

# CTA RIDER/NON-RIDER BEHAVIOR AND ATTITUDES SURVEY

Presented to Chicago Area Travel Model User Group  
September 1, 2010

Tara O'Malley  
Market Research Coordinator  
Chicago Transit Authority

Prepared for the Chicago Transit Authority  
Prepared by Abt SRBI



# Agenda

- **Background & Method**
- **Key Findings**
- **Summary of Key Findings**
- **Q & A**

# Background & Method

- ◎ **Background**

- ◎ **Method**

# Background

- Last conducted in 2000
- CTA wants to increase ridership
- Goal is to understand the complexities of those in CTA service area:
  - who they are
  - how they travel
  - transportation needs
  - CTA's image
  - opportunities for improving performance and communications

# Method

- Telephone survey among those with landlines and cell-phone service
- 2800 service area residents age 16+
- Disproportionate sample by geography
- Weighted to match known pop statistics by demography, geography, phone ownership
- Questionnaire: trip behavior, transportation needs, demographics, CTA and auto attitudes
- Fielded October – November 2009

# Key Findings

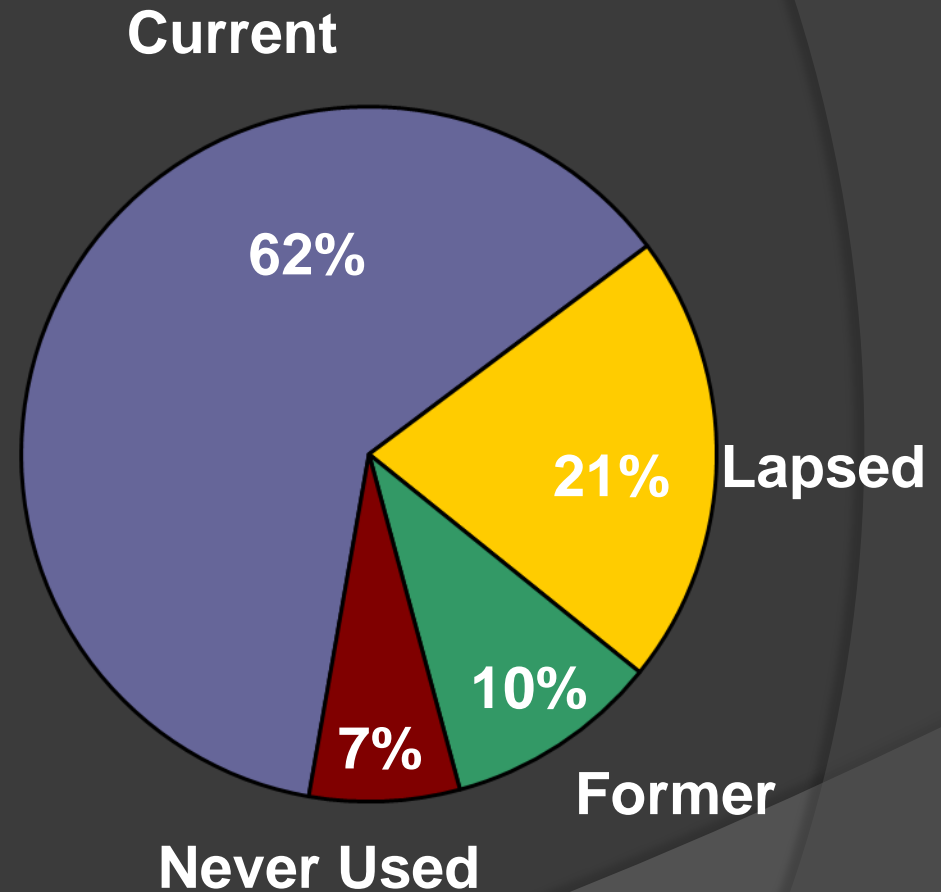
- ① **Customer Landscape**
- ② **Needs/Perceptions/Delivery Gaps**
- ③ **Segmentation**

# Customer Landscape

- **CTA Experience**
- **Customer & Non-customer Profiles**
- **Customer Subgroups**
- **Non-customer Subgroups**

# CTA Experience: Total Market

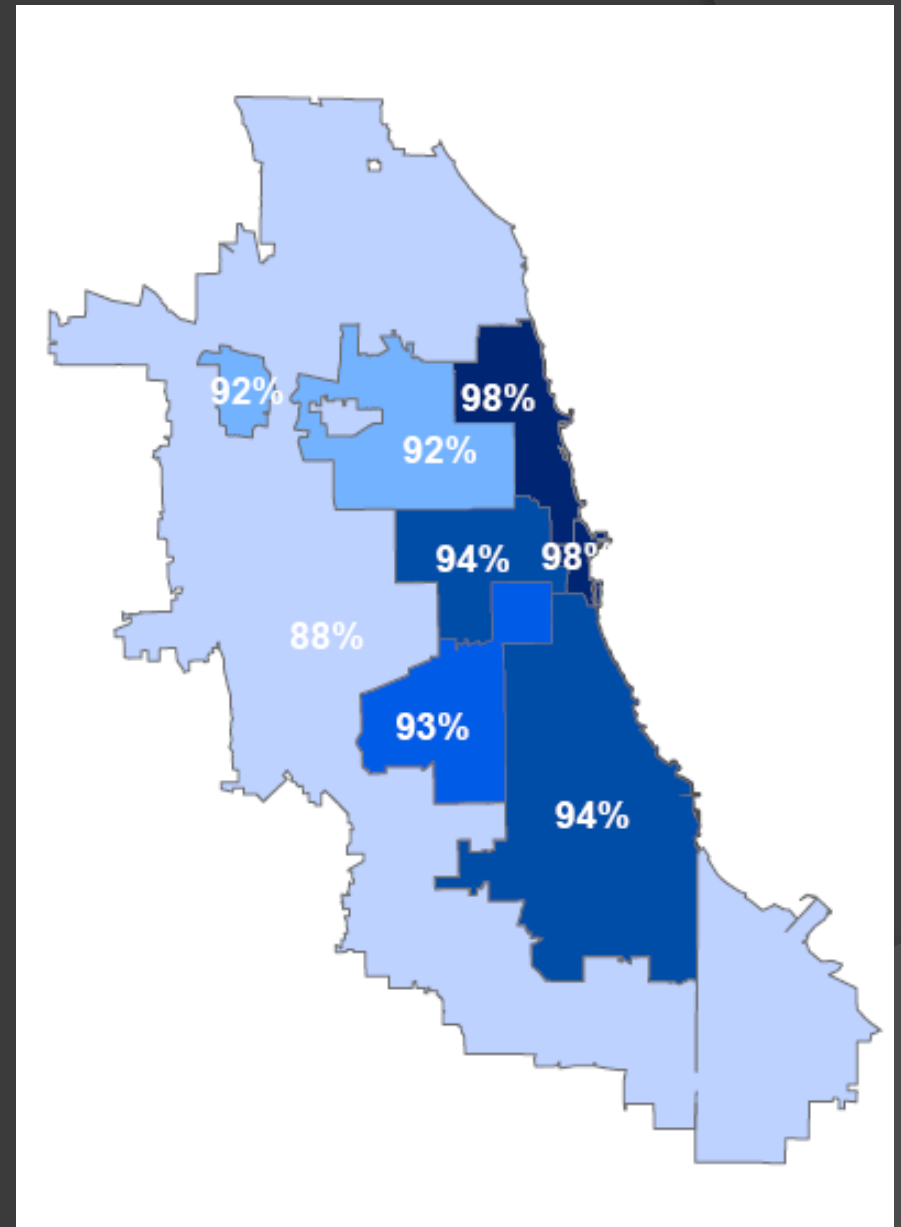
- Virtually all (93%) already tried CTA
- Most (62%) currently use
- Rest are mostly lapsed (past year, not past month – 21%) and former (tried but not past year – 10%)





# CTA Experience: By Geography

- 94% in the City as a whole
- Less so in the Suburbs (88%)
- Strongest in Downtown and North (both 98%)



# Customer & Non-customer Profiles

## Customers

- Skew male, younger, more students, less affluent, more Hispanic
- Skew City, “newer” to home
- Fewer have licenses or cars

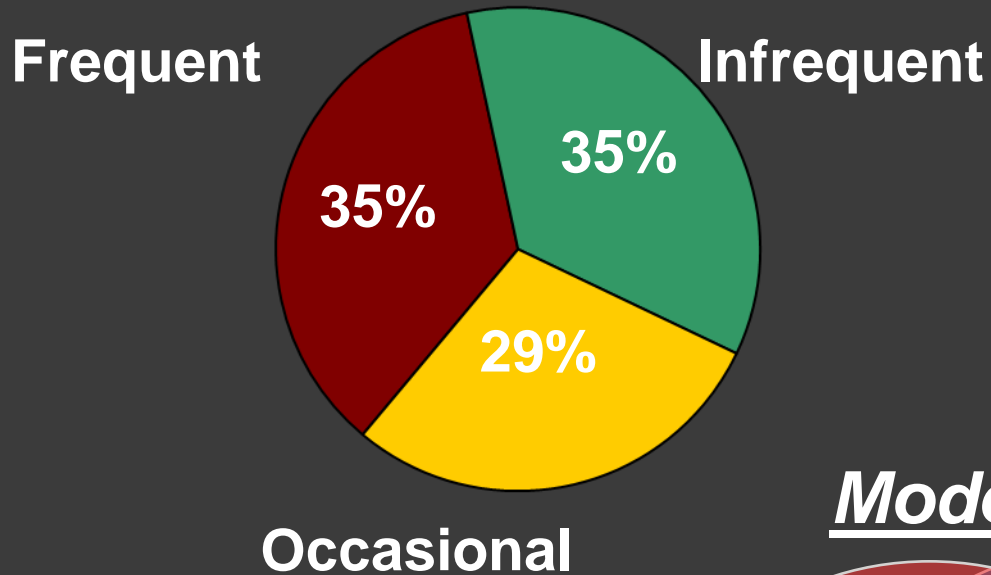
## Non-customers

- Skew female, older and retired, more affluent, more Caucasian
- Skew Suburbs, in home longer
- More have licenses and cars

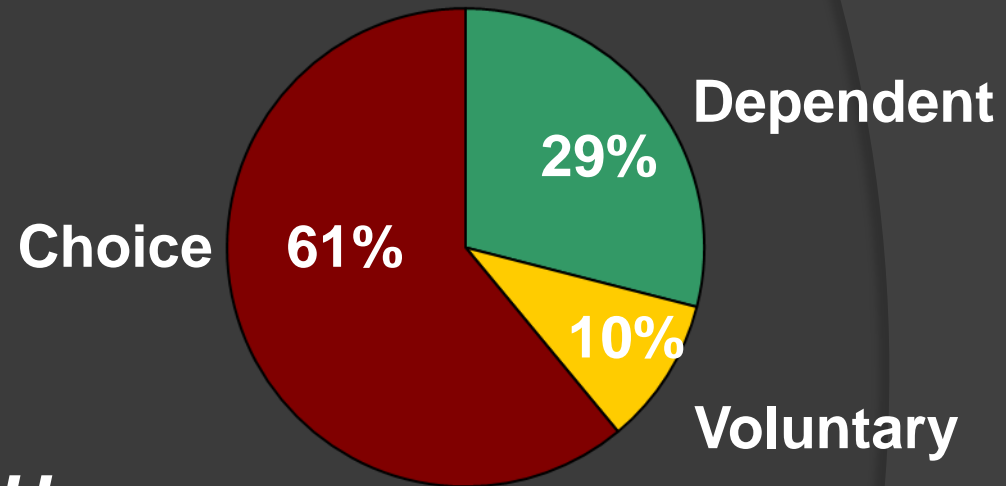


# Customer Subgroups: Overview

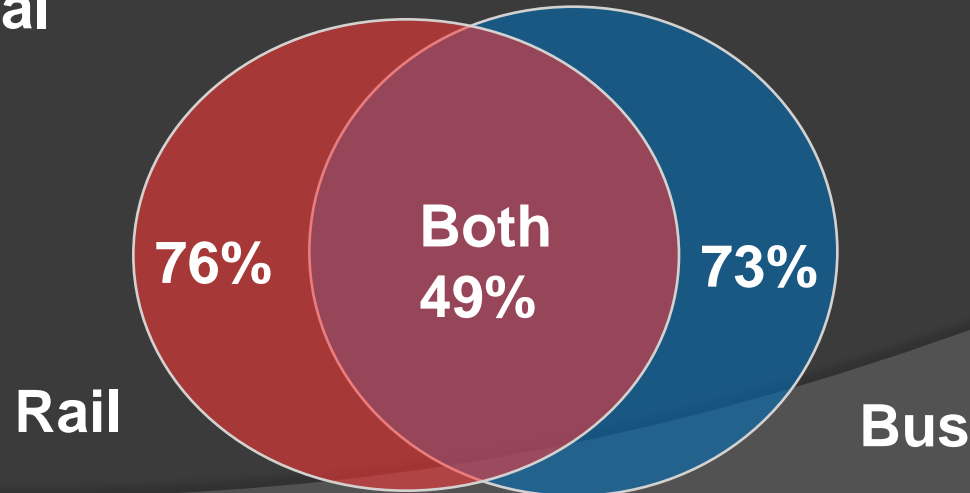
## Frequency of Use



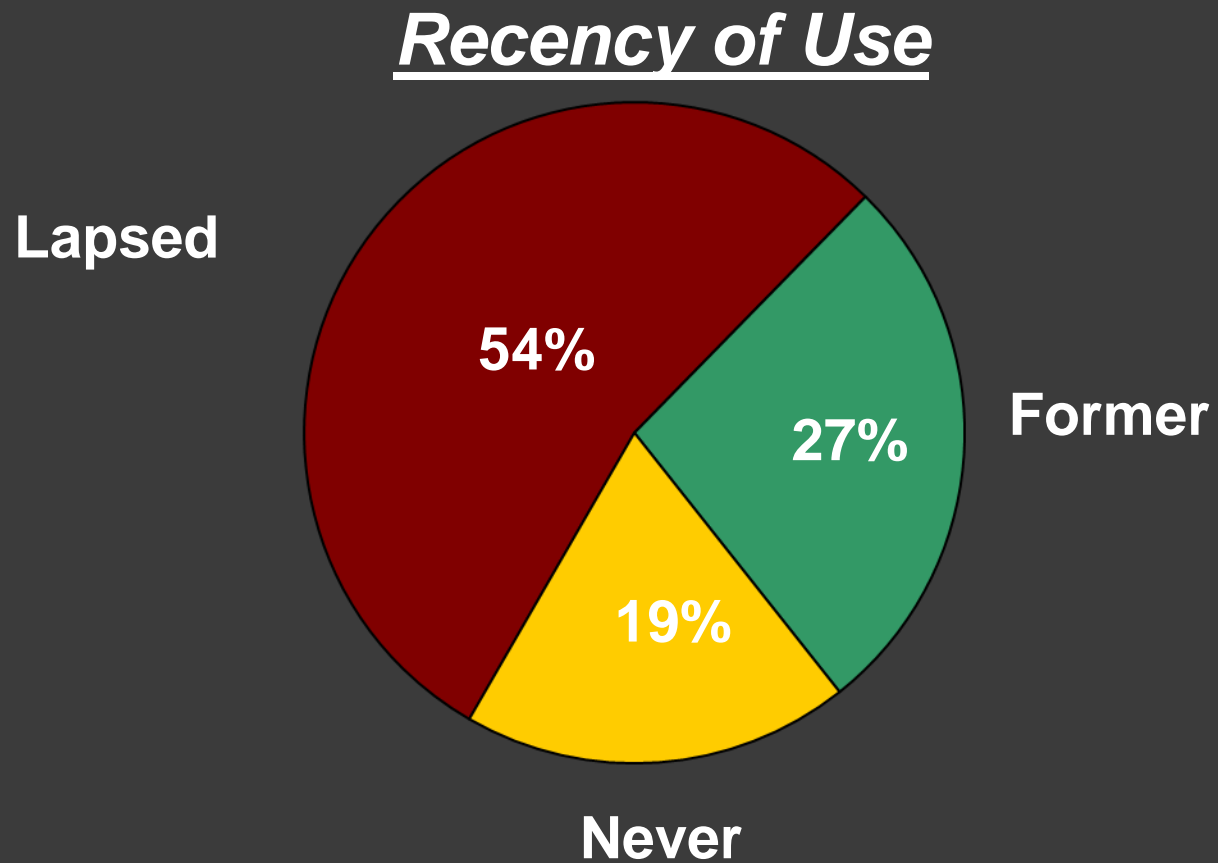
## Transit Dependence



## Mode Use



# Non-customer Subgroups: Overview



# Needs/Perceptions/Delivery Gaps

- ◎ **Transportation Needs Examined**
- ◎ **Transportation Needs Overall**
- ◎ **Overall Ratings**
- ◎ **Gap Charts**

# Transportation Needs Examined

- Examined 8 factors for needs and mode ratings (examined on an importance scale of 0-10):

<i>On Time</i> (OTP, quick)	<i>Part of your world</i> (familiar, nearby)
<i>Traffic</i> (congestion, environment)	<i>Flexibility</i> (schedules, emergency)
<i>Safety</i> (personal safety, crime)	<i>Comfort</i> (clean, comfortable, seating)
<i>Value</i> (good value)	<i>Info</i> (staff knowledge, trip info)

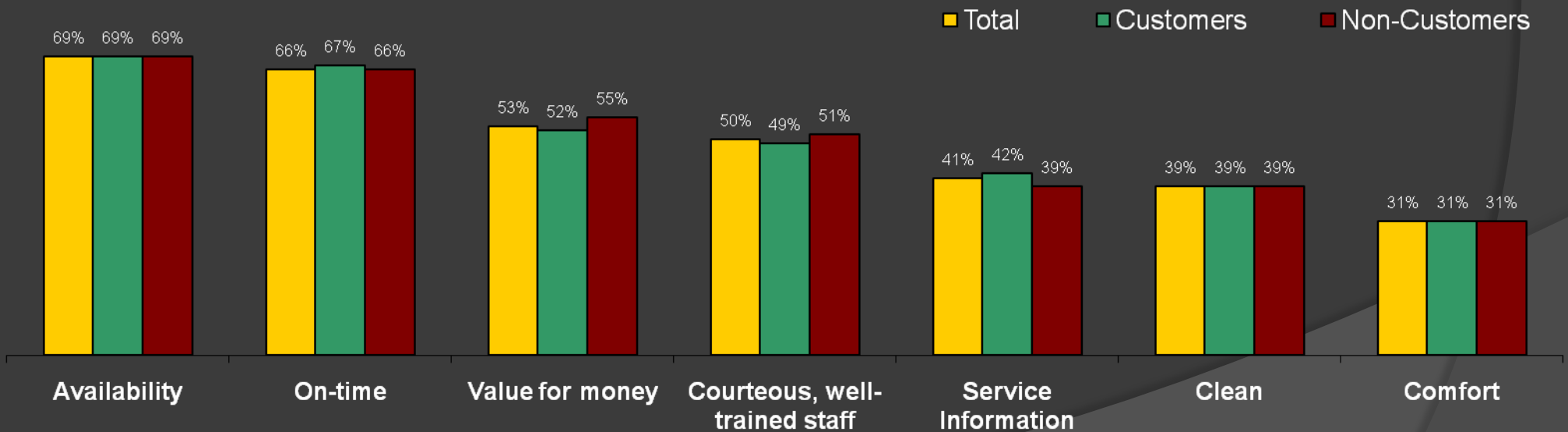
# Transportation Needs: Overall

	<u>Customers</u>	<u>Non-Customers</u>
	% 8/9/10; Rank	% 8/9/10; Rank
<i>On Time</i>	84 / 1	86 / 1
<i>Part of Your World</i>	73 / 2	73 / 4
<i>Flexibility</i>	72 / 3	84 / 2
<i>Value</i>	71 / 4	76 / 3
<i>Info</i>	66 / 5	69 / 7
<i>Traffic</i>	63 / 6 (t)	64 / 8
<i>Safety</i>	63 / 6 (t)	72 / 5
<i>Comfort</i>	57 / 8	71 / 6

- *On Time* is most important to customers, while *On Time* and *Flexibility* matter most to non-customers. Non-customers consider a variety of needs more important than customers do.
- *Comfort* matters least to customers, but non-customers care least about *Traffic*.

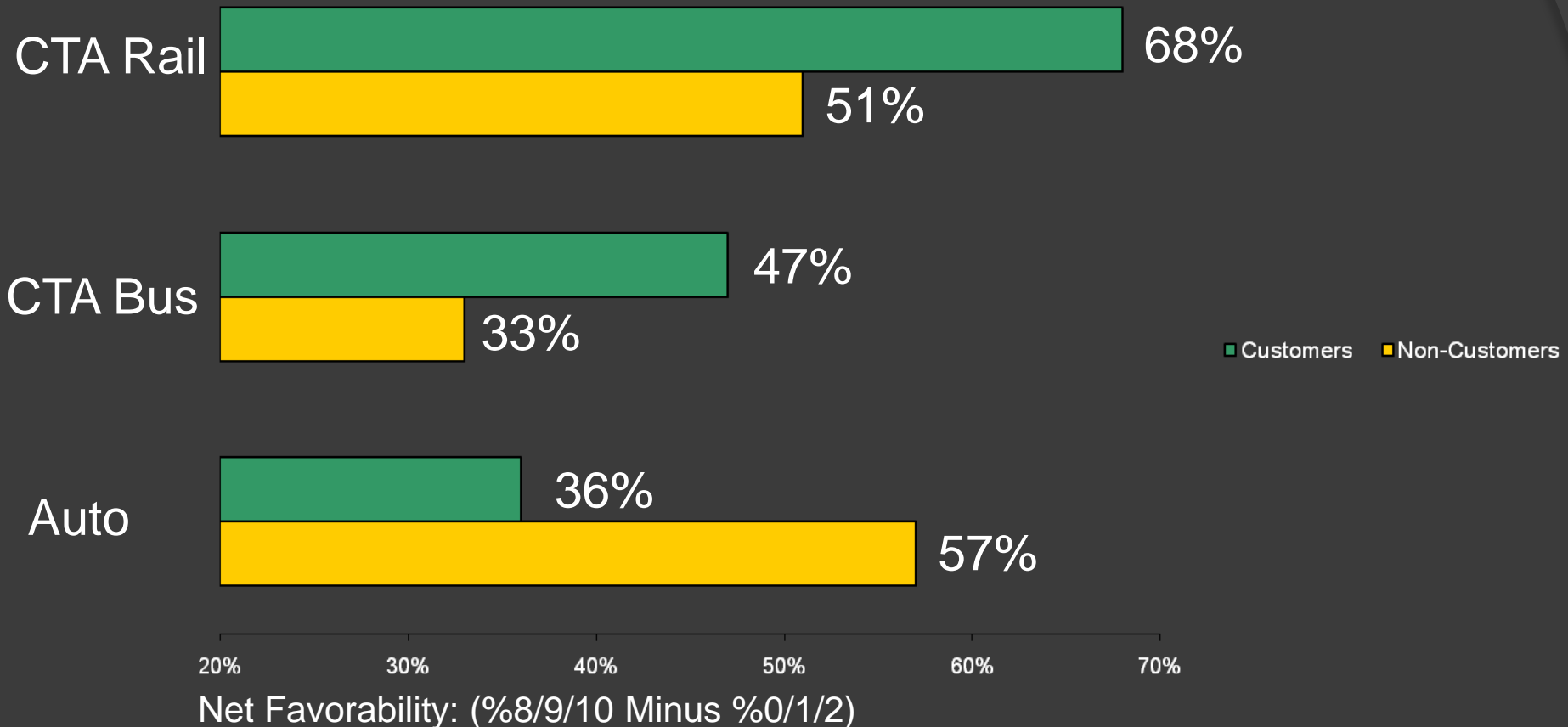
# Transportation Needs: Priorities

- In head-to-head comparisons of priorities, we looked closer at 7 areas.
- Of these, Customers and Non-customers agree that *Availability* and *On Time* matter most; *Comfort* least.





# Overall Ratings

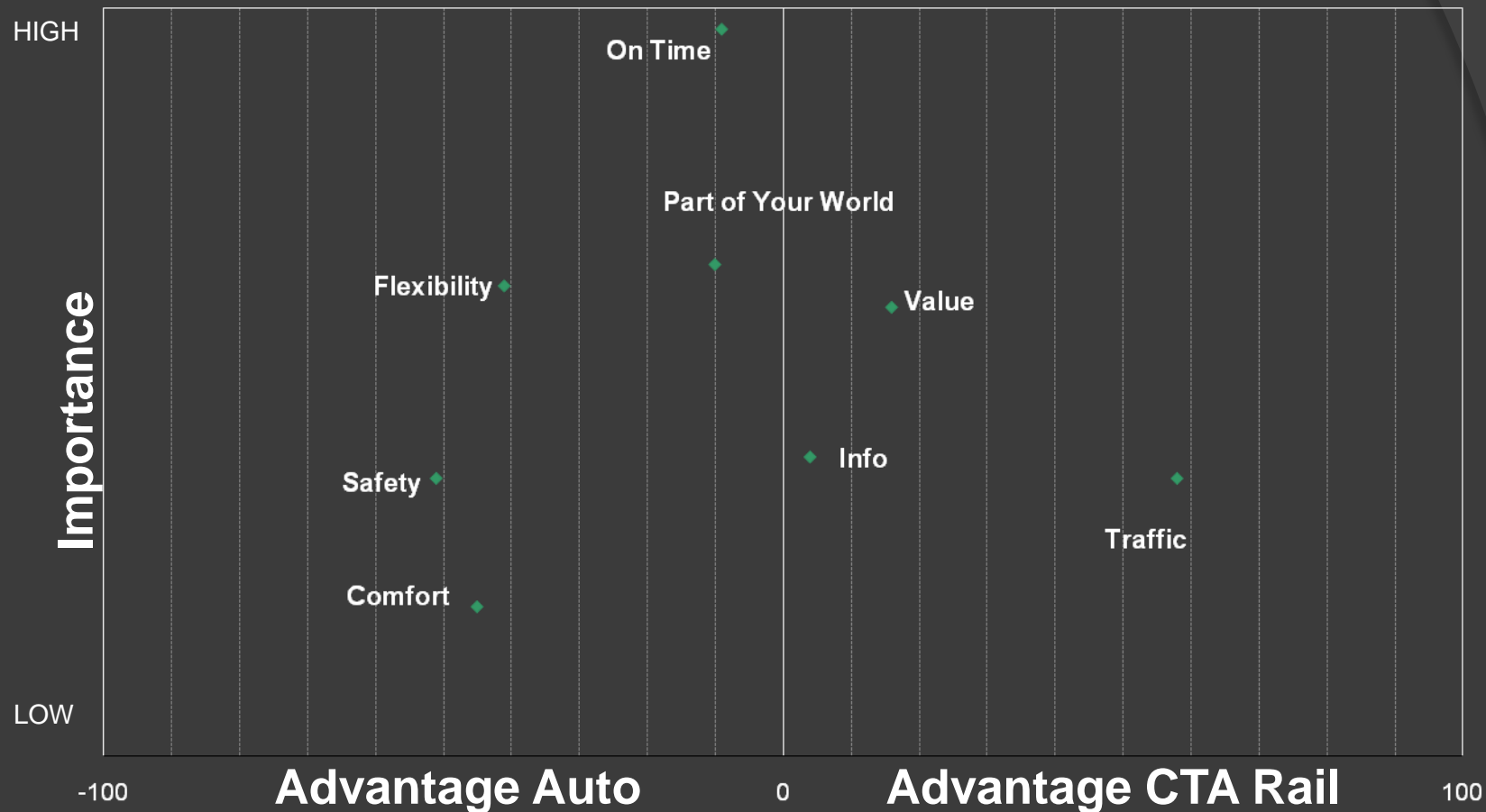


- Customers more positive about CTA modes than auto; rail leads
- Non-customers view auto and CTA rail almost at parity, bus much lower

# Gap Charts

- ◎ **Customer Gap Charts**
- ◎ **Non-customer Gap Charts**

# Customer Gap Chart: Rail vs. Auto



- Auto leads for *On Time*, *Flexibility*, and *Part of Your World*. Also for moderately important *Safety* and *Comfort*
- CTA rail holds a strong advantage for *Traffic*; slight advantage for *Value* and *Info*

# Non-customer Gap Chart: Rail vs. Auto



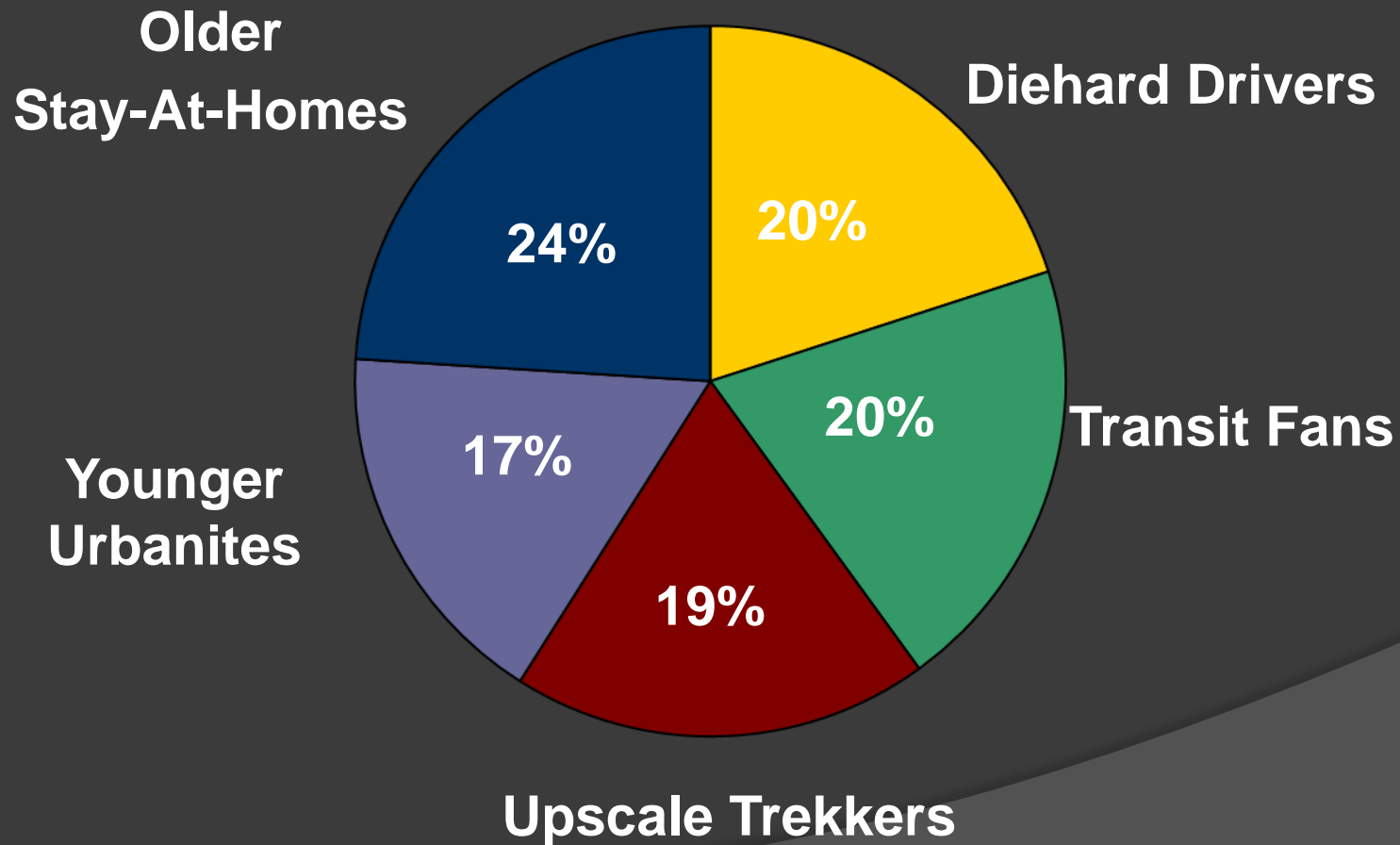
- Auto's advantages more pronounced among non-customers; *Value* is now also an advantage
- CTA rail's sole advantage is *Traffic* (low importance)

# Segmentation

- ⦿ **No longer just “Customers” and “Non-Customers”**
- ⦿ **Market segments**

# Segmentation

- Five distinct segments defined with fairly close proportions:

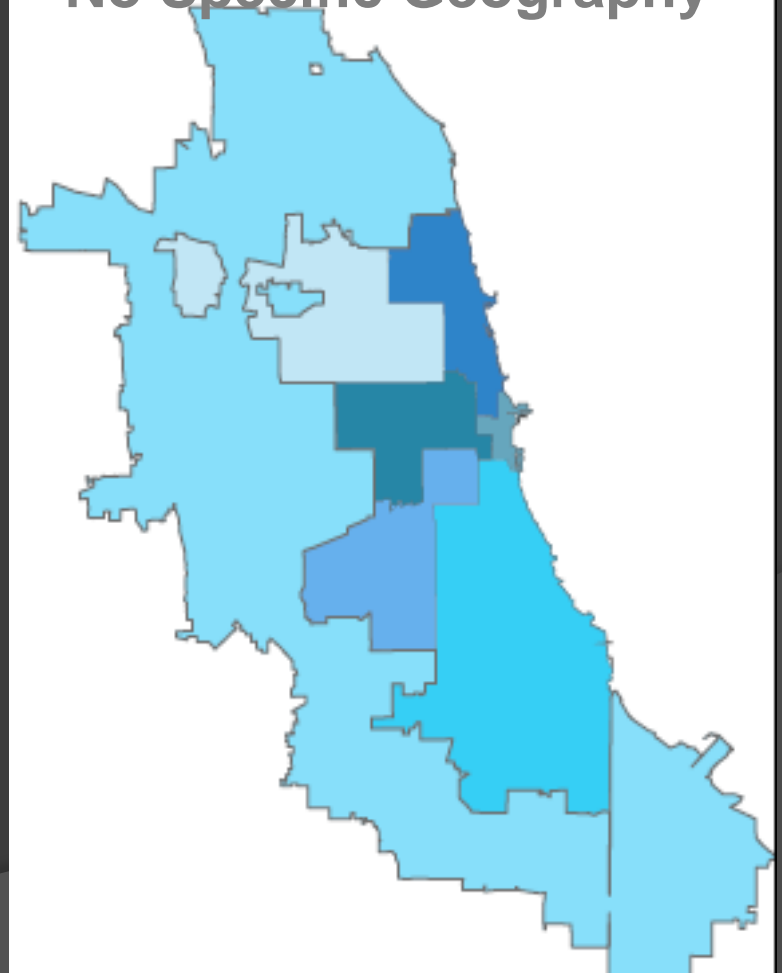


# Segmentation: Older Stay-at-Homes

- Older, more retired, long-term residents, African-American or Hispanic; less affluent
- Fewer trips (weekday/weekend); more likely to take CTA bus, less for car, less commuters
- Care most about *On Time*, *Part of Your World*, *Value* and *Info*
- Generally positive about CTA overall; rate bus, rail, and auto about equally on most attributes

24% of population  
23% of customers  
26% of non-customers

## No Specific Geography

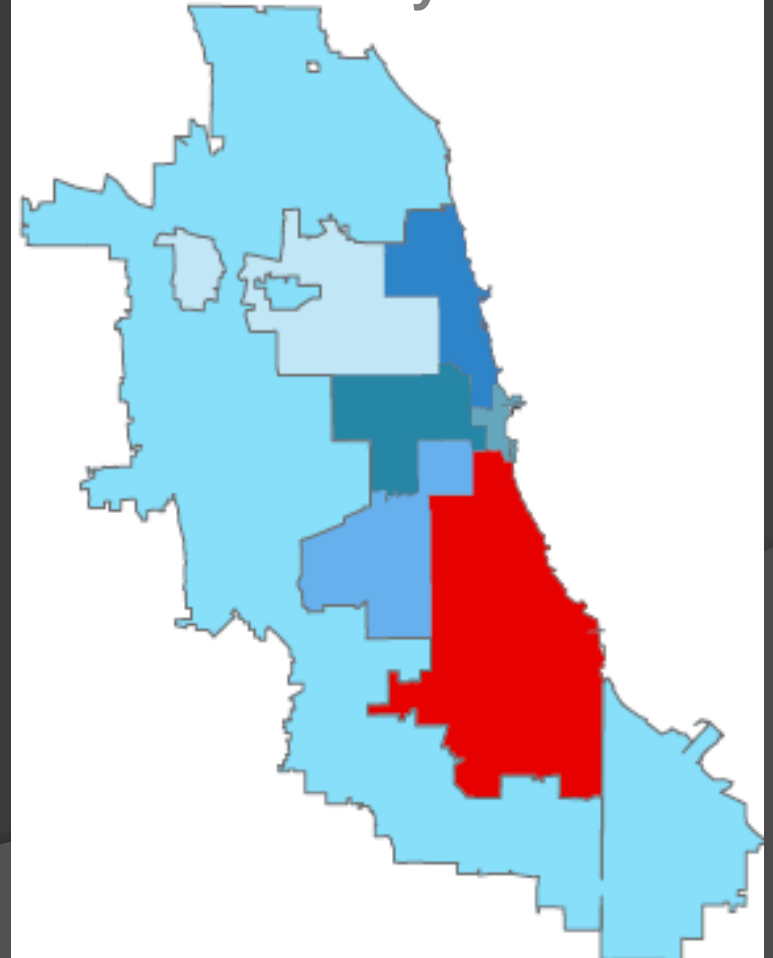


# Segmentation: Diehard Drivers

- More female, skew African-American
- Use car for weekday trips
- *On Time, Flexibility, Safety* (from crime) matter most to them; *Traffic* matters less
- Rate auto higher than all CTA modes

20% of population  
13% of customers  
32% of non-customers

Skew City South

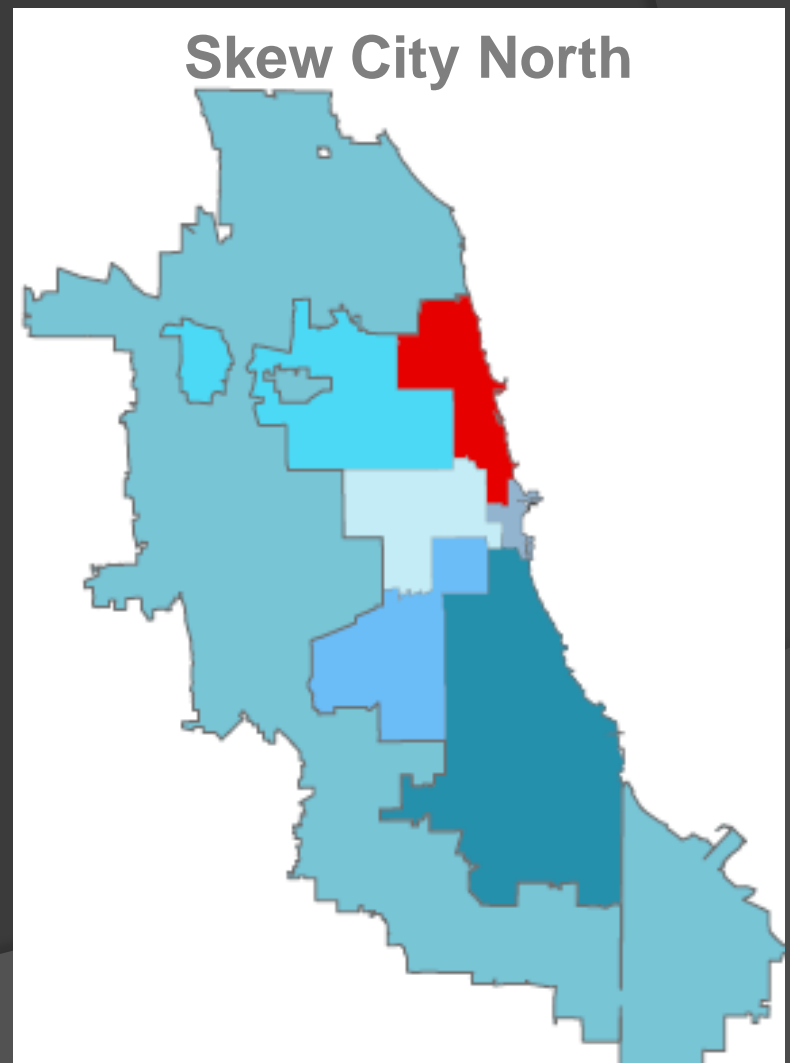




# Segmentation: Transit Fans

- More male, 25-34, Caucasian, small HH size
- Fewer weekday trips but “fair share” on weekend; bus and rail customers, more work at home/telecommute, fewer cars
- *On Time* is most important
- Favor all CTA modes over auto; rail and bus beat auto for *Value*, *Part of Your World*, *Traffic*; rail also leads for *On Time*

20% of population  
28% of customers  
7% of non-customers

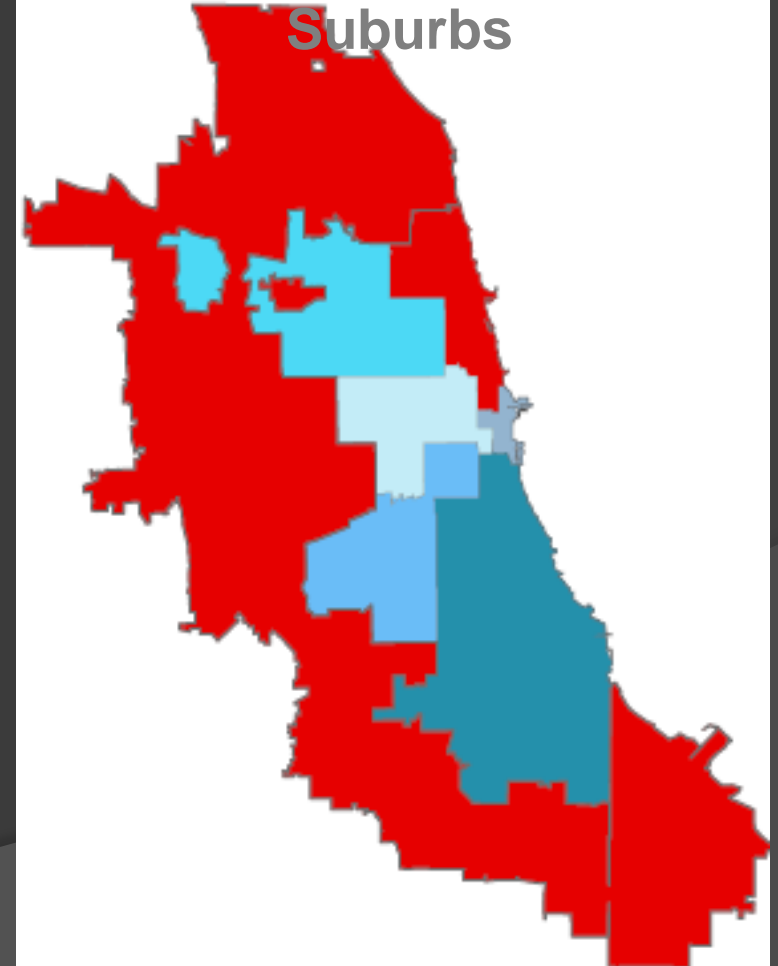


# Segmentation: Upscale Trekkers

- More male, employed, Caucasian, affluent, educated; fewer retired
- Make many trips, especially weekends, tend to drive
- *On Time* is the most important feature; so is *Part of Your World*
- Auto generally superior than rail; auto leads rail for *Flexibility* and *Safety*

19% of population  
20% of customers  
18% of non-customers

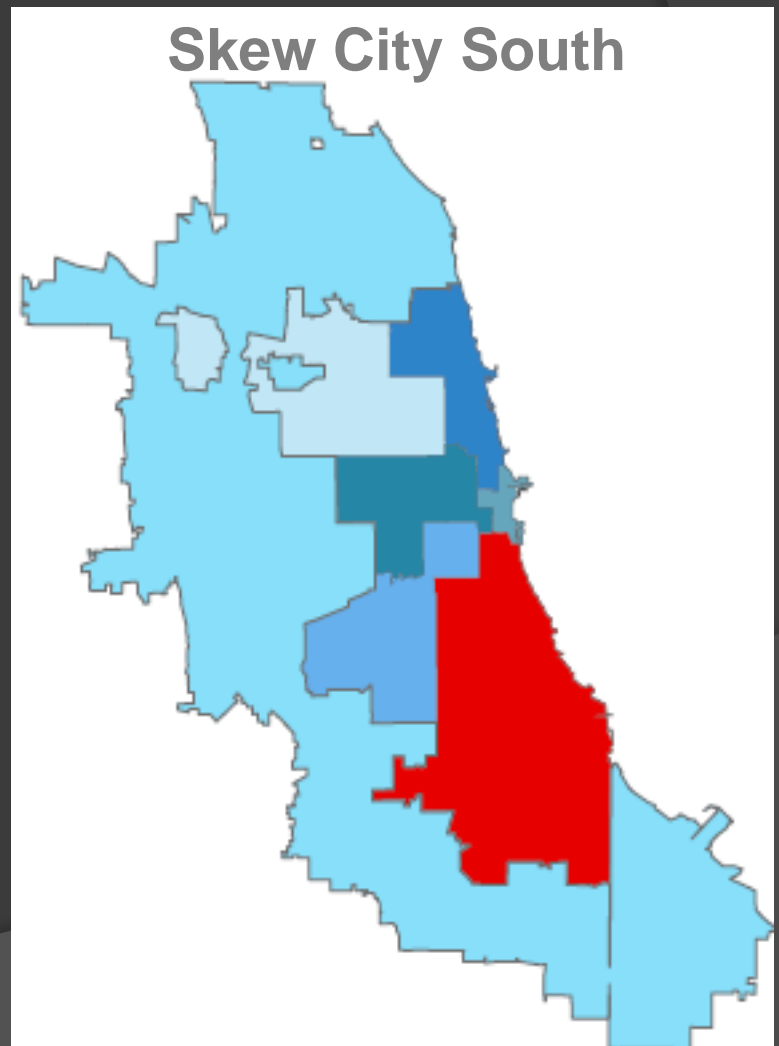
Skew City North &  
Suburbs



# Segmentation: Younger Urbanites

- More young, female, African-American, students; somewhat lower income
- More weekday trips, commuters; use CTA & car relatively equally
- Care most about *Flexibility, Value, and Part of Your World*
- Consider CTA rail equal to auto overall, but not bus; rail seen superior for *Traffic*, auto leads on all else

17% of population  
17% of customers  
16% of non-customers



# Summary of Key Findings

- ◎ CTA experience in service area is saturated.
- ◎ Customers
  - Equally divided into frequent, infrequent and occasional users.
  - Majority choose transit though they have other options; a third are totally dependent.
  - Bus and rail have equal penetration with about half of customers currently using both modes.
- ◎ Non-Customers
  - Majority of non-customers are lapsed (past year, not past month).

# Summary of Key Findings (Cont'd)

- ◎ Customers are most concerned with *On Time*; non-customers want this and much more.
- ◎ Overall, CTA modes rated higher than auto among customers; the reverse is true among non-customers.
- ◎ Analysis produced 5 distinct segments
  - Older Stay-At Homes
  - Diehard Drivers
  - Transit Fans
  - Upscale Trekkers
  - Younger Urbanites

# Questions?

Tara P. O'Malley  
Chicago Transit Authority  
Market Research Coordinator  
[tomalley@transitchicago.com](mailto:tomalley@transitchicago.com)  
312-681-4249

# Appendix

# Customer Subgroups: Frequency Detail

<u>Frequent</u>	<u>Infrequent</u>	<u>Occasional</u>
<ul style="list-style-type: none"><li>• Younger, less affluent, more employed, more African-American, fewer Caucasian</li><li>• More live in City</li><li>• More weekday travel, more commute</li></ul>	<ul style="list-style-type: none"><li>• Fewer work full time, more retired</li><li>• No significant geographic skews</li><li>• Fewer weekday/ weekend travel, more left home after AM peak</li></ul>	<ul style="list-style-type: none"><li>• More male, older, better educated, more affluent, more Caucasian</li><li>• More Suburb</li><li>• Heavier weekend travel, more likely to work at home/telecommute</li></ul>



# Customer Subgroups: Dependency Detail

<u>Dependent (29%)</u>	<u>Voluntary (10%)</u>	<u>Choice (61%)</u>
<ul style="list-style-type: none"><li>• More female, less educated, less affluent, fewer working full time</li><li>• More live in City</li><li>• Less rail than Voluntary customers</li></ul>	<ul style="list-style-type: none"><li>• Younger, more students, fewer working full time</li><li>• More live in City, “newer” to home</li><li>• Fewer commute, but are more likely to return during PM peak</li></ul>	<ul style="list-style-type: none"><li>• More male, better educated, more affluent, more working full time, more Caucasian</li><li>• Skew Suburb</li><li>• More weekday/ weekend travel, less travel on CTA</li></ul>

# Customer Subgroups: Mode Detail

## Rail

- More affluent, better educated, higher income, more working full time, more Caucasian
- More Suburb
- More weekday/weekend travel, more commuters

## Bus

- Less affluent, less educated, lower income, fewer working full time, fewer Caucasian
- More City
- Fewer weekday/weekend travel, fewer commuters

# Non-customer Subgroups: Recency Detail

<u>Lapsed</u>	<u>Former</u>	<u>Never</u>
<ul style="list-style-type: none"><li>• Younger, more affluent, better educated, more employed full time</li><li>• No geographic skews</li><li>• More weekday/ weekend travel</li></ul>	<ul style="list-style-type: none"><li>• More female, older, retired</li><li>• More live in City South, longer in current residence</li><li>• Fewer commuters</li></ul>	<ul style="list-style-type: none"><li>• More male, less educated, more Hispanic</li><li>• Skew Suburb</li><li>• Less weekday travel, less likely to use own car for travel, fewer with driver's license</li></ul>

# Explanation of the Scores

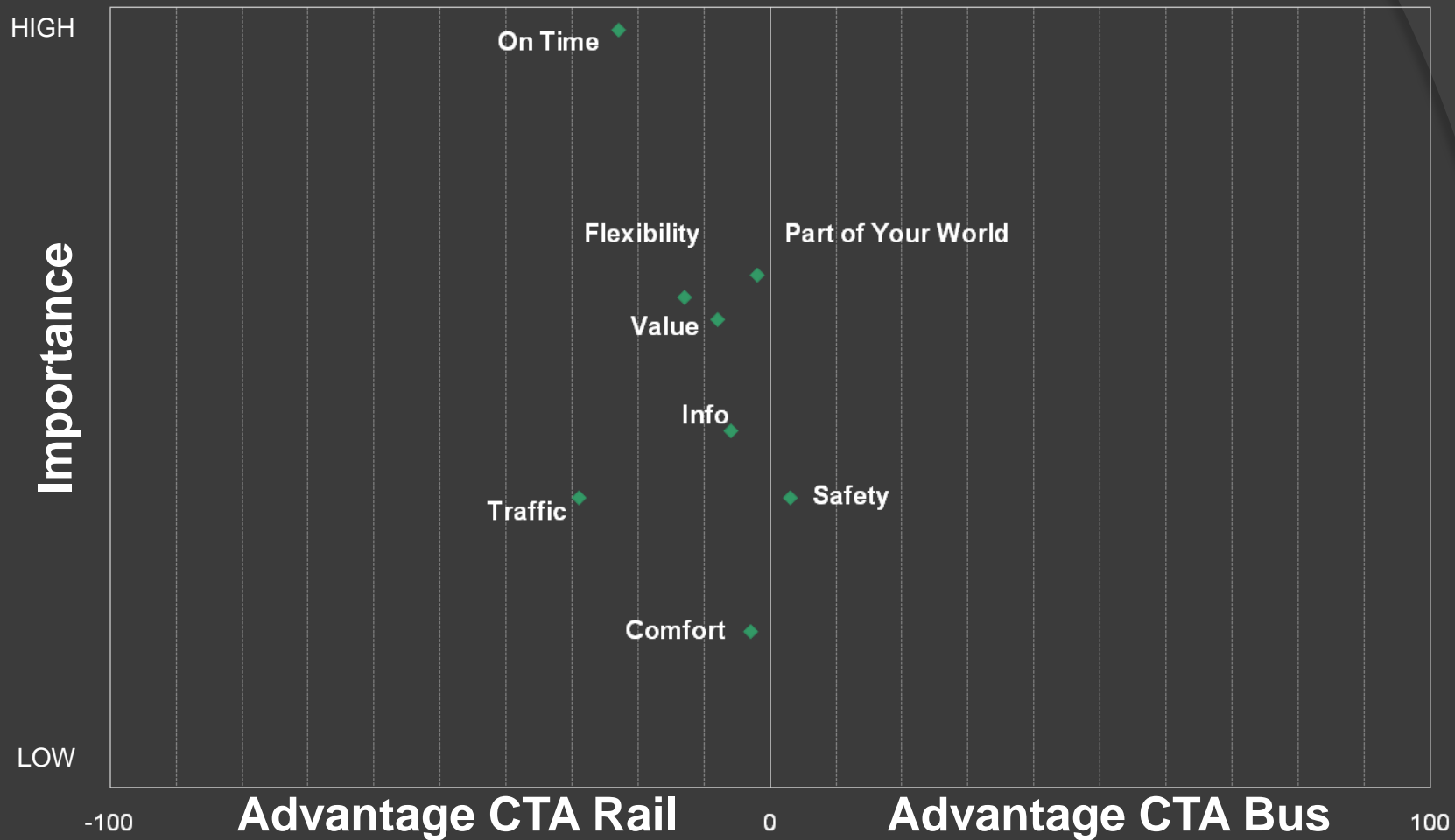
- Transportation needs use the top 3 box on an 11-point scale (% 8/9/10)
- Ratings use “net favorability” index
  - Index created by taking % top 3 box on an 11-point scale and subtracting bottom 3 box (% 8/9/10 minus % 0/1/2)

<i>On Time</i> (OTP, quick)	<i>Part of your world</i> (familiar, nearby)
<i>Traffic</i> (congestion, environment)	<i>Flexibility</i> (schedules, emergency)
<i>Safety</i> (personal safety, crime)	<i>Comfort</i> (clean, comfortable, seating)
<i>Value</i> (good value)	<i>Info</i> (staff knowledge, trip info)

# Explanation of the Gap Analysis

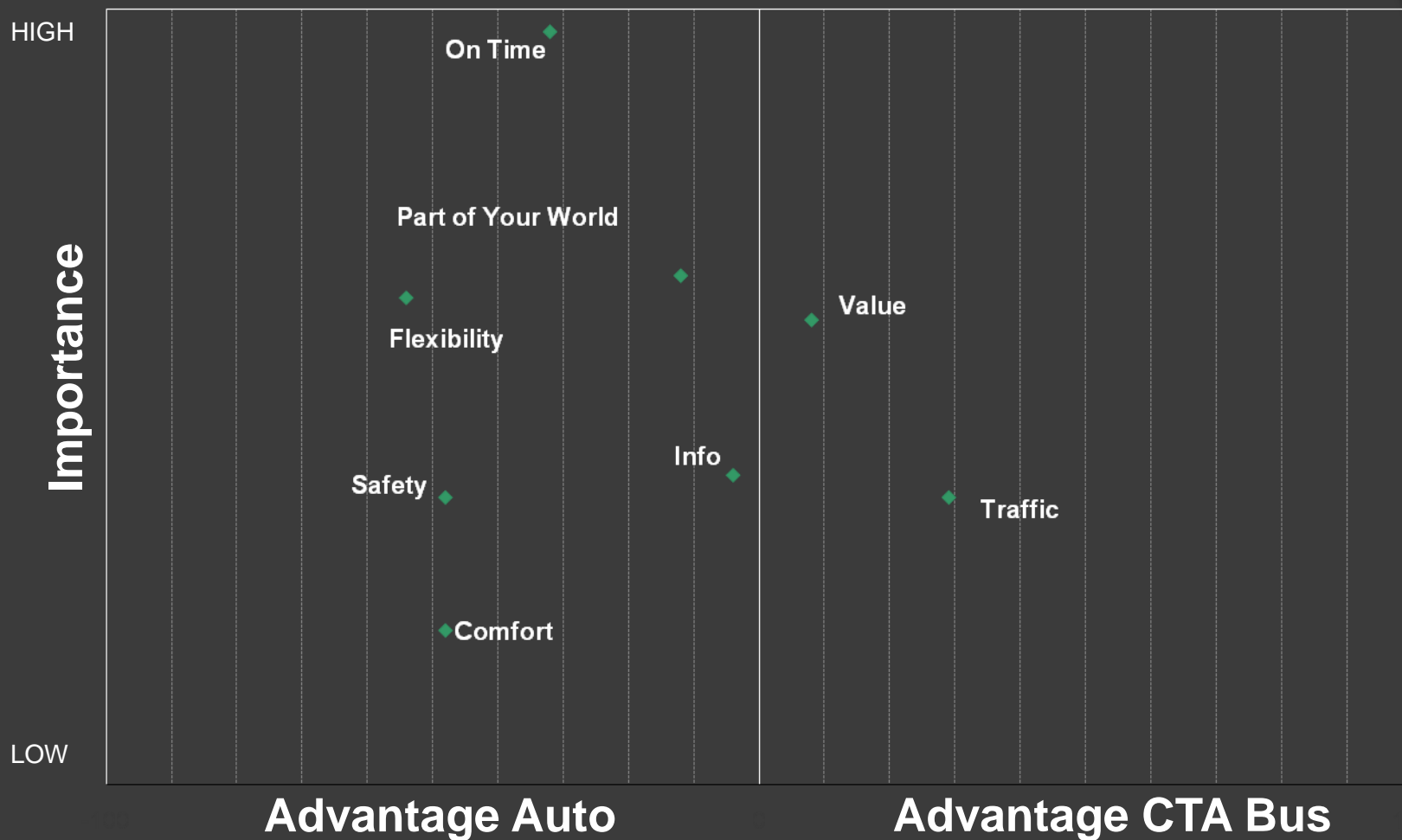
- Gap charts plot comparative mode advantages (x axis) vs. needs or importance (y axis)
- There are always two modes per chart
- Position of attribute on chart determined by two factors:
  - taking “net favorability” index of one mode and subtracting the index from the other comparison mode (i.e.; 12% Rail minus 20% Bus = -8% gap score or an 8% gap advantage for Bus)
  - taking the importance top 3 box score....the higher the score the closer the item is to the top of the chart

# Customer Gap Chart: Rail vs. Bus



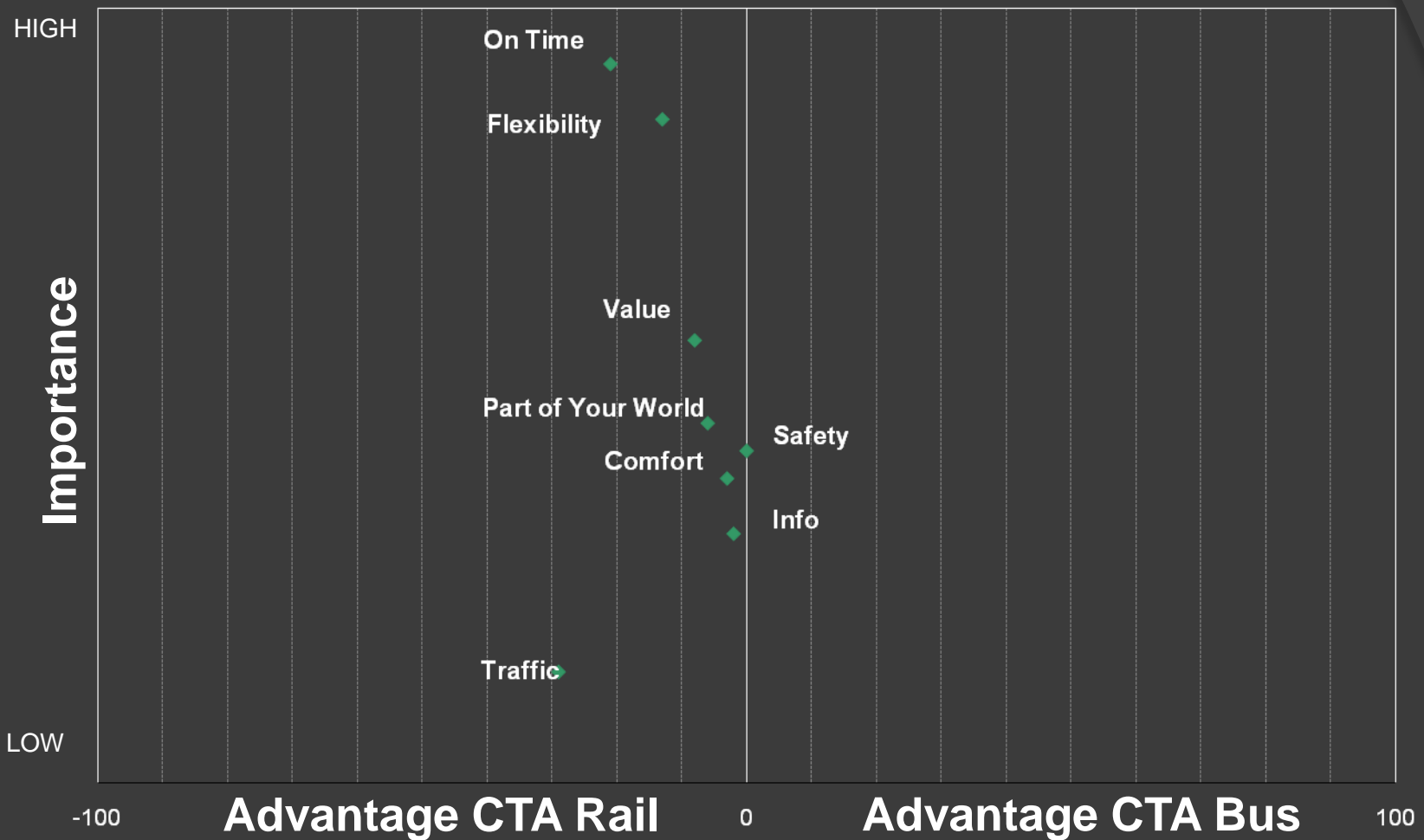
- CTA rail has edge on almost all attributes; largest rail advantages are *On Time* and *Traffic*.

# Customer Gap Chart: Bus vs. Auto



- CTA bus viewed similarly as rail when compared to auto; auto is advantageous in most areas
- Bus seen superior for *Traffic* with slight edge for *Value*

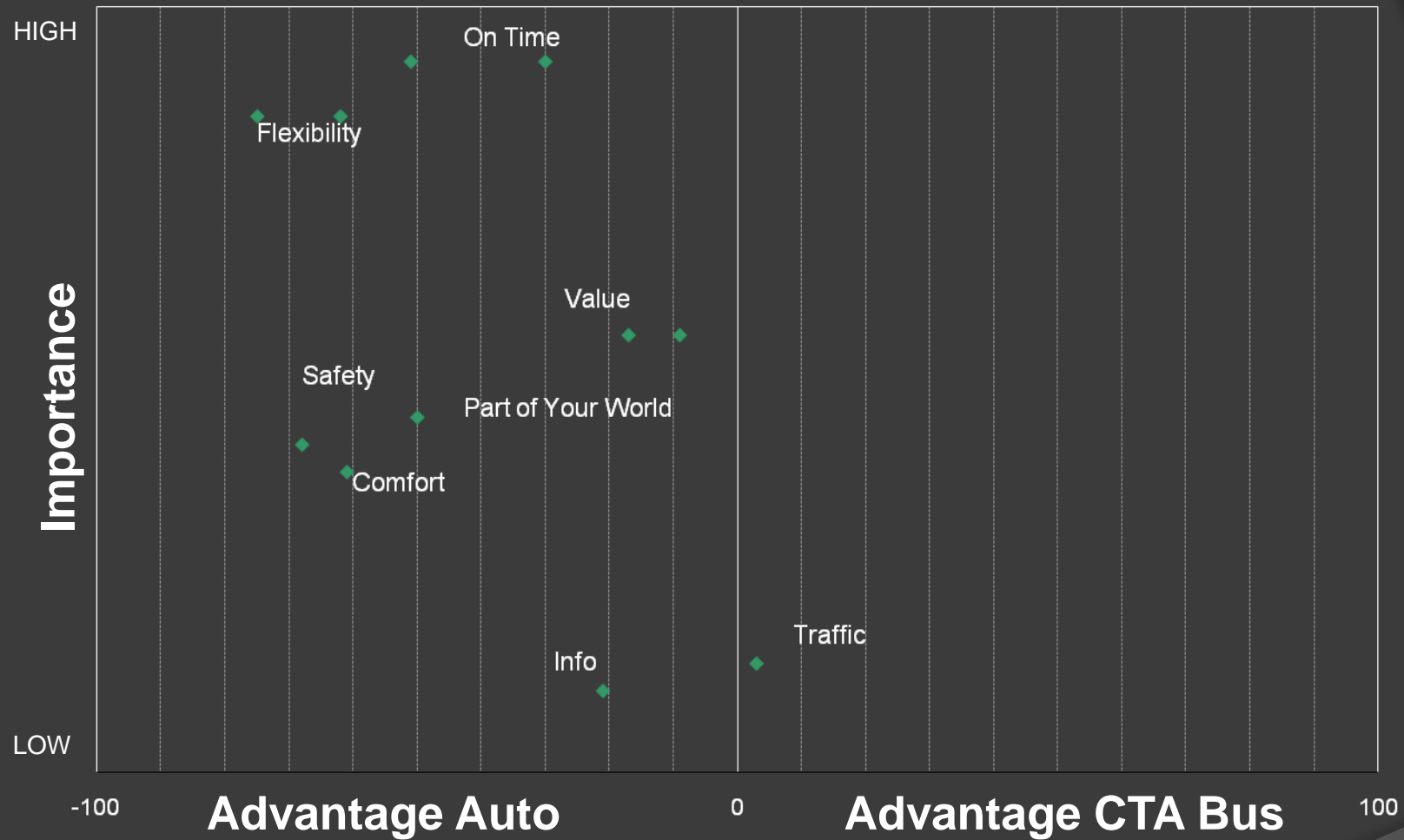
# Non-customer Gap Chart: Bus vs. Rail



- Non-customers view rail vs. bus the same as customers:
  - *On Time* and *Traffic* stand out for CTA Rail
  - Rail has the edge on all other attributes



# Non-customer Gap Chart: Bus vs. Auto



- Auto holds advantage over CTA bus on almost every attribute – even at “almost parity” with bus for *Traffic*

# Explanation of the Segmentation Analysis

- ⦿ Respondents divided into distinct segments using a multivariate procedure called *K-means Cluster Analysis*
- ⦿ Each segment contains individuals who share similar views with others in that same group, but carry different views than members of other segments
- ⦿ “Views” based on mode attribute ratings

# Segmentation Summary

- Analysis produced 5 distinct segments.
  - Older Stay-At Homes are older, take fewer trips and are generally positive about CTA.
  - Diehard Drivers are skewed female and very car-centered. Safety is very important but “net favorability” is negative for CTA modes.
  - Transit Fans are more likely to be young males. They are core customers although they take fewer trips.
  - Upscale Trekkers are just that, upscale and suburban. They are heavy discretionary travelers who generally prefer to drive. They need to have transportation options close by.
  - Younger Urbanites are heavy travelers. They are not loyal to any mode; they use CTA equally to auto. Like Diehard Drivers, *Safety* is very important but “net favorability” is negative for CTA modes.