

## **Project Overview**

- Longview Pedestrian Crossing Assessments
  - Review existing facilities and services
  - Collect traffic data
  - Conduct site visits
  - Meet with local stakeholders
  - Conduct crosswalk assessments
  - Prepare reports





### Project Background

- Identified safety issues at proposed mid-block crossing location
- Requested by Canterbury staff and residents

### Key Issues

- An existing concrete pathway connects Canterbury Park's main entrance to 3<sup>rd</sup> Avenue
- A similar concrete pathway continues southeast from 3rd Avenue to Canterbury Inn's main entrance
- The location and orientation of the existing concrete pathways create a natural pathway across 3<sup>rd</sup> Avenue
- The closest crosswalk is approximately 480-feet to the south at Hudson Street







- Study Area
  - 3<sup>rd</sup> Avenue adjacent to Canterbury facilities
  - 3<sup>rd</sup> Avenue/Hudson Street crossing
- Existing Facilities and Services
  - 3-lane cross section: 11' travel lanes; 12' median; 8' parking lanes
  - Continuous sidewalks on both sides of 3<sup>rd</sup> Avenue
  - Marked crosswalk at 3<sup>rd</sup> Avenue/Hudson Street
    - Requires out-of-direction travel for Canterbury residents
    - Does not provide sufficient time for pedestrians to cross the street
    - Motorists do not yield to pedestrians crossing the north leg of the intersection
    - · Pedestrian ramps do not align with the crosswalks



- Traffic Data
  - Traffic volumes: 15,320 daily
    - 989 morning, 177 afternoon, 1,308 evening
  - Travel speeds: 32 mph daily
  - Pedestrian activity: 42 between7am-7pm
    - 5 morning, 14 afternoon, 5 evening
- Other Considerations
  - Illumination
  - Topography
  - Vegetation
  - Sight distance





- Crosswalk Assessment
  - Purpose: determine if proposed mid-block crossing is supported by study methodology
  - Methodology: NCHRP Report 562 Improving Pedestrian Safety at Unsignalized Intersection
  - Existing traffic conditions: Mid-block crossing is NOT supported due to limited pedestrian activity
  - Sensitivity analysis: Mid-block crossing with a high level of crosswalk protection is supported with a minor increase in pedestrian activity



- Findings and Recommendations
  - Mid-block crossing is NOT supported due to limited pedestrian activity
  - Pedestrians will continue to cross at the proposed mid-block crossing with or without enhanced crossing treatments
  - There is potential for increases in pedestrian activity during summer months and through a consolidation of pedestrian activity
  - The City should continue to monitor the crossing and consider installing an enhanced mid-block crossing with a high level of crosswalk protection
  - The City should address needs at the 3<sup>rd</sup> Avenue/Hudson Street intersection with or without mid-block crossing



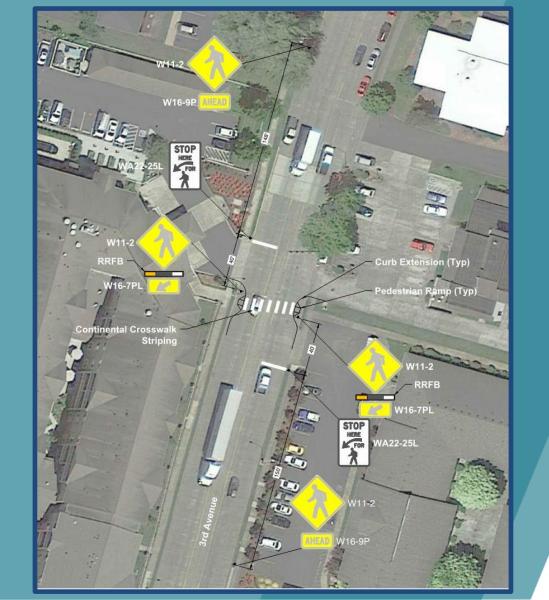
- Findings and Recommendations
  - Modify the eastbound approach to the 3<sup>rd</sup> Avenue/Hudson Street intersection to provide a separate eastbound left-turn lane and a shared through/right-turn lane.
  - Modify the traffic signal at the 3<sup>rd</sup> Avenue/Hudson Street intersection to provide protected left-turn phasing at the eastbound approach
    - » Lag the left-turn movement and increase the walk time for the east-west movement.
  - Upgrade the pedestrian signal heads with countdown heads at the 3<sup>rd</sup> Avenue/Hudson Street intersection.



- Findings and Recommendations (cont.)
  - Monitor the mid-block crossing and if/when pedestrian activity reaches the minimum requirement, consideration should be given to installing an enhanced mid-block crossing with the following crossing treatments:
    - Curb extensions on both sides of the proposed mid-block crossing.
    - ADA compliant pedestrian ramps at both ends of the crosswalk per City standards.
    - High visibility crosswalk pavement markings and signs per the MUTCD.
    - Rectangular Rapid Flash Beacons (RRFB) on the crosswalk signs.
    - Advance stop bars at each approach with "Stop Here for Pedestrian" signs.
    - Advance warning signs at each approach.



 Potential Mid-Block Crossing





- Project Background
  - School Zone Study February 2014
  - Several upgrades to existing facilities
  - Identified potential for mid-block crossing and potential to close Pine Street and Pennsylvania Street crossings

### Key Issues

- Pedestrian crossing activity at the Pennsylvania Street crossing limits the ability for vehicles, including buses, to exit the driveway.
- This frequently causes extended vehicle queues and delay within CVG drive aisle.







- Study Area
  - 30th Avenue adjacent to CVG Elementary School
  - Pine Street crossing
  - Pennsylvania Street crossing
- Existing Facilities and Services
  - 2-lane cross section: 11' travel lanes; 7' parking lanes
  - Continuous sidewalks on both sides of 30<sup>th</sup> Avenue
  - Marked crosswalks at Pine Street and Pennsylvania Street
    - Pavement markings and signs
    - Advance warning signs
    - School speed zone signs with flashing beacons
    - Supported by additional signage and crossing guards



- Traffic Data
  - Traffic volumes: 5,586 daily vehicles: 387 morning; 560 afternoon
  - Travel speeds: 30 mph daily: 21 mph morning; 22 mph afternoon
  - Pedestrian activity:
    - Pennsylvania Street: 25 morning; 119 afternoon
    - Pine Street: 4 morning; 37 afternoon
    - Mid-block: 0 morning; 1 afternoon

#### Other Considerations

- Illumination
- Topography
- Vegetation
- Sight distance



- Crosswalk Assessment
  - Purpose: determine if proposed mid-block crossing is supported with and without Pine and Pennsylvania Street crossings
  - Methodology: NCHRP Report 562 Improving Pedestrian Safety at Unsignalized Intersection
  - Existing traffic conditions: Mid-block crossing is NOT supported due to lack of pedestrian activity
  - Sensitivity analysis: Mid-block crossing IS supported if pedestrian activity is shifted from either Pine Street or Pennsylvania Street crossings



- Findings and Recommendations
  - Mid-block crossing is NOT supported by study methodology without a shift in pedestrian activity from one of the existing crossings
  - Pedestrians will continue to cross at existing crossings with or without the mid-block crossing
  - Mid-block crossing is not expected to address key issue associated with queueing and delay in drive aisle – could exacerbate issue
  - Mid-block crossing is **NOT** recommended



- Findings and Recommendations
  - Near-term recommendations
    - Work with crossing guards to improve operation of existing crossings
    - Educate students and parents about alternative pick-up and drop-off locations
    - Install stop bars at the existing crossings to stop vehicles from blocking driveways
    - Evaluate light levels at existing crossing to ensure they meet standards
  - Long-term Recommendations
    - Consider staggered release times for students
    - Consider reconfiguring drive aisle to separate buses from vehicles
    - Consider installing flashing beacons on existing crosswalk signs
    - Consider removal of on-street parking along 30<sup>th</sup> Avenue between Pennsylvania street

