighthouse for the Blind 214 Van Ness Avenue San Francisco, CA 94102 (425) 431-1381
Department of Rehabilitation 301 Howard Street, Suite 700 San Francisco, CA 94105-6604 (415) 904-7100 (VOICE & TTY)	Independent Living Resource Center 649 Mission Street, 3rd Floor, San Francisco, CA 94105-4128 (415) 543-6222
National Association for the Visually Handicapped 3201 Balboa Street San Francisco, CA 94121 (415) 221-3201	San Francisco Public Library: Library for the Blind and Print Disabled 100 Larkin Street, Civic Center San Francisco, CA 94102 (415) 557-4253
Bay Area Association of Disabled Sailors South Beach Harbor - Berths B61, B63 Embarcadero at Townsend	

2. Distance to City public programs:

The City is committed to providing an accessible path of travel to facilities where the City operates services, programs or activities open to the public. The closer the intersection is to a City service, program or activity open to the public, the more points it will receive.

Examples City public programs include but are not limited to:

- City hospitals or clinics
- City parks and recreational centers
- Branch libraries
- Civic buildings (such as City Hall)

The Mayor's Office of Disability is responsible for providing the list of sites that meet this definition.

3. Distance to Other Major Pedestrian Attractions:

The intent of this variable in the San Francisco Safety & Access tool is to serve as a surrogate measure for pedestrian usage at the intersection without having to make pedestrian counts, which are time and resource intensive activities. The closer the intersection is to one of these types of pedestrian attractions the higher points it will receive on this variable.

Examples of major pedestrian attractions include but are not limited to:

- Major shopping areas
- Major cultural venues
- Educational campuses
- State or Federal recreational areas
- Medical facilities
- Senior Centers

4. Phase:

A term used to describe a group of intersection movements that are controlled by a particular signal light. For example, the northbound through lanes could be a single phase or be grouped with north to west left turn lanes. If the northbound through lanes and the north to west left turn lanes are grouped together, they are considered a single phase because they are commanded by the same signal lights. If they are not grouped together, the north to west turn lane is one phase and the northbound through lanes is another phase, and commanded by two different sets of signal lights.

5. Split Phase:

Split phase is a term used to define the two separate phases for the side streets at an intersection. For a split phase, the left turn and through movements for each direction go through at the same time for the cross streets. Each approach is considered a phase and the through and left turn movements will have green at the same time. This is normally used for side streets where the side streets intersect a main street.

6. Pre-timed or Fixed Timed

Fixed time is referred to the signal timing which has a fixed sequence of red, yellow and green time for each movement within a given cycle length. This is different from actuated timing where there is vehicle detection involved in deciding green timing for each cycle. In fixed timing, the amount of red, yellow and green time for each movement does not change and is fixed irrespective of the change in traffic.

7. Traffic Actuated Timing:

Actuated Traffic Responsive Timing is a term used to describe how the intersection is timed to serve traffic. The intersection must contain vehicle detection devices for the computer at this intersection to “sense” the presence of cars. The amount of the green time allotted to each phase is variable depending upon the number of vehicles present at each of the phases. Each phase is given a minimum and maximum amount of green time and determines the green time by the number of vehicles that pass through the detection zones.

8. Push button actuation required

Pedestrian actuation required means that the pedestrian must press the push button to bring up the pedestrian signal indications and to provide sufficient time for the pedestrian to cross the street.