

Risk Analysis for Situations of Uncertainty

1. Site
2. Date/time of day:
3. Do you have the right of way to cross there?
 - a. Yes
 - b. No
4. What is the likelihood of being seriously injured or killed if you cross under these circumstances? (Use charts below to analyze likelihood of being surprised by an approaching vehicle, then hit AND seriously injured or killed.)
 - a. **Surprised:** *What is the likelihood of being surprised by a vehicle that could reach you during your crossing?*

Factor	Conditions
<u>Traffic volume</u> (higher volume equals higher risk of being surprised)	
<u>Warning time of approaching vehicles</u> (longer warning time equals lower risk of being surprised)	
<u>CONCLUSION (based on factors above):</u> <u>Likelihood of being surprised by an approaching vehicle</u> (high/moderate/low)	

- b. **Hit:** *If you are surprised by a vehicle that could reach you, what is the likelihood that it will hit you?*

Factor (Affecting likelihood of being hit)	More Likely	Likelihood moderate	Less likely
<u>Multiple threat</u> --More than one approaching lane: ("yes" equals drivers may pass another vehicle and hit you without seeing you")	Yes		No
<u>Speed of drivers</u> : (slower equals less likely to hit you)	Fast	Moderate	Slow
<u>Expectation</u> --Drivers expect pedestrians?: ("yes" equals less likely to hit you)	No	Somewhat	Yes
<u>Visibility</u> —Good line of sight/visibility: ("yes" equals less likely to hit you)	No	Fair	Yes
<u>Road conditions</u> : ("good" equals less likely to hit you)	Bad	Fair	Good
<u>Group of pedestrians</u> —crossing with you: ("yes" equals less likely to hit you)	No		Yes
<u>Waiting with foot in the street</u> : ("yes" = less likely to hit you)	No		Yes
<u>Using a cane</u> : ("yes" less likely that drivers will hit you)	No		Yes
<u>Drivers</u> —community/culture (from observation: do drivers tend to yield to pedestrians there?)	No		Yes
CONCLUSION (<i>based on factors:</i> <u>Likelihood of being hit</u> (high/moderate/low))			

- c. **Seriously injured or killed** (*If you're hit, how likely will you be seriously injured/killed?*) Data based on Vehicle Travel Speed and Pedestrian Injury Severity, Florida, 1993-1996; pedestrian in single-car crashes.

	Travel Speed (officer's estimate)						
Injury severity	1-20 mph (0-32 kmh)	21-25 mph (33-40 kmh)	26-30 mph (41-48 kmh)	31-35 mph (49-56 kmh)	36-45 mph (57-72 kmh)	46+ mph (73+ kmh)	TOTAL
Fatal	1.1%	3.7%	6.1%	12.5%	22.4%	36.1%	6.5%
Incapacitating	19.4%	32.0%	35.9%	39.3%	40.2%	33.7%	27.0%
Fatal or incapacitating	20.5%	35.7%	42.0%	51.8%	62.6%	69.8%	33.5%
Non-incapacitating	43.8%	41.2%	36.8%	31.6%	24.7%	20.5%	38.8%
Possible/no injury	35.6%	23.0%	21.2%	16.6%	12.7%	9.7%	27.7%

Alternatives if the Risk of Crossing is not Acceptable

- Get help to cross (pedestrians, drivers, store/business personnel, neighbor, bus passengers, etc.).
- Find a place where you can hear/see the traffic better, and/or you are more visible.
- Cross at a place that has better traffic control (a traffic signal or stop sign).
- Increase the likelihood that drivers will yield OR get drivers to yield (in ALL lanes!)
- Avoid the crossing.
- Under certain conditions, you can start to cross but return to curb if you hear something before you reach the middle of the street.
 - Conditions
 - Enough warning of approaching vehicles to be confident you have time to cross at least half the street
 - Able to determine when you have crossed at least half the street
 - Able to turn around quickly and effectively and return to crosswalk
- Request traffic engineer to revise or redesign the intersection.