# TRAVEL SAFE DELAWARE: An Action Plan for Safe Streets

Appendix D. Public Survey Summary

### **Public Survey Summary**

The following appendix describes the data collected from the public survey disseminated to Delaware residents to solicit input on areas of concern related to roadway safety. The survey was open to the public between July 10<sup>th</sup> and August 21<sup>st</sup>, 2023. The survey was created and made available using SurveyMonkey, an online survey platform. It was then distributed by members of the stakeholder committee, posted on the City of Delaware's website, and advertised on the City's social media. The survey received 295 responses.

### Key Findings Overall:

- Over 98% of respondents to the survey reported that they regularly use a personal automobile for their daily transportation needs.
- Approximately 75% of respondents have been impacted, or know someone that has been impacted, by a traffic crash.
- Approximately 80% of those surveyed responded that they believe distracted driving is one of the most significant factors contributing to traffic crashes.
  - On a scale of 1 (does not impact traffic crashes at all) to 5 (impacts crashes heavily), nearly 80% of respondents ranked it a 4 or higher.
- In addition to distracted driving, respondents stated that speeding and other traffic law violations are key factors leading to traffic crashes.
- Community members generally feel unsafe traveling by bicycle and believe that adding more and connecting existing bicycle infrastructure should be prioritized.
  - On a scale of 1 (very safe) to 5 (very unsafe), more than 50% of respondents ranked bicycling around Delaware as a 4 (somewhat unsafe) or higher.
- The locations most frequently noted as areas where people feel unsafe traveling included a significant emphasis on US 23, generally, but also sections of Downtown Delaware, as well as other major arterials and state routes through the city.

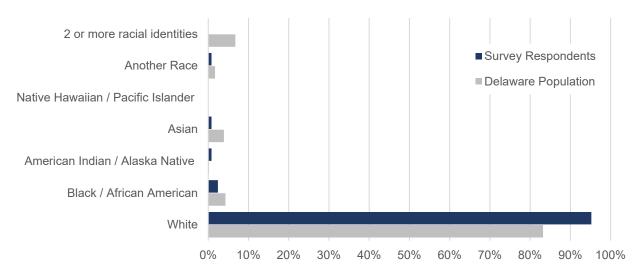
### Demographic Data of Survey Respondents

A few specific demographic data points were requested of survey respondents to understand how the cross-section of respondents compared to the overall population of the City of Delaware. These questions were optional, so respondents who did not feel comfortable answering any one of them were able to skip the question(s).

A total of 250 of the 295 respondents (about 85%) reported their race: 95.2% of these respondents indicated that they were White, with small proportions of American Indian, Asian, Latine, and Black respondents (less than 1% each). In comparison, according to data from the 2021 American Community Survey performed by the U.S. Census Bureau, about 83% of Delaware residents are White. Asian Americans and Black Americans each comprise about 4% of Delaware's population, and about 7% of Delaware's population identifies with two or more racial categories. The graph in Figure 1 on the following page provides a visualization of the racial composition of survey respondents compared to the City of Delaware in its entirety.

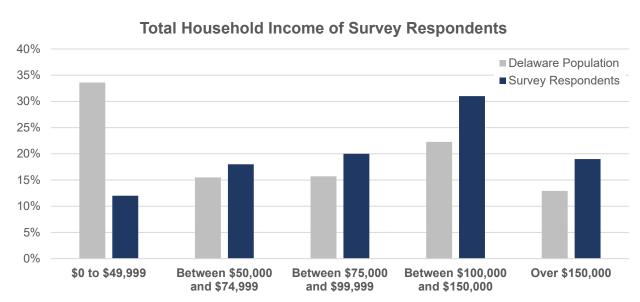
Figure 1. Racial Composition of Survey Respondents (250 of the 295 total responses)





Additional information was requested from survey respondents regarding their total household income as well as age range. The graph in Figure 2 below and the graph in Figure 3 on the following page provide visualizations of respondents' total household income and ages, respectively. About 50% of the respondents who provided personal income information earn more than \$100,000 and about 12% earn less than \$50,000 per year, groups which respectively make up 35% and 50% of the City of Delaware as a whole. Furthermore, about 55% of respondents who provided age information are aged 55 or older, while about 49% of City residents are 34 years old or younger.

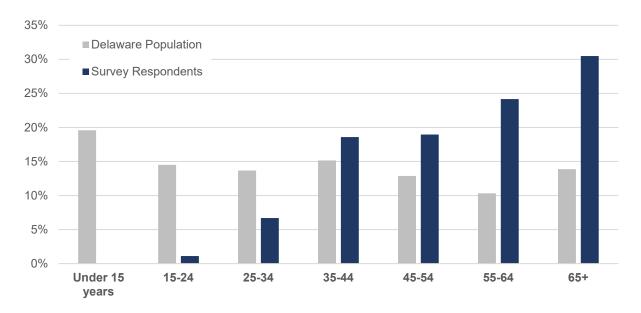
Figure 2. Distribution of Annual Household Income of Survey Respondents (138 of 295 responses)



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Figure 3. Age Distribution of Survey Respondents (269 of 295 respondents provided their age)

# Age Distribution of Survey Respondents Compared to General Population



There are notable disparities between the demographic compositions of the survey respondent sample and the population of the City of Delaware. For one, a significant majority of respondents who indicated their race identified as white, with minimal representation from other racial and ethnic groups. Additionally, the survey sample skewed toward higher-income and older residents compared to the City of Delaware population. This may be a result of the survey outreach methods used being more known or accessible to certain demographic groups, as well as self-selection biases that are largely inherent to online surveys.

Furthermore, certain demographic groups, like racial minorities, younger people, and lower-income residents, are generally harder to reach. Moving forward, targeted outreach strategies that ensure these uniquely important perspectives are incorporated into decision-making will need to be components of the City's ongoing safety work. These considerations informed the development of the Travel Safe Delaware plan and can be found in specific strategies and action items in the plan.

### Travel Habits and Experiences

The questions included in this section of the survey aimed to gauge the modes of travel Delaware residents use the most frequently. In addition, this section of the survey aimed to collect information on respondents' experiences with vehicle crashes.

Survey respondents were asked which modes of transportation they use most for daily travel. They were given the opportunity to choose up to three potential options. Over **98% of respondents** indicated that they frequently use a personal vehicle for their regular travel. Additionally, about **1.3%** of respondents indicated that they use public transit services for daily travel. Approximately one of every six respondents (**16%**) stated that they walk for daily travel, and approximately one in twelve respondents (**8%**) indicated that they bike as part of their daily travel. This indicates that some of the survey respondents use more than one mode of transportation for their *daily* travel needs. The graph in **Figure 4** below illustrates the total number of responses received for each mode of transportation.

Figure 4. Modes of Transportation Used for Daily Travel Needs (295 of 295 responses)

# 350 300 250 200 150 100 50 Personal Vehicle Public Transit Walking Bicycling

### Which of the Following Do You Use Most for Daily Travel?

Survey respondents were asked if they, or if someone they know, had ever been involved in a traffic crash, and if so, how severe it was. Respondents were given the opportunity to select multiple options. Approximately **75%** of those surveyed stated that they themselves, or someone that they knew, had been involved in a traffic crash. Additionally, **168 (49%)** of the respondents indicated that those crashes resulted in no injury or mild injuries only. However, **35 (10%)** resulted in a serious, life-altering injury or death. This indicates that some respondents have been involved in multiple crashes, and/or know someone else who has. Furthermore, more than **40%** of respondents stated that the crash they were involved in and/or someone they know was involved in occurred within the City of Delaware. The graphs in Figure 5 and Figure 6 on the following page illustrate these results.

Figure 5. Crash Involvement Reported by Survey Participants, Categorized by Level of Severity



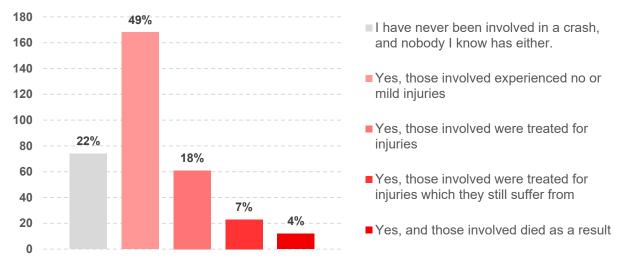
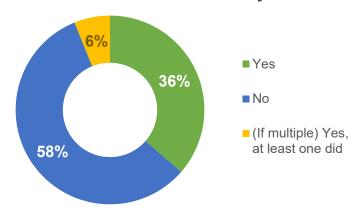


Figure 6. Proportion of Crash Involvement that Occurred within the City of Delaware (228 of 295 responses)

# If You Answered "Yes" to the Previous Question, Did the Crashes Occur within the City of Delaware?



### **Key Findings – Travel Habits and Experiences:**

- Nearly all survey respondents drive a personal vehicle as their primary mode of daily travel, however about 25% also listed walking, biking, or transit as another mode of transportation for regular daily travel.
- Over 75% of respondents have been impacted by a traffic crash or traffic crashes in some capacity. Of the 268 crashes reported by respondents, 23 (7%) led to serious injuries those involved still suffer from, and 12 (4%) led to a loss of life.
- Of the crashes noted, about 42% of them occurred within the City of Delaware.

### **Perceptions of Transportation Safety**

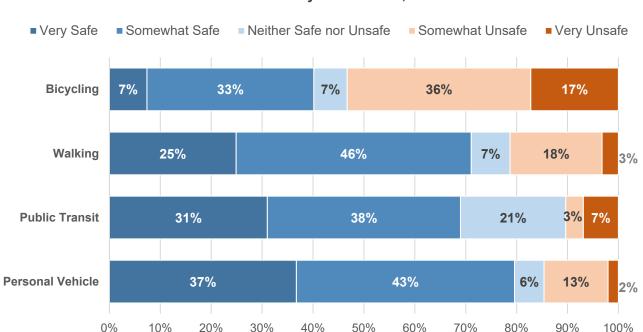
To gauge how safe survey participants felt while travelling by various modes of transportation within the city, they were asked to fill out a matrix table with ratings from "very safe" to "very unsafe." Respondents were asked to provide feedback for only the modes of transportation they use regularly. The image in Figure 7 below illustrates an example of the style of question asked, which allowed respondents to rank each mode of transportation across the given scale of very safe to very unsafe. If they do not use a given mode of transportation, they had the option to select "N/A" for that mode of transportation.

Figure 7. Sample Image of Question Asked Regarding Feeling of Safety when Traveling by Each Mode

When you travel around the city of Delaware, how safe do you feel? Please rate only the modes of travel that you use based on how safe you feel using them in Delaware.								
	Very safe	Somewhat safe	Neither safe nor unsafe	Somewhat unsafe	Very unsafe	N/A		
Personal Vehicle	$\bigcirc$	$\circ$	$\circ$	$\bigcirc$	$\bigcirc$	$\bigcirc$		
Public Transit	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$		
Walking	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$		
Bicycling	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$		

All respondents selected an option between "very safe" and "very unsafe" for use of a personal vehicle. However, for Public Transit, 200 respondents selected "N/A," indicating that they don't currently use transit and/or don't have an opinion on how safe they feel using it. For bicycling, 119 respondents selected "N/A," and for walking, 22 respondents selected "N/A." Based on the responses provided, it was clear that most respondents feel safe while driving around Delaware. Those who indicated that they walk generally feel relatively safe doing so, with only around 21% indicating otherwise. For the few respondents who use transit, they similarly indicated that they feel relatively safe doing so, with only 10% indicating otherwise. This is in stark contrast to those who indicated that they bike around Delaware – more than 50% of those respondents indicated that they feel "somewhat unsafe" or "very unsafe" while doing so. These results are illustrated by the graph in Figure 8 on the following page.

Figure 8. Perceptions of Safety for Specific Modes of Transportation (294 of 295 responses)



### When You Travel Around the City of Delaware, How Safe Do You Feel?

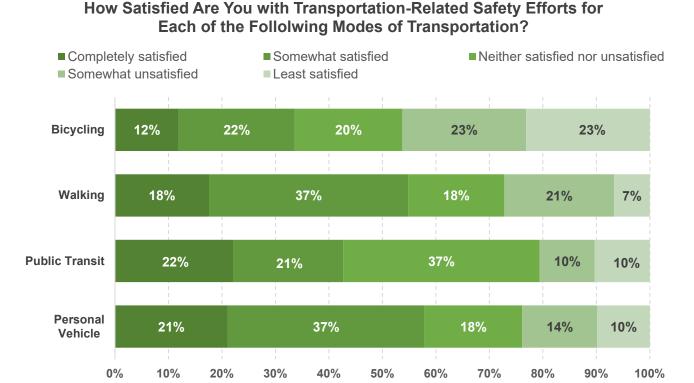
### **Key Findings - Perceptions of Transportation Safety:**

- Only around 21% of respondents indicated that they feel "somewhat unsafe" or "very unsafe" while walking in the city of Delaware. That is compared to approximately 71% of respondents who indicated that they feel at least "somewhat safe."
- **Nearly 80%** of respondents indicated that they felt at least "somewhat safe" while driving around Delaware. In contrast, approximately 15% of respondents stated that they felt "somewhat unsafe" or "very unsafe" when driving.
- More than 50% of respondents who indicated that they bike around Delaware shared that they feel "somewhat unsafe" or "very unsafe" when riding. Compared to the other modes of transportation, this indicates a higher need for prioritizing safety investments.

### Satisfaction with Existing Safety Efforts

Survey respondents were asked to fill out a matrix ranking their satisfaction with the City's and other agencies' actions to improve transportation safety. This matrix was structured similarly to the matrix table used to gauge perceptions of transportation safety. Respondents were asked to rank their satisfaction of safety efforts from "very satisfied" to "very unsatisfied." The graph in Figure 9 below illustrates these results for this question.

Figure 9. Respondent Satisfaction with Existing Transportation Safety Efforts in Delaware



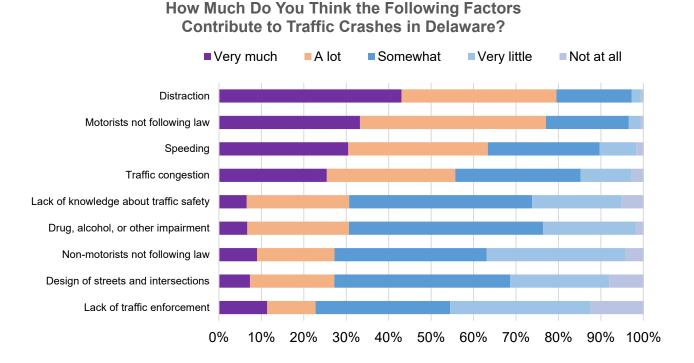
### **Key Findings - Satisfaction with Existing Safety Efforts:**

- Over half of respondents reported high levels of satisfaction with vehicle-related safety efforts. Of the 292 respondents that provided their opinion on vehicle-related safety efforts, approximately 57% of them (165 of 292 respondents) stated that they were either "completely satisfied" or "somewhat satisfied."
- In comparison to the relative satisfaction respondents expressed with vehicle-related safety efforts, the survey results show a higher level of dissatisfaction with bicycle and pedestrian-related safety efforts.
  - 46% of respondents who provided their opinion on bicycle-related safety efforts reported that they were somewhat unsatisfied or completely unsatisfied.
  - 24% of respondents stated that they were unsatisfied with pedestrian-related safety efforts.

### Roadway Safety Concerns

This section of the survey aimed to gauge opinions on the largest causes of traffic crashes and the largest roadway safety concerns in the City of Delaware. Respondents were presented with nine general concerns and asked to rank each issue's impact on traffic crashes on a scale from "not at all" to "very much." The graph in Figure 10 below illustrates these results.

Figure 10. Respondents Perception of Major Factors Contributing to Roadway Safety Concerns



### **Key Findings – Roadway Safety Concerns:**

- Survey respondents ranked distracted driving, speeding, and motorists' lack of adherence to traffic safety laws as the most contributory factors for traffic crashes.
  - When asked how much distracted driving impacts traffic crashes, around 43% of respondents stated, "very much," and 37% stated "a lot." This represents around 80% of respondents.
  - Around 33% of respondents think that motorists' failure to adhere to safety laws impacts crashes "very much." and 44% responded that motorists' failure to obey traffic safety laws contributes to crashes "a lot." Combined, this represents approximately 78% of respondents.
  - Around 30% of respondents think that speeding contributes to crashes "very much," and 33% responded that speeding contributes to crashes "a lot." This represents 63% of respondents.
- In seeming contrast to these stated opinions, more than 40% of respondents indicated that they think lack of traffic enforcement has little to no impact on traffic crashes.

### Roadway Safety Improvements

Survey respondents were asked to prioritize factors that should be addressed to enhance roadway safety within the City of Delaware. Like in the previous question, respondents were presented with six different factors and asked to rank them from "Not at All" to "Very Much" regarding how they think each should be prioritized. The graph in Figure 11 below illustrates the results of this question.

Which of the Following Factors Do You Think

Figure 11. Respondents Priorities for Roadway Safety Improvements



20% 30% 40% 50% 60% 70% 80% 90% 100%

### Key Findings – Roadway Safety Improvements

The top three factors that respondents prioritized for consideration in future transportation safety initiatives include adding sidewalks and shared-use path connections, improving connectivity of bicycle facilities, and improving the design of streets and intersections.

- Approximately 54% of respondents stated that adding sidewalks and shared-use paths should be prioritized – "very much" or "a lot."
- Approximately 42% of respondents stated that adding on-street bicycle facilities should be prioritized "very much" or "a lot."
- Approximately 40% of respondents stated that roadway and intersection design should be prioritized – "very much" or "a lot."

Interestingly, respondents to this question also indicated that increasing enforcement should be a relatively high priority – slightly more than 30% at "very much" or "a lot." This seems in contrast to previous responses indicated that lack of traffic enforcement was not as much of an issue relating to traffic crashes.

### **Priority Safety Locations**

Survey respondents were given the opportunity to provide specific locations within the City of Delaware where they feel, from a transportation perspective, the least safe overall, while driving, while walking, and while bicycling. This question was open-ended and allowed the respondent to provide a text response describing any specific location for each of the four (4) prompts. The top-5 most cited locations for each prompt are listed below:

Overall	While Driving	While Walking	While Biking
Route US-23 (15%)	Route US-23 (15%)	Downtown (15%)	Anywhere without a bike facility (19%)
US-36 / SR-37* (7%)	US-36 / SR-37* (7%)	Central Ave (6%)	Downtown (14%)
"The Point" (US-36 & SR-37) ( <b>7%)</b>	"The Point" (US-36 & SR-37) (7%)	Sandusky Street (6%)	US-42 <b>(9%)</b>
Downtown (6%)	Downtown (6%)	William Street (6%)	Central Ave (9%)
William Street (5%)	William Street (5%)	Route US-23 (4%)	William St / The Point / Liberty Rd (9%)

Other locations mentioned include: Pinecrest Drive, Houk Road, the East Side, Stratford Road.

### **Top Reasons for Identified Priority Safety Locations**

Speeding and complex intersections were among the top reasons provided for locations reported as unsafe overall or while driving. In terms of the places people listed as feeling unsafe while walking, lack of adequate infrastructure like sidewalks or path was the most common reason, as well as high vehicle speeds or unsafe driving behaviors, poor lighting or visibility, existing sidewalks being too close to roadways, and insufficient crossing treatments. Finally, respondents cited a lack of dedicated bicycle infrastructure as the top reason for feeling unsafe while bicycling, followed closely by high-stress vehicle environments not adequately buffered from bicyclist spaces, and unsafe driving behaviors like speeding and distracted driving.