Two Aspects of Ridesharing: State Parking Control Policy and HOV Lane Enforcement

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FOREWORD

This study was prepared in response to House Resolution No. 21 (1992) and House Resolution No. 136, H.D. 1 (1992), requesting the Bureau to study certain aspects of the enforcement of high occupancy vehicle lanes, and the modification of state parking policies to promote ridesharing arrangements between state and non-state employees. As both issues ultimately relate to the promotion of ridesharing, they were combined into a single study.

The Bureau extends its sincere appreciation to all those whose assistance and cooperation made this report possible. Special thanks are extended to the Automotive Management Division of the Department of Accounting and General Services; Department of Transportation, Leeward Oahu Transportation Management Association; Oahu Metropolitan Planning Organization; City and County of Honolulu, Building Department, Parking and Security Division; and Hawaiian Electric Company, Inc.

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INTRODUCTION

This study was prepared in response to House Resolution No. 21 (1992) concerning the enforcement of high occupancy vehicle (HOV) lanes (see Appendix A) and House Resolution No. 136, H.D. 1 (1992), concerning the modification of state parking policies (see Appendix B). Both measures were adopted during the Regular Session of 1992. The report reviews the State's parking control policies and how they can be modified to encourage ridesharing between state and non-state employees with the ultimate goal of reducing rush hour traffic on Oahu. The report also reviews the innovative HOV lane enforcement technique of mail-out citations supported by video camera surveillance and officer observation.

Traffic congestion on Oahu has increased dramatically over the years. As the island's population grows, more vehicles will be traveling on the highways and the traffic problem will worsen. By the year 2010, Oahu's population will have increased by another twenty percent, placing an even greater demand on the already overburdened highways.[1] A recent study released in Washington, D.C says that Hawaii's most heavily used roads are congested.[2] The study by the Road Information Center says that 93 miles or 50 percent of Hawaii's 185 miles of interstate freeway and arterial highways are clogged.[3] By comparison, the state with the highest congestion rate, Delaware, has 178 miles of such roads but reports that 78 percent of them--139 miles--are congested.[4]

The increased population will especially affect the traffic congestion during the morning and afternoon rush hours if commuters continue to drive alone at the current rate. Approximately eighty-five percent of the vehicles traveling to work on major roads contain only one person.[5] If the present trend of driving alone continues with the increased population, this translates to approximately 253,168 people driving their cars, vans and trucks to work by themselves everyday.[6] According to the Oahu Metropolitan Planning Organization (OMPO), by the year 2000 commuters will make approximately 25 percent more weekday vehicle trips, a 40 percent increase in travel on congested roadways and a 55 percent increase in the number of hours of weekday vehicle delay.[7]

Faced with these bleak statistics, the State has been taking measures to reduce traffic on Oahu's highways. The State Department of Transportation (DOT), the Legislature and the private sector have been trying to resolve the traffic problem using various transportation management techniques. Transportation management is the concept of solving the travel demand versus the transportation supply imbalance through systematic, coordinated efforts.[8] Transportation management can be "supply-side" or "demand-side" long or short-term measures focused on management techniques to obtain better use of existing highways and other resources.[9] Transportation management systems (TSM) focus on the supply-side measures which include ramp-metering, lane management, access management and traffic signal system improvements.[10] Travel demand management (TDM) focuses on measures that nudge travel behavior toward choices that increase transportation efficiency.[11] In other words,

it is a demand-side measure that is designed to influence travellers to adopt ridesharing modes of travel other than driving alone with the intent to ultimately reduce vehicle trips during periods when transportation resources are most heavily utilized.[12]

One TSM measure is the construction of more highways to create more lanes for commuters to use. This alternative maintains the free-flow of traffic and allows people to continue to drive alone and have the freedom of coming and going as they please. Building new highways, however, may not be feasible for several reasons.

Oahu lacks the area in which to construct more highways. The cost of constructing a new highway is also prohibitive. It would cost approximately $160 million to $200 million and take approximately ten years to complete a ten mile highway. The expense of acquiring the land adjacent necessary for such a project will also add tremendously to the final cost since land values in the urban core are very high. The cost, however, is not only financial. The acquisition of the land also entails dispossessing residents of their homes which will exacerbate the current housing shortage on Oahu. Despite the increased financial cost, the federal government is providing less funding to support the construction of new highways than it did in the past.[13] Lastly, even if a new highway could be constructed, it would take years to complete in which time the traffic problem will have become worse.

The Rideshare Alternative

One alternative means to alleviate traffic congestion is to promote ridesharing as an alternative to driving alone. "Ridesharing" is usually used as the collective term for various means to reduce total travel demand by reducing the number of vehicles on the road and increasing vehicle capacity.[14] It includes carpools, vanpools, conventional and subscription transit services.[15] Ridesharing is cost efficient and may even reduce the amount of aggravation that many people experience on their daily commutes. For purposes of this study, ridesharing will be used to mean carpooling and vanpooling only and does not include public transit.

Ridesharing among Oahu commuters would lessen the number of vehicles traveling on the highways and relieve the traffic congestion. If even one-fifth of those drivers now driving alone rode with another single driver nearly fifty thousand vehicles would be removed from the road.[16] Fifty thousand vehicles is roughly four times the number of vehicles that travel on the H-1 freeway between the H-2 interchange and Aloha stadium every morning between 6:00 a.m. and 8:00 a.m.[17] If fifty thousand vehicles were removed, the effect would be to eliminate all vehicles on this same stretch of the highway for two hours during the morning rush hour.[18]

It is difficult, however, to persuade people to rideshare. Ridesharing reduces people's ability to go where they want when they want. It is also difficult to form a carpool when people have different work schedules and the incentives to form carpools do not outweigh the inconveniences. People are willing to pay to drive alone to work. Unless incentives are

created for people to form carpools or disincentives are created to discourage single occupant vehicle (SOV) commutes, it will be difficult to implement a rideshare program on Oahu that will effectively reduce traffic.

Parking Policies that Promote Ridesharing

The DOT has been developing a TDM program that promotes ridesharing as an alternative to commuting alone. Despite the DOT's efforts to promote ridesharing, the majority of Oahu commuters still drive alone and the traffic problem has not decreased. One reason may be that some State policies may actually conflict with the DOT's rideshare policies. One impediment to implementing the rideshare program is the State's parking policy that provides little incentive to ridesharers.

A parking management plan that incorporates disincentives to SOVs and incentives to carpoolers into its current policy can be an effective long-term TDM measure. Parking policies that have an impact on parking supply and price can greatly affect a person's choice to rideshare. When parking supply is limited and the cost of parking is increased, the cost to commuters may outweigh the convenience of driving alone thereby increasing ridesharing among Oahu commuters.

Creating Efficient High Occupancy Vehicle (HOV) Lanes to Promote Ridesharing

The success of parking policies as a TDM program is directly related to HOV facilities which comprise another TDM program. An HOV facility is a traffic lane whose use is restricted during peak traffic hours for exclusive use by buses and carpools.[19] An HOV lane that offers high-speed travel to a large number of people and significant reductions in travel time can be an incentive for commuters to rideshare. If, however, vehicles with less than the required number of passengers use the HOV lanes, the flow of traffic will be slower. Therefore, adequate enforcement of the occupancy requirement is essential to maintain an efficient HOV facility if commuters are to perceive any advantages to carpooling.

Enforcement of HOV projects, however, may disrupt traffic flow depending upon the design of the HOV facility and the enforcement procedures. The Honolulu Police Department (HPD) has instructed its officers to cite occupancy violations only if it does not impede traffic. Unless an efficient means of enforcing HOV lanes is implemented, occupancy violations will occur, traffic flow will be disrupted and travel time on these lanes may not be reduced enough to encourage Oahu commuters to rideshare.

House Resolution Nos. 21 and 136 (1992) (see Appendices A and B), requested the Legislative Reference Bureau to study the feasibility of implementing two TDM measures:

(1) Modifying the state parking control policies to enhance the formulation of ridesharing arrangements between state and non-state employees; and

(2) Utilizing video cameras in addition to officer observation to supplement evidence for the issuance of high occupancy vehicle citations by mail.

If these TDM measures are successfully implemented, fewer vehicles will travel on Oahu's highways thereby reducing traffic congestion during morning and afternoon rush hours. This study examines the advantages and disadvantages of these measures and studies how they can be implemented on Oahu to attain the State's goal of increasing ridesharing among all Oahu commuters to relieve the growing traffic congestion.

Explanation of Commonly Used Terms and Acronyms

Throughout this study certain terms and acronyms are used frequently. The following is a list of some of these terms and acronyms and a brief explanation of each.

1. DOT - The Department of Transportation is responsible for the establishment, maintenance, and operation of transportation facilities for the State. The activities of the Department are aimed at providing a system of integrated transportation facilities which include highways, airports, harbors and other facilities. The Department is involved in the continuous task of determining statewide transportation needs through ongoing surveys and the inventory of planned resources. It creates the plans for statewide intermodal and multi-modal transportation systems and conducts research and development projects and periodic review of new technologies transportation systems.[20]

2. DAGS - The Department of Accounting and General Services is responsible for the State's centralized accounting and auditing system. It manages the State's property, surplus property, and inventory and supervises the State's central purchasing activities. The Department also maintains and operates state parking at state buildings and maintains the state's motor pool.[21]

3. DPS - The Department of Personnel Services administers a statewide personnel management program for the State's civil service system and formulates the rules governing the program. Included in the activities of the Department, as administered by its divisions and offices, are programs for personnel development and training; examination and recruitment of personnel; position clarification; the administration of pay; administration of contracts, rules; and labor-management relations.

4. HPD - The Honolulu Police Department operates for the purpose of establishing a system of law enforcement based on due regard for the constitutional rights of all persons, to promote the highest possible degree of mutual respect between the law enforcement officers

and the people of the City and County of Honolulu, and to provide expeditious apprehension of those who violate the law.[22]

5. **OMPO** - The Oahu Metropolitan Planning Organization is an advisory body responsible for coordinating the comprehensive, continuing, and cooperative transportation planning process for the island of Oahu. These responsibilities include: updating Oahu's regional transportation plan; developing an island-wide work program of transportation studies; conducting, administering, and assisting in transportation studies; and programming transportation projects to ensure federal funding.[23]

6. **TSM** - Transportation management systems are measures that seek to control the supply of transportation resources and include: ramp-metering, lane management, access management and traffic signal system improvements.

7. **TDM** - Travel demand management are measures that seek to encourage people to use efficient modes of transportation such as mass transit, carpools and vanpools and include: restrictive parking policies, HOV facilities and subsidized transit passes.

8. **Ridesharing** - Ridesharing is a collective term for various means to reduce total travel demand by reducing the number of vehicles on the road and increasing vehicle capacity and includes: carpools, vanpools, conventional and subscription transit services.

9. **Carpooling** - Carpooling is a term used for an arrangement between a group of people who choose to commute to and from work or school together. The carpool can have one designated driver or the participants can rotate driving duties.

10. **Vanpooling** - Vanpooling is a term used for an arrangement between a group of commuters who use a van supplied by a third party to commute to work. In many cases, an employer will provide a vehicle free of charge to a group of employees who then use the vehicle to commute to and from work together.

11. **SOV** - Single occupant vehicles are vehicles which carry only one person.

12. **HOV** - High occupancy vehicles are vehicles which carry more than one person.

13. **TMA** - Transportation management associations are arrangements between the public and private sector to coordinate the implementation of transportation programs.

14. **AVR** - Average vehicle ridership is the term used to describe the average number of passengers riding in each vehicle which has been calculated for a particular group of vehicles being surveyed.

15. **HOV lanes/facilities** - An HOV facility is a lane whose use is restricted during peak traffic hours for exclusive use by buses and carpools carrying a required number of

passengers. The purpose of HOV lanes is to maximize the people- carrying capacity of a roadway by providing free-flowing and faster travel for those vehicles carrying more than once occupant.

16. **LOTMA** - The Leeward Oahu Transportation Management Association is a TMA (defined above) that coordinates transportation plans for Leeward Oahu with other agencies including the DOT and OMPO (defined above).

Organization of the Report

This report is organized as follows:

Chapter 2 discusses the causes of increased traffic on Oahu and methods that can be used to decrease traffic congestion including the DOT's rideshare program. This chapter also introduces the issue of State policies that inhibit the DOT's rideshare program.

Chapter 3 discusses the alternative of modifying the State Parking Control Policy to increase ridesharing among state and non-state employees.

Chapter 4 discusses the unseen effects of modifying State parking policies.

Chapter 5 discusses the use of video camera surveillance supplemented by officer observation as an enforcement technique of HOV lanes.

Chapter 6 contains findings and recommendations.

Endnotes

1. Hawaii, Department of Transportation, Draft Rideshare Report (Honolulu: 1989) (hereafter referred to as Draft Rideshare Report), Introduction.

2. The Honolulu Advertiser, "Congested Roads", A-4, July 13, 1992.

3. Ibid.

4. Ibid.

5. Arthur Young, Promoting and Implementing Paratransit on Oahu: A Plan of Action (prepared for the Department of Transportation, State of Hawaii) (1987), Executive Summary, p. i.

6. Ibid.

7. Ibid.

8. Richard Pratt, Travel Demand Management and HOV Systems: HOV Facilities, Coming of Age (Seattle: 1991), p. 132.

9. Ibid.

10. Ibid.

11. Ibid., p. 113.

12. Hawaii, Oahu Metropolitan Planning Organization (OMPO), The Oahu Regional Transportation Plan (Honolulu: 1991) (hereafter referred to as The Oahu Regional Transportation Plan), p. viii.

13. Ibid.

14. U.S., Department of Transportation, Operation Green Light: Annual Report (Washington, D.C.: 1990), Appendix A.

15. Ibid.

16. Young, Executive Summary, p. i.

17. Ibid.

18. Ibid.

19. The Oahu Regional Transportation Plan, p. 5-1.

20. Claire Marumoto, Guide to Government in Hawaii, Legislative Reference Bureau (Honolulu: 1989), p. 105.

21. Ibid., p. 17.

22. Ibid., p. 134.

23. Ibid., p. 105.

Chapter 2

IMPLEMENTING RIDESHARE PROGRAMS TO REDUCE TRAFFIC ON OAHU

Causes of Increased Traffic on Oahu

The increasing traffic congestion on Oahu is a direct result of more vehicles traveling on the highways each year. One of the major reasons for the increasing number of vehicles is Oahu's growing population. By the year 2010, Oahu's population will have increased by another twenty percent, placing an even greater demand on the already overburdened highways.[1]

This increasing demand on Oahu's highways will create more severe traffic congestion during the morning and afternoon rush hours. According to a 1987 study prepared for the State DOT, approximately eighty-five percent of the vehicles travelling on the highways to work and school each day contained only one person.[2] This translates to approximately 253,168 people driving their cars, vans and trucks to work by themselves every day.[3] According to the Oahu Metropolitan Planning Organization (OMPO), by the year 2000 there should be approximately 25 percent more weekday vehicle trips, a 40 percent increase in travel on congested roadways and a 55 percent increase in the number of hours of weekday vehicle delay.[4]

Alternate Methods for Reducing Traffic Congestion on Oahu

When Oahu residents are asked how the traffic congestion should be solved, many people suggest that more highways be built to accommodate the growing population. More lanes would allow the growing population to continue to drive alone to work and school without experiencing an increase in travel times. The feasibility of building new highways on Oahu, however, is limited by several factors.

Oahu lacks the area in which to construct more highways. The cost of constructing a new highway is also very high. The construction of a new six lane highway is estimated to cost a minimum of $24 million to $30 million a mile at 1987 prices based on the national average adjusted for Hawaii.[5] The construction of a new lane on a highway is estimated to cost a minimum of $4 million to $5 million a mile.[6] The expense will also be increased by the cost of acquiring the land necessary to complete the project. The federal government is also providing less funds to support the construction of new highways than it did in the past.[7] Based on these figures, it would cost approximately $160 to $200 million and take approximately ten years to complete a 10 mile highway (approximately the distance between the H-1 - H-2 interchange and downtown Honolulu).[8] Lastly, even if the funds were available to build more highways, as stated above, a highway would not be ready for use for at least ten years during which time traffic congestion will worsen.

Ridesharing as Alternative Method to Reduce Traffic on Oahu

Constructing new highways will not completely solve the traffic problem on Oahu. If Oahu's traffic congestion is to improve, the number of vehicles traveling on the highways must be reduced. As the population grows, however, it will be impossible to achieve this goal if people continue to drive alone to work and school. Therefore, people must be encouraged to ride to work together to decrease the number of vehicles traveling on the highways, especially during peak traffic hours.

Most people, however, would choose to drive alone rather than be inconvenienced by rideshare arrangements. Ridesharing limits a person's freedom to drive wherever and whenever the person chooses to. It is also difficult for people to form carpools or vanpools when they have different schedules. Consequently, most people continue to drive alone despite the incentives that are offered to ridesharers, the higher cost of driving alone and longer commute times.

Despite people's resistance to forming carpools, according to the United States Census Bureau, Hawaii was the number one state in carpooling with approximately 20.5 percent of all commuters carpooling to work every day.[9] One reason for Hawaii's high carpool rate is that many spouses commute together.[10] Also, large employers are clustered in or near downtown Honolulu which makes spousal commuting possible. In other states, job sites are more likely to be spread throughout cities and suburbs.[11]

The State is the largest employer in the downtown area employing approximately ten thousand people out of a total of 55,700 employees in the area bordered by River Street, the H-1 freeway, South Street and the ocean. As an employer of nearly one-fifth of the downtown workforce, the State is in a position to promote ridesharing programs that will significantly contribute to the reduction of Oahu's traffic congestion.

Conflicting State Policies that Inhibit Ridesharing

The Legislature is aware of the need to implement transportation management measures to resolve the traffic congestion on Oahu and has enacted various pieces of legislation to reduce traffic congestion. One initiative the Legislature has taken is the promotion of ridesharing in Hawaii. Various laws have been enacted which requires the DOT to implement ridesharing programs and other alternatives to SOV commutes. According to section 26-19, *Hawaii Revised Statutes*, the DOT is required to "develop and promote ridesharing programs which shall include but not be limited to, carpool and vanpool programs, and may assist organizations interested in promoting similar programs and arrange for contracts with private organizations to manage and operate these programs and assist in the formulation of ridesharing arrangements." In 1982, the Legislature enacted chapter 279G, *Hawaii Revised Statutes*, which defined rideshare arrangements and limited the liability of employers who participated in rideshare programs. Act 90, Session Laws of Hawaii 1986, amended chapter 279G by adding sections 279G-3 and 279G-4 to establish a state policy that

encouraged commuting to and from work by means other than by SOVs, or ridesharing. Act 31, Sessions Laws of Hawaii 1989, amended section 26-19, *Hawaii Revised Statutes*, to plan, develop, promote and coordinate various travel system management programs, including alternative work and school hour programs, bicycling programs and ridesharing programs.

The DOT, following the Legislature's mandate, has adopted a policy to actively promote ridesharing programs to Oahu commuters to accomplish the ultimate goal of reducing the number of SOVs traveling on the crowded freeways. The DOT obtained rideshare program funding from what are referred to as "Exxon overcharge funds" and the Oahu Metropolitan Planning Organization (OMPO).[12] In 1989, an Interagency Committee on Ridesharing was established to develop policies which would promote ridesharing.[13] The committee, comprised of key representatives from state departments, public employee unions, the Legislature, the Department of Transportation Services of the City and County of Honolulu and the University of Hawaii, reviewed alternatives available to the State to encourage ridesharing among its employees.[14] In compliance with Act 31, Session Laws of Hawaii 1989, the DOT has also included in its budget funds for rideshare coordinator, marketing specialist, and program evaluation specialist positions to perform the statewide implementation of its rideshare program.[15]

Despite the DOT's attempts to implement rideshare programs on Oahu, the State has not succeeded in significantly reducing traffic congestion. In fact, state policies exist that may conflict with or inhibit the promotion of ridesharing. One example of this is the State's parking control policies. The Department of Accounting and General Services (DAGS) is responsible for operating state parking facilities. DAGS is also authorized to adopt rules to assist it in its operation of these parking facilities. Parking rates for state employees are very low compared to those charged in private parking facilities. Although the DOT has noted that low parking rates may encourage employees to drive alone to work thereby undermining the State's rideshare program, DAGS has been unwilling to raise the rates and use the parking facilities to implement the rideshare program. DAGS has an informal agency policy not to make a profit from the parking facilities and will charge only enough to cover the facilities' operational expenses.[16] DAGS has also decided that its parking facilities will benefit only state employees. Therefore, only carpools comprised solely of state employees will be given preferential treatment. Carpools that contain non-state employees are not given any special treatment. One reason for this policy is that state parking is already in short supply and allowing non-state employees into the parking facilities will displace state employees who DAGS believes are more entitled to state parking. In response to the parking shortage, DAGS is also planning the construction of more parking facilities downtown despite the negative consequences such an action will have on the state rideshare program.[17] DAGS' position is that state employees' parking should not be singled out by the DOT in its attempt to promote a rideshare program and that the DOT should also focus its efforts on the private sector's parking.[18]

In contrast, the DOT is concerned with the "bottom line" issue of reducing the number of SOVs traveling on Oahu's freeways. The DOT is aware that state parking management

policies can be an effective method to reduce the number of SOVs. The DOT, however, believes the following parking policies of DAGS seriously undermine the effectiveness of the state rideshare program and should be amended to conform to the philosophy of promoting ridesharing among all downtown employees:

(1) Pricing parking below the market value;

(2) Increasing the supply of state parking;

(3) Not allowing ridesharing between state and non-state employees.

The philosophical differences between DOT and DAGS regarding state employee parking indicate that policy decisions need to be made, either administratively at higher levels or legislatively, that clarify state priorities. Specifically, the State must determine what the primary purposes of providing parking to state employees are supposed to be. Is parking primarily intended to be an employee benefit, part of a compensation package that is used to recruit and retain employees, that augments salary, vacation, sick leave and retirement? Alternatively, is it a tool to promote the State's transportation policy as the DOT views it? If it is the latter, guidelines must be provided for DAGS to follow as it implements parking control policies that can be used as a tool to get SOVs off the roads.

The Interagency Committee on Ridesharing examined the state parking control policy to see how it could be modified to promote ridesharing. The following is a list of the issues which the Interagency Committee considered:

(1) Increasing the parking rate to a point where employees would be impacted to consider carpooling or riding the bus;

(2) Changing the statutes to allow the State to use parking special funds for ridesharing programs;

(3) Increasing the motor pool fleet for expanded employee use;

(4) Providing reduced rates for carpoolers; and

(5) Decreasing the number of parking spaces available to employees.[19]

The Interagency Committee, however, also realized that modifying the State's parking policy is politically sensitive. The members stated that increased parking rates would unfairly impact on lower income employees. Gary Rodrigues of the United Public Workers (UPW) also pointed out that any actions regarding parking fees may ultimately be affected by the collective bargaining process.[20]

Political and legal obstacles may make it difficult for the State to implement a parking control policy that encourages ridesharing. Other cities have confronted similar problems in their attempts to implement TDM programs focused on parking policies. These cities, however, have resolved these difficult issues in their own unique ways to implement an effective TDM program for their city. Therefore, in spite of the potential obstacles that the State faces in modifying its parking policy, it may still be possible for the State to find a workable solution.

Endnotes

1. Hawaii, Department of Transportation. Draft Rideshare Report (Honolulu: 1989) (hereinafter referred to as Draft Rideshare Report), Introduction.

2. Arthur Young, Promoting and Implementing Paratransit on Oahu: A Plan of Action (1987), p. i, Executive Summary.

3. Ibid.

4. Ibid.

5. Ibid.

6. Ibid.

7. Ibid.

8. Ibid., p. 11.

9. The Honolulu Advertiser, "Hawaii's Carpooling Rate Tops in the Nation", May 29, 1992.

10. Ibid.

11. Ibid.

12. Junie Hayashi, Rideshare Policies and Programs: A Review, Legislative Reference Bureau, Report No. 14 (Honolulu: 1989), p. 4.

13. Ibid., p. 5.

14. Draft Rideshare Report.

15. Ibid.

16. Telephone interview with Russell Nagata, Comptroller, State of Hawaii, Department of Accounting and General Services, July 10, 1992.

17. Telephone interview with Alexander Hirota, Division Chief, State of Hawaii, Department of Accounting and General Services, Automotive Management Division, July 1, 1992.

18. Ibid.

19. Ibid., see Appendix A.

20. Ibid.

Chapter 3

MODIFYING THE STATE PARKING CONTROL POLICY TO INCREASE RIDESHARING AMONG STATE AND NON-STATE EMPLOYEES

The State is the largest employer in the area bordered by River Street, the H-1 freeway, South Street and the ocean.[1] As an employer of over ten thousand people, the State is in a position to implement a transportation demand management plan that can reduce traffic congestion through efforts that encourage its employees to switch from single occupant vehicle (SOV) commutes to high-occupancy vehicle (HOV) commutes. Transportation demand management (TDM) is the name for a wide variety of policy alternatives to reduce vehicle trip-making.[2] A rideshare program is a type of TDM plan that seeks to reduce vehicle trip-making by convincing people to commute using HOVs rather than SOVs.

The State Department of Transportation (DOT) has been actively promoting a rideshare program to Oahu commuters. The DOT currently employs a rideshare coordinator and two assistants who work with transportation management associations to promote ridesharing. Transportation management associations (TMAs) are arrangements between the public and private sector to coordinate the implementation of transportation programs.[3] The goal of a TMA is to reduce traffic congestion by promoting TDM programs.[4] The following are some of the DOT's activities:

(1) Assisting people in forming carpools by operating a rideshare matching program;

(2) Presenting rideshare information to employees of state agencies and private industry; and

(3) Assisting TMAs such as the Oahu Metropolitan Planning Organization (OMPO) in the promotion of rideshare programs.

Despite the DOT's efforts to promote a rideshare program on Oahu, carpooling is not used enough to significantly decrease traffic congestion in the downtown area.[5] According to the United States Census Bureau, however, Hawaii leads the country in carpooling with approximately 20.5 percent of all commuters carpooling to work.[6] The reasons for this high rate of carpooling are that spouses commute together and job sites on Oahu are usually concentrated in the downtown area.[7] Despite this high rate, rideshare advocates still believe that the State could do more to encourage non-familial ridesharing. One suggestion is to modify certain state parking control policies which may conflict with or inhibit ridesharing.

If the State's parking policy is modified to encourage ridesharing between state and non-state employees in conjunction with the DOT's promotion of ridesharing, state employees may be more likely to switch to HOV transportation. For example, by raising the State's

current below-market parking rate, some employees will feel that the increased parking rate outweighs the convenience of driving alone and will use other modes of transportation. If the State's parking management plan limited the supply of parking and gave priority to carpools, many employees who would be stranded without a parking stall may choose to carpool with other state and non-state employees to take advantage of the parking incentives given to carpools.

Modifying the State's parking policy to promote ridesharing, however, is not an easy process. Disincentives such as controlling the supply of parking or increasing parking rates are some of the most politically charged and sensitive techniques. Parking policies that influence an employee's commute trip have a direct effect on the employee's perceived freedom and evoke strong reactions from people who are adversely affected by modified parking policies. A parking management plan which utilizes disincentives for SOV travel, however, has been proven to be an effective tool in reducing the amount of vehicles traveling on highways during peak periods.

Parking Policies that Utilize Disincentives to Reduce Employee SOV Commutes

To help in the effort to reduce traffic on Oahu, the State could adopt a parking management system that includes the following measures to promote the State's rideshare program:

(1) Limiting the supply of parking;

(2) Increasing the price of parking: and

(3) Recognizing carpools between state and non-state employees and providing incentives for these carpools.

As stated above, if the Legislature chooses to implement changes to state parking policies that encourage ridesharing, the Legislature must determine whether state employee parking should be used primarily as a TDM tool. If the Legislature decides to change parking policies for the primary purpose of promoting the state rideshare program, the Legislature should enact legislation that will guide DAGS in formulating such parking policies. Other cities have used parking management policies to create disincentives for SOV travel to increase their efforts in promoting ridesharing among downtown employees. Some have succeeded in reducing solo driving among commuters through controlling the supply of parking and increasing the rates. In other areas, however, modified parking management plans have not been successful. In each case, the success of the parking management plan seems to depend on whether the commuters were provided with alternate modes of transportation.

The following are some examples of cities that have attempted to implement parking policies to reduce the number of SOVs traveling on its highways. These cities have been

selected for this study because statistics on their TDM programs have been compiled to measure the success rates. These cities have not been selected on the basis of their similarity with Honolulu. Land in downtown Honolulu is expensive and extremely limited, therefore eastern cities such as Boston and New York are more comparable. Information on these cities indicate, however, that parking policies are not being used as a TDM tool.

For example, the City of New York has not used parking as a TDM measure for city employees because parking is so scarce in Manhattan that no city employees are provided parking at all unless the use of a vehicle is a term of the employee's employment. In Boston, the state and city employees are also not provided parking unless the use of a vehicle is necessary for employment. This policy arises from the lack of parking spaces and not as part of a TDM measure. Like New York City, Boston has passed legislation that freezes the construction of commercial parking spaces in some downtown areas.

Limiting Parking Supply and its Effectiveness in Reducing SOV Travel

Portland, Oregon has been successful in reducing SOV travel by implementing a parking policy that targets both the private and public sector and strictly controls the number of parking spaces in the downtown area. Downtown employment is approximately 90,000 and the residential population is 380,000.[8] Parking rates range between $65 per month to $87.50 per month.[9] The city fixes the number of allowed off-street and on-street parking spaces at 43,914, not including hotel and residential parking, to limit vehicles in the downtown area.[10] The requirement in most areas is 1.0 spaces per 1,000 square feet of development but range to a low of 0.7 spaces per 1,000 square feet where variances have been granted.[11] Carpool and transit programs are offered in conjunction with the city's tight regulation of parking supply. The city's regulation of parking supply succeeded in increasing the percentage of commuters using transit to approximately forty-three percent and the carpool rate to seventeen percent.

San Francisco has also experienced a reduction in SOV travel through the implementation of its "Transit First" policy that controls parking supply and price. San Francisco city planners are generally satisfied that parking management strategies have helped to maintain good transit use while keeping automobile use to a minimum.[12] Planners have indicated that there has not been any major increase in peak traffic from 1980 to 1990 in spite of considerable office growth.[13] The success of the Transit First policy may be attributed to the fact that San Francisco assists commuters in forming carpools through the local rideshare agency, RIDES and has an efficient subway system.[14] Data are not available, however, that measure the percentage of SOV commuters who switched to carpooling or vanpooling as opposed to mass transit.

Los Angeles' plan to limit parking has not been as successful as the Portland and San Francisco plans. In April, 1983, Los Angeles adopted a parking management ordinance which sought to control the supply of parking in the downtown area to reduce automobile use.[15]

The ordinance allowed a developer to reduce code-required parking up to forty percent on site and up to twenty-five percent for remote parking in exchange for the developer's promotion of commute alternatives at the development.[16] The ordinance has been underutilized and the number of commuters driving alone has not significantly decreased.[17] Part of the problem may be attributed to the geographic layout of downtown Los Angeles and the lack of efficient alternate modes of transportation including rideshare coordinators. Also, downtown Los Angeles is spread over a large area and it may be difficult for people in the same residential neighborhoods to locate carpools that can transport them to or near their offices.

Increasing Parking Rates and the Effectiveness on Reducing SOV Travel

The successful promotion of ridesharing among employees is also dependent on policies that affect the price of parking. A growing body of evidence indicates that the availability of inexpensive parking is the most important inducement for employees to use SOVs.[18] Conversely, higher-priced parking encourages the use of high-occupancy vehicles.[19] This is especially true in downtown areas where parking costs tend to be the highest, and where public transit and ridesharing programs are most likely to be available. The following are statistics gathered from other cities that have attempted to raise parking rates as a TDM measure to reduce the number of SOVs on the roadways.

In Ottawa, the Canadian government discontinued the provision of free parking to federal civil servants in 1975 and began charging employees seventy percent of commercial parking fees.[20] Ottawa is a transit-oriented city and the proportion of government employees driving to work alone dropped from thirty-five percent to twenty-seven percent within a few months of the imposition of the charge for parking.[21] This study, however, did not mention whether these new policies also increased carpool rates.

In a study of the employees at a regional rideshare agency in Los Angeles, it was found that forty-two percent of the employees drove to work alone when the company paid the monthly parking fee of $57.50 but when the company ended the practice of paying for parking at work, the proportion of their workers driving alone dropped to eight percent.[22] When free parking was available average automobile occupancy rates among those who commuted by car was 1.2 and after the free parking was eliminated automobile occupancy among those who came to work by car rose to 1.5.[23]

In Century City, a major office and shopping complex in Los Angeles, researchers studied the commute patterns of employees who had to pay the full cost of parking, those whose parking was partially subsidized by their employers and those who parked free because employers fully subsidized their parking. Among employees whose parking was free, ninety-two percent drove to work alone; eighty-five percent of those whose parking was partly subsidized commuted in SOVs; and only seventy-five percent of those who bore the full cost of parking commuted to work alone.[24] This study was based upon the assumption that parking was available for all employees. This study, however, did not gather information as to

what other modes of transportation the employees used. Therefore, it is hard to say whether the increased parking rates led to an increase in carpooling. It may have led instead to an increased use of mass transit by the employees.

In another survey conducted on two companies located in identical fifty-two story office towers in downtown Los Angeles, researchers determined that when parking subsidies were no longer given to employees, SOV commutes decreased. Ridesharing among employees, however, did not automatically rise. One company did not have a rideshare program, and many of its employees chose to take advantage of the transit subsidies that the company offered. Ridesharing rose, however, in the company that promoted a rideshare program.

Based upon the relatively limited evidence available from other jurisdictions, it appears that a parking management plan that limits the supply of parking and increases rates to discourage SOV commutes can be a successful TDM program that increases the use of alternate modes of transportation including ridesharing. The examples above clearly indicate that parking management plans are especially successful encouraging people to switch form SOVs to ridesharing when rideshare programs were available to assist the people in forming carpools. If the state parking policy is changed to adopt the disincentives used in other cities, the State can also be successful since the DOT has developed an extensive rideshare program that can assist employees in forming carpools.

The DOT has been promoting ridesharing to state employees and the private sector and has matched commuters interested in carpooling with other interested commuters for the Honolulu area. The DOT also provides funding for TMAs such as the Leeward Oahu Transportation Management Association (LOTMA) to assist them in creating programs that implement ridesharing. For example, with funding provided by the DOT, LOTMA has purchased a computer and software that will assist it in keeping records to match commuters for carpools.

Problems that Arise from the Use of Disincentives

Despite the success of parking management plans that use disincentives, problems also exist that limit the effectiveness of these policies. A fundamental problem with limiting the supply of parking is that parking demand may shift elsewhere unless total demand is reduced by other TDM plans such as rideshare programs. One of the first solutions commuters will try when parking has been limited in a location is to park nearby.[25] This spillover into surrounding residential areas may be more damaging than parking at the original site since residents' vehicles may be displaced by the commuters' vehicles during work hours.[26] One area that may be affected in the Honolulu area is the densely populated Makiki area.

An objection to policies that increase the price of parking is the equity issue. Since low income people spend a greater portion of their income on transportation than upper

income people, a price increase affects them disproportionately. Moreover, low income employees may live in rural areas where alternate modes of transportation are more limited than in urban areas and may have no other alternative but to bear the cost of higher parking rates.

Parking Policies that Use Incentives to Encourage Ridesharing

Implementing disincentives for SOV commutes may be viewed as a draconian method that may not be politically feasible to implement. Some employees may not be able to use transit or ridesharing to commute to work and may drive alone and spend extra time locating substitute parking spaces or pay the higher rates. To avoid the problems that may arise as a result of such policies, other parking policies can be used that still promote ridesharing among employees.

Some experts advise the use of incentives for ridesharing such as money or cash rewards, travel time savings using efficient HOV lanes, preferential parking locations and social recognition to persuade people to rideshare.[27] State Farm Insurance Company in Orange County, California had an approximately thirty percent trip reduction of SOVs through the use of a $30 a month travel incentive.[28] Hewlett-Packard in Colorado Springs accomplished a forty percent increase in carpooling among commuting employees, primarily through the use of a personalized matching system run by the employer.[29] Other employers, in both the public and private sector, believe that incentives alone are not enough to persuade enough commuters to switch from SOVs to carpools and vanpools. Therefore, many parking management plans incorporate both disincentives and incentives in its policies. Parking Management Policies Implemented by Other Jurisdictions San Francisco

Recognizing the success parking management plans have on reducing SOV commutes, some cities have implemented parking management programs that use both disincentives and incentives to encourage ridesharing and the use of mass transit. The State of California, Department of Transportation (Caltrans) is currently drafting an Employee Commute Management Program Plan in its District 4 (San Francisco) office. This parking management plan will be used to encourage its employees to utilize non-SOV commute modes.[30] The District 4 offices will be relocating to a new building in Oakland which gives Caltrans officials an excellent opportunity to change employee commute habits to include an increased use of rideshare modes.

The specific goal of the District 4 office is to increase the average vehicle ridership (AVR) and reduce the SOV rate. The following is the District's goals upon relocation to the new site:

(1) Attain an AVR of 1.64 within one of the relocation;

(2) Attain an AVR of 1.80 within two years of the relocation;

(3) Attain an AVR within three years of the relocation; and

(4) Attain a nineteen percent SOV rate by 2000.[31]

The new parking facility will accommodate approximately 610 vehicles.[32] District 4 employs approximately 3300 employees of which about one-half will be occupying the new offices.[33] The following is the priority list which has been established by the parking management plan:

(1) Approximately 270 state vehicles, including state vehicles that will be used for carpools and vanpools;

(2) Approximately sixty spaces will be allocated for each Deputy and Branch Chief;

(3) Twenty-three motorcycle spaces will be created by converting some of the existing 610 spaces;

(4) Approximately 289 spaces will be allocated for employee parking.[34]

The employee parking will be allocated giving preference to high occupancy commute vehicles and employees with disabilities. The higher priority will be given to vanpools and carpools with a greater number of passengers.[35] Final details have not been worked out, however, recognized carpools will be comprised only of District 4 employees.[36] A child of a District 4 employee who is attending the on-site child care center, however, is accepted as a carpool passenger.[37] Priority, however, will be given to the carpool with three adults.[38] The remaining spaces will be allocated to SOVs. District 4 officials have predicted that very few spaces will be available for SOVs.[39]

Parking incentives will also be offered to private carpools and vanpools which maintain the minimum occupancy requirements for at least fifteen working days per month. The State of California is prohibited from making a profit on a State facility.[40] Therefore, officials are planning to charge a monthly parking rate of fifty dollars to cover operational expenses.[41] Qualified carpools, however, will be eligible for a twenty dollar monthly parking discount in the garage while qualified vanpools will be eligible for a forty dollar monthly parking discount.[42] Vanpools will be required to carry a minimum of seven Caltrans employees for at least fifteen working days per month.[43]

Carpools and vanpools will be enforced through a spot- check method.[44] The participants of each carpool and vanpool are required to register with District 4 officials and all participants must arrive at the garage together.[45] Parking officials will give two warnings for occupancy violations and if the employee violates the occupancy rules a third time, the employee is banned from the program.[46] Parking officials anticipate minimal abuse of the carpool and vanpool occupancy requirement.[47]

To further encourage ridesharing among District 4 employees, rideshare matching services and other informational programs will be implemented.[48] The State will also continue its Reimbursed Rideshare program using state vehicles.[49] This program allows state employees to use state vehicles to form vanpools and sometimes carpools. The drivers and coordinators of the vanpools and carpools are compensated for their services. Only state employees, however, are permitted to participate in the pools using state vehicles.[50] To recruit reluctant employees to serve as vanpool drivers and coordinators for this program, the state offers a fifty dollar per month cash incentive.[51]

The Caltrans parking management plan also includes other features that the agency hopes will encourage other modes of transportation. The parking compound will include high quality bicycle racks surrounded by a chain link fence which will be available to District 4 employees at no charge.[52] Four showers will be provided in the basement and full-size clothing lockers will be given to bicycle and pedestrian commuters.[53] An on-site credit union, cafeteria, sundries store and a child care center minimize an employee's need to drive by providing these services on the premises.[54] District 4 is also planning a Guaranteed Return Trip Program which pays for an employee's ride home if the employee is stranded without a ride home.[55]

Bellevue, Washington

In 1987, the City Council of Bellevue directed the City Manager to create a transportation management program to reduce the demand for parking facilities at major city employment centers.[56] In 1988, the Rideshare Parking Management Program was created, which incorporated incentives for employees who used an alternative ridesharing commute mode.[57] Employees who formed rideshare arrangements or used public transit increased from fifteen percent to twenty-five percent of commuting employees.[58] Later in 1989, the City implemented the "pay for parking" component to further encourage employees to seek alternative methods of commuting to and from work and discourage people from being SOV drivers.[59] This created an immediate participation increase to forty-five percent.[60] Today, the program has been successful in having people consider alternative ridesharing methods with participation of its employees averaging between forty-seven and fifty-four percent.[61] Data are not available regarding the proportion of employees who have switched to ridesharing.

Everyone who works for the City of Bellevue whose work site is at several specified areas must register for the Rideshare Parking Management Program.[62] Employees can register for two rideshare options with participation levels of sixty or eighty percent.[63] In other words, employees do not have to rideshare every day. If the employee registers for a sixty percent participation level, the employee is required to rideshare only twelve or thirteen days a month. If an employee registers for an eighty percent participation level, the employee would have to rideshare only sixteen or seventeen days per month. During the remainder of the month, the City provides coupons to the employee which allow the employee to park in

the City's parking facility.[64] If employees choose to drive alone, they are required to pay the full price of parking which is $30 per month which is lower than market rates in the area.[65] Paying for parking, however, does not guarantee parking. Rather it provides the employee access to park in City parking lots that are monitored.[66] If an employee is unable to find a parking space, the City will reimburse the employee the pro-rated amount for that day.[67]

Employees who utilize carpools at least sixty percent of each month receive free parking for remainder of the month.[68] Employees who carpool at least eighty percent each month receive free parking for the remainder of the month plus a $15 per month incentive.[69] Employees who use vanpools run by the State sixty percent of the month also receive free parking.[70] Employees using the vanpools eighty percent of each month receive free parking and a $25 monthly subsidy paid directly to the state vanpool service.[71]

Enforcement issues are also addressed by the parking management program. Employees who pay for parking are issued a plastic tag which must be displayed in the vehicle at all times.[72] Employees who rideshare are given coupons that can be used only once.[73] The Bellevue Downtown Association (BDA) monitors City parking lots on a daily basis.[74] Vehicles that are improperly parked, parked overtime, parked using an invalid permit, or parked without a properly displayed permit will receive parking citations.[75] After three violations, a warning letter is sent, on the fifth violation, the BDA is authorized to tow the vehicle.[76] Violations are kept on the record for one year and then erased.[77]

Similar to the parking policy implemented by Caltrans, District 4, the parking policy of the City of Bellevue has other features that enhance the program. The City offers a guaranteed ride home in which rideshare participants may use vehicles from the City's motor pool fleet when they need a ride home and other alternatives are not available. Taxicabs are also available if a motor pool car is unavailable.[78]

Washington State Government, Olympia, Washington

The State of Washington has also implemented a parking policy to encourage ridesharing among state employees. Washington's primary state offices are located in the capitol city of Olympia, which unlike Honolulu is not a major metropolitan area. Olympia is a small town and traffic congestion is not a problem as compared to the Seattle area. The state office buildings are located on two large campuses and are serviced by one large plaza garage consisting of 5500 spaces. Various surface lots add another thousand spaces. The State employs approximately ten thousand employees in Olympia.

Although traffic congestion in Olympia is not yet a problem, the State of Washington is trying to minimize the effects of emissions from SOV commutes that adversely affect the environment.[79] They also recognize that energy can be saved if more HOV commutes to work are used.[80] Consequently, the State has implemented several policies to encourage more carpooling. The State has raised the parking rates from ten dollars per month to fifteen

dollars per month.[81] Although this new parking rate is still considerably less than parking rates across the nation, it represents a fifty percent rate increase. If three or more employees rideshare together, parking is free and carpoolers are compensated by the State.[82] Currently, the parking structure is at capacity and six hundred employees are on the wait list.[83] Carpools of three or more employees, however, are given priority for parking and allotted reserved spaces although the parking structure is zone parking for all other employees.[84] As an added incentive, the State also allows carpool to proceed to the front of the parking garage lines in the morning.[85]

City and County of Honolulu

The City and County of Honolulu is also dedicated to reducing SOV travel among its employees. Although it does not have a rideshare program to match employees with other ridesharers, carpools are given incentives. Carpools of two or more city employees are given preference for parking in the Civic Center parking facility where a wait list of over one year exists.[86] The City also offers reduced parking rates to carpools. The following is a list of the discounted carpool rates:

(1)	Carpools of two city employees	75% of parking rate
(2)	Carpools of 3 city employees	50% of parking rate
(3)	Carpools of 4 or more city employees	free parking

Despite these incentives, carpooling is not prevalent among City employees. Presently, approximately only forty spaces of the 1027 spaces in the Civic Center parking facility are needed for carpools.[87]

City parking officials also state that enforcing the carpool occupancy requirement is difficult. To maintain information on the carpools, each carpool participant is required to fill out an application. This application provides parking officials with a roster of each carpool which they use to enforce the carpool occupancy requirement.[88] Carpoolers are required to be in the vehicle when entering the parking facility.[89] Occupancy abuses occur despite safeguards.[90] Some occupancy abuses have been reported to the City, however, parking officials presently do not have the means to check on all alleged violations.[91] To maintain more control over the carpool occupancy requirement, parking officials sometimes require carpools to operate for a full year before the Building Superintendent provides any incentives to the carpools.[92]

The City recently explored increasing employee parking rates as a means of reducing SOVs. Councilman Gary Gill introduced a bill on April 30, 1992 that would have doubled the parking rates for all City employees except those who were in carpools or drove vehicles that used alternative fuels.[93] City officials are aware that employee parking rates are considerably

cheaper than other parking downtown and that the low cost might influence employees to drive to work alone. The following are monthly parking rates for City employees:

(1)	Reserved stall in the Civic Center parking facility	$35
(2)	Unassigned zone parking in in the Civic Center parking facility	30
(3)	Tandem parking in the Civic Center parking facility	20
(4)	Reserved uncovered stall	24
(5)	Unreserved uncovered stall	18
(6)	Satellite parking facilities (e.g., Blaisdell arena)	10[94]

The City Council did not pass this bill. Opponents to the bill stated that the parking rate increases alone would not reduce the number of city employees driving alone to work and would not be effective because it failed to provide alternate modes of transportation for city employees. Opponents to the bill believed that unless city employees have alternate modes of transportation, city employees would continue to drive alone to work. It was also noted that some employees live in areas that are not efficiently served by public transit and these employees would choose to pay the increased parking rate rather than spend more hours commuting to work. It was further noted that some of these employees who would be forced to pay the higher parking rates would be employees who could least afford the rate increases.

The State of Hawaii Parking Control Policy and the State Rideshare Program

Presently, rideshare advocates have raised the issue that the State Parking Control Policy may conflict with or inhibit the promotion of ridesharing. In 1989, the Interagency Committee on Ridesharing examined the issue of modifying the State's parking control policy to encourage ridesharing.[95] The Interagency Committee, however, confronted obstacles to modifying the parking policies and to date, the parking policies have not been significantly modified to promote ridesharing. The following are parking polices that if modified would likely decrease SOV commutes among state employees and encourage them to form carpools.

Increasing State Parking Rates

State parking rates are substantially less than comparable parking in the downtown area. The State parking rates range from a high of forty-two dollars per month for a covered, reserved stall to a low of thirteen dollars per month for open theater areas.[96] The State does

not offer reduced rates to carpools. The fair market value of other parking downtown is substantially higher. The following is a list of monthly parking rates for garages in the downtown area:

		Reserved	Unreserved
(1)	Restaurant Row	--	$156
(2)	Melim Building	$156	$114
(3)	Haseko Building	$210	$145
(4)	Grosvenor Center	$240	$160
(5)	Media Five	--	$130
(6)	Harbor Square	--	$155

This extreme price differential may encourage state employees to drive alone to work. Proponents of ridesharing believe that by increasing parking rates to be comparable to the fair market value of downtown parking, state employees may be more likely to seek alternate modes of transportation such as carpooling with state and non-state employees to defray the cost of the increased parking.[97]

Obstacles exist, however, that may make it difficult to raise state parking rates. DAGS has resisted adopting the DOT's approach to using parking as a TDM tool which would reduce the number of SOVs commuting to the downtown area. DAGS contends that state employees are not paid as much as employees in the private sector and it would be unfair to charge them the fair market value of parking.[98] Therefore, DAGS has an informal policy not to make a profit from a state facility.[99] Parking charges are calculated to only cover the operational expenses of the parking facilities.

The Hawaii Government Employees' Association (HGEA), the collective bargaining unit for many state and county employees may also raise some opposition to parking rate increases. Pursuant to chapter 89, *Hawaii Revised Statutes*, parking is a non-negotiable item for state and county employees in the collective bargaining process and the HGEA cannot technically oppose parking rate increases which the State can unilaterally raise. While parking is a non-negotiable item, however, HGEA has sometimes expressed concern regarding the increased costs of non-negotiable items especially when these costs erode newly negotiated pay increases. The State, however, has recently raised the monthly parking rate from thirty dollars per month to forty-two dollars per month without any strong objection from the HGEA. Therefore, whether, and the extent to which objections come from public employee unions may be determined by how substantial an increase is.

For one class of state employees, however, parking is a negotiable item whose parking charges can be brought to the bargaining table. Employees whose employment is conditioned upon the use of a vehicle during business hours are given a monthly parking subsidy of thirty dollars from the agency that employs them. It is the amount of this subsidy that can be negotiated at the bargaining table. Consequently, the State may have problems reducing the parking subsidy for this class of employees.

The Supply of State Parking in the Downtown Area

The State is also planning more parking for the downtown area.[100] One of the reasons cited for the expansion of the State's downtown parking facility is that a severe shortage of parking exists and the State has a five-year wait list for State parking.[101] The DOT opposes the construction of more parking facilities in the downtown area and advocates the use of alternate modes of transportation. If more parking is made available, state employees will probably continue to drive alone to work and the traffic congestion on Oahu will become more severe. Carpool Policies under the State Parking Control Policy

The State's parking control policy also lacks incentives for carpools. "Carpool" is defined as "an arrangement or agreement among two or more eligible employees or servicing agents each working within the state capital complex to use a motor vehicle which is registered as a carpool vehicle."[102] The vehicle being used for the carpool must be registered to the participants or to members of the participant's immediate family.[103] A vehicle owned by a non-state employee cannot qualify for parking even though it carries state employees.

Proponents of ridesharing contend that the above-referenced restriction inhibits ridesharing between state and non-state employees. If a non-state and state employee decided to form a carpool, the state employee would be forced to drive every day. Rideshare advocates believe this stringent policy may deter a state employee from carpooling with a non-state employee because they will not be able to rotate driving duties.

State parking officials, however, believe that the carpool program has more than enough incentives to encourage ridesharing.[104] The state parking policy recently reduced the carpool occupancy requirement from three state employees to two, to encourage more ridesharing. The program also gives preference to employees who can form carpools whenever there are vacancies within the State's parking facilities.[105] The Automotive Management Division of DAGS, however, has observed that preferential space assignment and free parking promotions do not motivate a large number of employees to sacrifice the flexibility and convenience of driving their own vehicles.[106] Currently only thirty-eight spaces are assigned to carpools within the division's twenty-four parking lots.[107]

DAGS has been unwilling to further modify the parking policy to allow vehicles owned by non-state employees to park in a state facility. Officials express concern that allowing non-

state employees to participate in the carpool with state employees would significantly reduce the chances of state employees obtaining parking within a reasonable length of time.[108] If the state parking control policy is modified to allow both state and non-state employee-owned vehicles to park in state garages, non-state employees would overtax the limited number of spaces available for state needs.

In support of their current parking program, state parking officials say that it will be difficult to enforce carpools between state and non-state employees.[109] For example, if any vehicle is allowed to park in a state parking facility, a state employee may obtain parking for non-state employees. In Washington, the State created a task force to study the increase in parking rates and required that all state employees re-register for parking.[110] This study revealed that many vehicles that parked in the state structure did not belong to state employees.[111] Because carpool occupancy violations may occur DAGS is unwilling to implement a system that would allow non-state vehicles to park in the state facility.

The State's Enforcement of the Carpool Occupancy Requirement

The state parking control policy requires that all participants be in the vehicle when it is parked in the morning.[112] This may be acceptable for carpoolers who all work in fairly close proximity to the parking garage. This requirement, however, may deter carpooling among some employees who would otherwise rideshare because any benefits arising from carpooling may be eliminated by the inconvenience of not being able to be dropped off and instead having to walk from the parking garage to their offices. State officials contend, however, that this requirement is necessary to enforce the carpool requirements. Without this requirement state parking officials would be required to make time-consuming investigations to determine whether an employee rode to work with the designated carpool. These investigations would require more personnel than the Automotive Management Division can spare.

The DOT believes that the urgent need to implement alternate modes of transportation outweighs the arguments raised by DAGS officials. They acknowledge that some state employees may be displaced because of the preference given to carpools that may sometimes carry non-state employees. They also realize that people may abuse the system. Their first priority, however, is to reduce the number of SOVs on Oahu's highways to relieve traffic congestion. If that means implementing policies that may not be fair to everyone affected, the DOT believes that sacrificing a few to save the whole is a better policy.

The State's Parking Policy Lacks Incentives for Carpoolers

The parking control policy also does not offer significant incentives for employees to rideshare or any disincentives for single occupant vehicles. A priority and regular waiting list exists for state parking.[113] Carpools, however, are not given as much a priority over single

occupant vehicles as is accorded to carpools in other cities. The approval or disapproval of recommended names for parking assignments is based on the following factors:

(1) Position in state government;

(2) Government agency's operational requirements;

(3) Status as a qualified disabled person;

(4) Need for a personal motor vehicle to carry out state business during the day;

(5) Car pools; and

(6) Other unique factors which justify the assignment of a priority parking space.[114]

Carpools are not given top priority and state employees who would otherwise form a carpool to obtain state parking may still be by-passed. The Division Chief, however, states that preference is given to carpools when parking is available. Carpools, however, are not offered reduced parking rates. Conversely, SOVs are not penalized with higher parking rates. Carpools participants do not receive cash incentives or a guaranteed ride home. The only incentive given to carpools is that they may select the specific stalls in the lot they desire, except those already reserved and those in the Capitol parking lot.

The state parking policy has done little to promote ridesharing between state and non-state employees. The current rules provide few of the incentives to carpoolers that other jurisdictions offer. SOVs are also not penalized as they are in other cities. Although modifying the state parking policy would most probably enhance the State's rideshare program, obstacles make it be politically difficult to modify these policies. Until a policy decision is made as to whether state parking is primarily a TDM tool to be used to increase ridesharing, rather than a benefit or service for state employees, DAGS will probably continue to resist any change in its parking policies. If the Legislature determines that the parking facilities should be used as a TDM tool it must then enact legislation that will assist DAGS in implementing new policies.

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Chapter 4

THE UNSEEN EFFECTS OF MODIFYING STATE PARKING POLICIES

The Real Cost of Parking for State Employees

Despite the below-market price of state parking, state employees may already be spending more of their incomes on parking than some private sector employees who receive parking subsidies from their employers as part of their total compensation package. Employer-paid or subsidized parking frequently is given to employees as a fringe benefit because it is not included in the employee's taxable income.[1] In other words, employers are able to give their employees tax-free money by paying for parking that would otherwise be paid for by the employee's after-tax income.

For example, many law firms in downtown Honolulu provide free parking to their attorneys. Among the larger downtown employers, Bank of Hawaii, First Hawaiian Bank and Hawaiian Electric provide free or subsidized parking for their employees in upper management. Consequently, if the state parking rates are raised, state employees, who on the average earn less than upper management employees in the private sector, will be paying even more for parking in comparison to certain other downtown workers.

Parking Policies of Private Sector Employers that Conflict with the State's Rideshare Program

The DOT's efforts to reduce SOVs by using state parking facilities as a TDM tool have also been frustrated by private sector employers who make parking available to their employees. Some large downtown employers may also have parking policies that actually encourage SOV commutes. One example is Hawaiian Electric Company (HECO) which occupies offices in downtown and outside the downtown area along Ward Avenue. HECO is one of only a few large employers who offer low-cost parking to many of their employees.

The Ward Avenue site is where most HECO employees work and HECO has four parking lots in this area. The company's parking policies are similar to the current state policies. According to a HECO official, parking is not a fringe benefit. Parking, however, is provided as a service to its employees and is not meant to be a money-making venture for the company. Parking rates range from twenty-five dollars per month for covered, reserved stalls to a low of fifteen dollars per month for unassigned, uncovered parking. These rates cover the operating expenses of the facilities but do not cover the real property taxes. Because these rates are considerably less than the market value of private lots, demand exceeds supply.

HECO's parking policies also include incentives for carpools such as paying monthly travel allowances to carpools to cover the cost of gasoline, insurance and auto maintenance.

Despite the rideshare incentives offered by employers such as HECO, the bottom-line effect of HECO's parking supply is an undermining of the DOT's rideshare program. The negative effects, however, are not intended and HECO officials have expressed a willingness to work with the State to formulate policies that will enhance the State's rideshare program.

Analysis

Since some large downtown employers provide free, subsidized or low-cost parking to their employees, changing only the state parking control policies may not be enough of an incentive to encourage ridesharing between state and non-state employees. Many non-state employees enjoy free or low-cost parking and would rather drive alone than incur the inconveniences of ridesharing. Therefore, even if the State changed its policies to allow carpools between state and non-state employees or raised its parking rates to discourage SOV commutes among its employees, other impediments to the ultimate goal of reducing traffic in the downtown area would remain in the form of parking policies of other employers in the downtown area that mirror the State's present policies but are not subject to state control.

Despite the fact that many private sector employees may not be persuaded to rideshare, the State can still amend its parking policies to promote ridesharing policies to advance the idea that TDM measures are necessary to solve Oahu's traffic problems. If carpool policies are relaxed to allow non-state employees to park in a state facility, DAGS will be required to formulate an effective enforcement procedure to monitor carpool occupancy rates. This procedure could then be used as a model for others in the community.

Additionally, if state parking rates are increased to a point where the facilities produce revenues in excess of expenses, the Legislature should consider in advance how those revenues will be used. The nature of state parking facilities is different from private parking lots. Most private parking lots are run for the purpose of making a profit for their owners. In the case of the Melim building, for example, parking rates are set at a level where the owner can recoup the initial outlay of expenses, pay for the current operating expenses of the facility and make some profit.[2]

If the state parking fees were raised to the levels charged in commercial lots downtown, the surplus revenues generated could be substantial. However, while the policies followed by DAGS in implementing the state parking policy may conflict with or inhibit the promotion of ridesharing, it must be noted that these policies are neither illogical or irrational, particularly to the extent that higher level guidance has not been provided.

For example, to the extent that DAGS follows a policy of not making a profit on state parking facilities, this can be seen as a facially neutral policy that neither makes money from state employees nor provides them with a subsidy (at least to the extent that DAGS determines that the "cost" of the parking for which the employees are paying is equal to the operating expenses for the parking facilities). If DAGS is to follow a policy of turning a profit

on state parking, then the next question would be how much of a profit should it try to earn? If the policy is to generate as great a profit as possible from the parking facilities, then the state parking facilities could be operated on the same basis as any commercial parking facility. In other words, the State could charge what the market would bear which would make parking a money-making activity and not an employee related benefit or service. A further decision would then need to be made as to how the profits should be used.

The potential problem regarding the disposition of the excess funds collected from the parking facilities may stem from the State's failure to clearly address whether state parking is really meant to be a benefit (or service) for state employees or a TDM tool. If it is to be used as a TDM tool then it may be acceptable to raise the parking rates despite the disproportionate negative impact it will have on state employees who will spend more of their income to pay for parking than some private sector employees who are subsidized by their own employers. The excess funds could then be used to purchase vans for state-employee vanpools and other rideshare alternatives as part of the State's traffic management plan for Oahu.

The Department of Personnel Services (DPS) may be also have some input into this issue. If parking is solely a TDM tool, the State may be handicapped in the job recruitment market. DPS may want to make parking a fringe benefit for certain state employees, particularly where positions may be hard to fill due to competition with the private sector. Currently, DPS' position is that parking is not meant to be a fringe benefit.[3]

Before the State determines whether state parking is an employee benefit or service or a TDM tool, the State must resolve the primary issue of its dual role in the community. Is it primarily a policy setter? If so, then it may be necessary to take drastic steps and use state parking as a TDM tool to set an example for the community despite the negative effect it will have on state employees. However, the State is also an employer who must be competitive in the job market to attract and retain capable employees. If the State determines that it is most important to attract competent employees, the State should reconsider using parking solely as a TDM tool since private sector employers often provide free or low-cost parking to certain employees as a fringe benefit. Parking in downtown Honolulu is important to many employees and the offer of free or subsidized parking ultimately may handicap the State in recruiting and retaining capable employees.

Endnotes

1. Donald H. Pickrell and Donald S. Shoup, "Employer Subsidized Parking and Work-Trip Mode Choice", Transportation Research Record No. 786, 1980.

2. Telephone interview with parking manager of Melim Building, August 1, 1992.

3. Telephone interview with Lois McCabe, Personal Secretary to the Director, Department of Personnel Services, November 12, 1992.

Chapter 5

INCREASING HOV LANE ENFORCEMENT ON OAHU USING INNOVATIVE TECHNIQUES

An HOV facility is another TDM measure that can reduce the number of vehicles traveling on Oahu's roadways. An HOV facility is a lane whose use is restricted during peak traffic hours for exclusive use by buses and carpools carrying a required number of passengers.[1] The purpose of HOV lanes is to maximize the people-carrying capacity of a roadway by providing free-flowing and faster travel for those vehicles carrying more than one occupant.[2] The number of passengers is usually set by law and an occupancy violation will result in a traffic citation. In 1989, Act 29, Session Laws of Hawaii 1989, was passed which reduced the minimum occupancy requirement from three to two riders to make it easier for commuters to form carpools. HOV lanes in operation on Oahu at the end of 1989 include:

(1) H-1 freeway: one HOV lane in each direction between Waiawa and Keehi interchanges;

(2) Moanalua freeway: a two-mile HOV lane kokohead direction from Halawa to Middle Street interchanges;

(3) Kalanianaole Highway: a two-mile contraflow HOV lane in the Ewa direction from Aina Haina to H-1 freeway;

(4) Kawaihai Street: a one-mile bus-only lane in Hawaii Kai from Hawaii Kai Drive to Kalanianaole Highway;

(5) Hotel Street Bus Mall: a ten block bus-only mall through downtown Honolulu for many of the major urban routes of TheBus system;

(6) Kalakaua Avenue: a four-block Ewa direction bus-only lane to provide more direct routing of TheBus services in Waikiki.[3]

An HOV facility will be most successful in encouraging commuters to rideshare if it is able to provide the following:

(1) An increase in the people-moving capacity of the facility;

(2) High-speed travel to a large number of people to reduce the average travel time; and

(3) An incentive for people to share rides to increase the number of people being carried per a vehicle.

The effectiveness of HOV lanes is typically measured in terms of travel time savings, with a minimum total travel time advantage of between five to eight minutes required to attract increased ridesharing.[4] HOV facilities are most effective in increasing ridesharing when travel times are reduced by fifteen minutes or more.[5] Differences in time savings are usually attributed to user compliance, enforcement and accessibility.[6] Various studies have been conducted which concluded that the effectiveness varies with each facility, however, the most successful HOV facilities are able to carry three times as many people as a conventional lane.[7] These studies have also found that HOV lanes are most effective in dense urban cores with high levels of existing transit and carpool use and are much less effective in less densely developed areas.[8] Therefore, HOV facilities can be an effective TDM measure for Oahu.

Occupancy violations increase the volume of traffic traveling on HOV lanes and these occupancy violations must be kept to a minimum to maintain free-flowing traffic. It has been observed that when HOV occupancy requirements are not strictly enforced, more SOVs will use the HOV lane to take advantage of the high-speed travel. If HOV facilities are as congested as the normal lanes, people may not be convinced to rideshare because HOV lanes will not provide any travel time savings. Consequently, it is imperative that HOV lane violations are adequately enforced.

Current Enforcement Measures in Hawaii

HOV lanes are authorized pursuant to section 291C-53, *Hawaii Revised Statutes*. In the City and County of Honolulu, the Honolulu Police Department (HPD) is authorized to enforce the HOV occupancy requirements. Pursuant to section 291C-165, *Hawaii Revised Statutes*, an officer is authorized to stop an offender and issue a citation when the officer observes an occupancy violation. The police use solo bike officers to carry out the enforcement of the HOV occupancy requirement.[9] Officers sometimes ride along with the traffic to observe traffic violations. At other times, officers may station themselves in the shoulder area of the freeway.

The stop and cite enforcement technique, however, has not been an efficient method of enforcement. It takes at least ten minutes for an officer to write a citation.[10] During this time, other occupancy violators cannot be apprehended. The scene of the violating vehicle being cited can also cause "rubbernecking" by other motorists which tends to slow the flow of traffic in the HOV lanes. Many HOV facilities also do not have a sufficient median shoulder that would allow a patrol officer to apprehend and ticket violators and this technique can be dangerous for both the officer and the passengers of the vehicle being cited.

In response to the negative aspects of the stop and cite method, the HPD has directed its officers not to enforce the HOV facilities unless they can do so without impeding traffic. As a result, HOV lane violations frequently occur. On Oahu, most HOV lanes are concurrent flow freeway lanes, without any barrier or separation from the normal traffic lanes. The exceptions are the Makai Viaduct and the Aina Koa to Kapiolani section on the H-1 freeway. The

violation rates on concurrent HOV lanes are usually higher than HOV facilities that are separated from the normal flow of traffic because it is easier to access the HOV lanes from the regular flow of traffic.[11]

HOV Occupancy Violation Rates on Oahu

Older surveys of the H-1 freeway, when an occupancy rate of three or more was in effect, indicated that eighty percent of the vehicles in the HOV lane were violators.[12] The DOT has conducted various surveys on the HOV occupancy violation rates since the reduction in the minimum occupancy requirement was reduced to two people. Violation rates during this period ranged from twenty-seven percent to 62.3 percent. The following are results of some of the DOT's study on HOV occupancy violation rates after the occupancy requirement had been reduced to two passengers:

(1) Kalanianaole Highway

December 19, 1990
All lanes, peak period: 6:45-7:45 a.m.
Average vehicle ridership (AVR): 1.29 people

HOV lane, peak period: 6:45-7:45 a.m.
AVR: 1.91 people
Violation rate: 27 percent[13]

November 14, 1991 to November 15, 1991
All lanes: peak period: 6:45-7:45 a.m.
AVR: 1.26 people

HOV lane: peak period: 6:45-7:45 a.m.
AVR: 1.60 people
Violation rate: 47.60 percent[14]

May 7, 1992
All lanes: peak period: 6:45-7:45
AVR: 1.28 people

HOV lane: peak period: 7:00-8:00 a.m.
AVR: 1.79 people
Violation rate: 33.71 percent[15]

(2) **Moanalua Freeway**

November 15, 1991
All lanes: peak period: 6:00-7:00 a.m.
AVR: 1.27 people

HOV lane: peak period: 6:00-7:00 a.m.
AVR: 1.44 people
Violation rate: 62.30 percent[16]

These statistics indicate that Oahu's HOV facilities are not operating efficiently. In one study done on the Moanalua freeway, sixty-two percent of all vehicles using the HOV lane had only one passenger. Many SOVs violate the HOV occupancy requirement because the commuters know that the chances of their being cited are minimal. The presence of SOVs traveling in the HOV lane reduces the people-moving capacity of the HOV facility. It also impedes high-speed travel and eliminates the travel time savings for ridesharers. Consequently, Oahu's HOV facilities are not providing an incentive for commuters to share rides.

Adequate enforcement is essential to the successful operation of Oahu's HOV facilities. Many HOV facilities on Oahu, however, do not provide adequate shoulder areas where an officer can safely pull over a violator without disrupting traffic and when an officer does pull a violator over, traffic-flow slows because of the rubbernecking. As a result, current enforcement measure are minimal.

Innovative HOV Occupancy Enforcement Techniques

The common method of detecting, stopping and citing violators is time consuming, expensive and often unsafe to the offender and the officer. To overcome design and operational difficulties of HOV facilities as exist in Honolulu, several strategies have been tested to streamline the citing of the offender. These techniques include:

(1) A mail-out warning approach;

(2) Barrier separated HOV lanes;

(3) Increased fines; and

(4) Mail-out citations supported by an officer's observation and video camera surveillance.

This study will focus on this last method.

Mail-out Citations Supported by Officer Observation and Video Camera Surveillance

Mail-out citations supported by video camera surveillance can be a more efficient method of enforcement than the current method of stopping and citing a violator. A mail-out citation is a system where an officer observes HOV lane violations and copies down the license plate number of the offending vehicle. After the identity of the registered owner is ascertained using information available at the agency having jurisdiction over motor vehicles (MVA), a citation is mailed to the registered owner at the address given to the MVA. A recent

study in Virginia stated that it takes approximately fifteen minutes for any officer to issue a citation but with the mail-out system, four to five times more citations can be issued.[17] If Hawaii adopts a mail-out system of citing HOV occupancy violators, HPD will be able to issue many more citations than it currently does. This method would also be safer for the violator and the officer since the officer would no longer be required to pull over a violator to cite them. A mail-out system of citing offenders will also avoid the risk of creating traffic disruption that often occurs when commuters "rubberneck" to observe the violator being cited. Most importantly, the mail-out system can be more cost-effective than the older method of enforcing HOV occupancy violations.

Obstacles to the Adoption of the Mail-out System of Citation Supported by Officer Observation and Video Camera Surveillance

Despite the advantages of a mail-out citation method, problems also exist with this innovative technique. One major problem is whether mail-out citations impermissibly place the burden on the registered owner of the vehicle to prove that the owner was not in violation of the occupancy requirements. Another concern is the feasibility of using video camera surveillance for enforcing HOV lane violations. Current technology cannot determine the occupancy of vehicles traveling on HOV facilities with enough certainty to issues citations.

Obstacles to Implementing Mail-out Citations

House Bill No. 23 was introduced during the 1991 regular session of the Hawaii Legislature. The bill provided for a system of mail out citations for HOV occupancy violations. The purpose of the bill was to implement a better method of enforcing HOV lane violations to create efficient HOV facilities. The bill provided that upon an officer observing an occupancy violation, the officer would take any information displayed on the vehicle which may identify its registered owner and cite the vehicle for an HOV occupancy violation.[18] The citation would then be mailed to the last known address of the registered owner of record.[19] The registered owner would then be responsible for answering the charge through the mail within seven days and would have the option of paying the fine or requesting that a hearing be set on the matter.[20]

This bill also provided that the registration plates are prima facie evidence as to the fault of the registered owner.[21] Specifically, the bill stated that the registered owner shall be deemed responsible for the illegal use of the carpool lane.[22] If the registered owner failed to respond to the mailed citation within the seven-day period, the traffic violations bureau would issue to the registered owner a penal summons ordering the registered owner's appearance in court.[23] This bill excluded from liability lessors of vehicles if the lessor provided the court with the name and address of the lessee within forty-five days after a notice has been sent to the lessor.[24]

The DOT, HPD, Leeward Oahu Transportation Management Association (LOTMA) and the Chamber of Commerce of Hawaii presented testimony in favor of the bill. The testimony of the Office of the Public Defender praised the purpose of the bill but raised concerns regarding the bill's provisions. In testimony, the Public Defender stated that a seven day time period may be too short a period for the violator to respond to the citation.[25] While a seven day response period may be appropriate in the case of parking citations where the ticket is physically located on a vehicle and consequently presumptively received by the vehicle driver on the date of issuance, a registered owner would have no knowledge of the issuance of an HOV occupancy citation until it is received in the mail.[26] The Public Defender recommended that the response period be extended to twenty-one or thirty days. In support of this recommendation the Public Defender raised the issue that the owner may be on vacation or not available for several days in which time a penal summons might be issued for the owner prior to the owner learning of the existence of the citation.[27] The Public Defender also noted that since the citation is not required to be mailed by either certified or registered mail, there is no guarantee that the registered owner will ever receive actual notice that the owner's vehicle is alleged to have violated the carpool lane provision.

The Public Defender also objected to the bill's provision which deemed the registered owner of a vehicle liable for the illegal use of the carpool lane. The title of the provision stated that registration plates would be "prima facie evidence as to the fault of the registered owner".[28] "Prima facie" evidence is "evidence which, if accepted in its entirety by the trier of fact, is sufficient to prove the fact".[29] Although the due process clause of the United State Constitution requires the prosecution to prove every element of the crime beyond a reasonable doubt in order to convict a defendant, the prima facie evidence rule allows the case to be presented to the jury without necessarily meeting its burden of persuasion. Prima facie evidence does not conclusively prove that the defendant is guilty. The defendant has the opportunity to rebut the evidence to prove the defendant's case.

Hawaii Supreme Court's Interpretation of the Prima Facie Evidence Rule

A law that requires the finding of guilt upon the finding of certain evidence, however, is impermissible. The Hawaii Supreme Court has ruled that a mandatory presumption of inference may impermissibly shift the burden to the defendant.[30] A bill such as H.B. No. 23 (1991) may impermissibly shift the burden to the violator. The bill provides that evidence of an HOV violation gathered through an officer's observation that the registered owner's vehicle was carrying less than two people in the carpool lane results in the registered owner being liable for the violation. This bill did not contain a provision whereby the registered owner could present evidence to rebut the officer's observation.

This problem, however, can be corrected if the text of the bill contained language to the effect that evidence collected by the observing officer identifying a vehicle through its registration plates will be prima facie evidence as to the fault of the registered owner of the vehicle observed to be in violation of the carpool occupancy requirement. This would not be a

mandatory finding of guilt. As stated above, prima facie evidence is authorized by law. A registered owner can present evidence to rebut the officer's evidence.

Other problems in the bill raised by the Public Defender are as follows:

(1) The bill contains practical obstacles to enforcement such as improper issuances of citations for unobserved passengers;

(2) No legislation is being enacted that would address the serious law enforcement problem created by dark tinted windows that could be used to avoid citations;

(3) The bill fails to provide any penalty for the improper use of the carpool lane; and

(4) It would be very difficult for the government to sustain its burden of proving this violation when no concrete evidence is available to prove that the vehicle was actually operating in the carpool lane when alleged, other than the notation of a police officer of a presumably moving vehicle. If the owner orally denies the officer's contention, a court would be in an awkward position in evaluating the evidence.[31]

Because of the potential for errors the bill was held in committee to explore other factors that can reduce officer observation errors. One recommendation was to use video cameras to provide evidence to support the officer's observation.

The Feasibility of Using Video Cameras in Determining the Occupancy of Vehicles Using HOV Facilities

In 1990, a study was done for the State of California, Department of Transportation to determine the feasibility of using videotape in HOV lane surveillance and enforcement.[32] California's current enforcement of HOV facilities is similar to Hawaii's stop and cite method. This enforcement method requires substantial commitments of personnel and equipment by the California Highway Patrol. It is estimated that personnel costs for enforcing California's ten mainline HOV lanes exceeded $400,000 in 1990.[33] The study was conducted over six days of field tests during which time researchers set cameras in different configurations on and under freeway overpasses and established a three-way monitor in a separate video control unit.[34] The researchers experimented with different speed films, camera placements and angles to obtain the most accurate counts of vehicle occupancy.[35]

Auxiliary equipment was also used to increase the accuracy of the videotape surveillance. The researchers used a special effects generator that made the exact time and location a permanent part of the videotape record.[36] Polarized filters helped to solve the problems with glare from shiny cars and windshields, however, it reduced the light-gathering

capability of the cameras.[37] Infra-red cameras and light sources were also used to document license plates after dark by videotaping the rear license plates of departing vehicles.[38]

Despite the different technological methods used, the researchers encountered several problems that hindered the accuracy of videotape surveillance in determining the number of occupants in the vehicles. The researchers discovered that it was not feasible to videotape oncoming vehicles under conditions of darkness or low visibility.[39] More significantly, they discovered that videotape reviewers cannot currently identify the number of vehicle occupants with enough certainty to support citations for HOV lane occupancy violations.[40] In early tests with three cameras located on an overpass, subsequent videotape review produced a "false alarm" rate of twenty-one percent.[41] That is, twenty-one percent of those vehicles identified as violators by videotape reviewers which had been checked by officers on site actually had the required number of occupants.[42] In later tests with the third camera moved to the freeway itself, the false alarm rate rose to fifty-one percent.[43] The chief cause of false alarms appeared to be small children and sleeping adults located out of view of all three cameras.[44]

The accuracy of videotape surveillance is also affected by other factors. Ambient lighting conditions, glare and such vehicle design features as tinted windows, headrests, windshield posts and high windows also made if difficult to interpret the number of videotaped vehicle occupants consistently.[45] Videotape reviewers in this study reported that these conditions made it impossible to estimate the occupancy of 11.4 percent of the vehicles passing by the video cameras.[46] Individual reviewers also differed widely in their attempts to document vehicle occupancy levels which suggest that tape reviewers must be well-trained to ensure that certain conditions do not trigger false alarms and that the ambiguous views are treated consistently by all reviewers.[47]

The Hawaii DOT also experimented with the use of video cameras to survey vehicle occupancy rates on Oahu. The DOT concluded that videotape surveillance cannot accurately determine the occupancy rates of vehicles traveling in HOV lanes.[48] The DOT also pointed out that peak morning traffic hours sometimes occurs in the dark especially during the winter months, therefore, video camera surveillance alone would not be a feasible alternative to enforce HOV occupancy violations.[49]

The California study also concluded that videotape by itself does not appear to be accurate enough to provide a basis for citations. It concluded, however, that the combination of videotape and an observing officer could conceivably provide the accuracy needed for a system of mailed warnings and citations.[50] The study concluded that this system is a cost-effective enforcement measure that would eliminate police pursuits of violators, and provide evidence for court hearings.[51]

Separate and distinct from the use of video-cameras in HOV lane enforcement, however, the state of California has considered prohibiting the use of video-cameras in vehicular speed ticketing. The technique involves the use of a high-speed camera that is placed in the back of a stationary vehicle. As a speeding car passes, a photo of the car and

its occupant is taken. A ticket is then mailed to the registered owner of the vehicle, usually arriving two weeks after the incident.

Senate Bill No. 1772 was introduced during the 1991 session of the California Legislature by Senator Frank Hill. The bill states the Legislature finds and declares that the results of photo radar as a measurement of vehicular speed, or the opinion of a person interpreting a photo radar recording, is unduly prejudicial evidence and should be excluded in a judicial proceeding unless notice of the violation is personally delivered to, and acknowledged by, the driver at the time of the violation.[52] The bill specifies that it is the intent of the Legislature to ensure the reliability of traffic citations relying on the use of photo radar and to protect against misidentification of innocent drivers.[53]

Another concern the drafters of the bill raised was the way in which cities contract with the manufacturers of the photo radar machines. Well over $80,000 worth of equipment, plus expert witnesses for use in court, are supplied free of charge to the cities in exchange for a part of the revenue from paid citations.[54] The bill passed the Senate but remains in committee in the Assembly as of this writing.

In late 1992, New Jersey enacted a law banning the use of photo radar to track speeding violators.[55] The concerns raised by legislators were similar to their California counterparts. The bill's primary sponsor, Stephen Mikulak cited the depersonalization of law enforcement, increased expenditures for hardware and an attack on the tradition in American jurisprudence that a person is innocent until proven guilty.[56]

Innovative Techniques Used in Other Jurisdictions

Virginia

Virginia also experienced high violation rates on its HOV facilities. Violation rates averaged approximately thirty percent during the peak-hour from 7:00 a.m. to 8:00 a.m.[57] In the peak period, violation rates sometimes increased to fifty-two percent.[58] Before 1989, Virginia used the traditional stop and cite method of enforcement.[59] This method was not successful in efficiently enforcing HOV violations. Consequently, in 1989, the Virginia Legislature amended its statute to allow the Virginia State Police to issue summonses by mail to HOV lane violators, thereby eliminating the need for troopers to detain them on the scene and allowing officers to catch more violators simply by writing down license numbers.[60]

This change in the statute made violations a traffic infraction rather than a moving violation and thereby eliminated the assessment of points toward the revocation of the driver's license is assessed. The statutory provision states:

> In the prosecution of an (HOV) offense, committed in the presence of a law-enforcement officer, of failure to obey a road sign restricting a highway, or portion thereof, to the use of

> high-occupancy vehicles, proof that the vehicle described in the HOV violation summons was operated in violation of this section, together with proof that the defendant was at the time of such violation the registered owner of the vehicle, shall constitute in evidence a rebuttable presumption that such registered owner of the vehicle was the person who committed the violation. Such presumption shall be rebutted if the registered owner of the vehicle testifies in open court under oath that he was not the operator of the vehicle at the time of the violation.[61]

This statute provides that an officer's observation of a violation of a vehicle will create a rebuttable presumption of that the registered owner committed the violation. It also provides, similar to H.B. No. 23 (1991) that summonses are mailed by first- class mail to the address of the owner of the vehicle as shown on the records of the State's Department of Motor Vehicles.[62] Unlike H.B. No. 23, however, the Virginia statute does not require a mandatory finding that the registered owner is responsible for the violation. It allows the registered owner to rebut the evidence in open court and under oath that the owner was not the operator of the vehicle at the time of the violation. The original statutory provision required that violators appear in court, although no penal summons was authorized where an owner did not appear. The statute was revised and no longer requires that violators appear in court.[63] Currently, violators are allowed simply to mail in their fine.

Despite the ease in which a registered owner can rebut the evidence of the violation gathered by the officer, this enforcement technique has been successful.[64] The ticket by mail program has increased by four or five times the number of tickets one officer can issue.[65] Before the new law took effect, the State Police wrote approximately five hundred summonses a month for HOV violations.[66] In July, 1990 troopers issued about 1,041 summonses, of which 517 were by mail.[67] Approximately eighty percent of all observed violators are mailed tickets.[68] Consequently, violations rates have been reduced, traffic flow is not interrupted as much as it is with normal enforcement methods, and the safety of the police officer and the motorist are enhanced.[69] It is interesting to note that even though it is easy for a registered owner to rebut the charge, in fact few violators are actually going to court to fight the tickets.[70]

Virginia has not adopted the use of video camera surveillance to supplement an officer's observation. To ensure that the proper individual receives the ticket, officers sometimes momentarily stop vehicles to obtain the driver's license or social security number of the driver.[71] Virginia police have found that even stopping the vehicle to obtain this information is much shorter than the fifteen minutes it normally takes to issue a citation. Some HOV facilities, however, have limited areas to pull over vehicles which restricts the use of this method and officers have adopted other safeguards.[72] One method is for the observing officer to copy down the make and color of the vehicle and check it later against information available on the registered plates with information at another department, the Department of Motor Vehicles.[73] These safeguards have proven to be helpful in eliminating citations being issued erroneously.

Washington State

Violation of the occupancy requirement is the most frequent problem associated with HOV lanes in Seattle.[74] Washington State also uses the traditional stop and cite method of enforcing HOV occupancy requirements. The State has also experienced limitations with this method and in November of 1989, the State implemented an innovative enforcement technique that uses a mail-out system of warnings to HOV lane violators. The Washington State Department of Transportation has developed a HERO program where motorists can call a toll-free number to report HOV lane violations to the State Patrol. The motorist must provide the Patrol the license number of the vehicle, plus some description of the vehicle. Vehicle owners are then informed by mail about the proper use of the lanes to deter repeat violations. The Washington State Patrol is kept informed of repeat violators. Whenever possible, the State Patrol contacts them or they are issued a moving violation on the road.[75]

Although recent studies have not been able to evaluate the percentage decrease in HOV violations, officials believe the program has been successful in decreasing HOV violations. The HERO program also seems to be an effective tool for relieving the public's frustration over often unpenalized HOV lane violators.[76] One problem with this program, however, is that callers sometimes do not leave adequate information regarding the violators which makes it impossible for the State Patrol to mail out a warning.[77] To date, no court challenges have been initiated regarding the permissibility of the mail-out warnings.

In 1991, the Washington State Legislature failed to pass a bill that would have allowed the State Patrol to enforce HOV lane violations using video camera surveillance. Among the concerns expressed in opposition to the bill was the reliability of current technology in detecting the occupancy of vehicles. This attempt to implement more innovative HOV enforcement techniques indicates that traditional methods of enforcement may not be sufficient to maintain efficient HOV facilities and that other methods need to be used to reduce the current violation rates.

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36. Ibid., p. 1-2.

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42. Ibid.

43. Ibid.

44. Ibid.

45. Ibid.

46. Ibid.

47. Ibid., p. 1-5.

48. Telephone interview with Ken Miyozono, State of Hawaii, Department of Transportation, July 6, 1992.

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Chapter 6

FINDINGS AND RECOMMENDATIONS

Findings

Conflicting State Policies that Inhibit Ridesharing

The Legislature has required the DOT to develop and promote rideshare programs. In response, the DOT has been actively promoting rideshare programs to Oahu commuters to reduce the number of SOVs during the morning and afternoon rush hours. The DOT'S efforts have been limited, at least in part, by some state policies that conflict with or actually inhibit ridesharing.

The State's parking control policy is an example of a state policy that conflicts with the DOT's rideshare program. State parking is priced well below current rates in downtown Honolulu, although this does not necessarily reflect the actual difference in out-of-pocket cost paid by the respective employees. The low cost of parking is attributable to DAGS' informal agency policy of not making a profit from state parking. The Automotive Division of DAGS charges parking rates that only cover the operating expenses of the parking facilities. As a result, the low cost of parking encourages employees to make more SOV commutes since parking is relatively inexpensive as compared to private lots.

DAGS has another policy that directly conflicts with the DOT's rideshare program. DAGS is planning the construction of more parking facilities in the downtown Honolulu area because demand far exceeds current supply. Currently, it takes approximately five years for a state employee who wants one to be assigned a parking stall. The increased number of parking spaces, however, will also encourage more SOV commutes during peak traffic hours which will limit the success of the DOT's rideshare program.

DAGS' informal agency policy of not making a profit from state parking, however, appears to be reasonable absent more specific guidance as to whether the State should make a profit off its own employees, and if so, how much that profit should be and how those excess funds should be used. Furthermore, the Legislature has not prohibited the construction of any more state employee parking in downtown Honolulu. To date, no formal policy decision appears to have been made as to whether state parking should be primarily for the benefit or convenience of state employees on the one hand, or a TDM tool on the other.

Therefore, rather than focus solely on the relatively narrow issue of extending parking benefits to persons in ridesharing arrangements between state and non-state employees, the Legislature and affected executive agencies should prioritize the competing interests. Standing alone, such a change may have limited impact if all ridesharers must arrive at the parking facility together (which is necessary to ensure that the persons involved are actually ridesharing) or if the parking fees of the state or non-state employees are low enough to make

SOV commuting preferable. If reducing Oahu's traffic congestion is determined to be more important than providing parking to state employees, then DAGS needs direction as to how its parking philosophy and policies should be altered to enhance the DOT's rideshare program. If the Legislature directs DAGS to raise the parking rates to make them more comparable to parking rates charged by privately owned lots in downtown Honolulu, then the Legislature must also consider how the excess funds should be used. If the State prohibits the construction of more state parking facilities, it should create alternative modes of transportation for its employees.

It is unlikely, however, that simply raising parking rates and limiting parking will achieve the DOT's goal of reducing traffic congestion on Oahu. A survey of other jurisdictions indicates that only when these methods are used in conjunction with the creation of alternate modes of transportation will commuters be more likely to switch from SOV commutes to ridesharing.

Furthermore, simply raising parking rates may unfairly affect state employees who may actually be paying more out-of-pocket for parking than any number of other downtown employees. Simply comparing the rates charged by the State as opposed to commercial parking structures is not an accurate comparison. Many private sector employers currently subsidize a portion or all of their upper level employees' parking expenses. Consequently, if the state parking rates are raised, state employees, who on the average earn less than upper level employees in the private sector, will be paying more for parking in comparison to other downtown workers.

From the policy standpoint, on one extreme, if state parking is viewed as being solely for the benefit or convenience of state employees, then there is no need to make any accommodation for ridesharers or anyone else participating in efforts to reduce traffic congestion. On the other extreme, if state parking is viewed solely as a TDM tool, the State could use its parking facilities to maximize income by simply charging the highest possible rates to anyone willing to pay, without regard to whether any of those individuals are state officers or employees.

As policy extremes are rarely acceptable, the challenge is usually one of finding an appropriate balance. To date, DAGS' position rests on a philosophy that state parking should be for the benefit or convenience of state employees with some accommodation (but relatively little incentive) for ridesharing, that the facilities should not be used to make a profit, and that the parking control system should be enforceable. If changes are ordered to DAGS' philosophy, the changes need to address which elements of the philosophy must be changed, and to what degree.

Video Camera Surveillance is Not Accurate Enough to Support a System of Mail-out Citations

An HOV facility (i.e., HOV lanes) will be most successful in encouraging commuters to rideshare it if is able to provide increased people-moving capacity, high-speed travel and reduced commute times. To accomplish this an adequate enforcement measure must be in place to discourage HOV lane violators who congest these lanes and increase the commute time of HOVs.

Hawaii's HOV lane enforcement technique has not been successful in deterring SOVs from using the lanes. Current violation rates on some HOV facilities are as high as sixty-two percent during peak rush hour periods. This is due in part to the current enforcement technique used by HPD. HPD has authorized its officers to stop an offender and issue a citation only when the officer can do so without impeding traffic. The current technique is time-consuming and tends to slow traffic down because of "rubber-necking". Additionally, many HOV facilities do not have sufficient shoulder areas that would allow a patrol officer to apprehend and ticket violators. This technique is also dangerous for both the officer and the passengers of the vehicle being cited. As result, officers infrequently enforce HOV lanes during rush hour periods.

Mail-out citations supported by video camera surveillance can be a more efficient method of enforcement as compared to the current method of stopping and citing violators. The use of the mail-out citations supported by video camera surveillance, however, raises some problematic issues.

House Bill No. 23 (1991) introduced the concept of mail-out citations. One significant problem with such measures, however, is that they may impermissibly place the burden on the registered owner of the vehicle to prove that the owner was not in violation of the occupancy requirement. Opponents to the bill have pointed out other problems with the bill's provisions:

(1) The seven-day time period in which the registered owner must respond to the citation is too short; and

(2) The lack of guarantee that the registered owner will get the citation since there is no requirement that the citation be mailed by registered or certified mail.

A California study has found that videotape surveillance enforcement requires substantial commitments of personnel and equipment. It was estimated that personnel costs for enforcing California's ten mainline HOV lanes exceeded $400,000 in 1990. Different video technology was used in California, yet despite the researchers best efforts, video camera surveillance still produced a twenty-one percent "false alarm" rate. Furthermore, researchers also discovered that the accuracy of videotape surveillance was affected by ambient lighting conditions, glare and such vehicle design features such as tinted windows, headrests,

windshield posts and high windows. The Hawaii DOT also conducted a video camera surveillance project and similarly concluded that this method would not be a feasible alternative to enforce HOV occupancy requirements.

Recommendations

State Parking Policies

Philosophical differences exist between DOT and DAGS regarding state employee parking. Policy decisions must be made, either administratively at higher levels or legislatively, to clarify state priorities regarding the balance between reducing traffic on Oahu and providing some, if not all, of its employees with parking.

It is therefore recommended that the Legislature:

(1) Set forth clearly defined long-range goals identifying the objective which the state transportation policy seeks to attain with regard to increasing AVR and reducing the SOV rate, at least among those parking in state facilities; and

(2) Provide DAGS with guidance in implementing parking policies that will assist the DOT in achieving the State's transportation goals.

To develop those goals, objectives, and parking policy modifications, the Legislature should direct the establishment of a task force to develop specific proposals for legislation, rulemaking, or both. In establishing the task force, however, the Legislature should establish philosophical parameters to guide the work of the task force, specifically:

(1) Whether state parking should be regarded as being primarily:

  (A) For the benefit or convenience (albeit not a formal benefit of employment) of state employees; or

  (B) A transportation demand management tool;

(2) Whether the State should make a profit on its parking facilities from fees charged to its own employees; and

(3) Whether the parking policies should be structured in such a manner that they can be enforced by DAGS' within the Department's existing resources. (Whether or not a concern exists that rideshare arrangements including non-state employees will displace state employees from parking facilities, there presumably would be concern that fictional ridesharing arrangements might be used as a means for individuals, state employees or otherwise, to obtain parking privileges for their SOVs.)

Membership on the task force should include at a minimum, representatives from the DOT, DAGS, and OMPO, and could appropriately be administered and staffed by any of the three. Other agencies and entities represented on the 1989 Interagency Committee on Ridesharing could also be included.

Parking policy modifications that should be addressed by the task force in light of the philosophical parameters established by the Legislature include:

- Extension of preferential rates and parking spaces for carpools to arrangements between state and non-state employees;

- Increased parking rates for all SOVs; and

- Limitations on the future construction of state parking facilities in downtown Honolulu.

In considering the issue of increasing parking rates for all SOVs, the task force should be directed to focus not only on the parking rates charged in private commercial structures, but the actual out-of-pocket costs paid by employees who obtain parking through their employers.

To the extent that profits are made on state parking facilities from higher parking fees for SOVs, the Legislature should also establish policy concerning the use of the extra funds generated. The experience of other jurisdictions indicates that increases in parking fees should be used in conjunction with the creation of alternative modes of transportation as a means of reducing SOV commutes. Accordingly, if the task force recommends increasing parking rates for SOVs, it should also develop estimates of those revenue increases and recommend the most effective use of those funds to increase ridesharing. Alternatives for the use of those funds include:

- Purchasing vans for state-run vanpools for state employees. In creating a vanpool service, the State can formulate its own incentives including but not limited to the following:

    (1) Paying people to coordinate the vanpools;

    (2) Paying employees to drive the van;

    (3) Paying for the gasoline;

    (4) Increasing the motor pool so that vanpool participants may have access to a vehicle should they be required to run errands during work hours.

- Hiring more personnel to assist in the enforcement of carpool occupancy requirements;

- Paying for bus passes for state employees who choose to ride the bus;

- Promoting alternatives to SOV commuting.

In the alternative, if the Legislature wants the task force to focus solely on the issue of extending preferential parking rates and spaces to ridesharing arrangements consisting of both state and non-state employees, the task force could be established with a mission that is considerably more limited in scope. In establishing the task force, however, the Legislature would still need to establish the first and third philosophical parameters discussed above, namely whether state parking is primarily for the benefit or convenience of state employees or a TDM tool, and whether or not any policy should be enforceable by DAGS' using its current resources.

HOV Enforcement

Currently obstacles exist which make it difficult to adopt the HOV enforcement technique of mailing out citations supported by video camera surveillance and police officer observation. Virginia has adopted the use of mail-out citations (without video camera surveillance) with apparent success. Other legislatures that have considered the issue recently have indicated distinct concerns that these types of approaches to enforcing traffic violations may impermissibly place the burden of proof on the registered owner, or rely upon the use of video cameras that are not reliable enough to merit use in enforcement of traffic laws, or both. Washington did not adopt the approach, New jersey affirmatively prohibited it, and California tried unsuccessfully to prohibit it. Accordingly, any action taken by Hawaii's Legislature could not be premised upon any national trend or consensus.

Rather than take an "all or nothing" approach at this time, it is recommended that the Legislature:

(1) Direct the DOT to work in conjunction with the HPD to establish a mail-out warning program similar to that which is currently used in Washington State. This method may be particularly effective in Honolulu. The community is relatively small and a warning from the Police Department may embarrass an offender enough to deter further abuse of the HOV lanes. More importantly, data and experience obtained from the mail-out warning program may provide a valuable base upon which an actual mail-out citation system (whether supported by video-camera surveillance or otherwise) can be based.

This technique does not involve major capital expenses for equipment. The Washington State Department of Transportation uses a toll-free line in which motorists can report HOV lane violations. Time and money, however, should be spent on promoting this program to increase the public's awareness and participation in the program.

(2) Increase the fine for an HOV lane violation. Currently, the fine imposed for a violation is not set. The District court judge has discretion in setting the amount of each fine. Although the Legislature may be prohibited from mandating the amount of the fine which the judge must impose, the Legislature can amend the current law which sets the range of fines for traffic offenses which the District court judge must comply with. Currently, the fine for the HOV lane violation is approximately fifty dollars. This amount does not deter SOVs from using the HOV lane. The risks do not outweigh the benefit of a shorter commute. If the fines were raised, however, the risks would outweigh the benefit of a shorter commute and the HOV lanes would be clear for HOVs.

HOUSE OF REPRESENTATIVES
SIXTEENTH LEGISLATURE, 1992
STATE OF HAWAII

H.R. NO. 21

HOUSE RESOLUTION

RELATING TO THE ENFORCEMENT OF HIGH OCCUPANCY VEHICLE LANES.

WHEREAS, traffic congestion is escalating as the growth and development of major urban, suburban, and residential centers throughout the State place an increasing number of vehicles on the major arterials which connect these important centers; and

WHEREAS, the concept of carpooling with more than one person per vehicle lessens the degree of traffic; and

WHEREAS, the travel time savings through the use of exclusive lanes for carpoolers during peak hours is an incentive to carpool; and

WHEREAS, to address peak hour traffic congestion, the State has established high-occupancy vehicle lanes on portions of the highway system; and

WHEREAS, the enforcement of violations is difficult due to the lack of shoulders along high-occupancy vehicle lanes and the deterioration in traffic flow should a police officer stop a vehicle without the specified amount of occupants; and

WHEREAS, the issuance of citations by mail to those who unlawfully utilize high occupancy vehicle lanes is a viable method of enforcing minimum occupancy requirements for high occupancy vehicle lanes; and

WHEREAS, the use of video cameras in addition to officer observation may provide a more accurate means of supporting citations by mail for lane occupancy violations; now, therefore,

BE IT RESOLVED by the House of Representatives of the Sixteenth Legislature of the State of Hawaii, Regular Session of 1992, that the Legislative Reference Bureau conduct a study on the feasibility of issuing citations by mail for the enforcement of minimum vehicle occupancy requirements for high occupancy vehicle lanes; and

H.R. NO. 21

BE IT FURTHER RESOLVED that the study explore the feasibility of utilizing video cameras in addition to officer observation to supplement evidence for the issuance of high occupancy vehicle citations by mail; and

BE IT FURTHER RESOLVED that the Legislative Reference Bureau submit findings and recommendations to the Legislature twenty days prior to the convening of the Regular Session of 1993; and

BE IT FURTHER RESOLVED that copies of this Resolution be transmitted to the Legislative Reference Bureau and the Department of Transportation.

OFFERED BY: _____

HOUSE OF REPRESENTATIVES
SIXTEENTH LEGISLATURE, 1992
STATE OF HAWAII

H.R. NO. 136 H.D. 1

HOUSE RESOLUTION

REQUESTING A STUDY TO MODIFY STATE PARKING CONTROL POLICIES TO ENCOURAGE RIDESHARING ARRANGEMENTS.

WHEREAS, the State Parking Control Program, which is administered by the Department of Accounting and General Services, is primarily responsible for meeting parking demands from employees and officials from the legislature, judiciary, and state administration; members of the general public; service vehicles; and other operational requirements of state agencies; and

WHEREAS, parking demands within the civic center complex is critical, and although it attempts to meet all these parking demands with spaces that are available, the existing parking program is random and arbitrary at best; and

WHEREAS, parking assignments are administered through the issuance of decals or permits for identification, enforcement, and control; and

WHEREAS, the present parking program allows only a particular vehicle to park in designated employee stalls; and

WHEREAS, this practice severely restricts carpooling and ridesharing between state, city, federal, and private company employees; and

WHEREAS, a parking permit system similar to that used by the University of Hawaii at Manoa, whereby the parking pass indicating the lot and stall number is hung on the rear view mirror of the vehicle and a parking stall is assigned by number to an individual with at least one vehicle, may be effective in encouraging carpooling; and

WHEREAS, such a practice would enable state employees to carpool with non-state employees so that the state employee would not have to drive his or her vehicle everyday, and if one of the carpoolers did not work on a particular day, the car pass could be used by one of the other carpoolers; and

WHEREAS, even if the state employee could find only one other carpooler, ridesharing would significantly reduce the number of vehicles on the highway during peak traffic hours; and

WHEREAS, in addition, if carpooling is encouraged among state employees who presently utilize state parking stalls, additional stalls will become available for other state employees; now, therefore,

BE IT RESOLVED by the House of Representatives of the Sixteenth Legislature of the State of Hawaii, Regular Session of 1992, that the Legislative Reference Bureau is requested to study the feasibility of modifying state parking control policies to enhance the formulation of ridesharing arrangements between state and non-state employees; and

BE IT FURTHER RESOLVED that the Legislative Reference Bureau report its findings and recommendations to the Legislature at least 20 days before the convening of the Regular Session of 1993; and

BE IT FURTHER RESOLVED that a certified copy of this Resolution be transmitted to the Director of the Legislative Reference Bureau.