

HOV Marketing and Positioning Research Study

Task 1 - Background Scan

Presented to, and prepared in cooperation with:
Gold Coast Commuter Services, Inc.
Fort Lauderdale, Florida

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PROJECT SUMMARY

The Florida Department of Transportation, Districts Four and Six, are improving I-95 from Palm Beach County through Broward County, to Dade County, and completing a 61 mile high occupancy vehicle (HOV) corridor as part of this project. Designated for buses, vanpools and carpools carrying at least two people (HOV-2), the lane will be a low-cost method to reward ridesharers and increase the average vehicle occupancy (AVO) rate along this heavily travelled corridor.

This project's objective is to collect and analyze data to plan for the effective marketing and evaluation of HOV lanes along I-95 in South Florida. This report focuses on Task 1 - a compilation of background information on the I-95 HOV lanes and experiences of HOV facilities across the country. Funding for this task was provided by FDOT's TDM Clearinghouse at the Center for Urban Transportation Research (CUTR) of the University of South Florida.

Anticipated Results

The project is designed to assist individuals in the public and private sectors who are responsible for implementing HOV systems. With the HOV Marketing and Positioning Research Study, transit and highway professionals will be able to understand what is needed to market and evaluate effective HOV projects successfully. The research will help FDOT, Gold Coast Commuter Services (GCCS), and others:

- heighten public awareness of the overall mission of HOV lanes;
- build constituencies, create partnerships, and foster support;
- increase public confidence and reduce hostility;
- develop reasonable expectations;
- facilitate immediate use of the facilities, ensuring increased utilization; and
- provide information that could enhance future project planning activities.

RESEARCH OBJECTIVE

The research objective is to assess and quantify attitudes of public decisionmakers, employers and commuters regarding high occupancy vehicle facilities.

The project would establish a baseline from which to measure progress against multimodal objectives. Baseline measurements include:

- Awareness of HOV facilities;
- Attitudes towards various HOV alternatives;
- Predisposition towards enforcement and adjudication of HOV violations.

The HOV Marketing and Positioning Research Study will sharpen the focus of the marketing program and provide a basis for determining achievements. Specifically, the project would

assess and quantify the behavior of public decisionmakers, employers, and commuters towards HOV facilities in the South Florida area. The full study will be conducted by CUTR with the cooperation of FDOT and Gold Coast Commuter Services.

SCOPE OF WORK

The first task was to compile the relevant information and review existing data from local, regional and state organizations regarding similar studies and research in progress and review current commuter and employer survey practices on HOVs used nationally. The findings of this task will be used to help design the survey instruments for the general public, business leaders, and public officials.

The HOV marketing plan of Gold Coast Commuter Services will be designed to improve the education and awareness of the HOV lane project among the commuters who are eligible to use the lane, the FDOT offices which maintain the facility, the law enforcement agencies charged with enforcing the lane restrictions, and the court system which will uphold or withhold adjudication of those caught in violation of the law. To identify the key issues and attitudes of these individuals and groups, and measure the changes accomplished, the expressed attitudes of some of the public-sector officials involved have been collected through informal telephone interviews.

HOV Violation Rates

It is very difficult to assess baseline information about the number of tickets written to HOV lane violators because this is not reported directly. Without this information, the follow-up conviction rates are also unattainable, and there is no significant way to measure and compare citation rates by week, month or year in South Florida. It may be advisable to collect statistics for a one year period to reflect all "Traffic Control Device" violations, but it is important to realize that this number will include ramp signals, failures to yield, and "Safety Zone" lane violations, as well as HOV lane violations.

FHP Lt. Rogers, Troop L, estimates that officers write approximately 150 tickets per day, and whereas up to 5 may have been challenged per day in the past, the number of challenges is now greater than 30 per day. Lt. Rogers made an analogy between the traffic court system and a popular TV game show for the way the FHP tickets are plead down or traded for smaller penalties.

In Dade County, Captain Ashley, Troop E, stated that enforcement of the HOV lane has been suspended through June, 1995 when he expects completion of the facility and improved signage through Dade County.

In Broward County, Troop L Captain Rosman said that the HOV lane enforcement has been "sporadic....up to the individual troopers" and that because his troop is understaffed, priority has had to go to crashes and other more serious violations.

According to FHP Lt. Rogers, Troop L, there are several obstacles to writing violations to the HOV lane, and tracking these numbers. Because there is no separate infraction listed on the ticket medium, it is recorded as a control device violation, and then the officer writes "carpool lane violation" on the ticket as well. This makes counting the numbers of tickets written for this infraction impossible by any means other than hand sorting through all of the tickets written over a specific period of time and counting the number of HOV tickets issued. Secondly, because ten different agencies patrol I-95 in Palm Beach County alone, their tickets would also have to be sorted and counted. The only statistics reported back to the state of Florida generally relate to accidents, fatalities, DUIs, and seat-belt violations. Carpool lane ticket statistics are not available.

HOV Adjudication Results

Traffic magistrates are officers of the traffic courts who resolve traffic and citation conflicts as an alternative to the defendant appearing before a traffic court judge. The magistrates are practicing attorneys who work specific hours of a week or month, and rotate through traffic satellite offices in the counties which hired them. For example, in Broward County, a magistrate's docket will contain up to seventy-five cases, and most magistrates will work two sessions in a day, processing between 121 and 150 cases in a four and one-half to five hour day. The only cases that go before a judge are those in which the person requests a judge or if the offense resulted in an accident.

Broward County- The first Traffic Magistrate contacted was Ron Baum who is the Administrative Magistrate for the West Satellite Traffic office. Baum does not see any citations in the central offices, "Central Fort Lauderdale doesn't give them," but says that at least ten percent of the North and South satellite dockets may be HOV violation cases. Although the offense does not top his list of severity, "It's one of the least egregious infractions, I still take them seriously, though not the same as blowing a light." Most people Baum has encountered plead that they were braking and swerved to avoid an accident or obstruction, the times were different (watch vs. real, Police watch vs. real...), or that they didn't see the sign. "They usually lose," said Baum.

Traffic Magistrate Brenda DiIoiia is one of the newer magistrates and only works the South Satellite office, where she has observed that it seems to be the same officer writing all of the HOV tickets, although she could not recall his name. Although she only sees one or two cases every two weeks, DiIoiia pointed out that when a defendant pleads that there was debris or an accident in the road that he/she was trying to avoid, it is very useful if the officer can say that he/she was following the individual in the carpool lane for longer than was reasonably necessary for the person to return to one of the regular flow lanes of traffic. She does not accept when a person says that he/she was unaware that it was a carpool lane. The most interesting case DiIoiia has experienced was when a woman plead that because she was pregnant, she was permitted in the carpool lane. Rather than challenge the Supreme Court's Roe v. Wade decision on a control device violation, DiIoiia dismissed the case, although she estimates that, in her experience, about

70% of the carpool lane violations stick.

Lou Schiff, the Administrative Traffic Magistrate for the North Broward satellite has handled about 70,000 citations in the five years he has served. Most of the cases Schiff has seen have not been challenged, although he cited some interesting defenses, including an urn containing a relative's remains being considered a second person. The standard excuses have been presented- Time confusion, sign confusion, and braking to avoid an accident. When a defendant tells Schiff that he didn't see the signs, Schiff asks the FHP officer if he observed the def. pass under an HOV sign. If not, Schiff asks the defendant where he entered I-95, and how long he had been travelling along it when he was cited. "Did you see the diamonds?", "Do you know what they mean...?" Schiff asserted that "You've gotta be [stupid] not to notice driving over diamonds," and he will generally fine the individual.

Schiff frequently withholds adjudication, and allows the person to pay \$25-35 in court costs, and have no points posted against their license. "I consider this a citation of rudeness, I'm sensitive to these people, if they change their plea to 'no contest'....the insurance companies shouldn't drop people or raise their rates, and Broward county will raise revenue without these citations....There are more important things for police officers to do, but people will continue to use carpool lanes, fine..." Schiff would like to see more signs posted, "You can never have too many."

Traffic Magistrate Carlos Llorente also only imposes nominal fines against violators, and withholds adjudication most of the time, even if the defendant has an atrocious driving record. Whereas he can charge the person \$57.00 for the fine, impose three points, and charge \$25.00 in court costs, he will generally only charge \$25 to 35 in costs.

Dade County- Magistrate David Shenkman cannot recall ever hearing an HOV lane violation case.

Traffic Magistrate Eunice Martin has seen few HOV violations, and judges them on a case-by-case nature. "I look more at the record than the nature of the offense." If the person has more than three tickets over a two year period, Martin generally upholds the ticket. If the person's record is clean, Martin will generally withhold adjudication. She believes that there is only one officer in Dade county writing HOV violations, most tend to ignore it.

Traffic magistrate Melissa Tenenbaum has not seen any HOV violations on her docket, and recalls memos telling magistrates to dismiss the tickets they may encounter for this offense during the introduction of the Flyover. Tenenbaum also pointed out that since Hurricane Andrew, she and others perceive a general "lack of courtesy" on the roads in South Florida that they do not remember as having existed before the catastrophe. In her view, the people who use emergency and HOV lanes to get around traffic are just rude.

Palm Beach County- Traffic Magistrate Dominick Grosso said that if the driver pleads no contest to an HOV violation, he usually withholds adjudication and charges the \$25.00 court costs. Overall, he likes the HOV lanes and believe they speed up traffic.

Traffic Magistrate Scott Kramer also serves on the Florida State Traffic Rules Committee, and believes he hears at least twice as many cases as any other magistrate in Palm Beach County. Unless the driver has a bad driving record or has a bad attitude with the officer, Kramer will withhold adjudication and charge court costs equivalent to the \$57.00 charge. This way, he believes, the driver is still punished, but insurance rates will not go up which may have created a burden on the driver's family. Less than 10% of Kramer's HOV cases result in a conviction. Personally, Kramer supports the HOV lanes in Broward and Dade, but he doubts their effectiveness in Palm Beach County. Although he hears the complaining, he thinks the effectiveness of HOV lanes is negligible.

Traffic Magistrate Carlos Llorente believes that the lanes should be given back to normal flow, and that they are a waste of time, money, and effort. Considering the way Downtown Miami is spread out and poorly served by transit, he is convinced that carpooling is not the answer for south Florida and more energy should be put onto rail connector lines. As a magistrate, Llorente supports the traffic laws and decides each case on its own merits.

Palm Beach County Traffic Magistrate John Boykin requires that the charging officer brings in a copy of the enacting rule he followed to charge the motorist, and if the statute is on point, the charge will generally stick for a total charge of \$69.50 and three points. The excuses Boykin has accepted include a lane being shut down, if the driver has proof, a discrepancy over the exact time of day if it was close to one of the posted hours, and once a motorist told Boykin that he had forgotten to change his car clock to reflect the daylight savings time shift.

Traffic Magistrate Dominick Grosso said that most HOV tickets have been uncontested, and the only justifiable reason he has heard is one in which the driver used the HOV lane to avoid an accident.

In summary, the prevailing attitudes from officials involved with the HOV lane implementation, enforcement, and adjudication seem to be of a lack of support and apathy towards the carpool lane project. The issues indicate that GCCS should plan to:

- Inform the Florida Highway Patrol officers how the HOV lanes may improve traffic flow and the value of consistent rather than sporadic enforcement.
- Encourage the cooperation of courts and the field enforcement officers so that more of the citations can be adjudicated by preparing officers for the magistrates' questions and the drivers' challenges.
- Demonstrate to the FHP officers that the courts take HOV lanes more seriously. The rates of challenges may go down, and the officers are more likely to write tickets that they know the courts will support. According to the Institute of Transportation Engineers, the violation rate seems to be more related to the level of enforcement than it is to the amount of the fine.

As part of the upcoming series of surveys, CUTR will collect information to help GCCS prepare the communications strategy and collateral material necessary to address the above situation.

Current Traffic Counts, Occupancy Levels, and Other Background Information.

Bill Lewis, District 4 FDOT Traffic Operations, reported that the HOV lanes through Broward and Palm Beach Counties are virtually the same. They both flow in both directions and the hours for operation are 7:00-9:00am and 4:00-6:00pm. Access is unlimited to enter and egress the HOV lane, and they are marked with the standard white diamond pavement paint and signs posted regularly along the interstate.

According to Lewis, Broward County experiences average daily traffic (ADT) highs of 180,000 vehicles in North and South Broward, and 240,000 vehicles in Central Broward. Although the original plan for HOV lanes in south Florida designated the lanes as HOV-3 (3 or more passengers per vehicle), FDOT petitioned the Federal Highway Administration to change the status to HOV-2. The Broward lanes are complete, and the lanes in Palm Beach county will be completed as the roadway is improved and expanded, although this is planned outside the five-year work program. From Palm Beach to Broward County, the only difference Lewis indicated is in the markings separating the HOV lane from the normal-flow lane in the two counties.

In FDOT District 6, Planner Rory Santana referred inquiries for information to Doug Coomer who is compiling traffic data including average vehicle occupancy information for Dade county about the I-95 project. Doug Coomer, a Vice-President with Kimley-Horn under contract to FDOT, has been contacted, and will share information with CUTR.

The Tallahassee Safety Office of the FDOT makes information available about crashes along I-95 in the HOV lane, although this data will be difficult to process. Lula Revels in the Safety Office can provide information about traffic conflicts if she is given date ranges, lane designation information, and any other specifications about the data. This data is typically sent in a print-out fashion, and can be made available as data on a disk, but requires a change in file output to yield usable data in anything other than printed form. The most recent annual data compiled is for 1993. For the Safety Office to waive payment for this service, a contract number must be provided at the time of the request. CUTR will discuss the value of this data with GCCS and FDOT Districts and whether this data has been collected by FDOT's I-95 consultants.

3. Proposed enforcement methods

CUTR has identified five methods of enforcement currently in use or under study in the country.

- Enforcement personnel dedicated to the facility.
- Enforcement personnel who monitor the HOV facility as only one of many responsibilities.
- Programs to encourage individuals to report violators. Follow-up letters usually explain the purpose of the HOV facility and alternative modes available to the

driver.

- Citation by mail to the owner of the vehicle, by matching license plates.
- Video surveillance (under consideration in Texas, California, and New York).

A project conducted in the Seattle evaluated various HOV lane enforcement intensity techniques. The techniques included intensive (or continuous saturation) enforcement, once per week saturation enforcement, and once per week stationary enforcement. The researchers concluded "each type of enforcement effort helped in lowering the number of HOV lane violations; however, it was not possible to determine which method was most effective. Violations decreased considerably during the first weeks of enforcement, regardless of the type of enforcement." They recommended using intensive enforcement only for the first three months (or less) of the operation of a new HOV facility. After that time, the enforcement emphasis should revert to routine enforcement.

CUTR also reviewed materials to examine the fines and other penalties. According to Texas Transportation Institute, nationally, the fines are usually in the \$50 to \$80 range. Some areas have initial fines as high as \$250. In California, the rates increase for repeat offenders over \$1,000 plus court costs for the third violation. Most violators also receive points toward license revocation.

In some states, the offense is defined as a moving violation, which can increase the driver's car insurance rates. Conversations with magistrates in South Florida indicate they are sensitive to this impact and may contribute to their reluctance to require more than a payment of court costs by the violator. The survey of public officials will need to examine this issue.

4. Commuter attitudes toward HOV lanes

After reviewing published literature and discussions with individuals who design and enforce HOV lanes and restrictions, several key issues typically appeared. The following general topics will be addressed to assess attitudes and impressions of HOV facilities in south Florida:

- Awareness of HOV facilities, purpose, and penalties
- Public support for HOV lanes as a traffic mitigation strategy
- Cost-effectiveness of HOV lanes versus other alternatives
- Travel time savings
- Travel time reliability
- Perceived enforcement practice (e.g., do police cite restricted lane violators?)
- Perceived support of the courts
- Safety for commuters and FHP

5. Other

The "Flyover" (\$40 million HOV bypass between the Dade-Broward county line and State Road 112 which rises 94 feet above the regular lanes of traffic) project presented a difficult public-

relations situation when miscommunication between the Florida Department of Transportation and the Florida Highway Patrol (FHP) put the commuters they were both trying to serve in an expensive, embarrassing, and some would say, dangerous situation. The south Florida press was quick to point out that although the FDOT invited all commuters to experience the Flyover without risking a ticket, the FHP was citing drive-alone commuters as they came off of the Flyover with "Disobeying a traffic control device" because the HOV enforcement signs were still posted and had not been covered. The citation is equivalent to one a driver would receive for failing to stop at a stop sign or traffic light, and carries a \$57 fine (plus court charges) and three points against the driver's license. Because of the road splitting, and the unfamiliarity to the drivers of this corridor, the number of minor accidents and near-hits has increased as vehicles make sudden stops at the Flyover approach, or last-minute lane changes to change their route at the split. This problem is being solved by posting clearer signs, and through the media informing commuters how to avoid or use the Flyover.

This situation shows the need for a coordinated communications strategy. Through the subsequent surveys, we may discover attitudes about the HOV facility reflect the early difficulties of the Flyover.

NEXT STEPS

Upon execution of the contract with FDOT District Four, CUTR will proceed with the sample design and development of the survey instruments for the commuters, business leaders, and public officials based on the above findings.

The range of possible objectives and possible measures of effectiveness are shown in the following table.

| Objective | Measures of Effectiveness |
|--|---|
| Improve the capability of a congested freeway corridor to move more people by increasing the number of persons per vehicle | Actual and percent increase in the person movement efficiency |
| | Actual and percent increase in AVO rate |
| | Actual and percent increase of carpoolers, vanpoolers, and bus riders |
| Increase the operating efficiency of bus service in the freeway corridor | Improvements in vehicle +productivity (operating cost per vehicle-mile, operating cost per passenger, operating cost per passenger mile) |
| | Improved bus schedule adherence (on-time performance) |
| | Improved bus safety (accident rates) |
| Provide travel time savings and a more reliable trip time HOVs using the freeway corridor | Peak-period, peak direction travel time in the HOV lanes should be less than the travel time in adjacent freeway lanes |
| | Increase in travel time reliability for vehicles using HOV lanes |
| Provide favorable impacts on air quality and energy consumption | Reduction in emissions |
| | Reduction in total fuel consumption |
| | Reduction in growth of VMT and VHT |
| Increase the per lane efficiency of the total freeway facility | Improvement in the peak-hour per lane efficiency of the total facility |
| Should not unduly impact the operation of the freeway mainlines | The level of service in the freeway mainlanes should not decline |
| Operate safely for motorists, | Number and severity of accidents for HOV and freeway lanes |
| | Accident rate per million VMT |
| | Accident rate per million passenger miles of travel |
| Should have public support | Support for the facility among users, non-users, general public, and policy makers |
| | Violation rates (percent of vehicles not meeting the occupancy requirement) |
| Should be cost-effective | Benefit-cost ratio |

This marketing plan will be designed to improve the education and awareness of the HOV lane project among the commuters who are eligible to use the lane, the FDOT offices which maintain the facility, the law enforcement agencies charged with enforcing the lane restrictions, and the court system which will uphold or withhold adjudication of those caught in violation of the law. To change the attitudes of these individuals and groups, and measure the changes accomplished, the expressed attitudes of some of the public-sector officials involved have been collected through informal telephone interviews.