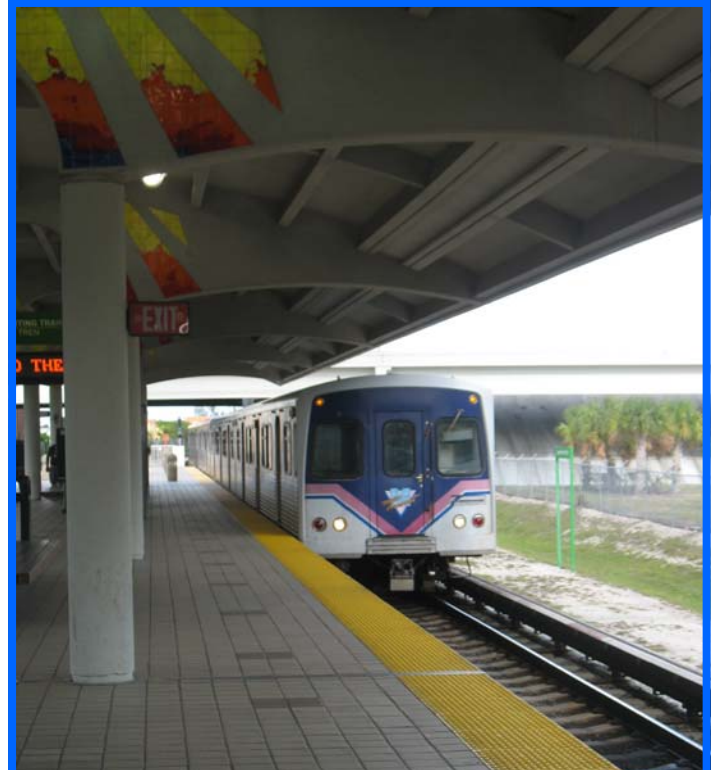




Miami-Dade 2009 Metrorail Transit Survey



Final Report
July 2009

Table of Contents

Introduction..... 1
 Metrorail 1
Survey Design 1
 Sampling Plan..... 1
 Survey Questionnaire 1
 Methodology..... 2
 Training 2
Implementation 3
 Passenger Door Counts..... 3
 Survey Implementation 4
Data Input 5
Minimization/Mitigation of Non-Response Bias 7
 Survey Instrument 7
 Implementation..... 7
Expansion Methodology..... 8
 Expansion Process 8
 Cross-Check Expanded Data against Auxiliary Sources..... 9
 Data Analysis..... 9

List of Tables

Table 1-- Survey Distribution by Station.....6
Table 2-- Origin – Destination Matrix Based on Survey Information.....6
Table 3-- Daily Ridership Directional Percentages.....10
Table 4-- Expanded Daily Ridership by Station.....11

List of Figures

Figure 1-- Daily Ridership Directional Summary.....10

List of Appendices

- Appendix A: On-Board Survey Instrument
- Appendix B: Counter Train Schedules
- Appendix C: Sample Forms
 - Sample Count Forms
 - Sample Sign In Sheet
 - Sample Survey Log
- Appendix D: Tabulated Directional Count Results

Introduction

The Miami-Dade County Metropolitan Planning Organization (MPO) has a goal to develop a data collection program that meets the Federal Transit Administration (FTA) guidelines and that supports the transit modeling efforts in areas which anticipate seeking federal support for transit capital projects. The Miami-Dade Transit (MDT) Metrorail Transit Survey (Metrorail Survey) conducted in April 2009 may be the first in a series of surveys that will become a continuing data collection effort that will supplement the modeling and transit planning efforts in Miami-Dade County and the South Florida Region. This Miami-Dade Metrorail Survey obtained ridership characteristics such as: origin-destination patterns, trip purpose and mode of access and egress. The data obtained from this survey will be used to update and validate the Southeast Regional Planning Model (SERPM v6.5) and will be used for transportation planning in the region.

Metrorail

Metrorail is a 22 mile elevated rapid transit system that runs from south central Miami-Dade to northwest Miami-Dade County. There are 22 Metrorail passenger stations, approximately one-mile apart. A connection to Broward and Palm Beach Counties is provided via Tri-Rail at the Tri-Rail / Metrorail transfer station.

There are 182 one-way weekday Metrorail train trips, 90 southbound and 92 northbound. The headway is 7.5 minutes during peak hours and 15 minutes during non peak hours. Each weekday one-way trip is made by a train comprised of 6 cars. There are 76 one-way weekend Metrorail train trips, 38 in each direction, with 30 minute headways. Each weekend (Saturday and Sunday) a one-way trip is made by a train comprised of 4 cars.

Survey Design

Sampling Plan

The Metrorail data collection effort consisted of two parts, passenger door counts to obtain the directional split and a survey. For the directional split, passenger door counts were conducted on the first three trains in the morning leaving from both the Palmetto and Dadeland South Stations on Thursday, April 2. Counts were taken in one car in each of the six different trains.

The Metrorail Survey was conducted on Tuesday, April 28. Tri-lingual survey questionnaires (English, Spanish, and Creole) were distributed to all passengers as they accessed Metrorail stations from 6:00 AM to 6:00 PM for both northbound and southbound trains and were collected at the exits of all 22 Metrorail stations.

Survey Questionnaire

The survey instrument, **Appendix A**, printed in color on 11" x 17" cardstock, was designed as a self-completion questionnaire with mainly self-coded questions. The customized form was in English, Spanish and Creole and consisted of 18 questions. To ensure ease of distribution, they were printed as gummed pads of 100 each with a solid cardboard backing. Each questionnaire

was pre-printed with a unique serial number, which linked each questionnaire to distribution from a specific station. The questionnaire was designed to obtain information in four categories: travel pattern (origin and destination), trip purpose, mode of access and egress (including a trip chain of all transit modes) and passenger demographics (age, race/ethnic origin, household size and vehicle availability). The survey instrument was reviewed by the MPO, MDT and by FTA. Their comments were incorporated into the survey instrument.

Methodology

The Metrorail survey consisted of two parts, passenger door counts and survey implementation. Passenger door counts were conducted in one car in six different trains, to obtain the directional split by station and time of day. Passenger door counts were conducted in the third car from the front of the train (based on the direction the train is going) in six different trains to obtain the directional split by station and time of day. Counts commenced with the first train departing at 6 AM in the morning from both the Palmetto and Dadeland South Stations; Palmetto being the northernmost station and Dadeland South being the southernmost station of the line. The next two trains leaving from these stations also had counts taken.

Surveys were disseminated to the assigned Metrorail station by serial number. This provided an error check for every survey to confirm if the origin station was identified correctly. In this way, there would be a check of where each passenger began their Metrorail trip. Surveyors were positioned by the turnstiles that provide access and egress to each station. Surveyors offered survey questionnaires to everyone entering the stations after they pass through the entrance turnstiles. The riders that refused the survey were counted in an attempt to count the boardings for the survey period. The unique serial numbers of surveys distributed were recorded for each hour (60 minute) increment. Surveys were collected in a survey return box placed at the bottom of each staircase / escalator and / or at exits. Surveyors encouraged and reminded people to drop off their completed surveys. Each station was assigned a Station Supervisor to oversee the survey distribution at their assigned station and to record the number of “ins” and “outs” from turnstiles with the assistance of the guards.

At the larger and busier stations, Station Platform Facilitators encouraged people to fill out the survey and provided assistance as necessary and as time permitted. Station Supervisors also filled the roll of Station Platform Facilitator at those stations that did not have assigned Station Platform Facilitators. In addition, an In-Train Facilitator was on each train to encourage passengers to fill out the survey and to provide assistance as necessary. Station Supervisors, Platform Facilitators, and In-Train Facilitators were professionals from consultant firms, FDOT, MPO, and MDT. The Surveyors were temporary employees staffed by Express Personnel.

Training

The days prior to the On-Board Passenger Door Counts, April 1, 2009, and the survey implementation, April 27, 2009, were training days. The training for the On-Board Passenger Door Counts was held at the MPO. The Lead Counters were provided with the objectives and logistics to conduct the counts. The assigned schedules and required forms were reviewed and

the Lead Counters spent time becoming familiar with them. The forms, identification badges and supplies were distributed to the lead counters.

Two Supervisor Training Sessions and two Surveyor Training Sessions were conducted concurrently for the Metrorail Survey implementation, one each in the morning and in the afternoon, of the day prior to the survey implementation. The Supervisor Training Sessions were held at Gannett Fleming's Miami Office in the morning and the Miami-Dade Government Center in the afternoon. The Surveyor Training Sessions were held at West Dade Career Center in the morning and the North Miami Beach Career Center in the afternoon.

The Supervisor Training Sessions consisted of the following:

- Survey Overview – the purpose, design, and methodology of the survey were explained.
- Supervisor Training – the detailed functions, duties, and responsibilities for Station Supervisors, Platform Facilitators, and In-Train Facilitators were outlined. Sample scripts were provided to encourage riders to take the survey.
- Survey Instrument – questions and possible answers were explained and discussed.
- Logistics – the logistics arriving at the Metrorail Stations, parking, and checking in and out were explained.
- Overview of Surveyor Training – the aspects of the surveyor training were highlighted.

The Surveyor Training Sessions consisted of the following:

- Survey Overview – the purpose, design, and methodology of the survey were explained.
- Surveyor Training – the detailed functions, duties, and responsibilities for Surveyors were outlined. The general logistics of checking in and out, parking, and arriving at the Metrorail Stations were explained. The survey instrument was reviewed with the Surveyors to make sure everyone understood the questions asked and how they should be answered. It was emphasized that returned surveys should be quickly reviewed, especially questions 1, 7 and 9, for accuracy, if time permitted. The procedures for distributing and collecting the surveys and record keeping were carefully explained.

Implementation

Passenger Door Counts

The passenger door counts were conducted on Thursday April 2, 2009 on three northbound and three southbound trains beginning at 6 AM from both the Palmetto and Dadeland South stations. Each train had three people assigned as counters, one for each door of the car, to count and record the number of people entering and leaving the train at each station. The lead counter (Train Captain) in each train also recorded the time the train departed each station. Temporary employees were hired to assist the lead counters in the physical passenger counts; these employees were trained by their lead counter the morning of the survey at the train station prior to initial departure. Together the agency and temporary employees formed six (6) teams, scheduled to remain together for the duration of the day. The counts continued through

approximately the 6 PM departure for each of the six trains and continued until the subject train arrived back at the counters' original station. The schedule for each of the six teams is included in **Appendix B**.

Each team member was given a pair of mechanical counters to assist in the accuracy of their counts. They were instructed to count the passenger boardings and departures (on/off) at each station. A form was developed for the Train Captain (lead counter) to record the door counts and the departure times. A similar form was developed for each of the counters to record their door counts. Samples of both forms are included in **Appendix C**.

Each team made twelve (12) complete one-way trips, eventually arriving back at their original departing station. Each team had a specific schedule prepared in advance that they followed (See Appendix A.) which minimized train changes and down time. At the end of the day the lead counter collected all the completed forms and miscellaneous supplies.

Survey Implementation

The distribution of surveys to riders was conducted on Tuesday April 28, 2009. Survey Station Supervisors arrived at their assigned stations by 5:30 AM on the day of the survey to prepare for survey distribution beginning at 6:00 AM. After arriving at their assigned station with their supplies, Station Supervisors toured the station to determine the best locations to place the return boxes, meet and position the surveyors and platform facilitators, post signage, meet the security guards and distribute supplies.

Station Supervisors signed in the surveyors (from the temp agency) and distributed their supplies which consisted of a yellow "Surveyor" t-shirt, identification badge, surveys, survey log sheet, pens, mechanical counters, and an apron to help store supplies. A sample sign in sheet is found in **Appendix C**.

Beginning at 6:00 AM and continuing to 6:00 PM, surveyors offered a survey to everyone over the age of 12 entering the station as they proceeded through the turnstiles. Surveyors recorded the serial number of the top survey on their survey pad on the Survey Log. The survey serial numbers were recorded at the beginning and end of each hour. A sample Survey Log is shown in **Appendix C**. Pens were offered to passengers to record their answers and as a token incentive for filling out the survey. Those passengers that refused a survey were counted using the mechanical counters. The total number of refusals for each hour was also recorded on the Survey Log. Surveyors were trained to encourage all passengers to take and fill out the survey. Each survey respondent that filled out the survey completely became eligible to win a drawing for a free Metropass. In order to facilitate that process, the respondent's name and home address was a voluntary question added at the end of the survey.

Platform Facilitators and Station Supervisors acting as Platform Facilitators were on the platform encouraging riders to fill out the survey, assisting those that needed help, answering questions

about the survey, and attempting to give surveys to those that may have refused the first time. Platform Facilitators recorded the serial number by hour for the surveys distributed.

In-Train Facilitators rode the trains to further encourage riders to fill out the survey, assist those that needed help, answer questions about the surveys, and give surveys to those that may have refused. In-Train Facilitators also recorded the serial number by hour for the surveys distributed. One In-Train Facilitator was assigned per train. Each In-Train Facilitator had a schedule and changed cars at each station.

Both the Platform Facilitators and the In-Train Facilitators were specifically trained to approach riders and ask if they needed help filling out the survey and to review questions 1, 7, and 9 for accuracy when reviewing or collecting surveys. Many of the Facilitators were bi-lingual, so they were able to provide assistance in English/Spanish, and some in English/Creole. The Facilitators conducted interviews to complete the surveys when necessary.

Surveys were collected at the destination stations in return boxes placed strategically at the exits. Station Supervisors and surveyors collected the returned surveys hourly. The surveys were bundled and labeled with the time of collection and station location.

Stations Supervisors, with the assistance of the security guards providing access keys and cards, also recorded the numbers (counts) off each turnstile for the number of boardings “ins” (Register 7) and exits “outs” (Register 8), as applicable. Turnstiles readings were recorded every hour. However, three stations (Palmetto, Okeechobee and Hialeah) did not have turnstiles since all turnstiles are in the process of being replaced with Smart Card Readers and some station’s turnstiles were out-of-order. There were three types of turnstiles in service which included: automatic (recorded both “ins” and “outs”), handicapped (recorded both “ins” and “outs”), and exit turnstiles that just recorded “out.”

Survey distribution was discontinued at 6:00 PM but surveys were collected until 6:45 PM. At the end of the survey day, the Station Supervisor collected all Survey Logs, supplies, and completed surveys and removed signage. Station Supervisors remained at their stations until their supplies were picked up by participating senior staff.

DATA INPUT

The data collected from the on-board counts and the survey were both entered manually into a data base. The count data recorded on the count forms recording the on/offers for each train at each station was input into an Excel spreadsheet. The result of that input is tabulated in **Appendix D**.

There were 30,112 surveys distributed during the Metrorail Survey and 17,862 surveys returned for a return rate of 59%. The number of surveys distributed at each of the 22 Metrorail Stations is summarized in **Table 1**, Survey Distribution by Station. **Table 2**, Origin – Destination Matrix Based on Survey Information depicts the origins and destinations for each station as entered by the respondent.

**Table 1 -- Survey Distribution
By Station**

Station	No. of Surveys
Dadeland South	4,099
Dadeland North	2,185
South Miami	1,197
University	643
Douglas Road	1,815
Coconut Grove	1,223
Vizcaya	561
Brickell	1,492
Government Center	3,982
Overtown	854
Culmer	521
Civic Center	1,846
Santa Clara	440
Allapattah	1,074
Earlington Heights	595
Brownsville	423
Dr. MLK, Jr.	820
Northside	915
Tri-Rail	923
Hialeah	1,181
Okeechobee	805
Palmetto	747
Sub-total	28,341
In-Train Facilitators	1,771
TOTAL	30,112

Table 2-- Origin – Destination Matrix Based on Survey Information

Origin/Destination	Dadeland South	Dadeland North	South Miami	University	Douglas Road	Coconut Grove	Vizcaya	Brickell	Government Center	Overtown	Culmer	Civic Center	Santa Clara	Allapattah	Earlington Heights	Brownsville	Dr. MLK Jr.	Northside	Tri-Rail	Hialeah	Okeechobee	Palmetto	No Response	Grand Total
Dadeland South	19	44	71	98	156	58	36	224	883	90	39	595	19	44	18	15	54	34	26	20	8	30	10	2,591
Dadeland North	16	13	29	54	75	43	32	154	622	48	28	350	8	17	8	3	16	12	7	11	9	9	8	1,572
South Miami	20	19	10	20	27	12	7	38	297	27	5	171	0	8	9	1	5	8	14	2	7	4	2	713
University	27	28	5	4	14	3	13	12	93	8	5	104	2	6	5	0	6	1	20	7	6	6	0	375
Douglas Road	98	87	61	32	11	21	12	93	236	21	21	89	14	25	10	7	16	9	15	9	15	8	7	917
Coconut Grove	80	53	47	24	45	4	5	44	135	6	5	52	5	11	6	2	7	4	12	6	7	9	4	573
Vizcaya	28	37	16	17	30	5	3	11	32	3	3	27	2	3	2	1	3	4	6	6	4	5	3	251
Brickell	117	131	60	35	65	21	12	12	40	7	15	66	5	11	8	4	5	7	28	22	11	22	4	708
Government Center	354	367	176	80	148	55	26	28	34	19	11	104	17	48	47	25	37	50	82	91	76	91	12	1,978
Overtown	76	58	33	22	32	10	11	12	43	5	7	29	1	3	19	4	9	17	10	11	18	18	4	452
Culmer	37	29	27	14	27	4	9	17	46	2	5	17	3	8	7	15	9	8	7	7	4	2	311	
Civic Center	204	206	91	60	45	21	11	41	81	4	7	24	3	14	24	13	45	42	78	42	36	34	7	1,133
Santa Clara	20	20	13	9	16	5	1	18	58	4	4	8	5	5	4	6	7	6	3	4	2	4	2	224
Allapattah	37	24	30	38	39	11	7	24	97	5	7	43	3	10	14	11	13	10	15	16	6	16	3	479
Earlington Heights	43	16	16	14	31	7	5	21	122	9	10	73	4	8	12	7	14	13	7	22	13	8	5	480
Brownsville	17	8	14	9	11	2	2	5	72	11	12	40	0	7	11	11	5	20	8	11	13	11	3	303
Dr. MLK Jr.	49	17	19	27	25	6	8	16	129	11	12	85	6	15	12	13	9	9	3	11	8	10	5	505
Northside	39	20	26	27	56	4	30	17	166	16	8	93	3	13	11	11	9	12	3	12	16	14	0	606
Tri-Rail	37	9	9	31	9	8	8	45	146	6	0	132	8	9	1	4	4	4	6	8	13	16	7	520
Hialeah	20	22	14	24	26	9	10	39	206	12	8	108	10	21	17	2	14	20	7	7	9	16	7	628
Okeechobee	25	8	5	13	25	4	12	35	227	26	4	155	12	8	4	8	7	14	7	0	8	13	0	620
Palmetto	14	12	5	15	18	10	7	40	215	17	3	159	4	7	4	7	8	11	16	13	9	4	1	599
Total Responses	1,377	1,228	777	667	931	323	267	946	3,980	357	219	2,524	134	301	253	170	302	315	380	338	301	352	96	16,538
No Response	9	4	2	2	7	5	5	4	27	3	3	18	0	4	3	1	3	5	6	6	4	0	1203*	1,324
Grand Total	1,386	1,232	779	669	938	328	272	950	4,007	360	222	2,542	134	305	256	171	305	320	386	344	305	352	1,299	17,862

* The sum of both the origin and destination questions that were not answered

Minimization/Mitigation of Non-Response Bias

The Metrorail Survey was implemented to maximize the response rate and the results must be carefully analyzed to mitigate the inevitable bias. In relative terms, non-response bias is generally a manageable issue for rail surveys. The following is a description of the strategies that were used to minimize and mitigate non-response bias for this effort.

Survey Instrument

Various methodological strategies were utilized to maximize the response rate, including a streamlined survey instrument to minimize the complexity of the instrument. The survey instrument was designed very carefully to be comprehensive and include only essential questions. It is typically the case that shorter survey instruments are more likely to be completed than longer ones. The complexity of the questions on the instrument was also an important consideration because respondents are less likely to complete the survey if it contains complicated language or concepts that are difficult for riders to understand.

Implementation

The implementation methodology focused on two primary strategies to minimize non-response bias: 1) utilization of trained personnel, and 2) utilization of specific methods that are designed to encourage respondents to complete the survey.

- a. The survey was advertised in advance of implementation to give riders a “heads-up” that the survey would occur. To this end, the Miami-Dade Transit (MDT) provided a written notice on the MDT website and posted large color signs (multi-lingual) at stations in advance of the survey. MDT also made verbal announcements (multi-lingual) on all trains after every station the day before and the day of the survey.
- b. The people that distributed and collected the survey instrument were trained to strongly encourage participation. The willingness of potential respondents to complete the survey cannot be controlled, but the implementing staff were trained to be enthusiastic, knowledgeable (about the purpose of the survey), and diligent in the completed survey collection.
- c. The goal of the staffing plan was to maintain a diverse staff in the field, increasing the odds that unlikely respondents that are non-English speaking have an opportunity to participate in the survey. The language proficiencies of all survey staff, both professional and temporary, were identified during the staffing plan. With this information, the staff was assigned to the various stations to maximize the language competencies at each station.

- d. The temporary surveyors were pre-screened to have the following desirable characteristics: well-groomed and courteous, able to stand for long periods of time, comfortable approaching strangers, attention to detail, and persistence. In addition, all surveyors were properly and adequately identifiable with logo shirts and/or official name tags.
- e. All survey staff was required to attend a comprehensive training. The training consisted of a discussion on the survey purpose, a brief description of the Metrorail system, a hands-on training with the survey instrument, and a discussion on logistics, expectations of surveyors, and a role-playing exercise.
- f. Miami-Dade MPO, MDT and FDOT staffs were also present on many trains in an effort to help establish survey legitimacy and provide additional information that a rider may desire.
- g. A pretest was conducted on a small sample size to review how the questions were understood and answered by the rider. Based on the results of this pretest, the questionnaire was revised slightly prior to the survey. The questions on this survey are similar to questions on surveys that have already been tested. Efforts have been made to eliminate bias in the survey questions.

Mitigation of non-response bias after the survey will be done through a careful analysis of the survey results relative to observed data from other sources. The demographics of respondents will be analyzed relative to the survey population, or universe. The survey universe will be defined in terms of the population of the study area, as defined by an approximate travel shed.

Expansion Methodology

The data analysis and expansion methodology will be done in coordination with the next phase of this project. The general expansion methodology that will be used is outlined below.

Expansion Process

The expansion process will be completed in a series of steps and is described below.

1. Survey data will be cleaned to eliminate illogical or clarify incomplete answers. It is likely that certain questions will be answered in a way that cannot be utilized or not answered at all.
2. Usable survey records will be expanded to AM counts by station, direction, and by time period. Typically, origin and destination questions result in lower response rates than other questions such as trip purpose or access mode, and often are a source of inaccuracies in the data. Depending on the nature of the raw survey data, multiple

expansion factors may be developed, by question or groups of questions. Stations will be grouped where necessary, if there are minimal responses at any given station.

3. Expanded AM survey data will be analyzed in terms of home-based versus non home-based trips to properly expand the AM sample to daily ridership. The data must be expanded to the daily total in travel demand model terms. For example, care will be taken to relate the data to production/attraction terms, rather than origin/destination, in order to validate the regional model trip distribution.
 - a. For home-based trip survey responses, origins and destinations will be doubled for each trip to reflect a production/attraction format.
 - b. Non home-based AM trips will be summarized. This category of trips includes all trips that utilize Metrorail for just one direction.
 - c. Non home-based AM trips, home based daily trips, and non home-based PM trips, derived from the observed AM travel patterns, will be added together. The product of this should reflect total daily trips.

If necessary a time period adjustment factor will be developed and applied to ensure that the expanded survey data for each respective time period matches the corresponding time of day counts.

Cross-Check Expanded Data against Auxiliary Sources

The expanded survey data will be cross-checked against other available data sources, including MDT counts.

1. Expanded survey responses will be summarized by key markets and checked against control counts, as described in the Expansion Process section, above. This analysis will provide a disaggregate accuracy check of the expanded data. If non-response bias is still present, based on this analysis, appropriate adjustment factors will be developed to mitigate the bias.
2. Dimensions other than the station level boardings will be utilized for cross-checking purposes. Direction and segment level expansion totals will be used for this purpose.

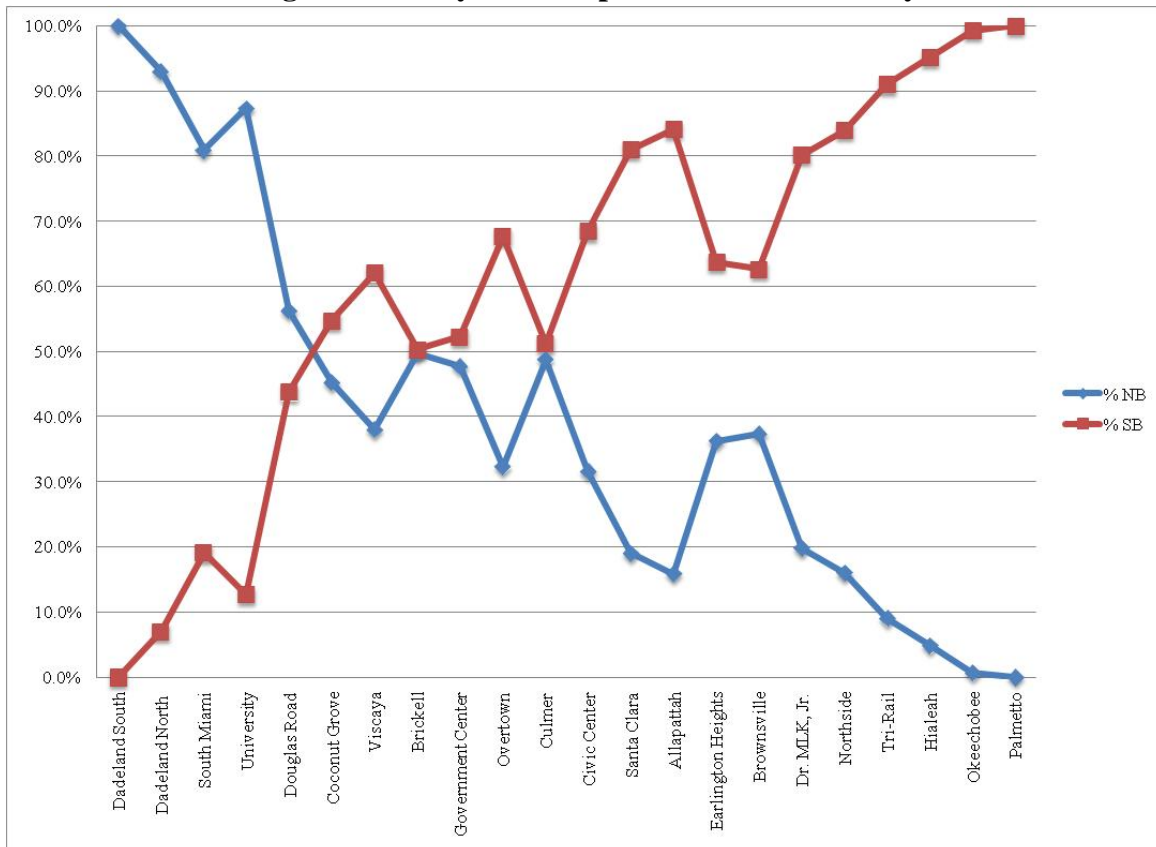
Data Analysis

The survey data was analyzed by station and direction for three time periods of travel: from 6:00 AM to 9:00 AM, from 9:00 AM to 3:00 PM, and from 3:00 PM to 7:00 PM. Based upon the survey results at each station, it was determined that the counts for each time period were very similar. Table 3 summarizes the overall ridership percentages for each station using the survey data collected from 6:00 AM to 6:00 PM. These overall percentages are graphically presented in Figure 1.

Table – 3 Daily Ridership Directional Percentages

Station Name	Total NB	Total SB	TOTAL	% NB	% SB
Dadeland South	383	0	383	100.0%	0.0%
Dadeland North	437	33	470	93.0%	7.0%
South Miami	305	72	377	80.9%	19.1%
University	227	33	260	87.3%	12.7%
Douglas Road	175	136	311	56.3%	43.7%
Coconut Grove	81	98	179	45.3%	54.7%
Viscaya	57	93	150	38.0%	62.0%
Brickell	177	179	356	49.7%	50.3%
Government Center	590	646	1,236	47.7%	52.3%
Overtown	42	88	130	32.3%	67.7%
Culmer	59	62	121	48.8%	51.2%
Civic Center	216	468	684	31.6%	68.4%
Santa Clara	27	115	142	19.0%	81.0%
Allapattah	27	143	170	15.9%	84.1%
Earlington Heights	62	109	171	36.3%	63.7%
Brownsville	65	109	174	37.4%	62.6%
Dr. MLK, Jr.	37	150	187	19.8%	80.2%
Northside	40	210	250	16.0%	84.0%
Tri-Rail	25	252	277	9.0%	91.0%
Hialeah	9	176	185	4.9%	95.1%
Okeechobee	1	144	145	0.7%	99.3%
Palmetto	0	60	60	0.0%	100.0%
TOTAL	3,042	3,376	6,418	47.4%	52.6%

Figure 1 – Daily Ridership Directional Summary



The directional ridership percentages for each station sample were expanded to represent the total population for each station using the total daily ridership (obtained from MDT April 2009 Counts). Table 4 provides a summary of the expanded daily ridership by station.

Table 4 – Expanded Daily Ridership by Station

Station Name	Total NB	Total SB	Total Ridership	% NB	% SB
Dadeland South	6,699	0	6,699	100.0%	0.0%
Dadeland North	4,550	344	4,894	93.0%	7.0%
South Miami	2,650	625	3,275	80.9%	19.1%
University	1,847	268	2,115	87.3%	12.7%
Douglas Road	1,924	1,496	3,420	56.3%	43.7%
Coconut Grove	741	896	1,637	45.3%	54.7%
Viscaya	524	855	1,379	38.0%	62.0%
Brickell	1,309	1,323	2,632	49.7%	50.3%
Government Center	4,532	4,962	9,494	47.7%	52.3%
Overtown	538	1,128	1,666	32.3%	67.7%
Culmer	598	629	1,227	48.8%	51.2%
Civic Center	1,885	4,084	5,969	31.6%	68.4%
Santa Clara	127	543	670	19.0%	81.0%
Allapattah	293	1,550	1,843	15.9%	84.1%
Earlington Heights	557	979	1,536	36.3%	63.7%
Brownsville	342	573	915	37.4%	62.6%
Dr. MLK, Jr.	259	1,050	1,309	19.8%	80.2%
Northside	336	1,762	2,098	16.0%	84.0%
Tri-Rail	177	1,788	1,965	9.0%	91.0%
Hialeah	88	1,711	1,799	4.9%	95.1%
Okeechobee	8	1,091	1,099	0.7%	99.3%
Palmetto	0	1,267	1,267	0.0%	100.0%
TOTAL	27,921	30,987	58,908	47.4%	52.6%

The returned questionnaires will be expanded by station and direction. The expanded survey data will be analyzed in terms of a number of key variables useful for travel demand model validation/calibration efforts. Those variables include:

- Trip origin and destination location;
- Activity purpose at origin and destination;
- Mode of access and egress;
- Predominant park-and-ride station locations;
- Other transit modes/lines used for the surveyed trip;
- Auto availability and driver’s license;
- Household composition/demographic data; and
- Purpose and length of time utilizing Metrorail service.

This list includes the standard variables analyzed in travel surveys for modeling purposes. Cross-tabulations across the variables listed above will be prepared for further analysis and use in model validation.

APPENDIX A

Survey Instrument

Please fill out this survey to help us plan for your public transit needs.
Please return your survey as you exit the Metrorail Station.
If you receive another survey today, please fill it out each time you ride Metrorail today.
ENGLISH

Por favor llene esta encuesta para guiarnos con la planificación de servicios de tránsito.
Por favor devuelva su encuesta al salir la estación de Metrorail.
Si recibe otra encuesta hoy, por favor llene una cada vez que use el servicio de Metrorail.
ESPAÑOL

Tanpri ranpli kéksyonè sa pou ou kapab édè nou planifyé bézwen transpòtasyon ou. Tanpri rémèt kéksyonè ya lè wap kite éstasyon Metrorail la jodiya. Tanpri ranpli yon kéksyonè chak fwa ou pran Metrorail jodiya.
KREOL

ORIGIN - WHERE DID YOU START THIS ONE-WAY TRIP?

- I originally started this one-way trip at:** *(Place you are coming from now.)*
 Work Place College / University School (K - 12) Shopping
 Social / Recreational Home Other _____ *(i.e. Airport, Hotel, etc.)*
- a. The Name of this Place, Business, or Building I am coming from is:**
 _____ *(Home or Name of Place, Business or Building)*
- b. Please provide nearest Intersection (or Cross Streets) if you do not know the exact address**
The address is: _____
 _____ and _____
(Cross Street #1) (Cross Street #2)

 City _____ Zip Code _____
- 2. I left from this Place** *(The place identified above)* **at:** _____: _____ **AM / PM** *(Circle one)*
- 3. To get to the first bus stop or Metrorail/Metromover/Tri-Rail Station for this one-way trip I:** *(Choose only one)*
 Walked Biked Drove and parked at the stop/station
 Rode with someone who dropped me off at the stop/station
 Rode with someone who parked a vehicle at the stop/station
 Other *(Please specify)* _____
- 4. I got on the Metrorail train at:** *(Check the station you got on Metrorail.)*
 Palmetto Brownsville Culmer Coconut Grove
 Okeechobee Earlington Overtown Douglas Road
 Hialeah Heights Government Center University
 Tri-Rail Allapattah South Miami
 Northside Santa Clara Brickell Dadeland North
 Dr. MLK Jr. Civic Center Vizcaya Dadeland South

DESTINATION - WHERE ARE YOU GOING?

- 5. I will get off the Metrorail train at:** *(Check the station you will get off Metrorail.)*
 Palmetto Brownsville Culmer Coconut Grove
 Okeechobee Earlington Overtown Douglas Road
 Hialeah Heights Government Center University
 Tri-Rail Allapattah South Miami
 Northside Santa Clara Brickell Dadeland North
 Dr. MLK Jr. Civic Center Vizcaya Dadeland South
- 6. When I leave the last bus stop or Metrorail/Metromover/Tri-Rail Station to get to where I am going for this one-way trip I will:**
(Choose only one)
 Walk Bike Drive a vehicle I parked at the stop/station
 Ride with someone who is picking me up at the stop/station
 Ride with someone who parked a vehicle at the stop/station
 Other *(Please specify)* _____

(Over)

PARTIDA - ¿DÓNDE EMPEZÓ SU VIAJE EN UNA SOLA DIRECCIÓN?

- Yo comencé este viaje en una sola dirección en:** *(Lugar de partida)*
 El trabajo La universidad La escuela (K - 12) Un lugar de compras
 Un lugar social / recreacional Mi casa Otro _____ *(Ej. Aeropuerto, Hotel, etc.)*
- a. El nombre del Lugar, Negocio o Edificio de partida es:**
 _____ *(Casa o Nombre del Lugar, Negocio o Edificio)*
- b. Por favor provea la intersección más cercana (calles que cruzan) si no tiene una dirección exacta**
La dirección es: _____
 _____ y _____
(Calle #1) (Calle #2)

 Ciudad _____ Código Postal _____
- 2. Partí de este lugar** *(el lugar identificado arriba)* **a las:** _____: _____ **AM / PM** *(Circule uno)*
- 3. Para llegar a la primera parada de autobús o estación de Metrorail/Metromover/Tri-Rail para este viaje en una sola dirección yo:** *(Escoja uno)*
 Caminé solamente Monté una bicicleta
 Vine en un carro que dejé en la parada / estación
 Vine en un carro que me dejó en la parada/estación
 Vine con alguien que se estacionó en la parada / estación.
 Otro *(Por favor especifique)* _____
- 4. Abordé Metrorail en la estación de:** *(Marque la estación en que abordo Metrorail)*
 Palmetto Brownsville Culmer Coconut Grove
 Okeechobee Earlington Overtown Douglas Road
 Hialeah Heights Government Center University
 Tri-Rail Allapattah South Miami
 Northside Santa Clara Brickell Dadeland North
 Dr. MLK Jr. Civic Center Vizcaya Dadeland South

DESTINO - ¿A DÓNDE VA?

- 5. Me bajaré del Metrorail en la estación de:** *(Marque la estación en que se bajará de Metrorail)*
 Palmetto Brownsville Culmer Coconut Grove
 Okeechobee Earlington Overtown Douglas Road
 Hialeah Heights Government Center University
 Tri-Rail Allapattah South Miami
 Northside Santa Clara Brickell Dadeland North
 Dr. MLK Jr. Civic Center Vizcaya Dadeland South
- 6. Cuando me vaya de la parada de autobús o estación de Metrorail/Metromover/Tri-Rail para ir a mi destino en una sola dirección voy a:**
(Escoja uno)
 Caminar solamente Ir en bicicleta
 Ir en un carro que yo dejé en la parada/estación
 Ir en un carro que me recogerá en la parada/estación
 Ir en un carro que alguien parqueo en la parada/estación
 Otro *(Por favor especifique)* _____

(Voltee la página)

PWEN DEPA - KI KOTE OU KOMANSE TRAJE SENP SA?

- Mwen té kòmansé trajè senp sa nan:** *(plas koté ou sòti konyéya)*
 Travay Kolèj/Inivèsité Lékòl Makèt
 Koté Plézi Lakay Yon lòt koté _____ *(pa eksanp Ayéwopò, osinon Otel)*
- a. Non Plas, Bizniz, osinon Bilding koté mwen sòti ya sé:**
 _____ *(Lakay osinon Non Plas, Bizniz oubyen Bilding)*
- b. Tanpri ba nou Kafou ki pi prè ya si ou pa konnen adrès ekzak la**
Adrès la sé: _____
 _____ épi _____
(Ryèl #1) (Ryèl #2)
 Vil _____ Kòd Postal _____
- 2. Mwen té kite Koté sa** *(koté ou té idantifyé nan kéksyon avan.)* **a:** _____: _____ **AM / PM** *(Antouré youn)*
- 3. Pou mwen te vini nan prèmyé bis stop osinon Metrorail/Metromover/Tri-rail Estasyon sa pou trajè senp sa, mwen té:** *(Chwazi sèlman youn)*
 Maché Vini sou Békan Kondi machin mwen ki paké nan éstasyon an
 Pran woulib nan men yon moun ki dépozém nan éstasyon an
 Pran woulib nan men yon moun ki paké machin li nan éstasyon an
 Itilizé lòt Mwayen *(Tanpri di ki mwayen)* _____
- 4. Mwen monté nan Metrorail tren sa nan estasyon:** *(Tchéké non estasyon an.)*
 Palmetto Brownsville Culmer Coconut Grove
 Okeechobee Earlington Overtown Douglas Road
 Hialeah Heights Government Center University
 Tri-Rail Allapattah South Miami
 Northside Santa Clara Brickell Dadeland North
 Dr. MLK Jr. Civic Center Vizcaya Dadeland South

DESTINATION - KI KOTE OU PRALE?

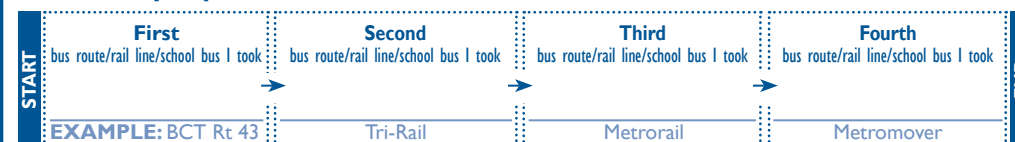
- 5. Map désann Metrorail tren sa nan estasyon:** *(Tchéké non estasyon an.)*
 Palmetto Brownsville Culmer Coconut Grove
 Okeechobee Earlington Overtown Douglas Road
 Hialeah Heights Government Center University
 Tri-Rail Allapattah South Miami
 Northside Santa Clara Brickell Dadeland North
 Dr. MLK Jr. Civic Center Vizcaya Dadeland South
- 6. Lè mwen kite dènyé bis stop osinon Metrorail/Metromover/Tri-rail Estasyon sa pou trajè senp sa, mwen pral:**
(Chwazi sèlman youn)
 Maché Pran Békan Kondi machin mwen ki paké nan éstasyon an.
 Pran woulib nan men yon moun kab vini chachém nan éstasyon an.
 Pran woulib nan men yon moun ki paké machin li nan éstasyon an.
 Itilizé lòt Mwayen *(Tanpri di ki mwayen)* _____

(Tounen paj la)

7. I will ultimately finish this one-way trip at: (Place you are going to.)
 Work Place College / University School (K - 12) Shopping
 Social / Recreational Home Other _____ (i.e. Airport, Hotel, etc.)
- a. The Name of this Place, Business, or Building I am going to is:
 _____ (Home or Name of Place, Business or Building)
- b. Please provide nearest Intersection (or Cross Streets) if you do not know the exact address
 The address is: _____
 _____ and _____
 (Cross Street #1) (Cross Street #2)
- City _____ Zip Code _____
8. I will arrive at this Place (the Place identified above) at: _____: _____ AM / PM (Circle one)

ABOUT THIS ONE-WAY TRIP

9. The exact order of bus routes, jitneys, and/or rail lines I will use to make this one-way trip is: (List in the boxes below the buses, school buses, jitneys and rail lines used for this one way trip.)



10. The fare type I used for this Metrorail one-way trip was:
 \$2 Regular Cash Bus to Rail Transfer Tri-Rail Transfer
 Metrorail Reduced Fare Permit (Circle one):
 Disabled Medicare Student Preschool
 Golden / Patriot Passport Metropass Discount Metropass
 College Metropass Visitor Metropass
11. I typically make this one-way trip:
 Less than once per week 1 time per week 2 times per week
 3 times per week 4 times per week 5 or more times per week.

PLEASE TELL US ABOUT YOURSELF. (This information will be kept strictly confidential.)

12. I live in Zip Code _____.
13. I live / stay in South Florida:
 Less than one month per year 1 to 6 months per year
 More than 6 months per year
14. I have a valid driver's license: Yes No
15. My age is: Under 16 16 - 24 24 - 34
 35 - 44 45 - 54 55 - 64 65 or over
16. My race is best described as:
 American Indian Asian Black / African American White
 Spanish / Hispanic / Latino Other _____
17. Including me, (# of People) _____ people live in my home and of those:
 (# of people) _____ have a driver's license;
 (# of people) _____ are under 16 years old
 (# of people) _____ are 65 or over; and
 (# of people) _____ work outside of our home.

18. There are _____ registered cars, trucks, vans or motorcycles in my household.

Register to win a free Metropass when you return a completed survey. (please print clearly)

Name: _____
 Address: _____
 City: _____ State: _____ Zip Code: _____

Please return completed surveys in the marked boxes as you leave the station.

7. Finalmente concluiré mi viaje de una sola dirección en: (El lugar de mi destino)
 El trabajo La universidad La escuela (K - 12) Un lugar de compras
 Un lugar social / recreacional Mi casa Otro _____ (Ej. Aeropuerto, Hotel, etc.)
- a. El nombre del Lugar, Negocio o Edificio de mi destino es:
 _____ (Casa o nombre del Lugar, Negocio o Edificio)
- b. Por favor provea la intersección más cercana (calles que cruzan) si no tiene una dirección exacta
 La dirección es: _____
 _____ y _____
 (Calle #1) (Calle #2)
- Ciudad _____ Código Postal _____
8. Llegaré a este lugar (el lugar identificado arriba) a las: _____: _____ AM / PM (Circule uno)

ACERCA DE ESTE VIAJE EN UN SOLO SENTIDO

9. Los autobuses/ autobús pequeño y/o líneas de tren en el orden exacto que usare para hacer este viaje en una sola dirección: (Liste en las cajas de abajo los autobuses, autobuses de escuela, autobús pequeño y líneas de tren usadas en este viaje en una sola dirección.)



10. La tarifa que usé para este viaje en Metrorail en una sola dirección era:
 \$2 en efectivo Transferencia de autobús a tren Transferencia de Tri-Rail
 Metrorail tarifa reducida - (Circule uno)
 Incapacitado Medicare Estudiante Preescolar (Circule uno)
 Dorado (Golden) / Pasaporte Patriota (Patriot) Metropass
 Metropass de Descuento Metropass Universitario Metropass de Visitante
11. Típicamente hago este viaje en una sola dirección:
 Menos de una vez por semana Una vez por semana 2 veces por semana
 3 veces por semana 4 veces por semana 5 o más veces por semana

POR FAVOR INFÓRMENOS SOBRE USTED. (Esta información se mantendrá estrictamente confidencial)

12. Mi código postal es _____.
13. Vivo / resido en el Sur de la Florida:
 Menos de un mes al año 1 a 6 meses al año
 Más de 6 meses al año
14. Tengo licencia de conducir: Sí No
15. Mi edad es: Menor de 16 16 - 24 24 - 34
 35 - 44 45 - 54 55 - 64 65 o más
16. La raza que me caracteriza es:
 Indio-Americano Asiático Negro / Afro-Americano Raza Blanca
 Español / Hispano / Latino Otro _____
17. Incluyéndome a mí, (# de personas) _____ persona(s) viven en mi hogar y de ellos:
 (# de personas) _____ tiene(n) licencia de conducir;
 (# de personas) _____ es(son) menores de 16 años;
 (# de personas) _____ es(son) de 65 or más; y
 (# de personas) _____ trabaja(n) fuera de nuestro hogar.

18. Tenemos registrados _____ carro(s), camiones, vanes o motocicletas en mi hogar.

Regístrese para ganar un Metropass gratis cuando devuelva una encuesta completa. (Por favor escriba claro)

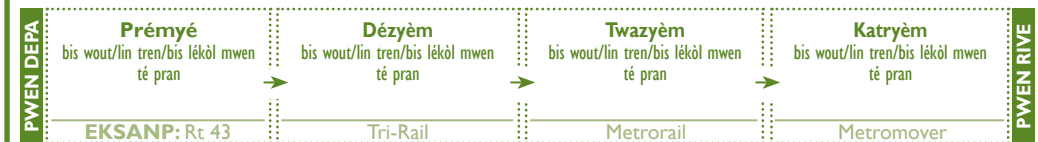
Nombre: _____
 Dirección: _____
 Ciudad: _____ Estado: _____ Código Postal: _____

Por favor devuelva la encuesta completa en las cajas marcadas cuando salga de la estación.

7. Map bouklé trajè senp sa nan:
 Travay Kolèj/Inivèsité Lékòl Makèt Koté Plézi
 Lakay Yon lòt koté _____ (pa eksanp Ayéwopò, osinon Otel)
- a. Non Plas, Bizniz, osinon Bilding koté mwen sòti ya sé:
 _____ (Lakay osinon Non Plas, Bizniz oubyen Bilding)
- b. Tanpri ba nou Kafou ki pi prè ya si ou pa konnen adrès ekzak la
 Adrès la sé: _____
 _____ épi _____
 (Ryèl #1) (Ryèl #2)
- Vil _____ Kòd Postal _____
8. Map rivé Koté sa (koté ou té idantifyé nan kéksyon avan) a: _____: _____ AM / PM (Antouré youn)

APWOPO TRAJE SENP SA

9. Lòd ekzak wout bis/Djitni ak/oswa Wout Tren map pran pou mwen fè trajè senp sa sé: (Ekri nan bwat anba yo bis, bis lékòl, djitni avèk wout tren ou pran pou trajè senp sa)



10. Fason mwen té péyé poum té pran Metrorail trajè senp sa sété:
 \$2 Lajan Kach Transfè Bis pou Tren Transfè Tri-Rail
 Kat Diskont Metrorail - (Antouré youn)
 Andikapé Médikè Elèv Matènèl
 Paspò Lò / Patryòt Métropas Diskont Métropas
 Kolèj Métropa Vizitè Métropas
11. Mwen fè trajè senp sa:
 Mwens ké yon fwa pa sémèn Yon fwa pa sémèn Dé fwa pa sémèn
 Twa fwa pa semen Kat fwa pa semen Plis ké senk fwa pa sémèn.

TANPRI PALE NOU DE WOU. (Enfòmasyon sa ap rété estrikman konfidansyèl)

12. Mwen abité nan kòd postal _____.
13. Mwen viv nan Sid Florida pou:
 Mwens ké yon mwa pa ané Youn a 6 mwa pa ané
 Plis ké 6 mwa pa ané
14. Mwen gen lisans poum kondi machin: Wi Non
15. Laj mwen se: Mwens ké 16 16 - 24 24 - 34
 35 - 44 45 - 54 55 - 64 65 oswa Plis
16. Pi bon fason pou dékri ras mwen sé:
 Mériken Indyen Aziatik Nwa/Afriken Mériken Blan
 PanYòl / Ispanik / Laten Lòt _____
17. Konté tèt pam, (kantité moun) _____ moun ki abité lakay mwen, é nan yo:
 (kantité moun) _____ ki genyen yon lisans;
 (kantité moun) _____ ki genyen mwens ké 16 an;
 (kantité moun) _____ ki genyen plis ké 65 an; épi
 (kantité moun) _____ ki travay déyò kay la.

18. Genyen _____vwati, kamyon, tibis (yòl) osinon motosiklèt ki imatrikilé lakay mwen.

Anréjistré pou kab genyen yon Métropas gratis lè ou rétonnen kéksyonè sa. (Tanpri ékri ak klaté)

Non ou: _____
 Adrès ou: _____
 Vil: _____ Eta: _____ Kòd Postal: _____

Tanpri mété kéksyonè ki konplété yon nan bwat ki maké pou yo a lè wap kité estasyon an.

APPENDIX B

On-Board Surveys - Directional Count Schedule

Metrorail On-Board Surveys - Directional Count Schedule

Team 1 - Northbound

Report Time: 5:30 AM

Southbound Trains								Northbound Trains									
Palmetto	Okeech- obee	Tri-Rail	Earl. Heights	Civic Center	Gov't Center	Douglas Road	Dadeland South		Dadeland South	Douglas Road	Gov't Center	Civic Center	Earl. Heights	Tri-Rail	Okeech- obee	Palmetto	
	0:03	0:05	0:10	0:05	0:06	0:09	0:09			0:09	0:10	0:05	0:05	0:09	0:05	0:05	
								Begin Shift	6:05	6:14	6:24	6:29	6:34	6:43	6:48	6:53	Stay on Train
7:00	7:03	7:08	7:18	7:23	7:29	7:38	7:47	Change Trains									
									8:00	8:09	8:19	8:24	8:29	8:38	8:43	8:48	Stay on Train
9:00	9:03	9:08	9:18	9:23	9:29	9:38	9:47	Change Trains									
									10:15	10:24	10:34	10:39	10:44	10:53	10:58	11:03	Stay on Train
11:15	11:18	11:23	11:33	11:38	11:44	11:53	12:02	Stay on Train	12:15	12:24	12:34						
											Lunch						
											13:19	13:24	13:29	13:38	13:43	13:48	Stay on Train
14:00	14:03	14:08	14:18	14:23	14:29	14:38	14:47	Stay on Train	15:00	15:09	15:19	15:24	15:29	15:38	15:43	15:48	Stay on Train
16:00	16:03	16:08	16:18	16:23	16:29	16:38	16:47	Change Trains									
									17:00	17:09	17:19	17:24	17:29	17:38	17:43	17:48	Stay on Train
18:00	18:03	18:08	18:18	18:23	18:29	18:38	18:47	End Shift									

Metrorail On-Board Surveys - Directional Count Schedule

Team 2 - Northbound

Report Time: 5:30 AM

Southbound Trains								Northbound Trains										
Palmetto	Okeech- obee	Tri-Rail	Earl. Heights	Civic Center	Gov't Center	Douglas Road	Dadeland South		Dadeland South	Douglas Road	Gov't Center	Civic Center	Earl. Heights	Tri-Rail	Okeech- obee	Palmetto		
	0:03	0:05	0:10	0:05	0:06	0:09	0:09			0:09	0:10	0:05	0:05	0:09	0:05	0:05		
								Begin Shift	6:15	6:24	6:34	6:39	6:44	6:53	6:58	7:03	Stay on Train	
7:15	7:18	7:23	7:33	7:38	7:44	7:53	8:02	Change Trains		8:15	8:24	8:34	8:39	8:44	8:53	8:58	9:03	Stay on Train
9:15	9:18	9:23	9:33	9:38	9:44	9:53	10:02	Change Trains										
									10:30	10:39	10:49	10:54	10:59	11:08	11:13	11:18	Stay on Train	
11:30	11:33	11:38	11:48	11:53	11:59													
					Lunch													
					12:44	12:53	13:02	Change Trains										
									13:30	13:39	13:49	13:54	13:59	14:08	14:13	14:18	Stay on Train	
14:30	14:33	14:38	14:48	14:53	14:59	15:08	15:17	Change Trains										
									15:45	15:54	16:04	16:09	16:14	16:23	16:28	16:33	Stay on Train	
16:38	16:41	16:46	16:56	17:01	17:07	17:16	17:25	Stay on Train	17:30	17:39	17:49	17:54	17:59	18:08	18:13	18:18	Change Trains	
18:30	18:33	18:38	18:48	18:53	18:59	19:08	19:17	End Shift										

Metrorail On-Board Surveys - Directional Count Schedule

Team 3 - NorthBound

Report Time: 5:30 AM

Southbound Trains								Northbound Trains									
Palmetto	Okeech- obee	Tri-Rail	Earl. Heights	Civic Center	Gov't Center	Douglas Road	Dadeland South		Dadeland South	Douglas Road	Gov't Center	Civic Center	Earl. Heights	Tri-Rail	Okeech- obee	Palmetto	
	0:03	0:05	0:10	0:05	0:06	0:09	0:09			0:09	0:10	0:05	0:05	0:09	0:05	0:05	
								Begin Shift	6:26	6:35	6:45	6:50	6:55	7:04	7:09	7:14	Stay on Train
7:23	7:26	7:31	7:41	7:46	7:52	8:01	8:10	Change Trains									
									8:23	8:32	8:42	8:47	8:52	9:01	9:06	9:11	Change Trains
9:30	9:33	9:38	9:48	9:53	9:59	10:08	10:17	Change Trains									
									10:45	10:54	11:04	11:09	11:14	11:23	11:28	11:33	Stay on Train
11:45	11:48	11:53	12:03	12:08	12:14												
					Lunch												
					12:59	13:08	13:17	Change Trains									
									13:45	13:54	14:04	14:09	14:14	14:23	14:28	14:33	Stay on Train
14:45	14:48	14:53	15:03	15:08	15:14	15:23	15:32	Change Trains									
									15:53	16:02	16:12	16:17	16:22	16:31	16:36	16:41	Stay on Train
16:45	16:48	16:53	17:03	17:08	17:14	17:23	17:32	Change Trains									
									17:45	17:54	18:04	18:09	18:14	18:23	18:28	18:33	Change Trains
18:45	18:48	18:53	19:03	19:08	19:14	19:23	19:32	End Shift									

Metrorail On-Board Surveys - Directional Count Schedule

Team 4 - Southbound

Report Time: 5:30 AM

Southbound Trains								Northbound Trains									
Palmetto	Okeech- obee	Tri-Rail	Earl. Heights	Civic Center	Gov't Center	Douglas Road	Dadeland South		Dadeland South	Douglas Road	Gov't Center	Civic Center	Earl. Heights	Tri-Rail	Okeech- obee	Palmetto	
	0:03	0:05	0:10	0:05	0:06	0:09	0:09			0:09	0:10	0:05	0:05	0:09	0:05	0:05	
6:00	6:03	6:08	6:18	6:23	6:29	6:38	6:47	Change Trains									
									7:00	7:09	7:19	7:24	7:29	7:38	7:43	7:48	Stay on Train
7:53	7:56	8:01	8:11	8:16	8:22	8:31	8:40	Stay on Train	8:45	8:54	9:04	9:09	9:14	9:23	9:28	9:33	Stay on Train
9:45	9:48	9:53	10:03	10:08	10:14	10:23	10:32	Change Trains									
									11:00	11:09	11:19	11:24	11:29	11:38	11:43	11:48	Stay on Train
12:00	12:03	12:08	12:18	12:23	12:29												
					Lunch												
					13:14	13:23	13:32	Change Trains									
									14:00	14:09	14:19	14:24	14:29	14:38	14:43	14:48	Stay on Train
15:00	15:03	15:08	15:18	15:23	15:29	15:38	15:47	Change Trains									
									16:08	16:17	16:27	16:32	16:37	16:46	16:51	16:56	Stay on Train
17:00	17:03	17:08	17:18	17:23	17:29	17:38	17:47	Change Trains									
									18:00	18:09	18:19	18:24	18:29	18:38	18:43	18:48	End of Shift

Metrorail On-Board Surveys - Directional Count Schedule

Team 5 - Southbound

Report Time: 5:30 AM

Southbound Trains								Northbound Trains									
Palmetto	Okeech- obee	Tri-Rail	Earl. Heights	Civic Center	Gov't Center	Douglas Road	Dadeland South		Dadeland South	Douglas Road	Gov't Center	Civic Center	Earl. Heights	Tri-Rail	Okeech- obee	Palmetto	
	0:03	0:05	0:10	0:05	0:06	0:09	0:09			0:09	0:10	0:05	0:05	0:09	0:05	0:05	
6:08	6:11	6:16	6:26	6:31	6:37	6:46	6:55	Change Trains									
									7:08	7:17	7:27	7:32	7:37	7:46	7:51	7:56	Stay on Train
8:00	8:03	8:08	8:18	8:23	8:29	8:38	8:47	Change Trains									
									9:00	9:09	9:19	9:24	9:29	9:38	9:43	9:48	Stay on Train
10:00	10:03	10:08	10:18	10:23	10:29	10:38	10:47	Change Trains									
									11:15	11:24	11:34	11:39	11:44	11:53	11:58	12:03	Stay on Train
12:15	12:18	12:23	12:33	12:38	12:44												
					Lunch												
					13:29	13:38	13:47	Change Trains									
									14:15	14:24	14:34	14:39	14:44	14:53	14:58	15:03	Stay on Train
15:15	15:18	15:23	15:33	15:38	15:44	15:53	16:02	Change Trains									
									16:15	16:24	16:34	16:39	16:44	16:53	16:58	17:03	Stay on Train
17:08	17:11	17:16	17:26	17:31	17:37	17:46	17:55	Change Trains									
									18:08	18:17	18:27	18:32	18:37	18:46	18:51	18:56	End Shift

Metrorail On-Board Surveys - Directional Count Schedule

Team 6 - SouthBound

Report Time: 5:30 AM

Southbound Trains								Northbound Trains									
Palmetto	Okeech- obee	Tri-Rail	Earl. Heights	Civic Center	Gov't Center	Douglas Road	Dadeland South		Dadeland South	Douglas Road	Gov't Center	Civic Center	Earl. Heights	Tri-Rail	Okeech- obee	Palmetto	
	0:03	0:05	0:10	0:05	0:06	0:09	0:09			0:09	0:10	0:05	0:05	0:09	0:05	0:05	
6:15	6:18	6:23	6:33	6:38	6:44	6:53	7:02	Change Trains									
									7:15	7:24	7:34	7:39	7:44	7:53	7:58	8:03	Stay on Train
8:08	8:11	8:16	8:26	8:31	8:37	8:46	8:55	Change Trains									
									9:08	9:17	9:27	9:32	9:37	9:46	9:51	9:56	Change Trains
10:15	10:18	10:23	10:33	10:38	10:44	10:53	11:02	Change Trains									
									11:30	11:39	11:49						
											Lunch						
											12:34	12:39	12:44	12:53	12:58	13:03	Stay on Train
13:15	13:18	13:23	13:33	13:38	13:44	13:53	14:02	Change Trains									
									14:30	14:39	14:49	14:54	14:59	15:08	15:13	15:18	Stay on Train
15:30	15:33	15:38	15:48	15:53	15:59	16:08	16:17	Change Trains									
									16:30	16:39	16:49	16:54	16:59	17:08	17:13	17:18	Stay on Train
17:23	17:26	17:31	17:41	17:46	17:52	18:01	18:10	Change Trains									
									18:23	18:32	18:42	18:47	18:52	19:01	19:06	19:11	End Shift

APPENDIX C

Survey Log Sheets

Metrorail Lead Counter Log Sheet

Name:			
Car:			
Door:	FR	MID	AFT
Direction:	NORTHBOUND	Time: _____:_____ AM / PM	

Station Name	ONs	OFFs	Time	
			Arr.	Dep.
Dadeland South				
Dadeland North				
South Miami				
University				
Douglas Road				
Coconut Grove				
Vizcaya				
Brickell				
Government Center				
Historic Overtown/Lyric Theatre				
Culmer				
Civic Center				
Santa Clara				
Allapattah				
Earlington Heights				
Brownsville				
Dr. Martin Luther King				
Northside				
Tri-Rail				
Hialeah				
Okeechobee				
Palmetto				

Metrorail Counter Log Sheet

Name:			
Car:			
Door:	FR	MID	AFT
Direction:	NORTHBOUND		Time: ____:____ AM / PM

Station Name	ONs	OFFs
Dadeland South		
Dadeland North		
South Miami		
University		
Douglas Road		
Coconut Grove		
Vizcaya		
Brickell		
Government Center		
Historic Overtown/Lyric Theatre		
Culmer		
Civic Center		
Santa Clara		
Allapattah		
Earlington Heights		
Brownsville		
Dr. Martin Luther King		
Northside		
Tri-Rail		
Hialeah		
Okeechobee		
Palmetto		

Metrorail Lead Counter Log Sheet

Name:			
Car:			
Door:	FR	MID	AFT
Direction:	SOUTHBOUND	Time: _____:_____ AM / PM	

Station Name	ONs	OFFs	Time	
			Arr.	Dep.
Palmetto				
Okeechobee				
Hialeah				
Tri-Rail				
Northside				
Dr. Martin Luther King				
Brownsville				
Earlington Heights				
Allapattah				
Santa Clara				
Civic Center				
Culmer				
Historic Overtown / Lyric Theater				
Government Center				
Brickell				
Vizcaya				
Coconut Grove				
Douglas Road				
University				
South Miami				
Dadeland North				
Dadeland South				

Metrorail Counter Log Sheet

Name:			
Car:			
Door:	FR	MID	AFT
Direction:	SOUTHBOUND	Time: _____:_____ AM / PM	

Station Name	ONs	OFFs
Palmetto		
Okeechobee		
Hialeah		
Tri-Rail		
Northside		
Dr. Martin Luther King		
Brownsville		
Earlington Heights		
Allapattah		
Santa Clara		
Civic Center		
Culmer		
Historic Overtown / Lyric Theater		
Government Center		
Brickell		
Vizcaya		
Coconut Grove		
Douglas Road		
University		
South Miami		
Dadeland North		
Dadeland South		

Station Supervisor Log

Name:	
Station:	

Time	Entry Turnstile Counts									
	1	2	3	4	5	6	7	8	9	10
6:00 AM										
7:00 AM										
8:00 AM										
9:00 AM										
10:00 AM										
11:00 AM										
12:00 PM										
1:00 PM										
2:00 PM										
3:00 PM										
4:00 PM										
5:00 PM										
6:00 PM										
7:00 PM										

Time	Exit Turnstile Counts									
	1	2	3	4	5	6	7	8	9	10
6:00 AM										
7:00 AM										
8:00 AM										
9:00 AM										
10:00 AM										
11:00 AM										
12:00 PM										
1:00 PM										
2:00 PM										
3:00 PM										
4:00 PM										
5:00 PM										
6:00 PM										
7:00 PM										

Station Supervisor Temp. Check In/Out Log

Name:	
Station:	

	Temp. Name	Check-IN Time	Check-OUT Time	Remarks
1.				
2.				
3.				
4.				
5.				

Surveyor Log Sheet

Name:	
Station:	

Time	Survey Serial Number		Survey Refusals
	Start	End	
6:00 AM			
7:00 AM			
8:00 AM			
9:00 AM			
10:00 AM			
11:00 AM			
12:00 PM			
1:00 PM			
2:00 PM			
3:00 PM			
4:00 PM			
5:00 PM			
6:00 PM			
7:00 PM			

APPENDIX D

Directional Count Raw Survey Data

Appendix D: 2009 MetroRail Directional Counts - Raw Survey Data

Time	On/Off	Palmetto		Okeechobee		Hialeah		Tri-Rail		Northside		MLK		Brownsville		Earlington Hts		Allapattah		Santa Clara		Civic Center		Culmer		Overtown/Lyric Ttre		Gov't Center		Brickell		Vizcaya		Coconut Grove		Douglas Road		University		South Miami		Dadeland North		Dadeland South		TOTAL				
		NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	ONS NB	ONS SB	OFFS NB	OFFS SB			
6AM to 7AM	Ons	0	5	0	9	0	9	1	28	4	9	3	9	9	7	11	11	6	3	3	7	15	6	3	5	4	0	8	3	20	6	2	11	9	9	12	1	6	0	16	0	79	2	83	0	294	140	217	130	
	Offs	4	0	3	0	14	0	9	2	4	2	15	0	7	0	6	1	3	1	8	0	37	5	3	0	6	2	79	51	10	7	2	4	0	2	4	16	2	12	1	8	0	3	0	14					
7AM to 8AM	Ons	0	9	0	55	2	35	9	53	4	22	3	17	9	12	5	12	2	25	0	6	4	6	4	2	3	2	7	4	11	16	3	6	6	8	8	0	3	0	67	0	89	3	53	0	292	293	261	203	
	Offs	10	0	8	0	14	0	9	4	7	0	3	5	2	0	0	5	3	5	1	2	48	45	3	3	9	3	108	85	17	4	7	6	1	0	7	32	1	0	2	0	1	0	4						
8AM to 9AM	Ons	0	6	0	12	0	12	1	8	0	16	2	7	4	5	4	9	1	12	3	17	3	11	1	3	9	3	9	12	19	13	3	6	15	20	14	42	108	0	29	10	74	3	58	0	357	227	262	260	
	Offs	1	0	0	0	8	2	5	0	5	0	7	1	9	0	3	0	3	1	0	0	65	37	2	7	10	1	108	43	14	15	6	1	2	6	9	19	2	21	3	36	0	21	0	49					
9AM to 10AM	Ons	0	6	0	17	1	28	1	39	3	35	2	23	3	12	5	17	1	25	2	8	11	25	6	1	0	4	4	10	2	11	3	1	1	2	4	1	3	1	26	1	33	0	28	0	139	267	188	168	
	Offs	9	0	2	1	12	1	4	2	10	2	3	0	0	6	2	2	1	2	0	4	30	39	3	0	2	5	87	58	18	9	1	2	1	0	0	8	2	4	1	9	0	3	0	11					
10AM to 11AM	Ons	0	5	0	5	1	9	0	4	0	13	0	19	1	7	2	13	2	12	0	5	19	43	10	7	4	9	39	32	7	11	4	10	7	16	16	9	7	1	33	2	35	0	19	0	206	232	151	274	
	Offs	1	0	0	0	5	0	6	0	7	0	2	3	3	1	4	2	10	5	7	0	29	11	0	8	7	9	43	58	5	16	4	2	3	16	8	29	5	26	1	25	1	24	0	39					
11AM to 12PM	Ons	0	6	0	3	2	13	0	38	5	17	6	9	17	6	6	6	2	9	1	6	18	25	6	2	4	0	66	20	17	3	11	1	4	0	13	0	18	0	25	0	14	1	28	0	263	165	297	60	
	Offs	10	0	18	0	34	1	22	2	31	2	27	2	8	1	15	1	8	5	2	3	46	13	4	1	3	4	46	13	11	1	2	1	3	0	5	0	1	0	1	0	0	3	0	7					
12PM to 1PM	Ons	0	5	0	8	0	14	1	3	1	14	2	12	1	17	3	5	0	16	0	12	7	51	1	4	0	22	66	85	9	8	1	0	4	3	5	9	3	2	7	3	8	6	3	0	122	299	61	321	
	Offs	0	0	2	1	9	1	5	0	1	4	2	3	3	3	1	3	3	5	1	2	9	24	0	6	2	11	14	117	2	7	1	11	0	3	4	17	2	6	0	19	0	36	0	42					
1PM to 2PM	Ons	0	2	1	0	1	3	2	1	5	1	3	1	4	3	2	5	2	1	2	0	19	9	3	1	4	0	49	94	11	19	0	5	7	2	7	32	6	7	14	27	12	2	9	0	163	215	159	206	
	Offs	3	0	2	0	11	0	7	1	22	0	12	1	1	2	7	1	12	1	5	0	19	1	1	1	1	5	0	37	59	2	10	1	7	3	16	4	17	1	9	4	12	0	26	0	42				
2PM to 3PM	Ons	0	3	0	6	0	11	0	3	6	28	4	15	9	7	7	4	2	9	6	3	39	36	9	10	3	4	100	47	15	9	7	4	5	4	28	8	12	1	17	3	36	1	26	0	331	216	298	165	
	Offs	12	0	8	0	17	0	31	1	37	0	16	4	11	3	13	1	13	3	3	2	35	17	1	2	15	5	39	24	7	14	5	6	12	9	16	11	1	9	6	11	0	20	0	23					
3PM to 4PM	Ons	0	5	0	8	1	10	2	24	2	14	2	7	2	16	2	9	3	16	4	8	12	91	6	19	4	10	70	73	15	13	5	31	10	17	22	6	18	7	24	17	31	4	30	0	265	405	197	416	
	Offs	4	0	11	0	12	4	16	0	11	4	9	3	3	9	4	8	17	8	6	2	16	6	4	9	8	1	33	51	6	15	15	5	7	10	6	17	1	20	6	52	2	81	0	111					
4PM to 5PM	Ons	0	0	0	3	1	12	2	21	5	13	5	11	4	9	2	2	3	6	4	29	47	10	5	1	6	0	85	11	16	4	7	2	7	3	23	6	29	0	25	0	6	1	14	0	296	144	326	118	
	Offs	9	0	14	0	31	1	65	2	31	2	24	3	17	5	16	1	19	1	4	0	14	2	5	2	13	3	28	4	6	6	6	2	8	4	13	9	0	9	2	13	1	41	0	8					
5PM to 6PM	Ons	0	1	0	11	0	11	2	15	3	16	0	12	0	6	4	8	1	8	1	2	10	114	1	5	1	34	45	166	12	33	8	9	1	11	20	16	7	6	13	9	13	10	16	0	158	503	145	484	
	Offs	9	0	10	0	18	0	19	2	12	3	7	2	1	10	4	6	7	9	4	3	4	2	2	3	3	10	21	50	3	19	4	8	7	7	4	21	0	23	2	55	4	126	0	125					
6PM to 7PM	Ons	0	7	0	7	0	9	4	15	2	12	5	8	2	2	9	4	2	1	1	11	12	32	4	1	0	0	42	45	23	10	3	2	5	2	3	6	7	4	9	0	7	0	16	0	156	178	179	215	
	Offs	10	0	15	0	15	0	44	4	21	0	8	5	3	3	10	4	8	0	4	1	4	0	0	0	4	0	15	10	7	5	2	1	3	4	4	19	2	18	0	21	0	57	0	63					
7PM to 8PM	Ons	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	44	0	23	0	5	0	1	0	0	0	0	0	0	0	0	0	0	0	0	92	1	133
	Offs	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	3	0	0	0	2	0	0	0	0	11	0	6	0	13	0	8	0	13	0	5	0	17	0	33	0	19						
TOTAL		NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	ONS NB	ONS SB	OFFS NB	OFFS SB			
TOTAL ONS		0	60	1	144	9	176	25	252	40	210	37	150	65	109	62	109	27	143	27	115	216	468	59	62	42	88	590	646	177	179	57	93	81	98	175	136	227	33	305	72	437	33	383	0	6,418				
TOTAL OFFS		82	0	93	2	201	10	242	20	199	19	135	32	68	44	85	35	107	49	45	19	356	204	28	42	87	56	658	634	108	134	56	69	50	85	84	228	20	162	29	278	9	474	0	557			5,895		

 Denotes Time Period During which Certain Southbound Trains were Halted