# City of Wilmington Pedestrian Safety Study

Wilmington Pedestrian Audit

Kirkwood Street: 7th Street to 11th Street

July 14, 2023

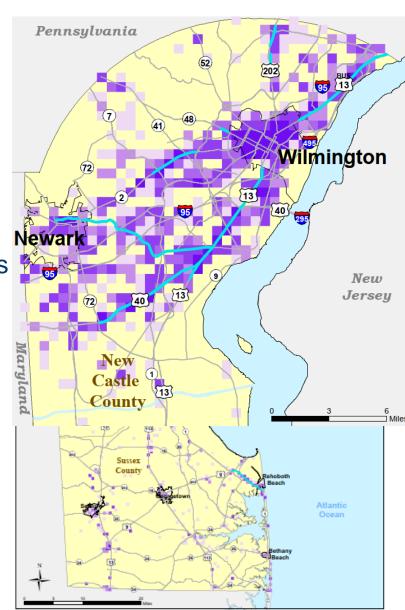




#### **Purpose of Study**



- Why are we here?
  - Improve pedestrian safety within City
  - Improve walking as a mode of transportation
    - Access to jobs
    - Access to recreation
    - Access to economic improvements
  - Major corridors surrounding Wilmington have been studied
    - US 13
    - SR 141
    - US 202
    - Philadelphia Pike
  - Site selection conducted in 2019 pinpoints Wilmington as next logical study location



#### Study Approach



- Review city-wide pedestrian crash history
- Identify critical corridors and intersections
- Convene stakeholder group
- Pedestrian safety audits of selected critical corridors and intersections
- Systemic pedestrian treatments at other locations

#### **Stakeholder Group**

- Peter Haag, DelDOT
- Sonya LaGrand, DelDOT
- Diane Gunn, Century, DelDOT Wilmington Projects Manager
- Paul Moser, DelDOT
- Meaghan Barna, DelDOT
- · Aimee String, DelDOT
- Catherine Smith, DTC
- John Calnan, DTC
- Capt. Rodney Layfield, State Police
- Lt. Lance Skinner, State Police
- Richard Klepner, Office of Highway Safety
- · Jackie McDermott, Office of Highway Safety
- Stephen Weber, City of Wilmington
- Tom Ogden, City of Wilmington
- Jeff Starkey, City of Wilmington
- Kelly Williams, City of Wilmington
- Sgt. Pete Leccia, Wilmington Police
- Dave Gula, WILMAPCO
- Federal Highway Administration

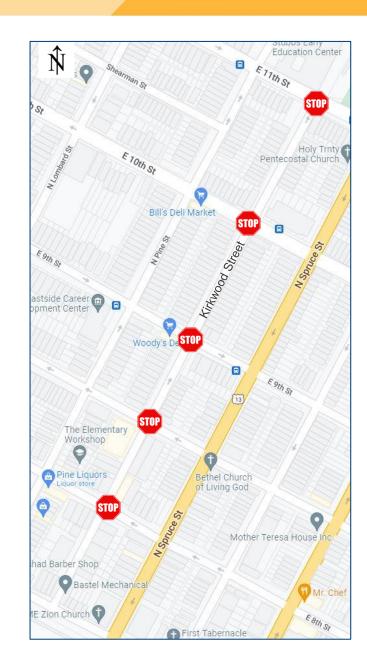


### KIRKWOOD STREET 7<sup>TH</sup> STREET TO 11<sup>TH</sup> STREET

#### **Kirkwood Street Corridor**

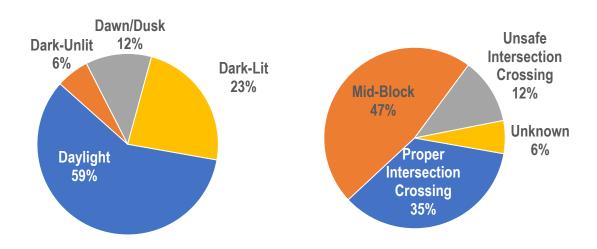


- 0.30-mile local roadway
- 2019 AADT < 1,000
- One-way roadway with NB traffic
- One through lane, ~10 ft width
- Curb-to-curb crossing distance
   ~26 ft
- On-street parking on both sides of the roadway
- Sidewalks and lighting present
- 25-MPH speed limit
- 6 unsignalized intersections
- Unsignalized mid-block parking lots and driveways between 7<sup>th</sup> Street to 8<sup>th</sup> Street and 10<sup>th</sup> Street to 11<sup>th</sup> Street

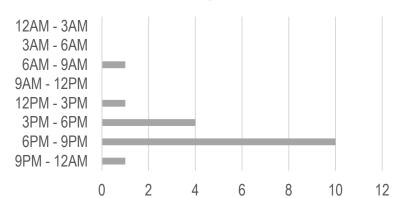


#### **Crash Trends**

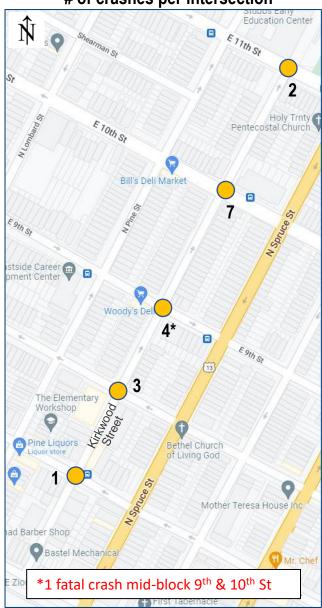
#### 17 Crashes (2009 - 2020)







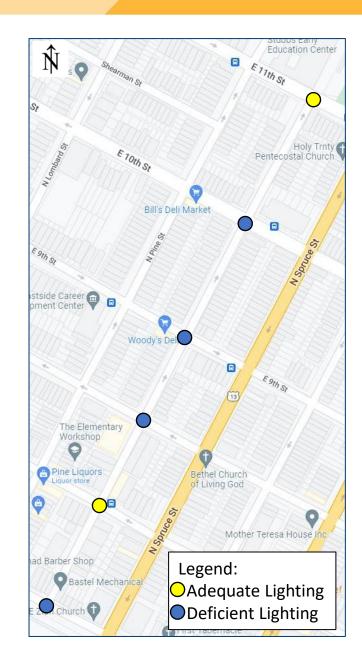
#### # of crashes per intersection



#### **Lighting Assessment**



- Qualitative driving assessment
- Streetlamps and LED luminaires are common
- Midblock coverage strong
- Lighting deficient at 4 intersections:
  - 7<sup>th</sup> street East and West legs
  - Taylor Street East leg
  - 9<sup>th</sup> Street North, West, and South legs
  - 10<sup>th</sup> Street East leg



#### **Unsignalized Intersections**

#### Kirkwood Street at 7th Street



- Zero pedestrian crashes
- Existing crosswalk domes on the north leg
- No existing marked crosswalks
- T intersection with no stop control
- Missing KIRKWOOD ST street blade signs at the intersection





#### Kirkwood Street at 8th Street



- One crash involving a NB vehicle striking a pedestrian crossing midblock
- Existing crosswalk domes on all legs
- No existing marked crosswalks
- NB approach is stop controlled





Kirkwood Street: 7th Street to 11th Street

#### Kirkwood Street at Taylor Street & wra 11





#### 3 crashes

- 1 crash involving two NB vehicles striking a pedestrian as a result of a rear-end crash
- 2 crashes involving a NB vehicle exiting a parking spot and striking a pedestrian crossing midblock
- Existing crosswalk domes on all legs
- No existing marked crosswalks
- NB approach is stop controlled



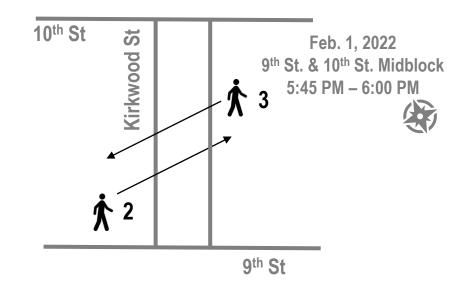


#### Kirkwood Street at 9th Street



#### 4 crashes

- 2 crashes involving a NB vehicle striking a pedestrian (1 in the crosswalk
- 1 crash involving a NBR vehicle striking a pedestrian crossing the south leg
- 1 crash involving a pedestrian (child) darting into the roadway and being struck by a NB vehicle (FATAL)
  - Wednesday, October 10, 2018, at 5:55 PM
- Existing crosswalk domes on all legs
- No existing marked crosswalks
- NB approach is stop controlled



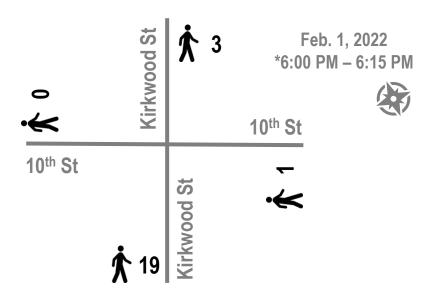


#### Kirkwood Street at 10th Street





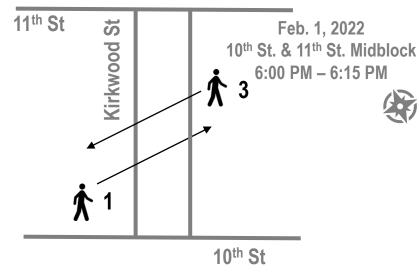
- 4 crashes involving a pedestrian crossing midblock between parked cars and being struck by a NB vehicle
- 2 crashes involving a NB vehicle striking a pedestrian in the crosswalk
- 1 crash involving a pedestrian entering the crosswalk and striking the side of a WB vehicle
- Existing crosswalk domes on the north leg
- No existing marked crosswalks
- NB approach is stop controlled
- Missing KIRKWOOD STREET and 10<sup>TH</sup> STREET street blade signs at the intersection
- During field observations, there was a crash at Pine Street at 10<sup>th</sup> Street, potentially increasing area pedestrian traffic





#### Kirkwood Street at 11th Street

 2 crashes involving a pedestrian crossing the unmarked east/west leg and an EB vehicle striking the pedestrian



- Existing crosswalk domes on the south leg
- No existing marked crosswalks
- NB approach is stop controlled



## POTENTIAL RECOMMENDATIONS AND NEXT STEPS

#### Recommendations



- Install pedestrian crossing warning signage along all non-stop controlled approaches
- Install crosswalk striping at all intersections with existing truncated domes
- Install missing KIRKWOOD STREET signs at 7<sup>th</sup> Street and 10<sup>th</sup> Street
- Install missing 10<sup>TH</sup> STREET signs at 10<sup>th</sup> Street
- Consider installing an east and/or west crosswalk leg on 11<sup>th</sup> Street for NB and SB Kirkwood street pedestrian traffic
- Consider lighting improvements at deficient locations

#### Thank you!

#### **Questions** & Answers



