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**REVIEWING, ANALYZING AND UPDATING MARKETING STRATEGIES TO
INCREASE PUBLIC TRANSIT RIDERSHIP**

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ABSTRACT

Ridership in the United States has been fluctuating over the last decade. With fuel prices increasing, urban and suburban settlements growing and global warming and environmental impact getting special attention, it is important to increase our knowledge of best marketing practices to attract riders to public transit as a better alternative to the use of their own car. Houston Metro is adding roughly 30 miles of light rail, offering new quick lines and routes and in general improving efficiency and reducing costs. But in order to move people out of their cars for all or some of their travels, a deeper analysis of the variables and a strategy to promote the public transit is required.

EXECUTIVE SUMMARY

The content of this research is to identify the various factors which might encourage the increase of transit ridership in two employment centers in Houston, Texas. Houston METRO is currently constructing 30 miles of light rail transit to supplement a regional bus system and its light rail starter line. Downtown Houston is the primary focus of the bus service and will serve as the nucleus for the rail service. The Galleria and Greenway Plaza areas have very large concentrations of employment, as well. METRO provides express Park and Ride service from a few locations to the Galleria and Greenway areas. The question in this research is what segment of workers will never be attracted to riding transit. Secondly, of those persons indicating willingness to ride, what variables work against their choosing METRO service and what are their personal perspectives about riding transit? To determine the responses to those questions, an on-line survey instrument was administered to persons in the database of Downtown, Greenway Plaza and Galleria area management associations.

The survey targeted persons who did not ride METRO, so of the respondents 96.9 percent indicated they do not ride METRO. The initial survey question asked riders to not continue the survey. About 89 percent rely on their vehicles as the primary mode of transportation with 17.5 percent traveling at least 45 minutes. A hindrance to using transit is peripheral trip making; the survey showed that 83.7 percent sometimes embark on personal trips, running errands, drop-off and pick-up children from school. The major reason given for not riding by 28 percent of respondents is METRO's existing service does not meet their need. An important finding is that 30 percent noted they would not consider riding METRO.

Reports of the number of transit riders' rise and fall across the years based on a variety of variables, among them are employment rates and gas prices. With fuel prices projected to increase over the years and urban and suburban communities continue growing, it is important to increase our knowledge of best marketing practices to attract riders. Age, gender, employment status, occupation, race and whether or not one possesses a driver's license all affect transit ridership. Moreover, socioeconomic characteristics of the household, such as household size, auto ownership or availability, income, housing, and lifestyle are important, as well. Literature shows that transit is generally viewed as inexpensive and serves as a method to reduce pollution and provide an alternative to congestion. In the case of the Houston centers surveyed, there may be people who think they do not have service when transit is actually available to them. These cases may present the opportunity to improve the marketing for services. In order to get more people out of their vehicles into the public transit systems, marketing should be geared to influencing their perceptions of public transit to stress efficiency, reliability, safety and security. As funds and potential demand support such, strategies must include increasing the services that are available to better meet needs. The use of public transit will surely increase as METRO brings additional light rail to fruition, and continues work with private agencies and other organizations whose interest is to increase transit ridership.

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INTRODUCTION

Ridership in the United States has been fluctuating over the last decade. With fuel prices increasing, urban and suburban communities growing and global warming and environmental impact getting special attention, it is of importance to increase our knowledge of best marketing practices to attract riders to public transit as a better alternative to the use of their own car. Houston Metro is adding roughly 30 miles of light rail, offering new quick line bus routes and in general improving efficiency and reducing costs. Downtown Houston is the historical focus of the bus service and will serve as the nucleus for the rail service. The Galleria and Greenway Plaza areas have very large concentrations of employment, as well. METRO provides express Park and Ride service from some residential locations to the Galleria and Greenway areas. In order to move more people out of their cars for all or some of their travels, a deeper analysis of the variables and a strategy to promote the public transit is required.

Transit agencies are known to sponsor various advertising strategies to attract riders. These strategies may include promotions for free or reduced rides, enticing advertisements, and information about cost savings. Beyond this, some agencies have market research components that investigate what riders desire and try to encourage officials to tailor services to perhaps more latent demand. In recent years, as budgets have tightened agencies have relaxed the market research components of their business and concentrated on more basic needs. As society is more technology dependent, it is opportune to discover what incentives or information will attract individuals from their private vehicles. This question is critical for communities across the nation as roadways become more congested and dollars available for highway expansion continue to lessen.

In 1994 the CTTR at TSU conducted a study based on a survey followed by a focus group. The findings from that work showed that potential cost or travel time savings did not motivate people to leave their cars. The participants responded positively to the potential to improve the environment. This proposal wants to reassess the rationale for transit choice and update to the present time. What variables might motivate an individual to move from personal transportation to public transit? How can knowledge about this information be used to promote and improve transit ridership?

RESEARCH OBJECTIVE

The goal of this research is to explore the travel habits of a select group of Houston employees to assess what information or marketing tools might motivate people to utilize public transportation. Specifically this research will:

- Describe the variables that individuals indicate influence their mode choice toward the automobile.
- Explore the information that can be shared to modify that mode choice.
- Also, this work will specifically solicit the portion of respondents that indicate they would never use public transportation.

LITERATURE REVIEW

The performance of the public transportation system in a growing urban area can help reduce congestion, environmental degradation, tailpipe emissions, improve air quality, and encourage mixed use development. Fast, frequent, reliable, direct, and inexpensive transit service is necessary but not sufficient to achieve mode shifts from auto to transit. To be relevant and competitive and to achieve mode shifts, good marketing strategies will play a vital role and must go with good quality transit services. The following represents an annotation of selected previous literature about public transit riders and marketing strategies.

According to Cervero and Kockelman (1997), age, gender, employment status (full time or part time), occupation type (managerial, retail and service, etc.), race and ethnicity, and possession of driver's license all could affect transit ridership. Moreover, socioeconomic characteristics of the household, such as household size, household structure and composition (for instance, number of persons younger than 5 years of age and those 5 years and older) affect ridership. Vehicle ownership, auto availability, income, housing tenure (own or rent), lifestyle, attitude toward using transit, and walking can also be regarded as important factors of transit ridership. Many of these factors relate directly or indirectly to variations in accessibility to a personal-use vehicle (auto or light truck). As noted by Crowley (2000), the most important single factor in explaining variations in transit use is auto availability.

In 1994, research was conducted on this question querying Houston area residents regarding their perspectives about transit. Researchers learned that individuals' perception about transit improved after they had ridden the system. At that time, the study group was not concerned about cost savings or time savings that could be attained via bus ridership. The only strategy they indicated would encourage them was improving the environment (Lewis and Lede, 1994)

Readily available and easily understood information seems to be the key to attracting new riders. Maps and attention to popular spots has served other cities well in assimilating new riders into the system ((Dziekhan, 2008). Houston locations such as the Museum of Natural Science, the Reliant Stadium (NFL venue) and Texas Medical Center are on the first 7 miles of light rail (the red line). The additional lines will link the University of Houston and Texas Southern University and the Houston Galleria area with the initial red line. According to the work by Dziekhan attracting new riders to these familiar landmarks, initially, can ease people into the system and increase their comfort levels leading to trip making by transit for other trip purposes.

Yalch et al. (2008) used on-line and telephone surveys to assess the Chicago area transit customers. They learned that respondents answering on-line surveys were biased in numerous areas when compared to those queried by telephone. On-line responders were likely to be students and ethnicities other than Hispanic. They tended to be harsher in rating existing service and less likely to recommend transit to others.

Yalch et al. note understanding the customer base is key to gaining new system riders. The macro (system wide) marketing research is an important function in effectively serving the urban areas (Davis and Mundy, 1992)

Perceptions of Transit and How the Industry Markets Itself

According to Rhindress et al., (2008) transit is generally viewed as inexpensive, sometimes convenient, brings mobility as well as reduces pollution and congestion. On the other hand people view it as time consuming, inconvenient and crowded. Having recognized that consumer behaviors are mostly affected by their values and perceptions, transit operators have used segmentation to guide strategy to achieve its marketing goals. Rhindress et al. suggest that even though transit agencies are faced with a big challenge with the growth in automobile ownership in the US, they can however take advantage of the existence of seniors and immigrants and give more attention to marketing and research practices that will be attractive to them. They should also work on the disadvantages and come out with strategies to increase awareness to help people to learn more about their local transit and to see it as an alternative for getting around.

The Role of Marketing in Public Transit Organizations

The role of marketing in respect of increasing transit ridership and to reduce urban traffic congestion is very crucial. Research has shown that most transit organizations have no marketing managers and that marketing is not given the needed recognition within the transit industry and is not embraced as a necessary part of their managerial activities. (Cronin Jr. and Hightower Jr., 2004). This means that there is the need for additional marketing education in the public transit industry. Cronin and Hightower also noted that most public transit industries do not have managers specifically for marketing positions; they only use other managers to be responsible for marketing, and pointed out the need for more industry-specific or in-house marketing education. They suggested that there should be marketing plans for the organizations and have a fixed schedule for the review of their marketing plans.

Proven Marketing Strategies for Public Transit

According to the TCRP Report No. 50, (1999), the use of marketing principles and strategies is a significant tool for transit agencies in meeting their goals of maintaining service levels to attract new riders and retain existing ones, as well as ensure support from the community at large. It continues to state that marketing must be viewed as a comprehensive process that is well planned, monitored and evaluated in order to maximize its impact. Some of the most successful public transit systems have adopted an approach to marketing of services that does not differ from any privately owned or operated service.

Generally good marketing in the private and public sector begins with the design of a good product or service to meet consumer needs. Other tasks include determining the appropriate distribution channels (place) and price (fare), before supporting those tasks with a promotional program. These marketing principles can be applied to public transit where service should be developed and planned through routes and schedules; distributed through fare media and sales outlets; and priced through fares and discounts, as well as promoted through awareness campaigns and advertising (TCRP Report No. 50, 1999, p.9).

The report suggests that marketing techniques that are both low-cost and cost-effective are needed by transit agencies and may be “crucial to their viability” (p. 37).

Factors Affecting Transit Ridership

Perk et al., (2008) discuss three major components that affect transit ridership. These include travel time reliability, rider cessation, and the characteristics of infrequent riders. They go on to indicate the following.

Transit service reliability. Where vehicles run on time and adhere to schedules has been a basic service objective of the transit industry, and it is essential to attracting and retaining riders.

Rider cessation and retention. Rider cessation is a situation which results from change in job, job location, or residential location and also when customers gain access to a car (i.e., when they have a choice). As such, ridership retention strategies should be adopted.

Infrequent Riders. Where transit agencies may boost ridership by encouraging infrequent riders to use transit in order to prevent rider cessation. It is important to note that infrequent riders can be a critical market for building transit ridership and revenue. At the same time failed services can cause people to switch or stop using a product/service.

They came to a conclusion that reliable transit service is essential to attracting and retaining riders, particularly in modern times when many transportation options are available. Transit service reliability is an important measure of service quality and has a direct influence on both level of service and passenger demand. (pp. 8-11)

Parking Policies as a Strategy to Increase Transit Ridership

Parking policies as a strategy to attract auto users to public transportation cannot be overlooked when discussing how to increase transit ridership. According to the TCRP Report 40, (2000), the goal of policy-makers at all levels of government has been to increase transit ridership for the achievement of the following:

First is to comply with federal legislations such as the Clean Air Act Amendment of 1990 (CAAA), which recognizes the growing use of the private automobile as the primary source of environmental degradation. Secondly, to encourage transit ridership through explicit parking pricing in areas of congested peak-hour travel and parking. Thirdly, to address parking problems and decrease SOV use in suburban activity centers or other non-central areas of growth, and lastly, to encourage transit ridership through explicit parking pricing in non-downtown commercial areas with parking problems. The report went on to state that increasing the prices of off-street parking can be a primary factor that affect the mode of choice of auto users. As a result an increase in parking prices can increase transit ridership (TCRP Report 40, 2000).

Cervero and Kockelman found that “density, land-use diversity, and pedestrian-oriented designs generally reduce trip rates and encourage non-auto travel in statistically significant ways, though their influences appear to be fairly marginal” (p. 4). Also, previous research showed that transit use depends primarily on local densities and secondarily on the degree of land use mixing.

Using Market Segmentation to Increase Transit Ridership

Another definition is to divide a market by a strategy directed at gaining a major portion of sales to a subgroup in a category, rather than a more limited share of purchases by all category users. According to TCRP Report 36 (1998), using a market segmentation strategy will help improve your agency's competitive position and better serve the needs of your customers.

Market segmentation is the process by which market segments/group of customers are with similar characteristics or needs and who exhibit similar purchase behavior to changes in marketing mix are identified. This is done with the expectation that some market segments will respond more positively than others do to marketing variables (TCRP Report 36, 1998, p. 9)

Market segmentation will increase ridership by both increasing the frequency of riding and attract new riders. It is important for efficient allocation of resources to go to market segments with the greatest potential for change. The report further noted that market segmentation provides the necessary research base on which all other marketing strategies can be successfully formulated. This includes all aspects of marketing, including product, service development, route structure, pricing and fare programs and communications. The report notes that segmentation is a systematic approach for controlled market coverage and expansion.

Public Transportation Marketing

In their book, *Public Transportation*, Gray and Hoel (1992) state that operating in a competitive environment where the public is free to choose presents a great challenge, and that organizations must develop customer-oriented delivery systems rather than focusing on operating systems. Public transportation must be allowed to change to match changing conditions in order to be successful in accomplishing its goals.

Pricing Strategies and their Effect on Public Transportation

According to the FHWA's Congestion Pricing Primer (2009), congestion pricing and public transportation convey mutual benefits in several ways:

- Road pricing benefits public transportation by improving the speeds and the reliability of public transportation service, increasing public transportation ridership, lowering costs for public transportation providers, and expanding the source of revenue that may be used for public transportation.
- Public transportation benefits road pricing by absorbing commuters who shift their travel from automobile to bus or rail.

By replacing traffic with free-flowing conditions on major routes, congestion pricing can improve the speed and productivity of current express bus services, making them more

attractive to commuters while reducing operating costs. Reducing congestion can also facilitate rapid deployment of innovative, high-performance bus rapid-transit (BRT) operations in major corridors, which require only modest investments in new vehicles and passenger facilities it stated (FHWA, 2009).

Improve Service Quality

A key precept of marketing is to provide a quality “product”. In the case of public transit, a reputation for providing quality service both encourages increased ridership and increases public support for transit. Both tax-based funding and fares become more acceptable when service quality is high. A key marketing effort, therefore, is to begin other measures to improve on-time performance, improve passenger amenities, and improve peak load capacities (Norman, 2003).

Transit Markets of the Future

In the TCRP report 28 (1998), Rosenbloom et al. identified thirteen (13) service concepts to be effective in increasing transit ridership, as follows:

- Feeder services,
- Express buses,
- Services to large employers,
- Reverse-commute services,
- Vanpool incentives,
- Park-and-ride services,
- Fare incentives,
- Travel training and transit familiarization,
- Light rail,
- Commuter rail,
- Route restructuring,
- Community buses/service routes and
- Special event services. (p. 51, p. 56)

The authors note that many riders are not those traditionally dependent on transit, and economic, demographic, social, and land use trends, as well as transport policies will influence future travel demand. They confirm the market segmentation literature indicating different kinds of consumers and segments have different needs. Like skilled marketers, planners must craft strategies rooted in consumer information that encourages people to choose mass transit over private vehicles. Agencies must identify and respond to the needs of travelers to maintain ridership and public support.

Other key lessons learned from the review of literature on marketing strategies are summarized below.

Understand the Market. Understanding customers and responding to their needs are very important. Market research, creating relationships with customers, listening to positive and negative feedback and making appropriate changes in response to the feedback is a crucial initial step.

Know and Describe the Product. The better the market is known; the more likely the product will fit the needs. Research can help in the design of transit service, as can a solid understanding per the previous point.

Enhance Customer Awareness. Transit professionals do not often consider themselves in sales and marketing, but in essence that type of thinking can benefit the user and the agency. Planning the sale, expressing the benefits and closing the sale by gaining new customers would bring an important cultural and business perspective to the transit agency.

Direct Sales Approaches. A number of transportation management associations sell transit service by making available bus passes, information kiosks and other direct approaches to gain new riders. Email is an often used way to appeal directly and on an individual basis to potential riders.

Advertising and Publicity. Media purchases in local and community newspapers is a frequently used advertising method. Also, when finances allow radio and television spots may be used to provide transit messaging. Public service announcements and free municipal channels offer no cost or lower costs approaches to reach traditional non-riders with transit service information.

In tandem, the above create a package of components that form a strategic outreach strategy to attract and retain new transit riders. The concept is to address the needs of the users by learning from research, listening to comments and building relationships.

The Future of Highway and Transit Finance

The Executive Committee of the TRB has listed finance as one of nine critical issues in transportation (CriticalIssues06 pdf). Forecast has indicated that the Highway Trust Fund will be out of funds by 2009/2010 and therefore will be unable to maintain levels of funding in the next reauthorization cycle of SAFETEA-LU. The next reauthorization will have to tap into other revenue sources to generate funds to boost revenue.

The main sources of funds for transit are fares, and funds from local and state government sources. Such sources are not increasing so fast as the system expands and requires the expansion of their operating funds. (CriticalIssues06). (pp. 9)

According to the (TR News 2006 edition) Financing Highways and Transit, the main sources of finance for highway and transit are

- Gas Tax
- User Fees – Diesel fuel – 24 percent Gasoline I – 16 percent; Fees on Tires, Trucks and other user charges – 9 percent

- State Mixes
- Local Contributions (pp. 2-3).

The largest source of revenue and more than one-third of total U.S. revenue available for highway spending comes from federal and state gas taxes. Almost 51percent of the revenue deposited to the federal highway trust fund comes from gas taxes. Twenty one (21) percent of all revenues for highways come from the federal government. Fifty two (52) percent comes from state governments and 27percent comes from local governments.

Transit Financing: Federal grants are provided from the Mass Transit Account of the Highway Trust Fund. Many states spend some of their gas tax receipts on transit. Ten states spend no gas tax receipts on transit, 19 states spend less than 1 percent on transit, 4 states spends 15-25 percent on transit. Other local revenues that transit receives are from sales taxes, property taxes, general revenues, advertising and fares.

Threat to fuel tax: Fuel taxes account for 91 percent of the Federal Highway Trust Fund revenue but the continuing improvements in vehicle fuel economy and or alternative fuels and inflation will cause a decline in the fuel taxes.

Other Options to Consider are as follows:

At the Federal Level

- An alternative means of taxing hybrid vehicles.
- Alternative fuels to be taxed
- VMT revenue system would be useful for electric vehicles
- Hydrogen should be taxed as fuel.
- Index motor fuel taxes to inflation, but did not attract sufficient political support to be included in SAFETEA-LU.

At the State level

- A VMT tax to replace the gas tax can generate as much revenue as a gas tax of 20 cents per gallon.
- A weight-distance tax
- The use of bond proceeds could increase 14percent of highway tax
- Indexing the gas tax to the rate of inflation
- Tolling on new facilities in selected circumstances could be considered. No state however found this politically possible.
- Vehicle sales taxes
- Congestion pricing or value pricing.

Additional proposals include bonding, tolls, HOT lanes, import revenues and toll facility leases. The paper concluded that there is the need to use the available revenue effectively. The transportation community must be well prepared and must identify suitable alternative ways to produce revenue as external conditions change.

Lessons Learned from TRB 89th Annual Conference 2010

For transit agencies to succeed in increasing ridership they should consider the following:

- Focus on efficiency and effectiveness of their operations; and policy makers should come out with some policy reforms to make it a success.
- Transit agencies should identify market segments and their varying service needs
- Funding: A more stable funding for transit is clearly a central issue and if resolved would help transit agencies accomplish much more than they can do under current conditions.

Some additional policy reforms that are needed to make transit a success are as follows:

- Improve the correlation between funding and ridership, measured not just as a count but also as a share of travel. Provide incentives for increasing transit mode share as well as transit ridership totals.
- Increase the connections between funding and outcomes that help achieve important policies such as congestion reduction and greenhouse gas mitigation.
- Create incentives for strategic partnerships with private sector employers and other organizations whose interests would be well served by higher levels of transit ridership and who might also be sources of funding support.
- Help transit agencies identify potential new markets for services. State and regional agencies could do this by carrying out surveys designed to identify market segments where transit could succeed.
- Help transit agencies test new services and programs without incurring significant liabilities (financial, political) if the new ideas fail.

There is a strong link between congestion pricing and transit and that the two should be used jointly to insure success. The following are some of the lessons learned:

- Transit improvements should come at the same time or prior to implementation of congestion pricing for maximum impact and public support
- Transit investments should not be limited to the revenue generated by pricing projects.
- Integrating congestion pricing and transit in planning and development can lead to big payoffs in livability and sustainability.

- System-wide strategies involving congestion pricing and transit offer considerable benefits.
- The U.S. federal government should encourage congestion pricing innovations to achieve livability and sustainability goals by integrating congestion pricing and transit through an innovations grant program such as the Value Pricing Pilot Program.
- Federal transit funding should give higher priority to projects involving congestion pricing.
- It was also learned that transit do play a role in reducing carbon emissions through technology, i.e., replacing old buses or using cleaner fuels.

Summary of Literature Review

From the review of literature, one can conclude that understanding customers, responding to their needs and selling to them are critical elements of successful transit marketing activities. Transit agencies can come up with improved services if only they conduct market research to understand the transportation needs of customers.

METHODOLOGY

In this study, various data collection methods including literature review and an online survey were used. Literature review provided information on research that has been conducted on perception of transit ridership and marketing strategies to increase transit ridership. Information helped to frame the survey questions. Data collection through online survey (Survey Monkey) was used. The study team developed the instrument and sent to employees from Greenway Plaza, Galleria and Downtown areas through the management associates for those areas, TREK and Central Houston, Inc., respectively. A pretest of 20 individuals occurred; thereafter survey questions were modified based on the pre-test results. A total of 750 persons received the survey with 98 responses received. The respondents are anonymous and not identifiable through the aggregated responses. Sixteen questions covering the respondents travel habits; their willingness to ride METRO, demographic and location information were asked. This assessment is viewed as informational because the number of respondents represents far less than 1 percent of the employee pool for those employment centers.

The major tasks of the study are as follows:

- Task 1:** Review and update literature relative to marketing and public information campaign to promote transit ridership.
- Task 2:** Identify a set of individuals including employees from Greenway Plaza, Galleria and Downtown areas of Houston, TX who currently do not drive to their jobs to serve as a focus group.
- Task 3:** Develop interview instrument to determine the state of the perceptions about public transportation.
- Task 4:** Give a pretest to the focus group inquiring of perceptions, matters of convenience and concepts about public transit in Houston.
- Task 5:** Revise the survey instrument per the pretest and administer the survey.
- Task 5:** Synthesize results and prepare the final report.

FINDINGS

The online instrument (Appendix A) sent to Downtown, Galleria and Greenway Plaza management district employee data bases yielded 98 survey respondents. People, who do not ride transit were the focus of the survey, so current users were not solicited. The questions inquired mostly about the key reasons respondents do not use public transportation with three questions focused on employees' household information. Important points from the survey are below.

General Information Summary

- 96.9 percent of respondents do not ride METRO; the initial survey question asked riders to not continue the survey.
- About 89 percent rely on their vehicles as a mode of transportation.
- The respondents' average time traveled to work varied greatly; 17.5 percent traveled at least 45 minutes.
- The survey also showed that 83.7 percent sometimes embark on personal trips, running errands, drop-off and pick-up children from school.
- Major reason given for not riding by 28 percent of respondents is METRO's existing service does not meet their need.
- 30 percent note they would not consider riding METRO.
- 38.9 percent indicated have no reason to consider riding METRO.
- If seeking information on how to ride, over 90 percent would look on the internet.

Respondents' Travel Behaviors

The survey results indicated that roughly 89percent of respondents own and travel to work by car or truck, 6.2percent carpool. The remaining respondents indicated 'other' which could mean inconsistent travel arrangements because walking and biking could have been selected. One reason people do not chose public transit is because of mid-day trips or errands where they need their cars; 21.1 percent of respondents run errands or have personal trips at lunch. Of the others, 32.6percent do not run errands or personal trips at lunch. For the home to work portion of the trip, the majority of those answering the survey (70.5 percent) do not regularly drop-off or pick-up children from school, although 29.5percent occasionally pick up or drop off children. A portion of those answering the survey indicated they do not run errands, which provides a potentially easier pool to attract to public transit (Figure 1).

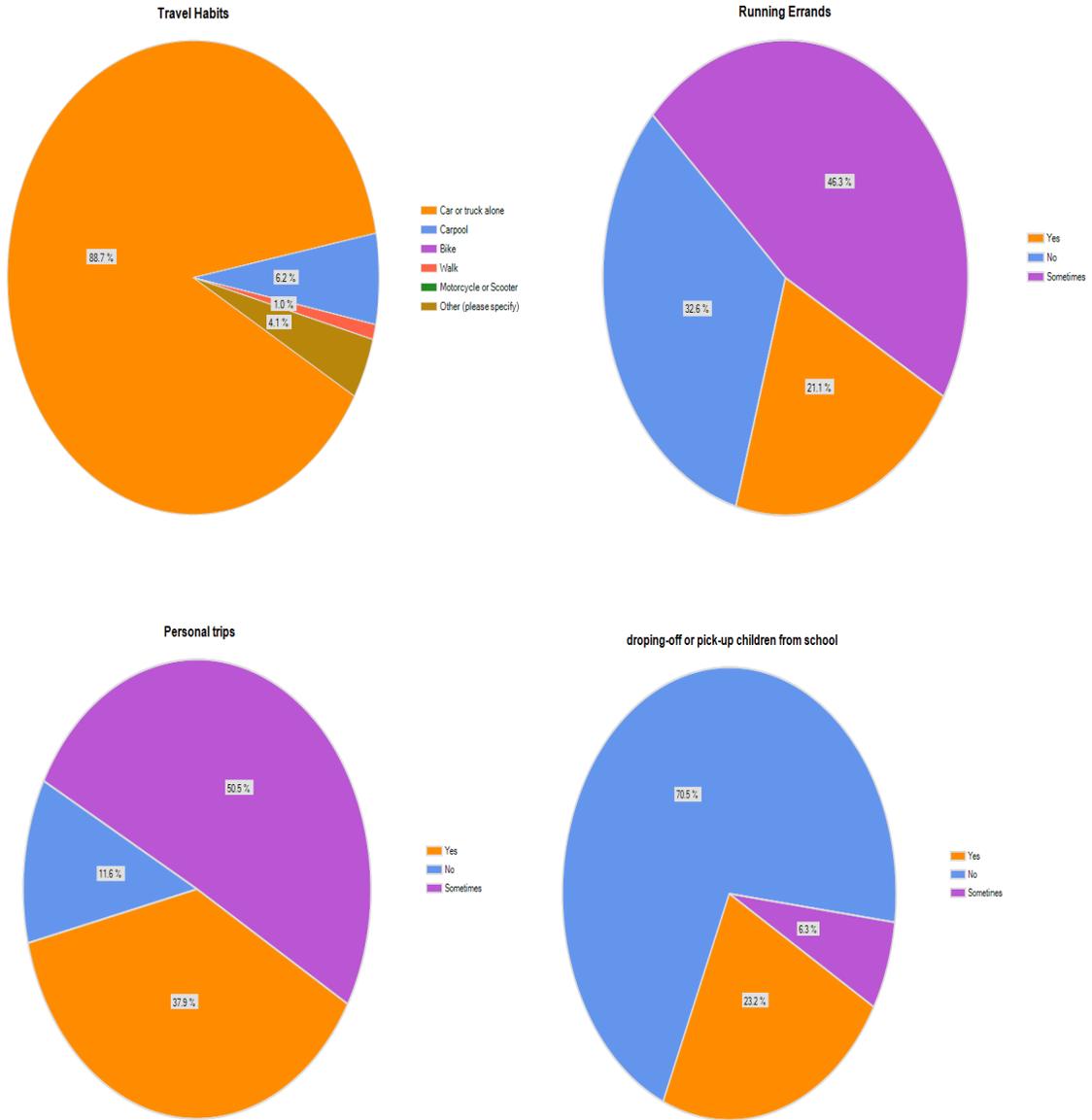


Figure 1
 Respondents' Travel Patterns, Behavior and Habits

Respondents' Willingness to Ride METRO

Regarding the respondents' willingness to ride METRO, 30percent indicated they will never ride. That implies almost 2 of 3 downtown, Uptown and Greenway employees would consider riding METRO under certain conditions. A variety of reasons can be considered to increase ridership including improved transit travel time, flexible work schedules, bus availability and access closer to home or work, more frequent service and better on-time performance. If parking prices at work are higher, road pricing fees increase and if fuel prices increase to \$4.00 per gallon, responders would be more likely to consider transit. Reasons not directly linked to travel are safer pedestrian access to and from stops, helping the environment by saving fuel and improving air quality. Links with regional rail is beneficial, a point which is positive for METRO's rail line extensions. Greater detail can be viewed in Appendix A. Table1 and Table1.1 show the number and percentage of respondents and the reasons why they do not ride METRO; they also show the various reasons most likely to get respondents to consider riding the bus or light rail. Also shown is 38.9percent of the respondents indicated they have no reason to consider riding the bus or light rail.

Respondents' Residential Information

Respondents gave various work zip codes for their home locations. Respondents' home zip codes showed how dispersed the origins throughout the region and why it is somewhat difficult to provide extremely high levels of transit service. The travel time responses are that 12.4percent travel 10 minutes or less, 25.8percent travel between 10 up to 20 minutes, 11.3percent travel 20 to 30 minutes, with 33.0percent at 30-45 minutes and 17.5percent travel more than 45 minutes. Figure 2 shows the distribution of trips.

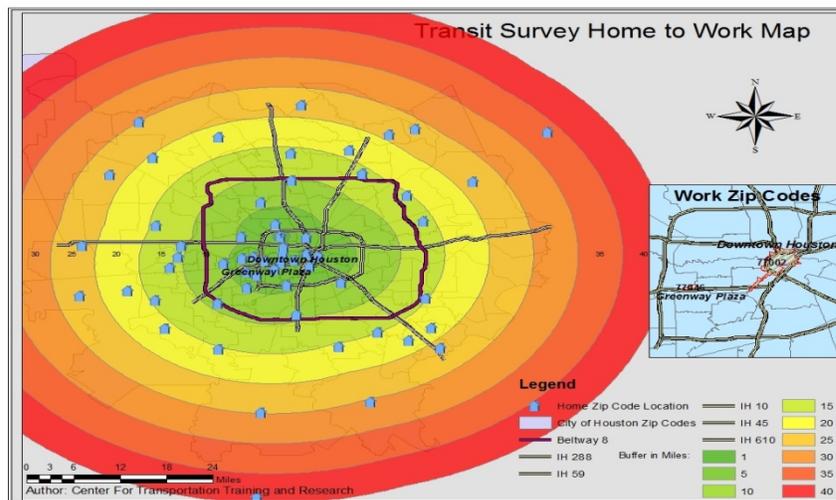


Figure 2
Respondents' Local Information

Respondents' Demographic information

Regarding respondents job status 96.8percent of the 98 respondents are full-time employees (working 35 hours or more), 3.3percent were part-time workers or working at one location and moving to another location. Annual income of respondents ranged between \$25,000 and \$300,000. None of them made less than \$25,000 annually. Thirty four (34.8)percent were single or single with a child, 56.9percent were married or married with children, 4.2percent were divorced or divorced with children. On the number of persons residing with respondents it was found that 21.1percent had one person residing with them, 34.7percent had two, 23.2percent had three, 11.6percent had four, 5.3percent had five and 4.2percent had more than 5 persons residing with them. Figure 3 details the respondents' demographic information.

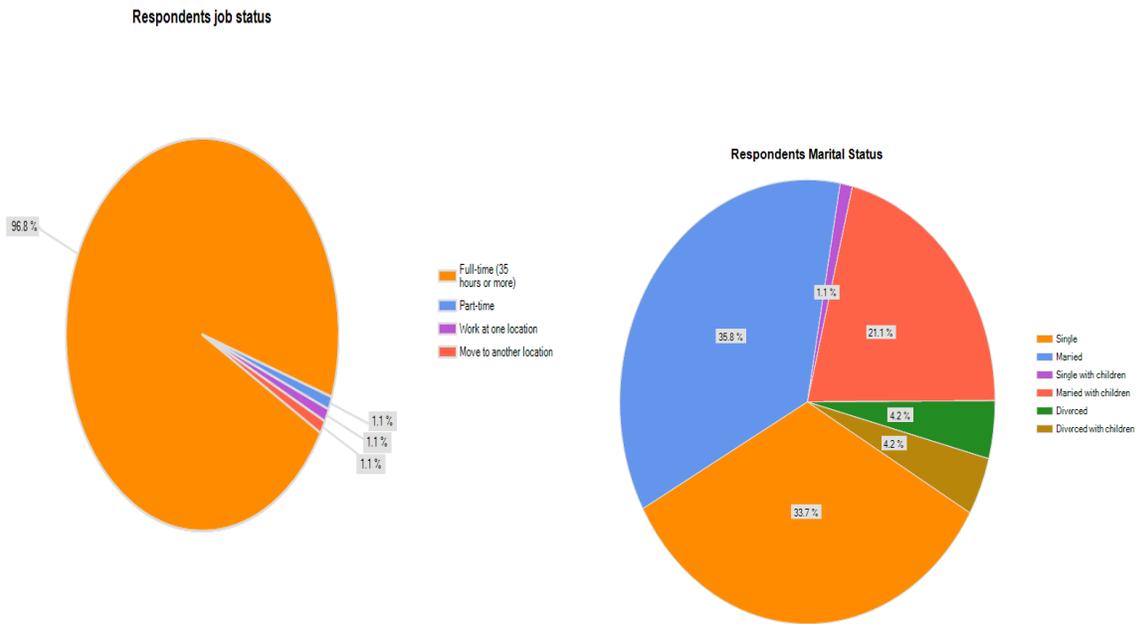


Figure 3

Respondents' Demographic Information

Number of Persons Residing with the Respondent

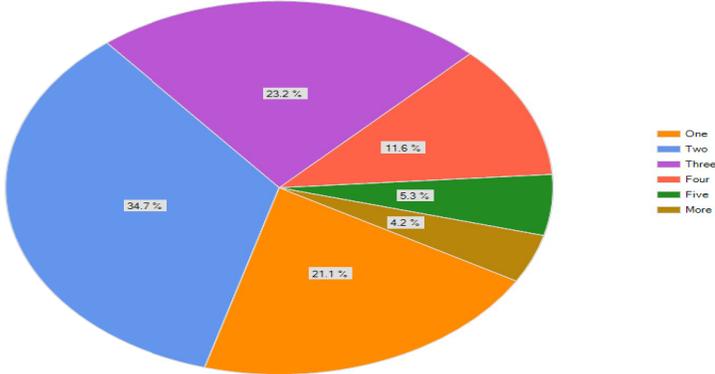


Figure 4
Number of Persons Riding with Respondent

CONCLUSION

Reports of the number of transit riders' rise and fall across the years based on a variety of variables, among them are employment rates and gas prices. With fuel prices projected to increase over the years and urban and suburban communities continue growing, it is important to increase our knowledge of best marketing practices to attract riders. Age, gender, employment status, occupation, race and whether or not one possesses a driver's license all affect transit ridership. Moreover, socioeconomic characteristics of the household, such as household size, auto ownership or availability, income, housing, and lifestyle are important, as well. Literature shows that transit is generally viewed as inexpensive and serves as a method to reduce pollution and provide an alternative to congestion. On the other hand people view it as time consuming, inconvenient and sometimes crowded. Marketing has been shown as an important tool in attracting new riders. Segmenting the market applying strategies, specifically targeting to demographic and potential riders lifestyles, is especially effective. Marketing must be viewed as a component of a comprehensive package of great service that is comfortable, safe and reliable. As in the case of any implemented task, the marketing should be monitored and evaluated to ensure its meeting goals.

Based on the survey of Houston area employees of the identified activity centers, roughly 30 percent of respondents indicated they would not consider riding transit. This is an important element to understand as METRO seeks to attract new riders. The remaining 70 percent form the core audience to attract. While not an absolute, errands or other personal trips on the way to or from work, may diminish a potential rider's likelihood to choose transit. Eleven percent of respondents had no peripheral trip making and another 40-50 percent only occasionally had extra stops. In general, respondents indicated current METRO bus service does not meet their needs. More in-depth analysis would be necessary to determine whether this is true or whether the employees are not fully aware of the METRO services. Cases where individuals have service available may present the opportunity to improve the marketing for services. In order to get more people out of their vehicles into the public transit systems, marketing should be geared to influencing their perceptions of public transit to stress efficiency, reliability, safety and security. As funds and potential demand support such, strategies must include increasing the services that are available to meet needs. The use of public transit will surely increase as METRO brings additional light rail to fruition, and continues work with private agencies and other organizations whose interest is to increase transit ridership.

APPENDIX

Appendix A-1

Table 1

Reasons for not riding METRO	Response Percent (%)	Response Count
Travel time is too long	12.6%	12
Have your own car	23.2%	22
Not convenient, stops no close enough	8.4%	8
Fare too high	1.1%	1
Buses are unreliable	2.1%	2
Not too safe	2.1%	2
Not convenient, schedules don't match my needs	22.1%	21
Other (please specify)	28.4%	26

Reasons to get you consider riding METRO	Response Percent (%)	Response Count
More frequent bus service	10.5%	10
Better on-time performance	3.2%	3
Safer pedestrian access to/from stops	1.1%	1
To help the environment, improve air quality	6.3%	6
A link with Regional Commuter Rail	7.4%	7
A bus line closer to your home or work	23.2%	22
Parking prices at work are higher	0.0%	0
Road pricing fees increase	2.1%	2

Fuel prices increase to \$4.00 per gallon	7.4%	7
None	38.9%	37

Table 2.

Respondents Range of Income	Response Percent (%)	Response Count
\$0 - \$25,000	0.0%	0
\$25,000 - \$50,000	18.4%	16
\$50,000 - \$75,000	16.1%	14
\$75,000 - \$100,000	24.1%	21
\$100,000 - \$150,000	24.1%	21
\$150,000 - \$250,000	8.0%	7
Greater than \$250,000	9.2%	8

Table 3.

Number of persons within Household	Response Percent	Response Count
One	21.1%	20
Two	34.7%	33
Three	23.2%	22
Four	11.6%	11
Five	5.3%	5
More	4.2%	4

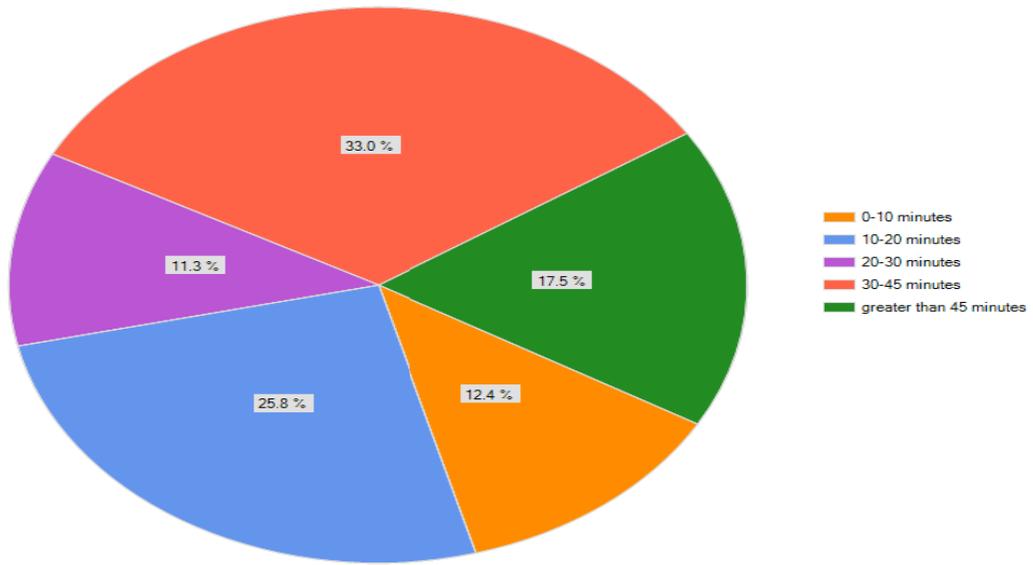
Table 4.

Marital Status	Response Percent	Response Count
Single	33.7%	32
Married	35.8%	34
Single with children	1.1%	1
Married with children	21.1%	20
Divorced	4.2%	4
Divorced with children	4.2%	4

Table 5.

Where to get information if interested	Response Percent	Response Count
Check via internet	93.4%	85
Look for a telephone number	1.1%	1
Seek transportation information on a Pamphlet or Brochure	0.0%	0
Call a friend	3.3%	3
Other	2.2%	2
Persons Responded	0	91
Persons who did not answer question	0	7

Respdents average travel time



8. Do you run errands or personal trips on your way home?
Yes No Sometimes

9. Do you drop-off or pick-up children from school?
Yes No Sometimes

10. What is your primary reason for not riding METRO or light rail?
 Travel time is too long Buses are unreliable
 Have your own car Not too safe
 Not convenient, stops no close enough Other _____
 Fare too high Not convenient, schedules don't match my needs

11. Which of the following would be most likely to get you to consider riding the bus or light rail?
 More frequent bus service A bus line closer to your home or work
 Better on-time performance Parking prices at work are higher
 Safer pedestrian access to/from stops Road pricing fees increase
 To help the environment, improve air quality Fuel prices increase to \$4.00 per gallon
 A link with Regional Commuter Rail None

12. What is your job status?
 Full-time (35 hours or more)
 Part-time
 Work at one location
 Move to another location

13. What is the range of your income?
 \$0 - \$25,000 \$100,000 - \$150,000
 \$25,000 - \$50,000 \$150,000 - \$250,000
 \$50,000 - \$75,000 Greater than \$250,000
 \$75,000 - \$100,000

14. How many persons reside at your home?
- One
 - Two
 - Three
 - Four
 - Five
 - More
 - s

15. What is your marital status? Please select one.

- Single
- Married
- Single with children
- Married with children
- Divorced
- Divorced with children

16. If you were interested in riding METRO, what would you do to get more information?

- Check via internet
- Look for a telephone number
- Seek transportation information on a pamphlet or brochure
- Call a friend
- Other _____

17. Are there any other comments you'd like shared with METRO?

Thank you for answering this survey. More information about METRO is available at www.ridemetro.org

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