

Vision Zero Site Visit

Present: Jerome Rouser (NFRMPO), Anna Rose Cunningham (NFRMPO), Lance McRory (Traffic), David Kaes (FC PD), Dave Dixon (Bike Fort Collins), Rachel Ruhlen (FC Moves), Nancy Nichols (FC Moves/Safe Routes to School), Drew Jurkofsky (FC PD), Mike Avrech (FC PD), Nick Dubbert (neighbor), Tom Carter (neighbor), Lauren Nagle (FC Moves), Amy Gage (FC Moves)

Date: 2023 03 20

Location: Lemay Ave & Centennial Rd

CONTEXT

Incident: On February 12, 2023, a bicyclist westbound on Centennial Rd in the left turn lane attempted to turn left after a vehicle northbound on Lemay Ave in the right lane had passed and was struck and killed by a second vehicle northbound on Lemay Ave in the left lane. It is likely the bicyclist did not see the second vehicle because it was obscured by the first vehicle. The second vehicle was traveling close to the speed limit of 40 mph. It was mid-day, sunny, and traffic was light (it was Superbowl Sunday). The bicyclist was experienced (100-150 miles/week), aware of the adjacent bicycle path, and typically used that path when bicycling with family.

Crash history: Since 2009, 6 crashes have occurred, not including the Feb 12 crash (see attached collision diagram). Four of these involved vehicles turning from (3) or onto (1) Centennial Rd (the other two were on Lemay Ave and did not involve vehicles using or attempting to use Centennial Rd). Of these four, two involved injuries, one of which was a serious injury. None involved pedestrians or bicyclists.

Intersection: This is an stop-sign controlled three-legged intersection with a stop sign, unmarked crosswalk, and curb ramps on Centennial Rd. North-south travel on Lemay Ave does not stop. Lemay Ave has five lanes, two lanes in each direction and a center turn lane; lane widths are ten feet. Centennial Rd has an eastbound right turn only lane and left turn only lane and one westbound lane, all are 14 feet wide.

Bike lanes on Centennial Rd end at the previous block (Eastborough Dr); Lemay Ave has bike lanes on both sides. All legs have sidewalk which are standard width except the sidewalk on the south side of Centennial Rd from Eastborough Dr to Lemay Ave and on the east side of Lemay Ave from Centennial Rd to Swallow Rd which is a short bike/ped path (12 feet wide on Centennial Rd and 10 feet wide on Lemay Ave). At Swallow Rd, the south end of the bike path, there is a marked crosswalk and a pedestrian signal to facilitate crossing Lemay Ave.

A small bicycle-only left-turn lane directs bicyclists from Centennial Rd at Eastborough Dr to the bike path and there are green dots indicating the entrance/exit of the bike path.

The verge between the sidewalk and the road is wide and contains mature trees. Curb ramps are in good condition and equipped with tactile bumps. Sidewalk and road surfaces are in good condition. Centennial Rd has 44 feet of on-street parking on the north side adjacent to Eastborough Dr.



Land use: Residential, single-family homes. Multifamily housing is on the opposite side of Lemay Ave.

Traffic volume: The average daily traffic (ADT) on Lemay Ave is 12,468 southbound and 13,921 northbound (2018 count). Centennial Rd ADT is 625 westbound, 587 eastbound. Two-hour manual bike/ped counts on Lemay Ave between Centennial Rd and Swallow Dr in annually from 2017 to 2022 ranged from 25 (12-2 pm on a weekday in 2022) to 103 (7-9 am on a weekday in 2019).

Pedestrian and Bicycle generators: Swallow Bikeway follows Centennial Rd to the bike path along Lemay Ave and then continues on Swallow Dr. Swallow Bikeway is an east-west connection for south-central Fort Collins, parallel and equidistant between arterial roads Drake Rd and Horsetooth Rd. It is classified High Comfort Bike Lane or Buffered Bike Lane. Boltz Middle School and Scotch Pines Village Shopping Center are major destinations for residents. There is a bus stop on northbound Lemay Ave south of Centennial Dr.

Site visit conditions: Daylight, cool, cloudy, no precipitation.

Observations

Confident cyclists may forego the bicycle-only left-turn lane on Centennial Rd at Eastborough Dr in favor of taking the lane and using the left-turn-only-lane to turn left onto Lemay Ave, as the bicyclist was doing on Feb 12 when the fatal crash occurred. This route is more efficient and does not require sharp turns on the bike path, pushing the beg button to call the pedestrian signal, and waiting up to 40 seconds for the signal to change. Neighbors expressed a desire for multiple options – the bike path option is good in some situations but it would be helpful to also have the option to turn left from Centennial Rd onto Lemay Ave.

Safe Routes to School instructors report difficulty teaching the complicated maneuvers required to use the Swallow Bikeway bike path on Centennial Rd and Lemay Ave to kids. The bicycle-only-left-turn lane is complex and requires looking at many potential conflict points. Neighbors report that parents don't allow their kids to use that path because they consider it to be dangerous.

The bike path option is not obvious to bicyclists unfamiliar with the area. There are green dots where it connects to the streets. The green dots are faded and in poor condition. Furthermore, the bike path does not get cleared when it snows, which may reduce trust in the reliability of the facility.

The unprotected bicycle-only left turn lane is unusual and unfamiliar. Several of these do exist throughout town, but they are not common and are less common outside of Fort Collins. There were concerns that these unusual facilities are unpredictable to both drivers and bicyclists.

For pedestrians, it is not clear where or how to cross Centennial Rd and/or Eastborough Dr to access the bike path.

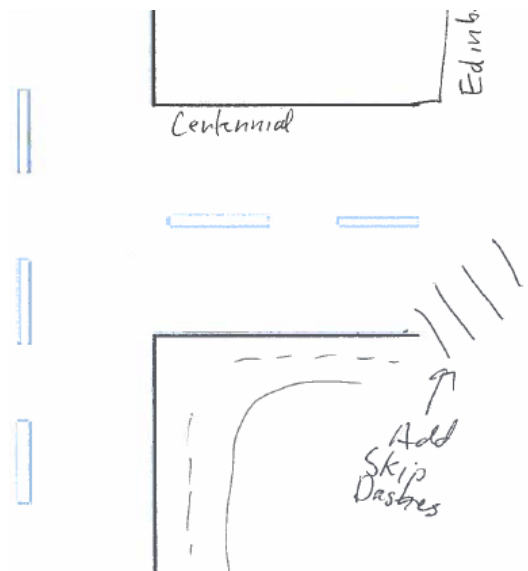
While the Swallow Bikeway provides a route to Boltz Middle School, there is no good way to access Scotch Pines Village Shopping Center to the north. Swallow Dr to the south and Drake Rd north of the shopping center are signalized intersections with pedestrian signal heads, but both are out of the way for pedestrians and bicyclists crossing at Swallow Dr would have to go against traffic on Lemay Ave to reach the shopping center. A sidewalk connects the north end of Eastborough Rd to Lemay Ave south of the shopping center, and many pedestrians cross Lemay Ave here.

Neighbors report that drivers tend to speed up approaching and traveling through the intersection of Lemay Ave and Centennial Rd. The speed limit on Lemay Ave is 40 mph – even drivers who are not exceeding the speed limit are traveling at deadly speed. Excessive speed from drivers on Centennial Rd approaching Lemay Ave has prompted one neighbor to park his trailer curbside, which he has noted has the effect of slowing westbound traffic and encouraging westbound bicyclists to use the bike path. Furthermore, neighbors observe the drivers cut the corners to maintain speed throughout the turn. This is true of turning movements through the Lemay Ave/Centennial Rd intersection as well as through the Centennial Rd/Eastborough Dr intersection. Observers noted that the wide lanes on Centennial Rd and Lemay Ave's straight, 5-lane configuration encourage speeding.

An additional concern is that drivers trying to get to Timberline Rd attempt to use Centennial Rd, which does not go through, and their navigation apps instruct them to turn around, prompting many to execute a U-turn on Centennial Rd and generate potential conflict points.

Suggestions to reduce crashes at this intersection included:

- Make bike/ped movement between Centennial Rd and the bike path more prominent
 - Signage
 - Green skip dashing
 - The [Urban Bikeway Design Guide](#) (National Association of City Transportation Officials) notes that colored pavement "may not be applicable for crossings in which bicycles are expected to yield right of way, such as when the street with the bicycle route has Stop or Yield control at an intersection".
 - Centerline on the bike path, ideally a pedestrian-only lane as well
 - Show an option for pedestrians
 - Replace the green dots
- Add a crosswalk at Centennial Rd to cross Lemay Ave
 - Rectangular Rapid Flash Beacon or HAWK signal on Lemay Ave at Centennial Rd
 - Pedestrian refuge island on Lemay Ave at Centennial Rd (which could be done with posts/paint)
 - There is a wish for a signal at Centennial Rd, but the proximity of the signal at Swallow Dr may be too close (400 feet)
- Manage traffic speed through the intersection
 - Bulb-outs to prevent people from cutting corners (which could be done with posts/paint)
- Manage traffic speed on Centennial Rd
 - Narrow the lane widths



- Install a median on Centennial Rd to narrow the ingress/egress (which could be done with posts/paint)
- Speed bumps (Federal Highway Administration recommends speed humps or speed tables)
- Install a curb extension
 - Neighbor has concerns about losing on-street parking
 - Could be done with posts/paint

Other suggestions to improve operations of these corridors included:

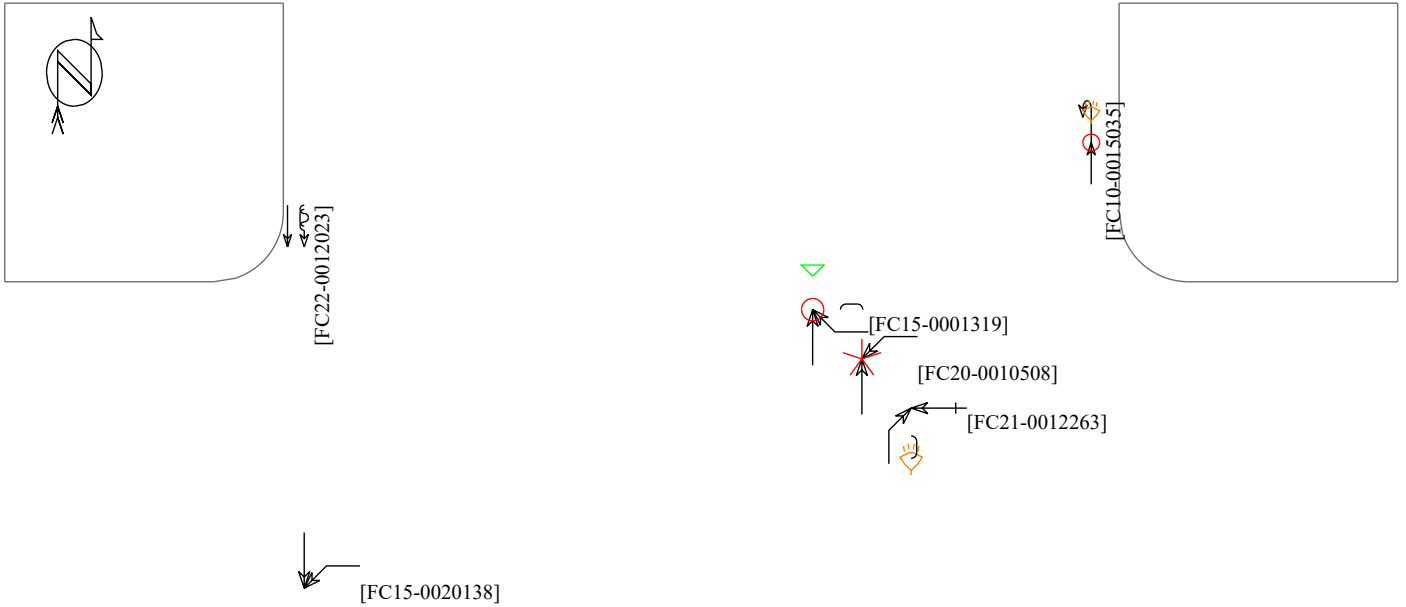
- Clear the bike path when there's snow/ice
- Increase the length of the school zone on Lemay Ave
- Provide several options for bicyclists and pedestrians to cross Lemay Ave
 - The existing crossing at Swallow Dr
 - A crossing near Strachan Dr
 - An option for confident bicyclists to safely turn left at Centennial Rd
- Install sidepaths on both sides of Lemay Ave (High Priority recommendation of the Active Modes Plan)
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S LEMAY AVE & CENTENNIAL RD

9/23/2009 - 1/23/2023

6 Crashes

Clear



- | | | | |
|---------------|-------------|--------------|--|
| ← Straight | Parked | × Pedestrian | DUI |
| ←+ Stopped | Weaving | Bicycle | 3rd Vehicle |
| ← Unknown | Changing Ln | ○ Injury | ←-M- Motorcycle |
| ↔ Backing | Right turn | Serious Inj | ←-O- Overturn |
| ↔↔ Overtaking | Left turn | ● Fatality | Fixed objects: |
| ←-D Sideswipe | U-turn | Nighttime | <input type="checkbox"/> General <input type="checkbox"/> Animal |
| | | | <input type="checkbox"/> Public Obj <input type="checkbox"/> Private Obj |