

2011 BUSINESS SATISFACTION SURVEY ON THE TRANSPORTATION SYSTEM

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Policy Implementation & Evaluation Section
Transportation Planning Branch



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Executive Summary

In July 2011, the City of Edmonton conducted a Business Satisfaction Survey on the Transportation System. The survey was the first of its kind in the city and was developed to satisfy a progress measure for the *Economic Vitality* strategic goal in the Transportation Master Plan, *The Way We Move*. Selected businesses were asked to complete a multiple choice survey on the overall satisfaction with the transportation system as well as on specific aspects of the system. Respondents were also given the opportunity to provide written comments.

The businesses were provided with different options for responding to the survey including an online submission, mail back, fax or email. Just over 3,200 businesses from various industry sectors and areas of the city were sent a survey package, of which 400 (12.4%) completed the survey and returned it mainly by mail and internet.

Key findings:

- 49% of businesses were *Satisfied* or *Very satisfied* with the overall transportation system;
- 77% rely *Very much* or *Somewhat* on the transportation system for their business operations;
- The top five aspects of the transportation system receiving a rating of *Very Satisfied* or *Satisfied* were:
 - The ability of customers and employees to access the business by car (70%);
 - Information on electronic message boards (60%);
 - Signage on truck and dangerous goods routes (57%)
 - Operation of on-street construction areas (51%)
 - Live-stream traffic information on edmontontraffcam.com (45% and 42% remaining neutral)
- The top four aspects of the transportation system receiving a rating of *Very Dissatisfied* or *Dissatisfied* were:
 - a. Overall condition of paved roads (74%);
 - b. Travel times on major truck routes (58%);
 - c. Winter road maintenance (51%)
 - d. Traffic signal coordination (38% and 25% remaining neutral)

The fact that the survey was deployed in the summer might have impacted the issues that were top of mind, such as potholes and increased travel times due to construction. The survey was also conducted following one of the heaviest snow fall seasons which might account for the high dissatisfaction with winter road maintenance.

Written Comments:

- Road maintenance (potholes, ruts, cracks) topped the list of written concerns, garnering the highest number of comments (42% of comments.)
- Concerns around lengthy travel times, construction delays, and winter road maintenance were equally represented with half of the travel time complaints specifically referring to Yellowhead Trail.
- Lack of satisfaction with construction projects centred around the perception of too many projects occurring at the same time throughout the city, particularly on major routes.
- Winter road maintenance received a high number of complaints. The issues were mainly around difficulty for trucks to navigate the roadway system when snow plowing had narrowed the lanes making it difficult for trucks to drive safely as well as customers not being able to access businesses due to the height of windrows.

- 14% of the comments referred to transit service and focused mainly on the lack of bus service to industrial areas, distance to bus stops, and the infrequency of service during off peak times. Some businesses cited having to use vehicle ownership as a criterion for hiring due to the lack or inadequacy of transit service.

1.0 Background and Purpose

The Way We Move is the City of Edmonton's Transportation Master Plan that establishes a framework for how the City will address its future transportation needs. The *Progress Measures Report* is a companion document which provides insight into the City's progress towards the TMP Strategic Goals. Progress measures are a way of monitoring progress toward the Goals and a way of gathering information to make well-informed decisions that will be reflected in the budgets and priority plans. One of the strategic goals as set out in *The Way We Move*, is Economic Vitality. Having a sense of how the Edmonton business community feels about the performance of the transportation system is important. It provides one view into whether the movement of goods and services is happening efficiently which is important to the economic vitality of the city. One of the two progress measures used to gauge the Economic Vitality strategic goal is a satisfaction survey of Edmonton businesses on the transportation system.

To that end a satisfaction survey of the Edmonton business community was undertaken between June 30 and July 15, 2011. The objectives of this survey were to gauge:

- The overall satisfaction with the transportation system;
- The level of satisfaction with specific aspects of the transportation system.

The survey was conducted and results analyzed in-house by City of Edmonton staff.

This report provides an overview of the methodology, the costs, summary of the results, and recommendations on the 2011 City of Edmonton business satisfaction survey on the transportation system. Recommendations are also provided on how to improve the survey in the future.

2.0 Survey Methodology

2.1 Survey Sample

In an effort to reduce time and costs, an existing list of businesses that participated in the 2003 Edmonton Region Commodity Flow Survey was used to develop the sample for the satisfaction survey. Out of the 4,324 businesses contacted in 2003, 3,202 were identified as appropriate for the satisfaction survey as they were located in the City of Edmonton.

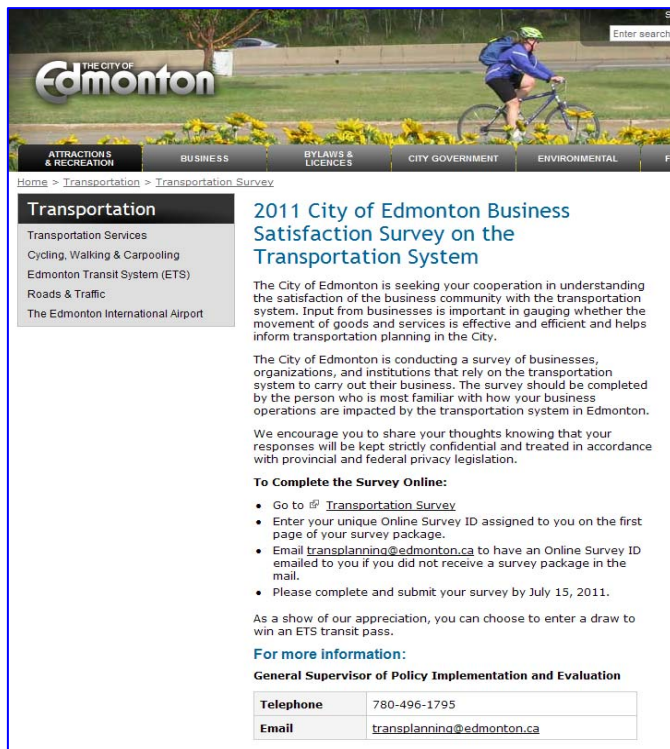
2.2 Questionnaire Design and Deployment

The City of Edmonton Business Satisfaction Survey on the Transportation System began with the development of measures of the transportation system from the perspective of the businesses. Drawing on the example of surveys conducted in Canada and internationally, user satisfaction measures were developed for the City of Edmonton. **Table 1** provides the measures and their indicators that were used to develop the questions for the satisfaction survey on the transportation system.

TABLE 1. TRANSPORTATION SATISFACTION MEASURES FOR BUSINESSES IN THE CITY OF EDMONTON

Measure	Indicators
1. Roadway Maintenance	<ul style="list-style-type: none"> • Winter road maintenance • Overall condition of paved roads
2. Roadway Design	<ul style="list-style-type: none"> • Accessibility for loading/unloading goods
3. Signage	<ul style="list-style-type: none"> • Signage for trucks and dangerous goods routes
4. Route Guidance	<ul style="list-style-type: none"> • Information on electronic changeable message boards • City of Edmonton live-stream traffic camera video on www.edmontontrafficcams.com
5. Value for time	<ul style="list-style-type: none"> • Travel time on truck routes • Traffic signal co-ordination
6. Parking	<ul style="list-style-type: none"> • Availability of on-street parking
7. Construction Zones	<ul style="list-style-type: none"> • Operation of on-street construction areas
8. Accessibility for Customers and Employees	<ul style="list-style-type: none"> • Accessibility by car, transit, bicycling, and walking
9. Overall	<ul style="list-style-type: none"> • Degree to which business relies on the transportation system • Overall satisfaction with the transportation system

A literature review of satisfaction surveys on the transportation system revealed that very little had been done in the way of satisfaction surveys aimed at the business community in relation to the transportation system. However there had been satisfaction surveys on the transportation conducted in Canada and worldwide of general road users.



Businesses were mailed a survey package consisting of an introductory cover letter with a unique identification number and an 18-question survey, sixteen of which were multiple choice asking respondents to rate their degree of satisfaction with various aspects of the transportation system on a five-point scale varying from *Very Satisfied* to *Very Dissatisfied*. The last question allowed respondents to provide a written comment on the overall transportation system. A sample survey is provided in **Appendix A**. Survey respondents were given four options for returning the completed survey including

FIGURE 1. CITY OF EDMONTON ONLINE SURVEY INTERFACE

mail-back using a postage paid envelope, via internet using a unique identification number, fax, or email. The surveys were mailed out using regular post but were delayed due to a postal strike. Survey packages were received by businesses between June 30 and July 7. The online version of the survey could be accessed from the City of Edmonton website at www.edmonton.ca/transportationsurvey (see Figure 1.)



Respondents were required to enter their unique identification number before completing the survey online. The online survey was hosted on the Google Docs site which allowed information to be received by City administrators in real-time as respondents completed their surveys. Information could then be easily copied to a spreadsheet for processing. **Figure 2** gives a view of the online survey tool hosted free of charge by *Google Docs*.

To increase the potential for responses, businesses were given the option of being entered to win an ETS monthly pass - 30% chose to enter the draw. The winner was contacted and a September 2011 bus pass was delivered.

FIGURE 2. TRANSPORTATION SATISFACTION SURVEY WEBPAGE HOSTED BY GOOGLE DOCS

2.3 Consultation on the Survey Tool

Both internal and external reviews of the survey were conducted prior to deployment. Internal reviews of the survey included the Edmonton Transit Service and Transportation Operations and externally the survey was circulated to the Edmonton Chamber of Commerce.

As well, a discussion with a FOIP Analyst with the City of Edmonton Corporate Services department indicated that the use of the contact information from the 2003 Commodity Flow Survey was acceptable given that the contact information currently exists in the public domain.

A pilot of the survey was conducted via two Edmonton businesses, one large logistics company which uses trailer trucks primarily and the other an industrial courier service which uses both small and large trucks. Feedback from these pilot survey indicated that the survey was appropriate in terms of length and the questions were clear with the exception of some which were edited as a result. Both people surveyed felt that the general comments section of the survey was important and they would take the time to complete it.

2.4 Costs

The costs of the survey were primarily for the printing and mailing of the survey which was contracted to the City of Edmonton Digital Print Centre. The correspondence included the survey (with cover letter) and postage paid return envelope. The four-page survey was printed on 11x14 size paper in order to open as a booklet and reduce the chances of pages being lost. The survey was tri-folded and sent as regular business size mail. **Table 2** provides a breakdown of costs.

TABLE 2. SURVEY COST BREAKDOWN

Printing	\$ 909.40
<i>11x14 paper size, booklet fold and tri-fold</i>	
<i>Envelope stuffing</i>	
Envelops	\$ 718.00
<i>Window envelops, 14 boxes @ \$24.50 each</i>	\$343.00
<i>Postage-paid return envelops</i>	\$375.00
Postage	\$ 2,033.73
<i>3,202 standard mail letters mailed out @ \$0.59/letters</i>	\$ 1,889.18
<i>245 standard letters postage-paid return mail @ \$0.59/letters</i>	\$ 144.55
Total Cost of Survey	\$3,661.13

3.0 Response Rates

In total, of the 3,202 surveys mailed out, 400 completed surveys were received achieving a 12% response rate. In order to achieve a 95% confidence level for the business population surveyed, 390 was the desired number of responses. Survey respondents were given the opportunity to submit their survey using four different methods and although it was anticipated that the majority of respondents would prefer to submit their completed surveys online, in fact a higher number submitted their surveys by mail using the postage paid envelope provided. Returned mail from businesses no longer in operation or moved comprised just under a third of the total mail-outs while another 60% were non-responsive. **Table 3** gives a breakdown of the response rates by type.

TABLE 3. SURVEY RESPONSE RATES

	Received	% Response
Total completed responses	400	12.4%
<i>Website</i>	<i>149</i>	<i>4.6%</i>
<i>Mail back</i>	<i>245</i>	<i>7.6%</i>
<i>Fax</i>	<i>6</i>	<i>0.19%</i>
<i>Email</i>	<i>0</i>	<i>0.00%</i>
Returned mail	938	29.3%
Non-response	1,864	58.2%
Total Mail Out	3,202	

Figure 3 and Table 4 provide a graphic of the response rates by quadrant and industry sector. When comparing the businesses surveyed by industry type it is noted that a disproportionate number of responses were received from businesses in the Industrial sector (utilities, construction and

manufacturing.) Thirty-eight percent of businesses who were mailed survey packages were from these industry sectors while only making up 15% of licensed businesses in Edmonton. As previously mentioned, the list of businesses used was gleaned from the 2003 Commodity Flow Survey which targeted businesses who use the transportation system and likely found that businesses in the utilities, construction, and manufacturing sectors make more use of the transportation system as part of their business operations compared to other industry sectors.

FIGURE 3. RESPONSE RATES BY QUADRANT OF THE CITY

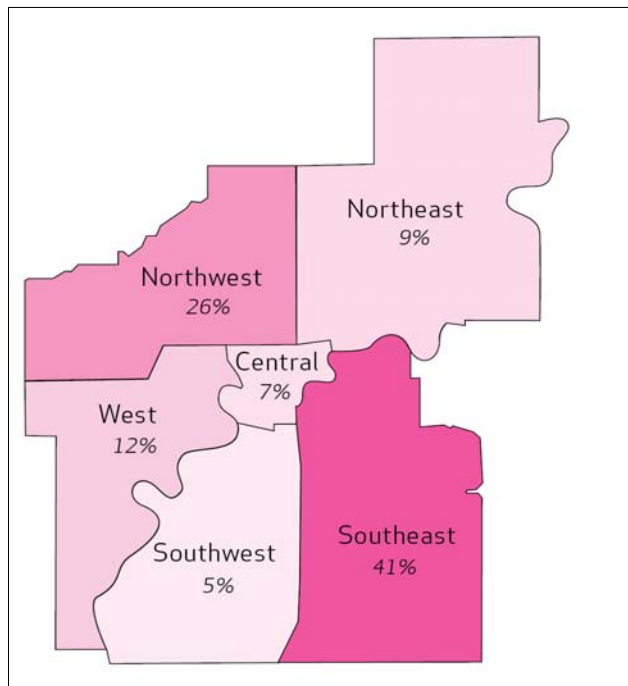


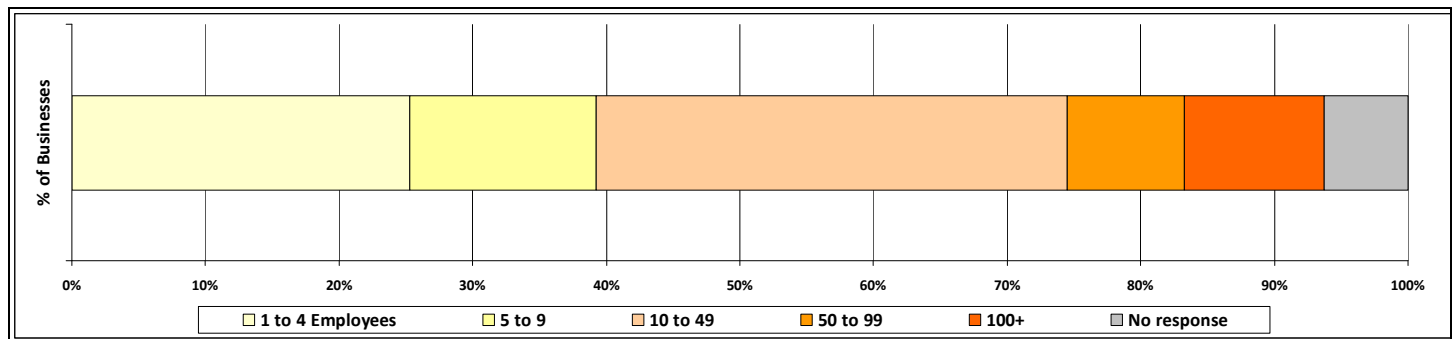
TABLE 4. RESPONSE RATES BY INDUSTRY

Industry	Total Respondents	Businesses Surveyed	City-Wide
Education	6	2%	3%
Government	2	1%	2%
Industrial	174	44%	15%
Private Services	95	24%	18%
Retail	58	15%	14%
Transportation Handling	23	6%	3%
Wholesale	42	11%	7%
Agriculture	0	0%	0%
Other	0	0%	38%
Total	400	100%	100%

Respondents were also asked to complete a contact information section which included the name of the company, contact person, address, phone number and email as well as the number of employees employed at the establishment. Over 90% of

respondents completed the question on the number of employees with results given in **Figure 4**. The majority of businesses which responded to the survey were small businesses with 83% of them employing up to 100 employees, as compared to 96% of establishments city-wide who employ up to 100 employees¹.

FIGURE 4. BUSINESS PROFILE BY NUMBER OF EMPLOYEES



¹ Edmonton Economic Development Corporation, Hoovers data on businesses registered in the City of Edmonton.

4.0 Survey Results

4.1 Multiple Choice Question Results

The results of the survey were analyzed in two parts: the multiple choice questions regarding specific aspects of the transportation system and the open response section in which respondents were asked to provide written comments as to what aspects of the transportation system could be improved and how it would benefit their business. The detailed results of the multiple choice section of the survey are provided graphically in **Figure 5**. From this data we are able to glean the top rated and lowest rated aspects of the transportation system from the perspective of the surveyed businesses.

The top five aspects of the transportation system receiving a rating of *Very Satisfied* or *Satisfied* were:

- I. The ability of customers and employees to access the business using a car (70%);
- II. Information on electronic message boards (60%);
- III. Signage on truck and dangerous goods routes (57%)
- IV. Operation of on-street construction areas (51%)
- V. Live-stream traffic information on edmontontrafficcam.com (45% and 42% remaining neutral)

With regards to the live-stream traffic information, respondents were first asked if they were aware that the service existed and if they responded positively they were directed to answer the question on the degree of satisfaction with the service. Respondents were split on their awareness of the service.

The top four aspects of the transportation system receiving a rating of *Very Dissatisfied* or *Dissatisfied* were:

- I. Overall condition of paved roads (74%);
- II. Travel times on major truck routes (58%);
- III. Winter road maintenance (51%)
- IV. Traffic signal coordination (38% and 25% remaining neutral)

There were two aspects of the transportation system that received high *Neutral* scores - Live-stream Traffic Information on edmontontrafficcam.com and Loading and Unloading Zones. The relatively high neutral scores received by these two aspects may be due to their lack of importance to the businesses surveyed or perhaps an inability to quantify the impacts of these aspects on their business.

4.2 Degree of Reliance and Overall Satisfaction with the Transportation System

The last two multiple choice questions asked more generally about the *degree of reliance of the business on the transportation system* and the *overall satisfaction with the transportation system*. The results of those two questions are provided in **Figures 6** and **7**. In term of reliance on the transportation system, as expected a large number (77%) indicated that they *Very Much* (53%) or *Somewhat* (24%) rely on the system for their business operations. Overall satisfaction with the transportation system scored lower with 49.5% indicating that they were *Very Satisfied* (2%) or *Satisfied* (47.5%) with the transportation system in enabling them to operate their business. The frustration with the disparity between the satisfaction with the system and high degree of reliance is clearly demonstrated in the open response question (Question #18) at the end of the survey.

FIGURE 5. LEVEL OF SATISFACTION OF EDMONTON BUSINESSES WITH ASPECTS OF THE TRANSPORTATION SYSTEM

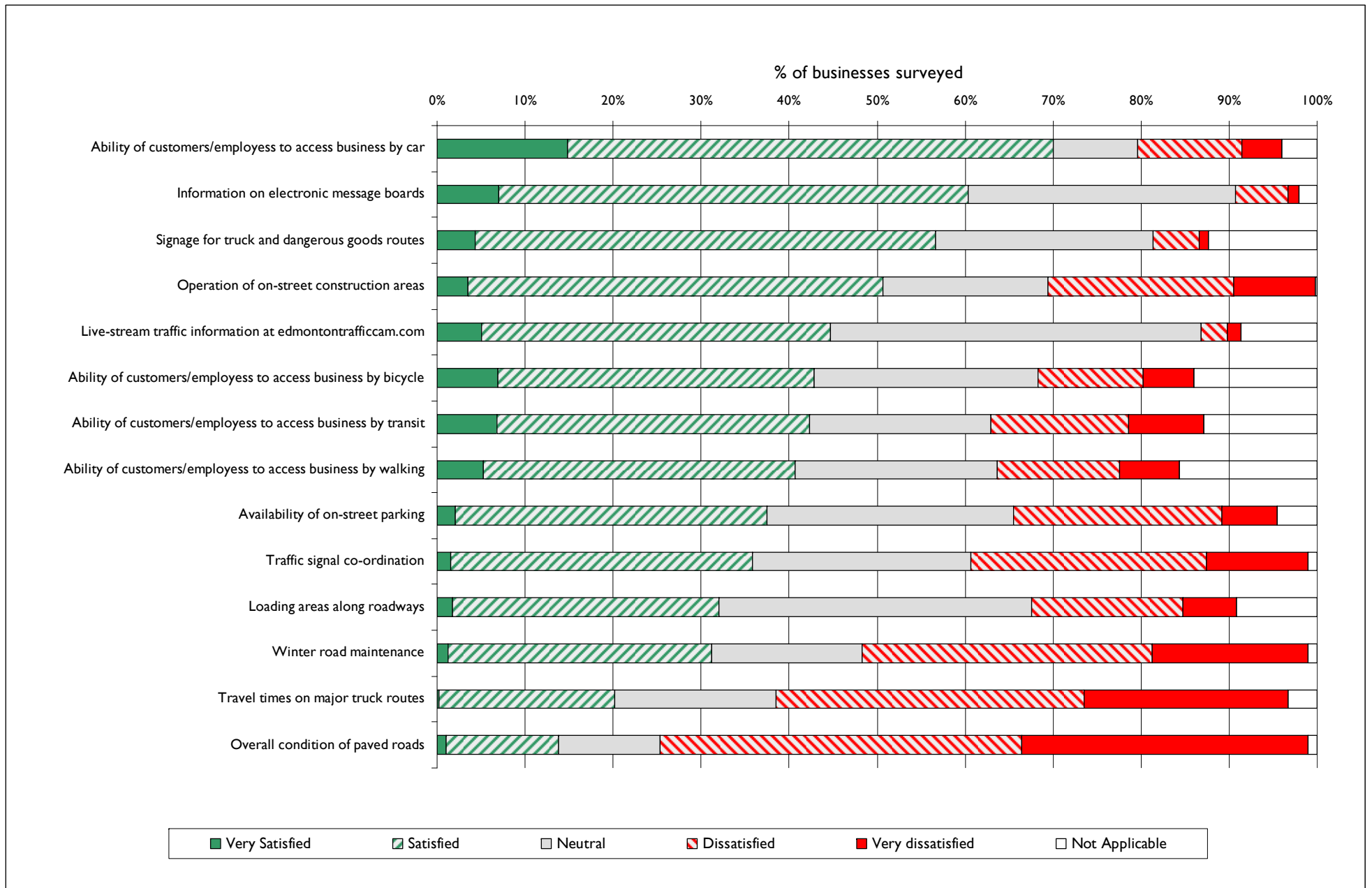


FIGURE 6. DEGREE OF RELIANCE ON THE TRANSPORTATION SYSTEM FOR BUSINESS OPERATIONS

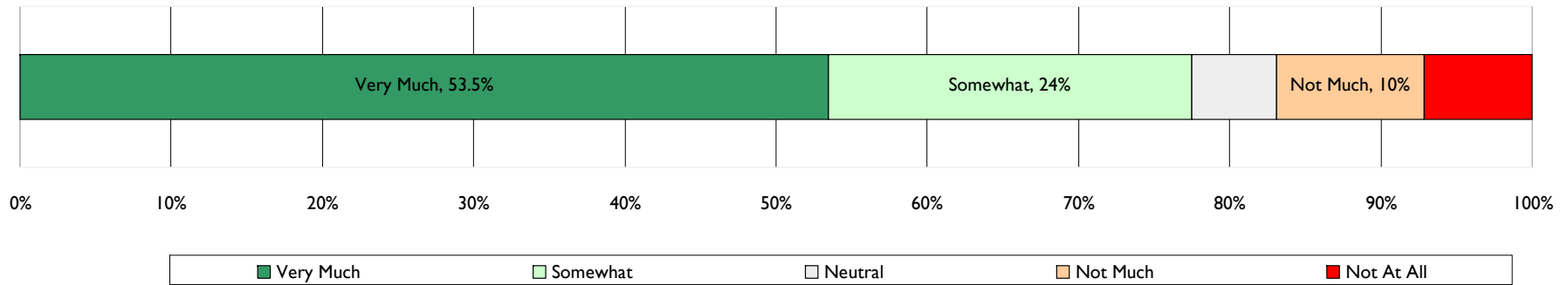
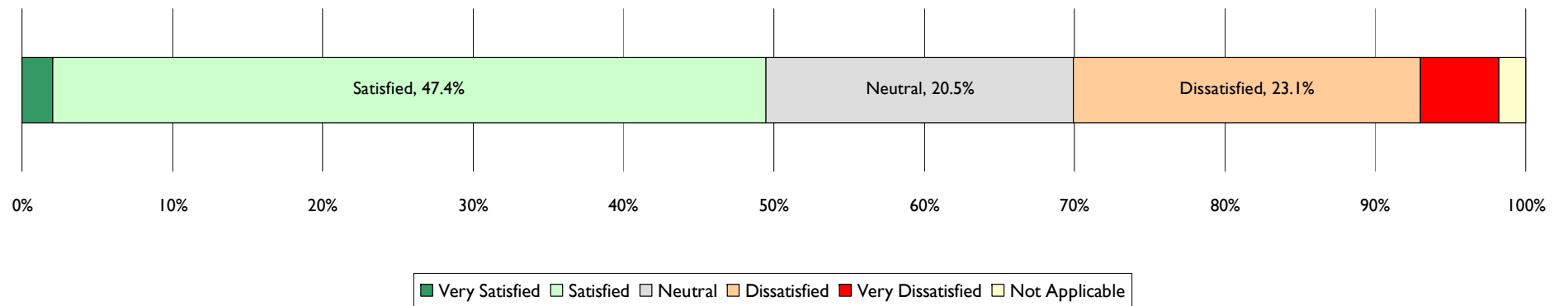


FIGURE 7. OVERALL SATISFACTION WITH THE TRANSPORTATION SYSTEM



4.3 Open Response Results

The last question on the survey invited businesses to respond to the question *What aspects of the transportation system would you like improved and how would that benefit your business?* Sixty-four percent of respondents completed the written response section. There were a number of themes that emerged from the written comments and they generally mirrored the responses in the multiple choice question section. Using the *Wordalizer* program a *word cloud* (Figure 8) was generated which extracts the most commonly occurring words used by respondents.

The word cloud provides a quick visual of the most commonly mentioned words and related issues such as *traffic*, *construction*, *parking*, and *potholes*. This was one way of mining some of the common ideas business owners conveyed in the survey.

A detailed review of the written comments below provided greater insight as to the concerns of businesses.

4.3.1 Potholes and Pavement Condition

Concerns around the condition of roadways in the city, including potholes, ruts and cracks, garnered the highest number of comments (over 42% of respondents). Many cited particular

roadways and intersections that they felt needed attention and some the financial cost of repairing truck suspension systems and undercarriages. Some examples of comments were:

“Repair roads, less pot holes which creates more damage to trucks undercarriage.”

“Maintenance of roads so vehicles don't have to be repaired so much (this is an added cost to businesses). Down time when vehicles are in for repairs.”

“... the amount of potholes on Parsons Road and along 45th avenue from 99th street to the loop on 51st Ave are terrible! A number of our clients as well as staff travel 45th avenue several times daily and the condition of that road is atrocious.”

“... 64 Ave and 30 St there is a brutal and treturous [sp] amount of potholes, sink holes, and ruts, that not only staff and customers must travel on, but also trucks transporting dangerous goods. Due to the absence of any drainage or sewage systems in the area, roads become unpassable [sp] in many sections because of flooding on a regular basis.”

“Potholes: Our maintenance costs for our vehicles front ends is extremely high.”

FIGURE 8. WORD CLOUD OF COMMON THEMES



“Properly repaired roads would allow our business to meet delivery deadlines for our customers and would reduce the time our delivery vehicles are in for repairs thereby improving our ability to meet the needs of our customers.”

“The condition of virtually all of the paved roads are terrible. Cracks and potholes cause us to wreck tires, and our vehicles require wheel alignment, shocks, and suspension components due to terrible roads.”

4.3.2 Travel Times

Concerns around lengthy travel times, construction delays, and winter road maintenance were equally represented and half of the travel time complaints were specifically with regards to Yellowhead Trail. Some of these comments were conflicting, ranging from pleas to remove all traffic signals rendering Yellowhead Trail “a true freeway” to comments asking for greater access for establishments. The overwhelming majority of comments on Yellowhead Trail were mainly aimed at the removal of all at-grade intersections. Some examples of comments were:

“Traffic jams on Yellowhead Trail affect us greatly - i.e. customer pickups and deliveries and technician access.”

“Remove barrier at 107 and Yellowhead and provide access.”

“Finish Yellowhead Trail so it is a complete non-stop freeway!!!”

“The Yellowhead, Whitemud and Anthony Henday are all bottlenecks which actually slow down the traffic. We need to divert large truck traffic away from these main thoroughfares in order to allow smaller commercial and passenger vehicles to travel without being slowed down by trucks.”

“Yellowhead Trail is a joke. Intersection on 106 St, 121 St, 124 St, 142 St, 149 St should be egress and access only with the flow of traffic and no left turns allowed.”

“Get rid of the lights on Yellowhead Trail and get the semis out of the left lane so it flows more safely and smoothly.”

Traffic signal timings and co-ordination were also mentioned in 13% of the comments as a perceived reason for longer travel times. In particular, there was a high degree of annoyance with the apparent lack of signal co-ordination on major arterial roadways. Some comments reflecting this were:

“Traffic signal lights are not coordinated in many cases, especially 137 Ave.”

“Coordinate traffic lights so you do not have to stop at every second light.”

“Better flow through the city, especially on truck/DG routes. Way too many lights, poor planning.”

“When you sit at a green light and do not move because the next light is red, that's not a good situation. Yellowhead & 156 streets are prime examples.”

“Why is it when you driving down major routes the lights are not in sync with each other?”

“Traffic lights on 50 Street between Yellowhead Trail and 137 Ave are deliberately timed to tie up traffic. Yellowhead Trail signals should be eliminated.”

4.3.3 Construction Planning and Delays

The lack of satisfaction with construction projects centred around the perception that too many projects were occurring at the same time throughout the city and particularly on major routes. Comments included:

“Coordinate construction projects so they don't block all major access roads at the same time”

“Less road construction all at one time...”

“There are way too many construction projects on the go at once. Why not concentrate on a few and get them completed so people can get around in this city.”

A summertime survey was likely the reason that construction captured a high level of interest and one comment captures that notion.

“Perform summer road construction 24 hours. Repeat this survey if and when road construction and maintenance returns to a somewhat level of normalcy.”

“I know we need construction but could we not do double shifts or work at night to minimize/shorten construction time?” This type of comment and others like it seem to indicate a degree of sympathy and understanding for completing construction projects under a tight summer schedule.

4.3.4 Winter Road Maintenance

Twenty percent of the comments were in reference to winter road maintenance, specifically snow and windrow removal. The issues seemed to mainly be around difficulty for trucks to navigate the roadway system when snow ploughing had narrowed the lanes making it difficult for trucks to drive safely as well as customers not being able to access businesses due to the height of wind rows.

“Snow plowing roads to the curb makes for very narrow travelling lane for large trucks.”

“... clear the roads of snow rather than just sanding on top of snow, clear residential areas earlier in the year before the snow packs hard and is 6 to 8" thick”

“Snow removal poor. Have had numerous trucks stuck and unable to unload product. Winter plowing along 109 St s/b plowed to the centre NOT left along the front sidewalk. Customers have to climb over windrows to get to business.”

“Better snow removal - employees would not incur time delays and accidents, employees travel time would be reduced and thereby making them happier employees”

“Snow removal is lacking seriously i.e. entire lanes used for snow wind rows on major roads - unacceptable.”

“Several times over the past few winters the City of Edmonton has completely blocked access to our business with a wind row from street clearing that was left for several weeks until removal occurred. When called the City wanted to charge \$300 plus dollars to remove it. This was completely unacceptable.”

“...removal of snow wind rows to facilitate staff and visitors to the facility. A lot of resident family members are seniors and like to park close to the entrance as possible. Leaving the wind rows makes it more difficult to get around and into our facility.”

“Edmonton is a winter city and winter road maintenance should be a top priority with extra budget allocated to cover unforeseen events such as last years snowfall.”

“I operate a home business. Residential plowing [sp] during winter is much needed. More LRT benefits traffic flow city-wide.”

4.3.5 Transit Service

Fourteen percent of the comments were in relation to transit service and focused mainly on the lack of bus service to industrial areas, distance to bus stops, and the infrequency of service during off peak times. Some businesses cited having to use vehicle ownership as a criterion for hiring due to the lack or inadequacy of transit service. The following are excerpts from comments relating to transit.

“I would like to see more and regular buses go to commercial and industrial areas in the south central part of Edmonton. Benefit: So I could go by bus to my janitorial customers in the 99 St and 51 Ave area instead of taking my van.”

“More flexible time schedule for users of DATS.”

“Improvements with the bus schedule within this area would be helpful. This has hindered our ability to hire employees. Unless they have their own transportation it's virtually impossible to work here especially after 5:00 pm.”

“More accessible bus routes for our employees would allow them to travel to work more easily (and present the option of alternative transportation to those employees that would choose to use it, rather than having to drive all the time).”

“Bus service does not operate later in the evening/early morning when our night shift ends. This means people without their own auto must either walk at 1:45AM in the morning, take a cab, or provide their own transportation which has in the past excluded potential people from obtaining employment with us.”

“Edmonton Transit needs better connections and links to LRT and Downtown from all points of the city during off rush hour times.”

“We are limited in our ability to hire new employees because the transit system does not service this area.”

“...limited bus operation and overall quality of the roadways has deteriorated. Thus affecting the ability to employ persons who rely on public transportation and forcing employees to spend longer hours travelling to and from work.”

“Earlier bus times on weekend allowing employees to get to work on time.”

5.0 Recommendations

The survey was conducted to inform the Economic Vitality Progress Measure for the Transportation Master Plan on the level of satisfaction of the business community with the Edmonton transportation system. The following are some recommendations for future Business Satisfaction Surveys on the Transportation System.

Frequency of Survey and Seasonal Timing

It is recommended that the survey be conducted at regular intervals in order to gauge changes in perception among businesses in Edmonton. City Council is best positioned to set direction on the frequency of conducting the survey however every three years would be the recommendation. It is also highly recommended that the survey be conducted in the fall season for a number of reasons. A fall survey could potentially benefit from a higher response rate by avoiding the absences of managers and owners during the summer vacation season and would avoid potentially skewed results on construction delays, pothole, and snow removal which might be top of mind in either the summer or winter seasons.

Reducing Return Mail

Prior to conducting the next business satisfaction survey, research should be done into whether a current list of existing licensed businesses is available for use. This would help to minimize the number of returned pieces of mail from businesses no longer operating or relocated, and would save both time and costs. Access to Hoovers database through Edmonton Economic Development Corporation may be helpful in this respect.

Survey Format and Questions

Although it was anticipated that the majority of businesses would complete the online survey in fact the majority of respondents, 61%, completed the paper survey and mailed it back using the postage paid envelope, compared to 37% of respondents who completed the survey online. Very few of the respondents (2%) chose to fax the form in and none emailed the form in. In the future it recommended that once again all options be provided for survey return as there was still a cost-savings (postage and data entry) realized through the online response method and typically offering a variety of methods increases response rates.

The layout (both paper and online) and wording of questions appeared to work well and was not confusing as evidenced by very few questions left unanswered or no comments relating to confusion of wording. For this survey the paper copy was printed double sided in a booklet style. This was effective in reducing the incidents of lost loose sheets and it is recommended that this print style be used again in the future.

Sample Size

The response rate for this survey achieved a 95% confidence level for the business sample size surveyed. However, in the future a more thorough review of the registered businesses in Edmonton using the transportation system might reveal a larger target population which would require a larger sample. Reviewing a current list of registered businesses and assessing whether they would use the transportation system for their operations would also require more time. Both of these improvements would increase costs and would have to be weighed against the corresponding potential improvement to the data gathered.

When comparing the businesses surveyed by industry type it is noted a disproportionate number of businesses in the utilities, construction and manufacturing sector were solicited to complete the survey. Thirty-eight percent of businesses who received a request to complete the survey were from these industry sectors while only making up 15% of licensed businesses in Edmonton. In the future it would be best to confirm that these industry sectors do in fact make more use of the transportation system for their

operations and are therefore more likely to have appropriate broad knowledge and frequent experience with the transportation system to respond to the survey.

Reporting on Findings to Businesses

It is recommended that the results of the survey as well as how the information collected will be used be communicated to the businesses who participated in the survey. It is important that businesses understand that the time and effort they put into completing the survey is valuable and that it will be used to inform decisions at the City. This would also be an opportunity to respond to some of the top areas of concern and clarify the reasoning behind some of the operational aspects of transportation. For example, better communication with the public as to how construction locations and scheduling are planned would help to bridge the information gap and decrease frustrations. This communication can happen via email and regular mail with very little cost as nearly 70% of respondents provided their email address on their survey form.

6.0 Conclusions

The results of the City of Edmonton Business Satisfaction Survey on the Transportation System provide data to inform the progress measure for the Economic Vitality goal of *The Way We Move*. This survey tool provided a means to gauge business satisfaction with the transportation system as well as a venue for businesses to give their suggestions for improvement from the perspective of their business needs.

The results of the survey indicate that overall, business owners are split on how well the transportation system is supporting them and helping them to further their business. There are several areas of the transportation system with which respondents showed major dissatisfaction, such as the overall condition of paved roads, particularly potholes and travel times on major truck routes. In a seemingly contradictory statement however, respondents were happy with the ability of their employees and customers to access their business by car. The message here may be that as constant users of the transportation system for their daily business purposes, business owners are more aware of the inconveniences and are directly impacted by the deficiencies in the transportation system. However those deficiencies are not severe enough on the whole to impede customers and their employees from reaching their establishment.

A palpable anger and disillusionment of business owners was demonstrated in the written comments section of the survey. Business owners were upset but perhaps were unaware of the appropriate venue (prior to the survey) to display that irritation. Better forums for communication between the public (perhaps specifically with businesses) and the transportation operations area of the City would help to bridge information gaps. Such a forum would help, for example, in explaining how construction project scheduling occurs – why it must all happen during particular months of the year. This particular issue seemed to be frustrating to many.

On a positive note, the survey results indicate that the businesses felt that the City is doing a fairly good job of communicating to people via on-road communication such as electronic changeable message boards and street signage.

As the first of its kind, this survey acts as a baseline for gauging the change in the level of satisfaction of the business community with the transportation system over time. To be successful in doing so, the survey will likely need be conducted every 3 years with results reported as part of *The Way We Move Progress Measures Report*. The relatively low cost of the survey makes it a cost-effective means of obtaining data to evaluate this progress measure on a regular basis.

Appendix A. 2011 City of Edmonton Business Satisfaction Survey on the Transportation System

June 24, 2011

Attention: ABC COMPANY
123 BLANK ST
EDMONTON, AB
T1A 2B3

www.edmonton.ca/transportationsurvey

Your Online Survey ID
SAMPLE123

2011 Business Satisfaction Survey on the Transportation System

Dear Sir/Madam:

The City of Edmonton is seeking your cooperation in understanding the satisfaction of the business community with the transportation system. Input from businesses is important in gauging whether the movement of goods and services is effective and efficient and helps inform transportation planning in the City.

The City of Edmonton is conducting a survey of businesses, organizations, and institutions that rely on the transportation system to carry out their business. The survey should be completed by the person who is most familiar with how your business operations are impacted by the transportation system in Edmonton.

We encourage you to share your thoughts knowing that your responses will be kept strictly confidential and treated in accordance with provincial and federal privacy legislation.

Please complete the enclosed survey and return it using one of the methods listed below. To complete the survey online go to www.edmonton.ca/transportationsurvey and enter your unique Online Survey ID provided above. As a show of our appreciation, you can choose to enter a draw to win an ETS transit pass.

Kindly complete and submit your survey by **July 15, 2011**. If you have any questions, please contact the General Supervisor of Policy Implementation and Evaluation at (780) 496-1795.

Yours truly,



Brian Latte
Manager, Transportation Planning

Thank you for participating! Submit survey via:

- Website:** www.edmonton.ca/transportationsurvey
- email to:** transplanning@edmonton.ca
- fax to: 780.496.4287
- Mail back using postage-paid envelope provided

Please rate your level of satisfaction with the following aspects of the transportation system, keeping your business operations in mind.

1. Winter road maintenance
 - Very satisfied
 - Satisfied
 - Neutral
 - Dissatisfied
 - Very dissatisfied
 - Not applicable
2. Loading and unloading areas along roadways
 - Very satisfied
 - Satisfied
 - Neutral
 - Dissatisfied
 - Very dissatisfied
 - Not applicable
3. Overall condition of paved roads
 - Very satisfied
 - Satisfied
 - Neutral
 - Dissatisfied
 - Very dissatisfied
 - Not applicable
4. Signage for truck and dangerous goods routes
 - Very satisfied
 - Satisfied
 - Neutral
 - Dissatisfied
 - Very dissatisfied
 - Not applicable
5. Travel times on major truck routes (e.g. Whitemud Drive, Yellowhead Trail, 170 St)
 - Very satisfied
 - Satisfied
 - Neutral
 - Dissatisfied
 - Very dissatisfied
 - Not applicable
6. Traffic signal co-ordination
 - Very satisfied
 - Satisfied
 - Neutral
 - Dissatisfied
 - Very dissatisfied
 - Not applicable
7. Availability of on-street parking
 - Very satisfied
 - Satisfied
 - Neutral
 - Dissatisfied
 - Very dissatisfied
 - Not applicable
8. Operation of on-street construction areas (i.e. controlling, warning, guiding traffic through or around a work area)
 - Very satisfied
 - Satisfied
 - Neutral
 - Dissatisfied
 - Very dissatisfied
 - Not applicable

This information is being collected under the authority of Section 33 (c) of the Freedom of Information and Protection of Privacy (FOIP) Act and will be used for the administration of Transportation Services programs including surveys to determine the level of satisfaction with aspects of the transportation system and this information will not be disclosed outside this public body. This information is protected by the privacy provisions of FOIP. If you have any questions regarding the collection, use, or disclosure of this information contact the General Supervisor of Policy Implementation, and Evaluation at (780) 496-1795.

9. Information on electronic changeable message boards

- Very satisfied
- Satisfied
- Neutral
- Dissatisfied
- Very dissatisfied
- Not applicable

10. Are you aware that the City of Edmonton provides live-stream traffic camera video at www.edmontontrafficcams.com?

- Yes [Proceed to Question 11]
- No [Skip to Question 12]

11. How satisfied are you with the live-stream traffic information on

www.edmontontrafficcams.com?

- Very satisfied
- Satisfied
- Neutral
- Dissatisfied
- Very dissatisfied
- Not applicable

Questions 12 to 15 are specifically about **your customers and employees**. How satisfied are you with your customers' and employees' ability to access your business using the following modes:

12. By car

- Very satisfied
- Satisfied
- Neutral
- Dissatisfied
- Very dissatisfied
- Not applicable

13. By transit

- Very satisfied
- Satisfied
- Neutral
- Dissatisfied
- Very dissatisfied
- Not applicable

14. Walking

- Very satisfied
- Satisfied
- Neutral
- Dissatisfied
- Very dissatisfied
- Not applicable

15. Bicycling

- Very satisfied
- Satisfied
- Neutral
- Dissatisfied
- Very dissatisfied
- Not applicable

16. Please rate the degree to which your business relies on the transportation system:

- Very much
- Somewhat
- Neutral
- Not much
- Not at all

17. Please rate your overall satisfaction with the transportation system (roadway, transit, walk, bicycle facilities) in enabling you to operate your business:

- Very satisfied
- Satisfied
- Neutral
- Dissatisfied
- Very dissatisfied
- Not applicable

18. What aspects of the transportation system would you like improved and how would that benefit your business?

Comments:

Please provide your contact information. It will only be used to verify our records and will not be associated with your survey response in any way.

Company/Organization/Institution Name:

Contact Person:

Address:

Postal Code

Phone Number:

Email Address:

Number of employees in your company, organization or institution:

- 1 to 4
- 5 to 9
- 10 to 49
- 50 to 99
- 100+

Please complete this portion if you would like your name entered in the draw to win an ETS transit pass. Your name will not be associated with the survey.

Name:

Phone #:

