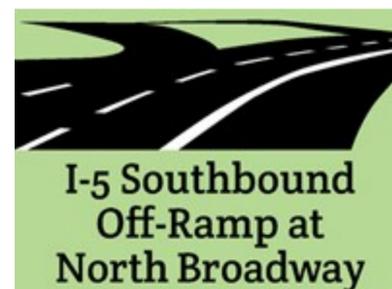


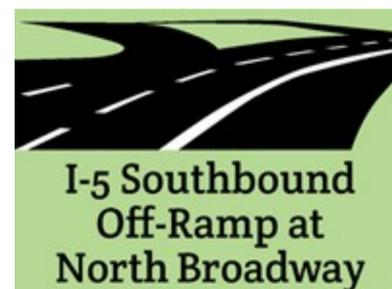
# Other Potential Design Options Considered (and Reasons for Not Pursuing)

- **Two pedestrian hybrid beacons (one at the existing pedestrian crossing near Broadway/Ross, and one on Broadway between Wheeler and Flint).**
  - ◇ Two locations less than 250 feet apart, only 300 feet from the Broadway/Vancouver/I-5 off-ramp intersection. Tight spacing would provide little storage space for queued vehicles between signals.
  - ◇ Close proximity of the beacon to an intersection (approximately 20 feet west of the Broadway/Flint intersection).
  - ◇ Pedestrian hybrid beacon should be at least 100 feet from a driveway or intersection.
  - ◇ Limited visibility of the beacon and pedestrian crossing for southbound drivers turning right from Flint onto Broadway.
  - ◇ Limited visibility of the beacon for westbound drivers on Broadway due to vertical and horizontal curves.



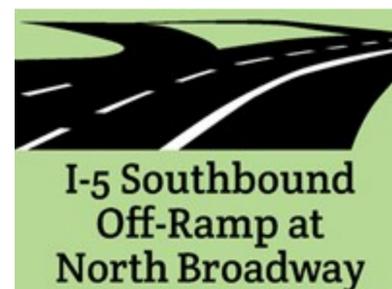
# Other Potential Design Options Considered (and Reasons for Not Pursuing)

- **Pedestrian hybrid beacon on Broadway between Wheeler and Flint**—Addressed concerns about proximity at existing pedestrian crossing near Broadway and Ross, but not considered feasible due to issues related to proximity to nearby intersections and visibility.
- **Full traffic signal at Broadway/Wheeler or Broadway/Flint**—Full traffic signal does not meet conventional traffic signal warrants based on vehicle or pedestrian volumes at this location. However it does meet warrants for a pedestrian hybrid beacon.
  - ◇ Lack of warrant justification, special approval for conventional traffic signal required.
  - ◇ Due to close spacing of side streets, signal would have to be designed to control Broadway/Wheeler and Broadway/Flint as a single intersection. *(continued)...*



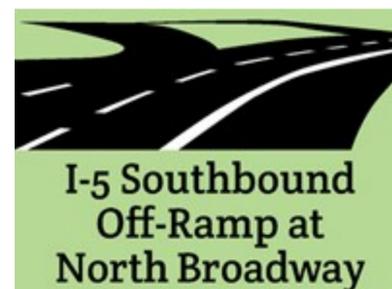
# Other Potential Design Options Considered (and Reasons for Not Pursuing)

- **Full traffic signal at Broadway/Wheeler or Broadway/Flint**—Full traffic signal does not meet conventional traffic signal warrants based on vehicle or pedestrian volumes at this location. However it does meet warrants for a pedestrian hybrid beacon.
  - ◇ While a traffic signal can assist pedestrians in getting across Broadway at this location, signal could not operate in a typical fashion with both intersections.
  - ◇ Would cause additional confusion and create conflicts that don't exist today (violating “No Turn on Red” conditions, etc.).
  - ◇ This design option is more expensive than other options and less likely to be funded and constructed in the near-term.
  - ◇ Signalizing Broadway/Flint is inconsistent with the N/NE Quadrant Plan recommendation to remove the Flint overcrossing of I-5 and the Flint/Broadway intersection in the long-term.



# Other Potential Design Options Considered (and Reasons for Not Pursuing)

- **Rectangular Rapid Flashing Beacons (RRFBs)** - RRFBs frequently used to increase visibility of pedestrian crossings and to increase driver yielding behavior.
  - ◇ Activated “on demand” and can’t be coordinated with other signals, can cause significant disruption to operations when closely spaced.
  - ◇ Less expensive to install than pedestrian hybrid beacons or traffic signals, but do not provide a red indication requiring vehicles to stop.
  - ◇ PBOT analyzed crossing locations in the study area based on pedestrian and vehicle volumes, speeds, and roadway characteristics and determined that a pedestrian crossing treatment with a red indication (e.g. pedestrian hybrid beacon, pedestrian signal) is the most appropriate crossing treatment for the study area.



# Other Potential Design Options Considered (and Reasons for Not Pursuing)

- **Closing left turn “slip lane” from Broadway to eastbound Weidler** - N/NE Quadrant Plan calls for left turn “slip lane” from westbound Broadway to eastbound Weidler to be closed in the long term.
  - ◇ New surface street connections identified in long-term plan would provide alternative routes for vehicles that currently use turn lane.
  - ◇ Until new street connections identified in N/NE Quadrant Plan are constructed, vehicles that used left turn lane would need to travel two blocks west to make a U-turn at the signal at Broadway/Benton.
  - ◇ PBOT reviewed video of left turn slip lane and determined that a number of vehicles currently using the facility are 30-foot trucks that are not capable of making a U-turn at the Broadway/Benton intersection.
  - ◇ Closing left turn slip lane would require reconstruction of part of the Broadway/Benton intersection to accommodate 30-foot trucks or construction of alternative local street routes identified in long range plan.
  - ◇ PBOT does not anticipate closing left turn lane as a near-term improvement.

