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Skill Retention for Driving Simulation Experiments

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SKILL RETENTION FOR DRIVING SIMULATION EXPERIMENTS

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submitted in partial fulfillment of requirements for the degree
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NIKHIL SARWATE

ABSTRACT

Whether driving a car in the real world or a simulator vehicle in a computer generated world, the procedural aspects of driving are very similar. The steering wheel is used to control the direction of the vehicle while the accelerator and brake pedals are used to control the speed. This similarity means that people who already possess the skill of driving in the real world are expected to transfer those existing skills to drive a simulator vehicle. Recognizing the need for skill transference, the typical protocol for conducting driving simulation experiments includes a practice drive, which affords participants the opportunity to learn to drive the simulator vehicle. Previous research has shown that some participants quickly learn to interact and exhibit consistently good performance while other participants first exhibit poor performance and require time driving, or repeated trials of a particular task, to improve their performance.

One of the risks of driving a simulated vehicle is experiencing symptoms of simulator sickness. The occurrence and severity of these symptoms are believed to increase with continued exposure. Therefore, it would be valuable if the practice drive could be completed on a different day than that of the experimental drive(s). Such an approach

would allow sufficient practice without requiring participants to remain in the simulator for a prolonged period of time. The possibility of having the practice occur on a separate day from the experiment was explored in this research.

A repeated measures experiment was designed to test whether the driving performance during two separate drives would differ more when the drives were separated by a longer interval of time. The simulator scenario was the same for both drives. The scenario required participants to drive a one-way, three lane freeway segment and make 75 lane changes. Half the participants drove on two consecutive days, and half the participants drove on two days, one week apart.

Forty-two participants were recruited from the Cleveland State University's student body, staff and faculty through paper advertisements and person-to-person contact. Thirty two participants, 21 males and 11 females, ranging in age from 19 to 30 years, completed two drives. During each drive, data about the use of the controls and the movement of the simulator vehicle were recorded.

The data recorded during each drive were reduced to describe the participants' performance making lane changes. The accuracy of the maneuver was described by lane position and the efficiency was described by the travel time between lane changes. The two measures were then combined into a cost, such that a decrease in cost over a series of lane changes represented an improvement in performance.

The total cost for each drive was calculated and used to compare the performance between the different drives and different participant groups. The performance of the two groups on their first drive was found to be the same ($z=-0.673$), illustrating that the difference in the characteristics (i.e. age and sex) of the groups was not significant.

Similarly the performance of the two groups on their second drive was found to be the same ($z=-0.516$). Together, these results support the notion that the practice scenario could be driven a day to a week prior to the experiment without negatively impacting the performance on subsequent experimental drive(s). Overall, the performance on the second drive was superior to the first drive ($z=2.66$) thus confirming that performance generally improves with practice.

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CHAPTER I

INTRODUCTION

An ability or capability is one's capacity to do or carry out an act. The level of performance with which one carries out that act is a measure of one's skill or proficiency. Humans possess the visual, cognitive and motor capabilities to drive a vehicle, however much is gained in terms of performance from practicing the driving task. Similarly, humans are capable of driving a simulated vehicle. The procedural aspects are very similar. The steering wheel is used to direct the vehicle and the brake and accelerator pedals are used to control speed. However, the visual information and the feedback from the real or simulator vehicle is different.

Previous research has shown that some participants are able to quickly transfer their existing driving skills to quickly learn to drive a simulator vehicle while other participants need more time to learn how to interact with the simulator vehicle and the computer generated environment. The question being explored in this thesis is whether the proficiency achieved by participant through practice is retained over time.

To explore this question some understanding about skill development, transference and retention is needed. Research from a variety of applications areas has been collected and presented in the following sections to provide this understanding.

1.1 Skill Development

The performance of most tasks gets better with practice. The surprising thing is that the rate and shape of enhancement is nearly the same across tasks. Ritter and Schooler (2001) put forward the notion that the power law of practice is universal. This law is found from short perceptual tasks to long term team oriented tasks and the rate at which individuals get better with practice seems to follow a similar pattern. Albeit the researchers indicate that varying amounts of skill transfer and skill learning occur on each task.

1.2 Skill Transfer

Skill transfer is how skill gained in one situation is applicable or fails to apply to another situation. The first ever psychologist to investigate transfer was the associationist Thorndike. Thorndike's theory of transfer (1906), known as the theory of identical elements, was based upon the concept that training in one type of activity would transfer to another only if those two activities shared some common stimulus-response elements. For instance "addition improves multiplication because multiplication is largely addition" (Thorndike, 1906, p. 243). Thorndike would consider transfer between diverse skills as long as it could be demonstrated that this transfer was arbitrated by identical elements.

1.3 Skill Retention

Factual, declarative knowledge is sensitive to the ravages of time while procedural skills are retained relatively intact over long periods. This was illustrated by Bunch (1936), Bunch and McCraven (1938) and Bunch and Lang (1939) who performed several experiments which suggested that there were in fact two components to skilled performance, one that was forgotten rather quickly and one that was retained more permanently. Participants were trained to solve a mazelike puzzle and then tested after various delay intervals on either the same or similar puzzles. The periods of delay in the experiment were two weeks as well as two, three and four months. The outcome showed that the performance on the same puzzle was quite perfect at no delay but declined at a rapid pace when the delay was increased. When similar, not the same, puzzles were used participants' performance were worse. However, the performance on similar puzzles was relatively constant over the different periods of delay. After a four month delay, the performance of the subjects on the same and similar puzzles was almost identical. The high performance on the same puzzle with no delay was due to the added effects of procedural and declarative memory. However, as the time passed, memory for specific facts about the training puzzle decayed and performance went down. After four months of delay, the participants solving the same puzzle had lost all of the declaratively encoded details and were performing at same level as subjects who were solving similar puzzles. This relatively stable baseline of performance for those solving the similar puzzles was provided by the procedural memory component.

1.4. Motor Skill Retention and Transfer

Fleishman & Parker Jr., (1962) investigated the factors in the retention and relearning of perceptual-motor skills. The task was designed to simulate a complex skill, involving a pilot flying a radar intercept mission. The research involved addressing the following questions:

- How well is such a complex skill retained without practice?
- What is the relation between the length of the no practice interval and the level of retention?
- If there is any loss in the proficiency, how much practice is needed to gain it back?
- What is the relation between retention and level of proficiency after original learning?
- Is the type of initial training related to retention?

To answer all of the above questions, there were two groups of subjects which were given extended training on a high complexity task. The difference between the two groups was the amount of verbal guidance provided in the initial training. Those participants who were trained from the beginning to a high level of proficiency, almost no loss was visible for a period up to fourteen months. Small losses were recovered in the first few minutes of relearning. With twenty four months of no practice, brisk recovery still occurred during the first twenty minutes of a relearning session. The digressions in the retention interval from one to fourteen months were shown to be not kin to retention performance. It appeared that retention was more of a function of specific task habits gained, than subjects' ability traits developed prior to training.

Shea & Morgan (1979) showed that retention was greater following high interference (random) acquisition than after low interference (blocked) acquisition when retention was measured under changed contextual interference conditions. The main aim of the research was to find out the effects of random, as compared with blocked, practice sequences on the attainment and retention of three similar motor skills. Retention was gauged after a 10-min. delay or a 10-day delay and under either the same or varied contextual conditions as acquisition. The results showed increased retention and transfer as a consequence of practice under high contextual interference. The application of this finding would suggest that coaches, teaching motor skills, should inform students about number of skills at each of many sessions instead of sessions focused on individual skills, in order to gain maximum retention.

Wrisberg & Liu (1991) studied the effect of contextual variety on the practice, retention and transfer of an applied motor skill. They found that a practice schedule which required the subjects to improvise their plan of action from one trial to the other enhanced retention and the transfer of motor skills in applied instructional conditions. The primary aim of the study was to determine the effect contextual diversity has on the practice, retention and transfer of the long and short badminton service in a standard physical education class. During the practice sessions on the long and short badminton serves, female and male participants performed under either blocked (i.e. all trials of one serve followed by all of the other) or varied (i.e. alternating trials of long and short serves) conditions. Alternating-trial participants showed a significantly bigger retention of the short serve and notably higher transfer of both serves than blocked trial subjects, despite observing minute difference in the work of the two groups during practice. It was

concluded that the exertion of a practice structure constituted by contextual variety may in some examples produce a positive effect on the retention and transfer performance of an applied motor skill.

Swift (1910) discovered that the skill of juggling two balls with a single hand had a high retention even after intervals of six years. This long term retention can be explained by 'muscle memory'. It is a form of procedural memory that can help one become very good at something through repetition. The more one does something, the procedural or muscle memory is developed and then the brain can quickly instruct the muscles to carry it out. However, the muscle memory does not judge performance. So if one practices the wrong way of doing the act, they become really good at doing the act the wrong way.

1.5 Learning to Drive a Simulator

Driving a simulated vehicle in a computer generated simulated environment is different from driving a car in the real world. The simulated environment does not look, feel, sound, smell, or move like the real world. Yet the basic mechanisms used to control the simulator and real vehicle are the same. The steering wheel is used to direct the vehicle while the brake and accelerator pedals are used to control the speed.

Driving simulators are mechanical systems and have unavoidable system lags. According to Dumas II & Klee (1996), simulators encounter a delay when the visual scene responds to driver input. This delay makes driving on the simulator more difficult thereby giving the subject imperfect control of the simulator vehicle. Bullinger, Kern, & Braun (1997) found that the driver experiences a delay from the time of an input until the

system responds. They believed that steering is always a component of the mechanical system lag of a simulator but plays a very nominal role in a real car.

1.6 Purpose

Based on a rudimentary understanding of learning, transfer, and retention, and the similarities between a driving a car in the real world and a simulator vehicle in a computer generated environment, it is expected that people who possess existing driving skills will:

- 1) be able to drive the simulator vehicle because of the procedural similarities between driving a car in the real world and driving a simulator vehicle;
- 2) show improvement in driving performance as new skills are developed to better control the simulator vehicle; and
- 3) retain the transferred and developed skills to drive the simulator vehicle after some period of delay.

The purpose of this research was to test whether the driving performance differs depending upon the size of the delay period. Because of the procedural nature of driving and its impact on skill retention, it is expected that driving performance will be consistent after either a one day or a one week delay.

Understanding the pervasiveness of the skill retention is valuable for designing future driving simulation studies. If skill retention is pervasive, then the practice drive and experimental drives can be separated in time without impacting the performance on the experimental drives. This is important because prolonged exposure to the driving simulator is believed to increase the occurrence of the symptoms of simulator sickness.

These symptoms include eye strain, headache, dizziness, nausea, which can not only make the participant feel bad but can also impact their driving performance. It follows that having participants drive multiple shorter driving sessions on separate days would be better than having them drive for one long driving session. They would be more comfortable and the quality of the performance data collected during the drives would be better.

1.7 Methodology

To test whether the period of delay impact the skill retention, a driving simulator study was conducted. Two groups of participants drove two identical drives requiring multiple lane changes. The first group drove the two drives on two consecutive days while the second group drove one week apart. The performance of the participants were measured in terms of the accuracy and the efficiency of the lane changes. Performance trends were examined and the performance between groups and between drives was tested for differences.

1.8 Organization of Thesis

This thesis is arranged in six chapters. Chapter I provides an introduction to the topic of skill retention and its value for driving simulation studies to support the hypothesis that performance on a lane changing task will be consistent given a one day or a one week delay. Chapter II contains a survey of different approaches for providing practice scenarios for driving simulation studies and a comprehensive review of the state of the knowledge about learning to drive a simulator. Chapter III contains a detailed description

of the study methodology. Chapter IV contains the results of the study and an examination into the observed performance trends. Chapter V contains the statistical analyses of the differences between the participant groups and drives. In Chapter VI, several key conclusions are drawn from the results of the trend examination and the statistical analyses and a discussion about the measures of performance used are discussed. The chapter concludes by stating the main contribution of this thesis for future driving simulation studies.

CHAPTER II

LITERATURE REVIEW

This chapter contains a survey of the different ways in which participants have been provided the opportunity to practice driving a simulated vehicle as a precursor to driving experimental scenarios. Details about the practice were drawn from a variety of driving simulation research papers. Additionally, a review of previous research into learning to drive a simulator and the needed amount of practice is presented. Together this information shows the need for this study and its value for future driving simulation experiments.

2.1 Practice Scenarios

Many driving simulation studies start with a practice scenario. This enables the subjects to learn and get comfortable with the simulator environment. Until the participants gain enough confidence to drive on the simulator, they may be observed having difficulties controlling the simulator vehicle. The extent to which one will be affected and the continuity of this problem varies across individuals.

Many researchers recognize the need for practice. Several approaches to providing that practice have been developed including using a fixed time, a fixed length, or allowing participants to self-evaluate. The shared shortcoming of these approaches is that they are not tailored to the individual and unless driving performance data is collected and evaluated, there is no assurance that the driver has received sufficient practice.

2.1.1 Fixed Time Practice

Practicing for a fixed amount of time is an approach used by many researchers. However, there appears to be no consensus as to the amount of time to use. Baas, Charlton, & Bastin (2000) used a practice time of 2 minutes. In their research on the effects of driver training on simulated driving performance, Dorn & Barker (2005) used a practice time of 10 minutes. Horberry et al. (2006) had their subjects drive for approximately 5 minutes to familiarize them with the simulator vehicle and experimental tasks. A similar practice time of 5 minutes was used by Thiffault & Bergeron (2003) and Bella (2007).

Quite a few researchers adopted practice sessions longer than 10 minutes. Research done by van Winsum, de Waard, & Brookhuis (1999) included a 30 minute practice scenario to make sure the participants were comfortable maneuvering between lanes. Ranney, Simmons, Boulos, & Macchi (1999) asked drivers to practice for 1 hour followed by 4.5 hours of practice the first day, plus an additional half an hour of practice the next day. Andersen, Sauer, & Saidpour (2004) asked drivers to practice for 1 hour before performing the experiment. A study by O'Neill, Krueger, Van Hemel, McGowan,

& Rogers (1999) had drivers practice for two complete days before starting the experiment.

2.1.2 Fixed Distance Practice

Practicing for a limited distance was another approach used by researchers, and similar to the fixed time approach, there appears to be no consensus as to how long of a practice drive should be provided. Upchurch, Fisher, & Waraich (2005) used a short highway segment of up to 2.25 miles (3.6 kilometers). Boyle & Mannering (2004) used an 8 kilometer loop to familiarize subjects with the simulator configurations. Lewis-Evans & Charlton (2006) had their participants practice on a 20 kilometers (12.4 miles) long rural road.

2.1.3 Self-Evaluation

An alternative to using a fixed time, fixed length, or a fixed number of trials, is to have the participants indicate when they are comfortable and ready to proceed with the experiment. This feeling of comfort is subjective and relative. Maltz & Shinar (2004), Salvucci (2001), Takayama & Nass (2008), Fisher, D. L., Pradhan, A. K., Pollatsek, A., & Knodler (2007) and Pradhan, Fisher, & Pollatsek (2006) all used this approach. Results of a study by Peli, E., Bowers, A. R., Mandel, A. J., Higgins, K., Goldstein, R. B., & Bobrow (2005) revealed that under this approach participants had continued to practice for 15-30 minutes, whereas a study by McAvoy, Schattler, & Datta (2007) reported that the participants adapted after approximately 10 minutes.

2.1.4 None or Not Reported

In certain studies there was no practice reported. Example are those by Lank, Haberstroh, & Wille (2011), Horst & Hogema (2011), Rong, Mao & Ma (2011), Melo, lobo, Couto & Rodrigues (2012). In other studies, although a practice drive was include, details were not sufficient to determine whether it was a fixed time, fixed length, or otherwise. Examples include those by Tijerina, L., Blommer, M., Curry, R., Greenberg, J., Kochhar, D., Simonds, C., & Watson (2011), Hoogendoorn, R. G., Hoogendoorn, S. P., Brookhuis, K. A., & Daamen (2011), Hoogendoorn, R., Hoogendoorn, S., & Brookhuis (2012), and Rossi, R., Gastaldi, M., Biondi, F., & Mulatti (2012).

2.2 Evaluating Performance during Practice

A study carried out by McGehee, D., Lee, J., Rizzo, M., & Bateman (2001) focused on the steering behaviors of older drivers. The results showed that these drivers need about 3 minutes to get acquainted with the simulation. McGehee et al. (2004) analyzed the time required for drivers to get familiar with the simulator as indicated by stable and consistent steering control. The participants drove on a two lane rural highway. It took the drivers approximately 240 seconds from the start of the experiment to adapt to the simulator. The focus was on steering behavior and lane position deviation. An additional inference drawn from this study was that the older drivers steering behavior has a high degree of variability relative to those of younger drivers but the results indicated that the older and younger drivers had similar lane deviations. Before this study, there was no research into the time it took for the participants to adapt to the simulator.

Sahami & Sayed (2010), analyzed the performance enhancements of participants driving along eighteen left and right hand curves on a two-lane road by inspecting the speed increment and decrement of the standard deviation from the lane center over the length of curves in succession. There was an enhancement in the performance of the subjects except a few who did not show consistency. This was done in addition to subjective senses of adaptation, leading to the discovery that the self-reported time of acclimation was less than the true adaptation time.

Saeed Sahami & Sayed (2013) inspected subjects' performance improvement driving through a series of seven cones arranged as a slalom course. The emphasis was on the examination of increase in speed over the length of the course. After 12 trials, one participant showed steady performance and the remaining still showing signs of speed increment.

2.2.1 Learning Curve Analyses

As mentioned earlier, adaptation is necessary when it comes to driving on a simulator. To ensure a participant has learned to drive the simulator vehicle, performance needs to be evaluated. Sahami et al. (2010) proposed a methodology to evaluate the process of learning by analyzing driver performance in terms of a cost, which could then be modeled by a learning curve. The initial work evaluated participants speed control on a rural two-lane roadway with fourteen speed changes. The speed control performance was modeled as a cost. Comparing the cost over successive speed changes to a learning curve was shown to be one way to differentiate between adapted, adapting and non-adapting subjects.

Ronen & Yair (2013) examined whether roads of different complexity (i.e. curved, urban, and straight) and demand required a different adaptation time. Learning curves, specifically exponential decay functions, were fit to different driving performance measures for each road type. The exponential decay function describes the relative rapid rate of acclimation until one achieves stability. The results of the experiment indicated that roads with different characteristics need different adaptation times. Curved roads, which were the most demanding of the three types examined required a longer adaptation time. The researchers conclude that it is preferable to use multiple performance measures for an in depth and accurate analysis of acclimation time.

Jenkins & Moran (2014) had participants drive at 25 mph (40 km/h) and maneuver between lanes on a straight road by driving through a series of target arrows. The arrows were placed forty meters apart. Improvement was measured as a decline in the lateral distance between the target arrows and the center of the front bumper. Most of the subjects showed signs of improvement after approximately fifteen lane maneuvers.

In a subsequent study by Jenkins & Seck (2014) the performance improvement for lane changing was indicated by a decrease in cost, calculated as the product of lateral position and the square of the travel time between lane changes. Eighteen participants drove at 55 mph (88.5 km/h) and increased their speed as they felt comfortable while making 20 lane changes. Another 18 participants drove at indicated speeds, ranging from 30 mph (48.3 km/h) to 65 mph (104.6 km/h) and made lane changes. The results indicated that 17 of the 36 participants had improved their performance and has obtained consistent control of the simulator vehicle.

In a recent study by Jenkins, Lewis & Hosseini (2015) the performance improvement of participants doing lane changes was evaluated to determine whether practicing one steering task would impact the performance on a subsequent steering task. Two lane changing tasks were used, each with a different spacing requiring a different amount of steering input. The performance on each lane changing task was shown to improve. The ordering of the tasks and the impact on the performance of the subsequent task was not significant when the differences between the participants was taken into account.

CHAPTER III

DRIVING SIMULATION EXPERIMENT

In this chapter a detailed description of the driving simulation experiment is provided. The description includes details about the experimental design, driving simulator, design of the scenario, experimental participants, and an experimental procedure.

3.1 Experimental Design

To test whether the skill of driving the simulator vehicle is retained over time, a single factor, repeated measures experiment was designed. The single factor was the time between the first and second drives and was defined as either one day or one week. For analysis purposes the one day delay was labelled “0” and the one week delay was labelled “1”. During each drive multiple measures of performance were collected.

3.2 Driving Simulator

The research was carried out on the DriveSafety RS-600 driving simulator at Cleveland State University (CSU) shown in Figure 1. This driving simulator features the

partial cab of a Ford Fusion, with a tilt motion base simulating the pitch during accelerations and decelerations. Five high definition monitors provide the forward field of view extending beyond 180 degrees. LCD panels replace the standard rear view and side mirrors.



Figure 1. RS-600 at Cleveland State University.

3.3 Experimental Scenario

The experimental scenario was developed to provide a repeated steering task. Given the experience evaluating performance of lane changing (Jenkins & Seck, 2014), a lane changing task was used. The scenario was developed using the DriveSafety HyperDrive Authoring Suite (version 1.9.35) which comes with the RS-600 simulator.

A 6-lane divided freeway tile was used. Each lane had a width of 3.5 m (11.5 ft). The shoulder width on either side of the road was 3 m (9.8 ft). The grass median was 25 m (82.0 ft) wide. Tiles were arranged to produce a straight roadway section 14.8 km (9.2 miles). There were no speed limit signs on the freeway tiles. The scenario did not have any traffic, vehicular or otherwise.

To indicate the required lane changes, target arrows were placed in the center of the desired travel lanes. A total of 75 target arrows used in our scenario. The arrows were arranged into 15 groups. In each group, 5 arrows were spaced 80 m (262.5 ft) apart. Successive target arrows were never separated by more than one lane. The location of each of the target arrows is given in Table 1. Groups of arrows were spaced 400 m (0.25 miles) apart. The ordering of the target arrows and their locations were the same for all participants.

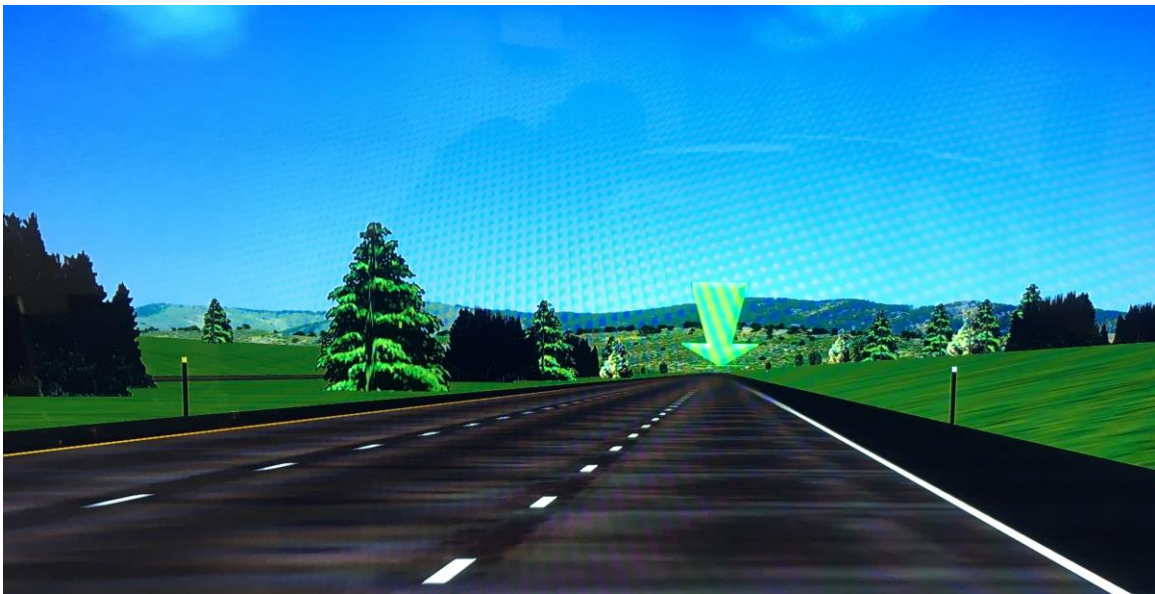


Figure 2. Target arrow in the center of the desired travel lane.

Table 1. Location of Target Arrows

| Location | Center of Left-Lane | Center of Center-Lane | Center of Right-Lane |
|----------|---|--|---|
| Arrow | 03, 08, 10, 11, 13, 20, 21, 25, 26, 28, 30, 31, 43, 45, 46, 53, 65, 66, 68, 73, 75 | 02, 04, 07, 09, 12, 14, 17, 19, 22, 24, 27, 29, 32, 34, 37, 39, 42, 44, 47, 49, 52, 54, 57, 59, 62, 64, 67, 69, 72, 74 | 01, 05, 06, 15, 16, 18, 23, 33, 35, 36, 38, 40, 41, 48, 50, 51, 55, 56, 58, 60, 61, 63, 70, 71 |

All but the first target arrow were scripted to be invisible at the beginning of the scenario. When each target arrow was reached, the simulator vehicle would activate a location trigger which would make the next target arrow appear. This approach of appearing targets was used to have subjects focus on one lane change at a time.

The subjects were free to drive at their desired speed, a speed that they were comfortable driving while maintaining control of the vehicles. If the vehicle went out of control, that participant was excused and he or she were not allowed to drive again.

Participants were given the following instructions:

“For this scenario your goal is to drive through each of the arrows on the road. At the moment, you only see one arrow ahead. When you drive through this arrow, another will appear, and so on for a total of 75 arrows. You can drive at a speed you feel comfortable, but make sure to keep the vehicle under control. If you spin out, the scenario will end.

Any questions?”

Each of the target arrows was given a unique identifier. This identifier was captured in the data collection file.

The standard data collection parameters available through the DriveSafety HyperDrive Authoring Suite were collected at a rate of 60 hertz. These include:

- ZoneName – the name of the active data collection zone;
- Time – time in seconds from beginning of the scenario;
- Frame – the number of simulation frames from the beginning of the scenario;
- Velocity – the speed of the simulator vehicle, meters/second;
- LanePos – the offset distance from the center of the current lane, meters;
- Steer – the position of the steering wheel, degrees;
- Accel – the normalized position of the accelerator pedal, 0 for not depressed to 1 for fully depressed;
- Brake – the normalized position of the brake pedal, 0 for not pressed to 1 for fully depressed;
- SubjectHeading – the heading of the simulator vehicle in degrees, where 0 is north, 90 is east, 180 is south and 270 is west;
- SubjectX – the current X coordinate of the simulator vehicle position, meters;
- SubjectY - the current Y coordinate of the simulator vehicle position, meters;
- LatAccel – the lateral component of the acceleration of the simulator vehicle;
- LongAccel - the longitudinal component of the acceleration of the simulator vehicle;
- Collision – the name of the object currently struck by the simulator vehicle; and
- ActiveTrigger – The name of the one trigger activated in the current frame.

3.4. Experimental Participants

Forty-two participants, 26 males and 16 females, were recruited from the CSU student body, staff and faculty through paper advertisements and person-to-person contact.

Volunteers had to possess a valid driver's license to participate in this study. Ten of the volunteers drove the scenario but did not return another day to drive the scenario again.

Thirty two volunteers drove the scenario on two separate days, 21 were male and 11 were female, with an age range of 19 to 29 years.

3.5. Simulator Sickness

The risk of driving the simulator vehicle is experiencing symptoms of simulator sickness. Kennedy et al. (1993) identified 21 different types of symptoms and developed a questionnaire to track their occurrence and severity. A version of this questionnaire is in Appendix A. Participants were required to complete this questionnaire prior to and after driving the experiment.

Forty two participants completed the first drive. Twenty seven (11 females, 16 males) claimed that they were free from any symptoms, and fifteen (5 females, 10 males) said that they had experienced minor symptoms.

Thirty two participants completed the second drive. Twenty five (6 females, 19 males) claimed to have no symptoms of simulator sickness, and seven (5 females, 2 males) reported minor discomfort.

3.6. Experimental Procedure

The experimental protocol (#29838-JEN-HS) was approved by the CSU Institutional Review Board. All participants had to confirm that they had a valid driver's license to participate and then read and sign the consent form, included in Appendix B. On the day of their first drive they completed a motion sickness history questionnaire. Those who reported being susceptible to motion sickness were cautioned that they may be at greater risk of experiencing symptoms of simulator sickness, although that connection has not been satisfactorily linked and is still being debated in the simulation community. For both the first and second drives, each participant did the following:

- Completed the simulator sickness questionnaire prior to driving;
- Drove the experimental scenario;
- Provide verbal assessments about experiencing any discomfort; and
- Complete the simulator sickness questionnaire after driving to document the degree and extent of any indication of simulator sickness they may have encountered during the drive.

Total time for all the tasks was not allowed to exceed one and a half hours. Participants received \$5 remuneration for each drive to compensate for any travel costs incurred.

Copies of the simulator sickness questionnaire, informed consent document, and motion sickness history questionnaire are included in Appendices A, B and C respectively.

CHAPTER IV

COST TRENDS

In this chapter the results from the driving simulation experiment are presented. The performance trends of the individual participants are examined to identify whether the expected learning occurred. The trends for both the 1day delay group and the 1 week delay group are presented.

4.1 Data Reduction

For each participant and drive, the driving simulator created a data file, for a total of 64 data files. Each file contained the values of the standard data collection parameters, recorded for every 1/60 second for the duration of the drive. These space delimited text files were imported into Excel.

Speelman and Kirsner (2005) recommended that both the accuracy and efficiency of the task being learned should be considered concurrently when evaluating performance, as these two components of learning usually interact in such a way that if a subject focusses on going fast, the accuracy suffers and if the subject focuses on the accuracy of

the task, the efficiency suffers. For this reason, the data resulting from this study was reduced to produce measures of accuracy and efficiency of the lane changing performance. The participant data are provided in Appendix D.

The efficiency or speed of performing the task was represented by the travel time between successive target arrows.

The accuracy of the task was represented by the steering control of the vehicle, specifically the perpendicular distance between the target arrow and the longitudinal center of the simulator vehicle at the moment the target arrow was reached. Since the target arrows were placed in the center of the travel lanes, the data collection variable “lane position” provided the lateral distance between the center of the vehicle and the target arrow. The lane position data ranged from -1.8 to $+1.8$ m (5.9 ft). Positive values indicate the vehicle is to the right and negative values to the left of the target arrow. If the lane position exceeds the range, the vehicle is not in the required lane.

The accuracy and efficiency measures were combined into a cost term, describing the performance of the lane changes as follows:

$$C_i = |LP_i|(t_i - t_{i-1})$$

where

C_i = the cost for lane change i

LP_i = lane position of the simulator vehicle,

t_i = time the simulator vehicle reaches lane change i

t_{i-1} = time the simulator vehicle reaches lane change $i-1$

The absolute value of lane position was used because the sign demonstrates the direction of the error and the needed information for accuracy was only the size of the error.

Good overall performance of a lane change would exhibit good accuracy and good efficiency. Good accuracy would be a small value of lane position. Good efficiency would be a small value of travel time. Therefore good performance would be a small value of cost.

4.2 Individual Learning Trends

The slopes of the lane position, travel time, and cost data, with respect the number of lane changes, were examined. The following three trends indicate learning because of the decrease in cost:

- Decreasing lane position and travel time resulting in a decrease in cost;
- Decreasing lane position and increasing travel time resulting in a decrease in cost; and
- Increasing lane position and decreasing travel time resulting in a decrease in cost.

Participant 32 is an example of someone who improved their driving performance on drive 1 by improving both accuracy and efficiency of the lane changing task. Figure 3 depicts the lane position data. The negative lane position trend is modelled by:

$$LP = -0.0005i + 0.371$$

Similarly, Figure 4 depicts the travel time data for drive 1. The negative travel time trend is modelled by:

$$TT = -0.0044i + 2.794$$

The product of these two data sets can only produce a negative result. Figure 5 depicts the calculated costs for drive 1. The negative trend is modeled by:

$$C = -0.0029i + 1.029$$

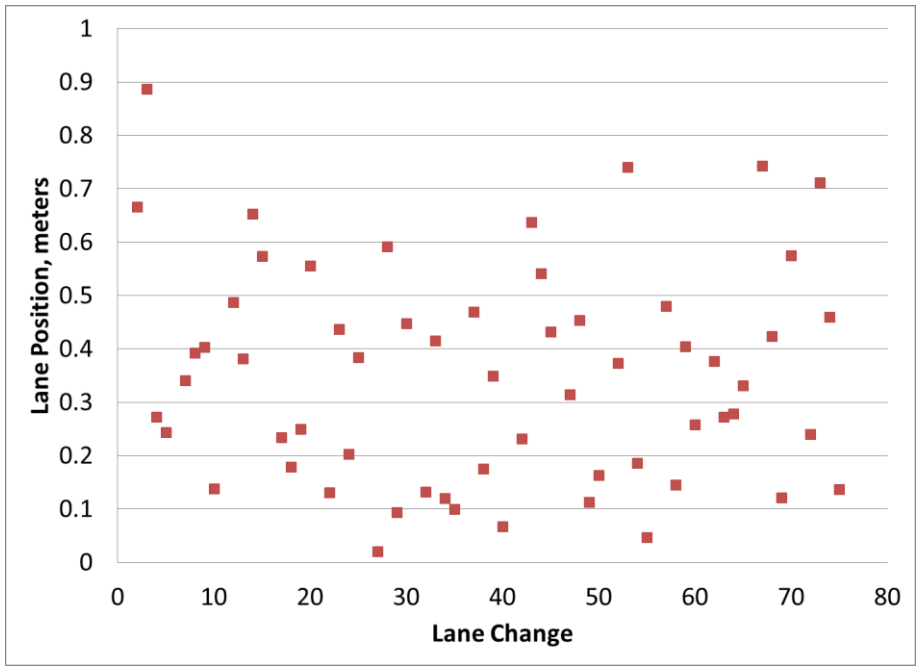


Figure 3. Lane position trend for Participant 32 on drive 1.

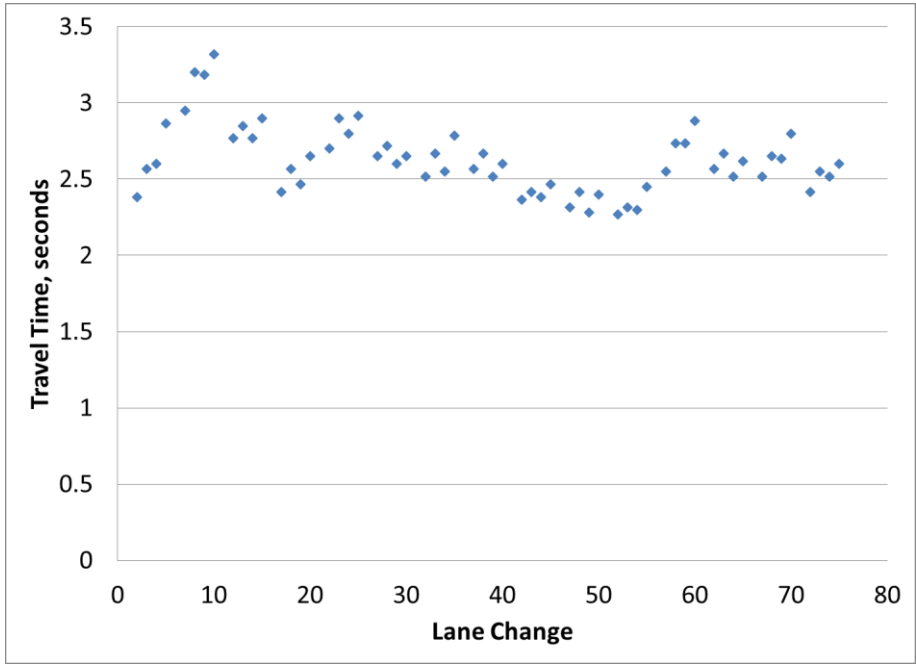


Figure 4. Travel time trend for Participant 32 on drive 1.

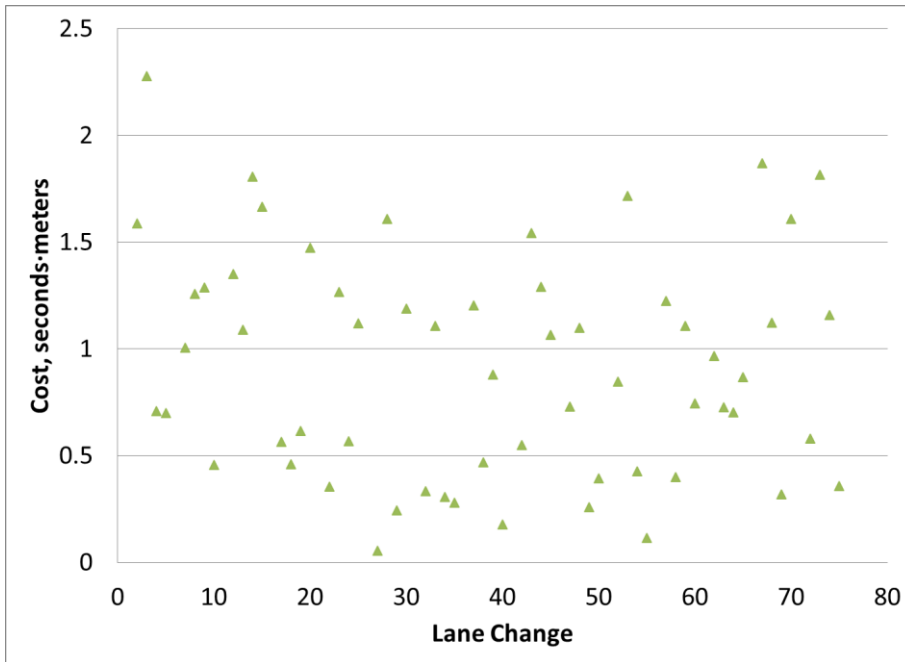


Figure 5. Cost trend for Participant 32 on drive 1.

4.2.1 Individual Learning Trends for Drive 1

The slopes of the lane position, travel time, and cost data for drive 1 are provided in Table 2. Fourteen participants showed an improvement in performance through a decrease in both lane position and travel time. Seven participants showed an improvement through a decrease in lane position, however the travel time increased. One participant showed an increase in lane position and a decrease in travel time that resulted in a decrease in the cost. Overall, 22 of 32 participants exhibited improved performance over 75 lane changes during drive 1.

For the remaining 10 participants, 7 had a decrease in lane position and an increase in travel time, and 3 had an increase in lane position and a decrease in travel time. Both resulted in an increase in cost.

Table 2. Lane Position, Travel Time, and Cost Trends for Drive 1

| Participant | LP slope | TT slope | Cost slope |
|-------------|----------|----------|------------|
| 1 | 0.000 | -0.001 | -0.002 |
| 2 | -0.001 | -0.006 | -0.005 |
| 3 | -0.002 | -0.010 | -0.014 |
| 4 | -0.002 | 0.005 | -0.005 |
| 5 | 0.000 | 0.006 | 0.001 |
| 6 | -0.001 | 0.000 | -0.005 |
| 7 | -0.005 | 0.049 | -0.016 |
| 8 | -0.002 | -0.005 | -0.008 |
| 9 | -0.004 | -0.015 | -0.016 |
| 10 | 0.006 | -0.026 | 0.006 |
| 11 | 0.006 | -0.007 | 0.009 |
| 12 | -0.002 | 0.006 | 0.000 |
| 13 | -0.004 | 0.005 | -0.009 |
| 14 | -0.003 | 0.018 | 0.001 |
| 15 | -0.002 | -0.010 | -0.012 |
| 16 | 0.000 | -0.022 | -0.015 |
| 17 | 0.000 | -0.006 | -0.002 |
| 18 | -0.005 | 0.000 | -0.020 |
| 19 | -0.005 | 0.008 | -0.010 |
| 20 | -0.009 | 0.071 | 0.001 |
| 21 | 0.000 | -0.003 | 0.001 |

| Participant | LP slope | TT slope | Cost slope |
|-------------|----------|----------|------------|
| 22 | -0.007 | 0.006 | -0.022 |
| 23 | 0.000 | 0.014 | 0.006 |
| 24 | 8.000 | -0.009 | -0.017 |
| 25 | -0.004 | -0.006 | -0.013 |
| 26 | -0.003 | 0.009 | -0.003 |
| 27 | -0.008 | -0.001 | -0.021 |
| 28 | -0.001 | 0.002 | 0.002 |
| 29 | 0.000 | 0.006 | 0.001 |
| 30 | -0.015 | -0.002 | -0.038 |
| 31 | -0.007 | 0.066 | 0.004 |
| 32 | -0.001 | -0.004 | -0.003 |

4.2.2 Individual Learning Trends for Drive 2

The slopes of the lane position, travel time, and cost data for drive 2 are provided in Table 3. Twelve participants showed an improvement in performance through a decrease in both lane position and travel time. Five participants showed an improvement through a decrease in lane position, however the travel time increased. Four participants showed an increase in lane position and a decrease in travel time that resulted in a decrease in the cost. Overall, 21 of 32 participants exhibited improved performance over 75 lane changes during drive 2.

For the remaining 11 participants, 2 had a decrease in lane position and an increase in travel time, and 9 had an increase in lane position and a decrease in travel time. Both resulted in an increase in cost.

Table 3. Lane Position, Travel Time, and Cost Trends for Drive 2

| Participant | LP slope | TT slope | Cost slope |
|-------------|----------|----------|------------|
| 1 | 0.000 | -0.014 | -0.004 |
| 2 | 0.000 | 0.003 | 0.000 |
| 3 | -0.003 | -0.002 | -0.017 |
| 4 | -0.001 | 0.000 | -0.005 |
| 5 | 0.001 | 0.000 | 0.004 |
| 6 | -0.001 | -0.005 | -0.006 |
| 7 | -0.001 | -0.004 | -0.004 |
| 8 | 0.003 | -0.007 | 0.005 |
| 9 | -0.001 | 0.001 | -0.003 |
| 10 | 0.000 | -0.003 | -0.002 |
| 11 | -0.001 | -0.005 | -0.008 |
| 12 | -0.001 | -0.005 | -0.006 |
| 13 | -0.003 | 0.004 | -0.010 |
| 14 | -0.005 | 0.017 | -0.010 |
| 15 | 0.000 | -0.023 | -0.005 |
| 16 | 0.000 | -0.020 | -0.007 |
| 17 | 0.001 | -0.004 | 0.002 |

| Participant | LP slope | TT slope | Cost slope |
|-------------|----------|----------|------------|
| 18 | -0.002 | -0.004 | -0.009 |
| 19 | -0.001 | -0.006 | -0.005 |
| 20 | 0.001 | -0.003 | 0.008 |
| 21 | 0.003 | -0.003 | 0.007 |
| 22 | 0.001 | -0.001 | 0.001 |
| 23 | 8.000 | -0.032 | -0.001 |
| 24 | 0.000 | 0.003 | 0.000 |
| 25 | 0.001 | -0.005 | 0.001 |
| 26 | -0.002 | 0.002 | -0.005 |
| 27 | 0.000 | -0.003 | -0.002 |
| 28 | -0.003 | 0.000 | -0.007 |
| 29 | -0.001 | 0.012 | 0.001 |
| 30 | 0.003 | -0.004 | 0.005 |
| 31 | 0.001 | -0.005 | 0.002 |
| 32 | -0.003 | -0.002 | -0.009 |

4.2.3 Individual Learning Trends across Drives

For each participant, the performance on both drives was compared. The results are shown in Table 4. Fourteen participants improved during both drives, which indicates that they were continuing to learn to drive the simulator. Seven participants improved on drive 1 and degraded on drive 2. The performance of 6 participants degraded on first

drive and improved on the second drive. The remaining 5 participants had degrading performance for both drives.

Table 4. Results of Individual Learning Trends for both Drives

| Number of participants | d=1 | d=2 |
|------------------------|----------|----------|
| 14 | Improved | Improved |
| 7 | Improved | Degraded |
| 6 | Degraded | Improved |
| 5 | Degraded | Degraded |

4.3 Cost Trends for Delay Groups

The cost slopes for the participants who had a 1 day delay between drives are shown in Table 5. Improvement was found for 10 participants during drive 1, and 8 participants during drive 2. Six participants improved during both drives.

Similarly, the cost slopes for the participants who had a 1 week delay between drives are shown in Table 6. Improvement was found for 11 participants during drive 1, and 12 participants during drive 2. Eight participants improved during both drives.

Table 5. Cost Trends for the 1 Day Delay Group

| Participant | Sex | Age (years) | d=1 | d=2 |
|-------------|--------|-------------|--------|--------|
| 2 | male | 25 | -0.005 | 0.000 |
| 5 | male | 27 | 0.001 | 0.004 |
| 6 | male | 27 | -0.005 | -0.006 |
| 9 | male | 24 | -0.016 | -0.003 |
| 11 | female | 20 | 0.009 | -0.008 |
| 12 | male | 21 | 0.000 | -0.006 |
| 15 | male | 22 | -0.012 | -0.005 |
| 16 | male | 23 | -0.015 | -0.007 |
| 17 | male | 23 | -0.002 | 0.002 |
| 18 | male | 23 | -0.020 | -0.009 |
| 20 | male | 29 | 0.001 | 0.008 |
| 21 | male | 26 | 0.001 | 0.007 |
| 24 | female | 21 | -0.017 | 0.000 |
| 25 | male | 21 | -0.013 | 0.001 |
| 29 | female | 21 | 0.001 | 0.001 |
| 32 | male | 22 | -0.003 | -0.009 |

Table 6. Cost Trends for the 1 Week Delay Group

| Participant | Sex | Age (years) | d=1 | d=2 |
|-------------|--------|-------------|--------|--------|
| 1 | female | 24 | -0.002 | -0.004 |
| 3 | male | 23 | -0.014 | -0.017 |
| 4 | female | 22 | -0.005 | -0.005 |
| 7 | male | 24 | -0.016 | -0.004 |
| 8 | male | 21 | -0.008 | 0.005 |
| 10 | male | 21 | 0.006 | -0.002 |
| 13 | female | 21 | -0.009 | -0.010 |
| 14 | female | 24 | 0.001 | -0.010 |
| 19 | male | 24 | -0.010 | -0.005 |
| 22 | male | 22 | -0.022 | 0.001 |
| 23 | female | 22 | 0.006 | -0.001 |
| 26 | female | 20 | -0.003 | -0.005 |
| 27 | female | 21 | -0.021 | -0.002 |
| 28 | female | 20 | 0.002 | -0.007 |
| 30 | male | 19 | -0.038 | 0.005 |
| 31 | male | 24 | 0.004 | 0.002 |

4.4 Total Costs

The total cost, TC_d is the cumulative cost incurred over an entire drive, d . The total cost for each drive was calculated as:

$$TC_d = \sum C_i$$

where

TC_d = total cost for drive d

C_i = cost for lane change i

The total cost indicates the overall performance of a participant during a drive. The total costs for participants of the 1 day delay group and the 1 week delay group are provided in Table 7 and Table 8 respectively. Included are the mean and standard deviations for each drive.

While the value of the total cost depends upon both the accuracy and efficiency measures used to describe the performance of the particular driving task, it also depends on the number of repetitions of that task. For this experiment, each drive presented 75 lane changes and each participant completed the same drive twice. Therefore, comparing the total cost between drives provide some relative measure of improvement.

Improved performance is therefore indicated by a decrease in total cost over the two drives. The differences in total costs for the 1 day delay group are shown on Table 7. The differences in total costs for the 1 week delay group are shown on Table 8. The mean and standard deviation values are included. Twenty seven participants exhibited better performance on the second drive than the first, as indicated by the positive difference in TC_1-TC_2 . The performance for Participants 2, 3, 5, 15, and 29 was worse on the second drive.

Table 7. Total Costs for 1 Day Delay

| Participant | TC ₁ | TC ₂ | TC ₁ -TC ₂ |
|--------------------|-----------------|-----------------|----------------------------------|
| 2 | 102.0 | 108.6 | -6.7 |
| 5 | 36.9 | 52.1 | -15.2 |
| 6 | 116.6 | 64.8 | 51.8 |
| 9 | 58.7 | 50.8 | 7.9 |
| 11 | 161.1 | 156.8 | 4.3 |
| 12 | 89.8 | 65.9 | 23.9 |
| 15 | 74.8 | 78.0 | -3.2 |
| 16 | 197.0 | 117.2 | 79.7 |
| 17 | 79.4 | 59.3 | 20.1 |
| 18 | 95.2 | 60.3 | 35.0 |
| 20 | 192.5 | 82.3 | 110.3 |
| 21 | 80.0 | 71.3 | 8.7 |
| 24 | 59.8 | 50.3 | 9.5 |
| 25 | 61.1 | 45.0 | 16.2 |
| 29 | 44.0 | 47.1 | -3.1 |
| 32 | 55.1 | 48.8 | 6.3 |
| mean cost | 94.0 | 72.4 | 21.6 |
| standard deviation | 49.6 | 30.9 | 33.5 |

Table 8. Total Costs for 1 Week Delay

| Participant | TC ₁ | TC ₂ | TC ₁ -TC ₂ |
|--------------------|-----------------|-----------------|----------------------------------|
| 1 | 131.7 | 130.5 | 1.2 |
| 3 | 83.7 | 92.3 | -8.6 |
| 4 | 68.7 | 63.6 | 5.1 |
| 7 | 97.3 | 42.8 | 54.4 |
| 8 | 63.0 | 59.0 | 4.0 |
| 10 | 61.4 | 48.8 | 12.6 |
| 13 | 120.9 | 89.1 | 31.8 |
| 14 | 113.6 | 108.0 | 5.6 |
| 19 | 110.2 | 72.8 | 37.4 |
| 22 | 125.5 | 77.1 | 48.4 |
| 23 | 114.3 | 85.0 | 29.3 |
| 26 | 91.7 | 79.0 | 12.7 |
| 27 | 77.7 | 40.9 | 36.7 |
| 28 | 175.9 | 143.6 | 32.3 |
| 30 | 116.7 | 68.0 | 48.7 |
| 31 | 107.5 | 46.8 | 60.7 |
| mean cost | 103.7 | 78.0 | 25.77 |
| standard deviation | 29.6 | 30.0 | 21.39 |

The difference between the 1 day delay and the 1 week delay groups is shown graphically on Figure 6.

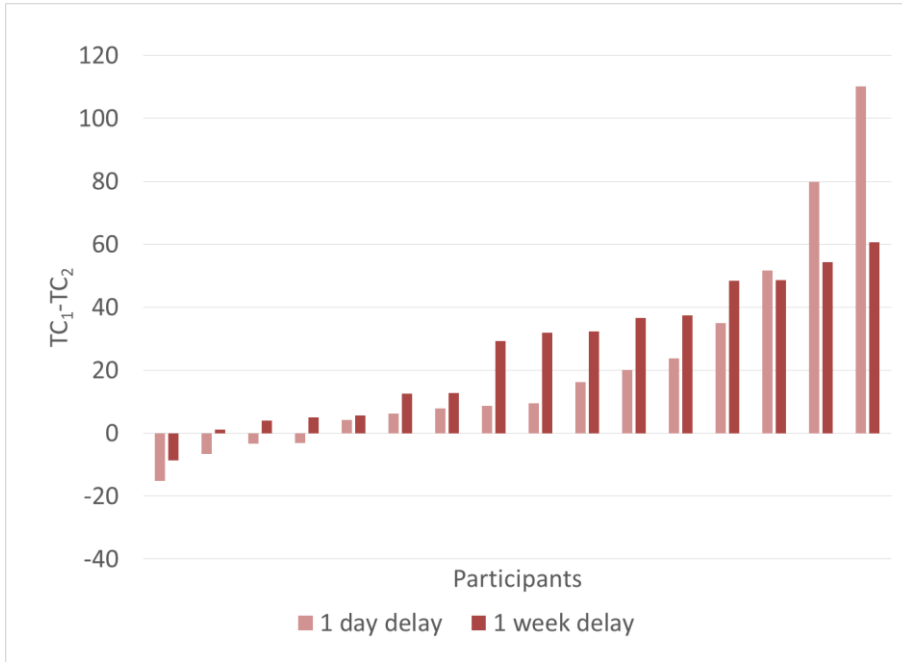


Figure 6. Trends in $TC_1 - TC_2$ for 1 day delay and 1 week delay groups

4.5 Summary

The cost trends were examined for individual participants for the first drive and second drive separately. For the first drive, 22 participants exhibited improved performance, indicated by a decrease in cost. For the second drive, 21 participants improved. The cost trends across the two drives were also examined. Fourteen participants improved during both drives. This trend indicates that they were continuing to learn to drive the simulator.

The total costs were examined for individual participants. A decrease in cost, from the first drive to the second drive indicates an improvement. Twenty seven participants exhibited better performance on the second drive than the first.

CHAPTER V

TOTAL COST COMPARISONS

In this chapter, a series of comparison of means tests are presented. The comparisons test whether:

- Performance improved for the 1 day delay group;
- Performance improved for the 1 week delay group;
- Performance improved for all the participants;
- Performance of the 1 day delay and 1 week delay groups were different for drive 1; and
- Performance of the 1 day delay and 1 week delay groups were different for drive 2.

5.1 Cost Difference between Drives for 1 Day Delay Group

To determine whether the 1 day delay group performed better on the second drive than the first drive, the mean total cost for the two drives were compared using a one-tail test.

Null hypothesis: $\overline{TC}_{1,day} = \overline{TC}_{2,day}$

Alternative hypothesis: $\overline{TC}_{1,day} > \overline{TC}_{2,day}$

Level of significance: $\alpha=5\%$

Test statistic:
$$z = \frac{(\overline{TC}_{1,day} - \overline{TC}_{2,day})}{\sqrt{\left(\frac{s_{TC1,day}^2}{n} + \frac{s_{TC2,day}^2}{m}\right)}} = \frac{(94.0 - 72.4)}{\sqrt{\left(\frac{49.6^2}{16} + \frac{30.9^2}{16}\right)}} = 1.478$$

Rejection region: $z > 1.645$

With the calculated test statistic, the null hypothesis was accepted and it was concluded that the mean total cost for the two drives were comparable. This means that the performance on both drive 1 and drive 2 were the same.

5.2 Cost Difference between Drives for 1 Week Delay Group

To determine whether the 1 week delay group performed better on the second drive than the first drive, the mean total cost for the two drives were compared using a one-tail test.

Null hypothesis: $\overline{TC}_{1,week} = \overline{TC}_{2,week}$

Alternative hypothesis: $\overline{TC}_{1,week} > \overline{TC}_{2,week}$

Level of significance: $\alpha=5\%$

Test statistic:
$$z = \frac{(\overline{TC}_{1,week} - \overline{TC}_{2,week})}{\sqrt{\left(\frac{s_{TC1,week}^2}{n} + \frac{s_{TC2,week}^2}{m}\right)}} = \frac{(103.7 - 78.0)}{\sqrt{\left(\frac{29.6^2}{16} + \frac{30.0^2}{16}\right)}} = 2.446$$

Rejection region: $z > 1.645$

With the calculated test statistic, the null hypothesis was rejected and it was concluded that the total cost for drive 1 was greater than that for drive 2. This means that the performance for drive 2 was better than that for drive 1.

5.3 Cost Difference between Drives for both Groups Combined

To determine whether all the participants combined performed better on the second drive, the mean total cost for the two drives were compared using a one-tail test.

Null hypothesis: $\overline{TC}_1 = \overline{TC}_2$

Alternative hypothesis: $\overline{TC}_1 > \overline{TC}_2$

Level of significance: $\alpha=5\%$

Test statistic:
$$z = \frac{(\overline{TC}_1 - \overline{TC}_2)}{\sqrt{\left(\frac{s_{TC1}^2}{n} + \frac{s_{TC2}^2}{m}\right)}} = \frac{(98.9 - 75.2)}{\sqrt{\left(\frac{40.5^2}{32} + \frac{30.1^2}{32}\right)}} = 2.66$$

Rejection region: $z > 1.645$

With the calculated test statistic, the null hypothesis was rejected and it was concluded that the total cost for drive 1 was greater than that for drive 2, when all the participants are considered together as a single group. This means that overall, the performance for drive 2 was better than that for drive 1.

5.4 Cost Difference between Groups for Drive 1

The one day delay group was comprised of 13 males and 3 females, ranging in age from 20 to 29 years. The one week delay group was comprised of 8 males and 8 females, ranging in age from 19 to 24 years. If the effect of age and/or sex was significant, then the total mean cost of these groups on the first drive would be different. To verify that the differences in characteristics (i.e. age and sex) of the two groups were not significant, the mean total costs of the two groups for drive 1 were compared.

Null hypothesis: $\overline{TC}_{1,day} = \overline{TC}_{1,week}$

Alternative hypothesis: $\overline{TC}_{1,day} \neq \overline{TC}_{1,week}$

Level of significance: $\alpha=5\%$

Test statistic:
$$z = \frac{(\overline{TC}_{1,day} - \overline{TC}_{1,week})}{\sqrt{\left(\frac{s^2_{TC_{1,day}}}{n} + \frac{s^2_{TC_{1,week}}}{m}\right)}} = \frac{(94.0 - 103.7)}{\sqrt{\left(\frac{49.6^2}{16} + \frac{29.6^2}{16}\right)}} = -0.673$$

Rejection region: $z > 1.96$ or $z < -1.96$

With the calculated value of the test statistic, the null hypothesis was accepted. There is evidence that the performance of the two groups was the same on the first drive. This means that differences in the characteristics of the groups were insignificant.

5.5 Cost Difference between Groups for Drive 2

With the characteristics of the two groups having been shown to be the same, the performance on the second drive were tested without controlling for the effects of sex and age, assuming no interaction between the effects of age and/or sex and the effects of the delay. Therefore, this test determined whether the time delay impacted the performance on the second drive.

Null hypothesis: $\overline{TC}_{2,day} = \overline{TC}_{2,week}$

Alternative hypothesis: $\overline{TC}_{2,day} \neq \overline{TC}_{2,week}$

Level of significance: $\alpha = 5\%$

Test statistic:
$$z = \frac{(\overline{TC}_{2,day} - \overline{TC}_{2,week})}{\sqrt{\left(\frac{s^2_{TC_{2,day}}}{n} + \frac{s^2_{TC_{2,week}}}{m}\right)}} = \frac{(72.4 - 78.0)}{\sqrt{\left(\frac{30.9^2}{16} + \frac{30.0^2}{16}\right)}} = -0.673$$

Rejection region: $z > 1.96$ or $z < -1.96$

With the calculated value of the test statistic, the null hypothesis was accepted. It is concluded that the two groups of participants had the same performance for drive 2. This means that the effect of the delay was not significant.

CHAPTER VI

CONCLUSIONS AND DISCUSSION

In this chapter, the results of the cost trend analyses and total cost comparisons are used to draw conclusions about the research hypothesis and the expectations about participants learning to drive the simulator vehicle. Participants were expected to:

- 1) be able to drive the simulator vehicle because of the procedural similarities of driving a car in the real world and driving a simulator vehicle;
- 2) show improvement controlling the simulator vehicle as new skills were developed; and
- 3) retain the newly learned skills to drive the simulator vehicle after some period of delay.

Assuming these expectations were satisfied, the experiment was designed to test whether the driving performance differed with the length of the delay period.

6.1. Conclusions about Participant Performance

Forty two participants were recruited to participate in the experiment. All of them completed the first drive. For unknown reasons, likely attributable to level of interest, motivation, or scheduling issues, only 32 returned to complete drive 2. All those who returned successfully completed both drives without losing control of the simulator vehicle, thereby illustrating that they were capable of driving the simulator vehicle, as expected.

6.1.1 Patterns of Learning

Participants were expected to exhibit improvement in their driving performance as they learned new skills, building upon their existing driving skills. These skills included interacting with the simulator to control the simulator vehicle in a consistent manner and learning the specific lane changing task used in the experiment. All participants showed improvement by reducing the lane position and/or travel time of the lane changing task.

During the first drive, 14 participants improved both the accuracy and efficiency of the lane changing task, 14 reduced their lane position, and 4 reduced their travel time. A total of 22 of the participants improved their overall performance, indicated by a reduction in the cost. During the second drive, 12 participants reduced both their lane position and travel time, 7 reduced their lane position, and 13 reduced their travel time. A total of 21 participants improved their overall performance.

The improvement in either lane position or travel time illustrates learning. The balance between accuracy and efficiency are indicative of the different learning strategies taken by the participants. The different strategies were expected.

Showing that the new skills learned during the first drive were retained or quickly relearned during the second drive is more complicated. The complication arises from the many confounding factors that have the potential to impact the driving performance. For instance, the health, condition, emotion, and attention of the participants can change their performance. Through the trend analysis across both drives, all four possible learning patterns were found: 14 participants continued to improve, 7 improved on the first drive and then performance degraded on the second drive, 6 had performance degrade during drive 1 but improved during drive 2, and 5 had performance degrade on both drives. It is possible that these trends not only indicate the different learning strategies but also the differences in time to learn needed by different participants.

Another way to look at whether the learning was persistent is to compare the overall performance improvement of all the participants. The results of the test comparing the mean total cost for drive 1 and drive 2 (i.e. $\overline{TC}_1 > \overline{TC}_2$) indicated that the mean total cost of drive 2 was significantly less than the mean total cost of drive 1, at the 5% level of significance. Overall the participant performance better on the second drive, thus indicating that at least some of what was learned during the first drive was retained.

6.1.2 Effect of the Length of the Delay

The effect of the length of the delay was tested by comparing the mean total cost of drive 2 for the 1 day delay group and the 1 week delay group (i.e. $\overline{TC}_{2,day} \neq \overline{TC}_{2,week}$). The difference was not significant and the conclusion is that the performance on the second drive is comparable if the drive occurs either one day or one week after the first drive.

6.2. Discussion about Measures of Performance

The experimental scenario was designed to have participants make a series of 75 lane changes. The lane changes were identified by placing target arrows in the desired travel lanes. Participants were instructed to drive through the arrows. The data indicates that participants were able to do this task successfully. They maintained control of the vehicle and drove through all the arrows.

The analysis was focused on examining the trends in performance of individual participants and comparing the performance between the experimental groups. Performance was defined as the product of the accuracy and efficiency of the lane changing task. Some discussion about the chosen performance measures, particularly their interaction, is provided in the following sections.

6.2.1 Accuracy

The accuracy was measured as the absolute value of lane position at the moment the simulator vehicle reached a target arrow. Individuals may have developed particular strategies to accomplish the lane changing task. Some may have exhibited long sweeping lane changes whereby the simulator vehicle may have been only partially in the desired lane when the arrow was reached, resulting in large lane position values. Others may have tried to abruptly steer into the desired lane as quickly as possible and then steer straight through the arrow, resulting in small lane position values.

A change in strategy, from abrupt to sweeping, would therefore increase the lane change values over successive lane changes. An increase in lane position was observed for 4 participants during drive 1 and 13 participants during drive 2. However, all of these

participants decreased their travel time. One could infer that by going faster, they needed to make more sweeping lane changes, or that making more sweeping lane changes allowed them to go faster. The importance of this result is recognizing the interaction between the accuracy and efficiency of the task.

6.2.2 Efficiency

For each lane change, the efficiency was measured as the travel time from the previous target arrow. A decrease in travel time was observed for 18 participants during drive 1 and 25 participants during drive 2.

For some, this improved efficiency was achieved to the detriment of the accuracy of the task. Four of the 18 participants during drive 1 and 13 of the 25 participants during drive 2 had an increase in the lane position values. These are the same participants identified in the previous section who, by going faster needed to make more sweeping lane changes, or made more sweeping lane changes to go faster.

For others, the improved efficiency was achieved in concert with an improvement in accuracy. Fourteen participants during drive 1 and 12 participants during drive 2 improved both the efficiency and accuracy of the lane changing task.

6.2.3 Cost

The cost for each lane change was defined as the product of the absolute value of the lane position and the travel time from the previous target arrow. Other formulations, providing greater weight to either the accuracy or efficiency could have been used and may have resulted in slightly different results.

Those drives which would be impacted would be those where the participant improved either the accuracy or efficiency but not both. In the experiment, there were 21 drives where the lane position decreased and the travel time increased, of which 9 resulted in an increase in cost and 12 resulted in a decrease in cost. Similarly, there were 17 drives where the lane position increased and the travel time decreased, of which 12 resulted in an increase in cost and 4 resulted in a decrease in cost.

6.3 Main Contribution of the Thesis

In this thesis the impact of the length of delay on the performance of driving a simulator vehicle was examined. The results support the hypothesis that the performance after a one day delay is the same as the performance after a one week delay. Knowing that the delay between drives, up to a week long, does not impact performance provides the opportunity to stretch out experiments over multiple driving sessions. Spreading out the exposure time to the simulated environment, over multiple sessions, will likely reduce the occurrence and severity of the symptoms of simulator sickness. However, it should be recognized that recruiting volunteers to complete multiple driving sessions is more challenging than recruiting for a single session. Of the 42 volunteers recruited for this experiment, 10 did not return for the second drive.

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APPENDICES

A. SIMULATOR SICKNESS QUESTIONNAIRE



Cleveland State University

SIMULATOR SICKNESS QUESTIONNAIRE (SSQ) (PRE-DRIVE) (POST-DRIVE)

Please identify the severity of the symptoms of simulator sickness that you experienced during the study.

| Nausea symptoms | Absent (0) | Slight (1) | Moderate (2) | Severe (3) |
|--------------------------------|---------------|---------------|-----------------|---------------|
| General discomfort | | | | |
| Increased salivation | | | | |
| Sweating | | | | |
| Nausea | | | | |
| Difficulty concentrating | | | | |
| Stomach awareness | | | | |
| Burping | | | | |
| | | | | |
| Oculomotor symptoms | Absent (0) | Slight (1) | Moderate (2) | Severe (3) |
| General discomfort | | | | |
| Fatigue | | | | |
| Headache | | | | |
| Eyestrain | | | | |
| Difficulty focusing | | | | |
| Difficulty concentrating | | | | |
| Blurred vision | | | | |
| | | | | |
| Disorientation symptoms | Absent (0) | Slight (1) | Moderate (2) | Severe (3) |
| Difficulty focusing | | | | |
| Nausea | | | | |
| Fullness of head | | | | |
| Blurred vision | | | | |
| Dizzy (eyes open) | | | | |
| Dizzy (eyes closed) | | | | |
| Vertigo | | | | |

Warning: Do not drive or engage in other demanding or risky activities until you feel better.

Thank you for your participation. If you have any questions about the study, please feel free to contact the Principal Investigator: Jacqueline Jenkins, Assistant Professor, Civil & Environmental Engineering Department, Cleveland State University, FH 120, Tel: (216) 687-2190.

B. CONSENT FORM



Cleveland State University

INFORMED CONSENT

Project Title: Learning to Drive a Simulator

Principal Investigator: Jacqueline Jenkins, Assistant Professor, Civil & Environmental Engineering Department, Cleveland State University, Fenn Hall 120, Tel: (216) 687-2190.

Study: This is a driving simulation study where the driving performance data of the participants will be recorded and analyzed to determine whether participants have learned to control the vehicle.

Volunteers: You must possess a valid driver license to participate in this study. Your participation is strictly voluntary. You can choose to withdraw at any time without penalty.

Risks: Those who drive in the simulator can experience simulator sickness. The most common symptoms mimic those of motion sickness. Those who are not in their usual state of fitness (e.g. suffering from a cold or flu, hangover, etc.), those who experience symptoms while playing first person video, and those who are susceptible to motion sickness when traveling in a vehicle (e.g. passenger car, train, airplane, boat) may be more susceptible to simulator sickness.

To manage this risk, the investigator will:

1. ask you to complete a motion sickness and simulator sickness history to assess whether you may have an increased susceptibility to simulator sickness;
2. ask you to complete the simulator sickness questionnaire prior to driving to obtain a baseline measure of your pre-drive state;
3. observe you while you drive and stop the simulator if you exhibit signs of simulator sickness;
4. routinely ask how you are feeling while you are driving and stop the simulator if you report that you are experiencing simulator sickness; and
5. ask you to complete the simulator sickness questionnaire after driving to measure your post-drive state and compare it to your pre-drive state.

If you experience simulator sickness, you will be asked to remain in the laboratory until your symptoms subside. These symptoms typically subside within minutes, however should they persist, your condition will be evaluated every 20 minutes using the simulator sickness questionnaire. If symptoms persist beyond 2 hours, the investigator will arrange for transportation (i.e. taxi) home and will monitor your recovery by phone/email.

We recommend that you do not drive or engage in other demanding or risky activities until you feel better.

There are no further foreseeable risks for participating in this study.

Benefits: You will receive \$5.00 for your participation to offset any incurred costs (e.g. gas, transit fare, parking, etc.). This is paid so long as you attempt to drive the scenario, regardless of whether you complete the driving scenario.

Participation: To participate in this study you will be asked to:

- confirm that you have a valid driver license;
- read and sign this informed consent, of which you will receive a copy to take with you;
- complete the simulator sickness and motion sickness history;
- complete the simulator sickness questionnaire prior to driving;
- drive through simulated driving scenarios;
- provide verbal assessments about experiencing symptoms of simulator sickness; and
- complete the simulator sickness questionnaire after driving to document the severity of any symptoms of simulator sickness you experienced during the study.

The total time for these tasks shall not exceed one and a half hours and shall be completed during one or two sessions, depending upon your availability. Please note that the recuperation time needed for those experiencing symptoms of simulator sickness may exceed this participation time.

Data about your driving performance will be automatically collected by the driving simulator and electronically recorded. The file will be stored on a password protected drive.

The Principal Investigator will ensure that your participation in this study will be kept confidential. This consent form, the electronic data collected by the driving simulator, and the post experiment questionnaire, will be retained for a minimum of 3 years as required by Federal regulations.

I understand that if I have questions about my rights as a research subject I can contact the CSU Institutional Review Board at (216) 687-3630.

Signature: _____

Name: _____

Date signed: _____

C. MOTION SICKNESS QUESTIONNAIRE



Cleveland State University

MOTION SICKNESS AND SIMULATOR SICKNESS HISTORY

Age: _____

Sex: Male Female

Please report what severity of motion sickness you typically experience during the following activities.

| Activity | None | Slight | Moderate | Severe | Don't know |
|--|------|--------|----------|--------|------------|
| Driving a passenger car/pickup truck/passenger van | | | | | |
| Riding in a passenger car/pickup truck/passenger van | | | | | |
| Riding in a bus | | | | | |
| Flying in a plane | | | | | |
| Riding in a small boat | | | | | |
| Riding on a large ship | | | | | |
| Watching IMAX films | | | | | |
| Playing first person action video games | | | | | |
| Playing first person driving video games | | | | | |

D. PARTICIPANT DATA

Participant 1

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 1 | | | | | | |
| 2 | 5.483 | 0.348 | 1.908 | 4.583 | 0.043 | 0.197 |
| 3 | 7.100 | 0.369 | 2.620 | 5.033 | 0.869 | 4.374 |
| 4 | 6.417 | 0.087 | 0.558 | 6.117 | 0.455 | 2.783 |
| 5 | 5.800 | 0.483 | 2.801 | 7.283 | 0.348 | 2.535 |
| 6 | | | | | | |
| 7 | 5.067 | 0.146 | 0.740 | 5.767 | 0.189 | 1.090 |
| 8 | 5.283 | 0.575 | 3.038 | 7.567 | 0.373 | 2.822 |
| 9 | 5.133 | 0.040 | 0.205 | 7.233 | 0.354 | 2.561 |
| 10 | 5.167 | 0.722 | 3.730 | 7.267 | 0.422 | 3.067 |
| 11 | | | | | | |
| 12 | 4.233 | 0.623 | 2.637 | 6.600 | 0.331 | 2.185 |
| 13 | 4.683 | 0.553 | 2.590 | 7.300 | 0.384 | 2.803 |
| 14 | 4.733 | 0.670 | 3.171 | 7.317 | 0.362 | 2.649 |
| 15 | 4.900 | 0.373 | 1.828 | 7.717 | 0.302 | 2.330 |
| 16 | | | | | | |
| 17 | 3.867 | 0.153 | 0.592 | 5.950 | 0.247 | 1.470 |
| 18 | 4.350 | 0.084 | 0.365 | 7.517 | 0.143 | 1.075 |
| 19 | 4.467 | 0.314 | 1.403 | 7.684 | 0.333 | 2.559 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 20 | 5.067 | 0.440 | 2.229 | 7.450 | 0.498 | 3.710 |
| 21 | | | | | | |
| 22 | 4.133 | 0.654 | 2.703 | 6.317 | 0.298 | 1.882 |
| 23 | 4.483 | 0.714 | 3.201 | 7.617 | 0.168 | 1.280 |
| 24 | 4.767 | 0.307 | 1.463 | 7.934 | 0.359 | 2.848 |
| 25 | 5.283 | 0.614 | 3.244 | 8.000 | 0.418 | 3.344 |
| 26 | | | | | | |
| 27 | 5.183 | 0.425 | 2.203 | 5.800 | 0.220 | 1.276 |
| 28 | 5.517 | 0.816 | 4.502 | 7.750 | 0.383 | 2.968 |
| 29 | 5.700 | 0.693 | 3.950 | 9.017 | 0.335 | 3.021 |
| 30 | 6.083 | 0.463 | 2.817 | 8.717 | 0.405 | 3.530 |
| 31 | | | | | | |
| 32 | 4.417 | 0.164 | 0.724 | 5.550 | 0.370 | 2.054 |
| 33 | 4.917 | 0.698 | 3.432 | 6.883 | 0.094 | 0.647 |
| 34 | 5.100 | 0.468 | 2.387 | 7.350 | 0.292 | 2.146 |
| 35 | 5.483 | 0.445 | 2.440 | 7.600 | 0.160 | 1.216 |
| 36 | | | | | | |
| 37 | 5.017 | 0.447 | 2.242 | 5.833 | 0.321 | 1.873 |
| 38 | 5.383 | 0.774 | 4.167 | 6.834 | 0.161 | 1.100 |
| 39 | 5.333 | 0.194 | 1.035 | 6.533 | 0.296 | 1.934 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 40 | 5.500 | 0.223 | 1.227 | 6.650 | 0.298 | 1.982 |
| 41 | | | | | | |
| 42 | 4.783 | 0.515 | 2.463 | 4.433 | 0.450 | 1.995 |
| 43 | 5.183 | 0.610 | 3.162 | 5.250 | 0.315 | 1.654 |
| 44 | 5.200 | 0.315 | 1.638 | 6.000 | 0.408 | 2.448 |
| 45 | 5.317 | 1.061 | 5.641 | 6.683 | 0.415 | 2.774 |
| 46 | | | | | | |
| 47 | 5.567 | 0.407 | 2.266 | 4.750 | 0.239 | 1.135 |
| 48 | 6.017 | 0.499 | 3.002 | 5.717 | 0.317 | 1.812 |
| 49 | 6.117 | 0.191 | 1.168 | 5.833 | 0.278 | 1.622 |
| 50 | 6.617 | 0.086 | 0.569 | 6.600 | 0.314 | 2.072 |
| 51 | | | | | | |
| 52 | 5.100 | 0.210 | 1.071 | 4.317 | 0.424 | 1.830 |
| 53 | 5.700 | 0.791 | 4.509 | 5.233 | 0.606 | 3.171 |
| 54 | 5.817 | 0.557 | 3.240 | 6.017 | 0.350 | 2.106 |
| 55 | 6.083 | 0.310 | 1.886 | 6.967 | 0.293 | 2.041 |
| 56 | | | | | | |
| 57 | 4.667 | 0.263 | 1.227 | 5.633 | 0.465 | 2.620 |
| 58 | 5.133 | 0.229 | 1.176 | 6.783 | 0.324 | 2.198 |
| 59 | 5.017 | 0.259 | 1.299 | 7.600 | 0.305 | 2.318 |

| Lane | Drive 1 | | | Drive 2 | | |
|--------|---------|----------|-------|---------|----------|-------|
| Change | Travel | Lane | Cost | Travel | Lane | Cost |
| | Time | Position | | Time | Position | |
| 60 | 5.333 | 0.176 | 0.939 | 7.700 | 0.163 | 1.255 |
| 61 | | | | | | |
| 62 | 5.050 | 0.426 | 2.151 | 6.017 | 0.243 | 1.462 |
| 63 | 5.367 | 0.159 | 0.853 | 7.267 | 0.176 | 1.279 |
| 64 | 5.100 | 0.270 | 1.377 | 7.400 | 0.212 | 1.569 |
| 65 | 5.200 | 0.450 | 2.340 | 8.700 | 0.475 | 4.133 |
| 66 | | | | | | |
| 67 | 4.400 | 0.149 | 0.656 | 3.983 | 0.226 | 0.900 |
| 68 | 4.900 | 0.420 | 2.058 | 4.550 | 0.808 | 3.676 |
| 69 | 5.017 | 0.534 | 2.679 | 5.150 | 0.419 | 2.158 |
| 70 | 5.334 | 0.178 | 0.949 | 6.250 | 0.202 | 1.263 |
| 71 | | | | | | |
| 72 | 4.683 | 0.206 | 0.965 | 4.817 | 0.451 | 2.172 |
| 73 | 4.717 | 1.099 | 5.184 | 6.033 | 0.442 | 2.667 |
| 74 | 4.667 | 0.482 | 2.249 | 6.417 | 0.327 | 2.098 |
| 75 | 5.200 | 0.540 | 2.808 | 6.733 | 0.414 | 2.788 |

Participant 2

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 1 | | | | | | |
| 2 | 3.500 | 0.502 | 1.757 | 3.967 | 0.405 | 1.607 |
| 3 | 3.667 | 0.889 | 3.260 | 4.017 | 0.957 | 3.844 |
| 4 | 3.717 | 0.283 | 1.052 | 3.950 | 0.378 | 1.493 |
| 5 | 3.883 | 0.573 | 2.225 | 4.067 | 0.559 | 2.273 |
| 6 | | | | | | |
| 7 | 3.883 | 0.200 | 0.777 | 3.883 | 0.644 | 2.501 |
| 8 | 4.033 | 0.853 | 3.441 | 4.000 | 0.877 | 3.508 |
| 9 | 3.983 | 0.063 | 0.251 | 3.933 | 0.414 | 1.628 |
| 10 | 4.083 | 1.182 | 4.827 | 4.033 | 0.615 | 2.481 |
| 11 | | | | | | |
| 12 | 4.017 | 0.098 | 0.394 | 3.883 | 0.368 | 1.429 |
| 13 | 4.117 | 0.474 | 1.951 | 3.983 | 0.815 | 3.246 |
| 14 | 4.033 | 0.234 | 0.944 | 3.900 | 0.160 | 0.624 |
| 15 | 4.133 | 0.646 | 2.670 | 4.017 | 0.657 | 2.639 |
| 16 | | | | | | |
| 17 | 3.750 | 0.350 | 1.313 | 3.867 | 0.074 | 0.286 |
| 18 | 3.800 | 0.129 | 0.490 | 4.000 | 0.709 | 2.836 |
| 19 | 3.617 | 0.150 | 0.543 | 3.917 | 0.058 | 0.227 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 20 | 3.733 | 0.032 | 0.119 | 4.017 | 0.534 | 2.145 |
| 21 | | | | | | |
| 22 | 3.450 | 0.349 | 1.204 | 3.917 | 0.435 | 1.704 |
| 23 | 3.500 | 1.450 | 5.075 | 4.083 | 0.273 | 1.115 |
| 24 | 3.483 | 1.396 | 4.863 | 3.950 | 0.190 | 0.751 |
| 25 | 3.600 | 0.007 | 0.025 | 4.083 | 0.511 | 2.087 |
| 26 | | | | | | |
| 27 | 3.467 | 0.290 | 1.005 | 3.917 | 0.115 | 0.450 |
| 28 | 3.567 | 0.430 | 1.534 | 4.033 | 0.550 | 2.218 |
| 29 | 3.467 | 0.073 | 0.253 | 3.950 | 0.102 | 0.403 |
| 30 | 3.533 | 0.701 | 2.477 | 4.050 | 0.555 | 2.248 |
| 31 | | | | | | |
| 32 | 3.400 | 0.230 | 0.782 | 3.933 | 0.025 | 0.098 |
| 33 | 3.517 | 0.010 | 0.035 | 4.133 | 0.491 | 2.029 |
| 34 | 3.400 | 0.367 | 1.248 | 4.083 | 0.319 | 1.303 |
| 35 | 3.517 | 0.636 | 2.237 | 4.267 | 0.317 | 1.353 |
| 36 | | | | | | |
| 37 | 3.400 | 0.708 | 2.407 | 4.267 | 0.322 | 1.374 |
| 38 | 3.467 | 0.939 | 3.255 | 4.433 | 0.190 | 0.842 |
| 39 | 3.400 | 0.200 | 0.680 | 4.300 | 0.274 | 1.178 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 40 | 3.467 | 0.528 | 1.830 | 4.450 | 0.442 | 1.967 |
| 41 | | | | | | |
| 42 | 3.383 | 1.012 | 3.424 | 4.250 | 0.207 | 0.880 |
| 43 | 3.550 | 0.232 | 0.824 | 4.333 | 0.678 | 2.938 |
| 44 | 3.417 | 0.400 | 1.367 | 4.233 | 0.100 | 0.423 |
| 45 | 3.567 | 0.104 | 0.371 | 4.333 | 0.415 | 1.798 |
| 46 | | | | | | |
| 47 | 3.417 | 0.555 | 1.896 | 4.167 | 0.548 | 2.283 |
| 48 | 3.533 | 0.950 | 3.357 | 4.283 | 0.419 | 1.795 |
| 49 | 3.500 | 0.377 | 1.320 | 4.183 | 0.283 | 1.184 |
| 50 | 3.567 | 0.808 | 2.882 | 4.283 | 0.698 | 2.990 |
| 51 | | | | | | |
| 52 | 3.400 | 0.841 | 2.859 | 4.100 | 0.224 | 0.918 |
| 53 | 3.483 | 1.043 | 3.633 | 4.250 | 0.314 | 1.335 |
| 54 | 3.433 | 0.340 | 1.167 | 4.133 | 0.736 | 3.042 |
| 55 | 3.500 | 0.876 | 3.066 | 4.250 | 1.170 | 4.973 |
| 56 | | | | | | |
| 57 | 3.400 | 0.195 | 0.663 | 4.150 | 0.392 | 1.627 |
| 58 | 3.500 | 0.485 | 1.698 | 4.317 | 0.351 | 1.515 |
| 59 | 3.400 | 0.491 | 1.669 | 4.183 | 0.476 | 1.991 |

| Lane | Drive 1 | | | Drive 2 | | |
|--------|---------|----------|-------|---------|----------|-------|
| Change | Travel | Lane | Cost | Travel | Lane | Cost |
| | Time | Position | | Time | Position | |
| 60 | 3.483 | 0.706 | 2.459 | 4.333 | 0.197 | 0.854 |
| 61 | | | | | | |
| 62 | 3.383 | 0.590 | 1.996 | 4.250 | 0.572 | 2.431 |
| 63 | 3.467 | 0.392 | 1.359 | 4.350 | 0.814 | 3.541 |
| 64 | 3.383 | 0.209 | 0.707 | 4.283 | 0.496 | 2.125 |
| 65 | 3.483 | 0.241 | 0.839 | 4.400 | 0.567 | 2.495 |
| 66 | | | | | | |
| 67 | 3.367 | 0.146 | 0.492 | 4.200 | 0.870 | 3.654 |
| 68 | 3.517 | 0.373 | 1.312 | 4.367 | 0.317 | 1.384 |
| 69 | 3.400 | 0.011 | 0.037 | 4.233 | 0.211 | 0.893 |
| 70 | 3.550 | 0.164 | 0.582 | 4.333 | 0.638 | 2.765 |
| 71 | | | | | | |
| 72 | 3.417 | 0.396 | 1.353 | 3.650 | 0.195 | 0.712 |
| 73 | 3.517 | 0.729 | 2.564 | 3.700 | 0.224 | 0.829 |
| 74 | 3.467 | 0.097 | 0.336 | 3.517 | 0.273 | 0.960 |
| 75 | 3.533 | 0.798 | 2.820 | 3.567 | 0.675 | 2.408 |

Participant 3

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 1 | | | | | | |
| 2 | 5.450 | 0.591 | 3.221 | 4.583 | 0.090 | 0.413 |
| 3 | 5.467 | 0.916 | 5.008 | 4.650 | 0.791 | 3.678 |
| 4 | 5.167 | 0.044 | 0.227 | 4.667 | 0.454 | 2.119 |
| 5 | 5.050 | 0.077 | 0.389 | 4.933 | 0.344 | 1.697 |
| 6 | | | | | | |
| 7 | 4.383 | 0.040 | 0.175 | 4.233 | 0.348 | 1.473 |
| 8 | 4.500 | 0.737 | 3.317 | 4.467 | 1.070 | 4.779 |
| 9 | 4.617 | 0.101 | 0.466 | 4.483 | 0.651 | 2.919 |
| 10 | 5.700 | 0.753 | 4.292 | 4.650 | 0.874 | 4.064 |
| 11 | | | | | | |
| 12 | 5.683 | 0.322 | 1.830 | 4.417 | 0.671 | 2.964 |
| 13 | 6.083 | 0.637 | 3.875 | 4.533 | 0.521 | 2.362 |
| 14 | 6.017 | 0.582 | 3.502 | 4.467 | 0.379 | 1.693 |
| 15 | 6.067 | 0.087 | 0.528 | 4.533 | 0.244 | 1.106 |
| 16 | | | | | | |
| 17 | 4.467 | 0.404 | 1.805 | 4.217 | 0.687 | 2.897 |
| 18 | 4.750 | 0.150 | 0.713 | 4.550 | 0.054 | 0.246 |
| 19 | 5.067 | 0.153 | 0.775 | 4.767 | 0.398 | 1.897 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 20 | 6.067 | 0.306 | 1.856 | 5.283 | 0.600 | 3.170 |
| 21 | | | | | | |
| 22 | 4.700 | 0.329 | 1.546 | 4.333 | 0.106 | 0.459 |
| 23 | 5.083 | 0.287 | 1.459 | 4.483 | 0.093 | 0.417 |
| 24 | 4.833 | 0.355 | 1.716 | 4.333 | 0.238 | 1.031 |
| 25 | 4.967 | 0.610 | 3.030 | 4.517 | 0.307 | 1.387 |
| 26 | | | | | | |
| 27 | 4.250 | 0.355 | 1.509 | 4.050 | 0.638 | 2.584 |
| 28 | 4.417 | 0.322 | 1.422 | 4.400 | 0.321 | 1.412 |
| 29 | 4.517 | 0.448 | 2.024 | 4.467 | 0.298 | 1.331 |
| 30 | 4.767 | 0.260 | 1.239 | 4.733 | 0.661 | 3.129 |
| 31 | | | | | | |
| 32 | 4.383 | 0.511 | 2.240 | 4.217 | 0.083 | 0.350 |
| 33 | 4.667 | 0.064 | 0.299 | 4.367 | 0.245 | 1.070 |
| 34 | 4.617 | 0.274 | 1.265 | 4.217 | 0.252 | 1.063 |
| 35 | 4.817 | 0.142 | 0.684 | 4.417 | 0.478 | 2.111 |
| 36 | | | | | | |
| 37 | 4.517 | 0.350 | 1.581 | 4.150 | 0.024 | 0.100 |
| 38 | 4.733 | 0.096 | 0.454 | 4.333 | 0.184 | 0.797 |
| 39 | 4.600 | 0.067 | 0.308 | 4.167 | 0.231 | 0.963 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 40 | 4.817 | 0.120 | 0.578 | 4.400 | 0.332 | 1.461 |
| 41 | | | | | | |
| 42 | 4.017 | 0.233 | 0.936 | 4.000 | 0.399 | 1.596 |
| 43 | 4.117 | 0.132 | 0.543 | 4.233 | 0.584 | 2.472 |
| 44 | 3.950 | 0.094 | 0.371 | 4.633 | 0.123 | 0.570 |
| 45 | 4.283 | 0.366 | 1.568 | 4.867 | 0.334 | 1.625 |
| 46 | | | | | | |
| 47 | 4.550 | 0.169 | 0.769 | 4.417 | 0.494 | 2.182 |
| 48 | 4.850 | 0.044 | 0.213 | 5.000 | 0.338 | 1.690 |
| 49 | 4.650 | 0.039 | 0.181 | 4.883 | 0.247 | 1.206 |
| 50 | 4.817 | 0.195 | 0.939 | 4.833 | 0.161 | 0.778 |
| 51 | | | | | | |
| 52 | 4.183 | 0.051 | 0.213 | 3.983 | 0.147 | 0.586 |
| 53 | 4.500 | 0.342 | 1.539 | 4.233 | 0.391 | 1.655 |
| 54 | 4.483 | 0.060 | 0.269 | 4.583 | 0.336 | 1.540 |
| 55 | 4.667 | 0.222 | 1.036 | 4.800 | 0.107 | 0.514 |
| 56 | | | | | | |
| 57 | 4.117 | 0.416 | 1.713 | 4.450 | 0.079 | 0.352 |
| 58 | 4.300 | 0.343 | 1.475 | 4.917 | 0.171 | 0.841 |
| 59 | 4.350 | 0.258 | 1.122 | 4.917 | 0.173 | 0.851 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 60 | 4.750 | 0.103 | 0.489 | 5.183 | 0.230 | 1.192 |
| 61 | | | | | | |
| 62 | 4.117 | 0.097 | 0.399 | 4.050 | 0.123 | 0.498 |
| 63 | 4.483 | 0.006 | 0.027 | 4.617 | 0.103 | 0.476 |
| 64 | 4.350 | 0.052 | 0.226 | 4.817 | 0.118 | 0.568 |
| 65 | 4.450 | 0.651 | 2.897 | 5.067 | 0.159 | 0.806 |
| 66 | | | | | | |
| 67 | 4.150 | 0.328 | 1.361 | 4.050 | 0.542 | 2.195 |
| 68 | 4.600 | 0.571 | 2.627 | 4.100 | 0.412 | 1.689 |
| 69 | 4.750 | 0.330 | 1.568 | 3.967 | 0.691 | 2.741 |
| 70 | 4.967 | 0.272 | 1.351 | 4.050 | 0.192 | 0.778 |
| 71 | | | | | | |
| 72 | 4.350 | 0.125 | 0.544 | 3.617 | 0.556 | 2.011 |
| 73 | 4.833 | 0.461 | 2.228 | 3.983 | 0.266 | 1.060 |
| 74 | 5.150 | 0.193 | 0.994 | 4.300 | 0.228 | 0.980 |
| 75 | 5.733 | 0.484 | 2.775 | 4.800 | 0.363 | 1.742 |

Participant 4

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 1 | | | | | | |
| 2 | 2.367 | 0.711 | 1.683 | 3.600 | 0.183 | 0.659 |
| 3 | 2.450 | 0.546 | 1.338 | 3.817 | 0.329 | 1.256 |
| 4 | 2.367 | 0.128 | 0.303 | 3.867 | 0.420 | 1.624 |
| 5 | 2.417 | 0.733 | 1.771 | 4.150 | 0.121 | 0.502 |
| 6 | | | | | | |
| 7 | 2.433 | 0.015 | 0.037 | 4.217 | 0.220 | 0.928 |
| 8 | 2.567 | 1.105 | 2.836 | 4.433 | 0.533 | 2.363 |
| 9 | 2.617 | 1.378 | 3.606 | 4.417 | 0.039 | 0.172 |
| 10 | 2.667 | 0.210 | 0.560 | 4.583 | 0.429 | 1.966 |
| 11 | | | | | | |
| 12 | 3.067 | 0.162 | 0.497 | 4.250 | 0.199 | 0.846 |
| 13 | 3.283 | 0.044 | 0.144 | 4.800 | 0.227 | 1.090 |
| 14 | 3.217 | 0.047 | 0.151 | 5.017 | 0.056 | 0.281 |
| 15 | 3.483 | 0.872 | 3.038 | 5.433 | 0.143 | 0.777 |
| 16 | | | | | | |
| 17 | 3.350 | 0.332 | 1.112 | 4.800 | 0.432 | 2.074 |
| 18 | 3.467 | 0.194 | 0.673 | 5.433 | 0.298 | 1.619 |
| 19 | 3.300 | 0.331 | 1.092 | 5.450 | 0.477 | 2.600 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 20 | 3.417 | 0.775 | 2.648 | 5.700 | 0.296 | 1.687 |
| 21 | | | | | | |
| 22 | 3.150 | 0.154 | 0.485 | 4.483 | 0.038 | 0.170 |
| 23 | 3.267 | 0.074 | 0.242 | 4.833 | 0.078 | 0.377 |
| 24 | 3.150 | 0.506 | 1.594 | 4.733 | 0.245 | 1.160 |
| 25 | 3.250 | 0.495 | 1.609 | 4.983 | 0.554 | 2.761 |
| 26 | | | | | | |
| 27 | 2.983 | 0.314 | 0.937 | 4.767 | 0.217 | 1.034 |
| 28 | 3.100 | 0.340 | 1.054 | 5.067 | 0.253 | 1.282 |
| 29 | 2.967 | 0.519 | 1.540 | 4.983 | 0.055 | 0.274 |
| 30 | 3.067 | 0.026 | 0.080 | 5.033 | 0.343 | 1.726 |
| 31 | | | | | | |
| 32 | 2.900 | 0.134 | 0.389 | 4.233 | 0.204 | 0.864 |
| 33 | 3.050 | 0.394 | 1.202 | 4.517 | 0.041 | 0.185 |
| 34 | 2.933 | 0.249 | 0.730 | 4.433 | 0.267 | 1.184 |
| 35 | 3.050 | 0.522 | 1.592 | 4.683 | 0.131 | 0.614 |
| 36 | | | | | | |
| 37 | 2.917 | 0.100 | 0.292 | 3.950 | 0.314 | 1.240 |
| 38 | 3.017 | 0.405 | 1.222 | 4.483 | 0.188 | 0.843 |
| 39 | 2.917 | 0.372 | 1.085 | 4.467 | 0.208 | 0.929 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 40 | 3.017 | 0.345 | 1.041 | 4.667 | 0.297 | 1.386 |
| 41 | | | | | | |
| 42 | 2.917 | 0.415 | 1.210 | 4.050 | 0.344 | 1.393 |
| 43 | 3.000 | 0.860 | 2.580 | 4.617 | 0.439 | 2.027 |
| 44 | 2.983 | 0.597 | 1.781 | 4.783 | 0.123 | 0.588 |
| 45 | 3.100 | 0.585 | 1.814 | 5.017 | 0.199 | 0.998 |
| 46 | | | | | | |
| 47 | 2.933 | 0.229 | 0.672 | 4.350 | 0.364 | 1.583 |
| 48 | 3.067 | 0.229 | 0.702 | 4.717 | 0.040 | 0.189 |
| 49 | 2.950 | 0.226 | 0.667 | 4.717 | 0.185 | 0.873 |
| 50 | 3.133 | 0.497 | 1.557 | 4.917 | 0.141 | 0.693 |
| 51 | | | | | | |
| 52 | 3.033 | 0.490 | 1.486 | 4.183 | 0.196 | 0.820 |
| 53 | 3.133 | 0.600 | 1.880 | 4.567 | 0.378 | 1.726 |
| 54 | 3.083 | 0.833 | 2.568 | 4.667 | 0.378 | 1.764 |
| 55 | 3.183 | 0.078 | 0.248 | 4.933 | 0.150 | 0.740 |
| 56 | | | | | | |
| 57 | 3.033 | 0.331 | 1.004 | 4.183 | 0.243 | 1.017 |
| 58 | 3.167 | 0.413 | 1.308 | 4.650 | 0.080 | 0.372 |
| 59 | 3.000 | 0.840 | 2.520 | 4.583 | 0.066 | 0.303 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 60 | 3.117 | 0.241 | 0.751 | 4.833 | 0.167 | 0.807 |
| 61 | | | | | | |
| 62 | 2.933 | 0.066 | 0.194 | 3.967 | 0.255 | 1.012 |
| 63 | 3.050 | 0.008 | 0.024 | 4.500 | 0.167 | 0.752 |
| 64 | 2.917 | 0.106 | 0.309 | 4.400 | 0.050 | 0.220 |
| 65 | 3.033 | 0.651 | 1.975 | 4.633 | 0.135 | 0.626 |
| 66 | | | | | | |
| 67 | 3.033 | 0.038 | 0.115 | 4.150 | 0.470 | 1.951 |
| 68 | 3.200 | 0.174 | 0.557 | 4.517 | 0.169 | 0.763 |
| 69 | 3.133 | 0.014 | 0.044 | 4.533 | 0.284 | 1.287 |
| 70 | 3.350 | 0.759 | 2.543 | 4.800 | 0.206 | 0.989 |
| 71 | | | | | | |
| 72 | 3.150 | 0.012 | 0.038 | 4.133 | 0.140 | 0.579 |
| 73 | 3.350 | 0.355 | 1.189 | 4.583 | 0.204 | 0.935 |
| 74 | 3.317 | 0.136 | 0.451 | 4.683 | 0.197 | 0.923 |
| 75 | 3.500 | 0.540 | 1.890 | 4.917 | 0.238 | 1.170 |

Participant 5

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 1 | | | | | | |
| 2 | 2.950 | 0.001 | 0.003 | 2.517 | 0.343 | 0.863 |
| 3 | 3.250 | 0.150 | 0.488 | 2.800 | 0.108 | 0.302 |
| 4 | 3.333 | 0.131 | 0.437 | 2.917 | 0.437 | 1.275 |
| 5 | 3.483 | 0.477 | 1.662 | 3.233 | 0.089 | 0.288 |
| 6 | | | | | | |
| 7 | 2.817 | 0.061 | 0.172 | 3.100 | 0.022 | 0.068 |
| 8 | 3.033 | 0.208 | 0.631 | 3.250 | 0.336 | 1.092 |
| 9 | 2.983 | 0.202 | 0.603 | 3.117 | 0.222 | 0.692 |
| 10 | 3.133 | 0.545 | 1.708 | 3.300 | 0.081 | 0.267 |
| 11 | | | | | | |
| 12 | 2.983 | 0.469 | 1.399 | 2.983 | 0.058 | 0.173 |
| 13 | 3.267 | 0.087 | 0.284 | 3.167 | 0.313 | 0.991 |
| 14 | 3.267 | 0.123 | 0.402 | 3.050 | 0.094 | 0.287 |
| 15 | 3.300 | 0.114 | 0.376 | 3.133 | 0.008 | 0.025 |
| 16 | | | | | | |
| 17 | 2.967 | 0.148 | 0.439 | 2.733 | 0.498 | 1.361 |
| 18 | 3.150 | 0.158 | 0.498 | 3.050 | 0.027 | 0.082 |
| 19 | 3.167 | 0.043 | 0.136 | 3.117 | 0.250 | 0.779 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 20 | 3.433 | 0.162 | 0.556 | 3.250 | 0.482 | 1.567 |
| 21 | | | | | | |
| 22 | 3.167 | 0.087 | 0.276 | 3.267 | 0.159 | 0.519 |
| 23 | 3.417 | 0.188 | 0.642 | 3.433 | 0.542 | 1.861 |
| 24 | 3.317 | 0.051 | 0.169 | 3.400 | 0.178 | 0.605 |
| 25 | 3.350 | 0.240 | 0.804 | 3.500 | 0.016 | 0.056 |
| 26 | | | | | | |
| 27 | 2.917 | 0.055 | 0.160 | 3.283 | 0.321 | 1.054 |
| 28 | 3.167 | 0.448 | 1.419 | 3.550 | 0.380 | 1.349 |
| 29 | 3.200 | 0.221 | 0.707 | 3.567 | 0.102 | 0.364 |
| 30 | 3.183 | 0.208 | 0.662 | 3.767 | 0.256 | 0.964 |
| 31 | | | | | | |
| 32 | 2.900 | 0.029 | 0.084 | 3.350 | 0.094 | 0.315 |
| 33 | 3.067 | 0.327 | 1.003 | 3.533 | 0.138 | 0.488 |
| 34 | 3.000 | 0.119 | 0.357 | 3.367 | 0.025 | 0.084 |
| 35 | 3.150 | 0.121 | 0.381 | 3.433 | 0.353 | 1.212 |
| 36 | | | | | | |
| 37 | 2.950 | 0.103 | 0.304 | 3.150 | 0.241 | 0.759 |
| 38 | 3.250 | 0.291 | 0.946 | 3.350 | 0.241 | 0.807 |
| 39 | 3.267 | 0.265 | 0.866 | 3.367 | 0.438 | 1.475 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 40 | 3.483 | 0.251 | 0.874 | 3.400 | 0.235 | 0.799 |
| 41 | | | | | | |
| 42 | 3.083 | 0.234 | 0.722 | 2.983 | 0.100 | 0.298 |
| 43 | 3.317 | 0.053 | 0.176 | 3.283 | 0.302 | 0.992 |
| 44 | 3.283 | 0.149 | 0.489 | 3.383 | 1.118 | 3.783 |
| 45 | 3.533 | 0.376 | 1.329 | 3.450 | 0.693 | 2.391 |
| 46 | | | | | | |
| 47 | 3.350 | 0.495 | 1.658 | 2.883 | 1.219 | 3.515 |
| 48 | 3.550 | 0.076 | 0.270 | 3.150 | 0.101 | 0.318 |
| 49 | 3.417 | 0.189 | 0.646 | 3.183 | 0.120 | 0.382 |
| 50 | 3.533 | 0.072 | 0.254 | 3.517 | 0.479 | 1.685 |
| 51 | | | | | | |
| 52 | 3.150 | 0.015 | 0.047 | 3.233 | 0.478 | 1.546 |
| 53 | 3.400 | 0.076 | 0.258 | 3.583 | 0.209 | 0.749 |
| 54 | 3.433 | 0.177 | 0.608 | 3.617 | 0.002 | 0.007 |
| 55 | 3.600 | 0.077 | 0.277 | 3.783 | 0.620 | 2.346 |
| 56 | | | | | | |
| 57 | 3.267 | 0.147 | 0.480 | 3.167 | 0.022 | 0.070 |
| 58 | 3.383 | 0.096 | 0.325 | 3.517 | 0.226 | 0.795 |
| 59 | 3.317 | 0.070 | 0.232 | 3.567 | 0.241 | 0.860 |

| Lane | Drive 1 | | | Drive 2 | | |
|--------|---------|----------|-------|---------|----------|-------|
| Change | Travel | Lane | Cost | Travel | Lane | Cost |
| | Time | Position | | Time | Position | |
| 60 | 3.533 | 0.227 | 0.802 | 3.833 | 0.121 | 0.464 |
| 61 | | | | | | |
| 62 | 3.083 | 0.190 | 0.586 | 3.317 | 0.036 | 0.119 |
| 63 | 3.317 | 0.064 | 0.212 | 3.383 | 0.144 | 0.487 |
| 64 | 3.350 | 0.172 | 0.576 | 3.150 | 0.181 | 0.570 |
| 65 | 3.617 | 0.018 | 0.065 | 3.150 | 0.599 | 1.887 |
| 66 | | | | | | |
| 67 | 3.367 | 0.519 | 1.747 | 2.733 | 0.447 | 1.222 |
| 68 | 3.633 | 0.492 | 1.788 | 3.033 | 0.109 | 0.331 |
| 69 | 3.683 | 0.325 | 1.197 | 3.000 | 0.174 | 0.522 |
| 70 | 3.733 | 0.096 | 0.358 | 2.917 | 0.060 | 0.175 |
| 71 | | | | | | |
| 72 | 3.267 | 0.262 | 0.856 | 2.550 | 0.383 | 0.977 |
| 73 | 3.600 | 0.064 | 0.230 | 2.750 | 0.433 | 1.191 |
| 74 | 3.583 | 0.001 | 0.004 | 2.633 | 0.257 | 0.677 |
| 75 | 3.633 | 0.346 | 1.257 | 2.817 | 0.320 | 0.901 |

Participant 6

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 1 | | | | | | |
| 2 | 3.133 | 0.261 | 0.818 | 3.017 | 0.158 | 0.477 |
| 3 | 3.200 | 0.667 | 2.134 | 4.067 | 0.870 | 3.538 |
| 4 | 3.350 | 0.154 | 0.516 | 3.833 | 0.093 | 0.357 |
| 5 | 3.850 | 0.651 | 2.506 | 4.317 | 0.489 | 2.111 |
| 6 | | | | | | |
| 7 | 3.867 | 0.199 | 0.769 | 3.667 | 0.253 | 0.928 |
| 8 | 4.433 | 0.803 | 3.560 | 4.267 | 0.476 | 2.031 |
| 9 | 4.717 | 0.134 | 0.632 | 3.900 | 0.127 | 0.495 |
| 10 | 4.433 | 0.794 | 3.520 | 3.833 | 0.652 | 2.499 |
| 11 | | | | | | |
| 12 | 3.300 | 0.889 | 2.934 | 3.900 | 0.210 | 0.819 |
| 13 | 4.267 | 0.699 | 2.982 | 4.467 | 0.533 | 2.381 |
| 14 | 4.200 | 0.303 | 1.273 | 3.500 | 0.229 | 0.802 |
| 15 | 4.817 | 0.506 | 2.437 | 3.767 | 0.333 | 1.254 |
| 16 | | | | | | |
| 17 | 3.800 | 0.122 | 0.464 | 3.250 | 0.353 | 1.147 |
| 18 | 4.383 | 0.478 | 2.095 | 3.967 | 0.293 | 1.162 |
| 19 | 4.717 | 0.410 | 1.934 | 3.617 | 0.211 | 0.763 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 20 | 4.917 | 0.743 | 3.653 | 4.017 | 0.377 | 1.514 |
| 21 | | | | | | |
| 22 | 3.533 | 0.467 | 1.650 | 3.450 | 0.064 | 0.221 |
| 23 | 6.117 | 0.467 | 2.857 | 4.400 | 0.219 | 0.964 |
| 24 | 4.950 | 0.203 | 1.005 | 4.583 | 0.263 | 1.205 |
| 25 | 5.167 | 0.572 | 2.955 | 4.150 | 0.261 | 1.083 |
| 26 | | | | | | |
| 27 | 3.067 | 1.684 | 5.164 | 3.900 | 0.099 | 0.386 |
| 28 | 3.433 | 0.678 | 2.328 | 4.433 | 0.541 | 2.398 |
| 29 | 4.433 | 0.026 | 0.115 | 3.733 | 0.151 | 0.564 |
| 30 | 5.200 | 0.709 | 3.687 | 3.567 | 0.300 | 1.070 |
| 31 | | | | | | |
| 32 | 4.200 | 0.053 | 0.223 | 3.550 | 0.067 | 0.238 |
| 33 | 5.033 | 0.710 | 3.574 | 4.417 | 0.463 | 2.045 |
| 34 | 5.367 | 0.333 | 1.787 | 3.467 | 0.052 | 0.180 |
| 35 | 5.117 | 0.584 | 2.988 | 3.533 | 0.216 | 0.763 |
| 36 | | | | | | |
| 37 | 3.933 | 0.398 | 1.565 | 2.883 | 0.012 | 0.035 |
| 38 | 4.567 | 0.543 | 2.480 | 3.717 | 0.459 | 1.706 |
| 39 | 4.933 | 0.433 | 2.136 | 3.433 | 0.221 | 0.759 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 40 | 4.900 | 0.451 | 2.210 | 3.567 | 0.132 | 0.471 |
| 41 | | | | | | |
| 42 | 3.050 | 0.785 | 2.394 | 3.417 | 0.209 | 0.714 |
| 43 | 3.183 | 0.360 | 1.146 | 3.967 | 0.639 | 2.535 |
| 44 | 3.150 | 0.262 | 0.825 | 3.650 | 0.152 | 0.555 |
| 45 | 3.333 | 1.039 | 3.463 | 3.633 | 0.290 | 1.054 |
| 46 | | | | | | |
| 47 | 3.433 | 0.079 | 0.271 | 3.367 | 0.062 | 0.209 |
| 48 | 3.817 | 0.145 | 0.553 | 4.467 | 0.599 | 2.676 |
| 49 | 3.883 | 0.035 | 0.136 | 4.717 | 0.167 | 0.788 |
| 50 | 4.983 | 0.497 | 2.477 | 3.783 | 0.036 | 0.136 |
| 51 | | | | | | |
| 52 | 4.833 | 0.301 | 1.455 | 2.950 | 0.155 | 0.457 |
| 53 | 5.750 | 0.413 | 2.375 | 3.700 | 0.384 | 1.421 |
| 54 | 4.017 | 0.011 | 0.044 | 3.800 | 0.086 | 0.327 |
| 55 | 4.600 | 0.928 | 4.269 | 4.050 | 0.121 | 0.490 |
| 56 | | | | | | |
| 57 | 3.367 | 0.415 | 1.397 | 2.833 | 0.177 | 0.502 |
| 58 | 4.833 | 0.305 | 1.474 | 3.517 | 0.169 | 0.594 |
| 59 | 4.233 | 0.430 | 1.820 | 3.367 | 0.435 | 1.465 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 60 | 4.233 | 0.562 | 2.379 | 3.617 | 0.425 | 1.537 |
| 61 | | | | | | |
| 62 | 3.383 | 0.209 | 0.707 | 2.983 | 0.231 | 0.689 |
| 63 | 3.950 | 0.541 | 2.137 | 3.600 | 0.070 | 0.252 |
| 64 | 3.917 | 0.332 | 1.300 | 3.383 | 0.185 | 0.626 |
| 65 | 4.117 | 0.757 | 3.116 | 3.567 | 0.675 | 2.408 |
| 66 | | | | | | |
| 67 | 3.767 | 0.034 | 0.128 | 3.167 | 0.419 | 1.327 |
| 68 | 4.067 | 0.701 | 2.851 | 3.933 | 0.539 | 2.120 |
| 69 | 4.067 | 0.230 | 0.935 | 3.700 | 0.085 | 0.315 |
| 70 | 4.233 | 0.185 | 0.783 | 3.667 | 0.048 | 0.176 |
| 71 | | | | | | |
| 72 | 3.417 | 0.337 | 1.151 | 3.067 | 0.200 | 0.613 |
| 73 | 4.433 | 0.779 | 3.454 | 4.067 | 0.640 | 2.603 |
| 74 | 4.467 | 0.059 | 0.264 | 4.067 | 0.081 | 0.329 |
| 75 | 4.517 | 0.958 | 4.327 | 3.767 | 0.410 | 1.544 |

Participant 7

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 1 | | | | | | |
| 2 | 3.517 | 0.294 | 1.034 | 3.483 | 0.139 | 0.484 |
| 3 | 3.850 | 0.832 | 3.203 | 3.567 | 0.341 | 1.216 |
| 4 | 3.750 | 1.186 | 4.448 | 3.450 | 0.437 | 1.508 |
| 5 | 3.850 | 0.115 | 0.443 | 3.517 | 0.498 | 1.751 |
| 6 | | | | | | |
| 7 | 3.283 | 0.448 | 1.471 | 3.283 | 0.075 | 0.246 |
| 8 | 3.700 | 0.272 | 1.006 | 3.367 | 0.434 | 1.461 |
| 9 | 3.717 | 0.242 | 0.899 | 3.283 | 0.125 | 0.410 |
| 10 | 3.750 | 0.555 | 2.081 | 3.367 | 0.455 | 1.532 |
| 11 | | | | | | |
| 12 | 3.033 | 0.675 | 2.048 | 3.200 | 0.133 | 0.426 |
| 13 | 3.167 | 0.710 | 2.248 | 3.317 | 0.209 | 0.693 |
| 14 | 3.100 | 1.476 | 4.576 | 3.200 | 0.180 | 0.576 |
| 15 | 3.233 | 0.961 | 3.107 | 3.317 | 0.043 | 0.143 |
| 16 | | | | | | |
| 17 | 2.900 | 0.258 | 0.748 | 3.167 | 0.449 | 1.422 |
| 18 | 3.000 | 0.358 | 1.074 | 3.267 | 0.189 | 0.617 |
| 19 | 2.933 | 0.112 | 0.329 | 3.183 | 0.113 | 0.360 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|--------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 20 | 3.067 | 0.221 | 0.678 | 3.300 | 0.107 | 0.353 |
| 21 | | | | | | |
| 22 | 2.917 | 0.085 | 0.248 | 3.133 | 0.061 | 0.191 |
| 23 | 3.033 | 0.112 | 0.340 | 3.283 | 0.157 | 0.515 |
| 24 | 2.917 | 1.339 | 3.905 | 3.150 | 0.250 | 0.788 |
| 25 | 21.767 | 0.605 | 13.169 | 3.283 | 0.134 | 0.440 |
| 26 | | | | | | |
| 27 | 3.017 | 0.017 | 0.051 | 3.117 | 0.092 | 0.287 |
| 28 | 2.800 | 0.196 | 0.549 | 3.233 | 0.555 | 1.795 |
| 29 | 2.850 | 0.095 | 0.271 | 3.133 | 0.295 | 0.924 |
| 30 | 13.600 | 0.340 | 4.624 | 3.233 | 0.295 | 0.954 |
| 31 | | | | | | |
| 32 | 2.733 | 0.169 | 0.462 | 3.083 | 0.387 | 1.193 |
| 33 | 2.733 | 0.186 | 0.508 | 3.200 | 0.106 | 0.339 |
| 34 | 2.950 | 0.242 | 0.714 | 3.083 | 0.226 | 0.697 |
| 35 | 15.067 | 0.219 | 3.300 | 3.217 | 0.269 | 0.865 |
| 36 | | | | | | |
| 37 | 3.067 | 0.030 | 0.092 | 3.067 | 0.003 | 0.009 |
| 38 | 2.983 | 0.428 | 1.277 | 3.150 | 0.911 | 2.870 |
| 39 | 3.133 | 0.043 | 0.135 | 3.117 | 0.101 | 0.315 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 40 | 15.284 | 0.305 | 4.662 | 3.200 | 0.138 | 0.442 |
| 41 | | | | | | |
| 42 | 3.350 | 0.174 | 0.583 | 3.017 | 0.041 | 0.124 |
| 43 | 3.517 | 0.205 | 0.721 | 3.150 | 0.116 | 0.365 |
| 44 | 3.717 | 0.351 | 1.305 | 3.050 | 0.263 | 0.802 |
| 45 | 17.234 | 0.076 | 1.310 | 3.183 | 0.130 | 0.414 |
| 46 | | | | | | |
| 47 | 3.517 | 0.497 | 1.748 | 3.050 | 0.341 | 1.040 |
| 48 | 3.550 | 0.330 | 1.172 | 3.200 | 0.149 | 0.477 |
| 49 | 3.583 | 0.273 | 0.978 | 3.083 | 0.099 | 0.305 |
| 50 | 16.450 | 0.168 | 2.764 | 3.217 | 0.026 | 0.084 |
| 51 | | | | | | |
| 52 | 3.717 | 0.457 | 1.699 | 3.067 | 0.035 | 0.107 |
| 53 | 3.717 | 0.057 | 0.212 | 3.150 | 0.377 | 1.188 |
| 54 | 3.767 | 0.249 | 0.938 | 3.100 | 0.276 | 0.856 |
| 55 | 17.300 | 0.162 | 2.803 | 3.200 | 0.157 | 0.502 |
| 56 | | | | | | |
| 57 | 3.550 | 0.027 | 0.096 | 3.033 | 0.039 | 0.118 |
| 58 | 3.450 | 0.409 | 1.411 | 3.167 | 0.228 | 0.722 |
| 59 | 3.600 | 0.389 | 1.400 | 3.067 | 0.110 | 0.337 |

| Lane | Drive 1 | | | Drive 2 | | |
|--------|---------|----------|-------|---------|----------|-------|
| Change | Travel | Lane | Cost | Travel | Lane | Cost |
| | Time | Position | | Time | Position | |
| 60 | 16.567 | 0.011 | 0.182 | 3.200 | 0.030 | 0.096 |
| 61 | | | | | | |
| 62 | 3.483 | 0.085 | 0.296 | 3.050 | 0.083 | 0.253 |
| 63 | 3.517 | 0.103 | 0.362 | 3.167 | 0.099 | 0.314 |
| 64 | 3.783 | 0.209 | 0.791 | 3.050 | 0.659 | 2.010 |
| 65 | 17.917 | 0.046 | 0.824 | 3.167 | 0.713 | 2.258 |
| 66 | | | | | | |
| 67 | 3.583 | 0.371 | 1.329 | 3.033 | 0.196 | 0.595 |
| 68 | 3.550 | 0.053 | 0.188 | 3.183 | 0.187 | 0.595 |
| 69 | 3.717 | 0.060 | 0.223 | 3.033 | 0.471 | 1.429 |
| 70 | 16.900 | 0.068 | 1.149 | 3.150 | 0.238 | 0.750 |
| 71 | | | | | | |
| 72 | 3.483 | 0.638 | 2.222 | 3.000 | 0.092 | 0.276 |
| 73 | 3.517 | 0.071 | 0.250 | 3.100 | 0.248 | 0.769 |
| 74 | 3.650 | 0.354 | 1.292 | 3.017 | 0.050 | 0.151 |
| 75 | 5.317 | 0.998 | 5.306 | 3.117 | 0.029 | 0.090 |

Participant 8

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 1 | | | | | | |
| 2 | 2.650 | 0.475 | 1.259 | 2.967 | 0.265 | 0.786 |
| 3 | 2.733 | 0.961 | 2.627 | 3.133 | 0.118 | 0.370 |
| 4 | 2.667 | 0.146 | 0.389 | 3.083 | 0.439 | 1.354 |
| 5 | 2.800 | 1.049 | 2.937 | 3.250 | 0.145 | 0.471 |
| 6 | | | | | | |
| 7 | 2.733 | 0.365 | 0.998 | 2.833 | 0.090 | 0.255 |
| 8 | 2.917 | 0.783 | 2.284 | 2.900 | 0.180 | 0.522 |
| 9 | 2.917 | 0.242 | 0.706 | 2.817 | 0.514 | 1.448 |
| 10 | 3.117 | 0.198 | 0.617 | 2.933 | 0.344 | 1.009 |
| 11 | | | | | | |
| 12 | 2.800 | 0.102 | 0.286 | 2.717 | 0.243 | 0.660 |
| 13 | 2.950 | 0.155 | 0.457 | 2.833 | 0.666 | 1.887 |
| 14 | 2.817 | 0.134 | 0.377 | 2.833 | 0.528 | 1.496 |
| 15 | 2.933 | 1.602 | 4.699 | 2.950 | 0.277 | 0.817 |
| 16 | | | | | | |
| 17 | 2.667 | 0.225 | 0.600 | 2.700 | 0.477 | 1.288 |
| 18 | 2.817 | 0.128 | 0.361 | 2.750 | 0.162 | 0.446 |
| 19 | 2.767 | 0.230 | 0.636 | 2.667 | 0.070 | 0.187 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 20 | 2.867 | 0.143 | 0.410 | 2.767 | 0.378 | 1.046 |
| 21 | | | | | | |
| 22 | 2.667 | 0.140 | 0.373 | 2.667 | 0.284 | 0.757 |
| 23 | 2.883 | 0.733 | 2.114 | 2.983 | 0.367 | 1.095 |
| 24 | 2.833 | 0.617 | 1.748 | 3.117 | 0.522 | 1.627 |
| 25 | 2.867 | 0.162 | 0.464 | 3.200 | 0.412 | 1.318 |
| 26 | | | | | | |
| 27 | 2.667 | 0.768 | 2.048 | 2.783 | 0.052 | 0.145 |
| 28 | 2.917 | 0.952 | 2.777 | 3.067 | 0.279 | 0.856 |
| 29 | 2.867 | 0.174 | 0.499 | 3.000 | 0.018 | 0.054 |
| 30 | 2.917 | 0.249 | 0.726 | 3.050 | 0.077 | 0.235 |
| 31 | | | | | | |
| 32 | 2.600 | 0.107 | 0.278 | 2.683 | 0.266 | 0.714 |
| 33 | 2.817 | 0.646 | 1.820 | 2.883 | 0.952 | 2.745 |
| 34 | 2.900 | 0.388 | 1.125 | 2.867 | 0.173 | 0.496 |
| 35 | 2.983 | 0.086 | 0.257 | 2.950 | 0.358 | 1.056 |
| 36 | | | | | | |
| 37 | 2.483 | 0.281 | 0.698 | 2.667 | 0.209 | 0.557 |
| 38 | 2.633 | 0.211 | 0.556 | 2.750 | 0.609 | 1.675 |
| 39 | 2.550 | 0.071 | 0.181 | 2.700 | 0.431 | 1.164 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 40 | 2.633 | 0.309 | 0.814 | 2.800 | 0.099 | 0.277 |
| 41 | | | | | | |
| 42 | 2.417 | 0.484 | 1.170 | 2.583 | 0.409 | 1.057 |
| 43 | 2.500 | 0.942 | 2.355 | 2.633 | 0.604 | 1.591 |
| 44 | 2.450 | 0.059 | 0.145 | 2.583 | 0.566 | 1.462 |
| 45 | 2.550 | 0.152 | 0.388 | 2.667 | 0.218 | 0.581 |
| 46 | | | | | | |
| 47 | 2.450 | 0.220 | 0.539 | 2.533 | 0.010 | 0.025 |
| 48 | 2.567 | 0.547 | 1.404 | 2.633 | 0.870 | 2.291 |
| 49 | 2.567 | 0.692 | 1.776 | 2.617 | 0.236 | 0.618 |
| 50 | 2.650 | 0.712 | 1.887 | 2.700 | 0.086 | 0.232 |
| 51 | | | | | | |
| 52 | 2.450 | 0.422 | 1.034 | 2.650 | 0.394 | 1.044 |
| 53 | 2.550 | 0.350 | 0.893 | 2.717 | 0.930 | 2.527 |
| 54 | 2.467 | 0.228 | 0.562 | 2.683 | 0.714 | 1.916 |
| 55 | 2.533 | 0.440 | 1.115 | 2.783 | 0.007 | 0.019 |
| 56 | | | | | | |
| 57 | 2.367 | 0.384 | 0.909 | 2.583 | 0.480 | 1.240 |
| 58 | 2.417 | 0.235 | 0.568 | 2.683 | 0.335 | 0.899 |
| 59 | 2.367 | 0.265 | 0.627 | 2.583 | 0.187 | 0.483 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 60 | 2.483 | 0.899 | 2.233 | 2.717 | 0.173 | 0.470 |
| 61 | | | | | | |
| 62 | 2.400 | 0.138 | 0.331 | 2.533 | 0.457 | 1.158 |
| 63 | 2.517 | 0.136 | 0.342 | 2.600 | 0.462 | 1.201 |
| 64 | 2.450 | 0.205 | 0.502 | 2.567 | 0.215 | 0.552 |
| 65 | 2.617 | 0.622 | 1.628 | 2.633 | 0.551 | 1.451 |
| 66 | | | | | | |
| 67 | 2.567 | 0.249 | 0.639 | 2.483 | 0.027 | 0.067 |
| 68 | 2.817 | 0.231 | 0.651 | 2.567 | 0.461 | 1.183 |
| 69 | 2.717 | 0.209 | 0.568 | 2.500 | 0.226 | 0.565 |
| 70 | 2.900 | 0.351 | 1.018 | 2.583 | 0.397 | 1.026 |
| 71 | | | | | | |
| 72 | 2.600 | 0.086 | 0.224 | 2.450 | 0.382 | 0.936 |
| 73 | 2.633 | 0.519 | 1.367 | 2.500 | 0.975 | 2.438 |
| 74 | 2.583 | 0.372 | 0.961 | 2.450 | 0.664 | 1.627 |
| 75 | 2.650 | 0.387 | 1.026 | 2.517 | 0.615 | 1.548 |

Participant 9

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 1 | | | | | | |
| 2 | 2.867 | 0.302 | 0.866 | 2.967 | 0.265 | 0.786 |
| 3 | 3.300 | 1.657 | 5.468 | 3.133 | 0.118 | 0.370 |
| 4 | 3.550 | 0.124 | 0.440 | 3.083 | 0.439 | 1.354 |
| 5 | 3.800 | 0.500 | 1.900 | 3.250 | 0.145 | 0.471 |
| 6 | | | | | | |
| 7 | 3.683 | 0.354 | 1.304 | 2.833 | 0.090 | 0.255 |
| 8 | 3.900 | 0.426 | 1.661 | 2.900 | 0.180 | 0.522 |
| 9 | 3.817 | 0.329 | 1.256 | 2.817 | 0.514 | 1.448 |
| 10 | 3.900 | 0.411 | 1.603 | 2.933 | 0.344 | 1.009 |
| 11 | | | | | | |
| 12 | 3.417 | 0.112 | 0.383 | 2.717 | 0.243 | 0.660 |
| 13 | 3.650 | 0.388 | 1.416 | 2.833 | 0.666 | 1.887 |
| 14 | 3.567 | 0.214 | 0.763 | 2.833 | 0.528 | 1.496 |
| 15 | 3.650 | 0.588 | 2.146 | 2.950 | 0.277 | 0.817 |
| 16 | | | | | | |
| 17 | 3.283 | 0.283 | 0.929 | 2.700 | 0.477 | 1.288 |
| 18 | 3.400 | 0.490 | 1.666 | 2.750 | 0.162 | 0.446 |
| 19 | 3.317 | 0.491 | 1.629 | 2.667 | 0.070 | 0.187 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 20 | 3.433 | 0.305 | 1.047 | 2.767 | 0.378 | 1.046 |
| 21 | | | | | | |
| 22 | 3.333 | 0.253 | 0.843 | 2.667 | 0.284 | 0.757 |
| 23 | 3.450 | 0.347 | 1.197 | 2.983 | 0.367 | 1.095 |
| 24 | 3.367 | 0.368 | 1.239 | 3.117 | 0.522 | 1.627 |
| 25 | 3.500 | 0.111 | 0.389 | 3.200 | 0.412 | 1.318 |
| 26 | | | | | | |
| 27 | 2.783 | 0.080 | 0.223 | 2.783 | 0.052 | 0.145 |
| 28 | 3.033 | 0.485 | 1.471 | 3.067 | 0.279 | 0.856 |
| 29 | 2.933 | 0.267 | 0.783 | 3.000 | 0.018 | 0.054 |
| 30 | 3.067 | 0.515 | 1.579 | 3.050 | 0.077 | 0.235 |
| 31 | | | | | | |
| 32 | 2.800 | 0.116 | 0.325 | 2.683 | 0.266 | 0.714 |
| 33 | 2.967 | 0.551 | 1.635 | 2.883 | 0.952 | 2.745 |
| 34 | 3.050 | 0.265 | 0.808 | 2.867 | 0.173 | 0.496 |
| 35 | 3.233 | 0.546 | 1.765 | 2.950 | 0.358 | 1.056 |
| 36 | | | | | | |
| 37 | 3.333 | 0.017 | 0.057 | 2.667 | 0.209 | 0.557 |
| 38 | 3.450 | 0.728 | 2.512 | 2.750 | 0.609 | 1.675 |
| 39 | 3.400 | 0.192 | 0.653 | 2.700 | 0.431 | 1.164 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 40 | 3.517 | 0.475 | 1.670 | 2.800 | 0.099 | 0.277 |
| 41 | | | | | | |
| 42 | 3.450 | 0.113 | 0.390 | 2.583 | 0.409 | 1.057 |
| 43 | 3.567 | 0.330 | 1.177 | 2.633 | 0.604 | 1.591 |
| 44 | 3.467 | 0.168 | 0.582 | 2.583 | 0.566 | 1.462 |
| 45 | 3.600 | 0.140 | 0.504 | 2.667 | 0.218 | 0.581 |
| 46 | | | | | | |
| 47 | 3.050 | 0.063 | 0.192 | 2.533 | 0.010 | 0.025 |
| 48 | 3.117 | 0.234 | 0.729 | 2.633 | 0.870 | 2.291 |
| 49 | 2.983 | 0.443 | 1.322 | 2.617 | 0.236 | 0.618 |
| 50 | 3.050 | 0.130 | 0.397 | 2.700 | 0.086 | 0.232 |
| 51 | | | | | | |
| 52 | 2.750 | 0.137 | 0.377 | 2.650 | 0.394 | 1.044 |
| 53 | 2.983 | 0.109 | 0.325 | 2.717 | 0.930 | 2.527 |
| 54 | 2.933 | 0.032 | 0.094 | 2.683 | 0.714 | 1.916 |
| 55 | 3.100 | 0.278 | 0.862 | 2.783 | 0.007 | 0.019 |
| 56 | | | | | | |
| 57 | 2.633 | 0.029 | 0.076 | 2.583 | 0.480 | 1.240 |
| 58 | 2.733 | 0.002 | 0.005 | 2.683 | 0.335 | 0.899 |
| 59 | 2.633 | 0.284 | 0.748 | 2.583 | 0.187 | 0.483 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 60 | 2.750 | 0.097 | 0.267 | 2.717 | 0.173 | 0.470 |
| 61 | | | | | | |
| 62 | 2.433 | 0.289 | 0.703 | 2.533 | 0.457 | 1.158 |
| 63 | 2.567 | 0.043 | 0.110 | 2.600 | 0.462 | 1.201 |
| 64 | 2.467 | 0.293 | 0.723 | 2.567 | 0.215 | 0.552 |
| 65 | 2.583 | 0.795 | 2.054 | 2.633 | 0.551 | 1.451 |
| 66 | | | | | | |
| 67 | 2.500 | 0.149 | 0.373 | 2.483 | 0.027 | 0.067 |
| 68 | 2.633 | 0.325 | 0.856 | 2.567 | 0.461 | 1.183 |
| 69 | 2.583 | 0.373 | 0.964 | 2.500 | 0.226 | 0.565 |
| 70 | 2.800 | 0.355 | 0.994 | 2.583 | 0.397 | 1.026 |
| 71 | | | | | | |
| 72 | 2.483 | 0.067 | 0.166 | 2.450 | 0.382 | 0.936 |
| 73 | 2.600 | 0.643 | 1.672 | 2.500 | 0.975 | 2.438 |
| 74 | 2.617 | 0.097 | 0.254 | 2.450 | 0.664 | 1.627 |
| 75 | 2.750 | 0.055 | 0.151 | 2.517 | 0.615 | 1.548 |

Participant 10

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 1 | | | | | | |
| 2 | 3.867 | 0.127 | 0.491 | 4.700 | 0.019 | 0.089 |
| 3 | 4.050 | 0.434 | 1.758 | 5.050 | 0.025 | 0.126 |
| 4 | 3.950 | 0.056 | 0.221 | 5.033 | 0.244 | 1.228 |
| 5 | 4.033 | 0.396 | 1.597 | 5.367 | 0.391 | 2.098 |
| 6 | | | | | | |
| 7 | 3.567 | 0.340 | 1.213 | 4.600 | 0.059 | 0.271 |
| 8 | 3.767 | 0.403 | 1.518 | 4.733 | 0.074 | 0.350 |
| 9 | 3.717 | 0.004 | 0.015 | 4.533 | 0.727 | 3.296 |
| 10 | 3.900 | 0.198 | 0.772 | 4.700 | 0.007 | 0.033 |
| 11 | | | | | | |
| 12 | 3.067 | 0.171 | 0.524 | 4.583 | 0.169 | 0.775 |
| 13 | 3.333 | 0.117 | 0.390 | 4.783 | 0.046 | 0.220 |
| 14 | 3.350 | 0.227 | 0.760 | 4.733 | 0.127 | 0.601 |
| 15 | 3.600 | 0.131 | 0.472 | 5.100 | 0.154 | 0.785 |
| 16 | | | | | | |
| 17 | 3.167 | 0.435 | 1.378 | 4.367 | 0.012 | 0.052 |
| 18 | 3.433 | 0.276 | 0.948 | 4.533 | 0.440 | 1.995 |
| 19 | 3.533 | 0.073 | 0.258 | 4.600 | 0.077 | 0.354 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 20 | 3.800 | 0.063 | 0.239 | 4.967 | 0.010 | 0.050 |
| 21 | | | | | | |
| 22 | 3.167 | 0.066 | 0.209 | 4.500 | 0.308 | 1.386 |
| 23 | 3.317 | 0.286 | 0.949 | 4.717 | 0.468 | 2.207 |
| 24 | 3.250 | 0.494 | 1.606 | 4.650 | 0.011 | 0.051 |
| 25 | 3.417 | 0.197 | 0.673 | 4.867 | 0.198 | 0.964 |
| 26 | | | | | | |
| 27 | 2.733 | 0.270 | 0.738 | 4.633 | 0.067 | 0.310 |
| 28 | 2.900 | 0.353 | 1.024 | 4.800 | 0.133 | 0.638 |
| 29 | 2.917 | 0.638 | 1.861 | 4.633 | 0.226 | 1.047 |
| 30 | 3.100 | 0.215 | 0.667 | 4.833 | 0.165 | 0.798 |
| 31 | | | | | | |
| 32 | 2.917 | 0.337 | 0.983 | 4.600 | 0.254 | 1.168 |
| 33 | 3.050 | 0.330 | 1.007 | 4.733 | 0.456 | 2.158 |
| 34 | 3.017 | 0.270 | 0.815 | 4.583 | 0.023 | 0.105 |
| 35 | 3.100 | 0.716 | 2.220 | 4.717 | 0.436 | 2.057 |
| 36 | | | | | | |
| 37 | 3.033 | 0.098 | 0.297 | 4.467 | 0.002 | 0.009 |
| 38 | 3.100 | 0.770 | 2.387 | 4.617 | 0.189 | 0.873 |
| 39 | 3.050 | 0.226 | 0.689 | 4.467 | 0.029 | 0.130 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 40 | 3.150 | 0.249 | 0.784 | 4.617 | 0.248 | 1.145 |
| 41 | | | | | | |
| 42 | 2.600 | 0.162 | 0.421 | 4.450 | 0.110 | 0.490 |
| 43 | 2.850 | 0.334 | 0.952 | 4.617 | 0.238 | 1.099 |
| 44 | 2.983 | 0.013 | 0.039 | 4.467 | 0.053 | 0.237 |
| 45 | 3.350 | 0.019 | 0.064 | 4.650 | 0.059 | 0.274 |
| 46 | | | | | | |
| 47 | 2.467 | 0.372 | 0.918 | 4.450 | 0.051 | 0.227 |
| 48 | 2.483 | 0.502 | 1.247 | 4.600 | 0.421 | 1.937 |
| 49 | 2.350 | 0.405 | 0.952 | 4.467 | 0.081 | 0.362 |
| 50 | 2.400 | 1.181 | 2.834 | 4.583 | 0.439 | 2.012 |
| 51 | | | | | | |
| 52 | 2.267 | 0.424 | 0.961 | 4.433 | 0.120 | 0.532 |
| 53 | 2.317 | 0.423 | 0.980 | 4.600 | 0.010 | 0.046 |
| 54 | 2.250 | 0.144 | 0.324 | 4.433 | 0.026 | 0.115 |
| 55 | 2.283 | 1.017 | 2.322 | 4.583 | 0.388 | 1.778 |
| 56 | | | | | | |
| 57 | 2.000 | 1.005 | 2.010 | 4.550 | 0.025 | 0.114 |
| 58 | 2.033 | 1.353 | 2.751 | 4.700 | 0.524 | 2.463 |
| 59 | 2.067 | 0.960 | 1.984 | 4.617 | 0.196 | 0.905 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 60 | 2.117 | 0.816 | 1.727 | 4.783 | 0.385 | 1.842 |
| 61 | | | | | | |
| 62 | 2.217 | 0.027 | 0.060 | 4.150 | 0.007 | 0.029 |
| 63 | 2.217 | 1.105 | 2.449 | 4.233 | 0.430 | 1.820 |
| 64 | 2.167 | 0.789 | 1.710 | 4.100 | 0.339 | 1.390 |
| 65 | 2.200 | 0.013 | 0.029 | 4.383 | 0.026 | 0.114 |
| 66 | | | | | | |
| 67 | 2.183 | 0.422 | 0.921 | 4.667 | 0.117 | 0.546 |
| 68 | 2.283 | 0.174 | 0.397 | 4.867 | 0.319 | 1.552 |
| 69 | 2.283 | 0.422 | 0.964 | 4.783 | 0.048 | 0.230 |
| 70 | 2.450 | 0.041 | 0.100 | 5.033 | 0.002 | 0.010 |
| 71 | | | | | | |
| 72 | 2.250 | 0.390 | 0.878 | 4.550 | 0.083 | 0.378 |
| 73 | 2.267 | 0.122 | 0.277 | 4.833 | 0.080 | 0.387 |
| 74 | 2.150 | 0.382 | 0.821 | 4.733 | 0.029 | 0.137 |
| 75 | 2.167 | 1.304 | 2.825 | 5.017 | 0.084 | 0.421 |

Participant 11

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 1 | | | | | | |
| 2 | 2.733 | 0.968 | 2.646 | 2.800 | 1.383 | 3.872 |
| 3 | 2.750 | 1.272 | 3.498 | 2.833 | 1.650 | 4.675 |
| 4 | 2.733 | 0.074 | 0.202 | 2.767 | 0.939 | 2.598 |
| 5 | 2.767 | 0.581 | 1.607 | 2.783 | 1.086 | 3.023 |
| 6 | | | | | | |
| 7 | 2.933 | 0.447 | 1.311 | 2.583 | 1.019 | 2.632 |
| 8 | 3.000 | 0.495 | 1.485 | 2.600 | 1.138 | 2.959 |
| 9 | 2.917 | 0.474 | 1.383 | 2.567 | 0.920 | 2.361 |
| 10 | 2.967 | 1.553 | 4.607 | 2.550 | 1.219 | 3.109 |
| 11 | | | | | | |
| 12 | 2.733 | 0.587 | 1.604 | 2.450 | 1.531 | 3.751 |
| 13 | 2.750 | 1.333 | 3.666 | 2.467 | 1.658 | 4.090 |
| 14 | 2.700 | 0.605 | 1.634 | 2.450 | 0.901 | 2.208 |
| 15 | 2.700 | 1.475 | 3.983 | 2.467 | 1.159 | 2.859 |
| 16 | | | | | | |
| 17 | 2.550 | 0.319 | 0.813 | 2.383 | 0.843 | 2.009 |
| 18 | 2.583 | 0.655 | 1.692 | 2.383 | 0.513 | 1.223 |
| 19 | 2.567 | 1.048 | 2.690 | 2.383 | 1.006 | 2.398 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 20 | 2.550 | 1.555 | 3.965 | 2.417 | 1.101 | 2.661 |
| 21 | | | | | | |
| 22 | 2.450 | 0.848 | 2.078 | 2.317 | 1.353 | 3.135 |
| 23 | 2.483 | 1.277 | 3.171 | 2.367 | 0.858 | 2.031 |
| 24 | 2.433 | 1.034 | 2.516 | 2.317 | 1.401 | 3.246 |
| 25 | 2.467 | 1.008 | 2.486 | 2.350 | 0.663 | 1.558 |
| 26 | | | | | | |
| 27 | 2.383 | 1.663 | 3.964 | 2.283 | 1.142 | 2.608 |
| 28 | 2.433 | 1.639 | 3.988 | 2.317 | 1.366 | 3.165 |
| 29 | 2.433 | 1.080 | 2.628 | 2.300 | 0.913 | 2.100 |
| 30 | 2.450 | 1.215 | 2.977 | 2.333 | 1.369 | 3.194 |
| 31 | | | | | | |
| 32 | 2.417 | 1.099 | 2.656 | 2.283 | 1.067 | 2.436 |
| 33 | 2.467 | 1.397 | 3.446 | 2.350 | 1.259 | 2.959 |
| 34 | 2.450 | 0.479 | 1.174 | 2.350 | 0.198 | 0.465 |
| 35 | 2.467 | 1.294 | 3.192 | 2.383 | 1.765 | 4.207 |
| 36 | | | | | | |
| 37 | 2.433 | 0.700 | 1.703 | 2.417 | 0.771 | 1.863 |
| 38 | 2.450 | 1.510 | 3.700 | 2.450 | 1.135 | 2.781 |
| 39 | 2.450 | 0.837 | 2.051 | 2.467 | 0.683 | 1.685 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 40 | 2.467 | 1.632 | 4.026 | 2.483 | 0.987 | 2.451 |
| 41 | | | | | | |
| 42 | 2.400 | 0.983 | 2.359 | 2.433 | 0.896 | 2.180 |
| 43 | 2.433 | 1.359 | 3.307 | 2.467 | 1.176 | 2.901 |
| 44 | 2.417 | 0.919 | 2.221 | 2.433 | 0.612 | 1.489 |
| 45 | 2.433 | 1.217 | 2.961 | 2.450 | 1.640 | 4.018 |
| 46 | | | | | | |
| 47 | 2.367 | 1.052 | 2.490 | 2.350 | 0.935 | 2.197 |
| 48 | 2.383 | 1.716 | 4.090 | 2.400 | 0.813 | 1.951 |
| 49 | 2.367 | 0.717 | 1.697 | 2.333 | 0.557 | 1.300 |
| 50 | 2.383 | 1.483 | 3.535 | 2.400 | 0.774 | 1.858 |
| 51 | | | | | | |
| 52 | 2.300 | 1.124 | 2.585 | 2.283 | 1.222 | 2.790 |
| 53 | 2.350 | 1.381 | 3.245 | 2.333 | 1.433 | 3.344 |
| 54 | 2.333 | 1.051 | 2.452 | 2.300 | 1.156 | 2.659 |
| 55 | 2.367 | 0.658 | 1.557 | 2.317 | 1.395 | 3.232 |
| 56 | | | | | | |
| 57 | 2.300 | 1.011 | 2.325 | 2.250 | 1.035 | 2.329 |
| 58 | 2.317 | 1.523 | 3.528 | 2.267 | 1.210 | 2.743 |
| 59 | 2.317 | 1.486 | 3.443 | 2.267 | 1.413 | 3.203 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 60 | 2.300 | 1.783 | 4.101 | 2.283 | 1.371 | 3.131 |
| 61 | | | | | | |
| 62 | 2.283 | 1.079 | 2.464 | 2.233 | 0.873 | 1.950 |
| 63 | 2.300 | 1.200 | 2.760 | 2.250 | 1.325 | 2.981 |
| 64 | 2.300 | 0.979 | 2.252 | 2.250 | 1.167 | 2.626 |
| 65 | 2.317 | 1.514 | 3.507 | 2.283 | 0.942 | 2.151 |
| 66 | | | | | | |
| 67 | 2.283 | 1.033 | 2.359 | 2.217 | 0.945 | 2.095 |
| 68 | 2.317 | 1.292 | 2.993 | 2.233 | 1.101 | 2.459 |
| 69 | 2.317 | 1.088 | 2.521 | 2.233 | 1.251 | 2.794 |
| 70 | 2.350 | 1.153 | 2.710 | 2.267 | 0.929 | 2.106 |
| 71 | | | | | | |
| 72 | 2.300 | 0.944 | 2.171 | 2.183 | 0.928 | 2.026 |
| 73 | 2.333 | 0.990 | 2.310 | 2.250 | 0.789 | 1.775 |
| 74 | 2.300 | 1.507 | 3.466 | 2.200 | 1.171 | 2.576 |
| 75 | 2.317 | 1.350 | 3.128 | 2.233 | 1.608 | 3.591 |

Participant 12

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 1 | | | | | | |
| 2 | 2.550 | 0.160 | 0.408 | 2.650 | 0.725 | 1.921 |
| 3 | 2.583 | 0.708 | 1.829 | 2.900 | 0.881 | 2.555 |
| 4 | 2.533 | 1.075 | 2.723 | 3.017 | 0.504 | 1.520 |
| 5 | 2.567 | 0.994 | 2.551 | 3.283 | 0.057 | 0.187 |
| 6 | | | | | | |
| 7 | 2.433 | 1.589 | 3.867 | 3.683 | 0.538 | 1.982 |
| 8 | 2.483 | 0.908 | 2.255 | 3.917 | 0.524 | 2.052 |
| 9 | 2.433 | 0.404 | 0.983 | 3.867 | 0.381 | 1.473 |
| 10 | 2.467 | 0.828 | 2.042 | 4.050 | 0.678 | 2.746 |
| 11 | | | | | | |
| 12 | 2.650 | 1.443 | 3.824 | 3.617 | 0.242 | 0.875 |
| 13 | 2.900 | 0.113 | 0.328 | 4.017 | 0.607 | 2.438 |
| 14 | 2.950 | 0.049 | 0.145 | 4.050 | 0.455 | 1.843 |
| 15 | 3.133 | 0.008 | 0.025 | 3.967 | 0.542 | 2.150 |
| 16 | | | | | | |
| 17 | 3.350 | 0.003 | 0.010 | 3.450 | 0.073 | 0.252 |
| 18 | 3.567 | 0.131 | 0.467 | 3.800 | 0.395 | 1.501 |
| 19 | 3.450 | 0.106 | 0.366 | 3.767 | 0.057 | 0.215 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 20 | 3.700 | 0.878 | 3.249 | 3.950 | 0.066 | 0.261 |
| 21 | | | | | | |
| 22 | 3.467 | 0.631 | 2.188 | 3.200 | 0.023 | 0.074 |
| 23 | 3.733 | 0.006 | 0.022 | 3.550 | 0.527 | 1.871 |
| 24 | 3.650 | 0.037 | 0.135 | 3.550 | 0.237 | 0.841 |
| 25 | 3.850 | 0.715 | 2.753 | 3.733 | 0.261 | 0.974 |
| 26 | | | | | | |
| 27 | 3.133 | 0.279 | 0.874 | 3.183 | 0.126 | 0.401 |
| 28 | 3.317 | 0.256 | 0.849 | 3.400 | 0.187 | 0.636 |
| 29 | 3.267 | 0.773 | 2.525 | 3.367 | 0.248 | 0.835 |
| 30 | 3.417 | 0.300 | 1.025 | 3.533 | 0.078 | 0.276 |
| 31 | | | | | | |
| 32 | 3.250 | 0.069 | 0.224 | 2.933 | 0.295 | 0.865 |
| 33 | 3.517 | 0.138 | 0.485 | 3.283 | 0.239 | 0.785 |
| 34 | 3.600 | 0.014 | 0.050 | 3.400 | 0.116 | 0.394 |
| 35 | 3.883 | 0.525 | 2.039 | 3.600 | 0.543 | 1.955 |
| 36 | | | | | | |
| 37 | 3.583 | 0.876 | 3.139 | 3.033 | 0.167 | 0.507 |
| 38 | 3.883 | 0.770 | 2.990 | 3.317 | 0.203 | 0.673 |
| 39 | 3.950 | 0.151 | 0.596 | 3.283 | 0.311 | 1.021 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 40 | 4.167 | 0.377 | 1.571 | 3.550 | 0.132 | 0.469 |
| 41 | | | | | | |
| 42 | 3.350 | 0.298 | 0.998 | 2.967 | 0.021 | 0.062 |
| 43 | 3.583 | 1.167 | 4.182 | 3.350 | 0.185 | 0.620 |
| 44 | 3.683 | 0.163 | 0.600 | 3.550 | 0.161 | 0.572 |
| 45 | 3.933 | 0.386 | 1.518 | 3.817 | 0.392 | 1.496 |
| 46 | | | | | | |
| 47 | 3.017 | 0.410 | 1.237 | 3.100 | 0.218 | 0.676 |
| 48 | 3.267 | 1.570 | 5.129 | 3.533 | 0.784 | 2.770 |
| 49 | 3.400 | 0.304 | 1.034 | 3.583 | 0.198 | 0.710 |
| 50 | 3.583 | 0.657 | 2.354 | 3.683 | 0.070 | 0.258 |
| 51 | | | | | | |
| 52 | 3.150 | 0.201 | 0.633 | 3.317 | 0.362 | 1.201 |
| 53 | 3.317 | 0.216 | 0.716 | 3.583 | 0.201 | 0.720 |
| 54 | 3.317 | 0.032 | 0.106 | 3.483 | 0.454 | 1.581 |
| 55 | 3.433 | 0.545 | 1.871 | 3.583 | 0.247 | 0.885 |
| 56 | | | | | | |
| 57 | 3.017 | 0.223 | 0.673 | 3.050 | 0.199 | 0.607 |
| 58 | 3.250 | 0.056 | 0.182 | 3.283 | 0.836 | 2.745 |
| 59 | 3.183 | 0.439 | 1.398 | 3.250 | 0.116 | 0.377 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 60 | 3.367 | 0.189 | 0.636 | 3.367 | 0.517 | 1.741 |
| 61 | | | | | | |
| 62 | 3.050 | 0.309 | 0.942 | 2.700 | 0.197 | 0.532 |
| 63 | 3.267 | 0.470 | 1.535 | 2.983 | 0.034 | 0.101 |
| 64 | 3.250 | 0.330 | 1.073 | 2.917 | 0.148 | 0.432 |
| 65 | 3.450 | 0.547 | 1.887 | 3.133 | 0.026 | 0.081 |
| 66 | | | | | | |
| 67 | 3.000 | 0.582 | 1.746 | 2.750 | 0.566 | 1.557 |
| 68 | 3.233 | 0.028 | 0.091 | 3.033 | 0.347 | 1.053 |
| 69 | 3.250 | 0.147 | 0.478 | 3.000 | 0.331 | 0.993 |
| 70 | 3.383 | 0.966 | 3.268 | 3.233 | 1.278 | 4.132 |
| 71 | | | | | | |
| 72 | 2.800 | 0.859 | 2.405 | 3.150 | 0.448 | 1.411 |
| 73 | 3.017 | 1.293 | 3.901 | 3.550 | 0.311 | 1.104 |
| 74 | 3.133 | 0.285 | 0.893 | 3.633 | 0.150 | 0.545 |
| 75 | 3.383 | 0.518 | 1.753 | 3.850 | 0.107 | 0.412 |

Participant 13

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 1 | | | | | | |
| 2 | 2.983 | 0.732 | 2.184 | 2.933 | 1.337 | 3.922 |
| 3 | 3.267 | 1.251 | 4.087 | 3.067 | 0.879 | 2.696 |
| 4 | 3.333 | 0.802 | 2.673 | 3.100 | 0.605 | 1.876 |
| 5 | 3.733 | 0.858 | 3.203 | 3.233 | 0.383 | 1.238 |
| 6 | | | | | | |
| 7 | 3.817 | 0.121 | 0.462 | 3.367 | 0.640 | 2.155 |
| 8 | 4.083 | 0.912 | 3.724 | 3.533 | 0.944 | 3.336 |
| 9 | 3.950 | 0.771 | 3.046 | 3.500 | 0.092 | 0.322 |
| 10 | 3.883 | 0.970 | 3.767 | 3.617 | 0.564 | 2.040 |
| 11 | | | | | | |
| 12 | 3.200 | 0.344 | 1.101 | 3.400 | 0.322 | 1.095 |
| 13 | 3.200 | 0.207 | 0.662 | 3.467 | 0.560 | 1.941 |
| 14 | 3.167 | 0.389 | 1.232 | 3.367 | 0.183 | 0.616 |
| 15 | 3.133 | 0.932 | 2.920 | 3.433 | 0.722 | 2.479 |
| 16 | | | | | | |
| 17 | 2.867 | 0.861 | 2.468 | 3.250 | 0.470 | 1.528 |
| 18 | 2.917 | 1.434 | 4.183 | 3.383 | 0.375 | 1.269 |
| 19 | 2.900 | 0.711 | 2.062 | 3.283 | 0.479 | 1.573 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 20 | 2.900 | 1.187 | 3.442 | 3.367 | 0.634 | 2.135 |
| 21 | | | | | | |
| 22 | 2.750 | 0.233 | 0.641 | 3.267 | 0.170 | 0.555 |
| 23 | 2.850 | 0.903 | 2.574 | 3.350 | 0.862 | 2.888 |
| 24 | 2.850 | 0.576 | 1.642 | 3.283 | 0.536 | 1.760 |
| 25 | 2.950 | 0.599 | 1.767 | 3.367 | 0.383 | 1.289 |
| 26 | | | | | | |
| 27 | 2.967 | 0.642 | 1.905 | 3.250 | 0.234 | 0.761 |
| 28 | 3.050 | 0.951 | 2.901 | 3.333 | 0.189 | 0.630 |
| 29 | 3.000 | 0.224 | 0.672 | 3.233 | 0.019 | 0.061 |
| 30 | 3.183 | 0.540 | 1.719 | 3.317 | 0.854 | 2.832 |
| 31 | | | | | | |
| 32 | 3.583 | 0.169 | 0.606 | 3.217 | 0.122 | 0.392 |
| 33 | 3.700 | 0.817 | 3.023 | 3.333 | 0.649 | 2.163 |
| 34 | 3.917 | 0.285 | 1.116 | 3.267 | 0.458 | 1.496 |
| 35 | 4.117 | 0.534 | 2.198 | 3.350 | 0.220 | 0.737 |
| 36 | | | | | | |
| 37 | 3.633 | 0.495 | 1.799 | 3.250 | 0.353 | 1.147 |
| 38 | 3.717 | 0.260 | 0.966 | 3.367 | 0.308 | 1.037 |
| 39 | 3.600 | 0.580 | 2.088 | 3.267 | 0.646 | 2.110 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 40 | 3.700 | 0.291 | 1.077 | 3.383 | 0.284 | 0.961 |
| 41 | | | | | | |
| 42 | 3.500 | 0.535 | 1.873 | 3.300 | 0.395 | 1.304 |
| 43 | 3.600 | 0.880 | 3.168 | 3.400 | 0.681 | 2.315 |
| 44 | 3.517 | 0.125 | 0.440 | 3.350 | 0.117 | 0.392 |
| 45 | 3.600 | 0.896 | 3.226 | 3.450 | 0.531 | 1.832 |
| 46 | | | | | | |
| 47 | 3.400 | 0.126 | 0.428 | 3.383 | 0.124 | 0.420 |
| 48 | 3.500 | 0.991 | 3.469 | 3.500 | 0.571 | 1.999 |
| 49 | 3.417 | 0.278 | 0.950 | 3.400 | 0.359 | 1.221 |
| 50 | 3.517 | 0.244 | 0.858 | 3.517 | 0.274 | 0.964 |
| 51 | | | | | | |
| 52 | 3.383 | 0.563 | 1.905 | 3.400 | 0.613 | 2.084 |
| 53 | 3.500 | 0.968 | 3.388 | 3.500 | 0.772 | 2.702 |
| 54 | 3.450 | 0.071 | 0.245 | 3.450 | 0.007 | 0.024 |
| 55 | 3.533 | 0.526 | 1.859 | 3.533 | 0.738 | 2.608 |
| 56 | | | | | | |
| 57 | 3.467 | 0.737 | 2.555 | 3.433 | 0.473 | 1.624 |
| 58 | 3.617 | 0.047 | 0.170 | 3.567 | 0.006 | 0.021 |
| 59 | 3.500 | 0.848 | 2.968 | 3.450 | 0.323 | 1.114 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 60 | 3.617 | 0.220 | 0.796 | 3.583 | 0.064 | 0.229 |
| 61 | | | | | | |
| 62 | 3.500 | 0.803 | 2.811 | 3.433 | 0.760 | 2.609 |
| 63 | 3.617 | 0.191 | 0.691 | 3.583 | 0.084 | 0.301 |
| 64 | 3.517 | 0.808 | 2.842 | 3.450 | 0.543 | 1.873 |
| 65 | 3.617 | 0.986 | 3.566 | 3.567 | 0.671 | 2.393 |
| 66 | | | | | | |
| 67 | 3.533 | 0.240 | 0.848 | 3.450 | 0.244 | 0.842 |
| 68 | 3.617 | 0.859 | 3.107 | 3.567 | 0.182 | 0.649 |
| 69 | 3.533 | 0.273 | 0.965 | 3.467 | 0.536 | 1.858 |
| 70 | 3.667 | 0.227 | 0.832 | 3.583 | 0.211 | 0.756 |
| 71 | | | | | | |
| 72 | 3.517 | 0.651 | 2.289 | 3.450 | 0.545 | 1.880 |
| 73 | 3.633 | 0.976 | 3.546 | 3.567 | 0.179 | 0.638 |
| 74 | 3.583 | 0.274 | 0.982 | 3.483 | 0.285 | 0.993 |
| 75 | 3.667 | 0.614 | 2.251 | 3.583 | 0.672 | 2.408 |

Participant 14

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 1 | | | | | | |
| 2 | 2.383 | 0.815 | 1.942 | 2.417 | 1.060 | 2.562 |
| 3 | 2.467 | 0.924 | 2.279 | 2.600 | 0.980 | 2.548 |
| 4 | 2.433 | 0.263 | 0.640 | 2.667 | 0.223 | 0.595 |
| 5 | 2.467 | 1.028 | 2.536 | 2.817 | 0.980 | 2.760 |
| 6 | | | | | | |
| 7 | 2.117 | 0.528 | 1.118 | 2.733 | 0.052 | 0.142 |
| 8 | 2.233 | 0.548 | 1.224 | 2.950 | 0.894 | 2.637 |
| 9 | 2.200 | 0.607 | 1.335 | 3.000 | 0.489 | 1.467 |
| 10 | 2.250 | 0.711 | 1.600 | 3.200 | 0.125 | 0.400 |
| 11 | | | | | | |
| 12 | 2.667 | 0.084 | 0.224 | 3.167 | 0.047 | 0.149 |
| 13 | 2.967 | 0.136 | 0.403 | 3.650 | 0.622 | 2.270 |
| 14 | 3.000 | 0.191 | 0.573 | 3.900 | 0.387 | 1.509 |
| 15 | 3.183 | 1.570 | 4.998 | 3.850 | 0.726 | 2.795 |
| 16 | | | | | | |
| 17 | 2.633 | 0.213 | 0.561 | 3.067 | 0.099 | 0.304 |
| 18 | 2.767 | 1.099 | 3.041 | 3.433 | 1.644 | 5.644 |
| 19 | 2.883 | 0.073 | 0.210 | 3.717 | 0.451 | 1.676 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 20 | 3.067 | 0.915 | 2.806 | 3.800 | 0.763 | 2.899 |
| 21 | | | | | | |
| 22 | 2.867 | 0.052 | 0.149 | 3.000 | 1.160 | 3.480 |
| 23 | 3.133 | 1.631 | 5.111 | 3.233 | 1.421 | 4.595 |
| 24 | 3.350 | 0.019 | 0.064 | 3.267 | 0.255 | 0.833 |
| 25 | 3.533 | 0.411 | 1.452 | 3.333 | 0.856 | 2.853 |
| 26 | | | | | | |
| 27 | 2.767 | 0.448 | 1.239 | 3.083 | 0.343 | 1.058 |
| 28 | 3.033 | 1.771 | 5.372 | 3.400 | 1.364 | 4.638 |
| 29 | 3.267 | 0.091 | 0.297 | 3.500 | 0.350 | 1.225 |
| 30 | 3.517 | 0.909 | 3.197 | 3.633 | 0.593 | 2.155 |
| 31 | | | | | | |
| 32 | 2.867 | 0.822 | 2.356 | 3.133 | 0.314 | 0.984 |
| 33 | 3.133 | 1.509 | 4.728 | 3.533 | 0.840 | 2.968 |
| 34 | 3.350 | 0.024 | 0.080 | 3.850 | 0.086 | 0.331 |
| 35 | 3.517 | 0.923 | 3.246 | 4.333 | 0.712 | 3.085 |
| 36 | | | | | | |
| 37 | 2.900 | 0.384 | 1.114 | 3.150 | 0.351 | 1.106 |
| 38 | 3.200 | 0.618 | 1.978 | 3.383 | 0.694 | 2.348 |
| 39 | 3.350 | 0.047 | 0.157 | 3.300 | 0.276 | 0.911 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 40 | 3.600 | 0.923 | 3.323 | 3.417 | 0.373 | 1.274 |
| 41 | | | | | | |
| 42 | 3.000 | 0.695 | 2.085 | 3.183 | 0.772 | 2.458 |
| 43 | 3.250 | 1.453 | 4.722 | 3.517 | 0.803 | 2.824 |
| 44 | 3.450 | 0.396 | 1.366 | 3.583 | 0.326 | 1.168 |
| 45 | 3.633 | 0.808 | 2.936 | 3.583 | 0.795 | 2.849 |
| 46 | | | | | | |
| 47 | 2.750 | 0.976 | 2.684 | 2.917 | 0.592 | 1.727 |
| 48 | 2.983 | 1.469 | 4.383 | 3.267 | 0.558 | 1.823 |
| 49 | 3.183 | 0.063 | 0.201 | 3.567 | 0.099 | 0.353 |
| 50 | 3.433 | 1.003 | 3.444 | 4.100 | 0.634 | 2.599 |
| 51 | | | | | | |
| 52 | 3.483 | 0.320 | 1.115 | 3.233 | 0.284 | 0.918 |
| 53 | 3.917 | 0.644 | 2.522 | 3.650 | 0.707 | 2.581 |
| 54 | 3.967 | 0.297 | 1.178 | 3.983 | 0.119 | 0.474 |
| 55 | 3.983 | 0.226 | 0.900 | 4.250 | 0.275 | 1.169 |
| 56 | | | | | | |
| 57 | 3.367 | 0.162 | 0.545 | 3.133 | 0.112 | 0.351 |
| 58 | 3.467 | 0.387 | 1.342 | 3.550 | 0.678 | 2.407 |
| 59 | 3.533 | 0.147 | 0.519 | 3.933 | 0.138 | 0.543 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 60 | 3.533 | 0.827 | 2.922 | 4.683 | 0.333 | 1.560 |
| 61 | | | | | | |
| 62 | 2.950 | 0.431 | 1.271 | 3.100 | 0.575 | 1.783 |
| 63 | 3.233 | 0.772 | 2.496 | 3.533 | 0.701 | 2.477 |
| 64 | 3.267 | 0.052 | 0.170 | 3.850 | 0.270 | 1.040 |
| 65 | 3.500 | 1.786 | 6.251 | 4.517 | 0.150 | 0.678 |
| 66 | | | | | | |
| 67 | 3.283 | 0.002 | 0.007 | 3.983 | 0.310 | 1.235 |
| 68 | 3.650 | 0.895 | 3.267 | 5.100 | 0.470 | 2.397 |
| 69 | 3.883 | 0.063 | 0.245 | 4.650 | 0.110 | 0.512 |
| 70 | 4.200 | 0.202 | 0.848 | 4.267 | 0.547 | 2.334 |
| 71 | | | | | | |
| 72 | 3.450 | 0.222 | 0.766 | 3.500 | 0.148 | 0.518 |
| 73 | 3.750 | 0.667 | 2.501 | 4.850 | 0.643 | 3.119 |
| 74 | 3.983 | 0.232 | 0.924 | 4.300 | 0.205 | 0.882 |
| 75 | 4.217 | 0.622 | 2.623 | 4.017 | 0.259 | 1.040 |

Participant 15

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 1 | | | | | | |
| 2 | 6.733 | 0.046 | 0.310 | 6.367 | 0.141 | 0.898 |
| 3 | 6.983 | 0.378 | 2.640 | 6.733 | 0.232 | 1.562 |
| 4 | 6.300 | 0.295 | 1.859 | 5.617 | 0.192 | 1.078 |
| 5 | 6.117 | 0.596 | 3.646 | 5.383 | 0.008 | 0.043 |
| 6 | | | | | | |
| 7 | 5.950 | 0.390 | 2.321 | 5.683 | 0.214 | 1.216 |
| 8 | 5.867 | 0.070 | 0.411 | 6.700 | 0.277 | 1.856 |
| 9 | 5.300 | 0.202 | 1.071 | 5.133 | 0.100 | 0.513 |
| 10 | 6.350 | 0.428 | 2.718 | 5.783 | 0.358 | 2.070 |
| 11 | | | | | | |
| 12 | 6.783 | 0.067 | 0.454 | 5.317 | 0.198 | 1.053 |
| 13 | 6.600 | 0.232 | 1.531 | 5.917 | 0.493 | 2.917 |
| 14 | 6.433 | 0.112 | 0.721 | 5.667 | 0.197 | 1.116 |
| 15 | 5.300 | 0.659 | 3.493 | 5.400 | 0.088 | 0.475 |
| 16 | | | | | | |
| 17 | 6.000 | 0.045 | 0.270 | 6.500 | 0.350 | 2.275 |
| 18 | 5.267 | 0.310 | 1.633 | 5.517 | 0.086 | 0.474 |
| 19 | 6.083 | 0.133 | 0.809 | 5.867 | 0.196 | 1.150 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|---------|----------|-------|---------|----------|-------|
| | Travel | Lane | Cost | Travel | Lane | Cost |
| | Time | Position | | Time | Position | |
| 20 | 5.700 | 0.429 | 2.445 | 7.983 | 0.359 | 2.866 |
| 21 | | | | | | |
| 22 | 7.383 | 0.007 | 0.052 | 5.317 | 0.242 | 1.287 |
| 23 | 5.517 | 0.386 | 2.129 | 6.450 | 0.129 | 0.832 |
| 24 | 5.033 | 0.404 | 2.034 | 5.900 | 0.272 | 1.605 |
| 25 | 7.083 | 0.306 | 2.168 | 5.350 | 0.578 | 3.092 |
| 26 | | | | | | |
| 27 | 6.083 | 0.025 | 0.152 | 6.333 | 0.207 | 1.311 |
| 28 | 6.133 | 0.385 | 2.361 | 5.667 | 0.354 | 2.006 |
| 29 | 5.483 | 0.028 | 0.154 | 4.833 | 0.132 | 0.638 |
| 30 | 5.867 | 0.523 | 3.068 | 4.583 | 0.469 | 2.150 |
| 31 | | | | | | |
| 32 | 6.083 | 0.006 | 0.037 | 5.950 | 0.300 | 1.785 |
| 33 | 6.000 | 0.122 | 0.732 | 4.750 | 0.152 | 0.722 |
| 34 | 5.050 | 0.708 | 3.575 | 4.383 | 0.233 | 1.021 |
| 35 | 6.217 | 0.282 | 1.753 | 4.817 | 0.112 | 0.539 |
| 36 | | | | | | |
| 37 | 5.333 | 0.216 | 1.152 | 5.967 | 0.378 | 2.255 |
| 38 | 6.333 | 0.290 | 1.837 | 4.800 | 0.226 | 1.085 |
| 39 | 6.433 | 0.186 | 1.197 | 4.367 | 0.262 | 1.144 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 40 | 6.267 | 0.062 | 0.389 | 4.500 | 0.152 | 0.684 |
| 41 | | | | | | |
| 42 | 6.933 | 0.026 | 0.180 | 6.000 | 0.500 | 3.000 |
| 43 | 6.584 | 0.276 | 1.817 | 4.283 | 0.450 | 1.928 |
| 44 | 6.300 | 0.014 | 0.088 | 4.250 | 0.301 | 1.279 |
| 45 | 5.467 | 0.284 | 1.553 | 4.417 | 0.427 | 1.886 |
| 46 | | | | | | |
| 47 | 6.450 | 0.165 | 1.064 | 3.350 | 0.442 | 1.481 |
| 48 | 5.633 | 0.085 | 0.479 | 4.950 | 0.065 | 0.322 |
| 49 | 5.650 | 0.024 | 0.136 | 4.550 | 0.229 | 1.042 |
| 50 | 6.883 | 0.083 | 0.571 | 4.783 | 0.135 | 0.646 |
| 51 | | | | | | |
| 52 | 6.183 | 0.114 | 0.705 | 5.900 | 0.297 | 1.752 |
| 53 | 5.800 | 0.270 | 1.566 | 4.467 | 0.488 | 2.180 |
| 54 | 5.317 | 0.003 | 0.016 | 4.433 | 0.212 | 0.940 |
| 55 | 5.667 | 0.236 | 1.337 | 4.517 | 0.112 | 0.506 |
| 56 | | | | | | |
| 57 | 5.850 | 0.094 | 0.550 | 5.267 | 0.321 | 1.691 |
| 58 | 5.850 | 0.218 | 1.275 | 4.883 | 0.194 | 0.947 |
| 59 | 5.717 | 0.058 | 0.332 | 4.733 | 0.318 | 1.505 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 60 | 5.567 | 0.170 | 0.946 | 4.717 | 0.094 | 0.443 |
| 61 | | | | | | |
| 62 | 5.933 | 0.095 | 0.564 | 5.567 | 0.251 | 1.397 |
| 63 | 5.417 | 0.196 | 1.062 | 5.450 | 0.042 | 0.229 |
| 64 | 5.200 | 0.064 | 0.333 | 4.733 | 0.219 | 1.037 |
| 65 | 4.967 | 0.212 | 1.053 | 5.050 | 0.240 | 1.212 |
| 66 | | | | | | |
| 67 | 6.167 | 0.159 | 0.981 | 4.250 | 0.215 | 0.914 |
| 68 | 5.233 | 0.181 | 0.947 | 5.100 | 0.384 | 1.958 |
| 69 | 5.000 | 0.108 | 0.540 | 4.517 | 0.267 | 1.206 |
| 70 | 4.783 | 0.264 | 1.263 | 4.333 | 0.115 | 0.498 |
| 71 | | | | | | |
| 72 | 6.267 | 0.240 | 1.504 | 5.167 | 0.200 | 1.033 |
| 73 | 5.083 | 0.326 | 1.657 | 4.883 | 0.210 | 1.026 |
| 74 | 5.783 | 0.261 | 1.509 | 4.017 | 0.291 | 1.169 |
| 75 | 6.000 | 0.276 | 1.656 | 3.900 | 0.278 | 1.084 |

Participant 16

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 1 | | | | | | |
| 2 | 5.667 | 0.846 | 4.794 | 7.633 | 0.464 | 3.542 |
| 3 | 6.950 | 0.873 | 6.067 | 6.217 | 0.746 | 4.638 |
| 4 | 6.600 | 0.342 | 2.257 | 5.733 | 0.000 | 0.000 |
| 5 | 6.700 | 0.246 | 1.648 | 6.783 | 0.267 | 1.811 |
| 6 | | | | | | |
| 7 | 8.100 | 0.509 | 4.123 | 5.950 | 0.406 | 2.416 |
| 8 | 6.717 | 0.907 | 6.092 | 5.650 | 0.676 | 3.819 |
| 9 | 7.150 | 0.203 | 1.451 | 4.983 | 0.000 | 0.000 |
| 10 | 6.183 | 1.043 | 6.449 | 5.500 | 0.480 | 2.640 |
| 11 | | | | | | |
| 12 | 4.650 | 0.196 | 0.911 | 7.150 | 0.289 | 2.066 |
| 13 | 5.750 | 1.220 | 7.015 | 5.383 | 0.700 | 3.768 |
| 14 | 6.183 | 0.237 | 1.465 | 6.500 | 0.034 | 0.221 |
| 15 | 6.300 | 0.099 | 0.624 | 5.667 | 0.515 | 2.918 |
| 16 | | | | | | |
| 17 | 5.333 | 0.600 | 3.200 | 5.750 | 0.406 | 2.335 |
| 18 | 7.117 | 0.234 | 1.665 | 5.533 | 0.489 | 2.706 |
| 19 | 5.533 | 0.665 | 3.680 | 4.617 | 0.146 | 0.674 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 20 | 5.200 | 1.431 | 7.441 | 5.833 | 0.444 | 2.590 |
| 21 | | | | | | |
| 22 | 5.483 | 0.081 | 0.444 | 6.883 | 0.001 | 0.007 |
| 23 | 6.817 | 0.433 | 2.952 | 5.417 | 0.446 | 2.416 |
| 24 | 6.300 | 0.765 | 4.820 | 4.733 | 0.331 | 1.567 |
| 25 | 5.733 | 1.091 | 6.255 | 5.150 | 0.896 | 4.614 |
| 26 | | | | | | |
| 27 | 4.533 | 0.274 | 1.242 | 5.933 | 0.093 | 0.552 |
| 28 | 5.183 | 1.013 | 5.251 | 4.933 | 0.839 | 4.139 |
| 29 | 5.100 | 0.206 | 1.051 | 5.050 | 0.423 | 2.136 |
| 30 | 5.200 | 1.405 | 7.306 | 5.050 | 0.735 | 3.712 |
| 31 | | | | | | |
| 32 | 4.867 | 0.152 | 0.740 | 5.300 | 0.101 | 0.535 |
| 33 | 5.833 | 0.677 | 3.949 | 5.600 | 0.293 | 1.641 |
| 34 | 5.283 | 0.444 | 2.346 | 4.617 | 0.331 | 1.528 |
| 35 | 5.133 | 0.752 | 3.860 | 4.850 | 0.315 | 1.528 |
| 36 | | | | | | |
| 37 | 5.267 | 0.912 | 4.803 | 4.883 | 0.454 | 2.217 |
| 38 | 5.750 | 0.336 | 1.932 | 5.300 | 0.367 | 1.945 |
| 39 | 5.133 | 0.769 | 3.948 | 4.400 | 0.416 | 1.830 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 40 | 5.450 | 0.390 | 2.126 | 5.367 | 0.256 | 1.374 |
| 41 | | | | | | |
| 42 | 5.117 | 0.548 | 2.804 | 4.100 | 0.143 | 0.586 |
| 43 | 5.500 | 1.259 | 6.925 | 5.683 | 0.479 | 2.722 |
| 44 | 5.300 | 0.326 | 1.728 | 4.800 | 0.003 | 0.014 |
| 45 | 5.967 | 0.748 | 4.463 | 4.483 | 0.824 | 3.694 |
| 46 | | | | | | |
| 47 | 5.183 | 0.136 | 0.705 | 5.167 | 0.043 | 0.222 |
| 48 | 5.650 | 0.763 | 4.311 | 5.467 | 0.500 | 2.733 |
| 49 | 4.883 | 0.694 | 3.389 | 4.633 | 0.125 | 0.579 |
| 50 | 4.717 | 0.470 | 2.217 | 4.550 | 0.706 | 3.212 |
| 51 | | | | | | |
| 52 | 5.017 | 0.591 | 2.965 | 4.367 | 0.384 | 1.677 |
| 53 | 5.633 | 0.755 | 4.253 | 4.900 | 0.482 | 2.362 |
| 54 | 4.967 | 0.245 | 1.217 | 4.667 | 0.023 | 0.107 |
| 55 | 5.117 | 0.843 | 4.313 | 5.217 | 0.193 | 1.007 |
| 56 | | | | | | |
| 57 | 5.233 | 0.599 | 3.135 | 3.817 | 0.056 | 0.214 |
| 58 | 5.850 | 0.538 | 3.147 | 5.467 | 0.182 | 0.995 |
| 59 | 4.267 | 1.129 | 4.817 | 5.217 | 0.278 | 1.450 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 60 | 4.033 | 0.230 | 0.928 | 4.750 | 0.246 | 1.169 |
| 61 | | | | | | |
| 62 | 4.183 | 0.909 | 3.803 | 4.767 | 0.459 | 2.188 |
| 63 | 4.833 | 0.580 | 2.803 | 5.000 | 0.427 | 2.135 |
| 64 | 4.250 | 0.617 | 2.622 | 4.467 | 0.380 | 1.697 |
| 65 | 5.667 | 0.982 | 5.565 | 4.750 | 0.777 | 3.691 |
| 66 | | | | | | |
| 67 | 5.733 | 0.204 | 1.170 | 5.367 | 0.107 | 0.574 |
| 68 | 5.200 | 1.015 | 5.278 | 4.633 | 0.785 | 3.637 |
| 69 | 4.317 | 0.027 | 0.117 | 4.517 | 0.133 | 0.601 |
| 70 | 6.317 | 0.072 | 0.455 | 5.350 | 0.229 | 1.225 |
| 71 | | | | | | |
| 72 | 5.783 | 0.638 | 3.690 | 4.633 | 0.557 | 2.581 |
| 73 | 5.300 | 0.778 | 4.123 | 5.417 | 0.752 | 4.073 |
| 74 | 4.733 | 0.002 | 0.009 | 5.050 | 0.011 | 0.056 |
| 75 | 4.433 | 0.940 | 4.167 | 4.883 | 0.837 | 4.087 |

Participant 17

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 1 | | | | | | |
| 2 | 2.767 | 0.786 | 2.175 | 2.783 | 0.036 | 0.100 |
| 3 | 2.933 | 0.937 | 2.749 | 3.283 | 0.220 | 0.722 |
| 4 | 2.933 | 0.111 | 0.326 | 3.583 | 0.007 | 0.025 |
| 5 | 3.167 | 0.212 | 0.671 | 4.167 | 0.173 | 0.721 |
| 6 | | | | | | |
| 7 | 4.467 | 0.547 | 2.443 | 3.317 | 0.387 | 1.284 |
| 8 | 4.850 | 0.300 | 1.455 | 3.783 | 0.708 | 2.679 |
| 9 | 5.133 | 0.133 | 0.683 | 3.917 | 0.223 | 0.873 |
| 10 | 5.717 | 0.307 | 1.755 | 4.317 | 0.507 | 2.189 |
| 11 | | | | | | |
| 12 | 3.417 | 0.082 | 0.280 | 2.917 | 0.232 | 0.677 |
| 13 | 3.783 | 0.198 | 0.749 | 3.250 | 0.387 | 1.258 |
| 14 | 3.800 | 0.027 | 0.103 | 3.433 | 0.099 | 0.340 |
| 15 | 4.217 | 0.548 | 2.311 | 3.617 | 0.201 | 0.727 |
| 16 | | | | | | |
| 17 | 3.117 | 0.522 | 1.627 | 2.667 | 0.014 | 0.037 |
| 18 | 3.550 | 0.683 | 2.425 | 2.983 | 0.429 | 1.280 |
| 19 | 3.817 | 0.841 | 3.210 | 3.050 | 0.501 | 1.528 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 20 | 4.383 | 0.213 | 0.934 | 3.350 | 0.255 | 0.854 |
| 21 | | | | | | |
| 22 | 3.417 | 0.002 | 0.007 | 2.617 | 0.120 | 0.314 |
| 23 | 4.000 | 0.768 | 3.072 | 2.850 | 0.404 | 1.151 |
| 24 | 4.517 | 0.280 | 1.265 | 2.850 | 0.176 | 0.502 |
| 25 | 5.217 | 0.504 | 2.629 | 3.083 | 0.133 | 0.410 |
| 26 | | | | | | |
| 27 | 3.100 | 0.172 | 0.533 | 2.400 | 0.301 | 0.722 |
| 28 | 3.533 | 0.522 | 1.844 | 2.533 | 0.783 | 1.984 |
| 29 | 3.767 | 0.185 | 0.697 | 2.517 | 0.246 | 0.619 |
| 30 | 3.967 | 0.023 | 0.091 | 2.617 | 0.322 | 0.843 |
| 31 | | | | | | |
| 32 | 2.883 | 0.158 | 0.456 | 2.350 | 0.282 | 0.663 |
| 33 | 3.183 | 1.081 | 3.441 | 2.500 | 0.371 | 0.928 |
| 34 | 3.317 | 0.306 | 1.015 | 2.600 | 0.433 | 1.126 |
| 35 | 3.433 | 0.361 | 1.239 | 2.850 | 0.181 | 0.516 |
| 36 | | | | | | |
| 37 | 3.233 | 0.361 | 1.167 | 2.617 | 0.190 | 0.497 |
| 38 | 3.650 | 0.302 | 1.102 | 2.717 | 0.962 | 2.613 |
| 39 | 3.967 | 0.143 | 0.567 | 2.733 | 0.167 | 0.456 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 40 | 4.367 | 0.200 | 0.873 | 2.783 | 0.780 | 2.171 |
| 41 | | | | | | |
| 42 | 2.883 | 0.128 | 0.369 | 2.633 | 0.844 | 2.223 |
| 43 | 3.483 | 0.469 | 1.634 | 2.850 | 0.213 | 0.607 |
| 44 | 3.750 | 0.117 | 0.439 | 2.850 | 0.133 | 0.379 |
| 45 | 4.133 | 0.843 | 3.484 | 3.000 | 0.135 | 0.405 |
| 46 | | | | | | |
| 47 | 3.200 | 0.244 | 0.781 | 2.517 | 0.122 | 0.307 |
| 48 | 3.717 | 0.478 | 1.777 | 2.700 | 0.511 | 1.380 |
| 49 | 3.900 | 0.068 | 0.265 | 2.767 | 0.349 | 0.966 |
| 50 | 4.033 | 0.072 | 0.290 | 2.967 | 0.623 | 1.848 |
| 51 | | | | | | |
| 52 | 2.767 | 0.187 | 0.517 | 2.567 | 0.293 | 0.752 |
| 53 | 3.117 | 0.540 | 1.683 | 2.783 | 0.829 | 2.307 |
| 54 | 3.350 | 0.042 | 0.141 | 2.867 | 0.277 | 0.794 |
| 55 | 3.817 | 0.130 | 0.496 | 3.067 | 0.164 | 0.503 |
| 56 | | | | | | |
| 57 | 3.217 | 0.082 | 0.264 | 2.817 | 0.266 | 0.749 |
| 58 | 3.650 | 0.295 | 1.077 | 2.983 | 0.082 | 0.245 |
| 59 | 3.967 | 0.238 | 0.944 | 2.900 | 0.342 | 0.992 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 60 | 4.067 | 0.699 | 2.843 | 3.033 | 0.313 | 0.949 |
| 61 | | | | | | |
| 62 | 2.967 | 0.654 | 1.940 | 3.117 | 0.145 | 0.452 |
| 63 | 3.300 | 1.278 | 4.218 | 3.383 | 0.550 | 1.861 |
| 64 | 3.600 | 0.358 | 1.289 | 3.450 | 0.346 | 1.194 |
| 65 | 3.933 | 0.367 | 1.444 | 3.683 | 0.147 | 0.541 |
| 66 | | | | | | |
| 67 | 3.033 | 0.414 | 1.256 | 2.983 | 0.860 | 2.566 |
| 68 | 3.300 | 0.125 | 0.413 | 3.183 | 0.627 | 1.996 |
| 69 | 3.317 | 0.317 | 1.051 | 3.167 | 0.385 | 1.219 |
| 70 | 3.483 | 0.729 | 2.539 | 3.333 | 0.079 | 0.263 |
| 71 | | | | | | |
| 72 | 3.100 | 0.039 | 0.121 | 2.967 | 0.492 | 1.460 |
| 73 | 3.667 | 0.440 | 1.613 | 3.083 | 0.259 | 0.799 |
| 74 | 3.883 | 0.001 | 0.004 | 2.950 | 0.105 | 0.310 |
| 75 | 4.233 | 0.619 | 2.620 | 3.067 | 0.129 | 0.396 |

Participant 18

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 1 | | | | | | |
| 2 | 3.783 | 0.775 | 2.932 | 4.433 | 0.489 | 2.168 |
| 3 | 4.133 | 1.069 | 4.419 | 4.650 | 0.580 | 2.697 |
| 4 | 4.250 | 0.543 | 2.308 | 4.600 | 0.252 | 1.159 |
| 5 | 4.467 | 1.023 | 4.569 | 4.817 | 0.633 | 3.049 |
| 6 | | | | | | |
| 7 | 4.633 | 0.177 | 0.820 | 4.317 | 0.482 | 2.081 |
| 8 | 4.767 | 0.401 | 1.911 | 4.483 | 0.128 | 0.574 |
| 9 | 4.650 | 0.538 | 2.502 | 4.367 | 0.049 | 0.214 |
| 10 | 4.800 | 0.438 | 2.102 | 4.533 | 0.295 | 1.337 |
| 11 | | | | | | |
| 12 | 3.967 | 0.259 | 1.027 | 4.333 | 0.112 | 0.485 |
| 13 | 4.117 | 0.643 | 2.647 | 4.517 | 0.053 | 0.239 |
| 14 | 4.133 | 0.127 | 0.525 | 4.367 | 0.130 | 0.568 |
| 15 | 4.333 | 0.700 | 3.033 | 4.517 | 0.656 | 2.963 |
| 16 | | | | | | |
| 17 | 4.350 | 0.236 | 1.027 | 4.383 | 0.334 | 1.464 |
| 18 | 4.467 | 0.887 | 3.962 | 4.533 | 0.137 | 0.621 |
| 19 | 4.400 | 0.431 | 1.896 | 4.400 | 0.124 | 0.546 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 20 | 4.533 | 0.282 | 1.278 | 4.567 | 0.231 | 1.055 |
| 21 | | | | | | |
| 22 | 4.467 | 0.045 | 0.201 | 4.300 | 0.390 | 1.677 |
| 23 | 4.650 | 0.249 | 1.158 | 4.433 | 0.554 | 2.456 |
| 24 | 4.533 | 0.309 | 1.401 | 4.350 | 0.371 | 1.614 |
| 25 | 4.683 | 0.288 | 1.349 | 4.500 | 0.368 | 1.656 |
| 26 | | | | | | |
| 27 | 4.350 | 0.177 | 0.770 | 4.233 | 0.307 | 1.300 |
| 28 | 4.550 | 0.366 | 1.665 | 4.483 | 0.202 | 0.906 |
| 29 | 4.433 | 0.019 | 0.084 | 4.383 | 0.005 | 0.022 |
| 30 | 4.583 | 0.568 | 2.603 | 4.550 | 0.122 | 0.555 |
| 31 | | | | | | |
| 32 | 4.250 | 0.450 | 1.913 | 4.133 | 0.443 | 1.831 |
| 33 | 4.433 | 0.498 | 2.208 | 4.317 | 0.024 | 0.104 |
| 34 | 4.367 | 0.069 | 0.301 | 4.200 | 0.003 | 0.013 |
| 35 | 4.500 | 0.451 | 2.030 | 4.383 | 0.029 | 0.127 |
| 36 | | | | | | |
| 37 | 4.300 | 0.234 | 1.006 | 4.300 | 0.132 | 0.568 |
| 38 | 4.383 | 1.098 | 4.813 | 4.500 | 0.184 | 0.828 |
| 39 | 4.317 | 0.513 | 2.215 | 4.367 | 0.272 | 1.188 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 40 | 4.433 | 0.280 | 1.241 | 4.567 | 0.022 | 0.100 |
| 41 | | | | | | |
| 42 | 4.200 | 0.006 | 0.025 | 4.333 | 0.080 | 0.347 |
| 43 | 4.317 | 0.540 | 2.331 | 4.483 | 0.095 | 0.426 |
| 44 | 4.250 | 0.118 | 0.502 | 4.300 | 0.069 | 0.297 |
| 45 | 4.400 | 0.232 | 1.021 | 4.467 | 0.365 | 1.630 |
| 46 | | | | | | |
| 47 | 4.133 | 0.214 | 0.885 | 4.167 | 0.277 | 1.154 |
| 48 | 4.317 | 0.892 | 3.851 | 4.300 | 0.384 | 1.651 |
| 49 | 4.283 | 0.103 | 0.441 | 4.250 | 0.303 | 1.288 |
| 50 | 4.400 | 0.500 | 2.200 | 4.417 | 0.043 | 0.190 |
| 51 | | | | | | |
| 52 | 4.083 | 0.047 | 0.192 | 4.250 | 0.206 | 0.876 |
| 53 | 4.183 | 0.269 | 1.125 | 4.400 | 0.150 | 0.660 |
| 54 | 4.050 | 0.346 | 1.401 | 4.283 | 0.044 | 0.188 |
| 55 | 4.150 | 0.521 | 2.162 | 4.417 | 0.159 | 0.702 |
| 56 | | | | | | |
| 57 | 4.050 | 0.120 | 0.486 | 4.167 | 0.114 | 0.475 |
| 58 | 4.150 | 0.431 | 1.789 | 4.300 | 0.304 | 1.307 |
| 59 | 4.067 | 0.174 | 0.708 | 4.167 | 0.141 | 0.588 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 60 | 4.183 | 0.410 | 1.715 | 4.317 | 0.161 | 0.695 |
| 61 | | | | | | |
| 62 | 4.183 | 0.077 | 0.322 | 4.117 | 0.031 | 0.128 |
| 63 | 4.383 | 0.331 | 1.451 | 4.283 | 0.198 | 0.848 |
| 64 | 4.300 | 0.368 | 1.582 | 4.150 | 0.243 | 1.008 |
| 65 | 4.467 | 0.426 | 1.903 | 4.300 | 0.266 | 1.144 |
| 66 | | | | | | |
| 67 | 4.417 | 0.096 | 0.424 | 4.067 | 0.060 | 0.244 |
| 68 | 4.617 | 0.409 | 1.888 | 4.267 | 0.390 | 1.664 |
| 69 | 4.500 | 0.320 | 1.440 | 4.200 | 0.257 | 1.079 |
| 70 | 4.667 | 0.098 | 0.457 | 4.383 | 0.251 | 1.100 |
| 71 | | | | | | |
| 72 | 4.517 | 0.127 | 0.574 | 4.233 | 0.319 | 1.350 |
| 73 | 4.633 | 0.072 | 0.334 | 4.417 | 0.195 | 0.861 |
| 74 | 4.483 | 0.014 | 0.063 | 4.267 | 0.105 | 0.448 |
| 75 | 4.633 | 0.441 | 2.043 | 4.433 | 0.394 | 1.747 |

Participant 19

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 1 | | | | | | |
| 2 | 2.583 | 1.300 | 3.358 | 3.100 | 0.129 | 0.400 |
| 3 | 2.617 | 0.858 | 2.245 | 3.133 | 0.826 | 2.588 |
| 4 | 2.567 | 0.714 | 1.833 | 3.083 | 0.625 | 1.927 |
| 5 | 2.583 | 0.499 | 1.289 | 3.067 | 0.028 | 0.086 |
| 6 | | | | | | |
| 7 | 2.500 | 1.167 | 2.918 | 3.067 | 0.048 | 0.147 |
| 8 | 2.633 | 0.908 | 2.391 | 3.167 | 0.623 | 1.973 |
| 9 | 2.733 | 0.508 | 1.389 | 3.133 | 0.504 | 1.579 |
| 10 | 2.800 | 1.595 | 4.466 | 3.250 | 0.154 | 0.501 |
| 11 | | | | | | |
| 12 | 2.950 | 0.614 | 1.811 | 3.033 | 0.244 | 0.740 |
| 13 | 3.033 | 0.748 | 2.269 | 3.133 | 0.307 | 0.962 |
| 14 | 3.050 | 0.326 | 0.994 | 3.033 | 0.739 | 2.242 |
| 15 | 3.100 | 0.150 | 0.465 | 3.150 | 0.405 | 1.276 |
| 16 | | | | | | |
| 17 | 2.967 | 0.152 | 0.451 | 3.017 | 0.027 | 0.081 |
| 18 | 3.067 | 0.475 | 1.457 | 3.133 | 1.042 | 3.265 |
| 19 | 2.933 | 1.270 | 3.725 | 3.083 | 0.282 | 0.870 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 20 | 3.083 | 0.272 | 0.839 | 3.100 | 0.333 | 1.032 |
| 21 | | | | | | |
| 22 | 2.900 | 1.136 | 3.294 | 3.133 | 0.483 | 1.513 |
| 23 | 2.967 | 0.086 | 0.255 | 3.250 | 0.769 | 2.499 |
| 24 | 2.867 | 1.783 | 5.111 | 3.083 | 0.266 | 0.820 |
| 25 | 2.967 | 0.863 | 2.560 | 3.200 | 0.213 | 0.682 |
| 26 | | | | | | |
| 27 | 2.833 | 0.421 | 1.193 | 2.867 | 0.020 | 0.057 |
| 28 | 2.883 | 1.525 | 4.397 | 2.967 | 0.131 | 0.389 |
| 29 | 2.833 | 0.755 | 2.139 | 2.850 | 0.326 | 0.929 |
| 30 | 2.867 | 1.366 | 3.916 | 3.033 | 1.281 | 3.886 |
| 31 | | | | | | |
| 32 | 3.083 | 0.289 | 0.891 | 2.800 | 0.089 | 0.249 |
| 33 | 3.233 | 0.583 | 1.885 | 2.950 | 0.019 | 0.056 |
| 34 | 3.300 | 0.493 | 1.627 | 2.900 | 1.030 | 2.987 |
| 35 | 3.450 | 0.322 | 1.111 | 2.983 | 1.421 | 4.239 |
| 36 | | | | | | |
| 37 | 3.333 | 0.385 | 1.283 | 2.900 | 0.441 | 1.279 |
| 38 | 3.433 | 0.238 | 0.817 | 3.050 | 0.385 | 1.174 |
| 39 | 3.250 | 0.107 | 0.348 | 2.917 | 0.216 | 0.630 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 40 | 3.383 | 0.210 | 0.711 | 3.067 | 0.440 | 1.349 |
| 41 | | | | | | |
| 42 | 3.283 | 0.484 | 1.589 | 2.900 | 0.161 | 0.467 |
| 43 | 3.367 | 1.012 | 3.407 | 3.017 | 0.089 | 0.268 |
| 44 | 3.333 | 0.812 | 2.707 | 2.900 | 0.253 | 0.734 |
| 45 | 3.433 | 1.093 | 3.753 | 3.000 | 0.866 | 2.598 |
| 46 | | | | | | |
| 47 | 3.333 | 0.333 | 1.110 | 2.850 | 0.149 | 0.425 |
| 48 | 3.383 | 0.295 | 0.998 | 2.967 | 0.279 | 0.828 |
| 49 | 3.367 | 0.089 | 0.300 | 2.900 | 1.121 | 3.251 |
| 50 | 3.417 | 0.316 | 1.080 | 2.983 | 0.330 | 0.985 |
| 51 | | | | | | |
| 52 | 3.200 | 0.660 | 2.112 | 2.833 | 0.903 | 2.559 |
| 53 | 3.350 | 0.258 | 0.864 | 2.917 | 0.600 | 1.750 |
| 54 | 3.250 | 0.545 | 1.771 | 2.900 | 0.031 | 0.090 |
| 55 | 3.350 | 1.143 | 3.829 | 3.000 | 0.753 | 2.259 |
| 56 | | | | | | |
| 57 | 3.167 | 0.144 | 0.456 | 2.817 | 0.429 | 1.208 |
| 58 | 3.317 | 0.054 | 0.179 | 2.983 | 0.640 | 1.909 |
| 59 | 3.183 | 0.481 | 1.531 | 2.800 | 0.302 | 0.846 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 60 | 3.300 | 0.035 | 0.116 | 2.967 | 0.279 | 0.828 |
| 61 | | | | | | |
| 62 | 3.133 | 0.552 | 1.730 | 2.683 | 0.455 | 1.221 |
| 63 | 3.217 | 0.005 | 0.016 | 2.850 | 0.341 | 0.972 |
| 64 | 3.117 | 0.313 | 0.976 | 2.733 | 0.154 | 0.421 |
| 65 | 3.200 | 1.135 | 3.632 | 2.850 | 0.107 | 0.305 |
| 66 | | | | | | |
| 67 | 3.083 | 0.374 | 1.153 | 2.650 | 0.636 | 1.685 |
| 68 | 3.200 | 0.137 | 0.438 | 2.783 | 0.832 | 2.316 |
| 69 | 3.117 | 0.580 | 1.808 | 2.633 | 0.104 | 0.274 |
| 70 | 3.217 | 0.031 | 0.100 | 2.767 | 0.145 | 0.401 |
| 71 | | | | | | |
| 72 | 3.083 | 0.234 | 0.722 | 2.600 | 0.076 | 0.198 |
| 73 | 3.183 | 1.165 | 3.709 | 2.733 | 0.371 | 1.014 |
| 74 | 3.167 | 1.174 | 3.718 | 2.600 | 0.040 | 0.104 |
| 75 | 3.233 | 0.905 | 2.926 | 2.650 | 0.163 | 0.432 |

Participant 20

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 1 | | | | | | |
| 2 | 2.217 | 1.738 | 3.853 | 3.650 | 0.493 | 1.799 |
| 3 | 2.200 | 1.108 | 2.438 | 4.667 | 0.269 | 1.255 |
| 4 | 2.167 | 1.053 | 2.282 | 5.883 | 0.094 | 0.553 |
| 5 | 13.434 | 0.049 | 0.658 | 6.700 | 0.145 | 0.972 |
| 6 | | | | | | |
| 7 | 2.233 | 1.769 | 3.951 | 4.567 | 0.269 | 1.228 |
| 8 | 2.217 | 0.330 | 0.732 | 5.250 | 0.448 | 2.352 |
| 9 | 2.233 | 0.157 | 0.351 | 5.333 | 0.249 | 1.328 |
| 10 | 11.334 | 0.780 | 8.840 | 5.467 | 0.251 | 1.372 |
| 11 | | | | | | |
| 12 | 2.367 | 1.049 | 2.483 | 4.617 | 0.004 | 0.018 |
| 13 | 2.533 | 0.975 | 2.470 | 5.667 | 0.132 | 0.748 |
| 14 | 2.783 | 1.625 | 4.523 | 5.383 | 0.022 | 0.118 |
| 15 | 20.734 | 0.144 | 2.986 | 4.667 | 0.639 | 2.982 |
| 16 | | | | | | |
| 17 | 7.150 | 0.217 | 1.552 | 4.483 | 0.071 | 0.318 |
| 18 | 6.517 | 0.275 | 1.792 | 4.717 | 0.032 | 0.151 |
| 19 | 5.900 | 0.570 | 3.363 | 4.750 | 0.310 | 1.473 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|--------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 20 | 20.500 | 0.155 | 3.178 | 5.717 | 0.183 | 1.046 |
| 21 | | | | | | |
| 22 | 4.367 | 0.924 | 4.035 | 4.333 | 0.441 | 1.911 |
| 23 | 5.617 | 0.217 | 1.219 | 5.283 | 0.180 | 0.951 |
| 24 | 7.817 | 0.380 | 2.970 | 5.917 | 0.191 | 1.130 |
| 25 | 22.650 | 0.133 | 3.013 | 6.067 | 0.300 | 1.820 |
| 26 | | | | | | |
| 27 | 4.200 | 0.915 | 3.843 | 5.583 | 0.112 | 0.625 |
| 28 | 5.150 | 0.467 | 2.405 | 5.767 | 0.080 | 0.461 |
| 29 | 8.817 | 0.349 | 3.077 | 5.550 | 0.296 | 1.643 |
| 30 | 28.067 | 0.250 | 7.017 | 5.817 | 0.184 | 1.070 |
| 31 | | | | | | |
| 32 | 7.850 | 0.284 | 2.229 | 6.117 | 0.113 | 0.691 |
| 33 | 11.434 | 0.129 | 1.475 | 5.483 | 0.449 | 2.462 |
| 34 | 8.500 | 0.268 | 2.278 | 5.183 | 0.117 | 0.606 |
| 35 | 23.117 | 0.803 | 18.563 | 6.433 | 0.645 | 4.150 |
| 36 | | | | | | |
| 37 | 4.683 | 0.613 | 2.871 | 5.167 | 0.108 | 0.558 |
| 38 | 5.733 | 0.037 | 0.212 | 6.050 | 0.287 | 1.736 |
| 39 | 7.933 | 0.099 | 0.785 | 6.167 | 0.324 | 1.998 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|--------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 40 | 22.967 | 0.283 | 6.500 | 6.900 | 0.184 | 1.270 |
| 41 | | | | | | |
| 42 | 5.133 | 0.642 | 3.296 | 6.083 | 0.103 | 0.627 |
| 43 | 6.233 | 0.137 | 0.854 | 6.750 | 0.082 | 0.554 |
| 44 | 8.634 | 0.612 | 5.284 | 6.017 | 0.053 | 0.319 |
| 45 | 26.451 | 0.111 | 2.936 | 5.767 | 0.730 | 4.210 |
| 46 | | | | | | |
| 47 | 9.467 | 0.136 | 1.287 | 5.183 | 0.008 | 0.041 |
| 48 | 5.833 | 0.082 | 0.478 | 5.400 | 0.381 | 2.057 |
| 49 | 6.333 | 0.307 | 1.944 | 5.200 | 0.255 | 1.326 |
| 50 | 31.434 | 0.386 | 12.134 | 5.517 | 0.227 | 1.252 |
| 51 | | | | | | |
| 52 | 6.850 | 0.213 | 1.459 | 5.050 | 0.270 | 1.364 |
| 53 | 7.717 | 0.124 | 0.957 | 5.683 | 0.121 | 0.688 |
| 54 | 6.300 | 0.322 | 2.029 | 5.433 | 0.018 | 0.098 |
| 55 | 25.700 | 0.134 | 3.444 | 5.467 | 0.131 | 0.716 |
| 56 | | | | | | |
| 57 | 7.167 | 0.240 | 1.720 | 5.200 | 0.279 | 1.451 |
| 58 | 6.167 | 0.135 | 0.833 | 5.900 | 0.977 | 5.764 |
| 59 | 6.483 | 0.210 | 1.362 | 6.133 | 0.177 | 1.086 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|--------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 60 | 20.534 | 0.589 | 12.094 | 5.783 | 0.467 | 2.701 |
| 61 | | | | | | |
| 62 | 5.617 | 0.115 | 0.646 | 3.983 | 0.025 | 0.100 |
| 63 | 7.067 | 0.256 | 1.809 | 4.583 | 0.302 | 1.384 |
| 64 | 7.700 | 0.422 | 3.249 | 4.900 | 0.255 | 1.250 |
| 65 | 22.984 | 0.299 | 6.872 | 5.200 | 0.312 | 1.622 |
| 66 | | | | | | |
| 67 | 5.933 | 0.393 | 2.332 | 4.767 | 0.190 | 0.906 |
| 68 | 7.084 | 0.065 | 0.460 | 5.467 | 0.010 | 0.055 |
| 69 | 7.783 | 0.074 | 0.576 | 5.233 | 0.406 | 2.125 |
| 70 | 25.401 | 0.254 | 6.452 | 5.367 | 0.734 | 3.939 |
| 71 | | | | | | |
| 72 | 6.700 | 0.353 | 2.365 | 3.950 | 0.175 | 0.691 |
| 73 | 6.733 | 0.262 | 1.764 | 4.400 | 0.312 | 1.373 |
| 74 | 6.283 | 0.300 | 1.885 | 4.467 | 0.124 | 0.554 |
| 75 | 8.117 | 0.502 | 4.075 | 4.600 | 0.698 | 3.211 |

Participant 21

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 1 | | | | | | |
| 2 | 2.900 | 0.958 | 2.778 | 2.583 | 0.504 | 1.302 |
| 3 | 3.083 | 0.332 | 1.024 | 2.633 | 0.737 | 1.941 |
| 4 | 4.800 | 0.283 | 1.358 | 2.550 | 0.425 | 1.084 |
| 5 | 5.083 | 0.077 | 0.391 | 2.600 | 1.498 | 3.895 |
| 6 | | | | | | |
| 7 | 3.283 | 1.081 | 3.549 | 2.583 | 0.140 | 0.362 |
| 8 | 3.350 | 0.406 | 1.360 | 2.667 | 0.732 | 1.952 |
| 9 | 3.250 | 0.590 | 1.918 | 2.700 | 0.198 | 0.535 |
| 10 | 3.317 | 0.354 | 1.174 | 3.367 | 0.670 | 2.256 |
| 11 | | | | | | |
| 12 | 2.917 | 0.370 | 1.079 | 3.250 | 0.368 | 1.196 |
| 13 | 3.000 | 0.050 | 0.150 | 3.367 | 0.364 | 1.225 |
| 14 | 2.883 | 0.678 | 1.955 | 3.167 | 0.031 | 0.098 |
| 15 | 2.933 | 1.325 | 3.887 | 3.200 | 0.665 | 2.128 |
| 16 | | | | | | |
| 17 | 2.783 | 0.021 | 0.058 | 3.100 | 0.004 | 0.012 |
| 18 | 2.850 | 0.854 | 2.434 | 3.383 | 0.364 | 1.232 |
| 19 | 2.833 | 0.233 | 0.660 | 3.183 | 0.147 | 0.468 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 20 | 2.883 | 0.023 | 0.066 | 3.183 | 0.094 | 0.299 |
| 21 | | | | | | |
| 22 | 2.750 | 0.090 | 0.248 | 2.717 | 0.426 | 1.157 |
| 23 | 2.850 | 0.007 | 0.020 | 2.800 | 0.363 | 1.016 |
| 24 | 2.767 | 0.142 | 0.393 | 2.650 | 0.308 | 0.816 |
| 25 | 2.867 | 0.183 | 0.525 | 2.750 | 0.130 | 0.358 |
| 26 | | | | | | |
| 27 | 2.733 | 0.703 | 1.922 | 2.517 | 0.688 | 1.732 |
| 28 | 2.817 | 0.668 | 1.882 | 2.600 | 0.405 | 1.053 |
| 29 | 2.750 | 0.927 | 2.549 | 2.550 | 1.059 | 2.701 |
| 30 | 2.833 | 0.238 | 0.674 | 2.633 | 0.005 | 0.013 |
| 31 | | | | | | |
| 32 | 2.717 | 0.771 | 2.095 | 2.650 | 0.430 | 1.140 |
| 33 | 2.783 | 1.020 | 2.839 | 2.767 | 0.156 | 0.432 |
| 34 | 2.750 | 0.172 | 0.473 | 2.683 | 0.519 | 1.393 |
| 35 | 2.867 | 0.166 | 0.476 | 2.783 | 0.116 | 0.323 |
| 36 | | | | | | |
| 37 | 2.717 | 0.368 | 1.000 | 2.683 | 0.318 | 0.853 |
| 38 | 2.833 | 0.145 | 0.411 | 2.783 | 0.011 | 0.031 |
| 39 | 2.733 | 0.431 | 1.178 | 2.700 | 0.420 | 1.134 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 40 | 2.850 | 0.066 | 0.188 | 2.817 | 0.145 | 0.408 |
| 41 | | | | | | |
| 42 | 2.733 | 0.395 | 1.080 | 2.700 | 0.153 | 0.413 |
| 43 | 2.817 | 0.020 | 0.056 | 2.783 | 0.091 | 0.253 |
| 44 | 2.717 | 0.522 | 1.418 | 2.683 | 0.416 | 1.116 |
| 45 | 2.833 | 0.224 | 0.635 | 2.783 | 0.348 | 0.969 |
| 46 | | | | | | |
| 47 | 2.717 | 0.563 | 1.530 | 2.667 | 0.675 | 1.800 |
| 48 | 2.817 | 0.242 | 0.682 | 2.733 | 0.104 | 0.284 |
| 49 | 2.733 | 0.638 | 1.744 | 2.650 | 0.264 | 0.700 |
| 50 | 2.833 | 0.075 | 0.213 | 2.767 | 0.151 | 0.418 |
| 51 | | | | | | |
| 52 | 2.683 | 0.204 | 0.547 | 2.583 | 0.115 | 0.297 |
| 53 | 2.783 | 0.985 | 2.742 | 2.683 | 0.452 | 1.213 |
| 54 | 2.767 | 1.046 | 2.894 | 2.583 | 0.381 | 0.984 |
| 55 | 2.900 | 0.877 | 2.543 | 2.700 | 0.415 | 1.121 |
| 56 | | | | | | |
| 57 | 2.817 | 0.804 | 2.265 | 2.500 | 0.514 | 1.285 |
| 58 | 3.000 | 0.197 | 0.591 | 2.617 | 0.308 | 0.806 |
| 59 | 2.933 | 1.060 | 3.109 | 2.500 | 0.626 | 1.565 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 60 | 3.050 | 0.111 | 0.339 | 2.633 | 0.575 | 1.514 |
| 61 | | | | | | |
| 62 | 2.983 | 0.151 | 0.450 | 2.450 | 0.401 | 0.982 |
| 63 | 3.133 | 0.181 | 0.567 | 2.550 | 0.324 | 0.826 |
| 64 | 3.033 | 0.609 | 1.847 | 2.483 | 0.100 | 0.248 |
| 65 | 3.133 | 0.484 | 1.517 | 2.550 | 0.480 | 1.224 |
| 66 | | | | | | |
| 67 | 3.050 | 0.379 | 1.156 | 2.450 | 0.749 | 1.835 |
| 68 | 3.100 | 0.871 | 2.700 | 2.500 | 1.296 | 3.240 |
| 69 | 3.067 | 0.715 | 2.193 | 2.517 | 0.395 | 0.994 |
| 70 | 3.217 | 0.474 | 1.525 | 2.633 | 0.849 | 2.236 |
| 71 | | | | | | |
| 72 | 3.317 | 0.213 | 0.706 | 2.883 | 0.372 | 1.073 |
| 73 | 3.400 | 0.312 | 1.061 | 3.033 | 0.971 | 2.945 |
| 74 | 3.300 | 0.426 | 1.406 | 3.067 | 1.101 | 3.376 |
| 75 | 3.350 | 0.530 | 1.776 | 3.150 | 0.971 | 3.059 |

Participant 22

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 1 | | | | | | |
| 2 | 3.050 | 1.707 | 5.206 | 2.917 | 0.235 | 0.685 |
| 3 | 3.383 | 1.000 | 3.383 | 3.200 | 0.665 | 2.128 |
| 4 | 3.667 | 0.471 | 1.727 | 3.150 | 0.266 | 0.838 |
| 5 | 4.067 | 0.544 | 2.212 | 3.433 | 0.351 | 1.205 |
| 6 | | | | | | |
| 7 | 3.817 | 0.538 | 2.053 | 3.550 | 0.296 | 1.051 |
| 8 | 3.833 | 0.759 | 2.910 | 3.800 | 0.858 | 3.260 |
| 9 | 3.883 | 0.228 | 0.885 | 3.700 | 0.059 | 0.218 |
| 10 | 4.267 | 1.196 | 5.103 | 3.833 | 0.226 | 0.866 |
| 11 | | | | | | |
| 12 | 3.750 | 0.768 | 2.880 | 3.050 | 0.409 | 1.247 |
| 13 | 3.967 | 1.149 | 4.558 | 3.350 | 0.470 | 1.575 |
| 14 | 3.950 | 0.528 | 2.086 | 3.283 | 0.158 | 0.519 |
| 15 | 4.033 | 1.050 | 4.235 | 3.550 | 0.331 | 1.175 |
| 16 | | | | | | |
| 17 | 3.717 | 0.364 | 1.353 | 3.333 | 0.329 | 1.097 |
| 18 | 3.950 | 0.753 | 2.974 | 3.833 | 0.614 | 2.354 |
| 19 | 4.167 | 0.468 | 1.950 | 3.783 | 0.087 | 0.329 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 20 | 4.217 | 0.915 | 3.858 | 3.833 | 0.521 | 1.997 |
| 21 | | | | | | |
| 22 | 3.833 | 0.286 | 1.096 | 3.217 | 0.189 | 0.608 |
| 23 | 4.717 | 0.863 | 4.071 | 3.500 | 0.488 | 1.708 |
| 24 | 4.617 | 0.140 | 0.646 | 3.583 | 0.302 | 1.082 |
| 25 | 4.450 | 0.537 | 2.390 | 3.850 | 0.421 | 1.621 |
| 26 | | | | | | |
| 27 | 3.800 | 0.294 | 1.117 | 3.517 | 0.300 | 1.055 |
| 28 | 4.317 | 0.870 | 3.756 | 3.700 | 0.226 | 0.836 |
| 29 | 4.417 | 0.056 | 0.247 | 3.467 | 0.103 | 0.357 |
| 30 | 4.417 | 0.483 | 2.133 | 3.450 | 0.613 | 2.115 |
| 31 | | | | | | |
| 32 | 4.033 | 0.418 | 1.686 | 3.017 | 0.007 | 0.021 |
| 33 | 4.317 | 0.734 | 3.168 | 3.350 | 0.823 | 2.757 |
| 34 | 4.283 | 0.086 | 0.368 | 3.367 | 0.208 | 0.700 |
| 35 | 4.350 | 0.575 | 2.501 | 3.550 | 0.658 | 2.336 |
| 36 | | | | | | |
| 37 | 4.050 | 0.302 | 1.223 | 3.333 | 0.197 | 0.657 |
| 38 | 4.283 | 0.576 | 2.467 | 3.550 | 0.530 | 1.882 |
| 39 | 4.267 | 0.051 | 0.218 | 3.383 | 0.079 | 0.267 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 40 | 4.183 | 0.504 | 2.108 | 3.383 | 0.515 | 1.742 |
| 41 | | | | | | |
| 42 | 3.783 | 0.364 | 1.377 | 3.217 | 0.434 | 1.396 |
| 43 | 3.933 | 0.668 | 2.628 | 3.467 | 0.634 | 2.198 |
| 44 | 3.733 | 0.367 | 1.370 | 3.517 | 0.009 | 0.032 |
| 45 | 4.017 | 0.607 | 2.438 | 3.583 | 0.698 | 2.501 |
| 46 | | | | | | |
| 47 | 4.183 | 0.332 | 1.389 | 3.200 | 0.253 | 0.810 |
| 48 | 4.267 | 0.599 | 2.556 | 3.533 | 0.229 | 0.809 |
| 49 | 3.967 | 0.270 | 1.071 | 3.633 | 0.302 | 1.097 |
| 50 | 3.983 | 0.785 | 3.127 | 3.817 | 0.518 | 1.977 |
| 51 | | | | | | |
| 52 | 4.150 | 0.415 | 1.722 | 3.317 | 0.315 | 1.045 |
| 53 | 4.100 | 0.755 | 3.096 | 3.617 | 0.443 | 1.602 |
| 54 | 3.817 | 0.090 | 0.344 | 3.583 | 0.175 | 0.627 |
| 55 | 3.933 | 0.512 | 2.014 | 3.800 | 0.416 | 1.581 |
| 56 | | | | | | |
| 57 | 3.867 | 0.300 | 1.160 | 3.183 | 0.405 | 1.289 |
| 58 | 4.433 | 0.817 | 3.622 | 3.333 | 0.410 | 1.367 |
| 59 | 4.650 | 0.007 | 0.033 | 3.300 | 0.443 | 1.462 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 60 | 4.317 | 0.636 | 2.745 | 3.433 | 0.598 | 2.053 |
| 61 | | | | | | |
| 62 | 3.850 | 0.330 | 1.271 | 3.200 | 0.080 | 0.256 |
| 63 | 4.900 | 0.654 | 3.205 | 3.400 | 0.423 | 1.438 |
| 64 | 4.667 | 0.113 | 0.527 | 3.367 | 0.250 | 0.842 |
| 65 | 4.517 | 0.612 | 2.764 | 3.417 | 0.463 | 1.582 |
| 66 | | | | | | |
| 67 | 4.433 | 0.314 | 1.392 | 3.100 | 0.255 | 0.791 |
| 68 | 4.267 | 0.674 | 2.876 | 3.333 | 0.672 | 2.240 |
| 69 | 4.183 | 0.130 | 0.544 | 3.300 | 0.217 | 0.716 |
| 70 | 4.267 | 0.170 | 0.725 | 3.467 | 0.018 | 0.062 |
| 71 | | | | | | |
| 72 | 4.550 | 0.358 | 1.629 | 3.217 | 0.346 | 1.113 |
| 73 | 4.167 | 0.226 | 0.942 | 3.433 | 0.865 | 2.970 |
| 74 | 3.817 | 0.019 | 0.073 | 3.350 | 0.265 | 0.888 |
| 75 | 3.967 | 0.578 | 2.293 | 3.467 | 0.589 | 2.042 |

Participant 23

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 1 | | | | | | |
| 2 | 3.700 | 0.975 | 3.608 | 6.683 | 0.055 | 0.368 |
| 3 | 5.217 | 0.632 | 3.297 | 8.884 | 0.209 | 1.857 |
| 4 | 7.400 | 0.099 | 0.733 | 8.334 | 0.207 | 1.725 |
| 5 | 8.134 | 0.383 | 3.115 | 8.267 | 0.192 | 1.587 |
| 6 | | | | | | |
| 7 | 5.533 | 0.248 | 1.372 | 6.300 | 0.043 | 0.271 |
| 8 | 7.350 | 0.376 | 2.764 | 7.033 | 0.304 | 2.138 |
| 9 | 8.667 | 0.412 | 3.571 | 6.583 | 0.262 | 1.725 |
| 10 | 9.534 | 0.357 | 3.403 | 6.567 | 0.309 | 2.029 |
| 11 | | | | | | |
| 12 | 8.867 | 0.143 | 1.268 | 6.150 | 0.236 | 1.451 |
| 13 | 6.033 | 0.183 | 1.104 | 6.567 | 0.105 | 0.690 |
| 14 | 4.967 | 0.109 | 0.541 | 6.483 | 0.231 | 1.498 |
| 15 | 4.733 | 0.263 | 1.245 | 6.867 | 0.134 | 0.920 |
| 16 | | | | | | |
| 17 | 4.950 | 0.067 | 0.332 | 6.850 | 0.185 | 1.267 |
| 18 | 6.067 | 0.179 | 1.086 | 7.167 | 0.212 | 1.519 |
| 19 | 7.117 | 0.187 | 1.331 | 6.900 | 0.164 | 1.132 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 20 | 8.450 | 0.216 | 1.825 | 7.267 | 0.277 | 2.013 |
| 21 | | | | | | |
| 22 | 5.700 | 0.223 | 1.271 | 6.317 | 0.188 | 1.188 |
| 23 | 6.683 | 0.212 | 1.417 | 6.133 | 0.119 | 0.730 |
| 24 | 7.233 | 0.048 | 0.347 | 5.317 | 0.431 | 2.292 |
| 25 | 8.367 | 0.227 | 1.899 | 5.450 | 0.361 | 1.967 |
| 26 | | | | | | |
| 27 | 8.617 | 0.220 | 1.896 | 5.500 | 0.373 | 2.052 |
| 28 | 7.350 | 0.343 | 2.521 | 5.817 | 0.265 | 1.541 |
| 29 | 5.800 | 0.296 | 1.717 | 5.667 | 0.289 | 1.638 |
| 30 | 6.183 | 0.319 | 1.973 | 5.900 | 0.284 | 1.676 |
| 31 | | | | | | |
| 32 | 7.983 | 0.238 | 1.900 | 6.400 | 0.391 | 2.502 |
| 33 | 7.167 | 0.181 | 1.297 | 7.733 | 0.242 | 1.872 |
| 34 | 6.117 | 0.113 | 0.691 | 7.000 | 0.322 | 2.254 |
| 35 | 5.917 | 0.167 | 0.988 | 6.617 | 0.096 | 0.635 |
| 36 | | | | | | |
| 37 | 8.417 | 0.075 | 0.631 | 5.517 | 0.083 | 0.458 |
| 38 | 6.183 | 0.396 | 2.449 | 6.800 | 0.166 | 1.129 |
| 39 | 5.500 | 0.039 | 0.215 | 5.933 | 0.297 | 1.762 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 40 | 5.450 | 0.147 | 0.801 | 5.683 | 0.166 | 0.943 |
| 41 | | | | | | |
| 42 | 6.833 | 0.282 | 1.927 | 5.233 | 0.211 | 1.104 |
| 43 | 8.300 | 0.383 | 3.179 | 5.450 | 0.477 | 2.600 |
| 44 | 8.234 | 0.332 | 2.734 | 5.317 | 0.348 | 1.850 |
| 45 | 7.517 | 0.408 | 3.067 | 5.467 | 0.396 | 2.165 |
| 46 | | | | | | |
| 47 | 6.333 | 0.313 | 1.982 | 5.250 | 0.391 | 2.053 |
| 48 | 6.850 | 0.260 | 1.781 | 5.283 | 0.341 | 1.802 |
| 49 | 6.850 | 0.207 | 1.418 | 4.917 | 0.237 | 1.165 |
| 50 | 7.300 | 0.294 | 2.146 | 5.100 | 0.138 | 0.704 |
| 51 | | | | | | |
| 52 | 5.367 | 0.085 | 0.456 | 4.667 | 0.099 | 0.462 |
| 53 | 5.817 | 0.364 | 2.117 | 4.850 | 0.163 | 0.791 |
| 54 | 6.833 | 0.379 | 2.590 | 4.650 | 0.143 | 0.665 |
| 55 | 8.050 | 0.186 | 1.497 | 4.783 | 0.082 | 0.392 |
| 56 | | | | | | |
| 57 | 6.650 | 0.262 | 1.742 | 5.000 | 0.229 | 1.145 |
| 58 | 8.050 | 0.233 | 1.876 | 5.667 | 0.142 | 0.805 |
| 59 | 8.284 | 0.302 | 2.502 | 5.533 | 0.224 | 1.239 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 60 | 8.500 | 0.241 | 2.049 | 5.683 | 0.066 | 0.375 |
| 61 | | | | | | |
| 62 | 6.717 | 0.230 | 1.545 | 5.050 | 0.031 | 0.157 |
| 63 | 8.417 | 0.244 | 2.054 | 5.233 | 0.208 | 1.089 |
| 64 | 8.534 | 0.317 | 2.705 | 4.983 | 0.292 | 1.455 |
| 65 | 8.034 | 0.368 | 2.956 | 5.150 | 0.438 | 2.256 |
| 66 | | | | | | |
| 67 | 6.367 | 0.363 | 2.311 | 5.217 | 0.291 | 1.518 |
| 68 | 6.517 | 0.479 | 3.122 | 5.333 | 0.406 | 2.165 |
| 69 | 6.333 | 0.415 | 2.628 | 5.150 | 0.319 | 1.643 |
| 70 | 6.600 | 0.262 | 1.729 | 5.267 | 0.159 | 0.837 |
| 71 | | | | | | |
| 72 | 7.700 | 0.119 | 0.916 | 4.883 | 0.109 | 0.532 |
| 73 | 8.750 | 0.320 | 2.800 | 5.150 | 0.481 | 2.477 |
| 74 | 8.067 | 0.304 | 2.452 | 5.650 | 0.388 | 2.192 |
| 75 | 7.633 | 0.446 | 3.405 | 6.400 | 0.395 | 2.528 |

Participant 24

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 1 | | | | | | |
| 2 | 3.450 | 1.147 | 3.957 | 2.717 | 0.151 | 0.410 |
| 3 | 3.700 | 0.327 | 1.210 | 2.933 | 0.377 | 1.106 |
| 4 | 3.767 | 0.771 | 2.904 | 3.050 | 0.102 | 0.311 |
| 5 | 4.050 | 0.098 | 0.397 | 3.367 | 0.306 | 1.030 |
| 6 | | | | | | |
| 7 | 4.083 | 0.200 | 0.817 | 3.183 | 0.279 | 0.888 |
| 8 | 4.283 | 0.530 | 2.270 | 3.467 | 0.553 | 1.917 |
| 9 | 4.217 | 0.380 | 1.602 | 3.550 | 0.530 | 1.882 |
| 10 | 4.433 | 0.882 | 3.910 | 3.800 | 0.259 | 0.984 |
| 11 | | | | | | |
| 12 | 4.150 | 0.192 | 0.797 | 3.250 | 0.067 | 0.218 |
| 13 | 4.283 | 0.264 | 1.131 | 3.467 | 0.126 | 0.437 |
| 14 | 4.300 | 0.036 | 0.155 | 3.450 | 0.005 | 0.017 |
| 15 | 4.533 | 0.166 | 0.753 | 3.667 | 0.060 | 0.220 |
| 16 | | | | | | |
| 17 | 4.167 | 0.000 | 0.000 | 3.133 | 0.041 | 0.128 |
| 18 | 4.417 | 0.071 | 0.314 | 3.333 | 0.241 | 0.803 |
| 19 | 4.383 | 0.787 | 3.450 | 3.250 | 0.228 | 0.741 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|---------|----------|-------|---------|----------|-------|
| | Travel | Lane | Cost | Travel | Lane | Cost |
| | Time | Position | | Time | Position | |
| 20 | 4.767 | 0.555 | 2.646 | 3.433 | 0.349 | 1.198 |
| 21 | | | | | | |
| 22 | 4.033 | 0.192 | 0.774 | 2.967 | 0.414 | 1.228 |
| 23 | 4.300 | 0.389 | 1.673 | 3.050 | 0.177 | 0.540 |
| 24 | 4.183 | 0.331 | 1.385 | 2.950 | 0.195 | 0.575 |
| 25 | 4.500 | 0.163 | 0.734 | 3.117 | 0.423 | 1.318 |
| 26 | | | | | | |
| 27 | 3.767 | 0.388 | 1.462 | 2.967 | 0.314 | 0.932 |
| 28 | 4.000 | 0.088 | 0.352 | 3.183 | 0.533 | 1.697 |
| 29 | 3.933 | 0.129 | 0.507 | 3.433 | 0.161 | 0.553 |
| 30 | 4.217 | 0.134 | 0.565 | 3.850 | 0.211 | 0.812 |
| 31 | | | | | | |
| 32 | 3.900 | 0.102 | 0.398 | 3.517 | 0.293 | 1.030 |
| 33 | 4.167 | 0.392 | 1.633 | 3.767 | 0.025 | 0.094 |
| 34 | 4.033 | 0.061 | 0.246 | 3.750 | 0.359 | 1.346 |
| 35 | 4.250 | 0.094 | 0.400 | 4.000 | 0.337 | 1.348 |
| 36 | | | | | | |
| 37 | 3.567 | 0.291 | 1.038 | 3.383 | 0.027 | 0.091 |
| 38 | 3.833 | 0.336 | 1.288 | 3.650 | 0.170 | 0.621 |
| 39 | 3.833 | 0.811 | 3.109 | 3.583 | 0.171 | 0.613 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 40 | 4.133 | 0.103 | 0.426 | 3.800 | 0.106 | 0.403 |
| 41 | | | | | | |
| 42 | 3.667 | 0.100 | 0.367 | 3.033 | 0.214 | 0.649 |
| 43 | 4.100 | 0.049 | 0.201 | 3.400 | 0.687 | 2.336 |
| 44 | 4.250 | 0.207 | 0.880 | 3.533 | 0.548 | 1.936 |
| 45 | 4.600 | 0.122 | 0.561 | 3.733 | 0.148 | 0.553 |
| 46 | | | | | | |
| 47 | 3.533 | 0.119 | 0.420 | 3.017 | 0.266 | 0.802 |
| 48 | 3.733 | 0.131 | 0.489 | 3.183 | 0.087 | 0.277 |
| 49 | 3.683 | 0.076 | 0.280 | 3.167 | 0.262 | 0.830 |
| 50 | 3.983 | 0.100 | 0.398 | 3.400 | 0.025 | 0.085 |
| 51 | | | | | | |
| 52 | 3.367 | 0.153 | 0.515 | 3.183 | 0.384 | 1.222 |
| 53 | 3.600 | 0.186 | 0.670 | 3.533 | 0.786 | 2.777 |
| 54 | 3.600 | 0.052 | 0.187 | 3.667 | 0.359 | 1.316 |
| 55 | 3.817 | 0.128 | 0.489 | 3.950 | 0.581 | 2.295 |
| 56 | | | | | | |
| 57 | 3.133 | 0.190 | 0.595 | 3.217 | 0.047 | 0.151 |
| 58 | 3.433 | 0.162 | 0.556 | 3.417 | 0.046 | 0.157 |
| 59 | 3.533 | 0.375 | 1.325 | 3.400 | 0.092 | 0.313 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 60 | 3.850 | 0.412 | 1.586 | 3.617 | 0.066 | 0.239 |
| 61 | | | | | | |
| 62 | 3.283 | 0.360 | 1.182 | 3.000 | 0.043 | 0.129 |
| 63 | 3.617 | 0.120 | 0.434 | 3.350 | 0.023 | 0.077 |
| 64 | 3.683 | 0.198 | 0.729 | 3.450 | 0.339 | 1.170 |
| 65 | 4.000 | 0.297 | 1.188 | 3.767 | 0.322 | 1.213 |
| 66 | | | | | | |
| 67 | 3.067 | 0.085 | 0.261 | 2.967 | 0.148 | 0.439 |
| 68 | 3.433 | 0.018 | 0.062 | 3.267 | 0.196 | 0.640 |
| 69 | 3.533 | 0.073 | 0.258 | 3.417 | 0.022 | 0.075 |
| 70 | 3.967 | 0.151 | 0.599 | 3.733 | 0.083 | 0.310 |
| 71 | | | | | | |
| 72 | 3.300 | 0.348 | 1.148 | 3.167 | 0.310 | 0.982 |
| 73 | 3.717 | 0.257 | 0.955 | 3.467 | 0.539 | 1.869 |
| 74 | 3.950 | 0.140 | 0.553 | 3.650 | 0.352 | 1.285 |
| 75 | 4.283 | 0.145 | 0.621 | 3.917 | 0.169 | 0.662 |

Participant 25

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 1 | | | | | | |
| 2 | 2.783 | 1.604 | 4.465 | 2.917 | 0.453 | 1.321 |
| 3 | 2.917 | 0.974 | 2.841 | 2.967 | 0.238 | 0.706 |
| 4 | 2.967 | 0.150 | 0.445 | 2.883 | 0.183 | 0.528 |
| 5 | 3.117 | 0.711 | 2.216 | 2.983 | 0.452 | 1.348 |
| 6 | | | | | | |
| 7 | 2.833 | 0.187 | 0.530 | 2.867 | 0.335 | 0.960 |
| 8 | 3.000 | 0.310 | 0.930 | 2.983 | 0.019 | 0.057 |
| 9 | 2.883 | 0.303 | 0.874 | 2.867 | 0.012 | 0.034 |
| 10 | 2.983 | 0.581 | 1.733 | 3.000 | 0.202 | 0.606 |
| 11 | | | | | | |
| 12 | 2.833 | 0.040 | 0.113 | 2.867 | 0.186 | 0.533 |
| 13 | 2.917 | 0.471 | 1.374 | 2.950 | 0.251 | 0.740 |
| 14 | 2.983 | 0.307 | 0.916 | 2.867 | 0.167 | 0.479 |
| 15 | 3.050 | 0.297 | 0.906 | 2.950 | 0.599 | 1.767 |
| 16 | | | | | | |
| 17 | 2.650 | 0.258 | 0.684 | 2.850 | 0.274 | 0.781 |
| 18 | 2.717 | 0.323 | 0.878 | 2.967 | 0.326 | 0.967 |
| 19 | 2.700 | 0.084 | 0.227 | 2.900 | 0.163 | 0.473 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 20 | 2.817 | 0.777 | 2.189 | 3.050 | 0.036 | 0.110 |
| 21 | | | | | | |
| 22 | 2.583 | 0.125 | 0.323 | 2.850 | 0.105 | 0.299 |
| 23 | 2.667 | 0.087 | 0.232 | 2.950 | 0.363 | 1.071 |
| 24 | 2.550 | 0.076 | 0.194 | 2.867 | 0.433 | 1.241 |
| 25 | 2.617 | 0.887 | 2.321 | 2.967 | 0.063 | 0.187 |
| 26 | | | | | | |
| 27 | 2.433 | 0.225 | 0.548 | 2.833 | 0.142 | 0.402 |
| 28 | 2.483 | 1.319 | 3.276 | 2.933 | 0.116 | 0.340 |
| 29 | 2.483 | 0.168 | 0.417 | 2.850 | 0.161 | 0.459 |
| 30 | 2.567 | 1.513 | 3.883 | 2.967 | 0.056 | 0.166 |
| 31 | | | | | | |
| 32 | 2.517 | 0.268 | 0.674 | 2.883 | 0.296 | 0.853 |
| 33 | 2.600 | 0.813 | 2.114 | 2.983 | 0.395 | 1.178 |
| 34 | 2.583 | 0.001 | 0.003 | 2.900 | 0.118 | 0.342 |
| 35 | 2.717 | 0.277 | 0.753 | 3.017 | 0.086 | 0.259 |
| 36 | | | | | | |
| 37 | 2.500 | 0.026 | 0.065 | 2.917 | 0.581 | 1.695 |
| 38 | 2.617 | 0.395 | 1.034 | 3.017 | 0.302 | 0.911 |
| 39 | 2.550 | 0.534 | 1.362 | 2.933 | 0.307 | 0.901 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 40 | 2.667 | 0.166 | 0.443 | 3.050 | 0.367 | 1.119 |
| 41 | | | | | | |
| 42 | 2.500 | 0.271 | 0.678 | 2.883 | 0.299 | 0.862 |
| 43 | 2.617 | 0.601 | 1.573 | 3.017 | 0.140 | 0.422 |
| 44 | 2.617 | 0.578 | 1.512 | 2.883 | 0.096 | 0.277 |
| 45 | 2.717 | 0.150 | 0.408 | 3.017 | 0.350 | 1.056 |
| 46 | | | | | | |
| 47 | 2.500 | 0.349 | 0.873 | 2.667 | 0.235 | 0.627 |
| 48 | 2.600 | 0.658 | 1.711 | 2.750 | 0.412 | 1.133 |
| 49 | 2.533 | 0.578 | 1.464 | 2.700 | 0.099 | 0.267 |
| 50 | 2.667 | 0.204 | 0.544 | 2.783 | 0.756 | 2.104 |
| 51 | | | | | | |
| 52 | 2.483 | 0.293 | 0.728 | 2.600 | 0.410 | 1.066 |
| 53 | 2.567 | 0.196 | 0.503 | 2.683 | 0.049 | 0.131 |
| 54 | 2.533 | 0.173 | 0.438 | 2.633 | 0.256 | 0.674 |
| 55 | 2.617 | 0.302 | 0.790 | 2.767 | 0.614 | 1.699 |
| 56 | | | | | | |
| 57 | 2.417 | 0.285 | 0.689 | 2.517 | 0.178 | 0.448 |
| 58 | 2.517 | 0.231 | 0.581 | 2.633 | 0.510 | 1.343 |
| 59 | 2.467 | 0.514 | 1.268 | 2.567 | 0.226 | 0.580 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 60 | 2.533 | 0.043 | 0.109 | 2.667 | 0.085 | 0.227 |
| 61 | | | | | | |
| 62 | 2.433 | 0.038 | 0.092 | 2.467 | 0.462 | 1.140 |
| 63 | 2.567 | 0.761 | 1.953 | 2.533 | 0.658 | 1.667 |
| 64 | 2.550 | 0.325 | 0.829 | 2.483 | 0.019 | 0.047 |
| 65 | 2.633 | 0.365 | 0.961 | 2.567 | 0.406 | 1.042 |
| 66 | | | | | | |
| 67 | 2.450 | 0.085 | 0.208 | 2.533 | 0.334 | 0.846 |
| 68 | 2.550 | 0.043 | 0.110 | 2.650 | 0.115 | 0.305 |
| 69 | 2.450 | 0.124 | 0.304 | 2.617 | 0.208 | 0.544 |
| 70 | 2.550 | 0.275 | 0.701 | 2.750 | 0.607 | 1.669 |
| 71 | | | | | | |
| 72 | 2.367 | 0.020 | 0.047 | 2.633 | 0.629 | 1.656 |
| 73 | 2.450 | 0.538 | 1.318 | 2.750 | 0.006 | 0.017 |
| 74 | 2.417 | 0.702 | 1.697 | 2.700 | 0.092 | 0.248 |
| 75 | 2.533 | 0.026 | 0.066 | 2.850 | 0.010 | 0.029 |

Participant 26

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 1 | | | | | | |
| 2 | 2.233 | 1.719 | 3.839 | 3.100 | 0.494 | 1.531 |
| 3 | 2.267 | 0.158 | 0.358 | 3.267 | 0.624 | 2.038 |
| 4 | 2.150 | 0.066 | 0.142 | 3.217 | 0.207 | 0.666 |
| 5 | 2.183 | 1.483 | 3.238 | 3.350 | 0.070 | 0.235 |
| 6 | | | | | | |
| 7 | 2.483 | 0.178 | 0.442 | 2.517 | 0.252 | 0.634 |
| 8 | 2.617 | 0.887 | 2.321 | 2.700 | 0.464 | 1.253 |
| 9 | 2.633 | 0.158 | 0.416 | 2.683 | 0.395 | 1.060 |
| 10 | 2.767 | 1.683 | 4.656 | 2.767 | 0.518 | 1.433 |
| 11 | | | | | | |
| 12 | 3.017 | 0.237 | 0.715 | 2.850 | 0.494 | 1.408 |
| 13 | 3.117 | 0.649 | 2.023 | 2.917 | 0.599 | 1.747 |
| 14 | 3.017 | 0.605 | 1.825 | 2.883 | 0.491 | 1.416 |
| 15 | 3.133 | 0.176 | 0.551 | 3.133 | 0.411 | 1.288 |
| 16 | | | | | | |
| 17 | 2.883 | 0.369 | 1.064 | 2.600 | 0.151 | 0.393 |
| 18 | 3.000 | 0.630 | 1.890 | 2.900 | 0.306 | 0.887 |
| 19 | 2.950 | 0.313 | 0.923 | 3.067 | 0.780 | 2.392 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 20 | 3.050 | 0.635 | 1.937 | 3.450 | 1.421 | 4.903 |
| 21 | | | | | | |
| 22 | 2.750 | 0.320 | 0.880 | 3.050 | 0.542 | 1.653 |
| 23 | 2.800 | 0.287 | 0.804 | 3.467 | 0.315 | 1.092 |
| 24 | 2.683 | 0.497 | 1.334 | 3.783 | 0.911 | 3.447 |
| 25 | 2.717 | 1.391 | 3.779 | 4.350 | 0.125 | 0.544 |
| 26 | | | | | | |
| 27 | 2.650 | 0.612 | 1.622 | 2.750 | 0.577 | 1.587 |
| 28 | 2.717 | 0.742 | 2.016 | 3.083 | 0.372 | 1.147 |
| 29 | 2.750 | 0.426 | 1.172 | 3.267 | 0.197 | 0.644 |
| 30 | 2.983 | 0.521 | 1.554 | 3.483 | 0.916 | 3.191 |
| 31 | | | | | | |
| 32 | 2.717 | 0.422 | 1.146 | 2.733 | 0.143 | 0.391 |
| 33 | 2.783 | 0.016 | 0.045 | 3.067 | 0.437 | 1.340 |
| 34 | 2.683 | 0.456 | 1.224 | 3.283 | 1.003 | 3.293 |
| 35 | 2.750 | 0.368 | 1.012 | 3.767 | 0.532 | 2.004 |
| 36 | | | | | | |
| 37 | 2.817 | 0.203 | 0.572 | 3.133 | 0.533 | 1.670 |
| 38 | 3.033 | 0.582 | 1.765 | 3.633 | 0.107 | 0.389 |
| 39 | 3.117 | 0.737 | 2.297 | 3.767 | 0.451 | 1.699 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 40 | 3.383 | 0.147 | 0.497 | 3.567 | 0.067 | 0.239 |
| 41 | | | | | | |
| 42 | 2.750 | 0.858 | 2.360 | 2.667 | 0.094 | 0.251 |
| 43 | 2.833 | 1.139 | 3.227 | 3.033 | 0.524 | 1.589 |
| 44 | 2.817 | 1.702 | 4.794 | 3.217 | 0.490 | 1.576 |
| 45 | 2.850 | 1.593 | 4.540 | 3.450 | 0.846 | 2.919 |
| 46 | | | | | | |
| 47 | 2.883 | 0.097 | 0.280 | 3.067 | 0.150 | 0.460 |
| 48 | 3.150 | 0.310 | 0.977 | 3.467 | 0.092 | 0.319 |
| 49 | 3.100 | 0.027 | 0.084 | 3.517 | 0.964 | 3.390 |
| 50 | 3.150 | 0.252 | 0.794 | 3.900 | 0.001 | 0.004 |
| 51 | | | | | | |
| 52 | 2.933 | 0.195 | 0.572 | 2.850 | 0.016 | 0.046 |
| 53 | 3.233 | 0.340 | 1.099 | 3.283 | 0.075 | 0.246 |
| 54 | 3.083 | 0.305 | 0.940 | 3.467 | 0.178 | 0.617 |
| 55 | 3.150 | 0.260 | 0.819 | 3.517 | 0.169 | 0.594 |
| 56 | | | | | | |
| 57 | 2.850 | 0.008 | 0.023 | 2.700 | 0.094 | 0.254 |
| 58 | 3.000 | 0.612 | 1.836 | 2.967 | 0.188 | 0.558 |
| 59 | 2.900 | 0.383 | 1.111 | 2.850 | 0.267 | 0.761 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 60 | 3.000 | 0.244 | 0.732 | 3.117 | 0.167 | 0.520 |
| 61 | | | | | | |
| 62 | 2.667 | 0.335 | 0.893 | 2.817 | 0.038 | 0.107 |
| 63 | 2.817 | 0.404 | 1.138 | 3.150 | 0.180 | 0.567 |
| 64 | 2.883 | 0.543 | 1.566 | 3.250 | 0.337 | 1.095 |
| 65 | 2.983 | 0.008 | 0.024 | 3.600 | 1.474 | 5.306 |
| 66 | | | | | | |
| 67 | 3.017 | 0.906 | 2.733 | 2.833 | 0.664 | 1.881 |
| 68 | 3.383 | 0.841 | 2.845 | 3.150 | 0.778 | 2.451 |
| 69 | 3.583 | 0.226 | 0.810 | 3.400 | 0.365 | 1.241 |
| 70 | 3.883 | 0.426 | 1.654 | 3.617 | 0.168 | 0.608 |
| 71 | | | | | | |
| 72 | 2.717 | 0.025 | 0.068 | 2.717 | 0.155 | 0.421 |
| 73 | 3.050 | 0.422 | 1.287 | 3.133 | 0.552 | 1.730 |
| 74 | 3.250 | 0.046 | 0.150 | 3.183 | 0.065 | 0.207 |
| 75 | 3.683 | 1.697 | 6.251 | 3.233 | 0.504 | 1.630 |

Participant 27

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 1 | | | | | | |
| 2 | 2.600 | 0.026 | 0.068 | 3.267 | 0.303 | 0.990 |
| 3 | 2.650 | 1.294 | 3.429 | 3.717 | 0.685 | 2.546 |
| 4 | 2.650 | 1.666 | 4.415 | 3.983 | 0.133 | 0.530 |
| 5 | 2.667 | 0.195 | 0.520 | 4.033 | 0.425 | 1.714 |
| 6 | | | | | | |
| 7 | 2.550 | 0.445 | 1.135 | 3.083 | 0.132 | 0.407 |
| 8 | 2.683 | 1.673 | 4.489 | 3.233 | 0.070 | 0.226 |
| 9 | 2.750 | 0.734 | 2.019 | 3.167 | 0.067 | 0.212 |
| 10 | 2.833 | 0.409 | 1.159 | 3.300 | 0.491 | 1.620 |
| 11 | | | | | | |
| 12 | 2.717 | 1.138 | 3.092 | 3.150 | 0.308 | 0.970 |
| 13 | 2.767 | 0.163 | 0.451 | 3.283 | 0.231 | 0.758 |
| 14 | 2.683 | 0.771 | 2.069 | 3.283 | 0.093 | 0.305 |
| 15 | 2.867 | 1.231 | 3.529 | 3.467 | 0.164 | 0.569 |
| 16 | | | | | | |
| 17 | 2.617 | 0.095 | 0.249 | 3.183 | 0.050 | 0.159 |
| 18 | 2.700 | 0.381 | 1.029 | 3.350 | 0.086 | 0.288 |
| 19 | 2.567 | 1.313 | 3.370 | 3.250 | 0.321 | 1.043 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 20 | 2.733 | 0.709 | 1.938 | 3.417 | 0.211 | 0.721 |
| 21 | | | | | | |
| 22 | 2.650 | 0.439 | 1.163 | 3.133 | 0.189 | 0.592 |
| 23 | 2.717 | 0.104 | 0.283 | 3.283 | 0.206 | 0.676 |
| 24 | 2.617 | 0.799 | 2.091 | 3.150 | 0.238 | 0.750 |
| 25 | 2.750 | 0.264 | 0.726 | 3.317 | 0.329 | 1.091 |
| 26 | | | | | | |
| 27 | 2.767 | 0.672 | 1.859 | 3.200 | 0.270 | 0.864 |
| 28 | 2.867 | 0.663 | 1.901 | 3.350 | 0.218 | 0.730 |
| 29 | 2.833 | 1.194 | 3.383 | 3.267 | 0.002 | 0.007 |
| 30 | 2.950 | 0.678 | 2.000 | 3.417 | 0.135 | 0.461 |
| 31 | | | | | | |
| 32 | 2.900 | 0.146 | 0.423 | 3.217 | 0.007 | 0.023 |
| 33 | 3.050 | 0.223 | 0.680 | 3.367 | 0.112 | 0.377 |
| 34 | 2.950 | 0.209 | 0.617 | 3.250 | 0.096 | 0.312 |
| 35 | 3.133 | 0.309 | 0.968 | 3.417 | 0.041 | 0.140 |
| 36 | | | | | | |
| 37 | 3.000 | 0.069 | 0.207 | 3.267 | 0.152 | 0.497 |
| 38 | 3.117 | 0.080 | 0.249 | 3.417 | 0.067 | 0.229 |
| 39 | 3.000 | 0.145 | 0.435 | 3.300 | 0.296 | 0.977 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|---------|----------|-------|---------|----------|-------|
| | Travel | Lane | Cost | Travel | Lane | Cost |
| | Time | Position | | Time | Position | |
| 40 | 3.133 | 0.116 | 0.363 | 3.450 | 0.217 | 0.749 |
| 41 | | | | | | |
| 42 | 2.767 | 0.387 | 1.071 | 3.250 | 0.071 | 0.231 |
| 43 | 2.883 | 0.095 | 0.274 | 3.400 | 0.131 | 0.445 |
| 44 | 2.800 | 0.723 | 2.024 | 3.283 | 0.328 | 1.077 |
| 45 | 2.883 | 0.239 | 0.689 | 3.383 | 0.462 | 1.563 |
| 46 | | | | | | |
| 47 | 2.683 | 1.462 | 3.923 | 3.217 | 0.187 | 0.602 |
| 48 | 2.817 | 0.558 | 1.572 | 3.367 | 0.099 | 0.333 |
| 49 | 2.733 | 0.337 | 0.921 | 3.267 | 0.408 | 1.333 |
| 50 | 2.900 | 0.074 | 0.215 | 3.400 | 0.101 | 0.343 |
| 51 | | | | | | |
| 52 | 2.667 | 0.062 | 0.165 | 3.267 | 0.091 | 0.297 |
| 53 | 2.750 | 0.488 | 1.342 | 3.400 | 0.093 | 0.316 |
| 54 | 2.700 | 0.492 | 1.328 | 3.283 | 0.094 | 0.309 |
| 55 | 2.833 | 0.877 | 2.485 | 3.417 | 0.118 | 0.403 |
| 56 | | | | | | |
| 57 | 2.617 | 0.050 | 0.131 | 3.267 | 0.193 | 0.630 |
| 58 | 2.700 | 0.089 | 0.240 | 3.367 | 0.243 | 0.818 |
| 59 | 2.617 | 0.126 | 0.330 | 3.283 | 0.178 | 0.584 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 60 | 2.700 | 0.100 | 0.270 | 3.367 | 0.393 | 1.323 |
| 61 | | | | | | |
| 62 | 2.533 | 0.283 | 0.717 | 3.167 | 0.109 | 0.345 |
| 63 | 2.650 | 0.187 | 0.496 | 3.283 | 0.049 | 0.161 |
| 64 | 2.550 | 0.821 | 2.094 | 3.183 | 0.036 | 0.115 |
| 65 | 2.667 | 0.410 | 1.093 | 3.283 | 0.308 | 1.011 |
| 66 | | | | | | |
| 67 | 2.567 | 0.160 | 0.411 | 3.083 | 0.148 | 0.456 |
| 68 | 2.683 | 0.108 | 0.290 | 3.167 | 0.377 | 1.194 |
| 69 | 2.600 | 1.044 | 2.714 | 3.083 | 0.381 | 1.175 |
| 70 | 2.700 | 0.069 | 0.186 | 3.217 | 0.469 | 1.509 |
| 71 | | | | | | |
| 72 | 2.617 | 0.069 | 0.181 | 3.017 | 0.186 | 0.561 |
| 73 | 2.733 | 0.274 | 0.749 | 3.133 | 0.204 | 0.639 |
| 74 | 2.667 | 0.473 | 1.261 | 3.033 | 0.239 | 0.725 |
| 75 | 2.783 | 0.062 | 0.173 | 3.133 | 0.290 | 0.909 |

Participant 28

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 1 | | | | | | |
| 2 | 2.200 | 1.341 | 2.950 | 2.767 | 1.349 | 3.732 |
| 3 | 2.167 | 1.757 | 3.807 | 2.783 | 1.460 | 4.064 |
| 4 | 2.133 | 1.728 | 3.686 | 2.733 | 0.098 | 0.268 |
| 5 | 2.133 | 0.713 | 1.521 | 2.750 | 0.702 | 1.931 |
| 6 | | | | | | |
| 7 | 2.133 | 1.589 | 3.390 | 2.567 | 1.481 | 3.801 |
| 8 | 2.183 | 1.700 | 3.712 | 2.583 | 1.585 | 4.095 |
| 9 | 2.183 | 1.506 | 3.288 | 2.583 | 0.218 | 0.563 |
| 10 | 2.217 | 1.028 | 2.279 | 2.600 | 1.232 | 3.203 |
| 11 | | | | | | |
| 12 | 2.300 | 1.794 | 4.126 | 2.467 | 1.357 | 3.347 |
| 13 | 2.367 | 1.106 | 2.618 | 2.483 | 1.760 | 4.371 |
| 14 | 2.367 | 0.709 | 1.678 | 2.483 | 0.548 | 1.361 |
| 15 | 2.433 | 1.296 | 3.154 | 2.483 | 1.241 | 3.082 |
| 16 | | | | | | |
| 17 | 2.483 | 0.189 | 0.469 | 2.400 | 1.687 | 4.049 |
| 18 | 2.550 | 0.686 | 1.749 | 2.450 | 1.063 | 2.604 |
| 19 | 2.500 | 0.642 | 1.605 | 2.433 | 1.164 | 2.832 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 20 | 2.550 | 1.319 | 3.364 | 2.467 | 1.438 | 3.547 |
| 21 | | | | | | |
| 22 | 2.467 | 1.400 | 3.453 | 2.400 | 1.059 | 2.542 |
| 23 | 2.517 | 1.304 | 3.282 | 2.450 | 0.883 | 2.163 |
| 24 | 2.483 | 0.305 | 0.757 | 2.383 | 0.770 | 1.835 |
| 25 | 2.517 | 1.736 | 4.369 | 2.433 | 1.648 | 4.010 |
| 26 | | | | | | |
| 27 | 2.433 | 1.378 | 3.353 | 2.383 | 1.059 | 2.524 |
| 28 | 2.483 | 1.143 | 2.839 | 2.433 | 1.473 | 3.584 |
| 29 | 2.467 | 0.594 | 1.465 | 2.417 | 0.004 | 0.010 |
| 30 | 2.517 | 0.663 | 1.669 | 2.467 | 1.030 | 2.541 |
| 31 | | | | | | |
| 32 | 2.433 | 1.709 | 4.159 | 2.417 | 0.957 | 2.313 |
| 33 | 2.467 | 1.792 | 4.420 | 2.467 | 1.502 | 3.705 |
| 34 | 2.467 | 0.439 | 1.083 | 2.450 | 0.700 | 1.715 |
| 35 | 2.483 | 1.176 | 2.920 | 2.500 | 0.602 | 1.505 |
| 36 | | | | | | |
| 37 | 2.417 | 1.314 | 3.176 | 2.417 | 0.772 | 1.866 |
| 38 | 2.450 | 1.551 | 3.800 | 2.500 | 0.318 | 0.795 |
| 39 | 2.450 | 1.180 | 2.891 | 2.433 | 0.053 | 0.129 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 40 | 2.467 | 1.547 | 3.816 | 2.517 | 0.517 | 1.301 |
| 41 | | | | | | |
| 42 | 2.417 | 1.491 | 3.603 | 2.433 | 0.742 | 1.806 |
| 43 | 2.433 | 1.727 | 4.202 | 2.500 | 1.038 | 2.595 |
| 44 | 2.450 | 1.022 | 2.504 | 2.483 | 0.119 | 0.296 |
| 45 | 2.467 | 1.037 | 2.558 | 2.533 | 0.873 | 2.212 |
| 46 | | | | | | |
| 47 | 2.400 | 1.775 | 4.260 | 2.467 | 0.573 | 1.413 |
| 48 | 2.417 | 1.389 | 3.357 | 2.517 | 1.093 | 2.751 |
| 49 | 2.433 | 0.964 | 2.346 | 2.483 | 0.875 | 2.173 |
| 50 | 2.450 | 1.272 | 3.116 | 2.550 | 0.612 | 1.561 |
| 51 | | | | | | |
| 52 | 2.383 | 1.280 | 3.051 | 2.483 | 1.053 | 2.615 |
| 53 | 2.417 | 1.628 | 3.934 | 2.567 | 1.523 | 3.909 |
| 54 | 2.400 | 1.160 | 2.784 | 2.533 | 0.748 | 1.895 |
| 55 | 2.433 | 1.185 | 2.884 | 2.583 | 1.136 | 2.935 |
| 56 | | | | | | |
| 57 | 2.350 | 1.414 | 3.323 | 2.550 | 1.071 | 2.731 |
| 58 | 2.383 | 1.781 | 4.245 | 2.633 | 0.497 | 1.309 |
| 59 | 2.400 | 0.603 | 1.447 | 2.583 | 0.622 | 1.607 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 60 | 2.400 | 1.623 | 3.895 | 2.650 | 0.557 | 1.476 |
| 61 | | | | | | |
| 62 | 2.367 | 1.480 | 3.503 | 2.517 | 0.673 | 1.694 |
| 63 | 2.433 | 1.266 | 3.081 | 2.600 | 0.779 | 2.025 |
| 64 | 2.400 | 0.754 | 1.810 | 2.533 | 0.727 | 1.842 |
| 65 | 2.433 | 1.598 | 3.889 | 2.567 | 1.196 | 3.070 |
| 66 | | | | | | |
| 67 | 2.400 | 1.098 | 2.635 | 2.467 | 0.791 | 1.951 |
| 68 | 2.483 | 1.249 | 3.102 | 2.533 | 1.379 | 3.494 |
| 69 | 2.467 | 0.660 | 1.628 | 2.517 | 0.302 | 0.760 |
| 70 | 2.483 | 1.733 | 4.304 | 2.533 | 1.798 | 4.555 |
| 71 | | | | | | |
| 72 | 2.450 | 0.854 | 2.092 | 2.483 | 1.521 | 3.777 |
| 73 | 2.500 | 1.653 | 4.133 | 2.517 | 1.475 | 3.712 |
| 74 | 2.500 | 0.465 | 1.163 | 2.517 | 0.631 | 1.588 |
| 75 | 2.533 | 0.869 | 2.202 | 2.550 | 0.948 | 2.417 |

Participant 29

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 1 | | | | | | |
| 2 | 2.967 | 0.258 | 0.765 | 2.533 | 0.279 | 0.707 |
| 3 | 3.217 | 0.594 | 1.911 | 2.783 | 0.491 | 1.367 |
| 4 | 3.267 | 0.065 | 0.212 | 2.933 | 0.880 | 2.581 |
| 5 | 3.517 | 0.209 | 0.735 | 3.317 | 0.159 | 0.527 |
| 6 | | | | | | |
| 7 | 3.333 | 0.133 | 0.443 | 3.300 | 0.030 | 0.099 |
| 8 | 3.533 | 0.115 | 0.406 | 3.617 | 0.064 | 0.231 |
| 9 | 3.517 | 0.234 | 0.823 | 3.583 | 0.204 | 0.731 |
| 10 | 3.700 | 0.288 | 1.066 | 3.767 | 0.236 | 0.889 |
| 11 | | | | | | |
| 12 | 3.417 | 0.332 | 1.134 | 3.167 | 0.169 | 0.535 |
| 13 | 3.650 | 0.252 | 0.920 | 3.417 | 0.156 | 0.533 |
| 14 | 3.717 | 0.028 | 0.104 | 3.467 | 0.162 | 0.562 |
| 15 | 3.983 | 0.150 | 0.598 | 3.717 | 0.006 | 0.022 |
| 16 | | | | | | |
| 17 | 3.433 | 0.103 | 0.354 | 3.250 | 0.330 | 1.073 |
| 18 | 3.617 | 0.218 | 0.788 | 3.417 | 0.253 | 0.864 |
| 19 | 3.600 | 0.122 | 0.439 | 3.383 | 0.009 | 0.030 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 20 | 3.800 | 0.148 | 0.562 | 3.517 | 0.109 | 0.383 |
| 21 | | | | | | |
| 22 | 3.350 | 0.335 | 1.122 | 3.217 | 0.223 | 0.717 |
| 23 | 3.633 | 0.029 | 0.105 | 3.583 | 0.193 | 0.692 |
| 24 | 3.717 | 0.168 | 0.624 | 3.567 | 0.135 | 0.482 |
| 25 | 4.033 | 0.345 | 1.392 | 3.767 | 0.162 | 0.610 |
| 26 | | | | | | |
| 27 | 3.433 | 0.093 | 0.319 | 3.333 | 0.350 | 1.167 |
| 28 | 3.700 | 0.387 | 1.432 | 3.700 | 0.510 | 1.887 |
| 29 | 3.683 | 0.136 | 0.501 | 3.733 | 0.390 | 1.456 |
| 30 | 3.800 | 0.291 | 1.106 | 3.867 | 0.291 | 1.125 |
| 31 | | | | | | |
| 32 | 3.233 | 0.436 | 1.410 | 3.250 | 0.160 | 0.520 |
| 33 | 3.633 | 0.253 | 0.919 | 3.650 | 0.233 | 0.850 |
| 34 | 3.867 | 0.063 | 0.244 | 3.767 | 0.127 | 0.478 |
| 35 | 4.150 | 0.122 | 0.506 | 4.050 | 0.223 | 0.903 |
| 36 | | | | | | |
| 37 | 3.633 | 0.024 | 0.087 | 3.433 | 0.198 | 0.680 |
| 38 | 3.900 | 0.021 | 0.082 | 3.883 | 0.333 | 1.293 |
| 39 | 3.850 | 0.130 | 0.501 | 4.033 | 0.116 | 0.468 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 40 | 4.050 | 0.014 | 0.057 | 4.333 | 0.057 | 0.247 |
| 41 | | | | | | |
| 42 | 3.483 | 0.441 | 1.536 | 3.400 | 0.021 | 0.071 |
| 43 | 3.833 | 0.424 | 1.625 | 3.817 | 0.143 | 0.546 |
| 44 | 3.950 | 0.303 | 1.197 | 4.033 | 0.490 | 1.976 |
| 45 | 4.217 | 0.455 | 1.919 | 4.400 | 0.351 | 1.544 |
| 46 | | | | | | |
| 47 | 3.783 | 0.001 | 0.004 | 3.500 | 0.005 | 0.018 |
| 48 | 4.150 | 0.078 | 0.324 | 4.033 | 0.122 | 0.492 |
| 49 | 4.100 | 0.315 | 1.292 | 4.217 | 0.084 | 0.354 |
| 50 | 4.283 | 0.094 | 0.403 | 4.300 | 0.015 | 0.065 |
| 51 | | | | | | |
| 52 | 3.733 | 0.188 | 0.702 | 3.483 | 0.310 | 1.080 |
| 53 | 4.017 | 0.223 | 0.896 | 3.983 | 0.314 | 1.251 |
| 54 | 3.933 | 0.021 | 0.083 | 4.167 | 0.457 | 1.904 |
| 55 | 4.083 | 0.001 | 0.004 | 4.283 | 0.044 | 0.188 |
| 56 | | | | | | |
| 57 | 3.667 | 0.256 | 0.939 | 3.467 | 0.090 | 0.312 |
| 58 | 3.967 | 0.035 | 0.139 | 3.933 | 0.297 | 1.168 |
| 59 | 3.833 | 0.252 | 0.966 | 3.883 | 0.249 | 0.967 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 60 | 3.917 | 0.033 | 0.129 | 4.100 | 0.301 | 1.234 |
| 61 | | | | | | |
| 62 | 3.533 | 0.171 | 0.604 | 3.567 | 0.152 | 0.542 |
| 63 | 3.767 | 0.063 | 0.237 | 4.033 | 0.003 | 0.012 |
| 64 | 3.750 | 0.285 | 1.069 | 4.083 | 0.173 | 0.706 |
| 65 | 3.900 | 0.400 | 1.560 | 4.250 | 0.174 | 0.740 |
| 66 | | | | | | |
| 67 | 3.450 | 0.002 | 0.007 | 3.650 | 0.132 | 0.482 |
| 68 | 3.733 | 0.327 | 1.221 | 4.050 | 0.127 | 0.514 |
| 69 | 3.783 | 0.033 | 0.125 | 4.033 | 0.229 | 0.924 |
| 70 | 4.017 | 0.128 | 0.514 | 4.267 | 0.256 | 1.092 |
| 71 | | | | | | |
| 72 | 3.400 | 0.217 | 0.738 | 3.567 | 0.057 | 0.203 |
| 73 | 3.667 | 0.469 | 1.720 | 3.917 | 0.355 | 1.390 |
| 74 | 3.700 | 0.176 | 0.651 | 3.983 | 0.290 | 1.155 |
| 75 | 3.967 | 0.443 | 1.757 | 4.200 | 0.354 | 1.487 |

Participant 30

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 1 | | | | | | |
| 2 | 2.450 | 1.593 | 3.903 | 2.350 | 0.449 | 1.055 |
| 3 | 2.483 | 1.130 | 2.806 | 2.483 | 0.931 | 2.312 |
| 4 | 2.433 | 1.148 | 2.794 | 2.467 | 0.588 | 1.450 |
| 5 | 2.467 | 1.558 | 3.843 | 2.633 | 0.142 | 0.374 |
| 6 | | | | | | |
| 7 | 2.350 | 1.254 | 2.947 | 2.333 | 0.197 | 0.460 |
| 8 | 2.367 | 1.443 | 3.415 | 2.450 | 0.748 | 1.833 |
| 9 | 2.350 | 1.307 | 3.072 | 2.417 | 0.960 | 2.320 |
| 10 | 2.350 | 0.492 | 1.156 | 2.517 | 0.491 | 1.236 |
| 11 | | | | | | |
| 12 | 2.350 | 1.363 | 3.203 | 2.183 | 0.385 | 0.841 |
| 13 | 2.400 | 1.433 | 3.439 | 2.400 | 0.063 | 0.151 |
| 14 | 2.433 | 1.759 | 4.280 | 2.350 | 0.640 | 1.504 |
| 15 | 2.450 | 1.337 | 3.276 | 2.483 | 0.490 | 1.217 |
| 16 | | | | | | |
| 17 | 2.467 | 1.014 | 2.501 | 2.267 | 0.249 | 0.564 |
| 18 | 2.500 | 1.544 | 3.860 | 2.433 | 0.230 | 0.560 |
| 19 | 2.533 | 1.233 | 3.124 | 2.400 | 0.475 | 1.140 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|---------|----------|-------|---------|----------|-------|
| | Travel | Lane | Cost | Travel | Lane | Cost |
| | Time | Position | | Time | Position | |
| 20 | 2.567 | 0.950 | 2.438 | 2.600 | 0.487 | 1.266 |
| 21 | | | | | | |
| 22 | 2.550 | 1.026 | 2.616 | 2.217 | 0.177 | 0.392 |
| 23 | 2.617 | 1.239 | 3.242 | 2.383 | 0.035 | 0.083 |
| 24 | 2.600 | 0.447 | 1.162 | 2.350 | 0.404 | 0.949 |
| 25 | 2.633 | 0.441 | 1.161 | 2.500 | 0.387 | 0.968 |
| 26 | | | | | | |
| 27 | 2.250 | 0.227 | 0.511 | 2.267 | 0.609 | 1.380 |
| 28 | 2.317 | 1.705 | 3.950 | 2.467 | 0.033 | 0.081 |
| 29 | 2.317 | 1.401 | 3.246 | 2.483 | 0.516 | 1.281 |
| 30 | 2.333 | 1.689 | 3.941 | 2.550 | 0.202 | 0.515 |
| 31 | | | | | | |
| 32 | 2.083 | 0.926 | 1.929 | 2.133 | 0.065 | 0.139 |
| 33 | 2.183 | 0.846 | 1.847 | 2.300 | 0.582 | 1.339 |
| 34 | 2.167 | 0.448 | 0.971 | 2.350 | 0.344 | 0.808 |
| 35 | 2.217 | 1.599 | 3.545 | 2.517 | 0.627 | 1.578 |
| 36 | | | | | | |
| 37 | 2.000 | 0.688 | 1.376 | 2.167 | 0.012 | 0.026 |
| 38 | 2.033 | 1.121 | 2.279 | 2.417 | 0.538 | 1.300 |
| 39 | 2.033 | 0.240 | 0.488 | 2.417 | 0.147 | 0.355 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 40 | 2.083 | 0.861 | 1.794 | 2.517 | 0.252 | 0.634 |
| 41 | | | | | | |
| 42 | 2.217 | 0.610 | 1.352 | 2.100 | 0.172 | 0.361 |
| 43 | 2.367 | 1.322 | 3.129 | 2.267 | 0.814 | 1.845 |
| 44 | 2.400 | 0.644 | 1.546 | 2.283 | 1.084 | 2.475 |
| 45 | 2.467 | 0.555 | 1.369 | 2.400 | 0.438 | 1.051 |
| 46 | | | | | | |
| 47 | 2.300 | 0.055 | 0.127 | 2.083 | 0.292 | 0.608 |
| 48 | 2.417 | 0.473 | 1.143 | 2.250 | 0.908 | 2.043 |
| 49 | 2.433 | 0.544 | 1.324 | 2.267 | 0.882 | 1.999 |
| 50 | 2.583 | 0.479 | 1.237 | 2.417 | 0.446 | 1.078 |
| 51 | | | | | | |
| 52 | 2.133 | 0.715 | 1.525 | 2.067 | 0.522 | 1.079 |
| 53 | 2.217 | 0.718 | 1.592 | 2.133 | 1.199 | 2.558 |
| 54 | 2.200 | 0.286 | 0.629 | 2.100 | 1.124 | 2.360 |
| 55 | 2.267 | 0.182 | 0.413 | 2.150 | 0.542 | 1.165 |
| 56 | | | | | | |
| 57 | 2.000 | 0.805 | 1.610 | 2.033 | 0.859 | 1.747 |
| 58 | 2.117 | 1.329 | 2.813 | 2.167 | 0.115 | 0.249 |
| 59 | 2.183 | 0.281 | 0.614 | 2.167 | 0.215 | 0.466 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 60 | 2.267 | 0.171 | 0.388 | 2.317 | 0.406 | 0.941 |
| 61 | | | | | | |
| 62 | 2.100 | 0.492 | 1.033 | 2.100 | 0.308 | 0.647 |
| 63 | 2.233 | 0.425 | 0.949 | 2.283 | 0.501 | 1.144 |
| 64 | 2.250 | 0.629 | 1.415 | 2.250 | 0.503 | 1.132 |
| 65 | 2.367 | 0.692 | 1.638 | 2.400 | 0.786 | 1.886 |
| 66 | | | | | | |
| 67 | 2.117 | 0.024 | 0.051 | 2.117 | 0.032 | 0.068 |
| 68 | 2.267 | 0.692 | 1.569 | 2.250 | 0.190 | 0.428 |
| 69 | 2.367 | 0.545 | 1.290 | 2.267 | 1.212 | 2.747 |
| 70 | 2.467 | 0.054 | 0.133 | 2.383 | 0.437 | 1.042 |
| 71 | | | | | | |
| 72 | 2.233 | 0.029 | 0.065 | 2.033 | 0.781 | 1.588 |
| 73 | 2.450 | 0.893 | 2.188 | 2.083 | 1.263 | 2.631 |
| 74 | 2.500 | 0.530 | 1.325 | 2.100 | 0.868 | 1.823 |
| 75 | 2.683 | 0.029 | 0.078 | 2.183 | 0.317 | 0.692 |

Participant 31

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 1 | | | | | | |
| 2 | 2.400 | 0.868 | 2.083 | 3.350 | 0.079 | 0.265 |
| 3 | 2.383 | 1.374 | 3.275 | 3.717 | 0.229 | 0.851 |
| 4 | 2.383 | 0.944 | 2.250 | 3.683 | 0.136 | 0.501 |
| 5 | 2.350 | 0.054 | 0.127 | 3.883 | 0.113 | 0.439 |
| 6 | | | | | | |
| 7 | 2.283 | 1.237 | 2.825 | 2.883 | 0.257 | 0.741 |
| 8 | 2.367 | 0.825 | 1.953 | 3.233 | 0.119 | 0.385 |
| 9 | 2.233 | 0.413 | 0.922 | 3.250 | 0.155 | 0.504 |
| 10 | 2.400 | 0.866 | 2.078 | 3.567 | 0.301 | 1.074 |
| 11 | | | | | | |
| 12 | 2.700 | 0.356 | 0.961 | 3.083 | 0.071 | 0.219 |
| 13 | 2.783 | 1.740 | 4.843 | 3.400 | 0.092 | 0.313 |
| 14 | 2.817 | 0.739 | 2.082 | 3.517 | 0.256 | 0.900 |
| 15 | 2.933 | 0.003 | 0.009 | 3.883 | 0.159 | 0.617 |
| 16 | | | | | | |
| 17 | 2.917 | 0.381 | 1.111 | 2.800 | 0.357 | 1.000 |
| 18 | 3.067 | 0.400 | 1.227 | 3.100 | 0.214 | 0.663 |
| 19 | 2.933 | 0.410 | 1.203 | 3.150 | 0.069 | 0.217 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 20 | 3.067 | 0.080 | 0.245 | 3.400 | 0.020 | 0.068 |
| 21 | | | | | | |
| 22 | 2.867 | 0.277 | 0.794 | 2.717 | 0.176 | 0.478 |
| 23 | 2.900 | 0.087 | 0.252 | 3.067 | 0.236 | 0.724 |
| 24 | 2.817 | 0.796 | 2.242 | 3.200 | 0.403 | 1.290 |
| 25 | 2.950 | 0.542 | 1.599 | 3.367 | 0.071 | 0.239 |
| 26 | | | | | | |
| 27 | 2.700 | 0.709 | 1.914 | 2.700 | 0.777 | 2.098 |
| 28 | 2.967 | 0.500 | 1.483 | 3.017 | 0.186 | 0.561 |
| 29 | 2.933 | 0.745 | 2.185 | 3.083 | 0.703 | 2.168 |
| 30 | 3.167 | 0.196 | 0.621 | 3.483 | 0.432 | 1.505 |
| 31 | | | | | | |
| 32 | 2.817 | 0.168 | 0.473 | 2.733 | 0.629 | 1.719 |
| 33 | 2.883 | 0.707 | 2.039 | 3.083 | 0.072 | 0.222 |
| 34 | 2.867 | 0.255 | 0.731 | 3.267 | 0.079 | 0.258 |
| 35 | 2.850 | 0.289 | 0.824 | 3.517 | 0.854 | 3.003 |
| 36 | | | | | | |
| 37 | 2.717 | 0.171 | 0.465 | 2.833 | 0.274 | 0.776 |
| 38 | 6.200 | 0.252 | 1.562 | 3.183 | 0.119 | 0.379 |
| 39 | 3.200 | 0.107 | 0.342 | 3.350 | 0.036 | 0.121 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 40 | 15.017 | 0.445 | 6.683 | 3.450 | 0.460 | 1.587 |
| 41 | | | | | | |
| 42 | 3.167 | 0.061 | 0.193 | 2.600 | 0.094 | 0.244 |
| 43 | 3.217 | 0.568 | 1.827 | 2.967 | 0.123 | 0.365 |
| 44 | 3.383 | 0.437 | 1.479 | 3.067 | 0.090 | 0.276 |
| 45 | 15.434 | 0.399 | 6.158 | 3.317 | 0.410 | 1.360 |
| 46 | | | | | | |
| 47 | 3.250 | 0.130 | 0.423 | 2.700 | 0.319 | 0.861 |
| 48 | 3.333 | 0.461 | 1.537 | 2.983 | 0.227 | 0.677 |
| 49 | 3.517 | 0.674 | 2.370 | 3.133 | 0.222 | 0.696 |
| 50 | 16.567 | 0.301 | 4.987 | 3.467 | 0.903 | 3.130 |
| 51 | | | | | | |
| 52 | 3.400 | 0.062 | 0.211 | 2.683 | 0.049 | 0.131 |
| 53 | 3.400 | 0.184 | 0.626 | 3.033 | 0.245 | 0.743 |
| 54 | 3.483 | 0.124 | 0.432 | 3.217 | 0.458 | 1.473 |
| 55 | 15.500 | 0.479 | 7.425 | 3.617 | 0.243 | 0.879 |
| 56 | | | | | | |
| 57 | 3.067 | 0.019 | 0.058 | 2.850 | 0.095 | 0.271 |
| 58 | 2.900 | 0.441 | 1.279 | 3.217 | 0.175 | 0.563 |
| 59 | 2.967 | 0.081 | 0.240 | 3.233 | 0.081 | 0.262 |

| Lane | Drive 1 | | | Drive 2 | | |
|--------|---------|----------|-------|---------|----------|-------|
| Change | Travel | Lane | Cost | Travel | Lane | Cost |
| | Time | Position | | Time | Position | |
| 60 | 13.800 | 0.447 | 6.169 | 3.350 | 0.061 | 0.204 |
| 61 | | | | | | |
| 62 | 3.033 | 0.933 | 2.830 | 2.750 | 0.108 | 0.297 |
| 63 | 3.000 | 0.589 | 1.767 | 3.133 | 0.171 | 0.536 |
| 64 | 3.267 | 0.264 | 0.862 | 3.217 | 0.038 | 0.122 |
| 65 | 15.367 | 0.322 | 4.948 | 3.350 | 0.145 | 0.486 |
| 66 | | | | | | |
| 67 | 3.250 | 0.127 | 0.413 | 2.583 | 0.438 | 1.132 |
| 68 | 3.300 | 0.153 | 0.505 | 2.900 | 0.066 | 0.191 |
| 69 | 3.500 | 0.717 | 2.510 | 3.033 | 0.187 | 0.567 |
| 70 | 16.784 | 0.257 | 4.313 | 3.417 | 0.141 | 0.482 |
| 71 | | | | | | |
| 72 | 3.450 | 0.310 | 1.070 | 2.583 | 0.163 | 0.421 |
| 73 | 3.550 | 0.003 | 0.011 | 2.900 | 0.266 | 0.771 |
| 74 | 3.767 | 0.366 | 1.379 | 3.083 | 0.697 | 2.149 |
| 75 | 5.117 | 0.021 | 0.107 | 3.367 | 0.492 | 1.656 |

Participant 32

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 1 | | | | | | |
| 2 | 2.383 | 0.666 | 1.587 | 2.550 | 0.578 | 1.474 |
| 3 | 2.567 | 0.887 | 2.277 | 2.600 | 1.136 | 2.954 |
| 4 | 2.600 | 0.273 | 0.710 | 2.650 | 0.755 | 2.001 |
| 5 | 2.867 | 0.244 | 0.699 | 2.900 | 0.150 | 0.435 |
| 6 | | | | | | |
| 7 | 2.950 | 0.341 | 1.006 | 2.933 | 0.271 | 0.795 |
| 8 | 3.200 | 0.393 | 1.258 | 3.117 | 0.461 | 1.437 |
| 9 | 3.183 | 0.404 | 1.286 | 3.083 | 0.157 | 0.484 |
| 10 | 3.317 | 0.138 | 0.458 | 3.083 | 0.571 | 1.761 |
| 11 | | | | | | |
| 12 | 2.767 | 0.488 | 1.350 | 2.883 | 0.202 | 0.582 |
| 13 | 2.850 | 0.382 | 1.089 | 3.083 | 0.447 | 1.378 |
| 14 | 2.767 | 0.653 | 1.807 | 3.067 | 0.321 | 0.984 |
| 15 | 2.900 | 0.574 | 1.665 | 3.100 | 0.051 | 0.158 |
| 16 | | | | | | |
| 17 | 2.417 | 0.234 | 0.566 | 2.550 | 0.153 | 0.390 |
| 18 | 2.567 | 0.179 | 0.459 | 2.633 | 0.048 | 0.126 |
| 19 | 2.467 | 0.250 | 0.617 | 2.550 | 0.395 | 1.007 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 20 | 2.650 | 0.556 | 1.473 | 2.633 | 0.185 | 0.487 |
| 21 | | | | | | |
| 22 | 2.700 | 0.131 | 0.354 | 2.100 | 0.201 | 0.422 |
| 23 | 2.900 | 0.437 | 1.267 | 2.117 | 0.669 | 1.416 |
| 24 | 2.800 | 0.203 | 0.568 | 2.117 | 0.439 | 0.929 |
| 25 | 2.917 | 0.384 | 1.120 | 2.217 | 0.330 | 0.732 |
| 26 | | | | | | |
| 27 | 2.650 | 0.021 | 0.056 | 2.150 | 0.494 | 1.062 |
| 28 | 2.717 | 0.592 | 1.608 | 2.217 | 0.845 | 1.873 |
| 29 | 2.600 | 0.094 | 0.244 | 2.200 | 0.271 | 0.596 |
| 30 | 2.650 | 0.448 | 1.187 | 2.400 | 0.243 | 0.583 |
| 31 | | | | | | |
| 32 | 2.517 | 0.132 | 0.332 | 2.517 | 0.641 | 1.613 |
| 33 | 2.667 | 0.415 | 1.107 | 2.733 | 0.368 | 1.006 |
| 34 | 2.550 | 0.120 | 0.306 | 2.717 | 0.282 | 0.766 |
| 35 | 2.783 | 0.100 | 0.278 | 2.883 | 0.348 | 1.003 |
| 36 | | | | | | |
| 37 | 2.567 | 0.469 | 1.204 | 2.667 | 0.422 | 1.125 |
| 38 | 2.667 | 0.176 | 0.469 | 2.767 | 0.251 | 0.694 |
| 39 | 2.517 | 0.350 | 0.881 | 2.700 | 0.051 | 0.138 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 40 | 2.600 | 0.068 | 0.177 | 2.783 | 0.115 | 0.320 |
| 41 | | | | | | |
| 42 | 2.367 | 0.232 | 0.549 | 2.783 | 0.279 | 0.777 |
| 43 | 2.417 | 0.638 | 1.542 | 3.000 | 0.110 | 0.330 |
| 44 | 2.383 | 0.541 | 1.289 | 3.000 | 0.214 | 0.642 |
| 45 | 2.467 | 0.432 | 1.066 | 3.133 | 0.167 | 0.523 |
| 46 | | | | | | |
| 47 | 2.317 | 0.315 | 0.730 | 2.617 | 0.731 | 1.913 |
| 48 | 2.417 | 0.454 | 1.097 | 2.733 | 0.300 | 0.820 |
| 49 | 2.283 | 0.113 | 0.258 | 2.767 | 0.303 | 0.838 |
| 50 | 2.400 | 0.164 | 0.394 | 2.917 | 0.284 | 0.828 |
| 51 | | | | | | |
| 52 | 2.267 | 0.374 | 0.848 | 2.650 | 0.015 | 0.040 |
| 53 | 2.317 | 0.741 | 1.717 | 2.767 | 0.124 | 0.343 |
| 54 | 2.300 | 0.186 | 0.428 | 2.717 | 0.001 | 0.003 |
| 55 | 2.450 | 0.047 | 0.115 | 2.883 | 0.227 | 0.655 |
| 56 | | | | | | |
| 57 | 2.550 | 0.480 | 1.224 | 2.683 | 0.407 | 1.092 |
| 58 | 2.733 | 0.146 | 0.399 | 2.850 | 0.236 | 0.673 |
| 59 | 2.733 | 0.405 | 1.107 | 2.750 | 0.166 | 0.457 |

| Lane Change | Drive 1 | | | Drive 2 | | |
|----------------|----------------|------------------|-------|----------------|------------------|-------|
| | Travel Time | Lane Position | Cost | Travel Time | Lane Position | Cost |
| 60 | 2.883 | 0.258 | 0.744 | 2.817 | 0.007 | 0.020 |
| 61 | | | | | | |
| 62 | 2.567 | 0.377 | 0.968 | 2.517 | 0.302 | 0.760 |
| 63 | 2.667 | 0.273 | 0.728 | 2.583 | 0.023 | 0.059 |
| 64 | 2.517 | 0.279 | 0.702 | 2.467 | 0.179 | 0.442 |
| 65 | 2.617 | 0.332 | 0.869 | 2.583 | 0.406 | 1.049 |
| 66 | | | | | | |
| 67 | 2.517 | 0.743 | 1.870 | 2.417 | 0.699 | 1.689 |
| 68 | 2.650 | 0.424 | 1.124 | 2.483 | 0.195 | 0.484 |
| 69 | 2.633 | 0.121 | 0.319 | 2.417 | 0.737 | 1.781 |
| 70 | 2.800 | 0.575 | 1.610 | 2.533 | 0.067 | 0.170 |
| 71 | | | | | | |
| 72 | 2.417 | 0.240 | 0.580 | 2.433 | 0.222 | 0.540 |
| 73 | 2.550 | 0.712 | 1.816 | 2.517 | 0.072 | 0.181 |
| 74 | 2.517 | 0.460 | 1.158 | 2.433 | 0.379 | 0.922 |
| 75 | 2.600 | 0.137 | 0.356 | 2.517 | 0.009 | 0.023 |