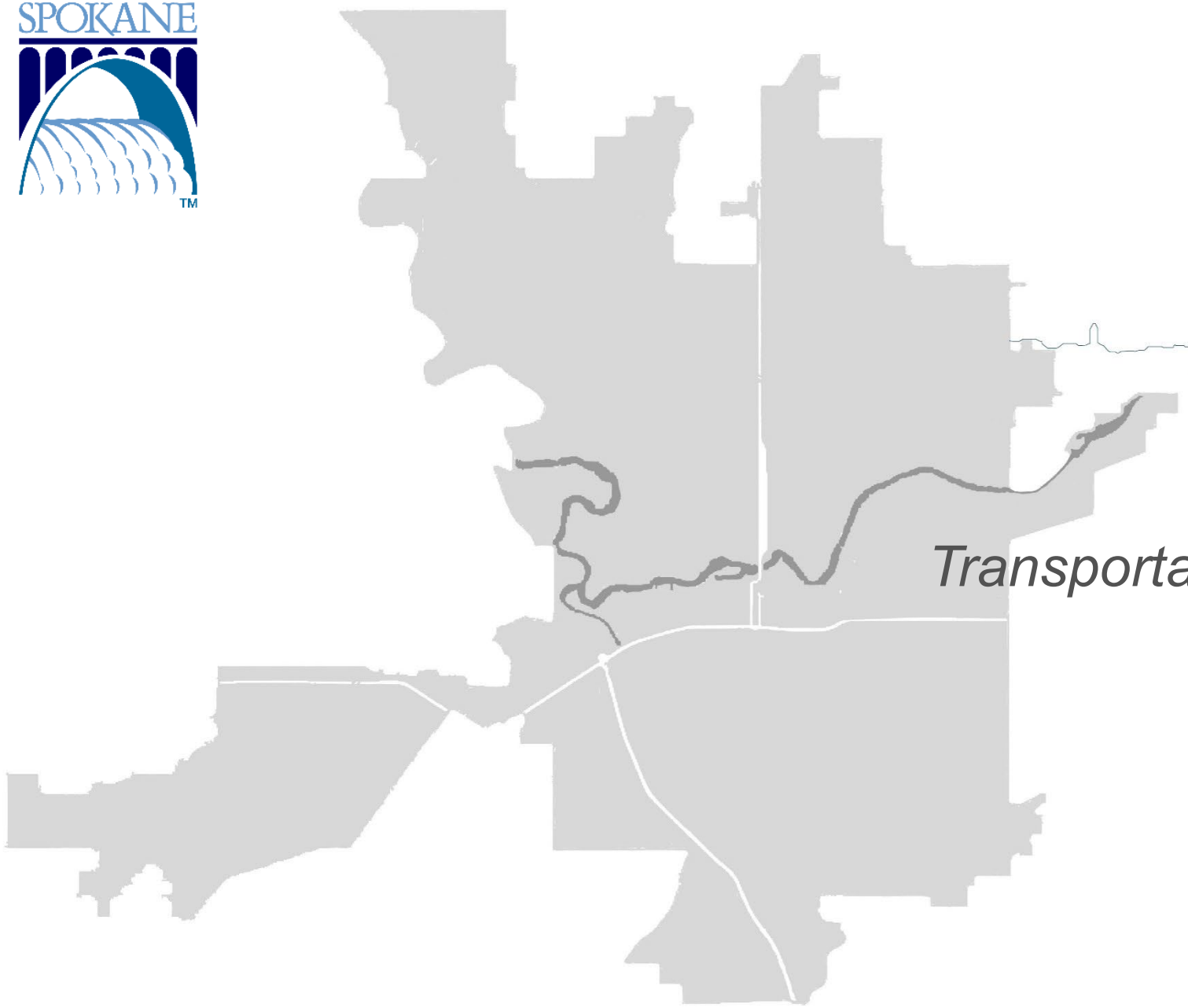


Grand Blvd Restriping

Transportation Commission Presentation

December 17, 2025

Project

- Existing: Grand Blvd is 4 lanes (2 auto lanes in each direction) with no center turn lane

- Proposed Option 1: Restripe Grand as 3 lanes (one 11 ft GP lane in each direction and one 12 ft center turn lane)

- Proposed Option 2: Restripe Grand as 4 lanes (one 10 ft GP lane northbound [downhill], two 10 ft GP lanes southbound [uphill], and one 10 ft center turn lane)

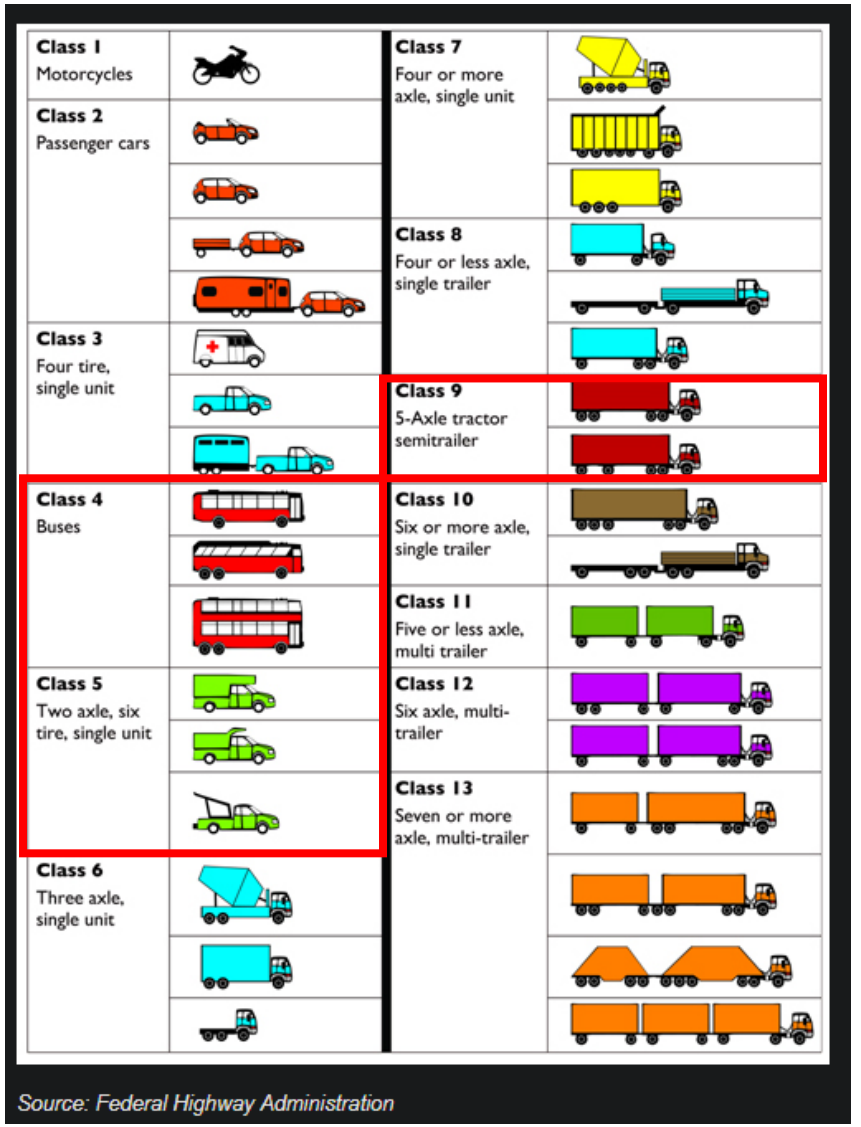
Option 1: One uphill auto lane, one downhill auto lane, center turn lane

Option 2: Two uphill auto lanes, one downhill auto lane, center turn lane

Typical Large Vehicle Classification for Grand Blvd

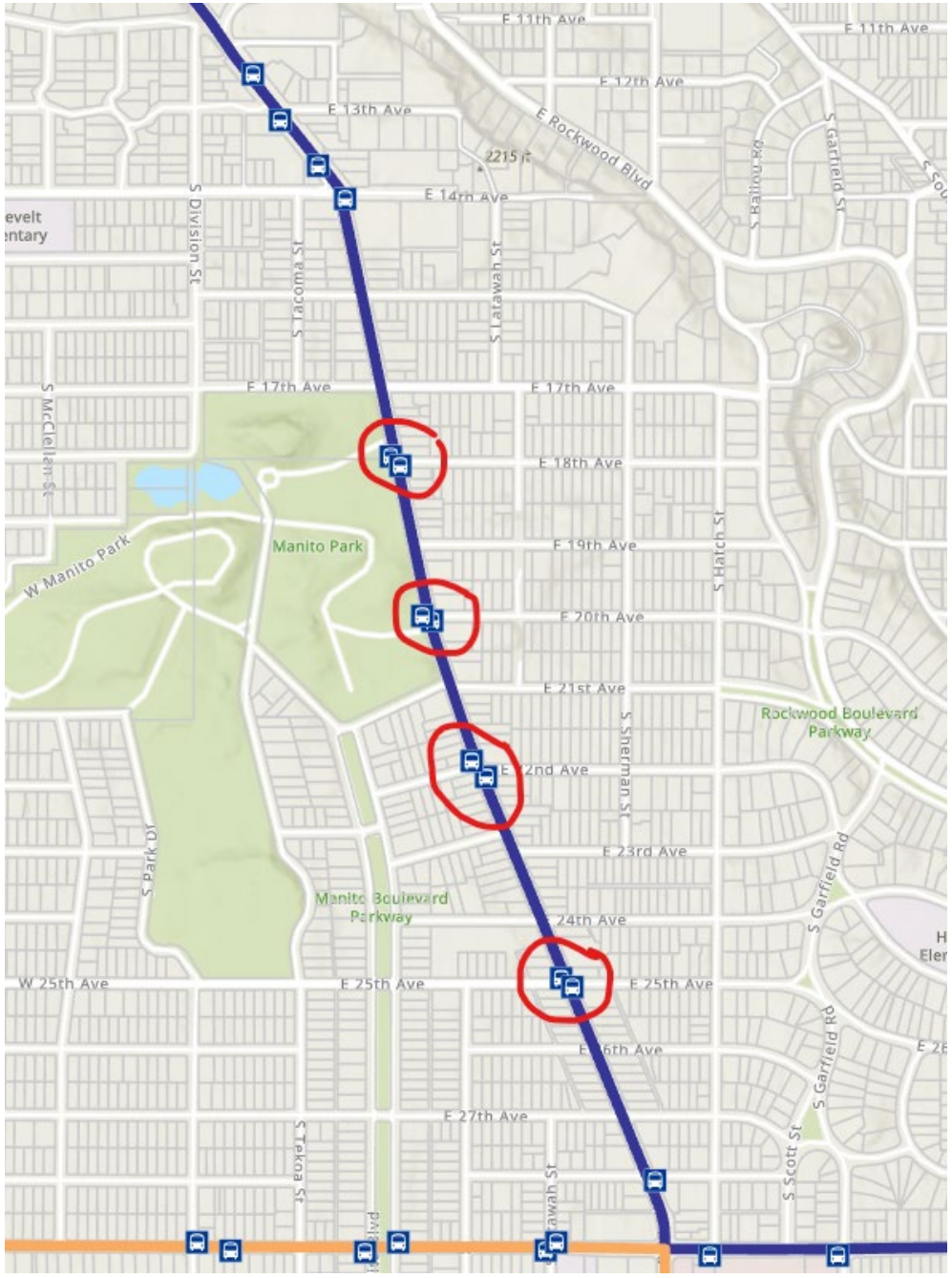
13 ft 4 in (approx.)

35 ft 10 in (approx.)



STA Route Details

- STA Route 4
- 15-min frequency
- Under Option 1, both directions would be stopped during STA bus loading and unloading
- Under Option 2, the downhill direction would be stopped during STA bus loading and unloading



Crosswalk Improvements

- 27th @ Grand:

	Existing Configuration	3-lane Option (1 lane in each direction with center turn lane)	4-lane Option (2 lanes uphill, 1 lane downhill, with center turn lane)
w/ Pedestrian Refuge	N/A	RRFB	RRFB
w/o Pedestrian Refuge	PHB	RRFB	PHB

Corridor Travel Times

PM Peak Hour (16:00 – 17:00) corridor travel times between 14th and 29th Ave

Configuration	NB (s) – downhill	SB (s) - uphill
Existing (two NB, two SB)	144.5	156.7
Option 1 (one NB, one SB)*	174.5	214.4
Option 2 (one NB, two SB)**	174.7	156.5

*Includes a bus dwelling time of 40 seconds at each of the three STA stops along both the downhill and uphill direction, every 15 minutes

**Includes a bus dwelling time of 40 seconds at each of the three STA stops along the downhill direction only, every 15 minutes

1. What's the ADT on Grand through this area?
2. With 12% trucks does the southbound grade present an issue with truck speeds, i.e., does the second southbound travel lane add a significant benefit (with the 4-lane option)?
3. There are numerous driveways, do we see an option that's more preferable considering the movement to/from these driveways?
4. Why do we have a signal at 25th? Have we looked at removing this signal to mitigate a portion of the added delay?
5. Does the crash history favor the 3-lane option?

- Weighted ADT = 14,400 veh/d; PM Peak Hour = 16:00-17:00
- Current Posted Speed = 30 mph
- Average slope = 2.3%, Max slope = 5.8%
- With numerous driveways, either option with the TWLTL would be preferable
  - TWLTL can be used as a two-stage crossing from a minor street/driveway in WA
- It's possible a signal at 25th was warranted in the past based on crash history, due to limited sight distance
- More crashes are correctable with the 3-lane option vs 4-lane option (see next slide)

CITY OF SPOKANE

Crash History

Date	Time	Sunrise	Sunset	Correctable w/ 3-lane	Correctable w/ 4-lane
2021-04-06	19:54	06:17	19:27	Yes	Yes
2021-04-12	12:39	06:05	19:35	Yes	Yes
2021-05-02	04:01	05:30	20:03	Yes	No
2021-06-24	08:43	04:52	20:51	Yes	No
2021-07-12	20:38	05:04	20:45	Yes	Yes
2021-10-29	12:20	07:29	17:36	Yes	Yes
2021-12-15	18:27	07:31	15:58	Yes	Yes
2023-08-02	17:20	05:28	20:22	Yes	Yes
2024-01-03	16:40	07:38	16:10	Yes	Yes
2024-05-31	09:36	04:56	20:39	Yes	Yes

- Out of 42 crashes from 2020 through 2024:
  - 10 are correctable with the 3-lane option
  - 8 are correctable with either the 3- or 4-lane option

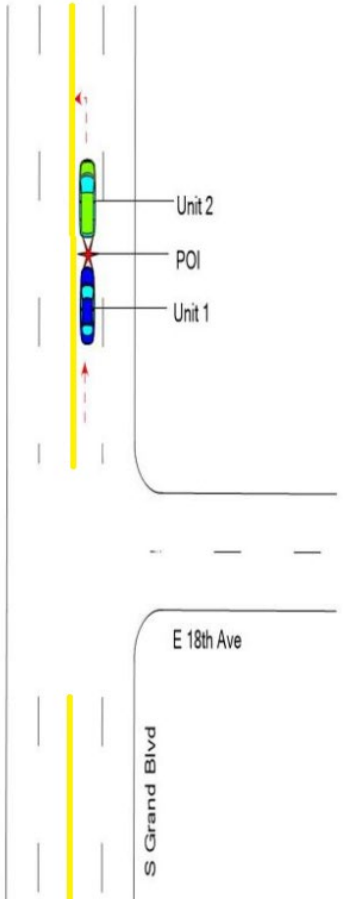
Examples of Correctable Crashes

2021-07-12 at 20:38

Not to scale

Rear end collision

Correctable with both configurations since center turn lane would allow for traffic turning off Grand Blvd to get out of the travel lanes

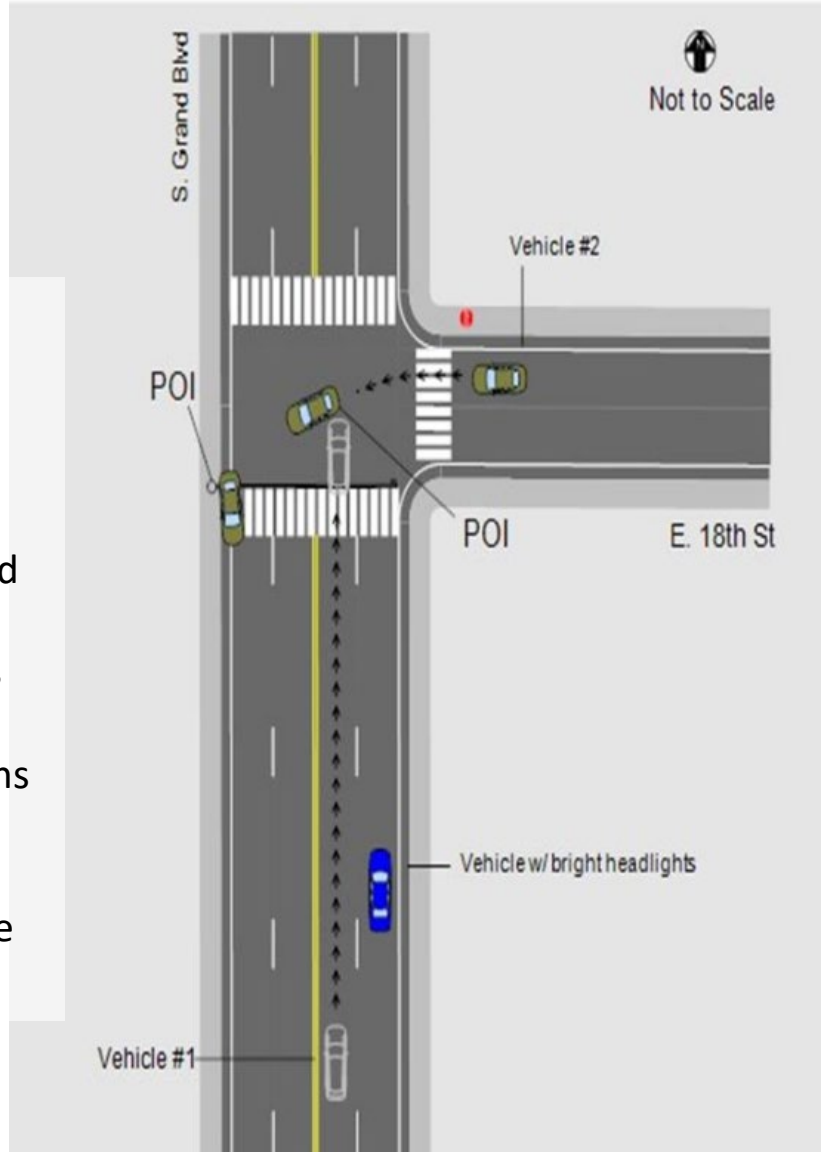


2024-01-03 at 16:40

Angle collision

Correctable with both configurations since we would be removing a northbound travel lane from both options

Not all types of angle collisions are correctable with the restriping, but this is an example of one that would be correctable



Examples of Correctable Crashes

2021-06-24 at 08:43

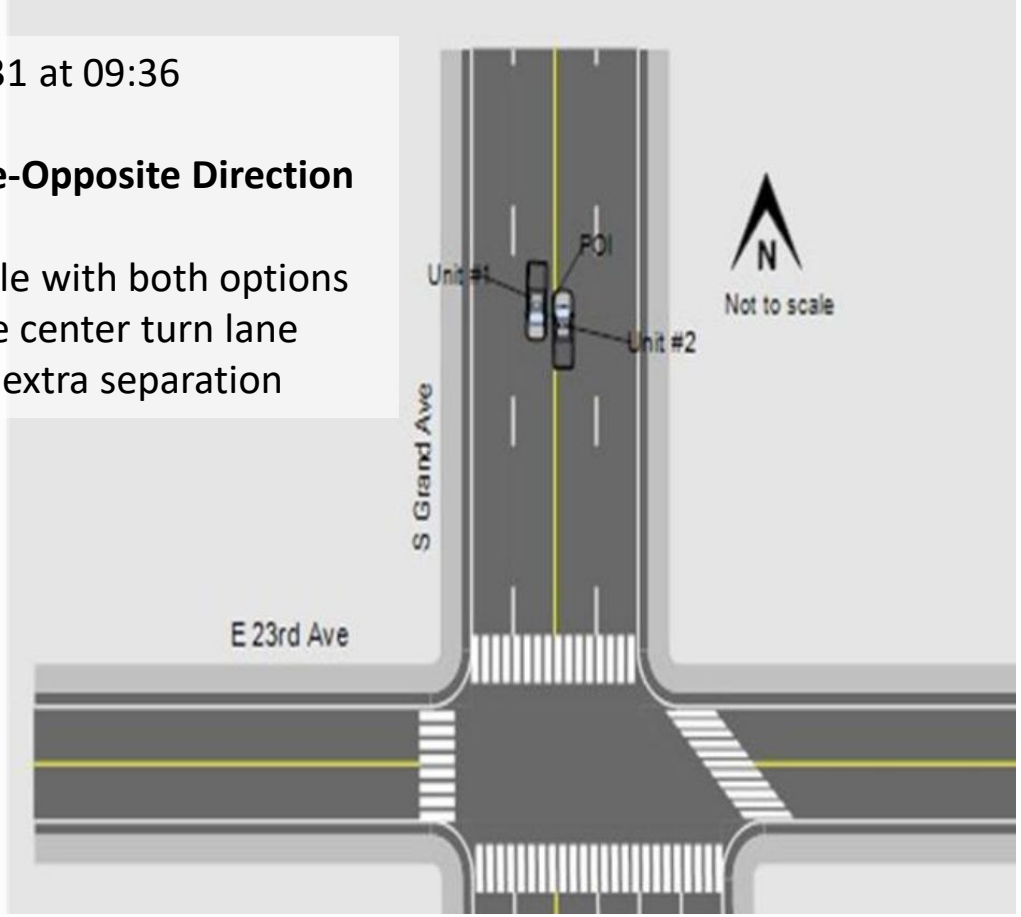
Sideswipe-Same Direction

Correctable with 3-lane but not the 4-lane configuration since only the 3-lane configuration would eliminate one of the southbound lanes, and this crash can only occur with two lanes in the southbound direction. If this crash had happened in the northbound direction, it would be correctable with both options.

2024-05-31 at 09:36

Sideswipe-Opposite Direction

Correctable with both options due to the center turn lane providing extra separation



Pros & Cons

	Pros	Cons
Option 1 (one lane uphill, one lane downhill, one center turn lane)	• Safest option for pedestrians • Provides center turn lane (safety benefit for vehicles) • Crossing treatments can be done cheaply for 3- vs 4-lane crossings	• Results in 1-min increase in travel time for vehicles and STA buses • No way for uphill traffic to pass slower moving freight vehicles • STA buses cannot be passed when making stops in either direction
Option 2 (two lanes uphill, one lane downhill, one center turn lane)	• Maintains existing travel time for NB (uphill) direction • Provides center turn lane (safety benefit for vehicles) • STA buses can be passed for the NB (uphill) direction • Uphill traffic has a second lane to pass slower moving freight traffic	• Would require expensive crossing enhancements for pedestrians • Not as safe for pedestrians crossing on Grand vs Option 1 • STA buses cannot be passed for the SB (downhill) direction • Travel time is higher for downhill direction, same as Option 1
Existing (two lanes uphill, two lanes downhill)	• Lowest travel time for vehicles • Able to pass slower moving/stopped traffic in both directions	• Least safe option for both pedestrians and people in motor vehicles • Passing movements around left turning traffic involves passing on the right, very unsafe

Discussion

Any questions, concerns, or ideas?