

Customer Satisfaction Study of Roadway Pavement Markings

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16. Abstract <p>The Florida Department of Transportation (Department) has conducted a customer satisfaction initiative since 1999 including qualitative research and customer satisfaction interviews. Results of customer satisfaction interviews show that customers do not recognize tangible improvements to pavement markings and reflectors especially when driving at night. The present study examines drivers' sensitivity to pavement markings and reflectors by instructing drivers to drive assigned roads, to keep diaries of their experiences on these assigned roads, and to discuss their experiences in focus groups and subsequent interviews.</p> <p>A major conclusion of this study is that the Department should use dichotomous questions when assessing customer satisfaction with pavement markings and reflectors and that these questions should ask whether or not pavement markings and reflectors are adequate (rather than assessing degrees of performance through response scales involving adjectives such as excellent, good, fair, etc.). A second conclusion is that customers provide more valid and reliable information about pavement markings and reflectors when they are providing this information for state-maintained roads that they have been assigned to drive and evaluate rather than providing satisfaction with all state-maintained roads.</p>					
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EXECUTIVE SUMMARY

Introduction

The Florida Department of Transportation (Department) has conducted a customer satisfaction initiative since 1999. Based on qualitative research conducted in 1999, the Department developed customer satisfaction questionnaires for several constituencies (e.g., residents of Florida, commercial drivers, well-elder drivers, special needs drivers, government officials, and visitors) to assess their satisfaction with a list of transportation system attributes. Surveys have been conducted every two years starting in 2000. The Department carefully considers customer satisfaction data and prepares strategic and tactical responses to the transportation system in an effort to increase customer satisfaction scores.

Customers' satisfaction with pavement striping and reflective pavement markings has been a troublesome issue for the Department. There have been two questions in the surveys that relate to pavement markings:

- During the day, the visibility of roadway striping and markings is good.
- At night, the visibility of roadway striping and markings is good.

Despite specific strategies to enhance ratings on these two questions, no improvements have been noted on subsequent surveys. The end result of this process is not only concern about how to improve customer satisfaction on these two attributes, but also a disconnect on the part of Department personnel responsible for roadway striping and marking. That is Department personnel do not understand why:

- Customer satisfaction ratings of roadway striping and markings remain lower (especially on the question about night-time driving).
- Tangible enhancements to roadway striping and markings have not increased customer satisfaction ratings.

The Department is concerned that physical, tangible changes to pavement striping and reflective pavement markings have not been accompanied by increases in customer satisfaction ratings. In other words, customers' perceptions of pavement striping and reflective pavement markings have lagged actual improvements that the Department has made to pavement markings.

The present study was designed to investigate why customer ratings have not kept pace with physical, tangible improvements to pavement striping and reflective pavement markings.

Research Problem

FDOT customer satisfaction surveys have traditionally resulted in comparably low ratings for the following question:

- At night, the visibility of roadway striping and marking is good.

Despite specific strategies to enhance ratings on this question, no improvements have been noted on subsequent surveys. Given their efforts to employ tangible strategies for increasing ratings and the lack of ratings increases based on strategy changes, FDOT personnel may begin to doubt the validity of the customer satisfaction rating process.

Kerr & Downs Research's Technical Plan to examine these issues focuses on two issues:

1. Testing the sensitivity of the current customer satisfaction questionnaire to adequately assess customers' satisfaction with roadway striping and marking.
2. Examining the salience of roadway striping and marking to customers overall satisfaction with the roadway system.

Research Methodology

Based on discussions with Department staff, it was determined that exploratory rather than quantitative research was more appropriate for examining the research issues. In-depth telephone interviews and focus groups were determined to be the best data collection methods. It was further decided that drivers should have recent experience with specific roadways so their responses to questions would be based on fresh exposure to the roads.

A second step in the research process involved selecting geographic areas for analysis. Given the budget, it was determined that three locations, one each in south, central, and north Florida would be most appropriate. Tallahassee, Orlando, and Ft. Lauderdale were selected as the test cities.

The experimental paradigm for the study was as follows:

- Select roads in each city that had high quality and low quality roadway striping and pavement reflectors (see Table 1)
- Recruit individuals to participate in the study
- Conduct an initial telephone interview (see Questionnaire in the Appendix)
- Instruct individuals to drive assigned roads within a 2-week period
- Instruct individuals to keep a diary of their experiences and perceptions while driving the assigned roads (see Diary in the Appendix)
- Conduct a second telephone interview with questions similar to those asked in the first telephone interview
- Conduct a focus group of selected individuals in each city (see focus group script in the Appendix)

Table 1: Cities and roads*

Tallahassee	Thomasville Road between Killarney Way and Kerry Forrest	Good
	I-10 east of Thomasville Road to the US 90 exit	Bad
	Thomasville Road between Kerry Forrest and Bradfordville/Bannerman Road	Good
	Pensacola Street between the stadium and Appleyard Drive	Bad
Orlando	Semorán Blvd. (SR-436) between Hazeltine National Dr. and Curry Ford Rd.	Good
	Semorán Blvd. (SR-436) north of SR-408 to Colonial Blvd.	Bad
	408 between Conway Rd. (SR-15) and Goldenrod Rd. (SR-551).	Good
	Colonial Blvd. (SR-50) between Semoran Blvd. (SR-436) and Herndon Ave.	Bad
Ft. Lauderdale	Griffin Rd. between University Dr. and the Turnpike	Good
	University Dr. between Stirling Rd. and Griffin Rd.	Bad
	Commercial Blvd. between the Turnpike and US-1	Good
	Powerline Rd. between Cypress Creek Rd. (62 nd St.) and Pompano Park	Bad
	Federal Hwy. (US-1) between Atlantic Blvd. and Commercial Blvd.	Good
	Atlantic Blvd. between Cypress Rd. and Federal Hwy. (US-1)	Bad

*Roads with high and low quality roadway striping and pavement reflectors were selected by the Department.

Conclusions & Recommendations

Pavement markings and pavement reflectors are not the most critical attributes when drivers think of factors that make them feel safe and in control on the roadway system. While not unimportant, pavement markings and reflectors rank near the middle of attributes that affect drivers' sense of safety and control¹. There are a host of external factors such as traffic density, practices of other drivers (e.g., driving with cell phone in hand, tailgating, etc.), and weather conditions that have the greatest impact on drivers' sense of safety and well-being.

Among roadway factors, signage (size, visibility, placement relative to decision making, lighted) and road surface (smooth, wide lanes, firm shoulders) have been identified in a previous Department study as most critical to drivers' safety and sense of being in control. The current study reinforced these findings.

Pavement markings and reflectors are seemingly taken for granted by drivers and do not come readily to mind when individuals think about their experiences on roadways or when they recount their experiences either through written diaries or during verbal discussions in focus groups. Many drivers express a sentiment that pavement reflectors and pavement markings are thought of in terms of being adequate or not being adequate. The current customer satisfaction questionnaire that FDOT uses provides four substantive response options for pavement markings/reflectors questions:

- Strongly agree
- Agree
- Disagree
- Strongly disagree

Based on this research study, two response options may be sufficient and the wording of the questions should be phased in terms of adequacy. For example,

- During the day, the visibility of roadway striping and markings is adequate.
 - Yes
 - No
- At night, the visibility of roadway striping and markings is adequate.
 - Yes
 - No
- When it's raining, the visibility of roadway striping and markings is adequate.
 - Yes
 - No
- Lane striping and reflectors marking lanes and sides of roads are adequate.
 - Yes
 - No

These dichotomous questions are more consistent with drivers' evaluative context for pavement markings and reflectors and should produce more valid and reliable responses. Substituting "adequate" for "good" makes the questions consistent with drivers' evaluative comments about pavement markings and reflectors.

¹Florida Department of Transportation: Customer Satisfaction Research, 2005-2006

A second methodological change should also improve the precision of the measurement process. This involves having individuals drive specific roads within a few days of interviewing them. Recent experience with roadways impacted drivers' ratings in this study. Operationalizing this methodological change can be done in a few different ways:

1. Ask drivers which state-maintained roadways they have driven within the previous few days. The interviewer could offer a list of roads and the driver could select one that meets the criteria. This approach will result in similar aggregate data across Districts and across the State of Florida since all roadways will be state maintained.
2. Another approach is more customized, but more expensive and more labor intensive. A select subset of drivers could be selected for pre-screening. This subset of drivers would be asked to drive specific roads within the following week. Follow-up interviews would focus questions on the assigned road. This approach requires more interviewing hours and will most likely require an incentive for respondents.

Kerr & Downs Research recommends the first alternative, i.e., asking drivers during the interview which state road they have driven most recently and focusing questions on this road.

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DETAILED RESULTS

Comparing Pavement Markings on "Good" & "Bad" Roads – 1st Telephone Interview

In each city, sets of "good" and "bad" roads were identified by the Department. "Good" roads had high quality pavement striping and raised reflective pavement markers, while "bad" roads had lesser quality pavement striping and no raised reflective pavement markers (see Table 1 on page 5 for a listing of good and bad roads).

Drivers were interviewed by telephone prior to driving the assigned roads. It should be noted that all drivers had driven the assigned roads at least occasionally prior to the study based on their self-reporting. The initial telephone interview covered the following four pavement marking and reflector questions:

- During the day, the visibility of roadway striping and markings is good.
- At night, the visibility of roadway striping and markings is good.
- When it's raining, the visibility of roadway striping and markings is good.
- Lane striping and reflectors marking lanes and sides of roads are adequate.

The first two questions were taken from the Department's Customer Satisfaction questionnaire administered in 2006 and in previous years. The last two questions were recommended by Kerr & Downs Research based on a comprehensive study in 2006 for the Department designed to re-engineer the customer satisfaction methodology.

Table 2 shows the average ratings (on a 4-point scale) for good and bad roads as expressed by drivers during the first telephone interview. A higher average rating equates to a higher quality rating (4 = strongly agree, 3 = agree, 2 = disagree, and 1 = strongly disagree). For the first three questions regarding pavement markings, drivers' ratings of "good" and "bad" roads were not statistically different. For the first question (During the day, the visibility of roadway striping and markings is good), the average rating for the bad roads (2.93) was higher than the average rating for good roads (2.88) although the difference was not statistically significant.

For the second question (At night, the visibility of roadway striping and markings is good), average ratings for good roads was slightly higher (2.37) than the ratings for bad roads (2.29). For the third question (When it's raining, the visibility of roadway striping and markings is good), the average rating for good roads (2.53) was higher than the average rating for bad roads (2.39), yet the difference was not statistically significant. Only for the fourth question (Lane striping and reflectors marking lanes and sides of roads are adequate) was the average rating for good roads (2.92) statistically higher than the average rating for bad roads (2.77). Detailed results of drivers' ratings are shown in Figures 1 through 4.

Table 2: Means tests for roads with good markings versus bad markings (1st interviews)

Roads with good markings (1st interview) vs Roads with bad markings (1st interview)				
Pair	N	Mean	Mean Difference	Significance
During the day, the visibility of roadway striping and markings is good	189	2.82 ¹ , 2.77 ²	0.05	0.67
At night, the visibility of roadway striping and markings is good	189	2.09, 2.23	-0.14	0.29
When it's raining, the visibility of roadway striping and markings is good	189	2.20, 2.52	-0.32	0.02
Lane striping and reflectors marking lanes and sides of roads are adequate	189	2.78, 2.59	0.19	0.72

*Statistically significant at $\alpha=.05$ level.

¹Good Roads.

²Bad Roads.

Detailed Results

Conclusion

All drivers had driven the "good" and "bad" roads prior to the first telephone interview. Overall, drivers did not give statistically higher ratings to pavement striping and raised reflective pavement markers on the good roads compared to the bad roads. Only one of the four questions dealing with pavement striping and raised reflective pavement markers had a statistically higher rating when comparing good to bad roads.

Figure 1: During the day¹

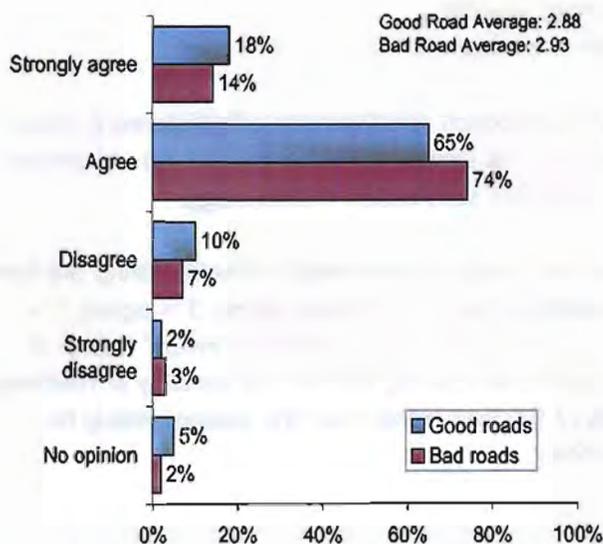


Figure 2: During the night²

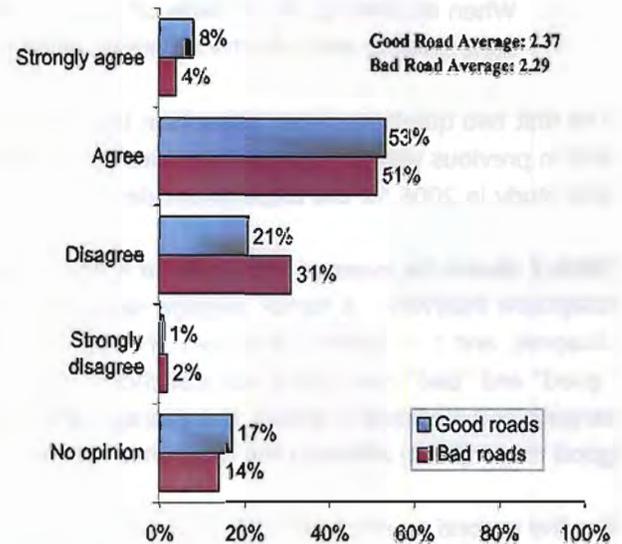


Figure 3: During the rain³

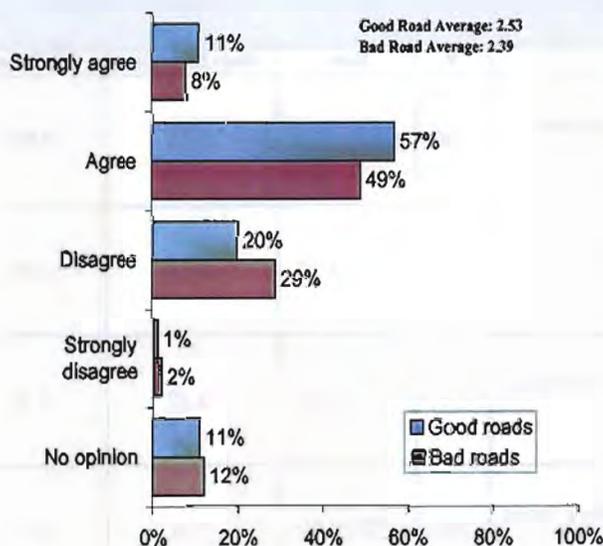
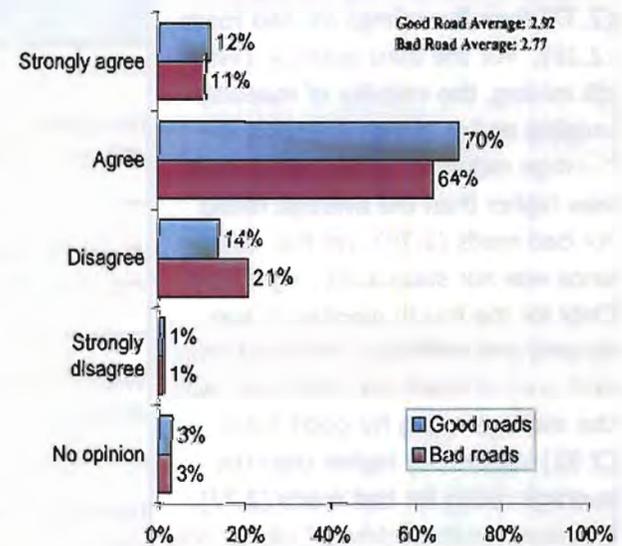


Figure 4: Lane striping and markings are adequate⁴



¹Actual question read: During the day, the visibility of roadway striping and markings is good.

²Actual question read: At night, the visibility of roadway striping and markings is good.

³Actual question read: When it's raining, the visibility of roadway striping and markings is good.

⁴Actual question read: Lane striping and reflectors marking lanes and sides of roads are adequate.

Comparing Pavement Markings on Good & Bad Roads – 2nd Telephone Interview

After the first telephone interview, drivers were asked to drive assigned roadways and to keep diaries about their driving experiences. After they drove the assigned roadways and completed their diaries, drivers were interviewed a second time by telephone and asked to rate several elements of the roadways. It should be noted that drivers not only reported driving the assigned roadways occasionally as they did during the first telephone interviews, but they also recently drove each roadway and focused their attention on the driving experience so they could complete their diaries. Hence, one would assume that the roadway characteristics were more clearly implanted in drivers' minds as they answered questions in the second telephone interview.

Table 3 shows the average ratings (on a 4-point scale) for good and bad roads as expressed by drivers during the second telephone interview. A higher average rating equates to a higher quality rating (4 = strongly agree, 3 = agree, 2 = disagree, and 1 = strongly disagree). Drivers gave higher average ratings to pavement markings on the good roads vs. pavement markings on the bad roads for all four questions dealing with pavement markings. Pavement markings on good roads received statistically higher average ratings compared to bad roads for the following three questions:

- During the day, the visibility of roadway striping and markings is good.
- Lane striping and reflectors marking lanes and sides of roads are adequate.
- At night, the visibility of roadway striping and markings is good.

Average ratings for good roads were higher than average ratings for bad roads, but not statistically higher for the following question.

- When it's raining, the visibility of roadway striping and markings is good.

Detailed results of drivers' ratings are shown in Figures 5 through 8.

Conclusions

Drivers, after driving the assigned roadways and taking notes about their experiences, were able to distinguish roadways with high quality pavement markings and reflectors vs. roadways with lower quality pavement markings and reflectors. On all four questions dealing with pavement markings and reflectors, drivers gave the good roads higher ratings, yet for only two of the questions were these differences in average ratings between good and bad roads statistically significant.

Table 3: Means tests for roads with good markings versus roads with bad markings – 2nd interview

Roads with good markings (2nd interview) vs Roads with bad markings (2nd interview)				
Pair	N	Mean	Mean Difference	Significance
During the day, the visibility of roadway striping and markings is good (Good, Bad)	70	3.20, 2.85	0.35	0.03**
At night, the visibility of roadway striping and markings is good (Good, Bad)	70	2.83, 2.50	0.33	0.01*
When it's raining, the visibility of roadway striping and markings is good (Good, Bad)	70	2.27, 2.24	0.03	0.86
Lane striping and reflectors marking lanes and sides of roads are adequate (Good, Bad)	70	2.98, 2.72	0.26	0.05**

*Statistically significant at $\alpha=.01$ level.

**Statistically significant at $\alpha=.05$ level.

Detailed Results

Figure 5: During the day¹

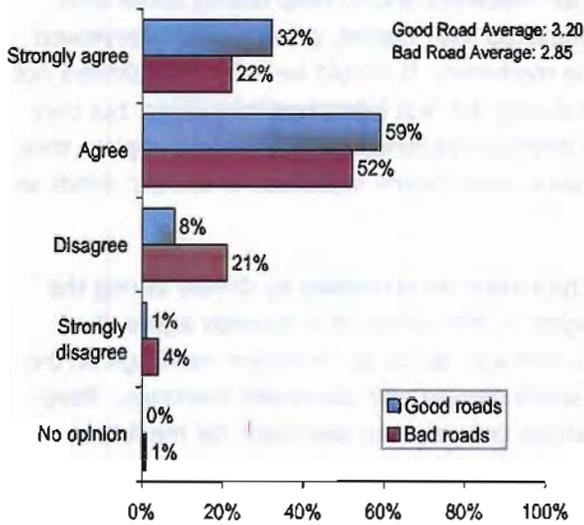


Figure 6: During the night²

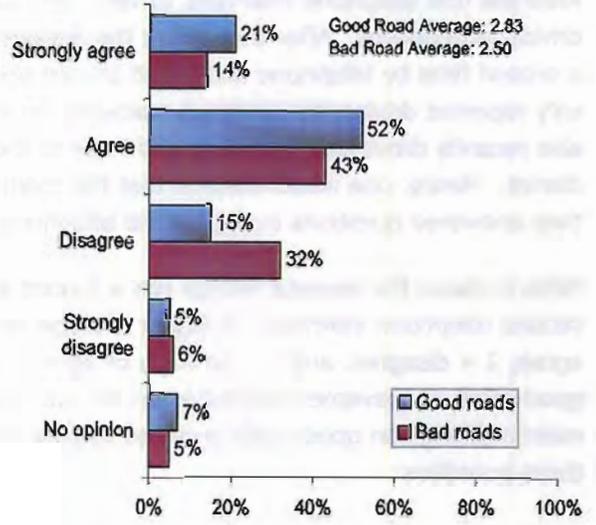


Figure 7: During the rain³

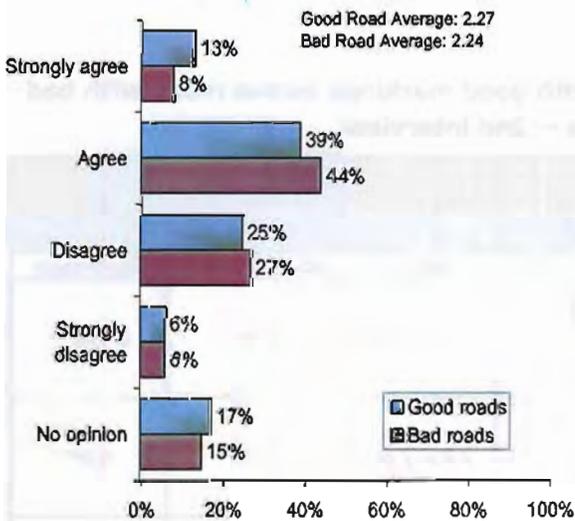
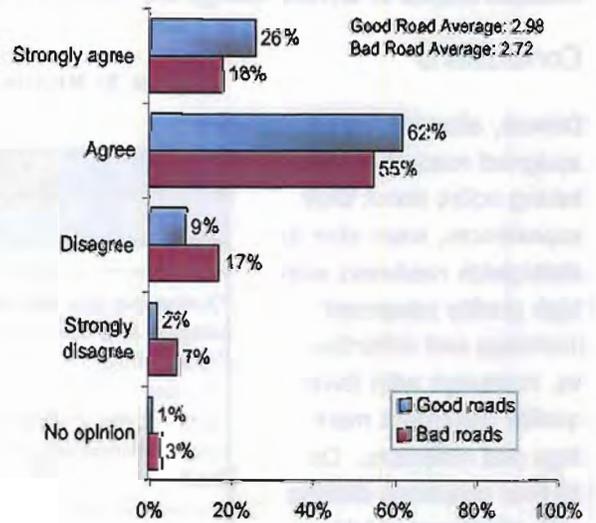


Figure 8: Lane striping and markings are adequate⁴



¹Actual question read: During the day, the visibility of roadway striping and markings is good.

²Actual question read: At night, the visibility of roadway striping and markings is good.

³Actual question read: When it's raining, the visibility of roadway striping and markings is good.

⁴Actual question read: Lane striping and reflectors marking lanes and sides of roads are adequate.

Impact of Traffic Density

Drivers' ratings were examined to discover if perceived traffic density had any impact on ratings of pavement markings/reflectors. Tables 4 and 5 show ratings for drivers who perceived a high level of traffic density on the assigned roads. Table 4 shows average ratings for good and bad roads during the first telephone interview. The good roads received higher ratings (that were not statistically significant) for pavement markings and reflectors on only one of the four questions. While the bad road received higher ratings on three of the questions, the differences were never statistically significant.

Table 5 shows average ratings under high density traffic conditions for good and bad roads during the second telephone interview. The sample size is small (n=10) so results should be viewed with caution. The good roads received higher ratings than the bad one for all four questions. The differences were statistically significant for the following questions:

- During the day, the visibility of roadway striping and markings is good.
- At night, the visibility of roadway striping and markings is good.
- Lane striping and reflectors marking lanes and sides of roads are adequate.

Conclusions

One could conclude that after driving the roads and keeping a diary, drivers under heavy traffic conditions were more likely to notice differences in quality of pavement markings and reflectors. Yet, the reader is cautioned not to place too much confidence in this conclusion since there were only 10 drivers in the second interview comparisons.

Impact of Drivers' Vision

During the first telephone interview, drivers characterized themselves in terms of their vision acuity. Analyses were conducted to determine if vision acuity impacted drivers' ability to distinguish roads with good pavement markings from those with bad pavement markings. Average ratings of good and bad roads during the first and second telephone interviews (for drivers with "excellent" vision) are shown in Tables 6 through 7. During the first telephone interview drivers with excellent vision gave good roads higher ratings than bad roads for three of the four questions (Table 6):

- When it's raining, the visibility of roadway markings is good.
- At night, the visibility of roadway striping and markings is good.
- Lane striping and reflectors marking lanes and sides of roads are adequate.

Ratings for good roads were statistically higher than ratings for bad roads only for the first of the two preceding questions.

Table 4: Heavy traffic – 1st interview

Roads with good markings (1st interview) vs Roads with bad markings (1st interview)				
Pair	N	Mean	Mean Difference	Significance
During the day, the visibility of roadway striping and markings is good (Good, Bad)	26	2.60, 2.78	-0.18	0.53
At night, the visibility of roadway striping and markings is good (Good, Bad)	26	2.14, 2.20	-0.06	0.83
When it's raining, the visibility of roadway striping and markings is good (Good, Bad)	26	2.45, 2.05	0.40	0.07
Lane striping and reflectors marking lanes and sides of roads are adequate (Good, Bad)	26	2.35, 2.86	-0.11	0.84

Table 5: Heavy traffic – 2nd interview

Roads with good markings (2nd interview) vs Roads with bad markings (2nd interview)				
Pair	N	Mean	Mean Difference	Significance
During the day, the visibility of roadway striping and markings is good (Good, Bad)	10	3.18, 2.38	0.80	0.05
At night, the visibility of roadway striping and markings is good (Good, Bad)	10	3.25, 2.20	1.05	0.02
When it's raining, the visibility of roadway striping and markings is good (Good, Bad)	10	3.52, 3.12	0.20	0.74
Lane striping and reflectors marking lanes and sides of roads are adequate (Good, Bad)	10	3.35, 2.45	0.90	0.04

Detailed Results

During the second telephone interview (after drivers had recently experienced driving the roads and had kept careful notes on their experiences) drivers gave good roads higher ratings than bad roads on all four questions, and three of the differences in ratings were statistically significant. (Table 7).

Results for drivers with less than excellent vision are shown in Tables 8 and 9. During the first telephone interview, drivers with less than excellent vision gave good roads higher ratings than they gave bad roads for only the two following questions but the results were not statistically significant:

- When it's raining, the visibility of roadway markings is good.
- Lane striping and reflectors marking lanes and sides of roads are adequate.

During the second telephone interview, drivers with less than excellent vision gave good roads higher ratings than they gave bad roads for all four questions but the differences were not statistically significant.

Conclusions

Drivers' vision acuity seemingly affected their ability to distinguish roads with good quality pavement markings from roads with bad quality pavement markings.

Table 6: Drivers with excellent vision – 1st interview

Roads with good markings (1st interview) vs Roads with bad markings (1st interview)				
Pair	N	Mean	Mean Difference	Significance
During the day, the visibility of roadway striping and markings is good (Good, Bad)	51	2.90, 2.93	-0.03	0.74
At night, the visibility of roadway striping and markings is good (Good, Bad)	51	2.40, 2.38	0.06	0.58
When it's raining, the visibility of roadway striping and markings is good (Good, Bad)	51	2.74, 2.30	0.44	0.01
Lane striping and reflectors marking lanes and sides of roads are adequate (Good, Bad)	51	2.88, 2.89	0.19	0.18

Table 7: Drivers with excellent vision – 2nd interview

Roads with good markings (2nd interview) vs Roads with bad markings (2nd interview)				
Pair	N	Mean	Mean Difference	Significance
During the day, the visibility of roadway striping and markings is good (Good, Bad)	22	3.48, 3.02	0.44	0.02
At night, the visibility of roadway striping and markings is good (Good, Bad)	22	2.84, 2.82	0.22	0.38
When it's raining, the visibility of roadway striping and markings is good (Good, Bad)	22	2.75, 2.20	0.55	0.04
Lane striping and reflectors marking lanes and sides of roads are adequate (Good, Bad)	22	3.24, 2.85	0.49	0.02

Table 8: Drivers with less than excellent vision – 1st interview

Roads with good markings (1st interview) vs Roads with bad markings (1st interview)				
Pair	N	Mean	Mean Difference	Significance
During the day, the visibility of roadway striping and markings is good (Good, Bad)	86	2.89, 3.11	-0.42	0.01
At night, the visibility of roadway striping and markings is good (Good, Bad)	86	2.50, 2.50	0	1
When it's raining, the visibility of roadway striping and markings is good (Good, Bad)	86	2.85, 2.50	0.15	0.28
Lane striping and reflectors marking lanes and sides of roads are adequate (Good, Bad)	86	2.92, 2.80	0.12	0.31

Table 9: Drivers with less than excellent vision – 2nd interview

Roads with good markings (2nd interview) vs Roads with bad markings (2nd interview)				
Pair	N	Mean	Mean Difference	Significance
During the day, the visibility of roadway striping and markings is good (Good, Bad)	20	3.39, 3.17	0.22	0.38
At night, the visibility of roadway striping and markings is good (Good, Bad)	20	3.00, 2.70	0.30	0.23
When it's raining, the visibility of roadway striping and markings is good (Good, Bad)	20	2.39, 2.29	0.10	0.89
Lane striping and reflectors marking lanes and sides of roads are adequate (Good, Bad)	20	3.30, 2.98	0.32	0.21

Impact of Wearing Glasses

This section examines the impact of wearing glasses when driving on drivers' ability to distinguish roads with good quality pavement markings from roads with bad quality pavement markings. Tables 10 and 11 show results for drivers who were supposed to wear glasses while driving and did so all of the time. These drivers' ratings for good roads in the first telephone interview (Table 10) exceeded their ratings for bad roads in three of the four questions but for only the following question were the differences statistically significant:

- When it's raining, the visibility of roadway striping and markings is good.

Table 11 shows results for the second telephone interview. Drivers who wore their driving glasses all of the time gave higher ratings to good roads than to bad roads for all four questions involving pavement markings yet the results, although close to being so, were not statistically significant.

Table 12 shows results for drivers who were supposed to wear glasses while driving but failed to do so at least half of the time. These drivers gave good roads lower ratings than bad roads on three of the four questions involving pavement markings. Results were not statistically significant.

Conclusion

While results were not statistically significant, they did suggest that drivers who are supposed to wear glasses while driving and do so were better able to distinguish roads with good quality pavement markings from roads with bad quality pavement markings more so than drivers who were supposed to wear glasses while driving and did not do so.

Table 10: Drivers who are supposed to wear glasses and did so while driving – 1st interview

Roads with good markings (1st interview) vs Roads with bad markings (1st interview)				
Pair	N	Mean	Mean Difference	Significance
During the day, the visibility of roadway striping and markings is good (Good, Bad)	49	2.91, 3.06	-0.18	0.11
At night, the visibility of roadway striping and markings is good (Good, Bad)	49	2.49, 2.31	0.18	0.19
When it's raining, the visibility of roadway striping and markings is good (Good, Bad)	49	2.87, 2.27	0.60	0.01
Lane striping and reflectors marking lanes and sides of roads are adequate (Good, Bad)	49	2.91, 2.85	0.06	0.87

Table 11: Drivers who are supposed to wear glasses and did so while driving – 2nd interview

Roads with good markings (2nd interview) vs Roads with bad markings (2nd interview)				
Pair	N	Mean	Mean Difference	Significance
During the day, the visibility of roadway striping and markings is good (Good, Bad)	17	3.83, 3.17	0.48	0.11
At night, the visibility of roadway striping and markings is good (Good, Bad)	17	3.21, 2.65	0.56	0.06
When it's raining, the visibility of roadway striping and markings is good (Good, Bad)	17	2.69, 2.43	0.26	0.33
Lane striping and reflectors marking lanes and sides of roads are adequate (Good, Bad)	17	3.57, 2.97	0.55	0.07

Table 12: Drivers who are supposed to wear glasses but only wore them half of the time or less – 1st interview

Roads with good markings (1st interview) vs Roads with bad markings (1st interview)				
Pair	N	Mean	Mean Difference	Significance
During the day, the visibility of roadway striping and markings is good (Good, Bad)	11	2.51, 3.36	-0.85	0.08
At night, the visibility of roadway striping and markings is good (Good, Bad)	11	2.64, 2.83	-0.19	0.64
When it's raining, the visibility of roadway striping and markings is good (Good, Bad)	11	2.64, 3.00	-0.36	0.28
Lane striping and reflectors marking lanes and sides of roads are adequate (Good, Bad)	11	2.73, 3.00	-0.27	0.39

Implications

Because drivers were better able to distinguish “good” roads from “bad” one after driving these specific roads and taking notes on the roadway characteristics, it would appear that to accurately assess satisfaction with roadways one would need to have driven the roadway recently and have paid very close attention to the characteristics being rated. Another way of stating this implication is to suggest that the current questions that the Department uses are not capable of measuring drivers’ opinions precisely enough for drivers to be able to discern changes in the underlying characteristics being measured (i.e., quality of pavement striping and reflective pavement markings).

A corollary implication is that the characteristics being measured, in this case pavement striping and reflective pavement markings are perceived in a dichotomous (rather than polychotomous) state. That is, pavement markings and reflectors are either good enough or they are not, rather than having several levels of quality or performance as presented in the current driver satisfaction questions that have four levels (strongly agree, agree, disagree, strongly disagree).

This latter interpretation has support from the focus group findings in which some drivers indicated that they noticed whether or not the pavement markings and reflectors were good or bad. Some verbatim comments from focus group participants are below:

- It is well striped.
- The lines and stripes are extremely bright and clear. I think that was the big thing that really stood out.
- No the striping is not that good.
- The striping in the middle two lanes in that section is not very good.
- If I was new to the area it would bother me more than it does. Looking at the picture it is not striped well and everything is really bunched together. It would be hard to navigate through. Many people said crossing lanes of traffic to get to the address you want to would be hard, but you have that on most roadways.
- Can’t even see the paint.
- The lines and reflectors are very easy to see in this area.
- I don’t like the part where the street is marked up right there; it looks like erasing on the street. I didn’t like the little lines. The rails are rusty.
- I know this stretch. This part is pretty good. Clear markings, good wide median, and the stores are set back from the road.
- Markings look brand new. The landscape looks clean. You have a clean view of both sides of the street.
- I thought it looked like it needs to be done over. Mismatched markings, worn pavement, barely noticeable median. I like driving Powerline because it is usually not that busy compared to 441. It is a better choice.
- Commercial feels safer because of dark white lines (clear). Has a wide median.

This latter interpretation would argue for dichotomous questions for pavement markings and reflectors. For example:

- | | |
|--|---|
| • During the day, the visibility of roadway striping and markings is adequate. | o No |
| o Yes | • When it’s raining, the visibility of roadway striping and markings is adequate. |
| o No | o Yes |
| • At night, the visibility of roadway striping and markings is adequate. | o No |
| o Yes | • Lane striping and reflectors marking lanes and sides of roads are adequate. |
| | o Yes |
| | o No |

Note that the first three questions were changed slightly from their original wording as "good" was replaced with "adequate." This replacement was suggested for two reasons:

1. In the first telephone interview, the only question that produced statistically significant differences in average ratings between good and bad roads was, "Lane striping and reflectors marking lanes and sides of roads are adequate."
2. Since focus group participants indicated that they perceived pavement markings and reflectors in a dichotomous state, the word "adequate" reflects the achievement of a desired state, while the word "good" adds an interpretive connotation to the question that may confuse the issue in drivers' minds.

Corroborating Evidence

When drivers rated the same roads, both before and after driving the assigned roadway and taking notes on their driving experiences on the assigned roadway, the average ratings they gave the "good" roads increased after driving them and taking notes on the experience. Table 13 shows the average ratings (on a 4-point scale) for good roads as expressed by drivers during the first and second telephone interviews. For the following three questions, average ratings after driving the roadways and taking careful notes were statistically higher than the average ratings prior to driving the roadways.

- During the day, the visibility of roadway striping and markings is good.
- At night, the visibility of roadway striping and markings is good.
- When it's raining, the visibility of roadway striping and markings is good.

For the fourth question (Lane striping and reflectors marking lanes and sides of roads are adequate), average ratings actually went down after drivers had experienced the roadway but the decrease was not statistically significant.

Confounding Evidence

Drivers' average ratings for bad roads prior to and after driving the assigned roads and keeping diaries of their experiences were also collected during the first and second telephone interviews (Table 14). Ratings increased from the first to the second interview for the first three questions (as they did for the good roads):

- During the day, the visibility of roadway striping and markings is good.
- At night, the visibility of roadway striping and markings is good.
- When it's raining, the visibility of roadway striping and markings is good.

Table 13: "Good" road ratings for 1st & 2nd interviews

Roads with good markings (1st interview) vs Roads with good markings (2nd interview)				
Pair	N	Mean	Mean Difference	Significance
During the day, the visibility of roadway striping and markings is good (1st, 2nd)	59	3.14, 3.33	0.19	0.02
At night, the visibility of roadway striping and markings is good (1st, 2nd)	59	2.89, 3.28	0.39	0.01
When it's raining, the visibility of roadway striping and markings is good (1st, 2nd)	59	2.43, 2.79	0.36	0.05
Lane striping and reflectors marking lanes and sides of roads are adequate (1st, 2nd)	59	2.41, 2.38	-0.03	0.85

Table 14: "Bad" road ratings for 1st & 2nd interviews

Roads with bad markings (1st interview) vs Roads with bad markings (2nd interview)				
Pair	N	Mean	Mean Difference	Significance
During the day, the visibility of roadway striping and markings is good (1st, 2nd)	59	2.71, 3.06	0.35	0.04
At night, the visibility of roadway striping and markings is good (1st, 2nd)	59	2.91, 3.02	0.11	0.48
When it's raining, the visibility of roadway striping and markings is good (1st, 2nd)	59	2.20, 2.81	0.41	0.03
Lane striping and reflectors marking lanes and sides of roads are adequate (1st, 2nd)	59	2.23, 2.31	0.08	0.84

Detailed Results

Increases in average ratings were statistically significant for the first and third questions, but no where close to statistically significant for the second question. For the fourth question (Lane striping and reflectors marking lanes and sides of roads are adequate), average ratings increased slightly between the first and second telephone interviews.

It appears that closer scrutiny and recent knowledge of the roadways increase one's ratings of pavement markings and reflectors regardless of the quality of the pavement markings and reflectors.

Comparing 2004 & 2007 Results

All analyses so far have focused on examining ratings of good roads versus bad roads for the 2007 study. The impetus for the 2007 study came from low ratings of pavement markings at night in the 2002 and 2004 studies, plus the fact that the 2002 and 2004 ratings did not improve after the Department had improved pavement markings.

Figures 9 through 12 on the following page compare pavement marking ratings in the 2007 study to ratings from the 2004 study. Average ratings for the good roads in 2007 were greater than the average ratings in the 2004 study for the following two questions:

- During the day, the visibility of roadway striping and markings is good.
- At night, the visibility of roadway striping and markings is good.

The average ratings of bad roads during the day in 2007 were lower than the 2004 ratings. This result should be expected since the 2004 study contained good and bad roads. In comparing 2004 customer satisfaction with pavement markings to the results obtained from the more complex research design in the 2007 study, it is clear that customers are more able to discern differences in pavement markings quality if they "study" the roads and have a specific roadway in mind when providing ratings. Roads with high quality pavement markings in the 2007 study received higher ratings compared to the 2004 study, and roads with lower quality pavement markings on the 2007 study received lower ratings compared to the 2004 study.

Figure 9: During the day – good roads¹

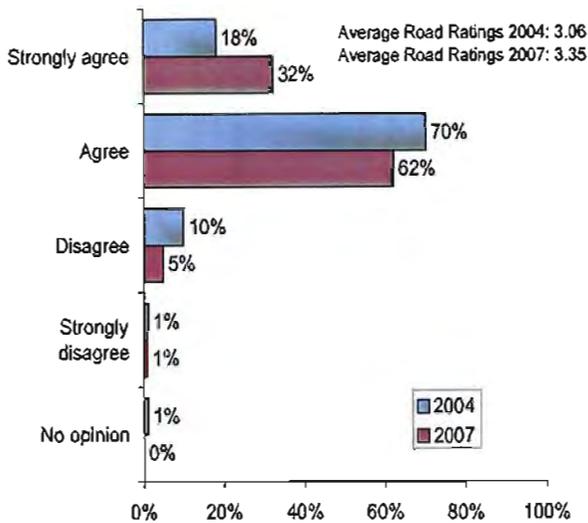


Figure 10: At night – good roads²

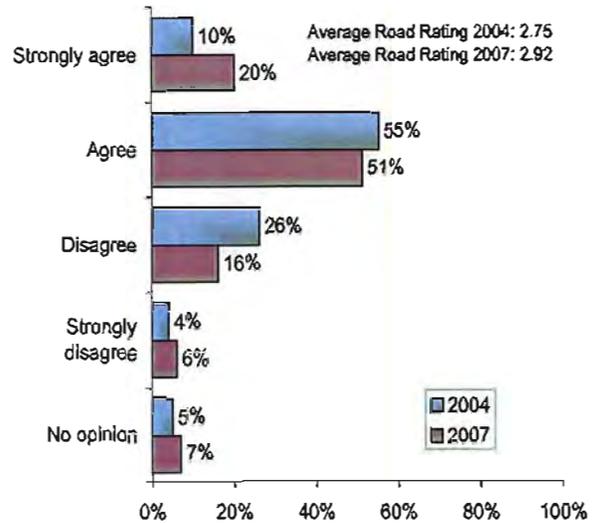


Figure 11: During the day – bad roads³

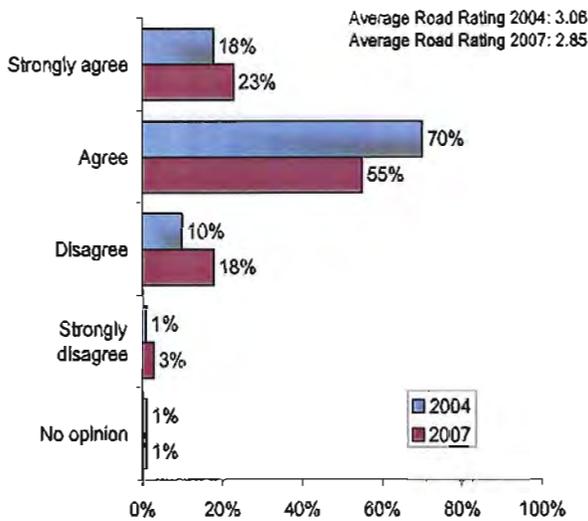
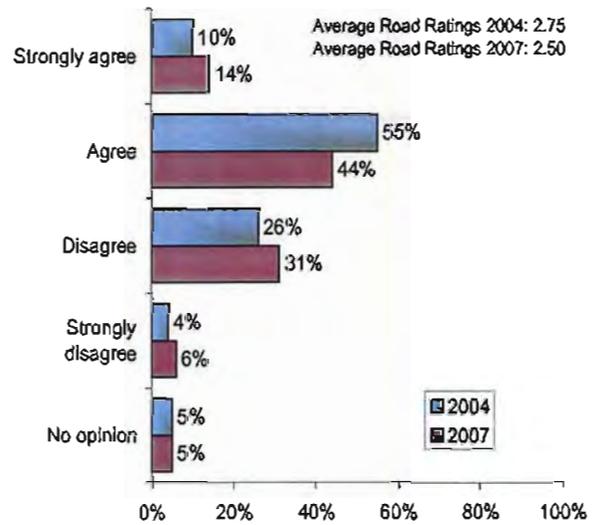


Figure 12: At night – bad roads⁴



¹Actual question read: During the day, the visibility of roadway striping and markings is good.

²Actual question read: At night, the visibility of roadway striping and markings is good.

³Actual question read: When it's raining, the visibility of roadway striping and markings is good.

⁴Actual question read: Lane striping and reflectors marking lanes and sides of roads are adequate.

APPENDIX

Orlando Focus Group-Edited Summaries

Diary content among Orlando drivers focused on width of lanes, turning lanes, bus lanes, having less clutter (businesses, driveways, etc.) along roadways, and lighting as issues that impact how safe they feel on the roadways and issues they would like to have addressed. Roadway striping and reflectors were mentioned but less so than the preceding issues. When discussing the two sections of Semoran Boulevard (between Hazeltine National Drive and Curry Road and the stretch of Semoran north of 408 to Colonial Boulevard. Drivers remarked on how crowded the “old” section was:

- Night and day, the older section from 50 to 408 is crammed, crowded. There ain’t no room for nothing. On one survey I made a note that there is nowhere to pull over without blocking major traffic. At least the new section, they added turn lanes so if someone does have a problem they can pull over and be out of the way.
- What I really like on the new section too is where the buses pull out of the way because on the old section you get tied up in front of buses all the time. There is nowhere to go. You just have to sit there and wait.

Drivers did mention reflectors when talking about the differences between the two stretches of Semoran Boulevard.

- I like the reflectors, but when you drive over them enough they lose their sparkle.
- They are putting reflectors in which I love those things. I wish every area you are not allowed to drive on (e.g., sides of the roadway) was full of them.

When drivers were shown photographs of the roadways, they focused on lighting, turn lanes, medians, width of lanes, and pavement markings/reflectors. Comments about the latter were:

Colonial stretch

- The striping in the middle two lanes in that section is not very good.
 - Looking at the picture, it is not striped will...
 - Striping is poor. The reflectors are poor.
- Semoran to Curry Ford**
- Paint is good.
 - The stripes are light covered and the pavement is dark.
 - The lines and reflectors are easy to see.

SR-408

- No comments regarding pavement markings/reflectors
- Semoran to Colonial Boulevard**
- No comments

When commenting on what would make the roadways safer, individuals focused on wider lanes, adding turning lanes, having pull-off areas, adding bus lanes, and having sufficient lighting. Pavement markers and reflectors were mentioned infrequently.

Focus Group Results

When asked to name roads (besides the ones they had been assigned to drive) with good (or bad) pavement markings or reflectors, individuals had difficulty thinking of roadways. Fairbanks, Loma, Lake Underhill, 1792 around Colonial and Orange Avenue south of town were mentioned as having bad pavement markings and reflectors.

Focus group individuals were given the following list of attributes and asked to indicate which were most and which were least important to their safe enjoyment of the roadway system.

Most Important *	Least Important	
0	8	Roadways are well maintained and landscaped
7	0	Lanes wide enough
2	1	Well lighted roads
2	1	Guard rails when needed
1	3	Sidewalks are placed so they do not endanger pedestrians
0	1	Signs large enough to read
3	0	Lane striping
0	0	Placement of signs
2	0	Pavement reflectors
4	0	Construction areas well marked
4	0	Signs place so one has time to make decisions
0	0	Roadway drains well
1	6	Synchronized traffic signals
0	0	Roadway shoulder firm and wide

*This exercise was conducted near the beginning of the focus groups in Orlando and Ft. Lauderdale, but at the end of the focus groups in Tallahassee.

Ft. Lauderdale Focus Group-Edited Summary

Drivers in Ft. Lauderdale focused on issues other than pavement markings and reflectors, however, when shown photographs of the assigned roads, drivers tended to mention pavement markers and reflectors more often when describing the roadways.

Selected comments from Ft. Lauderdale drivers when describing their assigned roads are shown below:

University (Sterling to Griffin) and Griffin (University to Turnpike)

- I felt University is much wider than Griffin. I feel Griffin is much prettier landscaped.
- I thought Griffin was overgrown. Couldn't see the signs.
- It seemed like parts of Griffin had fresher markers.
- Griffin has more reflectors than University

Powerline and Commercial

- From the turnpike to US 1 there are too many traffic lights.
- The traffic is crazy.
- When buses stop, it is really annoying
- Road surface on Powerline is not that good either.
- Too many lights.
- I hate driving on Commercial because it is narrow and congested.

Comments drivers made about assigned roads when they viewed photographs of them were focused on the following issues:

University (Sterling to Griffin)

- Lanes are confusing
- Median is faded
- Outside lane is narrow
- Sidewalk is too close to the roadway
- Reflectors are poor
- Not enough signs
- Street needs to be resurfaced

Comments

- University hasn't been updated since the 70s or 80s.
- They should repaint it, put better marked signs on it.
- The median is faded.
- I don't like having a sidewalk right there (next to the street).
- Cracks in the road, the road needs to be repaved.

Griffin (University to Turnpike)

- Median is overgrown
- Hard to see signs in advance
- Bike path should be on the other side of the roadway
- Open guardrail

Comments

- I feel pretty safe.
- The median is overgrown and signage is difficult to see in advance.
- I worry about the people on the bike path.
- That gutter is all the way in the bike lane too.
- The guardrail is right up there (close to the road). That bugs me.

Focus Group Results

Commercial

- Markings are clear
- Spacious median
- Stores are set back from the road
- Traffic is heavy
- Needs to be repaved

Comments

- Clear markings.
- Good wide median.
- Stores are set back from the road so there is no clutter.
- This is one of the better areas of Commercial, but I avoid Commercial because of the heavy traffic.
- Markings look brand new.
- The landscaping looks clean.
- The bike lanes look good.
- It's wide. I feel safe on this road.
- Lights are in synch. Traffic flow is easy.

Powerline

- Very heavy traffic
- Median needs to be wider
- Good landscaping
- Mismatched markings
- More signs needed

Comments

- Based on this picture, it looks fine to me. I noticed a long left turn lane.
- The landscaping on the left side is kind of like say if you wanted to go into one of those businesses you don't know where it is until you are right on top of it.
- I try to avoid this street during rush hour.
- I thought the median should be wider.
- It looks like it needs to be done over. It has mismatched markings, worn pavement, and a barely noticeable median.

Atlantic (Cyprus to Federal Highway)

- Needs new markings
- Some cracks along the side of the roadway
- Good landscaping
- Good space between street and sidewalk

Federal Highway (Atlantic to Commercial)

- Not enough signs
- Road surface is rough
- Congested
- Curb is very small
- Lanes are wide

Focus group individuals were given the following list of attributes and asked to indicate which were most and which were least important to their safe enjoyment of the roadway system.

Most Important*	Least Important	
0	5	Roadways are well maintained and landscaped
5	0	Road surface is smooth
4	0	Lanes wide enough
3	1	Well lighted roads
0	2	Guard rails when needed
2	4	Sidewalks are placed so they do not endanger pedestrians
2	2	Signs large enough to read
1	2	Lane striping
0	0	Placement of signs
1	3	Pavement reflectors
0	0	Construction areas well marked
3	1	Signs place so one has time to make decisions
0	1	Roadway drains well
1	3	Synchronized traffic signals

*This exercise was conducted near the beginning of the focus groups in Orlando and Ft. Lauderdale, but at the end of the focus groups in Tallahassee.

Focus Group Results

Tallahassee Focus Group-Edited Summary

The Tallahassee drivers talked more about pavement markings and striping than drivers in other focus groups. The nighttime pictures of the assigned roads highlighted the reflectors and helped focus drivers' attention on pavement markings and reflectors. It should be noted that the Tallahassee drivers' diaries did not contain more references to pavement markers and reflectors than drivers in the other two cities. Plus, Tallahassee drivers' ratings of the four pavement marker/reflector questions in the two telephone surveys did not vary significantly from ratings given by drivers in the other two cities

Thomasville Road (Kerry Forest to Bannerman) vs. Thomasville Road (Killarney Way to Kerry Forest)

- There are no street lights on the section past Kerry Forest. Wal-Mart has the only lights between Kerry Forest and Bannerman.
- The first section is always more dense (traffic).
- The trees cover the signs.
- I think the speed limit signs could be larger.

I-10 vs. Pensacola Street

- To get off of I-10 is hectic because of the construction.
- There are too many trees on Pensacola. Too many visual obstructions on the side of the road. The quality of the road surface is horrible.
- Timing of the lights on Pensacola is ridiculous.
- One section of Pensacola has been patched so much you feel like you are going over train tracks.
- There is no median on Pensacola.

Photographs of each roadway segment were shown to drivers who responded with the following comments:

Thomasville Road (Killarney Way to Kerry Forest)

- I would feel safe.
- But if I didn't know where Velda Dairy Road was or Ox Bottom Road, they would be hard to find.
- Because the lanes are wide, you can see the lane markings well.
- I feel safe because there is less traffic, more time to decide what to do, good weather.

Thomasville road (Kerry Forest to Bannerman)

- It is well striped.
- Markers are where they are supposed to be.
- It still has 3 lanes, the striping is good, and visibility is good.
- The lines and strips are extremely bright and clear.

Pensacola

- You can see on-coming traffic.
- It is faded, it is cracked, and it's probably adequate in the daytime.
- The turning lane goes the whole way.
- You could definitely use a median.

I-10

- Looks like there are no reflectors.
- Striping is still good.
- They have noise makers (reflectors) on the sides.

Focus group individuals were given the following list of attributes and asked to indicate which were most and which were least important to their safe enjoyment of the roadway system. It should be noted that this exercise came at the end of the Tallahassee focus group. During the group there was some comparatively more discussion of pavement markers and reflectors than in the other two cities, hence, the number of times that pavement markers were selected as a "most important" factor relative to safety and enjoyment of the roadway system was higher in Tallahassee than in the other two cities.

Most Important*	Least Important	
0	4	Roadways are well maintained and landscaped
4	2	Road surface is smooth
2	1	Lanes wide enough
3	1	Well lighted roads
1	1	Guard rails when needed
0	3	Sidewalks are placed so they do not endanger pedestrians
1	3	Signs large enough to read
3	0	Signs are visible
4	0	Lane striping
1	1	Pavement reflectors
0	0	Construction areas well marked
3	0	Signs placed so one has time to make decisions
1	0	Roadway drains well
0	2	Synchronized traffic signals
0	5	Shoulders are wide and firm

*This exercise was conducted near the beginning of the focus groups in Orlando and Ft. Lauderdale, but at the end of the focus groups in Tallahassee.

Focus Group Transcript - Tallahassee

Florida Department of Transportation Tallahassee Focus Group

Good evening. My name is Phillip Downs. Tonight we're going to be talking about driving and driving conditions on the road. All we're going to be doing is talking. This discussion will last about an hour and a half. We are interested in your opinions – there is no right or **wrong answers**, only how you feel. It is important that everyone gets involved, so no one can talk too much. To help me remember everything you say, I am taping this discussion.

Let's start by having each of you give a brief introduction:

- Ken: married, retired from the state, I live off of Car Lane. I drive on Thomasville Rd all the time. It wasn't as big as it used to be but I am very pleased with the road. I tend not to drive it during rush hour.
- Rick Harrison: I am a married guy. I work with the elderly and I am also a minister.
- Terry Collins: I am married
- William Rue: I am a doctoral student at FSU. I am married with a young daughter, and I am from Washington State.
- Sharon: I am retired; I have two sons, and two grandchildren. I am a freelance artist part-time. I drive Thomasville road two or three times a week. Plus I also call people who live on Killarn Lakes and who drove just to see what their opinion is.
- Titus: I am a student. I live downtown so I drive all the time. I work for an A/C company and I enjoy it.
- Donna: I'm just married. I have a child and a grandchild. I work for the state, we issue amber alerts for the state of Florida.
- Jay: I live in Killarn Lakes, I drive on Thomasville a lot and I love driving on the road
- Sonya Goldsman: I am a mother of one and I stay on Thomasville Rd

We had some of you drive Thomasville Road from Killarney Way to Kerry Forest Parkway and Thomasville Road from Killarney Way to Bannerman Road.

We selected those two stretches of road because they differ in at least one key way. Please write down what you think the key differences are. (If you were assigned I-10 & Pensacola, but have driven Thomasville Road in this area, please write down your responses as well)

DISCUSS

- There are no street lights on Kerry Forest to Bannerman, but there are some on Killarney Rd. to Kerry Forest.
- There are like 55 street lights on the east side of the road.
- Once you get up to Killearn, almost by Tallahassee Dr, there are like ten street lights. There are more lights before you get to Killarney Lakes, and then all of a sudden, there are no lights on the road. Walmart has the only lights between Bradfordville and here.
- To me, when I go the first part it's always more dense, and then it's more relaxed after you pass Walmart. I never get to relax on the first part; it seems like it's always dense traffic.
- Well I don't really drive that much and I don't get past Kerry Forest. Does it go down to four lanes, or is it six lanes everywhere?
- That is what I put down also, but like she said, I don't drive that stretch, I drive up to Kerry Forest a lot, but I don't drive past it.
- Lights were definitely an issue, but I felt like, from my experience of driving on it, the trees cover the signs. It was difficult seeing the street signs. It is hard to see on both stretches. I have a few professors that live in this area, and trying to get to their homes on Thomasville has been difficult with the smaller street signs.
- I didn't see it that way, but I thought the speed signs could have been bigger, on the first stretch. One of my drives was around five thirty; I thought it was just kind of surreal the way that the traffic comes from the interstate.

We had some of you drive I-10 east of the Thomasville Road exit to US 90 east of Tallahassee and Pensacola Street from the stadium to Appleyard Drive. Other than one being an interstate and the other a road within town, we selected those two stretches of road because they differ in at least one key way. Please write down what you think the key differences are. (If you were assigned Thomasville Road, but have driven I-10 and Pensacola Street, please write down your responses as well).

DISCUSS

- I do travel Pensacola St, and traffic is an issue; especially coming off I-10 with the construction, because people don't stop. To get on and off of I-10 is hectic, and then they drop the speed sign from 70 to 60.
- The speed.
- There is no median.
- There are too many trees on Pensacola. There are many visual obstructions on the side of the road. The quality of the road surface is horrible.
- Oh yeah, the quality of the road surface is a big thing.
- The timing of the lights is ridiculous; I can't go through there without being stopped by all three lights.
- Pensacola is all right with me, especially the new section.

- Yeah that's good, but the new section is only up there right before you get to the stadium.
- At Appleyard and Pensacola where the fire station is, it has been patched up so much you feel like you are going over train tracks.

Show pictures of roadways during the day. (Pictures are at the end of this transcription)

When you look at this picture and think about safely navigating this roadway, what is the first thing that comes to mind?

Thomasville Road from Killarney Way to Kerry Forest

- I would feel safe.
- Yeah you would feel safe, but if you didn't know where Velda Dairy Road or Ox Farm was, you don't know that it is on the right side of the road.
- Because the lanes are wide, you can see the lane markings well.
- Weather conditions are good.
- If you are a relatively new driver, you can see maybe only 200 yards ahead of you. But then you have all these power lines crossing the road and you have trees.
- I would feel safe.
- I feel safe because there is less traffic, more time to decide what to do, good weather; you don't feel like you are being rushed at all.
- You could feel good about crossing over from this lane to one of those little things with the sticks.

Thomasville Rd from Kerry Forest to Bannerman

- It is well striped.
- Markers are where they are supposed to be.
- You better make sure you get over in the left lane because Bradfordville will be coming up soon. If you don't get over, you aren't going to be able to get over.
- And you will have a heck of a time figuring out how to get back.
- It still has three lanes, the striping is good, and visibility is good. Now he was talking about Bannerman right? I would think they would have a sign, because that's the main thing. I feel safe on Thomasville.
- The lines and stripes are extremely bright and clear. I think that was the big thing that really stood out.
- Yeah the lines, the striping looked good; street signs you were looking for are in the wrong place, like behind this pole.
- There a lot of places to turn left on the first part of Thomasville Road, as if you are going out of town. Then some of the left turns are not equal, you have to go way far to the left. They are not right there, it's not like you can make a left turn because a lot of the times they are not lined up with the left turn lane, and that makes it kind of stressful.

Pensacola in the day

- You can see oncoming traffic.
- It is a nice day.
- It could be better; there are cracks all over the road.
- You are looking at a good part of Pensacola.
- No the striping is not that good.

- It is faded, it is cracked, and it's probably adequate in the daytime.
- It is ok.
- The turning lane goes the whole way.
- The traffic is light.
- Oh yea now that all the students have gone home.

I-10 in the day

- Smooth sailing, good visibility. Make you feel like you are in control, I mean you have guard rails.
- You could definitely use a median. That would make me feel safer.
- The road is a little cracked.
- There is not one interstate that is not under construction.
- On the left and the right sides you have the little grates that indicate when you are moving out of your lane; that is very helpful.

Show pictures of roadways during the night.

When you look at this picture and think about safely navigating this roadway, what is the first thing that comes to mind?

Thomasville Road at night

- Three lanes still, I am amazed with that.
- It could be a little lighter.
- I don't like driving at night anyway.
- It is a bit too dark from what I can remember. It needs some high powered street lights there. It doesn't really look that safe.
- The lights are better than they look here.
- On one side of the street you can't see anything, and on the other side, absolutely nothing.
- That could make the lights of the cars that are coming toward you brighter.
- Nothing really makes me feel safe.
- I would feel safe unless I was looking for a specific road and I was unfamiliar with some of those roads that I haven't gone on too many times.
- There is too much of a contrast. Say if you are riding in the left lane and a car is coming up behind you and there is a big glare. If there were lights on this side, you would be adapted to the lights already, so it wouldn't be so bad.
- Do you have a number of cars that actually drive on the road at night?
- Even if you are a seasoned driver like Jay or Ken, they don't want to drive on this at night or in heavy traffic because of the visibility and the light.
- The lines are adequate, you can see the reflectors.
- Maybe they should cut some of the trees down a little bit.

Pensacola at night

- It is well lit.
- Yeah, reasonably lit.
- It is a clear turn lane.
- The lane markings are ok.

I-10 at night

- Looks like there aren't any reflectors.

- Nothing is making me feel safe.
- Striping is still good.
- Four lanes
- They have the noise makers on the side.

Please write down which roads in Tallahassee area have the best roadway striping marking lanes and sides of the roadway?

- Any road they just finish.
- Capital Circle.
- Blairstone.
- Stadium.
- Centerville.
- Capital Circle from Mahan to Appalachian Parkway.
- Tharpe Street.

Please write down which roads in Tallahassee area have the best reflectors in the pavement on the roadway?

- Mission Road from Fred George to Tharpe Street.

Please write down which roads in Tallahassee area have the worst roadway striping marking lanes and the sides of the roadway?

- Old Bainbridge.
- Appleyard.
- Appalachian Parkway.
- Tennessee.
- St. Augustine.
- Capital Circle northwest.

Please write down which roads in Tallahassee area have the worst reflectors in the pavement on the roadway?

- Hartsfield Road.
- Adams Street.
- Jackson Bluff.
- Thomasville right after it leaves Monroe.
- Monroe.

Each of you were assigned to drive two stretches of roadway: one had good roadway striping for lanes and sides of the road and the other had average to poor roadway striping for lanes and sides of the road. Yet, your ratings were essentially the same for both roads. **Why?**

- Maybe we don't pay as much attention to it.
- Because our driving experience is bad because of the amount of traffic.
- We are way too distracted by what is going on and we can't really take the time to notice.
- You know where the lanes are, so the reflectors are not really a big deal.
- I think we expect it to be good because we expect the DOT to be watching out for what needs to be done, but we can't control the things that scare us about traffic lines.

- I don't pay attention. You get from one spot to another, but it is just the markers.
- You think it's always just going to be there, so why pay attention to it. I am more worried about my safety and staying out of somebody's way.
- The lane striping to me is more important than reflectors, and if the striping is there, I am assuming the reflectors are there. The reflectors are very important if it is raining or if it is dark.
- Well that must mean that they are at a level that is good because you would remember seeing them.
- When it is raining you are not thinking about the reflectors.
- Well I just remember from the phone survey that I was absolutely disgusted with Pensacola Rd, regardless of the weather. Then it was a little bit better with I-10. I'm not sure if I really emphasized the difference. I felt like the visibility was poor.
- I remember that the markings were ok. My thing with Pensacola was more or less the road surface.
- If you tell me that there is a difference in the two sections of Thomasville, I guess that I just missed it. You need to tell me what the difference is. Everything to me looks the same.
- Because nothing negative has happened; like when I was sitting at Killarney, a Wal-Mart truck went by and I thought it was going like seventy miles per hour. I was amazed and that scares me a lot more. I remember that at rush hour that kind of stuff goes on where I have never had any problems.
- Not just rush hour, it is all the time.
- Because I think that there is a level of standard that the roads are kept up to.
- I agree that the striping, the signs and reflectors are ok.
- The only way that I think you would really notice anything is if there is a big two foot spot that is just completely uncovered. When it is just yellow the whole time, we can't really tell the difference between the brightness of the yellow. You just trust that it is there and that you can still see it. If you can't see it, then that is when you recognize it and call the DOT.
- For me, if I am going out of town, I notice the lane striping and the reflectors because of that long uninterrupted drive. If you know where you are going, it is not on your mind too much.
- In town driving, you have to worry about people coming out in front of you.
- Sometimes you will be driving with your husband and you will say, I didn't notice that was there yesterday.
- Depending on what you spend the tax money on. If you spend less on that, where would that take us?
- It is possible that while there is a difference in the stripes and reflectors that there are other factors that bring them together. Maybe the money should be spent on these other factors. For example if you drive on Pensacola, the lines are a factor, but the trees are another. The lines might be horrible, but the trees have just been slightly trimmed. It might justify better allocation of precious resources instead of just painting the lines and adding reflectors.

The State of Florida Department of Transportation conducts driver satisfaction studies on a regular basis. The questionnaire contains many of the same questions you answered in your first telephone survey. (Road sign visibility, pavement markings, roadway surface, etc.) The Department reviews these surveys carefully and makes improvements accordingly. They have made improvements to pavement striping and reflectors, but drivers have not apparently noticed because the ratings for these factors have not increased. **Why is that?**

- Like you are saying, maybe we are focusing on the wrong thing, like power lines.
- On the new Stadium Drive they spent a lot of money on landscaping, but they didn't trim the trees. You can't see any of those signs because they are behind trees.

Here is a list of attributes (placement of signs, size of signs, striping, RPMs, lights, etc).

Take a minute and check the three that you think are most important to your safe navigation along roadways. *

- Road surface – 4
- Lanes are wide enough – 2
- Well lit roads – 3
- Guard rails – 1
- Signs large enough to read – 1
- Lane striping and marking – 4
- Signs are visible – 3
- Pavement markers are easily seen – 1
- Time to make decisions – 3
- Good drainage – 1

Here is a list of attributes (placement of signs, size of signs, striping, RPMs, lights, etc).

Take a minute and check the three that you think are least important to your safe navigation along roadways.

- Road signs are well maintained – 4
- Road surface – 2
- Road shoulders are firm and wide – 5
- Lanes are wide enough – 1
- Well lit – 1
- Guard rails and medians – 1
- Sidewalks – 3
- Signs are large enough to read – 3
- Pavement reflectors – 1
- Good drainage – 1

*This exercise was conducted near the beginning of the focus groups in Orlando and Ft. Lauderdale, but at the end of the focus groups in Tallahassee.

Road pictures that were shown to focus group participants follow in the following order:

Day

- I-10 between Thomasville Road and I-90 east of Tallahassee
- Pensacola Street between Stadium Drive and Appleyard Drive
- Thomasville Road between Killarney Way and Kerry Forest Parkway
- Thomasville Road between Kerry Forest Parkway and Bannerman Road

Night

- I-10 between Thomasville Road and I-90 east of Tallahassee
- Pensacola Street between Stadium Drive and Appleyard Drive
- Thomasville Road between Killarney Way and Kerry Forest Parkway
- Thomasville Road between Kerry Forest Parkway and Bannerman Road

















Focus Group Transcript - Ft. Lauderdale

Florida Department of Transportation Ft. Lauderdale

Good evening. My name is Phillip Downs. Tonight we're going to be talking about driving and driving conditions on the road. All we're going to be doing is talking. This discussion will last about an hour and a half. We are interested in your opinions – there are **no right or wrong answers**, only how you feel. It is important that everyone get involved, so no one can talk too much. To help me remember everything you say, I am taping this discussion.

Let's start by having each of you give a brief introduction.

- Phillip: 25 years old
- Almeda: live in Davy area, 2 kids, student, looking for a job and taking a statistics course, single mom.
- Robin: live in plantation, bookkeeper at plantation high school, single 12 godchildren
- Nancy: not working at moment, know the area you were talking about very well .because my mom lived in Hollywood. I have a dog and cat, and I talk a lot.
- McKinley: Student, 20 years old, just got my associates and I'm trying to get my bachelor's, and I drive a lot.
- Marcia: live in Davy, I work at Outdoor World; I'm a nurse and have an 18 year old son.
- Miguel: 24, also a student, also live in area, drive a lot as well.
- Dorothy: go by D, born and raised in Fort Lauderdale, I have 5 grandchildren, I'm retired, I care for my daughter's twins with autism and I drive down these roads
- Larry: head of security at Cyprus Bay, been in the states now for 6 years, drive a car and motorcycle on these roads, from Israel.

Difference between University between Sterling and Griffin Road and Griffin between University and Turnpike

DISCUSS

- I felt University is much wider than Griffin. I feel Griffin is much prettier, and is landscaped better than University.
- I thought Griffin was overgrown. I couldn't see some of the signs. I like to see the bike path on the other side of the guardrail. There was a broken down vehicle when I was driving and he was in the bike path but he was sticking out in the traffic.
- It seems that way because the houses are close to the road. Close to University between Griffin and Sterling, all the buildings are back so it seems much more open.
- Griffin is so overgrown. I felt it was overgrown in the median where they had a lot more planted, and it was not well-maintained and some of the sign was obstructed by tree branches on Griffin to the Turnpike.
- To me it was very gorgeous. I agree that the signs are hard to see, but not if you are looking for a specific sign.
- I noticed that on Griffin going west also. University doesn't have a sign. It is on the west side of the intersection it is not on the east side so you don't know it is university until you are right up there. I started looking the second time I went out there, and I did find it and it was totally obstructed in the median by a tree.
- But that is if you are going left. If you are going to go straight, there are two wires going across the intersection.
- It seemed like parts of Griffin had fresher markings. I like the contrasts. You can drive on 595 at day or night. It is clear; white and bright. You feel like you are on an airstrip.
- Griffin has more reflectors than University. The line stripings on University are worn.

PowerLine and Commercial Boulevard

DISCUSS

- From the turnpike to US 1 there are too many traffic lights. The traffic is so condensed going east. The traffic is crazy. The lanes are narrow. It's like 6 lights in that little space. Right when you go up the bridge on the little overpass, the road surface is bumpy, terrible, and rough.
- When busses stop it is really annoying.
- Powerline traffic is lighter. Landscape wasn't kept up; there is just a lot of dirt out there.
- Road surface on Powerline is not that good either.
- Traffic is condensed from MLK down towards Pompano Park South.
- The flow seemed easier on Powerline.
- It flows a lot smoother on Powerline than on Commercial.
- Powerline seems wider than Commercial. Commercial seems like a lot of lanes in a little area.
- I hate driving on Commercial because it is narrow and congested.
- There are too many lights
- Even from the Turnpike over to Federal is bad. Too many lights, you can't get a good flow going in that direction. It is just congested. Too much traffic, narrow lanes and all.

- The only problem I have is like he had over the overpass; it is so bumpy. I don't like that part. When you make a left on Commercial, right when you go up there are holes; minor potholes, but it rocks the car all the way up.
- The 3 specific areas I find particular bad are right west of 441 on Commercial, then the area around 95 in both directions; it is very congested, especially going east. It is very confusing for me to get onto 95 going west. The northbound is the first turn, and the first time you see signage for it. You can't get to the right lane soon enough. People do very dangerous maneuvers to get on the overpass.
- Exactly what she says. I always have a problem getting on 95 going west on Commercial. You don't know which is which. The signs don't come up soon enough to tell you. You aren't sure which way you are going to go. Sometimes you have to go left down here to get on.
- Commercial doesn't have wide lanes. They both do not have smooth roads, but Powerline traffic moves slower because of the wide lane.
- That is main difference. We have a major problem here with all of our east-west corridors anyway. Commercial is an east-west corridor and has very heavy traffic. In my experience, there are three main areas where there are a lot of traffic lights. The two I have mentioned and the third one is where you get to the railroad tracks where it crosses Dixie; there are lights every two blocks. Everybody is trying to get to US 1. It is a major commuter.
- They aren't always synchronized either.

Show pictures of roadways during the day.

When you look at this picture and think about safely navigating this roadway, what is the first thing that comes to mind?

REPEAT FOR EACH ROAD SEGMENT

University

- I don't like the part where the street is marked up right there; it looks like erasing on the street. I didn't like the little lines. The rails are rusty.
- University hasn't been updated since the 70s or 80s. Landscaping. They should repaint it; put better marked signs on it. Median is ugly.
- The median is faded. The u-turn is kind of blocked. When the cars make a left, the oncoming traffic would turn into your lane. It's kind of blocked if the traffic was heavy. See how the outside lane slims down right here. You wouldn't see it unless the driver was already in the third lane.
- I don't like having a sidewalk right there. A lady with a baby carriage can't walk along there with traffic. What is the speed along there? 40? 45? I'm uncomfortable. I wouldn't want to be walking along that road.
- Some people have to walk that area right there no matter what you say. See how large the sidewalk is
- Put a railing in between the roads.
- No reflectors. Only lighting on one side of the roads, so on the other side you are driving in the dark. They have one between every stripe.
- If you are not from this area, you probably don't know where the turnpike is. There are hardly any signs saying where the turnpike is until you get right up to it.

- Cracks in the road. The street needs to be repaved. The median needed new markings.

Griffin

- I feel comfortable on this road because I am somewhat familiar with it. I drive along paying a great deal of attention because I know where I am going. I feel pretty safe. Number one it is such a massive improvement over the previous road and how it used to be. The median is overgrown and signage is difficult to see in advance. If you were a tourist, you would have some difficulty.
- I worry about people in that bike path. I would rather see it on the other side. I would rather drive close to a rail than close to where people are walking. It is very distracting.
- That gutter is all the way in the bike lane too. What if they hit the gutter and spun?
- The guardrail is open right there. That kind of bugs me.

Safer on University versus Griffin?

- Griffin is newer; they have done some improvements there, but there are other things that make me feel less safe.
- The roads are cleaner, newer, smoother, the details are clearer, and the markings are clearer.

Commercial

- I know this stretch. This part is pretty good. Clear markings, good wide median, and the stores are set back from the road.
- This is one of the better areas on Commercial, but I avoid it during heavy traffic times because it is just awful. It is between two bad parts.
- The road surface looks old to me and that is a huge factor to feel safe.
- Markings look brand new. The landscape looks clean. You have a clean view of both sides of the street.
- It looks pretty new. Wasn't as worn out as the other ones. The bike lane looks good. Landscape is all right.
- It is wide. Felt safe. Lights were in synch. Traffic flow was easy. But that is because Robby told me exactly where it was. I know it is very even and feels good.

Powerline

- Not really familiar with this road at all. Based on this picture it looks fine to me. I noticed there is a long left turn lane. It must get pretty busy at certain times of the day to have that large of a turn lane.
- I don't like the fact that Powerline is going across the street all the way down like that. The landscaping on the left side obstructs the entrances to all of the business on that side.
- I drive Powerline a lot and feel somewhat safe, maybe because I am so familiar with it. It is very industrialized. You do find people going along without looking. That is one of the traffic issues. I try to avoid Powerline during rush hour.
- I feel very safe because I am always on this road. Even though it looks old, it is a smooth road and there is not much traffic.

- I thought the median should be thicker. I don't like how cars can jump over it. I thought the road looked old. The landscaping looked good. The traffic is usually not busy.
- I thought it looked like it needs to be done over. Mismatched markings, worn pavement, barely noticeable median. I like driving Powerline because it is usually not that busy compared to 441. It is a better choice.
- I don't drive. I wouldn't especially with hard to see white lines. I like to see street signs.

Compare

- Commercial feels safer because of dark white lines (clear). Has a wide median.

Atlantic between Cyprus and Federal HWY

- Pretty safe. I did write that they need new markings on the lanes. Good right hand swells. Good sidewalk. Good median. Sidewalk is not sitting right on the road.
- The lanes look good. Wide. I like the space between sidewalks. I know a lot of cars get broken down during the day.
- I feel pretty safe. The only thing is the lane striping. The grass is bright green. Looks like they take care of it.
- The landscaping is how it should be on every road. In between the median.
- Lane striping looks a little faded. There are cracks along the ground.

Federal Highway between Atlantic and Commercial

- I always feel safer when there is a marquis sign out there. In this one you can see, but in the other one, you don't see it until you are past it.
- The road looks like it has had a lot of patchwork done. It looks like it could be a bumpy road. It looks old.
- It has nice wide sidewalks. I don't like the idea of all these buildings. Are they homes or hotels?
- It seems safe with the sidewalk. When they open it up, cars can get on the sidewalk.
- The driveways coming out. You know how people coming out of their driveway and stick their nose out. If it is congested there is a good chance they will get hit. Seems like a lot of driveways.
- The curb looks kind of small like McKinley was saying. Someone could jump the curb. I could see that happening on a bad day.
- This is a section of road I feel comfortable on because there is not much traffic on that particular area. And it has been widened so often it has taken up space. Usually there is not as heavy traffic as some of the other roads and areas we have been discussing. It seems to have significant safety issues.
- Good clear view on both sides of the street. Both north and south. Again, the markings aren't good.
- The cars there, I wouldn't feel safe.
- I like how wide the lanes are though.

Atlantic safer?

- I don't travel it as much.
- It runs smoother even though it is only 2 lanes.
- I don't like the shoulder.

Please write down which roads in the area have the best roadway striping marking lanes and the sides of the roadway?

- Pine Island.
- University between I595 and Peters road.
- I also had University.
- 595 out there in Davy where I am, the markings are clear.
- Sawgrass and Expressway.
- 595.
- Expressway.
- Clearing between Pine Island.

Please write down which roads in area have the best reflectors in the pavement on the roadway?

- On Copeland in between Lions and Powerline.
- Don't notice reflectors.
- 595 on Hollandale.

The State of Florida Department of Transportation conducts driver satisfaction studies on a regular basis. The questionnaire contains many of the same questions you answered in your first telephone survey (road sign visibility, pavement markings, roadway surface, etc.) The Department reviews these surveys carefully and makes improvements accordingly. They have made improvements to pavement striping and reflectors but drivers have not apparently noticed because the ratings for these factors have not increased. **Why is that?**

- There is a little difference between the two. I think I rated one better than the other. I probably rated them about the same or one is a little better than the other.
- I don't even remember what I rated them. The difference between Commercial and Powerline is obvious.
- I probably didn't rate them based on when you mentioned that that is what the difference is. I know which of the roads we looked at had the better striping. I rated what I feel about the roads on my traffic experience and what is coming in and out.
- Most of my life I've been on roads that aren't lit so you use those stripings and markings. Initially when I went on University I went north to south to get to Sterling and come back. The survey asked Sterling to Griffin. It was obvious and clear to me that there were four line markings, stripings, and reflectors. When I went down the other road. Down Griffin towards the turnpike they were so much better.
- You voted overall because one side of the road is different from the other side.
- One side has lights, one has a bike lane, and University has none.
- Once you are in your lane, I don't find myself looking down at the road all the time.
- When you see it is when the guy in front of you starts to drift over.
- There is so much going on the road that you are paying attention to.

Here is a list of attributes (placement of signs, size of signs, striping, RPMs, lights, etc).

Take a minute and check the three that you think are most important to your safe navigation along roadways.*

- Road signs or well- maintained landscape:
- Road surface is smooth - 5
- Road shoulder wide and firm: 0
- Lanes wide enough: 4
- Well lighted: 3
- Guard rails and medians when needed: 0
- Sidewalk placement: 2
- Large signs to read: 2
- Lane striping: 1
- Signs placed so you can see them:
- Pavement reflectors easily seen: 1
- Construction area well-marked:
- Signs placed so have time to make decisions: 3
- Road surface drains well after rains:
- Synchronized traffic signals: 1
- Other:

Here is a list of attributes (placement of signs, size of signs, striping, RPMs, lights, etc).

Take a minute and check the three that you think are least important to your safe navigation along roadways.

- Road signs or well- maintained landscape: 5
- Road surface is smooth - 0
- Road shoulder wide and firm: 3
- Lanes wide enough: 0
- Well lighted: 0
- Guard rails and medians when needed: 2
- Sidewalk placement: 4
- Large signs to read: 2
- Lane striping: 2
- Signs placed so you can see them: 0
- Pavement reflectors easily seen: 3
- Construction area well-marked:
- Signs placed so have time to make decisions: 1
- Road surface drains well after rains: 1
- Synchronized traffic signals: 3
- Other:

*This exercise was conducted near the beginning of the focus groups in Orlando and Ft. Lauderdale, but at the end of the focus groups in Tallahassee.

Questionnaire Reactions

- Stripping and reflectors: yes/no or Likert type?
 - Yes/no
 - It is or it isn't
 - Some lines are better
 - If we say yes you will go paint it
 - Agree/disagree: 2
 - rest say yes/no
 - Yes/no or no opinion?

Road pictures that were shown to focus group participants follow in the following order:

Day

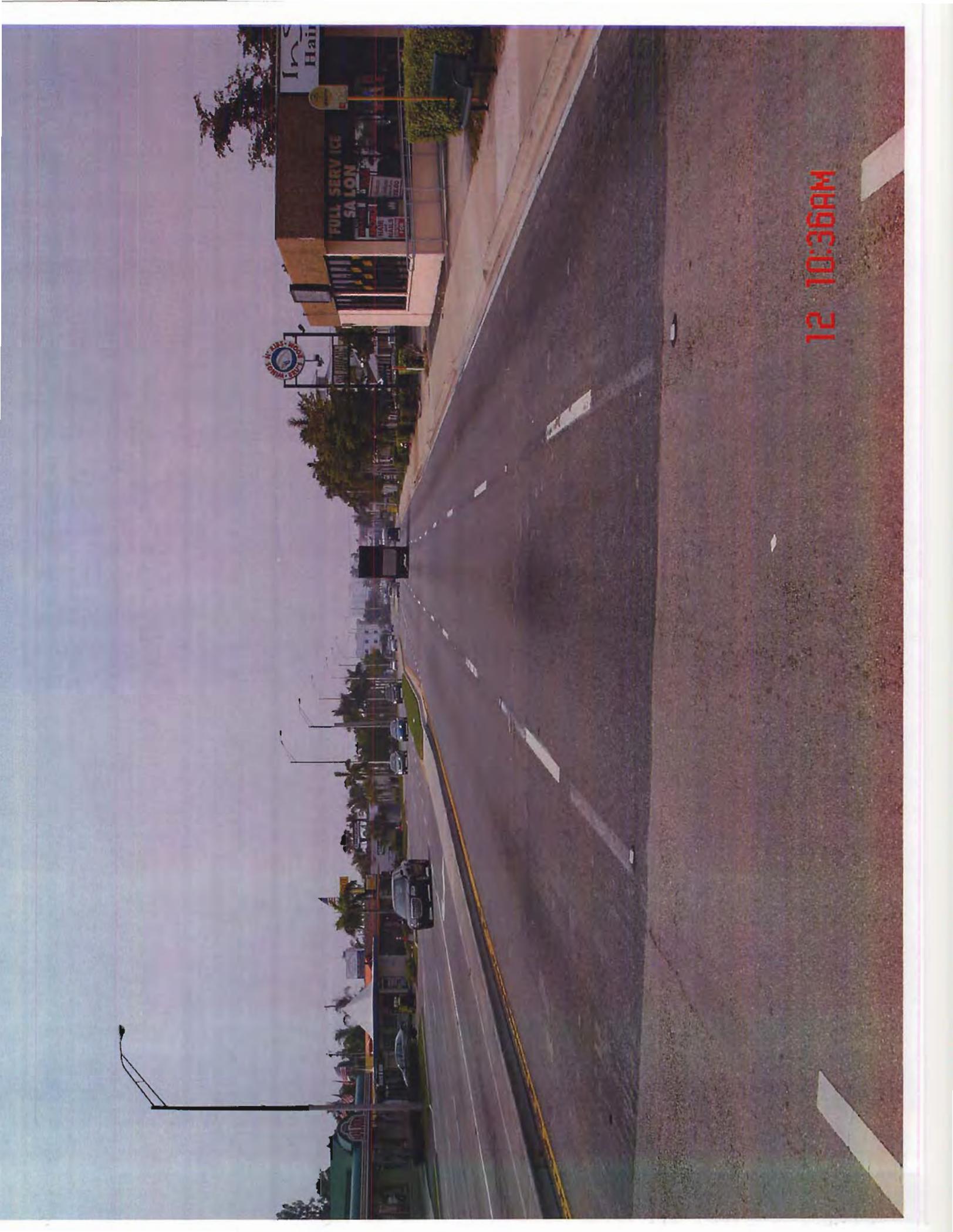
- Atlantic Boulevard between Cypress Road and Federal Highway
- Commercial Boulevard between the Turnpike and US-1
- Federal Highway (US-1) between Atlantic Boulevard
- Griffin Road between University Drive and the Turnpike
- Powerline Road between Cypress Creek Road (62nd Street) and Pompano Park
- University Drive between Stirling Road and Griffin Road



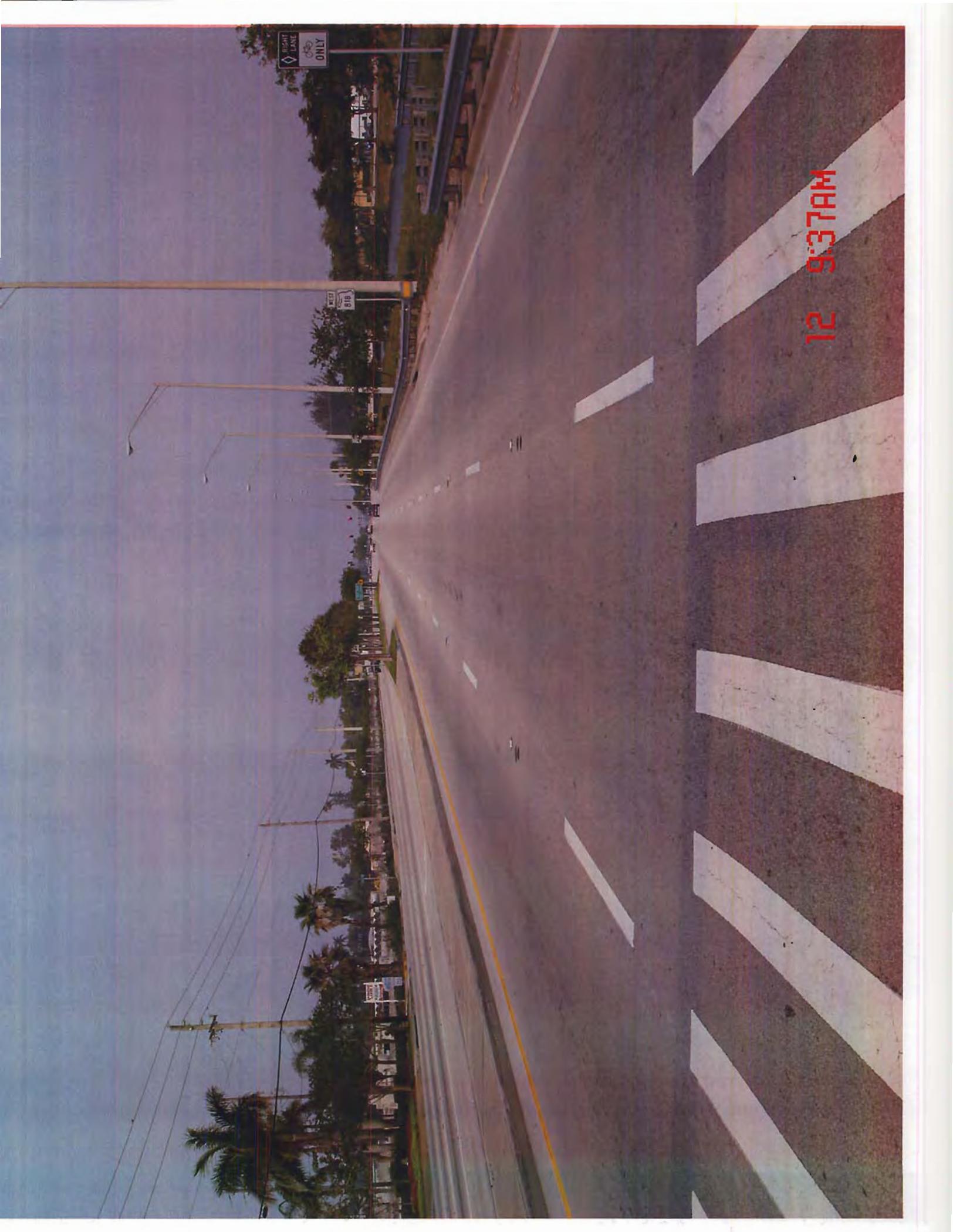
12 10:31 AM



12 10:14AM



12 10:36AM



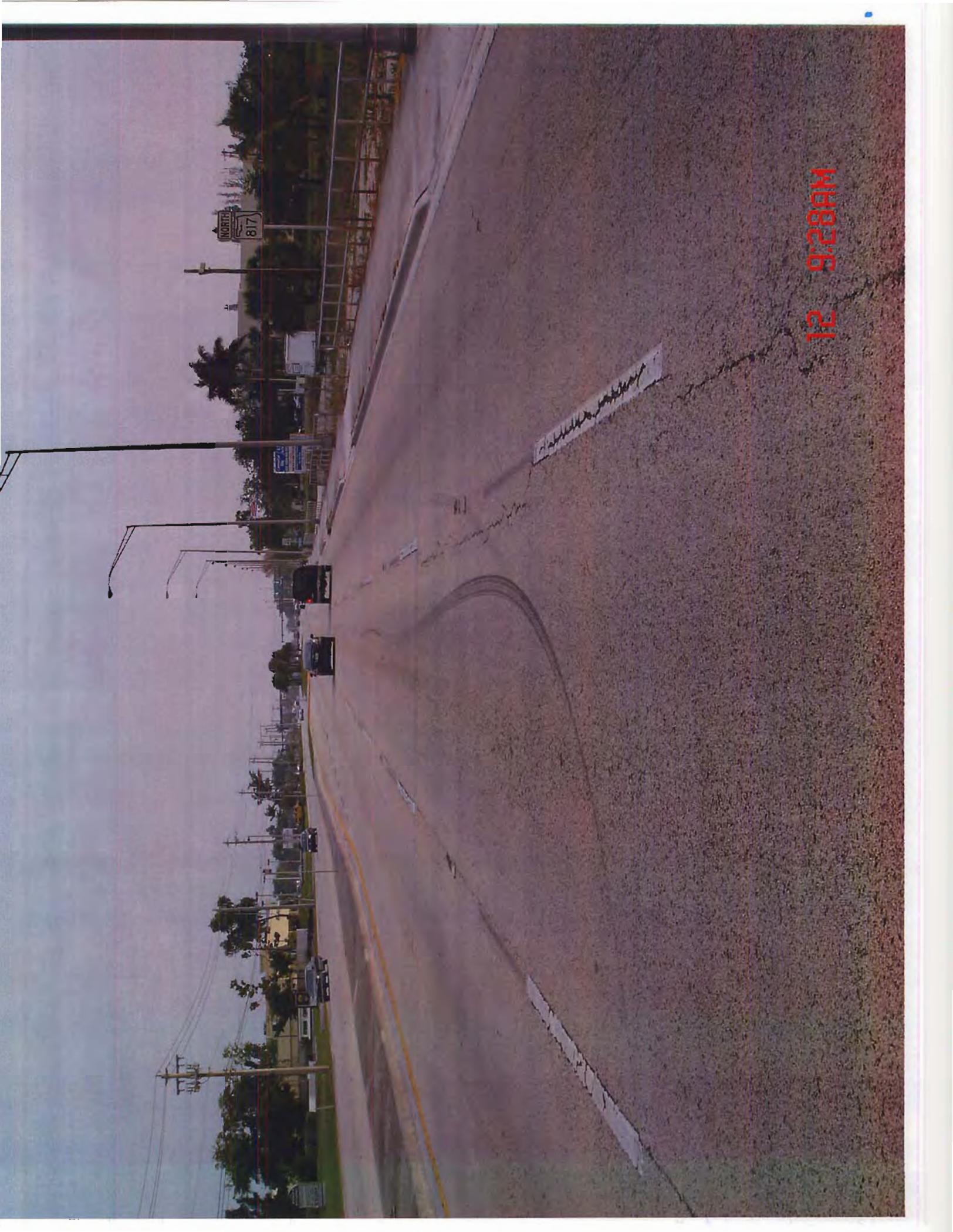
RIGHT LANE ONLY

WEST 818

12 9:37AM



12 10:21 AM



MOBILE
817

12 9:28AM

Focus Group Transcript - Orlando

Florida Department of Transportation Orlando Focus Group

Good evening. My name is Phillip Downs. Tonight we're going to be talking about driving and driving conditions on the road. All we're going to be doing is talking. This discussion will last about an hour and a half. We are interested in your opinions – there are **no right or wrong answers**, only how you feel. It is important that everyone get involved, so no one can talk too much. To help me remember everything you say, I am taping this discussion.

Let's start by having each of you give a brief introduction:

- Jan: born and raised in Orlando, second marriage, 3 grown sons, middle school media specialist
- Pam: I have two girls 11 and 7, I've been married 16 years to a native of Orlando and I grew up in Sarasota; also middle school – middle school math teacher
- Larissa: married to Michael, 2 kids – a boy, 10, and a girl, 8, I work at the First Academy, which is a Christian School associated with First Baptist Church of Orlando
- Victor: single, born in Miami, a cook
- Teresa: married for 27 years, 2 grown children, 2 grandchildren, and I work for Accounts Payable for AT&T
- Catherine: I have two boys, one granddaughter, I work down the street at St. Ray and I'm from Chicago, been here 16 years
- Bill: work for a local roofing company, 2 children that just started to drive
- Tammy: native of Orlando, work for Alpha Christian Academy teach pre-school children
- Dave: work for Home Project, operations manager, 3 small boys
- Susan: lived here for 10 years, originally from Pennsylvania, husband is from this area and we move around a lot so we can see the roads in different areas, software developer
- Laurie: school therapist assistant, one child Sarah, she is 5
- Newcomer: single, no kids, stock broker

Here is a list of attributes (placement of signs, size of signs, striping, RPMs, lights, etc). Take a minute and check the three that you think are most important to your safe navigation along roadways.*

- Road signs or well- maintained landscape: nobody
- Road shoulder wide and firm: 2
- Lanes wide enough: 7
- Well lighted: 2
- Guard rails and medians when needed: 2
- Sidewalks: 1
- Large signs to read:
- Lane striping: 3
- Signs placed so you can see them:
- Pavement reflectors easily seen: 2
- Construction area well-marked: 4
- Signs placed so have time to make decisions: 4
- Road surface drains well after rains
- Synchronized traffic signals: 1
- Other: speed limit changes have no warning, just show up; adequate turn lanes; marking lanes

*This exercise was conducted near the beginning of the focus groups in Orlando and Ft. Lauderdale, but at the end of the focus groups in Tallahassee.

Here is a list of attributes (placement of signs, size of signs, striping, RPMs, lights, etc). Take a minute and check the three that you think are least important to your safe navigation along roadways.

- Road signs or well- maintained landscape: 8
- Smooth road surface: 1
- Road shoulder wide and firm: 8
- Lanes wide enough:
- Well lighted roads: 1
- Guard rails and medians when needed: 1
- Sidewalks: 3 • Large signs to read: 1
- Lane striping: • Signs placed so you can see them:
- Pavement reflectors easily seen:
- Construction area well-marked:
- Signs placed so have time to make decisions:
- Road surface drains well after rains:
- Synchronized traffic signals: 6
- Other:

We had some of you drive Semoran Blvd. between Hazeltine National Dr. and Curry Ford Rd. and Semoran Blvd. north of 408 to Colonial Blvd.

We selected those two stretches of road because they differ in at least one key way. Please write down what you think the key differences are. (If you were assigned 408 & Colonial, but have driven Semoran in this area, please write down your responses as well)

DISCUSS

- Night and day; the older section from 50 to 408 is crammed and crowded. There isn't any room for anything. On one survey I made a note that there is nowhere to pull over without blocking major traffic. At least on the new section, they added turn lanes so if someone does have a problem they can pull over and be out of the way. I appreciated that.
- What I really like on the new section too, is where the buses pull out of the way because on the old section, you get tied up in front of buses all the time. There is nowhere to go. You just have to sit there and wait.
- Taking a left onto Lake Underhill on Semoran, just getting into the turn lane is a nightmare. If you are going south on Semoran towards Lake Underhill, between 50 and whatever it is, that is the old stretch
- The left turn lane is only about 5 or 6 car lanes. There are usually 15 or 16 cars that want to turn there so they are blocking the main traffic.
- That is because most of the people are trying to turn to get on 408. What they need is a way to get on 408 going east bound without having to go on Lake Underhill to do it. It should be on Colonial somewhere.
- They need a traffic light too for the people coming off the 408 if they want to turn left.
- Yeah, there is an accident everyday there.
- I know no one put the landscaping. As far as feeling safe, the landscape from Hazelnut to Curry Ford is just beautiful. You feel like you are down in Miami Beach or something. As soon as you get across, you feel like you are in the hood or something.
- I avoid that section. I go around it. It is very narrow and closed in. It has the one turn lane in the middle so the same people are going both ways.
- Over by Dahlia there is a turn lane. People there turn right into the gas station that is right in front of the turn lane. They sometimes stop ahead of the light before the gas station and also they turn on the lane when the light is red.

Drive the new section because??

- Space for people's safety.
- More lanes. They are wider. They have the bus pull off area.
- Adequate street lights.
- Businesses are more spaced out. Closer to 408, it is very crammed in there, more commercial.
- North of the 408 there must be a sign every foot and a half on that road. One of them near just north of the 408 says no left turn. I've looked at it several times and thought what do you mean no left turn? Where can't I turn left? I don't know what it is referring to.
- Too many signs because the businesses are right up to the road.
- You aren't getting any wider right there.
- Putting a sign in the right place. The sign she is saying is on the right hand side of the road there. Why would I care, I'm 3 lanes over in the right lane. If I'm going to turn left from here, I've got bigger problems.

We had some of you drive 408 between Conway Rd. and Goldenrod Rd. and Colonial Blvd. between Semoran Blvd. and Herndon Ave. Other than one being an interstate and the other a road within town, we selected those two stretches of road because they differ in at least one key way. Please write down what you think the key differences are. (If you were assigned Semoran, but have driven 408 and Colonial Blvd., please write down your responses as well).

DISCUSS

- The 408 is under construction, it will be all new pretty soon. It is hard to put something because it is going to be changed pretty soon.
- They are putting reflectors in which I love those things. I wish every area you are not allowed to drive on was full of them. Other states you go and the shoulder is just completely filled with those reflectors and people are less likely to drive over there when traffic gets busy because it is very bumpy. 50 doesn't have them.
 - It is great for when it is dark and when you are trying to see in the rain, but it also keeps people from venturing over there unless they really need to.
- Also for emergency vehicles and stuff.
- I like the reflectors, but when you drive over them enough they lose their sparkle.
- 408 is rough. They are working on it and doing the best they can. I don't think their striping is very bright because I am on the road at 5:30 in the morning and it is hard to see.
- They have those concrete pylons for alignment but they don't have any marking on them.
- Tough turns too.
- I'm satisfied with the speed limit in the construction area, but it is very badly marked.
- If you go to the Epass and you go across to get over and get off, it is really stressful trying to get over. They need to have Epass lane further over to the right.

- If you are going east on there at the Conway Toll the far left lanes trying to everyone is going full speed and these two lanes have to merge together all of a sudden. I drive that all the time and I hate that. I don't feel safe at all because I don't think people slow down at all at the toll plaza.
- The turn off lane, you are kind of in the middle. It is kind of hit or miss.
- To me the fact that the 408 has limited access is a huge difference. I thought Colonial did have a median.
- It does in some areas.
- I know at Colonial and 436 that light gets really backed up.
- I do that every single day. I turn right off of 50 onto 436 and they keep changing that lane. It used to be right turn only and you had right of way. Then they took it away and put in stop sign which nobody obeyed so they took it out again. Now it is a yield and it doesn't do any good because you are still stopped there.
- There isn't much difference. The two roads are fairly equal to me.
- They both get backed up at different times
- There are 2 nightmare times 8 to 10 and 3:30 to 6. It is really bad.
- It seems like there is plenty of space to put another lane over there because it really does get backed up.
- To me the 408 the traffic moves faster. People seem to know where they are going. On Colonial people are shopping. It is a different atmosphere.
- I mentioned the construction making it hard to see and tell where the lanes are. 50 seems to be a better roadway not considering the traffic just the road itself.
- On the 408 everybody is going in the same direction, you either miss your exit or you get it.
- It is aggravating to pay a toll when you are sitting in traffic.

Show pictures of roadways during the day.

When you look at this picture and think about safely navigating this roadway, what is the first thing that comes to mind?

PROBE

REPEAT FOR EACH ROAD SEGMENT

Colonial Stretch

- Not safe when you are trying to turn across 3 lanes of traffic if you were trying to go to Arby's over here.
- Overhead lighting is nice.
- It is mostly shoppers.
- I feel fairly safe. There is a median. There are turn lanes. It is wide enough. There is a left turn lane, but no right.
- Left turn lane is very short; it does not make me feel safe.
- High rates of speed. There are people that fly down that strip because they are just leaving Colonial and Bennett. It seems like if I turn right you have to turn quick. If I'm always going to the far left lane you have to haul butt to get across all four lanes. It always scares me.
- Finding an address at the speed and all of the traffic. Even if you have a Yahoo map you still have to find the actual place.
- The striping in the middle two lanes in that section is not very good.
- If I was new to the area it would bother me more than it does. Looking at the picture it is not striped well and everything is really bunched together. It would

be hard to navigate through. Many people said crossing lanes of traffic to get to the address you want to would be hard, but you have that on most roadways.

Semaron Stretch

- Center turn lane.
- Feeling claustrophobic.
- No bus lanes.
- Rough road surface.
- Feel like someone would pull out in front of you at any moment.
- There is nowhere to pull over unless you are by a business if you are having car trouble. There is no room if you are having in problems.
- This is the part where people getting off on 408 going east bound going through that little neighborhood and cut across. Meanwhile, other people are trying to turn left, southbound on 436. They are going along and somebody here on the left has just come on 408 has to pull into traffic.
- Once you get here it is not as bad. It is worse right before that.
- If there was a barrier like a center median I think it would make a huge difference. People do crazy things right there because there is nothing to stop them. They turn left across many lanes just to get on the other side. I have been hit right there just waiting to turn.

Semaron between here and Curry Ford

- Paint is good. The stripes are light colored and the pavement is dark.
- Sidewalks give you a really good indication of where the business entrances are and you see them in plenty of time.
- Telephone poles aren't 6 inches from your car when you pass them

What would you keep from new part?

- Turn lanes
- Median
- Don't like the bicycle lane. And the long right turn lanes with about 4 different places to turn. Here is a car waiting to turn out and he thinks you will turn and he pulls out in front of you.

408

- No where to pull off.
- Lanes aren't wide enough.
- Can't even see the paint.
- Difficult to navigate through.
- I came across there the other day. I thought the exit was gone.
- They are working on it.
- There is a median.

Show pictures of roadways during the night.

When you look at this picture and think about safely navigating this roadway, what is the first thing that comes to mind?

PROBE

REPEAT FOR EACH ROAD SEGMENT

Colonial Stretch

- I don't like driving it at night. I don't know if it is because the roads are dull. The pavement is poor. The striping is poor. The reflectors are poor. The lighting doesn't seem bright once you pass the library to Colonial.
- It is different. I think the picture is closer in. The lines show up better in the night. Even the paint looks brighter. I can't even see this yellow but here it is like it is glowing. At least on this stretch.
- Some parts, but not all of it.
- This part is concrete, further down it is asphalt. Asphalt is better.
- I didn't have a problem with driving that. I don't think for the most part I have had a problem. I remember trying to find a road. It seemed like it said Colonial.
- Asphalt.
- The signs aren't marked as well. If you are about to go to 436 there are no signs telling you where you are headed.
- The right lane becomes a turn lane and it doesn't give you much warning on that.
- It has changed. Once they changed it to a stop sign they got rid of the signs telling you right turn only.

Semaron Stretch

- Plenty of light.
- I don't think this is the worse stretch. Ahead, the congestion. Behind is trying to get on or off 408.
- Center turn lanes, same thing.
- Narrow lanes.
- Parking lots. They don't give you any indication there is a spot there. By the time you realize you are supposed to turn in, you have to slam on your brakes and turn right. It makes it very unsafe because the people in front of you are stopping.

Semaron between here and Curry Ford

- The lines and reflectors are very easy to see in this area.
- Well lit.
- Smooth road surface.
- I remember the signs being clear when I was driving it.
- I think the way the businesses and the landscaping you can see their signs.
- Difference from day.
- Lighting not coming from all of the congestion of the businesses.
- Businesses are farther off the road.
- This area is the worse part because it is about to get to Curry Ford and it is congested.

408

Colonial versus 408

- Colonial because it is bigger.
- You can see the lanes.
- You can pull over.
- If you go outside your lane you are hitting a wall.
- I don't like the barriers.

Write down why you would rather drive this stretch right here that goes up to Curry Ford than the stretch that goes up to 408? Feel safer because or why?

Most important thing?

- Space, feeling of open space.
- Wide lanes.
- Median.
- Less clutter, sides of street.
- It is the best place to pull-over.
- Turning lanes
- Not busy from development.
- Lanes are wider with more space on side of roads.
- Adequate lanes.
- Turning lanes.

Second thing

- Wider lanes.
- Medians.
- Less cluttered lanes.
- Good lighting.
- Turning lanes.
- Wider lanes.
- Turn lanes.
- Sufficient lighting.

Third thing

- Bus pull out.
- Turning lane.
- Wider lane.
- Bus lane.
- Turning lanes.
- Businesses set back from road.
- Sidewalks further back.
- Better striping.
- Landscaping.
- The bus pull out.

Fourth thing

- Turn lanes.
- Better layout: the turning lanes.
- Lighting.

- Businesses.
- Less clutter.
- Paving is smoother.
- Finding places to get off road if you are having trouble.
- Clear marking on pavement.
- Bus lanes.
- Median.

Please write down which roads in Orlando area have the best roadway striping marking lanes and the sides of the roadway?

- Huskawillow??
- The new Curry Ford area.
- Some areas of Goldenrod.
- University.
- 417.

Please write down which roads in Orlando area have the best reflectors in the pavement on the roadway?

- Going down Chickasaw, north of Curry Ford, if you take a left around this bend they have these reflectors. They are by far the best because you actually notice them.

Should they do these things less often?

- If they do medians and turn lanes you don't feel like you need those things as much.
- If you have a congested space, you want those things
- When it rains, the stripes are the only things that kept me going on that road.
- It seems to wear out in more places.
- I think it is really important if it is unfamiliar road. Most of us drive the same road everyday and you almost do it by route. You just know where you are. Years ago I had an accident. I was in the left hand lane, he pulled out in front of me and he thought he was in the turn lane.
- If the road is under construction, they need to be very careful that they mark the road real well. That section on 408 is an incredible oversight for them not to mark that any better.
- Because you are so used to it being a certain way, you want to drive it that way and it is like BAM, something is different and you are just lost. You don't know what to do you just start seeing all these barriers. The problem is we are a tourist town and everyone is from out of town.

What would you say to Department of Transportation?

- If you are in a city and you have overhead lighting you don't pay attention, but on a country road I sure do.
- When it is raining it is important.
- If you look at picture of 408, do you see any street lights besides that one?

Please write down which roads in Orlando area have the worst roadway striping marking lanes and the sides of the roadway?

- Fairbanks.
- Loma.
- Lake Underhill.
- 1792 between Colonial (3 or 4).
- Orange, not in the downtown area, but South.

Please write down which roads in Orlando area have the worst reflectors in the pavement on the roadway?

- Lee Road.
- Fairbank.

The State of Florida Department of Transportation conducts driver satisfaction studies on a regular basis. The questionnaire contains many of the same questions you answered in your first telephone survey (road sign visibility, pavement markings, roadway surface, etc.) The Department reviews these surveys carefully and makes improvements accordingly. They have made improvements to pavement striping and reflectors but drivers have not apparently noticed because the ratings for these factors have not increased. Why is that?

- If you pay attention to the traffic around here. Nobody really cares about the lanes; they just jut in and out in front of everybody. Unless it is raining, you really don't care about the lines. You are just trying to stay far away from people trying to hit you.
- That isn't really fair because you are not talking about lanes that are the same size and the same placement. If you were to take the stretch on the north side. That is an apple to orange comparison. To me that is not the same. It is so much better, wider and open that I'm going to say that is what makes me feel better more than the striping.
- You are going to pay more attention to striping if you are in tight situations.

•
Chester in room...Are striping or reflectors something you feel strongly about?

- Depends on the situation.
- How many street lights.
- Day or night.
- Concrete barriers need to have something on them.

Road pictures that were shown to focus group participants follow in the following order:

Day

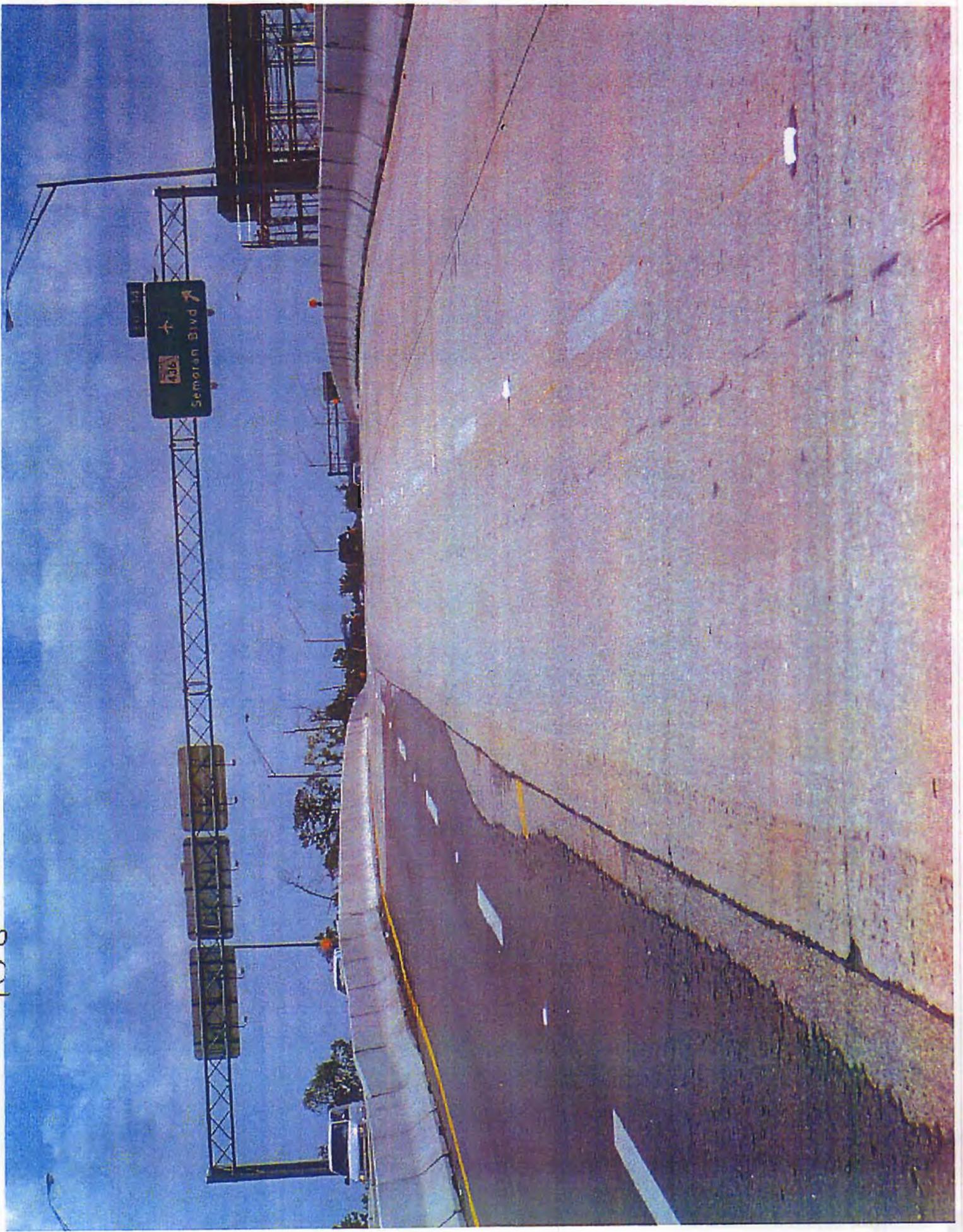
- Semoran Boulevard between Hazeltine National Drive and Curry Ford Road
- Semoran Boulevard north of 408 to Colonial Boulevard
- 408 between Conway Road and Goldenrod Road
- Colonial Boulevard between Semoran Boulevard and Herndon Avenue

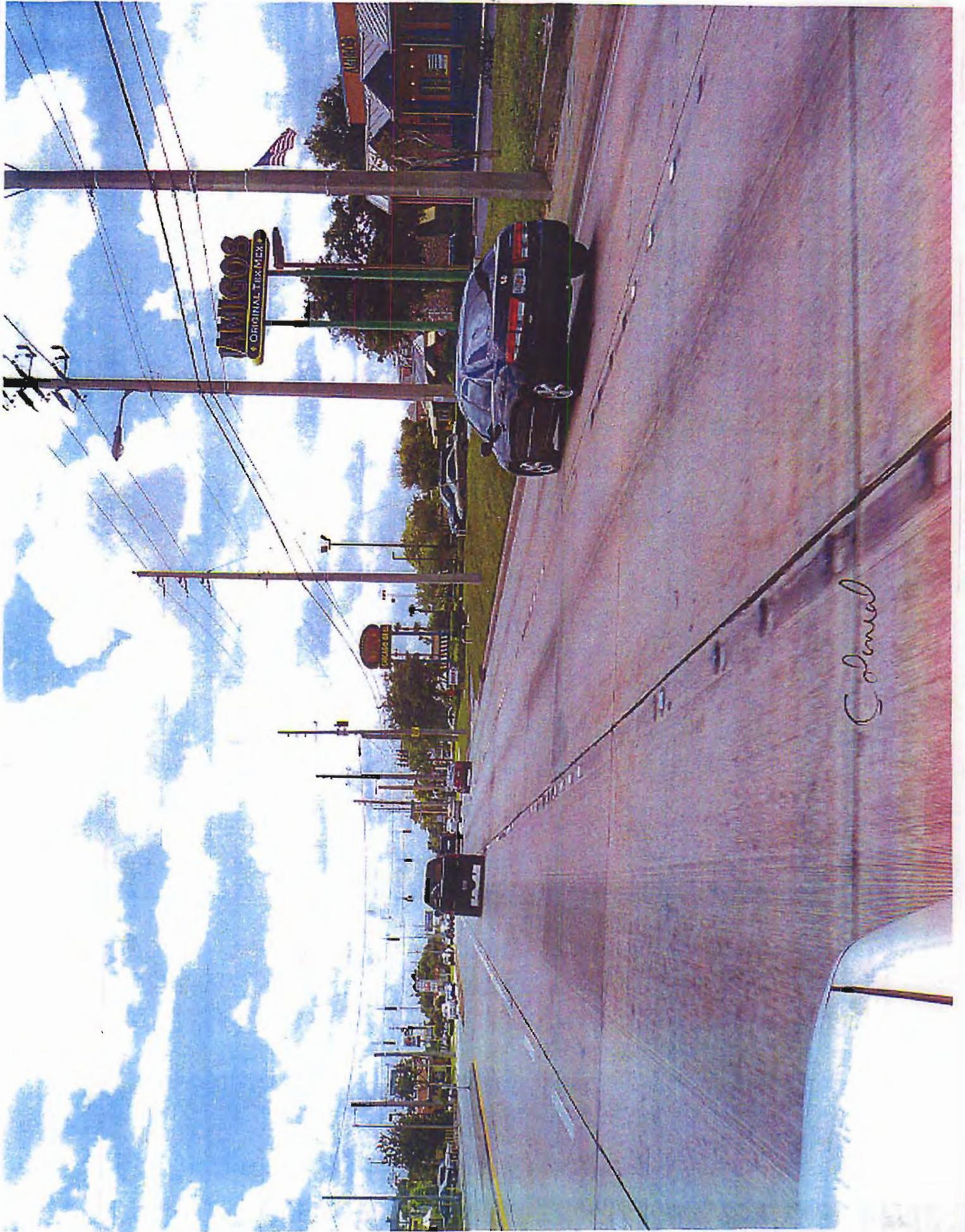
Night

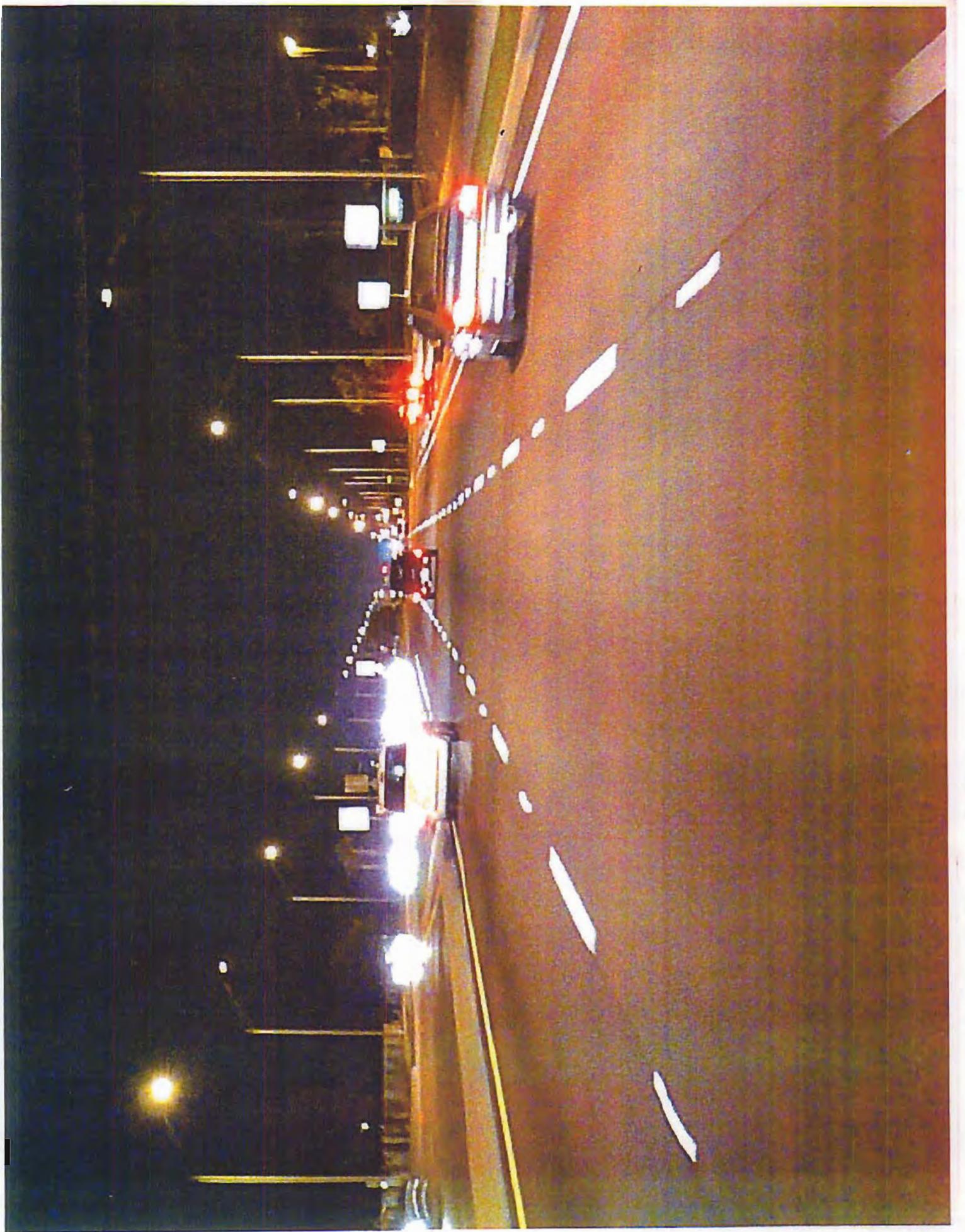
- Semoran Boulevard between Hazeltine National Drive
- Curry Ford Road and Semoran Boulevard north of 408 to Colonial Boulevard
- 408 between Conway Road and Goldenrod Road
- Colonial Boulevard between Semoran Boulevard and Herndon Avenue

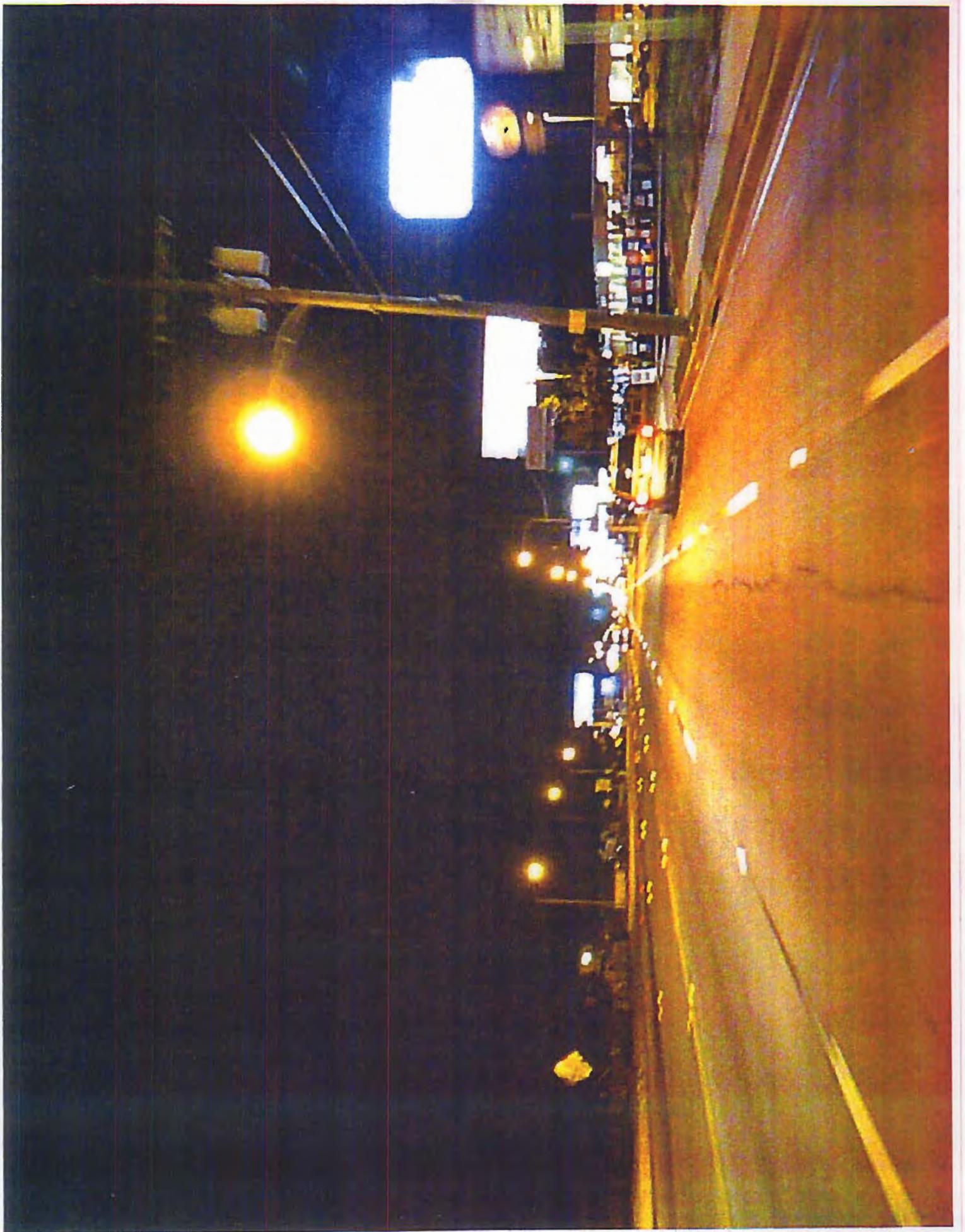


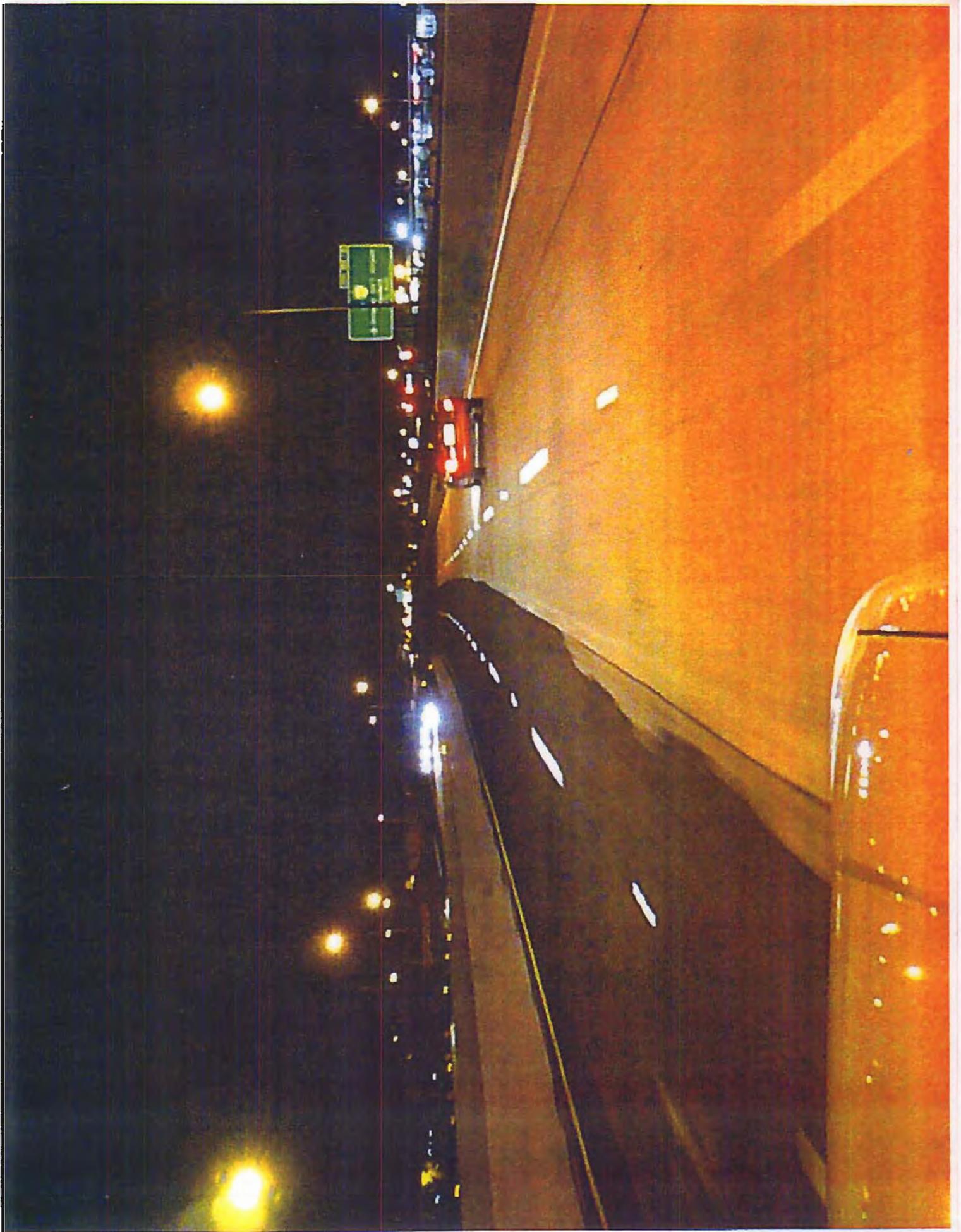
408

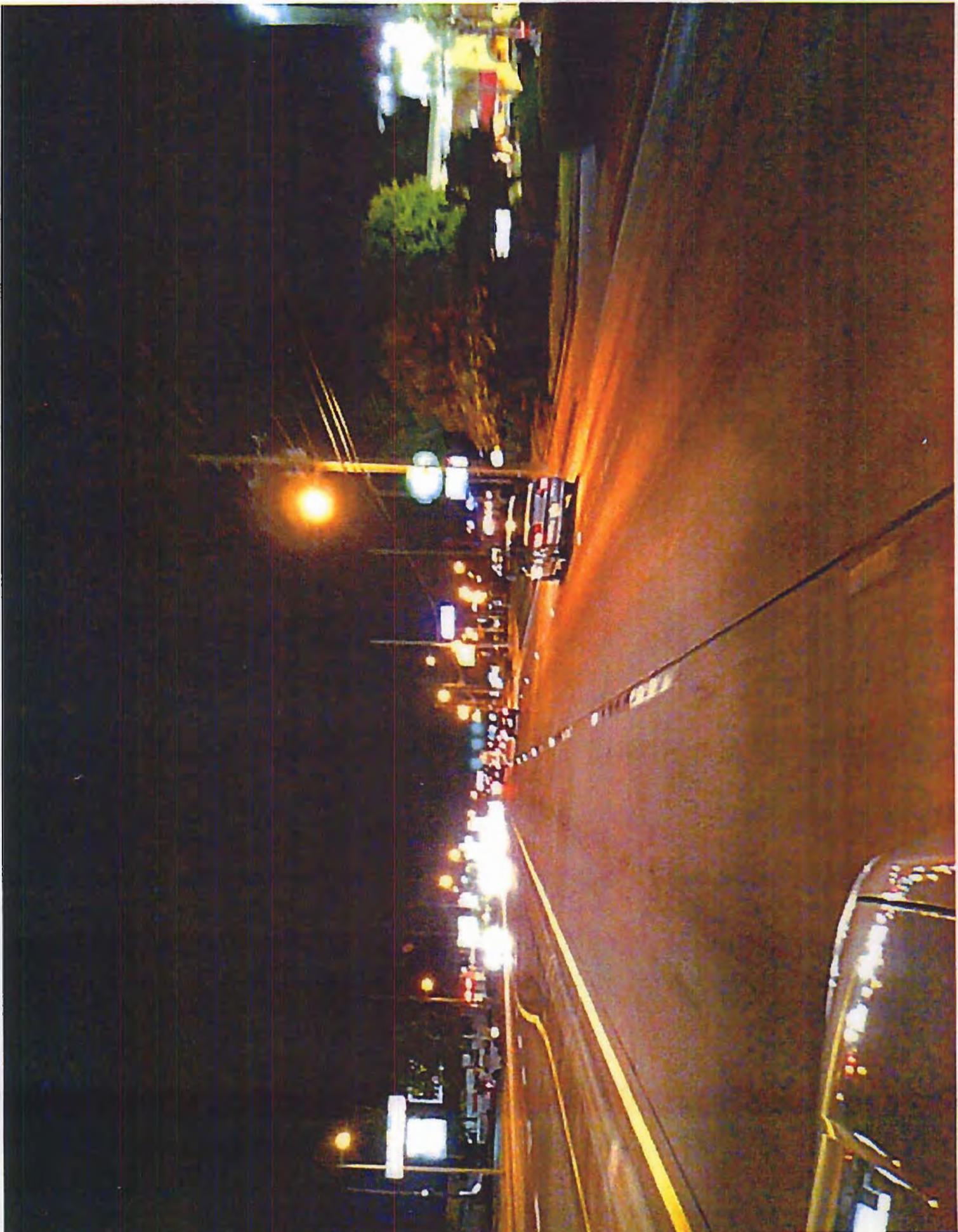












Questionnaire - Initial Telephone Interview

FDOT Pavement Markings – Initial Phone Interview

Q.1 Interviewer: Please select which study the respondent would like to participate in.

- 1 \$100 - Focus group participant
- 2 \$30 - Telephone ONLY study

Q.2 Interviewer: Did respondent drive "A" roads or "B" roads?

"A" roads

- Thomasville Rd. between Killarney Way and Kerry Forrest
- Thomasville Road between Kerry Forrest and Bradfordville/Bannerman Rd.

"B" roads

- I-10 east of Thomasville Rd. to the US 90 exit
- Pensacola St. between the stadium and Appleyard Dr.

- 1 "A" roads
- 2 "B" roads

[S - IF THE ANSWER IS 2, THEN SKIP TO QUESTION 5]

Q.3 About how many times in the past month have you driven along Thomasville Road between Killarney Way and Kerry Forest Parkway?

- 1 0
- 2 Once or twice
- 3 About once a week
- 4 More than once a week

Q.4 About how many times in the past month have you driven along Thomasville Road between Kerry Forest Parkway and Bradfordville Road?

- 1 0
- 2 Once or twice
- 3 About once a week
- 4 More than once a week

[A - IF THE ANSWER TO QUESTION 2 IS 1, THEN SKIP TO QUESTION 7]

Q.5 About how many times in the past month have you driven along I-10 east of Thomasville Road toward the US-90 exit heading toward Jacksonville?

- 1 0
- 2 Once or twice
- 3 About once a week
- 4 More than once a week

Q.6 About how many times in the past month have you driven along Pensacola Street between the FSU stadium and Appleyard Drive?

- 1 0
- 2 Once or twice
- 3 About once a week
- 4 More than once a week

[A - IF THE ANSWER TO QUESTION 2 IS 2, THEN SKIP TO QUESTION 33]

Q.7 I have just a few questions to ask you about the roadway along Thomasville Road between Killarney Way and Kerry Forest Parkway. Take a second and try to visualize this part of Thomasville Road.

I'm going to ask you a few questions, please tell me if you strongly agree, agree, disagree, strongly disagree or have no opinion for each question.

Q.8 The road signs are clearly readable.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

[ASK QUESTIONS 9 TO 11 IN RANDOM ORDER]

Q.9 During the day, the visibility of roadway striping and markings is good.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

Q.10 At night, the visibility of roadway striping and markings is good.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

Q.11 When it's raining, the visibility of roadway striping and markings is good.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

Q.12 The road surface is smooth.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

Q.13 The medians, guardrails, and lighting along this segment of Thomasville road make me feel safe when I drive on it.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

Q.14 Lane striping and reflectors marking lanes and sides of roads are adequate.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

Q.15 Traffic lights on this part of Thomasville Road are timed to let traffic flow.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

Q.16 Landscaping on this part of Thomasville Road is trimmed so visibility is not impaired.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

Q.17 There is adequate lighting on this part of Thomasville Road.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

Q.18 When I drive along this part of Thomasville Road, I feel safe and in control.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

Q.19 When you drive this part of Thomasville Road, how heavy is traffic. Use a 1 to 10 scale where 10 means traffic is extremely heavy and 1 means traffic is extremely light. (11=DK)

Traffic _____

Q.20 Now, let's focus on the roadway along Thomasville Road between Kerry Forest Parkway and Bradfordville Road. Try to visualize that stretch of Thomasville Road.

I'm going to ask you a few questions, please tell me if you strongly agree, agree, disagree, strongly disagree or have no opinion.

Q.21 The road signs are clearly readable.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

[ASK QUESTIONS 22 TO 24 IN RANDOM ORDER]

Q.22 During the day, the visibility of roadway striping and markings is good.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

Q.23 At night, the visibility of roadway striping and markings is good.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

Q.24 When it's raining, the visibility of roadway striping and markings is good.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

Q.25 The road surface is smooth.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

Q.26 The medians, guardrails, and lighting along this part of Thomasville Road make me feel safe when I drive on it.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

Q.27 Lane striping and reflectors marking lanes and sides of roads are adequate.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

Q.28 Traffic lights on this part of Thomasville Road are timed to let traffic flow.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

Q.29 Landscaping on this part of Thomasville Road is trimmed so visibility is not impaired.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

Q.30 There is adequate lighting on this part of Thomasville Road.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

Q.31 When I drive along this part of Thomasville Road, I feel safe and in control.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

Q.32 When you drive this part of Thomasville Road, how heavy is traffic. Use a 1 to 10 scale where 10 means traffic is extremely heavy and 1 means traffic is extremely light. (11=DK)

Traffic ____

[A - IF THE ANSWER TO QUESTION 2 IS 1, THEN SKIP TO QUESTION 59]

Q.33 I have just a few questions to ask you about the roadway along I-10 east of Thomasville Road to the US-90 exit heading toward Jacksonville. Take a second and try to visualize this part of I-10.

I'm going to ask you a few questions, please tell me if you strongly agree, agree, disagree, strongly disagree or have no opinion for each question.

Q.34 The road signs are clearly readable.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

[ASK QUESTIONS 35 TO 37 IN RANDOM ORDER]

Q.35 During the day, the visibility of roadway striping and markings is good.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

Q.36 At night, the visibility of roadway striping and markings is good.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

Q.37 When it's raining, the visibility of roadway striping and markings is good.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

Q.38 The road surface is smooth.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

Q.39 The medians, guardrails, and lighting along this segment of I-10 make me feel safe when I drive on it.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

Q.40 Lane striping and reflectors marking lanes and sides of roads are adequate.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

[A - IF THE ANSWER TO QUESTION 2 IS 1 OR 2, THEN SKIP TO QUESTION 42]

Q.41 Traffic lights on this part of I-10 are timed to let traffic flow.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

Q.42 Landscaping on this part of I-10 is trimmed so visibility is not impaired.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

Q.43 There is adequate lighting on this part of I-10.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

Q.44 When I drive along this part of I-10, I feel safe and in control.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

Q.45 When you drive this part of I-10, how heavy is traffic. Use a 1 to 10 scale where 10 means traffic is extremely heavy and 1 means traffic is extremely light. (11=DK)

Traffic _____

Q.46 Now, let's focus on the roadway along Pensacola Street between the FSU stadium and Appleyard Drive. Try to visualize that stretch of Pensacola Street.

Please tell me if you strongly agree, agree, disagree, strongly disagree or have no opinion.

Q.47 The road signs are clearly readable.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

[ASK QUESTIONS 48 TO 50 IN RANDOM ORDER]

Q.48 During the day, the visibility of roadway striping and markings is good.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

Q.49 At night, the visibility of roadway striping and markings is good.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

Q.50 When it's raining, the visibility of roadway striping and markings is good.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

Q.51 The road surface is smooth.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

Q.52 The medians, guardrails, and lighting along Pensacola Street between the FSU stadium and Appleyard Drive make me feel safe when I drive on it.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

Q.53 Lane striping and reflectors marking lanes and sides of roads are adequate.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

Q.54 Traffic lights along Pensacola Street between the FSU stadium and Appleyard Drive are timed to let traffic flow.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

Q.55 Landscaping along Pensacola Street between the FSU stadium and Appleyard Drive is trimmed so visibility is not impaired.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

Q.56 There is adequate lighting on this part of Pensacola Street.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

Q.57 When I drive along Pensacola Street between the FSU stadium and Appleyard Drive, I feel safe and in control.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

Q.58 When you drive along Pensacola Street between the FSU stadium and Appleyard Drive, how heavy is traffic. Use a 1 to 10 scale where 10 means traffic is extremely heavy and 1 means traffic is extremely light. (11=DK)

Traffic ____

Q.59 Now we'd like to get some basic profile information that we'll use in our final analysis.

Q.60 Are you supposed to wear glasses or contacts when you drive?

- 1 Yes
- 2 No

[S - IF THE ANSWER IS 2, THEN SKIP TO QUESTION 62]

Q.61 Do you wear your glasses or contacts when you are driving: READ

- 1 All of the time
- 2 Most of the time
- 3 About half of the time
- 4 Less than half of the time
- 5 Almost never

Q.62 How would you describe your vision when you are driving?

- 1 Excellent
- 2 Very good
- 3 Good
- 4 Fair
- 5 Poor

[A - IF THE ANSWER TO QUESTION 1 IS 2, THEN SKIP TO QUESTION 64]

Q.63 FOCUS GROUP STUDY SUMMARY

For the next phase of the study, you will need to drive the roads* and take notes using the forms we are going to send you. Then you will send us your notes by April 20th.

Finally, we will have you come in to our facility to participate in a group discussion about the roads you drove. This will last no longer than one and a half hours. After the discussion group, we will pay you \$100 as a way to thank you for your participation.

We will be sending you detailed information about the remainder of the study. Would you prefer to receive this information via mail, fax, or email? (Interviewer: make sure you have their mailing address, fax number, or email address recorded on the front of the screener)

*Participant will be driving [ANSWER TO Q. 2].

"A" roads

- Thomasville Rd. between Killarney Way and Kerry Forrest
- Thomasville Road between Kerry Forrest and Bradfordville/Bannerman Rd.

"B" roads

- I-10 east of Thomasville Rd. to the US 90 exit
- Pensacola St. between the stadium and Appleyard Dr.

- 1 Mail
- 2 Fax
- 3 Email

[A - IF THE ANSWER TO QUESTION 1 IS 1, THEN SKIP TO QUESTION 65]

Q.64 TELEPHONE ONLY STUDY SUMMARY

For the next phase of the study, you will need to drive the roads* and take notes using the forms we are going to send you. Then you will send us your notes by April 20th.

Finally, we will call you for the 15-minute follow-up interview to discuss the roads you drove. After the follow-up interview, we will send you \$30 as a way to thank you for your participation.

We will be sending you detailed information about the remainder of the study. Would you prefer to receive this information via mail, fax, or email? (Interviewer: make sure you have their mailing address, fax number, or email address recorded on the front of the screener)

*Participant will be driving [ANSWER TO Q. 2].

"A" roads

- Thomasville Rd. between Killarney Way and Kerry Forrest
- Thomasville Road between Kerry Forrest and Bradfordville/Bannerman Rd.

"B" roads

- I-10 east of Thomasville Rd. to the US 90 exit
- Pensacola St. between the stadium and Appleyard Dr.

- 1 Mail
 2 Fax
 3 Email

Q.65 Thank you so much. If you do not receive your materials in the next week, please call Kate at (850) 906-3111.

(Interviewer: Thank again for their time and hang up. There is still more info to be recorded for this interview to be considered complete.)

Q.66 Interviewer: Please enter the first and last name of the participant as recorded on the front of the screener.

Q.67 Interviewer: Please select participant's age as recorded on the screener?

- 1 18-29
 2 30-39
 3 40-49
 4 50-59
 5 60-69
 6 70+

Q.68 Record your (Interviewer) name here.

Questionnaire - Follow-Up Telephone Interview

FDOT Pavement Markings - Follow-Up

Q.1 Interviewer: Did respondent drive "A" roads or "B" roads?

"A" roads

- Thomasville Rd. between Killarney Way and Kerry Forrest
- Thomasville Rd. between Kerry Forrest and Bradfordville/Bannerman Rd.

"B" roads

- I-10 east of Thomasville Rd. to the US 90 exit
- Pensacola St. between the stadium and Appleyard Dr.

- 1 "A" roads - Thomasville Rd.
- 2 "B" roads - I-10 and Pensacola St.

[IF THE ANSWER IS 2, THEN SKIP TO QUESTION 40]

[IF THE ANSWER TO QUESTION 1 IS 2, THEN SKIP TO QUESTION 40]

Q.2 I have just a few questions to ask you about the roadway along Thomasville Road between Killarney Way and Kerry Forest Parkway. Take a second and try to visualize this part of Thomasville Road. I'm going to ask you a few questions, please tell me if you strongly agree, agree, disagree, strongly disagree or have no opinion for each question.

Q.3 The road signs are clearly readable.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

[ASK QUESTIONS 4 TO 6 IN RANDOM ORDER]

Q.4 During the day, the visibility of roadway striping and markings is good.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

Q.5 At night, the visibility of roadway striping and markings is good.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

Q.6 When it's raining, the visibility of roadway striping and markings is good.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

Q.7 The road surface is smooth.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

Q.8 The medians, guardrails, and lighting along this segment of Thomasville road make me feel safe when I drive on it.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

Q.9 Lane striping and reflectors marking lanes and sides of roads are adequate.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

Q.10 Traffic lights on this part of Thomasville Road are timed to let traffic flow.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

Q.11 Landscaping on this part of Thomasville Road is trimmed so visibility is not impaired.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

Q.12 There is adequate lighting on this part of Thomasville Road.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

Q.13 When I drive along this part of Thomasville Road, I feel safe and in control.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

Q.14 When you drive this part of Thomasville Road, how heavy is traffic. Use a 1 to 10 scale where 10 means traffic is extremely heavy and 1 means traffic is extremely light. (11=DK)

Traffic ____

Q.15 What do you recall about the condition of the striping on the road that marks the lanes and the sides of the road? **(PROBE)**

Q.16 Would you rate the striping as:

- 1 Excellent
- 2 Very good
- 3 Good
- 4 Fair
- 5 Poor
- 6 Do not recall (DO NOT READ)

Q.17 Can you visualize the striping in your mind right now? What was the striping like? **(PROBE)**

Q.18 What do you recall about the condition of the reflectors on the road surface? **(PROBE)**

Q.19 Would you rate the reflectors on the road surface as:

- 1 Excellent
- 2 Very good
- 3 Good
- 4 Fair
- 5 Poor
- 6 Do not recall (DO NOT READ)

Q.20 Can you visualize the reflectors in your mind right now? What do you recall about them? **(PROBE)**

Q.21 Now, let's focus on the roadway along Thomasville Road between Kerry Forest Parkway and Bradfordville Road. Try to visualize that stretch of Thomasville Road. I'm going to ask you a few questions, please tell me if you strongly agree, agree, disagree, strongly disagree or have no opinion.

Q.22 The road signs are clearly readable.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

[ASK QUESTIONS 23 TO 25 IN RANDOM ORDER]

Q.23 During the day, the visibility of roadway striping and markings is good.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

Q.24 At night, the visibility of roadway striping and markings is good.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

Q.25 When it's raining, the visibility of roadway striping and markings is good.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

Q.26 The road surface is smooth.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

Q.27 The medians, guardrails, and lighting along this part of Thomasville Road make me feel safe when I drive on it.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

Q.28 Lane striping and reflectors marking lanes and sides of roads are adequate.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

Q.29 Traffic lights on this part of Thomasville Road are timed to let traffic flow.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

Q.30 Landscaping on this part of Thomasville Road is trimmed so visibility is not impaired.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

Q.31 There is adequate lighting on this part of Thomasville Road.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

Q.32 When I drive along this part of Thomasville Road, I feel safe and in control.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

Q.33 When you drive this part of Thomasville Road, how heavy is traffic. Use a 1 to 10 scale where 10 means traffic is extremely heavy and 1 means traffic is extremely light. (11=DK)

Traffic ____

Q.34 What do you recall about the condition of the striping on the road that marks the lanes and the sides of the road? **(PROBE)**

Q.35 Would you rate the striping as:

- 1 Excellent
- 2 Very good
- 3 Good
- 4 Fair
- 5 Poor
- 6 Do not recall (DO NOT READ)

Q.36 Can you visualize the striping in your mind right now? What was the striping like? **(PROBE)**

Q.37 What do you recall about the condition of the reflectors on the road surface? **(PROBE)**

Q.38 Would you rate the reflectors on the road surface as:

- 1 Excellent
- 2 Very good
- 3 Good
- 4 Fair
- 5 Poor
- 6 Do not recall (DO NOT READ)

Q.39 Can you visualize the reflectors in your mind right now? What do you recall about them? **(PROBE)**

[IF THE ANSWER TO QUESTION 1 IS 1, THEN SKIP TO QUESTION 78]

Q.40 I have just a few questions to ask you about the roadway along I-10 east of Thomasville Road to the US-90 exit heading toward Jacksonville. Take a second and try to visualize this part of I-10. I'm going to ask you a few questions, please tell me if you strongly agree, agree, disagree, strongly disagree or have no opinion for each question.

Q.41 The road signs are clearly readable.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

[ASK QUESTIONS 42 TO 44 IN RANDOM ORDER]

Q.42 During the day, the visibility of roadway striping and markings is good.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

Q.43 At night, the visibility of roadway striping and markings is good.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

Q.44 When it's raining, the visibility of roadway striping and markings is good.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

Q.45 The road surface is smooth.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

Q.46 The medians, guardrails, and lighting along this segment of I-10 make me feel safe when I drive on it.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

Q.47 Lane striping and reflectors marking lanes and sides of roads are adequate.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

[IF THE ANSWER TO QUESTION 1 IS 1 OR 2, THEN SKIP TO QUESTION 49]

Q.48 Traffic lights on this part of I-10 are timed to let traffic flow.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

Q.49 Landscaping on this part of I-10 is trimmed so visibility is not impaired.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

Q.50 There is adequate lighting on this part of I-10.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

Q.51 When I drive along this part of I-10, I feel safe and in control.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

Q.52 When you drive this part of I-10, how heavy is traffic. Use a 1 to 10 scale where 10 means traffic is extremely heavy and 1 means traffic is extremely light. (11=DK)

Traffic ____

Q.53 What do you recall about the condition of the striping on the road that marks the lanes and the sides of the road? **(PROBE)**

Q.54 Would you rate the striping as:

- 1 Excellent
- 2 Very good
- 3 Good
- 4 Fair
- 5 Poor
- 6 Do not recall (DO NOT READ)

Q.55 Can you visualize the striping in your mind right now? What was the striping like? **(PROBE)**

Q.56 What do you recall about the condition of the reflectors on the road surface? **(PROBE)**

Q.57 Would you rate the reflectors on the road surface as:

- 1 Excellent
- 2 Very good
- 3 Good
- 4 Fair
- 5 Poor
- 6 Do not recall (DO NOT READ)

Q.58 Can you visualize the reflectors in your mind right now? What do you recall about them? (**PROBE**)

Q.59 Now, let's focus on the roadway along Pensacola Street between the FSU stadium and Appleyard Drive. Try to visualize that stretch of Pensacola Street.

Please tell me if you strongly agree, agree, disagree, strongly disagree or have no opinion.

Q.60 The road signs are clearly readable.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

[ASK QUESTIONS 61 TO 63 IN RANDOM ORDER]

Q.61 During the day, the visibility of roadway striping and markings is good.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

Q.62 At night, the visibility of roadway striping and markings is good.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

Q.63 When it's raining, the visibility of roadway striping and markings is good.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

Q.64 The road surface is smooth.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

Q.65 The medians, guardrails, and lighting along Pensacola Street between the FSU stadium and Appleyard Drive make me feel safe when I drive on it.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

Q.66 Lane striping and reflectors marking lanes and sides of roads are adequate.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

Q.67 Traffic lights along Pensacola Street between the FSU stadium and Appleyard Drive are timed to let traffic flow.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

Q.68 Landscaping along Pensacola Street between the FSU stadium and Appleyard Drive is trimmed so visibility is not impaired.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

Q.69 There is adequate lighting on this part of Pensacola Street.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

Q.70 When I drive along Pensacola Street between the FSU stadium and Appleyard Drive, I feel safe and in control.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree
- 5 No opinion

Q.71 When you drive along Pensacola Street between the FSU stadium and Appleyard Drive, how heavy is traffic. Use a 1 to 10 scale where 10 means traffic is extremely heavy and 1 means traffic is extremely light. (11=DK)

Traffic ____

Q.72 What do you recall about the condition of the striping on the road that marks the lanes and the sides of the road? (**PROBE**)

Q.73 Would you rate the striping as:

- 1 Excellent
- 2 Very good
- 3 Good
- 4 Fair
- 5 Poor
- 6 Do not recall (DO NOT READ)

Q.74 Can you visualize the striping in your mind right now? What was the striping like? (**PROBE**)

Q.75 What do you recall about the condition of the reflectors on the road surface? **(PROBE)**

Q.76 Would you rate the reflectors on the road surface as:

- 1 Excellent
- 2 Very good
- 3 Good
- 4 Fair
- 5 Poor
- 6 Do not recall (DO NOT READ)

Q.77 Can you visualize the reflectors in your mind right now? What do you recall about them? **(PROBE)**

Q.78 When we started this call today and you rated various elements of the roadways, were you thinking about the road striping and reflectors on the pavement when you were rating, or were you thinking of other factors?

- 1 Striping
- 2 Reflectors
- 3 Do not recall
- 4 Other factors

Q.79

Q.80 You drove: (READ CORRECT ROADS BELOW: [ANSWER TO Q. 1])

"A" roads

- Thomasville Rd. between Killarney Way and Kerry Forrest
- Thomasville Rd. between Kerry Forrest and Bradfordville/Bannerman Rd.

"B" roads

- I-10 east of Thomasville Rd. to the US 90 exit
- Pensacola St. between the stadium and Appleyard Dr.

Was the *striping* on one of them any better or any worse than the other

- 1 Better
- 2 Worse
- 3 Same (DO NOT READ)
- 4 Do not recall (DO NOT READ)

[IF THE ANSWER IS 3 OR 4, THEN SKIP TO QUESTION 83]

Q.81 Which road was [ANSWER TO Q. 80]?

- 1 Thomasville Rd. between Killarney Way and Kerry Forrest
- 2 Thomasville Rd. between Kerry Forrest and Bradfordville/Bannerman Rd.
- 3 I-10 east of Thomasville Rd. to the US 90 exit
- 4 Pensacola St. between the stadium and Appleyard Dr.

Q.82 Was it a lot [ANSWER TO Q. 80] or a little [ANSWER TO Q. 80]?

- 1 A lot better
- 2 A little better
- 3 A lot worse
- 4 A little worse

Q.83 Were the *reflectors* on one of the roads you drove any better or any worse than the other?

- 1 Better
- 2 Worse
- 3 Same (DO NOT READ)
- 4 Do not recall (DO NOT READ)

[IF THE ANSWER IS 3 OR 4, THEN SKIP TO QUESTION 85]

Q.84 Which road was [ANSWER TO Q. 83]?

- 1 Thomasville Rd. between Killarney Way and Kerry Forrest
- 2 Thomasville Rd. between Kerry Forrest and Bradfordville/Bannerman Rd.
- 3 I-10 east of Thomasville Rd. to the US 90 exit
- 4 Pensacola St. between the stadium and Appleyard Dr.

[IF THE ANSWER TO QUESTION 83 IS 3 OR 4, THEN SKIP TO QUESTION 86]

Q.85 Were they a lot [ANSWER TO Q. 83] or a little [ANSWER TO Q. 83]?

- 1 A lot better
- 2 A little better
- 3 A lot worse
- 4 A little worse

Q.86 Thank you so much for your participation. We'll be sending you a check for \$30 in the next couple of weeks.

(Interviewer: Thank again for their time and hang up. There is still more info to be recorded for this interview to be considered complete.)

Q.87 Interviewer: Please enter the first and last name of the participant as recorded on the front of the screener.

Q.88 Record your (interviewer) name here.

Q.89 Interviewers, now is the time to go back and edit your survey. This is your last chance to do so.

Selecting "1" will take you back to the first question for editing. You may skip to any questions that need editing using the skip, next, and previous buttons. Skip forward to this question (87) when you are finished editing.

Selecting "2" will record an automatic complete for this questionnaire.

- 1 No - I want to go back and edit this questionnaire.
- 2 Yes - This questionnaire is complete.

[IF THE ANSWER IS 1, THEN SKIP TO QUESTION 1]
[IF THE ANSWER IS 2, THEN SKIP TO QUESTION 1020]

Driving Diaries

After an initial telephone interview about characteristics of the assigned roadways, individuals were instructed to drive the assigned roadways and to keep diaries regarding their driving experiences. Specific questions in the diary included:

Please rate your driving experience along Pensacola Street between FSU's stadium and Appleyard Drive in terms of your overall satisfaction, your sense of being in control, knowing where you're going, and your sense of feeling safe. Check 1 in each column.

Daytime driving	Driving at night	
___	___	Extremely positive
___	___	Very positive
___	___	Positive
___	___	Somewhat positive
___	___	Neither positive nor negative
___	___	Somewhat negative
___	___	Negative
___	___	Very negative
___	___	Extremely negative

What would have made your overall satisfaction, your sense of being in control, knowing where you're going, and your sense of feeling safe more positive?

What specific changes to the roadway and the right-of-way would have made your overall satisfaction, your sense of being in control, knowing where you're going, and your sense of feeling safe more positive?

What contributed to your positive reactions to driving conditions while driving along this stretch of road? Check all that apply.

- ___ Surface of the road
- ___ Markings (striping and pavement markers) on the road surface
- ___ Lights on the side of the road
- ___ Traffic was light
- ___ Other drivers were driving properly
- ___ There was a median
- ___ Signs were easy to see and read
- ___ Landscaping was appealing
- ___ There were bike lanes
- ___ There were turn lanes
- ___ Traffic lights were synchronized
- ___ Other _____

Appendix

What contributed to your negative reactions to driving conditions while driving along this stretch of road?
Check all that apply.

- Signs were not easy to see and read
- Landscaping was not appealing or non-existent
- There were no bike lanes
- There were no turn lanes
- Traffic lights were not synchronized

Please add other comments that relate to your overall satisfaction, your sense of being in control, knowing where you're going, and your sense of feeling safe more positive while driving along this road?

What contributed to your negative reactions to driving conditions while driving along this stretch of road?
Check all that apply

- Surface of the road
- Markings (striping and pavement markers) on the road surface
- No lights on the side of the road
- Traffic was heavy
- Other drivers were not driving properly
- There was no median
- Signs were not easy to see and read
- Landscaping was not appealing or non-existent
- There were no bike lanes
- There were no turn lanes
- Traffic lights were not synchronized
- Other _____

Please add other comments that relate to your overall satisfaction, your sense of being in control, knowing where you're going, and your sense of feeling safe more positive while driving along this road?

Focus Group Script

Good evening. My name is Phillip Downs. Tonight we're going to be talking about driving and driving conditions on the road. All we're going to be doing is talking. This discussion will last about an hour and a half. We are interested in your opinions – there are **no right or wrong answers**, only how you feel. It is important that everyone get involved, so no one can talk too much. To help me remember everything you say, I am taping this discussion.

Let's start by having each of you give a brief introduction:

We had some of you drive Thomasville Road from Killarney Way to Kerry Forest Parkway and Thomasville Road from Killarney Way to Bannerman Road.

We selected those two stretches of road because they differ in at least one key way. Please write down what you think the key differences are. (If you were assigned I-10 & Pensacola, but have driven Thomasville Road in this area, please write down your responses as well)

DISCUSS

We had some of you drive I-10 east of the Thomasville Road exit to US 90 east of Tallahassee and Pensacola Street from the stadium to Appleyard Drive. Other than one being an interstate and the other a road within town, we selected those two stretches of road because they differ in at least one key way. Please write down what you think the key differences are. (If you were assigned Thomasville Road, but have driven I-10 and Pensacola Street, please write down your responses as well).

DISCUSS

Show pictures of roadways during the day.

When you look at this picture and think about safely navigating this roadway, what is the first thing that comes to mind?

PROBE

REPEAT FOR EACH ROAD SEGMENT

Show pictures of roadways during the night.

When you look at this picture and think about safely navigating this roadway, what is the first thing that comes to mind?

PROBE

REPEAT FOR EACH ROAD SEGMENT

Please write down which roads in Tallahassee area have the best roadway striping marking lanes and the sides of the roadway?

Please write down which roads in Tallahassee area have the best reflectors in the pavement on the roadway?

Please write down which roads in Tallahassee area have the worst roadway striping marking lanes and the sides of the roadway?

Please write down which roads in Tallahassee area have the worst reflectors in the pavement on the roadway?

Each of you was assigned to drive two stretches of roadway: one had good roadway striping for lanes and sides of the road and the other had average to poor roadway striping for lanes and sides of the road. Yet, your ratings were essentially the same for both roads. Why?

The State of Florida Department of Transportation conducts driver satisfaction studies on a regular basis. The questionnaire contains many of the same questions you answered in your first telephone survey. (road sign visibility, pavement markings, roadway surface, etc.) The Department reviews these surveys carefully and makes improvements accordingly. They have made improvements to pavement striping and reflectors but drivers have not apparently noticed because the ratings for these factors have not increased. Why is that?

IF THERE IS TIME

Here is a list of attributes (placement of signs, size of signs, striping, RPMs, lights, etc). Take a minute and check the three that you think are **most** important to your safe navigation along roadways.

Here is a list of attributes (placement of signs, size of signs, striping, RPMs, lights, etc). Take a minute and check the three that you think are **least** important to your safe navigation along roadways.