



Transportation and
Public Works

**Department of Transportation
and Public Works**

**2006 Customer Satisfaction Survey
Provincial Highway System**

Highlights Report



The 2006 Customer Satisfaction Survey - Provincial Highway System was conducted by the Marketing Research Centre for the Department of Transportation and Public Works.

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2006 Customer Satisfaction Survey - Provincial Highway System

The Nova Scotia Department of Transportation and Public Works conducts a Customer Satisfaction Survey to determine and evaluate the public's satisfaction with the provincial highway system. It is also used to determine the Department's effectiveness in providing services on the provincial highway system. This report highlights the survey findings¹.

The 2006 Customer Satisfaction Survey is based on telephone interviews with 2072 residents of Nova Scotia, 16 years of age and older. This sample is segmented by four provincial transportation districts:

Central District

Halifax and Hants Counties.

Eastern District

Antigonish, Guysborough, Inverness, Victoria, Cape Breton, and Richmond Counties.

Northern District

Pictou, Cumberland, and Colchester Counties.

Western District

Kings, Annapolis, Digby, Yarmouth, Shelburne, Lunenburg, and Queens counties.

This allows for a comparison and analysis at the district level.

A random sample of 2072 respondents provides a sampling error of plus or minus 2.15%, with a 95% confidence level. The margin of error for each of the four districts is shown in the following table.

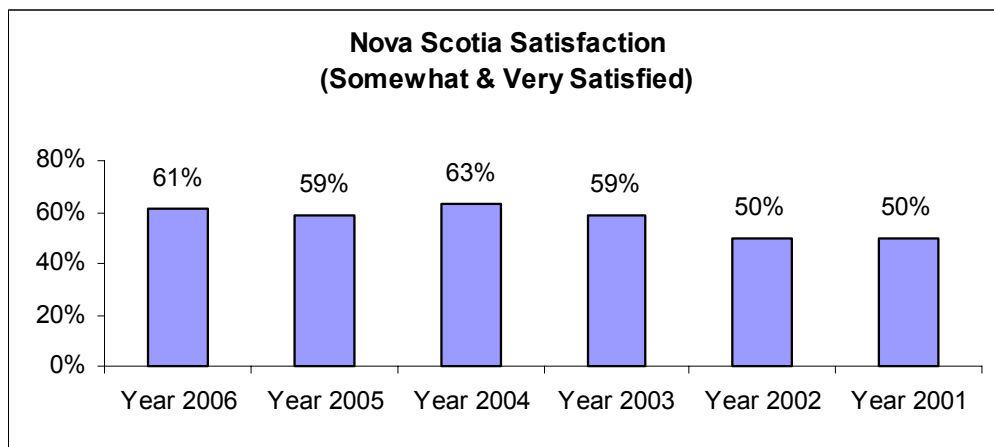
¹

As the data has been weighted to reflect the actual population by district, and percentages have been rounded to the nearest whole number, not all tables will add to 100%.

District	Population (Over 16)	Sample Size	Margin of Error (95% confidence level)
Central	352,466	519	±4.3
Eastern	148,527	518	±4.3
Northern	110,298	517	±4.3
Western	174,576	518	±4.3
Overall	785,827	2072	±2.15

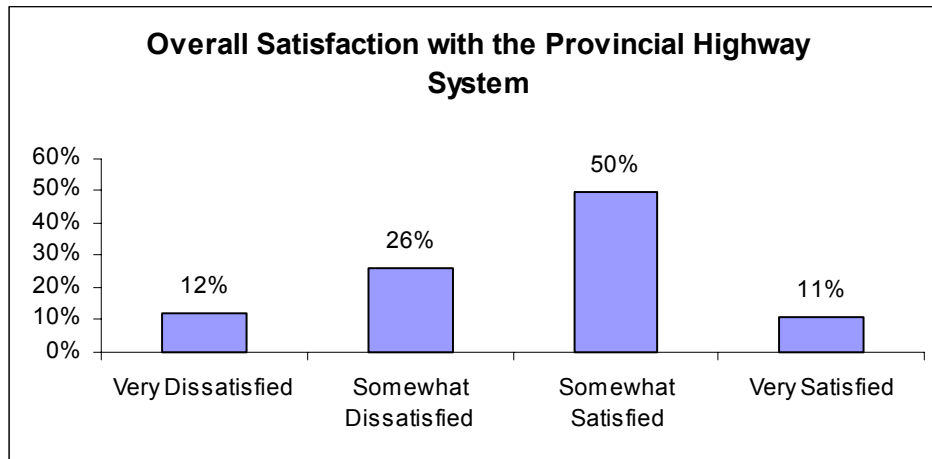
Overall Satisfaction

Overall satisfaction with the provincial highway system is a measurement of all of the variables that make up customer satisfaction.



Overall, the respondents were generally satisfied with the provincial highway system. Over six in ten respondents (61%) felt very or somewhat satisfied with the provincial highway system. This has increased by two percentage points since 2005.

The shift in satisfaction from 2005 to 2006 is a significant increase, with means of 2.55 and 2.61, respectively.



Respondents in all districts indicated a higher level of satisfaction² compared to the results of the 2005 survey (Central, 2.64 to 2.67; Eastern, 2.51 to 2.59; Northern, 2.49 to 2.50; Western, 2.41 to 2.56).

Respondents from the Central District had the highest level of satisfaction (64%) with the provincial highway system. The Western (62%), Eastern (60%) and Northern (56%) Districts had lower levels of satisfaction. Respondents from the Western District were significantly more satisfied with the provincial highway system than in 2005.

District	Central		Eastern		Northern		Western	
	2006 %	2005 %	2006 %	2005 %	2006 %	2005 %	2006 %	2005 %
Very Satisfied	14	11	12	11	10	9	7	9
Somewhat Satisfied	50	53	48	46	46	48	55	44
Somewhat Dissatisfied	26	23	25	25	28	25	26	25
Very Dissatisfied	11	12	14	18	16	17	12	21

² Scale: 1 (poor), 2 (only fair), 3 (good), 4 (excellent)

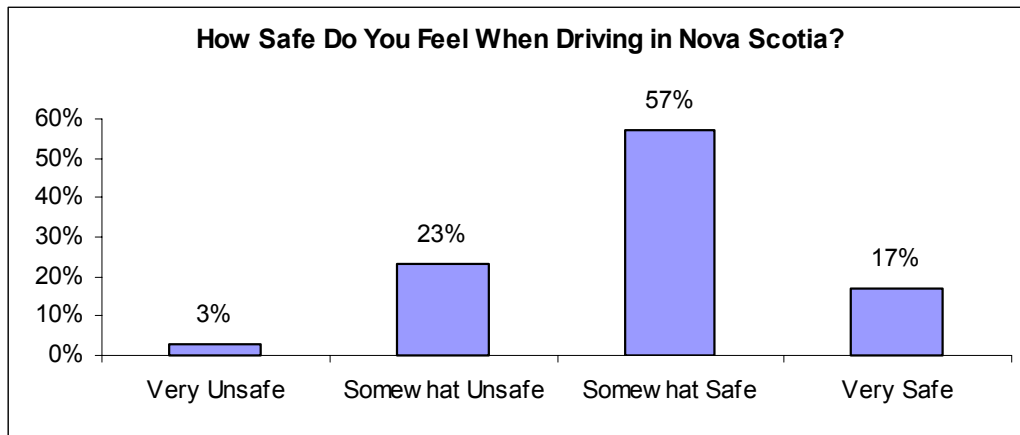
Why are Nova Scotians dissatisfied?

Respondents were dissatisfied for various reasons. The most frequent responses were:

- Roads are poorly paved/maintained (27%)
- Poor repair/condition (25%)
- Potholes on the road (24%)

These responses were also the most frequent responses in the 2005 Customer Satisfaction Survey.

Safety - Driving



Seven in ten respondents (74%), indicated that they felt “very safe” or “somewhat safe” when driving on the provincial highways.

Percentage who feel safe when driving in Nova Scotia

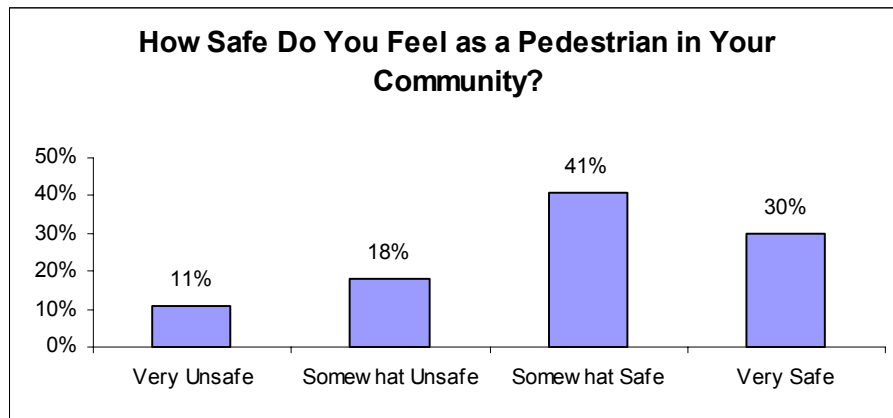
	2006	2005	2004
Central	74%	78%	81%
Eastern	75%	70%	74%
Northern	77%	75%	81%
Western	72%	71%	79%

Within the districts, respondents from the Northern and Eastern districts, 77% and 75% respectively, felt more safe while driving on provincial highway systems. During 2006, the Central district had a decrease in the rating of how safe they felt when driving in Nova Scotia.

Some of the reasons for respondents feeling unsafe while driving include:

- Other drivers (21%)
- Lack of four-lane highways (twinning) (13%)
- Need better roads (13%)
- Traffic, road conditions, poor signage (12%)

Safety - Walking



Seventy-one percent of respondents indicated they felt either very safe (30%) or somewhat safe (41%) when walking in their community. Twenty-nine percent felt either somewhat unsafe (18%) or very unsafe (11%).

Percentage who feel safe when walking in their community in Nova Scotia

	2006
Central	71%
Eastern	71%
Northern	72%
Western	68%

Perceived safety as a pedestrian varied slightly by district. The Western District had the lowest safety score at 68%, followed by the Eastern and Central Districts at 71%, and the Northern District was the highest at 72%.

Respondents indicated the main reasons why they felt unsafe when walking in their community were no sidewalks (26%), speeding (17%), and drivers not paying attention (16%).

Road Safety Measures

	Somewhat Agree 2006 %	Strongly Agree 2006 %
More Severe Penalties for Driving Infractions	34	40
More Police Enforcement of Existing Regulations	35	47
Highway Improvements	32	62
Public Education Programs about Safe Driving Habits	41	40
Drivers Being More Careful and Responsible	11	88
Pedestrians Being More Careful and Responsible	33	60
Increased Government Spending on Roads and Highways	30	64

Respondents agreed the most important contribution to road safety were drivers being more careful and responsible (99%). This was closely followed by highway improvements (94%) and increased government spending on roads and highways (94%).

Pedestrians being more careful and responsible was rated at 93%, more police enforcement of existing regulations (82%), public education programs about safe driving habits (81%), and more severe penalties for driving infractions (74%).

The Following Will Improve Road Safety by District³

	Central	Eastern	Northern	Western	Overall
	Means				
More Severe Penalties for Driving Infractions	2.98	3.16	2.90	3.05	3.02
More Police Enforcement of Existing Regulations	3.23	3.36	3.13	3.18	3.23
Highway Improvements	3.52	3.66	3.52	3.52	3.54
Public Education Programs about Safe Driving Habits	3.12	3.31	3.22	3.06	3.16
Drivers Being More Careful and Responsible	3.88	3.86	3.81	3.89	3.87
Pedestrians Being More Careful and Responsible	3.54	3.58	3.51	3.38	3.51
Increased Government Spending on Roads and Highways	3.48	3.70	3.60	3.54	3.55

³ Scale: 1 (poor), 2 (only fair), 3 (good), 4 (excellent)

How important are highway services to Nova Scotians?

Respondents indicated all of the seventeen highway services were important.⁴ The levels of importance for twelve services have significantly decreased in 2006.

Significance Testing - Importance

Importance	2006	2005	Change
Amount of four-lane divided highways	3.38	3.54	-0.16
Filling cracks and potholes	3.78	3.85	-0.07
Resurfacing sections of the highway	3.67	3.68	-0.01
Snow and ice removal during a storm	3.74	3.79	-0.05
Timeliness of a cleanup after a storm	3.76	3.78	-0.02
Number of passing lanes	3.24	3.36	-0.12
Length of passing lanes	3.28	3.43	-0.15
All pavement markings	3.70	3.78	-0.08
Roadside brush and tree clearing	3.37	3.41	-0.04
Helpfulness of non-commercial highway signs such as speed limit signs, road exit signs and so forth	3.49	3.70	-0.21
Amount of non-commercial highway signs such as speed limit signs, road exit signs and so forth	3.40	3.47	-0.07
Maintenance of non-commercial signs such as speed limit signs, road exit signs and so forth	3.46	3.50	-0.04
Width of highway shoulders	3.56	3.55	0.01
Surface condition of highway shoulders	3.58	3.60	-0.02
Grading and dust control of gravel	3.17	3.31	-0.14
Ditches and culverts	3.21	3.40	-0.19
Bridges	3.42	3.61	-0.19

*Scale: 1(very unimportant), 2(somewhat unimportant), 3(somewhat important), 4(very important)

Significance is indicated by **bolding.

⁴

Based upon the mean scores for importance ratings.

Twelve services significantly decreased in importance in 2006:

- Amount of four-lane divided highways
- Filling of cracks and potholes
- Snow and ice removal during a storm
- Number of passing lanes
- Length of the passing lanes
- All pavement markings
- Roadside brush and tree-clearing
- Helpfulness of non-commercial signs such as speed limit signs, road exit signs and so forth
- Amount of non-commercial highway signs such as speed limit signs, road exit signs and so forth
- Grading and dust control of gravel
- Ditches and culverts
- Bridges

How do Nova Scotians rate the importance of highway services?

The top seven services that received high ratings⁵ were:

- Filling cracks and potholes (97%)
- Resurfacing sections of the highway (97%)
- All pavement markings (97%)
- Timeliness of a cleanup after a storm (96%)
- Snow and ice removal during a storm (95%)
- Surface condition of highway shoulders (95%)
- Width of highway shoulders (94%)

The seven lowest ranking services were:

- Bridges (90%)
- Roadside brush and tree clearing (88%)
- Length of passing lanes (86%)
- Ditches and culverts (85%)
- Amount of four-lane divided highways (85%)
- Number of passing lanes (84%)
- Grading and dust control (81%)

⁵

Means below 2.70.

Importance of Highway Services

Importance	Somewhat Important 2005 %	Very Important 2005 %	Somewhat Important 2006 %	Very Important 2006 %
Amount of four-lane divided highways	27	63	28	57
Filling cracks and potholes	11	87	15	82
Resurfacing sections of the highway	23	72	27	70
Snow and ice removal during a storm	13	83	16	79
Timeliness of a cleanup after a storm	16	81	16	80
Number of passing lanes	38	49	41	43
Length of passing lanes	33	54	40	46
All pavement markings	16	80	24	73
Roadside brush and tree clearing	33	55	35	53
Helpfulness of non-commercial highway signs such as speed limit signs, road exit signs and so forth	19	64	37	56
Amount of non-commercial highway signs such as speed limit signs, road exit signs and so forth	33	58	41	50
Maintenance of non-commercial signs such as speed limit signs, road exit signs and so forth	32	60	39	54
Width of highway shoulders	33	61	32	62
Surface condition of highway shoulders	29	65	30	65
Grading and dust control of gravel roads	32	45	34	47
Ditches and culverts	38	50	42	43
Bridges	25	68	33	57

Significance Testing - Quality

Two of 17 services were rated significantly higher in quality in 2006:

- Filling cracks and potholes
- Maintenance of non-commercial signs such as speed limit signs, road exit signs and so forth

Nine of 17 services were rated significantly lower in quality in 2006:

- Resurfacing sections of the highway
- Snow and ice removal during a storm
- Timeliness of cleanup after a storm
- Number of passing lanes
- Pavement markings
- Helpfulness of non-commercial highway signs
- Width of highway shoulders
- Surface condition of highway shoulders
- Bridges

Significance Testing - Quality

Quality	2006	2005	Change
Amount of four-lane divided highways	2.34	2.37	-0.03
Filling cracks and potholes	1.84	1.76	0.08
Resurfacing sections of the highway	2.19	2.25	-0.06
Snow and ice removal during a storm	2.57	2.66	-0.09
Timeliness of a cleanup after a storm	2.57	2.66	-0.09
Number of passing lanes	2.33	2.38	-0.05
Length of passing lanes	2.33	2.35	-0.02
All pavement markings	2.59	2.69	-0.10
Roadside brush and tree clearing	2.56	2.53	0.03
Helpfulness of non-commercial highway signs such as speed limit signs, road exit signs and so forth	2.82	2.87	-0.05
Amount of non-commercial highway signs such as speed limit signs, road exit signs and so forth	2.72	2.75	-0.03
Maintenance of non-commercial signs such as speed limit signs, road exit signs and so forth	2.84	2.79	0.05
Width of highway shoulders	2.25	2.36	-0.11
Surface condition of highway shoulders	2.23	2.31	-0.08
Grading and dust control of gravel	2.19	2.22	-0.03
Ditches and culverts	2.48	2.50	-0.02
Bridges	2.57	2.65	-0.08

*Significance is indicated by **bolding**.

**Scale: 1(poor), 2(only fair), 3(good), 4(excellent)

How do Nova Scotians rate the quality of highway services?

When asked to rate the quality of highway services, very few respondents rated the highway services as “excellent” although the majority rated most services as “good.”

Those services rated⁶ highest among respondents in 2006 were:

- Maintenance of non-commercial highway signs such as speed limit signs, road exit signs and so forth
- Helpfulness of non-commercial highway signs such as speed limit signs, road exit signs and so forth
- Amount of non-commercial highway signs such as speed limit signs, road exit signs and so forth

Those services receiving the lowest rankings in 2006 were:

- All pavement markings
- Snow and ice removal during a storm
- Timeliness of cleanup after a storm
- Bridges
- Roadside brush and tree clearing
- Ditches and culverts
- Amount of four-lane divided highways
- Number of passing lanes
- Length of passing lanes
- Width of highway shoulders
- Surface condition of highway shoulders
- Resurfacing sections of the highway
- Grading and dust control
- Filling cracks and potholes

³

These are based upon the mean scores for quality ratings, the same cut-off of 2.70 used for 2005.

Quality of Highway Services

Quality	Good 2005 %	Excellent 2005 %	Good 2006 %	Excellent 2006 %
Amount of four-lane divided highways	42	5	41	4
Filling cracks and potholes	17	2	19	1
Resurfacing Sections of the Highway	38	3	34	3
Snow and ice removal during a storm	51	11	51	8
Timeliness of a cleanup after a storm	52	11	50	9
Number of passing lanes	44	4	44	2
Length of passing lanes	42	4	43	2
All pavement markings	59	9	57	6
Roadside brush and tree clearing	50	8	55	6
Helpfulness of non-commercial highway signs such as speed limit signs, road exit signs and so forth	47	15	69	8
Amount of non-commercial highway signs such as speed limit signs, road exit signs and so forth	64	8	64	6
Maintenance of non-commercial signs such as speed limit signs, road exit signs and so forth	67	8	73	7
Width of highway shoulders	45	3	40	2
Surface condition of highway shoulders	41	4	39	2
Grading and dust control of gravel roads	28	1	25	2
Ditches and culverts	52	3	50	2
Bridges	60	5	55	3

Where are the gaps in highway service?

We can use the information obtained from the 2006 survey results to assist in policy decision making and highway planning. One way to determine service priorities is to measure gaps that are present between the quality rating that respondents expressed and what services respondents felt were important. An important gap exists when the service is considered to be important and the service expectations of these same respondents are not being met. Lower gap scores indicate that service expectations are being met, high gap scores show that there is a problem.

Factor	2005 %	2006 %
Amount of four-lane divided highways	59	54
Filling cracks and potholes	86	82
Resurfacing sections of the Highway	69	70
Snow and ice removal during a storm	73	70
Timeliness of a cleanup after a storm	71	71
Number of passing lanes	47	42
Length of passing lanes	51	45
All pavement markings	73	69
Roadside brush and tree clearing	51	52
Helpfulness of non-commercial highway signs such as speed limit signs, road exit signs and so forth	42	50
Amount of non-commercial highway signs such as speed limit signs, road exit signs and so forth	52	47
Maintenance of non-commercial signs such as speed limit signs, road exit signs and so forth	54	50
Width of highway shoulders	59	62
Surface condition of highway shoulders	63	64
Grading and dust control of gravel roads	41	38
Ditches and culverts	48	43
Bridges	64	54

*Significant differences are **bolded**.

Twelve of seventeen gap scores had significant⁷ differences from 2005 to 2006. The only gap score to increase significantly in 2006 was **helpfulness of non-commercial highway signs**.

For the sixth year in a row, **filling cracks and potholes** has produced the largest gap value (82%). There was a significant improvement of four percentage points over 2005. Across the province there were differences in gap scores for this service. The Eastern District received the highest gap score with 87%, while the Central District showed the lowest gap score with 75%.

The gap score for **surface condition of shoulders** has increased to 64%, up from 63% in 2005. Central District yielded the lowest gap score of 59%, the Northern District had the highest gap score of 69%.

Width of highway shoulders produced a gap score of 62% in 2006. The District gap scores ranged from 57% (Central and Western) to 69% (Eastern).

All pavement markings including yellow and white lines significantly decreased by four percentage points from 2005, with a gap score of 69% in 2006. District gap scores ranged from 74% (Northern), to 70% (Eastern), to 68% (Central), to 62% (Western). Central had the highest with a gap score of 74%, and Eastern and Northern with slightly lower scores of 71% and 70%, respectively. Western had the lowest gap score (65%).

The gap score for **snow and ice removal**, the second largest gap score, decreased significantly by three percentage points from last year, producing a 70% gap score for 2006.

The gap for **timeliness for the clean up** (after a storm) was the same this year as in 2005, with a gap score of 71%. District gap scores ranged from 68% (Western) to 73% (Northern and Central).

Resurfacing sections of the highway, yielded a gap score of 70%. Eastern District showed the highest gap score (75%), while Central District showed a score of 61%, Northern with 74%, and Western with 70%.

The gap for **Bridges** yielded a gap score of 54%, a significant decrease of ten percentage points from last year, when it was 64%. Northern District (65%) had a higher gap score than the other three Districts, which ranged from 48% to 55%.

⁷

Significance testing was conducted at the 95% confidence level.

Helpfulness, amount and maintenance of non-commercial signs produced gap scores of 50%, 47% and 50%, respectively, all of which showed a change from last year. Helpfulness increased by eight percentage points, maintenance decreased by four percentage points and the amount of non-commercial highway signs such as speed limit signs, and road exit signs decreased by five percentage points from the 2005 results. All changes were significant.

The gap score for the **amount of four-lane divided highways** significantly decreased in 2006 to 54%. The Eastern District was the highest with a gap score of 60%.

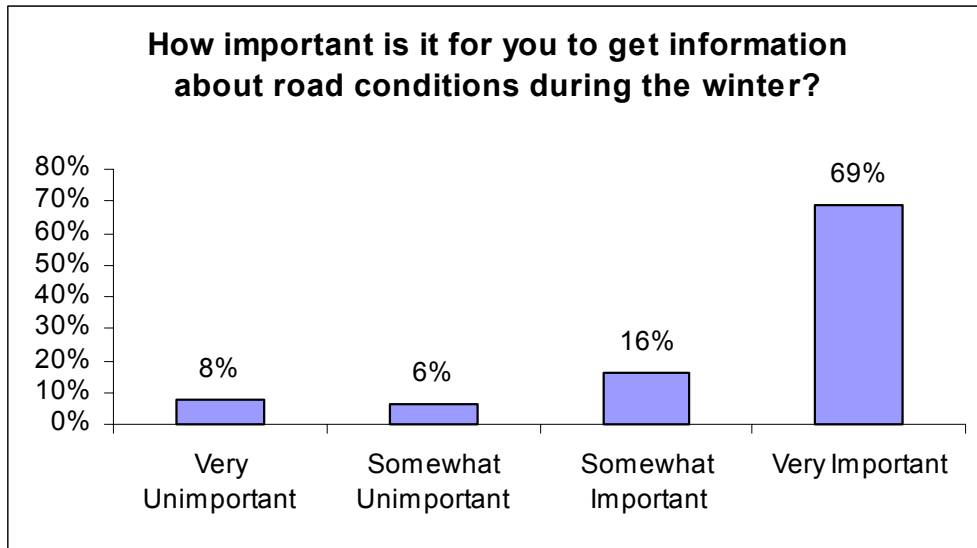
The **number and length of passing lanes** had gap scores of 42% and 45% respectively. The gap score for the **number of passing lanes** has significantly decreased by five percentage points from last year, while the gap score for the length of passing lanes has significantly decreased by six percentage points. The Eastern and Western Districts showed the highest gap scores for both the number and length of passing lanes with 45% and 47% respectively.

Roadside brush and tree clearing, and **grading and dust control** of gravel roads had gap scores of 52% and 38% respectively. Grading and dust control significantly decreased by three percentage points over 2005.

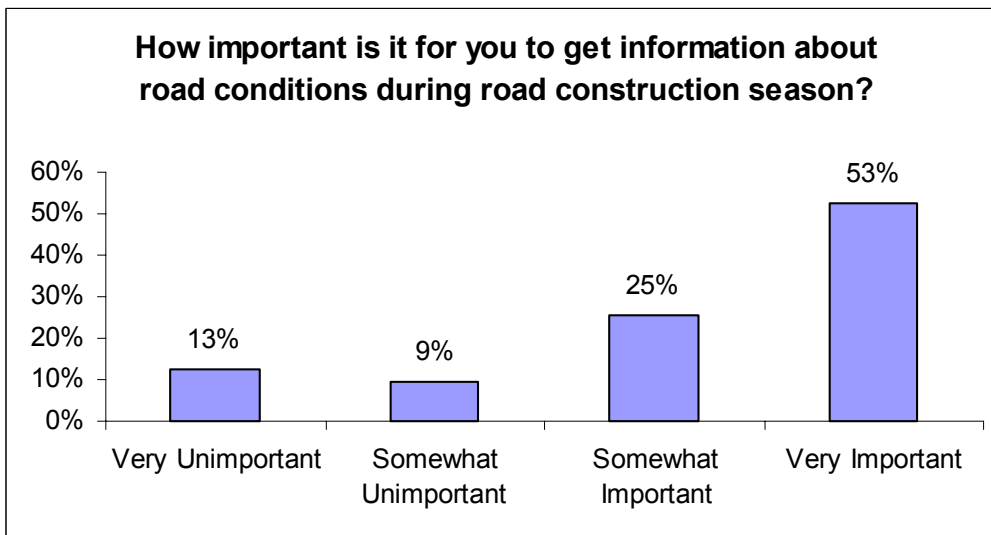
Ditches and culverts produced a small gap score of 43%, suggesting TPW is meeting expectations with regards to ditches and culverts. This was a significant improvement over 2005. The gap scores ranged from a low of 30% in the Central District to a high of 54% in the Northern District.

Highway Conditions Information

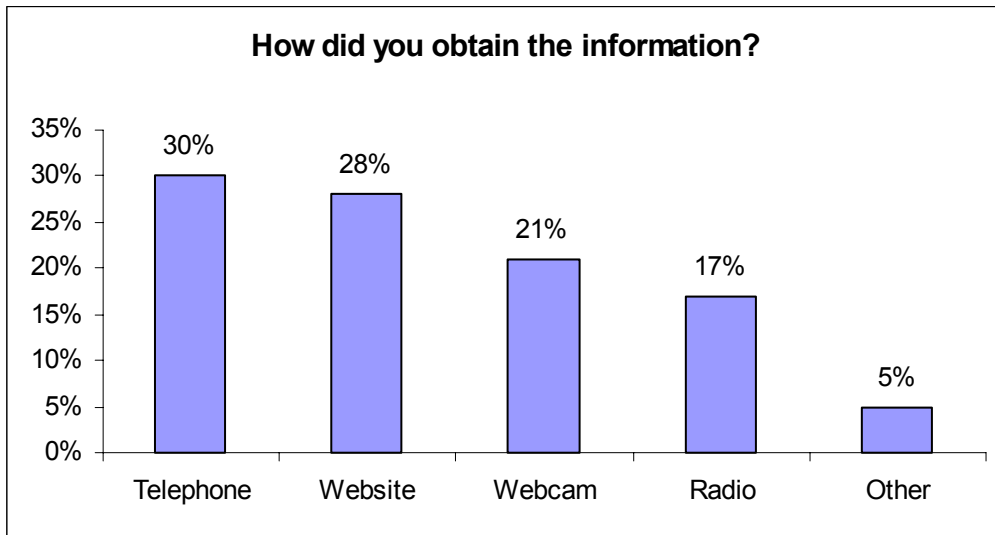
In 2006, respondents were asked how important it was for them to get information about road conditions during the winter and during construction season. When respondents were asked if they had ever obtained road condition information from the Department of Transportation and Public Works, an equal split indicated yes (50%) and no (50%).



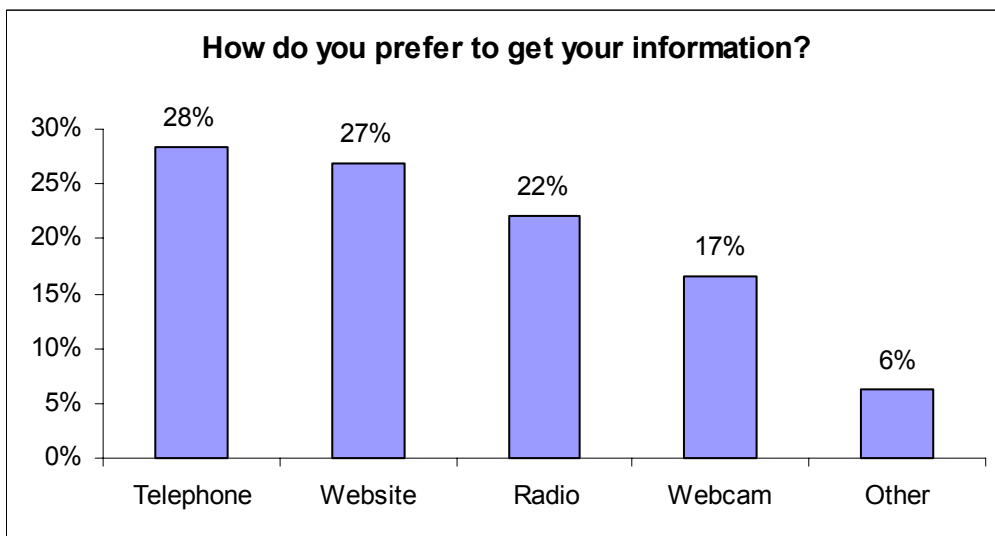
Sixty-nine percent of respondents indicated it was very important for them to get this information during the winter, while 16% indicated it was somewhat important.



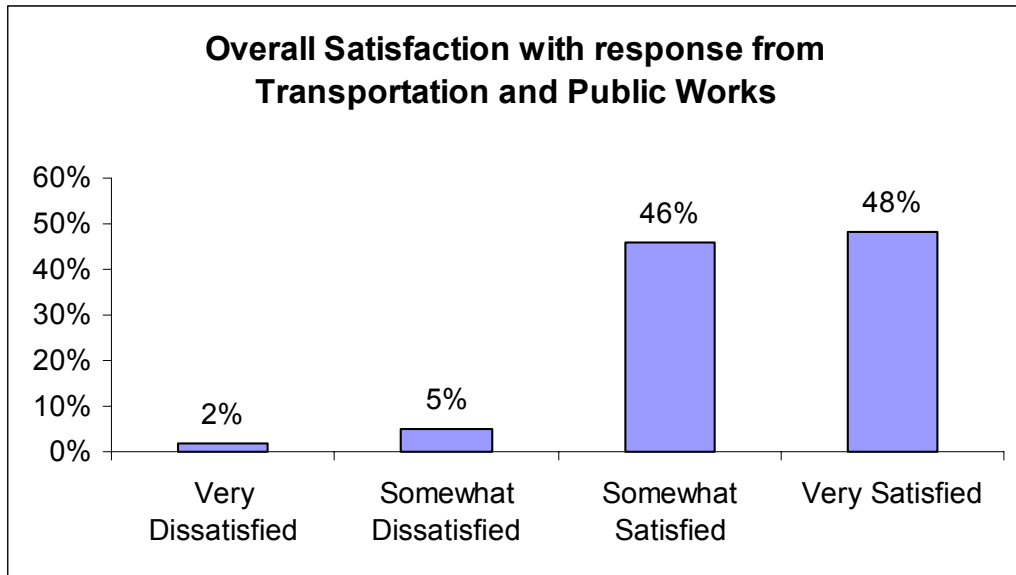
Fifty-three percent of respondents indicated it was very important to obtain information during the construction season, while 25% indicated it was somewhat important.



Of those indicating they did obtain road condition information, it was most often obtained by telephone (30%). The Transportation and Public Works website was the next most often used source of information (28%).

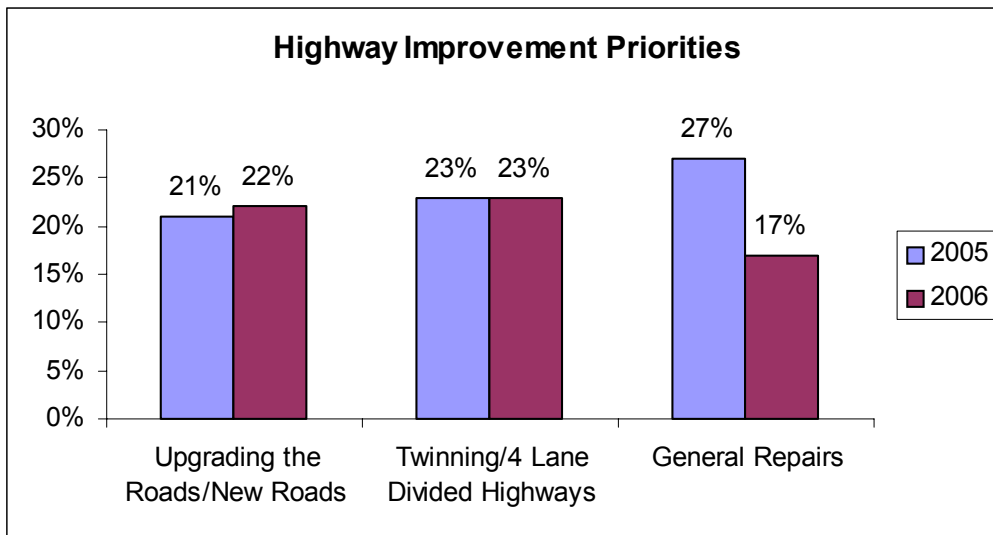


Preferred methods for obtaining information closely mirrored the actual methods used, with 28% indicating telephone and 27% selecting the TPW website. Web cameras were the least preferred method (17%) of survey respondents.



Finally, respondents were asked to rate their overall level of satisfaction with the road condition information supplied by TPW. Of the 1036 respondents who requested road condition information, 48% were very satisfied, while 46% were somewhat satisfied.

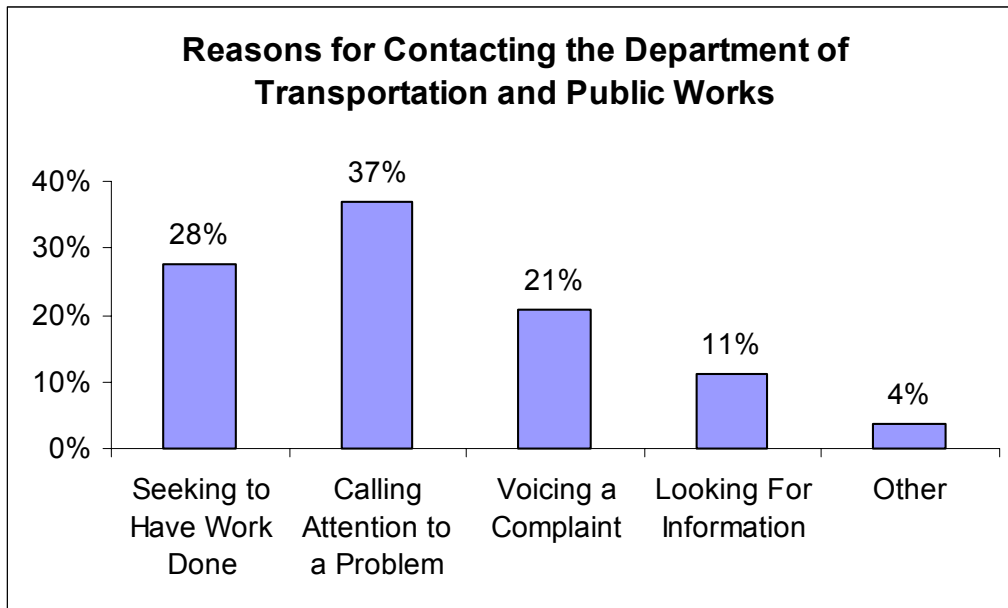
Highway Improvement Priorities



Overall, 23% of respondents indicated the top highway priority should be **twinning/four-lane divided highways**. The second highest priority was **upgrading the roads/new roads**, which was selected by 22% of respondents. **General repairs** was considered the number one priority by 17% of respondents.

Communication with Staff

A small percentage (18%) of respondents contacted the Department of Transportation and Public Works in the past year.



There were several reasons for the contact, but the majority related to calling attention to a problem (37%), or seeking to have work done (28%).

The majority of respondents (58%) were either somewhat (29%) or very satisfied (29%) with the responses from the Department.

How is this information used?

This Customer Satisfaction Survey assists the Department of Transportation and Public Works in several ways. This survey is used to:

- Assist TPW in finding ways to improve service delivery; for example, formulating service standards
- Report on TPW's performance in the area of customer satisfaction as part of the government-wide performance measurement process
- Support departmental planning and decision making

The identification of gaps between the level of service customers expected and what they believed they received revealed a number of service areas in which improvements could be made. This analysis provides the Department of Transportation and Public Works with a reliable tool for making choices on providing highway services in the future. Improvements in service delivery may be limited, due to budgetary or other constraints. However, through incremental improvements to services and by communicating the department's limitations TPW can begin to work toward addressing the existing gaps in the services in a systematic manner.