STREET COACHING FOR PEDESTRIAN & CYCLISTS: PUTTING LAWS INTO PRACTICE ON UNVERSITY CAMPUSES

Technical Memorandum: Survey Findings

AUTHORS

Troy Walden, Ph.D.

Emmaline Shields, MPH

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Texas Department of Transportation

Texas A&M Transportation Institute

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Introduction

University campuses are unique communities inside their specific regional areas, where multiple modes of transportation interact continuously (Loukaitou-Sideris et al., 2014). While university campuses often have physical layouts and social environments that encourage walking and bicycling, there are also many students and university employees that commute to campus during the week by vehicle (Loukaitou-Sideris et al., 2014). University communities also have mixed-use areas that draw in residents and visitors to retail shopping, residential housing, and entertainment districts. Consequently, campuses and surrounding areas are inundated with motorists, pedestrians, and bicyclists. This increases crash risk when pedestrian and bicycle road users are placed in conflict with motorists while competing for usable space. (Heinonen & Eck, 2007).

Despite a decrease in traffic crashes in 2020, Texas saw a rise in the number of pedestrian and bicyclist fatalities on Texas roadways (Texas Department of Transportation [TxDOT], 2021b). In Texas, pedestrian and bicyclist deaths accounted for one in five of all traffic fatalities in 2020 (TxDOT, 2021b). In 2020, Texas experienced 4,852 crashes involving pedestrians, which resulted in 1,211 suspected serious injuries and 731 deaths. This represents a nine percent increase in pedestrian fatalities over the previous year (TxDOT, 2022b). Texas also experienced 2,174 crashes involving bicyclists. These crashes resulted in 286 suspected serious injuries and 80 deaths. Bicycle-related crash fatalities increased nearly 20% between 2019 to 2020 (TxDOT, 2021a).

Safety officials attribute the upward crash trend to road user's widespread failure to follow state pedestrian and bicycle laws. This includes violations such as: failing to yield right of way, crossing at locations not designated for crossing, driver inattention, and speeding (TxDOT, 2021b; National Highway Traffic Safety Administration [NHTSA], 2019).

While fatal and serious injury crashes involving pedestrians and bicyclists are reported most often, less serious injury and near miss crashes typically are not. (Davis & Co., 2015). Lack of reporting results in lost data that could be used to inform safety stakeholders about contributing factors that lead to unsafe driving, walking, or biking behaviors (Davis & Co., 2015). Understanding factors that contribute to reporting all pedestrian and bicycle crashes/near misses, including less serious underreported incidences, is an important factor that helps stakeholders define the traffic safety problem.

Many crashes or near miss crash events are the result of lack of knowledge and non-compliance with traffic laws by all road users (NHTSA, 2019). Pedestrians and bicyclists might be unaware of or misunderstand pedestrian and bicycle laws that designate where and when they have the right of way (NHTSA, 2019). It is also possible that some drivers may be unaware of their road rights and obligations when they use the roadway together with pedestrians' and bicyclists'. (NHTSA, 2019). Common noncompliance include motorists failing to yield right of way; pedestrians and bicyclists failing to follow traffic signs and signals; and walking or biking in improper locations when sidewalks are available (TxDOT, 2022a; TxDOT, 2022b). Clearly, pedestrian and bicycle safety is the shared responsibility and requires all roadway system users to be aware and comply with traffic laws.

The Texas A&M Transportation Institute (TTI) recently conducted a survey of University of Texas at Austin (UT) students and employees. From the survey, investigators identified common crash variables that adversely impact pedestrians and bicyclists. In addition, investigators identified less severe and near miss crash events that may not have been captured in existing crash data. Finally, investigators measured the frequency of state law violations by pedestrians, bicyclists, and motorists. Understanding

the factors that contribute to unsafe conditions for vulnerable road users may help to inform the UT Austin safety community in determining effective treatment approaches, educational outreach, and targeted enforcement efforts.

Methods

Development of Survey

The investigation survey instrument was designed in fiscal year (FY) 2021 for a Texas Department of Transportation (TxDOT)–funded project: Street Coaching for Pedestrians and Cyclists – Putting Laws Into Practice on University Campuses. The survey instrument was revised, specifically for use in FY 2022 UT Austin focused project, and was approved for use by the TxDOT. Survey data was collected between November 2021 and April 2022 at UT Austin events and at high density vehicle, bicycle, and pedestrian locations on the UT Austin campus.

The survey was designed to be completed in person, on paper, and take less than 15 minutes to complete. Twenty-three multiple choice questions made up the survey. The appendix at the end of this technical memorandum includes a copy of the investigation survey instrument.

Sampling

Six university events/locations were identified to conduct the field surveys. Data/responses were collected at the following events/locations:

- UT Football Game – UT vs. Kansas State: November 26, 2021
- "The Drag" – Guadalupe & 22nd: December 9, 2021
- UT Campus – Texas Union and William C Powers, Jr. Student Activity Center: February 15, 2022
- UT West Campus – Cain & Abel's & 22nd Street: February 28, 2022
- UT Basketball Game – UT vs. Baylor: February 28, 2022
- UT Pedestrian Speedway – Speedway & East Dean Keeton: March 31, 2022

In addition to field data collection, an electronic version of the survey instrument was sent to UT Austin employees and students who participated in a focus group concerning pedestrian and bicycle safety on campus. One hundred forty-four field surveys were collected along with 29 electronic surveys. A total of 173 surveys were submitted and assessed as part of this evaluation.

Eligibility Criteria

In order to be eligible to participate, the respondent must be a student or employee at UT Austin and be at least 18 years of age. The respondents were asked the following questions to determine eligibility:

- Are you over the age of 18 years?
- Are you a college student or employee of University of Texas/Agency?
- Would you like to take our survey about pedestrian and bicycle laws and activities on college campuses?

If the respondent answered "no" to any of the previous listed questions, the survey would end. Of the 173 submitted surveys, only one participant was ineligible to participate and they did not complete the remainder of the survey. The survey was not included in the documented results detailed in this technical memorandum.

Analysis

All survey data points were collected using Qualtrics software. One hundred seventy-two surveys were entered into the software and then exported into Microsoft Excel. Descriptive statistics (e.g., frequency count, averages, and percentages) were calculated for all survey questions using Microsoft Excel.

Limitations

The investigators acknowledge that there are some limitations to respondent answers received. Limitations include:

- Participant experiences may be different from those who elected not to participate; participant opinions and experiences may not reflect or be generalizable to UT Austin overall.
- Some respondents may consciously or subconsciously give inaccurate answers to appear more socially acceptable.
- Some individuals that choose to participate in the survey are likely to share some characteristics that distinguish them from the ones that choose not to participate. For instance, people who usually have substantial knowledge or strong opinions about pedestrian/bicycle safety might be more likely to spend more time answering a research survey than people who don't. As a result, the sample may be biased and not represent the entire UT Austin population. The result may suggest an overrepresentation of individuals with strong opinions.

The results of the focus groups should be interpreted with these same limitations in mind.

Survey Findings

One hundred seventy-two completed surveys were used in this analysis. The respondents were asked inclusion/exclusion criteria questions, demographic questions, and questions about their own behavior as a pedestrian and/or bicyclist. Respondents were also asked about their experience/knowledge of traffic law violation trends, crashes, and near miss crash events involving motor vehicles.

Demographics

The bullet points below highlight the demographics associated with UT Austin respondents.

- 72 percent (n=124) of respondents were students,
- 28 percent (n=48) were employees at UT,
- 42 percent (n=72) were between the ages of 18 and 20,
- 31 percent (n=54) are between the ages of 21 and 24,
- 27 percent (n=46) are 25 years of age or older,
- The majority of employees were 25 and older (85.42 percent).
  95 percent of students were between the ages of 18 to 24.
- 40 percent (n=69) of all respondents were male,
- 58 percent (n=99) of all respondents were female, and
- 2 percent (n=4) preferred not to say.

Of the 124 UT Austin student respondents:

- 43 percent were male,
- 54 percent (n=67) were female, and
- 3 percent (n=3) preferred not to say.

Of the 48 UT Austin employee respondents:

- 31 percent (n=15) were male,
- 67percent were female, and
- 2 percent (n=1) preferred not to say.

The student body gender split at the UT Austin campus is comprised of 45 percent male and 55 percent female. The investigation survey sample is representative of the UT Austin student population (University of Texas, 2022), however, the gender split for UT Austin employees is skewed towards females. The UT Austin employee population by gender is listed at 46 percent male, 54 percent female, and 0.15 percent unknown (University of Texas, 2022).

The racial/ethnicity identification of UT Austin respondents were:

- White at 47 percent (n=81),
- Hispanic or Latino at 22 percent (n=37),
- Asian at 19 percent (n=32),
- Black or African American at 6 percent (n=10),
- Mixed race/other at 3 percent (n=6), and
- Prefer not to say at 3 percent (n=6).

There was an over representative of White students participating in this analysis (51 percent vs. 37 percent) and a slightly under representation of Hispanic (19 percent vs. 24 percent) and Asian (19 percent vs. 21 percent) students. Black or African American survey respondents were representative of the UT Austin student body (University of Texas, 2022).

Regarding UT Austin employees, the survey sample size suggests that there was a slight over representative of White employees responding (62 percent vs. 60 percent) and a slight under representation of Hispanic (19 percent versus 23 percent) and Asian (4 percent versus 8 percent) employee responses. Black or African American survey respondent employees were representative of the UT Austin staff and employee body (University of Texas, 2022).

Road User Behaviors

This section examines the number of road users by mode of transportation (i.e., pedestrians, bicyclists, and motorists) that use university and surrounding roadways. Additionally, respondents were asked to identify where, when, and why they were using various modes of transportation.

Respondents were asked to identify themselves as either a pedestrian, bicyclist and/or motorist. While everyone has different preferences when it comes to transportation, almost everyone is a pedestrian at one time or another (NHTSA, 2022c); this is represented in the survey findings. Nearly all of the respondents (99% n= 172) considered themselves to be a pedestrian, 76 percent (n=131) considered themselves to be a motorist, and 35 percent (n=61) considered themselves a bicyclist.

The majority of survey respondents consider themselves to be more than one type of road user (See Figure 1 below). Most consider themselves to be a motorist and a pedestrian (45 percent, n=78) followed by being all three types of road user (30 percent, n=52). Interestingly, no respondents considered themselves to only be a motorist or bicyclist, yet 19 percent (n=33) considered themselves to be only a pedestrian. It is important to note that all respondents considered themselves to be either a

pedestrian and/or bicyclist at any given time. Therefore, all respondents are vulnerable road users at one time or another. Figure 1 provides an illustration of UT Austin respondent road user type.

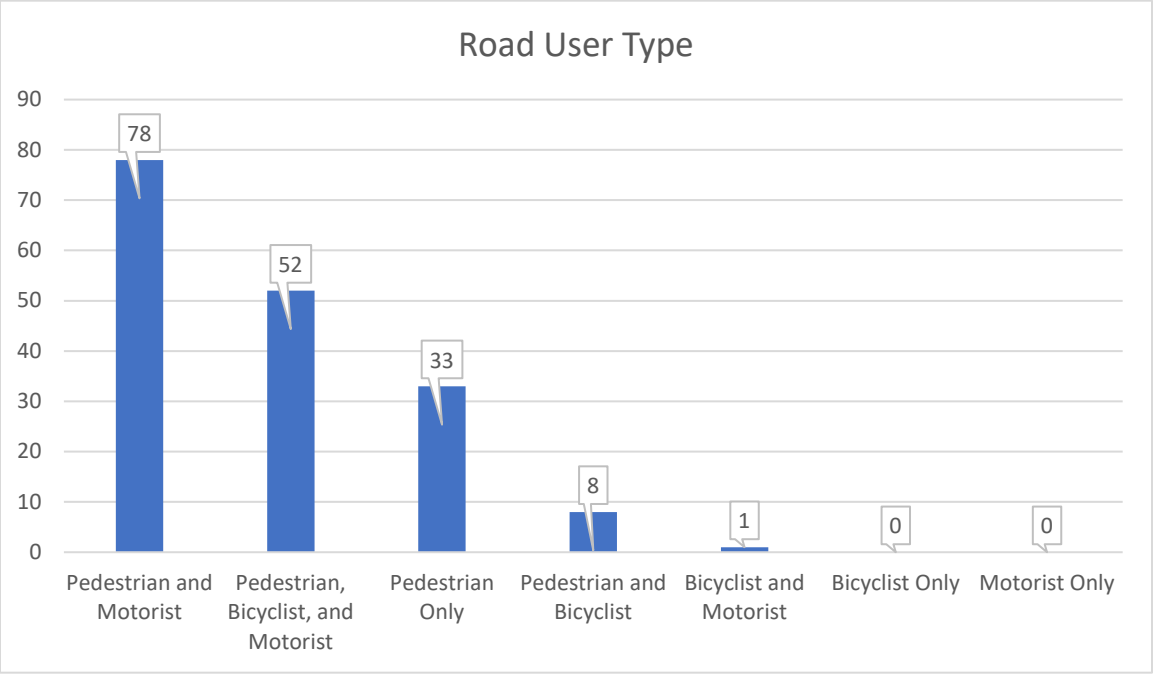

Figure 1. Number of Respondents Who Consider Themselves to be a Pedestrian, Bicyclist, and Motorist

Next, respondents were asked how often they walk to various locations on and near the UT Austin campus (see Table 1). Of the 171 respondents who considered themselves to be a pedestrian, the majority walk on campus daily. While a majority do walk on campus daily, less than one quarter actually walk to campus. These respondents likely commute to campus using alternative modes of transportation (e.g., bike, motor vehicle), and then walk once on campus.

Beyond campus, 77 percent of the respondents reported walking to shopping districts at least monthly. Ninety-three percent walk to residential areas a least monthly, 32 percent walk to bar districts at least monthly, and 7 percent walk to an off-campus job monthly. Table 1 provides an illustration of the respondent patterns of walking to locations on/off campus.

	Daily n (%)	Weekly n (%)	Monthly n (%)	Never/Not Applicable n (%)
To campus	35 (20%)	24 (14%)	35 (20%)	77 (45%)
Within campus	103 (60%)	37 (22%)	25 (15%)	6 (4%)
To work (off-campus)	3 (2%)	9 (5%)	0 (0.00%)	159 (93%)
Bar districts	0 (0.00%)	17 (10%)	38 (22%)	116 (68%)
Residential areas	65 (38%)	61 (36%)	33 (19%)	12 (7%)
Shopping districts	2 (1%)	37 (22%)	93 (54%)	39 (23%)

Table 1. How Often Respondents are Walking to Locations On/Near Campus

Sixty-one bicyclists responded to how often they biked to various location on and near campus (see Table 2). Forty-eight percent of all respondent's bike to campus daily and 89 percent bike to campus at least monthly. Daily biking to campus numbers were found to be very similar to those bicyclists who ride while on campus (48%). This suggests that those who are biking while on campus or also likely commuting to campus via bike as well. By contrast, 40 percent fewer pedestrians who walk daily while on campus also walk to campus.

Finally, 27 percent of bicyclists that bike to an off-campus job was significantly more than pedestrians who walk to an off-campus job; 7 percent. Fewer bicyclists ride to bar districts, residential areas, and shopping districts in comparison to pedestrians. Table 2 provides an illustration of how often respondents bike to locations on or near campus.

	Daily n (%)	Weekly n (%)	Monthly n (%)	Never/Not Applicable n (%)
To campus	29 (48%)	17 (28%)	8 (13%)	7 (11%)
Within campus	29 (48%)	17 (28%)	11 (18%)	4 (7%)
To work (off-campus)	6 (10%)	1 (2%)	9 (15%)	45 (74%)
Bar districts	1 (2%)	0 (0.00%)	8 (13%)	52 (85%)
Residential areas	22 (36%)	19 (31%)	9 (15%)	11 (18%)
Shopping districts	0 (0.00%)	19 (31%)	14 (23%)	28 (46%)

Table 2. How Often Respondents are Biking to Locations On/Near Campus

Respondents who identified as a pedestrian and/or bicyclist were asked why they walk and/or bike (see Figure 2). Eighty-five percent (n=147) cited transportation as the main reason they walk and/or bike. Eighty percent (n=136) of respondents who walk and/or bike listed health/exercise as their primary reason while over half of designated leisure/fun to be their reason for walking and/or biking. Other

listed reasons included: cost of parking, availability of parking, and not owning a car or bicycle. Figure 2 provides a visual for why people primarily walk or bike.

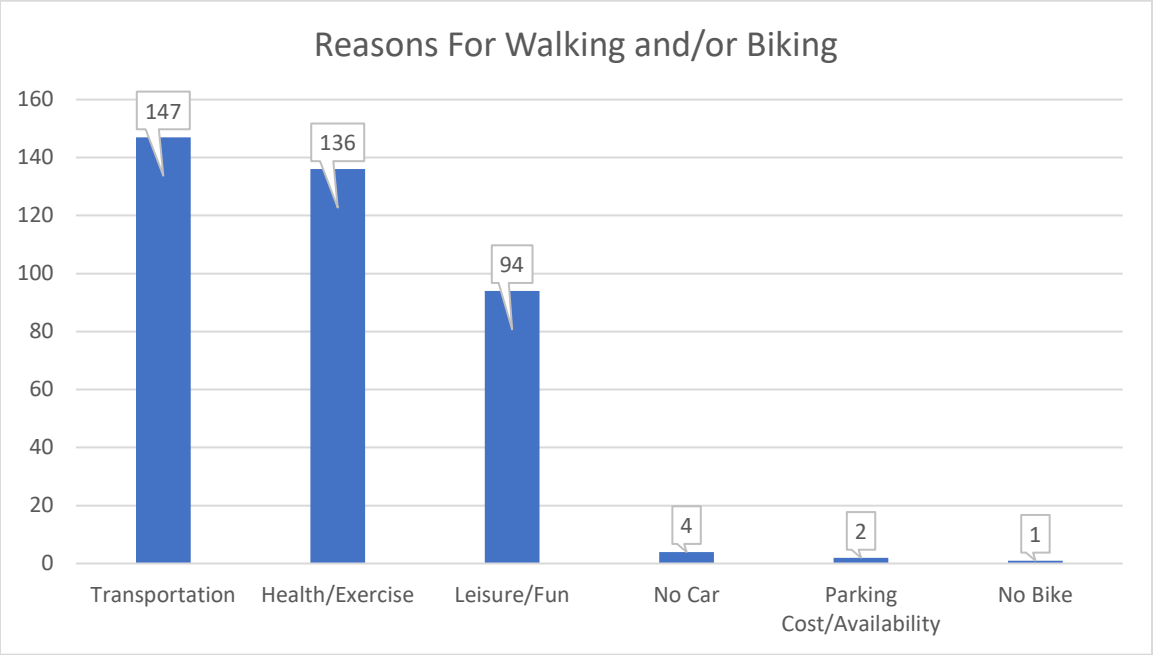

Figure 2. Primary Reasons for Walking and/or Biking

Respondents were asked when they primarily walk and/or bike (Figure 3). The majority of respondents walk and/or bike during the day between the hours of 8am-5pm while 15 percent walk and/or bike during the evening between 5pm-8pm. Fewer people were found to walk and/or bike at nighttime after 8pm. Figure 3 illustrates time of day when people most walk of ride a bicycle.

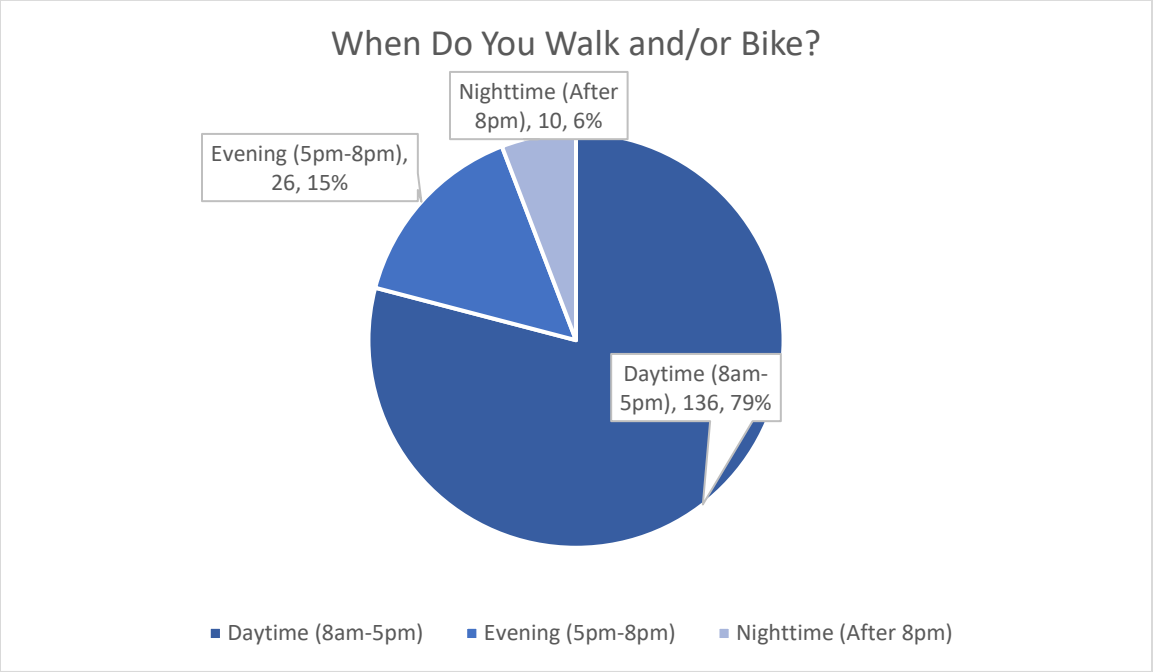

Figure 3. When Respondents Primarily Walk and/or Bike

Traffic Law Violation Trends

Respondents were asked about traffic law violation that they committed as a pedestrian, bicyclist, and motorist. The self-reported traffic law violations were analyzed and compared to the respondent relationship to the university, gender, age, and race/ethnicity.

Pedestrians

Respondents who considered themselves to be pedestrians were asked how often they had committed traffic law violations in the past 90 days (see Table 3). Twenty-four percent reported crossing the road at a location other than a crosswalk or intersection very often or always and over 90 percent reported doing so at least sometime in the past 90 days. Sixty-two percent of pedestrians reported that they always yield to vehicles when crossing at a location other than a crosswalk or intersection with at least 87 percent reporting doing so always and very often. Ninety-eight percent reported that they very often or always followed pedestrian crossing signals when available.

Of concern was that seventy-two percent of pedestrians reported always or very often entering the crosswalk after the pedestrian control signal countdown had started. Forty percent of pedestrians reported that they always, very often, or sometimes walk on the roadway when a sidewalk is available. Table 3 provides an illustration of respondent answers to pedestrian traffic law violations.

	Always n (%)	**Very Often n (%)**	**Sometimes n (%)**	**Not Often n (%)**	**Never/ Not Applicable n (%)**
Crossed the road at a location other than a crosswalk or intersection	12 (7%)	30 (17%)	112 (66%)	17 (10%)	0 (0.00%)
Yielded to vehicles when crossing at a location other than a crosswalk or intersection	106 (62%)	42 (25%)	12 (7%)	10 (6%)	1 (1%)
Followed pedestrian crossing signals when they are available	71 (42%)	96 (56%)	3 (2%)	1 (0.58%)	0 (0.00%)
Entered the crosswalk after the pedestrian countdown started	25 (15%)	98 (57%)	42 (25%)	4 (2%)	2 (1%)
Walked on the roadway when a sidewalk was available	3 (2%)	8 (5%)	56 (33%)	61 (36%)	43 (25%)

Table 3. Traffic Law Violations for Pedestrians

When pedestrian traffic law violations were analyzed by relationship to the university (see Table 4), UT Austin students were more likely than employees to engage in traffic law violations. As compared to UT Austin employees, students were always or very often more likely to report entering the crosswalk after the pedestrian traffic control signal countdown started. Students also reported more frequently walking on a roadway when a sidewalk was available. Table 4 provides an illustration of pedestrian traffic law violations by comparing student and employee relationship to the University.

		Always n (%)	Very Often n (%)	Sometimes n (%)	Not Often n (%)	Never/ Not Applicable n (%)
Crossed the road at a location other than a crosswalk or intersection	**Student**	8 (6%)	23 (19%)	77 (63%)	15 (12%)	0 (0.00%)
	Employee	4 (8%)	7 (15%)	35 (73%)	2 (4%)	0 (0.00%)
Yielded to vehicles when crossing at a location other than a crosswalk or intersection	**Student**	75 (61%)	30 (24%)	10 (8%)	8 (6%)	0 (0.00%)
	Employee	31 (65%)	12 (25%)	2 (4%)	2 (4%)	1 (2%)
Followed pedestrian crossing signals when they are available	**Student**	47 (38%)	73 (59%)	2 (2%)	1 (1%)	0 (0.00%)
	Employee	24 (50%)	23 (48%)	1 (2%)	0 (0.00%)	0 (0.00%)
Entered the crosswalk after the pedestrian countdown started	**Student**	20 (16%)	73 (59%)	27 (22%)	2 (2%)	1 (1%)
	Employee	5 (10%)	25 (52%)	15 (31%)	2 (4%)	1 (2%)
Walked on the roadway when a sidewalk was available	**Student**	3 (2%)	6 (5%)	42 (34%)	43 (35%)	29 (23%)
	Employee	0 (0.00%)	2 (4%)	14 (29%)	18 (38%)	14 (297%)

Table 4. Pedestrian Traffic Law Violations by Relationship to the University

		Always n (%)	Very Often n (%)	Sometimes n (%)	Not Often n (%)	Never/ Not Applicable n (%)
Crossed the road at a location other than a crosswalk or intersection	**Male**	9 (13%)	13 (19%)	39 (57%)	7 (10%)	0 (0.00%)
	Female	3 (3%)	15 (15%)	71 (72%)	10 (10%)	0 (0.00%)
	Prefer not to say	0 (0.00%)	2 (50%)	2 (50%)	0 (0.00%)	0 (0.00%)
Yielded to vehicles when crossing at a location other than a crosswalk or intersection	**Male**	29 (43%)	26 (38%)	6 (9%)	6 (9%)	1 (1%)
	Female	74 (75%)	16 (16%)	6 (6%)	3 (3%)	0 (0.00%)

	Prefer not to say	3 (75%)	0 (0.00%)	0 (0.00%)	1 (25%)	0 (0.00%)
Followed pedestrian crossing signals when they are available	**Male**	15 (22%)	52 (76%)	1 (1%)	0 (0.00%)	0 (0.00%)
	Female	56 (57%)	40 (40%)	2 (2%)	1 (1%)	0 (0.00%)
	Prefer not to say	0 (0.00%)	4 (100.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
Entered the crosswalk after the pedestrian countdown started	**Male**	15 (22%)	40 (59%)	12 (18%)	0 (0.00%)	1 (1%)
	Female	9 (9%)	55 (56%)	30 (30%)	4 (4%)	1 (1%)
	Prefer not to say	1 (25%)	3 (75%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
Walked on the roadway when a sidewalk was available	**Male**	1 (1%)	2 (3%)	21 (31%)	31 (46%)	14 (21%)
	Female	2 (2%)	7 (7%)	32 (32%)	30 (30%)	28 (28%)
	Prefer not to say	0 (0.00%)	0 (0.00%)	0 (0.00%)	3 (75%)	1 (25%)

Table 5 displays pedestrian traffic law violations by gender. Males were more likely to report traffic law violations as compared to females. Males were also nearly twice as likely to cross the road very often or always at a location other than a crosswalk or intersection as compared to females. Males were also more likely to enter the crosswalk very often or always after the pedestrian countdown started when compared to females. However, females were at least sometime more likely to walk on roadways when a sidewalk was available. Table 5 provides a depiction of pedestrian traffic law violations by gender.

		Always n (%)	Very Often n (%)	Sometimes n (%)	Not Often n (%)	Never/ Not Applicable n (%)
Crossed the road at a location other than a crosswalk or intersection	**Male**	9 (13%)	13 (19%)	39 (57%)	7 (10%)	0 (0.00%)
	Female	3 (3%)	15 (15%)	71 (72%)	10 (10%)	0 (0.00%)
	Prefer not to say	0 (0.00%)	2 (50%)	2 (50%)	0 (0.00%)	0 (0.00%)
Yielded to vehicles when crossing at a location other than a crosswalk or intersection	**Male**	29 (43%)	26 (38%)	6 (9%)	6 (9%)	1 (1%)
	Female	74 (75%)	16 (16%)	6 (6%)	3 (3%)	0 (0.00%)
	Prefer not to say	3 (75%)	0 (0.00%)	0 (0.00%)	1 (25%)	0 (0.00%)
Followed pedestrian crossing signals when they are available	**Male**	15 (22%)	52 (76%)	1 (1%)	0 (0.00%)	0 (0.00%)
	Female	56 (57%)	40 (40%)	2 (2%)	1 (1%)	0 (0.00%)
	Prefer not to say	0 (0.00%)	4 (100.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
Entered the crosswalk after the pedestrian countdown started	**Male**	15 (22%)	40 (59%)	12 (18%)	0 (0.00%)	1 (1%)
	Female	9 (9%)	55 (56%)	30 (30%)	4 (4%)	1 (1%)
	Prefer not to say	1 (25%)	3 (75%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
Walked on the roadway when a sidewalk was available	**Male**	1 (1%)	2 (3%)	21 (31%)	31 (46%)	14 (21%)
	Female	2 (2%)	7 (7%)	32 (32%)	30 (30%)	28 (28%)
	Prefer not to say	0 (0.00%)	0 (0.00%)	0 (0.00%)	3 (75%)	1 (25%)

Table 5. Pedestrian Traffic Law Violations by Gender

When pedestrian traffic law violations were analyzed by age (see Table 6), respondents between 18 and 20 years and those 25 or older, more frequently crossed the road at a location other than a crosswalk or intersection. Respondents 21 years or older were always or very often more likely to follow pedestrian crossing signals when available as compared to those between the ages of 18 and 20. Respondents 21 years or older were also always or very often more likely to enter the crosswalk after the pedestrian

countdown started as compared to those between 18 and 20. Lastly, respondents between the ages of 21 and 24 were twice as likely to sometimes walk on roadways when a sidewalk was available as compared to those between 18 and 20 and those 25 years or older. Table 6 provides an illustration of pedestrian traffic law violation by age.

		Always n (%)	Very Often n (%)	Sometimes n (%)	Not Often n (%)	Never/ Not Applicable n (%)
Crossed the road at a location other than a crosswalk or intersection	**18-20 y/o**	6 (8%)	13 (18%)	44 (62%)	8 (11%)	0 (0.00%)
	21-24 y/o	2 (4%)	9 (17%)	37 (69%)	6 (11%)	0 (0.00%)
	25+ y/o	4 (9%)	8 (24%)	31 (67%)	3 (7%)	0 (0.00%)
Yielded to vehicles when crossing at a location other than a crosswalk or intersection	**18-20 y/o**	44 (62%)	20 (28%)	3 (4%)	4 (7%)	0 (0.00%)
	21-24 y/o	33 (61%)	11 (20%)	6 (11%)	4 (7%)	0 (0.00%)
	25+ y/o	29 (63%)	11 (24%)	3 (7%)	2 (4%)	1 (2%)
Followed pedestrian crossing signals when they are available	**18-20 y/o**	28 (39%)	41 (58%)	1 (1%)	1 (1%)	0 (0.00%)
	21-24 y/o	21 (39%)	33 (61%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	25+ y/o	22 (48%)	22 (48%)	2 (4%)	0 (0.00%)	0 (0.00%)
Entered the crosswalk after the pedestrian countdown started	**18-20 y/o**	12 (17%)	42 (59%)	15 (21%)	2 (3%)	0 (0.00%)
	21-24 y/o	8 (15%)	33 (61%)	12 (22%)	0 (0.00%)	1 (2%)
	25+ y/o	5 (11%)	23 (50%)	15 (33%)	2 (4%)	1 (2%)
Walked on the roadway when a sidewalk was available	**18-20 y/o**	1 (1%)	4 (6%)	24 (34%)	28 (39%)	14 (20%)
	21-24 y/o	2 (4%)	2 (4%)	20 (37%)	15 (28%)	15 (28%)
	25+ y/o	0 (0.00%)	2 (4%)	12 (26%)	18 (39%)	14 (30%)

Table 6. Pedestrian Traffic Law Violation by Age Category

Table 7 provides an illustration of pedestrian traffic law violations by race/ethnicity. Black or African American respondents were the most likely to cross a road very often or always at a location other than a crosswalk or intersection. Hispanic or Latino respondents were most likely to very often or always enter the crosswalk after the pedestrian countdown started whereas Black or African American were not. When asked how often pedestrians walked on roadways when a sidewalk was available, Black, or

African American respondents were more likely to do so at least sometimes and Asian respondents were least likely.

		Always n (%)	Very Often n (%)	Sometimes n (%)	Not Often n (%)	Never/ Not Applicable n (%)
Crossed the road at a location other than a crosswalk or intersection	**White**	5 (6%)	14 (18%)	58 (73%)	3 (4%)	0 (0.00%)
	Hispanic or Latino	4 (11%)	3 (8%)	21 (57%)	9 (24%)	0 (0.00%)
	Asian	3 (9%)	6 (19%)	20 (63%)	3 (9%)	0 (0.00%)
	Black or African American	0 (0.00%)	4 (40%)	6 (60%)	0 (0.00%)	0 (0.00%)
	Other/Mixed	0 (0.00%)	2 (33%)	3 (50%)	1 (17%)	0 (0.00%)
	Prefer not to say	0 (0.00%)	1 (17%)	4 (67%)	1 (17%)	0 (0.00%)
Yielded to vehicles when crossing at a location other than a crosswalk or intersection	**White**	50 (63%)	20 (25%)	5 (6%)	5 (6%)	0 (0.00%)
	Hispanic or Latino	21 (57%)	10 (27%)	1 (3%)	4 (11%)	1 (3%)
	Asian	17 (53%)	8 (25%)	6 (19%)	1 (3%)	0 (0.00%)
	Black or African American	8 (80%)	2 (20%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	Other/Mixed	5 (83%)	1 (17%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	Prefer not to say	5 (83%)	1 (17%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
Followed pedestrian crossing signals when they are available	**White**	34 (43%)	43 (54%)	2 (3%)	1 (1%)	0 (0.00%)
	Hispanic or Latino	16 (43%)	21 (57%)	0 (0.00)	0 (0.00)	0 (0.00)
	Asian	10 (31%)	21 (66%)	1 (3%)	0 (0.00%)	0 (0.00%)
	Black or African American	5 (50%)	5 (50%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	Other/Mixed	3 (50%)	3 (50%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	Prefer not to say	3 (50%)	3 (50%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	White	12	43	23	1	1

Entered the crosswalk after the pedestrian countdown started		(15%)	(54%)	(29%)	(1%)	(1%)
	Hispanic or Latino	7 (20%)	24 (65%)	5 (14%)	1 (3%)	0 (0.00%)
	Asian	4 (13%)	19 (59%)	7 (22%)	1 (3%)	1 (3%)
	Black or African American	0 (0.00%)	6 (60%)	3 (30%)	1 (10%)	0 (0.00%)
	Other/Mixed	0 (0.00%)	4 (67%)	2 (33%)	0 (0.00%)	0 (0.00%)
	Prefer not to say	2 (33%)	2 (33%)	2 (33%)	0 (0.00%)	0 (0.00%)
Walked on the roadway when a sidewalk was available	**White**	2 (3%)	0 (0.00%)	33 (41%)	31 (39%)	14 (18%)
	Hispanic or Latino	0 (0.00%)	4 (11%)	10 (27%)	10 (27%)	13 (35%)
	Asian	0 (0.00%)	1 (3%)	6 (19%)	16 (50%)	9 (28%)
	Black or African American	0 (0.00%)	1 (10%)	4 (40%)	2 (20%)	3 (30%)
	Other/Mixed	1 (17%)	2 (33%)	1 (17%)	1 (17%)	1 (17%)
	Prefer not to say	0 (0.00%)	0 (0.00%)	2 (33%)	1 (17%)	3 (50%)

Table 7. Pedestrian Traffic Law Violations by Race/Ethnicity

Pedestrians were also asked how often motorists committed certain traffic law violation while they were walking (see Table 8). Eighty-Seven percent of pedestrian respondents reported that motorists yielded to them very often or always while they were crossing on a pedestrian signal. A lesser percentage, 73 percent, reported motorists always or very often yielding to them while crossing at a stop-controlled intersection.

Unfortunately, 76 percent of pedestrians reported that motorists sometimes or not often failed to yield while they were crossing the road at a crosswalk not located at an intersection. Furthermore, 56 percent of pedestrians reported that motorists sometimes or not often failed to yield when making a turn across their path. Table 8 provides an illustration of traffic law violations by motorists while walking.

	Always n (%)	Very Often n (%)	Sometimes n (%)	Not Often n (%)	Never/ Not Applicable n (%)
MOTORIST yielded to you while you were crossing the road on a pedestrian signal	36 (21%)	113 (66%)	15 (9%)	6 (4%)	1 (0.6%)
MOTORIST yielded to you while you were crossing the road at a stop-controlled intersection	62 (36%)	63 (37%)	30 (18%)	9 (5%)	7 (4%)
MOTORIST yielded to you while you were crossing the road at a crosswalk NOT located at an intersection	11 (6%)	37 (22%)	74 (43%)	40 (23%)	9 (5%)
MOTORIST yielded to you when making a turn across your path	17 (10%)	55 (32%)	91 (53%)	2 (1%)	6 (4%)

Table 8. Traffic Law Violations by Motorists While Walking

Bicyclists

Sixty-one bicyclists were asked how often they had committed traffic law violations in the past 90 days while biking (see Table 9). Very few bicyclists reported biking against traffic or biking without a light after dark. When asked how often they bike after dark with a light on the bicycle, 95 percent of bicyclists reported they always, very often, or sometimes do and 69 percent reported using a light always or very often. Additionally, 97 percent of bicyclists reported that they always or very often use hand signals when changing lanes and/or turning and 88 percent always or very often move to the right when being passed. Compared to pedestrians, bicyclists self-reported fewer traffic law violations. Table 9 provides an illustration of bicyclist involved traffic law violations.

	Always n (%)	Very Often n (%)	Sometimes n (%)	Not Often n (%)	Never/ Not Applicable n (%)
Biked against traffic in the road	0 (0.00%)	0 (0.00%)	6 (10%)	25 (41%)	30 (49%)
Biked after dark with a light on the bicycle	24 (39%)	18 (30%)	16 (26%)	1 (2%)	2 (3%)
Biked after dark without a light	0 (0.00%)	1 (2%)	7 (11%)	22 (36%)	31 (51%)
Used hand signals when changing lanes and/or turning	29 (48%)	30 (49%)	0 (0.00%)	1 (2%)	1 (2%)
Moved to the right when being passed	30 (49%)	24 (39%)	1 (2%)	5 (8%)	1 (2%)

Table 9. Bicyclist Traffic Law Violations

Table 10 lists bicyclist traffic law violations by respondent relationship to the university. While few traffic violations were reported, student bicyclists reported biking against traffic more frequently as compared to employees. A greater percentage of students reported always or very often biking with a light on their bicycle after dark in comparison to employees (75 percent versus 53 percent). However, a near equal distribution of UT Austin employees and students reported never or not often biking after dark without the use of a light. Students reported moving to the right less frequently while being passed

while employees reported using hand signals less frequently when changing lanes and/or turning less frequently.

		Always n (%)	Very Often n (%)	Sometimes n (%)	Not Often n (%)	Never/ Not Applicable n (%)
Biked against traffic in the road	**Student**	0 (0.00%)	0 (0.00%)	6 (14%)	14 (32%)	24 (55%)
	Employee	0 (0.00%)	0 (0.00%)	0 (0.00%)	11 (65%)	6 (35%)
Biked after dark with a light on the bicycle	**Student**	20 (45%)	13 (30%)	9 (20%)	1 (2%)	1 (2%)
	Employee	4 (24%)	5 (29%)	7 (41%)	0 (0.00%)	1 (6%)
Biked after dark without a light	**Student**	0 (0.00%)	1 (2%)	5 (11%)	14 (32%)	24 (55%)
	Employee	0 (0.00%)	0 (0.00%)	2 (12%)	8 (47%)	7 (41%)
Used hand signals when changing lanes and/or turning	**Student**	21 (47%)	23 (52%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	Employee	8 (47%)	7 (41%)	0 (0.00%)	1 (6%)	1 (6%)
Moved to the right when being passed	**Student**	22 (50%)	16 (36%)	1 (2%)	5 (11%)	0 (0.00%)
	Employee	8 (47%)	8 (47%)	0 (0.00%)	0 (0.00%)	1 (6%)

Table 10. Bicyclist Traffic Law Violations by Relationship to the University

When bicyclist traffic law violations were analyzed by gender (see Table 11), a greater percentage of males reported always or very often biking after dark with a light on the bicycle as compared to females. Interestingly, when asked how often the genders biked after dark without a light, a slightly greater percentage of females reported never or not often doing so. Female respondents were more likely than males to report always or very often moving to the right when being passed. Interestingly, 16 percent of male respondents reported not often moving to the right when being passed. Table 11 details both male and female traffic law violations by gender.

		Always n (%)	Very Often n (%)	Sometimes n (%)	Not Often n (%)	Never/ Not Applicable n (%)
Biked against traffic in the road	**Male**	0 (0.00%)	0 (0.00%)	3 (12%)	10 (40%)	12 (48%)
	Female	0 (0.00%)	0 (0.00%)	3 (9%)	14 (41%)	17 (50%)
	Prefer not to say	0 (0.00%)	0 (0.00%)	0 (0.00%)	1 (50%)	1 (50%)
Biked after dark with a light on the bicycle	**Male**	11 (44%)	8 (32%)	5 (20%)	1 (4%)	0 (0.00%)
	Female	13 (38%)	9 (26%)	10 (29%)	0 (0.00%)	2 (6%)
	Prefer not to say	0 (0.00%)	1 (50%)	1 (50%)	0 (0.00%)	0 (0.00%)
Biked after dark without a light	**Male**	0 (0.00%)	1 (4%)	3 (12%)	8 (32%)	13 (52%)
	Female	0 (0.00%)	0 (0.00%)	4 (2%)	13 (38%)	17 (50%)
	Prefer not to say	0 (0.00%)	0 (0.00%)	0 (0.00%)	1 (50%)	1 (50%)
Used hand signals when changing lanes and/or turning	**Male**	10 (40%)	15 (60%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	Female	17 (50%)	15 (44%)	0 (0.00%)	1 (3%)	1 (3%)
	Prefer not to say	2 (100.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
Moved to the right when being passed	**Male**	13 (52%)	8 (32%)	0 (0.00%)	4 (16%)	0 (0.00%)
	Female	16 (47%)	15 (44%)	1 (3%)	1 (3%)	1 (3%)
	Prefer not to say	1 (50%)	1 (50%)	0 (0.00%)	0 (0.00%)	0 (0.00%)

Table 11. Bicyclist Traffic Law Violations by Gender

Table 12 displays bicyclist traffic law violations by age. Twenty-two percent of respondents between the ages of 21 and 24 reported sometimes biking against traffic in the road . However, this age category (21-24 y/o) was more likely to always bike with a light or very often on their bicycle after dark, as compared to the other two age categories. When asked how often they bike after dark without a light,

respondents between the ages of 18 and 20 reported doing so more frequently than respondents 21 years or older. The majority of all three age categories reported always or very often moving to the right when being passed. However, about 17 percent of 21–24-year-old reported doing so only sometimes or not often. Table 12 provides more specific detail regarding bicycle traffic law violation according to age.

		Always n (%)	Very Often n (%)	Sometimes n (%)	Not Often n (%)	Never/ Not Applicable n (%)
Biked against traffic in the road	**18-20 y/o**	0 (0.00%)	0 (0.00%)	1 (5%)	6 (27%)	15 (68%)
	21-24 y/o	0 (0.00%)	0 (0.00%)	5 (22%)	8 (35%)	10 (43%)
	25+ y/o	0 (0.00%)	0 (0.00%)	0 (0.00%)	11 (69%)	16 (31%)
Biked after dark with a light on the bicycle	**18-20 y/o**	7 (32%)	6 (27%)	7 (32%)	1 (5%)	1 (5%)
	21-24 y/o	13 (57%)	6 (26%)	4 (17%)	0 (0.00%)	0 (0.00%)
	25+ y/o	4 (25%)	6 (38%)	5 (31%)	0 (0.00%)	1 (6%)
Biked after dark without a light	**18-20 y/o**	0 (0.00%)	1 (5%)	3 (14%)	6 (27%)	12 (55%)
	21-24 y/o	0 (0.00%)	0 (0.00%)	2 (9%)	7 (30%)	14 (61%)
	25+ y/o	0 (0.00%)	0 (0.00%)	2 (13%)	9 (56%)	5 (31%)
Used hand signals when changing lanes and/or turning	**18-20 y/o**	10 (45%)	12 (55%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	21-24 y/o	12 (52%)	11 (48%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	25+ y/o	7 (44%)	7 (44%)	0 (0.00%)	1 (6%)	1 (6%)
Moved to the right when being passed	**18-20 y/o**	12 (55%)	8 (36%)	0 (0.00%)	2 (9%)	0 (0.00%)
	21-24 y/o	10 (43%)	9 (39%)	1 (4%)	3 (13%)	0 (0.00%)
	25+ y/o	8 (50%)	7 (44%)	0 (0.00%)	0 (0.00%)	1 (6%)

Table 12. Bicyclist Traffic Law Violations by Age Category

When bicyclist traffic law violations were analyzed by race/ethnicity (see Table 13), respondents who identified as White were the least likely to report always or very often biking after dark with a light on the bicycle . Additionally, a greater percentage of respondents who identified as White (10%) and Hispanic/Latino (14%) reported at least sometime biking after dark without a light as compared to Asian (10%) and Black/African American (0%) respondents. Most respondents reported always or very often

moving to the right when being passed . However, White, and Hispanic/Latino respondents reported doing so less often than Asian and Black/African American respondents.

		Always n (%)	Very Often n (%)	Sometimes n (%)	Not Often n (%)	Never/ Not Applicable n (%)
Biked against traffic in the road	**White**	0 (0.00%)	0 (0.00%)	2 (6%)	14 (45%)	15 (48%)
	Hispanic or Latino	0 (0.00%)	0 (0.00%)	1 (7%)	7 (50%)	6 (43%)
	Asian	0 (0.00%)	0 (0.00%)	0 (0.00%)	2 (20%)	8 (80%)
	Black or African American	0 (0.00%)	0 (0.00%)	0 (0.00%)	1 (50%)	1 (50%)
	Other/Mixed	0 (0.00%)	0 (0.00%)	2 (100%)	0 (0.00%)	0 (0.00%)
	Prefer not to say	0 (0.00%)	0 (0.00%)	1 (50%)	1 (50%)	0 (0.00%)
Biked after dark with a light on the bicycle	**White**	7 (23%)	9 (29%)	12 (39%)	1 (3%)	2 (6%)
	Hispanic or Latino	8 (57%)	3 (21%)	3 (21%)	0 (0.00%)	0 (0.00%)
	Asian	5 (50%)	4 (40%)	1 (10%)	0 (0.00%)	0 (0.00%)
	Black or African American	1 (50%)	1 (50%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	Other/Mixed	2 (100%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	Prefer not to say	1 (50%)	1 (50%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
Biked after dark without a light	**White**	0 (0.00%)	1 (3%)	3 (10%)	11 (35%)	16 (52%)
	Hispanic or Latino	0 (0.00%)	0 (0.00%)	2 (14%)	5 (36%)	7 (50%)
	Asian	0 (0.00%)	0 (0.00%)	1 (10%)	4 (40%)	5 (50%)
	Black or African American	0 (0.00%)	0 (0.00%)	0 (0.00%)	1 (50%)	1 (50%)
	Other/Mixed	0 (0.00%)	0 (0.00%)	1 (50%)	0 (0.00%)	1 (0.00%)
	Prefer not to say	0 (0.00%)	0 (0.00%)	0 (0.00%)	1 (50%)	1 (50%)
Used hand signals when changing	**White**	13 (42%)	17 (55%)	0 (0.00%)	0 (0.00%)	1 (3%)

lanes and/or turning	**Hispanic or Latino**	6 (43%)	7 (50%)	0 (0.00%)	1 (7%)	0 (0.00%)
	Asian	6 (60%)	4 (40%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	Black or African American	2 (100%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	Other/Mixed	1 (50%)	1 (50%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	Prefer not to say	1 (50%)	1 (50%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
Moved to the right when being passed	**White**	12 (39%)	15 (48%)	1 (3%)	2 (6%)	1 (3%)
	Hispanic or Latino	5 (36%)	7 (50%)	0 (0.00%)	2 (14%)	0 (0.00%)
	Asian	8 (80%)	2 (20%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	Black or African American	2 (100%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	Other/Mixed	1 (50%)	0 (0.00%)	0 (0.00%)	1 (50%)	0 (0.00%)
	Prefer not to say	2 (100%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)

Table 13. Bicyclist Traffic Law Violations by Race/Ethnicity

Bicyclists were also asked how often they observed a motorist commit traffic law violations while they were biking in the past 90 days (see Table 14). When asked how often motorists yielded when making a turn across the bicyclists' travel path, the bicyclists responded very often or sometimes, 56 percent and 34 percent, respectively. Of greater concern is that 87 percent of bicyclists reported that motorists sometimes and not often kept a safe following distance. Table 14 provides a depiction of motorist traffic law violations while a person was biking.

	Always n (%)	**Very Often n (%)**	**Sometimes n (%)**	**Not Often n (%)**	**Never/Not Applicable n (%)**
MOTORIST yielded to you when making a turn across your path	2 (3%)	21 (34%)	34 (56%)	1 (2%)	3 (5%)
MOTORIST maintained a safe distance when passing you	1 (2%)	4 (7%)	40 (66%)	13 (21%)	3 (5%)

Table 14. Motorist Traffic Law Violations While Biking

Motorists

Lastly, motorists (N=131) were asked how often they committed traffic law violations while driving in the past 90 days (see Table 15). Nearly all of motorists reported always or very often yielding to pedestrians while they were crossing the road on a pedestrian signal or stop-controlled intersection. Additionally, motorists reported that they most always yield to pedestrians and bicyclists when making a turn across a pedestrian or bicyclist's path. Eighty-eight percent of motorists reported that they always or very often maintain a safe distance when passing a bicyclist.

The most common motorist reported traffic law violation was failing to yield to a pedestrian while they were crossing the road at a crosswalk not located at an intersection. Only one quarter of reporting motorists indicated that they sometimes or not often fail to yield to pedestrians crossing the road not located in a crosswalk.

	Always n (%)	Very Often n (%)	Sometimes n (%)	Not Often n (%)	Never/Not Applicable n (%)
Yielded to a pedestrian while they were crossing the road on a pedestrian signal	113 (86%)	16 (12%)	1 (1%)	1 (1%)	0 (0.00%)
Yielded to a pedestrian while they were crossing the road at a stop-controlled intersection	104 (79%)	25 (19%)	1 (1%)	1 (1%)	0 (0.00%)
Yielded to a pedestrian while they were crossing the road at a crosswalk NOT located at an intersection	52 (40%)	47 (36%)	18 (14%)	14 (11%)	0 (0.00%)
Yielded to a pedestrian when making a turn across the pedestrians' path	86 (66%)	32 (24%)	12 (9%)	1 (1%)	0 (0.00%)
Yielded to a bicyclist when making a turn across the cyclists' path	87 (66%)	33 (25%)	5 (4%)	3 (2%)	3 (2%)
Maintained a safe distance when passing a bicyclist	88 (67%)	28 (21%)	7 (5%)	4 (3%)	4 (3%)

Table 15. Motorist Traffic Law Violations

When motorist traffic law violations were analyzed by relationship to the university (see Table 16), UT Austin employees were more likely to report always yielding to pedestrians as they crossed the road on a pedestrian signal or at a stop-controlled intersection. As compared to UT Austin students, employees reported always maintaining a safe distance when following a bicyclist. UT Austin employees were also more likely to report always yielding when making a turn across a pedestrians' or bicyclists' path.

Of concern, only 29 percent of UT Austin students and 16 percent of UT Austin employees reported sometimes or not often yielding to pedestrians while crossing the road at a crosswalk not located at an intersection. Table 16 provides an illustration of Motorist Traffic Law Violations by Relationship to the University.

		Always n (%)	Very Often n (%)	Sometimes n (%)	Not Often n (%)	Never/ Not Applicable n (%)
Yielded to a pedestrian while they were crossing the road on a pedestrian signal	**Student**	73 (84%)	12 (14%)	1 (1%)	1 (1%)	0 (0.00%)
	Employee	40 (91%)	4 (9%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
Yielded to a pedestrian while they were crossing the road at a stop-controlled intersection	**Student**	69 (78%)	17 (20%)	1 (1%)	1 (1%)	0 (0.00%)
	Employee	36 (82%)	8 (18%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
Yielded to a pedestrian while they were crossing the road at a crosswalk NOT located at an intersection	**Student**	30 (34%)	32 (37%)	13 (15%)	12 (14%)	0 (0.00%)
	Employee	22 (50%)	15 (34%)	5 (11%)	2 (5%)	0 (0.00%)
Yielded to a pedestrian when making a turn across the pedestrians' path	**Student**	56 (64%)	23 (26%)	7 (8%)	1 (1%)	0 (0.00%)
	Employee	30 (68%)	9 (20%)	5 (11%)	0 (0.00%)	0 (0.00%)
Yielded to a bicyclist when making a turn across the cyclists' path	**Student**	53 (61%)	25 (29%)	4 (5%)	3 (3%)	2 (2%)
	Employee	34 (77%)	7 (16%)	1 (2%)	0 (0.00%)	1 (2%)
Maintained a safe distance when passing a bicyclist	**Student**	54 (62%)	21 (24%)	6 (7%)	4 (5%)	2 (2%)
	Employee	34 (77%)	7 (18%)	1 (2%)	0 (0.00%)	2 (5%)

Table 16. Motorist Traffic Law Violations by Relationship to the University

Table 17Table 11 details motorist traffic law violations by gender. Males were found to less likely report yielding to a pedestrian while they were crossing the road at a crosswalk not located at an intersection. Consequently, 31 percent of males and 21 percent of females reported they only sometime or not often yield to pedestrians while they were crossing the road at a crosswalk not located at an intersection. Females were found to less likely maintain a safe distance when passing a bicyclist compared to males. More information on motorist traffic law violation by gender can be found in Table 17.

		Always n (%)	Very Often n (%)	Sometimes n (%)	Not Often n (%)	Never/ Not Applicable n (%)
Yielded to a pedestrian while they were crossing the road on a pedestrian signal	**Male**	40 (83%)	8 (17%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	Female	69 (87%)	8 (10%)	1 (1%)	1 (1%)	0 (0.00%)
	Prefer not to say	4 (100%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
Yielded to a pedestrian while they were crossing the road at a stop-controlled intersection	**Male**	5 (73%)	13 (27%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	Female	66 (84%)	11 (14%)	1 (1%)	1 (1%)	0 (0.00%)
	Prefer not to say	3 (75%)	1 (25%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
Yielded to a pedestrian while they were crossing the road at a crosswalk NOT located at an intersection	**Male**	23 (48%)	10 (21%)	4 (8%)	11 (23%)	0 (0.00%)
	Female	28 (35%)	35 (44%)	14 (18%)	2 (3%)	0 (0.00%)
	Prefer not to say	1 (25%)	2 (50%)	0 (0.00%)	1 (25%)	0 (0.00%)
Yielded to a pedestrian when making a turn across the pedestrians' path	**Male**	31 (65%)	11 (23%)	6 (13%)	0 (0.00%)	0 (0.00%)
	Female	53 (67%)	10 (25%)	5 (6%)	1 (1%)	0 (0.00%)
	Prefer not to say	2 (50%)	1 (25%)	1 (25%)	0 (0.00%)	0 (0.00%)
Yielded to a bicyclist when making a turn across the cyclists' path	**Male**	31 (65%)	16 (33%)	0 (0.00%)	0 (0.00%)	1 (2%)
	Female	53 (67%)	16 (20%)	5 (6%)	3 (4%)	2 (3%)
	Prefer not to say	3 (75%)	1 (25%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
Maintained a safe distance when passing a bicyclist	**Male**	31 (65%)	15 (31%)	0 (0.00%)	0 (0.00%)	2 (4%)
	Female	53 (67%)	13 (16%)	7 (9%)	4 (5%)	2 (3%)

	Prefer not to say	4 (100%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)

Table 17. Motorist Traffic Law Violations by Gender

Table 18Table 12 provides information on motorist traffic law violations by age. Respondents 21 to 24 were found to least likely report yielding to pedestrians while they were crossing the road at a crosswalk not located at an intersection. Table 18 provides an illustration of respondent answers to motorist traffic law violation by age.

		Always n (%)	**Very Often n (%)**	**Sometimes n (%)**	**Not Often n (%)**	**Never/ Not Applicable n (%)**
Yielded to a pedestrian while they were crossing the road on a pedestrian signal	**18-20 y/o**	40 (83%)	7 (15%)	0 (0.00%)	1 (2%)	0 (0.00%)
	21-24 y/o	37 (88%)	5 (12%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	25+ y/o	32 (88%)	8 (19%)	1 (2%)	0 (0.00%)	0 (0.00%)
Yielded to a pedestrian while they were crossing the road at a stop-controlled intersection	**18-20 y/o**	38 (79%)	9 (19%)	0 (0.00%)	1 (2%)	0 (0.00%)
	21-24 y/o	34 (81%)	8 (19%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	25+ y/o	32 (78%)	8 (20%)	1 (2%)	0 (0.00%)	0 (0.00%)
Yielded to a pedestrian while they were crossing the road at a crosswalk NOT located at an intersection	**18-20 y/o**	18 (38%)	19 (40%)	5 (10%)	6 (13%)	0 (0.00%)
	21-24 y/o	15 (36%)	15 (36%)	6 (14%)	6 (14%)	0 (0.00%)
	25+ y/o	19 (78%)	13 (32%)	7 (17%)	2 (5%)	0 (0.00%)
Yielded to a pedestrian when making a turn across the pedestrians' path	**18-20 y/o**	29 (60%)	14 29%)	4 (8%)	1 (2%)	0 (0.00%)
	21-24 y/o	31 (74%)	8 (19%)	3 (7%)	0 (0.00%)	0 (0.00%)
	25+ y/o	26 (63%)	10 (24%)	5 (12%)	0 (0.00%)	0 (0.00%)
Yielded to a bicyclist when making a turn	**18-20 y/o**	30 (63%)	12 (25%)	3 (6%)	6 (6%)	0 (0.00%)
	21-24 y/o	27	12	1	0	1

across the cyclists' path		(64%)	(29%)	(2%)	(0.00%)	(5%)
	25+ y/o	30 (73%)	9 (22%)	1 (2%)	0 (0.00%)	1 (2%)
Maintained a safe distance when passing a bicyclist	**18-20 y/o**	32 (67%)	11 (23%)	2 (4%)	3 (6%)	0 (0.00%)
	21-24 y/o	27 (64%)	8 (19%)	5 (12%)	0 (0.00%)	2 (5%)
	25+ y/o	29 (71%)	9 (22%)	0 (0.00%)	1 (2%)	2 (5%)

Table 18. Motorist Traffic Law Violations by Age Category

When motorist traffic law violations were analyzed by race/ethnicity (see Table 19Table 13), Black or African American motorists were least likely to always or very often yield to a pedestrian while they were crossing the road at a crosswalk not located at an intersection. Black or African American motorists were ordinally followed by Asian, Hispanic, and then White respondents. White motorist respondents were least likely to maintain a safe distance when passing a bicyclist always or very often. White respondents were followed by Hispanic, Asian, and then Black or African American respondents. Table 19 provides more information on motorist traffic law violations by race/ethnicity.

		Always n (%)	**Very Often n (%)**	**Sometimes n (%)**	**Not Often n (%)**	**Never/ Not Applicable n (%)**
Yielded to a pedestrian while they were crossing the road on a pedestrian signal	**White**	57 (85%)	9 (13%)	0 (0.00%)	1 (1%)	0 (0.00%)
	Hispanic or Latino	25 (83%)	4 (13%)	1 (3%)	0 (0.00%)	0 (0.00%)
	Asian	16 (94%)	1 (6%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	Black or African American	8 (100%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	Other/Mixed	3 (75%)	1 (25%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	Prefer not to say	4 (80%)	1 (20%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
Yielded to a pedestrian while they were crossing the road at a stop-controlled intersection	**White**	51 (76%)	15 (22%)	0 (0.00%)	1 1%)	0 (0.00%)
	Hispanic or Latino	24 (80%)	5 (17%)	1 (3%)	0 (0.00%)	0 (0.00%)
	Asian	13 (76%)	4 (24%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	Black or African American	8 (100%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	Other/Mixed	4 (100%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)

	Prefer not to say	4 (80%)	1 (20%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
Yielded to a pedestrian while they were crossing the road at a crosswalk NOT located at an intersection	**White**	27 (40%)	28 (42%)	6 (9%)	6 (9%)	0 (0.00%)
	Hispanic or Latino	12 (40%)	10 (33%)	4 (13%)	4 (13%)	0 (0.00%)
	Asian	6 (35%)	6 (35%)	3 (18%)	2 (12%)	0 (0.00%)
	Black or African American	4 (50%)	1 (13%)	3 (38%)	0 (0.00%)	0 (0.00%)
	Other/Mixed	0 (0.00%)	1 (25%)	2 (50%)	1 (25%)	0 (0.00%)
	Prefer not to say	3 (60%)	1 (20%)	0 (0.00%)	1 (20%)	0 (0.00%)
Yielded to a pedestrian when making a turn across the pedestrians' path	**White**	42 (63%)	21 (31%)	3 (4%)	1 (1%)	0 (0.00%)
	Hispanic or Latino	17 (57%)	7 (23%)	6 (20%)	0 (0.00%)	0 (0.00%)
	Asian	12 (71%)	2 (12%)	3 (18%)	0 (0.00%)	0 (0.00%)
	Black or African American	8 (100%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	Other/Mixed	3 (75%)	1 (25%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	Prefer not to say	4 (80%)	1 (20%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
Yielded to a bicyclist when making a turn across the cyclists' path	**White**	47 (70%)	13 (19%)	1 (1%)	3 (4%)	3 (4%)
	Hispanic or Latino	20 (67%)	7 (23%)	3 (10%)	0 (0.00%)	0 (0.00%)
	Asian	9 (53%)	7 (41%)	1 (6%)	0 (0.00%)	0 (0.00%)
	Black or African American	6 (75%)	2 (25%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	Other/Mixed	2 (50%)	2 (50%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	Prefer not to say	3 (60%)	2 (40%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
Maintained a safe distance when passing a bicyclist	**White**	46 (69%)	11 (16%)	4 (6%)	3 (4%)	3 (4%)
	Hispanic or Latino	17 (57%)	9 (30%)	2 (7%)	1 (3%)	1 (3%)
	Asian	11	5	1	0	0

		(65%)	(29%)	(6%)	(0.00%)	(0.00%)
	Black or African American	8 (100%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	Other/Mixed	3 (75%)	1 (25%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	Prefer not to say	3 (60%)	2 (40%)	0 (0.00%)	0 (0.00%)	0 (0.00%)

Table 19. Motorist Traffic Law Violations by Race/Ethnicity

Crashes and Near Misses

In addition to road user behavior and traffic law violation trends, investigators also captured self-reported and near miss crashes information involving pedestrians, bicyclists, and motorists. The investigators intentionally obtained information on environmental factors about when the event occurred (i.e., time of day, weather conditions, location). The following section provides details of the self-reported and near miss crash events along with environmental factors that may have caused adverse impact.

Pedestrians

Pedestrians were asked if they had been involved in a crash or a near miss crash event with a motor vehicle on or near UT Austin campus within the past 90 days (Figure 4). Of the 171 pedestrians responding, 32 percent reported a near miss crash with a motor vehicle. Two percent of respondents reported actually being involved in a crash event with a motor vehicle. Thirty-four percent, or one in three of all pedestrian respondents reported being involved in a crash or experiencing a near miss crash event on or near UT Austin campus. Figure 4 provides an illustration of pedestrian involved motor vehicle crashes or near miss crashes on or near UT Austin campus.

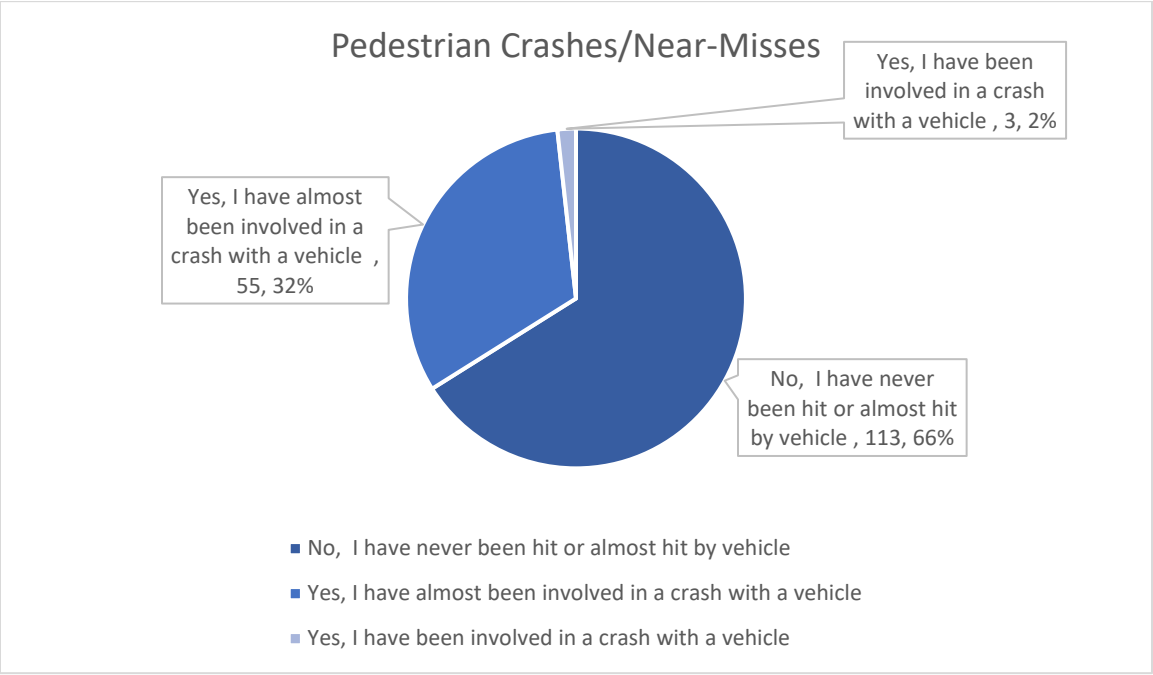

Figure 4. Pedestrian Reported Crashes/Near Misses

Table 20 details pedestrian reported crashes and near miss crash events by respondent relationship with the university. The percentage of students and employees who reported a crash or a near miss crash with a motor vehicle were found to be similar. Interestingly, 35% of UT Austin students and 31% of UT Austin employees (as pedestrians) have experienced a collision or near miss collision with a motor vehicle. Table 20 provides more detail on pedestrian reported crashes and near misses on UT Austin campus.

		Students n (%)	Employees n (%)
As a pedestrian on or near campus, have you been involved in a crash with a vehicle or almost involved in a crash with a vehicle in the past 90 days?	**No, I have never been hit or almost hit by vehicle**	80 (65%)	33 (69%)
	Yes, I have almost been involved in a crash with a vehicle	40 (33%)	15 (31%)
	Yes, I have been involved in a crash with a vehicle	3 (2%)	0 (0.00%)

Table 20. Pedestrian Reported Crashes/Near Misses by Relationship to the University

When pedestrian crashes and near misses were analyzed by gender (see Table 21), males were more likely than females to report being or almost being involved in a crash with a motor vehicle (38 percent versus 30 percent, respectively).

		Male n (%)	Female n (%)	Prefer not to say n (%)
As a pedestrian on or near campus, have you been involved in a crash with a vehicle or almost involved in a crash with a vehicle in the past 90 days?	**No, I have never been hit or almost hit by vehicle**	42 (62%)	69 (70%)	2 (50%)
	Yes, I have almost been involved in a crash with a vehicle	25 (37%)	29 (29%)	1 (25%)
	Yes, I have been involved in a crash with a vehicle	1 (1%)	1 (1%)	1 (25%)

Table 21. Pedestrian Reported Crashes/Near Misses by Gender

Table 22 displays pedestrian reported crashes and near misses by age category. Respondents between the ages of 21 and 24 were the most likely to report a crash or near miss crash compared to 18 to 20 years old and respondents 25 or older.

		18-20 y/o n (%)	21-24 y/o n (%)	25+ y/o n (%)
As a pedestrian on or near campus, have you been involved in a crash with a vehicle or almost involved in a crash with a vehicle in the past 90 days?	**No, I have never been hit or almost hit by vehicle**	49 (69%)	32 (59%)	32 (70%)
	Yes, I have almost been involved in a crash with a vehicle	21 (30%)	20 (37%)	14 (30%)
	Yes, I have been involved in a crash with a vehicle	1 (1%)	2 (4%)	(0.00%)

Table 22. Pedestrian Reported Crashes/Near Misses by Age

Lastly, pedestrian reported crashes were analyzed by race/ethnicity. Table 23 shows the results. About 28 percent of respondents who identified as White, Hispanic, and Asian reported being involved in a crash or almost being involved in a crash with a motor vehicle. Respondents who identified as Black or African American disproportionally reported almost being involved in a crash when compared to the other race/ethnicity. Table 23 provides an illustration of pedestrian reported crashes and near miss crash events by race/ethnicity.

		White n (%)	Hispanic n (%)	Asian n (%)	Black n (%)	Mixed/Other n (%)	Prefer not to say n (%)
As a pedestrian on or near campus, have you been involved in a crash with a vehicle or almost involved in a crash with a vehicle in the past 90 days?	**No, I have never been hit or almost hit by vehicle**	57 (71%)	26 (70%)	23 (72%)	2 (20%)	3 (50%)	2 (33%)
	Yes, I have almost been involved in a crash with a vehicle	22 (28%)	10 (27%)	9 (28%)	8 (80%)	3 (50%)	3 (50%)
	Yes, I have been involved in a crash with a vehicle	1 (1%)	1 (3%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	1 (17%)

Table 23. Pedestrian Reported Crashes/Near Misses by Race/Ethnicity

Characteristics of the environment in which the 58 pedestrian-involved crashes and near miss crashes occurred are shown in Figure 5. Seventy-two percent of pedestrian crash and near crash events occurred during clear weather and 7 percent occurred during rainy weather. In addition, 40 percent of pedestrian crash and near crash events occurred in the evening hours between 4pm and 6pm. Forty one percent occurred in the morning between 7 am and 9 am. Seventy four percent occurred near campus, 47

percent occurred on campus, and 28 percent occurred near a bus stop. Lastly, about 16 percent occurred during a large event, such as a football game.

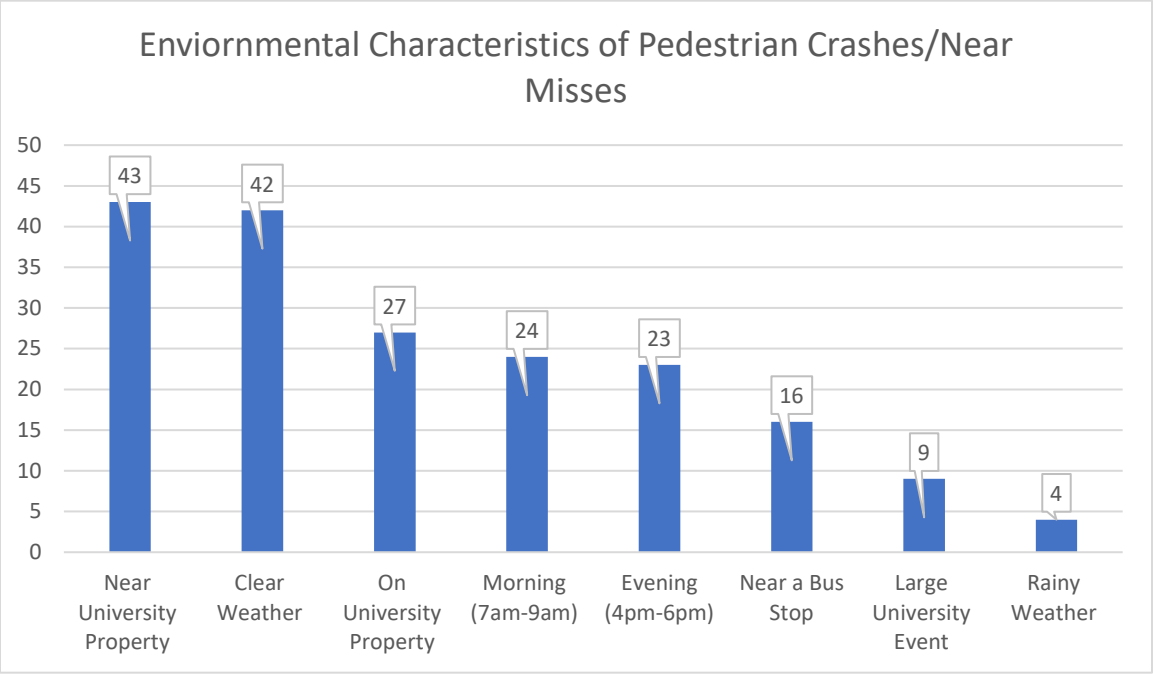

Figure 5. Environmental Characteristics of Pedestrian Reported Crashes/Near Misses

Bicyclists

Sixty-one bicyclists were asked if they had been involved in a crash or near miss crash event with a motor vehicle on or near campus in the past 90 days (see Figure 6). Thirty-four percent of bicyclists reported almost being in a crash with a motor vehicle; however, no bicyclists reported being involved in an actual crash.

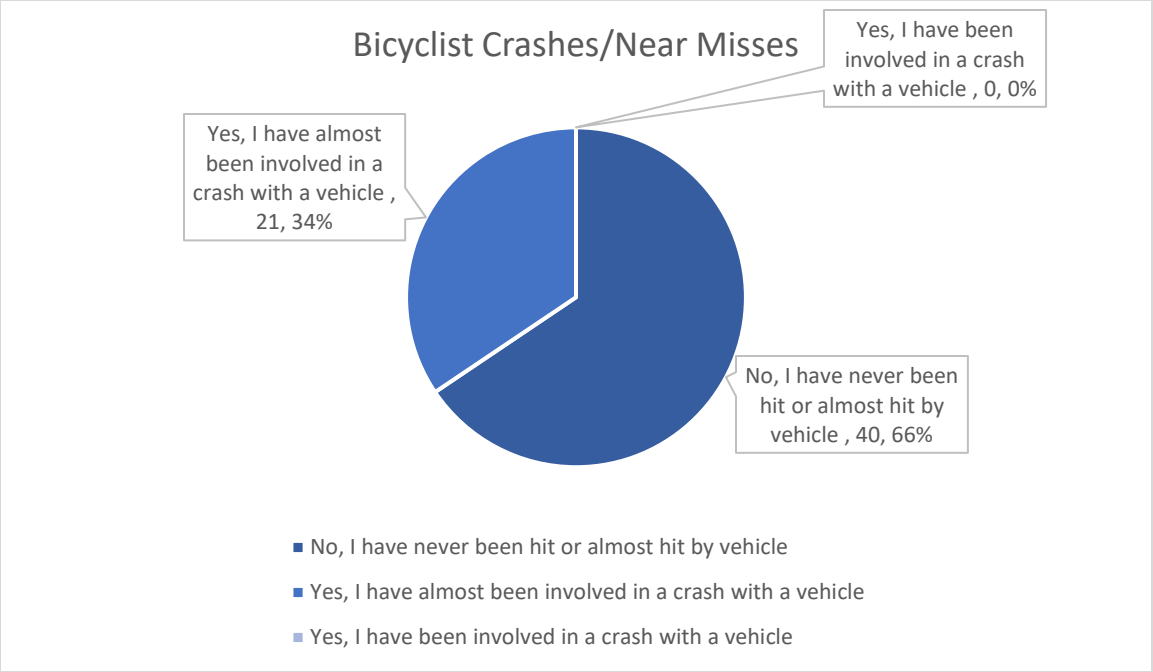

Figure 6. Bicyclist Reported Crashes/Near Misses

Table 24 details pedestrian reported crashes and near miss crashes by respondent relationship with the university. A greater percentage of UT Austin employee bicyclists reported almost being involved in a crash with a motor vehicle as compared to UT Austin student bicyclists (47 percent versus 30 percent, respectively).

		Students n (%)	Employees n (%)
As a bicyclist on or near campus, have you been involved in a crash with a vehicle or almost involved in a crash with a vehicle in the past 90 days?	**No, I have never been hit or almost hit by vehicle**	31 (70%)	9 (53%)
	Yes, I have almost been involved in a crash with a vehicle	13 (30%)	8 (47%)
	Yes, I have been involved in a crash with a vehicle	0 (0.00%)	0 (0.00%)

Table 24. Bicyclist Reported Crashes/Near Misses by Relationship to the University

When crashes and near miss crashes involving bicyclists was analyzed by gender (see Table 25), males were found to be much more likely to report a near miss crash with a vehicle as compared to females. Fifty-two percent of male respondents reported a near miss crash. In comparison, only 17 percent of female bicyclists reported a near miss crash with a vehicle.

		Male n (%)	Female n (%)	Prefer not to say n (%)
As a bicyclist on or near campus, have you been involved in a crash with a vehicle or almost involved in a crash with a vehicle in the past 90 days?	**No, I have never been hit or almost hit by vehicle**	12 (48%)	28 (82%)	0 (0.00%)
	Yes, I have almost been involved in a crash with a vehicle	13 (52%)	6 (17%)	2 (100%)
	Yes, I have been involved in a crash with a vehicle	0 (0.00%)	0 (0.00%)	0 (0.00%)

Table 25. Bicyclist Reported Crashes/Near Misses by Gender

Table 26 displays bicyclist reported crashes and near misses by age. Respondents 25 years or older were the most likely to report a near miss crash with a vehicle, followed by respondents between the ages of 21 and 24 and then 18-20 years.

		18-20 y/o n (%)	21-24 y/o n (%)	25+ y/o n (%)
As a bicyclist on or near campus, have you been involved in a crash with a vehicle or almost involved in a crash with a vehicle in the past 90 days?	**No, I have never been hit or almost hit by vehicle**	16 (73%)	15 (65%)	9 (56%)
	Yes, I have almost been involved in a crash with a vehicle	6 (27%)	8 (35%)	9 (44%)
	Yes, I have been involved in a crash with a vehicle	0 (0.00%)	0 (0.00%)	0 (0.00%)

Table 26. Bicyclist Reported Crashes/Near Misses by Age

Table 27 displays bicyclist reported crashes and near misses by race/ethnicity. Over one half of respondents who identified as Asian or Black/African American reported a near miss crash even while riding their bike. About 29 percent of White respondents and 21 percent of Hispanic respondents reported almost being hit by a vehicle while riding their bike.

		White n (%)	Hispanic n (%)	Asian n (%)	Black n (%)	Mixed/Other n (%)	Prefer not to say n (%)
As a bicyclist on or near campus, have you been involved in a crash with a vehicle or almost involved in a crash with a vehicle in the past 90 days?	**No, I have never been hit or almost hit by vehicle**	22 (71%)	11 (79%)	4 (40%)	1 (50%)	1 (50%)	1 (50%)
	Yes, I have almost been involved in a crash with a vehicle	9 (29%)	3 (21%)	6 (60%)	1 (50%)	1 (50%)	1 (50%)
	Yes, I have been involved in a crash with a vehicle	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)

Table 27. Bicyclist Reported Crashes/Near Misses by Race/Ethnicity

Characteristics of the environment in which the 21 bicyclist-involved crashes and near miss crashes are shown in Figure 7. Eighty-one percent occurred during clear weather and 14 percent occurred during rainy weather. Thirty-eight percent occurred in the evening and 43 percent occurred in the morning. Fifty seven percent occurred near campus, 19 percent occurred on campus, and 10 percent occurred near a bus stop. Lastly, 19 percent occurred during a large university events. Figure 7 provides frequency counts for crash and near miss crash events for bicyclists.

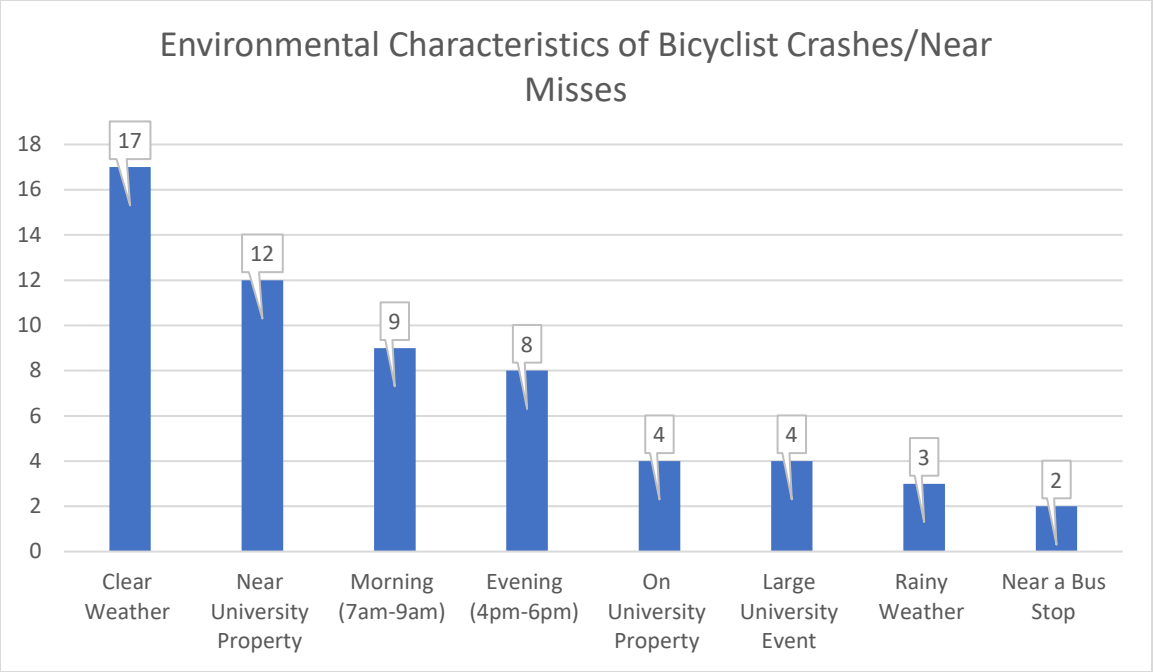

Figure 7. Environmental Characteristics of Bicyclist-Involved Crashes/Near Misses

Motorists

Lastly, motorists were asked if they had ever been involved in a campus related crash or near miss crash event with a pedestrian or bicyclist within the past 90 days (see Figure 8Figure 8). Of the 131 motorists asked, 21 had been involved in a crash or near miss crash with a pedestrian and/or bicyclist. Seventeen percent of motorists reported a crash or near miss crash event.

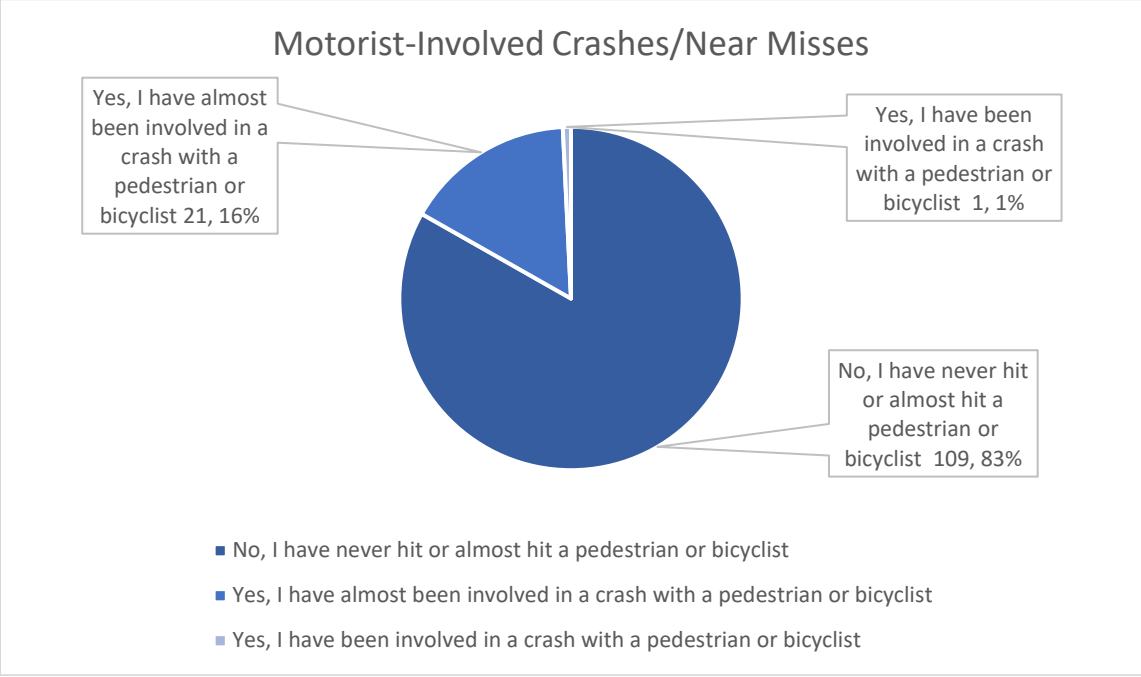

Figure 8. Motorist Reported Crashes/Near Misses

Table 28 shows motorist reported crashes and near miss crash events by respondent relationship with the university. UT Austin students were more likely to report being involved in a crash or a near miss crash event with a pedestrian or bicyclist as compared to UT Austin employees. Twenty-one percent of students reported being involved in a crash or in a near miss crash event as compared to only 9 percent of UT Austin employees.

		Students n (%)	Employees n (%)
As a motorist on or near campus, have you been involved in a crash or almost crash with a pedestrian or bicyclists in the past 90 days?	**No, I have never been hit or almost hit by vehicle**	69 (79%)	40 (91%)
	Yes, I have almost been involved in a crash with a vehicle	17 (20%)	4 (9%)
	Yes, I have been involved in a crash with a vehicle	1 (1%)	0 (0.00%)

Table 28. Motorist Reported Crashes/Near Misses by Relationship to the University

When crashes and near miss crashes are reported by motorists and analyzed by gender (see Table 29), males and females were equally as likely to report being involved in a crash or near crash event with a pedestrian or bicyclist. Seventeen percent of females and 15 percent of males reported being involved in a crash or a near miss crash event with a pedestrian or bicyclist.

		Male n (%)	Female n (%)	Prefer not to say n (%)
As a motorist on or near campus, have you been involved in a crash with a vehicle or almost involved in a crash with a vehicle in the past 90 days?	**No, I have never been hit or almost hit by vehicle**	41 (85%)	65 (82%)	3 (75%)
	Yes, I have almost been involved in a crash with a vehicle	7 (15%)	13 (16%)	1 (25%)
	Yes, I have been involved in a crash with a vehicle	0 (0.00%)	1 (1%)	0 (0.00%)

Table 29. Motorist Reported Crashes/Near Misses by Gender

Table 30 displays motorist reported crashes and near miss crash events by age category. Respondents between the ages of 18 and 24 were the most likely to report being involved in a crash or a near miss crash event with a pedestrian or bicyclist. Nineteen percent of respondents between the ages of 18 and 20, 19 percent of respondents between the ages of 21 and 24, and 12 percent of respondents 25 years or older reported being involved in a crash or near miss crash event with a pedestrian or bicyclist.

		18-20 y/o n (%)	21-24 y/o n (%)	25+ y/o n (%)
As a motorist on or near campus, have you been involved in a crash with a vehicle or almost involved in a crash with a vehicle in the past 90 days?	**No, I have never been hit or almost hit by vehicle**	39 (81%)	34 (81%)	36 (88%)
	Yes, I have almost been involved in a crash with a vehicle	8 (17%)	8 (19%)	5 (12%)
	Yes, I have been involved in a crash with a vehicle	1 (2%)	0 (0.00%)	0 (0.00%)

Table 30. Motorist Reported Crashes/Near Misses by Age

Table 31 shows motorist reported crashes and near miss crash events by race/ethnicity. Respondents who identified as Black or African American motorists were the most likely to report being involved in a crash or near miss crash event with a pedestrian or bicyclist. Seventeen percent of Hispanic/Latino, eighteen percent of Asian respondents, and 13 percent of White respondents reported being involved in a crash or near miss crash event with a pedestrian or bicyclist.

		White n (%)	Hispanic n (%)	Asian n (%)	Black n (%)	Mixed/Other n (%)	Prefer not to say n (%)
As a motorist on or near campus, have you been involved in a crash with a vehicle or almost involved in a crash with a vehicle in the past 90 days?	**No, I have never been hit or almost hit by vehicle**	58 (87%)	25 (83%)	14 (82%)	6 (75%)	2 (50%)	4 (80%)
	Yes, I have almost been involved in a crash with a vehicle	8 (12%)	5 (17%)	3 (18%)	2 (25%)	2 (50%)	1 (20%)
	Yes, I have been involved in a crash with a vehicle	1 (1%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)

Table 31. Motorist Reported Crashes/Near Misses by Race/Ethnicity

Characteristics of the environment in which the reported 22 motorist crashes and near miss crash events are shown in Figure 9. Sixty four percent occurred during clear weather and 5 percent occurred during rainy weather. Thirty-two percent occurred in the evening and 9 percent occurred in the morning. Forty-one percent occurred near campus, 18 percent occurred on campus, and 5 percent occurred near a bus stop. Lastly, 27 percent occurred during a large university event.

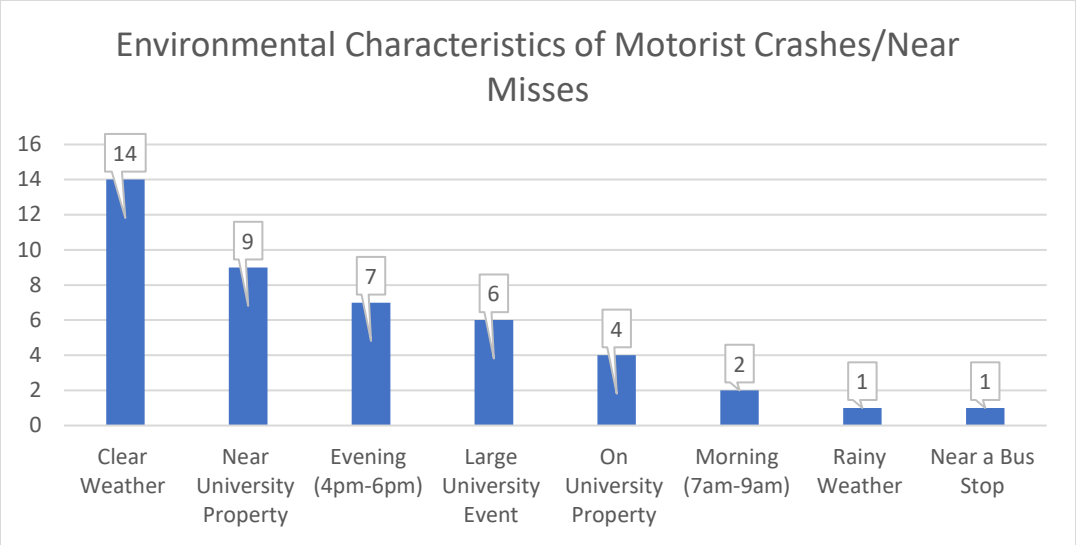

Figure 9. Environmental Characteristics of Motorist Crashes/Near Misses

Discussion

The survey findings helped to identify and define the most common state traffic law violations, crash and near crash event characteristics among UT students and employees. This information helps to guide education, enforcement, and prevention efforts at UT Austin.

Pedestrian

At some point in the day, everyone is a pedestrian (NHTSA, 2022c). Pedestrian-vehicle crashes are a significant problem in the United States as pedestrian injuries and fatalities remain high. In 2020, 6,516 pedestrians were killed and an estimated 55,000 pedestrians were injured nationwide (NHTSA, 2022c). In Texas, pedestrian deaths account for nearly one in five of all traffic fatalities (TxDOT, 2022b).

In 2020, there were 4,852 crashes involving pedestrians in Texas, which resulted in 1,211 serious injuries and 731 deaths; this represents a nine percent increase in pedestrian fatalities over the previous year (TxDOT, 2022b). Unsafe pedestrian behavior is a major factor in pedestrian injuries and fatalities. According to TxDOT, the top factors contributing to pedestrian traffic crashes in Texas includes pedestrians failing to yield the right-of-way to vehicles, driver inattention, drivers failing to yield the right-of-way to pedestrians, and speeding (TxDOT, 2022b).

Findings from this survey suggest that one-third of UT Austin employees and students have been involved in a crash or a near crash event with a motor vehicle on or near campus within the past 90 days. The most frequent traffic law violations by pedestrians involves jaywalking, which is a general term for any form of illegal street-crossing by a pedestrian. Jaywalking is often cited as a poor pedestrian behavior that leads to pedestrian injuries and fatalities (Heinonen & Eck, 2007). The most common jaywalking pedestrian behaviors reported by UT Austin employees and students included crossing the road at a location other than a crosswalk or intersection, entering the crosswalk after the pedestrian countdown had started, and walking on the roadway when a sidewalk was available.

The findings from this survey suggests that one quarter of UT Austin pedestrians cross the road at a location other than a crosswalk or intersection either very often or always, and over 90 percent had done this at least sometime in the past 90 days. NHTSA emphasizes that it is important for pedestrians

to cross the roadway at crosswalks or intersections when possible. This is because drivers expect pedestrians at these locations and drivers are more attentive (NHTSA, 2022c). The likelihood of a crash increases when pedestrians and bicyclists cross at locations that are not designed for crossing (NHTSA, 2019). The crash risk becomes even greater in urban settings (NHTSA, 2019).

The most frequent traffic law violation listed by pedestrians who participated in this survey was entering the crosswalk after the pedestrian countdown had started. Over 70 percent of pedestrians enter the crosswalk after the pedestrian countdown has started at least very often or always in the past 90 days. Some pedestrians might not understand or be aware of signs that convey safe walking procedures. Therefore, some pedestrians might inadvertently enter roads and be struck by oncoming traffic because they are confused (Heinonen & Eck, 2007). At a traffic signal, the flashing hand indicates that any pedestrian who is already crossing should finish soon and that others should not begin to enter the crosswalk (City of Austin, n.d.). However, it is evident that many pedestrians still enter the crosswalk during this time. Pedestrian non-compliance with signs and signals is a significant factor in pedestrian-vehicle crashes nationwide (Heinonen & Eck, 2007).

According to the Texas Transportation Code (TCC), a pedestrian must use the sidewalk if one is provided and if it is accessible to the pedestrian (TCC, Sec. 552.006). Thirty-nine percent of pedestrians reported walking on the roadway when a sidewalk was available at least sometimes. Pedestrians improperly using facilities by walking in the road causes inadequate separation between the different road users. Pedestrians are safer when they are separated from bicyclists and motor vehicles (NHTSA, 2019).

In Texas, drivers failing to yield the right-of-way to pedestrians is the top factor contributing to traffic crashes involving pedestrians. This investigation suggests that motorists do not yield frequently to pedestrians on and near UT's campus. Thirty percent of pedestrian respondents reported that motorists failed to yield right of way while they were crossing the road at a crosswalk not located at an intersection. Furthermore, 70 percent of pedestrian respondents reported that motorists failed to yield right of way when making a turn across their path. In many cases, drivers are either not anticipating the presence of crossing pedestrians or they choose not to yield when a pedestrian is waiting at the edge of the roadway to cross (Fitzpatrick et al., 2014). Even when the road is marked by a crosswalk, drivers often fail to yield to pedestrians (Fitzpatrick et al., 2014). Pedestrian hybrid beacons and rectangular rapid-flashing beacons are the most effective treatments in improving driver yielding rates (Fitzpatrick et al., 2014).

Bicyclists

While Americans are increasingly biking to commute, for exercise, or leisure, fatalities in traffic crashes involving bicyclists and other cyclists continue to rise (NHTSA, 2022a). From 2011 to 2020, bicyclist and other cyclist fatalities increased by 38% from 682 in 2011 to 938 in 2020 (NHTSA, 2022b). In Texas, bicyclist deaths also continue to climb. In 2020, there were 2,173 traffic crashes involving bicyclists in Texas and 80 deaths (TxDOT, 2021a). Common contributing factors to traffic crashes involving bicyclists include poor conspicuity, bicyclists failing to follow traffic signs and signals, and biking in improper locations such as the wrong side of the road (NHTSA, 2019). Like drivers, bicyclists are required to obey all traffic signs and signals, including stopping at red lights and stop signs (City of Austin, n.d.). Failing to yield the right of way is the highest factor in fatal bike crashes, followed by bicyclists not being visible (NHSTA, 2022b). State laws also dictates that those who ride bicycles must use hand signals when turning or stopping, ride with traffic, use bike lanes or ride as near as possible to the right-hand curb,

and ride at night with a white light on the front and a red light or reflector on the back (City of Austin, n.d.).

Based on the findings of this survey, 34 percent of UT Austin employees and students reported almost being involved in a crash with a motor vehicle while biking; however, zero reported being in an actual crash. Although over one-third of bicyclist respondents reported almost being involved in a crash with a motor vehicle, very few self-reported traffic law violations. The most common unsafe behavior reported was biking after dark without a light on the bicycle. Over 25 percent of respondents reported they only bike with a light on their bicycle sometimes. When drivers can't see bicyclists, a crash is more likely (NHTSA, 2019).

According to the bicyclists surveyed, motorists frequently committed traffic violations, such as not yielding right of way when the motorist turns across the bicyclists' path. Additionally, motorists fail to keep a safe following distance when following bicyclists. According to NHTSA, motorists should yield to bicyclists as they would to any other motorist and avoid turning in front of a bicyclist who is traveling on the road or a sidewalk (NHTSA, 2022a). Additionally, motorists should give bicyclists room and should not pass too closely (NHTSA, 2022a).

Motorists

Motorists play an essential role in pedestrian and bicycle safety. When drivers maintain safe speeds and practice other safe driving behaviors, safer environments are created for vulnerable road users (NHTSA, 2022c). As previously noted, the number of motorist involved pedestrian and bicycle crashes has increased nationwide and in Texas. Motorist driving behaviors including speeding, distraction, lack of traffic law awareness, non-compliance with traffic laws (e.g., failing to yield), and alcohol or drug impairment contribute to traffic crashes involving bicyclists and pedestrians (NHTSA, 2019).

On UT Austin campus and surrounding areas, seventeen percent of motorists reported being involved in a crash or near crash event with a pedestrian and/or bicyclist. Overall, very few motorists self-reported traffic law violations. The most frequent traffic law violation motorists listed was not yielding right of way to a pedestrian while they were crossing the road at a crosswalk not located at an intersection.

Conclusion

No single factor is completely responsible for the issue of pedestrian and bicycle-vehicle crashes that result in injuries and fatalities. A combination of unsafe pedestrian and bicyclist behavior, motorist behavior, unsafe physical environments, and environmental conditions all contribute to crashes (Heinonen & Eck, 2007). This survey identified some of the most frequently experienced unsafe pedestrian and bicyclist behavior, motorist behavior, and environmental characteristics of crashes and near miss crash events.

Unsafe pedestrian and bicyclist behavior can largely be attributed to lack of traffic law knowledge and/or compliance by all road users (NHTSA, 2019). Additionally, pedestrians and bicyclists might be unaware of or misunderstand pedestrian and bicycle laws (NHTSA, 2019). It is also possible that some motorists are unaware of their rights and duties when sharing the road with pedestrians and bicyclists (NHTSA, 2019).

Motorists, pedestrians, and bicyclists are safer when they comply with traffic laws and correctly use roadway facilities. Common noncompliance includes motorists failing to yield right of way; pedestrians

and bicyclists failing to follow traffic signs and signals; and walking or riding in improper locations such as the road when sidewalks are available. Education efforts for the UT Austin community should focus on improving traffic law awareness. Based on the results of this survey, education efforts should focus on:

- pedestrian crossing at designated locations (TCC Sec. 552.005),
- pedestrian traffic signal compliance (TCC Sec. 552.002),
- pedestrian proper use of designated facilities (TCC, Sec. 552.006),
- bicyclist light after dark (TCC, Sec. 551.104b),
- motorists keeping a safe bicyclist following distance (TCC, Sec. 551.103), and
- motorists yielding to pedestrians and bicyclists (TCC, Sec. 552.003 & TCC, Sec 552.002).

Traffic law violations were also analyzed by demographic variables, including relationship to the university (student versus employee), gender, age, and race/ethnicity, in order to determine target audiences for education and enforcement efforts. Overall, UT Austin students were more likely than UT Austin employees to report traffic law violations. UT Austin students also were more likely to report being involved in a crash or near crash event as a motorist, but UT Austin employees were more likely to report being involved in a crash or near crash event as a bicyclist – similar percentages of both groups were reported as being involved in a crash or near crash event as a pedestrian.

When traffic law violations were analyzed by gender, males were more likely to report traffic law violations compared to females. Additionally, males were more likely than females to report being involved in a crash or near crash event as a pedestrian and bicyclist - similar percentages of both groups reported being involved in a crash or a near crash event as a motorist. Interestingly, age did not play a significant role in predicting traffic law violations. However, respondents between the ages of 18 and 24 were more likely to be involved in a crash or near crash event as a pedestrian and motorist, but respondents 25 or older were more likely to report being involved in a crash or near crash event as a bicyclist. Overall, race/ethnicity did not play a significant role in predicting traffic law violation trends or crashes. Although, Black or African American, Hispanic, or Latino, and White respondents were more likely than Asian respondent to self-report traffic law violations.

A crash analysis completed as part of this project suggested that most pedestrian and bicyclist crashes on UT Austin campus and surrounding areas involve males and individuals between the ages of 18 to 24 years old. While traffic law compliance and awareness should be addressed in all demographics, the crash analysis and survey findings suggest that certain demographics should be more aggressively targeted, including males and students between the ages of 18 to 24. It is important for messaging and educational approaches to target these road users.

In addition to unsafe behavior by pedestrians, bicyclists, and motorists, environmental conditions also play a role in crash risk. These conditions include time of day and weather. Nationally, time of day is a factor in pedestrian and bicyclist fatalities; The hours from 6:00pm to 9:00pm account for more pedestrian and bicyclist fatalities than other times of day (Pedestrian and Bicycle Safety Information Center, 2021). The result from this survey suggests that 32 to 40 percent of crashes or near miss crashes occurred during the evening (4pm-6pm). Furthermore, 41 to 43 percent of crashes and near miss crashes reported by pedestrians and bicyclists occurred in the morning (7am-9am). It is possible that these temporal patterns correspond with specific circumstances. For instance, crashes might occur

during the evening or morning because overall vehicle traffic increases during these hours as people commute to and from work and/or school (Heinonen & Eck, 2007).

Weather also plays a critical factor in pedestrian and bicycle crashes. Bad weather increases the probability of fatality by 128% (Monsere et al., 2017). Specifically, rainy weather has a positive influence on both crash rate and severity level (Monsere et al., 2017). The survey results suggest that the majority of reported crashes or near miss crash events occurred during clear weather (64 to 81 percent) and only about 5 to 14 percent of reported crashes or near miss crash events occur during rainy weather. This may be because pedestrians and bicyclists are less likely to be walking or biking in rainy weather. Both time of day and weather conditions, along with lighting conditions should be considered when designing enforcement and prevention activities (Monsere et al., 2017).

The majority of crashes and near miss crash events reported by UT Austin students and employees occurred near campus or on campus. University campuses are unique communities inside their specific regional areas, where multiple modes of transportation interact continuously (Loukaitou-Sideris et al., 2014). Crash risk increases when physical environments allow vulnerable road users to come into contact with moving vehicles (Loukaitou-Sideris et al., 2014). In addition to the increased interaction between the various road users, the physical campus environment may contribute to crash risk. For instance, the campus environment may encourage unsafe pedestrian and/or driver behavior if it lacks crosswalks or crossing devices or if sidewalks or bike lanes are absent (NHTSA, 2019). The complexity and limitations of university campuses needs to be examined when designing treatment approaches. Not only should education and enforcement efforts be targeted on and near campus, but improvements to infrastructure should be considered. For instance, pedestrian hybrid beacons and rectangular rapid-flashing beacons have been identified as effective in improving driver yielding rates and can be used as a treatment on UT's campus (Fitzpatrick et al., 2014). Additionally, increased and/or improved sidewalks and bike lanes can minimize the number of bicyclists and pedestrians in the roadway; therefore, minimizing vulnerable road user and motorist interactions.

In addition to the university campus, bus stops have been associated with a higher pedestrian crash risk (Craig et al., 2019). Results of this survey suggests that 28 percent of pedestrian reported crashes or near miss crashes occurred near a bus stop. Near bus stops, motorists may be confused as to whether the pedestrian intends to cross or is waiting for a bus, and motorists may be more distracted due to increased signage at these stops (Craig et al, 2019). Additionally, yielding behavior decreases at bus stops (Craig et al, 2019). A targeted approach to educating the public about passing behavior combined with increased penalties for passing can effectively increase yielding rates while decreasing passing rates (Craig et al, 2019). High-visibility enforcement efforts can also enhance reduce crash risk by citing or ticketing drivers as well as publicizing the increased penalties (Craig et al, 2019).

Another condition where there may be increased interaction between vulnerable road users and motorists is large university events, such as sporting events. Increased traffic congestion and road closures, coupled with potential for increased alcohol-use, can lead to dangerous conditions for all road users. Interestingly, fewer pedestrians and bicyclists reported a crash or almost crash occurring during large university events compared to motorists. During large events, roads are usually blocked off and there is a large police presence directing traffic at intersections. While this may lead to safer walking or biking conditions , these same treatment approaches may lead to confusion and inattentive driving for motorists. As previously noted, distracted driving is a leading cause of crashes (NHTSA, 2019). Clearer and increased signage and police direction may help improve driving conditions.

From the surveys, TTI identified common crash variables that adversely impact pedestrians and bicyclists, as well as identify less severe and near miss events that may not be captured in existing crash data. Additionally, the survey measured frequency of state law violations by pedestrians, bicyclists, and motorists. Understanding these factors that contribute to unsafe conditions for vulnerable road users can help UT Austin determine effective treatment approaches, educational outreach, and targeted enforcement efforts.

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Appendix A – Survey

Putting Laws into Practice on University Campuses Survey

Start of Block: Default Question Block

Q1 You are invited to take part in a research study being conducted by the Texas A&M Transportation Institute (TTI). Please review the attached information sheet to decide whether or not you want to take part. (Insert Link to Approved Info Sheet).

You may contact the Principal Investigator, Dr. Troy Walden, to tell him about a concern or complain about this research at t-walden@tti.tamu.edu or (979) 317-2526.

Q2 Are you over the age of 18 years old?

- Yes (1)
- No (2)

Skip To: End of Survey If Are you over the age of 18 years old? = No

Q3 Are you a college student or employee of University of Texas/Agency?

- Yes (1)
- No (2)

Skip To: End of Survey If Are you a college student or employee of the University of Texas/Agency? = No

Display This Question:

If Are you a college student or employee of the University of Texas/Agency? = Yes

Q4 What is your relationship with the University of Texas/Agency?

- ○ Student (1)
- ○ Employee (2)

Q5 Would you like to take our survey asking out pedestrian and bicycle laws and activities on college campuses?

- ○ Yes (1)
- ○ No (2)

Skip To: End of Survey If Would you like to take our survey asking out pedestrian and bicycle laws and activities on colleg... = No

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Page Break

Q6 What is your gender?

- ○ Male (1)
- ○ Female (2)
- ○ Prefer not to say (3)

Q7 How old are you?

- ○ 18-20 (1)
- ○ 21-24 (2)
- ○ 25+ (3)

Q8 What is your ethnicity? Select all that apply.

- ☐ Asian (1)
- ☐ Black or African American (2)
- ☐ Hispanic or Latino (Any Origin) (3)
- ☐ White (4)
- ☐ Other (Please Specify): (5) _____
- ☐ Prefer not to say (6)

Page Break

Q9 Which of the following would you consider yourself to be? Select all that apply.

- ☐ Pedestrian/Walker (1)
- ☐ Bicyclist (2)
- ☐ Motorist/Driver (3)

Display This Question:

If Which of the following would you consider yourself to be? Select all that apply. = Pedestrian/Walker

Q10 Complete the following table by indicating how often you **WALK**:

	Daily (1)	Weekly (2)	Monthly (3)	Never/Not Applicable (4)
To campus (from off-campus to campus) (1)	○	○	○	○
Within campus (from campus to campus) (2)	○	○	○	○
To work (off-campus) (3)	○	○	○	○
Bar districts (e.g., 6th street) (4)	○	○	○	○
Around residential areas (5)	○	○	○	○
Around shopping districts (6)	○	○	○	○

Page Break

Display This Question:

If Which of the following would you consider yourself to be? Select all that apply. = Bicyclist

Q11 Complete the following table by indicating how often you **BIKE**:

	Daily (1)	Weekly (2)	Monthly (3)	Never/Not Applicable (4)
To campus (from off-campus to campus) (1)	○	○	○	○
Within campus (from campus to campus) (2)	○	○	○	○
To work (off-campus) (3)	○	○	○	○
Bar districts (e.g., Northgate, 6th street) (4)	○	○	○	○
Around residential areas (5)	○	○	○	○
Around shopping districts (6)	○	○	○	○

Page Break

Display This Question:

If Which of the following would you consider yourself to be? Select all that apply. = Pedestrian/Walker

Or Which of the following would you consider yourself to be? Select all that apply. = Bicyclist

Q12 What are the primary reasons you walk and/or bike? Select all that apply.

- ☐ Transportation (1)
- ☐ Exercise/Health (2)
- ☐ Leisure/Fun (3)
- ☐ Other (Please specify): (4) _____
- ☐ N/A (5)

Display This Question:

If Which of the following would you consider yourself to be? Select all that apply. = Pedestrian/Walker

Or Which of the following would you consider yourself to be? Select all that apply. = Bicyclist

Q13 When do you primarily walk and/or bike?

- ○ Daytime (8am-5pm) (1)
- ○ Evening (5pm-8pm) (2)
- ○ Nighttime (After 8pm) (3)
- ○ N/A (4)

Page Break

Display This Question:

If Which of the following would you consider yourself to be? Select all that apply. = Pedestrian/Walker

Q14 How often have you done the following in the **past 90 days** while **WALKING**?

	Not Often (2)	Sometimes (3)	Very Often (4)	Always (5)	Never/NA (1)
Crossed the road at a location other than a crosswalk or intersection? (1)	○	○	○	○	○
Yielded to vehicles when crossing at a location other than a crosswalk or intersection? (9)	○	○	○	○	○
Followed pedestrian crossing signals when they are available? (2)	○	○	○	○	○
Entered the crosswalk after the pedestrian countdown started? (4)	○	○	○	○	○
Walked on the roadway when a sidewalk was available? (3)	○	○	○	○	○

Page Break

Display This Question:

If Which of the following would you consider yourself to be? Select all that apply. = Pedestrian/Walker

Q15 While **WALKING** how often has a motorist done the following in the **past 90 days**?

	Not Often (2)	Sometimes (3)	Very Often (4)	Always (5)	Never/NA (1)
MOTORIST yielded to you while you were crossing the road on a pedestrian signal. (5)	○	○	○	○	○
MOTORIST yielded to you while you were crossing the road at a stop-controlled intersection. (6)	○	○	○	○	○
MOTORIST yielded to you while you were crossing the road at a crosswalk NOT located at an intersection. (7)	○	○	○	○	○
MOTORIST yielded to you when making a turn across your path? (4)	○	○	○	○	○

Display This Question:

If Which of the following would you consider yourself to be? Select all that apply. = Pedestrian/Walker

Q16 As a pedestrian on or near campus, have you been involved in a crash with a vehicle or almost involved in a crash with a vehicle in the **past 90 days**?

- ○ Yes, I have been involved in a crash with a vehicle (1)
- ○ Yes, I have almost been involved in a crash with a vehicle (2)
- ○ No I have never been hit or almost hit by vehicle (3)

Display This Question:

If As a pedestrian on or near campus, have you been involved in a crash with a vehicle or almost inv... = Yes, I have been involved in a crash with a vehicle

Or As a pedestrian on or near campus, have you been involved in a crash with a vehicle or almost inv... = Yes, I have almost been involved in a crash with a vehicle

Q17 Please select all of the characteristics of the environment in which the crash occurred or almost occurred.

- ☐ Large University Gathering (e.g., football game, graduation) (1)
- ☐ Morning (7am-9am) (2)
- ☐ Evening (4-6pm) (3)
- ☐ Clear Weather (7)
- ☐ Rainy Day (4)
- ☐ On University Property (5)
- ☐ Near University Property (e.g., North Gate) (6)
- ☐ Near a bus stop (8)

Display This Question:

If Which of the following would you consider yourself to be? Select all that apply. = Bicyclist

Q18 How often have you done the following in the **past 90 days** while **BIKING?**

	Not Often (2)	Sometimes (3)	Very Often (4)	Always (5)	Never/NA (1)
Biked against traffic in the road? (5)	○	○	○	○	○
Biked after dark with a light on the bicycle? (6)	○	○	○	○	○
Biked after dark without a light? (7)	○	○	○	○	○
Used hand signals when changing lanes and/or turning? (9)	○	○	○	○	○
Moved to the right when being passed? (11)	○	○	○	○	○

Page Break

Display This Question:

If Which of the following would you consider yourself to be? Select all that apply. = Bicyclist

Q19 While **BIKING** how often has a motorist done the following in the **past 90 days**?

	Not Often (2)	Sometimes (3)	Very Often (4)	Always (5)	Never/NA (1)
MOTORIST yielded to you when making a turn across your path? (3)	○	○	○	○	○
MOTORIST maintained a safe distance when passing you? (2)	○	○	○	○	○

Display This Question:

If Which of the following would you consider yourself to be? Select all that apply. = Bicyclist

Q20 As a bicyclists on or near campus, have you been involved in a crash with a vehicle or almost involved in a crash with a vehicle in the **past 90 days**?

- ○ Yes, I have been involved in a crash with a vehicle (1)
- ○ Yes, I have almost been involved in a crash with a vehicle (2)
- ○ No, I have never been hit or almost hit by vehicle (3)

Display This Question:

If As a bicyclists on or near campus, have you been involved in a crash with a vehicle or almost inv... = Yes, I have been involved in a crash with a vehicle

Or As a bicyclists on or near campus, have you been involved in a crash with a vehicle or almost inv... = Yes, I have almost been involved in a crash with a vehicle

Q21 Please select all of the characteristics of the environment in which the crash occurred or almost occurred.

- [ ] Large University Gathering (e.g., football game, graduation) (1)
- [ ] Morning (7am-9am) (2)
- [ ] Evening (4-6pm) (3)
- [ ] Clear Weather (7)
- [ ] Rainy Day (4)
- [ ] On University Property (5)
- [ ] Near University Property (e.g., North Gate) (6)
- [ ] Near a bus stop (8)

Display This Question:

If Which of the following would you consider yourself to be? Select all that apply. = Motorist/Driver

Q22 How often have you done the following in the **past 90 days** while driving?

	Not Often (2)	Sometimes (3)	Very Often (4)	Always (5)	Never/NA (1)
Yielded to a pedestrian while they were crossing the road on a pedestrian signal? (5)	○	○	○	○	○
Yielded to a pedestrian while they were crossing the road at a stop-controlled intersection? (6)	○	○	○	○	○
Yielded to a pedestrian while they were crossing the road at a crosswalk NOT located at an intersection? (7)	○	○	○	○	○
Yielded to a pedestrian when making a turn across the pedestrian's path? (4)	○	○	○	○	○
Yielded to a bicyclist when making a turn across the cyclist's path? (3)	○	○	○	○	○
Maintained a safe distance when passing a bicyclist? (2)	○	○	○	○	○

Display This Question:

If Which of the following would you consider yourself to be? Select all that apply. = Motorist/Driver

Q23 As a motorists on or near campus, have you been involved in a crash or almost crash with a pedestrian or bicyclists in the **past 90 days**?

- ○ Yes, I have been involved in a crash with a vehicle (1)
- ○ Yes, I have almost been involved in a crash with a vehicle (2)
- ○ No, I have never been hit or almost hit by vehicle (3)

Display This Question:

If As a motorists on or near campus, have you been involved in a crash or almost crash with a pedes... = Yes, I have been involved in a crash with a vehicle

Or As a motorists on or near campus, have you been involved in a crash or almost crash with a pedes... = Yes, I have been involved in a crash with a vehicle

Q24 Please select all of the characteristics of the environment in which the crash occurred or almost occurred.

- [ ] Large University Gathering (e.g., football game, graduation) (1)
- [ ] Morning (7am-9am) (2)
- [ ] Evening (4-6pm) (3)
- [ ] Clear Weather (7)
- [ ] Rainy Day (4)
- [ ] On University Property (5)
- [ ] Near University Property (e.g., North Gate) (6)
- [ ] Near a bus stop (8)