APPENDIX I:

PILOT TEST FINDINGS

Atlanta Regional On-Board Transit Survey

Pilot Test Summary

ETC Institute

Agenda

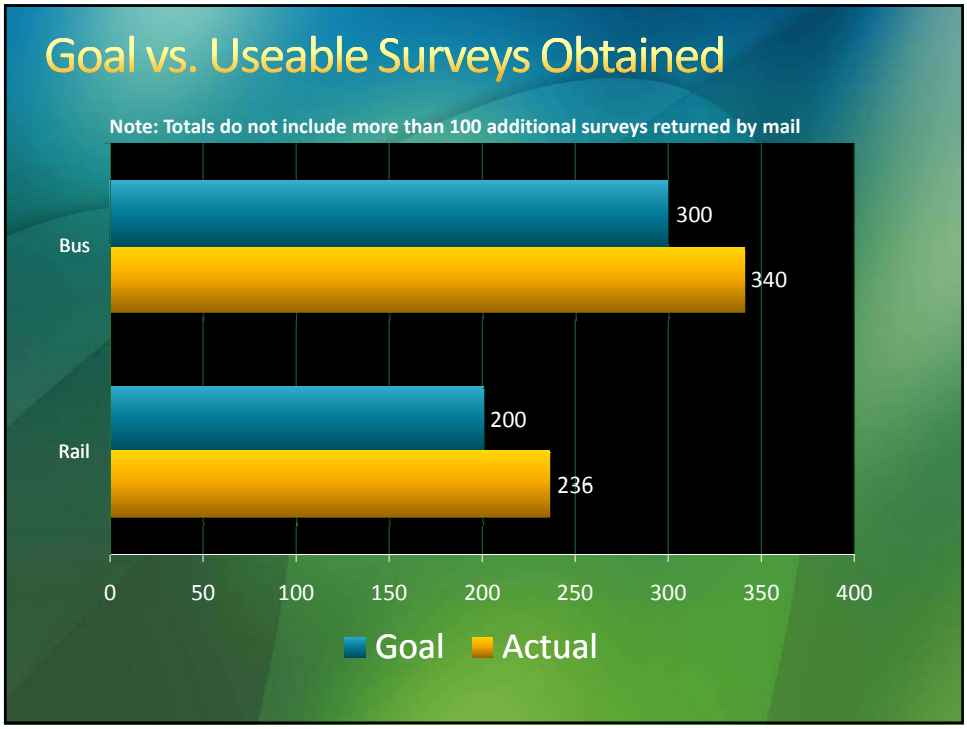
- Purpose/Scope
  - Routes/Stations Included
  - Training
- Assessment of the Survey Process
  - Survey Design
  - Sampling Methodology
- Assessment of the Data Quality
  - Completeness
  - Accuracy
- Next Steps
  - Analysis of the Data
  - External Review of the Data

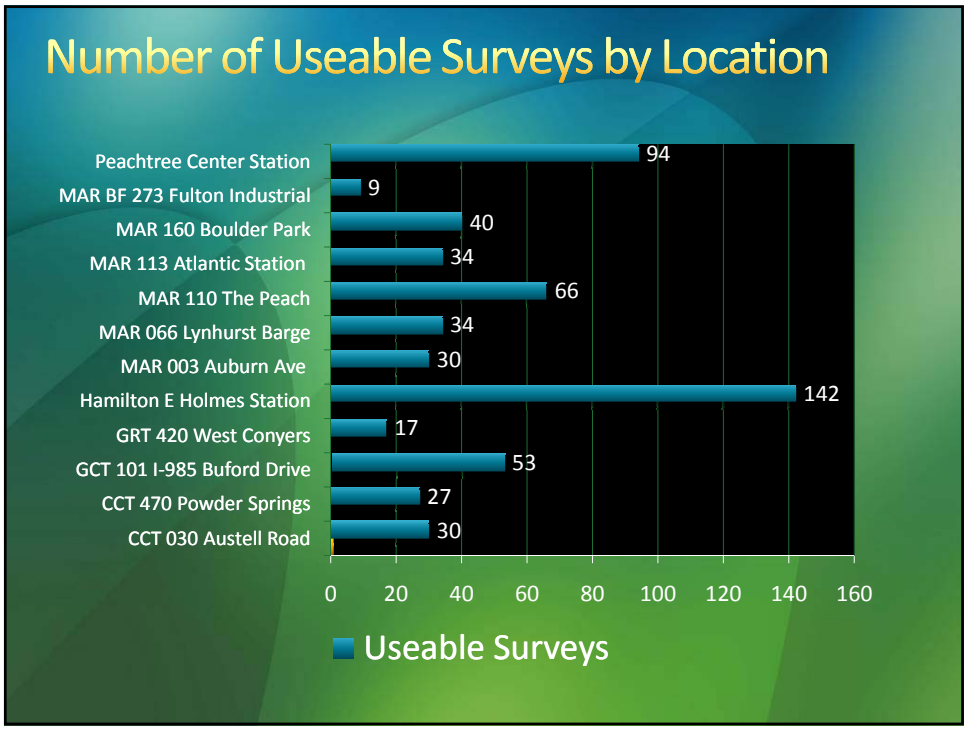
Purpose/Goal

- Purpose: to assess all aspects of the survey including survey design, sampling methodology, implementation, data processing tasks
- Goal: to obtain 500 completed surveys

Routes/Stations Included

- Bus Routes
  - Route 30 - (Cobb - Austell Road)
  - Route 470 (Cobb - Powder Springs)
  - Route 101 (Gwinnett - I-985/Buford Drive)
  - Route 3 (MARTA - Auburn Ave. / M.L. King Jr. Dr)
  - Route 110 (MARTA - The Peach)
  - Route 66 (MARTA - Lynhurst / Barge Rd Park & Ride)
  - Route 160 (MARTA - Boulder Park)
  - Route 273 (MARTA Fulton Industrial Express - Blue Flyer)
  - Route 113 (MARTA Atlantic Station/Auburn Ave)
  - Route 420 (GRTA - West Conyers)
- Train Stations
  - Hamilton E. Holmes
  - Peachtree Center


Goal vs. Useable Surveys Obtained
Note: Totals do not include more than 100 additional surveys returned by mail
Bus
300
340
Rail
200
236
0
50
100
150
200
250
300
350
400
Goal
Actual


Number of Useable Surveys by Location
Peachtree Center Station
94
MAR BF 273 Fulton Industrial
9
MAR 160 Boulder Park
40
MAR 113 Atlantic Station
34
MAR 110 The Peach
66
MAR 066 Lynhurst Barge
34
MAR 003 Auburn Ave
30
Hamilton E Holmes Station
142
GRT 420 West Conyers
17
GCT 101 I-985 Buford Drive
53
CCT 470 Powder Springs
27
CCT 030 Austell Road
30
0
20
40
60
80
100
120
140
160
Useable Surveys

Assessment of …

Training & Staffing

Staffing Plan

- Pilot Test Involved 16 Personnel
  - 1 – Project Manager
  - 2 – Field Supervisors
  - 13 - Survey Team
    - 1- Team Leader
    - 1 - Assistant Team Leader
    - 1 – Data Entry support staff
    - 10 – interviewers/Traffic Counters
- We plan to have 4 Teams this fall
  - 1 - Commuter Bus Team
  - 2 - Non-Commuter Bus Teams
  - 1 - One Rail Team

Training Process

- Day 1: Introduction to the project; orientation to tablet PCs
- Day 2: On-site reconnaissance of the routes and stations that were included in the pilot test
- Day 3: Extensive training on survey administration and sampling procedures.
- Day 4: Practical exercise to ensure that all interviewers could perform required tasks properly

Staffing/Training Observations

- Staff grasped concepts of the survey quickly
- Fairly easy to train people to use tablet PCs
- Only 1 of 17 people was not able to demonstrate proficiency in required tasks
- Temp Agency Labor Was Excellent
  - Arrived on time
  - Good attitude

Assessment of …

Survey Design

Survey Design Issues

- Many minor changes were made to the tablet PC version of the survey during the training process
  - A total of 14 programming revisions were completed during the 4 days of training
- Major Changes Included:
  - Adding off location for rail transfers
  - Adding a question at the beginning to see if the respondent has 5 minutes to complete the survey.
  - Adding a skip pattern for the home address if the person's origin or destination was the person's home.

Recommended Survey Design Improvements

- Adding a searchable database for all businesses/employers in the region.
- Improving quality of the data provided in the pull-down tab for possible stops along each route.
- Adding logic that limits the routes a person can transfer to if they are riding a specific route.
- Adding a place to record the date and time to the tablet PC.

Assessment of …

Survey Procedures and Sampling Methodology

Survey Procedures: Buses

- Advance notice posted on buses
- One Bus Per Route Was Staffed with 2-3 people per bus from approximately 630am-6:30pm.
  - Actual hours varied by route
  - Staff made continuous loops on routes all day with 30 minute breaks every2-3 hours
- Responsibilities
  - 1 Person on each bus completed Boarding/Alighting Counts
  - 1-2 people per bus administered surveys

Survey Procedures: Trains

- 4 staff assigned to each train station during the day
  - Surveys administered from 630am – 630pm
- Staff assigned to work different areas of the platform and to cover different cars
- Slightly different procedures were used at HE Holmes compared to Peachtree Center since HE Holmes was at the end of the line
  - Two directions at Peachtree Center
  - Most surveys completed on the train at HE Holmes

Sampling Methodolgy Used

- Every third person was asked to participate in the survey
  - Generally very effective
  - Interviewers did not have to decide who to interview
    - The procedures determined who would be interviewed
- Mail-back surveys distributed to riders who did not have time to complete the survey during the trip
  - Surveys were precoded so the surveys could be linked to the time and exact location where the survey was given to a rider

Suggested Improvements

- The rail survey should be administered by zones rather than at a single station
  - Interviewers got stuck on trains while administering surveys
  - Administering the survey in zones with 3-4 stations per zone over multiple days will increase productivity of interviewers
- A mix of printed and electronic surveys should be used for buses with long headways.
  - 1 interviewer can manage two surveys at the same time
    - Start printed survey with PERSON 1
    - Administer Tablet PC survey to PERSON 2
    - Collect/review printed survey with PERSON 1

Assessment of …

Ridership Counts

Ridership Count Issues

- Rail Stations: Existing Electronic Counts for the Rail System Will Be Used
  - Sampling Plan will be based on ridership counts between station to ensure good distribution of trips
- Commuter Routes: Counts recorded by bus drivers will be used for commuter routes
  - Ridership data reported by drivers matched boarding/alighting counts recorded by interviewers on all commuter routes in the pilot test
- Local Routes: Automated counters need to be validated before the survey begins
  - Manual counts will be needed to validate countes on all fixed routes

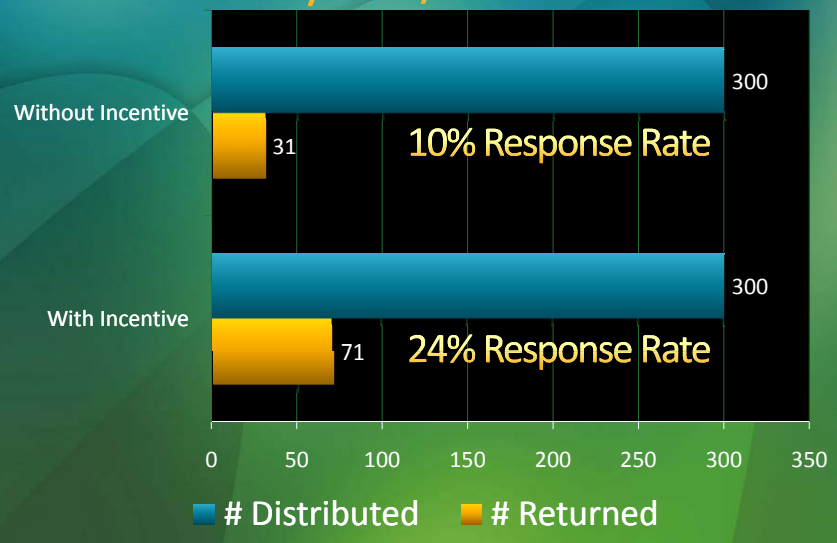
Assessment of …

Survey Participation

Participation Rates

- Overall, 86% of those asked initially agreed to participate
- Short Trips: among those who intially agreed to participate in the survey, 29% indicated that they had less than 5 minutes to complete the survey
  - These riders were given a mail-back survey

Response Rate to Short Trip Surveys Administered by Mail/Internet



Recommend Using A Drawing for a Free Monthly Pass as an Incentive This Fall

Other Response Rate Observations

- Home address data was useable for 100% of the surveys returned by mail for which an incentive was offered
  - More than 20% of the "no incentive" surveys returned by mail did not provide complete home addresses
- Internet Survey Option: only 3 out of 600 people who were given the short trip mail survey went to the website to complete the survey
  - www.AtlantaTransitSurvey.com

Assessment of …

Survey Quality

Useability of Address Data

- Percentage of Addresses that were successfully geocoded:
  - 100% of the Origin addresses
  - 99.8% of the Destination addresses
  - 99.5% of the Home addresses
    - Locations not geocoded were outside GA
  - 100% of Boarding Locations
  - 99.8% of Alighting Locations

Assessment of Survey Length

- During the first two days of the pilot test, the lack of Time was the Primary Reason Surveys were not fully completed
- The use of the mail-back survey corrected for this problem
  - The latest version of the tablet PC survey asks respondent at the beginning of the survey if he/she has at least 5 minutes for the survey
    - If not the station/route location, time, and boarding/alight location data is recorded along with the serial number of the mail-back survey that is given to the rider

Time Needed to Complete Survey

Assessment of Completeness

- 95% of the tablet PC surveys were complete and useable
- 88% of paper surveys completed with direct supervision were useable
- Only 43% of paper surveys that were not completed under direct supervision were useable, which is the reason this method is NOT going to be used

Findings …

Next Steps

Updated Project Schedule

- August
  - Finalize survey and sampling plan
- September
  - Finalize programming of tablet PCs
  - Gather updated ridership data
  - Conduct Training
- October-December
  - Administer Survey
- January
  - Finish cleaning survey data
  - Collect additional data if needed to fill gaps