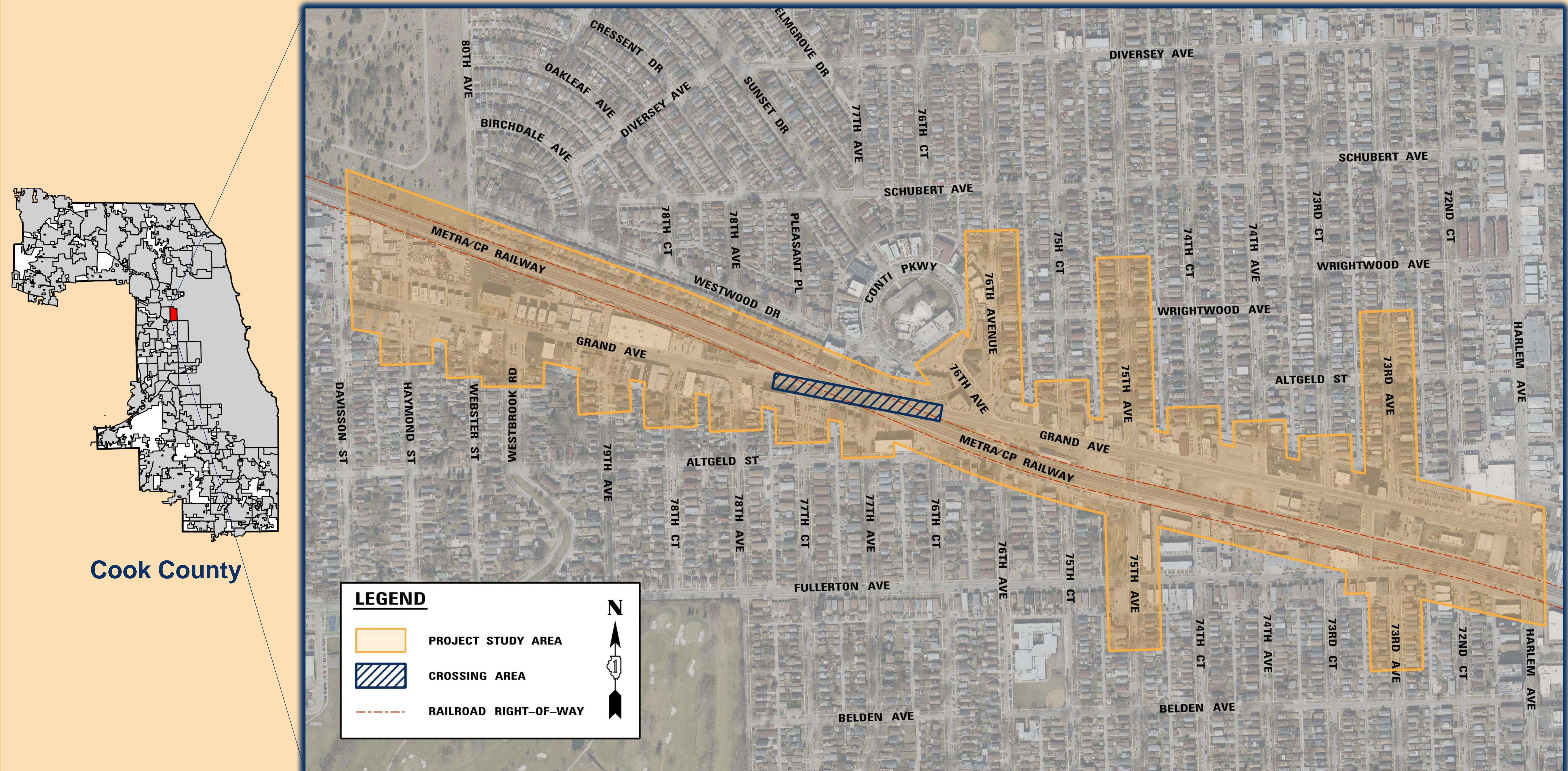








PROJECT LOCATION MAP



Cook County

LEGEND

-  PROJECT STUDY AREA
-  CROSSING AREA
-  RAILROAD RIGHT-OF-WAY





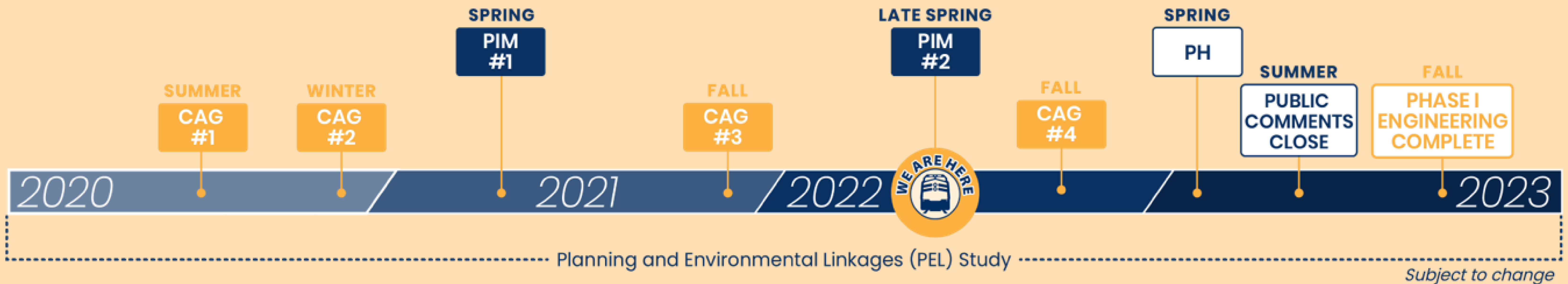
PROJECT OVERVIEW AND TIMELINE

PROJECT OVERVIEW

Six alternatives were investigated for the construction of a grade-separated railroad crossing. A comprehensive analysis was conducted to identify impacts and costs associated with each alternative.

- ① Grand Avenue over the railroad
- ② Grand Avenue under the railroad
- ③ Combination of lowering Grand Avenue and raising the railroad
- ④ Railroad over Grand Avenue
- ⑤ Railroad under Grand Avenue
- ⑥ Combination of lowering railroad under and raising Grand Avenue

PROJECT TIMELINE



CAG Community Advisory Group Meeting	PUBLIC COMMENTS CLOSE Targeted Public Comments Closing
PIM Public Information Meeting	PHASE I Targeted Engineering Completed
PH Public Hearing	



PROJECT PURPOSE AND NEED

PROJECT PURPOSE

The purpose of the project is to **alleviate congestion** and **improve safety** and **mobility** for all transportation users at the Grand Avenue and Metra/Canadian Pacific Railway crossing. In addition to improving safety, project improvements are expected to **increase mobility throughout the region**.

PROJECT NEED

- As the suburban population of the Chicago metropolitan area grows, transportation **usage is expected to increase** on Grand Avenue and the Metra/Canadian Pacific Railway.
- In addition to future traffic demand, factors contributing to **safety deficiencies** include:
 - the acute angle of the Grand Avenue intersection and the railroad
 - the long distance required to traverse the tracks
- Subsequent to a **severe train/vehicle crash** that occurred in November 2005, the National Transportation Safety Board’s official safety **recommendation** to the Governor of Illinois and the Illinois Commerce Commission was that **a grade separation be constructed** at the Grand Avenue grade crossing.

WHAT IS A PURPOSE AND NEED STATEMENT?

- Fundamental requirement for a project involving the NEPA process.
- Provides the foundation for project justification under NEPA and Section 404 of the Clean Water Act.
- Concise technical document providing information and facts about the transportation needs.
- Establishes the framework for which alternatives can be developed, measured, and evaluated.
- Clarifies/describes why impacts may be acceptable based on the project needs.

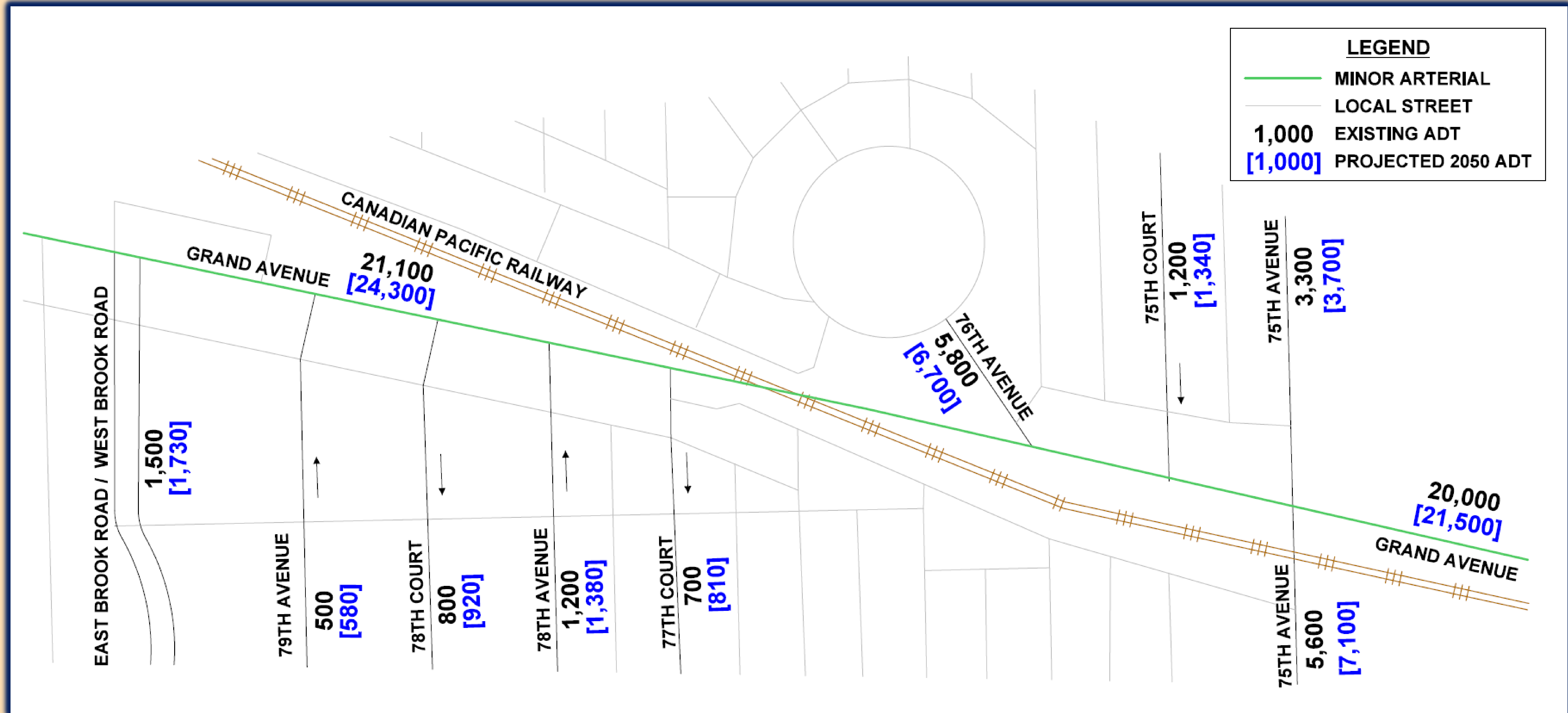


PROJECT BENEFITS

-  Increased Safety
-  More Efficient Response from the Police and Fire Departments
-  Improved Mobility for All Modes of Transportation
-  Reduced Congestion and Delays
-  Reduced Vehicle-Train Conflict



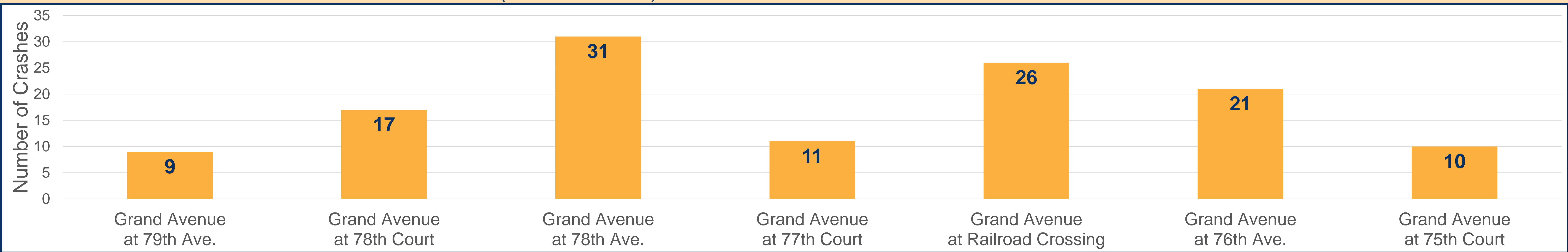
AVERAGE DAILY TRAFFIC EXISTING AND DESIGN YEAR, 2050



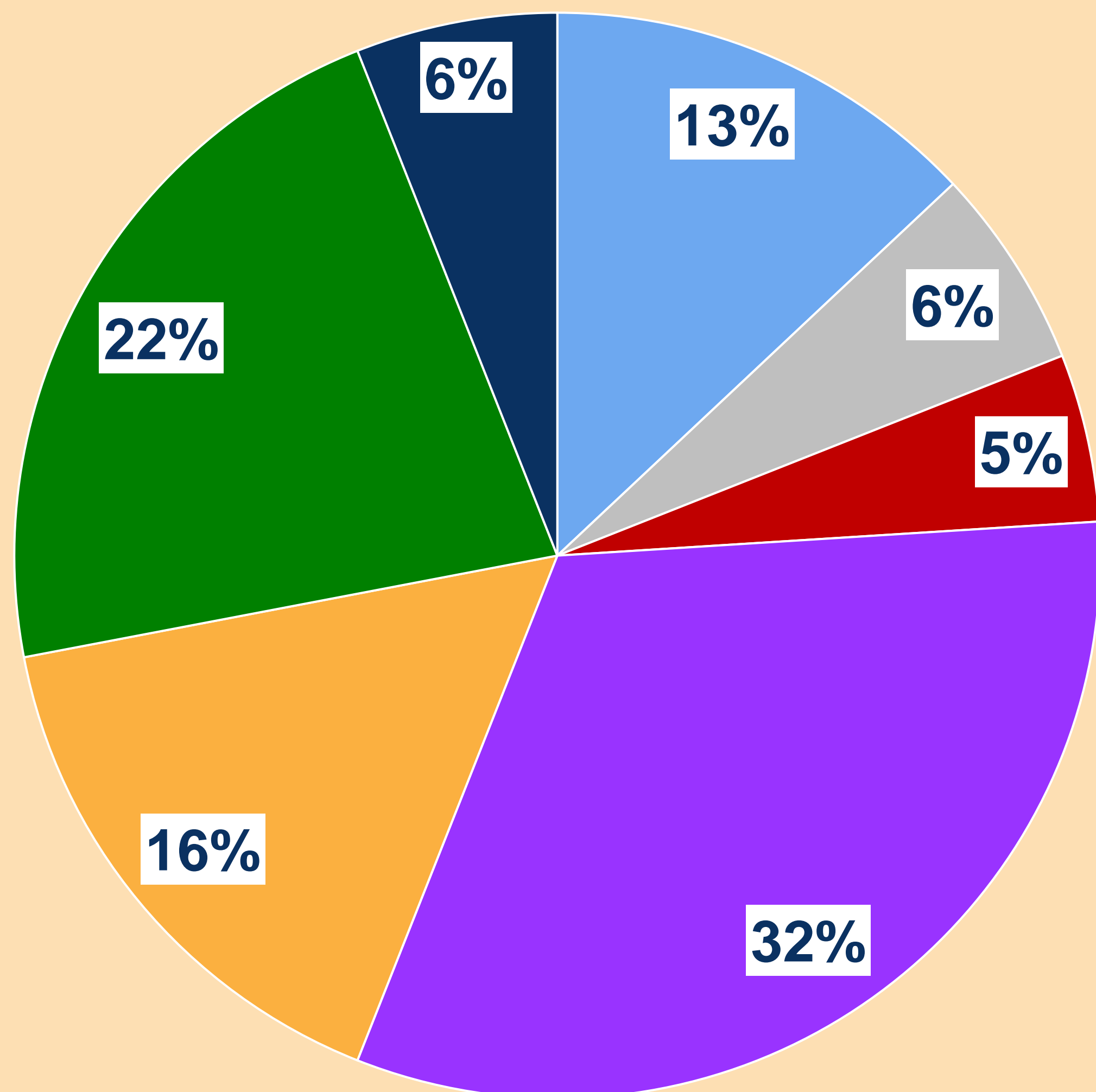


CRASH HISTORY AND DATA

CRASH STATISTICS BY INTERSECTION (2016 to 2020)



CRASH STATISTICS BY TYPE (2016 to 2020)



- Angle
- Fixed Object
- Parked Vehicle
- Rear End
- Sideswipe Same
- Turning
- Other

Total Number of Crashes from 2016 to 2020 = 125

Other Includes:

- Other Non-collision
- Other Object
- Pedestrian
- Sideswipe Opposite Direction



COMPLETE STREETS (SHARED-USE PATH AND SIDEWALKS)

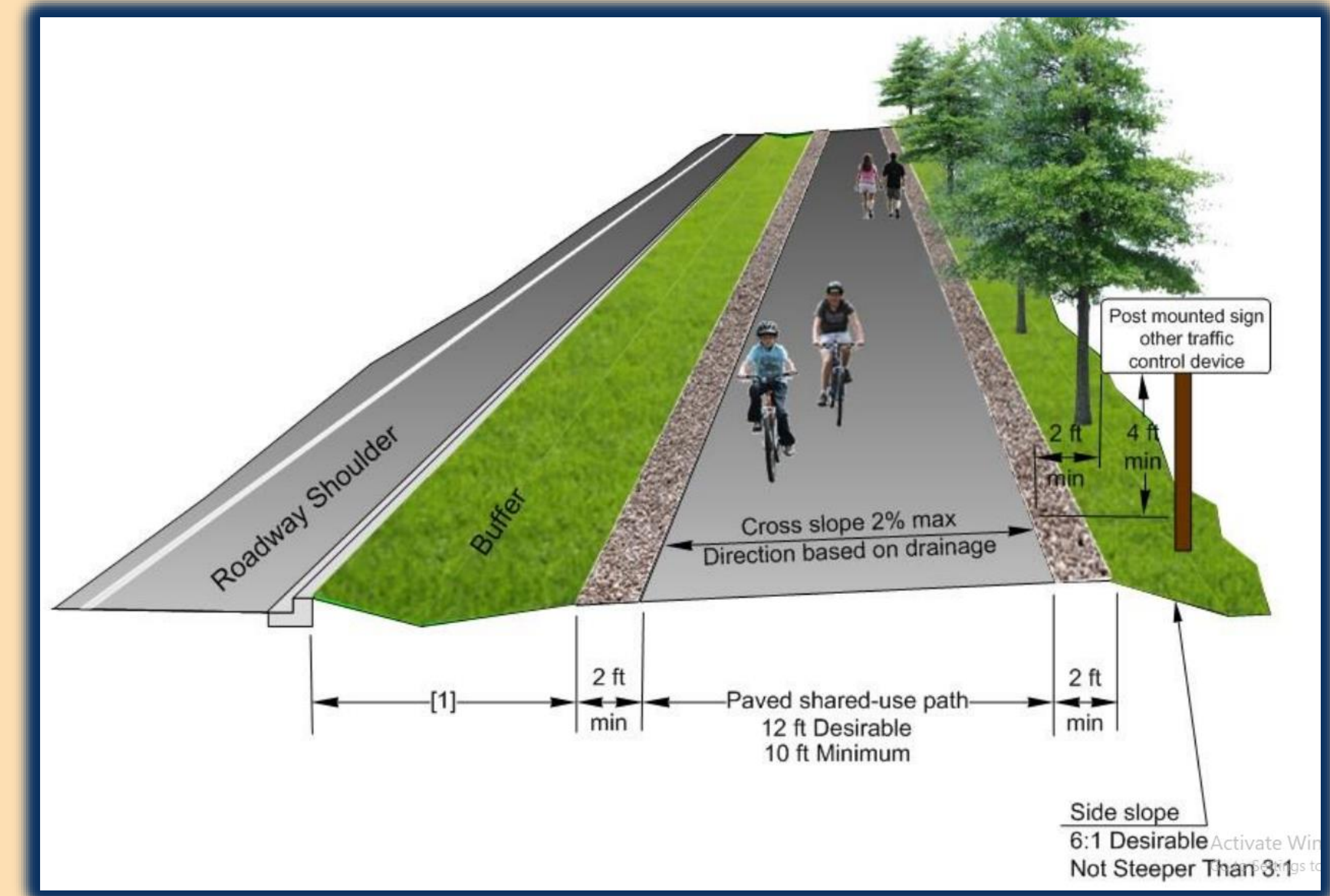
The Grand Avenue grade separation will accommodate pedestrians and bicyclists and is designed to include ALL roadway users.

Grand Avenue has high traffic volumes (ADT>20,000) with speeds over 30 mph.

SAFETY is the primary concern for both pedestrians and bicyclists.

The recommended accommodations to achieve improved safety are:

- A 10-foot wide shared-use path along the north side of Grand Avenue with a 5-foot wide buffer for increased safety and easy bicycle/pedestrian access to Conti Parkway.
- A 7-foot wide sidewalk along the south side of Grand Avenue.
(5' sidewalk with 2' concrete buffer = 7')



Shared-Use Path Example

The IDOT Complete Streets Policy implementation was finalized in June 2010.

Revisions to IDOT design criteria comply with the Illinois Complete Street Law.

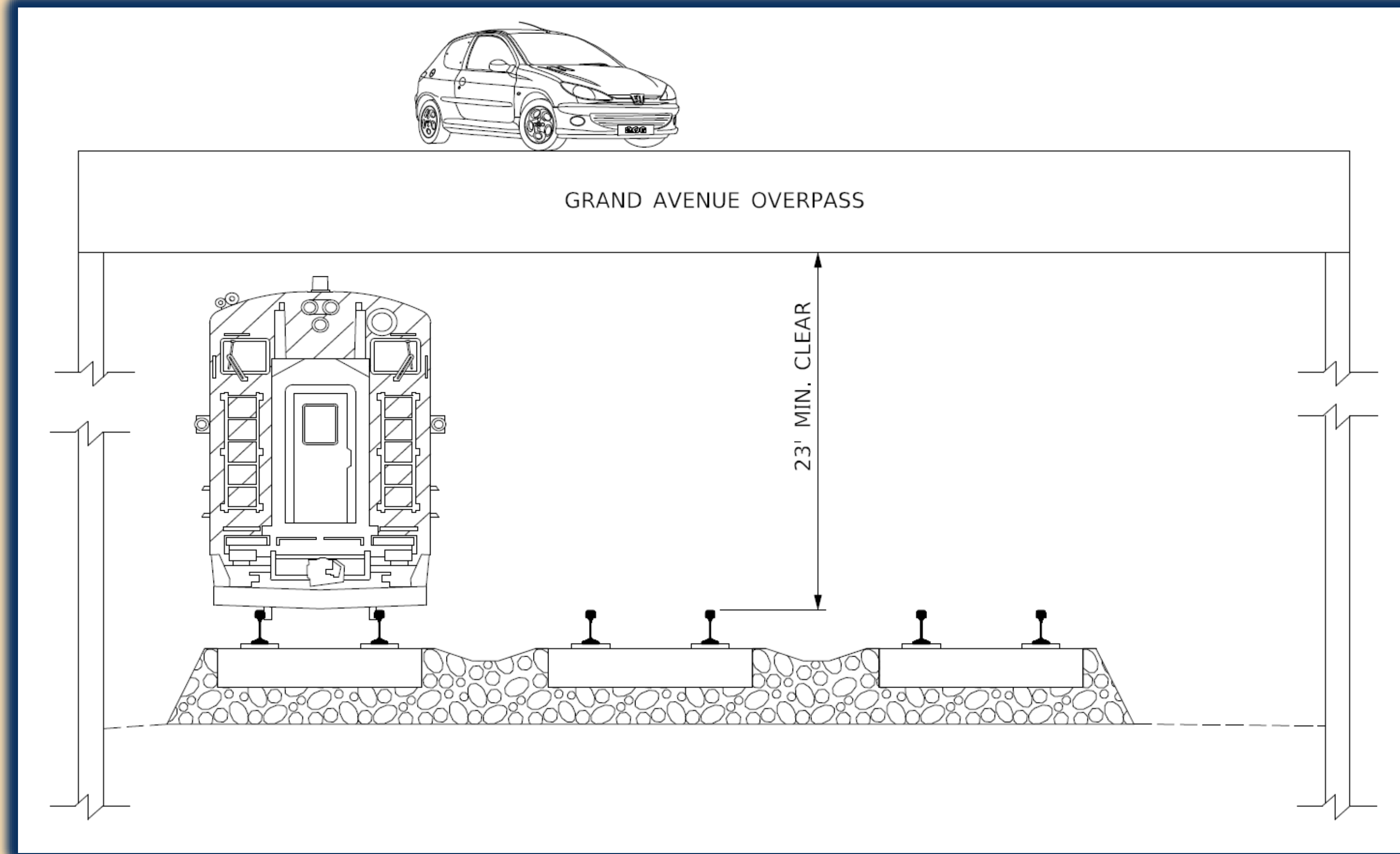
The Illinois Complete Street Law (Illinois Highway Code; Sec. 4-220) states the following:

“Bicycle and Pedestrian ways shall be given full consideration in the planning and development of transportation facilities. In or within one mile of an urban area, bicycle and pedestrian ways shall be established in conjunction with construction, reconstruction or other change of any State transportation facility.”



TYPICAL SECTIONS AT GRADE SEPARATION

OVERPASS ALTERNATIVES

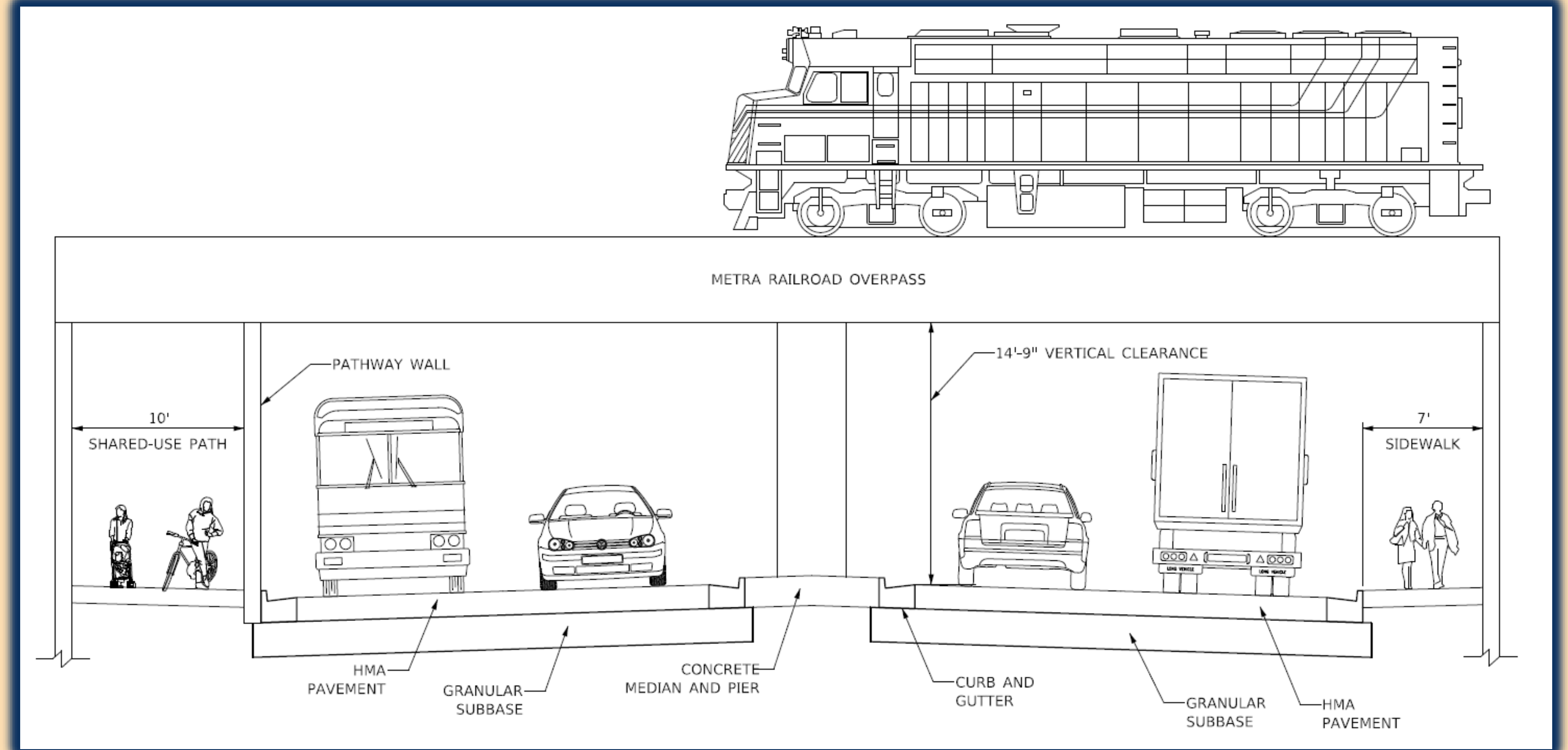


ALTERNATIVE 1: Grand Avenue Over the Railroad
(Approx. 700' Tunnel)

ALTERNATIVE 5: Railroad Under Grand Avenue
(1-2 Mile Tunnel)

ALTERNATIVE 6: Combination of Lowering Railroad and Raising Grand Avenue
(Approx. 700' Tunnel)

UNDERPASS ALTERNATIVES



ALTERNATIVE 2: Grand Avenue Under the Railroad
(Westbound: 560') (Eastbound: 580')

ALTERNATIVE 3: Combination of Lowering Grand Avenue and Raising Railroad
(Westbound: 450') (Eastbound: 500')

ALTERNATIVE 4: Railroad Over Grand Avenue
(Westbound: 450') (Eastbound: 500')

Note: Due to the extreme skew of the railroad crossing, two staggered bridges must be constructed over the eastbound and westbound sections of Grand Avenue.



ALTERNATIVES COMPARISON

Alternatives	Cost	Displacements		Right of Way Acquisition	Side Road Impacts	Property Access Impacts
		Residential	Commercial			
Alternative 1 <i>Grand Avenue Over Railroad</i>	\$109M	2	10	10,700 SQ FT	3	7
Alternative 2 <i>Grand Avenue Under Railroad</i>	\$96M	1	6	8,300 SQ FT	2	4
Alternative 3 <i>Hybrid Railroad Over and Grand Avenue Under</i>	\$124M	1	3	10,500 SQ FT	1	5
Alternative 4 <i>Railroad Over Grand Avenue</i>	\$138M	1	0	8,900 SQ FT	0	3
Alternative 5 <i>Railroad Under Grand Avenue</i>	\$583M	>21	>5	649,300 SQ FT	0	0
Alternative 6 <i>Hybrid Grand Avenue Over and Railroad Under</i>	\$104M	1	4	5,800 SQ FT	2	10