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- Background
- 2014 "Learning" Pilot outcomes
- 2015 Edmonton Household Travel Survey



### **Project Team**

- Project Manager
- Project Team
- Working Group
  - City stakeholders
  - Alberta Transportation
  - Capital Region Board
- Consultant team:
  - Texas Transportation Institute
  - Advanis







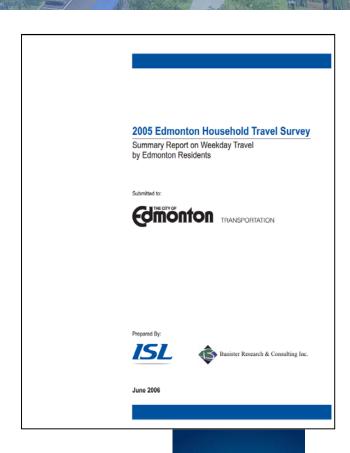
### Why a Household Travel Survey

- Largest, comprehensive source of personal travel data for Edmonton region
- Basis for travel forecasting and transportation planning in Edmonton
- Edmonton Region Travel Model used by decision-makers, administration, developers
- Household, individual socio-economic factors & travel data



### 2005 Edmonton Household Travel Survey

- 24-hour, activity-based survey
- 6,620 households sampled
- 1.7% sampling rate
- Sept-Dec collection period
- Informed:
  - City's Transportation Master Plan –
     The Way We Move
  - LRT planning and expansion
  - Prioritization and design new road infrastructure in City and Region







# 2014 Learning Pilot Purpose

- 1. Understand changes over 10 years
- 2. Build in-house knowledge
- 3. Evaluate effort and resources needed

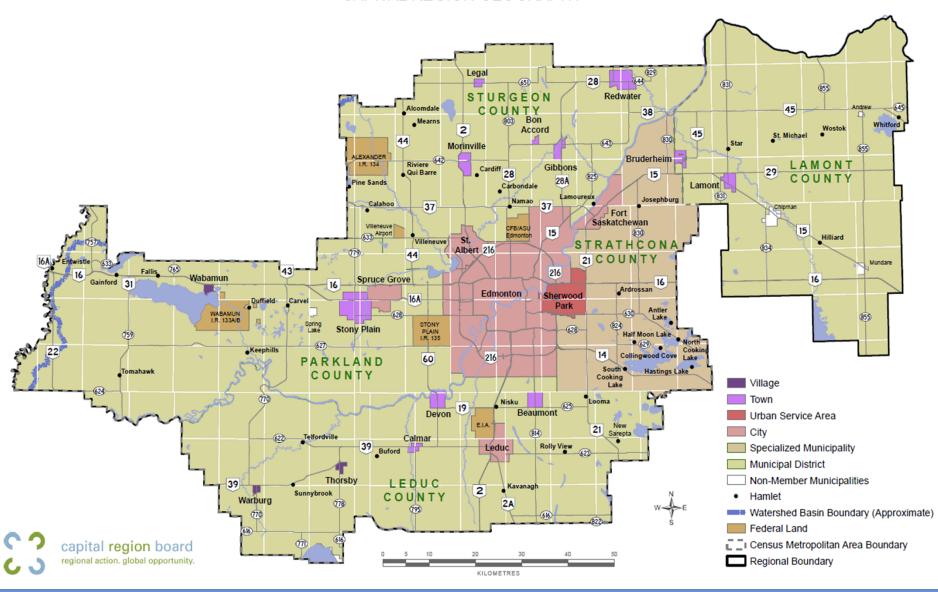


### Pilot Study Area

- City and surrounding region 420,000 households
- 1.2 million people
- Large university campus
- Major employment sectors: health, education, public service, construction and manufacturing



#### CAPITAL REGION GEOGRAPHY

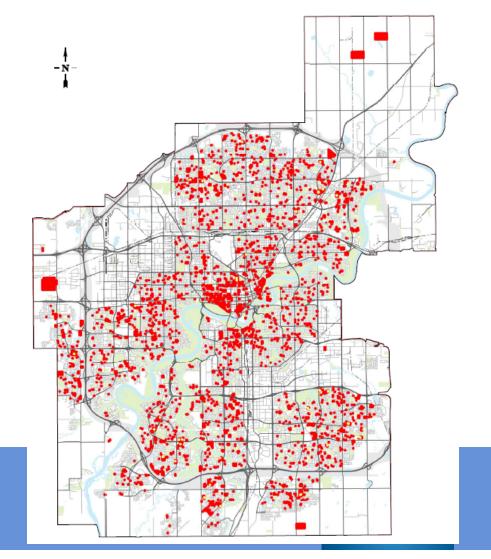


# Pilot Design Phase

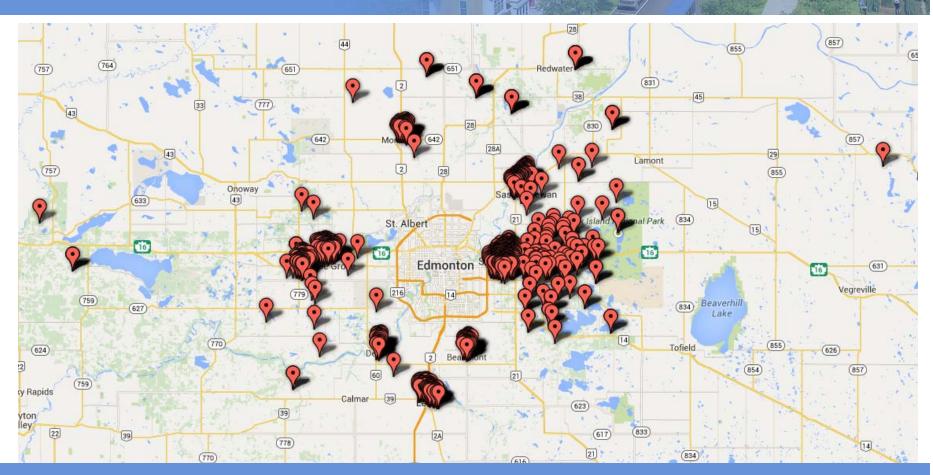
- 2005 Survey used as Base
- Updated data elements, survey questions
- Identified Sample
  - City, region, Insight community, City staff
- Survey design
- Online survey and CATI script programming

## City Sample

- Random address selection using 2014 Municipal Census records
- 2800 selected



### Regional Sample



#### Recruitment

- City/Region random address selection
- Edmonton Insight Community
- City staff
- Total 6,035 households invited

What is the Edmonton Household Travel Surveyi

The Idmonton Household Travel Survey is being conducted by the City of Idmonton, in cooperation with Alberta Tramportation and the Capital Region Board, to understand the tramportation needs of the growing Edmonton and region population. The survey will collect information from participating households in Edmonton and the region about:

- Where people go Why they eo
- When they go
- How they get where the

Provide insight into travel patterns that will shape our future

We need your participation in the Edmonton Household Travel Survey to provide the information needed for transportation planning in the City of Edmonton and the region. How can I participate in the survey?

- Receive an invitation to particip
  the well or by small.
- Register to participate in the survey.
- Receive your "Travel and Activity Diary" package in the mail.
- hours during your assigned survey day
- Submit your "Travel and Activity Dia via web, phone or by mail.

Get started online or by phone
www.edmonton.ca/TravetSurvey.
//BDL 229-1877

(780) 229-1877 Veekdays 9:00 am-9:00 pm aturday 10:00 am-5:00 pm

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Transportation
Planning for
our Growing
Region



#### How will results be used?

The City of Edmonton, in cooperation with Alberta inframporation and the Capital Region Board, is conducting a household travel survey to understand, the travel patterns of households throughout. Edmonton and the region. The information you provide to us in very Important and will support and inform transportation planning in the Edmonton region.

Data collected from the last household travel survices conducted in 2005 helped in the development of the City of Edmenton's Transportation Master Plan planning for LRT expansion, and prioritizing and designing new read infrastructure throughout the reason. Including Anthony Henday Drive.

#### Why should I participate?

As citizens of the City of Edmonton and the surrounding region we rely on the transportation system in one way or another. Manny of us use the transportation system everyday by waiking, cycling, using transit or driving to the places we need to go. To gota an effective and efficient transportation system we require up-to-date

#### How will my personal information be protected?

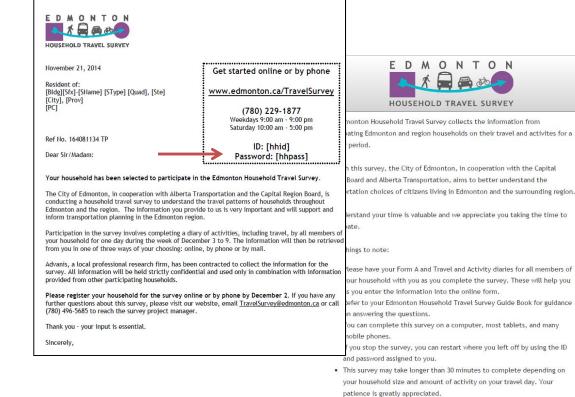
ersonal information will be collected under we Freedom of Information and Protection of frivacy Act of Alberta. All information obtained on the Edmonton Nousehold Travel Survey (Il be kept completely confidential. Advanta, local professional research firm, has been ontracted to collect the information for the

for more information visit www.edmonton.ca/TravelSurvey call (780) 494-5485

#### Recruitment

- Online and phone selfrecruitment
- Insight Community and City Staff online only

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Password: Advance a local professional research firm, has been contracted to collect the **Privacy Statement** 

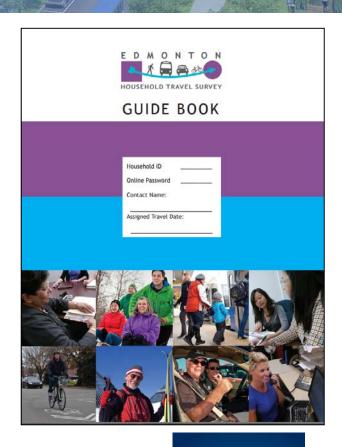
package.

Please enter the ID and password that were provided to you in your diary

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### Data Retrieval

- Household instruction guide and individual diaries
- Household information
- Personal & Work/School Location
- Travel and Activity Diary
- Multimodal data retrieval (mail, phone and web)







## **Pilot Findings**



### Response Rates

|           | City (n=2800) |      | Region ( | n=1175) | Total (n=3975) |      |  |
|-----------|---------------|------|----------|---------|----------------|------|--|
| Recruited | 115           | 4.1% | 88       | 7.5%    | 203            | 5.1% |  |
| Retrieved | 71            | 62%  | 51       | 58%     | 122            | 60%  |  |

- An additional 2,000 Insight Community members and 120 Transportation Planning staff were also invited to participate .
- In total, nearly 6,000 households were invited.



## Mode of Retrieval

Of those households that fully completed and submitted their survey:

|        | City | Region |
|--------|------|--------|
| Online | 58%  | 45%    |
| Mail   | 31%  | 43%    |
| Phone  | 11%  | 12%    |

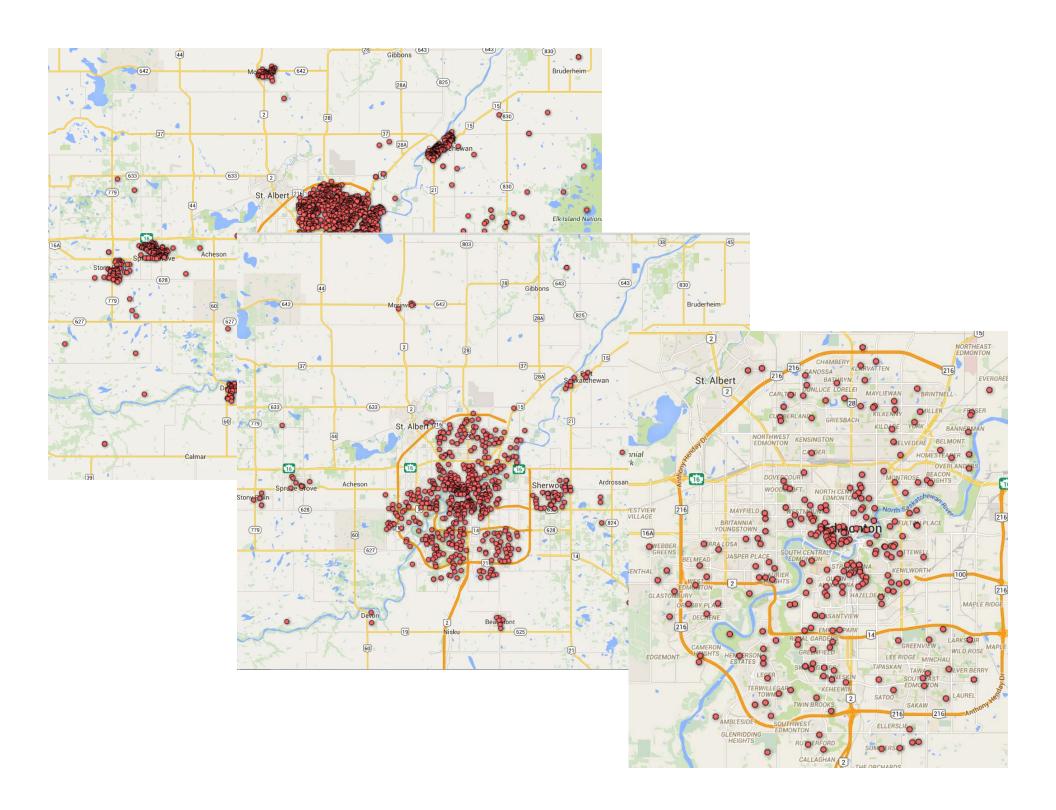


## Retrieved vs. Usable

|           | City & Region | Edmonton Insight<br>Community and<br>Staff | Total |
|-----------|---------------|--|-------|
| Retrieved | 164           | 321  | 485   |
| Usable    | 122           | 257  | 379   |
| % loss    | 26%           | 20%  | 22%   |

- All of the survey loss occurred from the mailback mode
- Of the 247 received by mail, 106 were not usable (43%)





### Demographics

|         |        |        |       |        | 1 2 2 1 |        |          |          | AND UNIVERSITY OF STREET |
|---------|--------|--------|-------|--------|---------|--------|----------|----------|--------------------------|
|         | Survey | Census |       | Survey | Census  |        |          |          |                          |
| Age     | %      | %      | Diff. | %      | %       | Diff.  |          |          | TotalD                   |
| Group   | Males  | Males  | Males | Female | Female  | Female | Survey % | Census % | iff.                     |
| 0 - 9   | 9.7%   | 12.2%  | -2.5% | 6.8%   | 11.6%   | -4.8%  | 8.2%     | 11.9%    | -3.7%                    |
| 10 - 14 | 3.4%   | 5.9%   | -2.5% | 3.5%   | 5.5%    | -2.0%  | 3.5%     | 5.7%     | -2.2%                    |
| 15 - 19 | 2.9%   | 6.5%   | -3.6% | 4.7%   | 6.3%    | -1.6%  | 3.8%     | 6.4%     | -2.5%                    |
| 20 - 24 | 6.1%   | 7.9%   | -1.8% | 4.0%   | 7.6%    | -3.6%  | 5.0%     | 7.7%     | -2.8%                    |
| 25 - 34 | 17.1%  | 16.3%  | 0.8%  | 20.4%  | 15.6%   | 4.8%   | 18.9%    | 16.0%    | 2.9%                     |
| 35 - 44 | 16.3%  | 14.1%  | 2.2%  | 13.8%  | 13.9%   | 0.0%   | 15.0%    | 14.0%    | 1.0%                     |
| 45 - 54 | 12.9%  | 15.3%  | -2.4% | 17.1%  | 15.2%   | 1.9%   | 15.1%    | 15.3%    | -0.1%                    |
| 55 - 64 | 19.5%  | 11.6%  | 7.9%  | 17.4%  | 11.6%   | 5.8%   | 18.4%    | 11.6%    | 6.8%                     |
| 65 - 74 | 9.2%   | 5.9%   | 3.3%  | 10.1%  | 6.4%    | 3.7%   | 9.7%     | 6.1%     | 3.5%                     |
| 75 - 84 | 2.1%   | 3.3%   | -1.2% | 2.1%   | 4.3%    | -2.2%  | 2.1%     | 3.8%     | -1.7%                    |
| 85+     | 0.8%   | 1.0%   | -0.2% | 0.0%   | 2.0%    | -2.0%  | 0.4%     | 1.5%     | -1.1%                    |

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# Dwelling Type

| Housing Structure Type   | Survey<br>Count | Survey % | Census % | Differenc<br>e |
|--------------------------|-----------------|----------|----------|----------------|
| Single Detached          | 90              | 75.0%    | 59.2%    | 15.8%          |
| Semi-Detached/Row/Duplex | 8               | 6.7%     | 14.4%    | -7.7%          |
| Apartment                | 22              | 18.3%    | 24.7%    | -6.3%          |
| Other                    | 10              | 8.3%     | 1.7%     | 6.6%           |
| Total                    | 120             | 100.0%   | 100.0%   |                |



## Comparison to Census Results

- Slight oversampling on seniors
- Good alignment with Journey to Work 2014 census results
- Over-sampling on single family dwelling type
- Under-sampling on multi-family dwellings

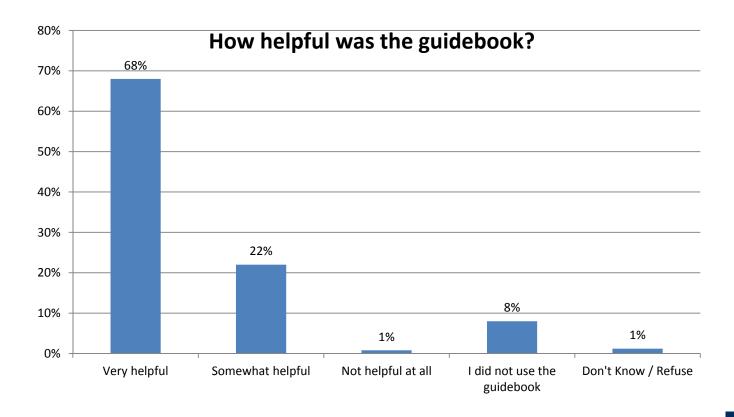


# Respondent feedback

- 94% were adequately aware of what participating meant
- 81% were motivated by invitation materials
- 72% were motivated by their interest in local/regional transportation/issues



## Respondent feedback





## Respondent feedback

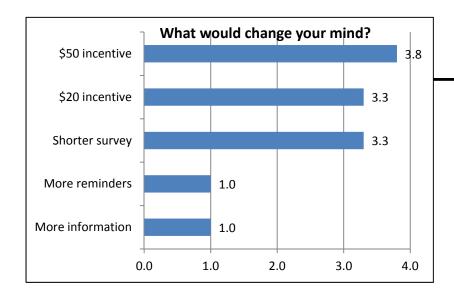
- Some seniors did not see value in participating since they don't travel much
- The word "survey" has a negative connotation
- Mentioning City of Edmonton adds validity

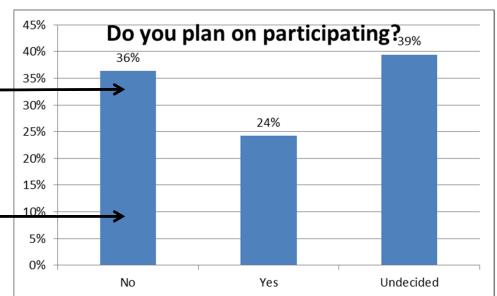


### Respondent feedback – Outbound Calling



"I don't have time to do surveys"







## Learnings



# Design Phase

- HTS survey programming is complex & specialized
- Call centre services are costly to set up
- Call centre staff training needed is extensive
- Survey materials development is time consuming



# Recruitment Phase

#### Mail recruitment

- 2005 vs. 2014 pilot: 7.8% vs. 5.1%
- Outbound recruitment improves participation
   Web
- 4 times more likely to web recruit vs. phone
- 1.5 times more likely to web retrieve vs. mail and 4.5x more likely than phone



## Respondent Feedback

- FAQs common questions and helpful tips
- Examples of use of 2005 survey data
- Clarify what it means to participate
- Mulitmodal submission options
- Web incentives
- Mailback is prone to error, intimidating and seen as burdensome relative to web
- Simplify travel diary

### Next Steps: 2015 Household Travel Survey

- Ruled out mail back survey
- Interactive, easy to use web tool
- Data quality control and database
- Data expansion and scaling methodology
- Booster sample of transit users
- Potential study of active mode use



### Household Travel Survey Next Steps

- Awarded to Malatest
- Team includes HDR, Prof. Jeff Casello,
   David Kriger, Vision Creative

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