Appendix A

New Mexico Department of Transportation ADA Directive
New Mexico Department of Transportation has established Standard Drawings (attached) for Americans with Disabilities Act (ADA) for use on NMDOT facilities. These Standard Drawings provide guidance for compliance with the PROPOSED Accessibility Guidelines for Pedestrian facilities in the Public Right-Of-Way (PROWAG). These guidelines shall apply to all new and altered Pedestrian Access Routes (PAR). These Standard Drawings are intended to provide guidance for the detailed design of ADA facilities and are not a substitute for detailed construction drawings. Standard Drawings PAD-001-7/10, PAD-001-8/10 and PAD-001-9/10 are no longer applicable.

General Office staff is to utilize the \aspen\publicshare drive to access the Directive. District and Regional Office staff can access the Directive utilizing the appropriate District drive as indicated below:

- District 1 \d1vnxesv0r01\d1design
- District 2 \d2vnxesv0r01\d2public\public
- District 3 \d3vnxesv0r01\D3Public\District 3\PS&E_Section
- District 4 \d4vnxesv0r01\d4public\d4public
- District 5 \d5vnxesv0r01\d5design
- District 6 \d6vnxesv0r01\D6Public\nmdot_public

Furthermore, the Directive will reside in the Department’s external website. The web address is:

http://www.dot.state.nm.us
METROPOLITAN/REGIONAL PLANNING
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GENERAL NOTES:

1. NFPA 1 is recognized as a TITLE II PUBLIC ENTITY UNDER THE AMERICANS WITH DISABILITIES ACT (ADA) OF 1990 (PUBLIC LAW) 101-336. A TITLE II ENTITY IS DEFINED AS ANY STATE OR LOCAL GOVERNMENT ENTITY AND PROHIBITS DISCRIMINATION ON THE BASIS OF DISABILITY. THE ADA EXTENDS THE PROTECTION OF THE REHABILITATION ACT OF 1973 AS AMENDED TO PROTECT PERSONS WITH DISABILITIES IN ALL PUBLIC FACILITIES AND PROGRAMS IRRELEVANT OF THE FUNDING SOURCE.

2. THESE DRAWINGS PROVIDE GUIDANCE FOR COMPLIANCE WITH THE PROPOSED ACCESSIBILITY GUIDELINES FOR PEDESTRIAN FACILITIES IN THE PUBLIC RIGHT-OF-WAY (PROW), JULY 26, 2010, LATEST EDITION. THESE GUIDELINES SHALL APPLY TO ALL NEW AND ALTERED PEDESTRIAN ACCESS ROUTES (PAR).

3. REFER TO CONSTRUCTION PLANS FOR THE DETAILED LAYOUTS AND DETAILS. PEDESTRIAN ACCESS ROUTES (PAR) SHALL BE FIRM, STABLE, AND SLIP RESISTANT. PROVIDE SLIP RESISTANT TEXTURE ON SIDEWALKS AND CURB RAMPS BY BROOMING TRANSVERSELY TO THE SLOPE OF THE RAMPS AND OR PERPENDICULAR TO PEDESTRIAN TRAVEL. EXTEND TEXTURE FULL WIDTH AND LENGTH OF CURB RAMPS INCLUDING SIDE PLATES. DO NOT SCORER OR MAKE GROOVES IN SLOPED SURFACES. SIDEWALKS SHOWN ON STANDARD DETAILS ARE FOR ILLUSTRATIONS ONLY.

4. VERTICAL SURFACE DISCONTINUITIES SHALL BE 0.5 INCHES MAX. VERTICAL DISCONTINUITIES BETWEEN 0.25 INCHES AND 0.5 INCHES SHALL BE BEVELED WITH A SLOPE NOT STEEPER THAN 50 PERCENT. THE BEVEL SHALL BE APPLIED ACROSS THE ENTIRE VERTICAL SURFACE (CONCRETE). A CONSTRUCTION Joint SHALL NOT BE USED TO ATTACH JOINTS OR JOINTS BETWEEN CONCRETE TO OTHER MATERIALS. LONGITUDINAL OPENINGS IN GUIDING KERBS OR JOINTS SHALL BE PLACED SO THAT THE LONG DIMENSION IS PERPENDICULAR TO THE DOMINANT DIRECTION OF TRAVEL.

5. PROVIDE EXTENSION JOINT MATERIAL 0.8 INCHES THICK WHERE CURB RAMPS ADJOIN ANY ROADWAY, SIDEWALK OR STRUCTURE WITH THE TOP OF JOINT KERB OR ADJACENT CURB RAMPS OR GRADE. NON-VALAUX AREAS AT 3 YARD OR FLATTER.

6. CONSTRUCTION COST (BOTTOM OF CURB RAMPS WHERE THE RAMPS MEET STREET LEVEL).

SIDEWALKS

12. SIDEWALKS, AND CURB AND GUTTER CONSTRUCTION SHALL BE IN ACCORDANCE WITH SERIAL 200-01-VI.

13. SIDEWALK CROSS SLOPE IS RECOMMENDED TO BE CONSTRUCTED FOR CROSS SLOPE OF 1% TYPICAL, BUT NOT ROUGHER THAN 1% CROSS SLOPE ON THE PEDESTRIAN ACCESS ROUTE (PAR).

14. SIDEWALK SHALL HAVE A MINIMUM WIDTH OF 5.0 FT. EXCLUSIVE OF THE WIDTH OF THE CURB RETURN. EXCEPTION: WHERE SIDEWALK WIDTH NEEDS TO BE REDUCED TO NO LESS 4.5 FT. PASSING SPACES SHALL BE PROVIDED AT INTERVALS OF 200 FT. MAXIMUM PASSING SPACES SHALL BE 5.0 FT MINIMUM BY 5.0 FT MINIMUM.

15. ANY SIGNS POSTED, UTILITY POLES, FIRE HYDRANTS, TRAFFIC SIGNALS, STREET FURNITURE, AND OTHER OBJECTS SHALL NOT REDUCE THE CLEAR WIDTH TO LESS THAN 4.0 FT.

16. THE CLEAR WIDTH OF PEDESTRIAN ACCESS ROUTES (PAR) WITHIN MEDIANS AND PEDESTRIAN REFUGES IS TO BE 5.0 FT MINIMUM.

CURB RAMPS

17. FOR NEW CONSTRUCTION AND ALTERATIONS, CONSTRUCT CURB RAMPS AND FLARE SLOPES WITH THE FLATTEST SLOPE PRACTICABLE. THE MAXIMUM SLOPE ALLOWABLE IS INDICATED IN NOTE 18 OF THE CURB RAMPS STANDARD DETAILS. SLOPES THAT EXCEED THOSE INDICATED IN THE CURB RAMPS STANDARD DETAILS, OR CONSTRUCTION PLANS, WILL NOT BE ACCEPTED AND WILL BE REJECTED AND RECONSTRUCTED.

18. RUNNING SLOPE OF THE CURB RAMPS SHALL BE 8% MAX (RECOMMENDED) BUT NOT LESS THAN 5% WHEN CONNECTING TO STEEP GRADIENTS. WHEN APPLYING THE 10 FOOT MAX. SLOPE, THE RUNNING SLOPE OF THE CURB RAMPS IS TO BE BEVELED AT 3% TO AVOID CHASING THE SLOPE IRREGULARLY. WHERE CONNECTING TO STEEP GRADIENTS, THE CURB RAMPS WILL BE EXTENDED AS FAR AS POSSIBLE. THE CURB RAMPS WILL BE EXTENDED TO 10 FEET IN LENGTH.


20. CURB RAMPS AND SIDE PLATE LENGTHS ARE VARIABLE AND BASED ON CURB HEIGHT AND THE SIDEWALK SLOPE.


22. CONSTRUCT CURB RAMPS FLUSH TO ADJACENT ROADWAY. GRADE EROSION OF ELEVATIONS AT THE ROAD LINE TO ENSURE POSITIVE DRAINAGE AND PREVENT PONDING. FOR LEVEL TURNS, TURNS BEYOND CURB, ADJUST SLOPES TO PROVIDE POSITIVE DRAINAGE.

23. GRADE BREAKS AT THE TOP AND BOTTOM OF CURB RAMPS SHALL BE BEVELED TO THE CURB LINE AT THE TOP AND 5.0 FT MINIMUM 2.0 FT CLEAR SPACE BEYOND THE CURB FACE, WITHIN THE WIDTH OF THE CROSSWALK AND WHOLLY OUTSIDE THE PARALLEL VEHICLE TRAVEL LANE.

24. ALL SLOPES ARE MEASURED WITH RESPECT TO A LEVEL PLANE. THEREFORE, THE LENGTH OF CURB RAMPS IS NOT SOLELY DEPENDENT ON THE HEIGHT OF CURB RAMP (_FOR EXAMPLE, A 4% CURB DOES NOT NECESSARILY MEAN A RAMP LENGTH OF 6.5 FT OR 3% SLOPE_)

CROSSWALKS

25. PROVIDE A SEPARATE CURB RAMPS FOR EACH MARKED OR UNMARKED CROSSWALK CURB RAMPS LOCATIONS SHALL BE PLACED WITHIN THE WIDTH OF THE MARKED OR UNMARKED CROSSWALK AS SHOWN IN THE CONSTRUCTION PLANS.

DETECTABLE WARNING

26. DETECTABLE WARNING SURFACES (DWS) CONSISTING OF TRUNCATED DOMES SHALL BE USED WHERE CURB RAMPS, BLENDED TRANSITIONS, OR TURNING SPACES ARE AT A FLUSH PEDESTRIAN CONNECTION TO THE STREET OR WHERE THE PEDESTRIAN ACCESS ROUTE LATERIALLYIES A GRADE BREAK, CROSSES A STREET, ALLEY, TRAFFIC ISLAND, MEDIAN, OR PAVED: DETECTABLE WARNING SURFACES (DWS) WILL NOT BE INSTALLED AT RESIDENTIAL DRIVEWAYS.

27. DETECTABLE WARNING SURFACES MUST BE PROVIDED AT THE JUNCTION BETWEEN THE PAR AND COMMERCIAL DRIVEWAYS THAT ARE STOP & YIELD CONTROLLED OR ARE CONTROLLED BY A SIGNAL.

28. DETECTABLE WARNING SURFACES ARE SHOWN IN CONTRACT PLANS AND SHEET NW-001-A12 OF THE STANDARD DRAWINGS.

ACCESSIBLE PEDESTRIAN SIGNALS (APS) AND PEDESTRIAN PUSHBUTTONS

25. FOR ALTERNATION PROJECTS, PROVIDE ACCESS TO EXISTING PEDESTRIAN BUTTONS TO THE REHABILITATION ACT OF 1973 AS AMENDED TO PROTECT PERSONS WITH DISABILITIES IN ALL PUBLIC FACILITIES AND PROGRAMS IRRELEVANT OF THE FUNDING SOURCE.

26. PEDESTRIAN SIGNAL PUSH BUTTONS SHALL COMPLY WITH THE CURRENT EDITION OF THE MANUAL ON UNPLANNED TRAFFIC CONTROL DEVICES (MUTC) AND LOCATED WITHIN A HORIZONTAL REACH OF 8 FT TO 10" AND SHALL BE WITHIN 20 FT TO 40" ABOVE THE SIDEWALK SURFACE.

27. PEDESTRIAN SIGNAL SHALL HAVE A 3FT MINIMUM CLEARANCE TO PROVIDE ACCESS TO PUSH BUTTONS.

ALTERATIONS TO EXISTING FACILITIES - GENERAL NOTES.

ADDITIONS OR ALTERATIONS TO ANY FACILITY SHALL CONFORM TO THE REQUIREMENTS OF THE NEW CONSTRUCTION STANDARDS WITHIN THE ANAG PEDESTRIAN ACCESS STANDARDS AND PROVISIONS 26 AND 27 ON LATEST EDITION. ANY DESIGN / CONSTRUCTION DEVIATION THAT IS LICENSED VIA A VARIANCE OR TECHNICALLY INEFFECTIVE BY THE DEFINITION BELOW SHALL REQUIRE SUBMITAL AND APPROVAL OF AN AGA VARIANCE / PERMITS.

11. EXCEPTION: IN A TRAFFIC MANNER, IF TRAFFIC IS FLOWING ON A SLOW MOVING ROAD, THEN THE TRAFFIC MANNER SHALL BE ADAPTED TO THE MAXIMUM PEDESTRIAN FACILITY THAT IS BEING ALTERED AND CAN BE MORE ACCESSIBLE SHALL BE MADE ACCESSIBLE WITHIN THE SOC OF THE ALTERATION.

12. TECHNICAL INEFFECTIVENESS: MEANS, WITH RESPECT TO AN ALTERATION OF A BUILDING OR A FACILITY, THAT IT HAS LITTLE USELESSNESS OF BEING ACCOMPLISHED BECAUSE EXISTING STRUCTURAL CONDITIONS WHILE REQUIRE REMOVING EXALTED BUILDING OR RELATING A LEAF-BEARING MEMBER WHICH IS AN ESSENTIAL PART OF THE STRUCTURAL FRAMES, OR BECAUSE THEREOF OTHER PHYSICAL OR SITE CONSTRAINTS PREVENT.

13. IN ALTERATIONS WHERE EXISTING PHYSICAL CONSTRAINTS (E.G. BUILDING ELEVATION) THAT WILL BE ALTERED OR MODIFY PEDESTRIAN CROSSINGS A SINGLE DIAGонаL CURB RAMP SHALL BE PERMITTED TO SERVE WITHIN PEDESTRIAN STREET CROSSINGS.

NEW MEXICO DEPARTMENT OF TRANSPORTATION STANFORD ENGINEERING PEDESTRIAN ACCESS ROUTE GENERAL NOTES PEDESTRIAN ACCESS ROUTE GENERAL NOTES 685-001-2 601-1 12
KEYED NOTES

1. TURNING SPACE SHALL HAVE MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2% OR (RECOMMEND 1%). TURNING SPACE SHALL BE 4.5 FT BY 4.5 FT MIN (RECOMMEND 5.0 FT BY 5.0 FT) AT THE TOP OF THE CURB RAMP AND SHALL BE PERMITTED TO OVERLAP OTHER TURNING SPACES AND CLEAR SPACES WHERE THE TURNING SPACE IS CONSTRANDED AT THE BACK OF SIDEWALK. THE TURNING SPACE SHALL BE 4.0 FT MIN BY 5.0 FT MAX. THE 5.0 FT SHALL BE PROVIDED IN THE DIRECTION OF THE RAMP RUN.

2. CROSS SLOPE SHALL BE 2% MAX (RECOMMENDED 1%). EXCEPTION: THE CROSS SLOPE OF CURB RAMPS AT PEDESTRIAN STREET CROSSINGS WITHOUT yield or STOP CONTROL, TRAFFIC SIGNALS DESIGNED FOR THE GREEN PHASE, AND AT MIDBLOCK PEDESTRIAN STREET CROSSING, THE CROSS SLOPE IS PERMITTED TO MATCH STREET OR HIGHWAY GRADE.

3. RUNNING SLOPE OF THE CURB RAMP SHALL BE 3% MAX (RECOMMENDED 1%) BUT SHALL NOT REQUIRE THE RAMP LENGTH TO EXCEED 15.0 FT TO AVOID CHANGING THE SLOPE INCAPABILITY WHEN CONNECTING TO STEEP GRADES. WHEN APPLYING THE 18 FOOT MAX LENGTH, THE RUNNING SLOPE OF THE CURB RAMP SHALL BE EXTENDED AS FLAT AS MAXIMUM EXTENT PRACTICABLE.

4. GRADE BREAKS AT THE TOP AND BOTTOM OF CURB RAMPS RUNS SHALL BE PERPENDICULAR TO THE DIRECTION OF THE RAMP RUN. GRADE BREAKS SHALL NOT BE PERMITTED ON THE SURFACE OF RAMP RUNS AND TURNING SPACE. SURFACE SLOPES THAT MEET AT GRADE BREAKS SHALL BE FLOW.

5. COUNTER SLOPE OF THE GUTTER OR STREET AT THE FOOT OF A CURB RAMP, RUN OR TURNING SPACE SHALL BE 0% MAX.

6. FLARED SIDES ARE TO HAVE A SLOPE OF 10% MAX (RECOMMENDED 8%). MEASURED PARALLEL TO THE BACK OF THE CURB, UNLESS THE FLARED SIDES ARE PROTECTED FROM CROSS TRAVEL BY LANDSCAPING, STREET FURNITURE, CHAINS, FENCING, OR RAILINGS.

NOTES

A. DO NOT SCORE OR MAKE GROOVES IN SLOPED SURFACES. LINES SHOWN ON STANDARD DETAILS ARE FOR ILLUSTRATION ONLY.

B. DETAILS OF THE DETECTABLE WARNING SURFACE ARE SHOWN IN THE CONSTRUCTION PLANS AND SHEET 5-001-085-012 OF THE STANDARD DRAWINGS.

C. IN ALTERATIONS WHERE EXISTING PHYSICAL CONSTRAINTS PREVENT COMPLIANCE TO PROVIDE A CURB RAMP FOR EACH PEDESTRIAN CROSSING A SINGLE DIAGONAL CURB RAMP SHALL BE PERMITTED TO SERVE BOTH PEDESTRIAN STREET CROSSINGS.

D. CONCRETE CURB RAMPS CONSTRUCTED AS PART OF THE CURB RAMP WILL BE CONSIDERED INCIDENTAL TO ITEM NUMBER 830060 AND NO SEPARATE PAYMENT WILL BE MADE.
KEYED NOTES

1. Turning space shall have maximum cross slope and longitudinal slope of 2% (recommended 1.5%). Turning space shall be 4 ft. by 6 ft. min. (recommended 5 ft. by 6 ft.) at the top of the curb ramp and shall be permitted to overlap other turning spaces and clear spaces. Where the turning space is constrained at the back of sidewalk, the turning space shall be 4.5 ft. min by 6 ft. min. The 8 ft. run shall be provided in the direction of the ramp run.

2. Curb slope shall be 2% max (recommended 1.5%). Exception: the cross slope of curb ramps at pedestrian street crossings without yield or stop control, traffic signals designed for the green phase, and at midblock pedestrian street crossing, the curb slope is permitted to match street or highway grade.

3. Running slope of the curb ramp shall be 8% max. (recommended 7%) but shall not require the ramp run to exceed 15 0.3 ft. to avoid chaging the slope inadvertently when connecting to steeper grades, when applying the 15 foot max length, the running slope of the curb ramp shall be extended as flat as maximum extent practicable.

4. Grade breaks at the top and bottom of curb ramps runs shall be perpendicular to the direction of the ramp run. Grade breaks shall not be permitted on the surface of ramp runs and turning space. Surface slopes that meet at grade breaks shall be flush.

5. Counter slope of the gutter or street at the foot of a curb ramp, run, or turning space shall be 8% max.

6. Flared sides are to have a slope of 10% max (recommended 9%) measured parallel to the back of the curb, unless the flared sides are protected from cross travel by landscaping, street furniture, chains, fencing, or railings.

NOTES:

1. Do not score or make grooves in sloped surface. Lines shown on the standard details are for illustration only.

2. Details of the detectable warning finish are shown in the construction plans and sheets 608-001-00 through 001-012 of the standard drawings.

3. In alterations where existing physical constraints prevent compliance to provide a curb ramp for each pedestrian crossing a single diagonal curb ramp shall be permitted to serve both pedestrian street crossings.

4. Concrete header curb constructed as part of the curb ramp will be considered incidental to item number 500504 and no separate payment will be made.

DEPARTMENT OF TRANSPORTATION
STANDARD DRAWING

PARALLEL CURB RAMPS

NEW MEXICO

DRAWING SCALE = NOT TO SCALE

900504

608-001-3

608 3 of 12
KEYED NOTES

1. TURNING SPACE SHALL HAVE MAXIMUM CROSS SLOPE AND LOWEST SLOPE OF 3% (RECOMMENDED, 5%). TURNING SPACE SHALL BE 8'-0" BY 8'-0" MIN (RECOMMENDED 10'-0" BY 10'-0") AT THE TOP OF THE CURB RAMP AND SHALL BE PERMITTED TO OVERLAP OTHER TURNING SPACES AND CLEAR SPACES, WHERE THE TURNING SPACE IS CONSTRUCTED AT THE BACK OF CURBLINE, THE TURNING SPACE SHALL BE 4'-0" MIN BY 4'-0" FT. THE 4'-0" FT. SHALL BE PROVIDED IN THE DIRECTION OF THE RAMP RUN.

2. CROSS SLOPE SHALL BE 1% MAX (RECOMMENDED 1%). EXCEPT FOR THE CROSS SLOPE OF CURB RAMPS AT PEDESTRIAN STREET CROSSINGS WITH/YIELD OR STOP CONTROL, TRAFFIC SIGNALS DESIGNED FOR THE GREEN PHASE, AND AT MEDICAL PEDESTRIAN STREET CROSSING, THE CROSS SLOPE IS PERMITTED TO MATCH STREET OR HIGHWAYGRADE.

3. RUNNING SLOPE OF THE CURB RAMP SHALL BE 0% MIN (RECOMMENDED 5%) BUT SHALL NOT REQUIRE THE RAMP LENGTH TO EXCEED 15'-0" TO AVOID CHANGING THE SLOPE INDEPENDENTLY WHEN CONNECTING TO STEEP GRADUES. WHEN APPLING THE 18 FOOT MAX LENGTH, THE RUNNING SLOPE OF THE CURB RAMP SHOULD BE EXTENDED AS FLAT AS A MAXIMUM EXTENT PRACTICABLE.

4. GRADE BREAKS AT THE TOP AND BOTTOM OF CURB RAMPS RUNS SHALL BE PERPENDICULAR TO THE DIRECTION OF THE RAMP RUN. GRADE BREAKS SHALL NOT BE PERMITTED ON THE SURFACE OF RAMP RUNS AND TURNING SPACE SURFACE SLOPES THAT MEET AT GRADE BREAKS SHALL BE FLUSH.

5. COUNTER SLOPE OF THE GUTTER OR STREET AT THE FOOT OF A CURB RAMP, Run OR TURNING SPACE SHALL BE 5% MAX.

6. FLARED SIDES ARE TO HAVE A SLOPE OF 10% MAX (RECOMMENDED 6%). MEASURED PARALLEL TO THE BACK OF THE CURB, UNLESS THE FLARED SIDES ARE PROTECTED FROM CROSS TRAVEL BY LANDSCAPING, STREET FURNITURE, CHAINS, FENCING, OR RAUNDAGES.

NOTES:

(A) DO NOT REMOVE OR MAKE MODIFICATIONS TO STARTLING SURFACES LINES SHOWN ON STANDARD DETAILS AND ARE FOR ILLUSTRATION ONLY.

(B) DETAILS OF THE DETECTABLE WARNING SURFACES ARE SHOWN IN THE CONSTRUCTION PLANS AND SHEET 908-101-010 OF THE STANDARD DRAWINGS.

(C) IN ALTERATIONS WHERE EXISTING PHYSICAL CONSTRAINTS PREVENT COMPLIANCE TO PROVIDE A CURB RAMP FOR EACH PEDESTRIAN CROSSING A SINGLE DIAGONAL CURB RAMP SHALL BE PERMITTED TO SERVE BOTH PEDESTRIAN STREET CROSSINGS.

(D) CONCRETE CURB CURVES CONSTRUCTED AS PART OF THE CURB RAMP WILL BE CONSIDERED INCIDENTAL TO ITEM NUMBER 808-004 AND NO SEPARATE PAYMENT WILL BE MADE.
KEY NOTES

1. TURNING SPACE SHALL HAVE MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 0.2% (RECOMMEND 1 IN 50). TURNING SPACE SHALL BE 4.5 FT BY 4.5 FT MIN AND 6.0 FT BY 6.0 FT AT THE TOP 30% OF THE CURB RAMP AND SHALL BE PERMITTED TO OVERLAP OTHER TURNING SPACES AND CLEAR SPACES. WHERE THE TURNING SPACE IS CONSTRUCTED AT THE BACK OF SIDEWALK, THE TURNING SPACE SHALL BE 4.5 FT BY 6.0 FT MIN BY 5.0 FT. THE 5.0 FT SHALL BE POSITIONED IN THE DIRECTION OF THE RAMP RUN.

2. CROSS SLOPE SHALL BE 3.0% (RECOMMEND 1 IN 30). EXCEPTION TO THE CROSS SLOPE OF CURB RAMPS AT PEDESTRIAN STREET CROSSINGS WITHOUT YIELD OR STOP CONTROL, TRAFFIC SIGNS DESIGNED FOR THE GREEN PHASE, AND AT MIDBLOCK PEDESTRIAN STREET CROSSINGS, THE CROSS SLOPE IS PERMITTED TO MATCH STREET OR HIGHWAY GRADE.

3. RUNNING SLOPE OF THE CURB RAMP SHALL BE 3.0% MAX (RECOMMENDED 7.0% BUT NOT REQUIRED IF RAMP LENGTH IS EXCEEDED BY 10.0 FT TO AVOID CHASING THE SLOPE INDEPENTLY WHEN CONNECTING TO STEEP GRADINGS. WHEN APPLYING THE 10.0 FT MAX LENGTH, THE RUNNING SLOPE OF THE CURB RAMP SHALL BE EXTENDED AS FLAT AS MAXIMUM PRACTICABLE.

4. GRADE BREAKS AT THE TOP AND BOTTOM OF CURB RAMPS RUNS SHALL BE PERPENDICULAR TO THE DIRECTION OF THE RAMP RUN. GRADE BREAKS SHALL NOT BE PERMITTED ON THE SURFACE OF RAMP RUNS AND TURNING SPACE. SURFACE SLOPES THAT MEET AT GRADE BREAKS SHALL BE FLUSH.

5. COUNTERT SLOPE OF THE GUTTER OR STREET AT THE FOOT OF A CURB RAMP, RUN ON TURNING SPACE SHALL BE 3% MAX.

6. FLARED SIDES ARE TO HAVE A SLOPE OF 10% MAX (RECOMMEND 9%). MEASURED PARALLEL TO THE BACK OF THE CURB, UNLESS THE FLARED SIDES ARE PROTECTED FROM CROSS TRAVEL BY LANDSCAPING, STREET FURNITURE, CHAINS, FENCING, OR RAILINGS.

NOTES:

A. DO NOT SCORE OR MAKE GROOVES IN SLOPED SURFACE LINES SHOWN ON STANDARD DETAILS ARE FOR ILLUSTRATION ONLY.

B. DETAILS OF THE DETECTABLE WARNING SURFACE ARE SHOWN IN THE CONSTRUCTION PLANS AND SHEET BM-001-812 OF THE STANDARD DRAWINGS.

C. IN ALTERNATIVES WHERE EXISTING PHYSICAL CONSTRAINTS PREVENT COMPLIANCE TO PROVIDE A CURB RAMP FOR EACH PEDESTRIAN CROSSING A SINGLE DIAGONAL CURB RAMP SHALL BE PERMITTED TO SERVE BOTH PEDESTRIAN STREET CROSSINGS.

D. CONCRETE HEADER CURBS CONSTRUCTED AS PART OF THE CURB RAMP WILL BE CONSIDERED INCIDENTAL TO ITEM NUMBER 4064A AND NO SEPARATE PAYMENT WILL BE MADE.
KEYE NOTES

1. TURNING SPACE SHALL HAVE MAXIMUM CROSS SLOPE AND 1:15/1:4 Horizontal SLOPE OF 2.5% (RECOMMENDED 1:15). TURNING SPACE SHALL BE 4.5 FT BY 4.5 FT MIN. (RECOMMEND 5.5 FT BY 5.5 FT) AT THE TOP OF THE CURB RAMP AND SHALL BE PERMITTED TO OVERLAP OTHER TURNING SPACES AND CLEAR SPACES WHERE THE TURNING SPACE IS CONFINED TO THE BACK OF SIDEWALK. THE TURNING SPACE SHALL BE 4.5 FT MIN. BY 5.5 FT MIN. THE 5.5 FT SHALL BE PROVIDED IN THE DIRECTION OF THE CURB RUN.

2. CROSS SLOPE SHALL BE 2.5% (RECOMMENDED 1:15). EXCEPTION: THE CROSS SLOPE OF CURB RAMPS AT PEDESTRIAN STREET CROSSINGS WITHOUT YIELD OR STOP CONTROL, TRAFFIC SIGNALS DESIGNED FOR THE GREEN PHASE, AND AT MIDDLE PEDESTRIAN STREET CROSSINGS, THE CROSS SLOPE IS PERMITTED TO MATCH STREET OR HIGHWAY GRADE.

3. RUNNING SLOPE OF THE CURB RAMP SHALL BE 6% MAX. (RECOMMENDED 7.5%) BUT SHALL NOT REQUIRE THE RAMP LENGTH TO EXCEED 12.0 FT TO AVOID CHASING THE SLOPE INDEFINITELY WHEN CONNECTING TO STEEP GRADATIONS. WHEN APPLYING THE 18 FOOT MAX LENGTH, THE RUNNING SLOPE OF THE CURB RAMP SHALL BE EXTENDED AS FLAT AS MAXIMUM DEGREE PRACTICABLE.

4. GRADE BREAKS AT THE TOP AND BOTTOM OF CURB RAMPS RUNS SHALL BE PERPENDICULAR TO THE DIRECTION OF THE RAMPS RUN. GRADE BREAKS SHALL NOT BE PERMITTED ON THE SURFACE OF RAMPS RUNS AND TURNING SPACES SLOPES THAT MEET AT GRADE BREAKS SHALc BE FLUSH.

5. COUNTER SLOPE OF THE GUTTER OR STREET AT THE FOOT OF A CURB RAMP, RUN OR TURNING SPACE SHALL BE 3% MAX.

6. FLARED SIDES ARE TO HAVE A SLOPE OF 10% MAX. (RECOMMENDED 1:10). MEASURED PARALLEL TO THE BACK OF THE CURB. UNLESS THE FLARED SIDES ARE PROTECTED FROM CROSS TRAVEL BY LANDSCAPING, STREET FURNITURE, CHAINS, FENCING, OR RAILINGS.

NOTES:

A. 5"-6HT OR MAKE GROOVES IN SLOPED SURFACE. LINES SHOWN IN STANDARD DETAILS ARE FOR ILLUSTRATION ONLY.

B. DETAILS OF THE DETECTABLE WARNING SURFACE ARE SHOWN IN THE CONSTRUCTION PLANS AND SHEET 608-001-B10 OF THE STANDARD DRAWINGS.

C. IN ALTERATIONS WHERE EXISTING PHYSICAL CONSTRAINTS PREVENT COMPLIANCE TO PROVIDE A CURB RAMP FOR EACH PEDESTRIAN CROSSING A SINGLE DIAGONAL CURB RAMP SHALL BE PERMITTED TO SERVE BOTH PEDESTRIAN STREET CROSSINGS.

D. CONCRETE CURB RAMPS CONSTRUCTED AS PART OF THE CURB RAMP WILL BE CONSIDERED INCIDENTAL TO ITEM NUMBER 608000 AND NO SEPARATE PAYMENT WILL BE MADE.
KEYED NOTES

1. TURNING SPACE SHALL HAVE MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2% (RECOMMEND 1%). TURNING SPACE SHALL BE 4 FT BY 4 FT MIN (RECOMMEND 6 FT BY 6 FT) AT THE TOP OF THE CURB RAMP AND SHALL BE PERMITTED TO OVERLAP OTHER TURNING SPACES AND CLEAR SPACES WHERE THE TURNING SPACE IS RESTRICTED IN THE BACK OF SIDEWALK. THE TURNING SPACE SHALL BE 4 FT MIN BY 8 FT MIN. THE 6 FT SHALL BE PROVIDED IN THE DIRECTION OF THE RAMP RUN.

2. CROSS SLOPE SHALL BE 2.5% MAX (RECOMMEND 1%). EXCEPTION: THE CROSS SLOPE OF CURB RAMPS AT PEDESTRIAN STREET CROSSING WITHOUT YIELD OR STOP CONTROL, TRAFFIC SIGNALS, OR GREEN PHASE, AND AT MONOBLOCK PEDESTRIAN STREET CROSSING, THE CROSS SLOPE IS PERMITTED TO MATCH STREET OR HIGHWAY GRADE.

3. RUNNING SLOPE OF THE CURB RAMP SHALL BE 8.9% MAX (RECOMMEND 7%). BUT SHALL NOT REQUIRE THE RAMP LENGTH TO EXCEED 15 FT TO AVOID CHANGING THE SLOPE INDENTICELY WHEN CONNECTING TO STEEP GRADES. WHEN APPLYING THE 15 FOOT MAX LENGTH, THE RUNNING SLOPE OF THE CURB RAMP SHALL BE EXTENDED AS FLAT AS MAXIMUM EXTENT PRACTICABLE.

4. GRADE BREAKS AT THE TOP AND BOTTOM OF CURB RAMPS RUNS SHALL BE PERPENDICULAR TO THE DIRECTION OF THE RAMPS RUN AND TURNING SPACE. SURFACE SLOPES THAT MEET AT GRADE BREAKS SHALL BE FLUSH.

5. COUNTER SLOPE OF THE DUTTER OR STREET AT THE FOOT OF A CURB RAMP, RUN OR TURNING SPACE SHALL BE 9% MAX.

6. PLANDED SIDES ARE TO HAVE A SLOPE OF 10% MAX (RECOMMEND 8%) MEASURED PARALLEL TO THE BACK OF THE CURB. UNLESS THE PLANED SIDES ARE PROTECTED FROM CROSS TRAVEL BY LANDSCAPING, STREET FURNITURE, CHAINS, FENCING, OR OTHERS.

NOTES:

A. DO NOT SCORE OR MAKE GROOVES IN SLOPED SURFACE LINES SHOWN ON STANDARD DETAILS ARE FOR ILLUSTRATION ONLY.

B. DETAILS OF THE DETECTABLE WARNING SURFACE ARE SHOWN IN THE CONSTRUCTION PLANS AND SHEET DWG-1-011-012 OF THE STANDARD DRAWING.

C. IN ALTERATIONS WHERE EXISTING PHYSICAL CONSTRAINTS PREVENT COMPLIANCE TO PROVIDE A CURB RAMP FOR EACH PEDESTRIAN CROSSING A SINGLE DIAGONAL CURB RAMP SHALL BE PERMITTED TO SERVE BOTH PEDESTRIAN STREET CROSSINGS.

D. CONCRETE HEADER CURBS CONSTRUCTED AS PART OF THE CURB RAMP WILL BE CONSIDERED ACCIDENTAL TO ITEM NUMBER 59804 AND NO SEPARATE PAYMENT WILL BE MADE.
KEYED NOTES

1. TURNING SPACE SHALL HAVE MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 3%. TURNING SPACE SHALL BE 4.0 FT BY 4.0 FT MIN (RECOMMEND 5.0 FT BY 5.0 FT) AT THE TOP OF THE CURB RAMP AND SHALL BE PERMITTED TO OVERLAP OTHER TURNING SPACES AND CLEAR SPACES WHERE THE TURNING SPACE IS CONSTRAINED AT THE BACK OF SIDEWALK. THE TURNING SPACE SHALL BE 4.0 FT MIN BY 5.0 FT MAX. THE 5.0 FT SHALL BE PROVIDED IN THE DIRECTION OF THE RAMP RUN.

2. CROSS SLOPE SHALL BE 2% MAX (RECOMMENDED 1%). EXCEPTION: THE CROSS SLOPE OF CURB RAMPS AT PEDESTRIAN STREET CROSSING WITHOUT YIELD OR STOP CONTROL, TRAFFIC SIGNALS DESIGNED FOR THE GREEN PHASE, AND AT INTERSECTIONS PEDESTRIAN STREET CROSSING. THE CROSS SLOPE IS PERMITTED TO MATCH STREET OR HIGHWAY Grade.

3. RUNNING SLOPE OF THE CURB RAMP SHALL BE 8% MAX (RECOMMENDED 7%). BUT SHALL NOT REQUIRE THE RAMP LENGTH TO EXCEED 15.5 FT TO AVOID CHANGING THE SLOPE INDEFINITELY WHEN CONNECTING TO STEEP GRADES. WHEN APPLYING THE 15 FOOT MAX LENGTH, THE RUNNING SLOPE OF THE CURB RAMP SHALL BE EXTENDED AS FLAT AS MAXIMUM EXTENT PRACTICAL.

4. GRADE BREAKS AT THE TOP AND BOTTOM OF CURB RAMPS RUNS SHALL BE PERPENDICULAR TO THE DIRECTION OF THE RAMP RUN. GRADE BREAKS SHALL NOT BE PERMITTED ON THE SURFACE OF RAMP RUNS AND TURNING SPACE. SURFACE SLOPES THAT MEET AT GRADE BREAKS SHALL BE FLUSH.

5. COUNTER SLOPE OF THE GUTTER OR STREET AT THE FOOT OF A CURB RAMP RUN OR TURNING SPACE SHALL BE 5% MAX.

6. FLARED SIDES ARE TO HAVE A SLOPE OF 10% MAX (RECOMMENDED 8%), MEASURED PARALLEL TO THE BACK OF THE CURB. UNLESS THE FLARED SIDES ARE PROTECTED FROM CROSS TRAVEL BY LANDSCAPING, STREET FURNITURE, CHAINS, FENCING, OR RAILINGS.

NOTES:

A. DO NOT SCORE OR MAKE GROOVES IN SLOPED SURFACE. LINES SHOWN ON STANDARD DETAILS ARE FOR ILLUSTRATION ONLY.

B. DETAILS OF THE DETECTABLE WARNING SURFACE ARE SHOWN IN THE CONSTRUCTION PLANS AND SHEET 69A-601-713 OF THE STANDARD DRAWINGS.

C. IN ALTERATIONS WHERE EXISTING PHYSICAL CONSTRAINTS PREVENT COMPLIANCE TO PROVIDE A CURB RAMP FOR EACH PEDESTRIAN CROSSING A SINGLE DIAGONAL CURB RAMP SHALL BE PERMITTED TO SERVE BOTH PEDESTRIAN STREET CROSSINGS.

D. CONCRETE HEADER CURBS CONSTRUCTED AS PART OF THE CURB RAMP WILL BE CONSIDERED INCIDENTAL TO ITEM NUMBER 80805 AND NO SEPARATE PAYMENT WILL BE MADE.
STAIRWAY REQUIREMENTS:
1. Stairways shall be 4 feet wide minimum between handrails.
2. All steps on a flight of stairs shall have uniform riser heights and uniform tread depth. Risers shall be 4 inches (100 mm) minimum, and treads shall be 11 inches (279 mm) maximum. Treads shall be 8 inches (203 mm) minimum measured from riser to riser.
3. Open risers shall not be permitted.
4. Stair treads shall be stable, firm, and slip resistant.
5. The radius of curvature at the leading edge of the tread shall be 1 inch (25 mm); maximum nosings that project beyond risers shall have the underside of the landing edge curved or beveled. Risers shall be permitted to slope under the tread at an angle of 3 inches (76 mm) maximum from the vertical, or nosings shall be 1 inch (25 mm) maximum beyond the tread below.
6. Handrails shall be provided on both sides of stairs.
7. Outdoor stairs and outdoor approaches to stairs shall be designed so that water will not accumulate on walking surfaces.

HANDRAIL REQUIREMENTS:
1. Handrails shall be provided on both sides of stairs and ramps.
2. Handrails shall be continuous within the full length of each stair flight or ramp run. Inside handrails on switchback or doored stairs or ramps shall be continuous between flights or runs.
3. Top gripping surfaces of handrails shall be 34 inches (864 mm) minimum and 38 inches (965 mm) maximum vertically above stair nosings and ramp surfaces. Handrails shall be at a consistent height above stair nosings and ramp surfaces.
4. Clear space between handrail and wall shall be 1 inch (25 mm) minimum.
5. Gripping surfaces shall be continuous without interruption by new posts, other construction elements, or obstructions.
6. Handrails, handrail brackets or balusters attached to the bottom surface of the handrail, shall not be considered obstructions provided they comply with the following criteria:
   a. Not more than 20 percent of the handrail length is obstructed.
   b. Horizontal projections beyond the sides of the handrail occur in 2 inches (50 mm) minimum below the bottom of the handrail and.
   c. Edges have 1 inch (25 mm) minimum radius
7. Handrails and any wall or other surface adjacent to them shall be free of any sharp or abrasive elements. Edges shall have 1 inch (25 mm) minimum radius.
8. Handrails shall not rotate within their fittings.
9. Handrails for stairs and ramps shall have extensions.
   Exception: Extensions are not required for continuous handrails at the inside turn of stairs and ramps.
10. In alterations, full extensions of handrails shall not be required because such extensions would be hazardous or impossible due to plan configuration.
11. Ramp handrails shall extend horizontally 12 inches (305 mm) minimum beyond of ramp runs such extension shall return to wall guard or the walking surface or shall be continuous to the handrail of an adjacent ramp run.
12. At the top of a stair flight handrails shall extend horizontally above the landing for 12 inches (305 mm) minimum, extending directly above the first treads nosing. Such extensions shall return to a wall, or the walking surface, or shall be continuous to the handrail of an adjacent stair flight.
13. At the bottom of the stair flight handrails shall extend at the slope of the stair flight for a horizontal distance at least equal to the tread depth beyond the last riser nosing. Such extensions shall return to a wall, guard, or the landing surface, or shall be continuous to the handrail of an adjacent stair flight.
### Accessible Passenger Loading Zone Requirements:

1. **Passenger Loading Zones** should be provided at a 6-inch (152mm) wide access aisle adjacent and parallel to a vehicle pull-up space. Accessible passenger loading zones shall be at the same level as the vehicle pull-up space they serve.

2. **Accessibility** shall be part of the accessible route to the building or facility entrance, and marked to discourage parking.

3. **Vehicle pull-up spaces in accessible passenger loading zones** shall have surface slopes not steeper than 1:12. Accessible passenger loading zones shall be at the same level as the vehicle pull-up space they serve.

4. **Vertical clearance** of 114 inches (2900mm) minimum shall be provided at accessible passenger loading zones and along vehicle access routes to such areas from site entrances.

5. Each accessible passenger loading zone shall be identified by a sign on a post. Signs shall include the international symbol of accessibility.

### Ramp Requirements:

1. **Ramp runs shall have a running slope greater than 1:12 and not steeper than 1:12.** The exception shall be 1:4 for ramps in or at existing buildings or facilities that are not provided with accessible routes.

2. **Ramps shall have a running slope not steeper than 1:12.** Exemptions shall be provided for ramps in or at existing buildings or facilities that are not provided with accessible routes.

### Table for Existing Sites, Buildings, and Facilities:

<table>
<thead>
<tr>
<th>Slope</th>
<th>Maximum Rise</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steeper than 1:12 but not steeper than 1:8</td>
<td>3 inches (76mm)</td>
</tr>
<tr>
<td>Steeper than 1:8 but not steeper than 1:4</td>
<td>2 inches (51mm)</td>
</tr>
<tr>
<td>Steeper than 1:4</td>
<td>1 inch (25mm)</td>
</tr>
</tbody>
</table>

### Dimensions of Parking Spaces:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Width</td>
<td>28 inches (711mm)</td>
</tr>
<tr>
<td>Minimum</td>
<td>20 inches (508mm)</td>
</tr>
<tr>
<td>Maximum</td>
<td>36 inches (914mm)</td>
</tr>
</tbody>
</table>

### Ramp Location:

- **Curb ramp** required, location shall be determined by the building or site plan.
- **Optional curb ramp location** is shown.

### Ramp Type:

- **Transit stop requirements** should be located so that there is a level and stable surface for boarding vehicles and pedestrians with disabilities.

- **Locating transit stops** at signalized intersections increases the usability for pedestrians with disabilities.

- **Williams lift bollards** are installed at transit stops, they must not obstruct the clear space at boarding and allowing areas or reduce the width of the transit stop area.

- **Transit stops** shall comply with Provisions Section 5 in 308 transit stops and transit shelters.

### Note 9:

- The international symbol of accessibility can be clearly visible on the space or occupied.
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Appendix B

Elements of 2011 Proposed PROW Guidelines that Apply to Curb Ramps, Crosswalks, and Sidewalks
### Elements of 2011 Proposed PROW Guidelines that Apply to Curb Ramps, Crosswalks, and Sidewalks

**Table B-1: Summary of Chapter R2 – Scoping Requirements**

<table>
<thead>
<tr>
<th>Chapter/Section</th>
<th>Element</th>
<th>Summary of Proposed Guideline</th>
</tr>
</thead>
</table>
| R2              | R2 - Scoping Requirements | Required to comply with R302:  
• Within sidewalks and pedestrian circulation paths located in public right-of-way  
• Connecting to accessible elements, spaces, facilities and accessible routes  
• Within pedestrian street crossings, including medians and pedestrian refuge islands, and pedestrian at-grade rail crossings  
• Connecting departure and arrival sidewalks  
• Within overpasses, underpasses, bridges, and similar structures that contain pedestrian circulation paths |
| R204            | Pedestrian Access Routes | Required to comply with R302:  
• Within sidewalks and pedestrian circulation paths located in public right-of-way  
• Connecting to accessible elements, spaces, facilities and accessible routes  
• Within pedestrian street crossings, including medians and pedestrian refuge islands, and pedestrian at-grade rail crossings  
• Connecting departure and arrival sidewalks  
• Within overpasses, underpasses, bridges, and similar structures that contain pedestrian circulation paths |
| R206            | Pedestrian Street Crossings | Required to comply with R306 |
| R207            | Curb Ramps and Blended Transitions | Required to comply with R304:  
• Shall connect pedestrian access routes at each pedestrian street crossing  
• Ramp (excluding flared sides) or blended transition shall be contained wholly within width of pedestrian street crossing served  
• In alterations where existing physical constraints prevent one ramp for each crossing, a single diagonal curb ramp can serve both crossings |
| R208            | Detectable Warning Surfaces | Required to comply with R305:  
• Curb ramps and blended transitions at pedestrian street crossings  
• Pedestrian refuge islands  
• Pedestrian at-grade rail crossings not located within a street or highway  
• Boarding platforms at transit stops for buses and rail vehicles where the edges of the boarding platform are not protected by screens or guards  
• Boarding and alighting areas at sidewalk or street level transit stops for rail vehicles where side of the boarding and alighting areas facing rail vehicles is not protected by screens or guards.  
Not required at pedestrian refuge islands that are cut-through at street level and less than 6 feet in length in direction of pedestrian travel. |
<p>| R209            | Accessible Pedestrian Signals and Pedestrian Pushbuttons | Where pedestrian signals are provided at pedestrian street crossings, they shall include accessible pedestrian signals and pedestrian pushbuttons complying with sections 4E.08 through 4E.13 of the MUTCD. Shall comply when signal controller and software are altered, or signal head is replaced. |
| R210            | Protruding Objects | Required to comply with R402. Cannot reduce the clear width required for pedestrian access routes. |</p>
<table>
<thead>
<tr>
<th>Chapter/Section</th>
<th>Element</th>
<th>Summary of Proposed Guideline</th>
</tr>
</thead>
<tbody>
<tr>
<td>R213</td>
<td>Transit Stops and Transit Shelters</td>
<td>Required to comply with R308.</td>
</tr>
</tbody>
</table>

* Not addressed in ADAAG, or differs from ADAAG

### Table B-2: Summary of Chapters R3 and R4 Technical Requirements

<table>
<thead>
<tr>
<th>Chapter/Section</th>
<th>Element</th>
<th>Summary of Proposed Guideline</th>
</tr>
</thead>
</table>
| R3              | R302 - Pedestrian Access Routes | R302.2 Components. Pedestrian access routes shall consist of one or more of:  
- Sidewalks and other pedestrian circulation paths, or portion of, complying with R302.3 through R302.7  
- Pedestrian street crossings and at-grade rail crossings complying with R302.3 through R302.7, and R306  
- Pedestrian overpasses and underpasses and similar structures complying with R302.3 through R302.7  
- Curb ramps and blended transitions complying with R302.7 and R304  
- Ramps complying with R407  
- Elevators complying with sections 407 or 408 of Appendix D to 36 CFR part 1191  
- Platform lifts complying with section 410 of Appendix D to 36 CFR part 1191  
- Doors, doorways, and gates complying with section 404 of Appendix D to 36 CFR part 1191 |
|                 | Continuous Width – In general* | R302.3 Minimum Continuous Width: 4 feet  
(2004 ADAAG, minimum 3 feet; allowed to be reduced to 32 inches for a length of 24 inches maximum provided that reduced width segments are separated by segments that are minimum 48 inches long and 36 inches wide) |
|                 | Clear Width - Medians and Pedestrian Refuge Islands* | R302.3.1 Medians and Pedestrian Refuge Islands  
Minimum: 5 feet  
(2004 ADAAG, minimum clear width is not defined differently for medians/islands, thus minimum: 3 feet) |
|                 | Clear Width - Passing Spaces* | R302.4 Passing Spaces - required where route width is less than 5 feet  
Minimum: 5 feet by 5 feet, at intervals of maximum 200 feet  
<table>
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<tr>
<th>Chapter/Section</th>
<th>Element</th>
<th>Summary of Proposed Guideline</th>
</tr>
</thead>
</table>
| Grade (Slope)*  | R302.5 Grade | • In general, maximum: 5 percent  
• Pedestrian access routes contained within street or highway right-of-way (except street crossings) can be general grade established for adjacent street or highway  
• Pedestrian street crossings, maximum: 5 percent  
(2004 ADAAG only addressed in general, with no allowance for street slope) |
| Cross Slope*    | R302.6 Cross Slope | • In general, maximum: 2 percent  
• Pedestrian street crossings without yield or stop control, maximum: 5 percent  
• Midblock crossings can equal street or highway grade  
(2004 ADAAG only addressed in general, with no allowance for street slope) |
| Surfaces – In general | R302.7 Surfaces.  
Surfaces of pedestrian access routes and elements and spaces required to comply with R302.7 that connect to pedestrian access routes shall be firm, stable, and slip resistant |
| Surfaces – Vertical Alignment* | R302.7.1 Vertical Alignment | • Shall be generally planar within pedestrian access routes.  
• Grade breaks shall be flush.  
• At rail crossings: outer edges: level and flush with top of rail  
• At rail crossings: between rails: aligned with top of rail  
(Not addressed in 2004 ADAAG) |
| Surfaces – Vertical Surface Discontinuities | R302.7.2 Vertical Surface Discontinuities | • Maximum: 0.5 inch  
• Between 0.25-0.5 inch, shall be beveled with maximum 50 percent slope |
| Surfaces – Horizontal Openings | R302.7.3 Horizontal Openings | • Maximum: 0.5 inch  
• Elongated openings shall be placed so that long dimension is perpendicular to dominant direction of travel |
| Surfaces – Flange Way Gaps at Pedestrian At-Grade Rail Crossings | R302.7.4 Flange Way Gaps | • Maximum 2.5 inches on non-freight rail track  
• Maximum 3 inches on freight rail track  
(2004 ADAAG did not make an allowance for freight rail track) |
| R3 R304 - Curb Ramps and Blended Transitions | General* | Advisory R304.1 defines perpendicular, parallel, and combination ramps, as well as blended transitions. Perpendicular can be provided where sidewalk is at least 12 feet wide, parallel where at least 4 feet wide, and combination at least 6 feet wide.  
(2004 ADAAG only addressed perpendicular and diagonal ramps) |
<table>
<thead>
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</tr>
</thead>
</table>
| Perpendicular Curb Ramps – Turning Space at Top of Ramp* | R304.2.1 Turning Space  
• Minimum: 4 feet by 4 feet  
• Shall be permitted to overlap other turning spaces and clear spaces  
• Where constrained by back-of-sidewalk: minimum: 4 feet by 5 feet, with 5-foot dimension in direction of ramp run (In 2004 ADAAG, minimum: 3 feet by 3 feet, at least as wide as curb ramp. In alterations, allowed instead of top landing flares with maximum slope 1:12 (8.3 percent)) | |
| Perpendicular Curb Ramps – Ramp Running Slope* | R304.2.2 Running Slope  
• Minimum: 5 percent  
• Maximum: 8.3 percent  
(2004 ADAAG did not indicate minimum running slope, and permitted in existing sites, buildings, and facilities, to have running slopes steeper than 1:12 (8.3%) complying with below where such slopes are necessary due to space limitations:  
• 8.3%-10% for rise up to 6 inches  
• 10%-12.5% for rise up to 3 inches) | |
| Perpendicular Curb Ramps – Ramp Running Slope Direction in Relation to Curb* | R304.2.2 Running Slope  
Shall cut through or be built up to curb at right angles or meet gutter grade break at right angles where curb is curved (Not addressed for perpendicular ramps in 2004 ADAAG; however required diagonal or corner type curb ramps with returned curbs or other well-defined edges to have edges parallel to direction of pedestrian flow.) | |
| Perpendicular Curb Ramps – RAMP RUNNING SLOPE DIRECTION in RELATION to Curb | R304.2.2 Running Slope  
Shall cut through or be built up to curb at right angles or meet gutter grade break at right angles where curb is curved | |
| Perpendicular Curb Ramps – Ramp Length* | R304.2.2 Running Slope  
Maximum: 15 feet (No maximum length for curb ramps specified in 2004 ADAAG, but allowed ramps in general to rise up to 30 inches, which translates to 30 feet for 8.3% slope, longer for a shallower slope) | |
| Perpendicular Curb Ramps – Turning Space Running Slope* | R304.2.2 Running Slope  
Maximum: 2 percent (2004 ADAAG did not indicate running slope for curb ramp turning areas, but allowed maximum 1:48 (2.08%) for landing areas for other types of ramps) | |
| Perpendicular Curb Ramps – Flared Sides Slope | R304.2.3 Flared Sides  
Where a pedestrian circulation path crosses the curb ramp, maximum: 10 percent, measured parallel to the curb line | |
<table>
<thead>
<tr>
<th>Chapter/Section</th>
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</tr>
</thead>
</table>
|                | Parallel Curb Ramps – Turning Space at Bottom of Ramp – General* | R304.3.1 Turning Space  
• Shall be provided at the bottom of the curb ramp  
• Permitted to overlap other turning spaces and clear spaces  
• Minimum: 4 feet by 4 feet  
• Where constrained by 2 or more sides: minimum: 4 feet by 5 feet, with 5-foot dimension in direction of pedestrian street crossing  
(2004 ADAAG did not address parallel curb ramps; however, for ramps in general, required landing areas at least as wide as widest ramp run leading to landing with minimum 5 feet clear length.) |
|                | Parallel Curb Ramps – Ramp Running Slope* | R304.3.2 Running Slope  
• Minimum: 5 percent  
• Maximum: 8.3 percent  
(2004 ADAAG did not indicate minimum running slope, and did not address parallel curb ramps. Permitted in existing sites, buildings, and facilities, to have running slopes steeper than 1:12 (8.3%) complying with below where such slopes are necessary due to space limitations:  
• 8.3%-10% for rise up to 6 inches  
• 10%-12.5% for rise up to 3 inches) |
|                | Parallel Curb Ramps – Ramp Running Slope Direction in Relation to Curb* | R304.3.2 Running Slope  
Shall be in-line with the direction of sidewalk travel  
(Not in 2004 ADAAG) |
|                | Parallel Curb Ramps – Ramp Length* | R304.3.2 Running Slope  
Maximum: 15 feet  
(No maximum length for curb ramps specified in 2004 ADAAG, but allowed ramps in general to rise up to 30 inches, which translates to 30 feet for 8.3% slope, longer for a shallower slope) |
|                | Parallel Curb Ramps – Turning Space Running Slope* | R304.3.2 Running Slope  
Maximum: 2 percent  
(2004 ADAAG did not indicate running slope for curb ramp turning areas, but allowed maximum 1:48 (2.08%) for landing areas for other types of ramps) |
|                | Blended Transitions – Running Slope | R304.4.1 Running Slope  
Maximum: 5 percent  
(2004 ADAAG did not address blended transitions) |
|                | Common Requirements – General | R304.5 Common Requirements. Curb ramps and blended transitions shall comply with R304.5. |
|                | Common Requirements – Width* | R304.5.1 Width  
Minimum: 4 feet (excluding any flared sides)  
(2004 ADAAG: minimum 3 feet) |
<table>
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<tr>
<th>Chapter/Section</th>
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</tr>
</thead>
</table>
| Common Requirements – Grade Breaks* | R304.5.2 Grade Breaks                                                   | • Shall be perpendicular to direction of ramp run at top and bottom of curb ramp runs  
• Not permitted on ramp runs and turning spaces  
• Surface slopes that meet at grade breaks shall be flush.  
*(2004 ADAAG did not address direction, flush meeting, advised against compound slopes)* |
| Common Requirements – Cross Slope | R304.5.3 Cross Slope                                                   | • Maximum: 2 percent  
• At pedestrian street crossings without yield or stop control and at midblock pedestrian street crossings, permitted to equal the street or highway grade  
*(2004 ADAAG only addressed in general, allowed up to 1:48 (2.08%), with no allowance for street slope)* |
| Common Requirements – Counter Slope - of Gutter or Street at Foot of Curb Ramp Runs, Blended Transitions, and Turning Spaces | R304.5.4 Counter Slope                                                   | Maximum: 5 percent                                                                                                                                                                                                                       |
| Common Requirements – Clear Space - Beyond the Bottom Grade Break* | R304.5.5 Clear Space                                                   | Minimum: 4 feet by 4 feet, provided within width of pedestrian street crossing and wholly outside parallel vehicle travel lane  
*(2004 ADAAG: Curb ramps and flared sides shall be located to not project into vehicular traffic lanes, parking spaces, or parking access aisles. Curb ramps at marked crossings shall be wholly contained within markings, excluding flared sides. Diagonal curb ramps require minimum 4 feet by 4 feet. Diagonal ramps with flares require with segment of curb 24 inches long minimum located on each side of curb ramp and within marked crossing)* |
<p>| R3 | R305 - Detectable Warning Surfaces                                      | R305.1.3 Contrast                                                      | Shall contrast visually with adjacent gutter, street or highway, or pedestrian access route surface, either light-on-dark or dark-on-light                                                                                     |</p>
<table>
<thead>
<tr>
<th>Chapter/Section</th>
<th>Element</th>
<th>Summary of Proposed Guideline</th>
</tr>
</thead>
</table>
| Size*           | R305.1.4 Size | Depth: Minimum: 2 feet in direction of pedestrian travel Width:  
|                 |          | • At curb ramps and blended transitions, shall extend full width of ramp run (perpendicular ramp), blended transition, or turning space (parallel ramp)  
|                 |          | • At pedestrian at-grade rail crossings not located within street or highway, shall extend full width of crossing  
|                 |          | • At boarding platforms for buses and rail vehicles, shall extend full length of public use areas of platform  
|                 |          | • At boarding and alighting areas at sidewalk or street level transit stops for rail vehicles, shall extend full length of transit stop (2004 ADAAG specified, at curb ramps, either the full depth of the curb ramp or 24 inches deep minimum measured from the back of the curb on the ramp surface. Did not address at-grade rail crossings or street-level transit stops) |
| Placement – Perpendicular Curb Ramps* | R305.2.1 Perpendicular Curb Ramps | Where ends of bottom grade break are:  
|                 |          | • in front of back of curb, shall be placed at the back of curb  
|                 |          | • behind back of curb and distance from either end of bottom grade brake to back of curb is 5 feet or less, shall be placed on ramp run within one dome spacing of bottom grade break  
<p>|                 |          | • behind back of curb and distance from either end of bottom grade brake to back of curb is over 5 feet, shall be placed on lower landing at back of curb (2004 ADAAG indicated, in reference to depth measurement, placement at back of curb, without variation) |
| Placement – Parallel Curb Ramps* | R305.2.2 Parallel Curb Ramps | Shall be placed on turning space at flush transition between street and sidewalk (2004 ADAAG indicated, in reference to depth measurement, placement at back of curb; did not address parallel ramps) |
| Placement – Blended Transitions* | R305.2.3 Blended Transitions | Shall be placed at back of curb. Where level pedestrian street crossings are provided (e.g. raised pedestrian street crossings, depressed corners), shall be placed at flush transition between street and sidewalk (2004 ADAAG indicated, in reference to depth measurement, placement at back of curb; did not address blended transitions or level pedestrian crossings) |
| Placement – Pedestrian Refuge Islands – Cut-Through* | R305.2.4 Pedestrian Refuge Islands | Shall be placed at edges of pedestrian island, separated by 2 feet minimum length of surface without detectable warnings (2004 ADAAG did not address pedestrian island cut-throughs) |</p>
<table>
<thead>
<tr>
<th>Chapter/Section</th>
<th>Element</th>
<th>Summary of Proposed Guideline</th>
</tr>
</thead>
</table>
|                 | Placement – Pedestrian At-Grade Rail Crossings – Not Located Within a Street or Highway* | R305.2.5 Pedestrian At-Grade Rail Crossings  
Shall be placed on each side of rail crossing  
- Edge nearest rail crossing shall be 6 to 15 feet from centerline of nearest rail  
- Where pedestrian gates are provided, detectable warning surfaces shall be placed on side of gates opposite rail.  
*(2004 ADAAG did not address at-grade rail crossings)* |
|                 | Placement – Boarding Platforms for Buses and Rail Vehicles | R305.2.6 Boarding Platforms  
Shall be placed at boarding edge of platform |
|                 | Placement – Boarding and Alighting Areas at Sidewalk or Street Level Transit Stops for Rail Vehicles* | R305.2.7 Boarding and Alighting Areas  
Shall be placed at the side of boarding and alighting area facing rail vehicles  
*(2004 ADAAG did not address street-level transit stops)* |
| R3              | R306 - Pedestrian Street Crossings |  |
|                 | Roundabouts – Separation Where Sidewalks Are Flush Against Curb And Pedestrian Street Crossing is Not Intended* | R306.3.1 Separation  
- A continuous and detectable edge treatment shall be provided along street side of sidewalk.  
- Detectable warning surfaces shall not be used for edge treatment.  
- Where chains, fencing, or railings are used for edge treatment, shall have bottom edge 15 inches maximum above sidewalk  
*(2004 ADAAG did not address roundabouts)* |
|                 | Pedestrian Activated Signals at Roundabouts with Multi-Lane Crossings, and Roundabouts and Other Signalized Intersections with Channelized Turn Lanes* | R306.3.2 Pedestrian Activated Signals  
R306.4 Channelized Turn Lanes at Roundabouts  
R306.5 Channelized Turn Lanes at Other Signalized Intersections  
- Shall comply with R209  
- At roundabouts: Shall be provided for each multi-lane segment of each pedestrian street crossing, including splitter island  
- At roundabouts: Shall clearly identify which pedestrian street crossing segment signal serves  
*(2004 ADAAG did not address roundabouts or channelized tune lanes)* |
| R3              | R308 - Transit Stops and Transit Shelters |  |
|                 | Boarding and Alighting Areas - Dimensions | R308.1.1.1 Dimensions  
- Parallel to street or highway, minimum 5 (60 inches) feet  
- Perpendicular to curb or street or highway edge, minimum 8 feet (96 inches) |
<table>
<thead>
<tr>
<th>Chapter/Section</th>
<th>Element</th>
<th>Summary of Proposed Guideline</th>
</tr>
</thead>
</table>
|                 | Boarding and Alighting Areas - Grade | R308.1.1.2 Grade  
- Parallel to street or highway, the same as street or highway, to extent practicable  
- Perpendicular to street or highway, maximum 2 percent  
*(2004 ADAAG allows up to 1:48 (2.08 percent) perpendicular to street highway)* |
|                 | Boarding Platforms - Platform and Vehicle Floor Coordination | R308.1.2.1 Platform and Vehicle Floor Coordination  
Shall be positioned to coordinate with vehicles in accordance with applicable requirements in 49 CFR parts 37 and 38 |
|                 | Boarding Platforms - Slope | R308.1.2.2 Slope  
- Maximum 2 percent in any direction  
- Where boarding platforms serve vehicles operating on existing track or existing street or highway, slope of platform parallel to track or street or highway is permitted to be equal to grade of track or street or highway  
*(2004 ADAAG allows up to 1:48 (2.08 percent))* |
|                 | Common Requirements - Surfaces | R308.1.3.1 Surfaces  
Shall comply with R302.7 |
|                 | Common Requirements - Connection | R308.1.3.2 Connection  
Shall be connected to streets, sidewalks, or pedestrian circulation paths by compliant pedestrian access routes |
|                 | Transit Shelters - Connection | R308.2 Transit Shelters  
Shall be connected to boarding and alighting areas or boarding platforms by compliant pedestrian access routes |
|                 | Transit Shelters - Clear Space* | R308.2 Transit Shelters  
- Shall provide a clear space within shelter that complies with R404, including: minimum 2.5 feet (30 inches) by 4 feet (48 inches), adjoining a pedestrian access route or other clear space, with additional maneuvering space if confined on three sides.  
- If seating is provided in shelter, shall be either at one end of seat or at least 1.5 feet (18 inches) from front edge of seat.  
*(2004 ADAAG did not address clear space placement in relation to seating)* |

**R4**

<table>
<thead>
<tr>
<th></th>
<th>R402 - Protruding Objects</th>
</tr>
</thead>
</table>
|       | R402.2 Protrusion Limits  
Objects with leading edges between 2.25 feet (27 inches) and 6.7 feet (80 inches) above finish surface shall protrude 4 inches maximum horizontally into pedestrian circulation paths.  
*(2004 ADAAG allows handrails to protrude up to 1.5 inches)* |
<table>
<thead>
<tr>
<th>Chapter/Section</th>
<th>Element</th>
<th>Summary of Proposed Guideline</th>
</tr>
</thead>
</table>
|                | Post-Mounted Objects – Mounted on Free-Standing Posts or Pylons* | R402.3 Post-Mounted Objects  
- Objects mounted between 2.25 feet (27 inches) and 6.7 feet (80 inches) above finish surface shall overhang pedestrian circulation paths 4 inches maximum measured horizontally from post or pylon base. Base dimension shall be 2.5 in thick minimum.  
- Where mounted between posts or pylons and clear distance between posts or pylons exceeds 1 foot, lowest edge of object shall be between 2.25 feet (27 inches) and 6.7 feet (80 inches) above finish surface.  
(2004 ADAAG does not require sloping handrails serving stairs and ramps to comply) |
|                | Reduced Vertical Clearance* | R402.4 Reduced Vertical Clearance  
Guardrails or other barriers to pedestrian travel shall be provided where vertical clearance is less than 6.7 feet (80 inches) high. Leading edge of guardrail or barrier shall be located 2.25 feet (27 inches) maximum above finish surface.  
(2004 ADAAG allows door closers and door stops to be 78 inches minimum above finish floor or ground) |
| R4             | R403 - Operable Parts |  
|                | Clear Space | R403.2 Clear Space  
Shall provide a clear space at operate parts that complies with R404 |
|                | Height | R403.3 Height  
Shall be placed within one or more of reach ranges specified in R406 |
|                | Operation | R403.4 Operation  
Shall be operable with one hand and not require tight grasping, pinching, or twisting of wrist. Force required to activate: 5 pounds (22 N) maximum. |
| R4             | R404 - Clear Spaces |  
|                | Surfaces | R404.2 Surfaces  
Shall comply with R302.7, with running slope consistent with grade of adjacent pedestrian access route and cross slope of 2 percent maximum.  
(2004 ADAAG allows up to 1:48 (2.08 percent) slope) |
|                | Size | R404.3 Size  
Minimum 2.5 feet (30 inches) by 4 feet (48 inches) |
|                | Knee and Toe Clearance | R404.4 Knee and Toe Clearance  
Unless otherwise specified, shall be permitted to include knee and toe clearance complying with R405 |
|                | Position | R404.5 Position  
Unless otherwise specified, shall be positioned for either forward or parallel approach to an element |
<table>
<thead>
<tr>
<th>Chapter/Section</th>
<th>Element</th>
<th>Summary of Proposed Guideline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approach</td>
<td>R404.6 Approach</td>
<td>One full unobstructed side of clear space shall adjoin pedestrian access route or another clear space</td>
</tr>
</tbody>
</table>
| Maneuvering Space | R404.7 Maneuvering Space | Where clear space is confined on all or part of three sides, additional maneuvering space shall be provided:  
- Forward Approach: minimum 3 feet wide where depth exceeds 2 feet  
- Parallel Approach: minimum 5 feet wide where depth exceeds 1.25 feet (15 inches) |
| R4              | R406 - Reach Ranges |  
| Unobstructed Forward Reach | R406.2 Unobstructed Forward Reach | Between 1.25 feet (15 inches) and 4 feet (48 inches) above finish surface |
| R4              | R406 - Reach Ranges |  
| Unobstructed Side Reach | R406.3 Unobstructed Side Reach | Between 1.25 feet (15 inches) and 4 feet (48 inches) above finish surface (An obstruction with depth maximum 10 inches shall be permitted between clear space and element.) |
| R4              | R407 – Ramps |  
| Unobstructed Side Reach | R406.3 Unobstructed Side Reach | Between 1.25 feet (15 inches) and 4 feet (48 inches) above finish surface (An obstruction with depth maximum 10 inches shall be permitted between clear space and element.) |
| R4              | R407 – Ramps |  
| Running Slope* | R407.2 Running Slope | Minimum: 5 percent  
Maximum: 8.3 percent  
(2004 ADAAG did not specify a minimum, and allowed ramps in existing sites, buildings, and facilities, to have the following running slopes where necessary due to space limitations: 8.3%-10% for rise up to 6 inches, 10%-12.5% for rise up to 3 inches.) |
| Cross Slope     | R407.3 Cross Slope | Maximum: 2 percent  
(2004 ADAAG allows up to 1:48 (2.08 percent)) |
| Width           | R407.4 Width | Minimum: 3 feet (including clear width between hand rails where provided) |
| Rise            | R407.5 Rise | Maximum: 2.5 feet (30 inches) |
| Landings – Location | R407.6 Landings | Shall be at top and bottom of each ramp run |
| Landings – Slope | R407.6.1 Slope | Maximum: 2 percent in any direction  
(2004 ADAAG allows up to 1:48 (2.08 percent)) |
<p>| Landings – Width | R407.6.2 Width | Minimum: as wide as widest ramp run leading to landing |</p>
<table>
<thead>
<tr>
<th>Chapter/Section</th>
<th>Element</th>
<th>Summary of Proposed Guideline</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Landings – Length</td>
<td>R407.6.3 Length Minimum: 5 feet</td>
</tr>
<tr>
<td></td>
<td>Landings – Change in Direction between Runs</td>
<td>R407.6.4 Change in Direction Minimum: 5 feet by 5 feet</td>
</tr>
<tr>
<td></td>
<td>Surfaces</td>
<td>R407.7 Surfaces Shall comply with R302.7</td>
</tr>
<tr>
<td></td>
<td>Handrails</td>
<td>R407.8 Handrails Ramp runs with rise greater than 6 inches shall have handrails complying with R409</td>
</tr>
</tbody>
</table>

* Not addressed in ADAAG, or differs significantly from ADAAG.
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Appendix C

Rating System
Rating System

**INTRODUCTION**

To aide in categorizing the non-compliant assets, a rating system was developed for curb ramps, intersections and sidewalk segments. This appendix provides the scoring system for each pedestrian element and the scoring results.

**CURB RAMP RATING SYSTEM**

As referenced in Chapter 2, non-compliant curb ramps have been rated in priority as high, medium, or low. Curb ramps included in the high priority category have a deficiency that render the ramp unusable for a mobility device user. The medium and low priority curb ramps were delineated based on the following rating system.

The curb ramp rating system was developed based on a simple point system which can be seen in Table C-1. For each non-compliant element, one point was assessed. The more severe the non-compliant element, the more points assessed. For example, if the ramp running slope has a measurement of less than 8.3% no points are recorded, if the running slope ranges between 8.3% and 12.5% one point is recorded, and if the running slope is greater than 12.5%, two points are recorded. A surveyed curb ramp that meets all ADA guidelines will receive a score of zero. The more points a curb ramp earns the more deficiencies the curb ramp contains.

**Table C-1: Curb Ramp Scoring System**

<table>
<thead>
<tr>
<th>Curb Ramp Element</th>
<th>Categorical Rating Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ramp Width</td>
<td>&gt;= 48” = 0 &lt; 48” = 1</td>
</tr>
<tr>
<td>Ramp Running Slope</td>
<td>&lt; 8.33% = 0 8.3% to 12.5% = 1 &gt; 12.5% = 2</td>
</tr>
<tr>
<td>Ramp Cross Slope</td>
<td>&lt; 2% = 0 2% to 4% = 1 &gt; 4% = 2</td>
</tr>
<tr>
<td>Flare Slope</td>
<td>&lt;= 10% = 0 &gt; 10% = 1</td>
</tr>
<tr>
<td>Top Landing Size</td>
<td>&gt;= 48”x48” = 0 &lt; 48”x48” = 1</td>
</tr>
<tr>
<td>Top Landing Run Slope</td>
<td>&lt; 2% = 0 2% to 4% = 1 &gt; 4% = 2</td>
</tr>
<tr>
<td>Top Landing Cross Slope</td>
<td>&lt; 2% = 0 2% to 4% = 1 &gt; 4% = 2</td>
</tr>
<tr>
<td>Lower Landing Depth (Parallel Only)</td>
<td>&gt;= 48” = 0 &lt; 48” = 1</td>
</tr>
<tr>
<td>Lower Landing Width (Parallel Only)</td>
<td>&gt;= 60” = 0 &lt; 60” = 1</td>
</tr>
<tr>
<td>Lower Landing Run Slope (Parallel Only)</td>
<td>&lt; 2% = 0 2% to 4% = 1 &gt; 4% = 2</td>
</tr>
<tr>
<td>Lower Landing Cross Slope (Parallel Only)</td>
<td>&lt; 2% = 0 2% to 4% = 1 &gt; 4% = 2</td>
</tr>
<tr>
<td>Sidewalk Connection</td>
<td>Yes = 0 No = 1</td>
</tr>
<tr>
<td>Tactile Surface</td>
<td>Yes = 0 No = 1</td>
</tr>
</tbody>
</table>
The rating system provided a minimum score of zero and a maximum score of 28. The score totals and results for all curb ramps are displayed below in Figure C-1.

**Figure C-1: Curb Ramp Categorical Rating System Results**

The results show a scoring range of zero to 24 with an average score of 5.27 and a median and mode of five. Curb ramps with a score of five or less were included in the low priority category and curb ramps with a score of six to 24 were included in the medium priority category.
Non-compliant intersections were also rated in priority levels of high, medium, and low. High priority intersections were selected based on major accessibility issues such as obstructions and missing curb ramps. The medium and low priority ratings are based on the following rating system.

The intersection rating system is based on a point system which can be seen in Table C-2. Each non-compliant element received a score of one. A fully compliant intersection will receive a score of zero. The more compliance issues, the higher the intersection rating score. The highest possible intersection score, assuming the intersection has two side islands and a median, is 18.

Table C-2: Intersection Scoring System

<table>
<thead>
<tr>
<th>Intersection Element</th>
<th>Categorical Rating Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marked Crosswalk</td>
<td>Yes = 0</td>
</tr>
<tr>
<td>Barrier or Obstruction</td>
<td>No = 0</td>
</tr>
<tr>
<td>Median Width</td>
<td>&gt;= 60” = 0</td>
</tr>
<tr>
<td>Median Tactile Surface (Only If Median is &gt;= 6’ in Length)</td>
<td>Yes = 0</td>
</tr>
<tr>
<td>Median Tactile Surface Correctly Installed</td>
<td>Yes or N/A = 0</td>
</tr>
<tr>
<td>Side Island Width</td>
<td>&gt;= 60” = 0</td>
</tr>
<tr>
<td>Side Island Tactile Surface (Only If Side Island is &gt;= 6’ in Length)</td>
<td>Yes = 0</td>
</tr>
<tr>
<td>Side Island Tactile Surface Correctly Installed</td>
<td>Yes = 0</td>
</tr>
<tr>
<td>Pedestrian Signal Countdown</td>
<td>Yes = 0</td>
</tr>
<tr>
<td>Pedestrian Button Accessible</td>
<td>Yes = 0</td>
</tr>
<tr>
<td>Pedestrian Button Height</td>
<td>15” to 48” = 0</td>
</tr>
</tbody>
</table>

The rating system provided a minimum score of zero and high score of 11. The results of the scoring system are shown in Figure C-2.
The results show a scoring range of zero to eleven with an average score of 1.13 and a median and mode of one. Curb ramps with a score of one were included in the low priority category and curb ramps with a score of two to 11 were included in the medium priority category.
**Sidebar Rating System**

The sidewalk rating system used the three tiers of high, medium, and low priority for non-compliant sidewalk segments. High priority sidewalks were selected based on significant compliance issues such as extremely narrow sidewalks and non-continuous sidewalk segments. Both medium and low priority sidewalks were based on the scoring system seen in Table C-3.

**Table C-3: Sidewalk Scoring System**

<table>
<thead>
<tr>
<th>Sidewalk Element</th>
<th>Categorical Rating Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sidewalk Width</td>
<td>(\begin{align*} &amp; \geq 48'' = 0 \ &amp; &lt; 48'' = 1 \end{align*})</td>
</tr>
<tr>
<td>Sidewalk Continuous</td>
<td>\begin{align*} &amp; \text{Yes} = 0 \ &amp; \text{No} = 1 \end{align*}</td>
</tr>
<tr>
<td>Running Slope</td>
<td>\begin{align*} &amp; \text{Matches Street} = 0 \ &amp; \text{Does Not Match St.} = 1 \end{align*}</td>
</tr>
<tr>
<td>Obstruction</td>
<td>\begin{align*} &amp; \text{None} = 0 \ &amp; \text{Each Instance} = 1 \end{align*}</td>
</tr>
<tr>
<td>Surface Obstruction</td>
<td>\begin{align*} &amp; \text{None} = 0 \ &amp; \text{Based on Percentage of Length} \ &amp; \begin{align*} &amp; 0-25% = 1 \ &amp; 26-50% = 2 \ &amp; 51-75% = 3 \ &amp; 76-100% = 4 \end{align*} \end{align*}</td>
</tr>
<tr>
<td>Removable Barrier</td>
<td>\begin{align*} &amp; \text{None} = 0 \ &amp; \text{Based on Percentage of Length} \ &amp; \begin{align*} &amp; 0-25% = 1 \ &amp; 26-50% = 2 \ &amp; 51-75% = 3 \ &amp; 76-100% = 4 \end{align*} \end{align*}</td>
</tr>
<tr>
<td>Cross Slope</td>
<td>\begin{align*} &amp; \leq 2% = 0 \ &amp; \text{Based on Percentage of Length} \ &amp; \begin{align*} &amp; 0-25% = 1 \ &amp; 26-50% = 2 \ &amp; 51-75% = 3 \ &amp; 76-100% = 4 \end{align*} \end{align*}</td>
</tr>
<tr>
<td>Driveway</td>
<td>\begin{align*} &amp; \leq 2% = 0 \ &amp; \text{&gt; 2% (Each Instance) = 1} \ &amp; \text{Signalized w/o Tactile (Each Instance) = 1} \end{align*}</td>
</tr>
<tr>
<td>Protrusion</td>
<td>\begin{align*} &amp; \text{None} = 0 \ &amp; \text{Each Instance} = 1 \end{align*}</td>
</tr>
</tbody>
</table>

The rating system provided a minimum score of zero and high score of 88. The results of the scoring system are shown in Figure C-3.
The results show a scoring range of zero to 88 with an average score of 9.67, a median score of seven, and a mode of zero. Sidewalk segments with a score of one to nine were included in the low priority category and curb ramps with a score of ten to 88 were included in the medium priority category.
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