

Cleveland, OH

Individualized Marketing Demonstration Program Individual City Report

Prepared by:

MELE Associates, Inc.
14660 Rothgeb Drive
Suite 102
Rockville, MD 20850
(P) 240-453-6990
(F) 240-453-6991

www.meleassociates.com

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Individualized Marketing Demonstration Program
City Report

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1.0 Introduction

The Greater Cleveland Regional Transit Authority (GCRTA) is the nation's thirteenth-largest public transportation system. It serves the residents of Northeast Ohio, a population of more than 1.4 million people, and covers a geographic region encompassing 458 square miles and 58 municipalities surrounding the city of Cleveland.

Public transportation has a long and proud history in Northeast Ohio, spanning more than 100 years. Prior to 1900, the electric streetcar was the primary means of travel in the city of Cleveland. Then in 1913, a rapid transit system was added with the creation of the Shaker Lines. Cleveland's bus era began in 1925, when the Motor Coach Division of Cleveland Railway initiated operation of a downtown loop. These early transit groups contributed many firsts to public transportation, including the front-entrance, center-exit streetcar design and rapid transit service to a major airport.

With such a rich history of public transportation use, Cleveland provides a wonderful opportunity to test how Individualized Marketing works to reduce car use and promote environmentally friendly modes of travel by targeting older, more established citizens within Cleveland.

The Federal Transit Administration (FTA) Individualized Marketing Demonstration is seen by GCRTA as an opportunity to gain further insight into ways to change behavior of the "could ride/should ride" commuter. This information would be used by GCRTA to modify its current marketing/communications efforts and to initiate any necessary changes in its operations in order to increase public transportation usage throughout Northeast Ohio.

2.0 Selection Reasoning

Cleveland was selected based on four criteria previously established before project solicitation began. These criteria included:

- a. Leveraging Resources
- b. Partnerships & Coordination
- c. Integration of Project with Overall Strategic Approach
- d. Value of Project Characteristics as National Model

a. Leveraging Resources

This factor focused on the applicant's ability to secure resources beyond those provided by the FTA, and the applicant's commitment to the success of the project through examination of the commitment and resources provided, including in-kind contribution of material, equipment, space, staff time, and other creative contributions.

In response to this criterion, GCRTA established an office in the center of the target area of Lakewood. The office was equipped with computers, a fax line, internet, and seven phone lines. A post office box was set up for collection of the surveys and service sheets.

b. Partnerships & Coordination

This factor focused on special consideration given to appropriate partnerships created by the applicant for implementation of the project. Scoring took into account the applicant's ability to clearly explain how the staff would coordinate with the project team, how both would contribute toward the success of the project, and how the results of the project would be utilized to improve the applicant's organization. Scoring also was determined by whether the applicant addressed how the project would coordinate with related activities in the

organization and community, as well as successful partnerships with community organizations in the past.

In response to this criterion, GCRTA acknowledged its plans to work with three partners on the Individualized Marketing Demonstration Program (IMDP). Descriptions of these partners and their roles in the project are as follows:

- Cleveland State University's College of Urban Affairs: create a sample group and conduct surveys and interviews in coordination with the FTA Team.
- Northeast Ohio Areawide Coordinating Agency (NOACA): furnish data on traffic patterns, traffic volumes, projected travel habits, and other statistics, as well as communicate the results of the study to other organizations in Greater Cleveland.
- Brokaw Inc.: develop marketing materials for use in the research study, and advise GCRTA in the execution of the IMDP.

c. Integration of Project with Overall Strategic Approach

This factor focused on the degree to which the project would fit into an overall approach to increase ridership in the applicant's location. Greater consideration was given to areas that have demonstrated success in planning and executing other initiatives aimed at increasing ridership, and could show a high level of commitment throughout the organization for the project.

In response to this criterion, GCRTA outlined its long term strategic plan to make public transportation an attractive alternative to driving in Northeast Ohio.

During its first two years, the plan focused on rider retention. Rider surveys and marketing research was done and revealed a high level of customer dissatisfaction, resulting in a steady loss of regular transit users. GCRTA responded by reengineering its system for riders: purchasing 340 new buses, expanding its network of Park-N-Rides, and making infrastructure upgrades to its heavy- and light-rail lines. It also worked with its operators to enhance customer service. These actions caused a dramatic decrease in service interruptions, improved on-time performance, and produced greater customer satisfaction. The end result was a stabilization of ridership, with GCRTA posting its first ridership increase in six years.

In 2003, GCRTA changed its focus from retention to recruitment. It identified the customer segments offering the greatest opportunity for expanding ridership, which included business commuters, college students, and those attending sporting and special events. Unique promotional offers were created for each segment with discount-fare incentives. Shortly after, an ethnographic marketing research study was done of potential riders. The study was performed by an outside consultant and involved in-depth, one-on-one interviews with nonriders in the subject's own environment. In addition to providing valuable insight into customer motivations, the study also confirmed the need for additional feedback.

d. Value of Project Characteristics as National Model

This factor focused on whether demographic and situational characteristics of the city proved to be of high value as a research demonstration to other locales. Scoring also took into effect the applicant's ability to point out the value of the location as a national or regional model.

In response to this criterion, GCRTA compared the similarities of Cleveland's transportation region to those of systems operating in areas such as Baltimore, Pittsburgh, Chicago, and Minneapolis. As a metropolitan area, Cleveland shares many characteristics with other regions of the country, and is considered to be the crossroads between the Midwest and the East Coast. The fact that GCRTA is similar in size and structure to many other transit

systems across the country is important because information gained from a pilot research study conducted in Cleveland would be useful to a large number of other public transportation authorities.

e. Other Considerations

In addition to the four main criteria, other considerations were regarded during the selection process. Some of these included:

- i. Population Size
- ii. Active Fleet Size
- iii. Unlinked Passenger Trips
- iv. Climate Zone
- v. Diversity index

These criteria were scored according to the following chart:

Population size: <i>Very Small</i> Less than 100,000 <i>Small</i> 101,000 – 250,000 <i>Medium</i> 251,000 – 500,000 <i>Large</i> 501,000 – 750,000 <i>Very Large</i> 750,000 and above	Active Fleet Size: <i>Small</i> <50 peak vehicles <i>Mid</i> 50-100 peak vehicles <i>Large</i> 100-500 peak vehicles <i>Very Large</i> >500 peak vehicles	Diversity Index (based on % of non-whites): <i>Very Low</i> Less than 20% <i>Low</i> 21 – 40% <i>Moderate</i> 41 – 60% <i>High</i> 61 – 80% <i>Very High</i> 81% and above
Unlinked Passenger Trips: <i>Low</i> Less than 1 million <i>Mid</i> 1 million to 4 million <i>High</i> 4 million to 30 million <i>Very High</i> over 30 million	Climate Zone: <i>Zone 1</i> Very cold <i>Zone 2</i> Cold <i>Zone 3</i> Moderate <i>Zone 4</i> Warm <i>Zone 5</i> Very Warm	

i. Population Size

Cleveland offers a medium population of 478,403 people. It is a typical size of many cities throughout the United States and offers a wide range of comparison.

ii. Active Fleet Size

Cleveland's active fleet size was a very positive contributing factor to the city's selection, as they have over 500 peak vehicles, which is considered a very large fleet size.

iii. Unlinked Passenger Trips

Cleveland's unlinked passenger trips were also a determining factor in city selection, as they ranged over 30 million trips per year, considered a very large ridership statistic. Because ridership was already so high, some concern was shown at being able to increase public transportation use further. However, Cleveland's ridership statistics were also very promising, as they showed a trend towards public transportation increase throughout the years.

iv. Climate Zone

Cleveland's climate also served as a substantial national model, due to their cold weather and it's compatibility to other northern states.

v. Diversity Index

Cleveland's diversity index was also a positive contributor in city selection, due to the large percentage of non-whites in the area. With such a diverse population, Cleveland could more accurately represent numerous neighborhoods throughout the United States, making the project more easily reproduced in the future with similar results.

3.0 Public Transit System Description

The Greater Cleveland Regional Transit Authority (GCRTA) is the nation's thirteenth largest public transportation system. It serves the residents of Northeast Ohio, a population of more than 1.4 million people, and covers a geographic region encompassing 458 square miles, and 58 municipalities surrounding the city of Cleveland.

GCRTA's public transportation system is multi-modal, with bus, express motor coach, light rail, heavy rail, circulator, loop, and paratransit transportation options available to customers.

GCRTA operates 108 rail cars on 34 miles of track and 624 buses on 1,606 route miles. It has four main rapid transit lines, composed of both light and heavy rail, with a total of 52 passenger rail stations. The transit authority has also created a network of Park-N-Ride and Transit Centers for express bus service to Cleveland's central business district and other large employment corridors. Other transportation services offered include Community Circulator routes in neighborhoods and suburbs and Paratransit service for those with disabilities.

In 2002 and 2003, 340 new clean-air buses were added to the fleet. As a result, GCRTA now has one of the cleanest bus fleets in the country, as well as 100 percent wheelchair-accessible. The bus system has also recently been upgraded with GPS tracking units, which are monitored by a communication center.

In 2003, GCRTA recorded a 1.5 percent increase in ridership. It was the first ridership increase realized by the transit authority in six years, and it reflects the many improvements made by GCRTA to ensure service reliability and customer satisfaction.

4.0 Coverage / Average Annual Ridership

At the beginning of the Individualized Marketing Demonstration Program (IMDP), Greater Cleveland Regional Transit Authority (GCRTA) 624 buses, 60 heavy rail cars, 48 light rail cars, 77 Paratransit vehicles, and 64 community circulators. Out of these vehicles, 500 buses, 22 heavy rail cars, 16 light rail cars, 58 Paratransit vehicles, and 50 community circulators run during peak hours.

On average, 180,000 people rode GCRTA each day, which equates to approximately 53 million passenger trips annually.

5.0 Test Area

Within the city of Cleveland, a certain area was designated as a "test area." Houses within the test area received marketing intervention, and those outside the area (control group) were used for comparison purposes.

a. Reason for Selection

There were many reasons for selecting the particular test area within Cleveland, which included, but are not limited to, the following:

- The area provided an excellent opportunity to study the ridership behavior of senior citizens
- Travel behavior research obtained from this study could be applied in many areas of the country where a large percentage of retired individuals reside
- The GCRTA has increased contact and intervention with the senior citizens for special events, providing bus and rail services to large groups coming from other areas
- GCRTA began offering incentives to the senior market by supplying discount transit passes (2/3 off for seniors 65 and older)
- Partnerships could arise with senior citizen agencies and golden age centers
- The area had an adequate transit system in addition to many sidewalks and walking trails
- The neighborhoods were well established and comprised of older persons, which made this project site different from the three others. It was agreed that the FTA IMDP would look at four scenarios, and not four identical projects, resulting in a much broader scope of lessons learned.

b. Description, physical, ridership, how served, etc

The target area is located in an area just outside of downtown Cleveland, known as Lakewood. Lakewood is comprised of older and well-established neighborhoods. Because of the high percentage of senior citizens in Lakewood, the target group for the Cleveland project consisted of households with at least one member who was 55 years of age or older. Households within this test area received the marketing intervention. A control group was established (based on random selection) for comparison purposes.

Within the target area, there exists a mixed transit system, (community circulator, bus, and rail), in addition to an array of sidewalks and walking paths. Twelve to fifteen percent of all transit riders occur on the rail system, which runs throughout most of the greater Cleveland area. Nearly all buses in the fleet are low floor buses, which allow easy accessibility to handicapped individuals by use of ramps. Community circulators run through specific communities.

6.0 Methods

a. How IMDP was applied

The Individualized Marketing Demonstration Program is marked by three distinct phases:

1. 'Before' Survey
 - a. Segmentation Phase
 - i. Group I
 - ii. Group R
 - iii. Group N
2. Individualized Marketing Intervention
 - a. Motivation and Information Phases
 - b. Convincing Phase
3. After Survey

These three phases follow a process that has been pre-planned and implemented previously in other areas. Each lasts approximately six weeks.

i. 'Before' Survey

The Cleveland 'Before' survey was conducted using a mail-back survey technique utilizing a one-day trip diary for all household members. The goal of the 'Before' survey was to gather information about the target and control areas, including residents' current travel patterns and habits, their interest in public transportation, walking, and cycling modes, and their willingness to learn more about environmentally friendly modes of transportation in their community. The first nominated travel day for the Cleveland 'Before' survey was on March 28, 2005. Announcement letters were sent in advance to inform participants about the purpose of the travel survey. A main mailing letter and an information pamphlet accompanied the mail-back survey diaries, which were received by respondents on their nominated travel days. A series of telephone calls and reminder letters were then used to motivate the respondents to return their travel surveys.

a. Segmentation Phase

Segmenting households using the 'Before' survey data made it possible to identify households that were willing and able to change their mobility patterns, and those who already use one or more environmentally friendly modes. Households that were not interested and had no potential for change received no further direct contact, but were sent an AAA brochure on how to use their car more efficiently.

Twelve hundred persons were randomly selected from the target group. These 1200 were then classified into three main groups:

1. Group 'I' – Participants willing and able to change their mobility patterns, and those interested in receiving more information about the how, when, and why of public transportation and alternate transportation methods.
2. Group 'R' – Participants already using one or more environmentally friendly transportation mode. This group was then separated into two sub-groups:
 - a. 'R with' meaning participants already using environmentally friendly transportation mode(s) but interested in receiving information.
 - b. 'R without' meaning those already using environmentally friendly mode(s) but not interested in receiving further information
3. Group 'N' – Households not interested in changing their transportation habits, and those determined to have no potential for change.

ii. Individualized Marketing

a. Motivation and Information Phases

The motivation and information phases focused attention on all households in the 'I' (interested) group and in the 'R with' group (regular users of one or more environmentally friendly modes with information needs). Households in the 'I' and 'R with' groupings were mailed a Service Sheet that contained a comprehensive list of public transportation, bicycling, and walking materials that could be ordered. The 'R without' group respondents received a gift item for already using an environmentally friendly mode, along with additional information materials. This design methodology was utilized because it was observed that regular users of

alternative modes without information requests could benefit from new and updated materials.

b. Convincing Phase

In the convincing phase, further services, or 'home visits' were offered to households as an opportunity to learn more about a particular alternative mode via a face-to-face conversation with a qualified representative for each mode, (bus driver, cycling and/or walking professional). The convincing phase was instrumental in motivating and encouraging households to try out an alternative mode they were interested in. Bus passes were distributed during public transportation home visits, thereby allowing household members to 'test' the system.

iii. After Survey

The Cleveland 'After' survey was conducted using a self-administered mail back survey for households and individuals. The survey forms were identical to those used in the 'Before' survey. Announcement letters, reminder letters, and phone calls were also used to motivate residents to fill out and return their travel surveys. The first nominated travel day for the 'After' survey was on July 11, 2005.

7.0 Results

a. 'Before' Survey

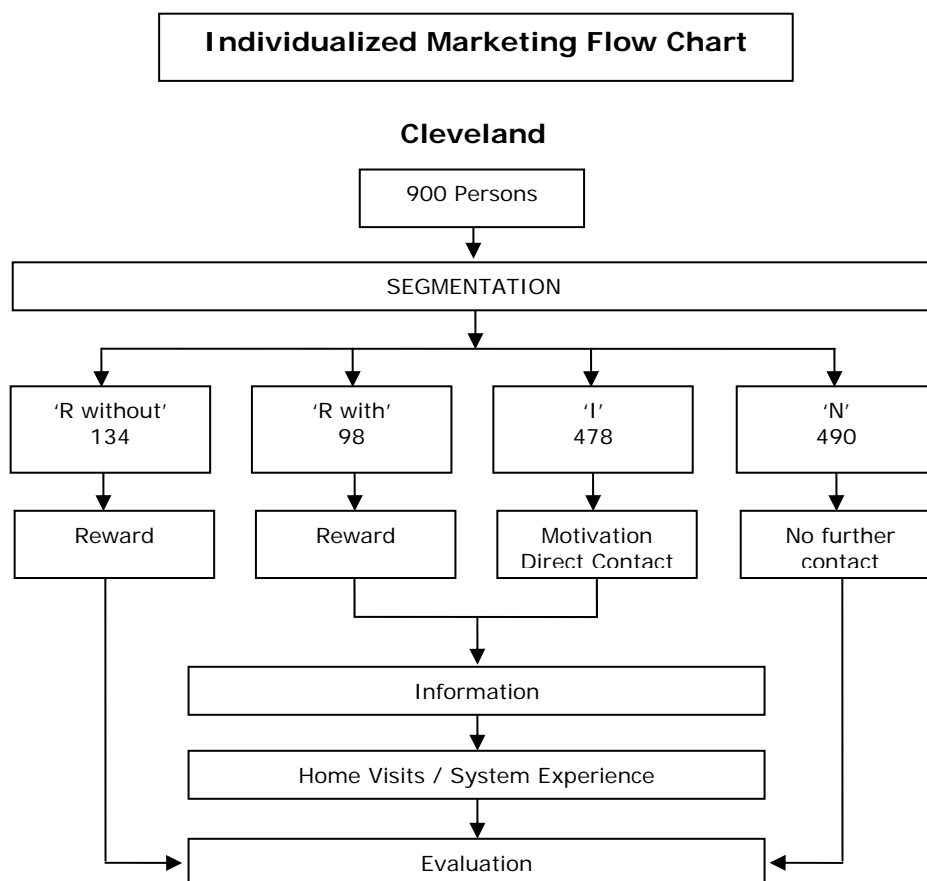
As shown in the table below, of the 2,700 surveys mailed, 265 were returned by the post office without opening for varying reasons, such as the residents had moved or the address no longer matched the household name. That reduced the sample size to 2,435 persons. Of those, 1,583 completed and returned the survey. This represents a 65% response to the 'Before' survey.

'Before' Survey Response

Gross Number of Surveys Mailed	2,700
Surveys Returned To Sender Due to Address Change (Sample Loss)	265
Adjusted Gross Sample Size	2,435
Surveys Returned Complete	1,583
Response Rate	65%

As shown in the figure below, results from the segmentation phase of the 'Before' survey indicated that there were 478 persons (40%) in the 'Interested' or 'I' group, 232 (19%) persons in the 'R' group, and 490 (41%) persons who were 'Not Interested' or 'N' group.

Figure 1: IMDP flow chart



A total of 47 home visits were conducted during the convincing phase. Nineteen of these visits were conducted via a phone consultation. These home visits were approximately 45 minutes long and were perceived as “positive” by each household. They included:

- Fourteen households received public transportation home visits. These households received a free one month transit pass to encourage participants to “test” the system. Three public transportation consultation calls were also conducted.
- Cycling home visits were administered to 8 households. Each household received personalized advice on bicycling issues and concerns, in addition to information materials and discount coupons. Four cycling consultation calls were conducted as well.
- Nine walking home visits were conducted by walking advocated from a local walking organization. Information materials were distributed to households in addition to discount coupons. Four walking consultation calls were administered as well.

b. After Survey

The response rate to the Cleveland ‘After’ survey was 69%, with 1,814 persons (net) returning their travel survey, as can be seen in the table below.

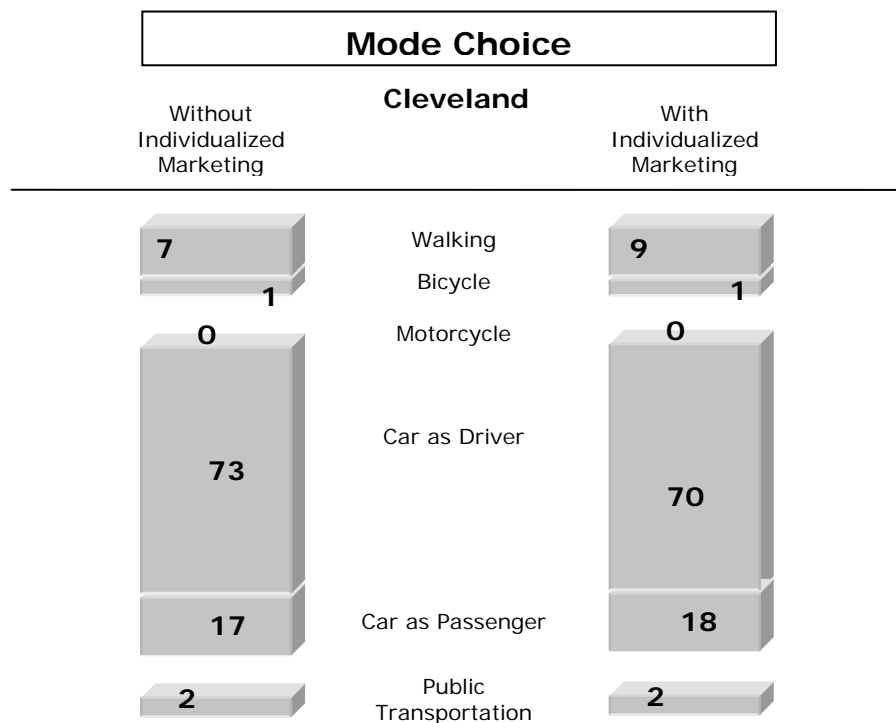
'After' Survey Response

Gross Number of Surveys Mailed	2,900
Surveys Returned To Sender Due to Address Change (Sample Loss)	271
Adjusted Gross Sample Size	2,629
Surveys Returned Complete	1,814*
Response Rate	69%

* Total survey returns are broken down into two sections – the target group returns totalled 894 and the control group returns totalled 920 *

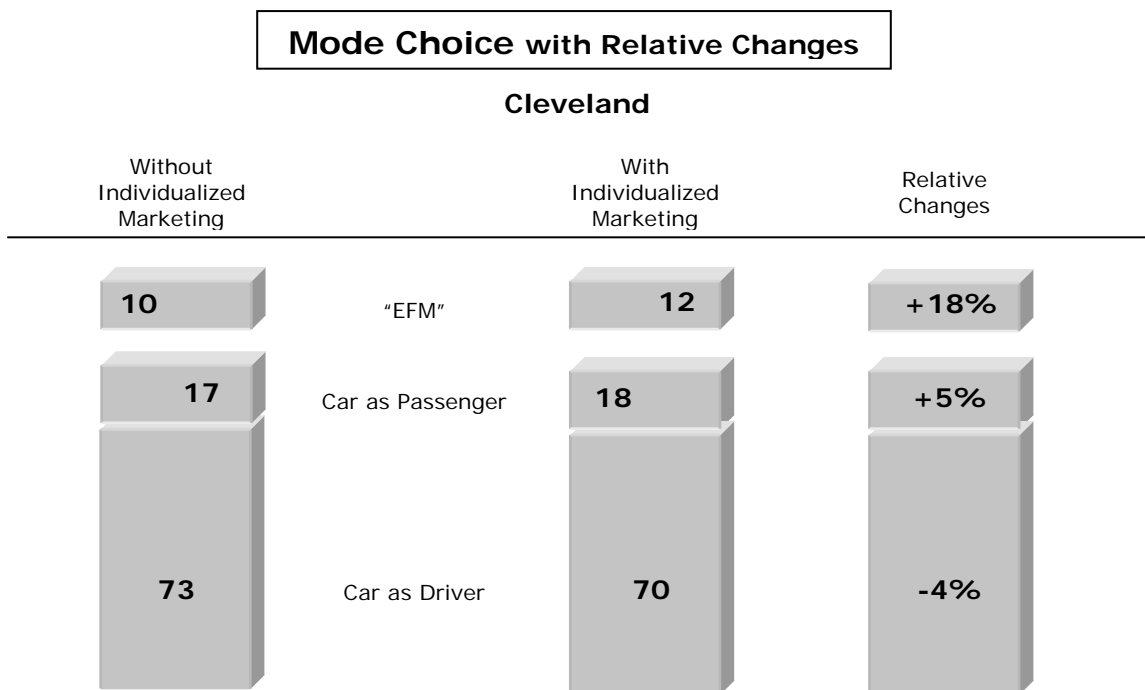
c. Comparison of Before & After Survey Results

An important component of the Cleveland Individualized Marketing Demonstration project is the extensive evaluation of results. A pilot project aims to assess the potential of different techniques for application on a larger scale in Cleveland; therefore, a detailed and robust evaluation of the effects on travel behavior is of critical importance. The actual changes in mode choice are the key indicator of a successful campaign in Cleveland. To separate the effect of the IMDP from other influences, a control group was applied to the survey design. The changes due to the IMDP are calculated by comparing the travel patterns in the target group with those in the control group. This comparison between target and control groups consequently demonstrates the effect of Individualized Marketing. The survey results indicate that there were changes in the use of most main travel modes as a result of the Cleveland IMDP. Car (as driver) usage decreased by 3%, whereas car (as passenger) mode increased by one percentage point. The walking mode showed the most significant change, increasing by 2%. The use of public transportation and bicycling rose slightly, but these small changes can only be seen on the detailed level of trips per person per year.



The figure above also indicates that, before the IMDP, Cleveland residents were walking (without using another mode) for 7% of their daily trips and bicycling for 1% of their daily trips. The car represents the mode most frequently used, with 73% car (as driver) and 17% car (as passenger) trips. Public transportation accounts for only 2% of all trips. Environmentally friendly modes (EFM) showed increases following the marketing intervention. The walking mode increased by two percentage points. The bicycling and public transportation modes increased slightly, but these changes were not statistically significant. Car (as passenger) mode rose by one percentage point, whereas car (as driver) mode decrease by 3%.

The figure below shows the changes in mode choice measured by the 'After' survey in terms of trips per person per year. There was an 4% reduction in car (as driver) use with corresponding increases (+18%) in environmentally friendly modes (EFM) and for the car as passenger mode (+5%).



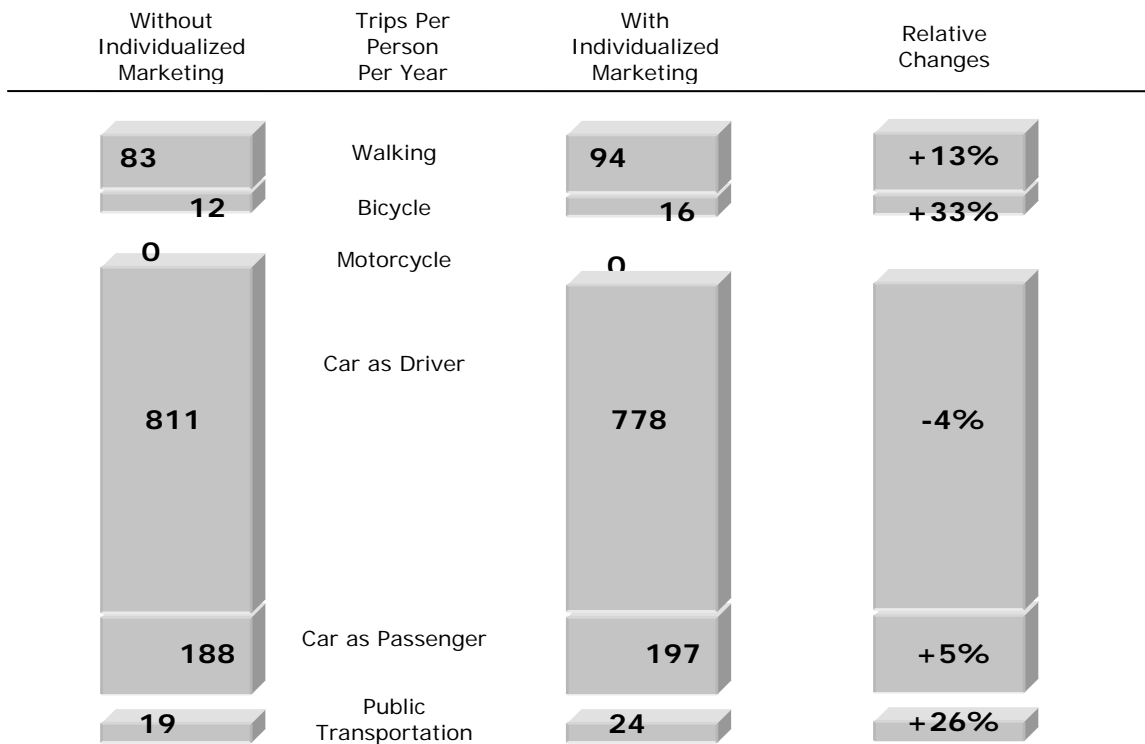
Experience shows that in countries with such low levels of public transportation use, it is more effective to promote walking, bicycling, *and* public transportation. The results for the public transportation mode will be better than simply promoting public transportation alone, and this was the rationale for promoting all environmentally friendly modes in the FTA Individualized Marketing Demonstration Project in Cleveland.

The figure below demonstrates everyday mobility in Cleveland, which excludes long distance trips and holiday travel. For an average of the year (341 days), the majority of trips were made by car, with 811 by car (as driver) and 188 by car (as passenger). There were 114 trips undertaken per person per year by environmentally friendly modes: 83 by foot, 12 by bicycle, and 19 using public transportation.

With the Individualized Marketing Intervention, car (as driver) trips decreased by 4%, while the car (as passenger) mode increased by 5%. Car (as driver) trips were replaced by environmentally friendly modes – walking increased by 13%, bicycling by 33%, and public transportation by 26%.

Mode Choice: Trips Per Person Per Year

Cleveland



The table below compares everyday mobility car mileage with and without Individualized Marketing. The target group, which contained 1,200 persons, had a total of 1,040 cars in the 'Before' survey, and 1,030 cars in the 'After' survey. A successful IMDP campaign resulted in an 8% reduction in vehicle miles traveled by these cars. This equates to 430,000 miles reduced per year.

Car Mileage

Without Individualized Marketing		With Individualized Marketing
1,040	(Private) Cars in Total	1,030
15	Miles Per Car Per Day (everyday mobility)	14
5.35 million	Total Miles Per Year (341 days)	4.92 million
	Reduction (mi per year)	-0.43 million
	Relative Reduction	-8%

d. Intended Use of Results

GCRTA intends to use the results of the Individual Marketing Demonstration Program to modify the communications strategy developed for transit riders and to create a target profile of individuals most likely to change their travel behavior in favor of public transportation.

A secondary objective of GCRTA is to acquire information from test participants that is universal to all rider groups, permitting the transit authority to tailor communications programs to the individuals who are most likely to change their travel behavior and choose public transportation.

8.0 City Response

According to the GCRTA, the experience of the IMDP was great. Meeting early deadlines in the project caused some stress, but the project as a whole seemed to go smoothly and to be a positive experience.

Compiling all the collateral materials was a feat; however, now GCRTA has a new “Bike, Bus, & Train” pamphlet, and new revised brochure about Paratransit service, and an updated system map. Developing the target area map was most challenging, but the city was very impressed with the final product.

Developing new relationships with the City of Lakewood, some of the local retailers, the Chamber of Commerce, the Lakewood YMCA, and the Cleveland Metroparks was a great experience. Everyone was very excited about the IMDP and could not have been more helpful and supportive.

The Home Visits were each a unique experience. These visits helped those at GCRTA to meet some of their riders, and to get great feedback about the transportation services.

At the conclusion of the IMDP, GCRTA hops to use the results to develop next year’s Marketing Plan.

9.0 Conclusion

The Individualized Marketing Demonstration Program in Cleveland was successful in many ways. The Cleveland project team committed necessary resources to the project to ensure that the marketing intervention had a direct impact on residents in the target area. The results indicate that increases that travel behavior changes were accomplished.

Following the marketing efforts, car use decreased by four percentage points, whereas environmentally friendly modes increased by eight percentage points. Based on these encouraging results, it is anticipated that a large-scale project conducted in Cleveland would substantially reduce car use, while increasing public transportation ridership and residents’ usage of walking and cycling modes.

The success of the Cleveland IMDP results shows that Individualized Marketing can be effectively utilized in well established, smaller cities comprised of a large percentage of senior citizens. It is also anticipated that after comparing Cleveland’s results with those of the other three demonstration cities, there will be a good indication of how Individualized Marketing works in different types of neighborhoods located in both large and small cities across the United States.