Road and Trail Intersection Safety Rating

PARKS & TRAILS NEW YORK

Instructions: Use the following checklist to assess the safety of a Road and Trail Intersection. The checklist is split into three sections; add the scores from all three sections to determine the final rating. The three sections focus on the characteristics of the roadway leading up to and through the intersection (in either direction, where applicable); the characteristics of the trail leading up to and through the intersection (again, in either direction where applicable); and the characteristics of the intersection itself.

This rating system is primarily designed for intersections where a multi-use trail crosses a public road and continues in either direction. However, the rating system can also be used where a trail terminates at a roadway or continues along the roadway, or where a road has a dead-end stop.

Complete a separate checklist for each trail approach if conditions are substantially different. The final score calculated in the checklist corresponds to the Safety Rating included on Page 3.

Please consider uploading your intersection to the statewide database maintained by PTNY. You can also check the database to see how others have scored your local intersection. Guidance related to the completion of each question is included on the sheet. More information can be found online at (ptny.org/intersection-safety)

Trail Name	
Intersecting Roadway	
Location (City/State/Zip)	
County	
Date	
Rating	

v. 8.18

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Roadway Characteristics			Score	Guidance
1	What is the nature of the road?	Neighborhood or Side Street **(20)** Secondary or Rural Road **(10)** Major Arterial **(0)**		Generally, neighborhood or side streets are unstriped, while secondary or rural roads and major arterials have full markings. Major Arterials are generally those used by more than 5,000 cars per day (AADT or Annual Average Daily Traffic), while Secondary or Rural Roads have 2,000 to 5,000 AADT, and neighborhood or side streets have fewer than 2,000 AADT.
2	What is the posted speed limit for the section of road being crossed?	30 mph or less **(20)** 31-40 mph **(15)** 41-50 mph **(5)** 55+ mph **(0)**		The speed limit posted on the nearest sign approaching the intersection. If posted speeds are not the same in both directions, use the higher of the two posted speeds.
3	How many travel lanes (including turning lanes) does the roadway have at this point?	2 lanes **(15)** 3 lanes **(5)** 4 lanes **(0)**		How many total traffic lanes would a trail user need to cross to continue the trip? One travel lane in each direction would be a 2 lane road; a 2-lane road with a turning lane would be 3 lanes, etc.
4	Do motorists have a stop or yield sign, traffic signal, or Pedestrian Hybrid Beacon at the intersection?	Pedestrian Hybrid Beacon or Traffic Signal with phase for trail crossing **(10)** Stop Sign on Road **(7)** Yield Sign on Road **(5)** Traffic Signal, but no trail crossing phase **(2)** No traffic sign or signal at intersection **(0)**		Are motorists required to slow or stop at either a sign, traffic signal, or another form of traffic control? Choose the traffic control characteristic from this list that most closely resembles that found at the intersection. A Pedestrian Hybrid Beacon (or HAWK Signal) as is seen to the right, is activated only when a pedestrian is entering the intersection. 
5	Are stop/yield lines used on road as it approaches the intersection?	Yes **(2)** No **(0)**		Are lines painted on the road clearly marking where vehicular traffic should stop to allow cyclists or pedestrians to cross?
6	Are there signs alerting motorists to the upcoming trail intersection?	Yes, far from the intersection **(4)** Yes, but only in one direction, or too close to the intersection **(2)** No **(0)**		The recommended distance between signs and the intersection varies based on the speed and design of the roadway, and on how much motorists are directed to slow down. Generally, 100 feet from the intersection will suffice; although additional distance is required on higher speed roads.
7	Is additional signage present or are other means used to alert motorists of trail crossing ahead?	Yes **(2)** No **(0)**		Additional measures may include supplemental plaques with distance or other information, signs that notify road users who has right of way at the intersection or direct motorists to reduce speed, or flashing beacons that alert motorists to trail users crossing ahead.
8	Is traffic calming infrastructure or median islands used on the roadway?	Yes, multiple kinds (4) Yes, one kind **(2)** No **(0)**		Traffic calming attempts to bring motor vehicle speeds closer to those of bicyclists. Traffic calming infrastructure can include (but are not limited to) speed humps/tables, curb bump outs, pinch points, or chicanes, or median Islands allowing for multi-stage crossing
9	Is on-street parking permitted near the trail crossing?	Yes **(0)** No **(2)**		Per New York State law, parking is not allowed within 20 feet of a crosswalk at an intersection, or within 30 feet of a traffic light, stop or yield sign, unless explicitly permitted by posted signs or meters.
10	Is there a bicycle lane available on the roadway being crossed?	Yes **(3)** No **(0)**		If the roadway is used to cyclists access the trail, motorists are likely to be more aware of the presence of cyclists and pedestrians, calming traffic.
ROADWAY TOTAL SCORE				Add score from Questions 1 through 10

Trail Characteristics			Score	Guidance
11	Are measures that prevent vehicular access (bollards, gates, signs) used properly?	Yes **(2)** No bollards or improperly used **(0)**		Bollards and/or gates that prevent vehicular access should be located no closer than 20 feet from intersection, and should permit passage without dismounting for cyclists. Bollards should be at least 3.2 feet tall and indicated with diamond-shaped pavement marking. Signs saying "No Motor Vehicles" should be easily readable.
12	Is trail paved in asphalt, concrete or other "hard" surface within 20 ft. of intersection?	Both sides paved **(2)** Only one side paved **(1)** Neither side paved **(0)**		Paving decreases the likelihood of exposed roots, overgrowth that infringes the travel way and other negative trail conditions, as well as allowing use of safety measures such as pavement marking and centerlines on intersection approach.
13	Are advance warning signs or pavement markings present on trail?	Yes, both signage and pavement markings **(5)** Yes, either signage or pavement markings **(2)** No **(0)**		Advance warning signage or pavement marking should be placed at least 50 feet from intersection. Signage includes "Stop", "Yield", and "Traffic Control Ahead" signs, among others. Pavement markings include "X ING AHEAD" in white lettering.
14	Is there a painted centerline present on intersection approach?	Yes **(2)** No **(0)**		A solid centerline (4 - 6 inches in width) is preferred within 50 feet of the intersection to indicate a no passing area. Edge lines may also be added at intersection approach.
15	Are there working lights on the trail within 75 feet of the intersection?	Yes **(2)** No **(0)**		If it is not possible to assess whether lighting is functioning, the presence of lighting within 75 feet of the intersection is sufficient.
16	Does the trail have a significant grade approaching the intersection? If so, are measures used to mitigate?	Significant grade with mitigation **(2)** Significant grade without mitigation **(0)** No grade **(4)**		Does the trail have a significant grade approaching the intersection (5% or greater)? If so, are measures such as a switchback, signage, and/or other interventions used to mitigate?
17	Is curb cut and ramp of equal width of trail available for crossing use?	Yes **(2)** No **(0)**		Curb cuts and ramps should be at least as wide as the trail; for high volume trails/intersections where queuing may be an issue, wider ramps should be considered.
18	Are there surface conditions, overgrowth or other trail issues that affect safety within 50 ft. of intersection?	Yes **(0)** No **(2)**		Negative conditions could include overgrowth that infringes on the travel way, exposed roots, pavement deterioration, holes, standing water, and the presence of loose rock or soil.
19	What is the distance between the trail/road intersection and the next closest road/road intersection?	More than 24 feet **(4)** Between 6.5 and 24 ft. **(2)** Less than 6.5 feet **(0)**		Sidepaths, or trails that travel alongside and parallel to roadways, should maintain physical distance from the parallel roadway through the crossing, to ensure that visibility is maintained for all users.
20	If the next closest intersection is less than 24 feet from the trail intersection, is there a traffic signal or signage warning motorists to the presence of the trail intersection?	Yes, traffic signal with specific signal for trail users **(4)** Yes, signage warning of trail **(2)** No **(0)** Next intersection more than 24 feet away **(2)**		Are motorists turning from a parallel road onto the road that intersects the trail made aware of the potential presence of trail users, either by means of signage or a traffic signal?
TRAIL TOTAL SCORE				Add score from Questions 11 through 20

Intersection Control / Right of Way			Score	Guidance
21	At what angle does the trail cross the road?	Less than 60 degrees **(0)** Between 60 and 90 degrees **(8)** Approx. 90 degrees **(12)**		Midblock crossings should intersect the roadway at as close to a 90-degree angle as is possible, with 60 degrees being the minimum acceptable crossing angle.
22	What type of crossing treatment is used?	No crosswalk **(0)** Marked Crosswalk **(3)** Raised and/or High Visibility Crosswalk **(6)**		A marked and signed crosswalk should be used at all trail intersections. A basic crosswalk consists of two parallel lines running across the roadway; while a high visibility (also known as continental or ladder) crosswalk consists of a series of lines 12" to 24" in width and separated by gaps of 12" to 60".
23	Is it clear which user has right of way at the intersection - is the higher use travelway afforded right of way?	Yes **(4)** No or Unclear **(0)**		At unmarked or uncontrolled trail intersections, bicyclists and pedestrians are required to yield to vehicles in the roadway. At marked crosswalks, drivers are required to yield to pedestrians. Sidepaths should be given the same priority through intersections as the parallel roadway. For the purposes of this checklist, those evaluating the intersection should answer "No" only when right of way assignment is not clearly defined or assigned in error to the lower volume roadway.
24	Are crossing signals timed for use by pedestrians?	Yes **(2)** No or No Signal **(0)**		Standard crossing intervals are 3.5 feet per second for pedestrians (i.e a 35-foot wide roadway would require a 10 second pedestrian crossing phase).
25	Are crossing signal push button detectors clearly identified and located in accessible spot?	Yes **(2)** No or No Signal **(0)**		If a push button detector is used, path users of all dimensions should be able to access it without leaving the trail, including cyclists. Push buttons should be used at a height of 3.5 feet.
26	Are accessible crossing signals (audible tones or speech messages) and/or detectable warning pavers used to facilitate intersection crossing?	Yes **(2)** No **(0)**		Detectable warning pavers alert visually-impaired trail users to their location at a transition from curb to crosswalk or roadway. They are generally installed within the curb ramp. Accessible crossing tones include a variety of audible signals that transmit crossing information to users, such as announcing the time left on the crossing signal phase or loud beeping that indicates the crossing phase.
INTERSECTION TOTAL SCORE				Add score from Questions 21 through 26
OVERALL SCORE				Add Roadway Total Score, Trail Total Score, and Intersection Total Score to get overall score

TOTAL SCORE	*SAFETY RATING*	*DESCRIPTION*
<59	**F**	Significant safety issues present that may lead to high likelihood of motorist-trail user conflicts at intersections; candidate for engineering/planning attention
60-74	**D**	Safety issues present that may degrade trail user experience; candidate for engineering/planning improvements
75-84	**C**	Potentially serious safety issues present; candidate for safety enhancements
85-94	**B**	Few safety issues present; candidate for safety enhancements
95+	**A**	Few safety issues present; case study candidate

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