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# GUARANTEED RIDE HOME

# I. DESCRIPTION

Guaranteed Ride Home (GRH) is TSM program providing car and vanpool patrons a ride to home or to other destination in an emergency. The intent of the program is to overcome one of the barriers to ridesharing - need of a vehicle to get home, to school, to day-care or to other locations in emergencies. In spite of the name, the strategy is a guaranteed trip to any location.

The guaranteed trip might be provided through company or public agency cars and fleet vehicles, short term auto rentals or through taxi services in the case of employers or public agencies. Most often, the program is offered by employers as part of a TSM program encouraging car-pooling, transit, walking and cycling. In some cases, it is offered by a government agency, such as the Denver Regional Council of Governments or Metro in Seattle. TMAs also offer GRH. According to one survey, 71 percent offer the service.<sup>1</sup>

GRH is a relatively new TSM concept. In 1989, there were only 11 known and surveyed GRH programs in the country.<sup>2</sup> Since that time, many more programs have developed or are planned. In the greater Los Angeles area alone, 14 percent of firms recently surveyed indicate they do have GRH programs, and 88 percent of those who did not have the program expressed interest in receiving information about it.

Examples of programs include:

 Hughes Aircraft Back-Up Vanpool Program, Tucson, Arizona: provides an emergency van only for vanpoolers during the day and after work. For after work service, employees must call the Hughes rideshare office before 4 p.m.

- Golden Gate Bridge District Flex-Pool Program, San Francisco, California: provides vanpool services for all commuters using District transit, vanpools, carpools or club buses in downtown San Francisco. Vans are owned by the District and driven by volunteer commuters in exchange for unlimited use of the van. Reservations must be made by 3:30 p.m.
- Montgomery County Government Subsidized Taxi Program, Montgomery County, Maryland: provides county employees who use transit and carpool with reimbursement for taxi or transit use in emergencies.
- Denver Regional Council of Governments, Denver, Colorado: 16,500 registered car-poolers who rideshare at least twice per week are eligible for two free taxi rides for emergencies over a 6-month test period.
- Xerox Company Fleet Car Program, Palo Alto, California: rideshare patrons may use company cars in emergencies. Use is limited to two hours, though cars can be brought home and returned the next day.
- City of Bellevue Subsidized Taxi Service, Bellevue, Washington: carpool, vanpool and transit patrons are eligible for the program. Applicants are given taxi vouchers good for limited mileage for one year. Users must pay for the cab themselves, then send in the voucher to the regional transit agency (Metro) and request reimbursement. Metro refunds the taxi fare less a \$1.00 co-payment.

# II. EFFECTS

#### **Effectiveness Considerations**

Effectiveness depends on how GRH effects solo drivers, car-poolers and transit users. The program might cause more car-pooling among those already car-pooling. It might cause some solo drivers to switch to car-pooling or transit. It might cause some transit users to shift to carpools, since the program removes some of the uncertainty about getting to emergencies as a carpool patron. Presumably, the proportion of transit users attracted to car-pooling will be outweighed by the

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proportions of solo drivers attracted to carpools and by the increased use of car-pooling among existing rideshare patrons.

#### **Transportation Effects**

Unfortunately, there is very little good evaluation of GRH to sort out these effects. Generally, GRH programs do not keep track of previous mode of travel or frequency of mode use. One review of eleven programs nationwide found, "no program was able to statistically support or reject the contention that GRH services encourage ridesharing ... mainly due to inadequate ridesharing data before and after the GRH programs were implemented".<sup>3</sup> A review of 77 programs in the Los Angeles area found 74 percent did not know how their program had affected ridesharing. Only 15 percent said the program had increased ridesharing, based on surveys and interviews of program participants.<sup>4</sup>

Seattle Metro did examine before and after mode of travel for a program in the area of Bellevue, Washington. Participants entering the program mainly were regular rideshare and transit users. Only 8.5 percent of participants were regular solo drivers. In terms of total trips made by all the participants, transit and vanpool trips increased, and solo driving trips decreased. While the number of solo driving trips made by the group before the program was small (due to the few regular solo drivers in the program, and little solo driving among regular rideshare and transit patrons), the percent drop in these trips was dramatic: 71 percent. Solo driving trips decreased mostly due to regular solo drivers turning to bus or rideshare use, but not due to a decrease in occasional solo driving trips among regular rideshare and transit users.

The effect on rideshare and transit trips in the Bellevue program was more complex:

- Bus trips increased 12 percent
- Carpool trips dropped 2 percent
- Vanpool trips increased 64 percent.

Evaluators note the main increase in transit and ridesharing trips came from regular solo drivers switching to these modes, rather than increased use of these modes by regular users. The evaluators speculate the small increase in transit and ridesharing among regular users of these modes may be due to their very frequently use of these modes. Ninety six percent of the regular rideshare and transit patrons used these modes at least four days per week before the program. Carpool use decreased due to some switching from carpools to transit and vanpools. Overall, the net effect on vehicle trips was favorable, in spite of a decline in carpool use.<sup>5</sup>

A weakness of the Metro valuation is no control group was employed to determine the amount of mode switching normally taking place among commuters without GRH. A separate study of commuters in the same program area as the GRH experiment found about five percent entered and left ridesharing in the study year.<sup>6</sup> Thus, at least some of the switching to/from carpools in the Metro GRH program might be due to normal or "background" levels of switching.

An evaluation of GRH at Warner Center in Los Angeles did not report prior mode use, only employee impressions of the program. Fifty nine percent of rideshare and transit patrons indicated GRH was important in their decision to carpool, vanpool or ride a bus.<sup>7</sup>

#### **Other Effects and Considerations**

Reductions in air pollution will depend on the effectiveness of the programs in reducing vehicle miles of travel (VMT) by curbing solo driving and/or trip length. As the case studies show, there is little evidence on the effects of GRH. To the extent it switches commuter to ridesharing who drive alone all or most of the time, there will be reductions in VMT.

However, if the program does not increase the frequency of ridesharing among those who rideshare before the program, as in the Metro evaluation above, then the reduction in VMT will be limited to the effects of the program on solo drivers. In the Metro program, only 8.5 percent of program participants previously were solo drivers.



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# **III. IMPLEMENTATION**

### Applicability

GRH programs have been initiated by a wide variety of public and private sector entities. As the examples above show, program sponsors include city and county governments, companies, rideshare agencies and TMAs.

The strategy has the most potential among large pools of clerical instead of professional workers, and in settings where transit service is good or improving.

#### **Planning Considerations**

No matter which entity initiates GRH, program implementation involves several planning and implementation checkpoints:

 Start up usually involves a survey of employees to determine the interest in GRH and the frequency of car-pooling and transit use. Best prospects for successful



implementation are among solo drivers expressing interest in the program and among occasional rideshare patrons whose rideshare frequency might be boosted by GRH.

- A decision needs to be made about how emergency trips will be provided: through company cars and vans, taxis, short term auto rentals, transit or some combination.
- Costs need to be estimated, using possible high and low use ranges. Generally, taxi rental is more cost effective for short trips, but auto rental is preferred for longer trips.
- Most importantly, a decision must be made on what constitutes an eligible trip. Will eligible trips include at work emergencies or late meetings or a combination?

Liability for injury during the emergency ride is an important implementation issue. Employer liability for injury sustained by an employee is governed by state law. In many states, worker compensation laws state an employee must be carrying out a duty in connection with employment at the time of the injury to qualify for compensation. Administrative practice and court precedent in each state will determine whether injury sustained to or returning from work is defined as work related. Generally, injury to/from work is not considered work related injury, though if an employer pays for employee travel or uses its own fleet vehicles in GRH, the travel may be considered work related. If so, the employer may be liable.

Other implementation considerations:

- A written policy is an essential implementation step. It should include the purpose of the program and how it works, define legitimate reasons for using the service, designate a department as responsible for implementation, allow the employer recourse if users violate procedures and attache needed forms (e.g. registration and reimbursement vouchers).
- Eligibility must be clearly defined. Will GRH be available only to full-time employees, to employees at all work sites, only to registered car-poolers who carpool at least some number of days per week, to transit users, cyclists and walkers or all employees?
- Other issues include valid and invalid uses of GRH. Trips for unexpected business appointments, employee or family member sickness usually are valid uses. Personal errands or working late without a supervisors request might be invalid reasons.
- Restrictions must be spelled out. Options include number of uses within a certain period, maximum miles within a period, or maximum cost per trip. A responsible department or employee must be designated for program administration.

Employees do not need to report GRH payments to IRS as taxable income if the program is used only occasionally. IRS has not yet ruled on what "occasionally" means, but use once per month or less most likely is not taxable, whereas use once per week may be taxable.

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Winning management support is an important implementation step. Managers may resist GRH because, at first glance, it seems to require an unlimited budget. One way over this hurdle is to ask management to set aside a small, fixed amount of money to test a six month program. If increased ridesharing and low use of the emergency services are the results, management may then support a broadened program.

Because GRH is a relatively new approach and there is still uncertainty regarding effectiveness, it probably is best to begin with a pilot program. Presuming GRH proves effective and depending on commuters most influenced by the program (family, non-family, frequent or infrequent car-poolers, solo drivers, transit users), the program then can be expanded and targeted. For example, if the strongest effect of the strategy is to switch solo drivers into car-pooling, then GRH campaigns might be targeted toward those corridors and residential areas where there are high proportions of solo drivers.

Monitoring is another important implementation issue. As discussed previously, too few GRH programs evaluate effects of the program on ridesharing and solo driving. An annual survey of prior mode and frequency of use before and during the program is needed to track effectiveness. Control or comparison groups also are needed to insure valid results.

#### Costs

The costs of GRH depend on the frequency of emergency use and the cost of serving a trip. Generally, the costs are not great in large part because participants generally do not use the ride home services very much. Also,



costs can be constrained by limiting the number of rides an individual employee can make, and/or requiring employees to cover part of the trip costs. Some examples of program costs are:

 In the Metro program referenced above, only 2 to 4 percent of the maximum number of subsidized miles available were used. Focus group discussions in this program indicated participants saved their available miles for emergencies.<sup>8</sup>

- The Warner Center TMA in Los Angeles found about 1 percent of the 6,000 eligible rideshare patrons used the service in 1989. The 74 trips taken cost the TMA an average of \$46 each, or \$3,400 total.
- A survey of eleven GRH programs nationwide found average use is about 13 rides per 100 eligible employees per year. However, much higher usage rates are found among programs serving commuters working late or overtime versus programs offering emergency service only during the workday.<sup>9</sup>
- Commuter Transportation Services in Los Angeles suggests for planning purposes one should estimate between .5 and 20 percent of current rideshare patrons will use the service.<sup>10</sup> The high end of the range applies to companies allowing rides for overtime, errands or business trips. The low end applies to companies allowing emergency use only. Given average trip length and taxi rates in Los Angeles, and presuming a population of 350 rideshare patrons in a hypothetical company, the high and low range is \$64 and \$2,240 per year, or between \$0.18 and \$6.40 per rideshare patron per year.

There are other program costs aside from trip payments. Typically, programs will market their services and, occasionally, evaluate them. The Warner Center TMA GRH program was initiated with high quality publications and promotions costing about \$15,000. Of course, the program was targeting 6,000 potential users in an area of 27,000 employees. For most employers and TMAs, the costs should be less.

Finally, some costs may be incurred by employees. One cost is in the form of co-payment. The Golden Gate program described above charges between \$1.50 and \$3.00 per ride, depending on the destination. The Metro and City of Bellevue program charges a \$1.00 co-payment. Another possible cost is in driving responsibilities. Emergency rides may be driven by rideshare or security staff at larger companies or public agencies. This is the case at Hughes Aircraft in Tucson, Arizona and Palo Verde Nuclear Power Plant, Wintersberg, Arizona.<sup>11</sup>



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The financing of GRH varies depending on how the program is integrated into other TSM services. At the Hughes Aircraft program referenced above, the cost of GRH is included in the overall budget for vanpool services. The same is true at 3M, St. Paul, Minnesota. In a program for employees of Montgomery County, Maryland, use is expected to be so low that the trip costs will be covered from petty cash allotted to departments. In some cases, because GRH is a relatively new strategy, programs have been initiated with federal demonstration grants. Golden Gate Bridge, Highway and Transportation District received a demonstration grant to begin its program.

# **IV. FUTURE DIRECTIONS**

GRH is a promising strategy for boosting ridesharing, but it should be further tested before broad promotion and adoption. In the few instances where GRH has been evaluated, it appears to have attracted some solo drivers to ridesharing, but its effects on employees already ridesharing are still uncertain. One hypothesis worth testing is whether GRH can boost the frequency of carpool, vanpool and transit use among infrequent users of these modes. Another key issue to examine is the degree to which GRH influences solo drivers to switch to car-pooling or transit. A final issue needing evaluation is whether or not GRH affects the frequency of family member versus employee car-pooling. It may be that GRH is of less benefit to spousal carpools since either carpool member can handle an emergency involving their child, whereas only one person in an employee carpool can handle an emergency involving their child. Careful tracking of employee mode use, frequency of use, behavior of family versus non-family car-poolers and switching among modes before and after introduction of GRH (preferably at employers with and without the program) will provide answers to these issues.

GRH deserves continued testing and evaluation in the future. Key issues include:

#### Effectiveness

• What industries, agencies, businesses and employee groups are best candidates for GRH?

- As programs mature, what participation rates can be expected among private and public employers over a region?
- In what situations will GRH attract the most solo drivers, boost transit and carpool use and shift the least transit users into carpools?
- Is spousal or commuter carpooling more likely to occur under GRH?
- What is the effect of broadening eligible trips from emergencies to overtime and errands?
- What is the effect of varying levels of co-payment?

#### Implementation

Implementation of GRH entails several implementation issues deserving attention and analysis:

- Under what conditions are company cars and vans, taxis, short term auto rentals, or transit the preferred means of providing the guaranteed ride?
- What are expected cost ranges for programs and determinants of cost?
- How can GRH agreements be best structured to account for liability under worker compensation laws?
- What are model policies and agreements defining eligibility, legitimate program purposes, employer recourse for violation of the agreement and other particulars?
- What program elements or test periods are needed to win management support?
- What co-payment and ride restriction policies are reasonable and acceptable from the employee standpoint?

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-	Footnotes	
1	<i>TMAs: Organization, Implementation and Evaluation,</i> Erik Ferguson, Catherine Ross and Michael Meyer, paper before the Transportation Research Board, January, 1991.	
2	An Examination of Eleven Guaranteed Ride Home Programs Nationwide, Cosette Polena and Lawrence Glazer, Crain and Associates, paper before the Transportation Research Board, January, 1991.	
3	Cosette Polena and Lawrence Glazer, Op. Cit.	
4	<i>Guaranteed Ride Home: Taking the Worry Out of Ridesharing,</i> Commuter Transportation Services, Los Angeles, 1990.	
5	"Guaranteed Ride Home: An Insurance Program for HOV Users," Eileen Kadesh and Laurie Elder, Transportation Research Record No. 1212, Transportation Research Board, 1989.	
б	The Difficulty With Easy Ride: Obstacles to Voluntary Ridesharing in the Suburbs, Stephenie Frederick, Kay Kenyon, paper before the 1991 Transportation Research Board Conference.	
7	Evaluation of Second Year Effectiveness of Guaranteed Ride home at Warner Center TMO, Christopher Park, Paper before the Transportation Research Board meeting, January, 1992.	
8	Eileen Kadesh and Laurie Elder, Op. Cit.	
9	Cosette Polena and Lawrence Glazer, Op. Cit.	
10	Commuter Transportation Services, Op. Cit.	
11	Cosette Polena and Lawrence Glazer, Op. Cit.	
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