

# MONTGOMERY AVENUE CORRIDOR TRAFFIC CALMING AND SAFETY ACTION PLAN

Federal Highway Administration (FHWA)  
Safe Streets for All (SS4A) Discretionary Grant Program



# Update



- ▶ SS4A Program Goals and Objectives
- ▶ Existing Conditions
  - ▶ Crash History
  - ▶ Operational Characteristics

# SS4A Program Goals and Objectives



- ▶ Lower Merion intends to incorporate the SS4A Action Plan Components for this high-volume corridor, including traffic and safety data gathering, best practices research, and road design intervention recommendations to improve safety for all corridor users on Montgomery Avenue.
  
- ▶ SS4A Action Plan Components:
  - ❖ Leadership Commitments & Goal Settings
  - ❖ Planning Structure
  - ❖ Safety Analysis
  - ❖ Engagement & Collaboration
  - ❖ Equity Considerations
  - ❖ Policy and Process Changes
  - ❖ Strategy & Project Selections
  - ❖ Progress & Transparency

# SS4A Goals and Objectives



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## Safe Streets and Roads for All Action Plan Components

### Safety Analysis



Analysis of existing conditions and historical trends that provides a baseline level of crashes involving fatalities and serious injuries across a jurisdiction, locality, Tribe, or region. Includes an analysis of locations where there are crashes and the severity of the crashes, as well as contributing factors and crash types by relevant road users (motorists, people walking, transit users, etc.). Analysis of systemic and specific safety needs is also performed, as needed (e.g., high-risk road features, specific safety needs of relevant road users, public health approaches, analysis of the built environment, demographic, and structural issues, etc.). To the extent practical, the analysis should include all roadways within the jurisdiction, without regard for ownership. Based on the analysis performed, a geospatial identification of higher-risk locations is developed (a High-Injury Network or equivalent).

# Comprehensive Safety Action Plan



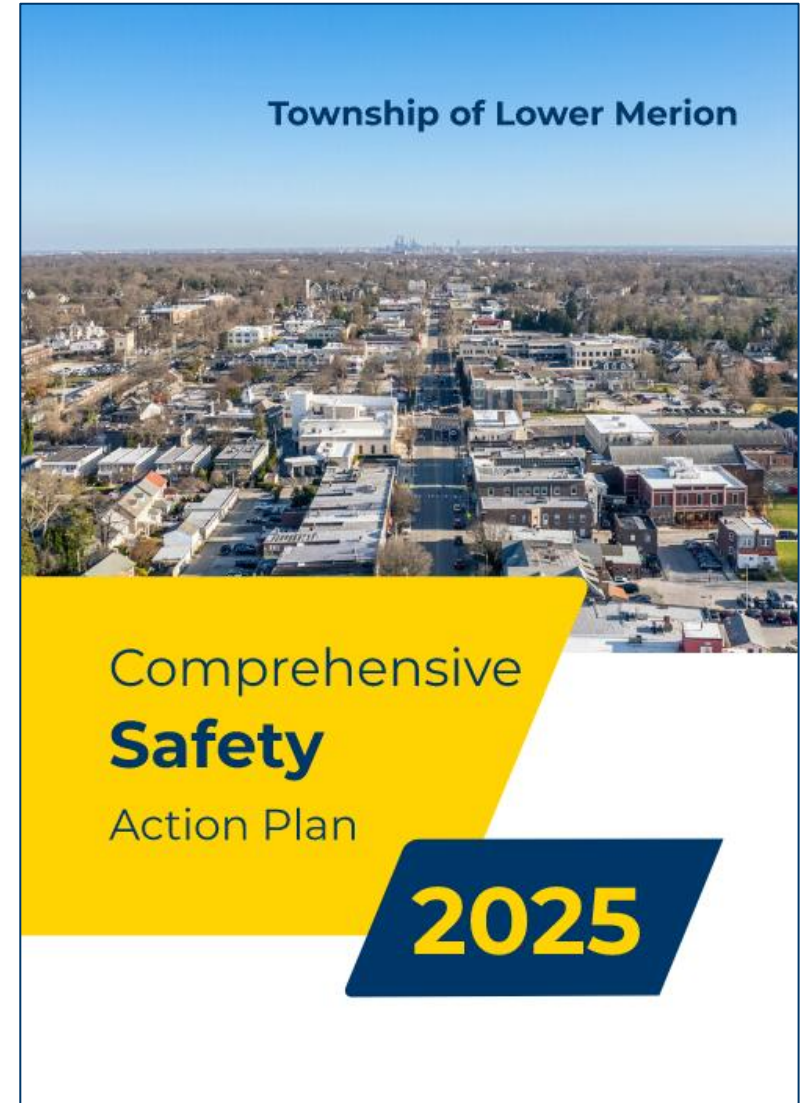
- ▶ Lower Merion Township published **2025 Comprehensive Safety Action Plan**



- ▶ Goal:

Lower Merion Township’s Comprehensive Safety Action Plan outlines a bold, data-driven strategy to **eliminate traffic fatalities and serious injuries across the Township**. Developed through extensive crash analysis, community engagement, and coordination with regional partners, the plan sets a **Vision Zero goal of reducing roadway deaths and serious injuries by 50% by 2030**.

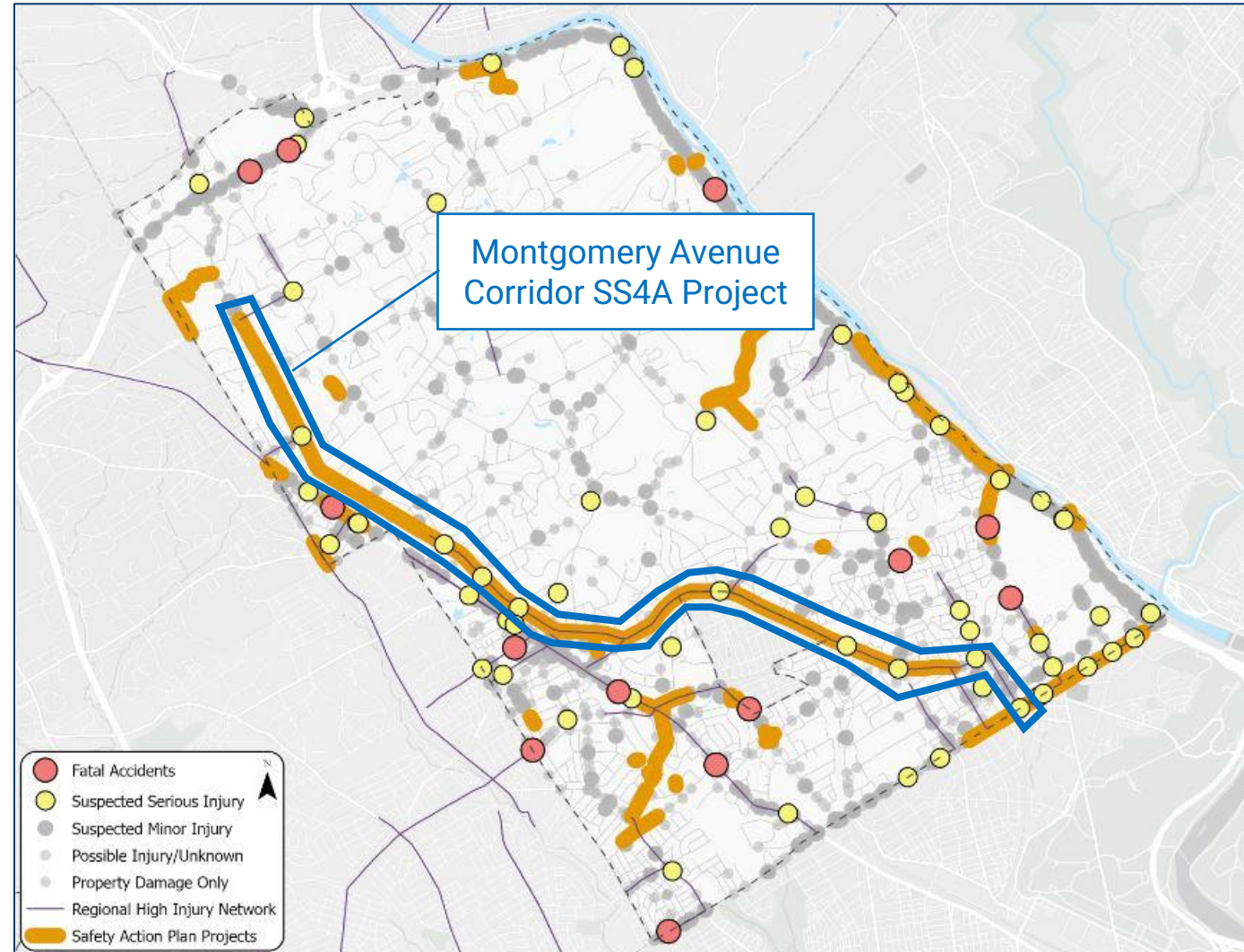
It includes targeted infrastructure projects, policy updates, and safety initiatives rooted in the Safe System Approach—**prioritizing safer roads, safer speeds, safer vehicles, safer road users, and improved post-crash care**. The plan reflects our community’s shared commitment to creating a safer, more accessible transportation network for all.”



# Comprehensive Safety Action Plan



- ▶ Identifies and Discusses:
  - ▶ Crash Statistics
  - ▶ High Injury Roadway Network
  - ▶ Safety Action Plans
  - ▶ Outreach & Engagement
  - ▶ Policy and Process Changes
  - ▶ Strategies
  - ▶ Project Selections

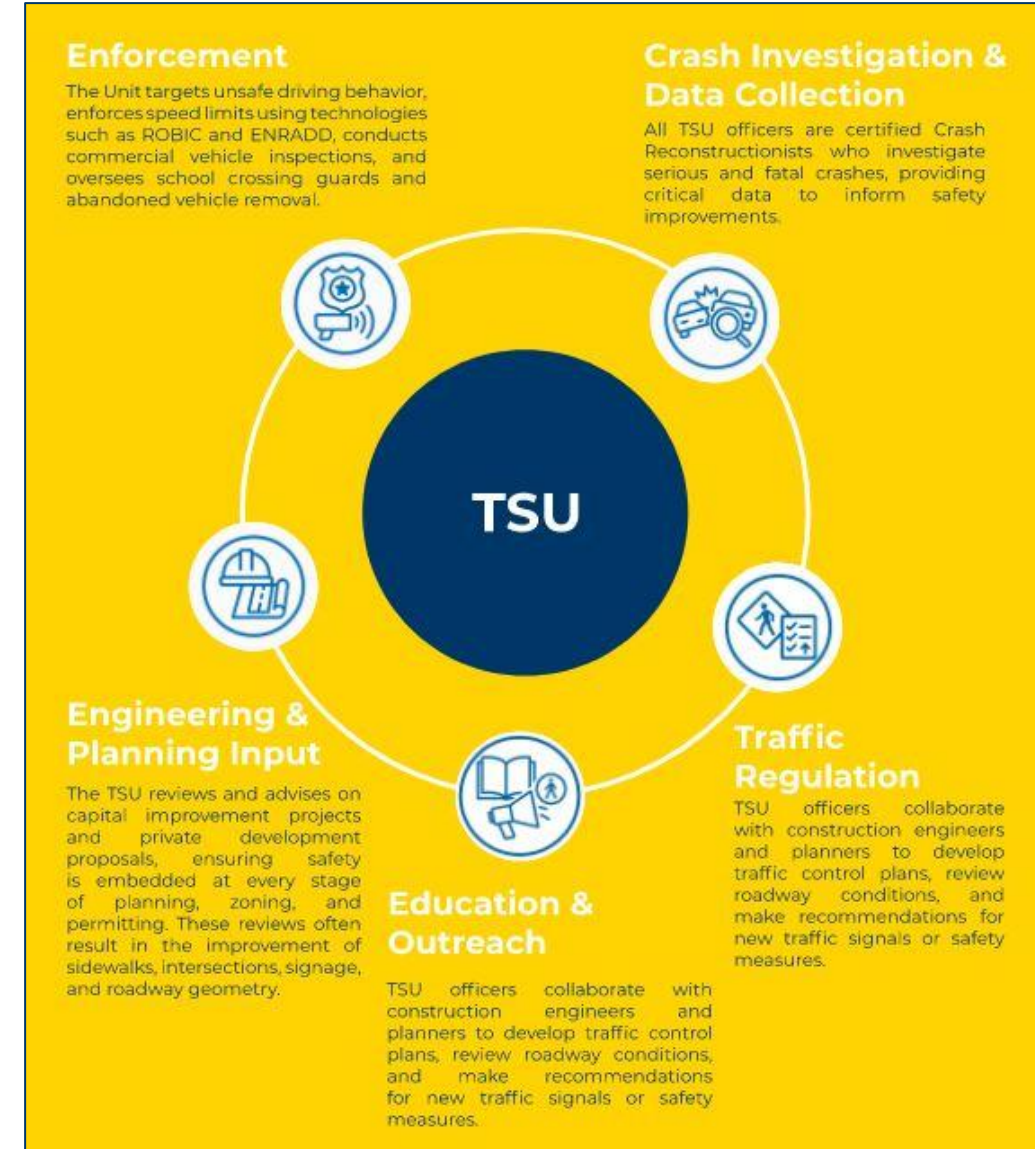


# Comprehensive Safety Action Plan



## ▶ Lower Merion Police Department's Traffic Safety Unit (TSU)

- ▶ Enforcement
- ▶ Crash Investigation/Data Collection
- ▶ Traffic Regulation
- ▶ Education & Outreach
- ▶ Engineering & Planning Input



# Study Area



- ▶ Limits: Spring Mill Road to City Avenue
- ▶ 35 Study Intersections (32 Signalized, 3 Unsignalized)



# Study Intersections



1. Spring Mill Road
2. Airdale Road
3. Roberts Road
4. Merion Avenue
5. Morris Avenue
6. Pennswood Road
7. *New Gulph Road/Rose Lane*
8. *Booth Lane*
9. Grays Lane/Old Lancaster Road
10. Haverford Station Road
11. Woodside Road
12. Mill Creek Road
13. Anderson Avenue
14. Glenn Road
15. Llanfair Road
16. Church Road
17. LMHS Driveway
18. Owen Road
19. Cherry Lane/ Penn Road
20. Gypsy Lane/ Wynnewood Road
21. Essex Avenue/ McClenaghan Mill Road
22. Old Gulph Road/Narberth Avenue/Sabine Avenue
23. Iona Avenue
24. Brookhurst Avenue
25. Woodbine Avenue
26. Meeting House Lane/ Maplewood Avenue
27. Merion Road
28. Winding Way
29. *Bowman Avenue/ Brookway Road*
30. Levering Mill Road/Old Lancaster Road
31. Bryn Mawr Avenue
32. Bala Avenue/ Conshohocken State Road
33. Conshohocken State Rd/Union Avenue/Llanberris Rd
34. Conshohocken State Rd/St. Asaph's Road
35. Conshohocken State Rd/City Avenue

*Italics = Unsignalized Intersection*

# Crash Analysis - Definitions



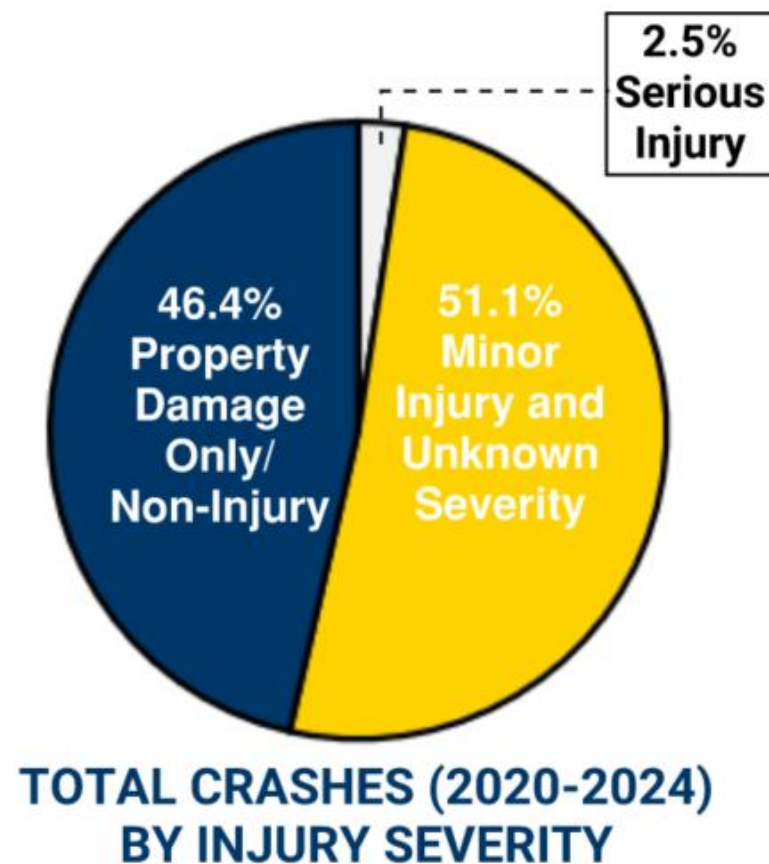
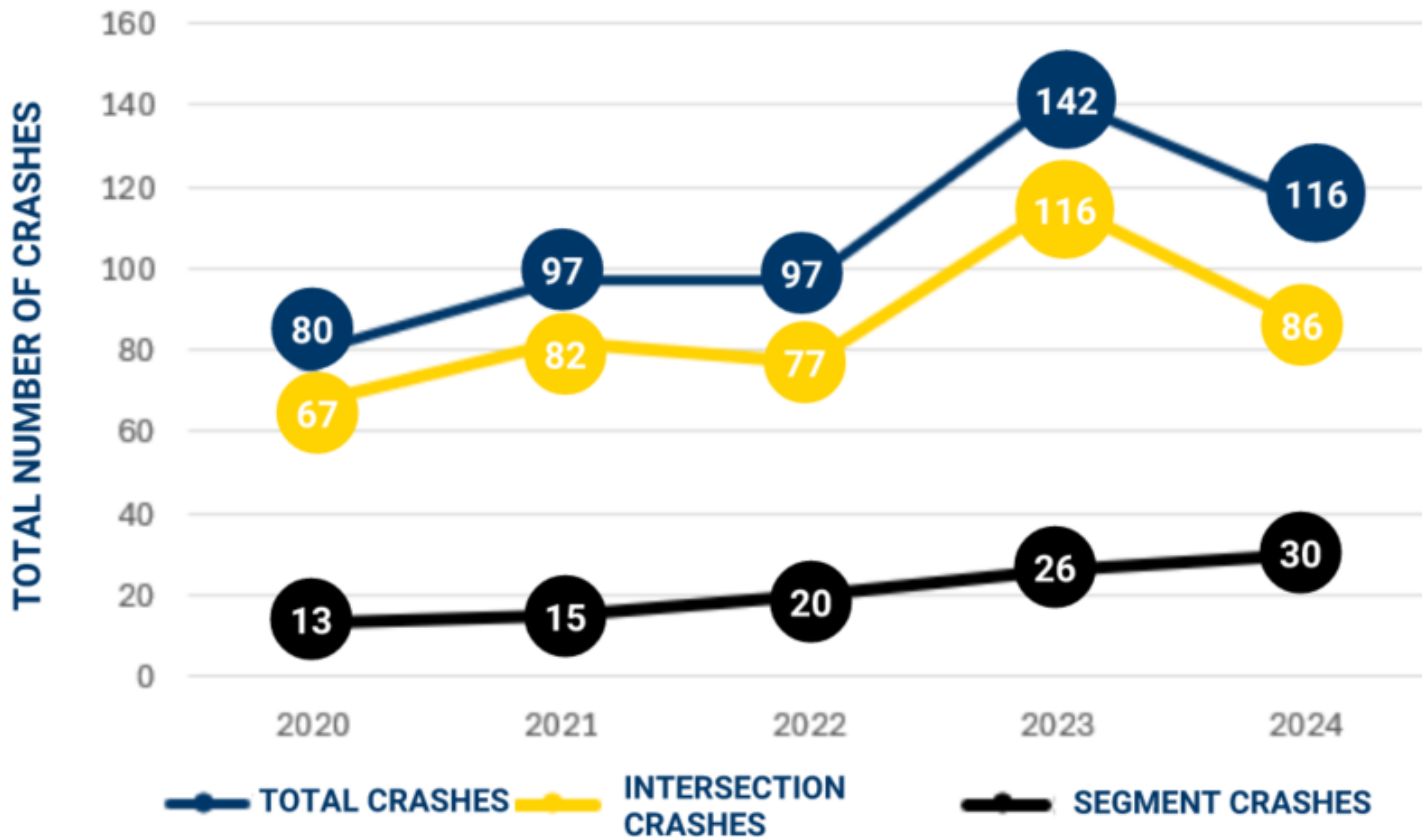
**Reportable Crash:** “A crash resulting in an injury in any degree, to any person involved; or crashes resulting in damage to any vehicle serious enough to require towing.”

# Crash Analysis – 5-Year Crash Summary



- ▶ Total Reportable Crashes on Montgomery Avenue from Spring Mill Road to City Avenue during 2020-2024

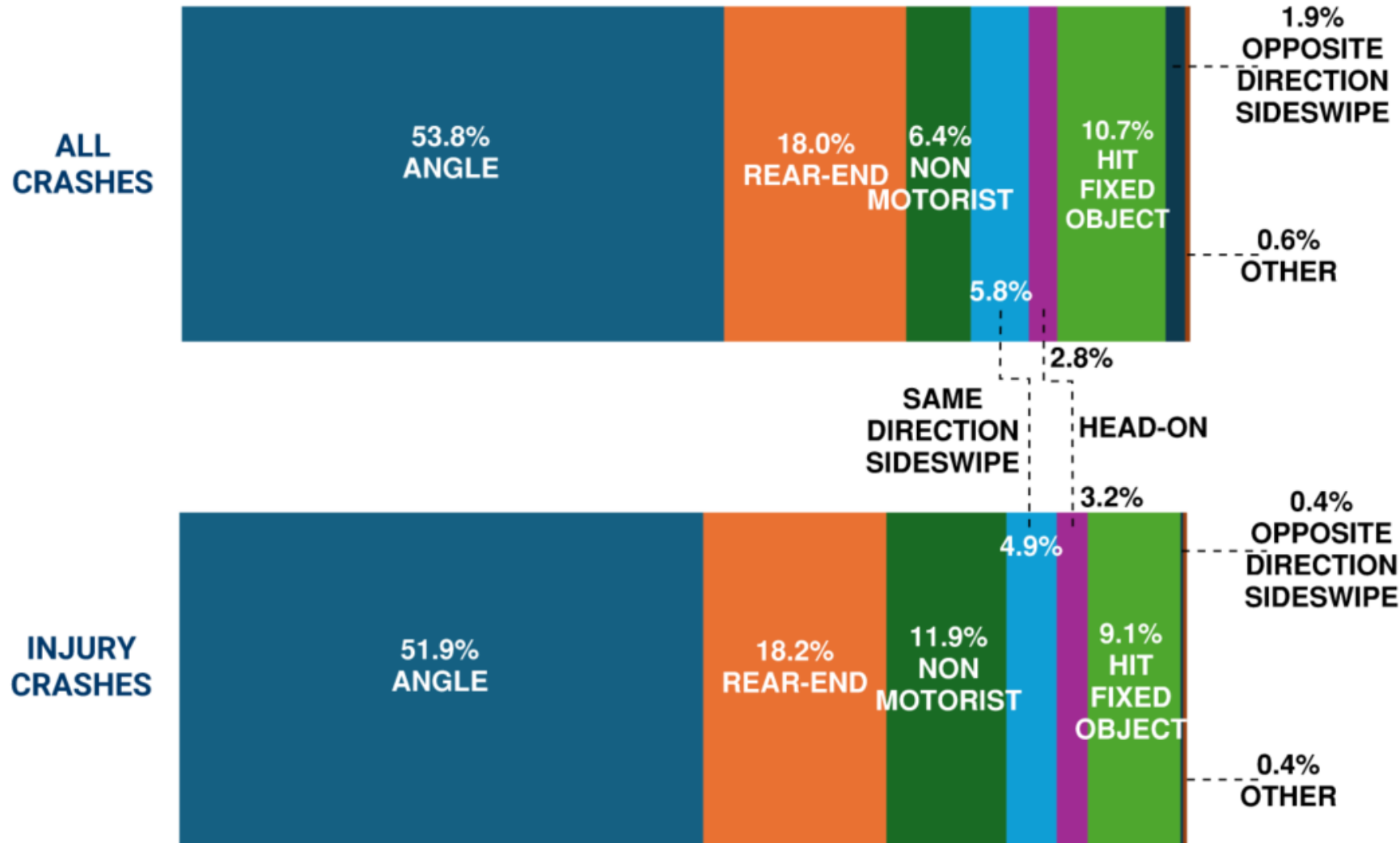
TOTAL CRASHES BY YEAR



# Crash Analysis – By Crash Type



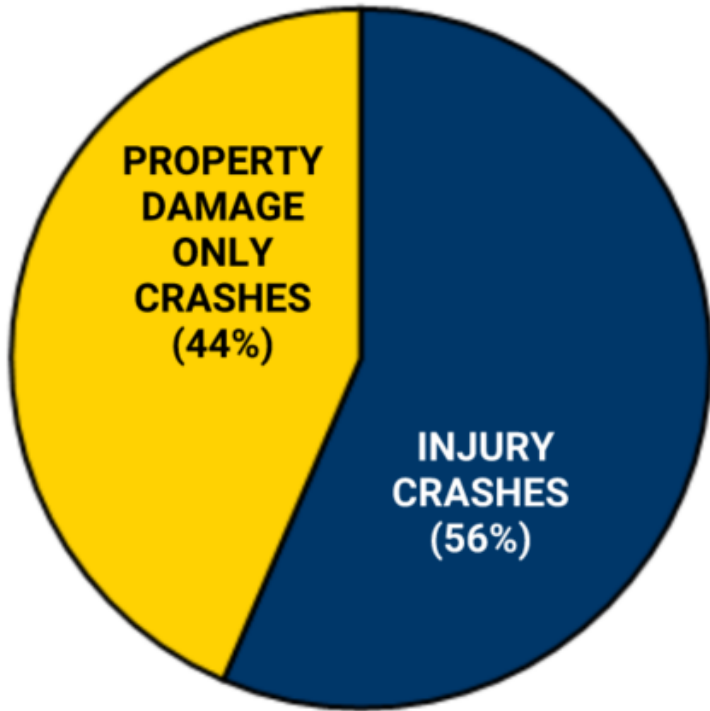
TOTAL CRASHES BY CRASH TYPE



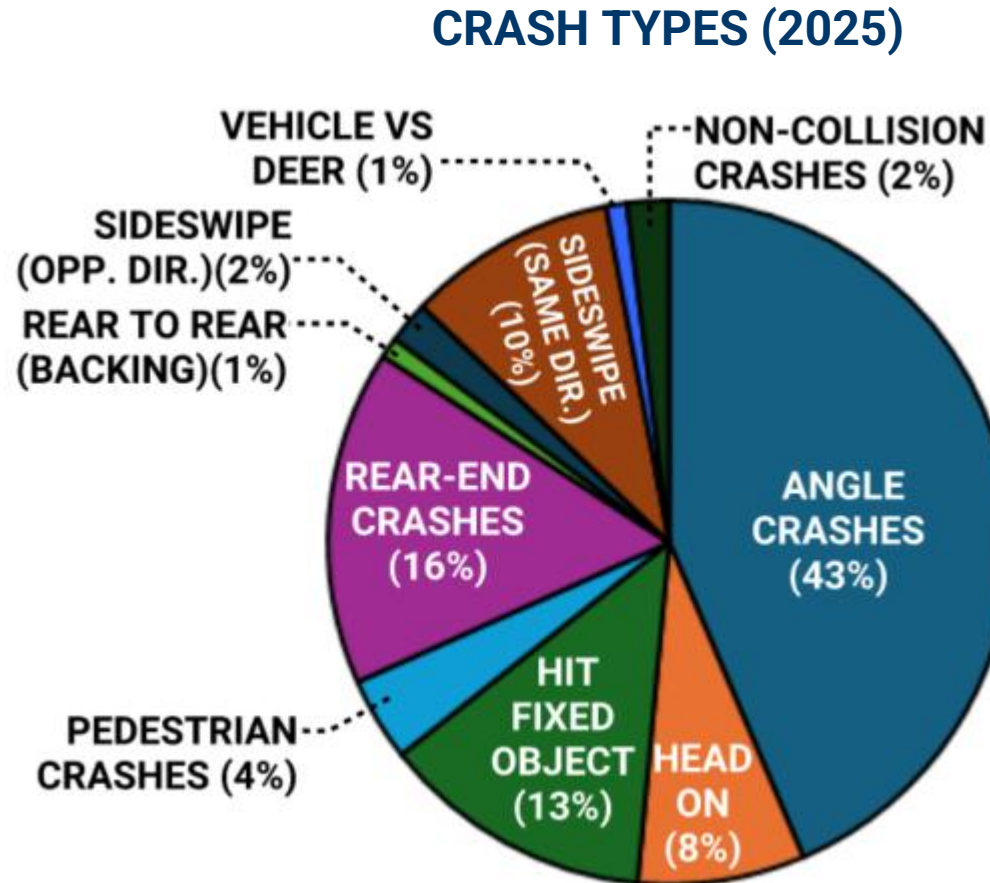
# Crash Analysis – Preliminary 2025 Data



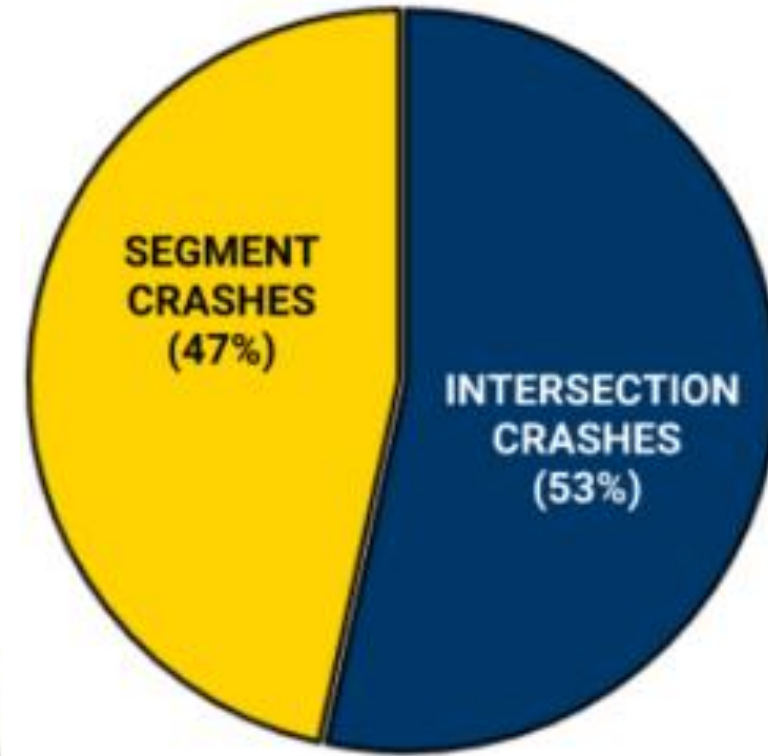
▶ 101 Total Reportable Crashes on Montgomery Avenue in 2025



**INJURY TYPE  
CRASHES (2025)**



**CRASH TYPES (2025)**



**INTERSECTION VS  
SEGMENT CRASHES  
(2025)**

# Crash Analysis – 5-Year Crash Rates



► 15 or more reportable crashes:

- ❖ Airdale Road
- ❖ Morris Avenue
- ❖ Old Lancaster Road/Grays Lane/Haverford Station Road
- ❖ Woodside Road
- ❖ Cherry Lane/Penn Road
- ❖ Gypsy Lane/Wynnewood Avenue
- ❖ Old Lancaster Road/Levering Mill Road
- ❖ Conshohocken State Road/Bala Avenue
- ❖ Colwyn Lane\*
- ❖ City Avenue

\*Note: Some crashes may be more related to the roadway curvature than the intersection geometry/traffic control.

## MONTGOMERY AVENUE CRASH RATES (2020-2024)

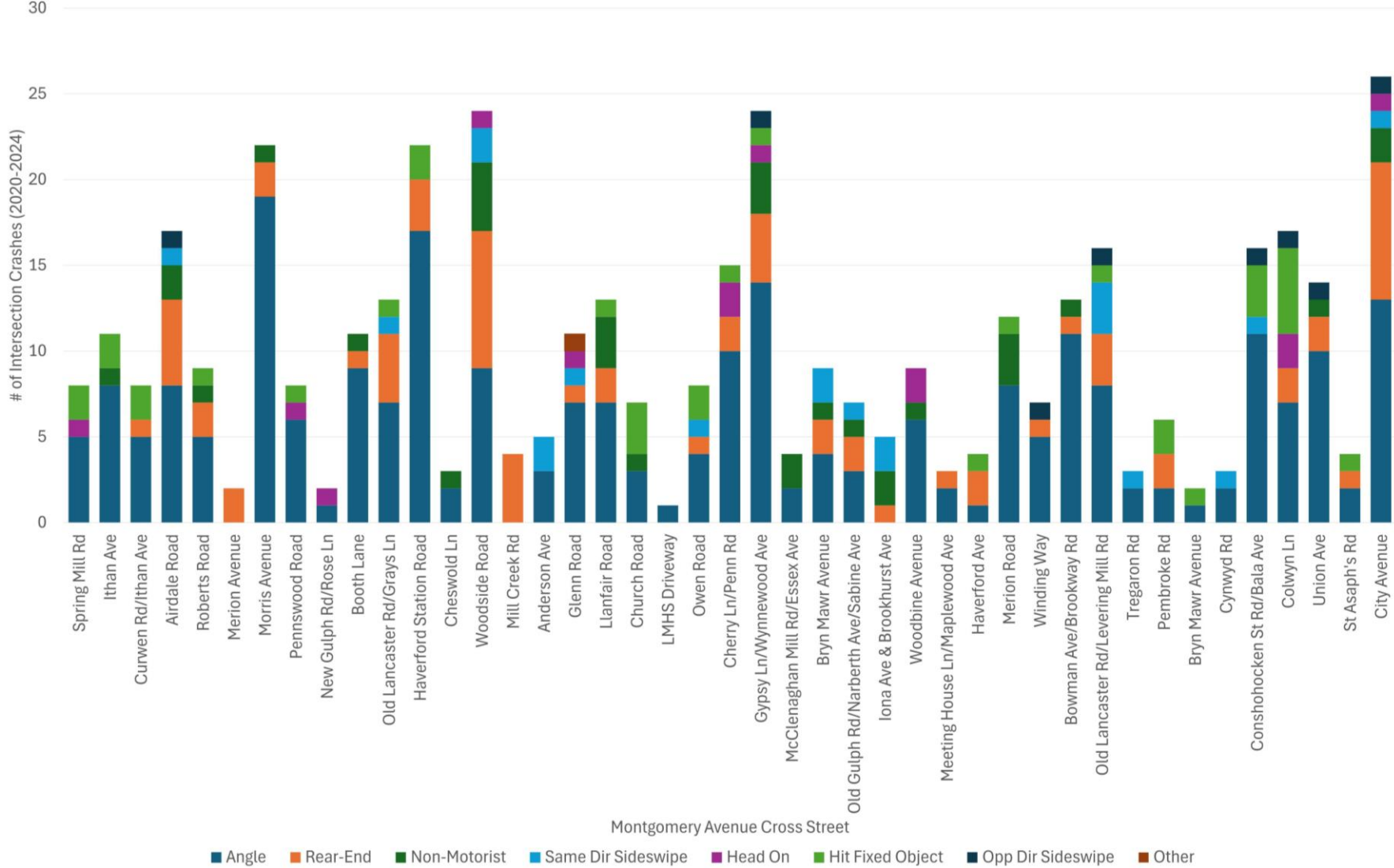
Description	MONTGOMERY AVENUE CRASH RATE			CRASH RATE FROM HOMOGENEOUS REPORT		
	TOTAL	ANGLE	INJURY	TOTAL	ANGLE	INJURY
Montgomery Ave (Total)	<b>1.91</b>	<b>1.03</b>	<b>1.02</b>	1.49	0.58	0.76
Section 1 (Spring Mill Rd to Cheswold Ln)	<b>1.59</b>	<b>0.95</b>	<b>0.90</b>	1.49	0.58	0.76
Section 2 (Cheswold Ln to Penn Rd)	<b>1.82</b>	<b>0.84</b>	0.76	1.49	0.58	0.76
Section 3 (Penn Rd to Haverford Ave)	<b>1.67</b>	<b>0.78</b>	<b>1.07</b>	1.49	0.58	0.76
Section 4 (Haverford Ave to Bala Ave)	<b>2.32</b>	<b>1.35</b>	<b>1.28</b>	1.49	0.58	0.76
Section 5 (Bala Ave to City Ave)	<b>3.46</b>	<b>1.78</b>	<b>1.78</b>	2.01	0.84	1.12

\*Crash Rates in **BOLD** exceed the Statewide Average Crash Rate for the specific crash type and roadway type.

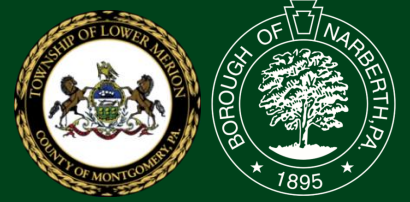
# 5-Year Reportable Crash Data Summary by Crash Type



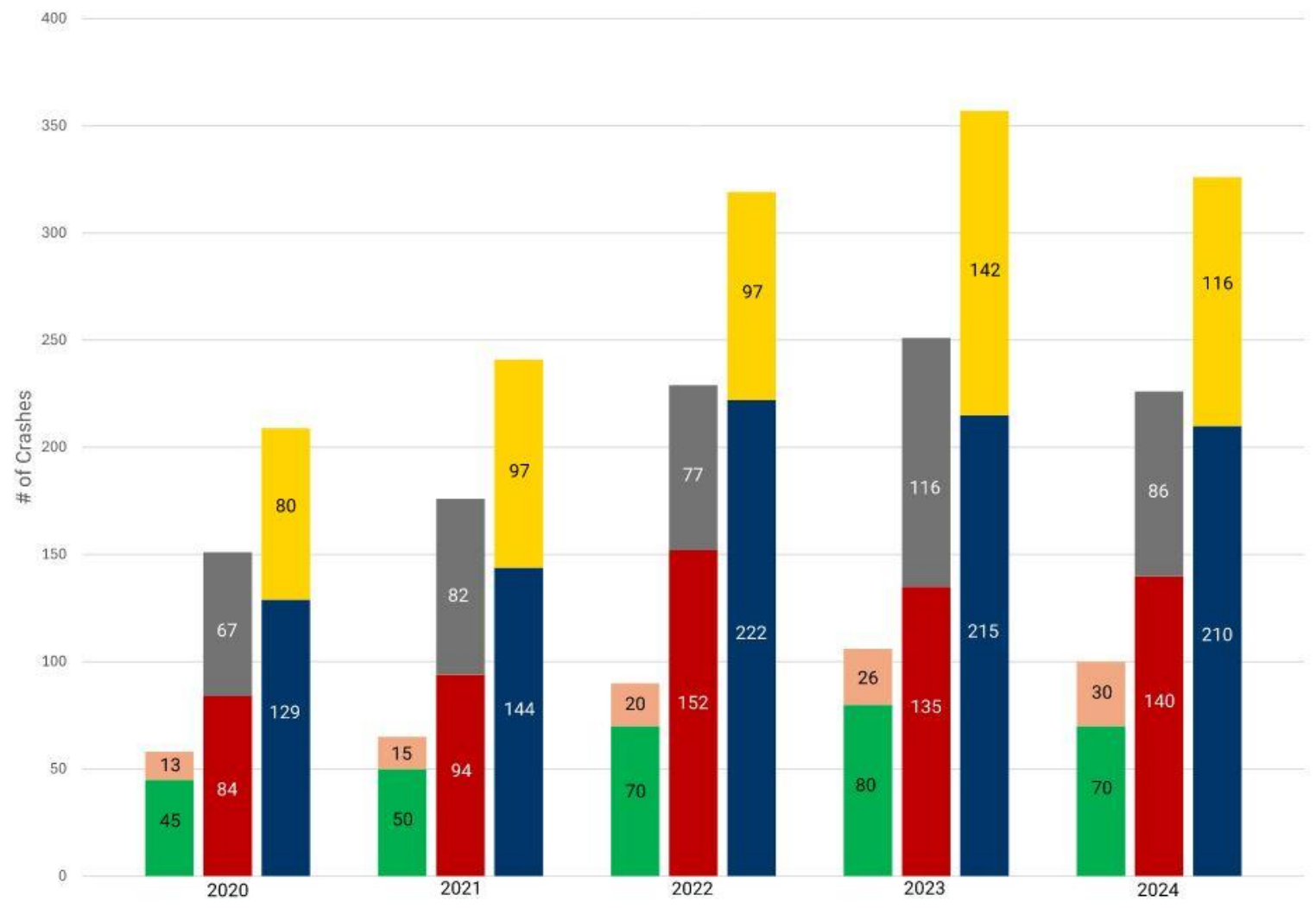
Montgomery Avenue 5-Year Intersection Crash Data (2020-2024) by Crash Type



# Crash Analysis – By Year



Summary of Reportable & Non-Reportable Crashes by Year (2020-2024)



- Total Non-Reportable Crashes
- Total Reportable Crashes
- Non-Reportable Intersection Crashes
- Reportable Intersection Crashes
- Non-Reportable Segment Crashes
- Reportable Segment Crashes

\*Note that the Non-Reportable Crash Data does not include crashes on Conshohocken State Road between Bala Avenue and City Avenue

# Crash Analysis – Non-Reportable Crashes



## MONTGOMERY AVENUE NON-REPORTABLE CRASH STATISTICS (2020-2024)

Year	Crash Type				Crash Location	
	Angle	Rear-End	Fixed Object	Other	Intersection	Segment
2020	56	41	6	26	84	45
2021	49	25	6	64	94	50
2022	52	67	11	92	152	70
2023	56	55	14	90	135	80
2024	51	51	11	97	140	70
<b>TOTAL</b>	<b>264</b>	<b>239</b>	<b>48</b>	<b>368</b>	<b>605</b>	<b>315</b>

**920 Total Non-Reportable Crashes** from 2020-2024 on Montgomery Avenue between Spring Mill Road and Bala Avenue/Conshohocken State Road.

# Crash Analysis – Ped/Bike Crashes



- ▶ 34 Total Crashes from 2020 to 2024 involved a Pedestrian or Bicycle
  - ▶ All 34 Crashes resulted in Injury:
    - ▶ 28 Pedestrians, 6 bicyclists
    - ▶ 1 Fatal Crash at Conshohocken State Road & City Avenue
    - ▶ 4 Major Injury Crashes
- ▶ 1 Fatal Crash in 2025 at Levering Mill Road

# Crash Analysis – Ped/Bike Crashes



## Locations

- ▶ 4 Crashes (1)
  - ▶ Woodside Road
- ▶ 3 Crashes (3)
  - ▶ Merion Road, Llanfair Road, Gypsy Lane
- ▶ 2 Crashes (4)
  - ▶ Airdale Road, McClenaghan Mill Road/Essex Avenue, Levering Mill Road/Old Lancaster Avenue, City Avenue
- ▶ 1 Crash (13)
  - ▶ Woodbine Avenue, Union Avenue, Roberts Road, Old Gulph Road/Narberth Avenue, Morris Avenue, Ithan Avenue, Iona Avenue, Church Road, Cheswold Lane, Bryn Mawr Avenue, Brookhurst Avenue, Bowman Avenue, Booth Lane

## Crash Patterns

- ▶ Vehicle turning left – 50%
- ▶ Vehicle going straight – 35%
- ▶ Vehicle turning right – 12%

## Conditions

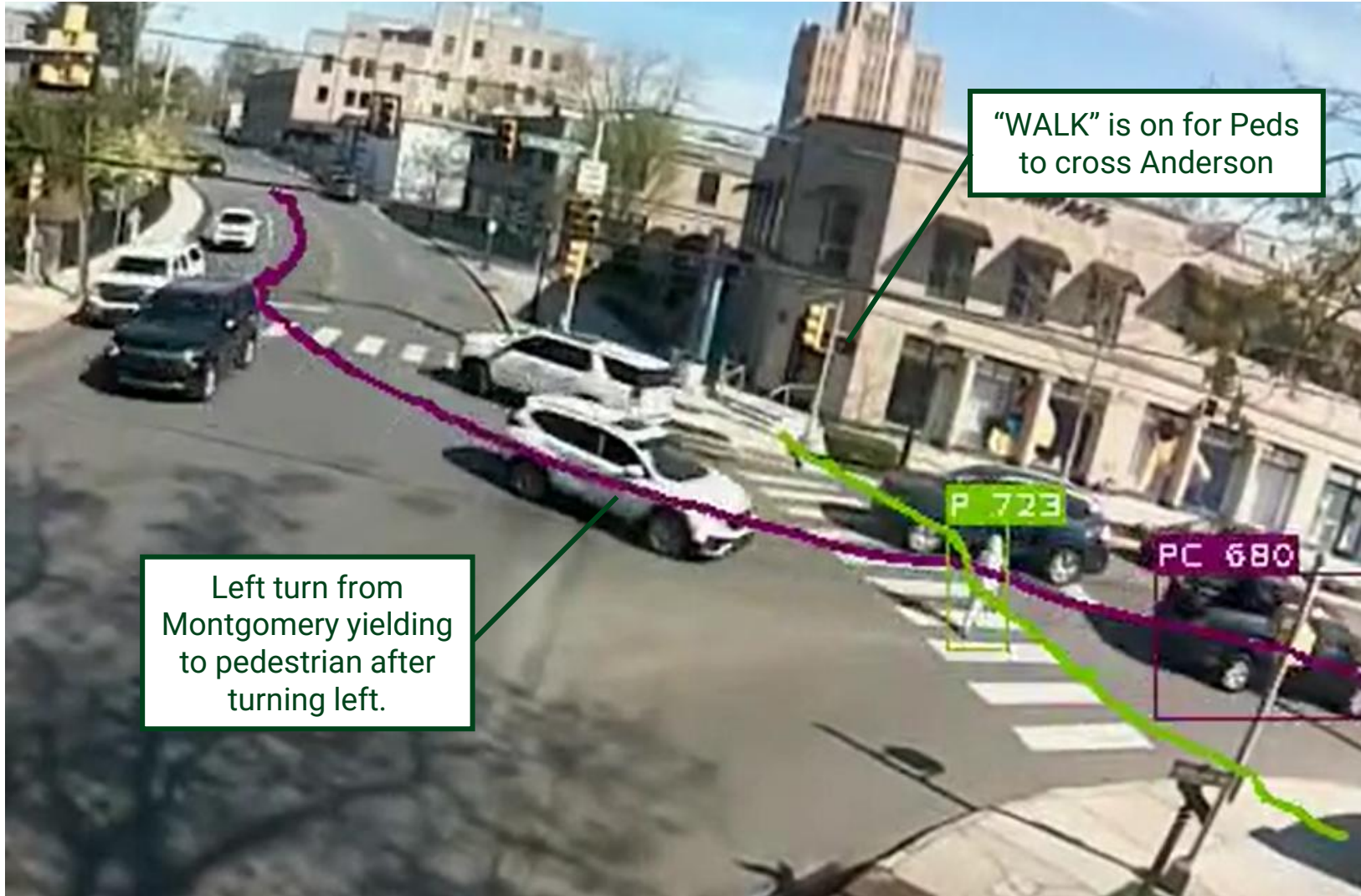
- ▶ Daylight – 65%
- ▶ Dry Roadway – 74%
- ▶ Fall/Winter – 79%

# Crash Analysis – Driver Actions



Common Driver Actions for Reportable Crashes on Montgomery Avenue (2020-2024)

# Existing Safety Issues - Pedestrians



“WALK” is on for Peds to cross Anderson

Left turn from Montgomery yielding to pedestrian after turning left.

- ▶ Conflicts with Permissive Left-Turns
  - ▶ Left-Turns must yield to opposing through volumes and must also yield to pedestrian in crosswalk
  - ▶ Heavy through volumes + heavy pedestrian volumes result in less gaps for left-turns

Vehicle-Pedestrian Conflicts at Montgomery Avenue & Anderson Avenue

# Existing Safety Issues - Pedestrians



## ► Infrastructure

- Older Pedestrian Push Buttons (left)
- Non-ADA compliant curb ramps (right)
- Limited sidewalk width and buffers

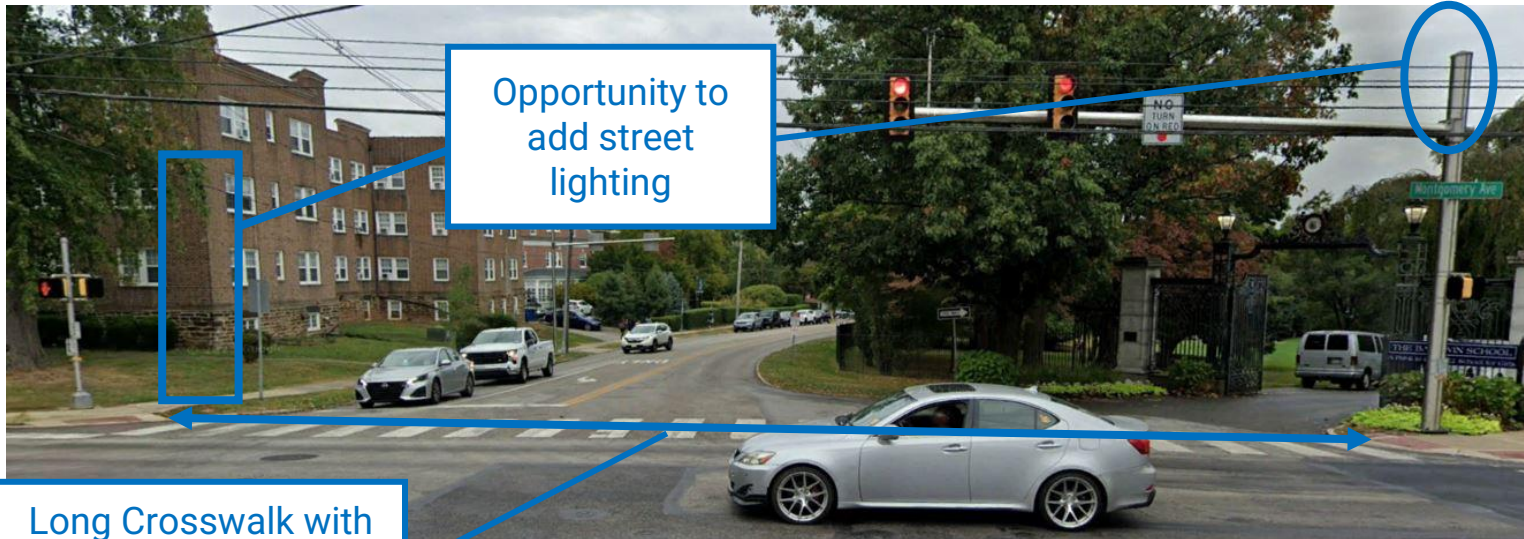
## ► Crosswalks (below)

- Limited Intersection Lighting
- Long crosswalks with create more exposure to vehicular conflicts



Top Left: non-APS push button with missing sign on NE corner of Montgomery Avenue & Roberts Road.

Top Right: Non-compliant ADA curb ramp on NW corner of Montgomery Avenue & Airdale Road. Need two separate curb ramps and missing DWS.



Bottom Left: Facing southbound Morris Avenue at Montgomery Avenue at The Baldwin School Entrance. No luminaires over crosswalk. Long crosswalk that results in more exposure to vehicular conflicts.

Long Crosswalk with More Exposure to Vehicular Conflicts

Opportunity to add street lighting

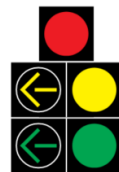
# Existing Safety Issues - Vehicles



Left-turn queues blocking sight distance for opposing left-turns (see example below).



Left-Turn phasing primarily protected-permitted in single direction only along Montgomery Avenue Corridor.



# Montgomery Avenue Traffic Flow Concerns

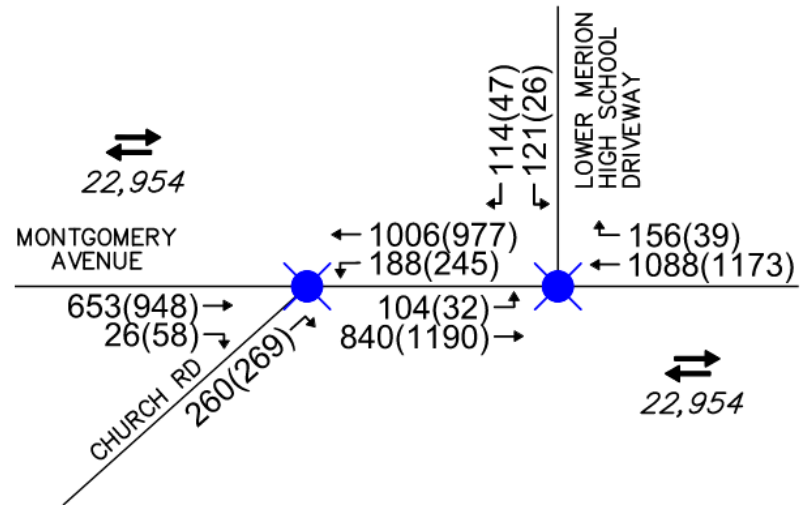


- ▶ Left-turn Movements from Shared Through Lanes
  - ▶ Weaving
  - ▶ Speed Variation
  - ▶ Sudden Deceleration
  - ▶ Limited Sight Distance at Intersections
  
- ▶ Numerous Residential/Business Driveways
  - ▶ Crossing Movements
  - ▶ Sudden Deceleration at Small Radius Driveways/Intersections

# Traffic Volumes & Signal Phasing



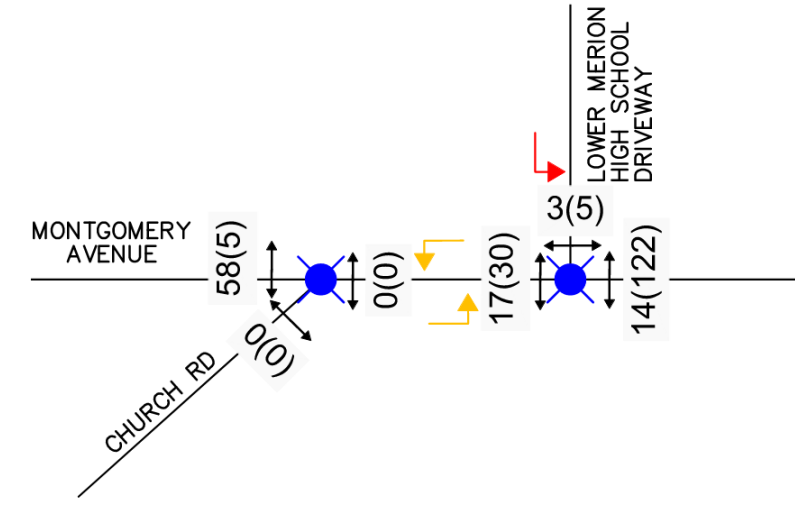
## Vehicular Turning Movement Counts



**LEGEND:**

- ANNUAL AVERAGE DAILY TRAFFIC/DIRECTION
- $xx,xxx$
- $00(00)$  AM PEAK HOUR VOLUME (PM PEAK HOUR VOLUME)
- UNSIGNALIZED INTERSECTION
- SIGNALIZED INTERSECTION

## Pedestrian Volumes & Left-Turn Signal Phasing



**LEGEND:**

- PROTECTED-ONLY LEFT-TURN PHASING
- PROTECTED-PERMISSIVE LEFT-TURN PHASING
- PERMISSIVE LEFT-TURN PHASING
- AM PEAK HOUR (PM PEAK HOUR) PEDESTRIAN VOLUMES CROSSING ROADWAY
- $00(00)$
- UNSIGNALIZED INTERSECTION
- SIGNALIZED INTERSECTION WITH EXCLUSIVE PEDESTRIAN PHASE
- SIGNALIZED INTERSECTION

# Existing Intersection Levels of Service



## Existing Intersection LOS – AM PEAK HOUR

### LOS A-B

(Most Drivers experience little delay and congestion)

**18 Intersections** [Roberts Road; Merion Avenue; New Gulph Road/Rose Lane; Booth Lane; Mill Creek Road; Glenn Road; Llanfair Road; Church Road; LMHS Driveway; Owen Road; Iona Avenue; Brookhurst Avenue; Woodbine Avenue; Merion Road; Winding Way; Brookway Road/Bowman Avenue; Bryn Mawr Avenue; Conshohocken State Road/Bala Avenue]

### LOS C

(Some Drivers experience minor delay/congestion on Montgomery Ave or longer delays on side streets)

**11 Intersections** [Airdale Road; Morris Avenue; Grays Lane/Old Lancaster Avenue; Haverford Station Road; Woodside Road; Anderson Avenue; Penn Road/Cherry Lane; Gypsy Lane/Wynnewood Avenue; Essex Avenue/McClenaghan Mill Road; Meeting House Lane/Maplewood Avenue; Levering Mill Road/Old Lancaster Road]

### LOS D-E

(Most Drivers experience delays and congestion on Montgomery Ave and Side Street)

### 2 intersections

[Pennswood Road; Narberth Avenue/Old Gulph Road]

# Existing Intersection Levels of Service



## Existing Intersection LOS – PM PEAK HOUR

### LOS A-B

(Most Drivers experience little delay and congestion)

**18 Intersections** [Roberts Road; Merion Avenue; New Gulph Road/Rose Lane; Booth Lane; Glenn Road; Llanfair Road; Church Road; LMHS Driveway; Owen Road; Essex Avenue/McClenaghan Mill Road; Iona Avenue; Brookhurst Avenue; Woodbine Avenue; Merion Road; Winding Way; Brookway Road/Bowman Avenue; Bryn Mawr Avenue; Conshohocken State Road/Bala Avenue]

### LOS C

(Some Drivers experience minor delay/congestion on Montgomery Ave or longer delays on side streets)

**10 Intersections** [Morris Avenue; Grays Lane/Old Lancaster Avenue; Haverford Station Road; Woodside Road; Mill Creek Road; Anderson Avenue; Penn Road/Cherry Lane; Gypsy Lane/Wynnewood Avenue; Narberth Avenue/Old Gulph Road; Levering Mill Road/Old Lancaster Road]

### LOS D-E

(Most Drivers experience delays and congestion on Montgomery Ave and Side Street)

### 3 intersections

[Airdale Road; Pennswood Road; Meeting House Lane/Maplewood Avenue]

# Next Steps



## ▶ TONIGHT

- ▶ Present Crash & Traffic Data
- ▶ Solicit Public Feedback

## ▶ NEXT STEPS

- ▶ Development of Preliminary Recommendations
- ▶ Solicit Public Feedback on Preliminary Recommendations
- ▶ Refining Recommendations
- ▶ Presentation of Draft Action Plan

FEEDBACK SURVEY:



\*Hardcopies of survey are available upfront after meeting.