



**Department of Transportation
and Public Works**

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2003 Customer Satisfaction Survey
Provincial Highway System**

Highlights Report



The 2003 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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2003 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 2003 Customer Satisfaction Survey is based on telephone interviews with 2068 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 2068 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.

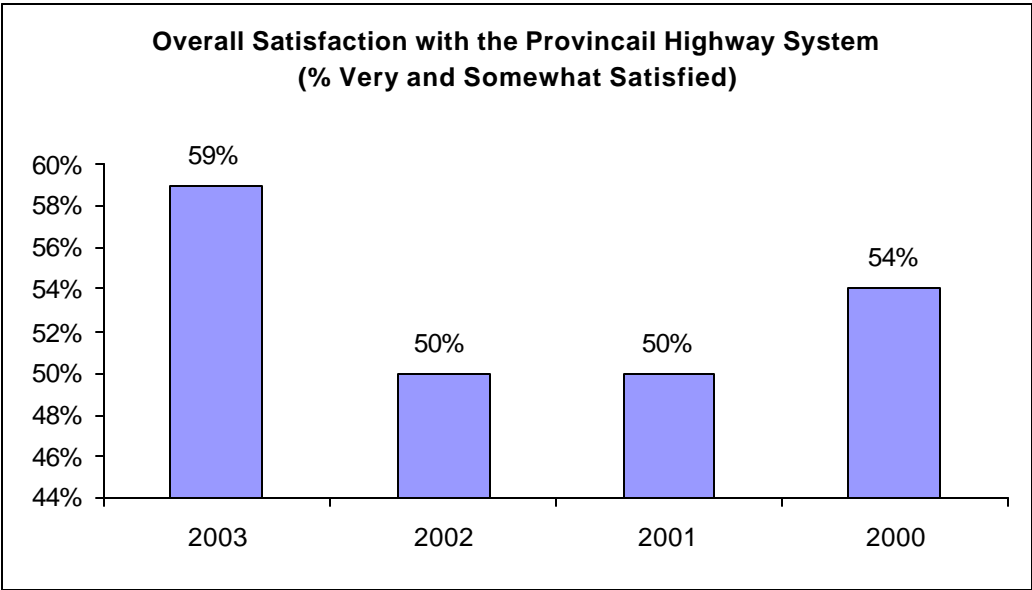
¹ As the data has been weighted to reflect the actual population by district, and percentages have been rounded to the nearest whole number, not all tables will add to 100%.

District	Population (over 16)	Sample Size	Margin of Error (95% confidence level)
Central	338,479	518	± 4.3
Eastern	150,424	517	± 4.3
Western	173,693	517	± 4.3
Northern	110,058	516	± 4.3
Overall	772,655	2,068	± 2.15

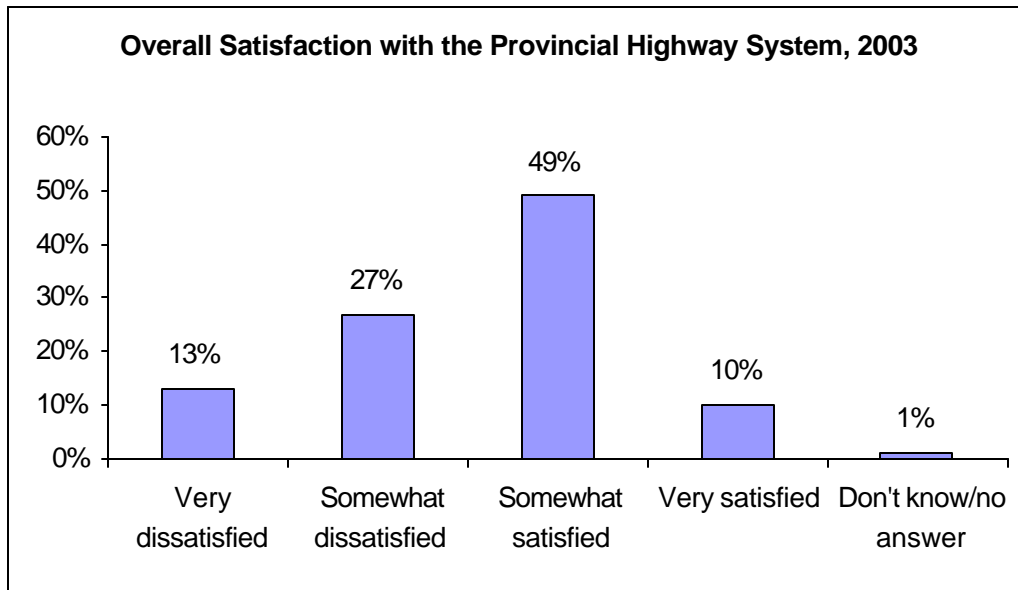
Overall Satisfaction

Overall satisfaction with the provincial highway system is a measurement of all the variables that make up customer satisfaction. There are many variables that can influence the way people respond, for example, the number of motor vehicle accidents that occur in the winter season.

Overall, Nova Scotians were generally satisfied with the provincial highway system. More than half of all residents were either “somewhat satisfied” or “very satisfied” with the provincial highway system.



Almost six in ten residents from Nova Scotia (59%) felt very or somewhat satisfied with the provincial highway system. This had increased nine percent since 2002.



Residents in all of the four districts indicated higher satisfaction as compared with the results from the 2002 survey. Central Nova Scotia expressed the highest level of satisfaction (65%), while Northern Nova Scotia expressed the lowest amount of satisfaction (55%).

The Central, Eastern and Northern Districts showed significant² increases³ in satisfaction from 2002 to 2003. Residents, in the Central District, indicated a satisfaction mean⁴ of 2.45 in 2002 and 2.69 in 2003. Residents, in the Eastern District, indicated a satisfaction mean of 2.33 in 2002 and 2.48 in 2003. Residents, in the Northern District, indicated a satisfaction mean of 2.31 in 2002 and 2.48 in 2003.

² Significance testing was done at the 95% confidence level.

³ Mean scores were used to calculate significant differences.

⁴ Scale: 1 (very dissatisfied), 2 (somewhat dissatisfied), 3 (somewhat satisfied), 4 (very satisfied).

District	Central		Northern		Eastern		Western	
Year	2003 %	2002 %	2003 %	2002 %	2003 %	2002 %	2003 %	2002 %
Very satisfied	13	8	8	7	10	6	9	8
Somewhat satisfied	52	46	47	39	47	41	47	43
Somewhat dissatisfied	26	29	28	31	25	33	29	28
Very dissatisfied	8	17	16	22	18	20	15	20

Why are Nova Scotians dissatisfied?

Nova Scotians were dissatisfied for various reasons. The most frequent responses were:

- Roads are poorly paved/maintained
- Potholes on the roads
- Poor repair/condition

These responses were also the most frequent responses, in the 2002 Customer Satisfaction Survey.

Highway Services - Rating the Department’s Performance

To obtain feedback on how the department performs in providing highway services, we asked a number of questions about the importance and the quality of these services.

How important are highway services to Nova Scotians?

Nova Scotians felt that every highway service was important. However, the level of importance⁵ for all highway services has decreased since the 2002 Customer Satisfaction Survey.

⁵ These are based on mean scores for importance ratings.

Significance Testing - Importance

Factor	2003	2002	Change
Amount of four lane divided highways	3.60	3.65	-0.05
Filling Cracks and potholes	3.83	3.89	-0.06
Resurfacing sections of the highway	3.67	3.81	-0.14
Ice and snow removal during a storm	3.85	3.89	-0.04
Completeness of a cleanup after a storm	3.77	3.88	-0.11
Highway design, including curves, grading and width	3.61	3.73	-0.12
Number of passing lanes	3.50	3.64	-0.14
Length of passing lanes	3.55	3.70	-0.15
All pavement markings	3.80	3.87	-0.07
Roadside brush and tree clearing	3.43	3.49	-0.06
Helpfulness of non-commercial highway signs such as speed limit signs, road exit signs and so forth	3.71	3.75	-0.04
Amount of non-commercial highway signs such as speed limit signs, road exit signs and so forth	3.53	3.68	-0.15
Maintenance of non-commercial highway signs such as speed limit signs, road exit signs and so forth	3.58	3.74	-0.16
Width of highway shoulders	3.63	3.73	-0.10
Surface condition of highway shoulders	3.64	3.72	-0.08
Grading and dust control of gravel	3.43	3.57	-0.14
Ditches and culverts	3.44	3.62	-0.18
Bridges	3.76	3.78	-0.02

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

All services except bridges had a significant decrease⁶ from 2002 to 2003, with regard to importance.

⁶ Significance testing was done at the 95% confidence level.

Importance of Highway Services

Factor	Somewhat Important 2002 %	Somewhat Important 2003 %	Very Important 2002%	Very Important 2003%
Amount of four-lane divided highways	21	22	71	69
Filling cracks and potholes	7	11	91	87
Resurfacing sections of the highways	16	28	82	70
Ice/snow removal during a storm	8	10	90	87
Completeness of the clean up (ice/snow) after a storm	10	18	89	79
Highway design including curves, grading and width	21	31	75	64
Number of passing lanes	25	35	69	57
Length of passing lanes	22	32	73	61
All pavement markings including yellow/white lines	10	16	88	82
Roadside brush/tree clearing	32	39	59	53
Helpfulness of non-commercial highway signs such as speed limit signs, road exit signs and so forth	19	22	78	74
Amount of non-commercial highway signs such as speed limit signs, road exit signs and so forth	22	33	73	60
Maintenance of non-commercial highway signs such as speed limit signs, road exit signs and so forth	19	31	78	64
Width of highway shoulders	22	29	75	67
Surface condition of highway shoulders	21	26	76	69
Grading and dust control of gravel roads	28	34	61	51
Ditches and culverts	28	37	66	53
Bridges	16	19	81	79

How do Nova Scotians rate the quality of highway services?

Most residents rated the highway services as "good" or "excellent".

Significance Testing - Quality

Factor	2003	2002	Change
Amount of four lane divided highways	2.50	2.39	0.11
Filling Cracks and potholes	1.97	1.9	0.07
Resurfacing sections of the highway	2.30	2.21	0.09
Ice and snow removal during a storm	2.73	2.52	0.21
Completeness of a cleanup after a storm	2.78	2.61	0.17
Highway design, including curves, grading and width	2.69	2.64	0.05
Number of passing lanes	2.46	2.42	0.04
Length of passing lanes	2.44	2.46	-0.02
All pavement markings	2.75	2.73	0.02
Roadside brush and tree clearing	2.60	2.53	0.07
Helpfulness of non-commercial highway signs such as speed limit signs, road exit signs and so forth	2.86	2.78	0.08
Amount of non-commercial highway signs such as speed limit signs, road exit signs and so forth	2.73	2.74	-0.01
Maintenance of non-commercial highway signs such as speed limit signs, road exit signs and so forth	2.78	2.76	0.02
Width of highway shoulders	2.45	2.45	0
Surface condition of highway shoulders	2.38	2.39	-0.01
Grading and dust control of gravel	2.31	2.35	-0.04
Ditches and culverts	2.5	2.5	0
Bridges	2.61	2.6	0.01

*Significant differences are bolded.

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

The services that showed significant increases⁷ in perceived quality between 2002 and 2003 were:

- Amount of four lane divided highways
- Filling in cracks and potholes
- Resurfacing sections of the highway
- Ice and snow removal during a storm
- Completeness of the clean up (ice and snow) after a storm
- Highway design including curves grading and width
- Roadside brush and tree clearing
- Helpfulness of non-commercial highway signs.

There were no services that showed a significant decrease in perceived quality.

Those services⁸ rated highest among residents in 2003 were:

- Helpfulness of non commercial signs
- Maintenance of non commercial signs
- Completeness of the clean up after a storm
- All pavement markings
- Amount of non commercial signs
- Ice and snow removal during a storm
- Highway design
- Bridges.

Those services receiving the lowest ratings⁷ in 2003 were:

- Filling in cracks and potholes
- Resurfacing sections of the highway
- Grading/dust control of gravel roads
- Surface condition of highway shoulders
- Length of passing lanes
- Width of highway shoulders
- Number of passing lanes
- Amount of four lane highways.

⁷ Significance testing was at the 95% confidence level.

⁸ These are based upon the mean scores for quality ratings.

Quality of highway services

Factor	Good 2002 %	Good 2003 %	Excellent 2002 %	Excellent 2003 %
Amount of four-lane divided highways	41	44	6	8
Filling cracks and potholes	24	25	3	3
Resurfacing sections of the highway	36	39	5	5
Ice/snow removal during a storm	49	54	7	12
Completeness of the clean up (ice/snow) after a storm	52	56	9	13
Highway design including curves, grading, width	57	58	7	7
Number of passing lanes	46	47	5	5
Length of passing lanes	47	47	5	4
All pavement markings including yellow/white lines	60	61	10	10
Roadside brush and tree clearing	52	54	7	8
Helpfulness of non-commercial highway signs such as speed limit signs, road exit signs and so forth	66	68	8	10
Amount of non-commercial highway signs such as speed limit signs, road exit signs and so forth	63	63	8	8
Maintenance of non-commercial highway signs such as speed limit signs, road exit signs and so forth	64	65	9	9
Width of highway shoulders	47	47	6	5
Surface condition of highway shoulders	45	44	5	4
Grading /dust control of gravel roads	36	34	4	3
Ditches and culverts	52	51	5	3
Bridges	55	56	7	7

Where are the gaps in highway service?

We can use the information obtained from the 2003 survey results to assist in policy decision making and highway planning. One of the ways to determine service priorities, is to measure gaps that are present between the quality rating that Nova Scotians expressed and what services Nova Scotians consider to be important. An important gap exists when the service is considered to be important and the service expectations of these same residents are not being met. Lower gap scores indicate that service expectations are being met, high gap scores show that there is a problem.

Every gap score had decreased since the 2002 Customer Satisfaction Survey.

Gap Analysis

Factor	2002 %	2003 %
Amount of four-lane divided highways	64	61
Filling cracks and potholes	88	85
Resurfacing sections of the highway	78	68
Ice and snow removal during a storm	82	75
Completeness of the clean up after a storm	80	68
Highway design, including curves, grading and width	68	58
Number of passing lanes	63	55
Length of the passing lanes	67	58
All pavement markings including yellow and white lines	79	74
Roadside brush and tree clearing	55	51
Helpfulness of non-commercial highway signs such as speed limit signs, road exit signs and so forth	71	66
Amount of non-commercial highway signs such as speed limit signs, road exit signs and so forth	66	56
Maintenance of non-commercial highway signs such as speed limit signs, road exit signs and so forth	70	59
Width of highway shoulders	71	65
Surface condition of highway shoulders	72	67
Grading and dust control of gravel roads	53	45
Ditches and culverts	62	51
Bridges	74	72

The largest gap percentage occurred with respect to **filling in cracks and potholes**. This was consistent with the survey results from 2002. Overall, 85% of Nova Scotians felt that filling in cracks and potholes was a very important service and the department was not meeting the service needs of residents to the highest level. Overall this score has decreased by 3% since 2002. Across the province there were only slight differences between gap scores for this service in each district, the scores range from 82% (Central) to 87% (Western).

The gap score for **surface conditions of shoulders** decreased to 67% from a score of 72% in 2002. Central District had the lowest gap score of 58% which is lower than Eastern (67%), Northern (72%) and Western (70%).

The **width of highway shoulders** decreased its gap score from 71% in 2002 to 65% in 2003. The district scores for this service ranged from 57% (Central) to 70% (Northern).

Currently, eight in ten (82%) residents felt that **all pavement markings including yellow and white lines** was “very important” to them, while 1 in 10 of the same residents felt that the quality of the pavement markings was “excellent”. This produced a gap score of 74%, which is 5 percentage points lower than last year’s score of 79%. District gap scores ranged from 73% (Central and Western) to 78% (Northern).

The gap score for **ice and snow removal** has decreased 7 percentage points from last year to 75%. The gap for **completeness of the clean up** (after a storm) decreased 12 percentage points to a score of 68%. Completeness of the clean up (after a storm) decreased the most out of any service. For the completeness of the clean up, Central District had the lowest gap score (61%) and Northern District had the highest gap score (75%).

Resurfacing sections of the highways yielded a gap score of 68%, this has decreased from last year when it was 78%. At the district level, Central had the lowest gap score (60%) and Northern had the highest gap score (72%).

Seventy-nine percent of Nova Scotians indicated that **bridges** were “very important” to them. However, only 7% of these same residents indicated that they felt the Department of Transportation and Public Works was doing an “excellent” job in regard to bridges. This produced a gap score of 72%, down 2 percentage points from last year.

The gap scores for the **helpfulness, amount and maintenance of non-commercial signs** were 66%, 56%, and 59%, respectively. These scores had all decreased from last year when they were 71%, 66%, and 70%, respectively. Central District had the lowest gap scores for amount (52%) and maintenance (56%). Western District had the lowest gap score for the helpfulness of non-commercial highway signs (63%).

The gap score for the **amount of four-lane divided highways** showed an decrease of 3% over last year’s score. It decreased to 61%. Western District was the closest to meeting the expectations of residents with a gap score 49%.

Nova Scotians appeared to be moderately satisfied with the **number and length of passing lanes**, these services had gap scores of 55% and 58%, respectively. Gap scores for both of these services have decreased by 8% and 9%, respectively from 2002. Central District showed the best scores, 50% and 54%, respectively.

The gap score for **ditches and culverts** decreased from last year. It decreased 11% from last year’s value of 62%, to 51% this year. The gap scores for the districts were spread wide with Central’s gap being 37% and Northern’s gap being 59%.

The gap score for **highway design** has decreased considerably from 2002. In 2002, it was 68% and in 2003 it was 58%. The gap scores for this service ranged from Central (56%) to Northern (61%).

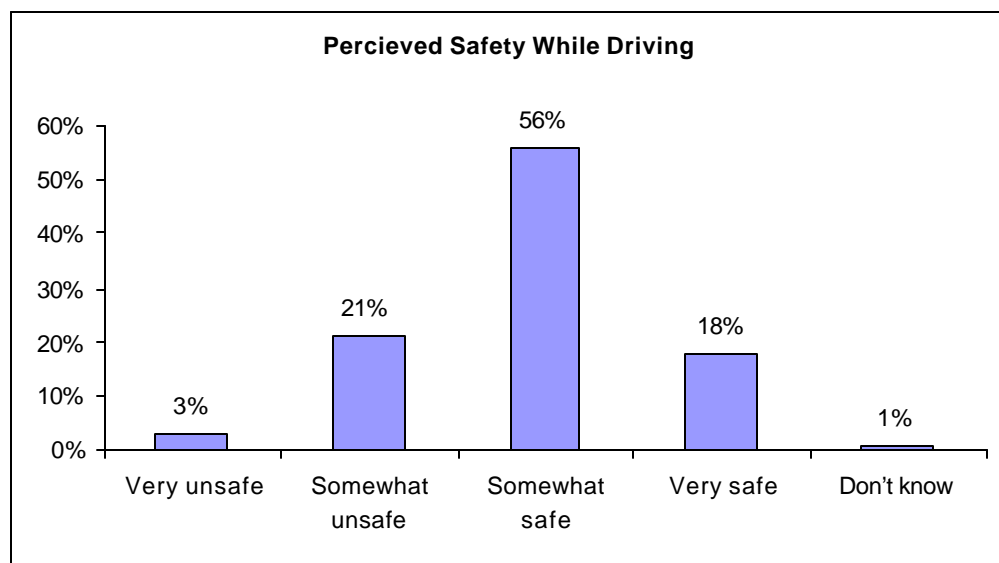
For the most part, **roadside brush and tree clearing**, and **grading/dust control of gravel roads** were satisfactory to the Nova Scotians who were surveyed, with gap scores of 51% and 45%, showing fairly strong service provision in all four districts.

The Gap Analysis provides the department with an accurate and focused tool for making choices on providing highway services in the future. While the department lacks funding to make changes to all areas of service, through incremental improvements to services and better communication of the Department's limitations, we can begin to address the existing gaps in services in a systematic manner.

Safety, Trade-offs, Improvement Priorities and Staff

Safety

Approximately seven in ten Nova Scotians (74%), indicated that they felt “very safe” or “somewhat safe” when driving on the provincial highways. There was a slight change in how safe residents felt driving in Nova Scotia from 2002, when it was 69%. The survey results suggest that perceived driver safety has the greatest effect on the level of satisfaction with highways in Nova Scotia. The safer a person feels while driving on the highways, the more satisfied they are with the highways.



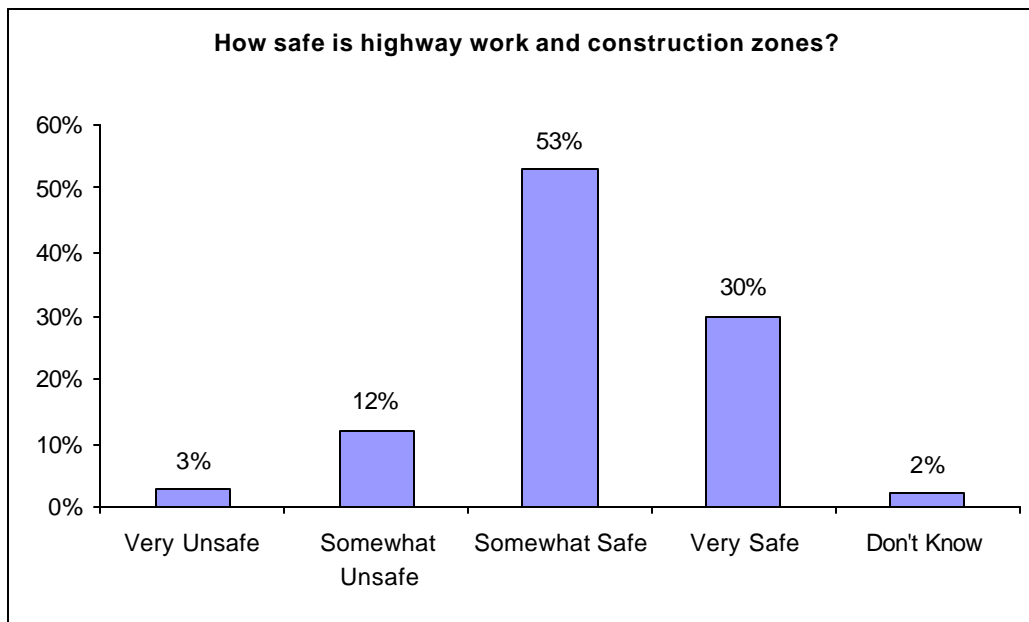
Residents of Western Nova Scotia reported the lowest level of perceived safety (71%).

	2003	2002
Central	78%	71%
Eastern	73%	68%
Northern	74%	70%
Western	71%	68%

*Significant differences are bolded.

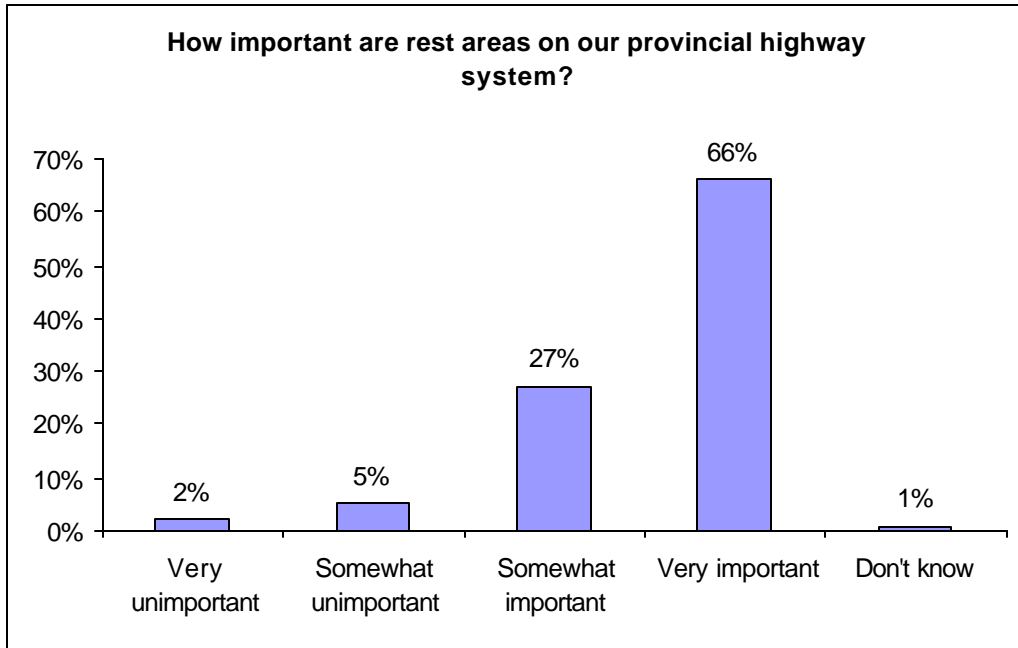
Thirty-two percent of the residents, who stated that they felt unsafe while driving in Nova Scotia, indicated that the reason for this was the poor condition of the roads.

Nova Scotians were also asked to rate how safe they think highway work or construction zones, in Nova Scotia, are for highway motorists. The results suggested that most residents (83%) felt that such work zones were safe for motorists.

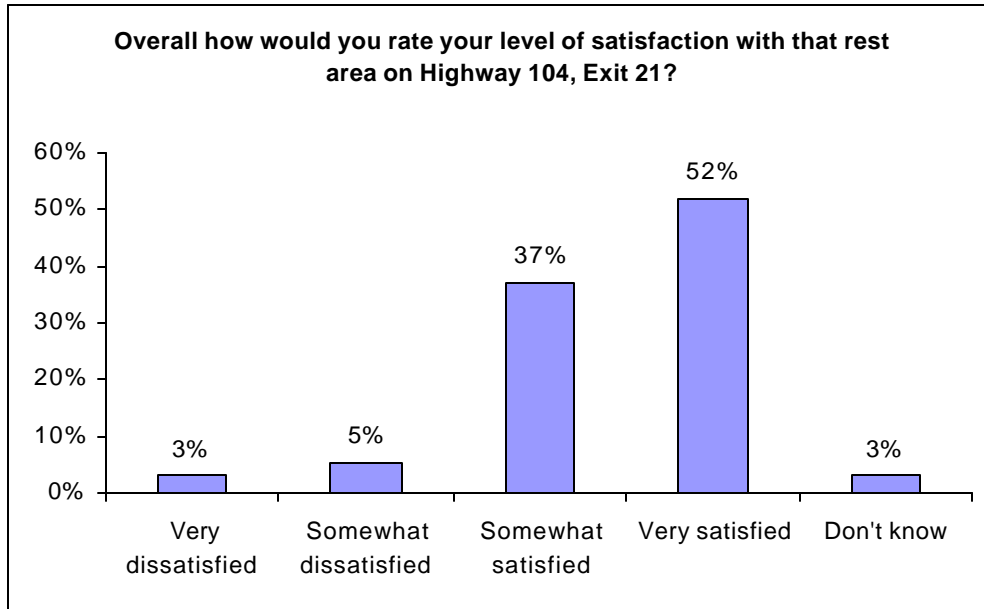


Rest Areas

When asked about how important rest stops were on our provincial highways, more than nine in ten residents indicated that they were somewhat (27%) or very (66%) important.

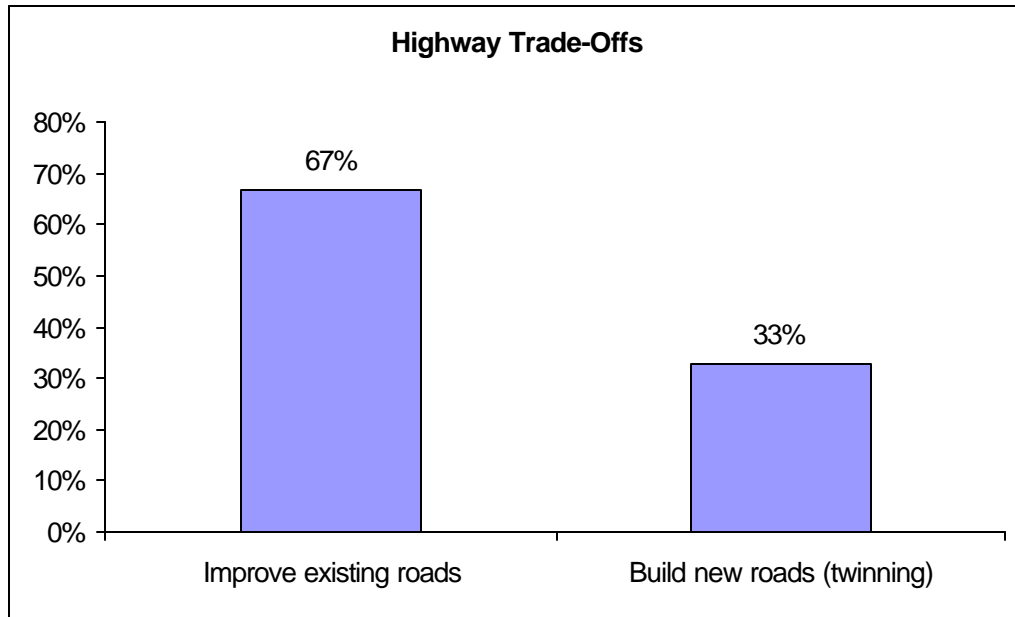


Only one quarter of the residents (25%) indicated that they had used the rest area on Highway 104, Exit 21, which is located between Salt Springs and Stellarton. Almost nine in ten residents who used this rest area felt somewhat (37%) or very (52%) satisfied with it.



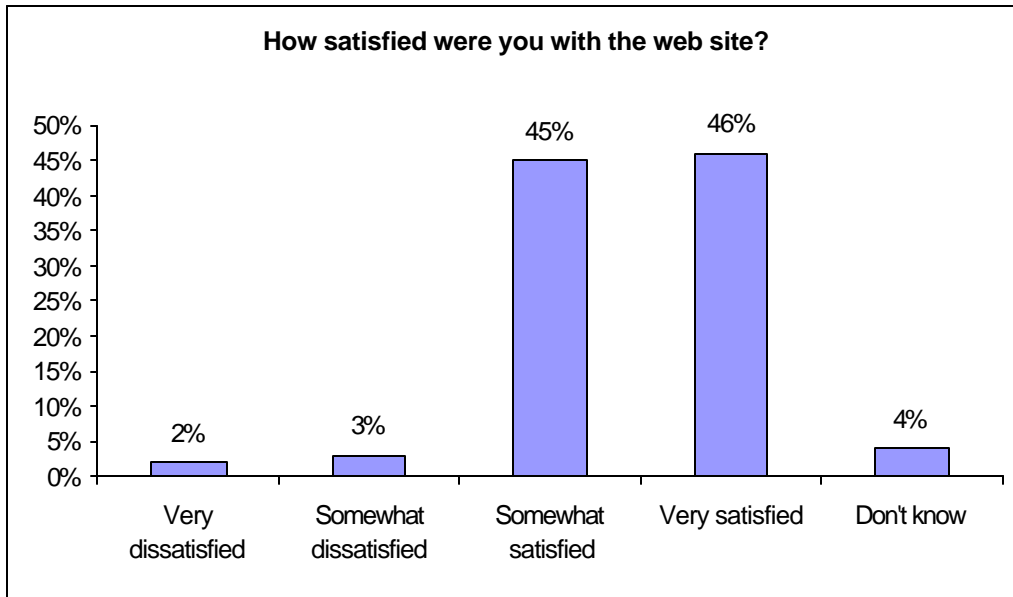
Highway Trade-offs

Two thirds of the residents in Nova Scotia were in favour of the department making improvements to existing roads rather than building new roads. Regionally, the results of those in favour of building new roads ranged from the Central District (38%) to the Western District (24%). These results are very similar to 2002.



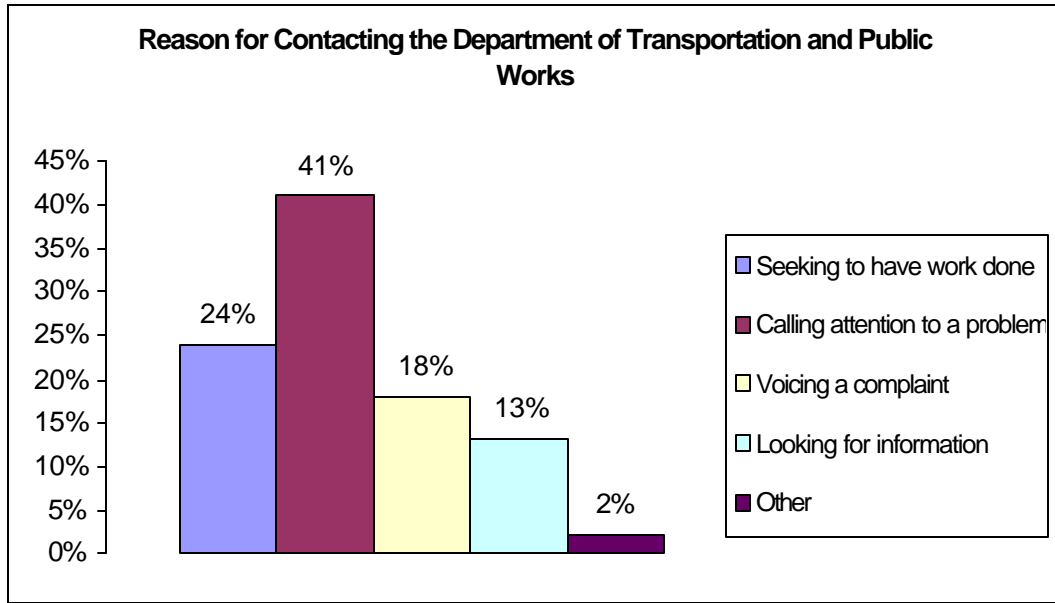
Web Site

Only 10% of the residents surveyed indicated that they had visited the Nova Scotia Department of Transportation and Public Works web site. More than nine in ten residents, who indicated that they had visited the web site, said that they were somewhat (45%) or very (46%) satisfied with the Nova Scotia Department of Transportation and Public Works web site.

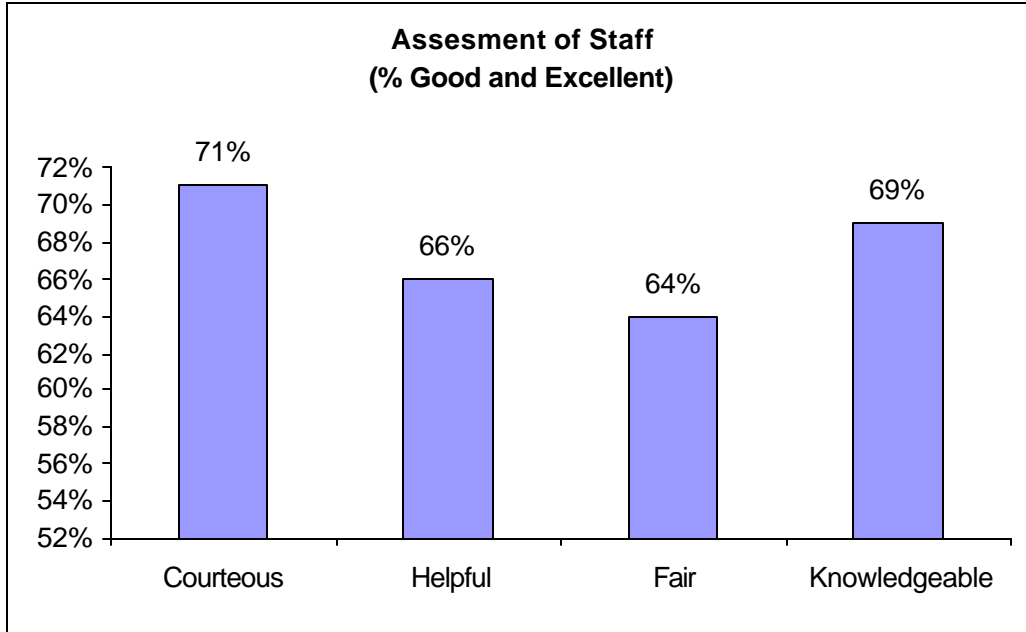


Staff

Sixteen percent of those who were surveyed said that they contacted the Department in 2003, this is up 1% from 2002. They cited several reasons for the contact; in most cases they were calling attention to a problem.

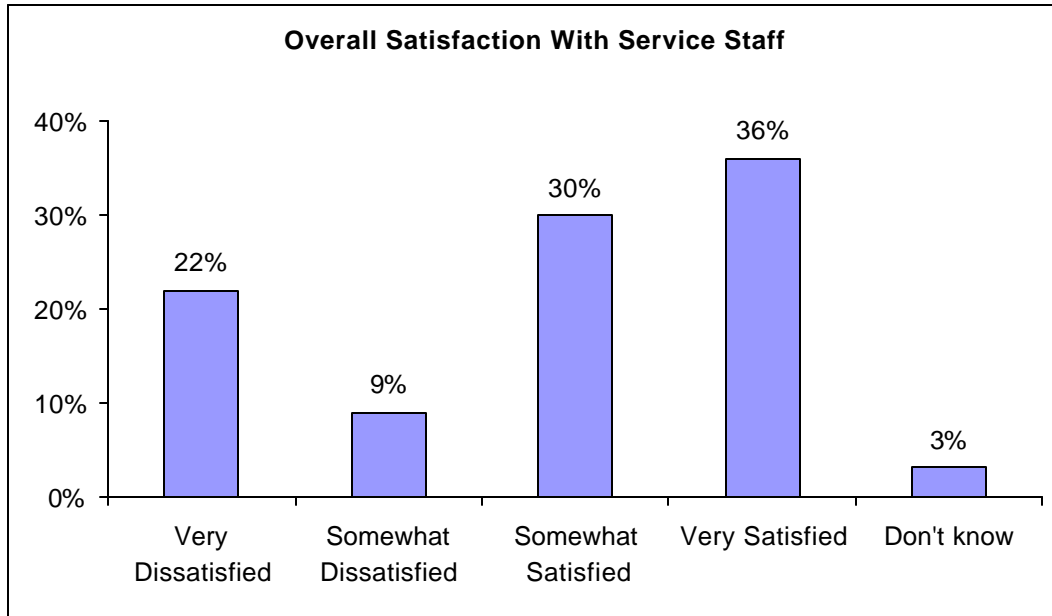


Most of the residents who contacted the department gave positive ratings⁸ to the staff for being courteous, helpful, fair, and knowledgeable. Staff courtesy received the highest rating at 71%, with 49% indicating “good” and 22% “excellent”.



⁸ Assessment of Staff ratings include Good and Excellent combined.

Two thirds of Nova Scotians, who contacted the department within the past year were somewhat satisfied (30%) or very satisfied (36%) with the service provided by the staff. The main reason that Nova Scotians felt dissatisfied with the services provided by the department staff was due to the “Work not being done”.



How is this information used?

This Customer Satisfaction Survey assists the Department of Transportation and Public Works in several ways. The survey results are 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 services in a systematic manner.