CALIFORNIA STATE UNIVERSITY
MONTEREY BAY

Vision Zero Tacoma

CAPSTONE PROPOSAL

Submitted in partial satisfaction of requirements of the degree of

MASTER OF SCIENCE in

Instructional Science and Technology

Gator Lanphear

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Capstone Approvals: (At least one advisor and capstone instructor should approve)

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Executive Summary/Abstract

The City of Tacoma government does not have a required driver's training program for general employees to use City of Tacoma fleet vehicles. With 2,500 employees and multiple locations for operation, there are a variety of driving skills and needs for using fleet vehicles. By focusing on employee drivers, Vision Zero Tacoma can inform and train a larger number of drivers initially and begin the efforts to eliminate traffic-pedestrian fatalities and severe injuries. The creation of the Vision Zero Tacoma Driver's Training Certification course, the City of Tacoma will have one new strategy to meet the expectations of Resolution 40559, which is to place human safety at the forefront of the transportation systems and end traffic fatalities and serious injuries.

This course will inform the COT employees of safe driving habits, hazard perception, and responsibly driving a COT fleet vehicle. Through interactive videos, assessments, and visual information, learners will reconnect with safe driving best practices and habits. During an interactive real world driving simulation, learners will develop and strengthen hazard perception skills to enhance on the road awareness. Through information recall, feedback, and job aids, learners will continue to review and practice driver safety after the modules are complete.

Currently, employees are subject to a low challenge, behind the wheel observation or, more commonly, a conversation about driving with a supervisor. This does not include any sort of knowledge check and information recall or training in safe driving skills. The City of Tacoma will verify that employees are licensed by the State of Washington to operate a motor vehicle during the onboarding process of employment. Additionally, current employees who take the training will have driver license information on file.

Background on Project

Traffic-related fatalities are a serious problem in the United States. 40,000 deaths occur annually. In western Washington cities, deaths and serious injury crashes increased 5% from 2014 – 2018. In Tacoma alone, 17,000 collisions were reported. This number includes 187 school-aged bicyclist or pedestrians, over 400 fatalities and serious injuries, and a 12% increase in fatal and serious crashes. This percentage of increase is twice as high as the statewide average.

Vision Zero Tacoma was created to eliminate traffic-related fatalities and serious injuries in the City of Tacoma by 2035. The Tacoma City Council passed Resolution 40559 on February 19, 2020 and committed to the goals of the Vision Zero Action Network. By doing so, the City of Tacoma (COT) "seeks innovative strategies to focus on human safety in our transportation system" (Vision Zero, 2020).

By successfully completing the Vision Zero Tacoma Safe Driver Training Certification Program, employees of the City of Tacoma will be recognized as safe drivers to operate and continue to use COT fleet vehicles for work related purposes.

Problem Description (gap analysis)

Municipal fleet vehicles allow employees to conduct work and can place hundreds of cars on the road at any given time. The City of Tacoma does not have safe driver training for employees of the City of Tacoma. Any employee can reserve and use COT fleet vehicles for work purposes without prior training from the city. A system of verification of safe driving skills prior to reserving and driving a COT car would create an opportunity in line with the goals of Vision Zero Tacoma to ensure baseline knowledge and skills training for all employees of COT.

Without proper safety checks and training, COT cannot know the many different driving abilities of the thousands of employees, nor can it ensure the safety of everyone else on the streets if there is no baseline, internal training required.

With the increasing number of traffic related collisions and fatalities in Tacoma prior to the pandemic, and with many employees returning to the office, it is necessary to provide awareness and training to as many large groups as possible to ensure safer streets. Much the same way training is given for cyber security, equity training, and equipment usage the City of Tacoma requires of the employees, it is imperative that safe driving is taught and reinforced.

Raising awareness for the goals of Vision Zero Tacoma, employees will be better equipped to safely navigate the busy urban streets. Secondary to the cost of human lives, it can be financially beneficial to decrease the collisions by COT employees.

By enhancing training to hazard perception and reinforcing safe driving best practices, Vision Zero Tacoma can begin to build a safer environment for all those who share the roads in Tacoma.

Target Audience and Context

As all employees of the City of Tacoma have access to use COT fleet vehicles, the intended audience for this course is new and existing employees. This can be used as part of new employee onboarding, and it can be used as a training to keep established employees up to date on best practices for driver safety and hazard perception. The employees are at least 18. COT verifies driver's licenses. Employees are of many different backgrounds, abilities, identities, and cultures and the languages spoken are many. While this training will be created in English, closed captions and language translations can be created after the City of Tacoma reviews and

chooses to adopt this program. This will be well after the finalization of this project for CSUMB – MIST.

The course is a series of modules for employees to use asynchronously with City issued computers during work hours. It is designed to be asynchronous and online because of the growing use of computers and telework options for many city jobs. Employees who are in the field can take this training program online and with remote logins and should be granted time – either during usual work hours or paid after shift time to do from a safe, non-work environment. Making this an online, asynchronous learning opportunity, more employees will be able to complete this training at their pace and they can schedule training time into their work schedule.

Employees have been working from home due to City of Tacoma COVID regulations and most will reconstitute by the end of this calendar year. Many employees are familiar with online Learning Management Systems used by COT because of other training courses. LMS learning is the most effective way to onboard new employees and train veteran employees. While online learning addresses the situation in 2022, learning will continue to be the right learning media in the future because of the varied work locations, schedules, and priorities of city employees.

As many of the employees are experienced drivers and are experienced driving city vehicles specifically, there may be pushback for having to take a training in something they may be comfortable or very experienced doing. Moreover, as the bulk of the employees are drivers, there will be an added challenge for these learners and there may be reluctance to comply with the training. To mitigate the reluctance and frustration of the more veteran employees, the course will be presented in a modern, magazine style television show format.

Environmental Scan or Literature Review

Hazard Perception, Urban Planning, and Equity

The goal is to reach zero traffic related fatalities in the City of Tacoma. This literature review will focus on human safety and traffic related fatalities and serious injuries to pedestrians and other types of mobility. Through examining hazard perception, driving skills, and driving speed, pedestrians are increasingly at risk from motorized vehicle., Urban planning can be asked to redesign dangerous urban areas, however, it is rare to find city planning initiatives that have equity driven plans to make the streets safer. A faster, more attainable solution can be encouraged to slow down, pay attention, and go through hazard perception and defensive driving courses.

With so many hazardous factors, can good training and skills make our streets safer?

Hazard perception, Driving Skills, and Speed

In the 1970s, research was done to determine what makes safe drivers. Despite popular culture opinion, Williams & O'Neill showed that racecar drivers, although highly skilled, had more accidents than the regular driver control group on public streets (1974). Horswill and McKenna determined that speeding "has consistently been found to be an important predictor of accident liability" (2004) and that the driver's skill does not account for road safety. Furthermore, Horswill et al, determined that "hazard perception" was a greater determinant of safer driving than driving skill. As hazard perception training encourages drivers to scan the roadway for potential situations, drivers who self-reported having had no accidents for this study, reacted faster while watching film clips of dangerous traffic situations than those drivers who had self-reported accidents, speeding tickets, or other variants (2004). Thus is can be extrapolated that those who self-reported no accidents and reacted faster in simulated driving

situations, may use many of the same hazard perception skills naturally, or through training, than those who self-reported accidents, speeding tickets, or other variants.

Skills and habits are important to safety and creating awareness and opportunities to practice safe driving would decrease pedestrian and cyclist fatalities and serious injuries. Further studies showed the efficacy of hazard perception training for experienced drivers and found that even 20 minutes of video training programs increased hazard perception and self-awareness (Horswill et al., 2013).

Conclusion

As the world strives to become more equitable, more sustainable, and more future focused – less pragmatic than it has been for the past 40 years – we can see that there are many factors that put pedestrians and alternate modes of movement at high risk. Urban streets are becoming more crowded and more dangerous. It is up to the municipalities to lead the charge to make streets safer and reach the goal of zero fatalities. By planning with safety in mind, cities can redesign how our cities operate.

However, not all the onuses can be placed on cities and planners. There must be a movement to reeducate the driving population and the pedestrians themselves. Neighborhoods that experience more poverty and homelessness are a greater risk of traffic-related fatalities (Bernhardt & Kockelman, 2021). Retraining experienced drivers as well as bolstering skills of soon to be drivers, can ensure greater hazard perception and safer streets. Encouraging, or forcing, drivers to slow down in high-risk areas combined with urban design can create an environment that is conducive to non-motorized urban movement.

Moreover, equity must remain in the forefront of education and design. The public struggles to survive on the streets and the public policy makers struggle with the impacts to the

environment, economy, and social equity. Advocates for the environment, the economy, and social equity, all have the intentions of making our cities better, but in the end, it will take a powerful understanding of the interrelationships between all three.

Solution Description

Goals of the Project

The goal of this project is to create a measurable driver safety and hazard perception training program for new and veteran employees of the City of Tacoma based on Resolution 40559 and the Vision Zero Tacoma strategies for safe driving. Without a driver safety and hazard perception training program, employees of the City of Tacoma lack true oversight and standards for their driving abilities and skills. This can lead to zero accountability for any hazardous behaviors, ignoring safety protocols, or lack of skills, especially if a crash occurs. Supervisory roles in subordinate accountability can also be overlooked as any semblance of a standard is not maintained or even set.

This asynchronous learning course will introduce employees to the mission and scope of the Vision Zero Tacoma Project and Resolution 40559. Included in the course will be several modules focused on different learning opportunities.

The first will include an introduction to Vision Zero Tacoma and provide national and local statistics of vehicle and pedestrian fatalities and severe crashes. It will act as the foundation and introduction to the learning present in the subsequent modules. This will include a knowledge check based on the recalling statistical information provided.

The second module will review and reinforce driver safety best practices based on guidelines created by state and local driving rules and regulations. Learners can evaluate and reinforce best practices and examine their own driving experience and skills. Included will be concepts of distracted driving, road awareness, and ways to make sure the driver is safe even before starting the vehicle. This module will include an online accessible or printable checklist.

The third module will introduce the concept of hazard perception and show how hazard perception training can enhance the skills and abilities even the most experienced drivers. This will be followed by creating good habits, skill building, and practice methods and periodic knowledge checks.

The fourth, and final module will culminate in a video simulation of real-world based scenarios of potentially hazardous driving situations. Learners will use their newly acquired knowledge and past driving experience to recognize potential and developing hazards to gain points to self-evaluate their learning based on a point system at the completion of the simulation.

There are many different ethnicities and cultures represented by the City of Tacoma employee base. With Resolution 40622[1] as a guide, this project will take care to place special awareness to a Land Acknowledgement and provide a variety of images and information that is sensitive to equity and inclusion and per the guidelines for the City of Tacoma government. Through this training program, employees of the City of Tacoma meet the training goals of Vision Zero Tacoma and will help them lead the way to creating safer streets and neighborhoods.

[1] A RESOLUTION affirming the City Council's dedication and commitment to comprehensive and sustained transformation of all of the institutions, systems, policies, practices, and contracts impacted by systemic racism, with initial priority being given to policing in the City of Tacoma.

Learning Objectives

By completion of this course, City of Tacoma employees can:

1. Recall statistical information about crash data in Tacoma and the United States with 80% accuracy.
2. Describe the goals of Vision Zero Tacoma with appropriate phrases 100% accuracy.
3. Summarize the traditional approach to automobile crash fatalities and serious injuries and the informed Vision Zero Tacoma approach with 100% accuracy.
4. Order steps introduced in a safe driving pre-drive check list from a list with 100% accuracy.
5. Fill out a Driver's Check list job aid to use before driving a fleet car to fidelity.
6. Compare current driving habits to hazard perception skills.
7. Apply hazard perception skills to real-world driving situations.
8. Determine developing hazards in a video driving simulation with 80%.

Proposed Solution to Fill the Gap

To fill the gap for the lack of standardized driver safety and hazard perception training course, this is a proposal to create the Vision Zero Tacoma Driver Training Certification Program. This is project is based on Resolution 40559 and the Vision Zero Tacoma strategies for safe driving.

It will be an asynchronous, eLearning course, available through COT LMS, with online accessible checklist job aid. It will remove supervisory oversight and eliminate opportunity to ignore regulations.

This course will include a series of modules to introduce current statistics, inform of the latest safe driving techniques, list ways to increase hazard perception, and allow for practicing new knowledge through assessment and interactive learning, and allow for each driver to use a checklist to prepare and manage driving a city vehicle.

To meet the needs of the learners from the City of Tacoma, the course will be presented in a magazine style show format and a real-world driving scenario-based activity using video clips. Statistics will be presented so that learners may access them at any time during and in the future of the training, while the knowledge checks will allow many opportunities to practice learning and enhance hazard perception. Initial pushback by experienced drivers can be mitigated through the Attention Schema theory, embodiment principle, andragogy, and gamification. Additionally, familiar concepts and imagery will maintain attention of learners easily distracted when not wanting to engage. The host of the learning will be exciting, funny, and direct while offering information and knowledge in a conversational tone and realistic manner. The goal is to engage the learner in a non-corporate training video style with heavy dependence on the Personalization Principle.

Employees who complete the course successfully (above 80% assessment) will be certified by the Vision Zero Tacoma Driver's Training Certification Program. This will allow them to submit a form to their supervisors prior to reserving and using a COT fleet vehicle.

Learning Theories, Instructional Principles

Behaviorism learning will include positive and negative reinforcement as consequences during knowledge checks. The dialogue will ask questions and then response with answers later with a "if you answered X, good job!".

Connectivism will be used to include the latest information and data presents as well as best practices for driver safety and hazard perception. Learners will make decisions and choices to forward their learning and progress their knowledge. Overall, the concepts and practical skills will connect the learner to their own lives.

Andragogy is included to help learners grow their skills and knowledge as they mature as drivers. The course takes into consideration that adult learners continue to grow and bring that wealth of experience and knowledge to their learning. This may cause some learners to pushback on the learning and will pose a challenge for design and execution. This will guide the course to create a design that both motivates the learner and prepares them to learn.

Social Learning Theory allows the learners to pay attention to the model so that they can learn from the behaviors. If the behavior is informed and interesting, the learners may retain more, want to reproduce the behavior, and be motivated to try the behaviors observed.

Cognitivism/Gagne's Nine Events will play heavily in the video segments. The host will seek to gain the attention of reluctant learners. All modules will inform of the objectives and present content in a manner that will keep the attention of the learners. The course will allow for prior learning to be stimulated so that the learning will develop organically. The knowledge checks and driving simulation will elicit performance, provide feedback, assess performance, and allow for a self-assessment based on a rubric. The style of the video segments and the presentation of information is designed to be more interesting and exciting to increase retention and transfer.

Merrill's Principles of Instruction inform design and production to demonstrate behaviors and skills properly and accurately for learners to retain. The course will have ample

opportunity to learn and then apply knowledge and skills. Modules will include common licensed driver skills and knowledge and will activate those skills as needed. While information will be presented in a television magazine style format, learners will have the opportunity to click links and review data and information as they see fit.

ARCS design will include using local, iconic, and pop culture references to gain and hold learner interests. The script and host will show the relevance of the information provided and how the skills can support safe driving habits. Throughout the course, the confidence will be bolstered using positive affirmations and stimulating prior knowledge. The hope is that all the learning and practice will result in learner satisfaction.

Coherence Principle will help guide the design to ensure the amount of audio, imagery, and text are appropriate as not to overwhelm the learner and their senses.

Personalization Principle is the backbone of the learning. The host will speak in a casual language and conversational tone, often using first person dialogue to help the learner feel involved and not that they are being lectured.

Modality and Redundancy Principle will ensure the narration is neither overrun with inaccurate, disjointed imagery nor inundated with text.

Learning Strategies and Justification

Receptive Training: Receptive training is considered more "telling" and included to raise awareness and considered, "one direction", learners may find opportunity to "tune out, turn off, or daydream" (Stolovitch & Keeps, 2020). Information, statistics, and data will be presented in the first module and in the beginning of subsequent modules. This capstone design will pay

careful attention to present receptive training in an interesting and interactive manner. Learners will be connected to familiar references to help measure and identify the magnitude of the crash statistics and other information. By using interactive pages throughout the course, data and much of the information presented will allow for individualized examination so learners can move on from different sections when they are ready.

Guided Discovery: Guided discovery allows for the learners to engage with the scenarios and use the direction to determine the best solution. The final module involves real-world driving simulation videos. This includes an introduction and explanation of the expectation of the following activity. In this module, learners will make choices based on the video presented and decide when the best time is to react or act. The introductory portion of the simulation module will be robust enough to differentiate less experienced learners to the expectations as well as allow for more practice scenarios for those with more experience.

Media Components

Different software and hardware will be used in creation of this course work for the capstone project including video and audio editing software, graphic design software, interactive production software, photographic and video equipment, audio equipment.

Some of this course will be video presentations with audio and captions. The presentation may include video, illustrations, animation, stills, and sounds.

This is an asynchronous, computer-based course and many streams of media are required. Since learners need to access the information and courses when it is convenient for them, this modality will provide the most direct delivery of the learning. Additionally, this learning will have accessibility for all learners.

Some of the learning and assessment will be done with still images, illustrations, and slide presentations. This will give the learner some real-world situations to assess their knowledge of hazard perception and driver awareness.

Anticipated Challenges

Due to prior knowledge of driving and length of time with state issued driver license, there may be reluctance by experienced drivers, long term city employees, and management.

With the driving experience, a pre-test will be created to allow for moving past certain portions of the module. This will allow knowledgeable drivers the opportunity to advance in the course without having to review some rudimentary and fundamental driving skills. However, the hazard perception and simulation portions will be required.

Methods/Procedures

Prototype

This proposal was created to develop, create, implement, evaluate the capstone course for the CSUMB – MIST program. The goal is to meet the proposal goals and scheduled deadlines.

Deliverables

- Create a four-module, asynchronous, eLearning course with learning objectives, information, video content, illustrations, animation, graphics, and images using Captivate and other software.
- Create an online accessible checklist for employees of the City of Tacoma to use when checking out a vehicle from the COT fleet.
- Embed eLearning course in the COT LMS

- Capstone Proposal

Design/Development Narrative

As this course will be online, asynchronous, on-screen avatars, narrator, and images will need to be developed. Most of the images will be created by using stock footage and original content development. Additionally, voice actors and live actors may be necessary to complete this project.

Training will need to be coordinated with the training and safety departments to build the course in the LMS program the City of Tacoma uses.

Work associates will be asked to try out the course and provide feedback.

Steps to Complete Project

While the prototype was created in 5 weeks, most of the content will need to be recreated from scratch. The script is good and accurate but will need more sections. Many of the still images and graphics are usable and accurate. The video stand ups will be reshot using different setting, wardrobe, and audio tools. The driving simulations will be reshot with a fixed focal point and a clean windshield. All the elements created and/or re-created will be combined in Captivate after being created in Adobe Creative Cloud for video, audio, graphics, animation, and images. The timeline is longer this time and designer, producer, editor, shooter, is highly skilled.

Each module will be outlined for the audio/video components. The script will be increased and enhanced with information and dialogue. Images, illustrations, and animations will be created to reflect the A/V outline. Storyboards will be created using the A/V outline as a guide. A shot list will be created based on the A/V outline. The vehicle will be washed, the camera affixed, and the driving simulation will be recorded. The host stand up portions will be scripted, put in a teleprompter program, and the video will be recorded. All components will be edited and added to Captivate as soon as all principle and secondary shooting is complete. Pick ups will be made as needed.

Resources

Needs	Estimated Dates	Training	Cost	Other
Computer	Have	None	$0.00	
Video equipment	Have	None	$0.00	
Audio equipment (microphones/studio monitors/headphones)	Have	Gained	$150.00	
Software – Captivate	Subscribed	Gained	$500	
Learning Management System	Through City of Tacoma	Lots	$0.00	Need approval for this
Host	Have	None	Cheeseburger	Gator is the host

Technical Skills Required

1. Video production and graphic design skills, including (but not limited to) writing, directing, shooting, editing, graphic, special effects, animation are known and will be used to create this project.
2. Adobe Captivate was learned and new skills can be acquired as needed.
3. APA writing style will be used for the proposal portion.

Timeline/Progress Report

Milestone Checklist

Item	Begin or Inquiry Date	Notes
Capstone proposal Final submission	09/04/2022	
Finalize detailed outline of safe driving habits, hazard perception, and guide.	09/18/2022	
Finalize Shooting script	09/25/2022	
Finalize storyboards	09/25/2022	Due 09/27/2022
Begin shooting driving sequences	10/03/2022	
Develop a job aid check list and/or online form	10/07/2022	
Begin shooting stand up segments	10/10/2022	
Begin editing video segments	10/14/2022	
Project Checkpoint	10/25/2022	
ePortfolio and & MIST Reflection	11/08/2022	
Google Drive: Evidence Files	11/15/2022	
Capstone Complete	11/22/2022	
Capstone Summary	12/07/2022	
Release form	12/07/2022	
Final report	12/07/2022	
Final Google Drive: All Evidence Files	12/13/2022	
Capstone Project Presentation (pre-recorded)	12/13/2022	
Capstone Festival	12/17/2022	

Evaluation/Testing Plan

Formative Evaluation Plan

Formative assessments will occur throughout design and development by the designer and faculty advisor.

The director of Vision Zero Tacoma Project will review modules and content related to the objectives throughout the building of the capstone. She will assess accuracy and value of content as well as design and delivery. Changes will be made based on this feedback.

The capstone project will be evaluated by the designer, fellow MIST students, and the faculty advisor for accessibility, user interface, navigability, use of design theories and elements, learning theory practices, and overall content achievements. They will be asked to provide

feedback and that will inform assessments and evaluation of the capstone project. Suggestions will be evaluated and implemented as needed.

After completion of the design of the course, educators and managers will evaluate the ease of use, lesson flow, and overall design pleasantness. These educators and managers will also be asked about their understanding of the content and delivery method. They will be asked to provide feedback. Any suggestions will be evaluated for reasoning, necessity, and budget/timeline and implemented as necessary.

Upon completion of the course, employees will be given a survey to evaluate the ease of use, lesson flow, and overall design pleasantness. Additionally, the employees who complete the training course, will be asked for further evaluation on the information presented, the way the learning was presented, and their assessment of whether they feel they learned knowledge on how to be safe and more perceptive drivers. Changes can be made for future use, as evaluated, and needed.

Summative Evaluation Plan

The summative evaluation will be based on Kirkpatrick's Four Level Evaluation Model. For Level 1 information:

Reaction: How did the learner like the learning process? This will be achieved through a Google Forms evaluation after completion of the training modules.

1. Was this course helpful and informative?
2. Was the training interesting? (Scale 1 -5)

For Level 2:

Learning: What did they learn? By assessing the pre-test and posttest, how much learning occurred and what they learned. Pre and Post tests will be the same.

1. Did you gain knowledge during this course?
2. Was there information you knew prior to taking this course?
3. Did you find the new information helpful to evaluate your driving skills?
4. Do you plan to apply the safe driving habits and recommendations to your driving?

Level 3:

1. The City of Tacoma can look at their own crash data and set a baseline prior to course implementation.
2. Evaluation of data every year following course implementation.

Level 4: Examine the crash data for two years after this course is implemented.

Level 5: The project will examine the fatalities and serious injuries following this course to determine the non-fiduciary value.

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Appendix A

Formative Evaluation created and used during IST 622. Future formative evaluations need to be more comprehensive.

1. Email
2. I was able to start the learning module when I was ready (mark one)
    a. Strongly disagree
    b. Disagree
    c. Neutral
    d. Agree
    e. Strongly agree
3. The AUDIO level was appropriate (mark one)
    a. Strongly disagree
    b. Disagree
    c. Neutral
    d. Agree
    e. Strongly agree
4. I was able to see the VIDEO on my screen (mark one)
    a. Strongly disagree
    b. Disagree
    c. Neutral
    d. Agree
    e. Strongly agree
5. I was informed of my learning goals (mark one)
    a. Strongly disagree
    b. Disagree
    c. Neutral
    d. Agree
    e. Strongly agree
6. The learning module communicated information at an appropriate level to me (mark one)

a. Strongly disagree
b. Disagree
c. Neutral
d. Agree
e. Strongly agree

7. The information was presented in an interesting way (mark one)
    a. Strongly disagree
    b. Disagree
    c. Neutral
    d. Agree
    e. Strongly agree
8. Gator needed to fix his shirt (mark one)
    a. Strongly disagree
    b. Disagree
    c. Neutral
    d. Agree
    e. Strongly agree
9. The on-screen graphics were legible (mark one)
    a. Strongly disagree
    b. Disagree
    c. Neutral
    d. Agree
    e. Strongly agree
10. I understood what to do in the first interactive quiz about “Crash vs. Accident” (mark one)
    a. Strongly disagree
    b. Disagree
    c. Neutral
    d. Agree
    e. Strongly agree
11. I understood what to do in the two question Vision Zero Tacoma Goals assessment (mark one)

a. Strongly disagree
b. Disagree
c. Neutral
d. Agree
e. Strongly agree

12. I understood what to do for the "Assessment" section of the course (mark one)
    a. Strongly disagree
    b. Disagree
    c. Neutral
    d. Agree
    e. Strongly agree
13. I would like to learn more about he reports used by Vision Zero Tacoma (mark one)
    a. Yes
    b. No
    c. Maybe
14. I believe I am a safe driver (mark one)
    a. Strongly disagree
    b. Disagree
    c. Neutral
    d. Agree
    e. Strongly agree
15. I have been in ____ non-work-related automobile collisions since I got my first driver's license (Reminder, all answers are confidential, and this question is optional)
    a. 0
    b. 1
    c. 2
    d. 3
    e. 4
    f. 5 or more

Appendix B

Summative evaluation is based on Kirkpatrick's Four Level Evaluation Model.

For Level 1 information:

1. Was this course helpful and informative?
2. Was the training interesting? (Scale 1 -5)

For Level 2:

1. Did you gain knowledge during this course?
2. Was there information you knew prior to taking this course?
3. Did you find the new information helpful to evaluate your driving skills?
4. Do you plan to apply the safe driving habits and recommendations to your driving?

Level 3:

1. The City of Tacoma can look at their own crash data and set a baseline prior to course implementation.
2. Evaluation of data every year following course implementation.

Level 4: Examine the crash data for two years after this course is implemented.

Level 5: The project will examine the fatalities and serious injuries following this course to determine the non-fiduciary value.

Appendix C

Job aid checklist to be completed.