MAINTENANCE CONDITION OF KENTUCKY HIGHWAYS

Statewide Maintenance Rating Program - FY 2013

Division of Maintenance
Operations and Pavement Management Branch
March 2013

Kentucky
UNBRIDLED SPIRIT

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2013 MAINTENANCE RATING PROGRAM REPORT

EXECUTIVE SUMMARY

Introduction

The Kentucky Transportation Cabinet (KYTC) has surveyed the state's roadside conditions in order to estimate the needs for routine maintenance. The 2013 Maintenance Rating Program (MRP) inspections were completed statewide during summer 2012. The purpose of this report is to provide the results of the inspections and assess the current condition of the highway infrastructure maintenance activities. The report is broken into two parts – a statewide report used for higher level analysis; and individual district reports used on a local level for management decisions.

Background

The KYTC Maintenance Rating Program (MRP) is a systematic measurement process that uses annual performance measurements of highway infrastructure data to support planning and management decisions regarding maintenance activities and resources. Data collected from the MRP is used in conjunction with the cabinet's Operations Management System (OMS) to calculate the maintenance budget for each of the twelve highway districts.

Automated Data Collection

The KYTC GIS department developed a mobile GIS application in 2010. This application allowed inspections to be completed with a Mobile GPS unit. The mobile application gave Central Office access to a SDE layer that was updated daily with inspection results. The application also eliminated data entry in Central Office and reduced the associated error rates. All districts have utilized the device and software since the 2011 data collection.

Target for Sustained Performance

The **target performance level** score was set at **80** (service level B-good) for each highway district and for the statewide score for all highways.

The target serves as a benchmark for districts to help identify best practices among high performers and opportunities for improvement. The statewide target may be increased in the future as the districts reach higher levels of performance.

It is generally recognized that the level of service provided on the four road types for all features will not be the same. Interstate highways with higher traffic volumes and higher speed limits need to be maintained at a higher level of service than Rural Secondary roads. It is the responsibility of each district to set target values for every feature for each of the four road types to achieve the target score of 80.

Results

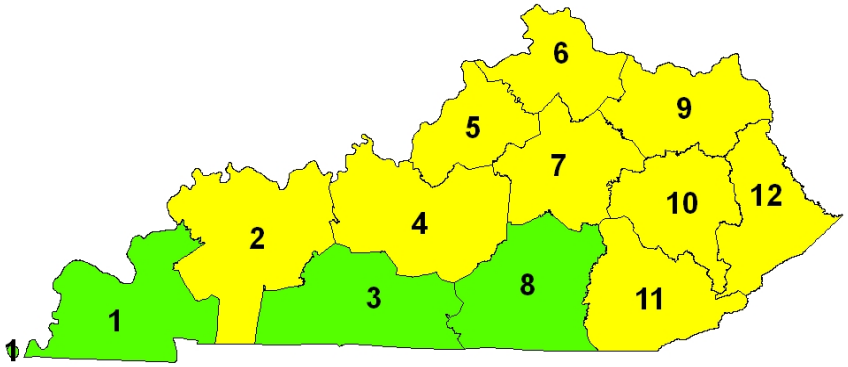
The MRP score is based on a 100 point scale. The statewide weighted scores determined from data collected during Fiscal Year 2013 are shown on Table 1: Statewide Maintenance Levels of Service.

Table 1: Statewide Maintenance Levels of Service

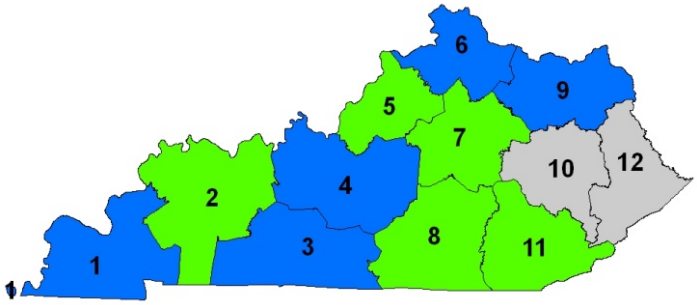
Statewide Scores FY 13		
Classification	Score	Grade
Interstates	88.7	**B**
National Highway System	87.6	**B**
State Primary and Secondary	81.2	**B**
Rural Secondary	77.5	**C**
All Roads	80.5	**B**

The total statewide weighted score for FY ’13 is 80.5. This is relatively unchanged from the FY ‘12 score of 80.1 and falls at the target level of service. The highest performing roadway system for FY ‘13 was Interstate. The Interstate system received a score of 88.7 (a decrease from the FY ‘12 score of 90.5). The Rural Secondary System once again had the lowest statewide score (77.5). This represents an increase from the FY ‘12 score of 77.0.

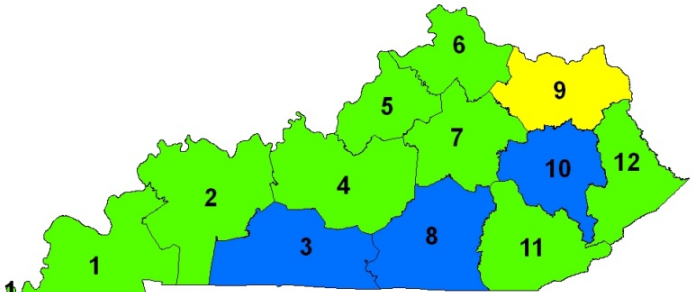
The district levels of service determined from data collected during Fiscal Year 2013 are shown on Figure 1: District Maintenance Levels of Service. District eight was the highest overall performing district (89.2). District nine received the lowest overall score of 74.3.



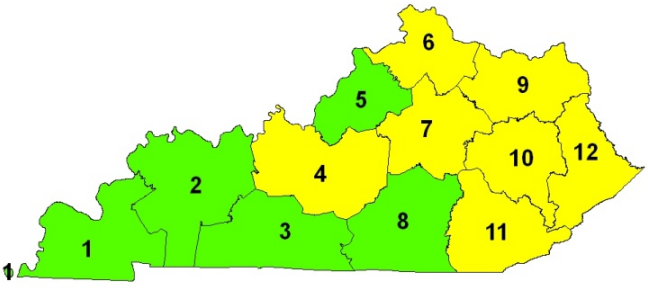
ALL ROADS



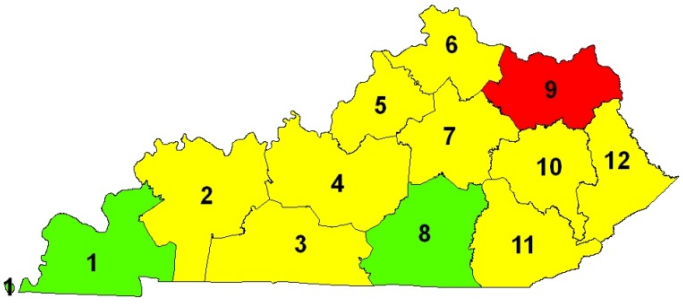
INTERSTATES



NATIONAL HIGHWAY SYSTEM



STATE PRIMARY AND SECONDARY



RURAL SECONDARY

Figure 1: District Maintenance Levels of Service

The overall statewide weighted scores for each maintenance feature inspected as part of the Maintenance Rating Program are shown on Table 2: Statewide Maintenance Feature Scores. Shoulder and pavement drop off were the only failing features. Rideability, vertical clearance, and ditches scored close to the fail threshold.

Table 2: Statewide Maintenance Feature Scores

FEATURE DESCRIPTION	OVERALL SCORE
Rideability	72.5
Appearance	90.3
Vertical Clearance	71.6
Visual Obstructions	88.0
Fencing	76.4
Guardrail Specifications	73.2
Guardrail Damage	83.7
Attenuators	80.9
Potholes	81.6
Rutting	75.1
Pavement Drop Off	68.9
Shoulder Drop Off	67.2
High Shoulder	86.5
Shoulder Potholes	82.8
Drains	76.3
Ditches	72.5
Curb and Gutter	87.3
White Stripe	91.8
Yellow Stripe	88.6
Guide Signs	90.8
Guide Sign Assemblies	86.7
Warning and Reg. Signs	81.1
Warning and Reg. Sign Assemblies	83.0

The overall district weighted scores for each maintenance feature inspected for the Maintenance Rating Program are shown on Table 3: District Maintenance Feature Scores. Districts will be able to request reimbursement for up to $100,000 per feature to correct failing MRP features (below 70). Features not eligible for additional funding are those impacted by resurfacing (appearance, rideability, rutting, and pavement potholes).

TABLE 3 - DISTRICT MAINTENANCE FEATURE SCORES
All State Roads - Fiscal Year 2013

District:	1	2	3	4	5	6	7	8	9	10	11	12
Rideability Index	70.4	75.0	77.5	76.0	68.8	69.1	71.3	72.9	71.9	69.5	72.5	70.3
Appearance	93.0	90.8	84.9	80.9	96.0	92.5	90.1	96.4	89.5	94.4	84.6	94.8
Vertical Clearance	87.0	60.5	79.1	62.7	81.4	70.9	71.5	84.7	70.3	81.8	59.7	52.4
Visual Obstructions	93.1	92.9	82.8	89.0	78.8	79.0	82.8	89.6	88.5	93.5	83.8	97.3
Fencing	54.2	60.5	78.9	69.0	88.6	85.3	89.2	88.9	92.6	N/A	66.0	100.0
Guardrail Out of Specifications	82.2	82.4	81.6	89.3	91.0	83.9	71.0	72.3	75.4	25.8	80.2	69.4
Guardrail Damaged	92.6	94.5	96.5	95.8	82.2	86.7	75.7	81.6	79.2	89.3	80.6	78.4
Attenuators/Rail Ends Damaged	78.5	98.6	77.8	97.7	92.3	70.2	73.6	81.0	66.9	71.6	91.9	75.9
Pavement Potholes	80.5	80.3	94.3	88.3	68.4	82.1	80.9	95.9	70.7	85.0	70.4	72.5
Rutting	59.6	70.4	91.8	47.7	75.4	82.9	84.3	93.4	88.6	57.0	78.5	83.8
Pavement Dropoff	54.6	66.6	83.1	50.2	80.3	71.5	81.8	98.2	52.2	56.6	78.3	58.8
Shoulder Dropoff	68.0	66.8	56.5	43.8	75.1	67.2	61.5	85.3	77.8	85.2	62.0	69.1
High Shoulder	93.1	93.0	84.1	87.1	80.9	90.6	84.8	95.7	71.3	86.0	75.5	87.1
Shoulder Potholes	91.8	88.5	74.2	86.1	73.4	78.2	91.8	90.6	71.6	84.4	70.1	82.5
Drains	95.0	43.7	64.2	82.9	80.4	83.5	67.3	90.6	83.5	80.9	85.6	72.4
Ditches	95.2	56.7	58.4	74.1	79.6	72.0	71.2	75.5	72.6	83.1	73.0	64.3
Curbs and Gutters	N/A	N/A	N/A	N/A	86.2	85.8	90.8	100.0	N/A	N/A	N/A	92.2
White Striping	93.4	N/A	100.0	99.9	94.8	N/A	N/A	96.0	90.4	73.1	N/A	81.9
Yellow Striping	98.9	N/A	94.4	99.4	96.8	N/A	N/A	99.1	72.9	55.7	N/A	77.3
Guide Sign Faces	97.0	97.4	96.0	83.8	84.8	86.7	84.0	94.9	78.6	77.1	100.0	94.3
Guide Sign Assemblies	100.0	90.6	85.2	81.8	70.5	75.3	63.8	94.3	85.3	97.3	98.0	91.3
Warning/Reg Sign Faces	92.1	93.6	67.4	79.1	70.8	74.1	80.8	88.5	42.6	81.4	95.2	96.0
W/R Sign Assemblies	96.2	71.2	81.1	87.1	59.7	81.4	84.0	94.6	80.8	86.1	79.2	89.8

Strength - A feature scored at 90 or higher across the district.

Within Acceptable Limits - A feature scored between 70 and 90 points across the district.

Failing - A feature scored below 70 across the district.

Features did not have a sample size large enough to produce statistically valid data

*Some values may appear to be shaded incorrectly due to rounding

The costs for routine maintenance, obtained through both EMARS and OMS, are shown in Figure 2: Maintenance Spending. Only activities that impact features inspected by the MRP were included in the summary. For a complete list of activities included refer to Appendix V.

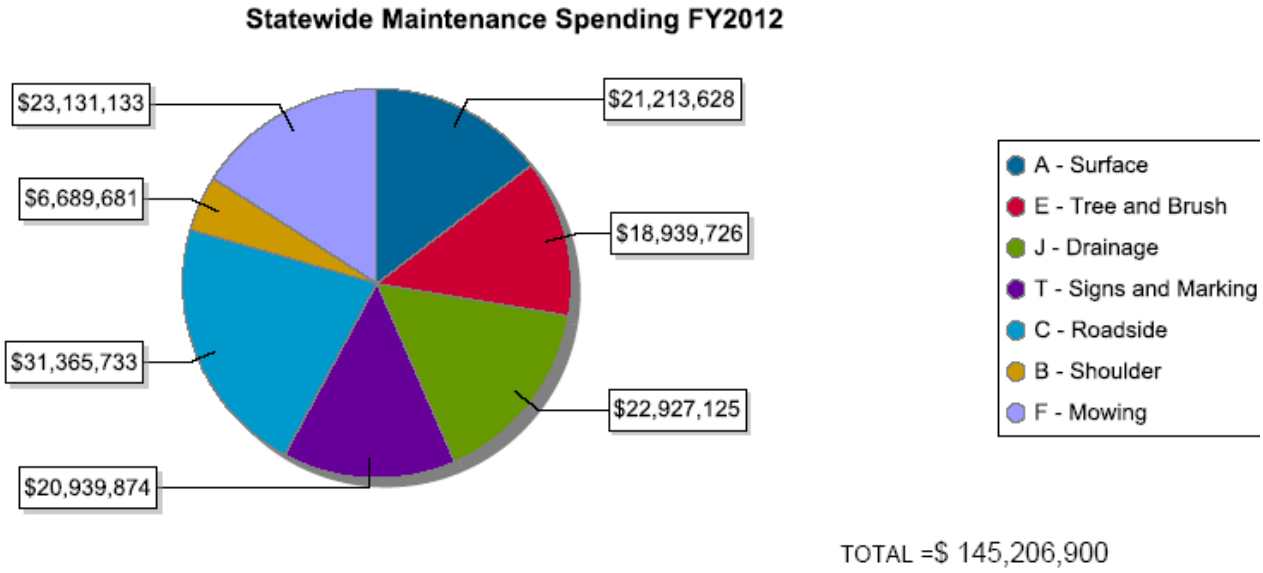


Figure 2: Maintenance Spending

Districts were allotted extra money for failing Maintenance Rating Program features with the FY '11 MRP Report scores. Districts were able to request reimbursement for up to $100,000 per low scoring feature (in FY '12 budgets) in an effort to improve maintenance service provided. This money was tracked according to activity spending to ensure it was used to address issues noted in the report. Districts received a total allotment of $2.40 million for FY '12 budgets. Table 2: Statewide Scores by Year compares the overall weighted scores from FY '11 (used to determine FY '12 allotments) to FY '13 scores (impacted by FY '12 budget). During this time, the level of service for rural secondary roads improved while other roadway classifications dropped.

Table 4: Statewide Scores by Year

Statewide Scores Comparison		
Classification	FY2011	FY2013
ALL ROADS	81.3	80.5
INTERSTATE	90.5	88.7
NATIONAL HIGHWAY SYSTEM	88.4	87.6
STATE PRIMARY AND SECONDARY	82.4	81.2
RURAL SECONDARY	76.6	77.5

A. GOALS AND REQUIREMENTS

Assess the maintenance activities of the Kentucky Transportation Cabinet.

The MRP allows the cabinet to assess the effectiveness of infrastructure maintenance activities and compare the outcomes to customer expectations.

Make informed policy and management decisions.

The results of the MRP provide guidance for investment decisions and resource allocation. In addition, the MRP findings also offer a means to assess effectiveness of prior decisions and resource allocations. MRP findings also reveal where additional resources are needed to bring performance to targeted levels.

The MRP supports the cabinet goal of delivering a consistent level of customer service across the state by providing the necessary data to identify differences in performance across districts, road types, and roadway features. The results of the MRP demonstrate how each district is performing in comparison to targeted levels in specific categories. The MRP can thereby help district management determine how district resources should be allocated to achieve a consistent level of service. The MRP can also help district and cabinet management formulate the budget request necessary to achieve targeted levels of performance.

Similarly, the MRP communicates targeted performance levels, along with the policy and budget decisions that drive them, to policy makers as well as citizens. The MRP thus aids the Commonwealth's Executive and Legislative branches in determining acceptable levels of performance for their constituents.

The MRP is designed to support "management by fact" at all levels and provides a means to identify best practices among the districts by identifying districts exceeding target levels. These practices can then be shared with districts that may be falling short of their goals.

Promote alignment with the Transportation Cabinet's Strategic Plan.

The Maintenance Rating Program is vital to two of the cabinet's four strategic goals. These goals are as follows:

Strategic Goal Number 1: "Ensure Mobility & Access" to preserve the transportation system infrastructure.

Strategic Goal Number 3: "Continually Improve Organizational Performance" of Operational and Support Processes.

The MRP is a direct assessment tool for maintenance activities related to infrastructure preservation, as defined in *Strategic Goal Number 1*. The MRP is also the principal

performance measure for assessing maintenance process improvement, thereby facilitating *Strategic Goal Number 3.*

Provide Data for GASB-34.

MRP data can be used to satisfy the Governmental Accounting Standards Board Statement 34 (GASB-34) condition of highway assets requirement. This requirement obligates state governments to report all capital assets, including infrastructure, in a *statement of net assets* and to report depreciation expense associated with these assets. Infrastructure assets are not required to be depreciated if (1) the government manages the assets using an asset management system that has certain defined characteristics and (2) the government can document that the assets are being preserved approximately at (or above) a condition level established and disclosed by the government.

KYTC's Operations Management System (OMS) satisfies the first requirement listed above. The MRP fulfills the second requirement.

B. METHODOLOGY

Sampling and Data Collection

Data is collected during one wave each year, June through October.

For this wave, between 300 and 400 roadway segments are randomly selected in each district among the following four road types:

Interstates - Those routes designated as part of the Eisenhower National System of Interstate and Defense Highways. These include three north-south interstates (I-65, I-71, I-75); two east-west interstates (I-24 and I-64); and smaller loop routes in Louisville Metro and Northern Kentucky.

Other NHS - Non-interstate routes that are part of the National Highway System. This category includes most of the state's parkways and major US routes. Some state routes (roads designated with a "KY" prefix) are also components of this system.

Other SP/Sec - State Primary and Secondary roads include all "KY" routes which do not carry an NHS or Rural Secondary designation.

Rural Secondary – The system of roads in Kentucky that are usually considered “farm to market” roads.

Each roadway segment is 500 feet in length and includes all adjacent right-of-way. Two-person teams from each district inspect the selected roadway segments and complete the MRP data form for each segment. The MRP data form splits performance measures into five main categories: roadway general, pavement, shoulders, drainage, and traffic. The following are some of the inspected features: general aesthetics, visual obstructions, potholes, rutting, drop off, ditches, and guide sign faces. These measures are then used in the calculation of statewide and district MRP scores.

Quality Assurance

The Field Data Collection Manual was revised in May 2006 to reflect the recording changes for some features. The training manual contains an introduction of the Maintenance Rating Program and its purposes, as well as definitions and guidelines for recording measurements and observations on the inspection form. Additionally, the manual establishes safety procedures for both the inspection team and the public. This manual along with a training power point presentation is available on the website: http://transportation.ky.gov/maintenance/

Statewide training was available prior to the summer 2009 data collection to ensure new employees are properly trained and to address any additional questions regarding the program. All districts requested and received training with the exception of districts three and eight during this time. District three requested and received training prior to the summer 2010 data collection. All districts were trained for mobile device collection in 2011 and additional training was offered in 2012.

A quality assurance procedure was established to assess the accuracy of MRP data collection, and indirectly, the consistency of training. Two teams from the central office in Frankfort re-inspected approximately 10% of the segments surveyed in each district. The results of the quality assurance inspections will be compared to that of the original inspections and will be used to determine additional needs for training of the field data collection teams.

A committee of stakeholders, including Maintenance and Traffic Engineers in the MRP will periodically meet to review the data collection procedures, features and weight factors to make further improvements to align the MRP with the Strategic Goals of the cabinet.

C. ANALYSIS

The inspection results for each of the sample sets were analyzed using the Operations Management System MRP module. Most of the information reported is statistical summaries of the data. Rideability indices were provided by the Pavement Management Branch within the Division of Maintenance. Each road type score was weighted according to the proportion of centerline miles for each of the four road types to produce district and statewide road type totals and a state total score. Spending data was taken from OMS and EMARS according to fiscal year. Spending data from the previous fiscal year is paired with MRP data collected during the current fiscal year.

Each of the roadway features measured was evaluated and given an "importance weight" with respect to the other features so that the sum of all weights is 100. These importance weights were determined through a consensus of approximately 100 key KYTC managers and staff. They are based on the customer requirements identified and prioritized in the 1998 Voice of the Customer research conducted by the cabinet. These requirements include safety, protection of the infrastructure, comfort and convenience, and aesthetics. Importance weights were revised in 2011 to reflect results of the 2010 Maintenance Customer Survey performed by KTC.

The targeted confidence levels and intervals are based on the size of the samples. The target confidence interval for the smallest sample, road type by district, is set as 90% +/- 10%. District totals and road type totals have a confidence interval of 90% +/- 5%, while the statewide total target confidence interval is set as 99% +/- 3%. For a feature where the number of occurrences is less than nineteen in the sample segments, no data is reported, as the data may lack statistical validity.

If no data was present for a particular feature in a district, the scores were adjusted for missing values so that the potential value remained 100. This allows for calculation of overall district and road type scores in the absence of specific feature data.

APPENDIX I

Statewide Scores

Appendix I charts show the MRP score by road type for each feature measured. Boxes are color coded according to scores:

Green – a strength, score at 90 or higher
Yellow – within acceptable limits, score between 70 and 90
Red – failing, score below 70

In some cases, a score of "N/A" is listed. In these instances, there were not enough occurrences in order to achieve the desired confidence level. This may be due to the absence of a particular feature in the sample segments (such as guardrail, curb, etc.). It also may indicate that inspection crews were unable to measure certain items due to safety concerns (as with striping on interstates).

Statewide Scores

FEATURE DESCRIPTION	INTERSTATE	NATIONAL HIGHWAY SYSTEM	STATE PRIMARY AND SECONDARY	RURAL SECONDARY	ALL ROADS
Rideability	85.0	80.4	73.4	69.6	72.5
Appearance	93.8	93.6	92.0	87.9	90.3
Vertical Clearance	90.9	90.8	72.4	66.6	71.6
Visual Obstructions	99.4	99.4	89.2	84.2	88.0
Fencing	78.5	76.0	88.2	67.4	76.4
Guardrail Specifications	93.4	79.0	70.5	70.2	73.2
Guardrail Damage	86.8	91.6	81.4	82.3	83.7
Attenuators	87.6	89.6	78.1	79.2	80.9
Potholes	78.6	82.9	84.0	79.2	81.6
Rutting	87.6	82.0	73.0	75.2	75.1
Pavement Drop Off	91.1	92.7	71.4	61.2	68.9
Shoulder Drop Off	88.2	85.0	69.3	60.9	67.2
High Shoulder	97.6	94.8	87.0	84.0	86.5
Shoulder Potholes	84.7	80.5	83.4	82.6	82.8
Drains	84.1	82.6	79.4	72.1	76.3
Ditches	92.3	80.4	73.3	69.2	72.5
Curb and Gutter	93.1	89.0	86.5		87.3
White Stripe	95.4	87.1	93.0	88.7	91.8
Yellow Stripe	100.0	97.6	89.8	85.8	88.6
Guide Signs	88.6	87.6	90.3	92.2	90.8
Guide Sign Assemblies	95.9	90.7	83.9	90.5	86.7
Warning and Reg. Signs	82.0	90.8	78.8	82.1	81.1
Warning and Reg. Sign Assemblies	70.7	88.9	84.7	80.3	83.0
Total Score	88.7	87.6	81.2	77.5	80.5

District One Scores

FEATURE DESCRIPTION	INTERSTATE	NATIONAL HIGHWAY SYSTEM	STATE PRIMARY AND SECONDARY	RURAL SECONDARY	ALL ROADS
Rideability	83.1	83.6	70.8	67.9	70.4
Appearance	86.8	98.6	96.1	90.2	93.0
Vertical Clearance	97.4	98.6	89.2	83.3	87.0
Visual Obstructions	100.0	100.0	95.1	90.2	93.1
Fencing	65.5	33.3			54.2
Guardrail Specifications		80.0			82.2
Guardrail Damage		100.0			92.6
Attenuators					78.5
Potholes	86.8	100.0	80.4	77.9	80.5
Rutting	73.7	30.4	56.9	64.7	59.6
Pavement Drop Off	100.0	85.5	64.7	40.2	54.6
Shoulder Drop Off	100.0	73.9	76.5	58.8	68.0
High Shoulder	100.0	95.6	92.2	93.1	93.1
Shoulder Potholes	80.3	100.0	90.2	92.6	91.8
Drains		92.3	100.0	91.4	95.0
Ditches	100.0	100.0	97.0	92.9	95.2
Curb and Gutter					
White Stripe		90.7	94.4		93.4
Yellow Stripe		98.1	100.0	98.0	98.9
Guide Signs	100.0	100.0	97.2	96.2	97.0
Guide Sign Assemblies		100.0	100.0		100.0
Warning and Reg. Signs		100.0	92.4	90.7	92.1
Warning and Reg. Sign Assemblies		100.0	90.9	100.0	96.2
Total Score	90.5	88.6	85.9	81.7	84.2

Appendix I.2

District Two Scores

FEATURE DESCRIPTION	INTERSTATE	NATIONAL HIGHWAY SYSTEM	STATE PRIMARY AND SECONDARY	RURAL SECONDARY	ALL ROADS
Rideability	81.7	82.2	75.3	72.6	75.0
Appearance	94.4	84.6	90.5	92.4	90.8
Vertical Clearance	94.4	80.2	61.0	53.8	60.5
Visual Obstructions	100.0	97.8	93.7	90.6	92.9
Fencing	61.8	72.2		52.6	60.5
Guardrail Specifications		90.6			82.4
Guardrail Damage		92.4			94.5
Attenuators		100.0			98.6
Potholes	58.3	67.0	94.7	67.0	80.3
Rutting	100.0	74.7	70.5	67.9	70.4
Pavement Drop Off	94.4	81.3	69.5	58.5	66.6
Shoulder Drop Off	88.9	80.2	69.5	59.4	66.8
High Shoulder	100.0	100.0	92.6	91.5	93.0
Shoulder Potholes	79.2	69.8	94.7	85.8	88.5
Drains		47.6	61.1	21.4	43.7
Ditches	58.6	52.9	60.5	52.9	56.7
Curb and Gutter					
White Stripe					
Yellow Stripe					
Guide Signs		89.7	96.9	100.0	97.4
Guide Sign Assemblies		100.0	88.6	90.9	90.6
Warning and Reg. Signs			93.7	93.8	93.6
Warning and Reg. Sign Assemblies			73.0	69.2	71.2
Total Score	83.5	80.9	80.3	72.0	77.0

District Three Scores

FEATURE DESCRIPTION	INTERSTATE	NATIONAL HIGHWAY SYSTEM	STATE PRIMARY AND SECONDARY	RURAL SECONDARY	ALL ROADS
Rideability	91.0	88.0	77.0	76.1	77.5
Appearance	76.5	100.0	92.2	77.9	84.9
Vertical Clearance	97.1	100.0	85.3	71.2	79.1
Visual Obstructions	97.1	100.0	92.2	73.1	82.8
Fencing	96.6	69.6			78.9
Guardrail Specifications		85.2			81.6
Guardrail Damage		100.0			96.5
Attenuators					77.8
Potholes	55.9	100.0	97.6	92.8	94.3
Rutting	100.0	94.8	90.2	92.3	91.8
Pavement Drop Off	94.1	96.6	92.2	74.0	83.1
Shoulder Drop Off	100.0	79.3	61.8	48.1	56.5
High Shoulder	100.0	96.6	83.3	82.7	84.1
Shoulder Potholes	92.6	74.1	80.4	68.8	74.2
Drains		94.7	52.2	70.0	64.2
Ditches	100.0	85.2	51.6	58.8	58.4
Curb and Gutter					
White Stripe		100.0	100.0		100.0
Yellow Stripe		100.0	95.8	92.8	94.4
Guide Signs		64.3	95.4	100.0	96.0
Guide Sign Assemblies		61.9	88.9		85.2
Warning and Reg. Signs		94.1	58.0	71.4	67.4
Warning and Reg. Sign Assemblies		100.0	100.0	64.3	81.1
Total Score	92.4	90.7	83.2	76.2	80.5

District Four Scores

FEATURE DESCRIPTION	INTERSTATE	NATIONAL HIGHWAY SYSTEM	STATE PRIMARY AND SECONDARY	RURAL SECONDARY	ALL ROADS
Rideability	88.0	78.9	76.6	74.9	76.0
Appearance	94.9	76.4	80.8	80.9	80.9
Vertical Clearance	97.4	80.6	58.6	63.6	62.7
Visual Obstructions	100.0	100.0	88.5	88.2	89.0
Fencing	56.8	68.2			69.0
Guardrail Specifications	100.0	71.0			89.3
Guardrail Damage	90.9	92.1			95.8
Attenuators					97.7
Potholes	100.0	82.6	85.6	90.9	88.3
Rutting	84.6	75.0	48.1	43.6	47.7
Pavement Drop Off	100.0	97.2	51.0	43.6	50.2
Shoulder Drop Off	100.0	83.3	51.0	31.8	43.8
High Shoulder	97.4	98.6	87.5	85.4	87.1
Shoulder Potholes	100.0	82.6	85.6	86.4	86.1
Drains			90.3	75.8	82.9
Ditches	100.0	87.3	81.3	65.4	74.1
Curb and Gutter					
White Stripe		98.5	100.0		99.9
Yellow Stripe		100.0	100.0	98.7	99.4
Guide Signs		100.0	78.2	87.2	83.8
Guide Sign Assemblies		100.0	72.4	88.6	81.8
Warning and Reg. Signs			75.0	82.6	79.1
Warning and Reg. Sign Assemblies			88.9		87.1
Total Score	94.0	87.8	78.4	74.3	77.2

District Five Scores

FEATURE DESCRIPTION	INTERSTATE	NATIONAL HIGHWAY SYSTEM	STATE PRIMARY AND SECONDARY	RURAL SECONDARY	ALL ROADS
Rideability	83.7		70.0	63.8	68.8
Appearance	94.9	100.0	94.1	98.0	96.0
Vertical Clearance	79.5	90.0	79.4	83.3	81.4
Visual Obstructions	100.0	100.0	81.4	68.6	78.8
Fencing	77.8			89.5	88.6
Guardrail Specifications	91.7		91.3		91.0
Guardrail Damage	95.8		78.3		82.2
Attenuators			90.5		92.3
Potholes	80.8	75.0	63.2	70.6	68.4
Rutting	82.0	95.0	76.5	70.6	75.4
Pavement Drop Off	82.0	100.0	92.2	64.7	80.3
Shoulder Drop Off	79.5	100.0	79.4	66.7	75.1
High Shoulder	92.3	80.0	83.3	75.5	80.9
Shoulder Potholes	87.2	75.0	70.6	73.0	73.4
Drains	89.1		88.7	68.8	80.4
Ditches	94.7		76.0	79.4	79.6
Curb and Gutter			86.7		86.2
White Stripe	96.0	95.0	94.8	94.3	94.8
Yellow Stripe	100.0		97.0	96.7	96.8
Guide Signs	84.0	66.7	82.5	89.5	84.8
Guide Sign Assemblies	92.0		67.5	68.4	70.5
Warning and Reg. Signs			72.2	70.7	70.8
Warning and Reg. Sign Assemblies			67.5	50.0	59.7
Total Score	88.1	83.3	80.2	74.7	79.0

District Six Scores

FEATURE DESCRIPTION	INTERSTATE	NATIONAL HIGHWAY SYSTEM	STATE PRIMARY AND SECONDARY	RURAL SECONDARY	ALL ROADS
Rideability	85.0	77.1	68.7	66.5	69.1
Appearance	100.0	96.2	92.7	90.6	92.5
Vertical Clearance	90.0	100.0	72.9	62.5	70.9
Visual Obstructions	100.0	100.0	77.1	77.1	79.0
Fencing	88.0				85.3
Guardrail Specifications	100.0		82.6		83.9
Guardrail Damage	82.6		87.0		86.7
Attenuators			68.4		70.2
Potholes	81.2	90.4	87.0	74.0	82.1
Rutting	95.0	50.0	80.2	87.5	82.9
Pavement Drop Off	92.5	96.2	74.0	62.5	71.5
Shoulder Drop Off	87.5	76.9	67.7	62.5	67.2
High Shoulder	100.0	100.0	88.5	91.7	90.6
Shoulder Potholes	75.0	100.0	87.0	63.5	78.2
Drains	85.2	100.0	88.0	75.0	83.5
Ditches	94.9		72.4	66.7	72.0
Curb and Gutter					85.8
White Stripe					
Yellow Stripe					
Guide Signs	93.8	100.0	91.6	76.9	86.7
Guide Sign Assemblies	100.0	100.0	70.7		75.3
Warning and Reg. Signs		93.3	77.5	67.6	74.1
Warning and Reg. Sign Assemblies		100.0	79.4	82.9	81.4
Total Score	90.4	89.5	79.0	73.4	78.1

District Seven Scores

FEATURE DESCRIPTION	INTERSTATE	NATIONAL HIGHWAY SYSTEM	STATE PRIMARY AND SECONDARY	RURAL SECONDARY	ALL ROADS
Rideability	85.3	80.3	70.8	67.7	71.3
Appearance	90.0	86.7	93.1	87.7	90.1
Vertical Clearance	95.0	91.7	74.3	60.4	71.5
Visual Obstructions	100.0	100.0	86.1	72.6	82.8
Fencing	82.9	88.0	90.0		89.2
Guardrail Specifications		80.0			71.0
Guardrail Damage		84.0			75.7
Attenuators		73.9			73.6
Potholes	62.5	70.8	85.2	81.1	80.9
Rutting	92.5	93.3	84.2	81.1	84.3
Pavement Drop Off	90.0	96.7	78.2	81.1	81.8
Shoulder Drop Off	90.0	83.3	65.4	48.1	61.5
High Shoulder	100.0	98.3	91.1	72.6	84.8
Shoulder Potholes	87.5	87.5	90.1	95.3	91.8
Drains	69.6	89.7	61.1	68.3	67.3
Ditches	86.5	92.0	67.4	68.3	71.2
Curb and Gutter					90.8
White Stripe					
Yellow Stripe					
Guide Signs	81.0	100.0	84.8		84.0
Guide Sign Assemblies			60.0		63.8
Warning and Reg. Signs			69.7	91.3	80.8
Warning and Reg. Sign Assemblies			90.0	81.0	84.0
Total Score	85.5	87.1	78.7	74.8	78.4

District Eight Scores

FEATURE DESCRIPTION	INTERSTATE	NATIONAL HIGHWAY SYSTEM	STATE PRIMARY AND SECONDARY	RURAL SECONDARY	ALL ROADS
Rideability		82.4	76.5	69.6	72.9
Appearance	100.0	98.9	98.0	95.2	96.4
Vertical Clearance	78.8	96.6	88.9	81.0	84.7
Visual Obstructions	93.9	97.7	90.9	87.6	89.6
Fencing	33.3	94.1			88.9
Guardrail Specifications	96.2	88.6	64.0		72.3
Guardrail Damage	73.1	88.6	80.0		81.6
Attenuators		93.8	79.0		81.0
Potholes	84.8	97.2	97.5	95.2	95.9
Rutting	100.0	96.6	87.9	95.2	93.4
Pavement Drop Off	97.0	100.0	100.0	97.1	98.2
Shoulder Drop Off	97.0	96.6	92.9	80.0	85.3
High Shoulder	97.0	95.4	97.0	95.2	95.7
Shoulder Potholes	69.7	88.6	92.4	90.5	90.6
Drains		96.2	88.9	90.5	90.6
Ditches	100.0	79.3	77.7	73.5	75.5
Curb and Gutter					100.0
White Stripe		100.0	100.0		96.0
Yellow Stripe		100.0	99.0	99.0	99.1
Guide Signs		87.8	92.4	97.2	94.9
Guide Sign Assemblies		92.2	81.8	100.0	94.3
Warning and Reg. Signs		94.9	87.5	87.9	88.5
Warning and Reg. Sign Assemblies		81.2	87.1	100.0	94.6
Total Score	87.9	92.6	88.6	88.8	89.2

District Nine Scores

FEATURE DESCRIPTION	INTERSTATE	NATIONAL HIGHWAY SYSTEM	STATE PRIMARY AND SECONDARY	RURAL SECONDARY	ALL ROADS
Rideability	86.1	58.1	74.4	71.3	71.9
Appearance	100.0	91.7	92.5	85.9	89.5
Vertical Clearance	100.0	91.7	80.6	55.6	70.3
Visual Obstructions	100.0	100.0	88.2	85.9	88.5
Fencing	95.8	88.9			92.6
Guardrail Specifications	96.6	63.0	80.0		75.4
Guardrail Damage	75.9	85.2	80.0		79.2
Attenuators		90.0			66.9
Potholes	88.1	45.8	75.8	69.7	70.7
Rutting	90.5	88.3	78.5	97.0	88.6
Pavement Drop Off	97.6	88.3	68.8	28.3	52.2
Shoulder Drop Off	88.1	78.3	73.1	80.8	77.8
High Shoulder	100.0	78.3	76.3	63.6	71.3
Shoulder Potholes	82.1	45.8	78.5	69.7	71.6
Drains	89.4	92.5	89.2	76.7	83.5
Ditches	100.0	79.3	80.9	62.4	72.6
Curb and Gutter					
White Stripe	92.3	86.7	90.6		90.4
Yellow Stripe	100.0	98.3	81.2	59.3	72.9
Guide Signs		57.6	92.1		78.6
Guide Sign Assemblies			88.7		85.3
Warning and Reg. Signs		54.8	39.1	42.9	42.6
Warning and Reg. Sign Assemblies			93.6	70.0	80.8
Total Score	91.9	76.7	79.2	67.1	74.3

District Ten Scores

FEATURE DESCRIPTION	NATIONAL HIGHWAY SYSTEM	STATE PRIMARY AND SECONDARY	RURAL SECONDARY	ALL ROADS
Rideability	85.0	71.9	64.0	69.5
Appearance	100.0	92.8	95.1	94.4
Vertical Clearance	100.0	84.5	75.5	81.8
Visual Obstructions	100.0	90.7	95.1	93.5
Fencing				
Guardrail Specifications	51.4	21.0		25.8
Guardrail Damage	93.1	89.5		89.3
Attenuators	73.9			71.6
Potholes	100.0	82.0	85.3	85.0
Rutting	92.0	55.7	52.0	57.0
Pavement Drop Off	93.0	52.6	53.9	56.6
Shoulder Drop Off	99.0	83.5	84.3	85.2
High Shoulder	97.0	86.6	83.3	86.0
Shoulder Potholes	95.0	79.4	87.8	84.4
Drains		78.0	83.9	80.9
Ditches	81.9	83.0	83.5	83.1
Curb and Gutter				
White Stripe	81.8	72.9		73.1
Yellow Stripe	100.0	54.0	49.2	55.7
Guide Signs	69.8	77.1	78.4	77.1
Guide Sign Assemblies	91.5	100.0		97.3
Warning and Reg. Signs	100.0	79.1		81.4
Warning and Reg. Sign Assemblies	100.0	86.2		86.1
Total Score	90.7	75.4	74.0	76.3

District Eleven Scores

FEATURE DESCRIPTION	INTERSTATE	NATIONAL HIGHWAY SYSTEM	STATE PRIMARY AND SECONDARY	RURAL SECONDARY	ALL ROADS
Rideability	83.2	83.8	73.3	69.1	72.5
Appearance	100.0	100.0	92.3	73.5	84.6
Vertical Clearance	89.3	75.7	57.1	57.8	59.7
Visual Obstructions	96.4	100.0	85.7	78.4	83.8
Fencing		50.0			66.0
Guardrail Specifications		90.0	79.3		80.2
Guardrail Damage		94.0	79.3		80.6
Attenuators		92.9	90.9		91.9
Potholes	100.0	89.3	75.3	60.8	70.4
Rutting	64.3	97.1	80.2	74.3	78.5
Pavement Drop Off	82.1	90.0	75.8	78.4	78.3
Shoulder Drop Off	71.4	90.0	63.7	54.9	62.0
High Shoulder	92.9	100.0	69.2	76.5	75.5
Shoulder Potholes	91.1	64.3	67.0	73.0	70.1
Drains			95.4	75.4	85.6
Ditches	88.5	94.6	72.0	69.4	73.0
Curb and Gutter					
White Stripe					
Yellow Stripe					
Guide Signs		100.0	100.0	100.0	100.0
Guide Sign Assemblies			100.0		98.0
Warning and Reg. Signs		100.0	94.6	95.0	95.2
Warning and Reg. Sign Assemblies			77.3		79.2
Total Score	88.1	89.0	79.9	74.6	78.6

District Twelve Scores

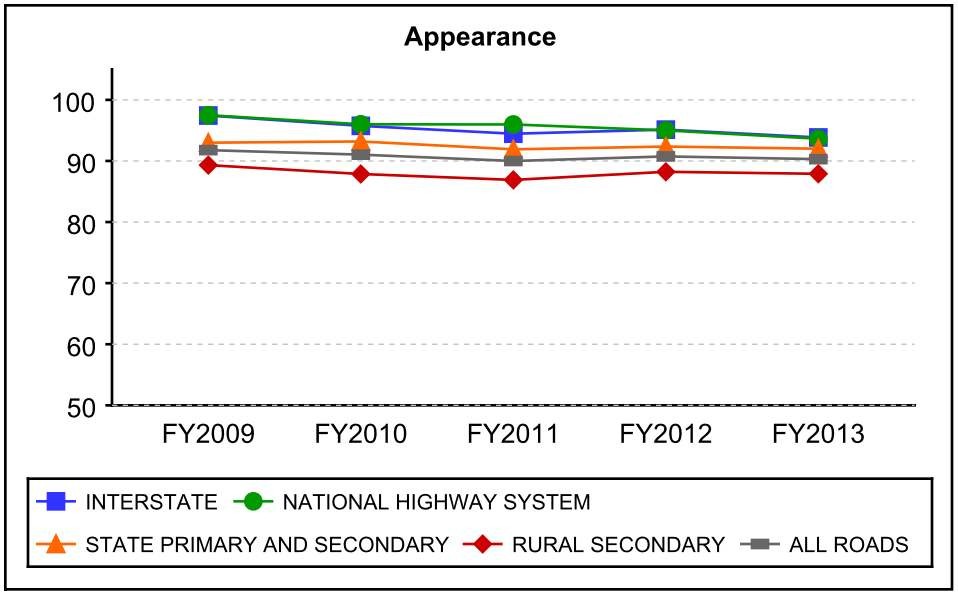
FEATURE DESCRIPTION	NATIONAL HIGHWAY SYSTEM	STATE PRIMARY AND SECONDARY	RURAL SECONDARY	ALL ROADS
Rideability	84.7	74.2	59.8	70.3
Appearance	99.1	95.8	91.9	94.8
Vertical Clearance	94.4	53.1	36.0	52.4
Visual Obstructions	100.0	97.9	95.5	97.3
Fencing	100.0			100.0
Guardrail Specifications	70.4	62.2	78.6	69.4
Guardrail Damage	90.7	66.7	89.3	78.4
Attenuators	89.5	61.3	90.0	75.9
Potholes	90.7	74.0	64.0	72.5
Rutting	81.5	84.4	83.8	83.8
Pavement Drop Off	99.1	57.3	46.0	58.8
Shoulder Drop Off	83.3	63.5	71.2	69.1
High Shoulder	90.7	90.6	81.1	87.1
Shoulder Potholes	93.1	71.4	93.2	82.5
Drains	82.2	71.0	70.6	72.4
Ditches	77.4	66.3	56.8	64.3
Curb and Gutter	94.6			92.2
White Stripe	60.2	87.8		81.9
Yellow Stripe	92.6	84.2	62.5	77.3
Guide Signs	100.0	91.6	95.8	94.3
Guide Sign Assemblies	84.0	86.7	100.0	91.3
Warning and Reg. Signs	97.7	92.4	100.0	96.0
Warning and Reg. Sign Assemblies	92.6	87.9	91.3	89.8
Total Score	88.8	77.8	76.6	79.0

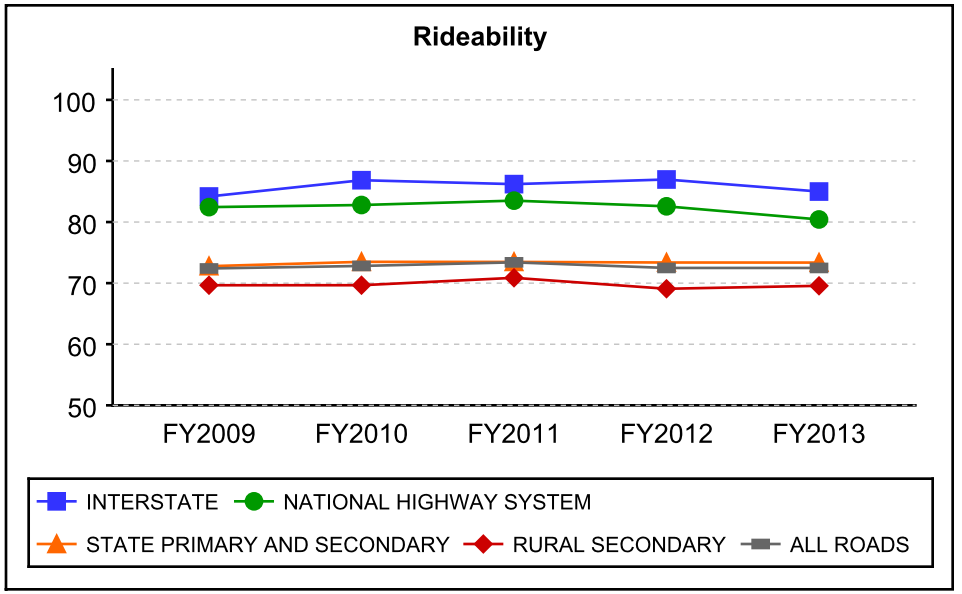
APPENDIX II

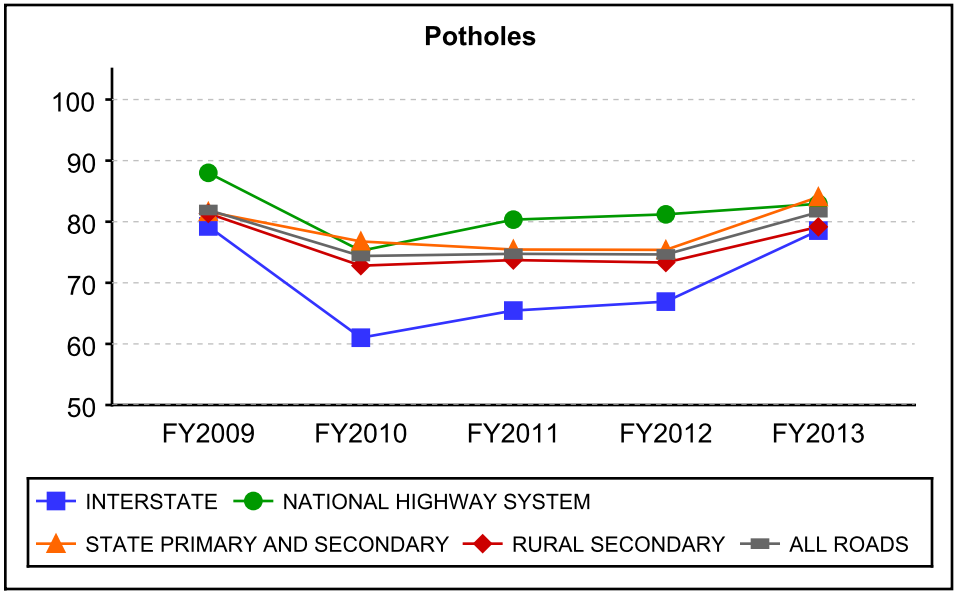
Statewide Scores by Element Type

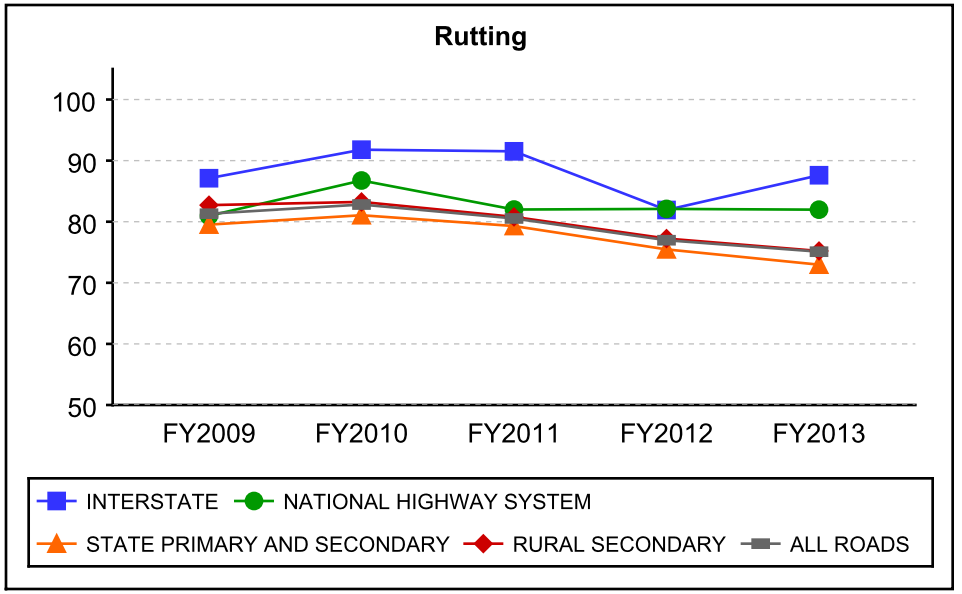
Appendix II is a graphical representation of historical scores on a statewide basis. Scores for the current and previous four years are represented in the graphs for each of the four road types. The gray shaded area represents the weighted average of all roads for the given feature. This weighting is based on the number of miles present for each road type. For this reason, the shaded area may not appear to be a true average of the individual lines. In general, the weighted average will tend to gravitate toward the RS and Other SP/SS scores as these have the majority of centerline miles.

In some instances, there may be insufficient data available to analyze a specific road type. In these cases, individual lines may be broken or may not appear at all. Where possible, the overall average score is still displayed.



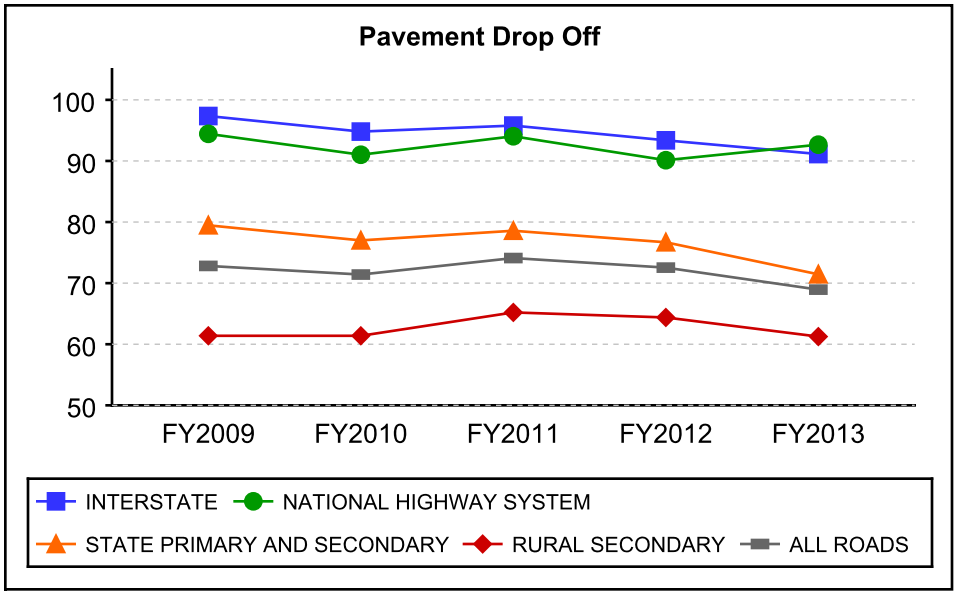






Statewide

Appendix II.1


Pavement Drop Off
100
90
80
70
60
50
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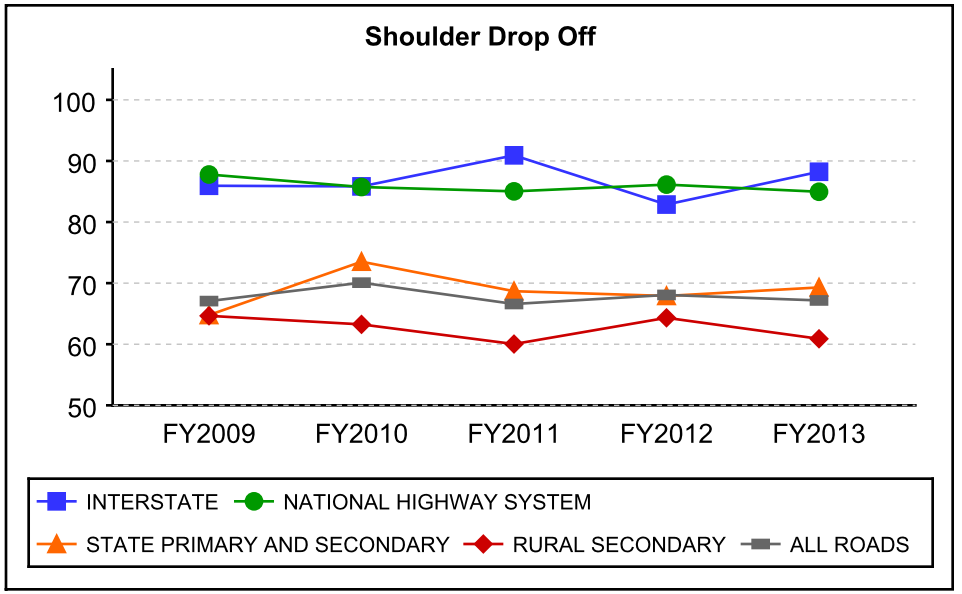
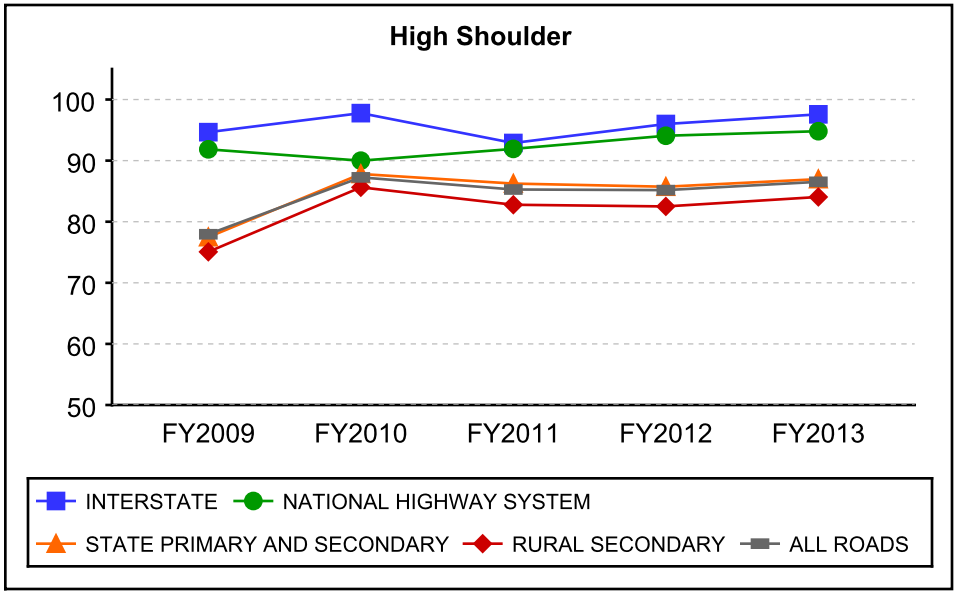
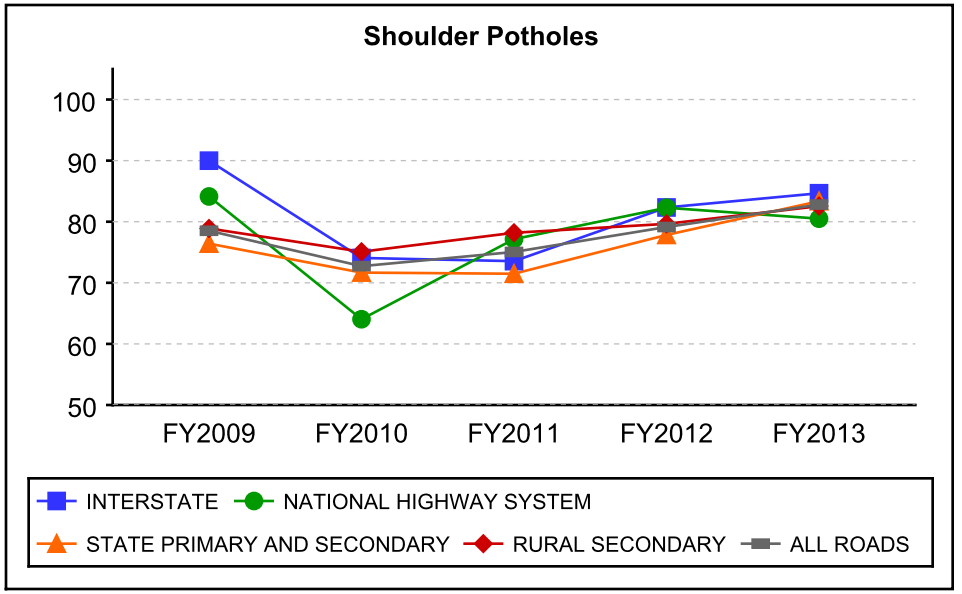
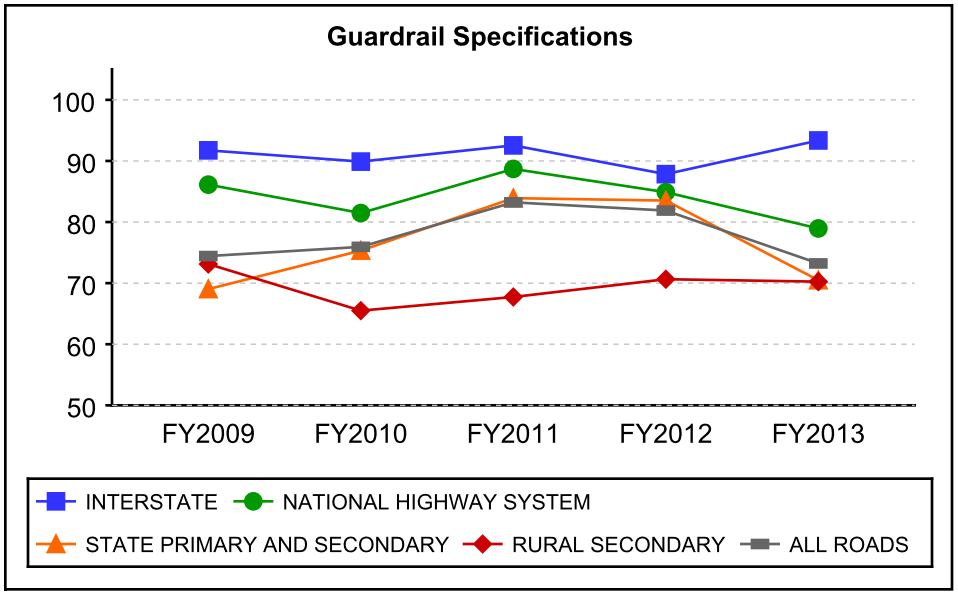
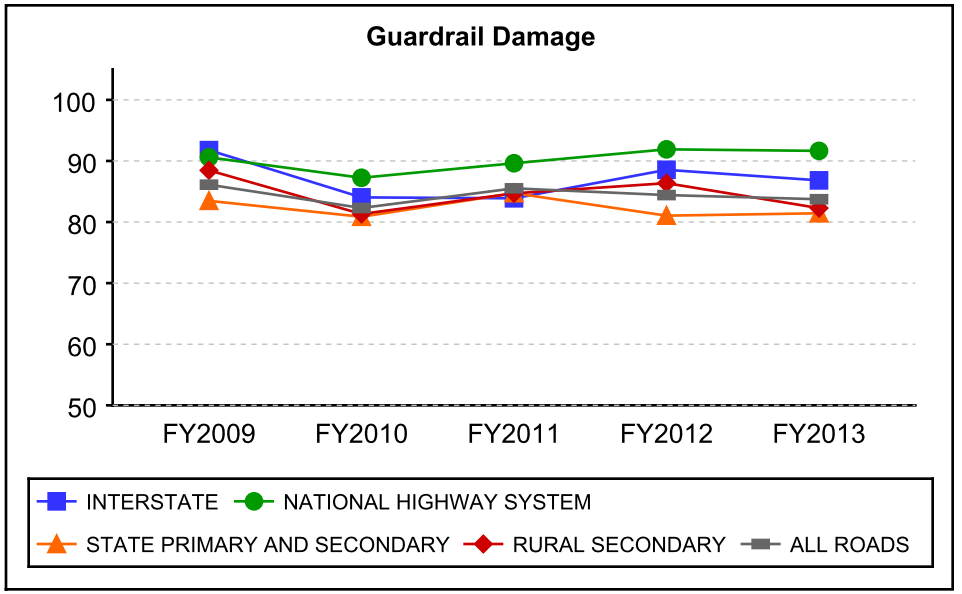
FY2010
FY2011
FY2012
FY2013
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS

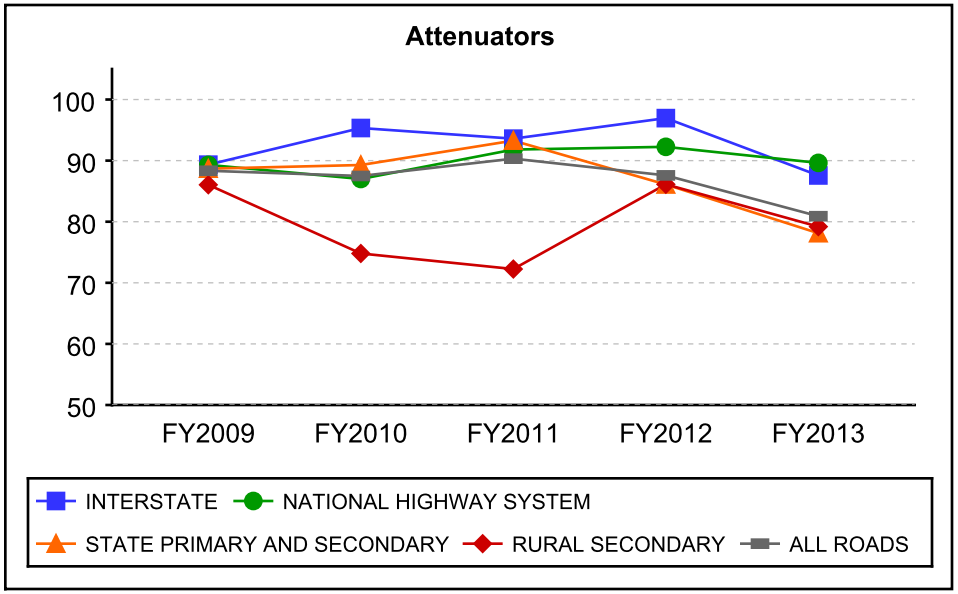

Shoulder Drop Off
100
90
80
70
60
50
FY2009
FY2010
FY2011
FY2012
FY2013
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS

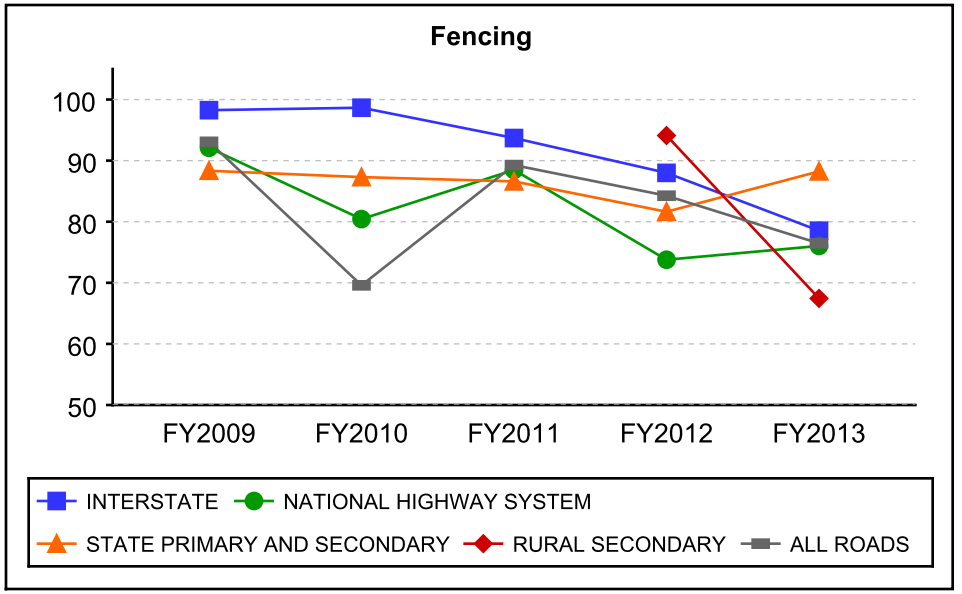

High Shoulder
100
90
80
70
60
50
FY2009
FY2010
FY2011
FY2012
FY2013
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS

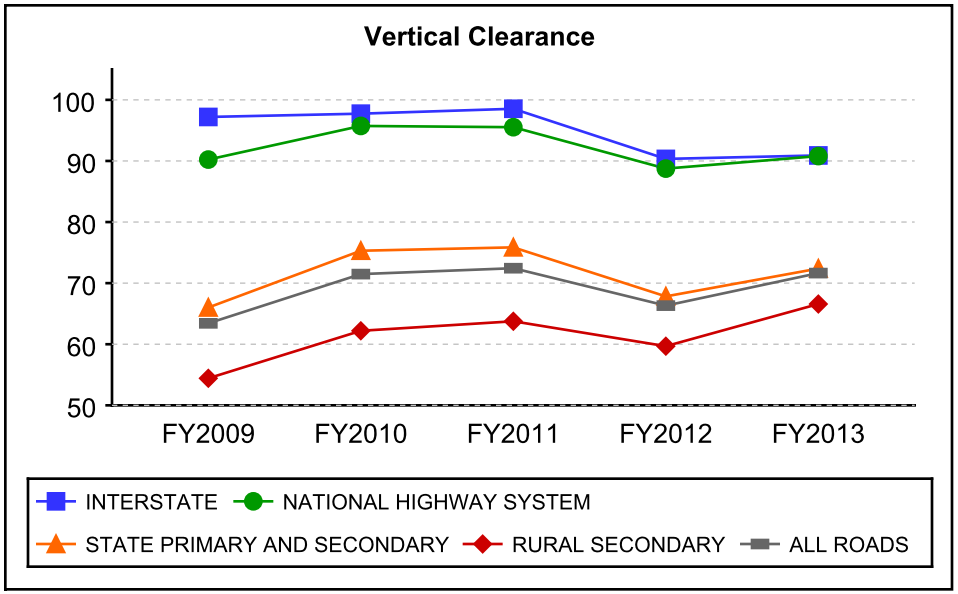

Shoulder Potholes
100
90
80
70
60
50
FY2009
FY2010
FY2011
FY2012
FY2013
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS

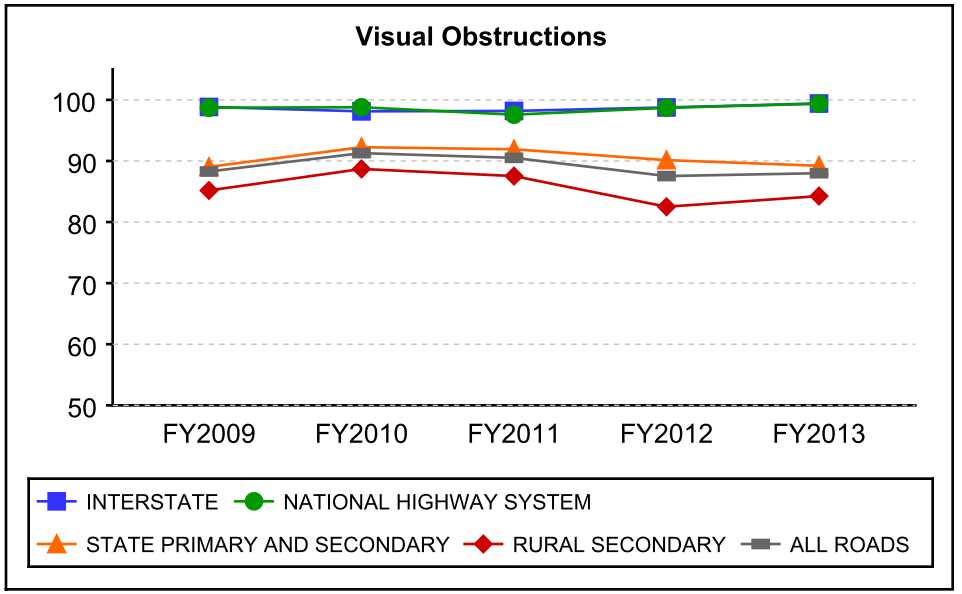

Guardrail Specifications
100
90
80
70
60
50
FY2009
FY2010
FY2011
FY2012
FY2013
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS

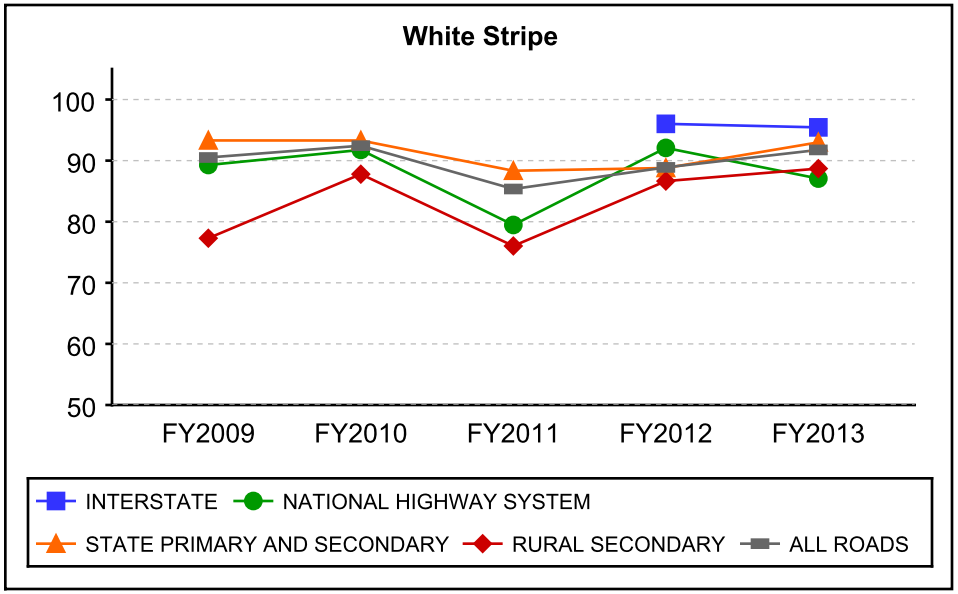

Guardrail Damage
100
90
80
70
60
50
FY2009
FY2010
FY2011
FY2012
FY2013
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS

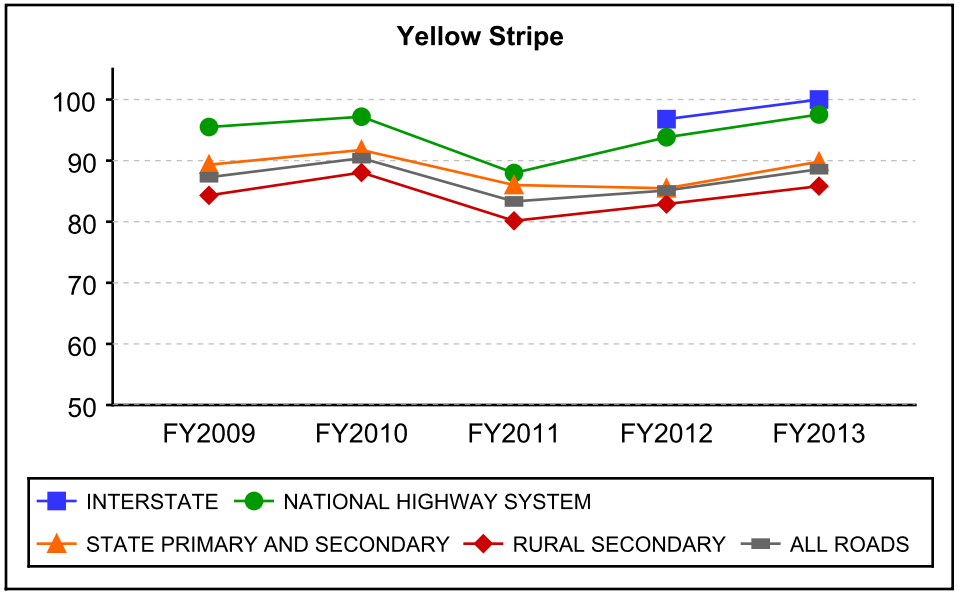

Attenuators
100
90
80
70
60
50
FY2009
FY2010
FY2011
FY2012
FY2013
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS

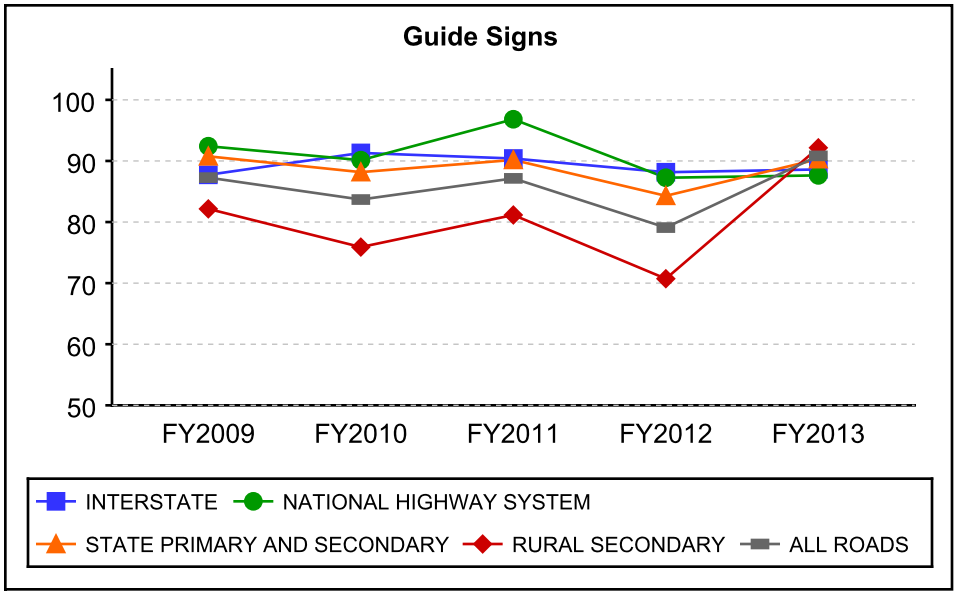

Fencing
100
90
80
70
60
50
FY2009
FY2010
FY2011
FY2012
FY2013
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS

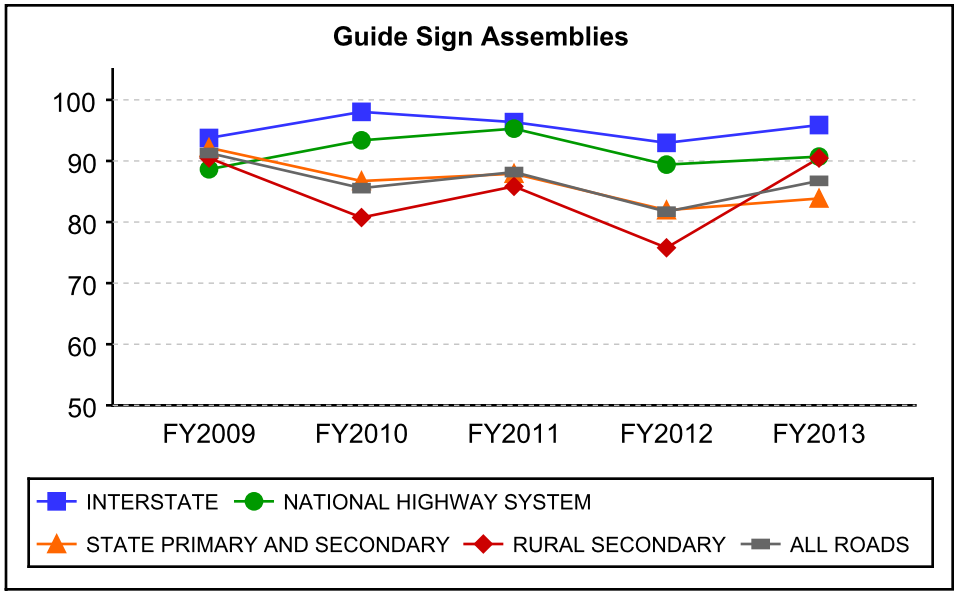

Vertical Clearance
100
90
80
70
60
50
FY2009
FY2010
FY2011
FY2012
FY2013
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS

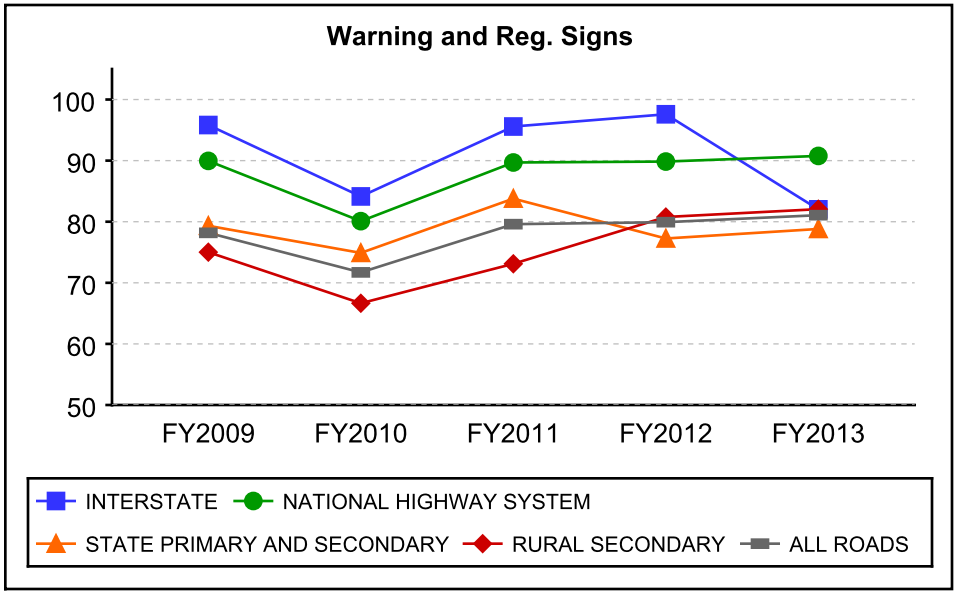

Visual Obstructions
100
90
80
70
60
50
FY2009
FY2010
FY2011
FY2012
FY2013
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS

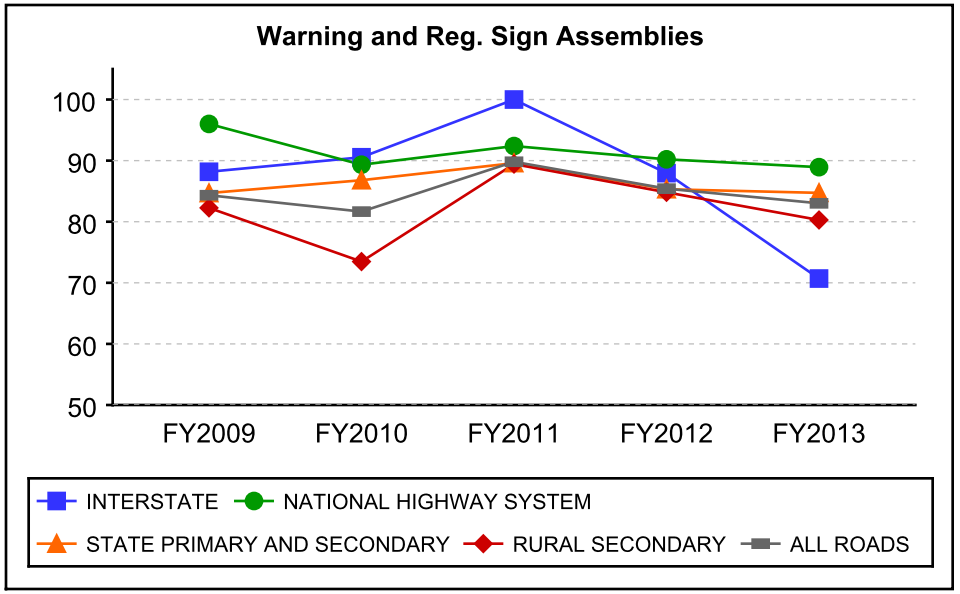

White Stripe
100
90
80
70
60
50
FY2009
FY2010
FY2011
FY2012
FY2013
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS

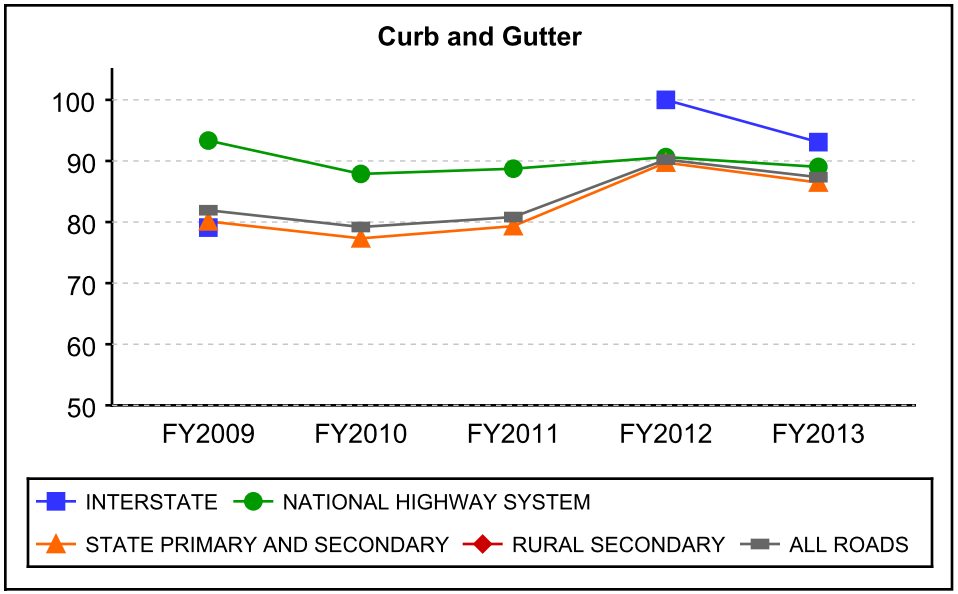

Yellow Stripe
100
90
80
70
60
50
FY2009
FY2010
FY2011
FY2012
FY2013
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS

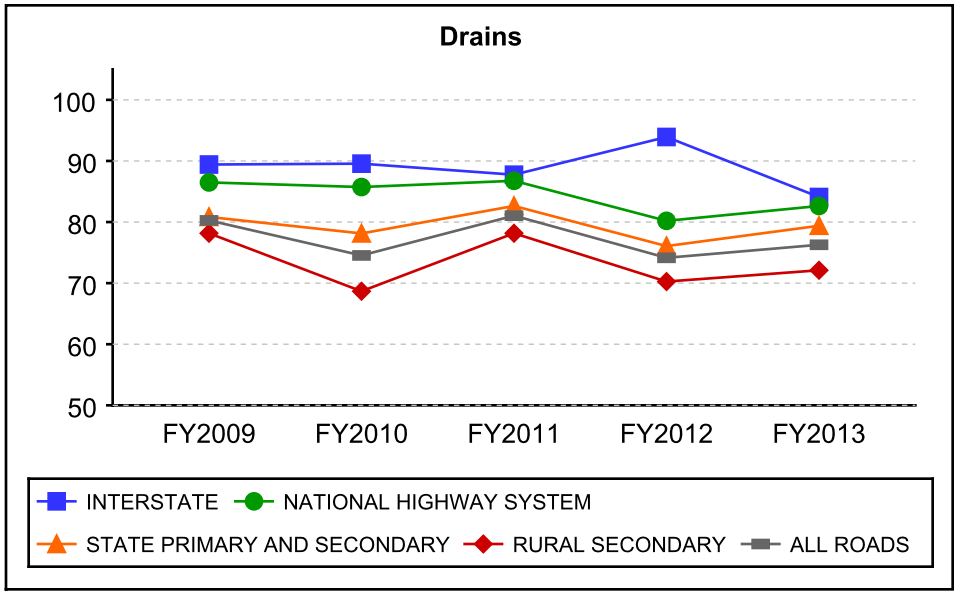

Guide Signs
100
90
80
70
60
50
FY2009
FY2010
FY2011
FY2012
FY2013
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS

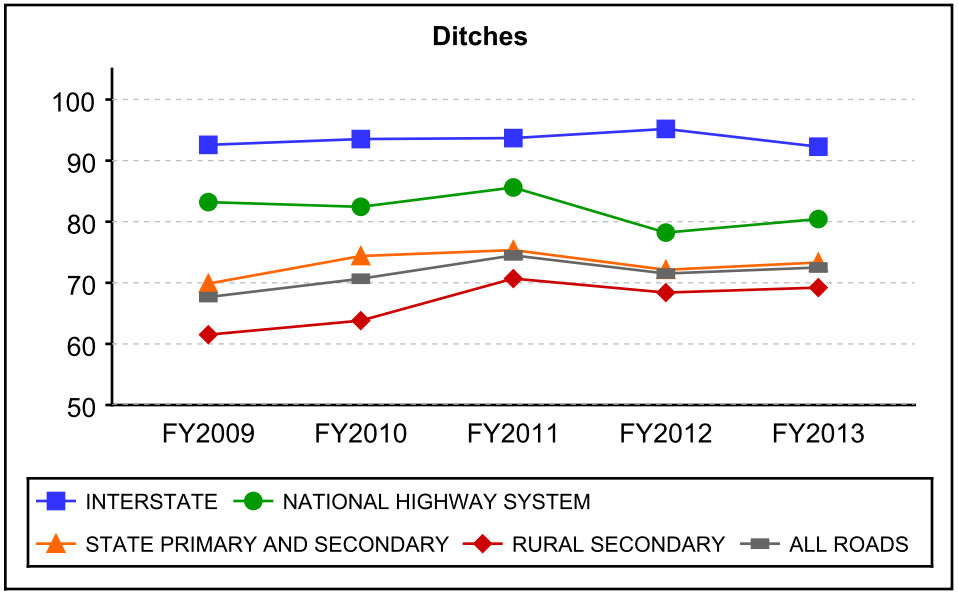

Guide Sign Assemblies
100
90
80
70
60
50
FY2009
FY2010
FY2011
FY2012
FY2013
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Warning and Reg. Signs
100
90
80
70
60
50
FY2009
FY2010
FY2011
FY2012
FY2013
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Warning and Reg. Sign Assemblies
100
90
80
70
60
50
FY2009
FY2010
FY2011
FY2012
FY2013
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Curb and Gutter
100
90
80
70
60
50
FY2009
FY2010
FY2011
FY2012
FY2013
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Drains
100
90
80
70
60
50
FY2009
FY2010
FY2011
FY2012
FY2013
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS

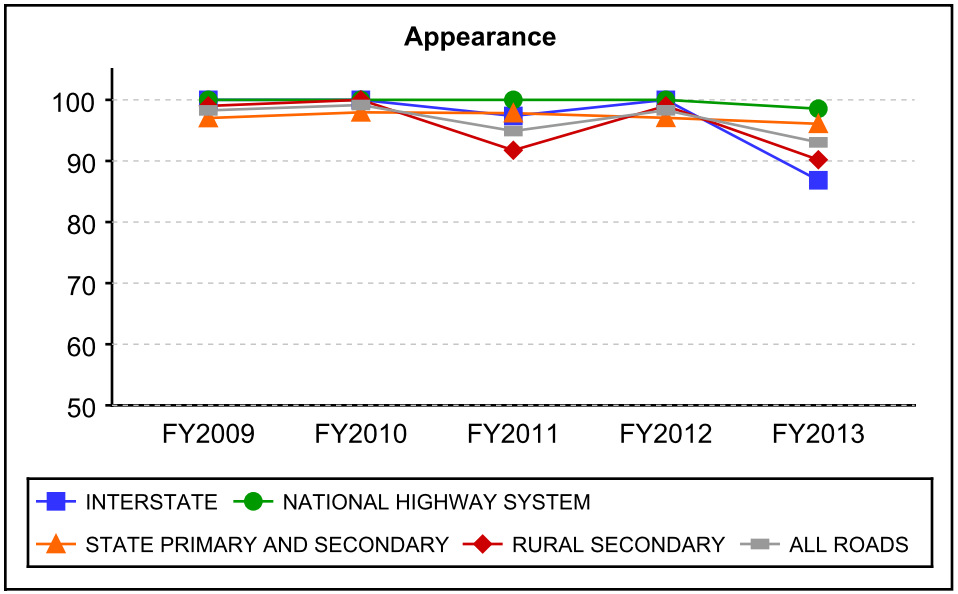

Ditches
100
90
80
70
60
50
FY2009
FY2010
FY2011
FY2012
FY2013
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS

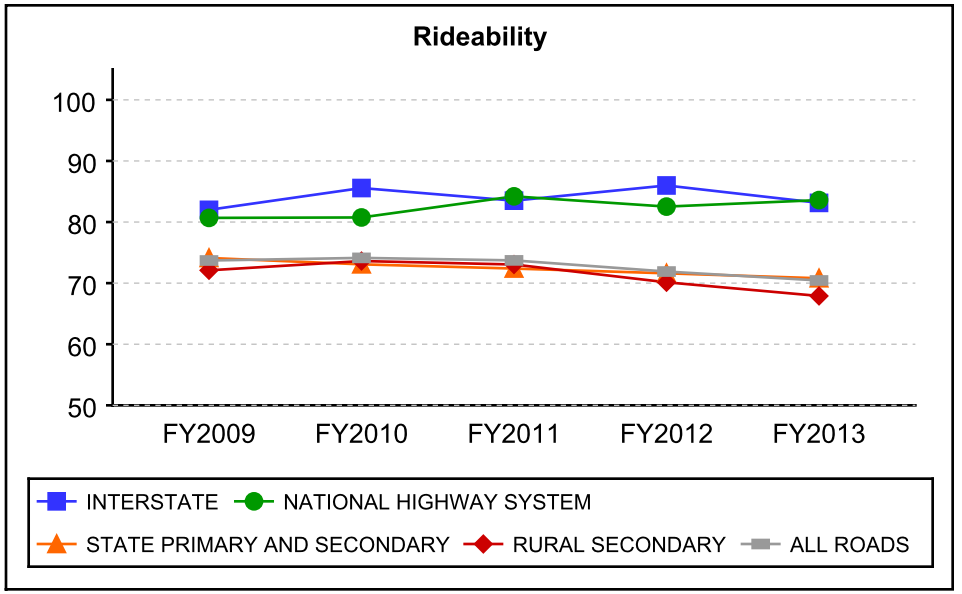
APPENDIX III

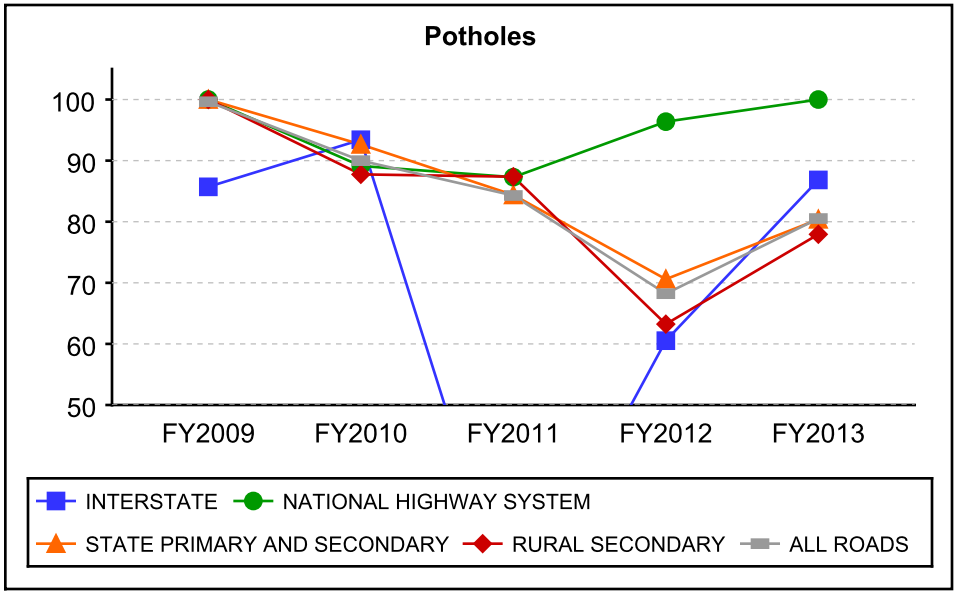
District Scores by Element Type

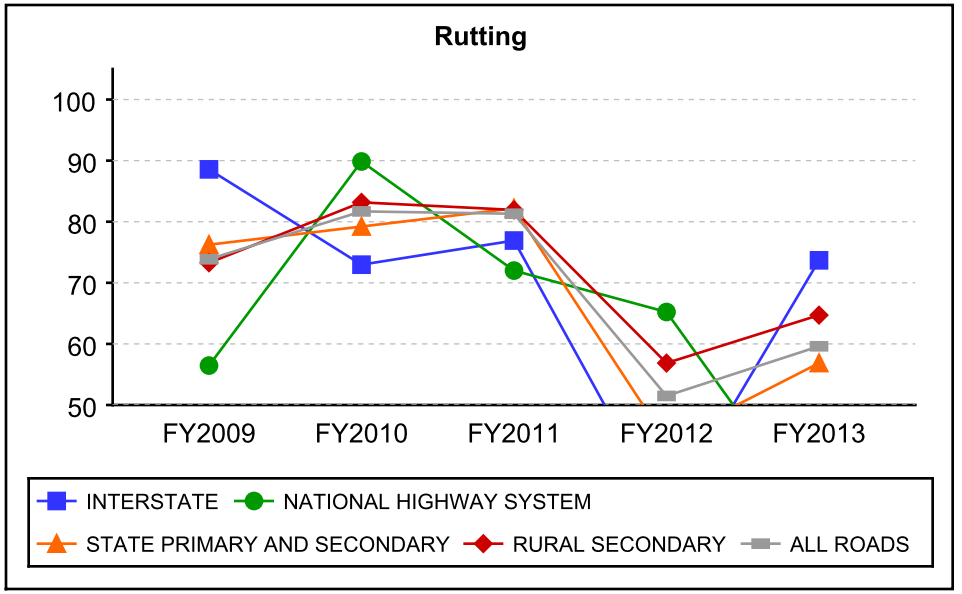
Similar to Appendix II, the District Scores by Element Type have scores for the current and previous four years represented in the graphs for each of the four road types. The gray shaded area represents the weighted average of all roads for the given feature.

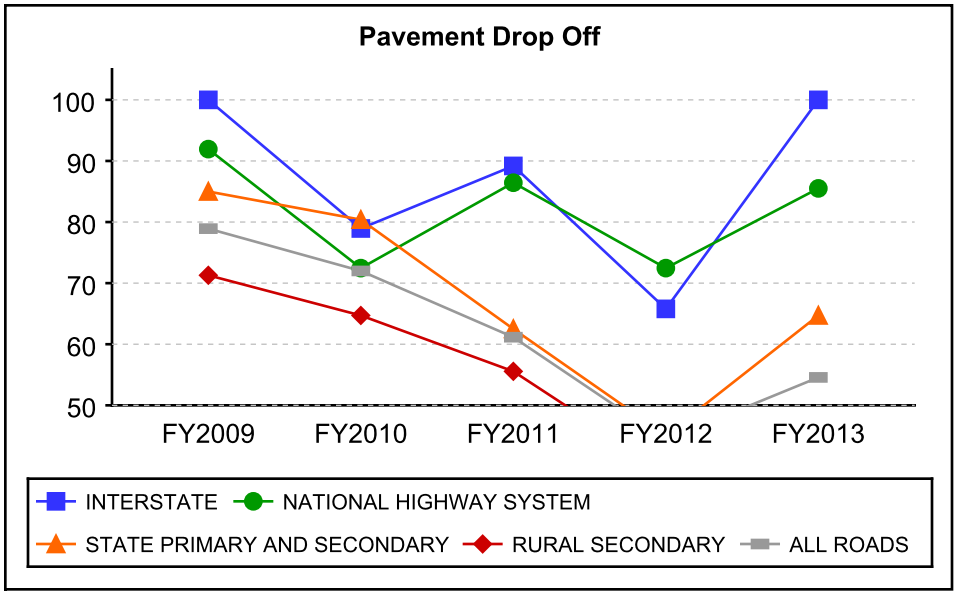
Due to the much smaller sample size in district evaluations, there are many more instances where there was insufficient data for analysis. These graphs are still shown, but will be marked accordingly. In some cases, the line representing a specific road type may be missing or broken due to insufficient data for a specific year or road type, but the district-wide average for all road types is still shown where possible.

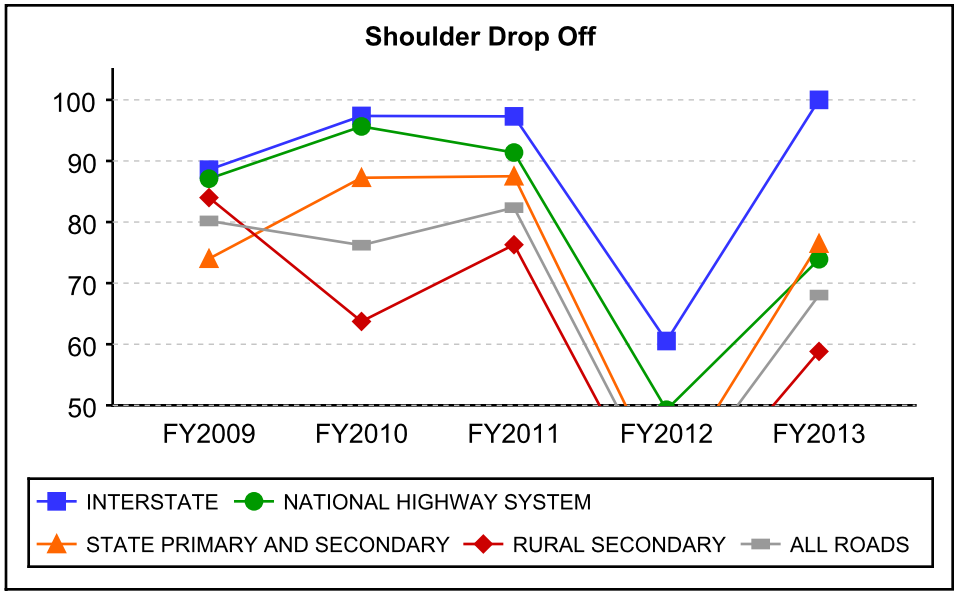

Appearance
100
90
80
70
60
50
FY2009
FY2010
FY2011
FY2012
FY2013
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS

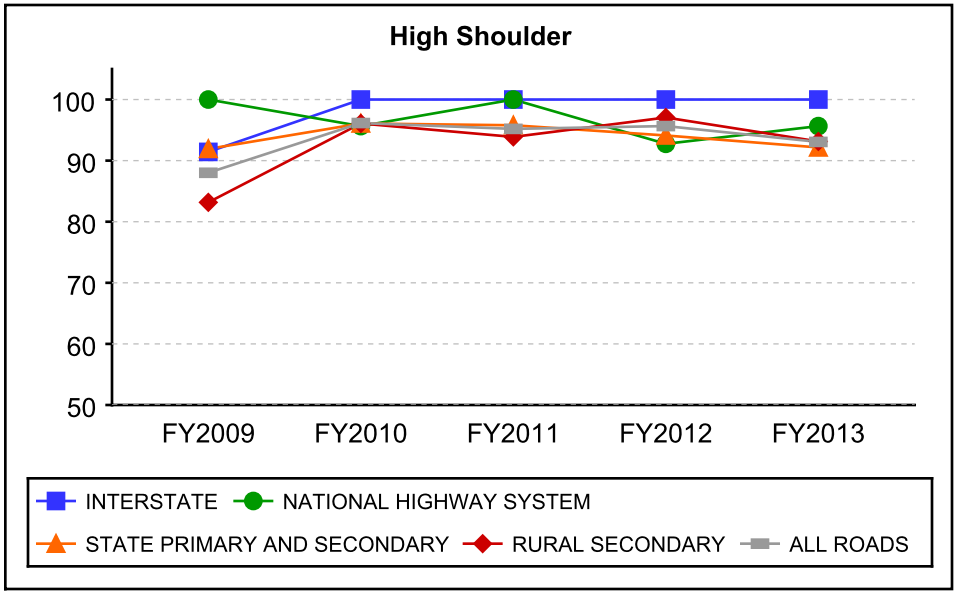

Rideability
100
90
80
70
60
50
FY2009
FY2010
FY2011
FY2012
FY2013
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS

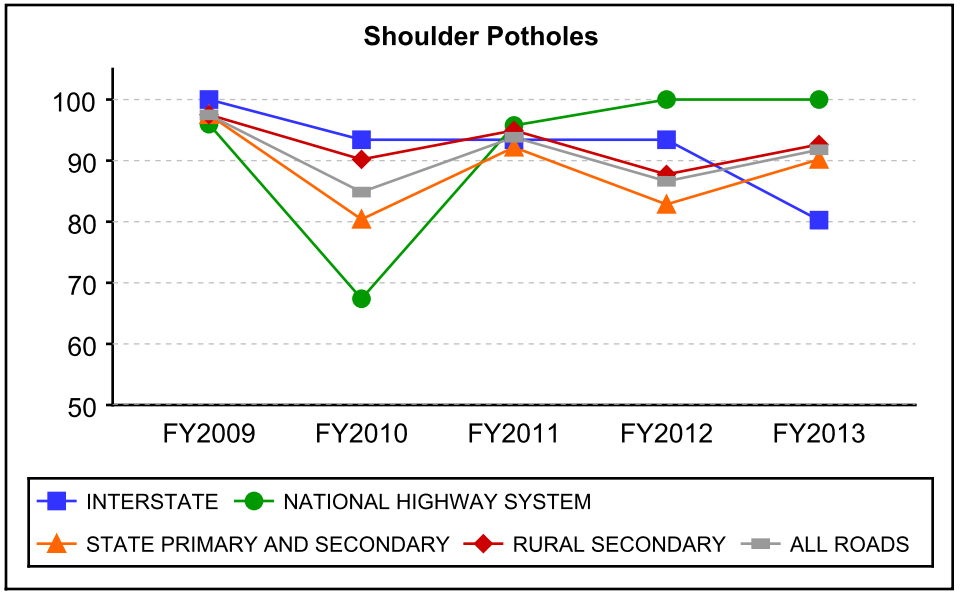

Potholes
100
90
80
70
60
50
FY2009
FY2010
FY2011
FY2012
FY2013
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS

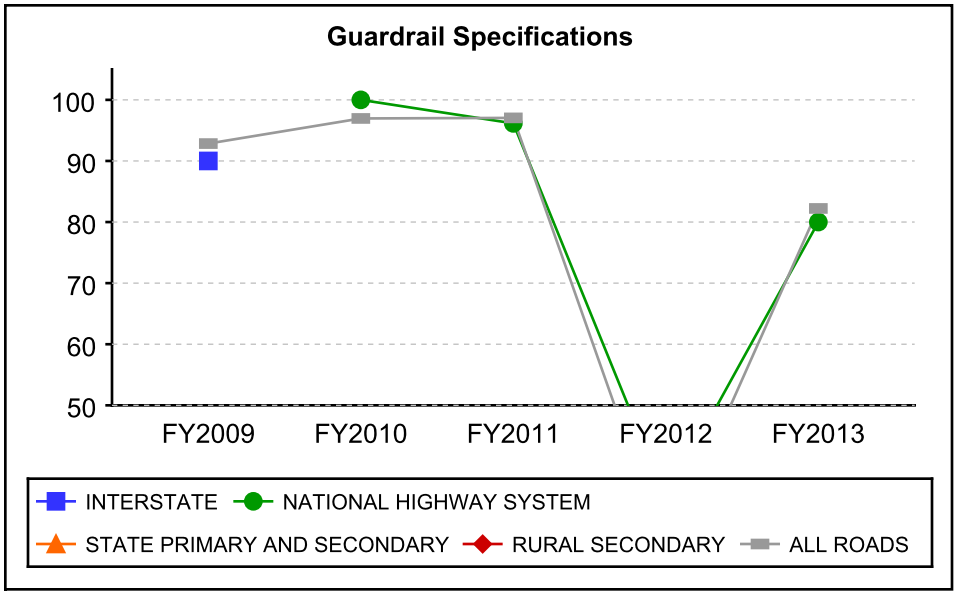

Rutting
100
90
80
70
60
50
FY2009
FY2010
FY2011
FY2012
FY2013
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS

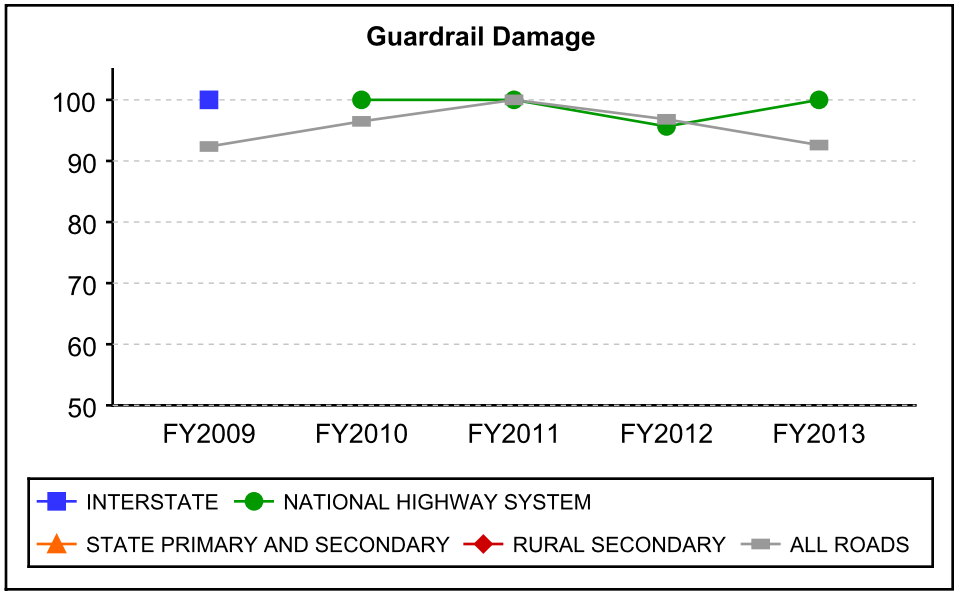

Pavement Drop Off
100
90
80
70
60
50
FY2009
FY2010
FY2011
FY2012
FY2013
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS

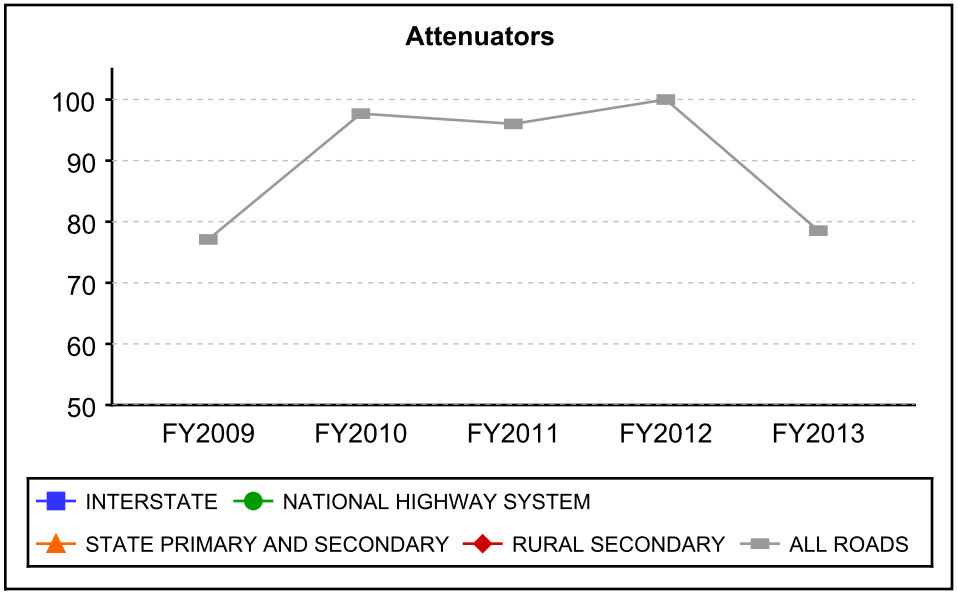

Shoulder Drop Off
100
90
80
70
60
50
FY2009
FY2010
FY2011
FY2012
FY2013
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS

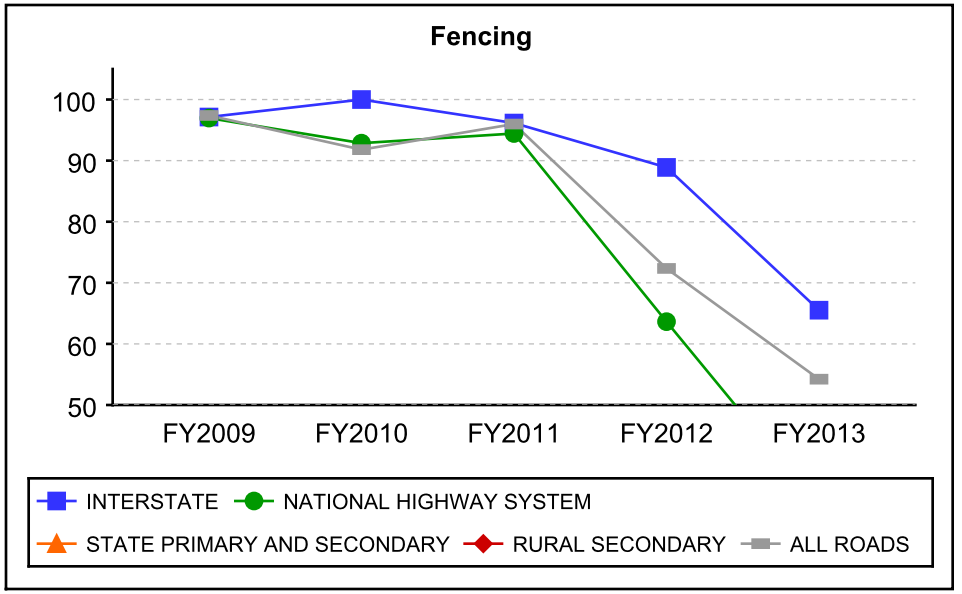

High Shoulder
100
90
80
70
60
50
FY2009
FY2010
FY2011
FY2012
FY2013
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS

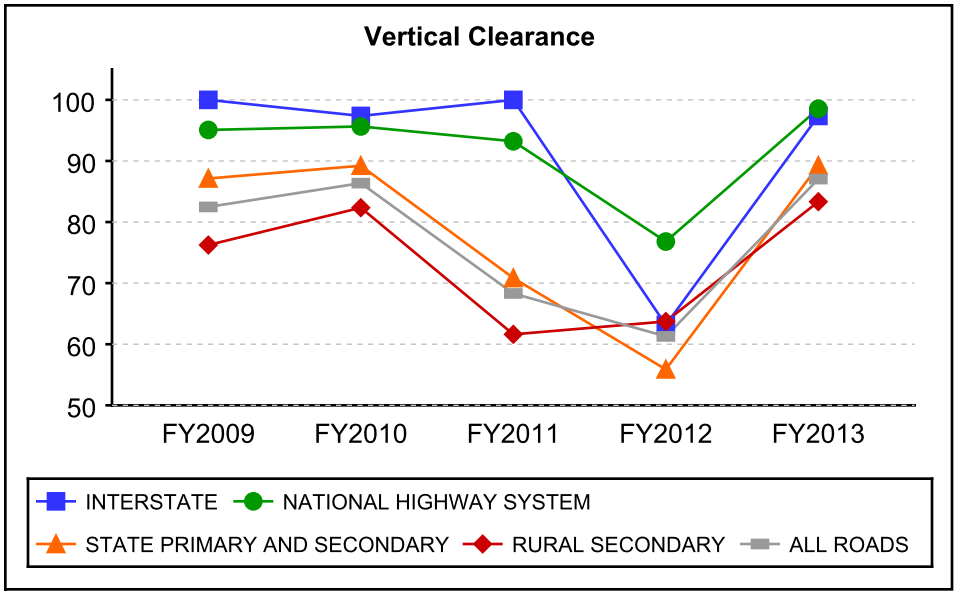

Shoulder Potholes
100
90
80
70
60
50
FY2009
FY2010
FY2011
FY2012
FY2013
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS

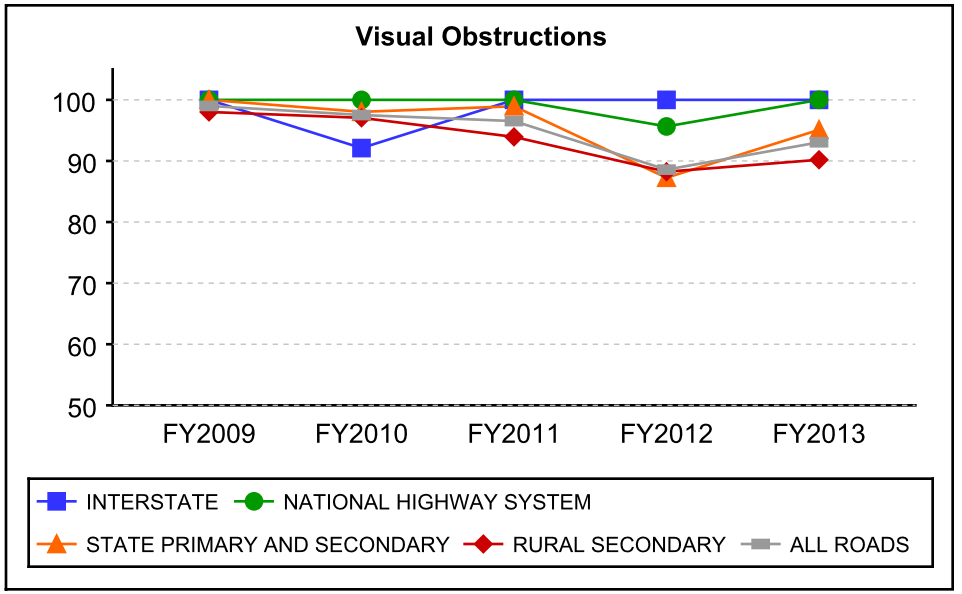

Guardrail Specifications
100
90
80
70
60
50
FY2009
FY2010
FY2011
FY2012
FY2013
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS

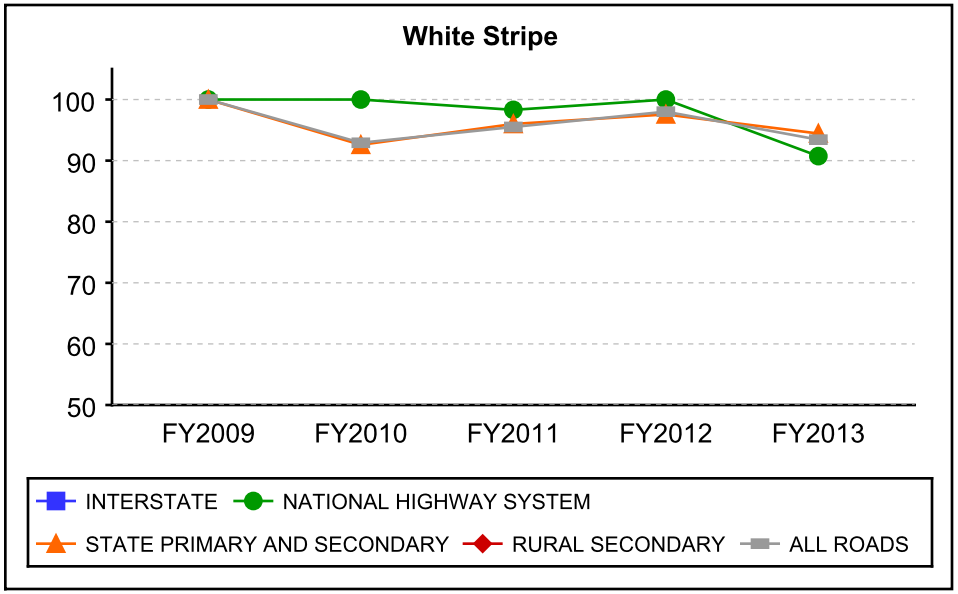

Guardrail Damage
100
90
80
70
60
50
FY2009
FY2010
FY2011
FY2012
FY2013
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS

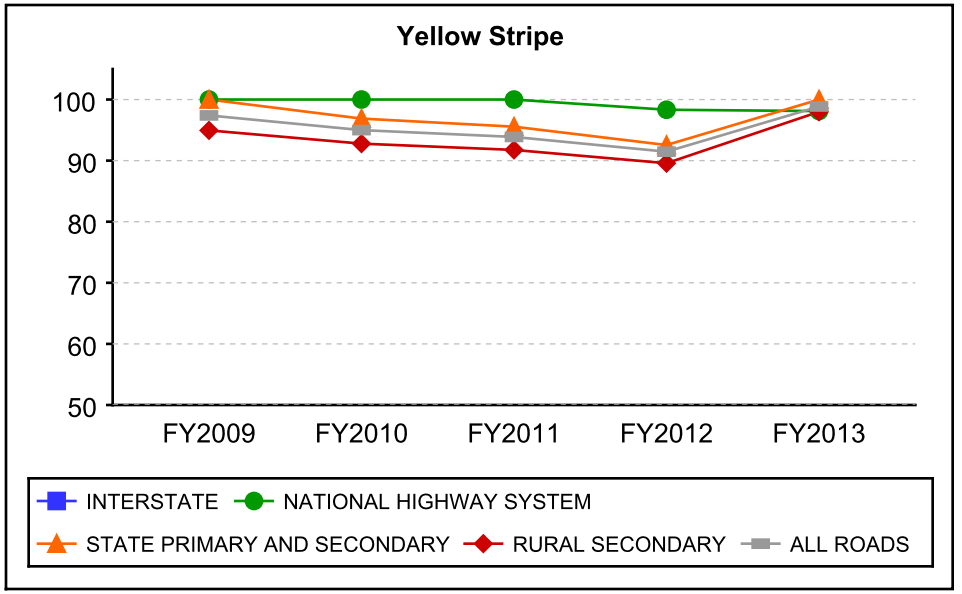

Attenuators
100
90
80
70
60
50
FY2009
FY2010
FY2011
FY2012
FY2013
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS

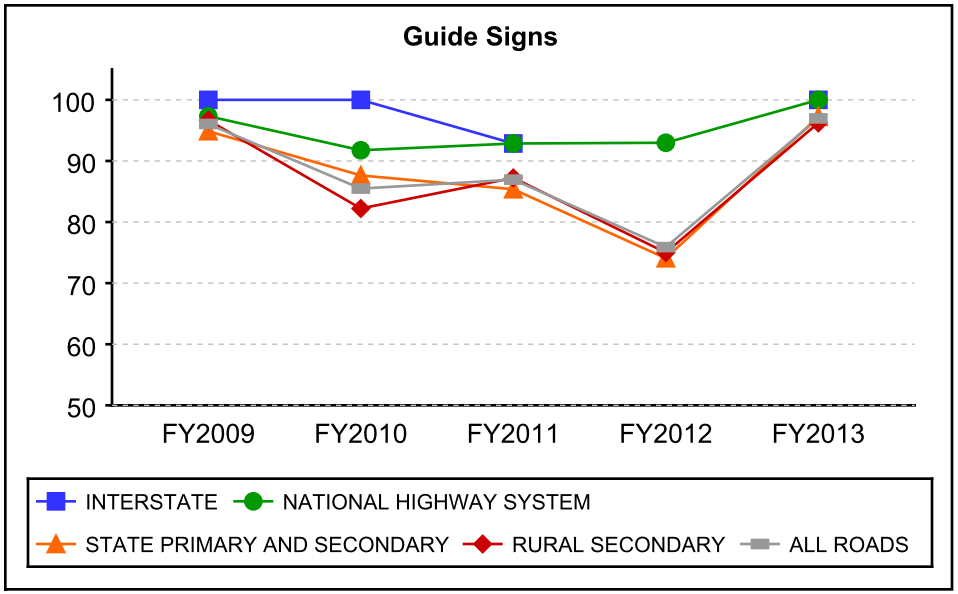

Fencing
100
90
80
70
60
50
FY2009
FY2010
FY2011
FY2012
FY2013
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS

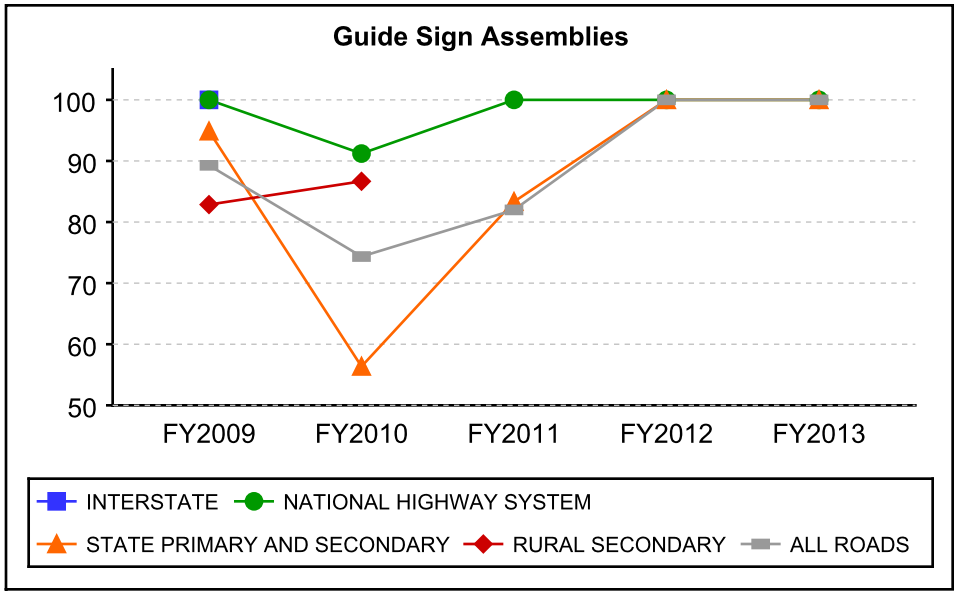

Vertical Clearance
100
90
80
70
60
50
FY2009
FY2010
FY2011
FY2012
FY2013
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS

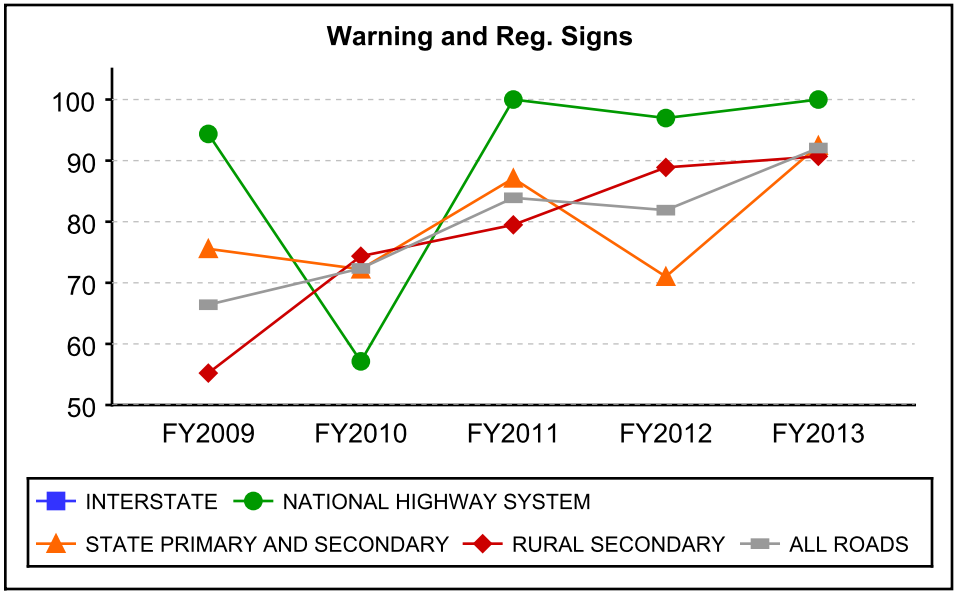

Visual Obstructions
100
90
80
70
60
50
FY2009
FY2010
FY2011
FY2012
FY2013
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS

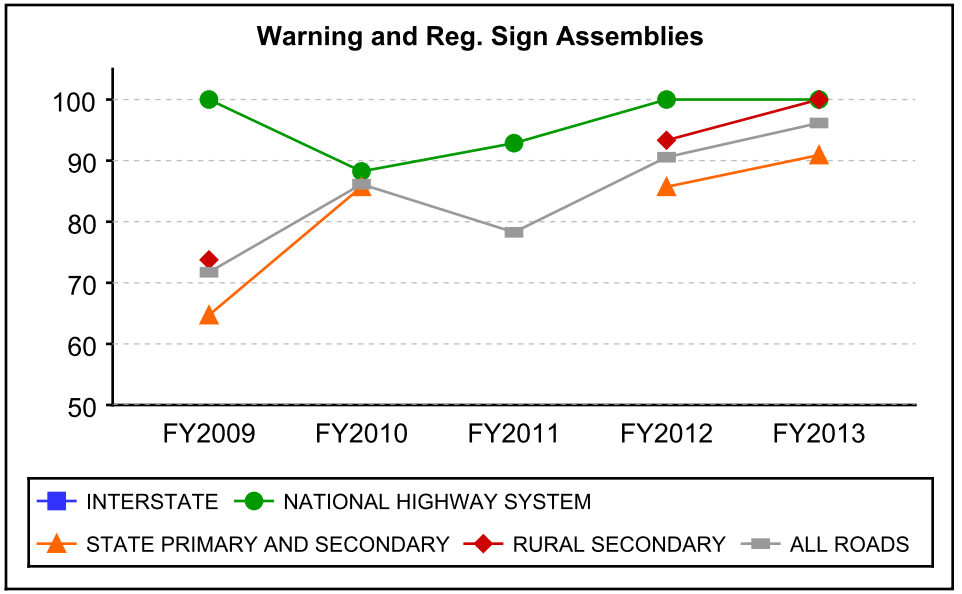

White Stripe
100
90
80
70
60
50
FY2009
FY2010
FY2011
FY2012
FY2013
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS

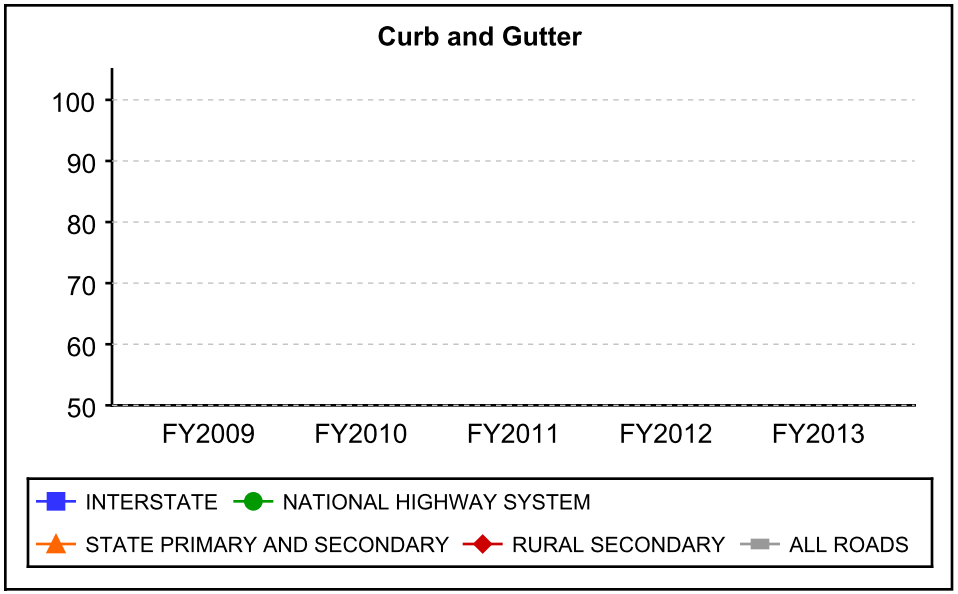

Yellow Stripe
100
90
80
70
60
50
FY2009
FY2010
FY2011
FY2012
FY2013
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS

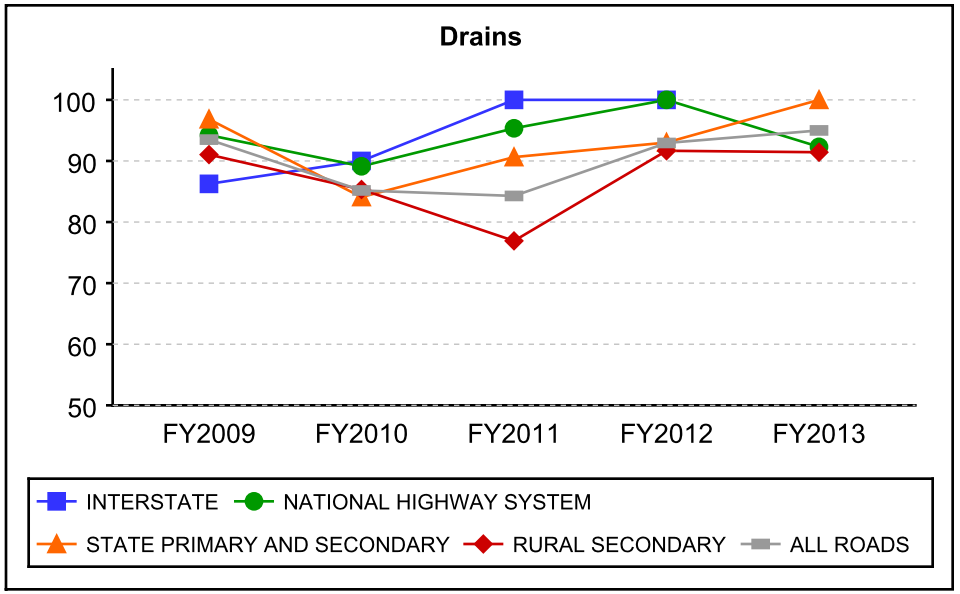

Guide Signs
100
90
80
70
60
50
FY2009
FY2010
FY2011
FY2012
FY2013
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS

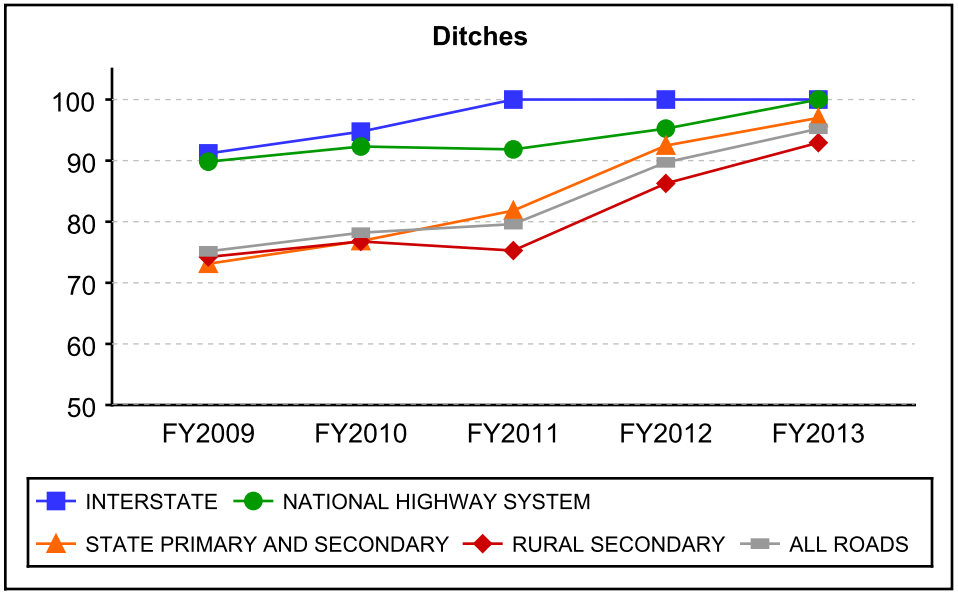

Guide Sign Assemblies
100
90
80
70
60
50
FY2009
FY2010
FY2011
FY2012
FY2013
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS

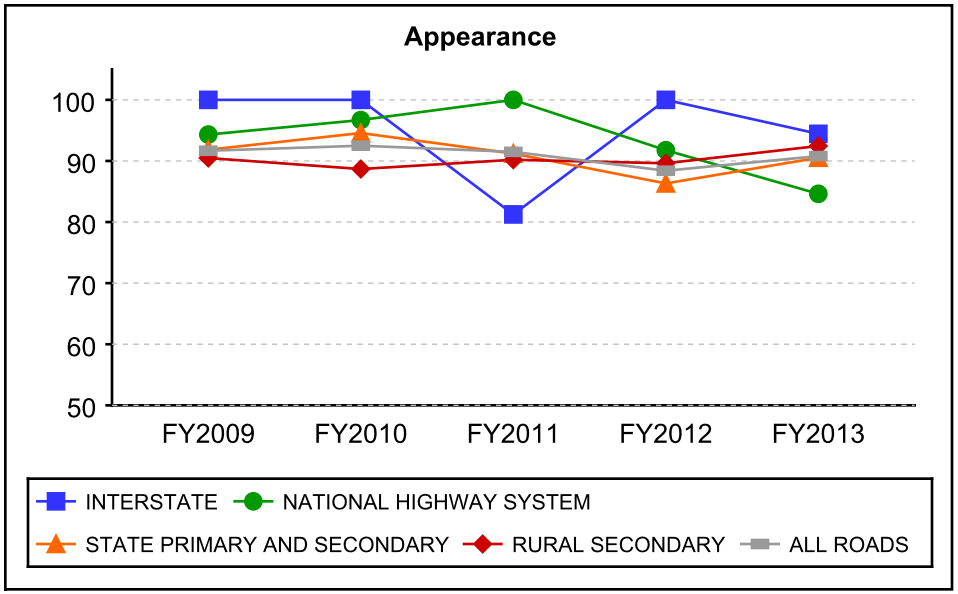

Warning and Reg. Signs
100
90
80
70
60
50
FY2009
FY2010
FY2011
FY2012
FY2013
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS

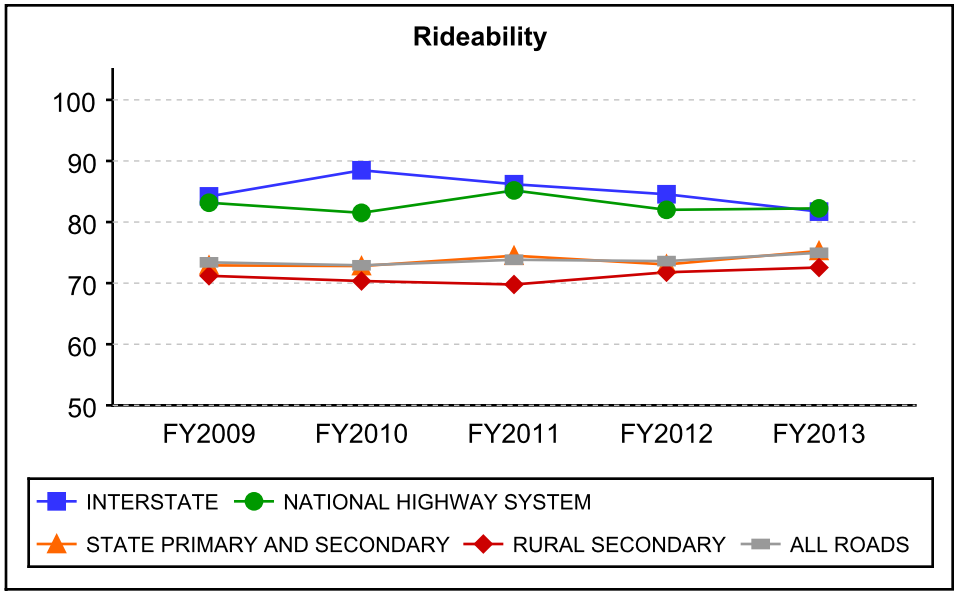

Warning and Reg. Sign Assemblies
100
90
80
70
60
50
FY2009
FY2010
FY2011
FY2012
FY2013
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS

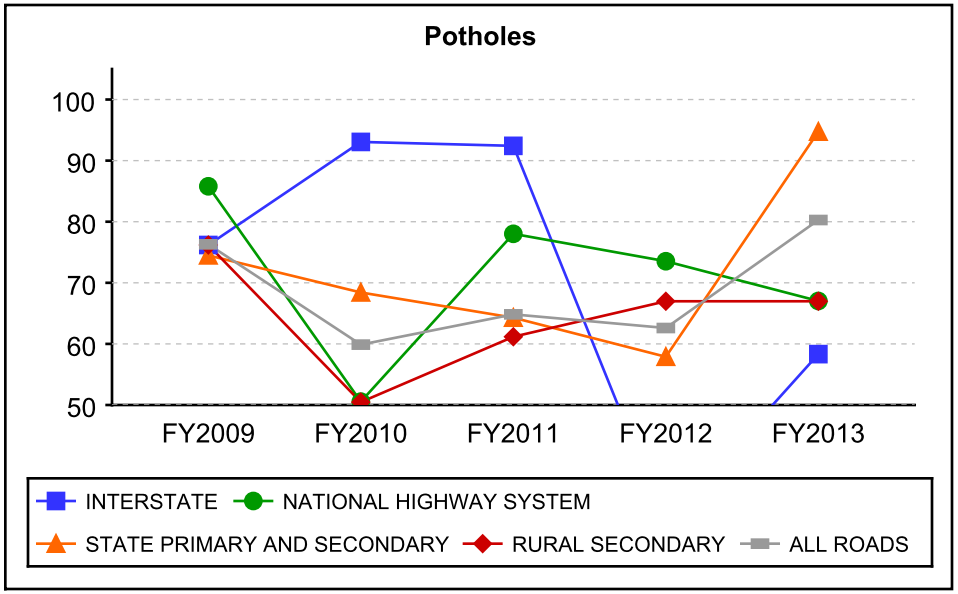

Curb and Gutter
100
90
80
70
60
50
FY2009
FY2010
FY2011
FY2012
FY2013
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS

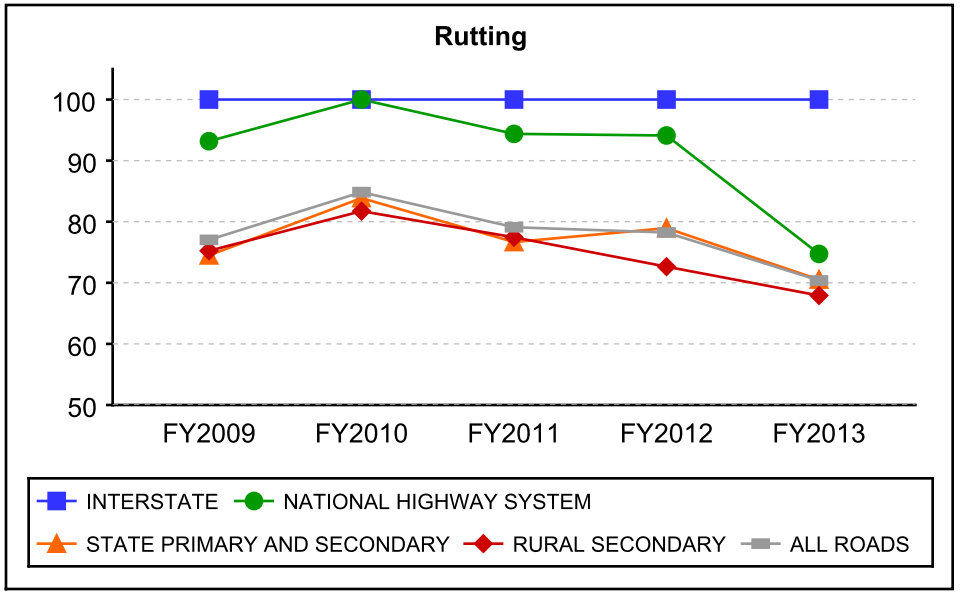

Drains
100
90
80
70
60
50
FY2009
FY2010
FY2011
FY2012
FY2013
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS

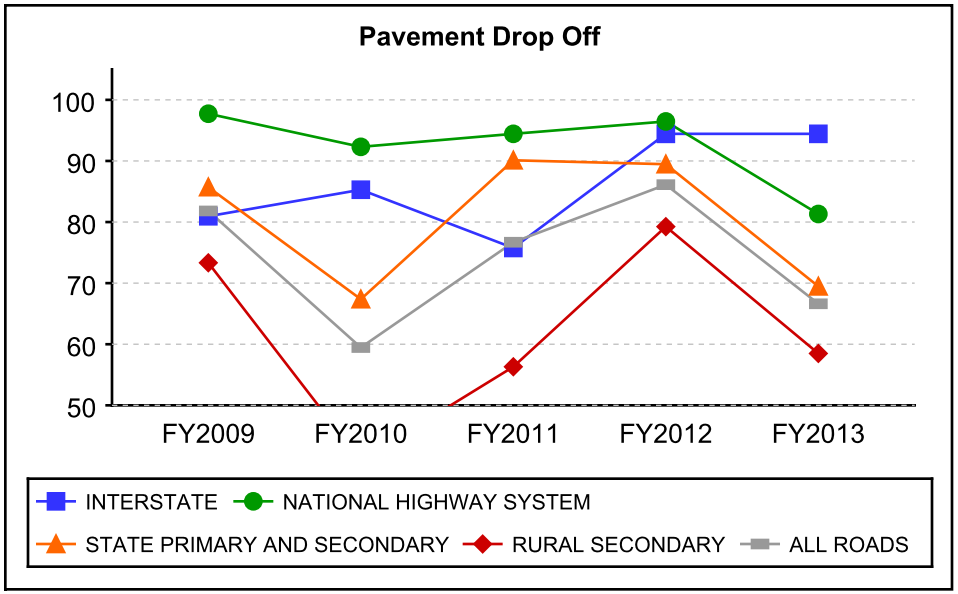

Ditches
100
90
80
70
60
50
FY2009
FY2010
FY2011
FY2012
FY2013
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS

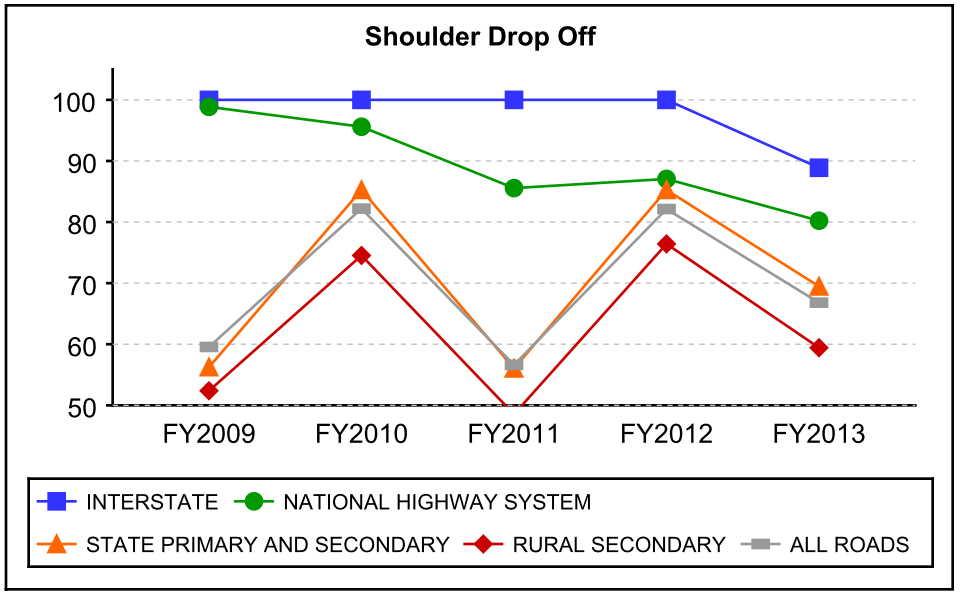

Appearance
100
90
80
70
60
50
FY2009
FY2010
FY2011
FY2012
FY2013
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS

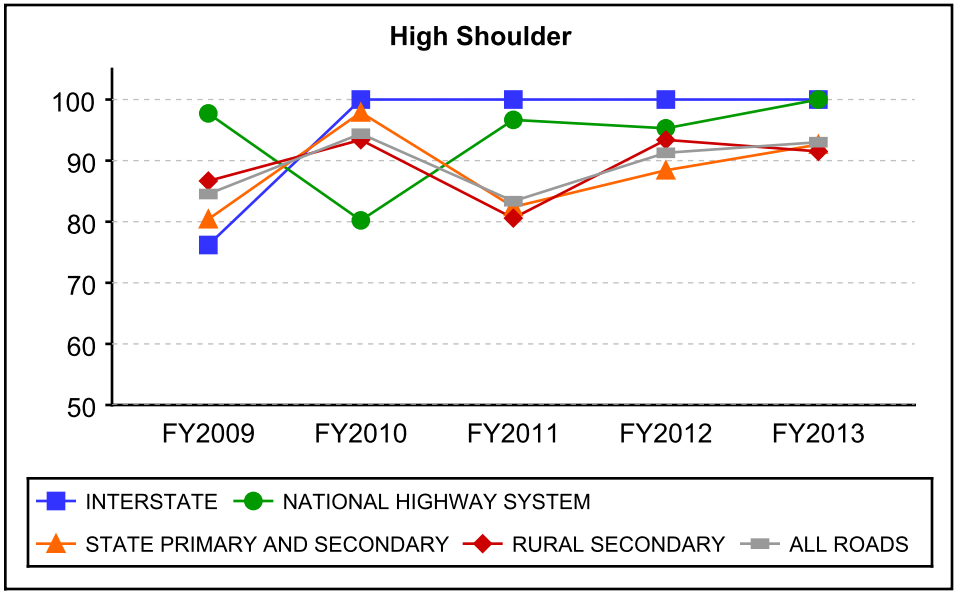

Rideability
100
90
80
70
60
50
FY2009
FY2010
FY2011
FY2012
FY2013
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS

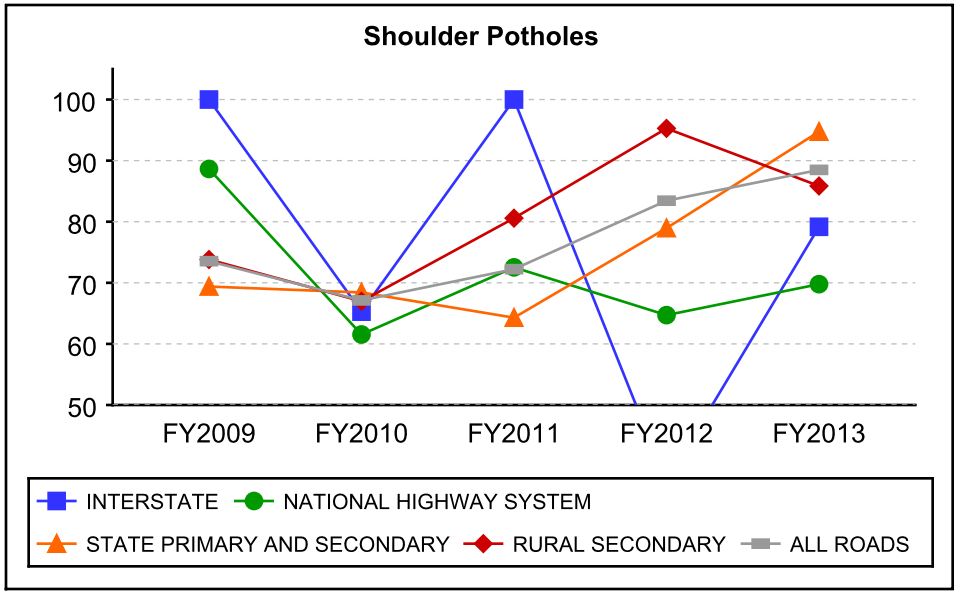

Potholes
100
90
80
70
60
50
FY2009
FY2010
FY2011
FY2012
FY2013
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS

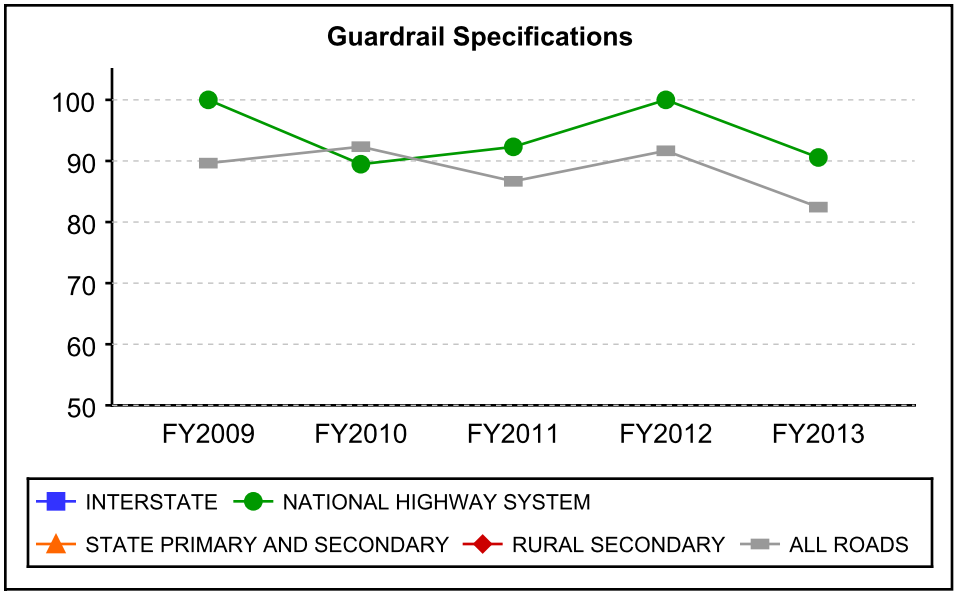

Rutting
100
90
80
70
60
50
FY2009
FY2010
FY2011
FY2012
FY2013
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS

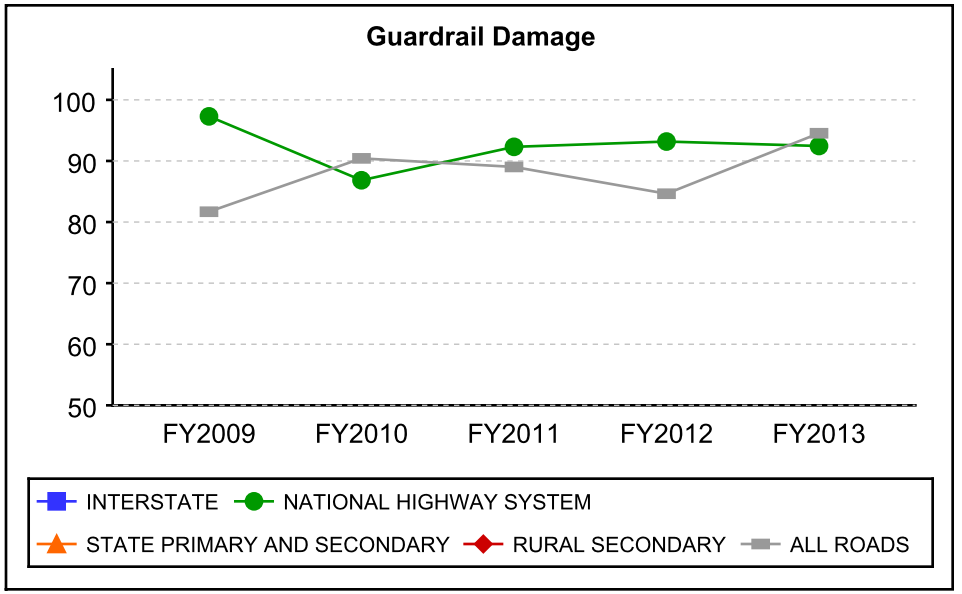

Pavement Drop Off
100
90
80
70
60
50
FY2009
FY2010
FY2011
FY2012
FY2013
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS

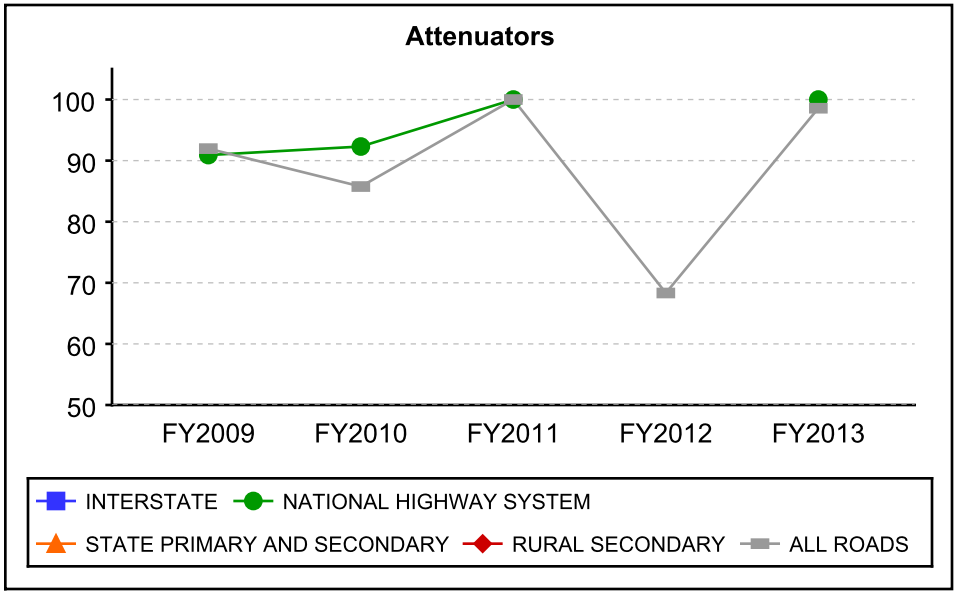

Shoulder Drop Off
100
90
80
70
60
50
FY2009
FY2010
FY2011
FY2012
FY2013
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


High Shoulder
100
90
80
70
60
50
FY2009
FY2010
FY2011
FY2012
FY2013
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Shoulder Potholes
100
90
80
70
60
50
FY2009
FY2010
FY2011
FY2012
FY2013
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Guardrail Specifications
100
90
80
70
60
50
FY2009
FY2010
FY2011
FY2012
FY2013
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Guardrail Damage
100
90
80
70
60
50
FY2009
FY2010
FY2011
FY2012
FY2013
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Attenuators
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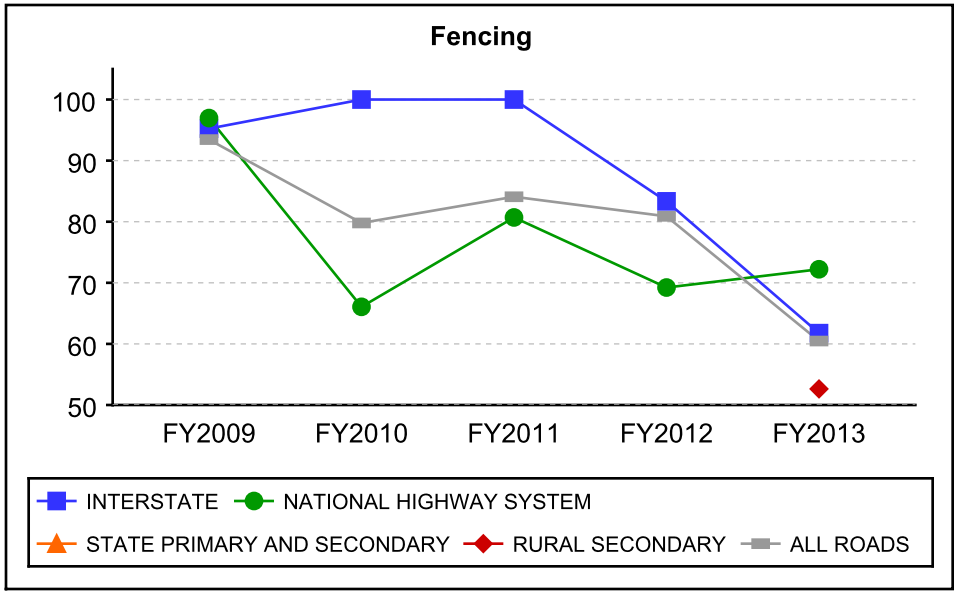
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS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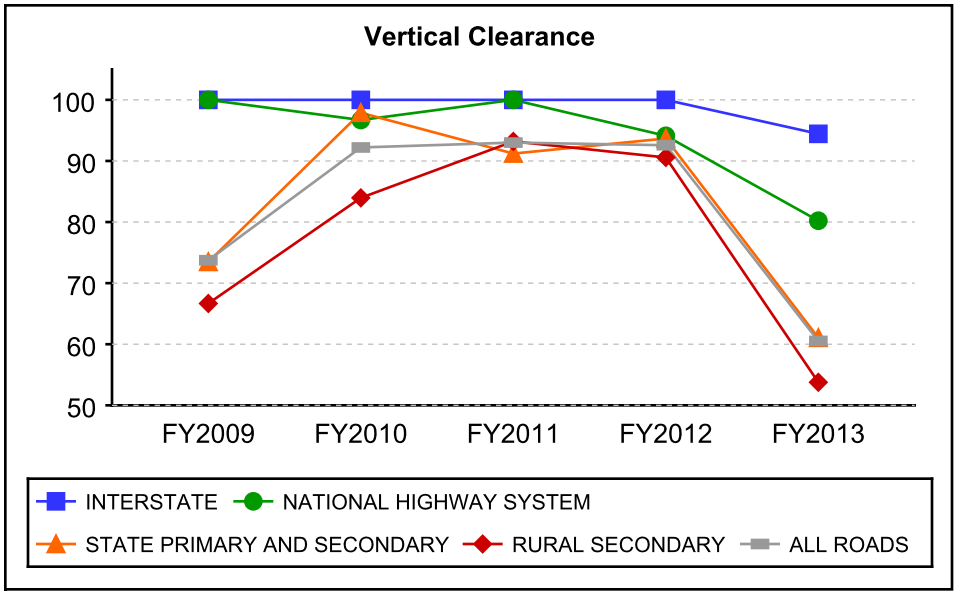
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS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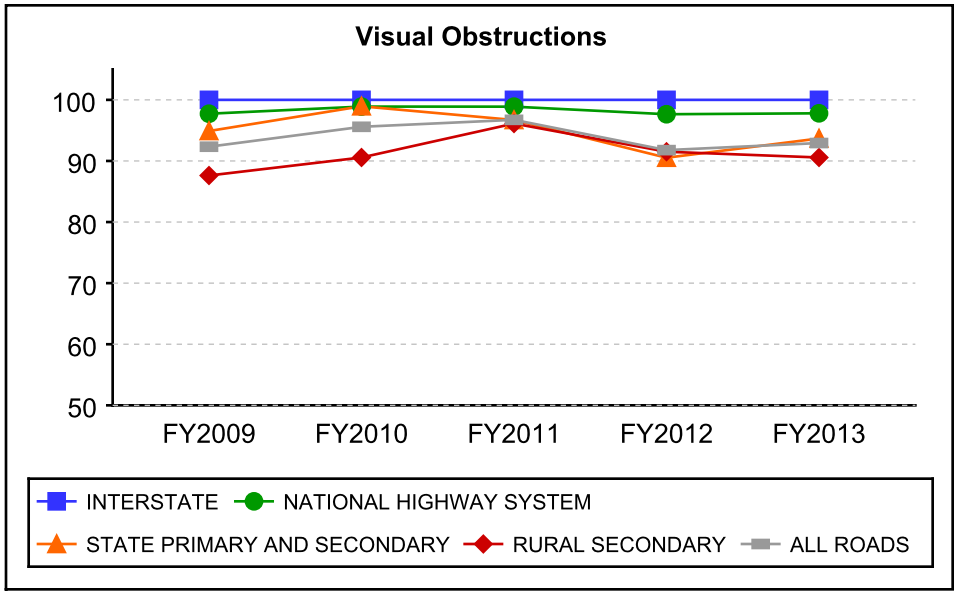
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS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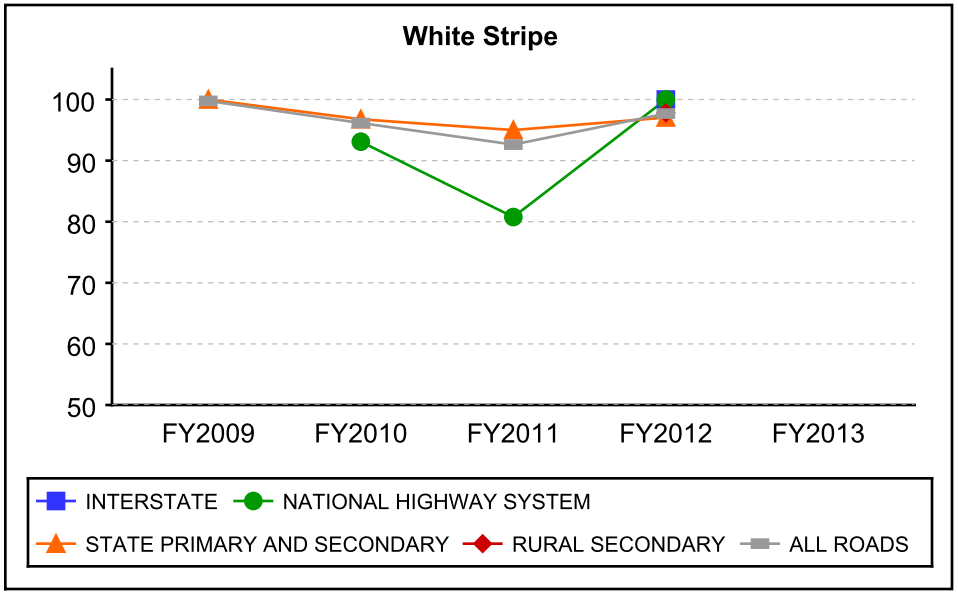
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


White Stripe
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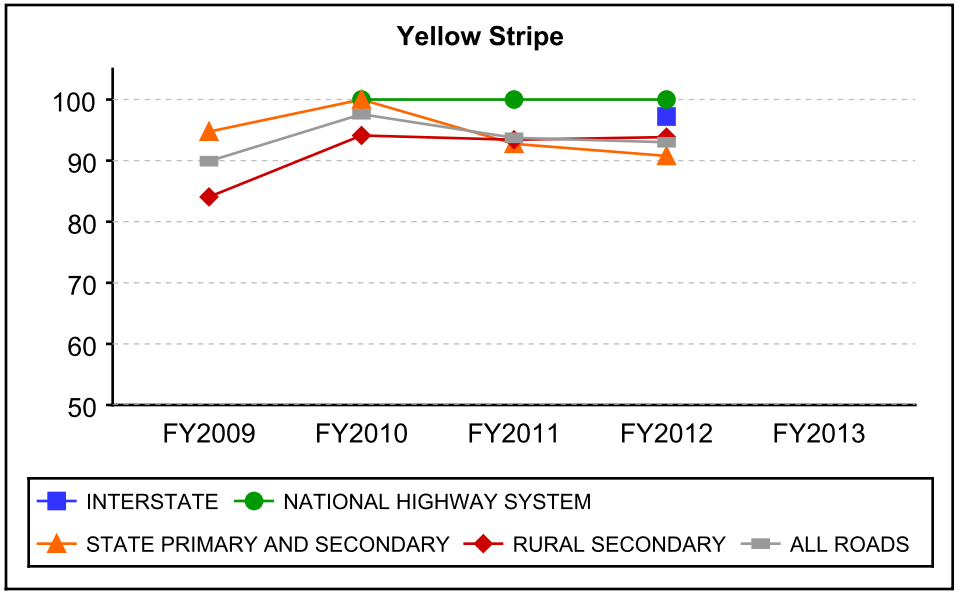
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Yellow Stripe
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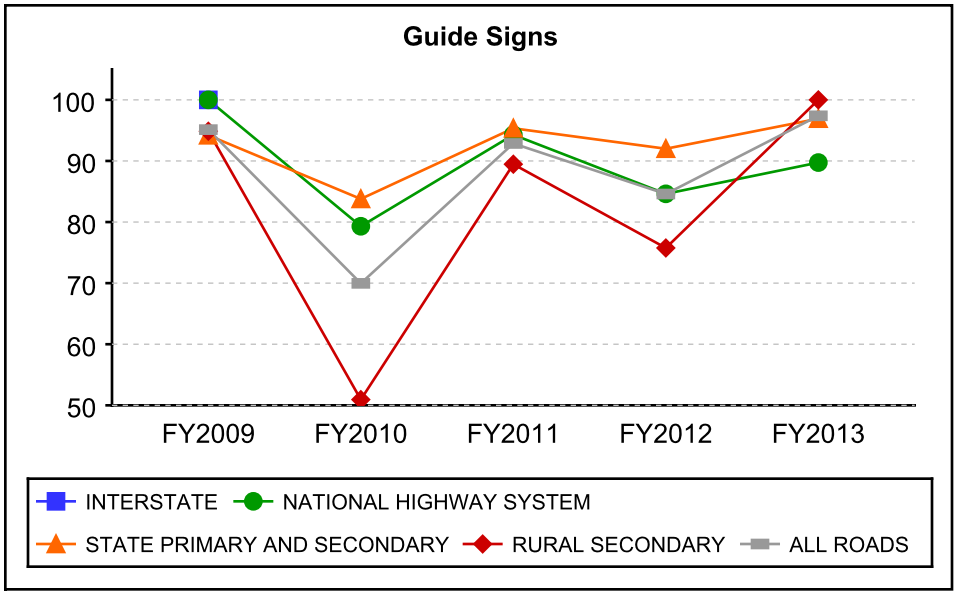
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS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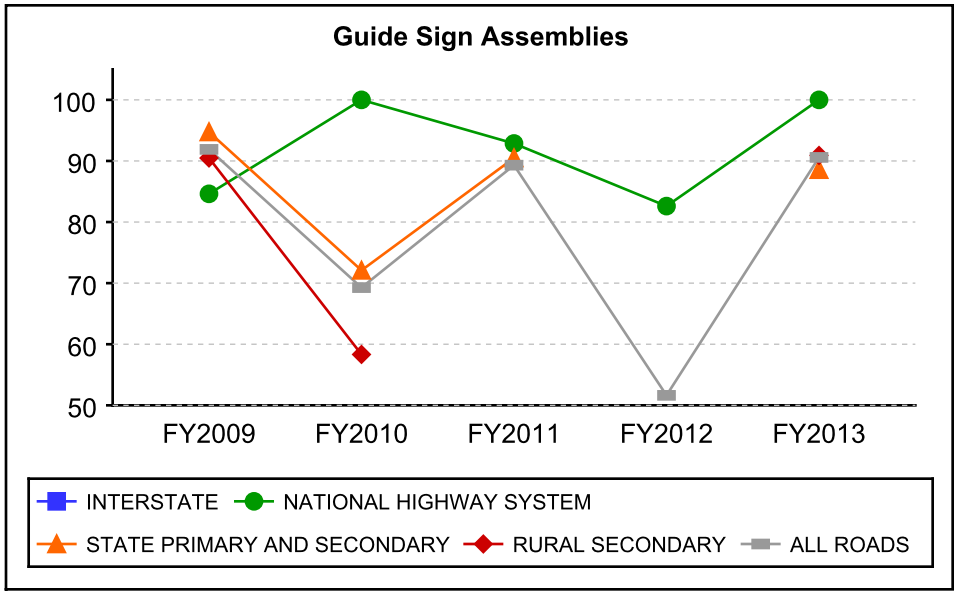
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Guide Sign Assemblies
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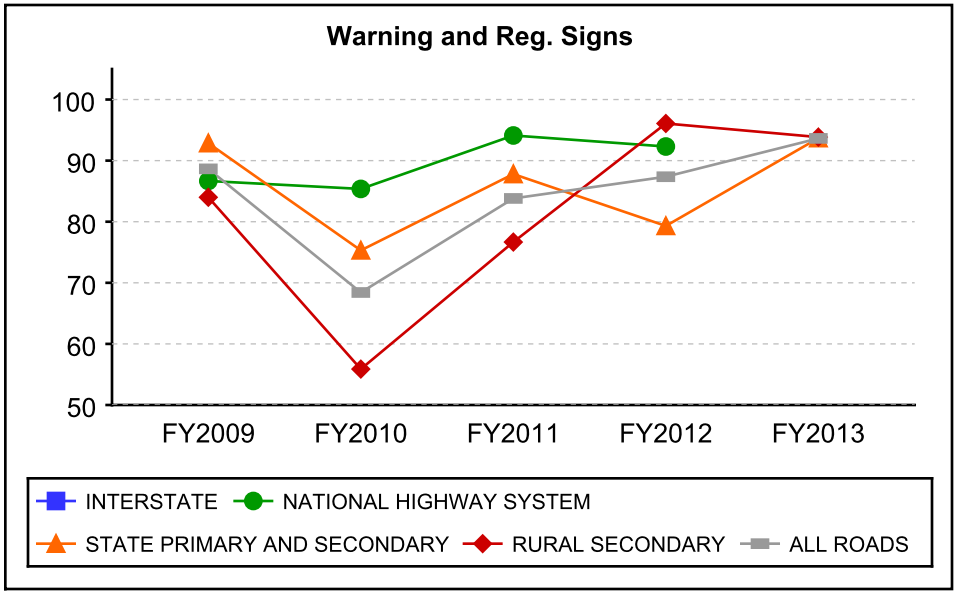
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Warning and Reg. Signs
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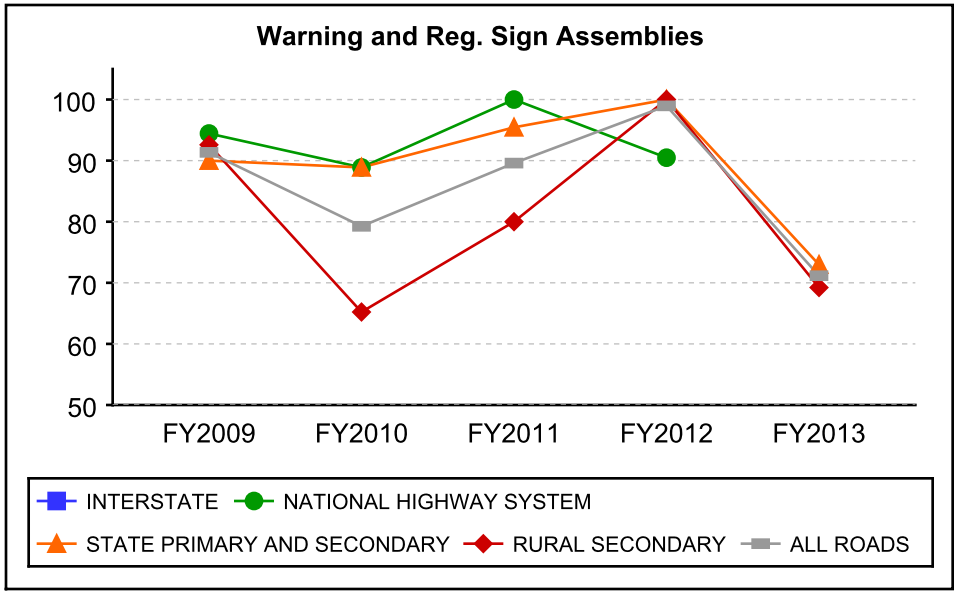
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Warning and Reg. Sign Assemblies
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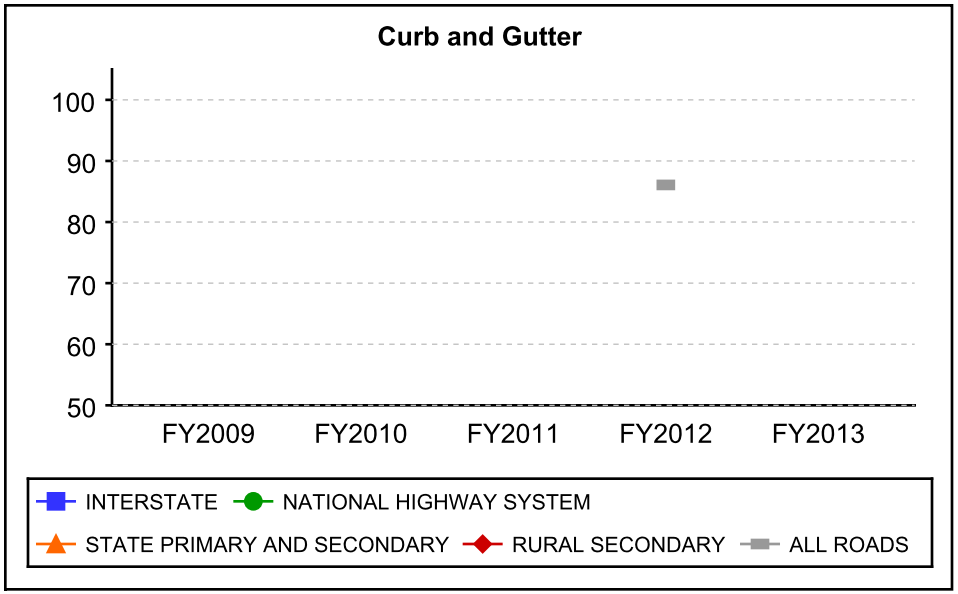
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Curb and Gutter
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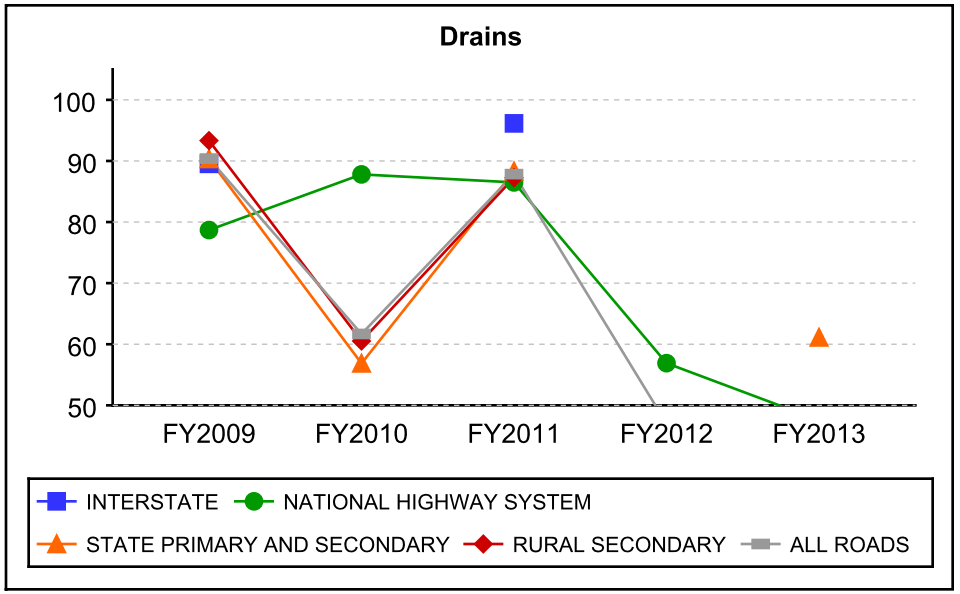
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Drains
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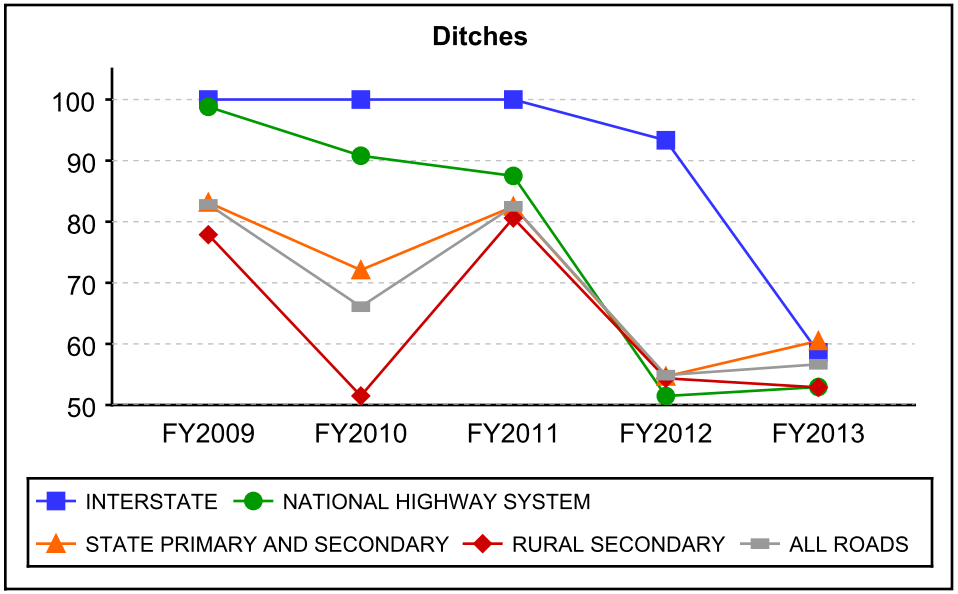
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Ditches
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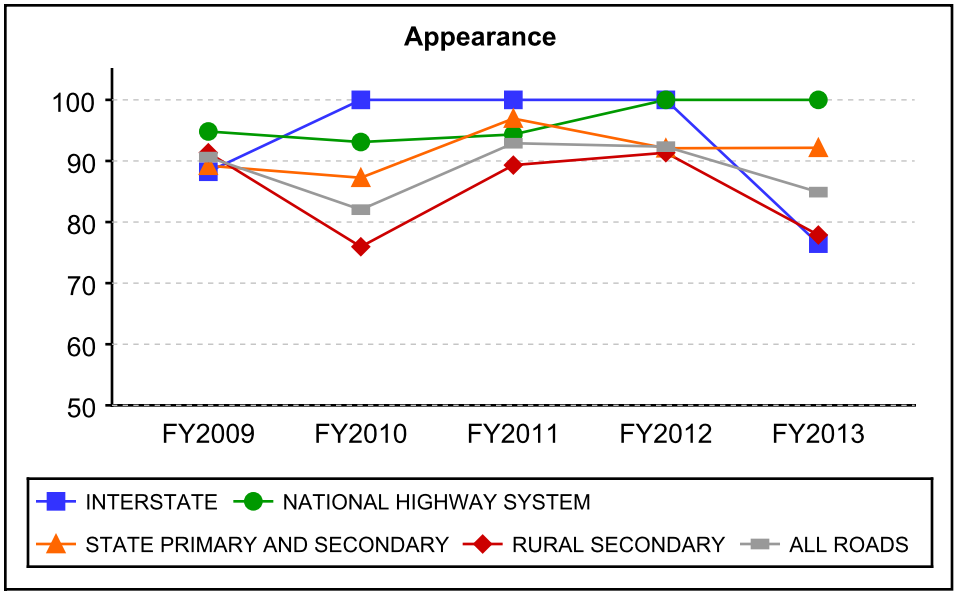
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Appearance
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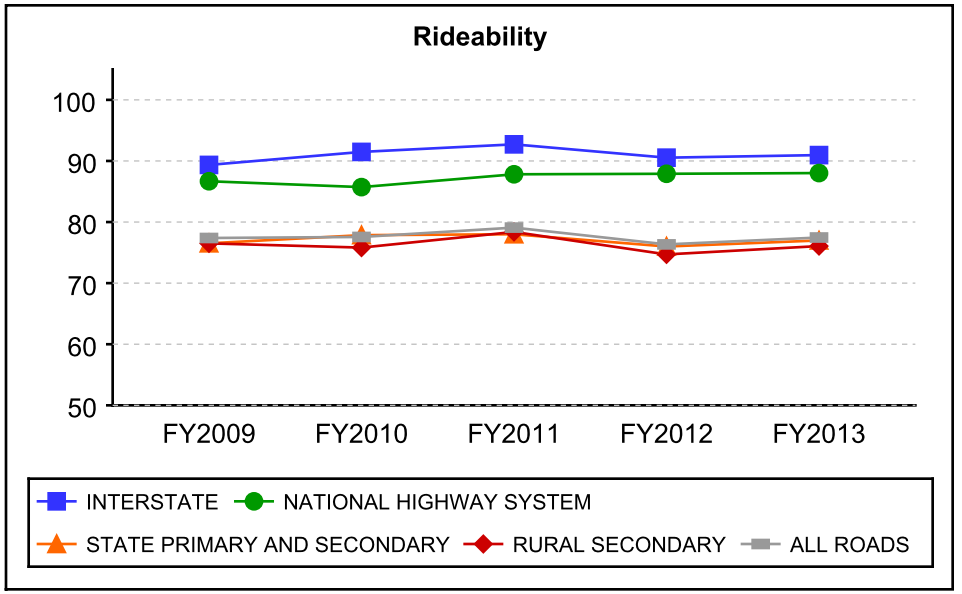
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Rideability
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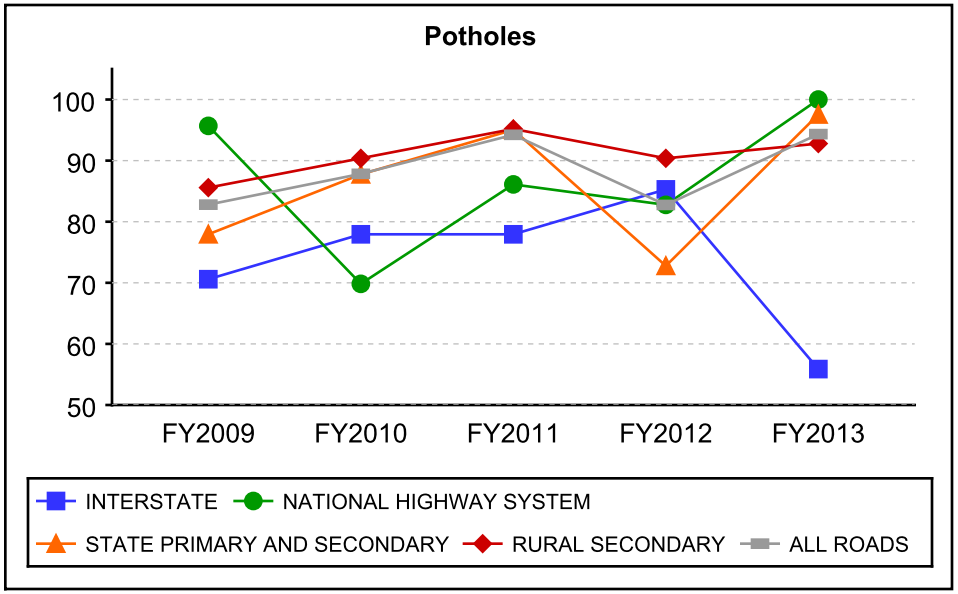
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Potholes
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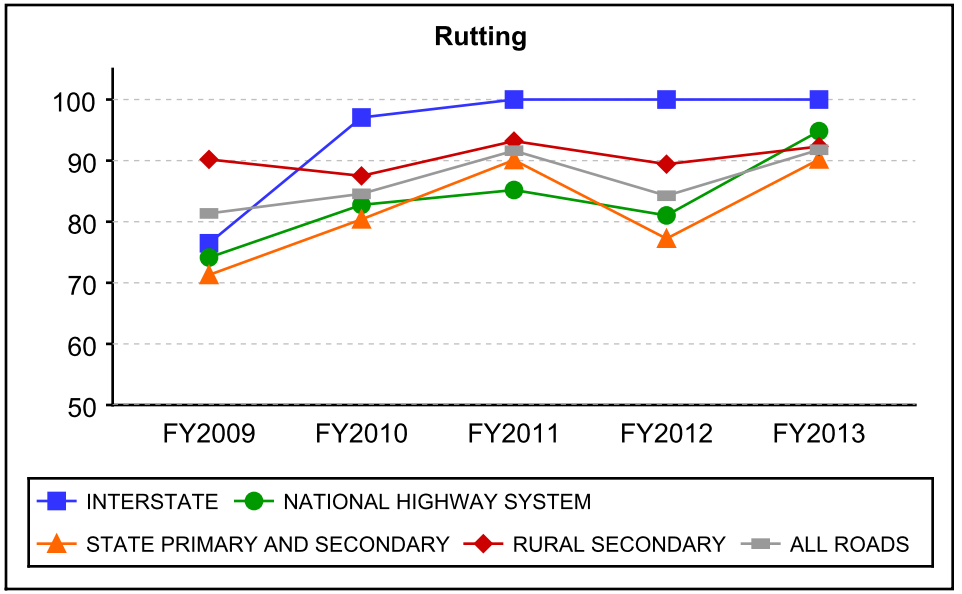
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Rutting
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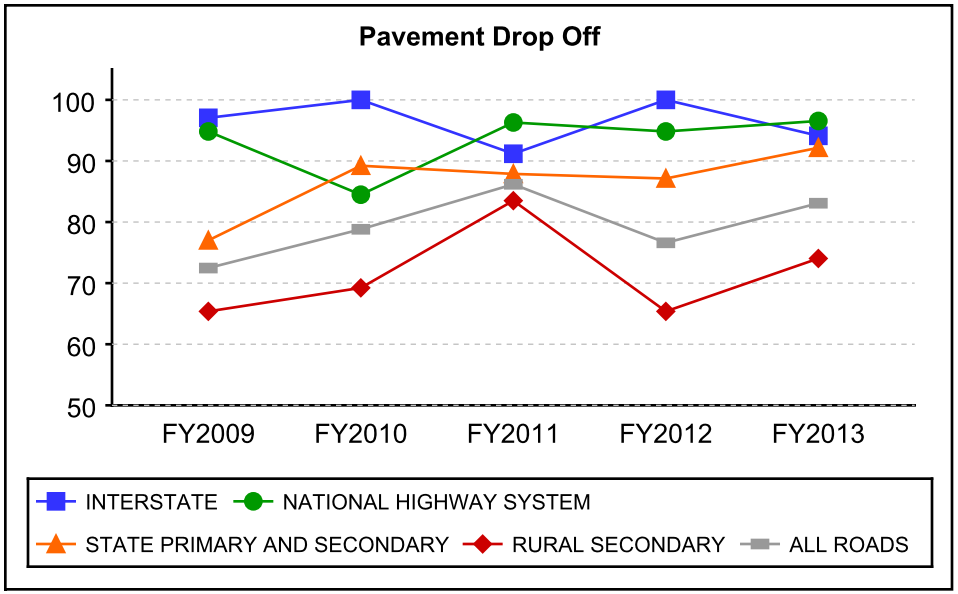
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Pavement Drop Off
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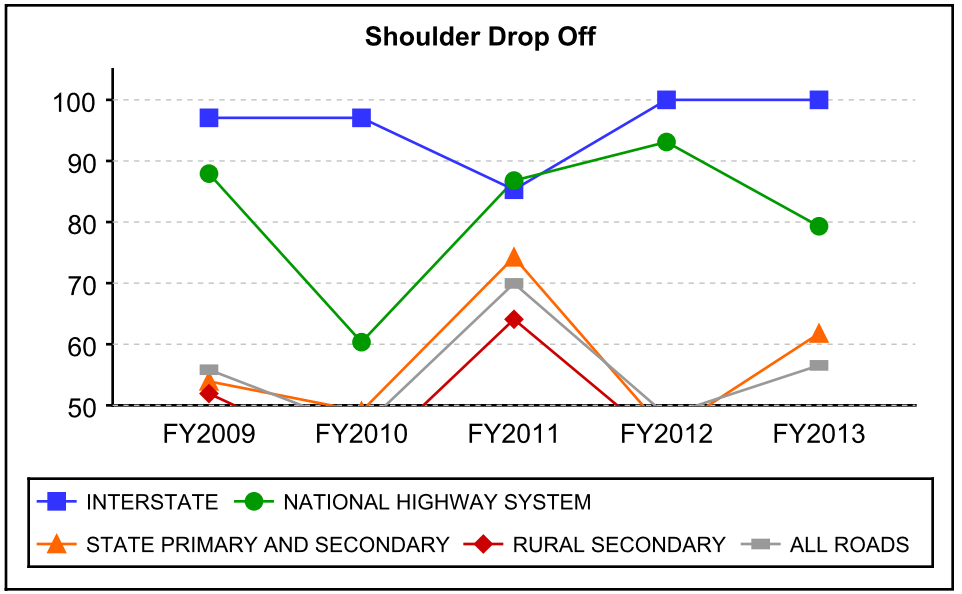
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Shoulder Drop Off
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INTERSTATE
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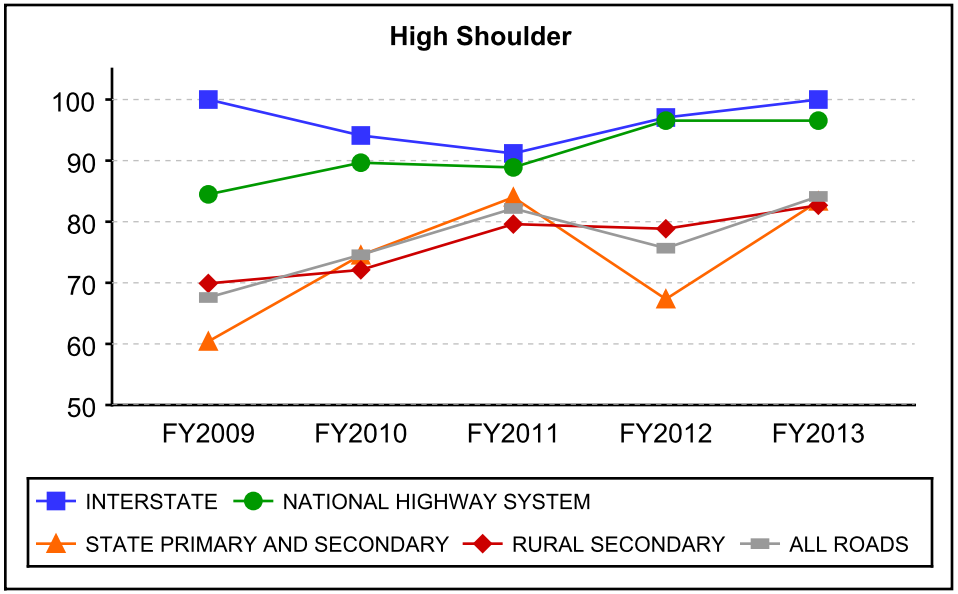
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


High Shoulder
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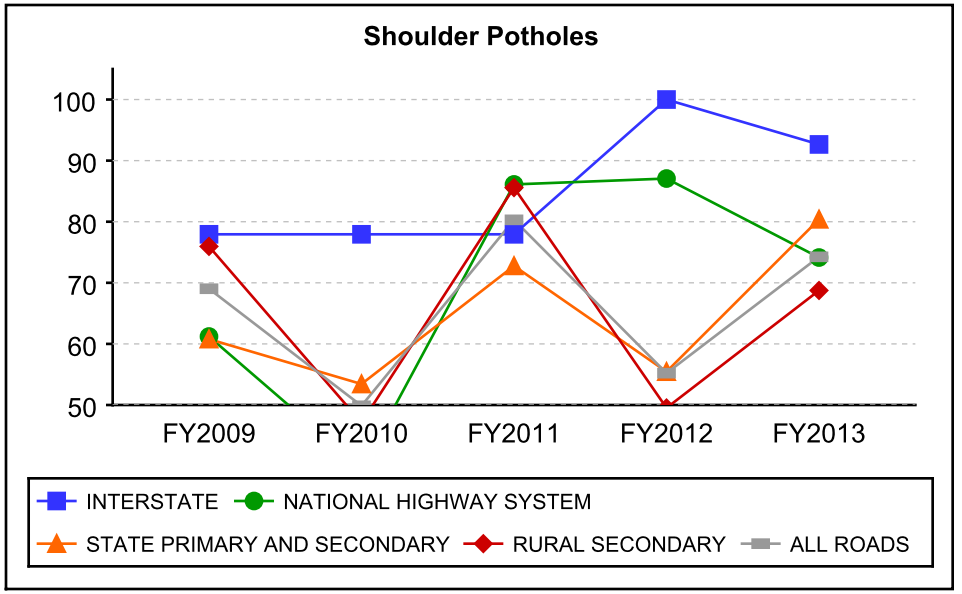
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Shoulder Potholes
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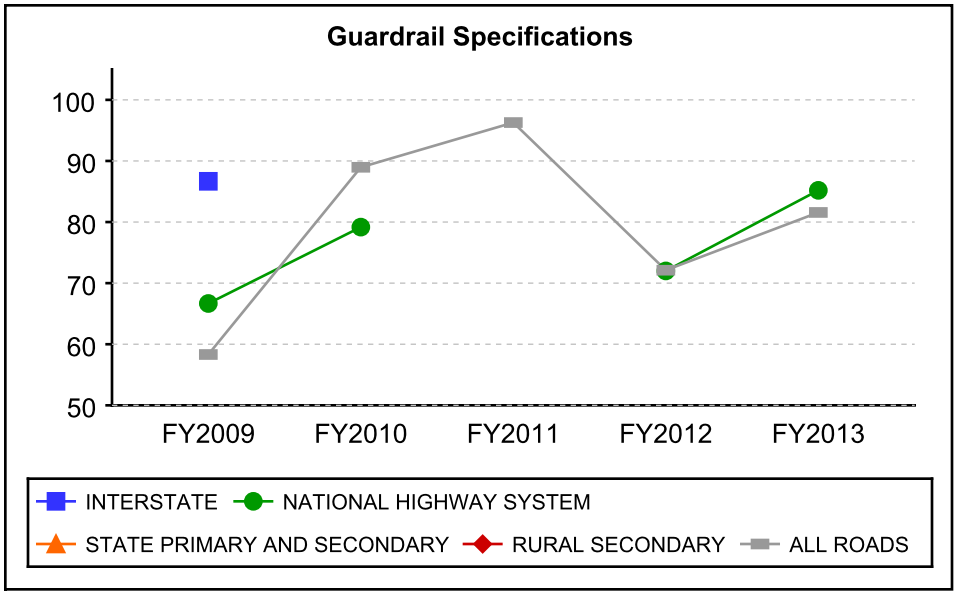
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Guardrail Specifications
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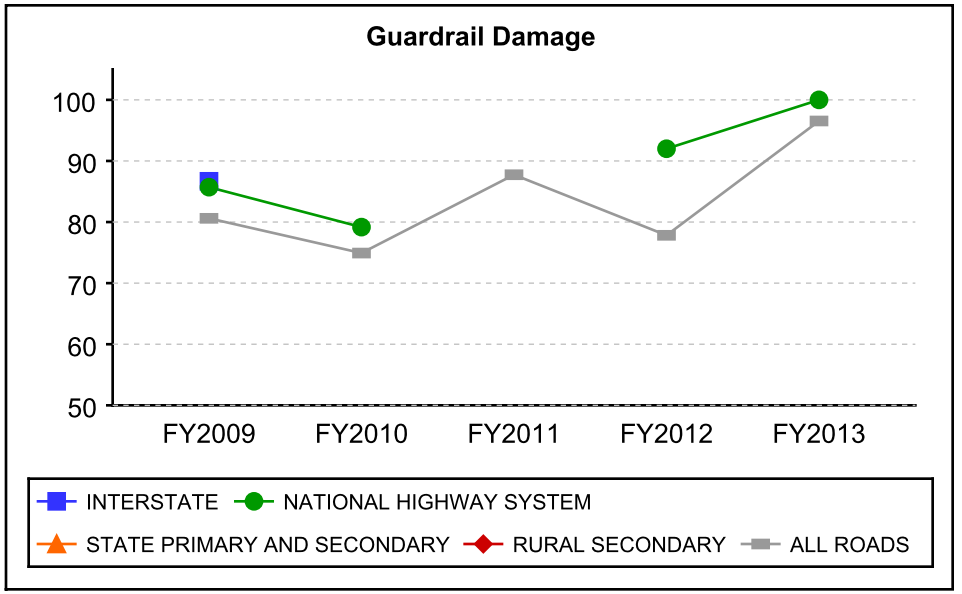
ALL ROADS


Guardrail Damage
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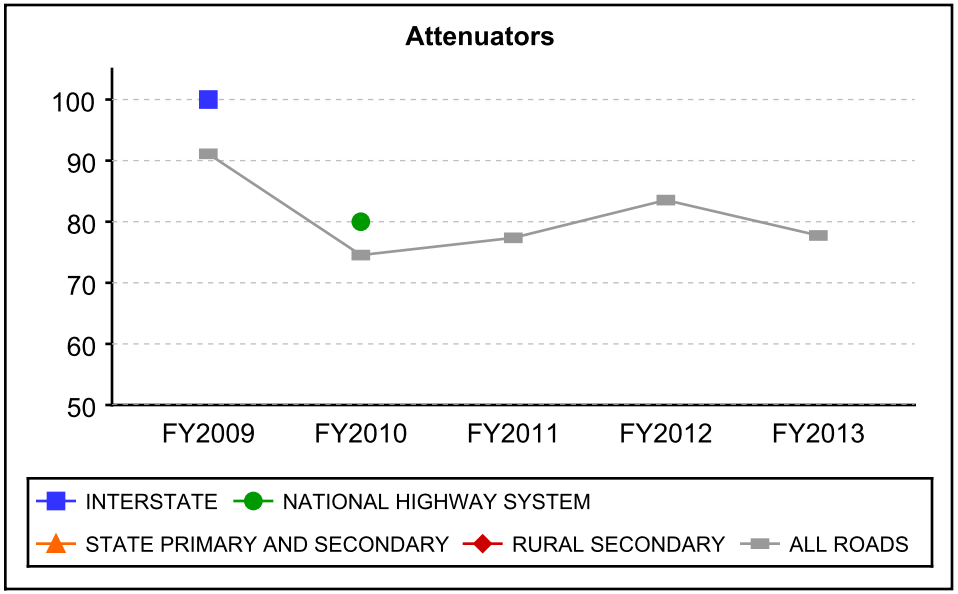
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS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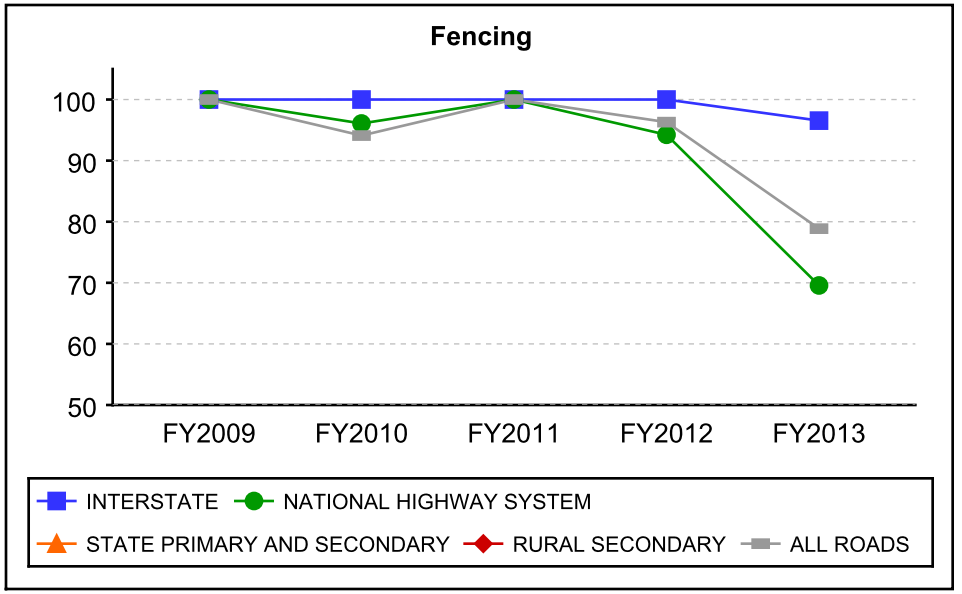
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS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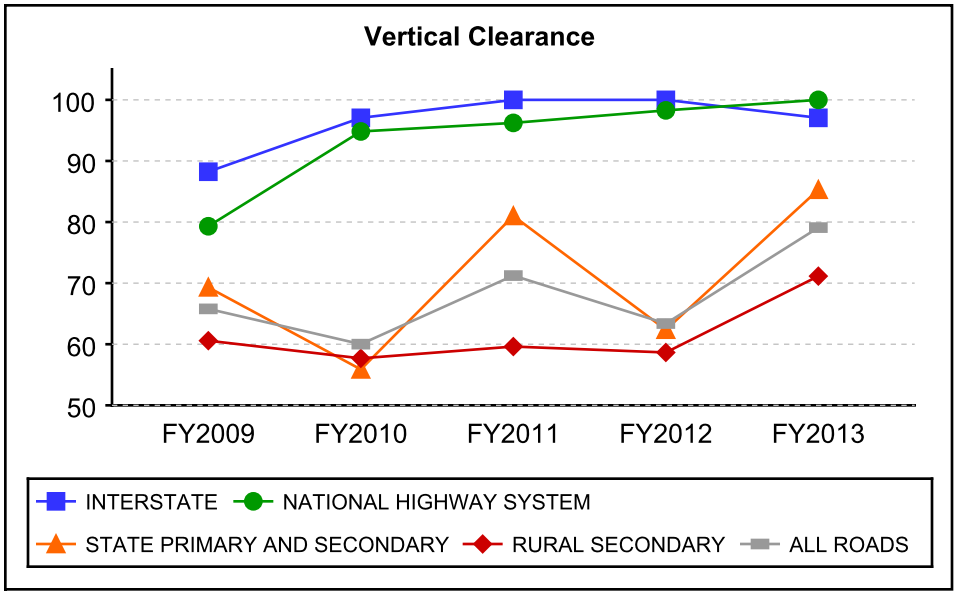
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Vertical Clearance
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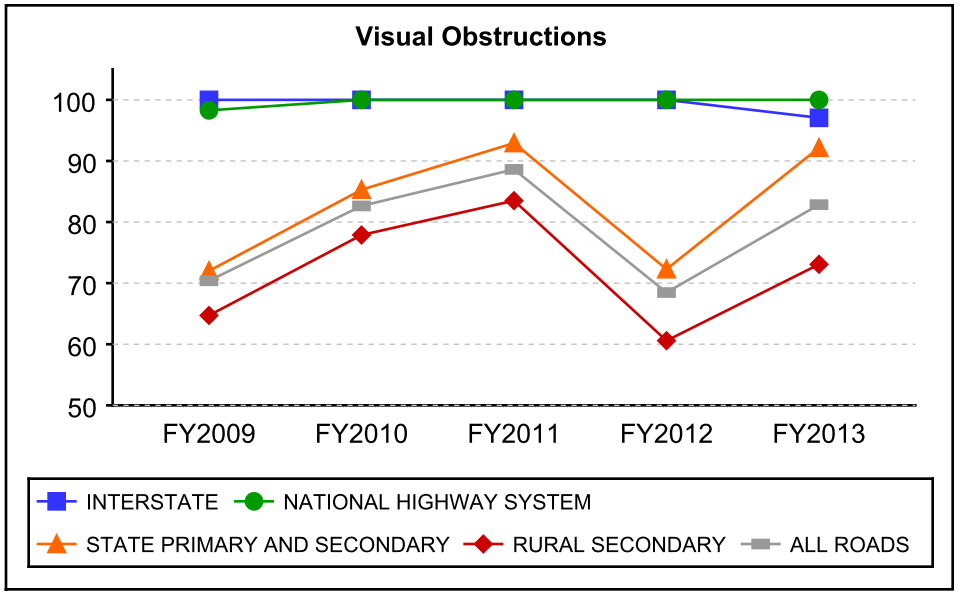
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Visual Obstructions
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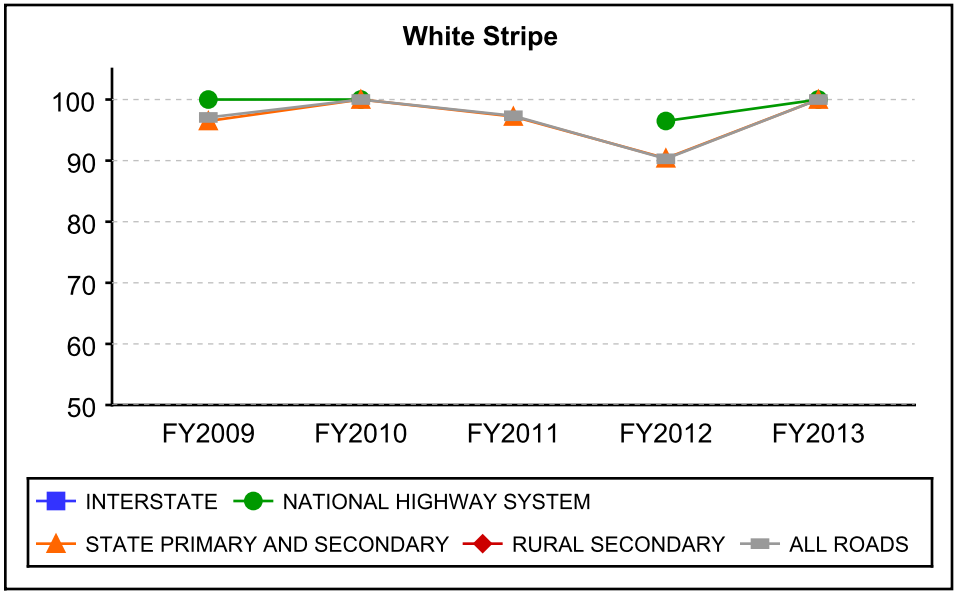
RURAL SECONDARY
ALL ROADS


White Stripe
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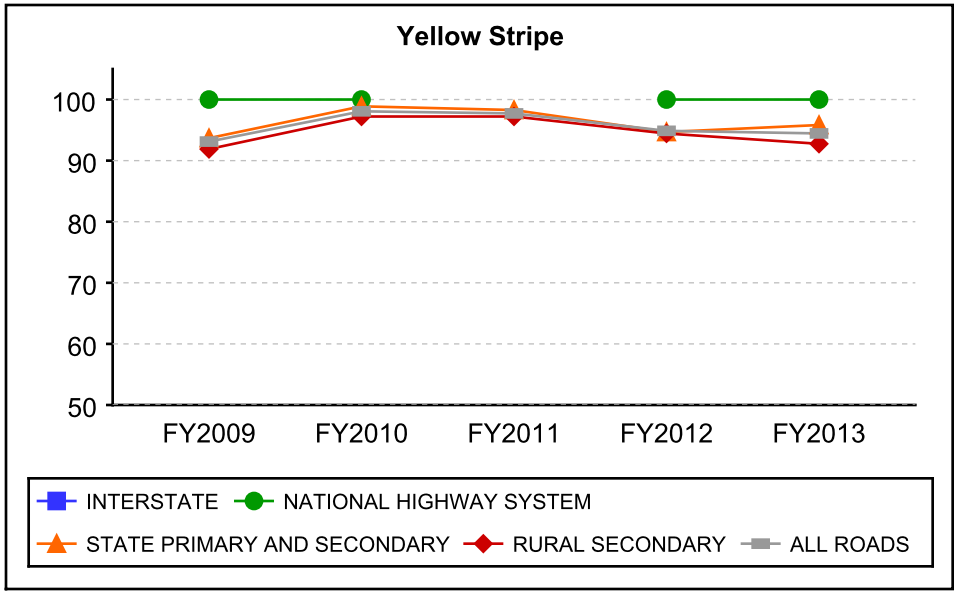
RURAL SECONDARY
ALL ROADS


Yellow Stripe
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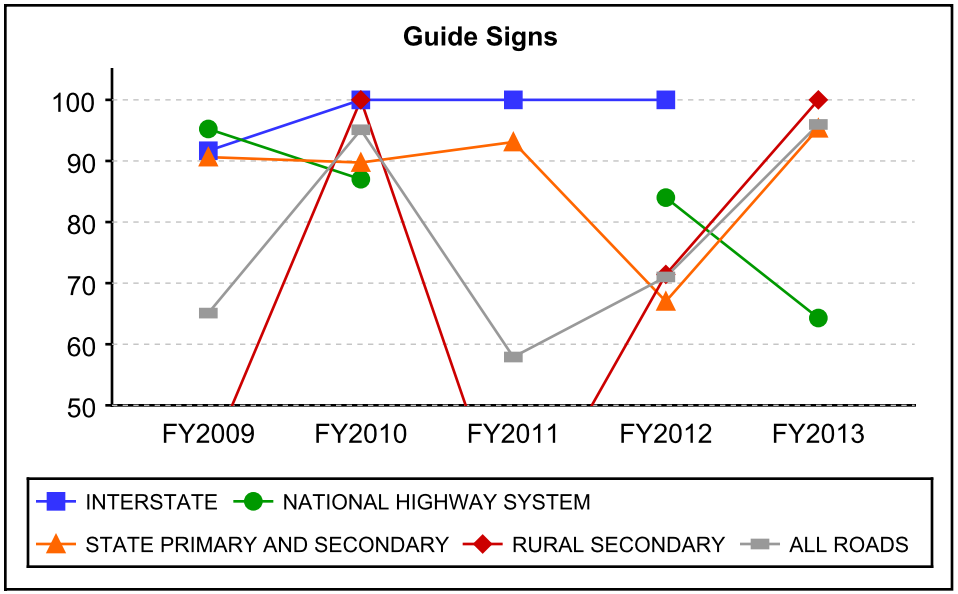
RURAL SECONDARY
ALL ROADS


Guide Signs
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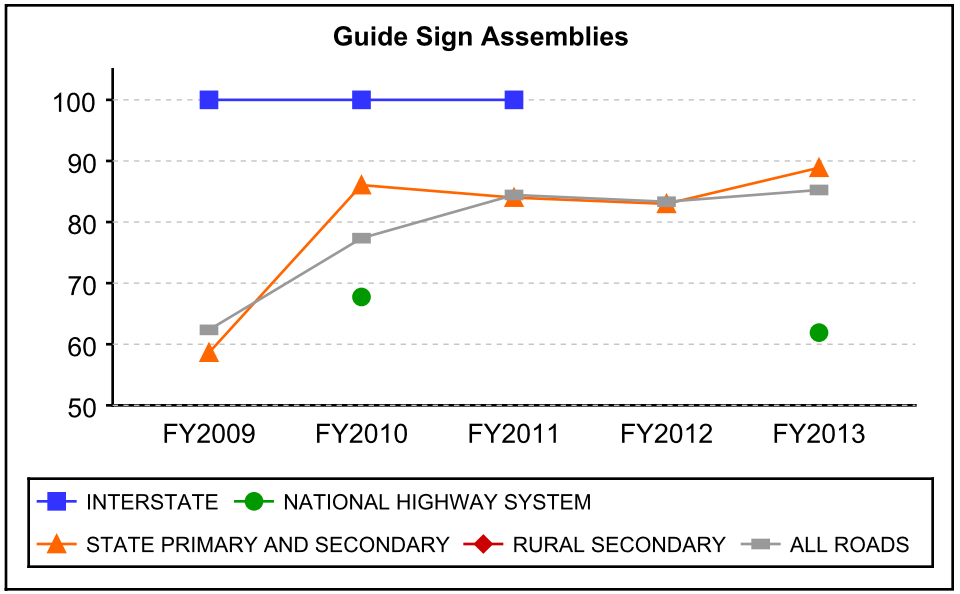
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Guide Sign Assemblies
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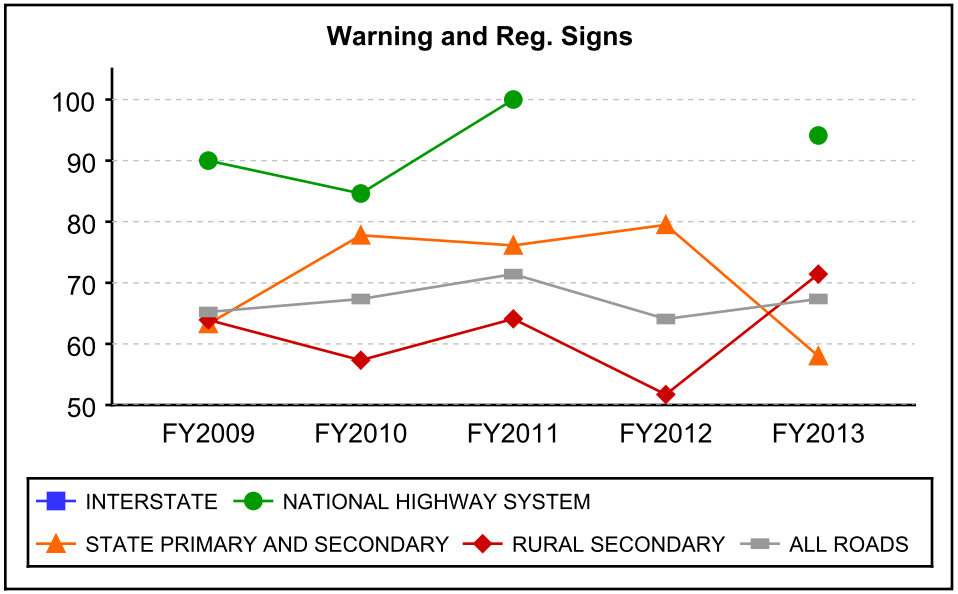
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Warning and Reg. Signs
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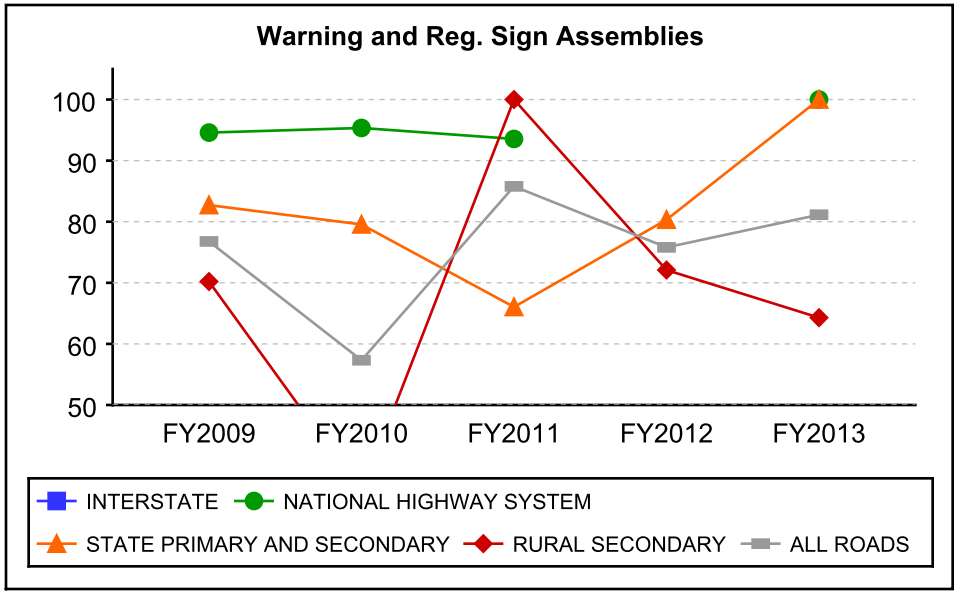
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Warning and Reg. Sign Assemblies
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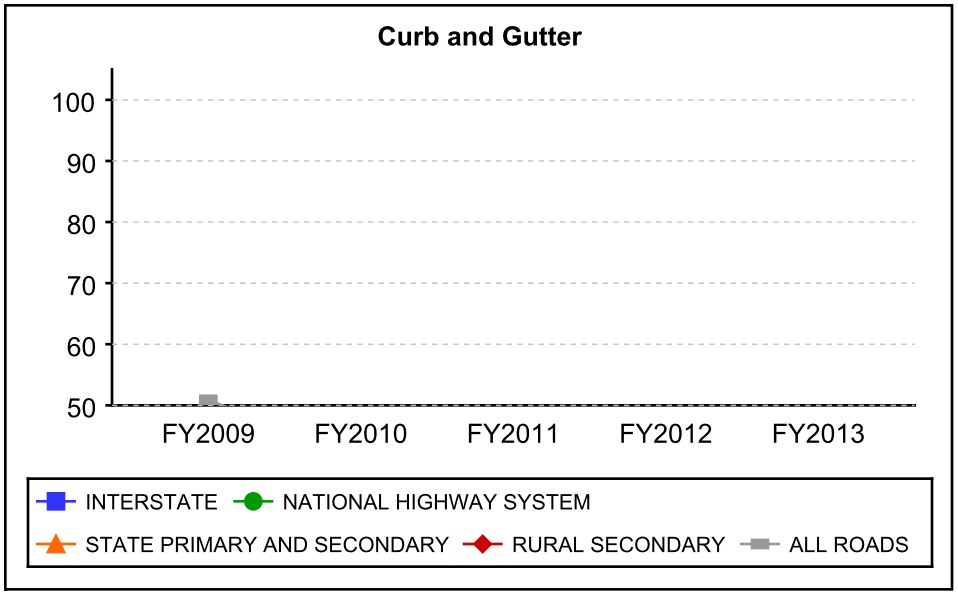
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Curb and Gutter
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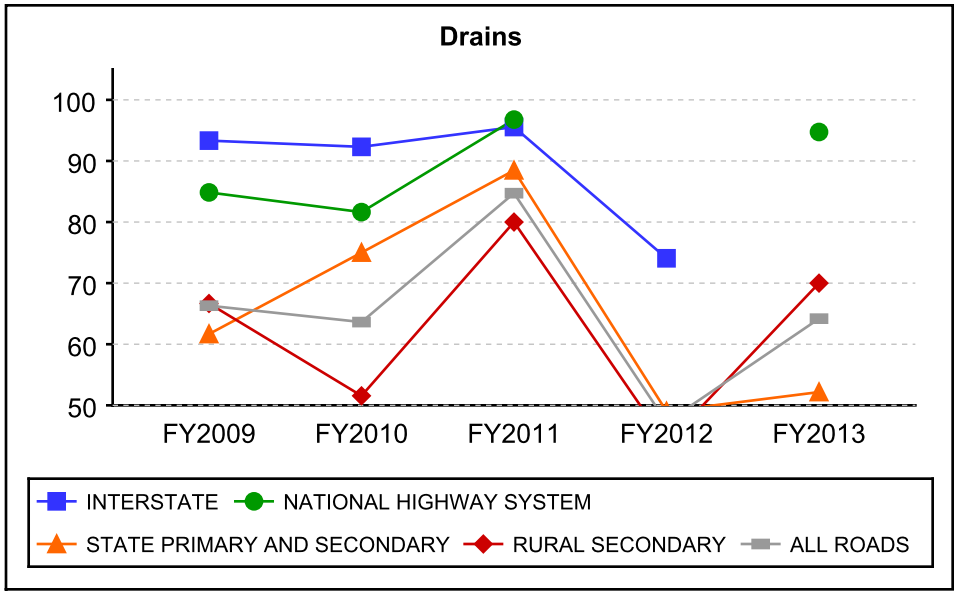
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Drains
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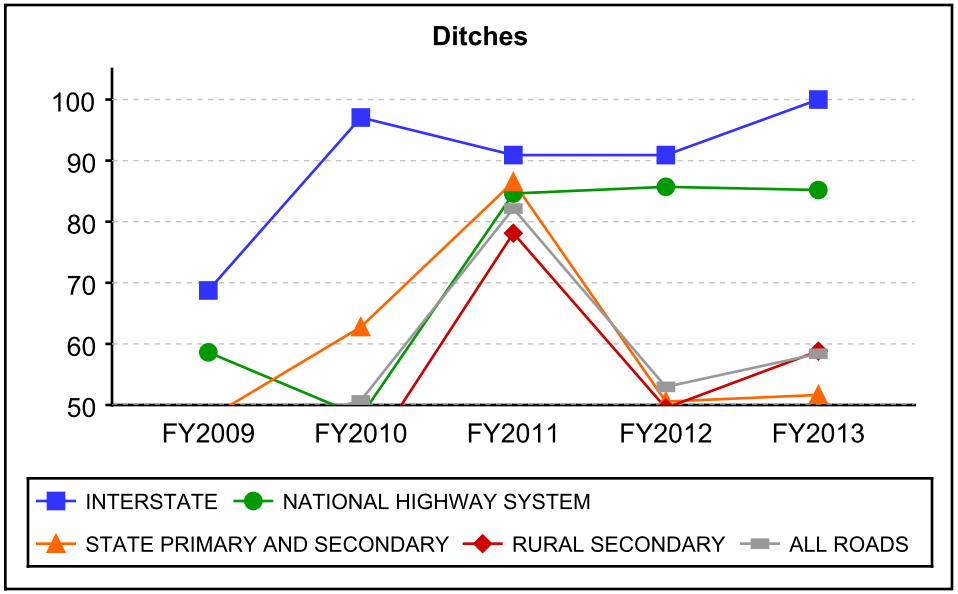
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Ditches
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INTERSTATE
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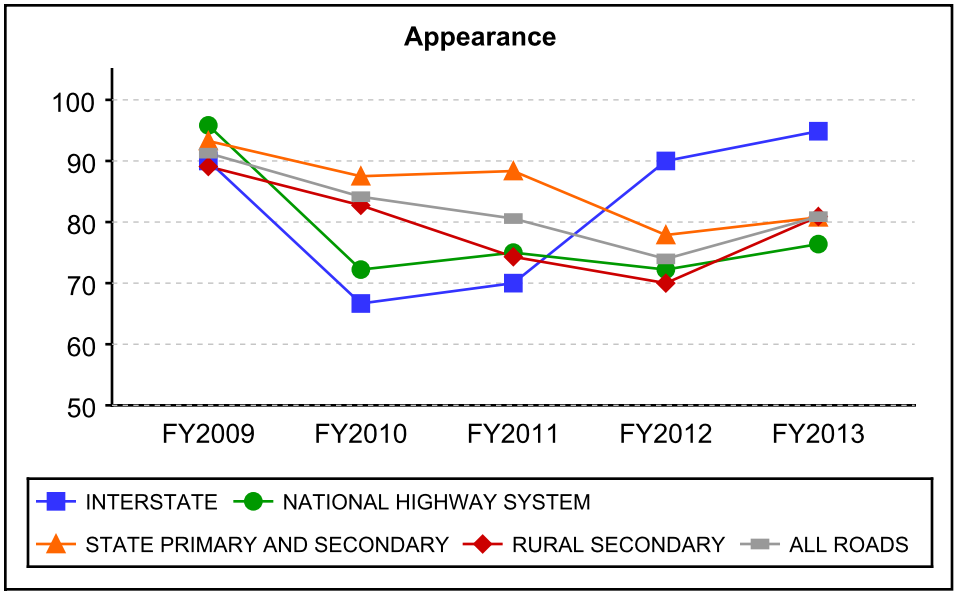
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Appearance
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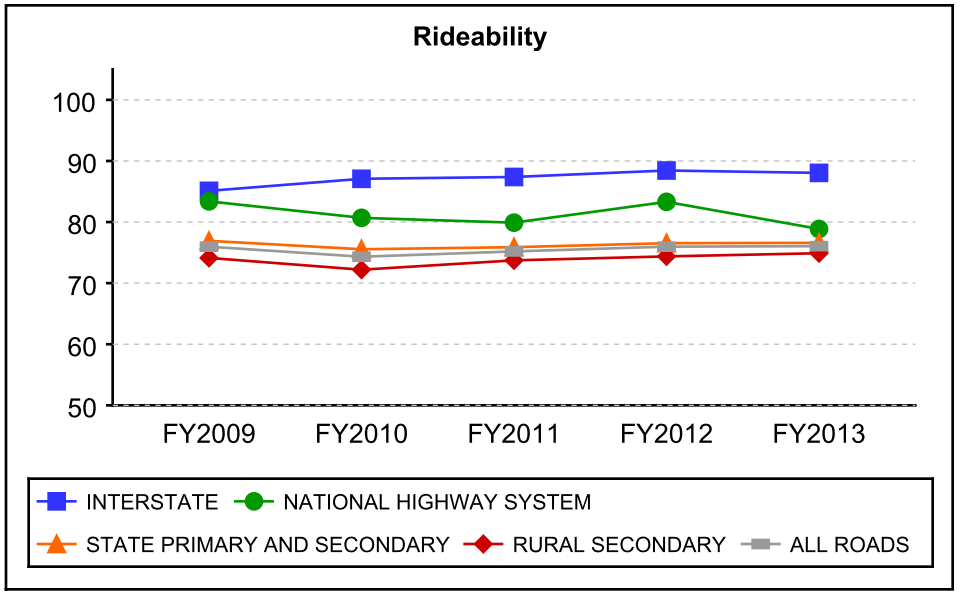
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Rideability
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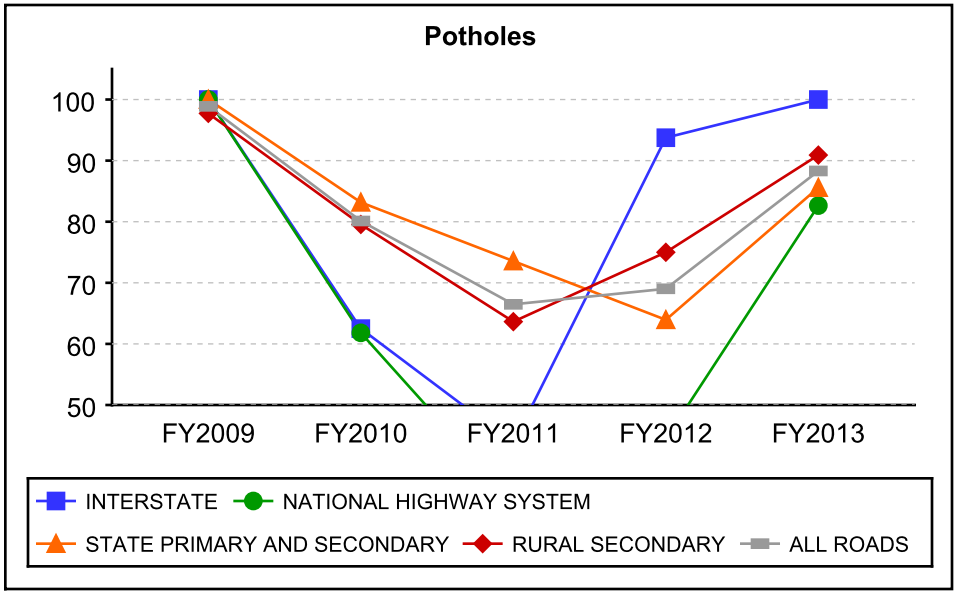
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Potholes
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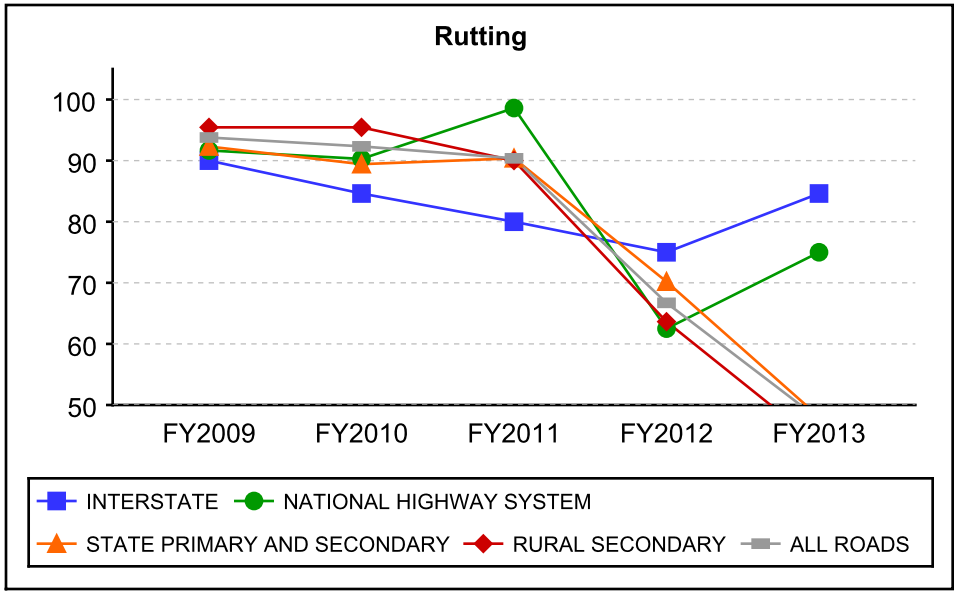
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Rutting
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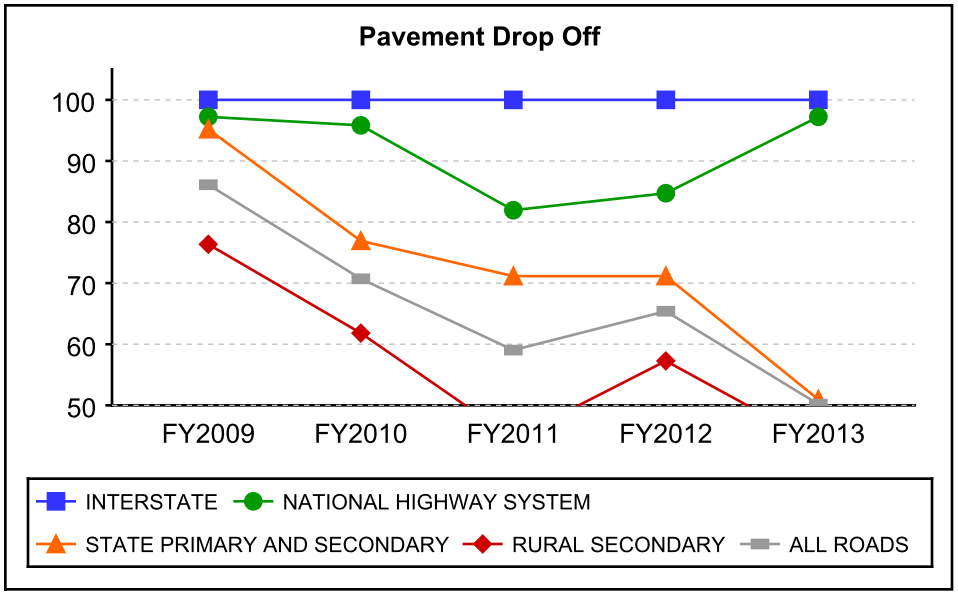
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Pavement Drop Off
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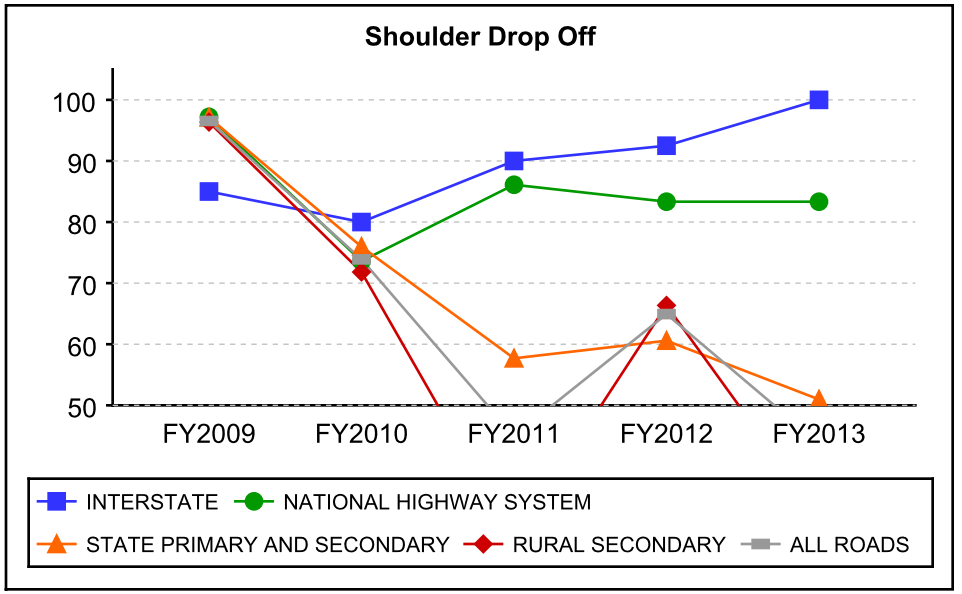
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Shoulder Drop Off
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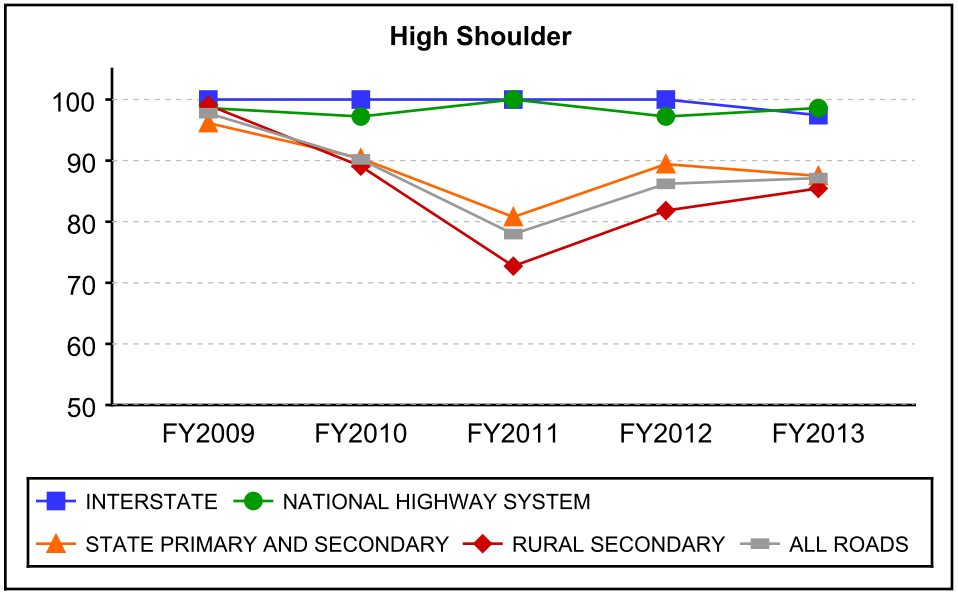
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


High Shoulder
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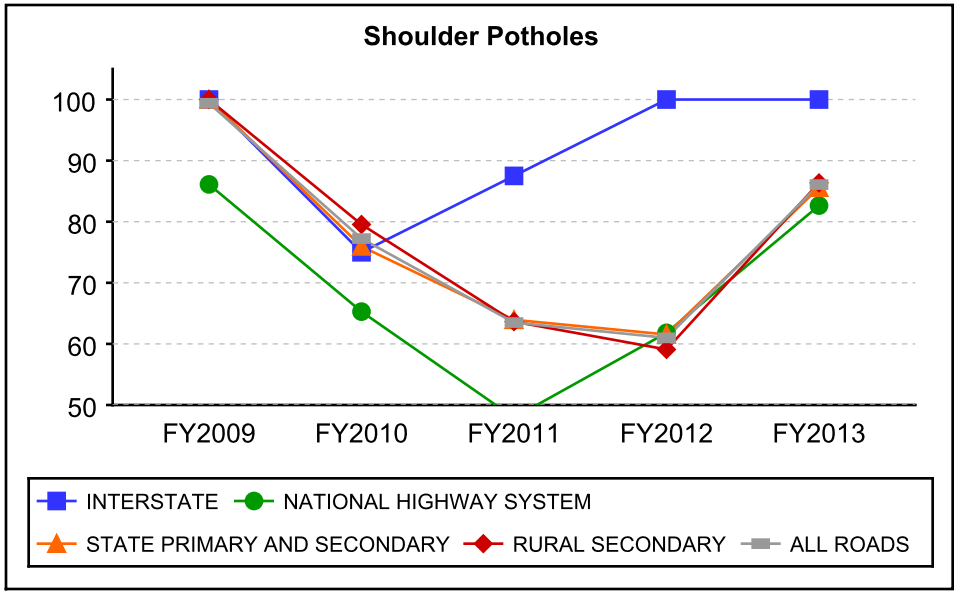
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Shoulder Potholes
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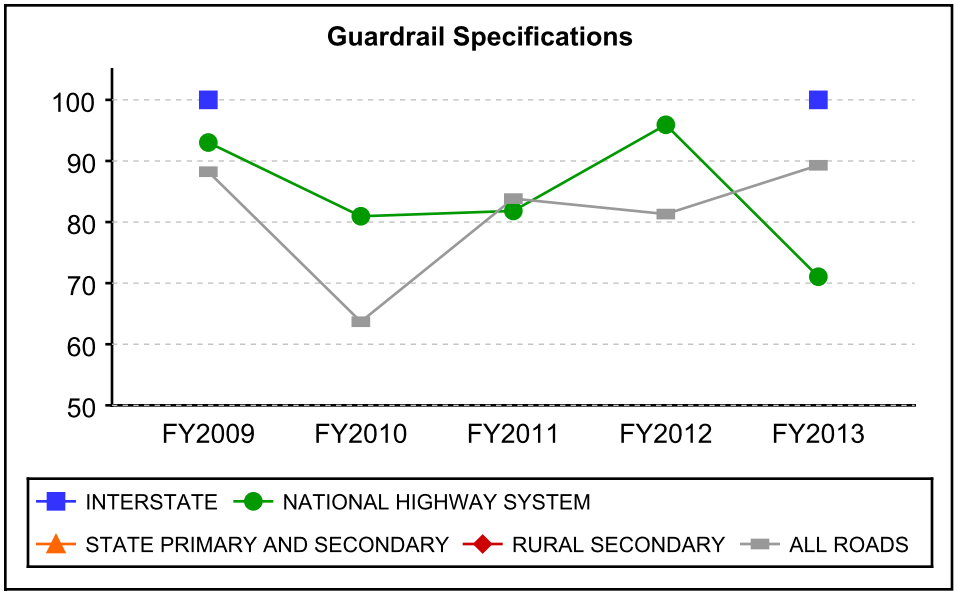
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Guardrail Specifications
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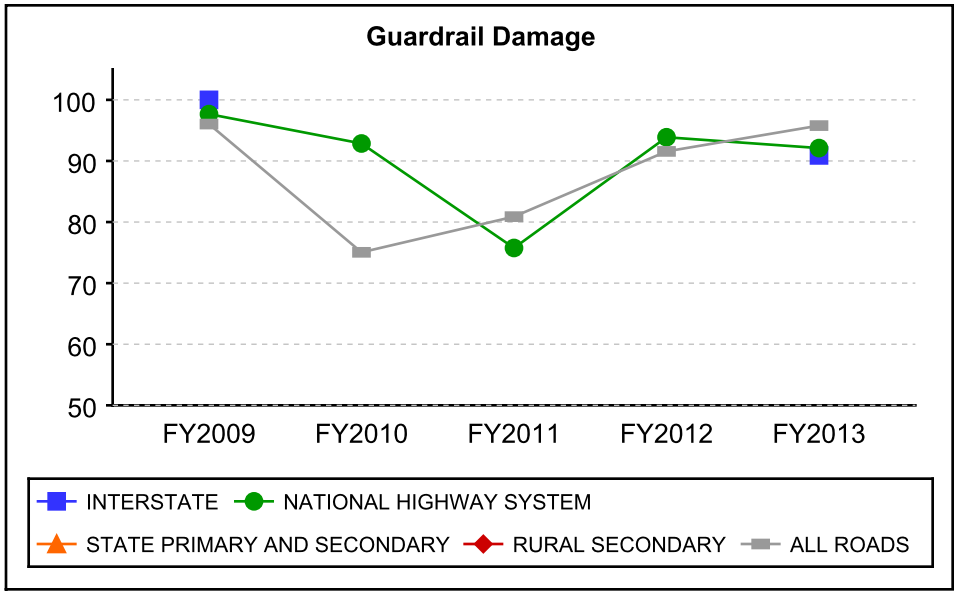
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Guardrail Damage
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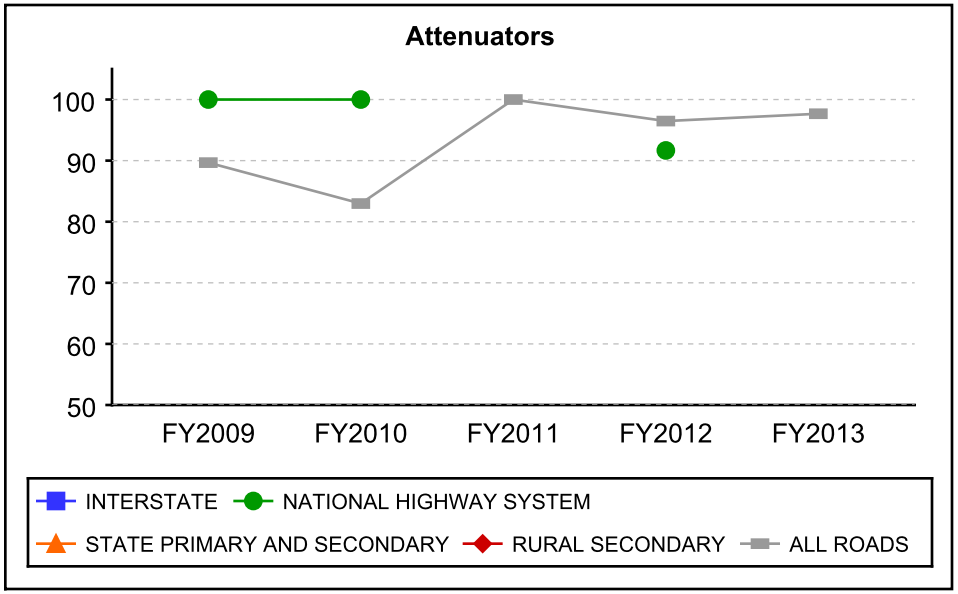
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Attenuators
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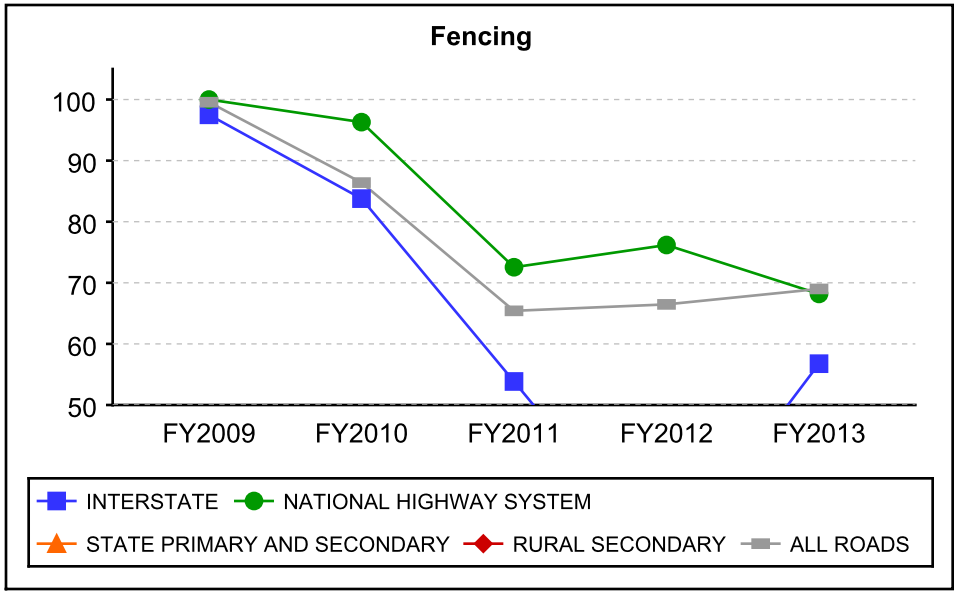
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Fencing
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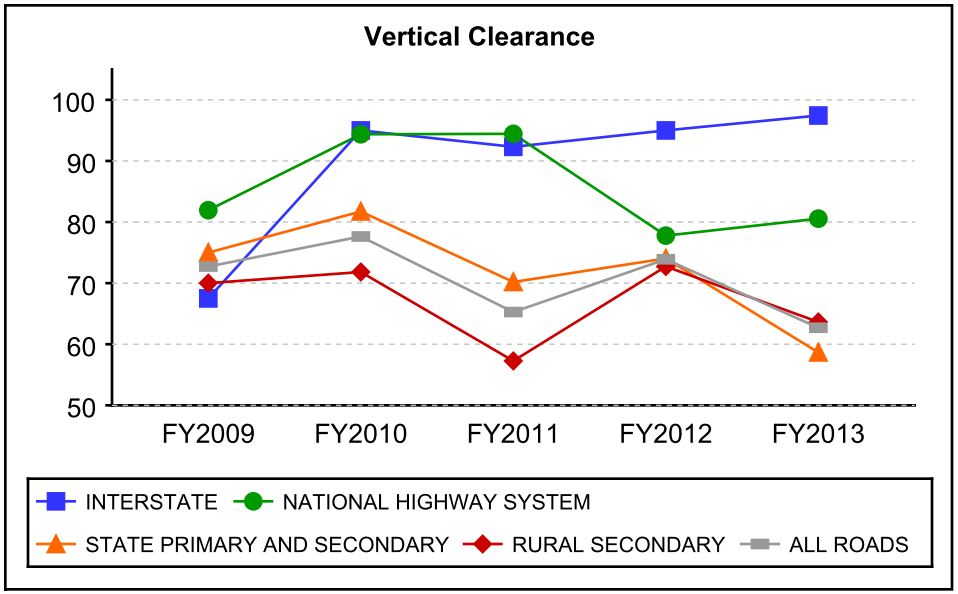
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Vertical Clearance
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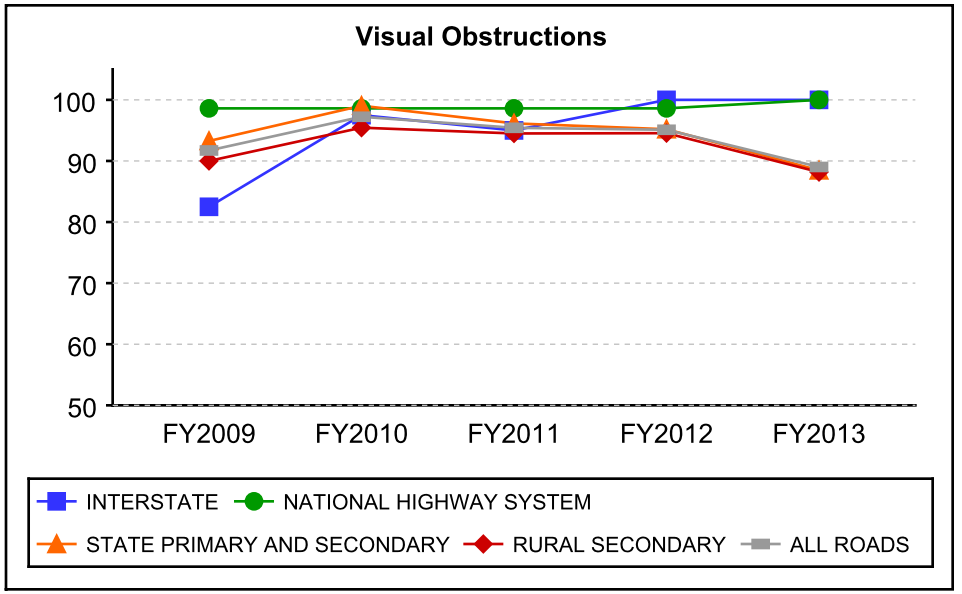
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Visual Obstructions
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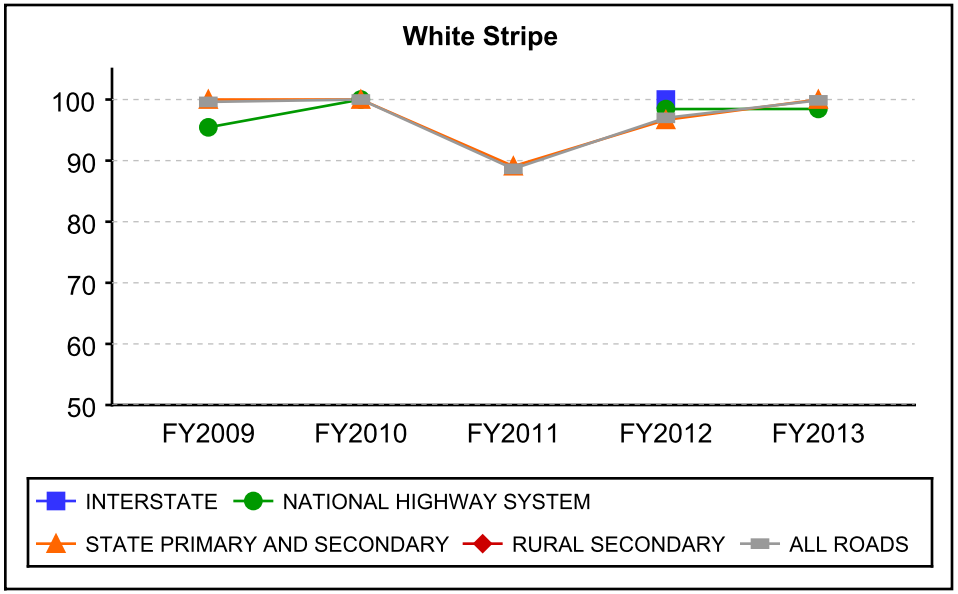
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


White Stripe
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INTERSTATE
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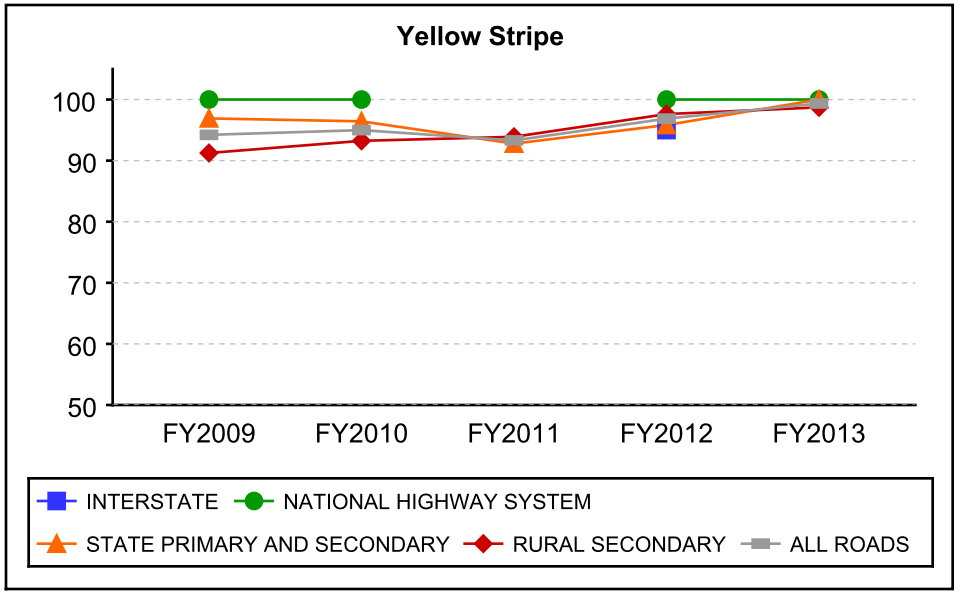
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Yellow Stripe
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INTERSTATE
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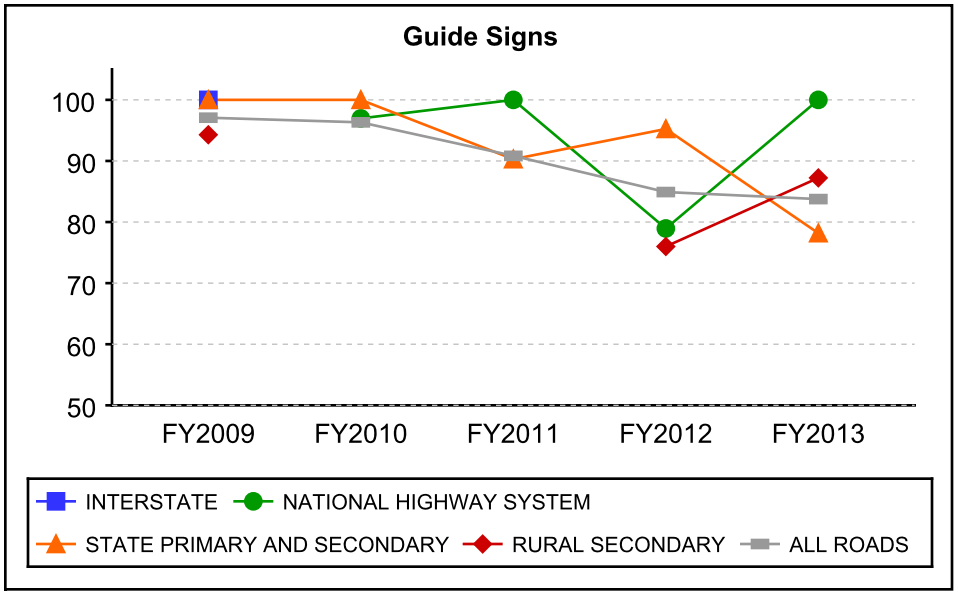
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Guide Signs
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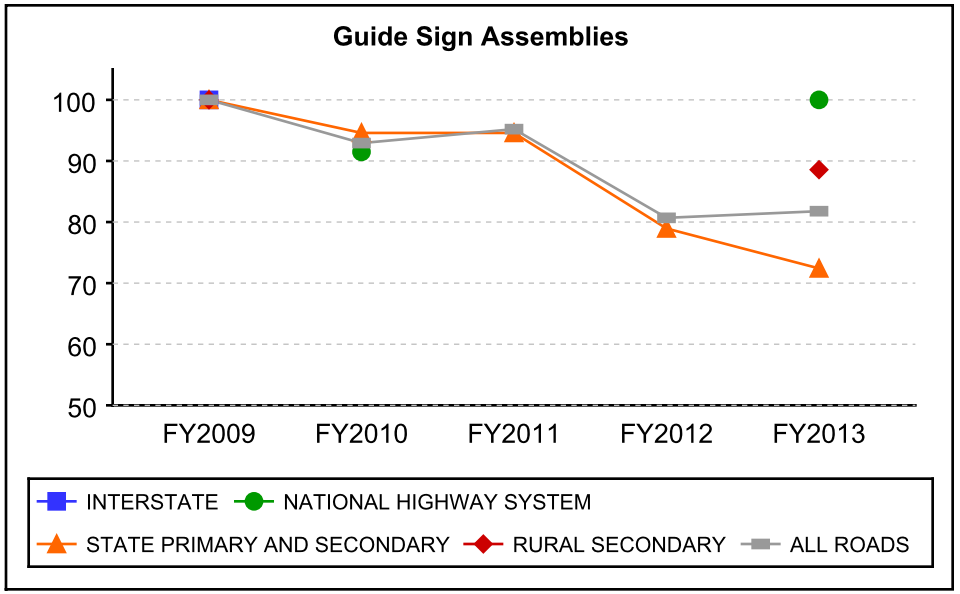
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Guide Sign Assemblies
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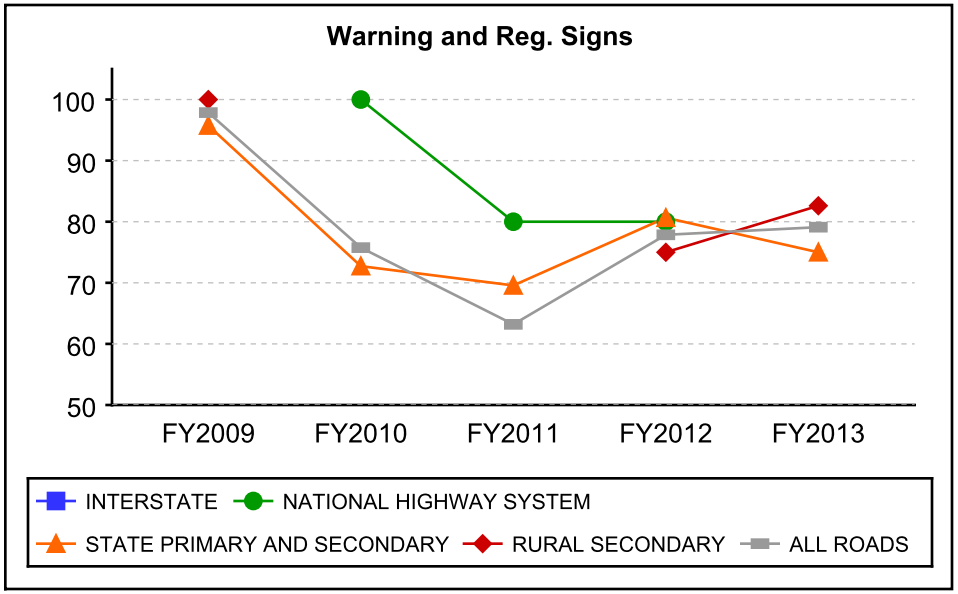
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Warning and Reg. Signs
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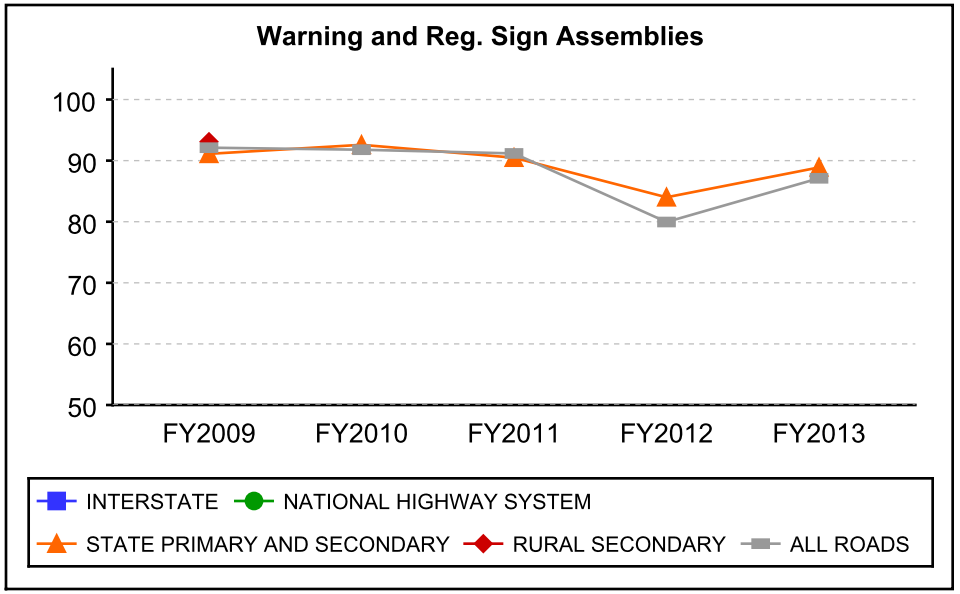
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Warning and Reg. Sign Assemblies
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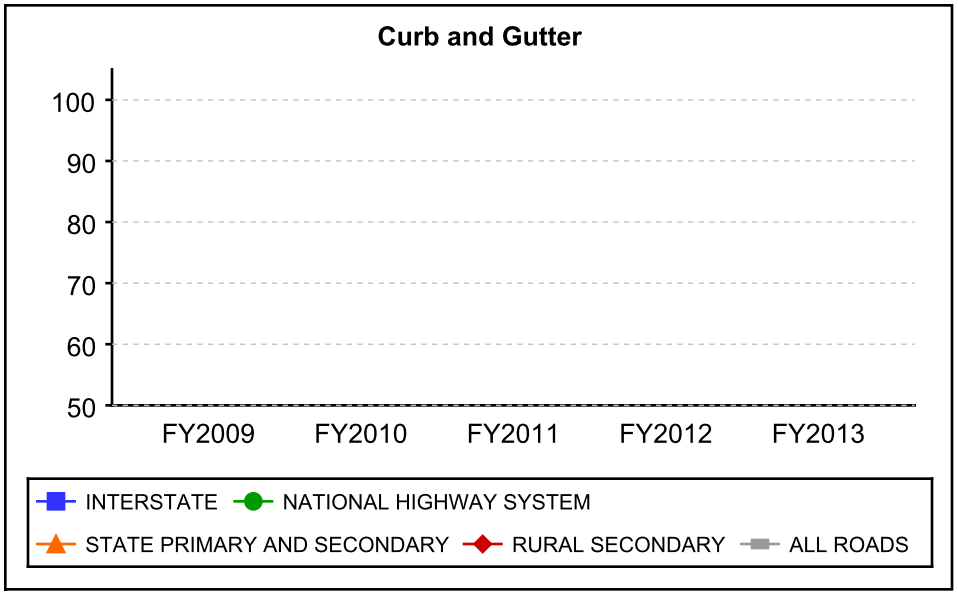
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Curb and Gutter
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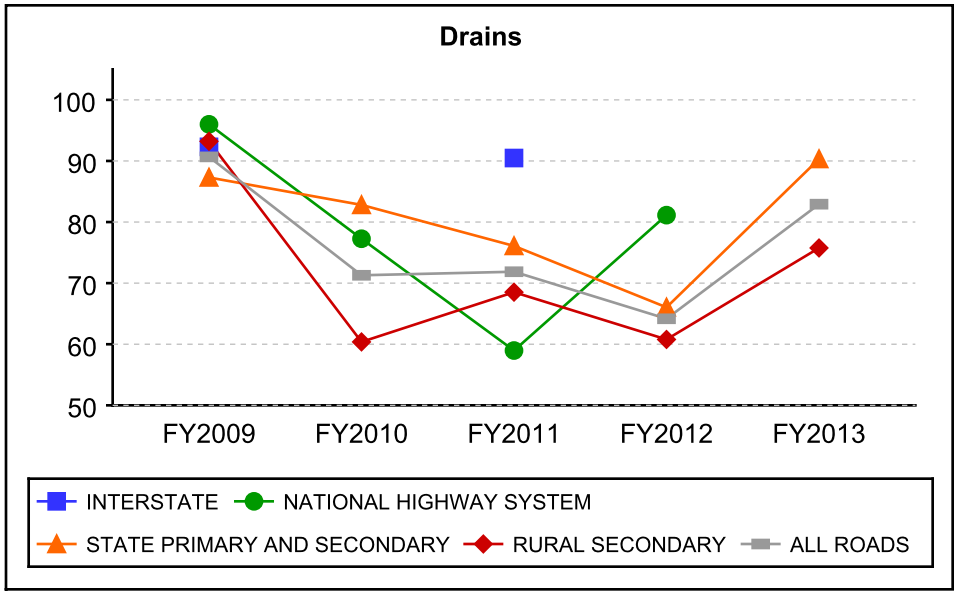
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Drains
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INTERSTATE
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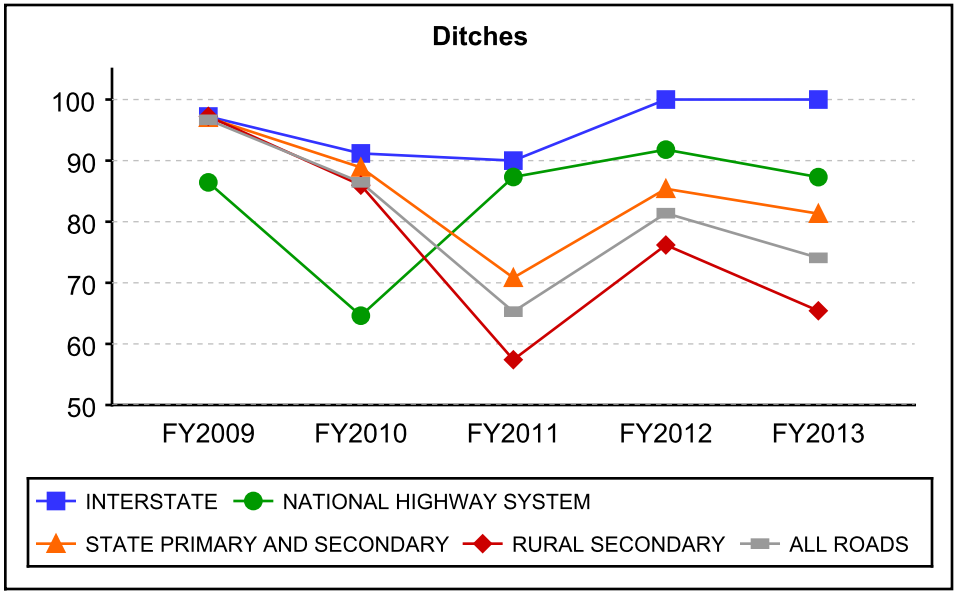
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Ditches
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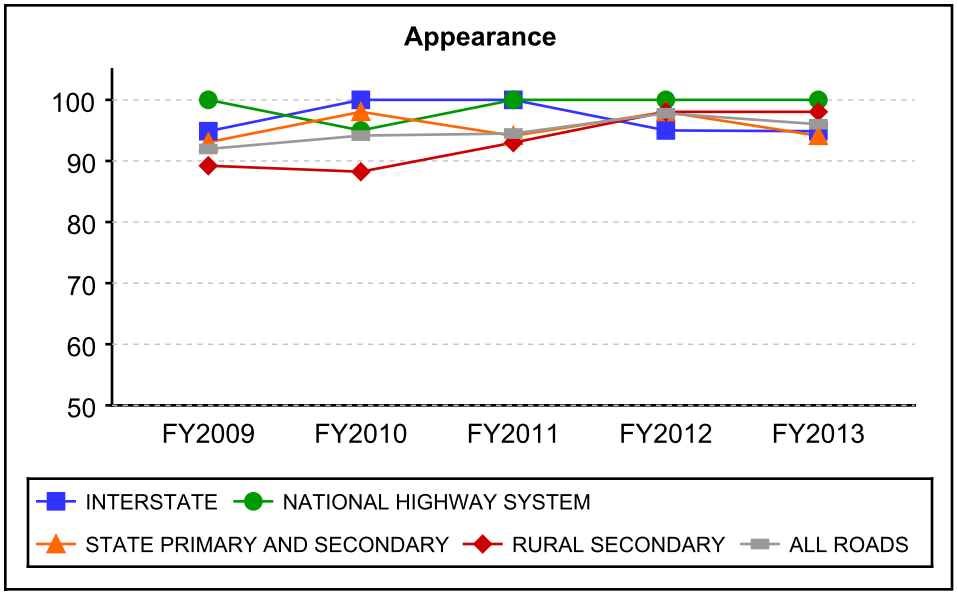
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Appearance
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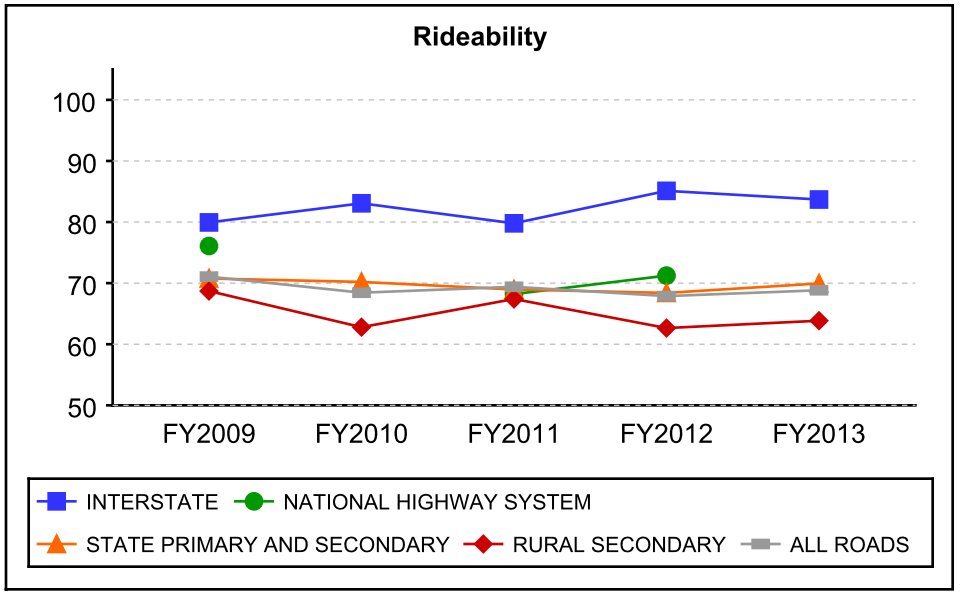
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Rideability
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INTERSTATE
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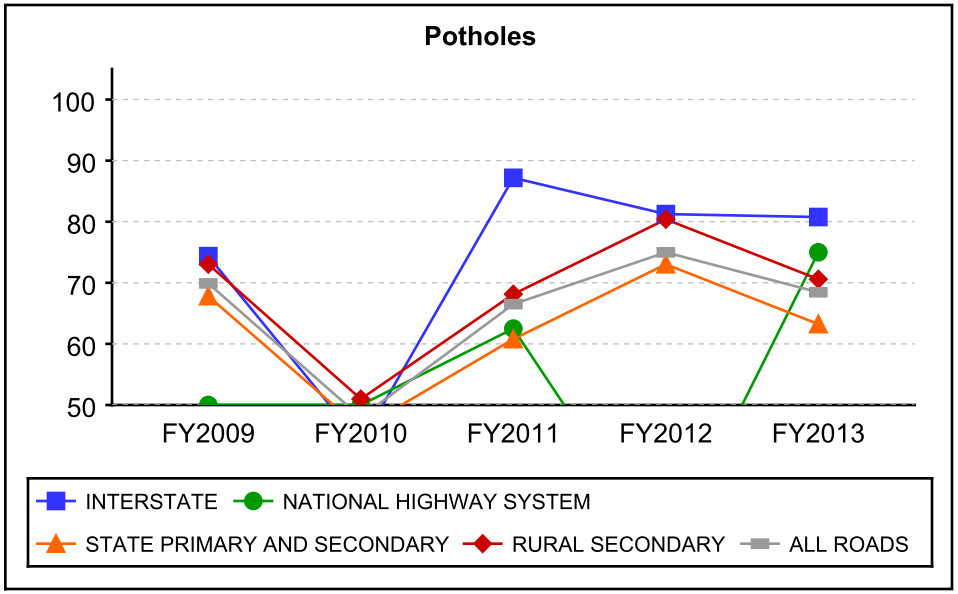
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Potholes
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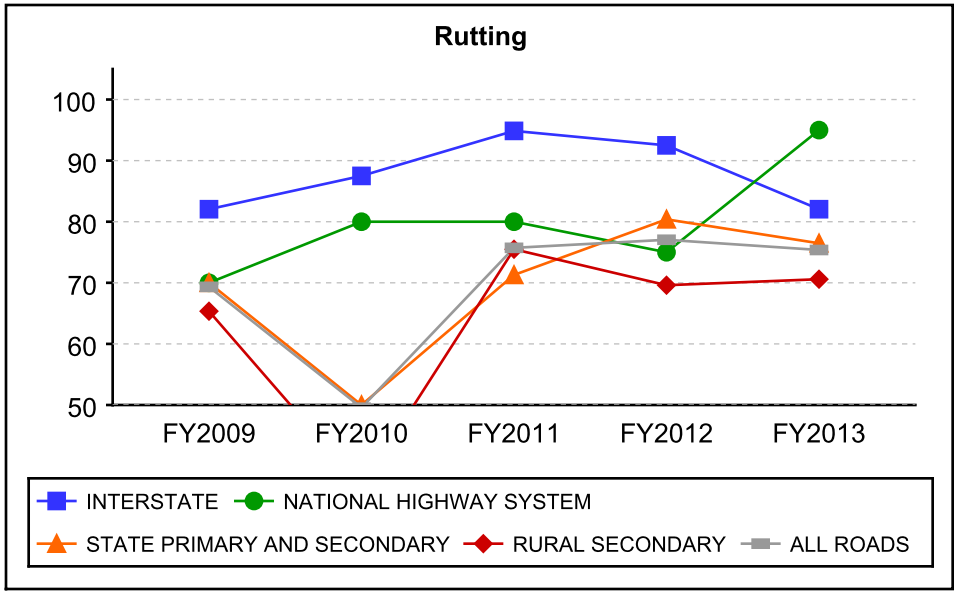
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Rutting
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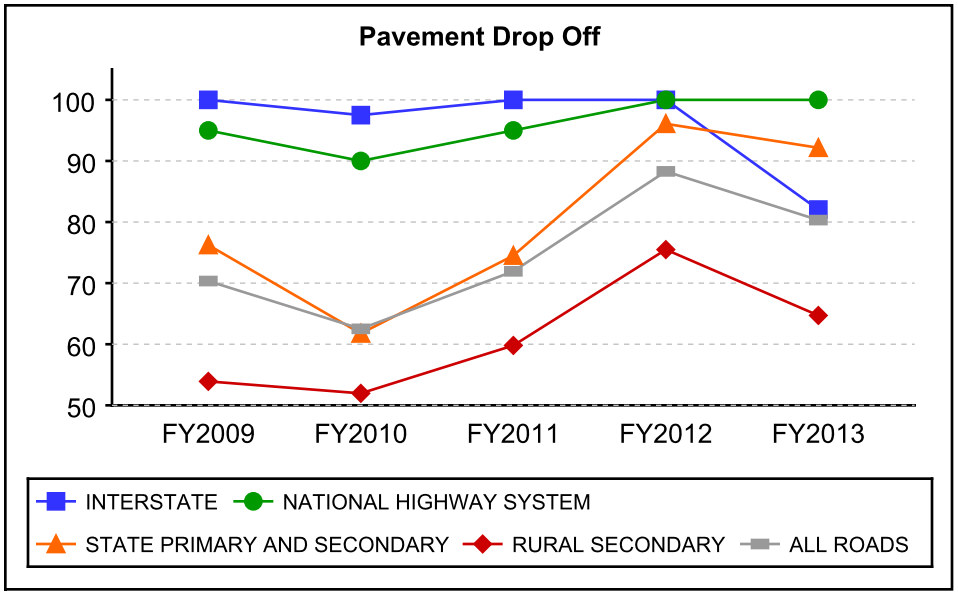
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Pavement Drop Off
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INTERSTATE
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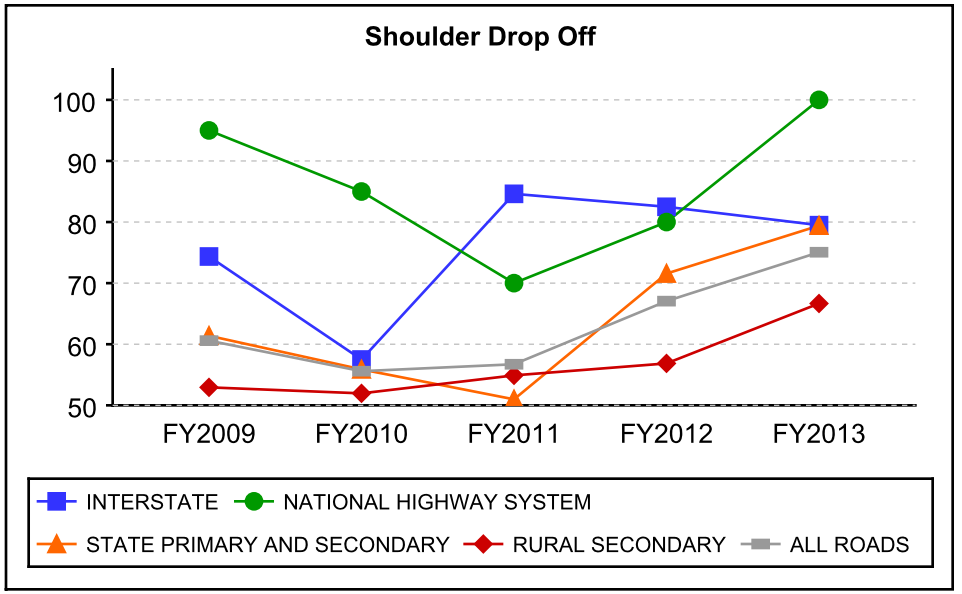
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Shoulder Drop Off
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INTERSTATE
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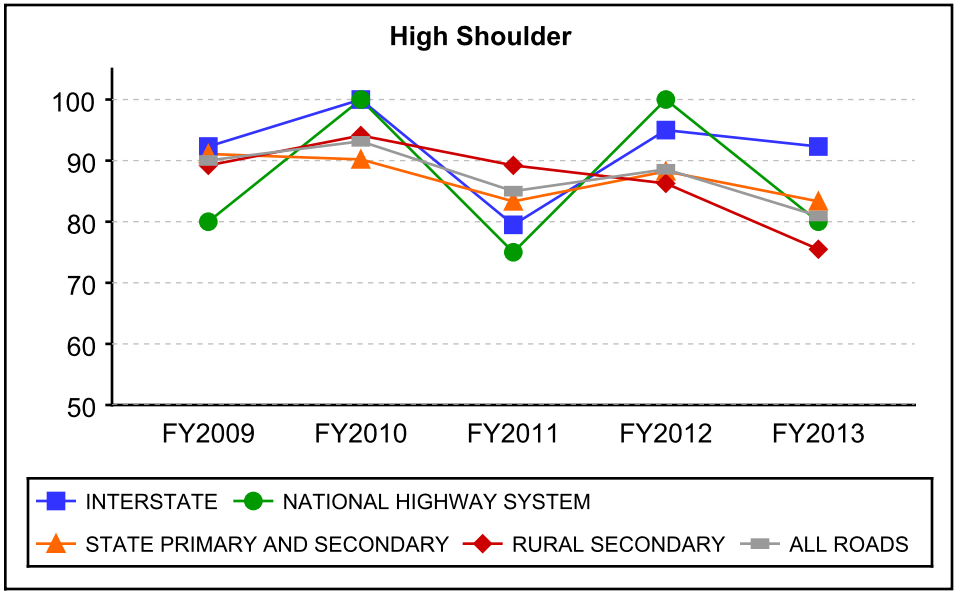
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


High Shoulder
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INTERSTATE
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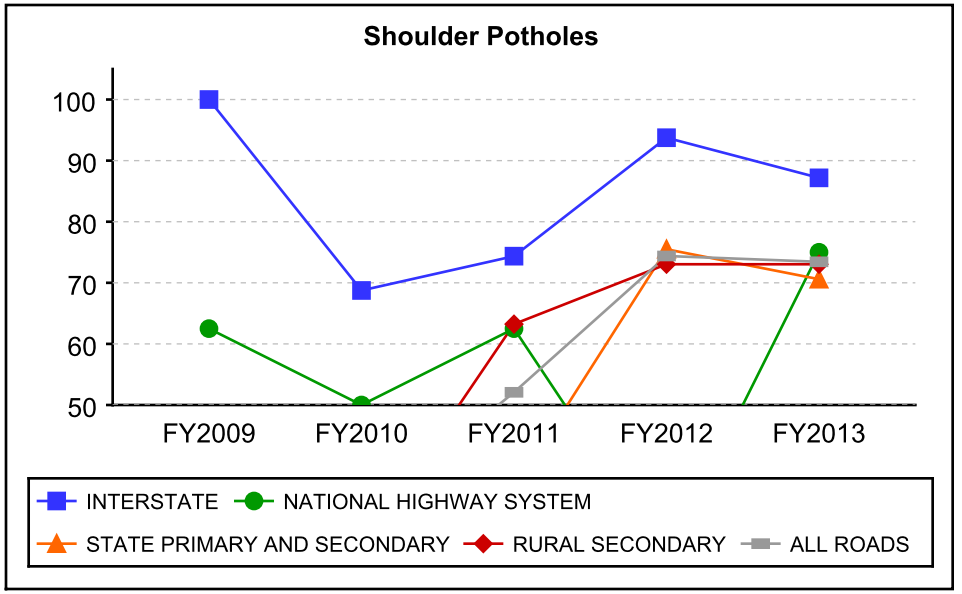
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Shoulder Potholes
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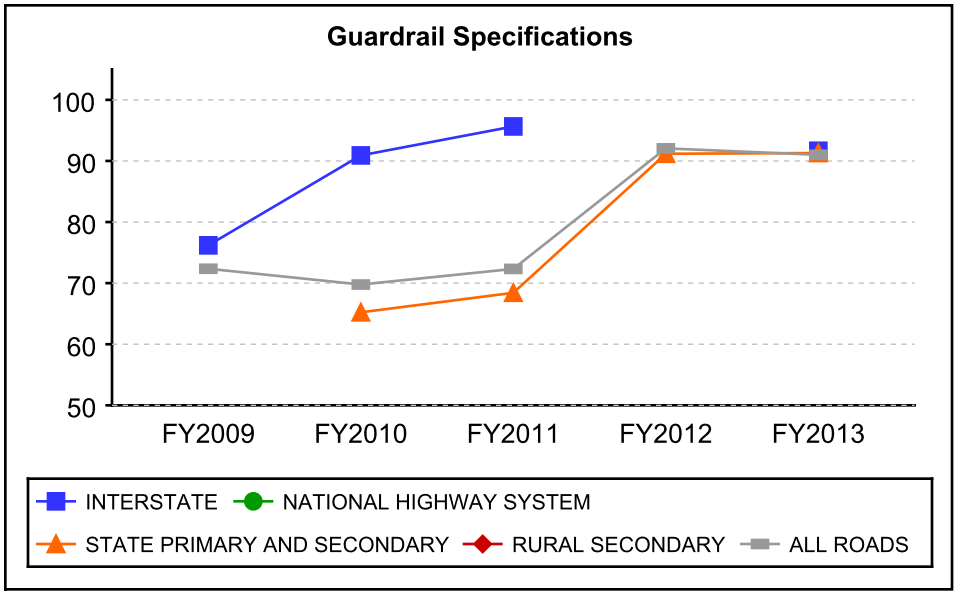
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Guardrail Specifications
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INTERSTATE
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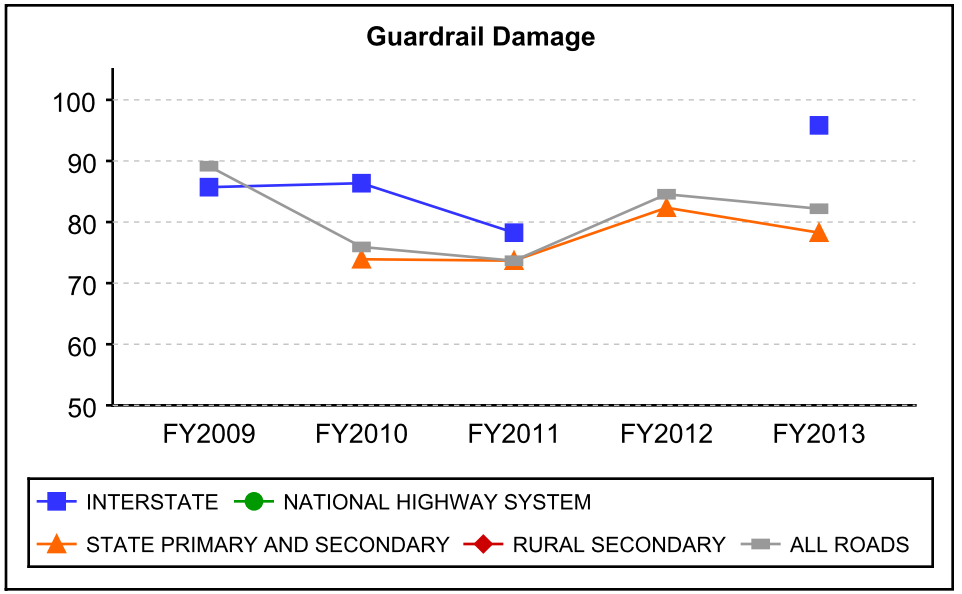
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Guardrail Damage
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INTERSTATE
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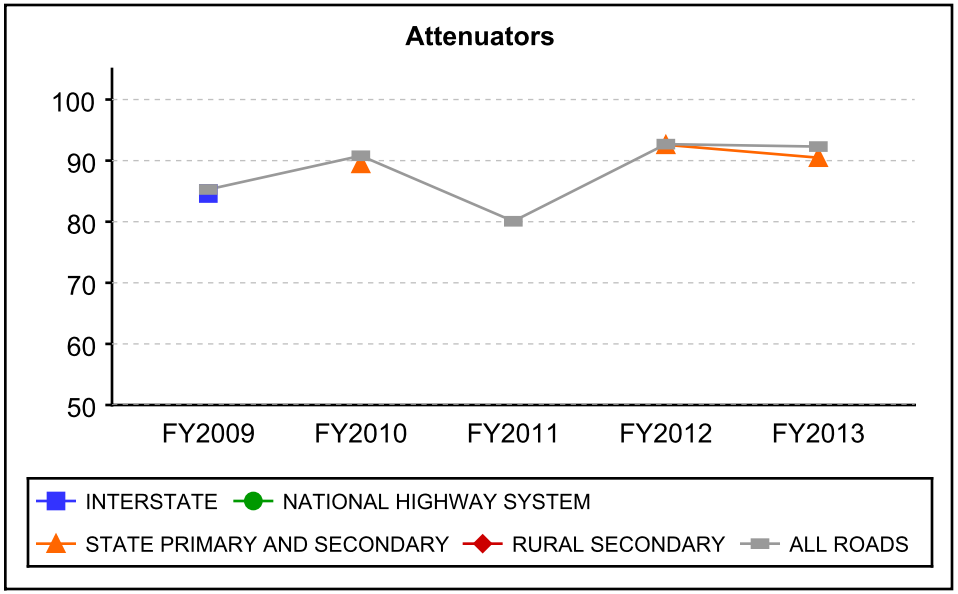
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Attenuators
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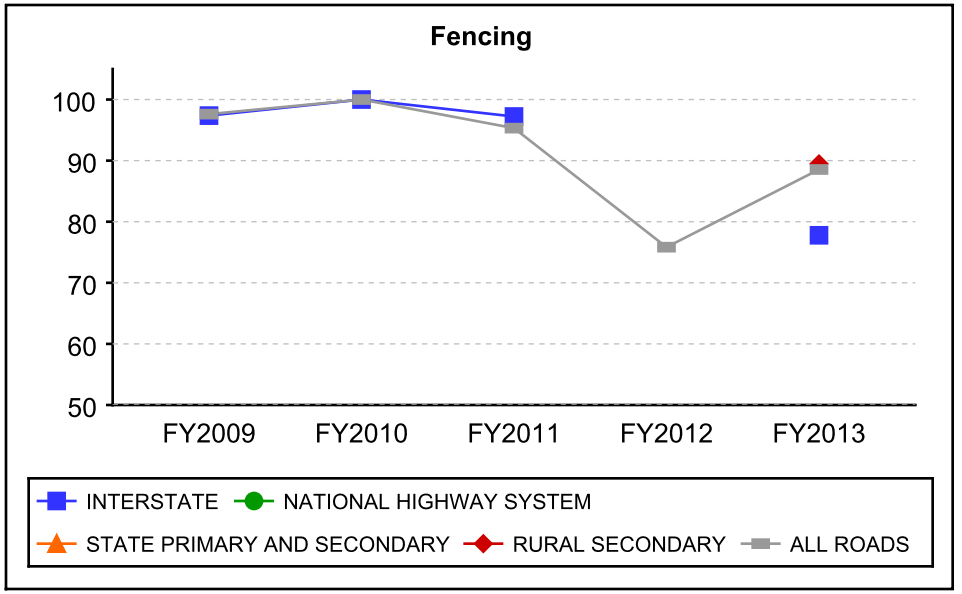
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Fencing
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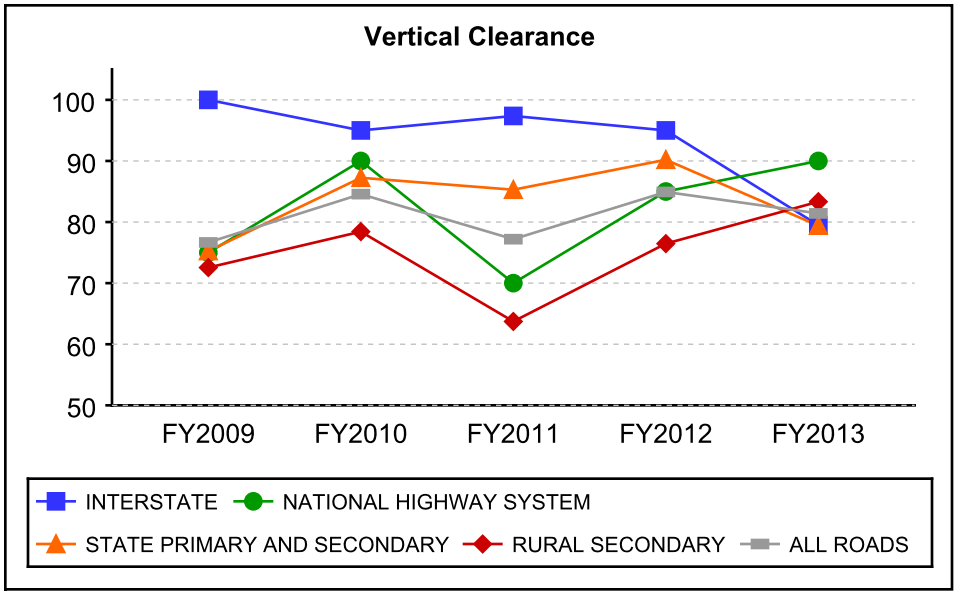
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Vertical Clearance
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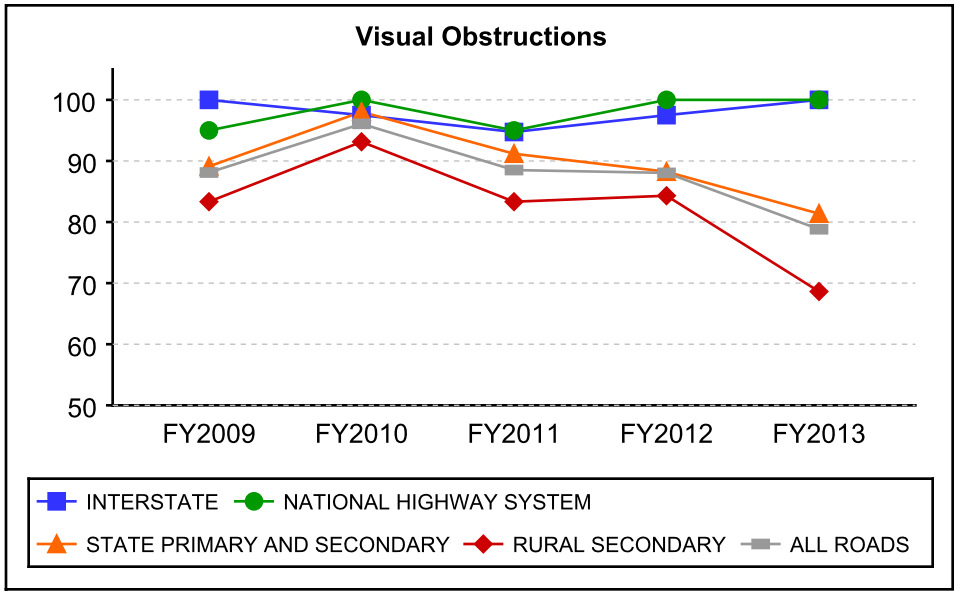
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Visual Obstructions
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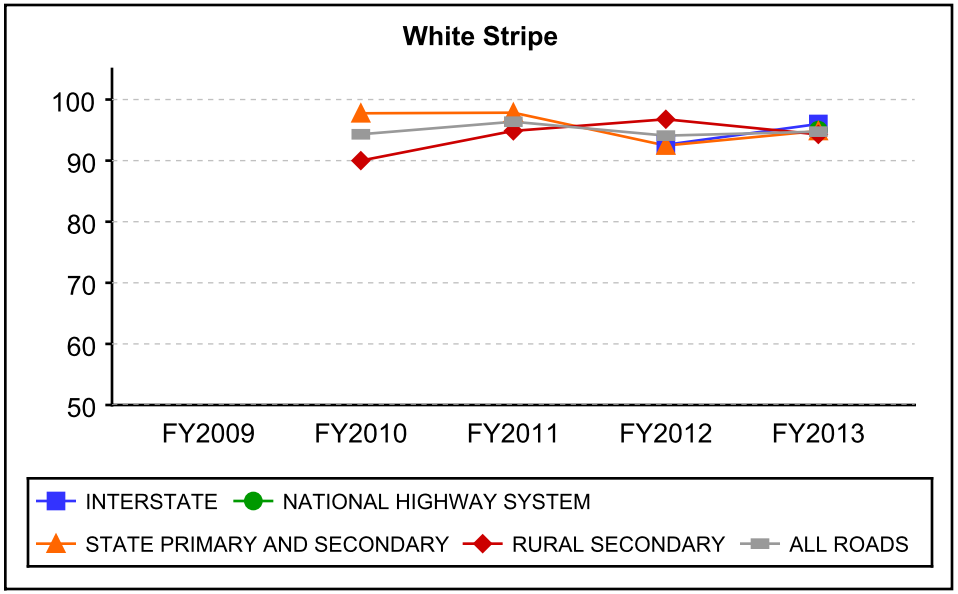
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


White Stripe
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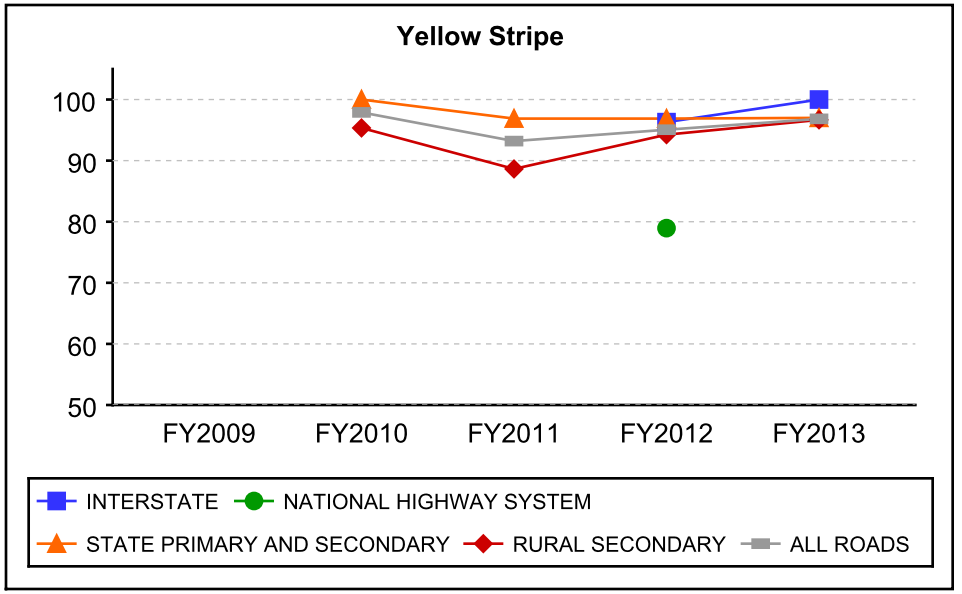
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Yellow Stripe
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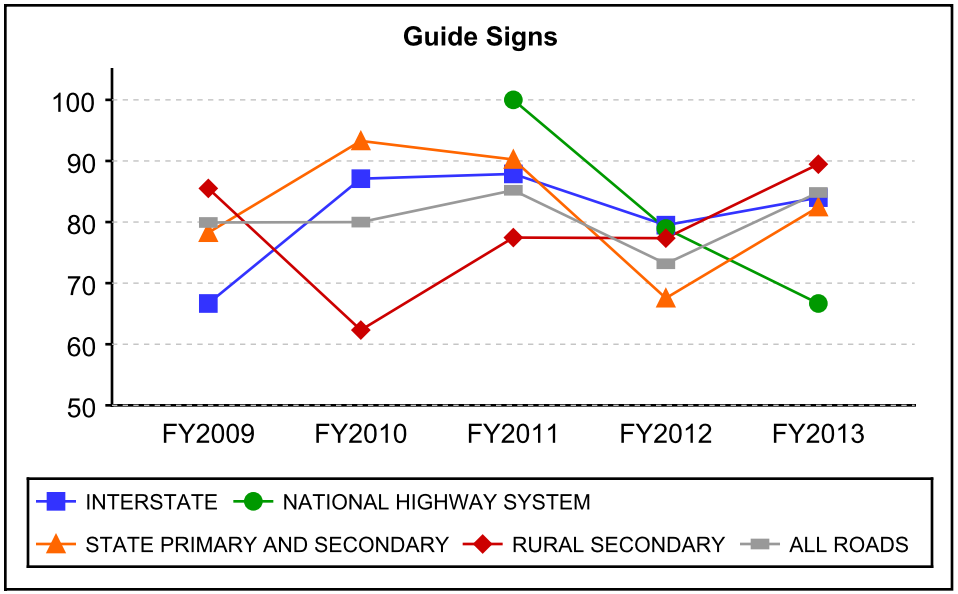
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Guide Signs
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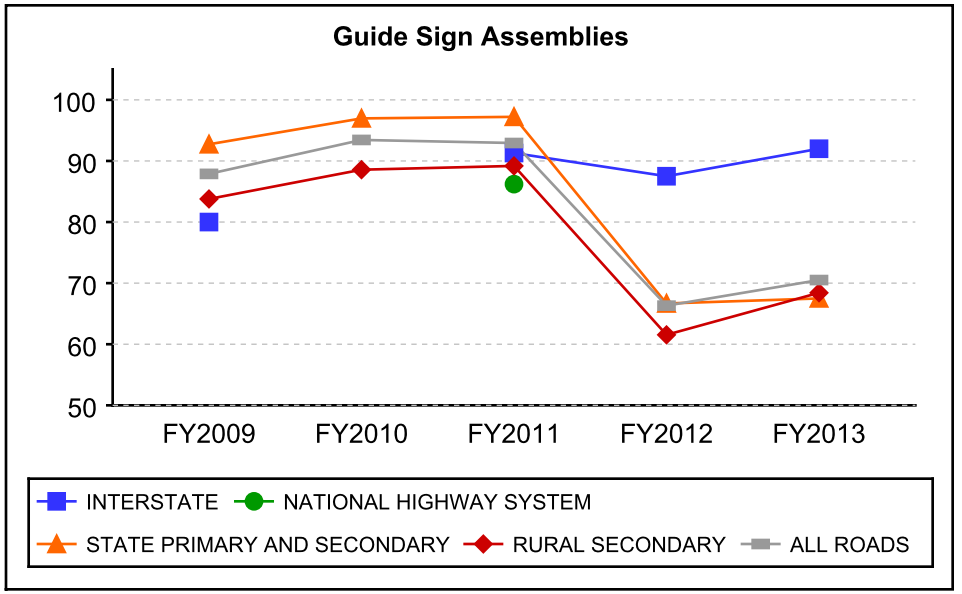
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Guide Sign Assemblies
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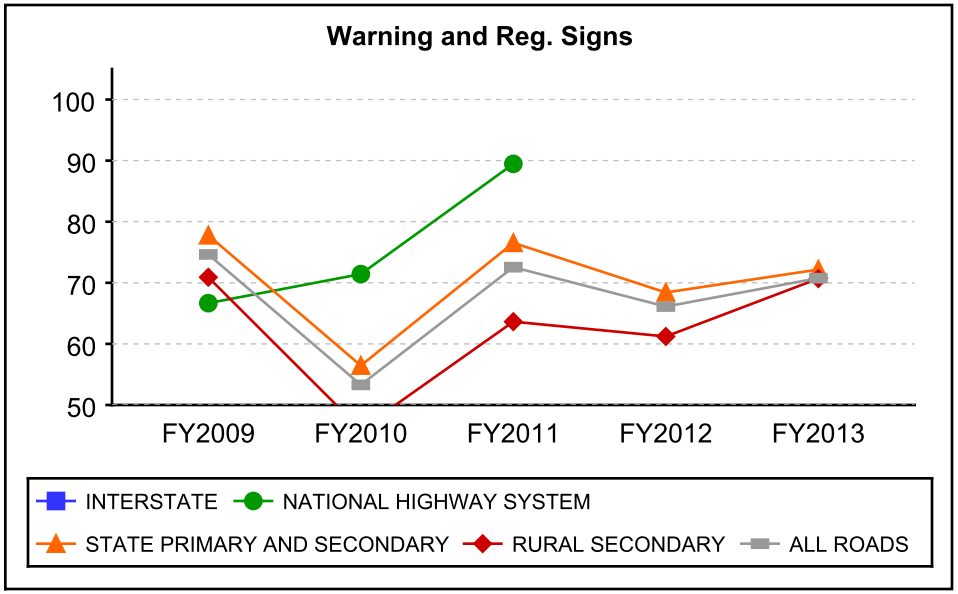
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Warning and Reg. Signs
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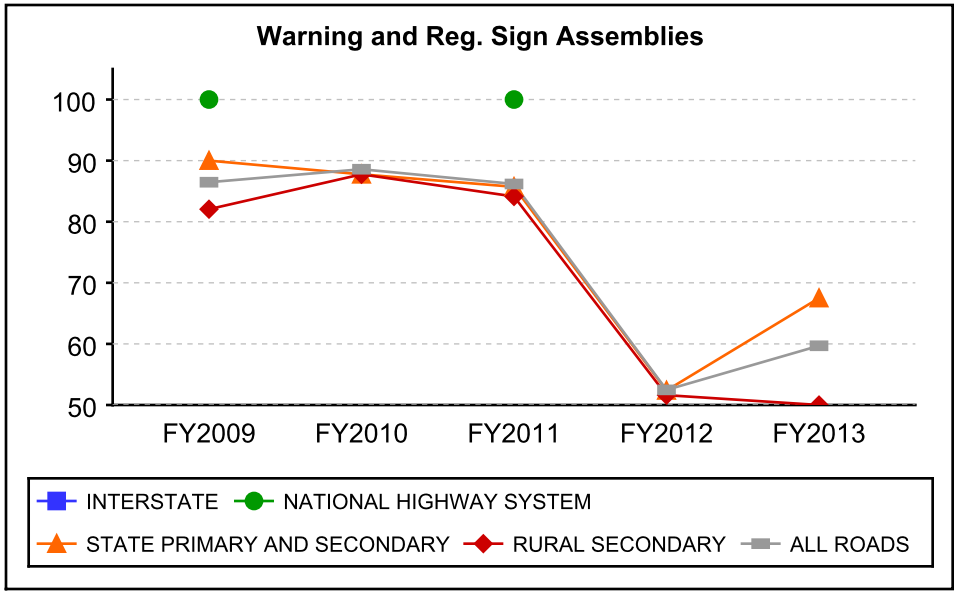
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Warning and Reg. Sign Assemblies
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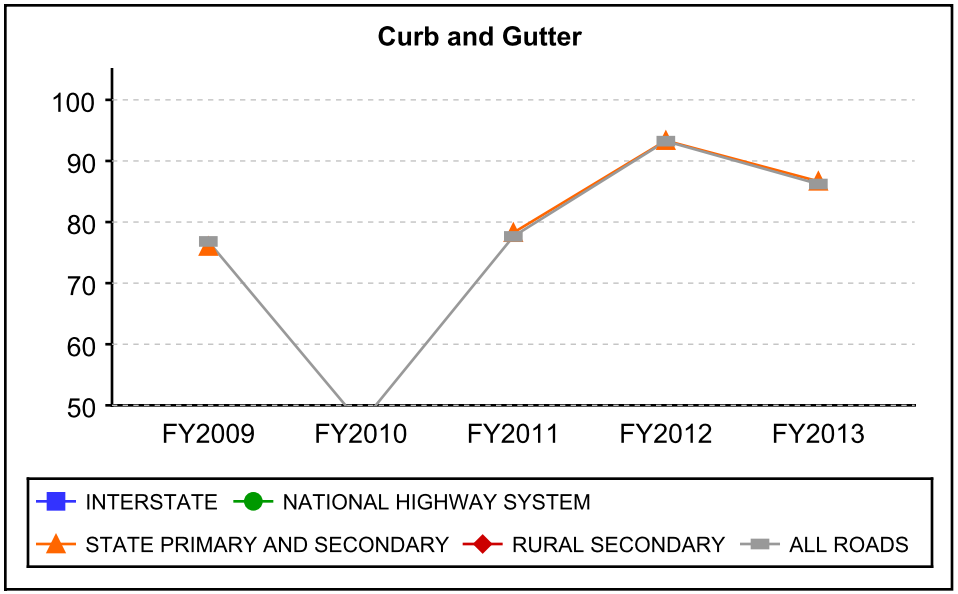
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Curb and Gutter
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FY2009
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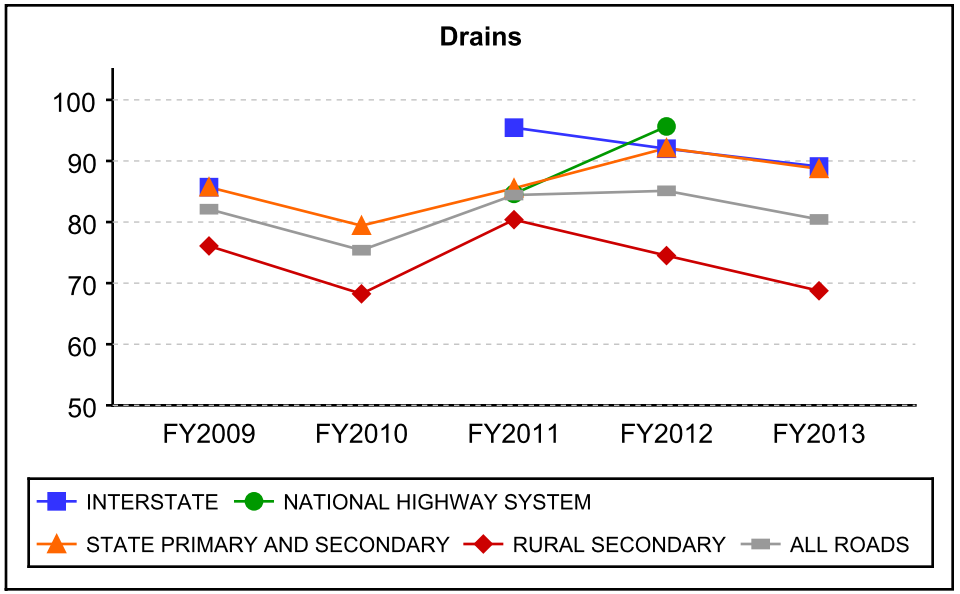
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Drains
100
90
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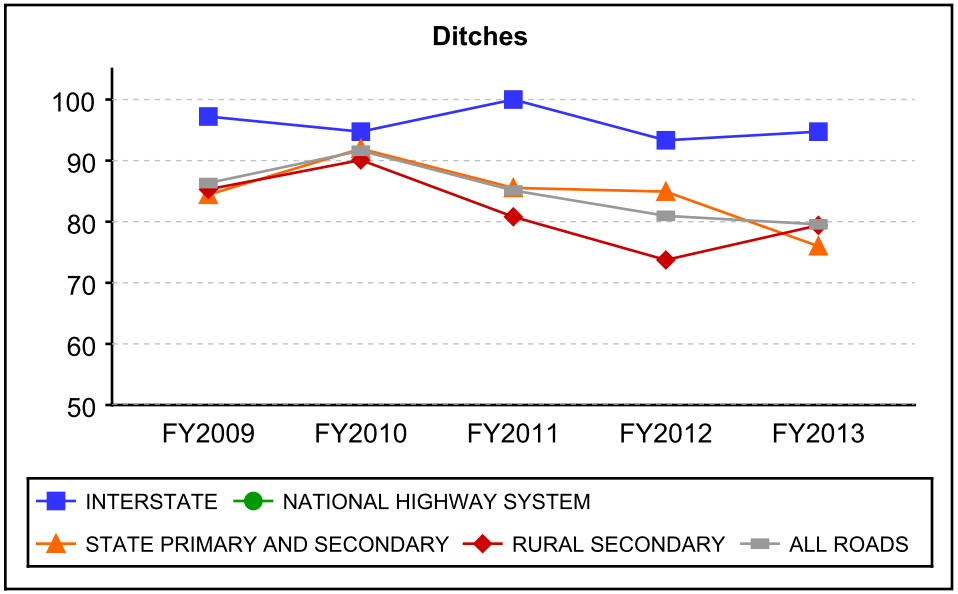
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Ditches
100
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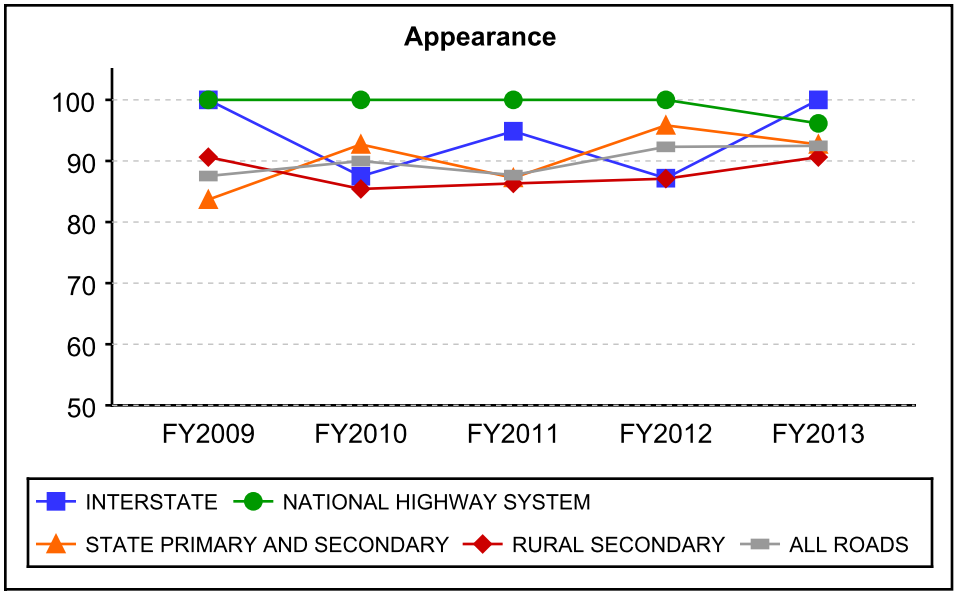
FY2013
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Appearance
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INTERSTATE
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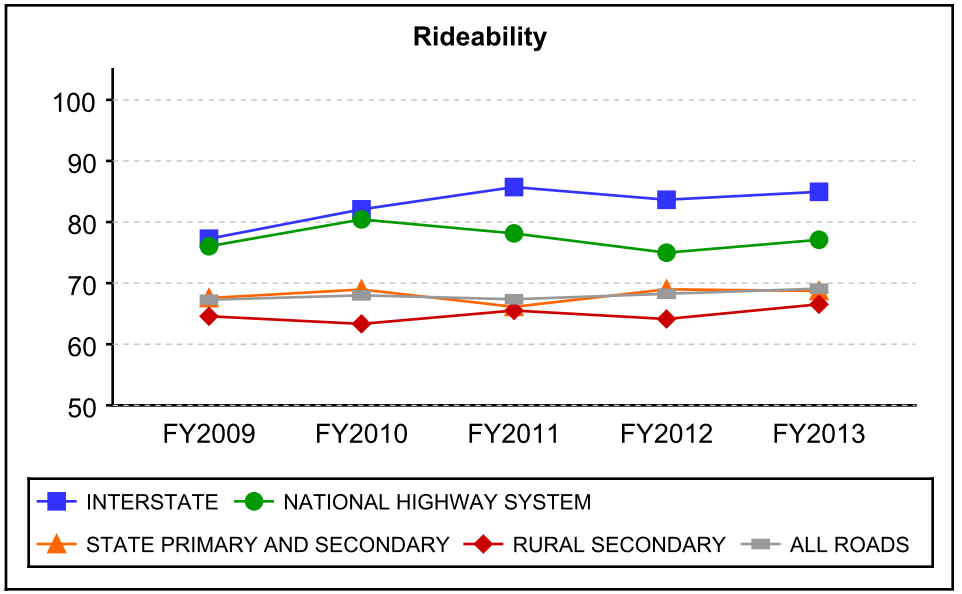
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Rideability
100
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INTERSTATE
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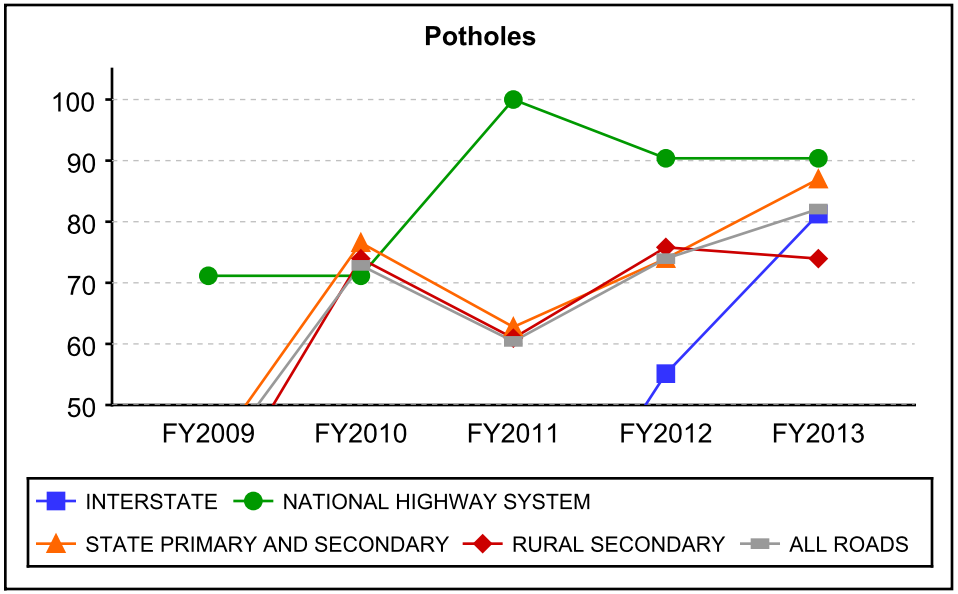
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Potholes
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INTERSTATE
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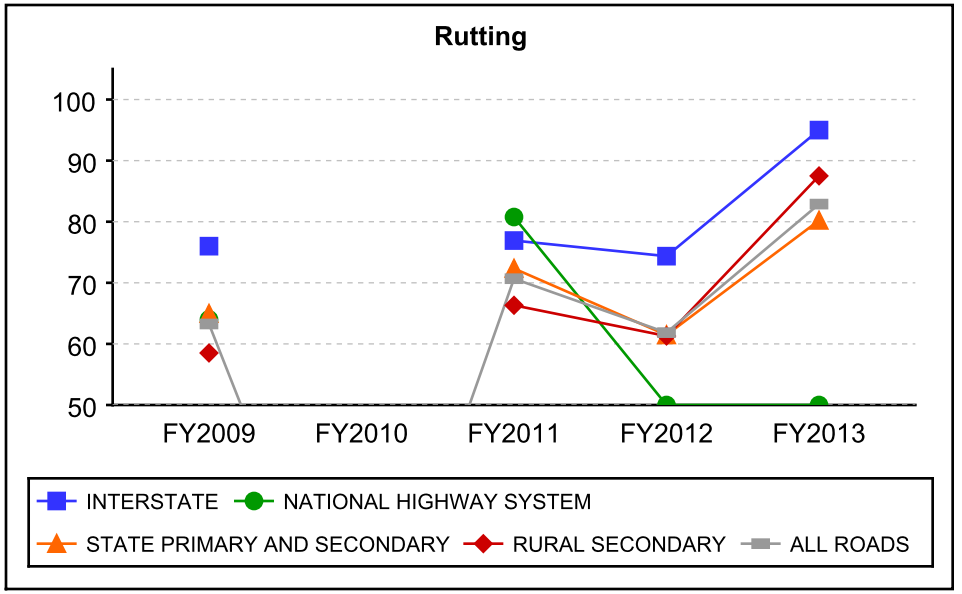
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Rutting
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INTERSTATE
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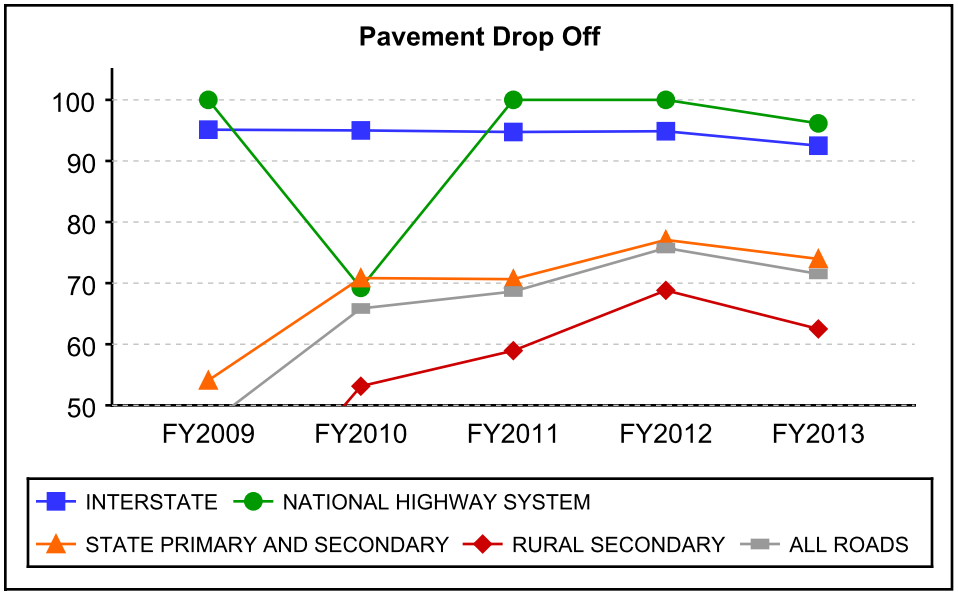
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Pavement Drop Off
100
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INTERSTATE
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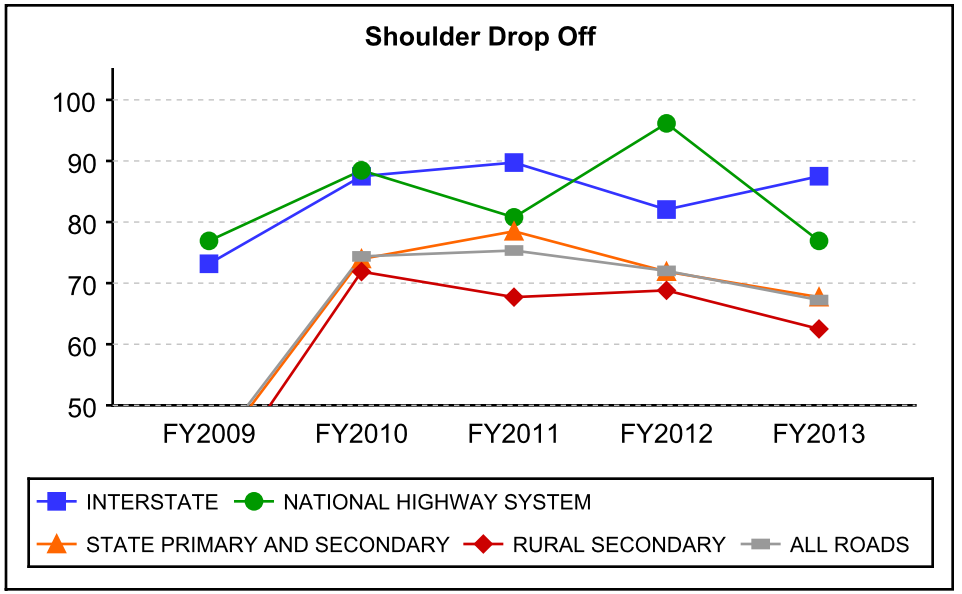
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Shoulder Drop Off
100
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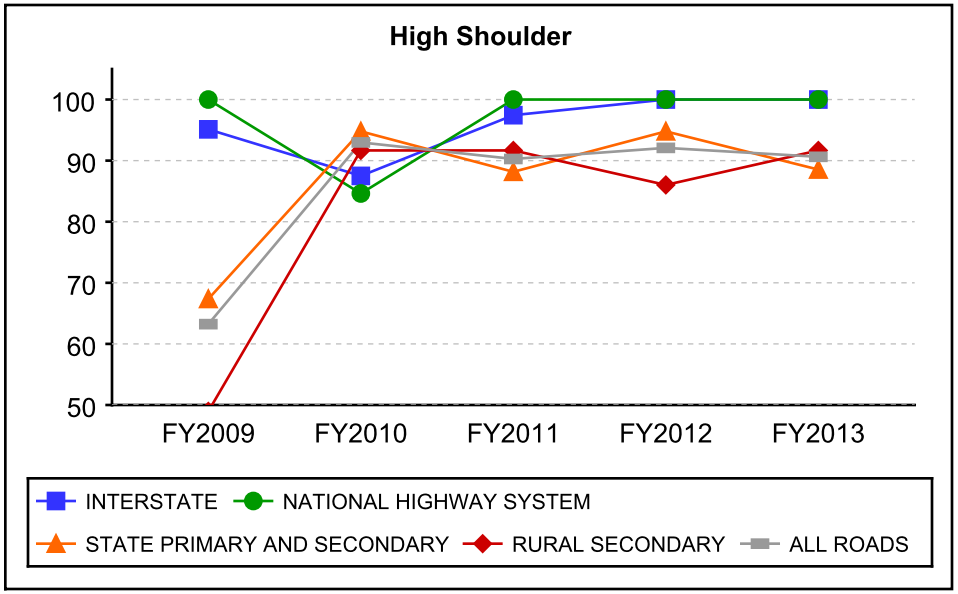
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


High Shoulder
100
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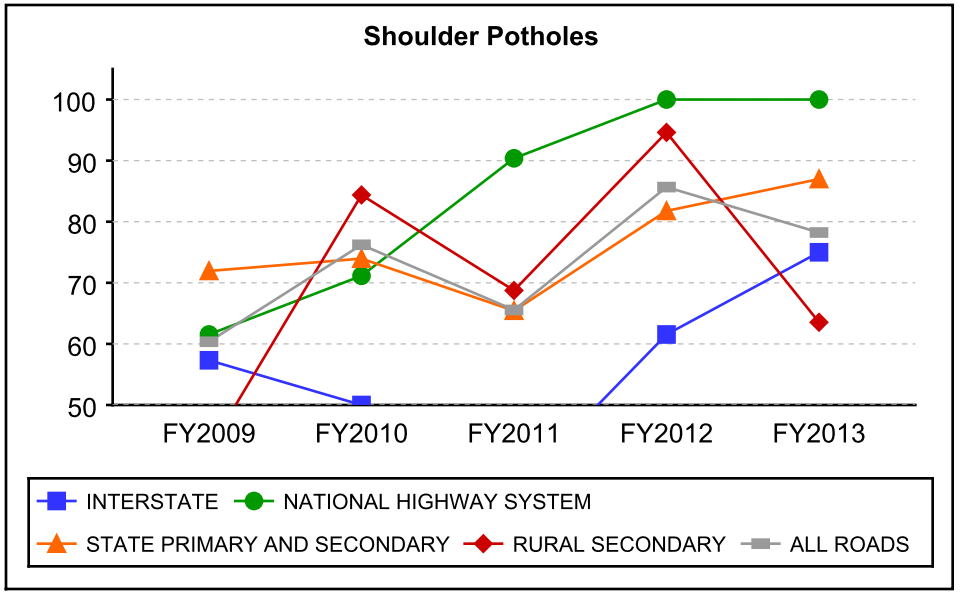
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Shoulder Potholes
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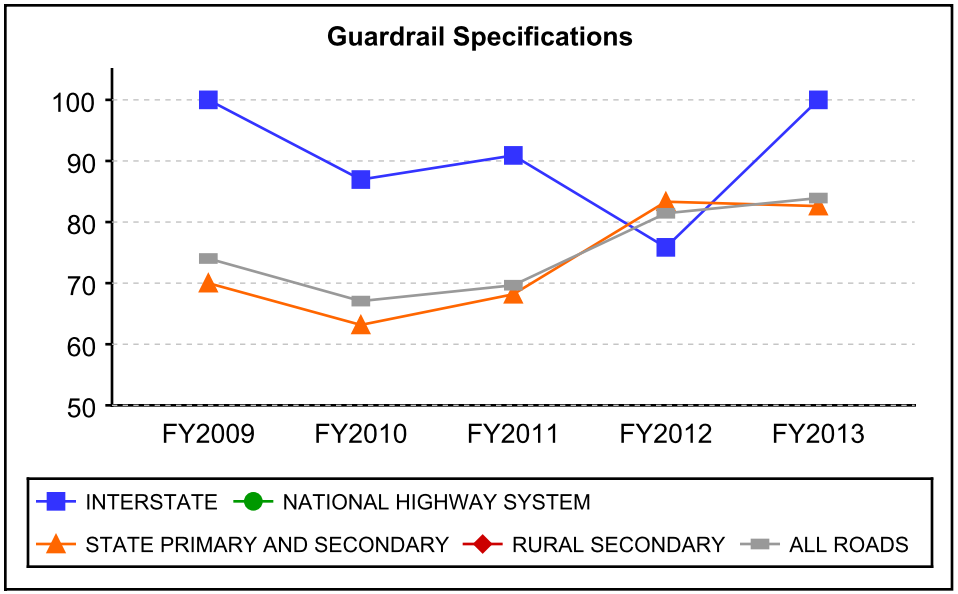
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Guardrail Specifications
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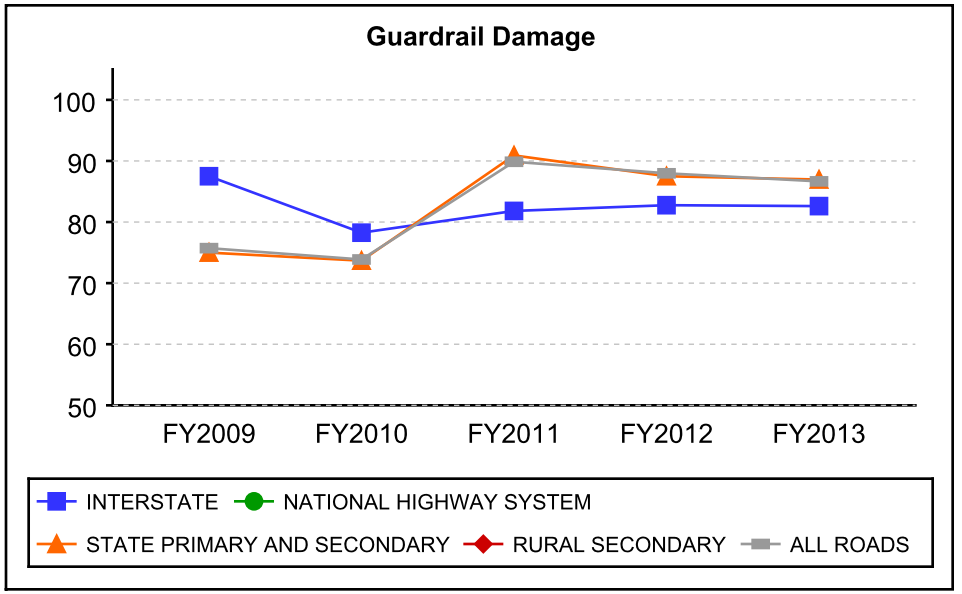
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Guardrail Damage
100
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FY2009
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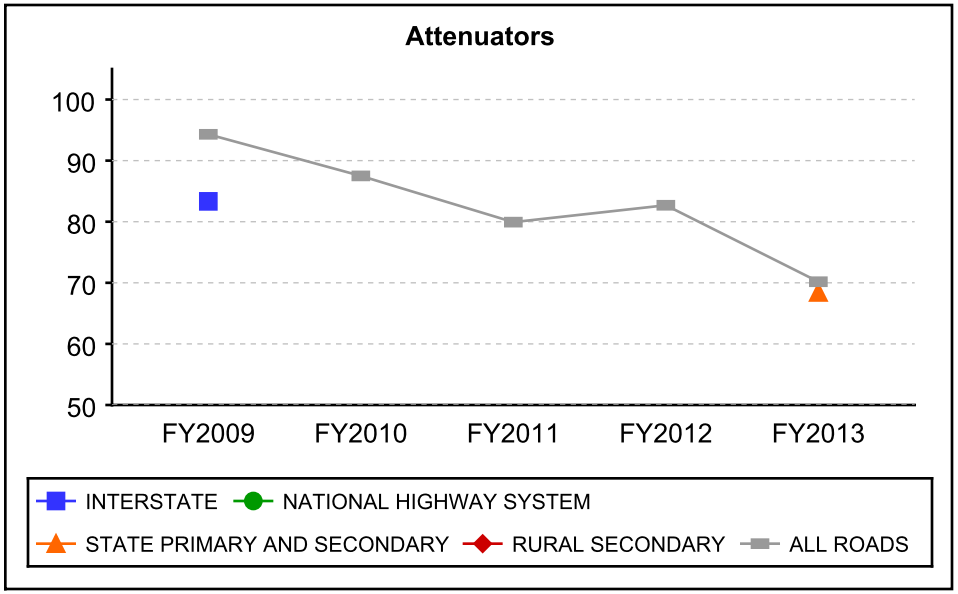
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Attenuators
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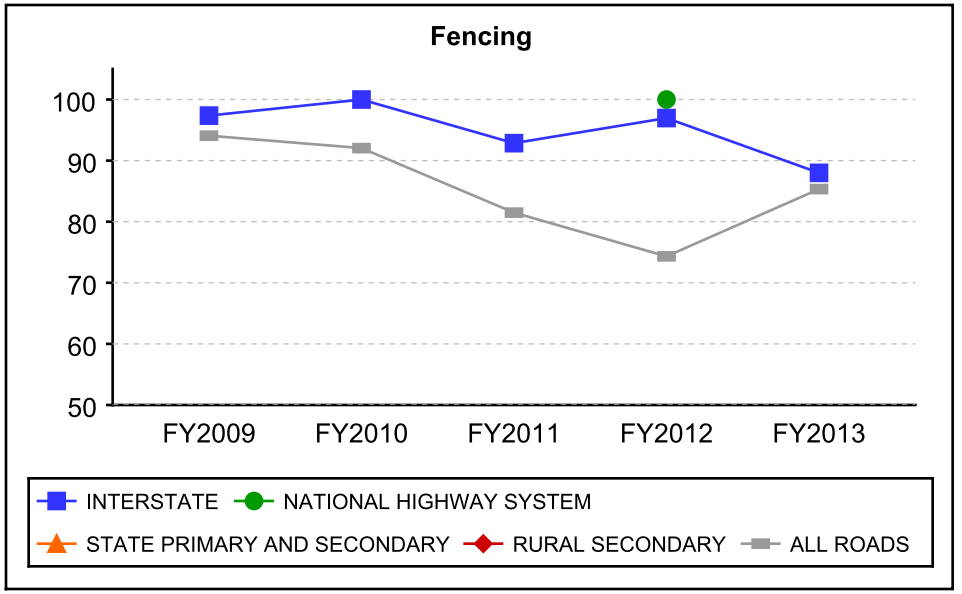
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Fencing
100
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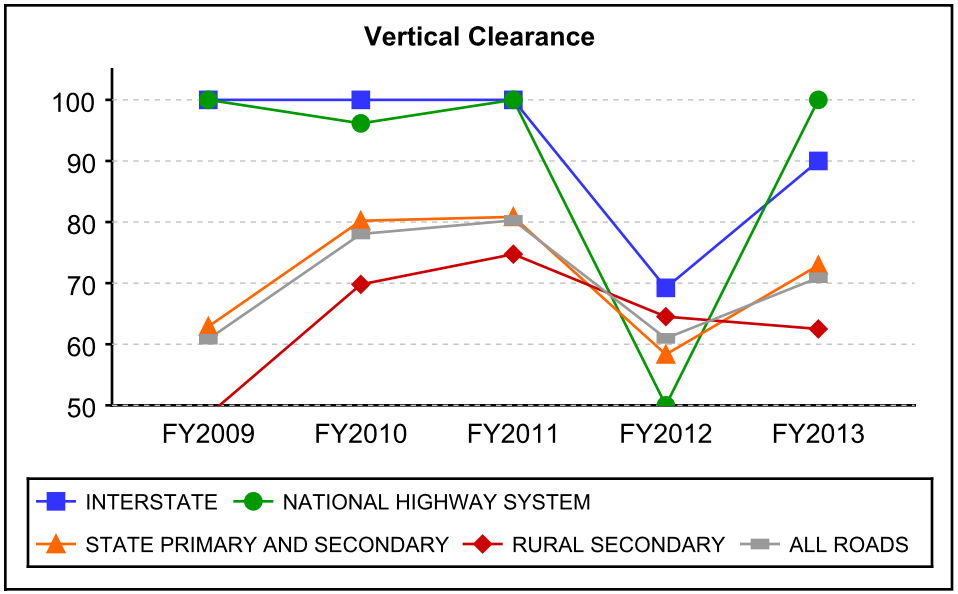
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Vertical Clearance
100
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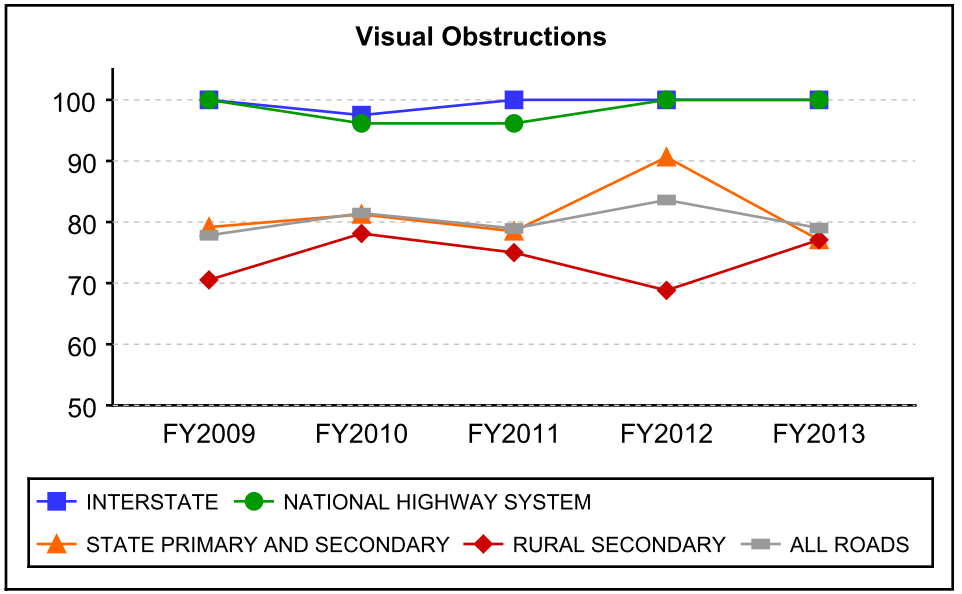
FY2011
FY2012
FY2013
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Visual Obstructions
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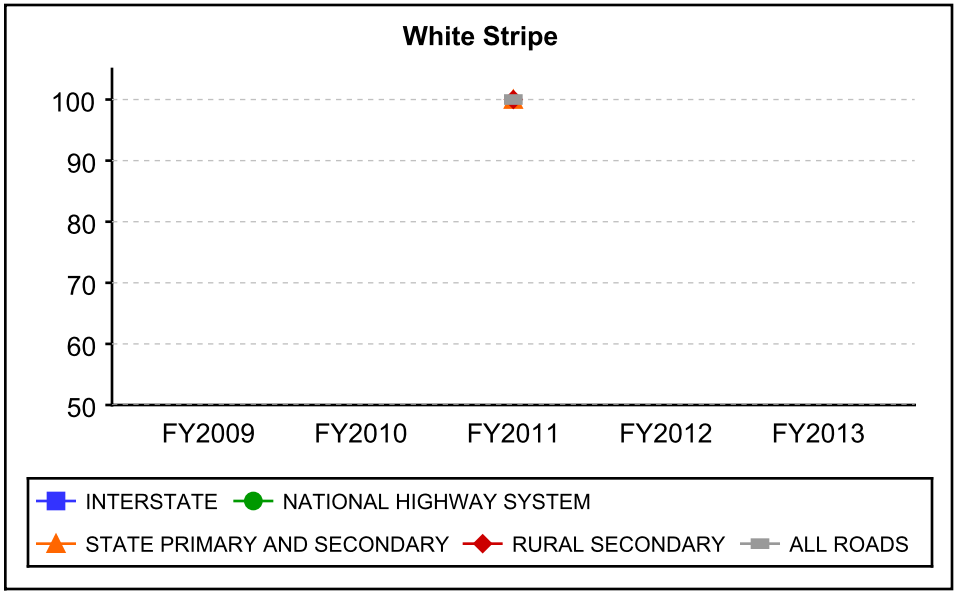
FY2012
FY2013
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


White Stripe
100
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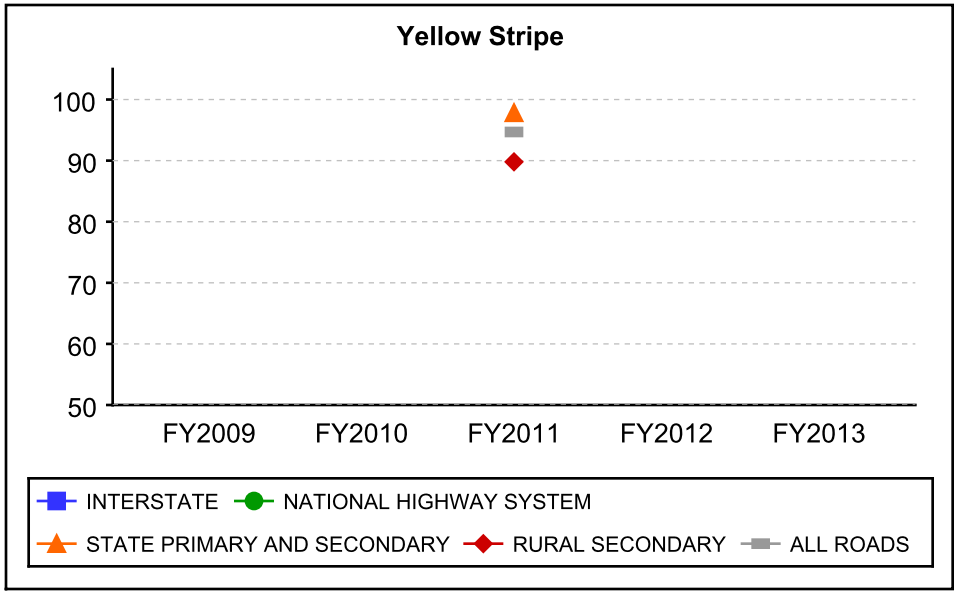
FY2009
FY2010
FY2011
FY2012
FY2013
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Yellow Stripe
100
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FY2009
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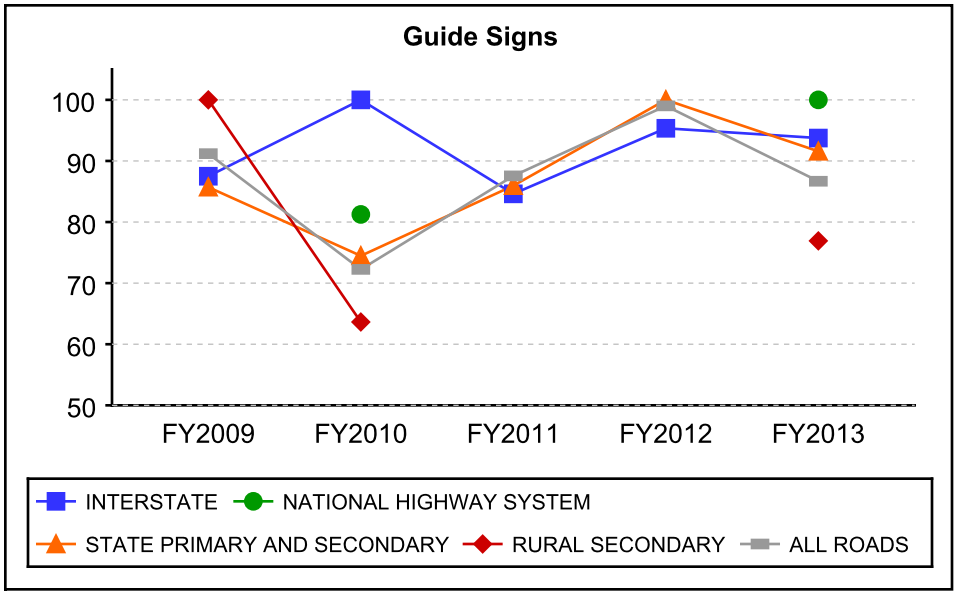
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Guide Signs
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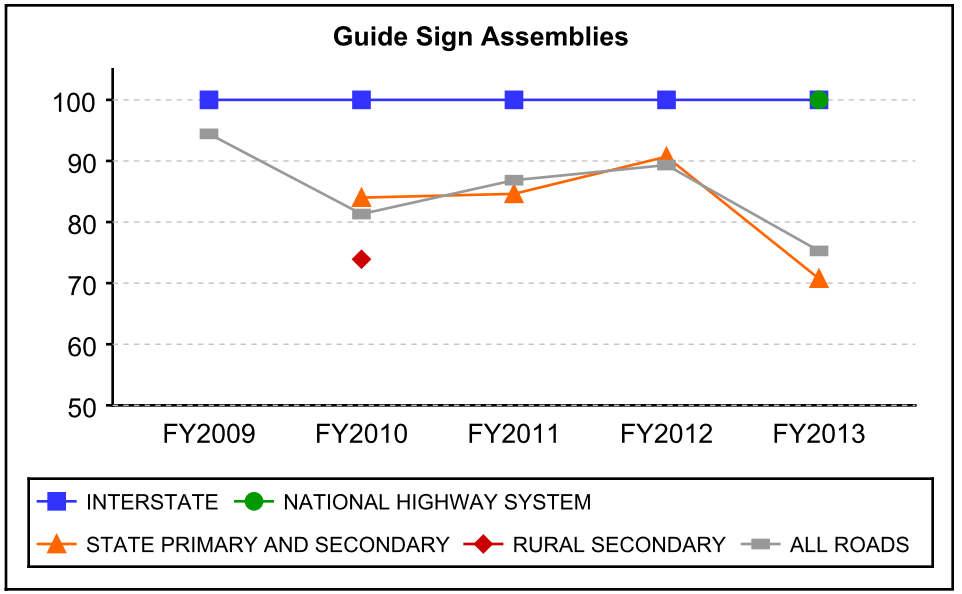
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Guide Sign Assemblies
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INTERSTATE
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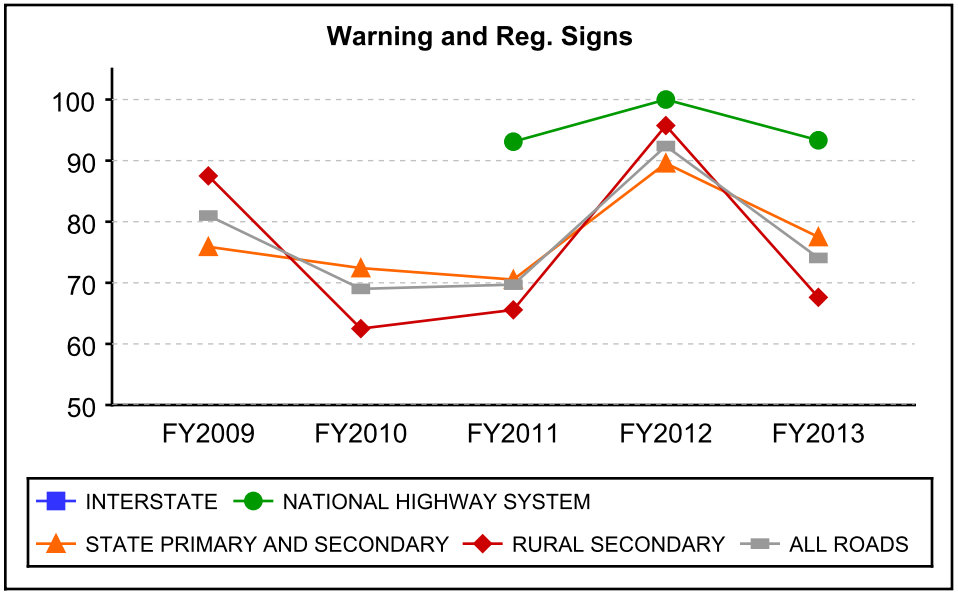
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Warning and Reg. Signs
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FY2011
FY2012
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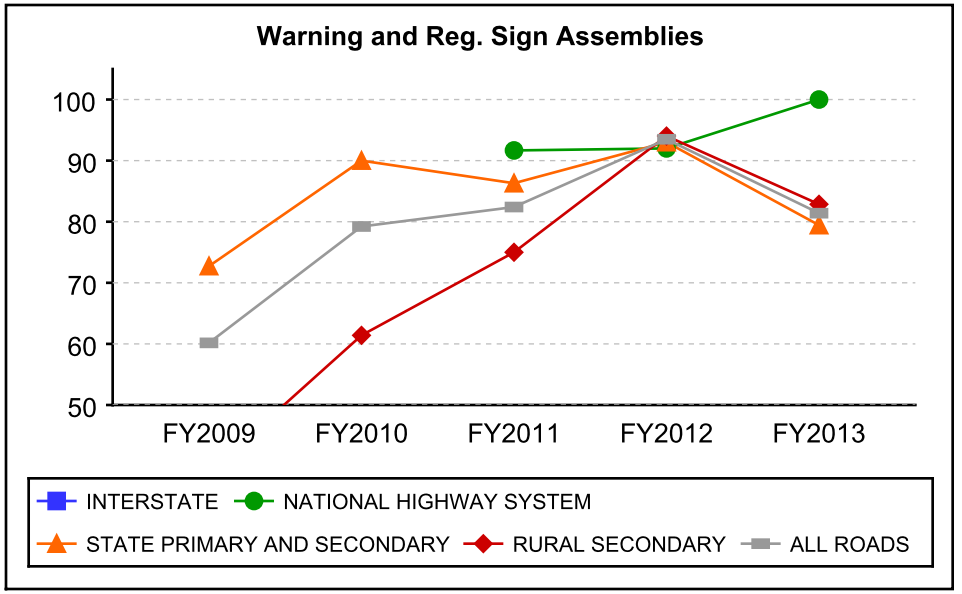
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Warning and Reg. Sign Assemblies
100
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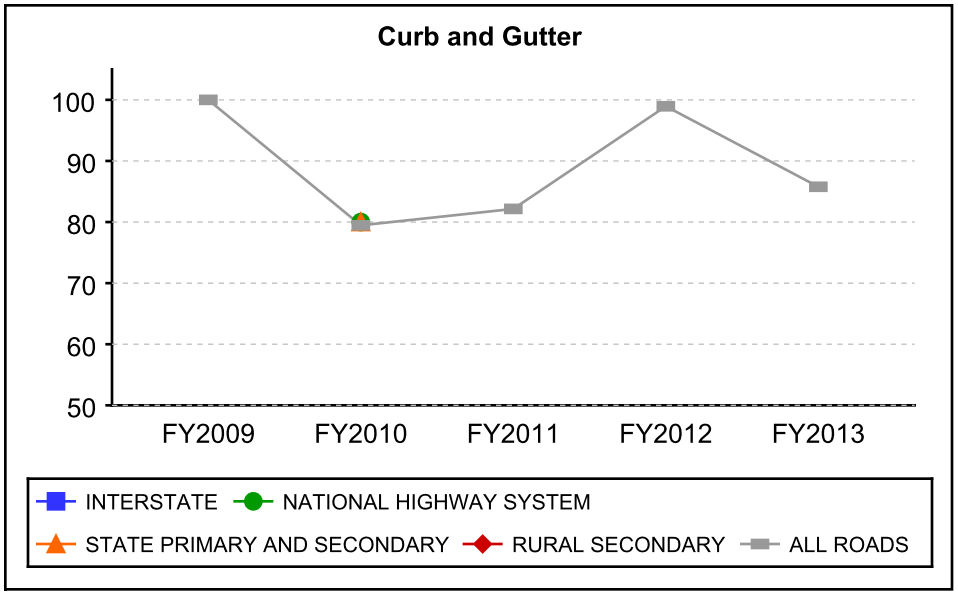
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Curb and Gutter
100
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INTERSTATE
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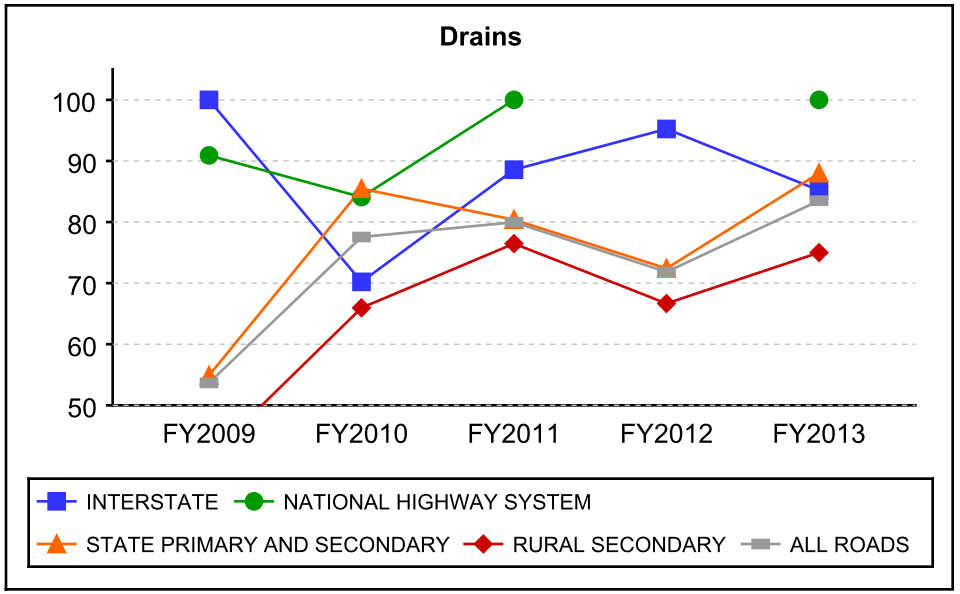
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Drains
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INTERSTATE
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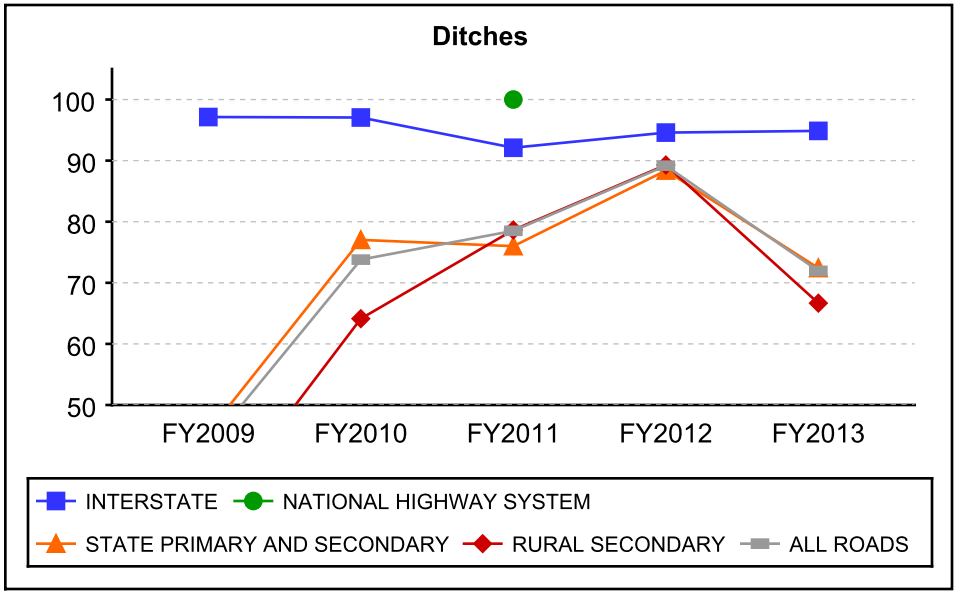
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Ditches
100
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FY2013
INTERSTATE
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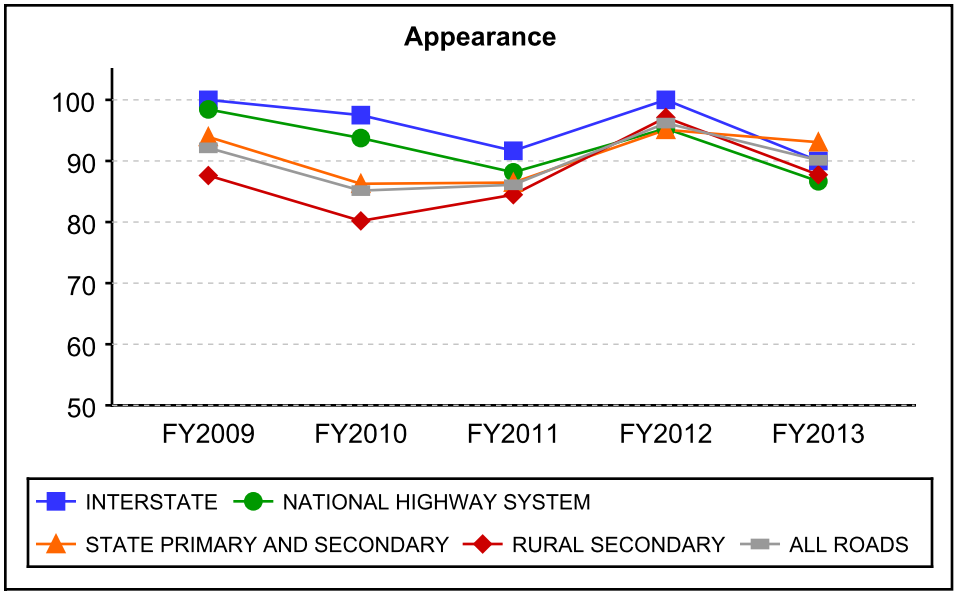
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Appearance
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INTERSTATE
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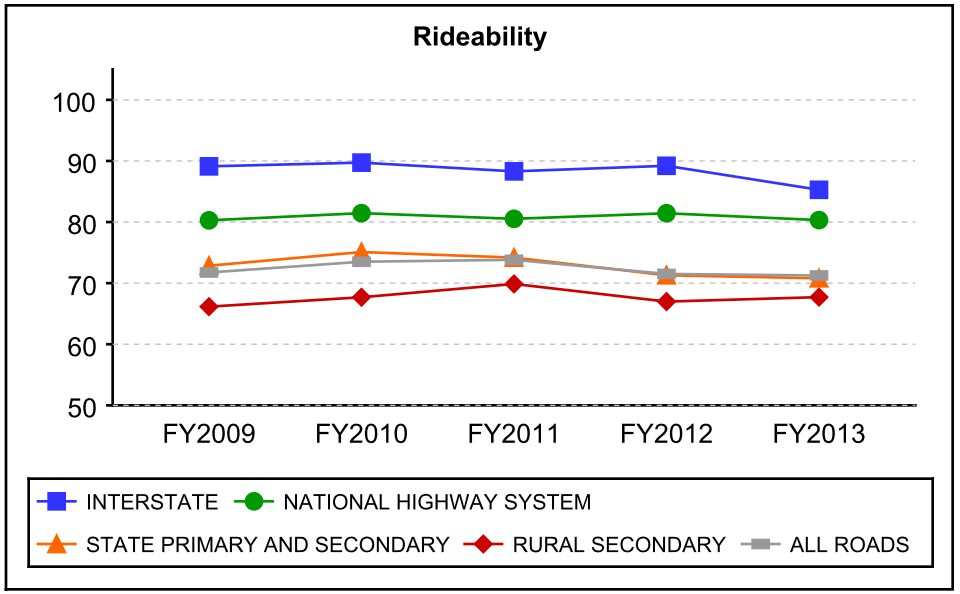
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Rideability
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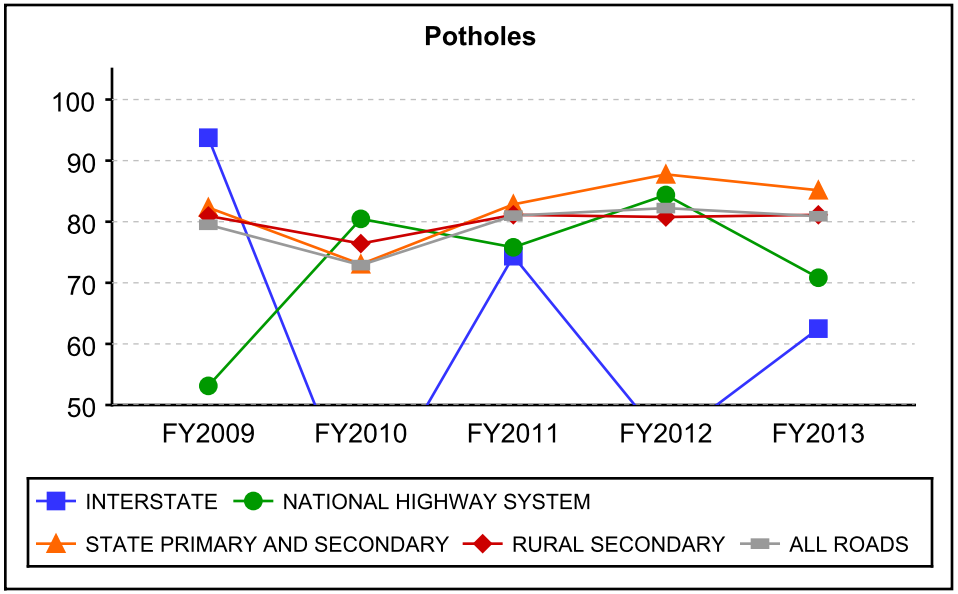
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Potholes
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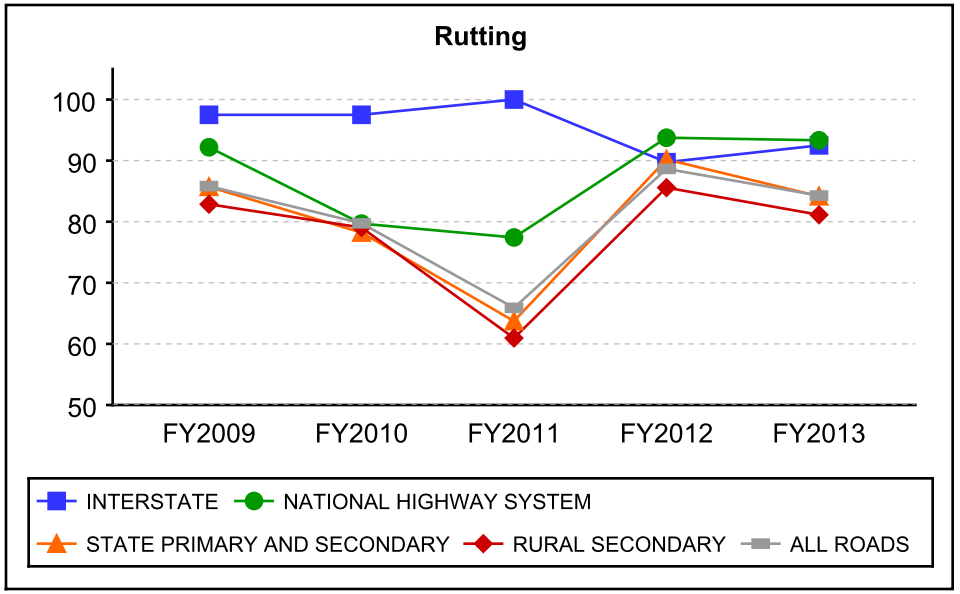
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Rutting
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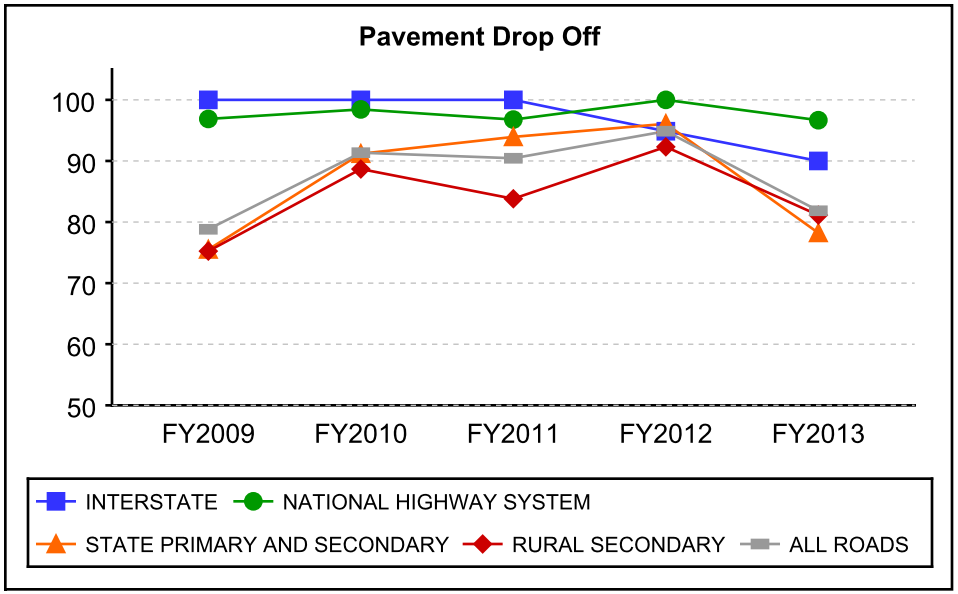
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Pavement Drop Off
100
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FY2009
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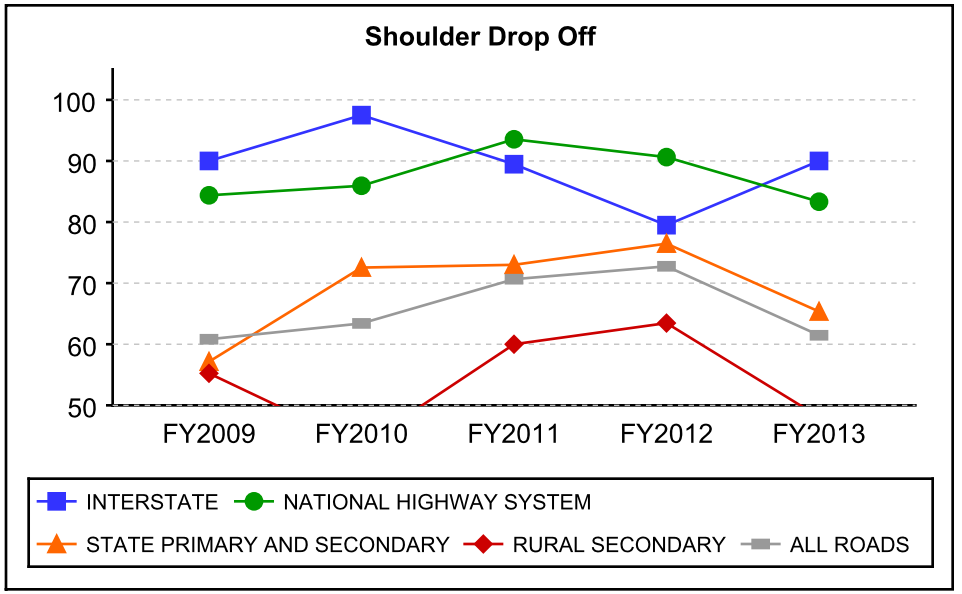
FY2013
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Shoulder Drop Off
100
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FY2009
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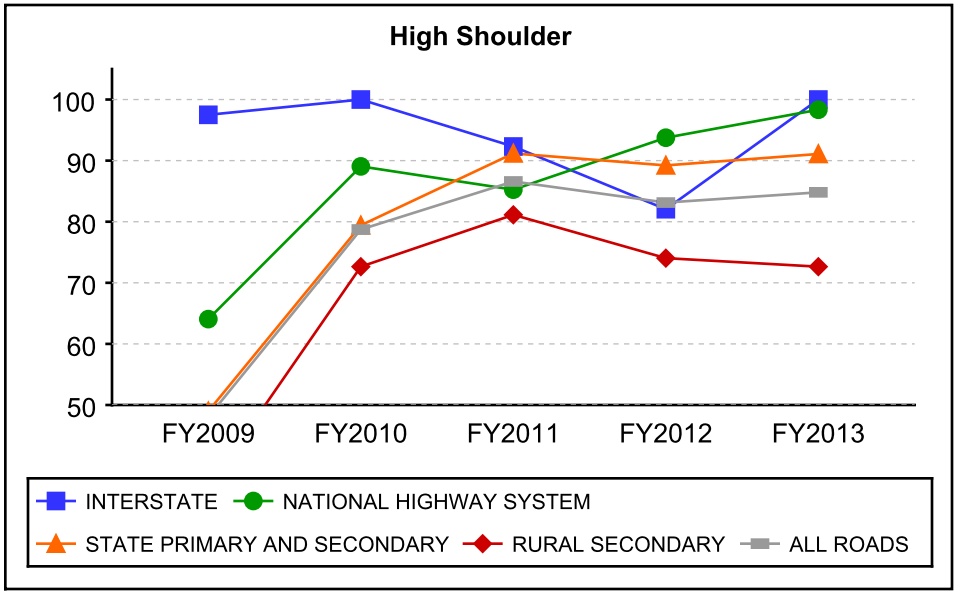
FY2013
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


High Shoulder
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FY2009
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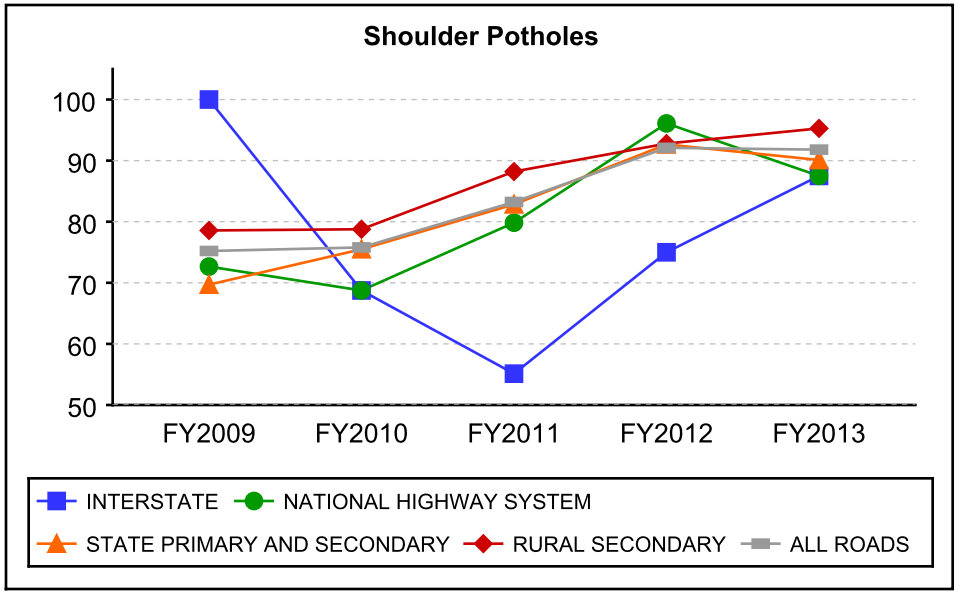
FY2013
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Shoulder Potholes
100
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FY2009
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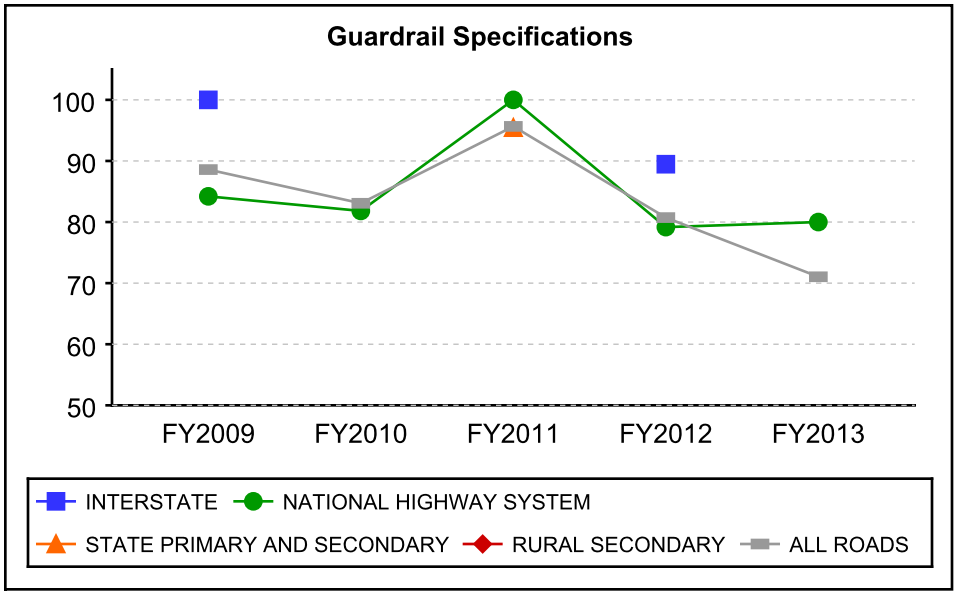
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Guardrail Specifications
100
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FY2009
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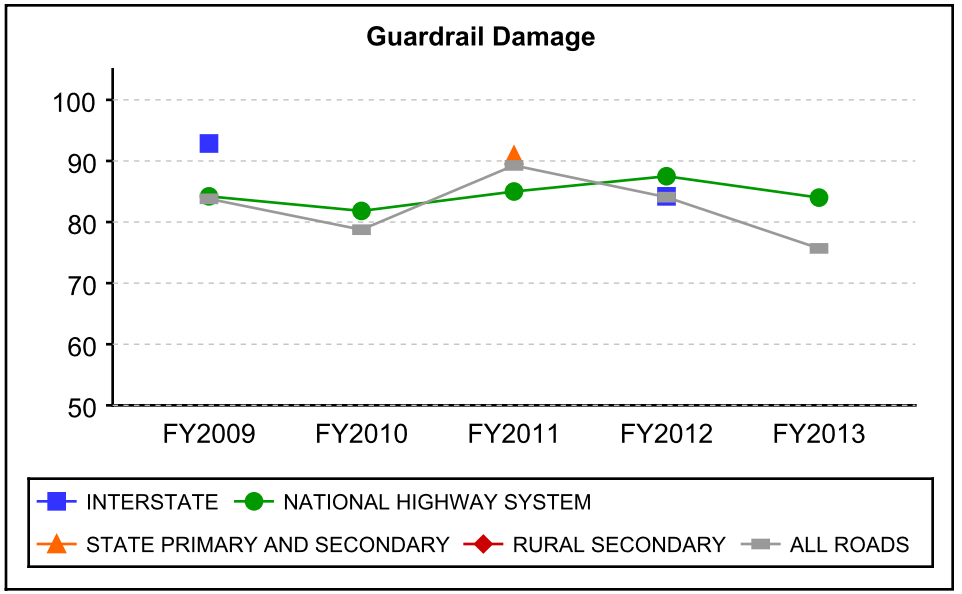
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Guardrail Damage
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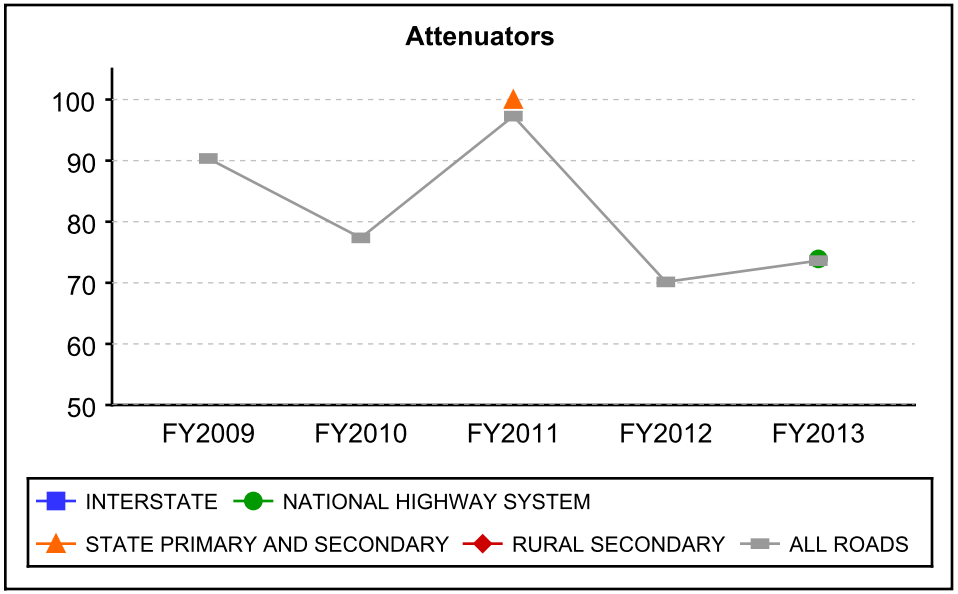
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Attenuators
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FY2009
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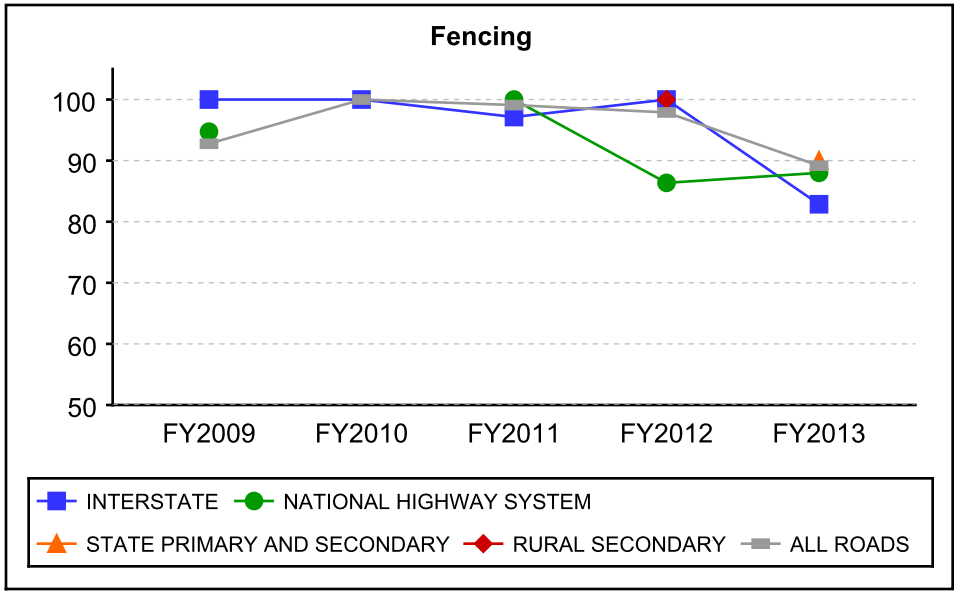
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Fencing
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FY2009
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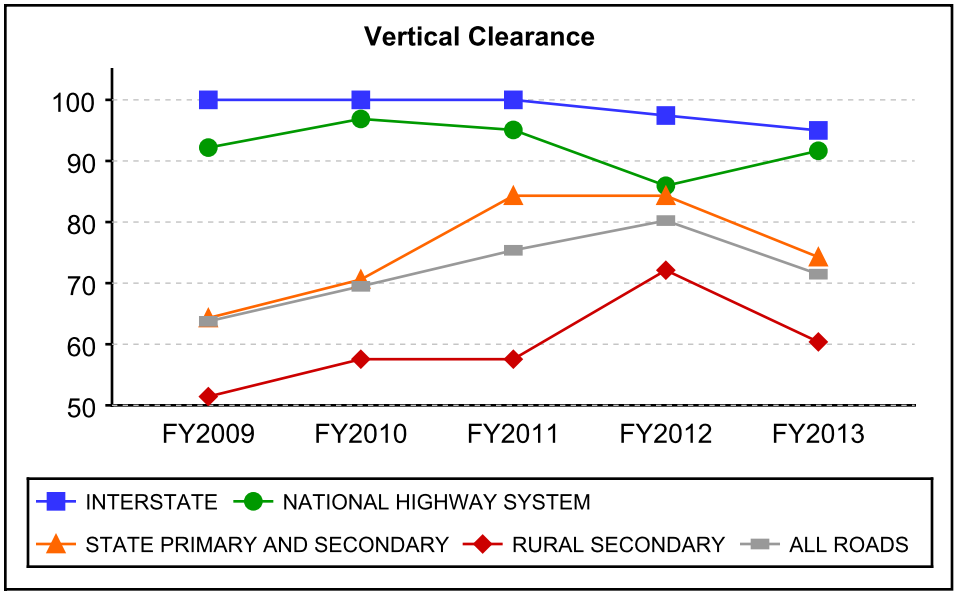
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Vertical Clearance
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FY2009
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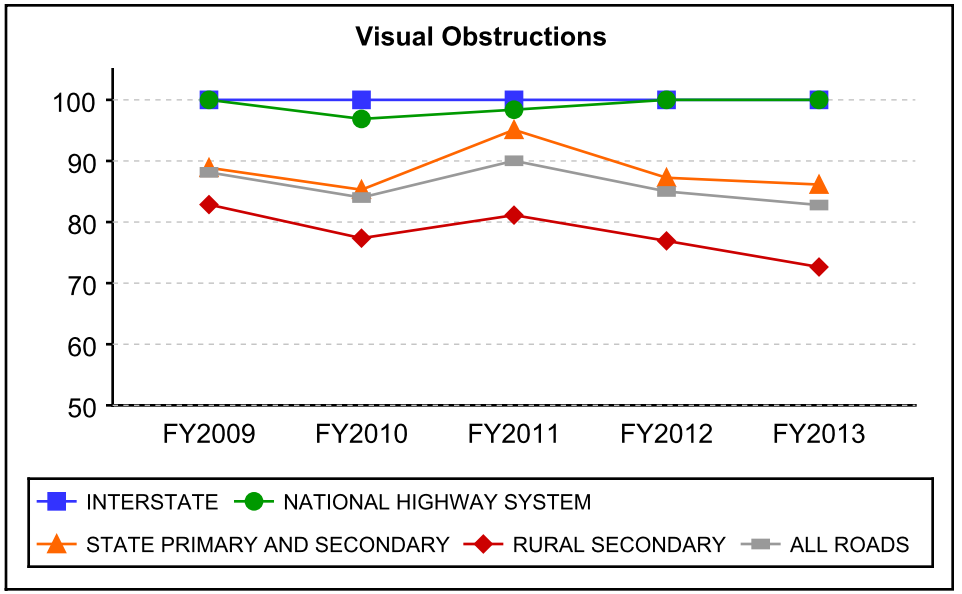
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Visual Obstructions
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FY2009
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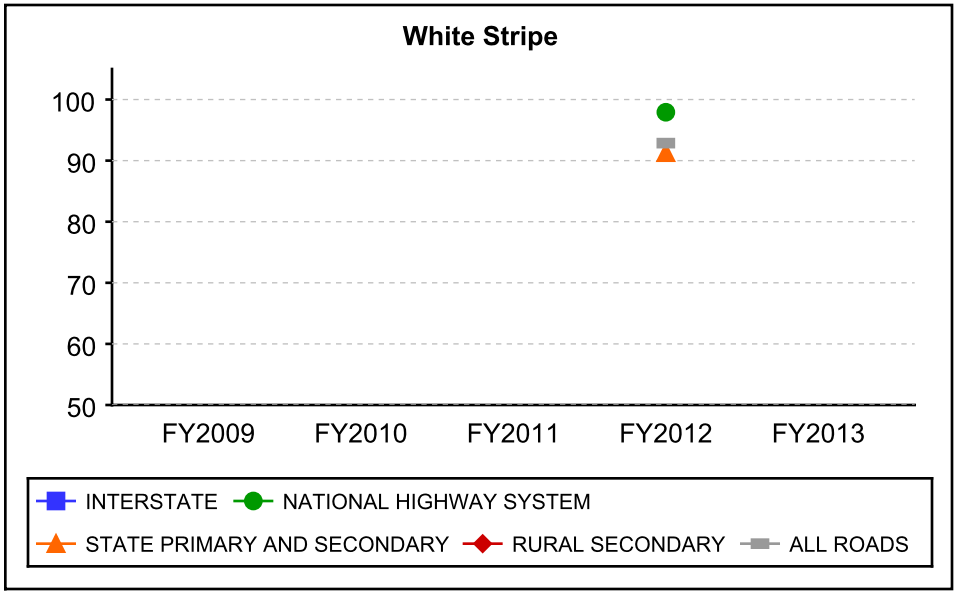
FY2013
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


White Stripe
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FY2009
FY2010
FY2011
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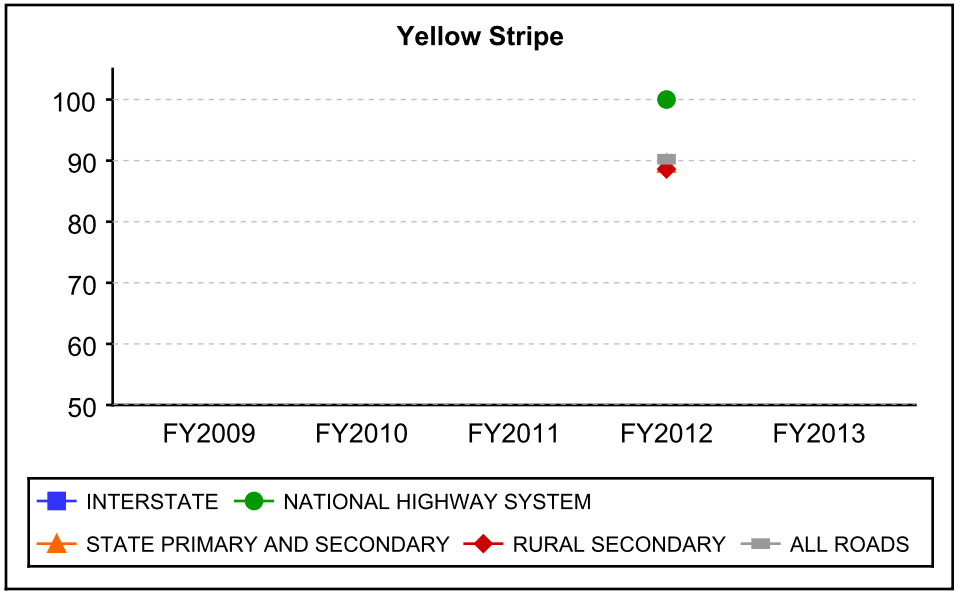
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Yellow Stripe
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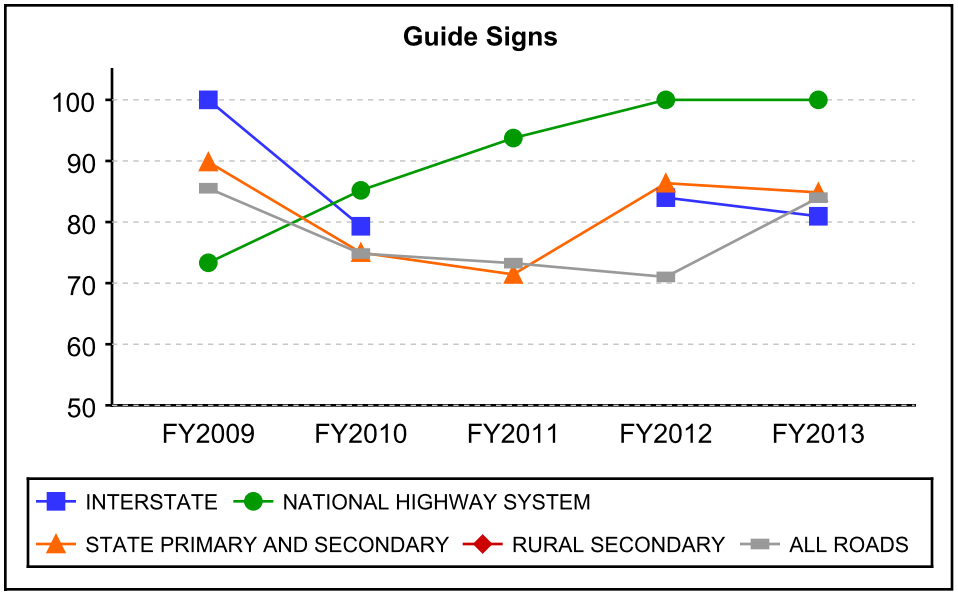
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Guide Signs
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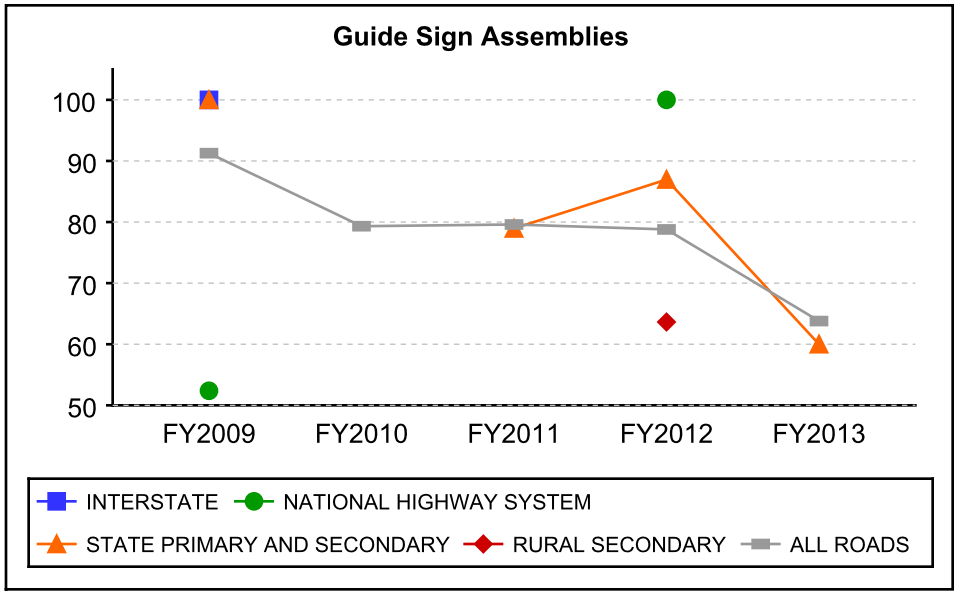
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS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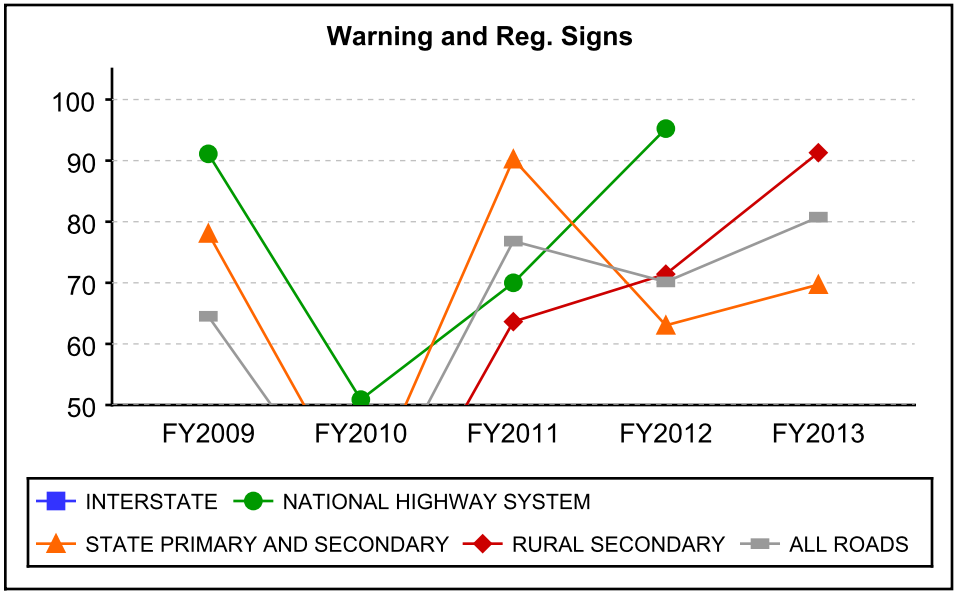
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Warning and Reg. Signs
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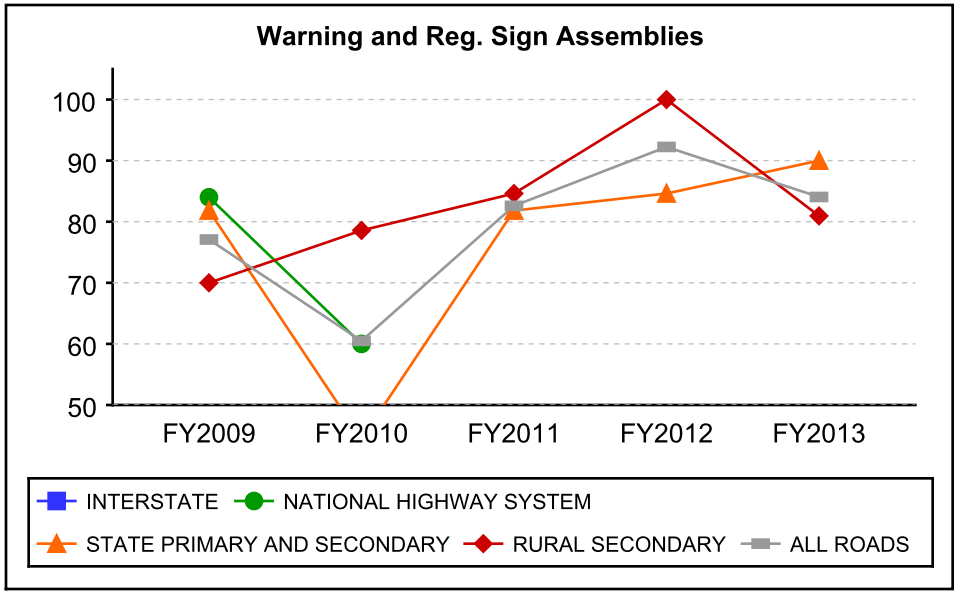
RURAL SECONDARY
ALL ROADS


Warning and Reg. Sign Assemblies
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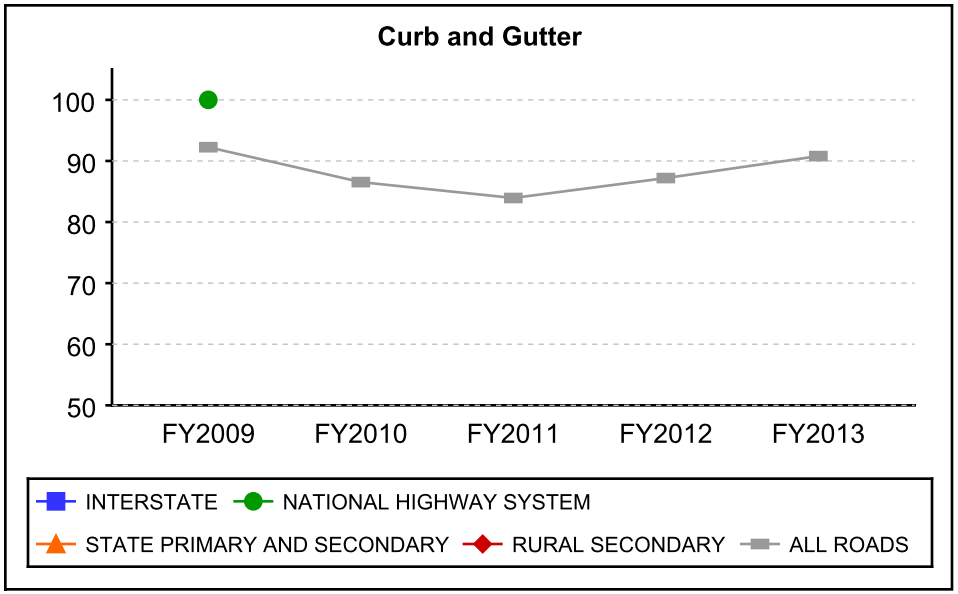
RURAL SECONDARY
ALL ROADS


Curb and Gutter
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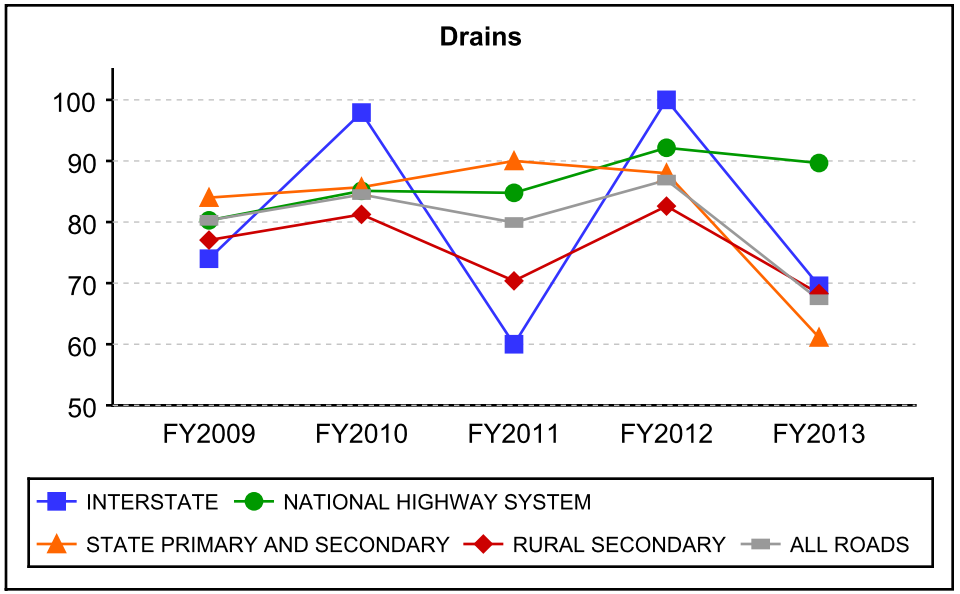
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Drains
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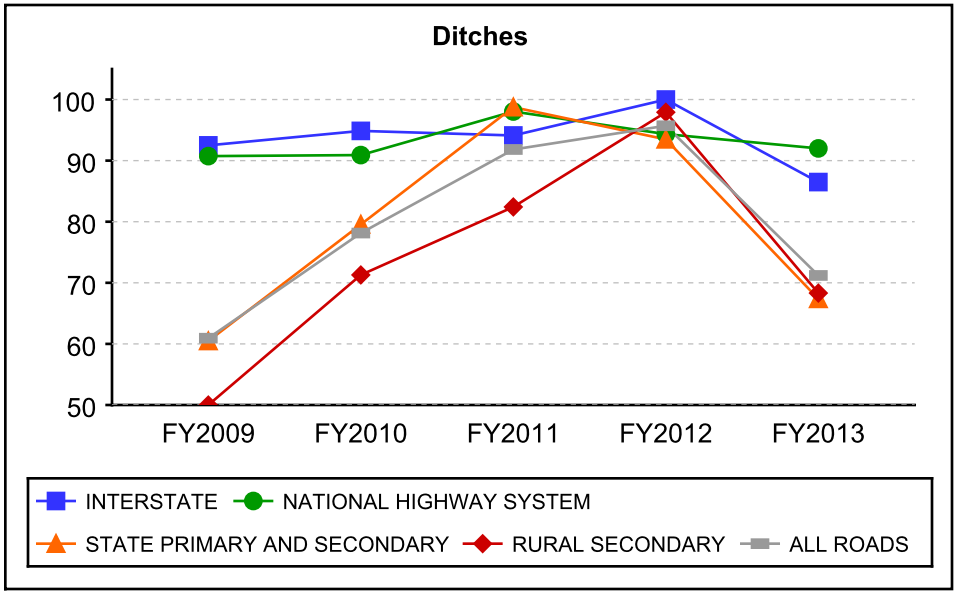
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Ditches
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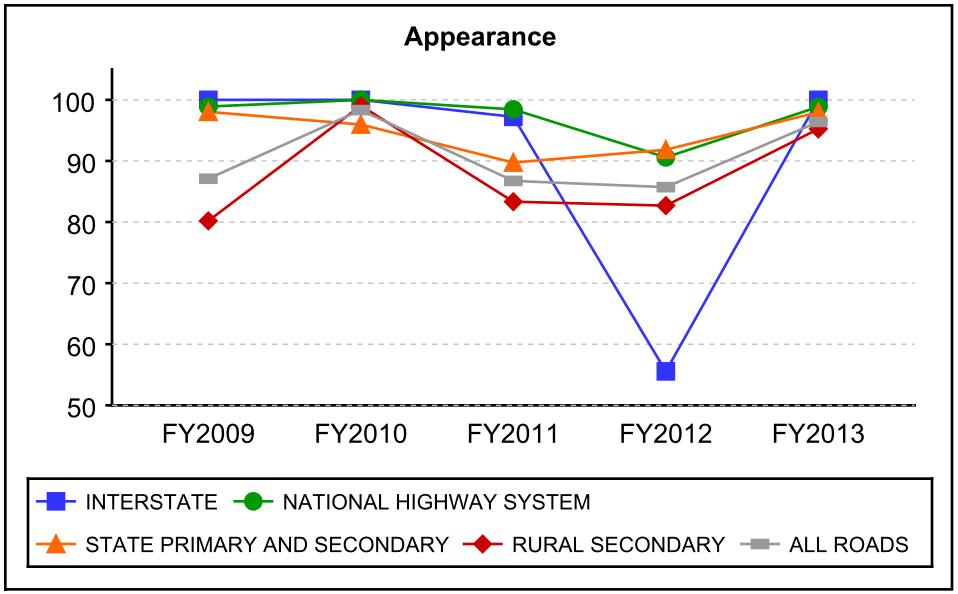
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Appearance
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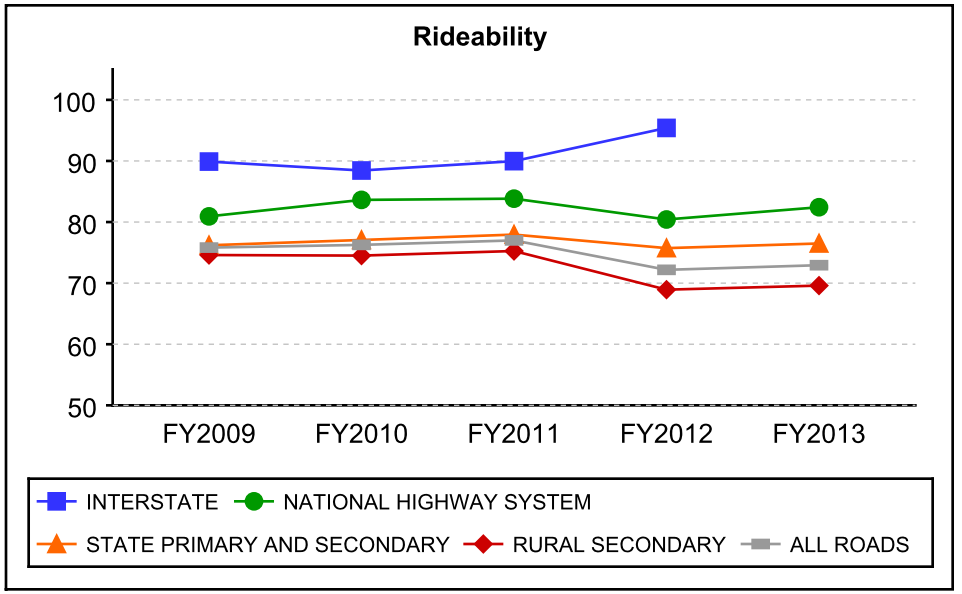
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Rideability
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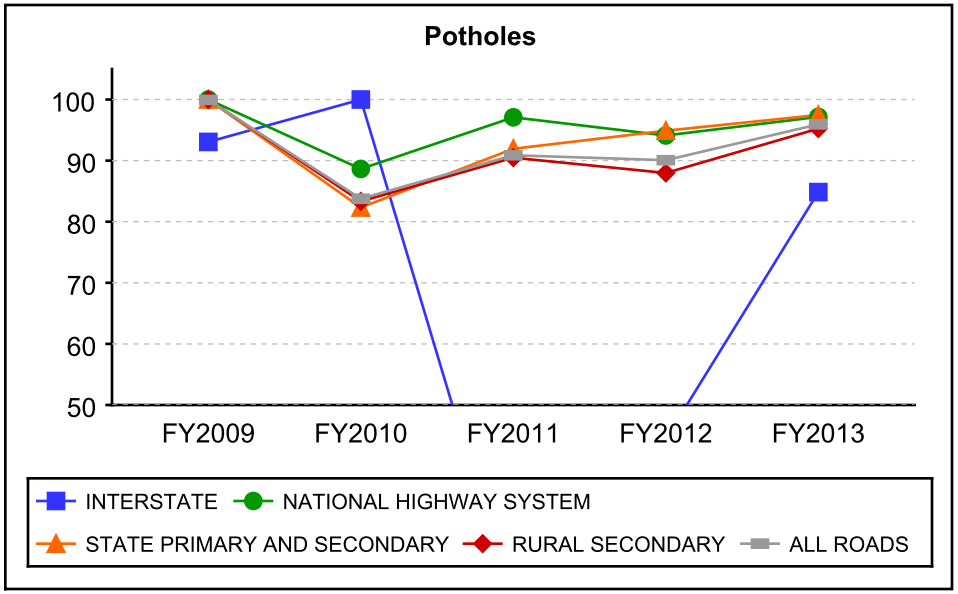
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Potholes
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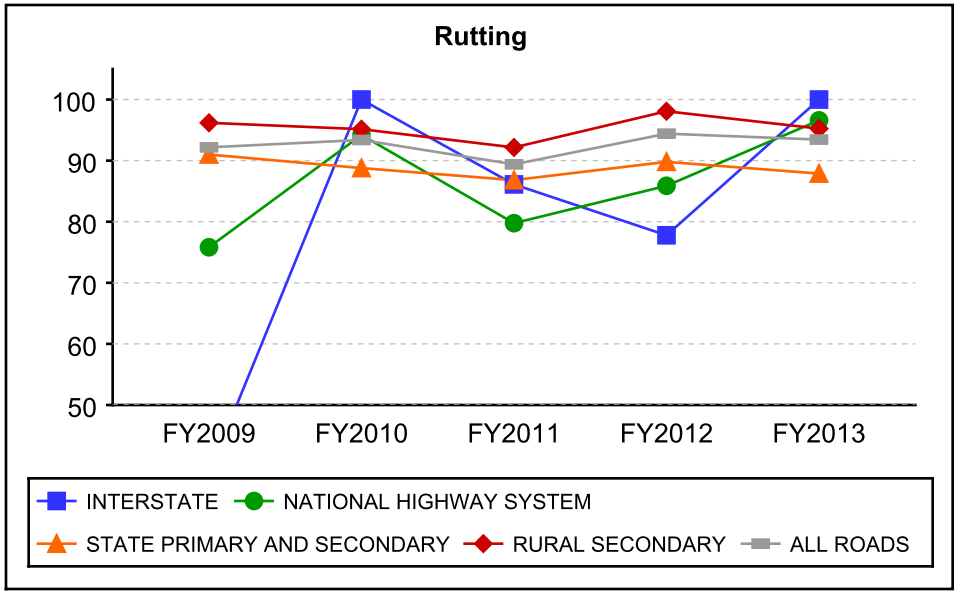
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Rutting
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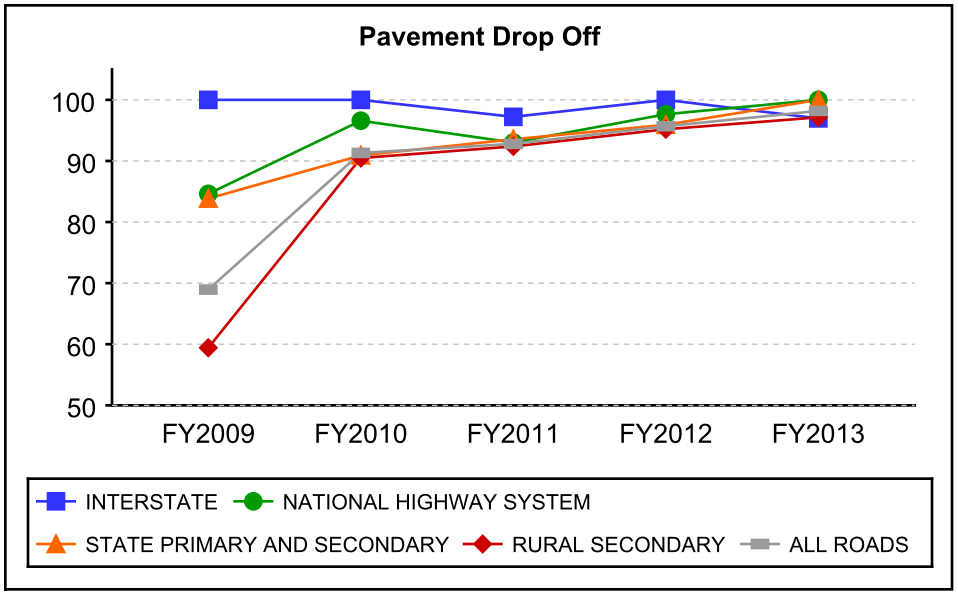
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Pavement Drop Off
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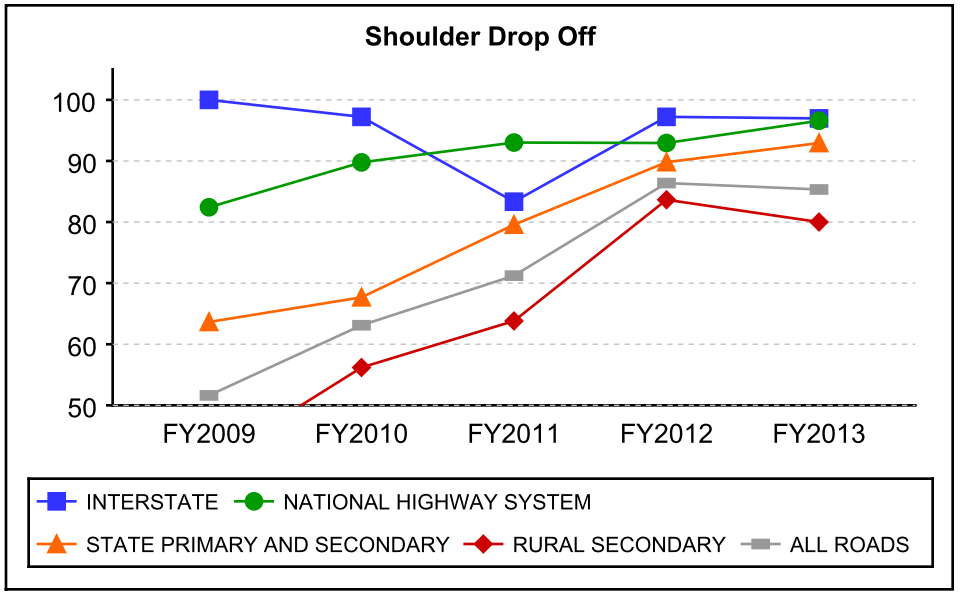
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Shoulder Drop Off
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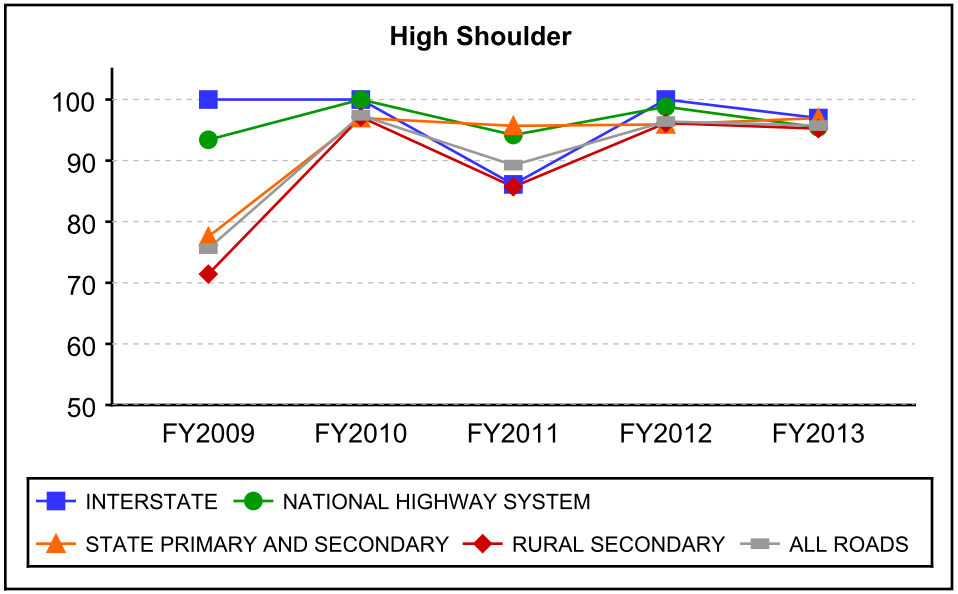
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


High Shoulder
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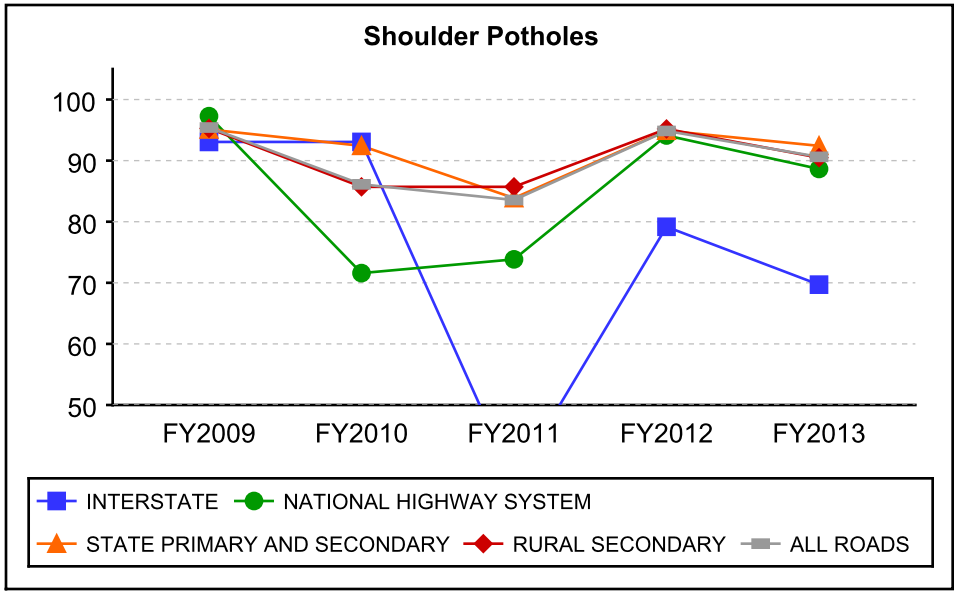
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Shoulder Potholes
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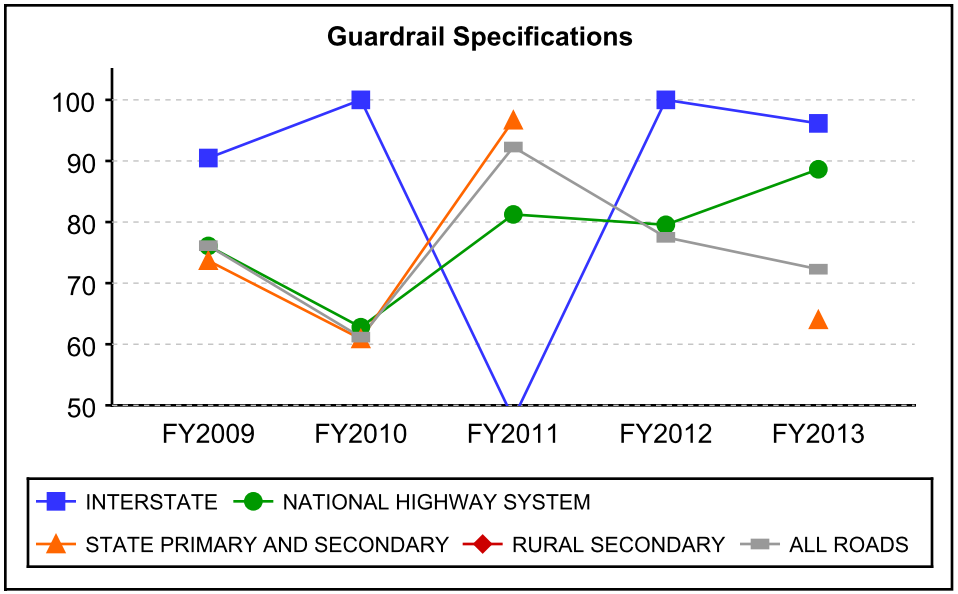
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Guardrail Specifications
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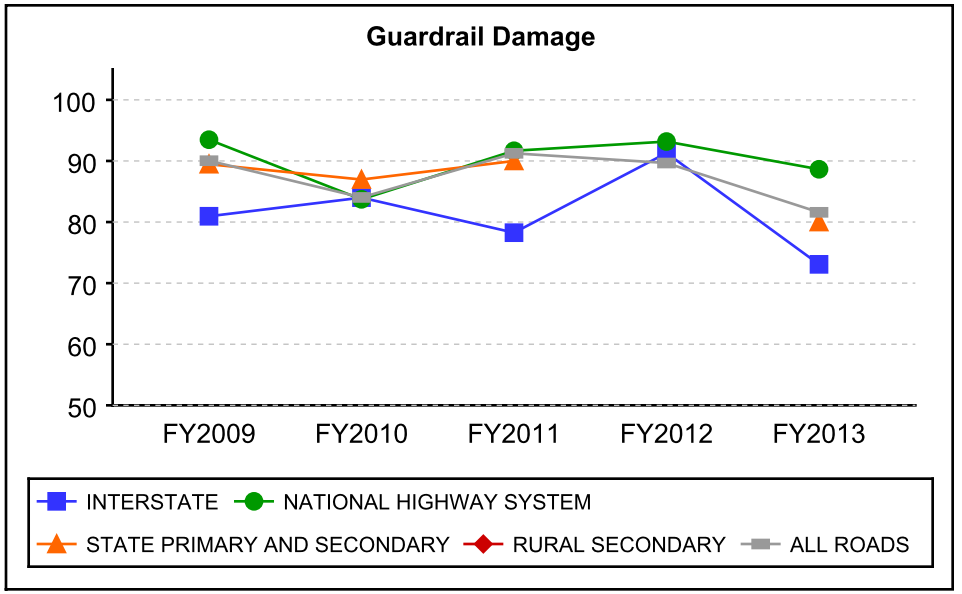
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Guardrail Damage
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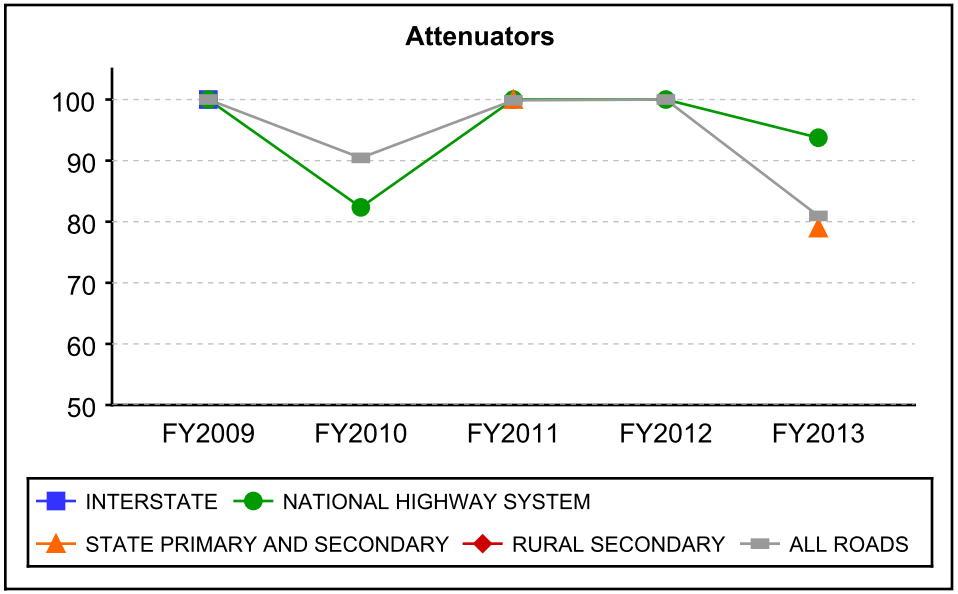
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS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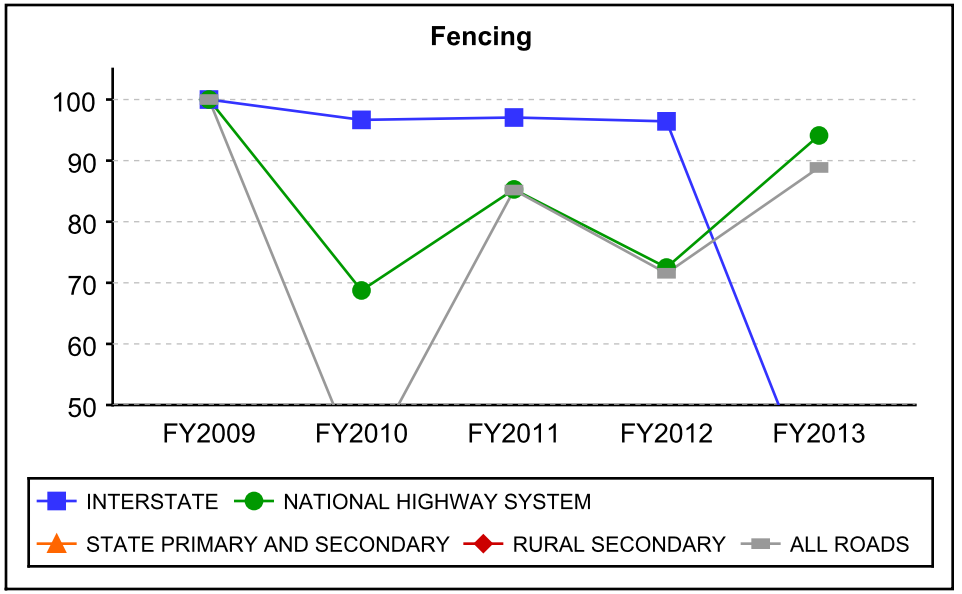
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS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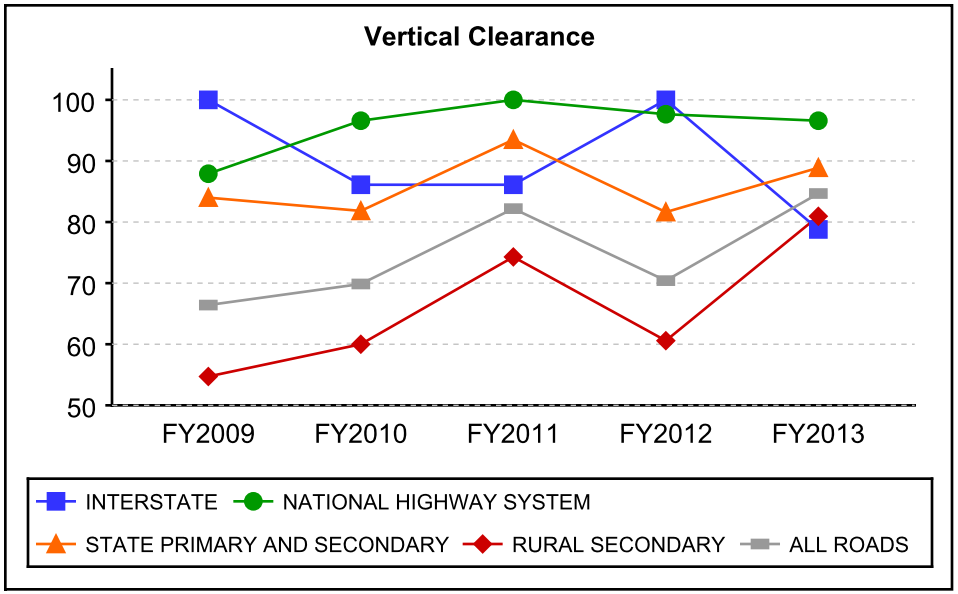
RURAL SECONDARY
ALL ROADS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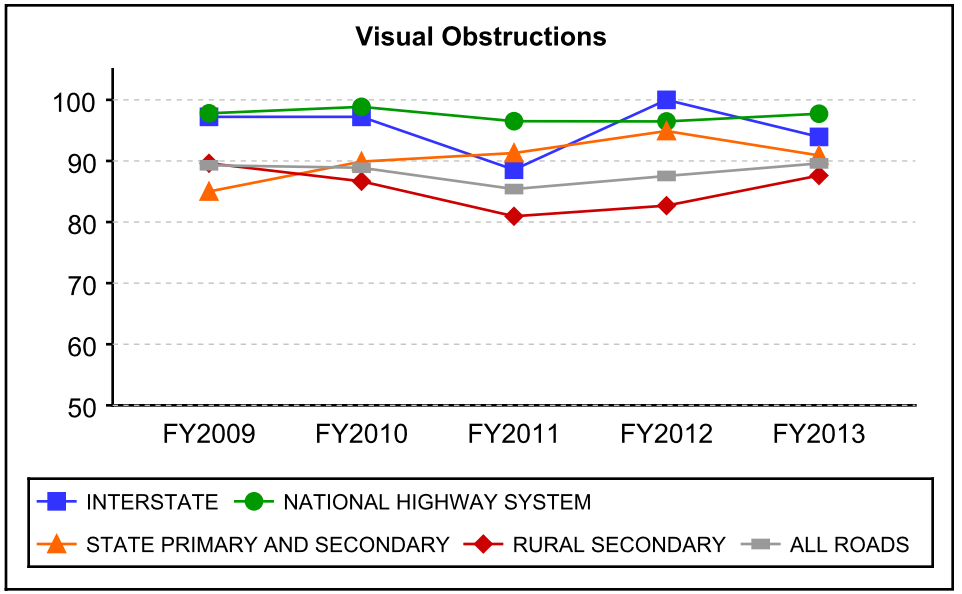
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS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STATE PRIMARY AND SECONDARY
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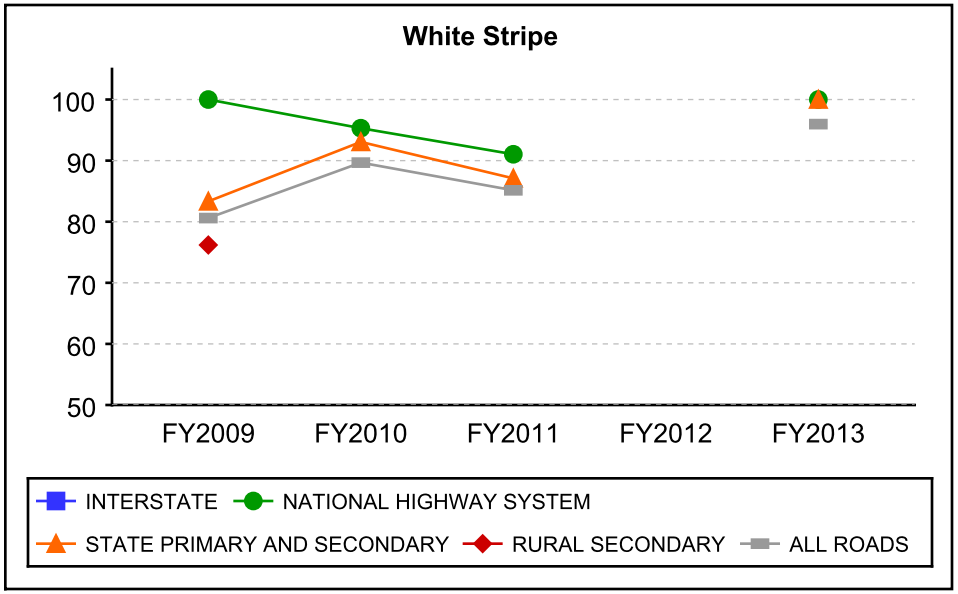
ALL ROADS


White Stripe
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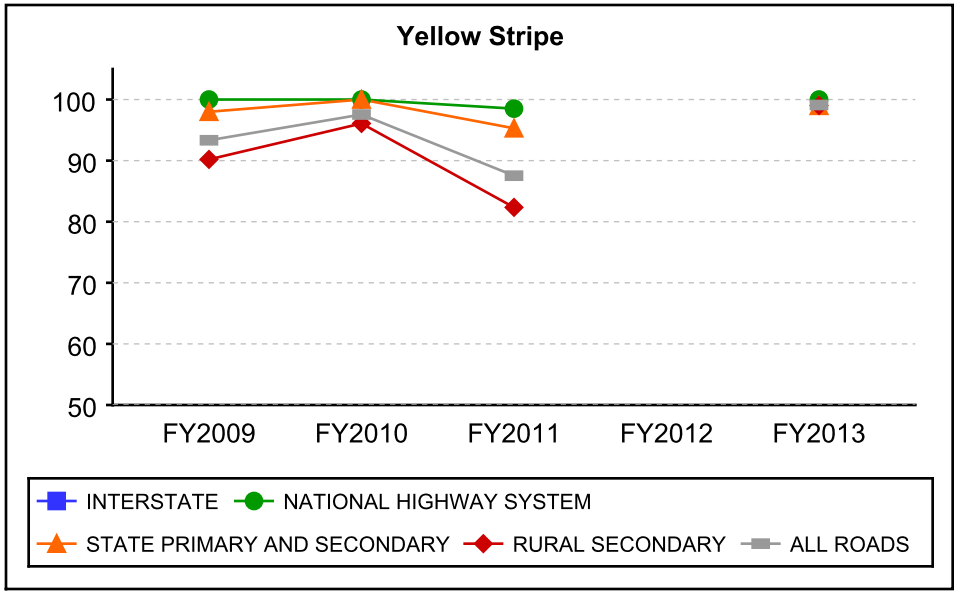
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Yellow Stripe
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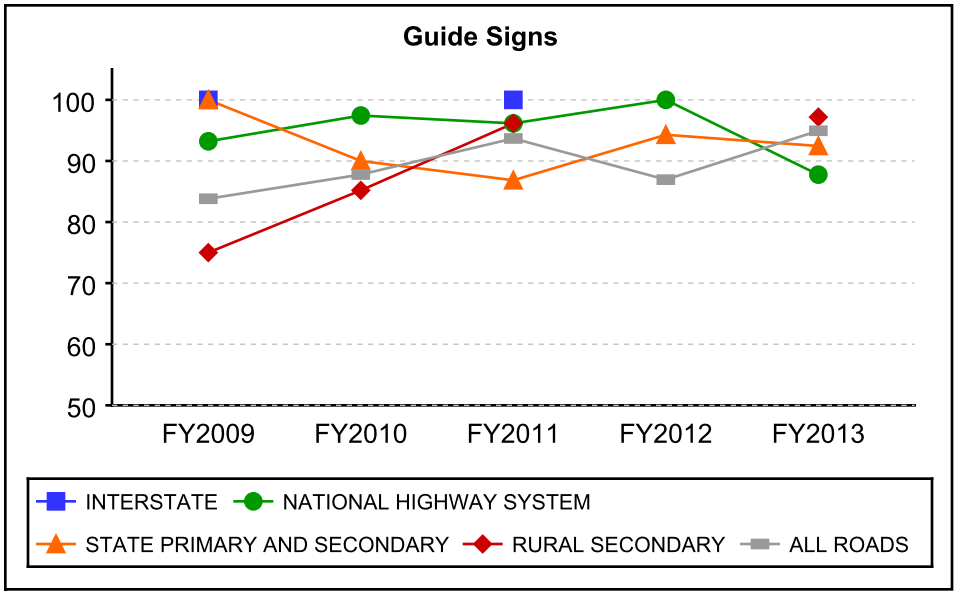
RURAL SECONDARY
ALL ROADS


Guide Signs
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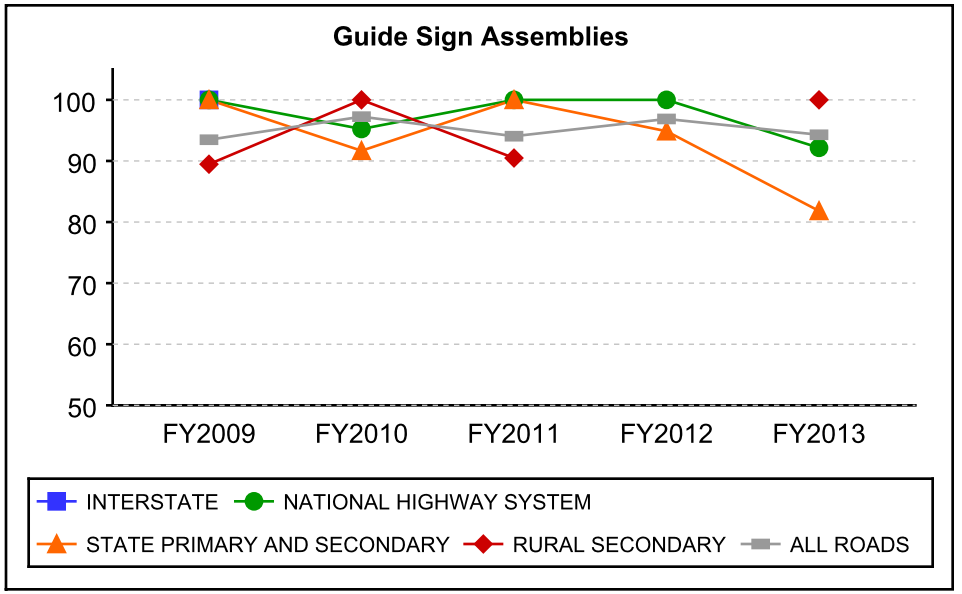
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Guide Sign Assemblies
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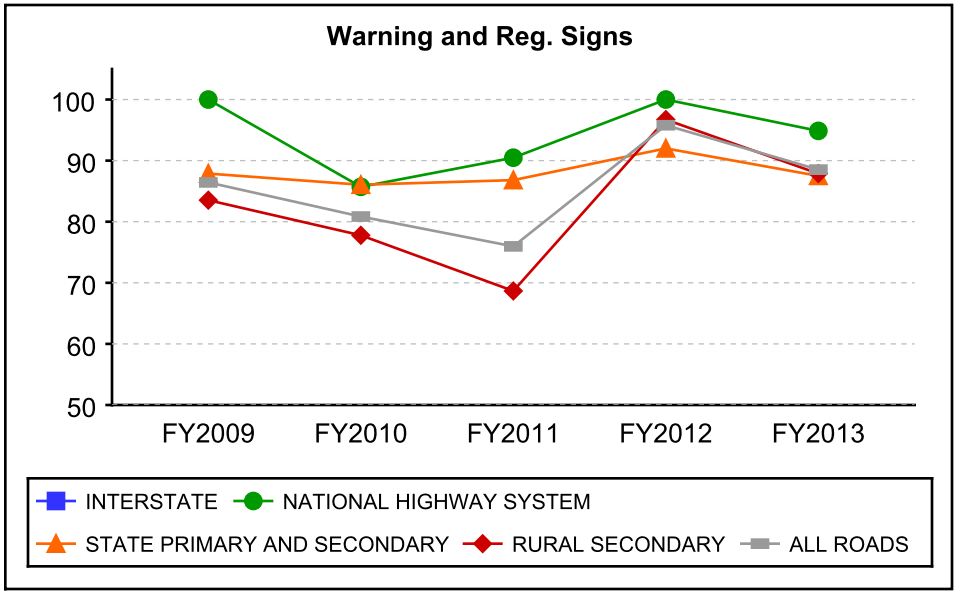
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Warning and Reg. Signs
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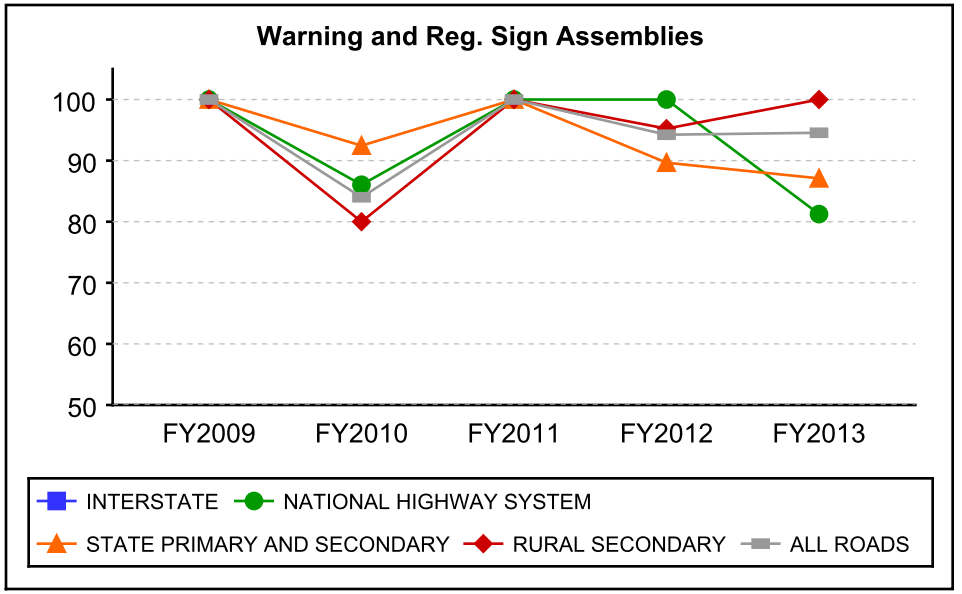
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Warning and Reg. Sign Assemblies
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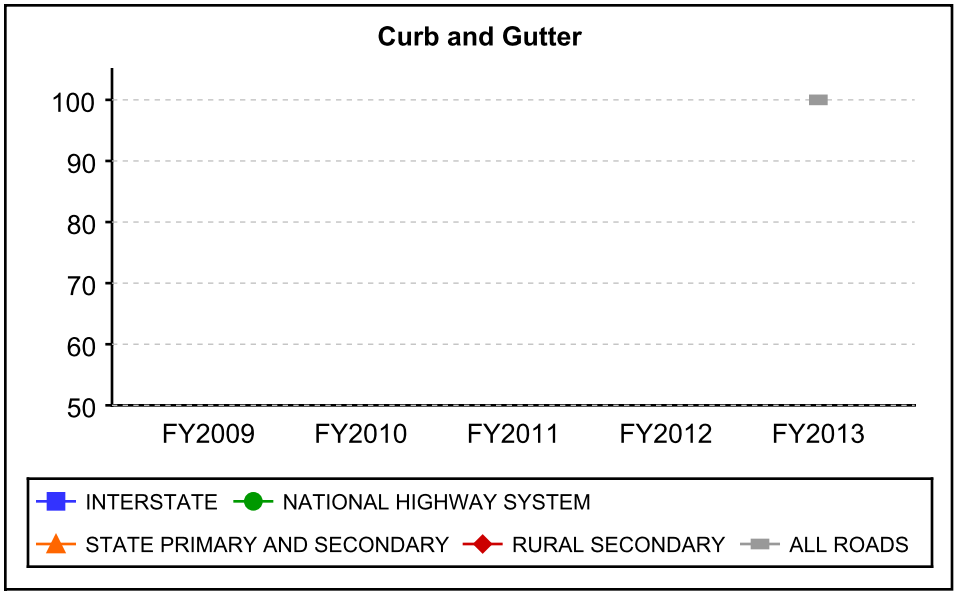
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Curb and Gutter
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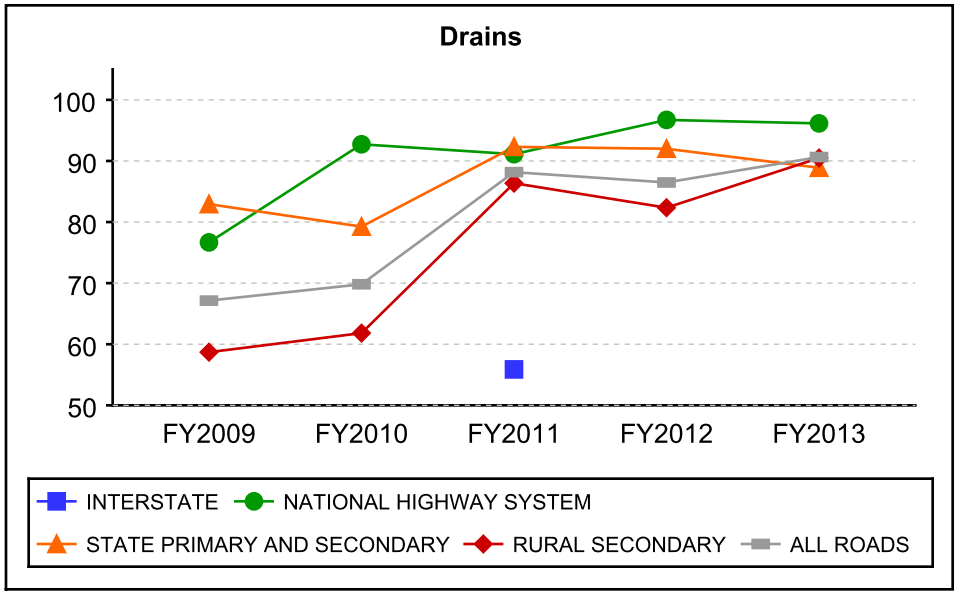
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Drains
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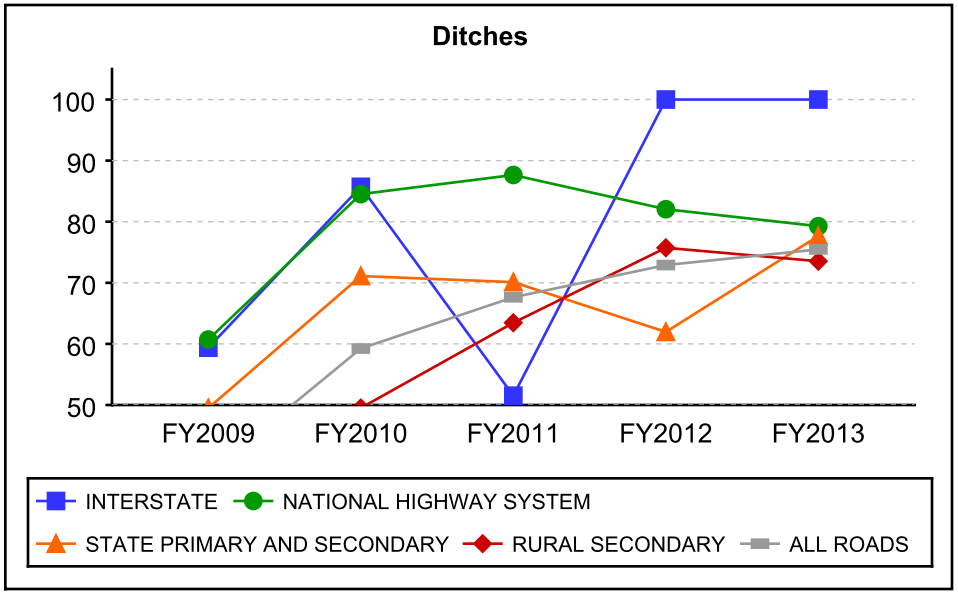
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Ditches
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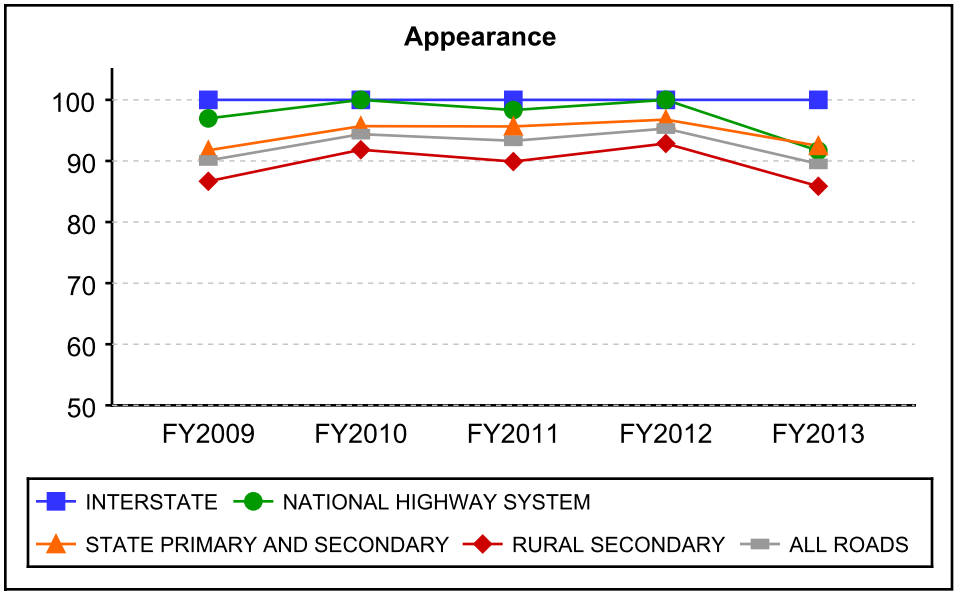
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Appearance
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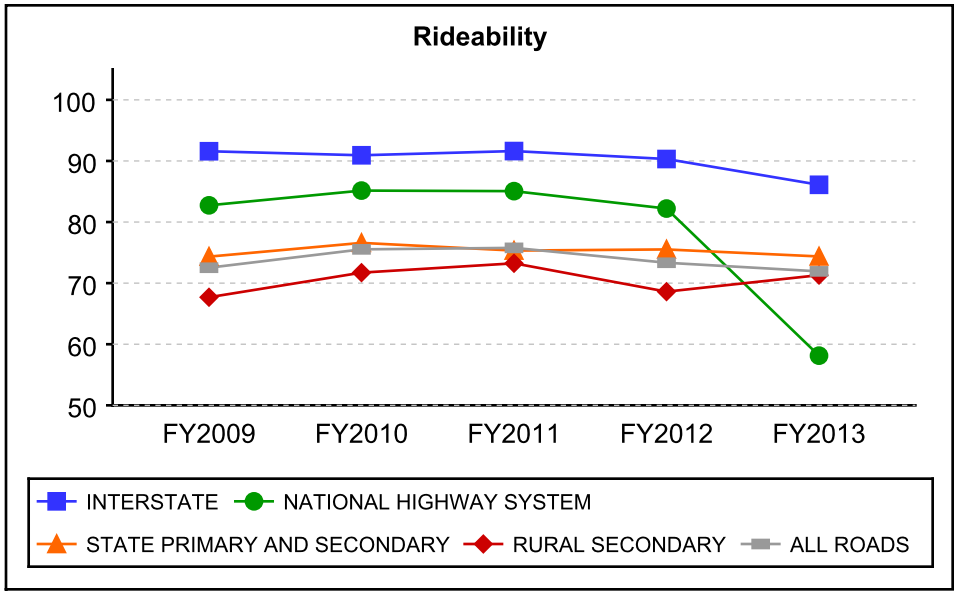
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Rideability
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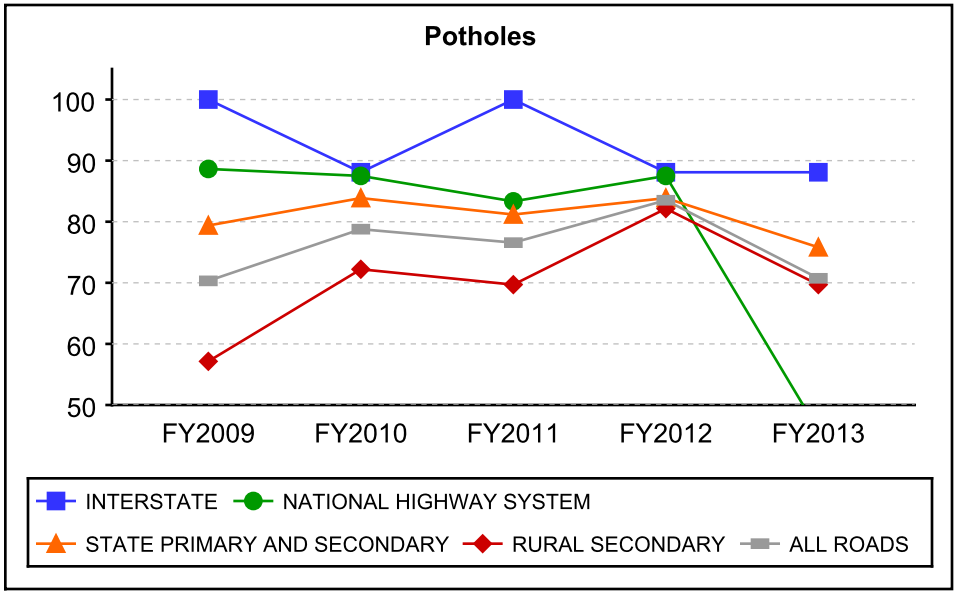
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Potholes
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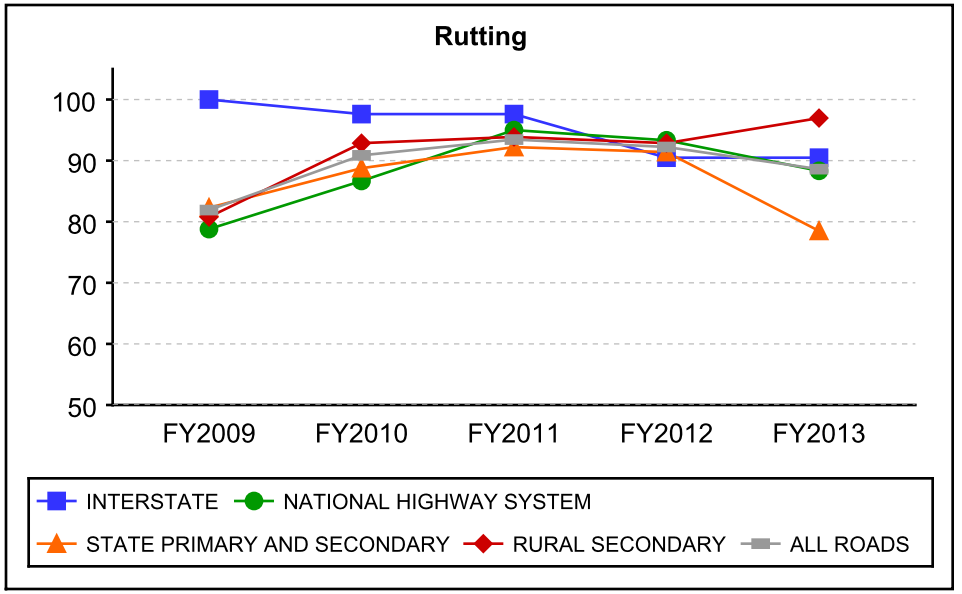
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Rutting
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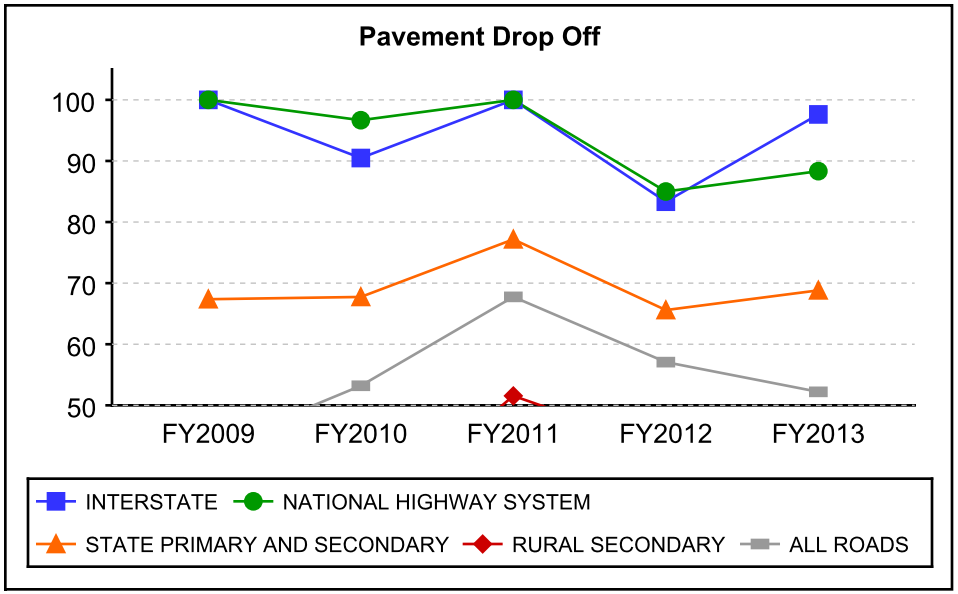
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Pavement Drop Off
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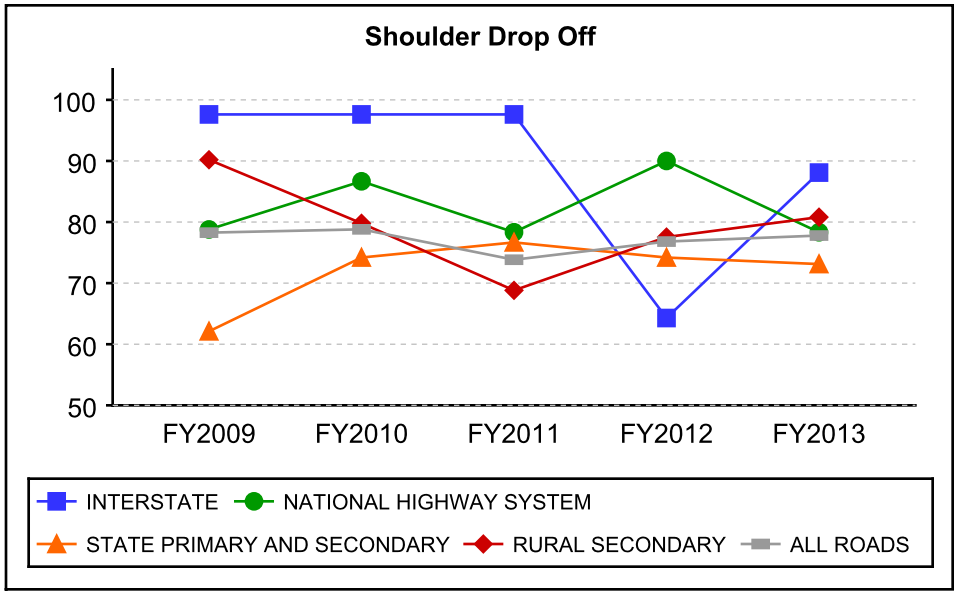
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Shoulder Drop Off
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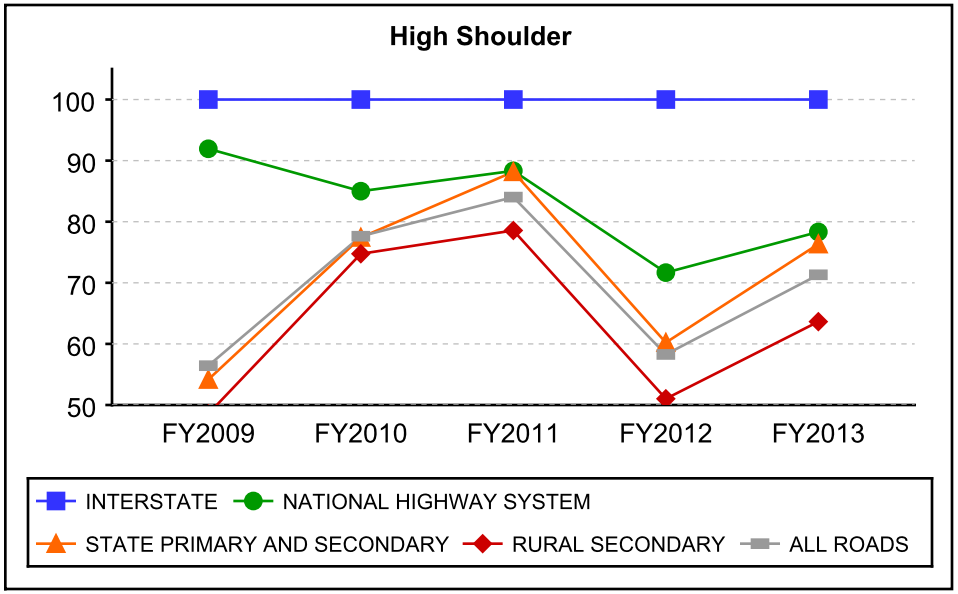
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


High Shoulder
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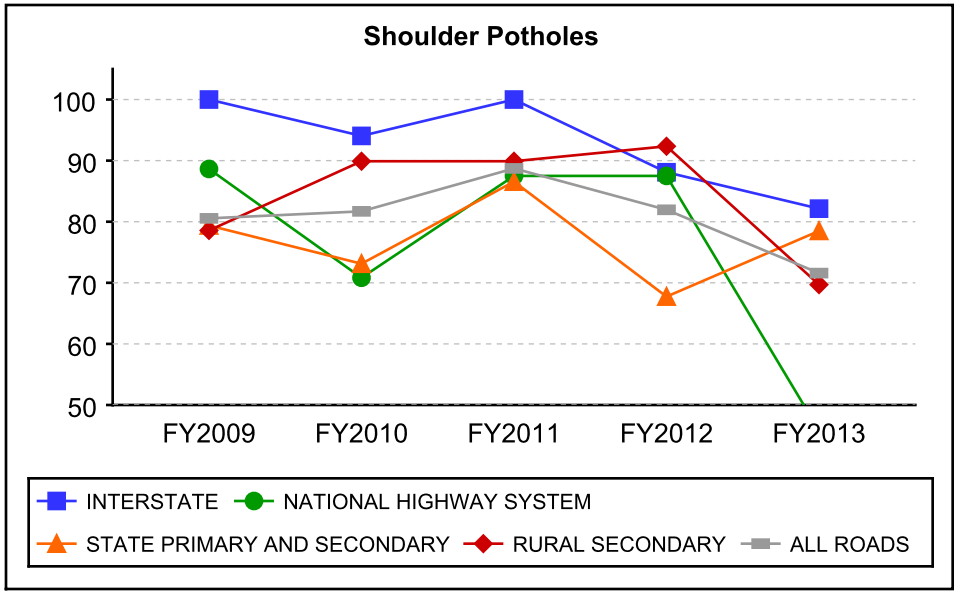
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Shoulder Potholes
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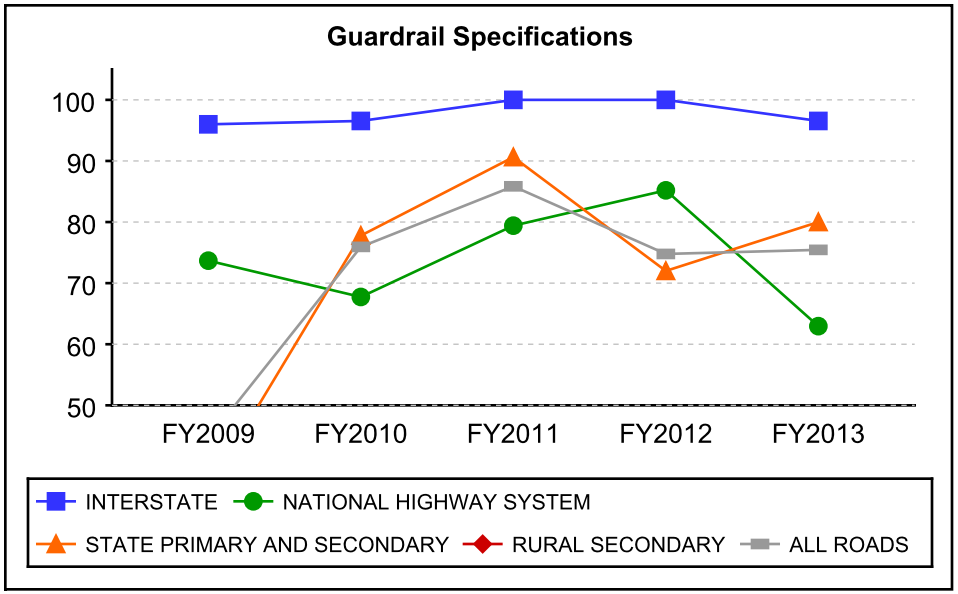
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Guardrail Specifications
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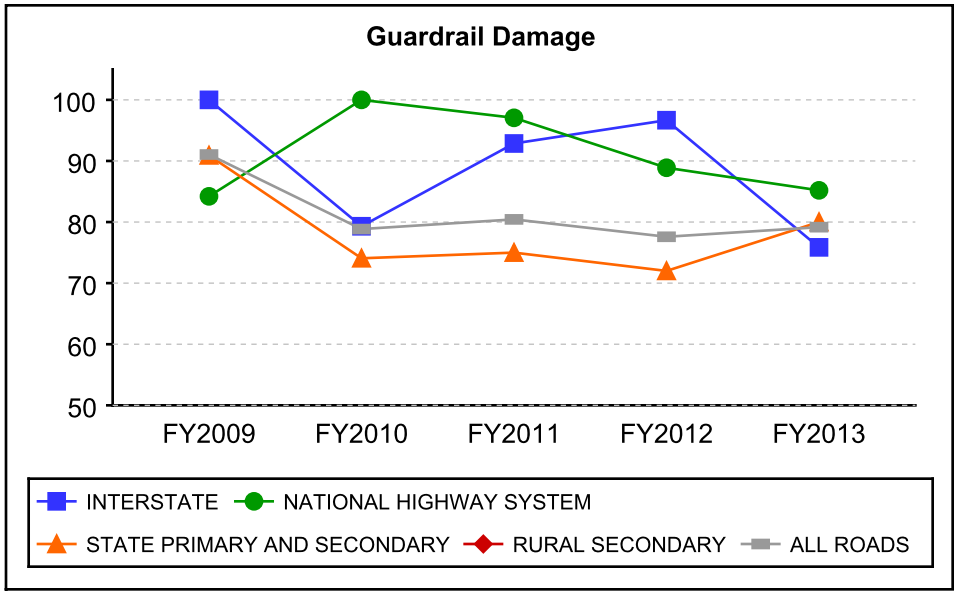
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Guardrail Damage
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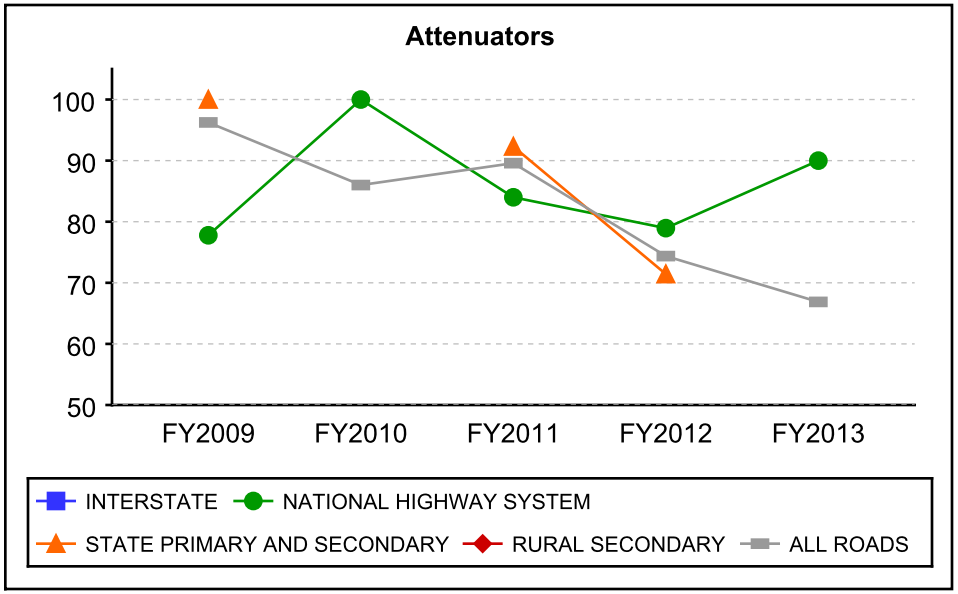
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Attenuators
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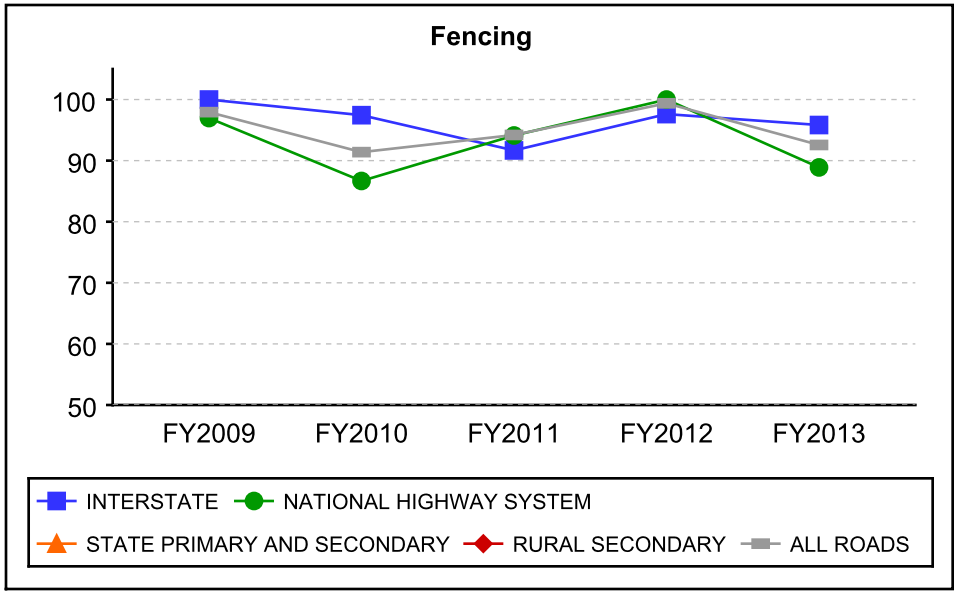
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Fencing
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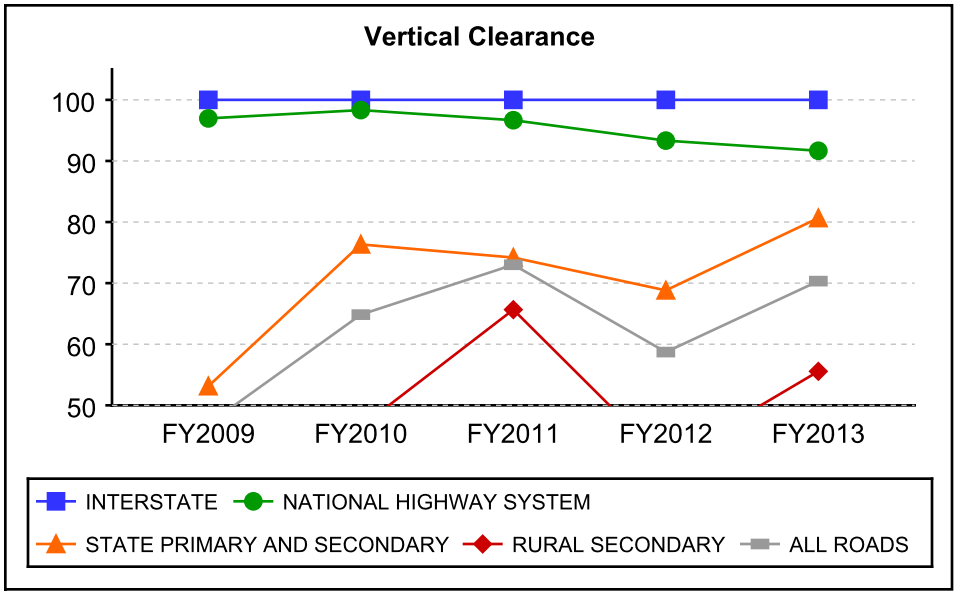
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Vertical Clearance
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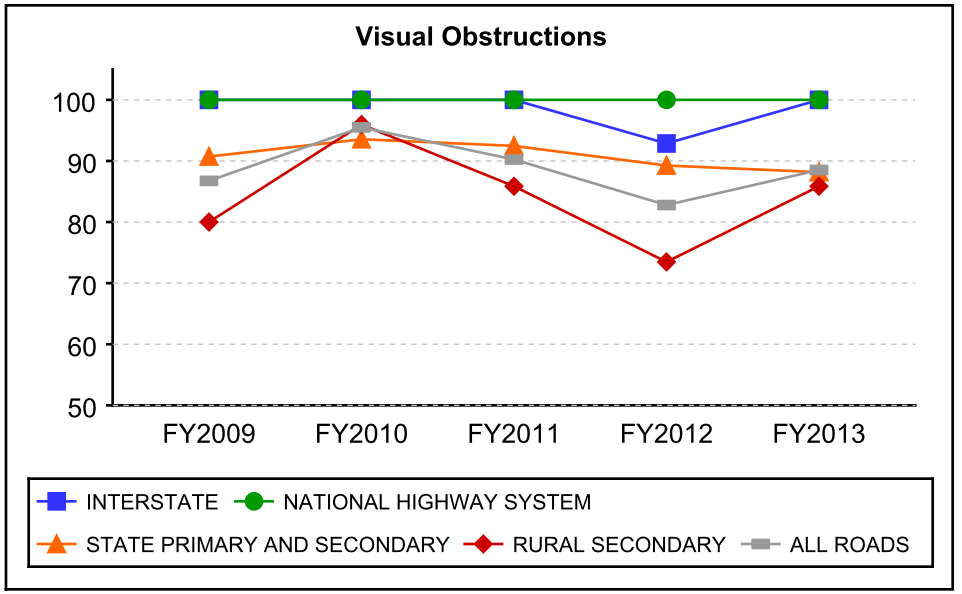
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Visual Obstructions
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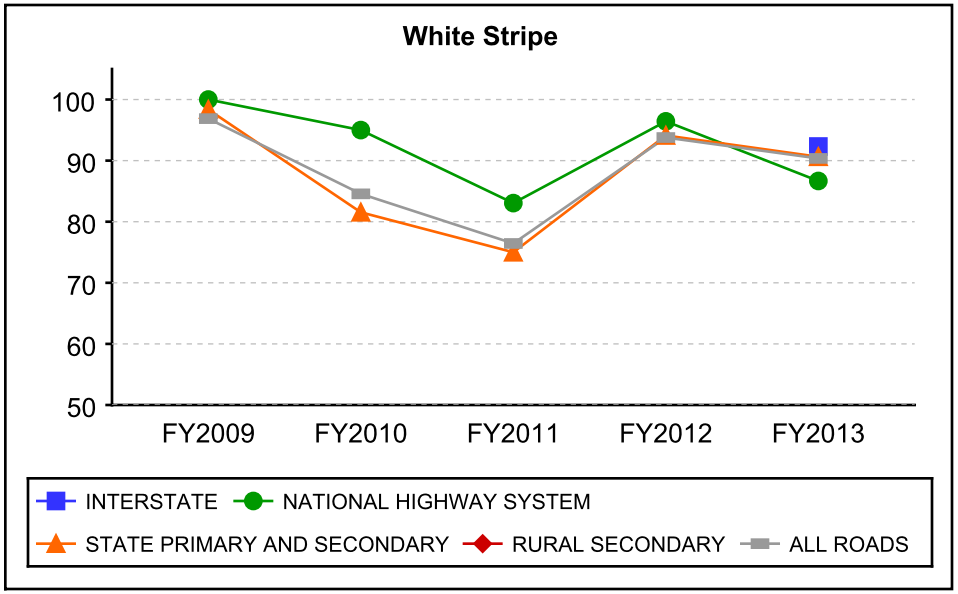
RURAL SECONDARY
ALL ROADS


White Stripe
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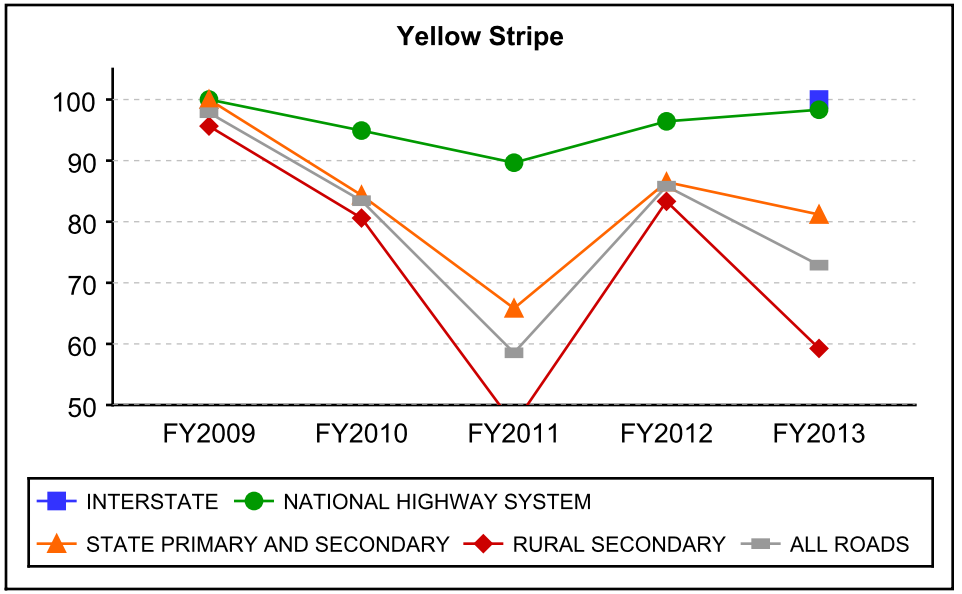
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Yellow Stripe
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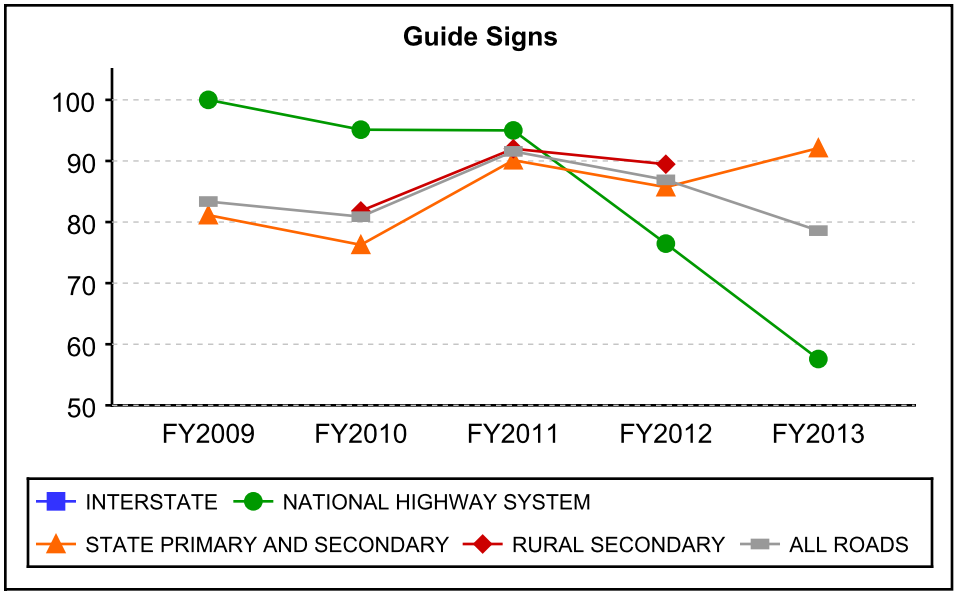
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Guide Signs
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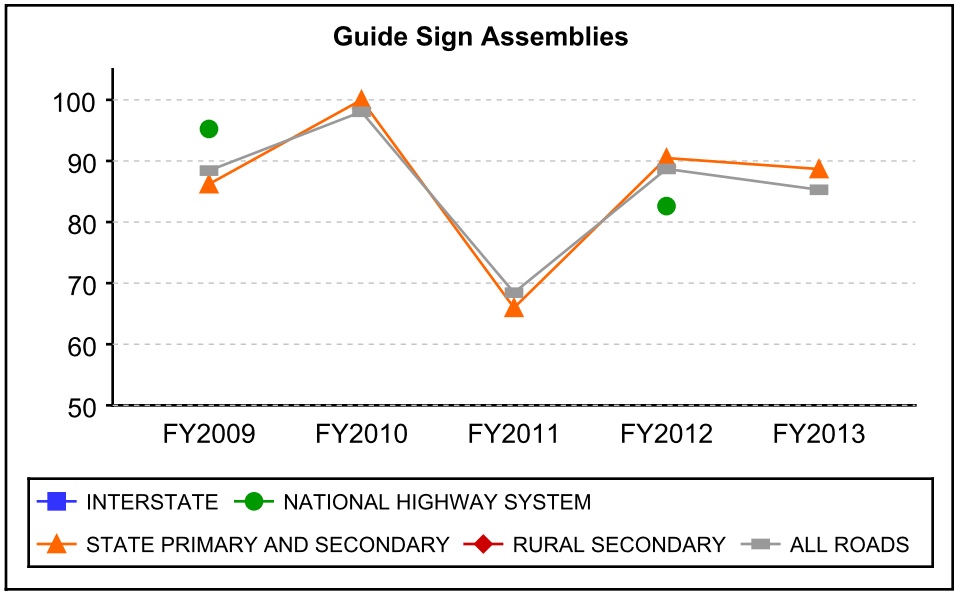
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Guide Sign Assemblies
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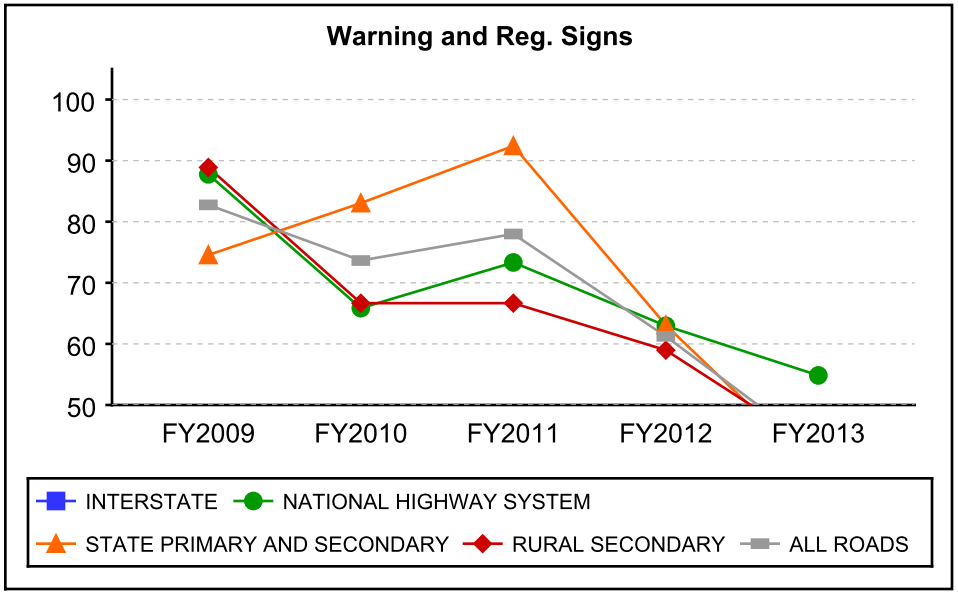
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Warning and Reg. Signs
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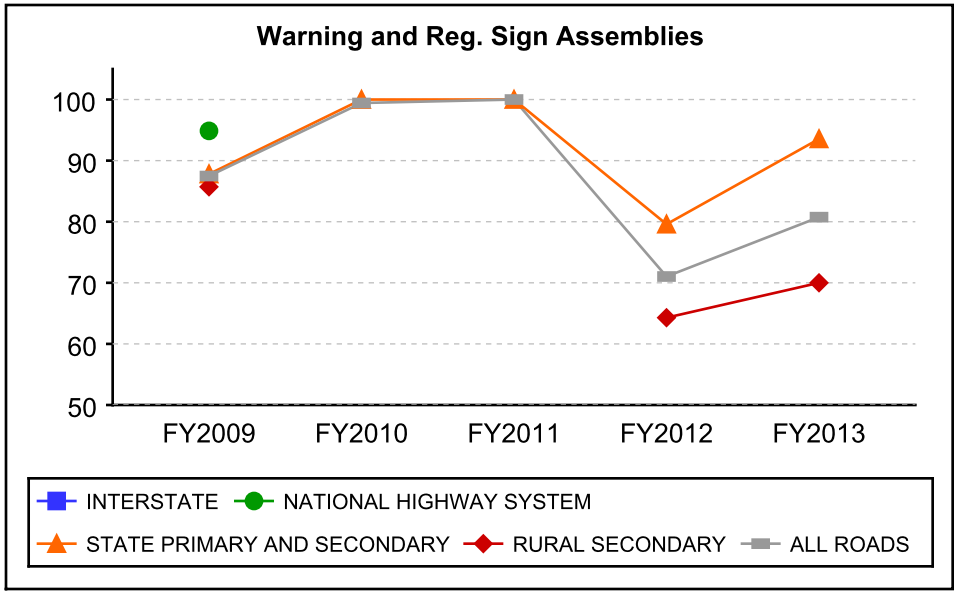
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Warning and Reg. Sign Assemblies
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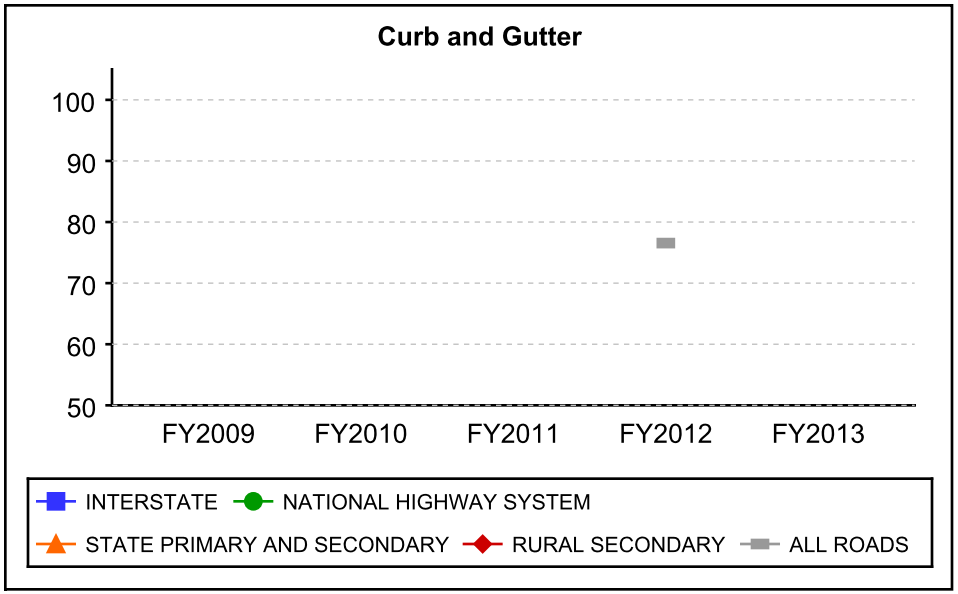
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Curb and Gutter
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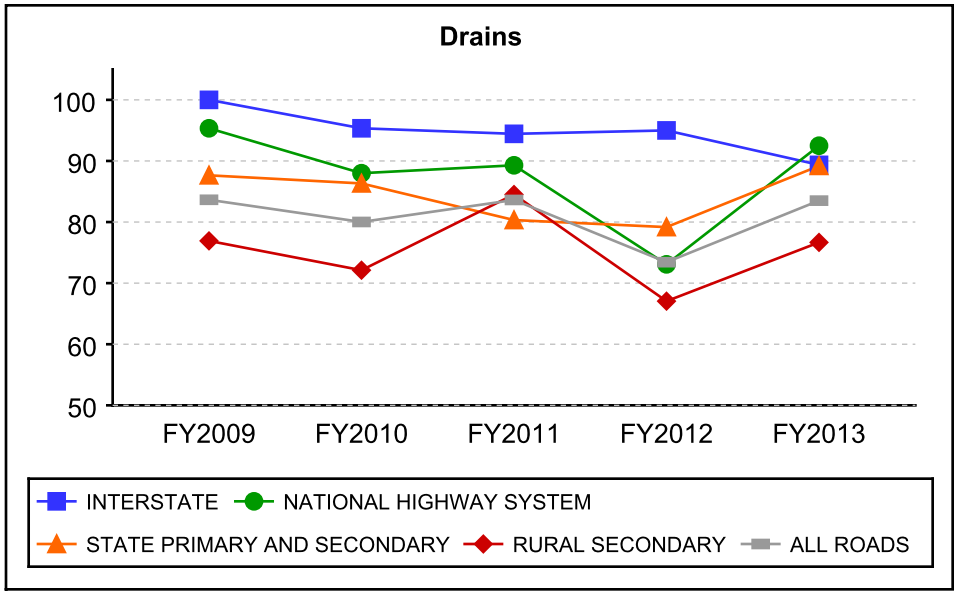
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Drains
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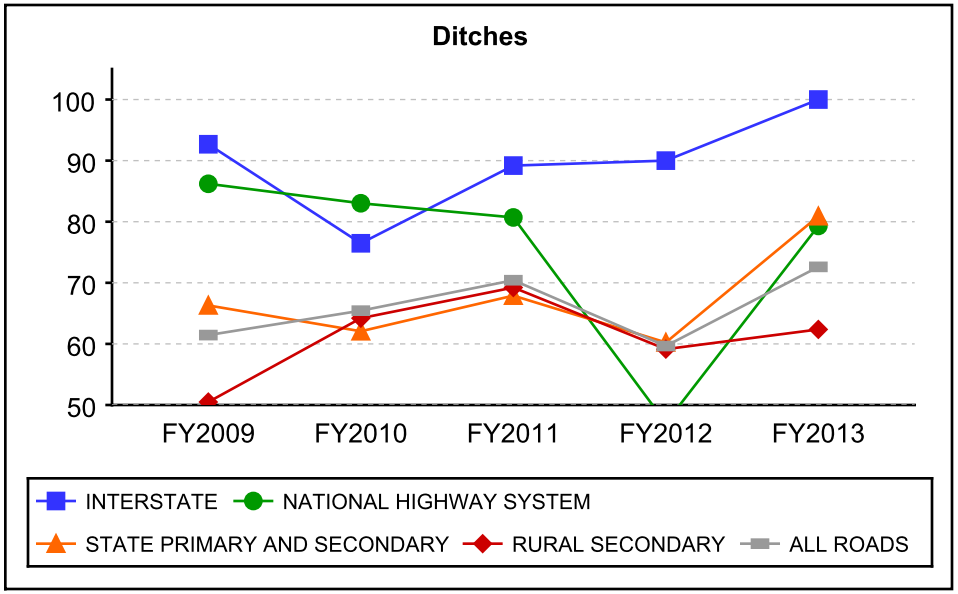
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Ditches
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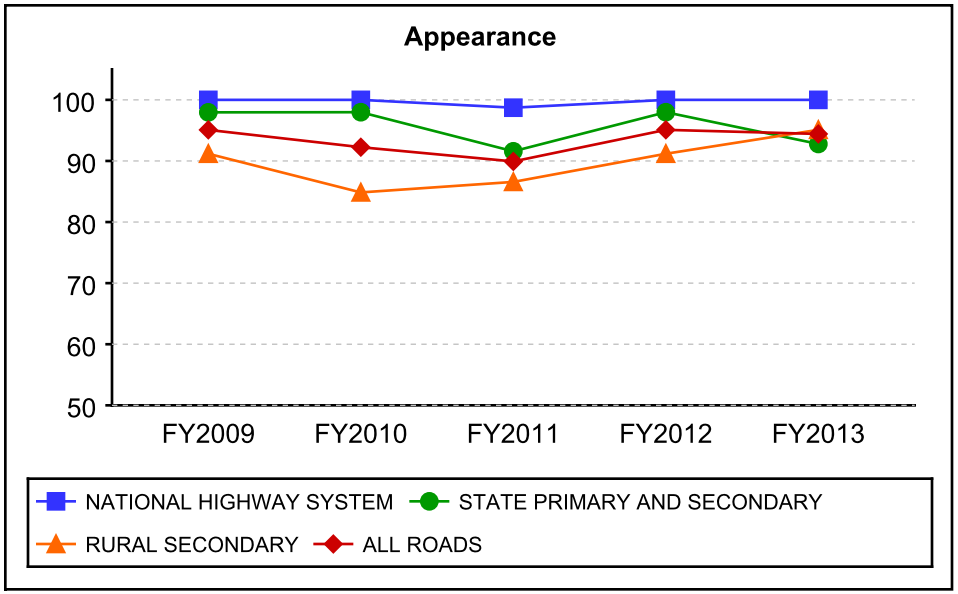
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Appearance
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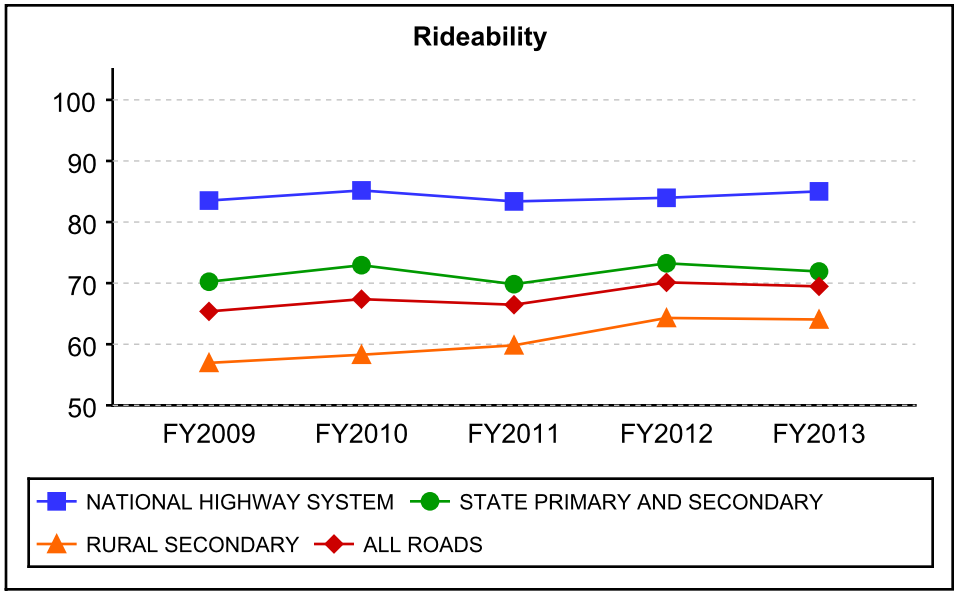
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Rideability
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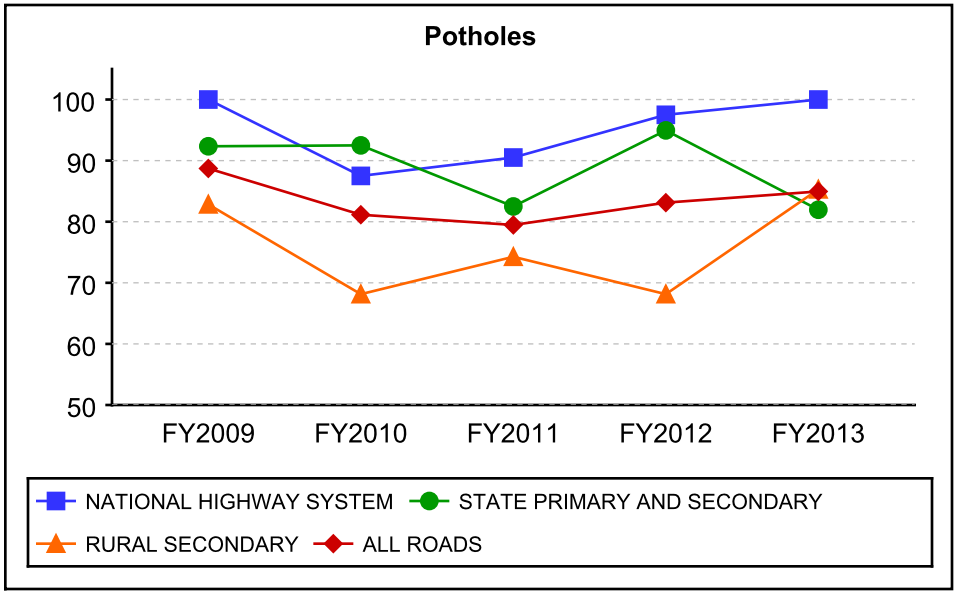
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Potholes
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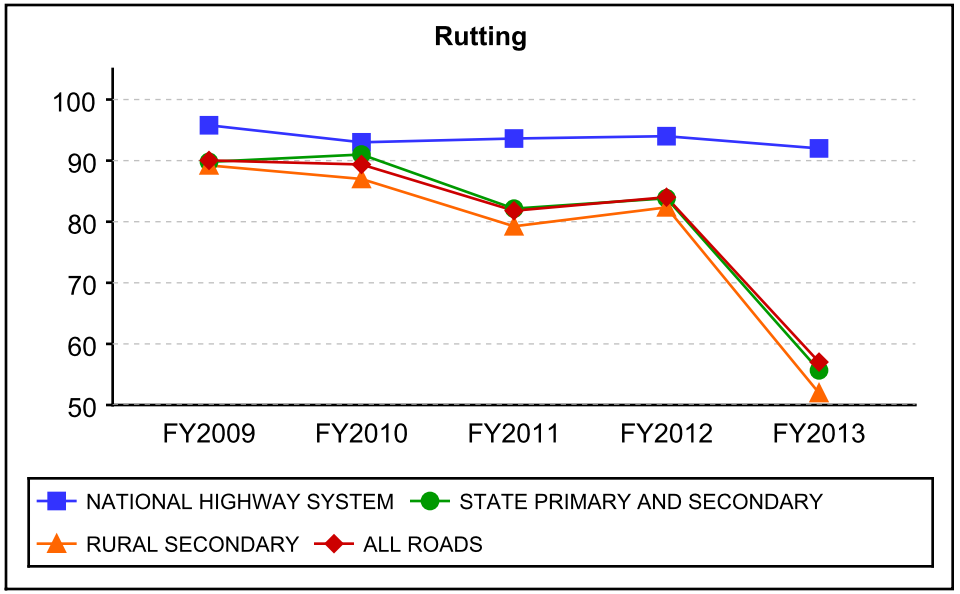
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Rutting
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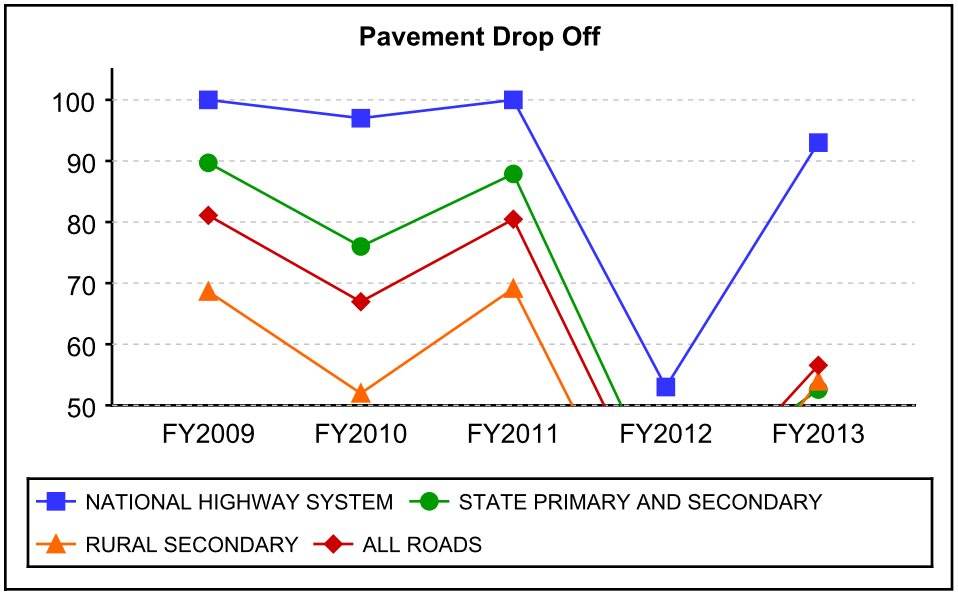
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Pavement Drop Off
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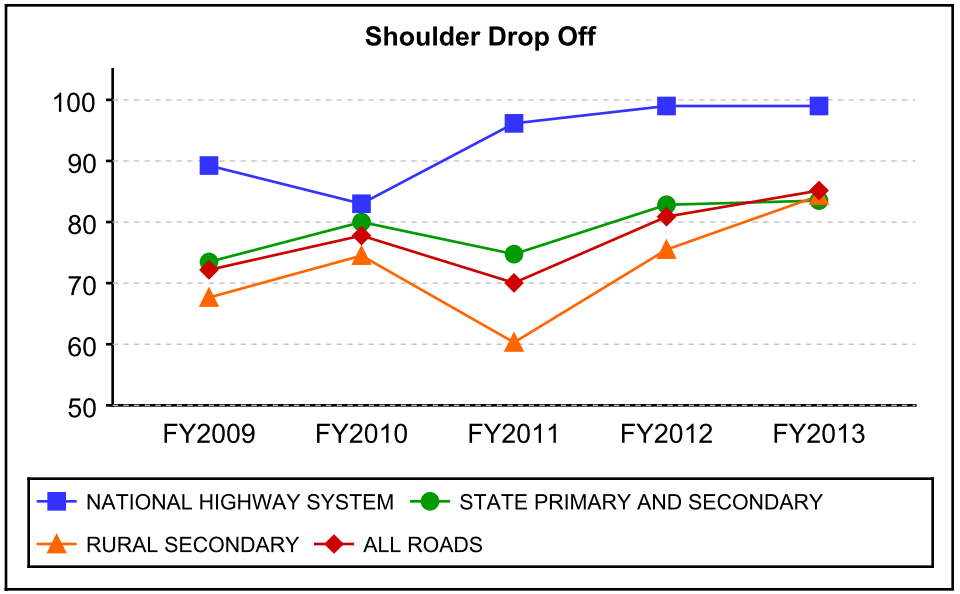
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Shoulder Drop Off
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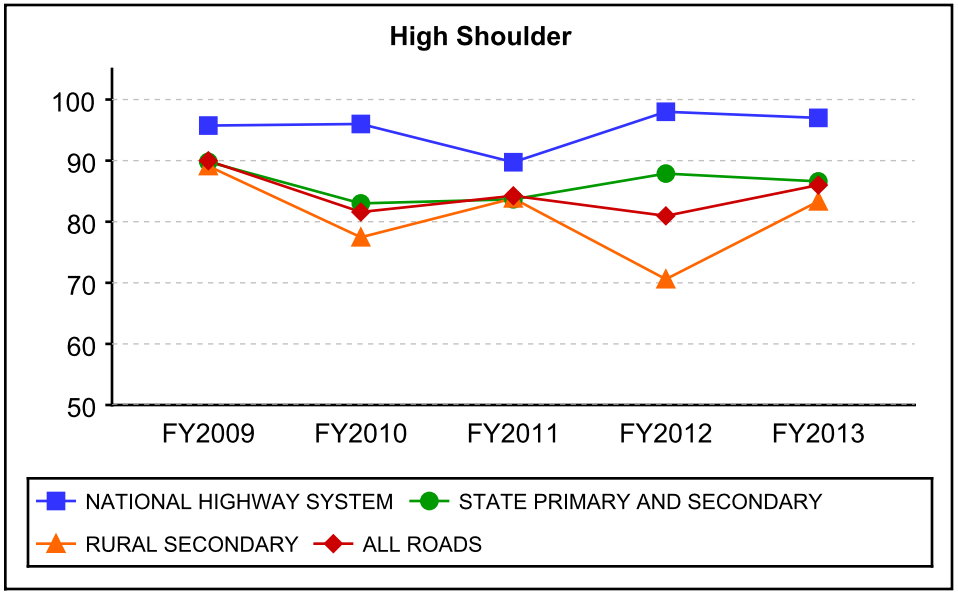
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


High Shoulder
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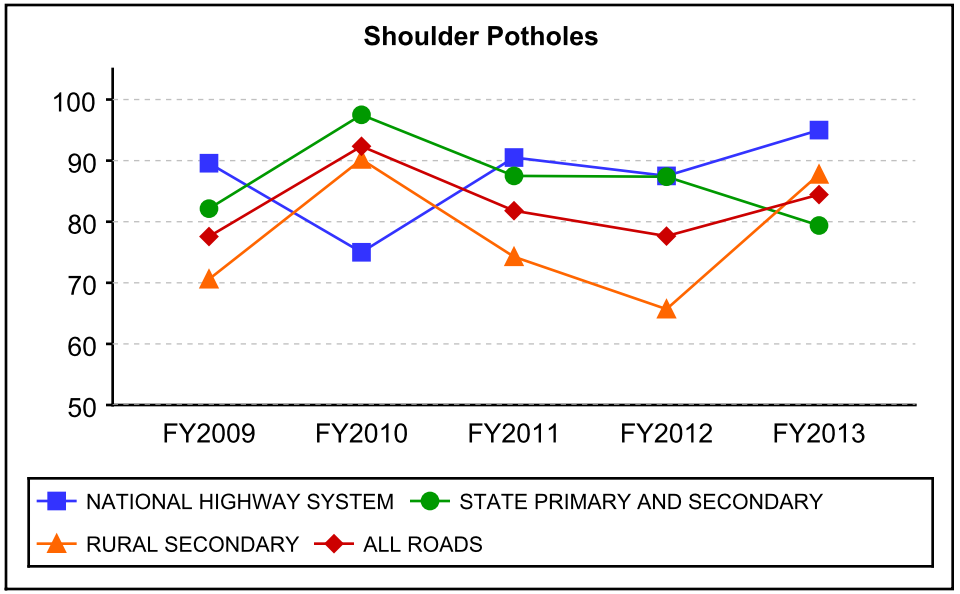
RURAL SECONDARY
ALL ROADS


Shoulder Potholes
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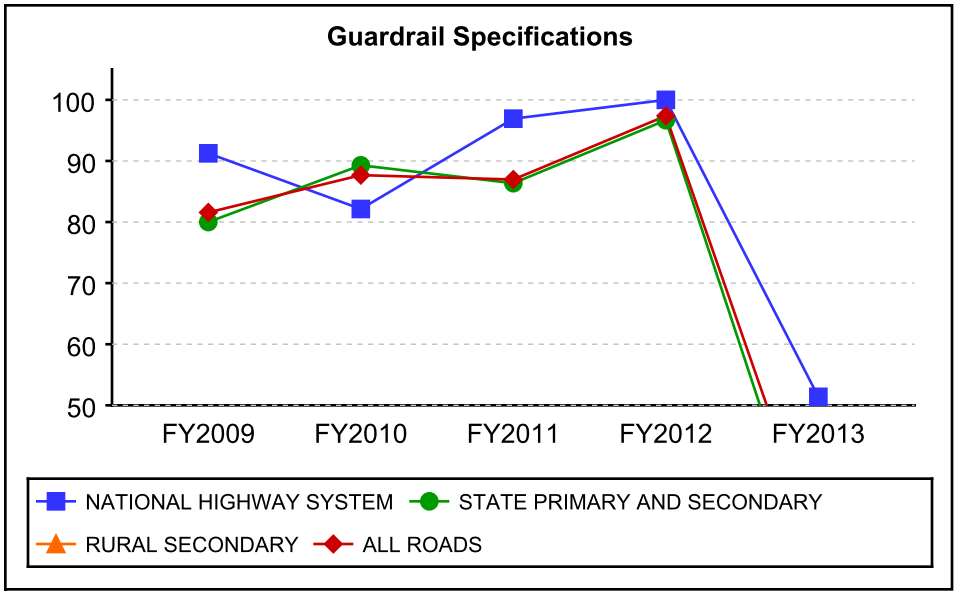
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Guardrail Specifications
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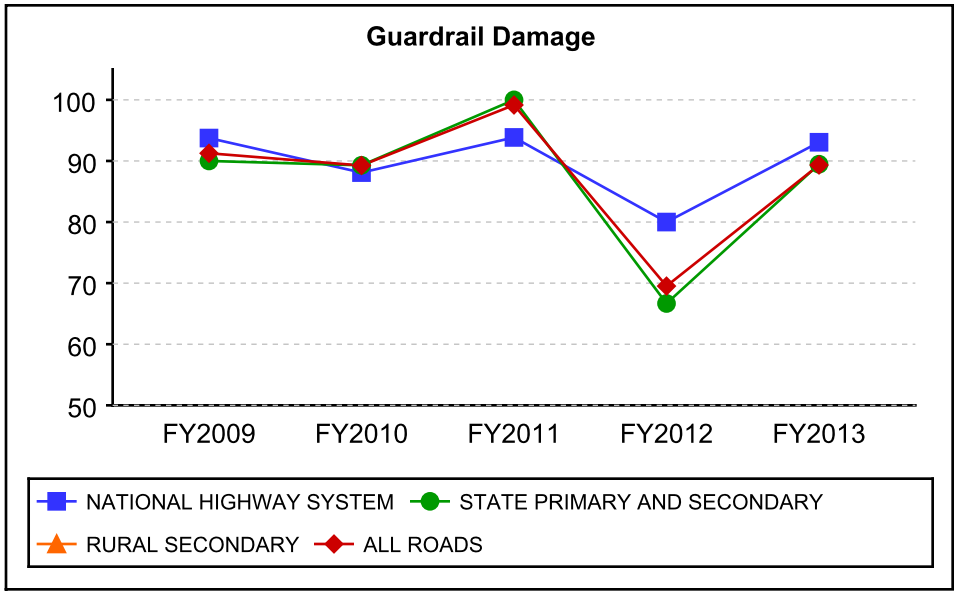
RURAL SECONDARY
ALL ROADS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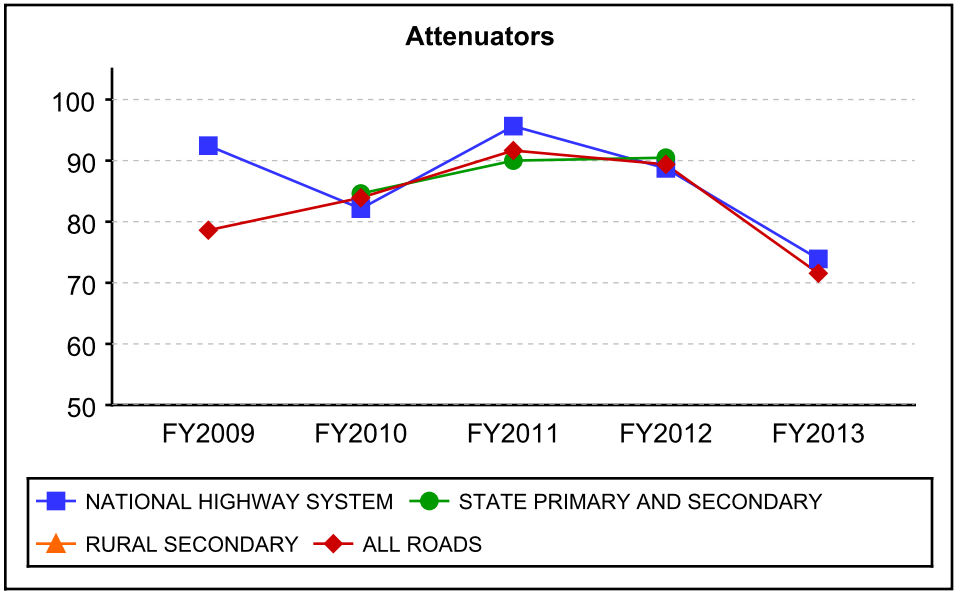
RURAL SECONDARY
ALL ROADS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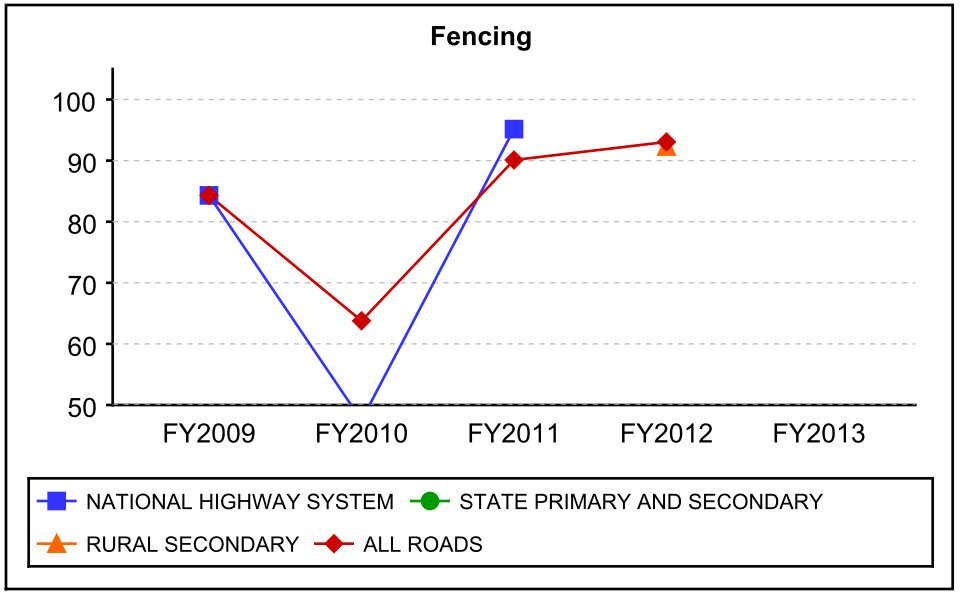
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS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RURAL SECONDARY
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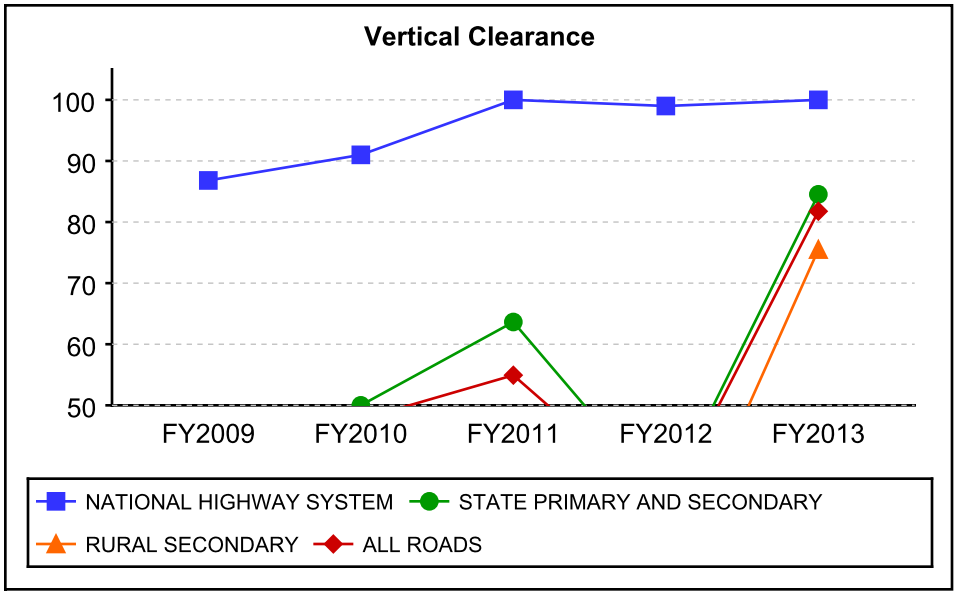
Vertical Clearance
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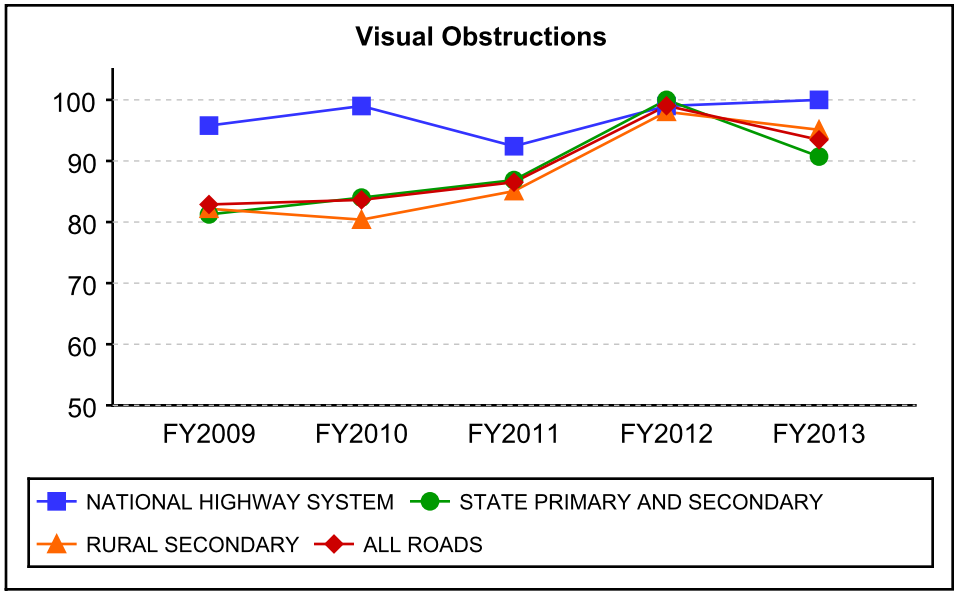
RURAL SECONDARY
ALL ROADS


Visual Obstructions
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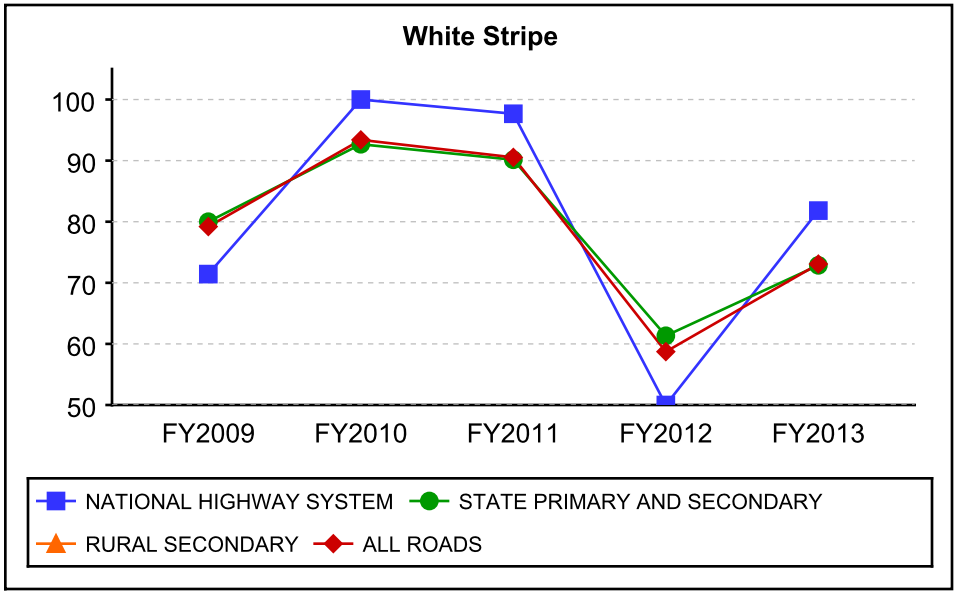
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


White Stripe
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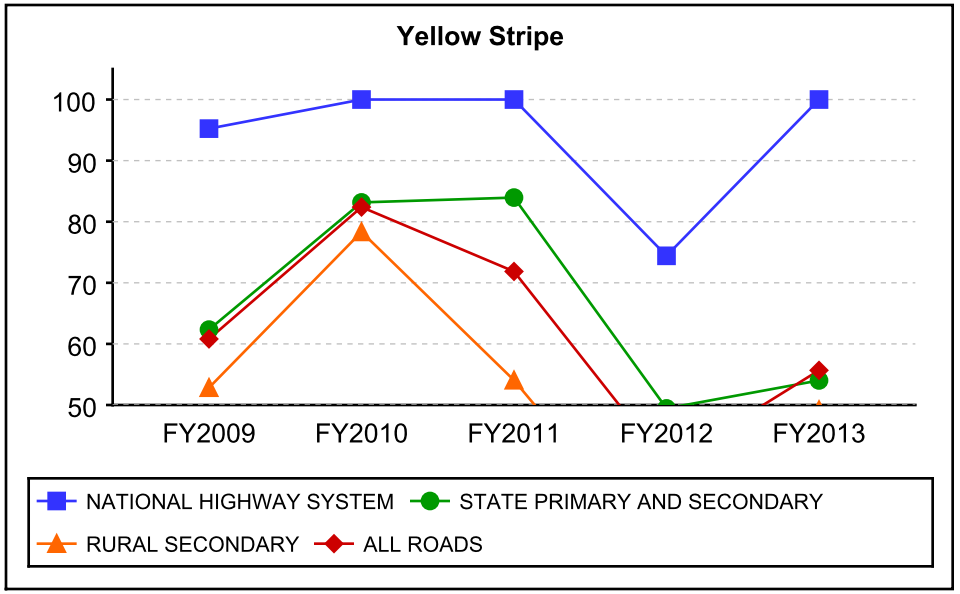
RURAL SECONDARY
ALL ROADS


Yellow Stripe
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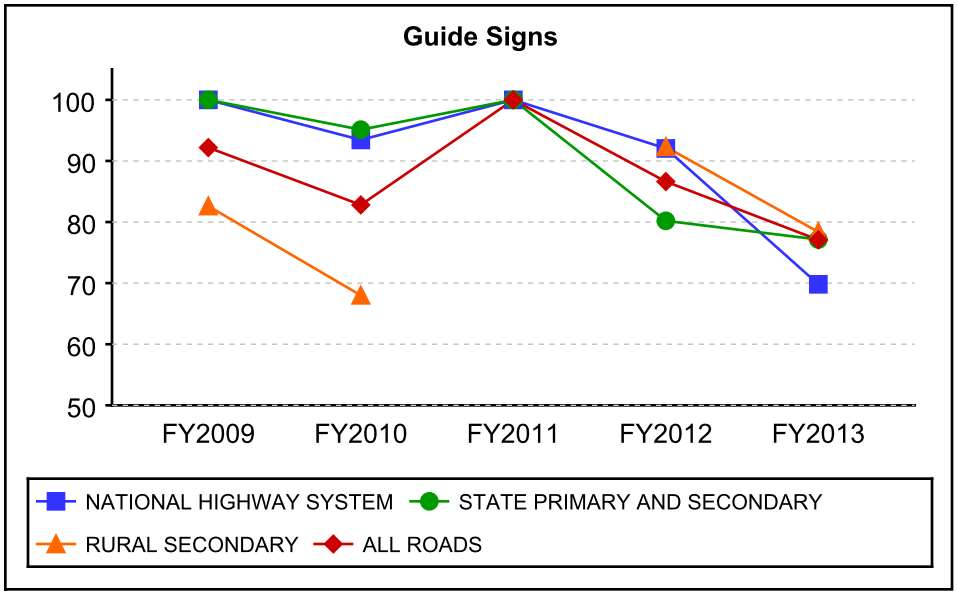
RURAL SECONDARY
ALL ROADS


Guide Signs
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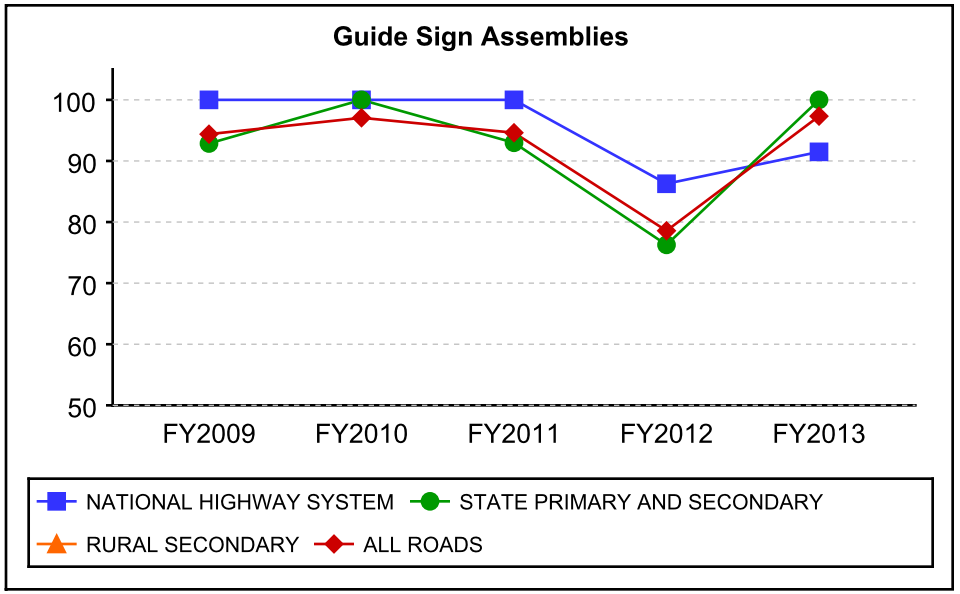
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Guide Sign Assemblies
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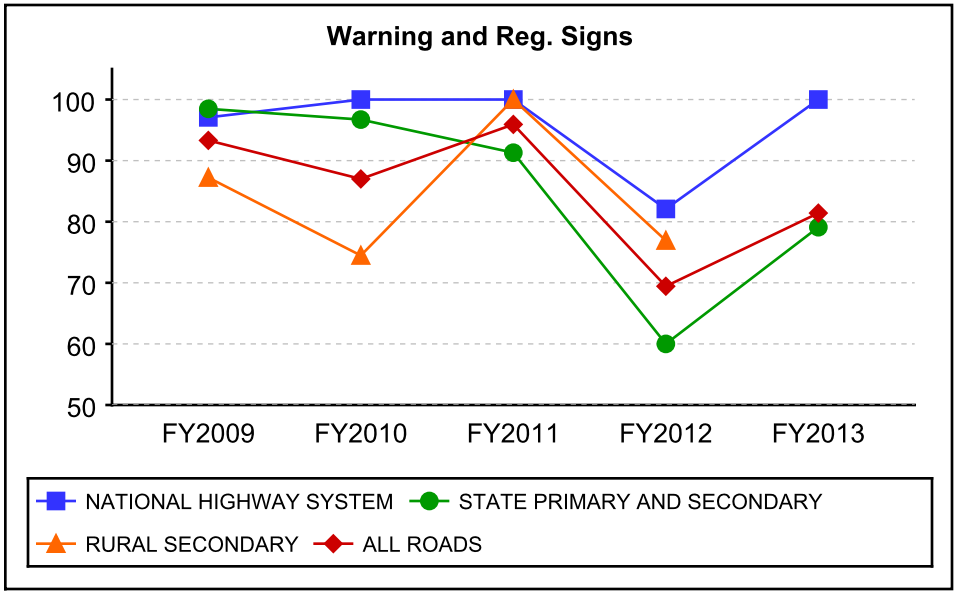
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Warning and Reg. Signs
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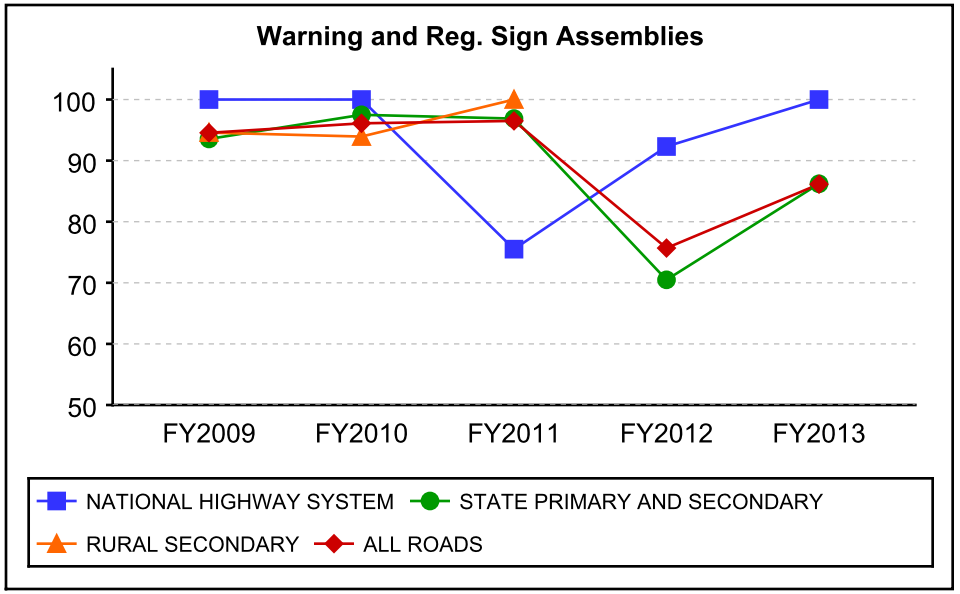
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Warning and Reg. Sign Assemblies
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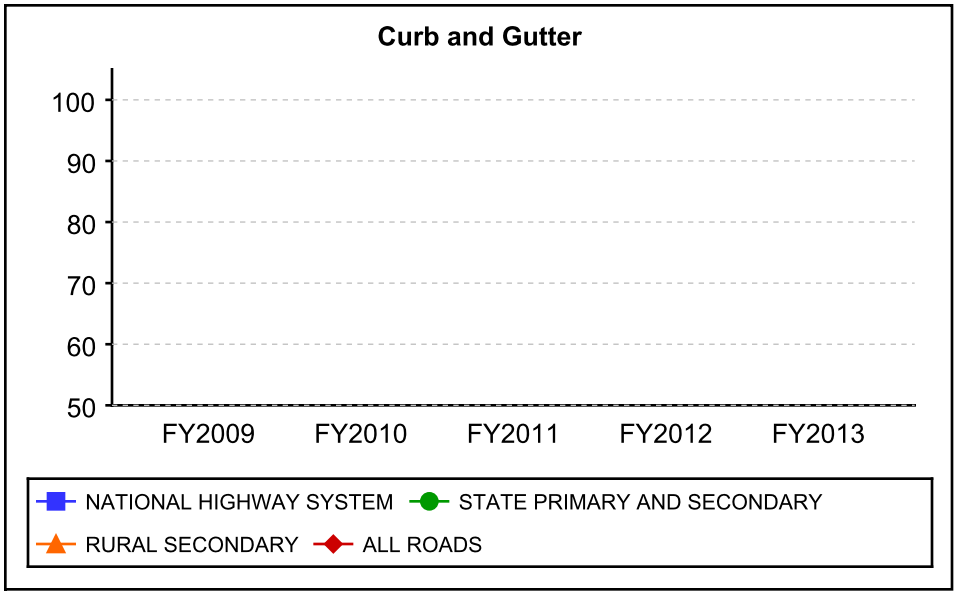
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Curb and Gutter
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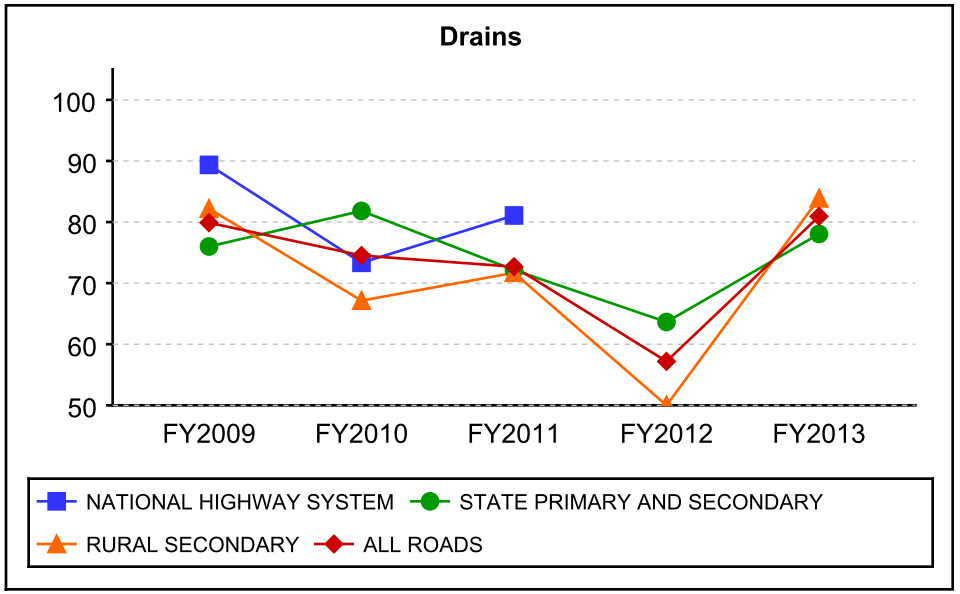
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Drains
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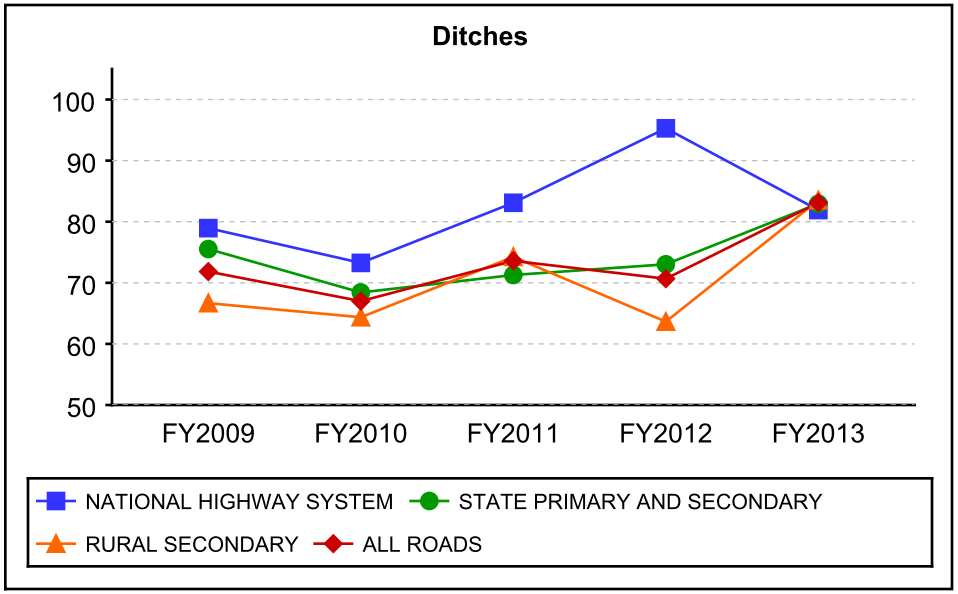
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Ditches
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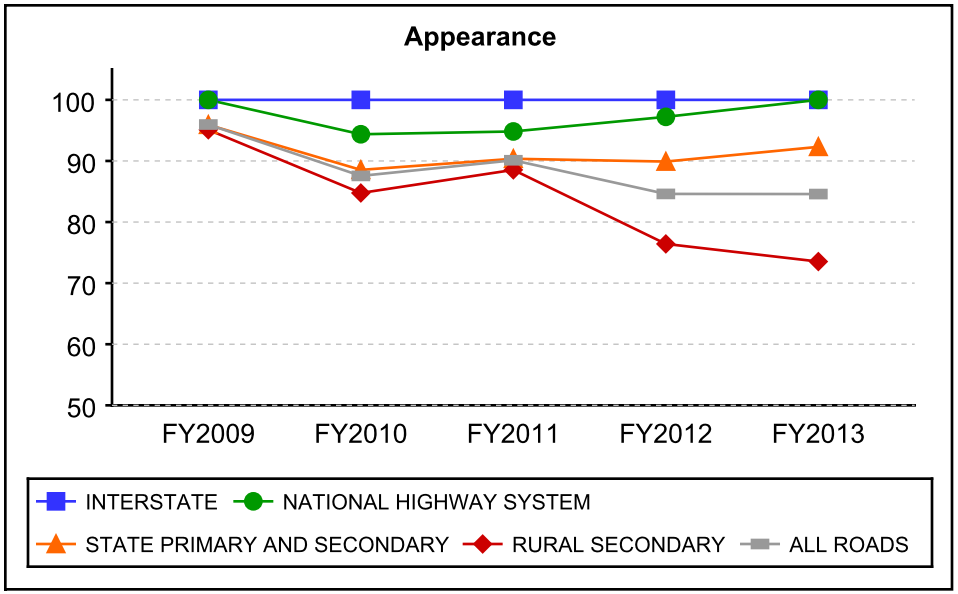
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Appearance
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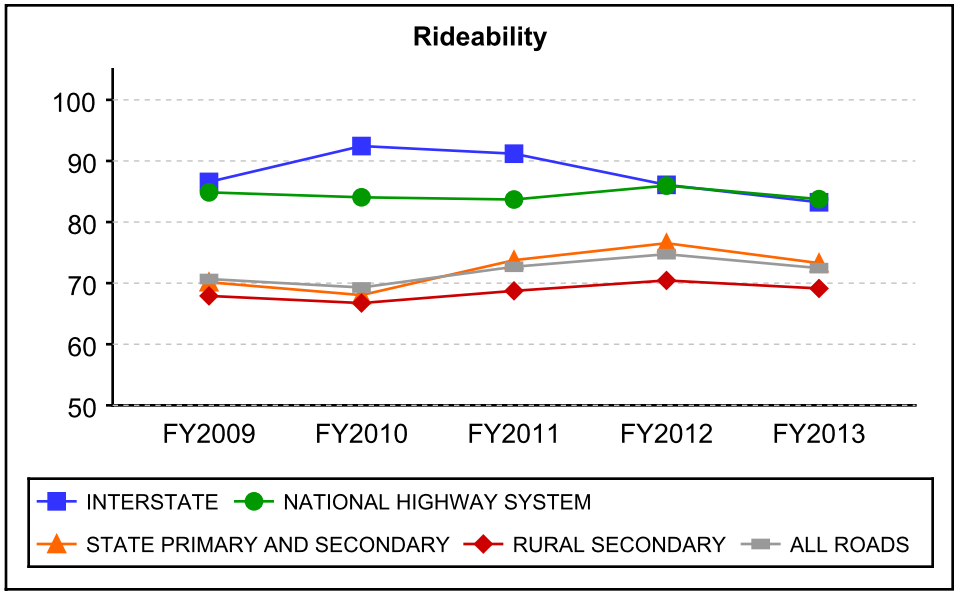
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Rideability
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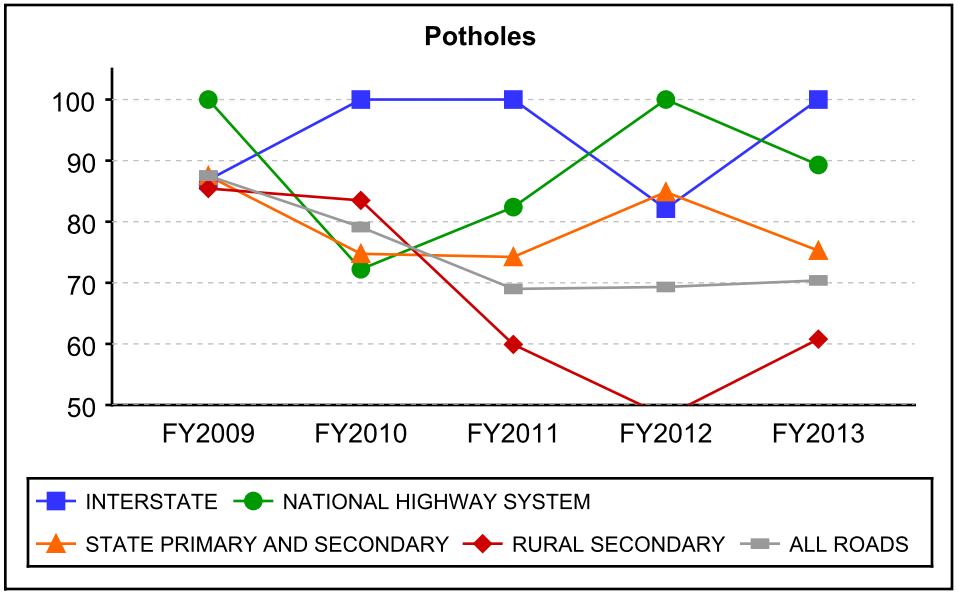
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Potholes
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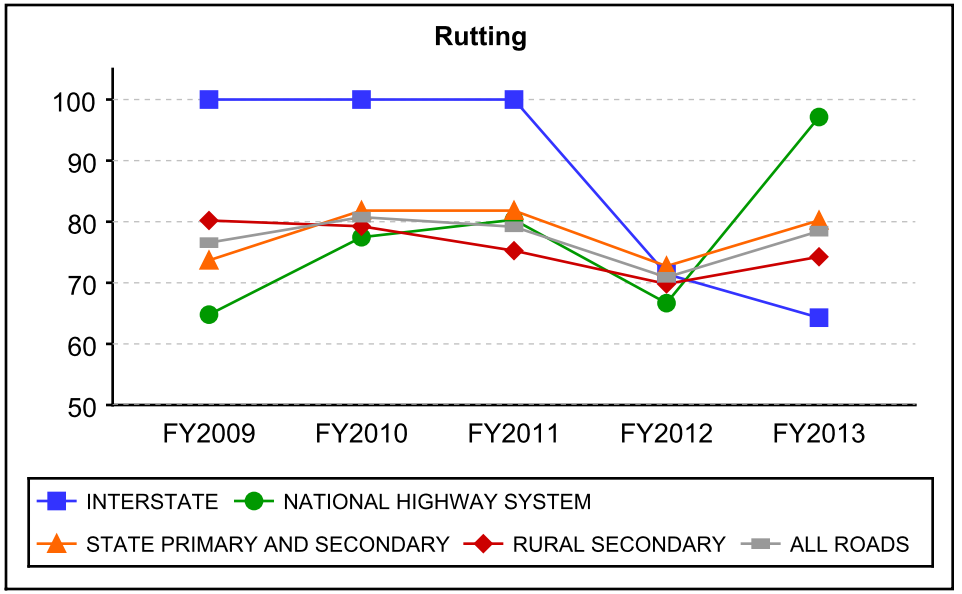
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Rutting
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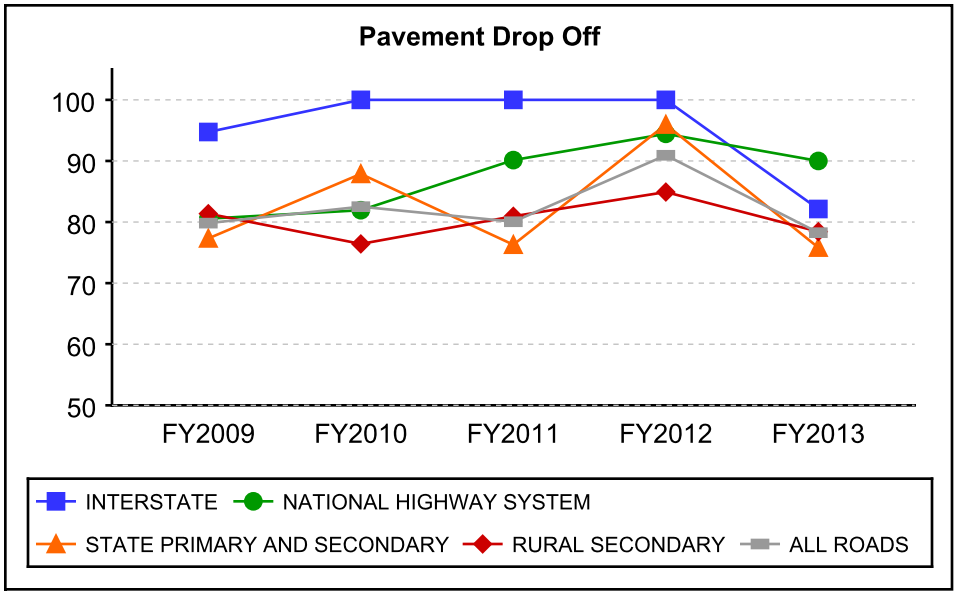
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Pavement Drop Off
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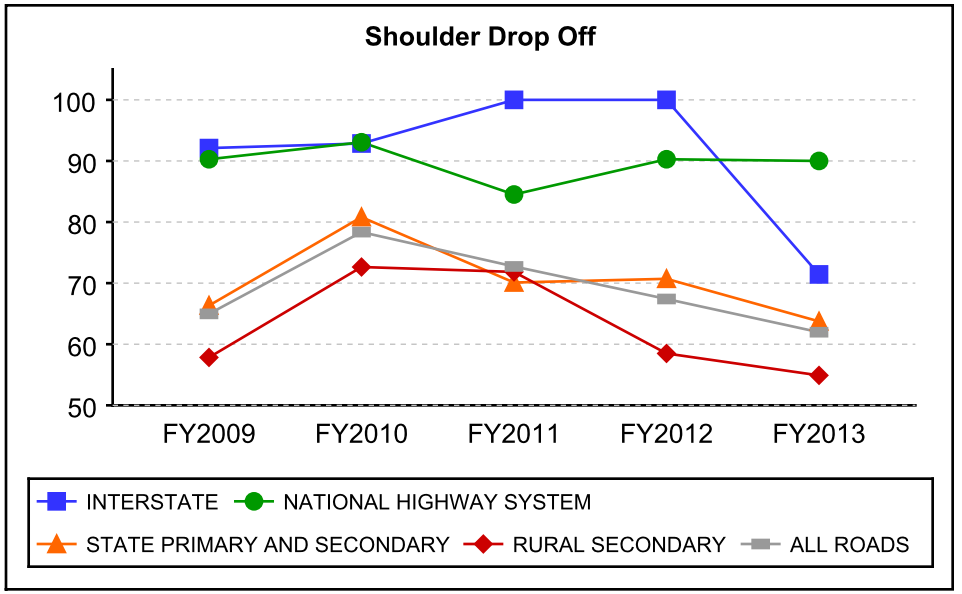
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Shoulder Drop Off
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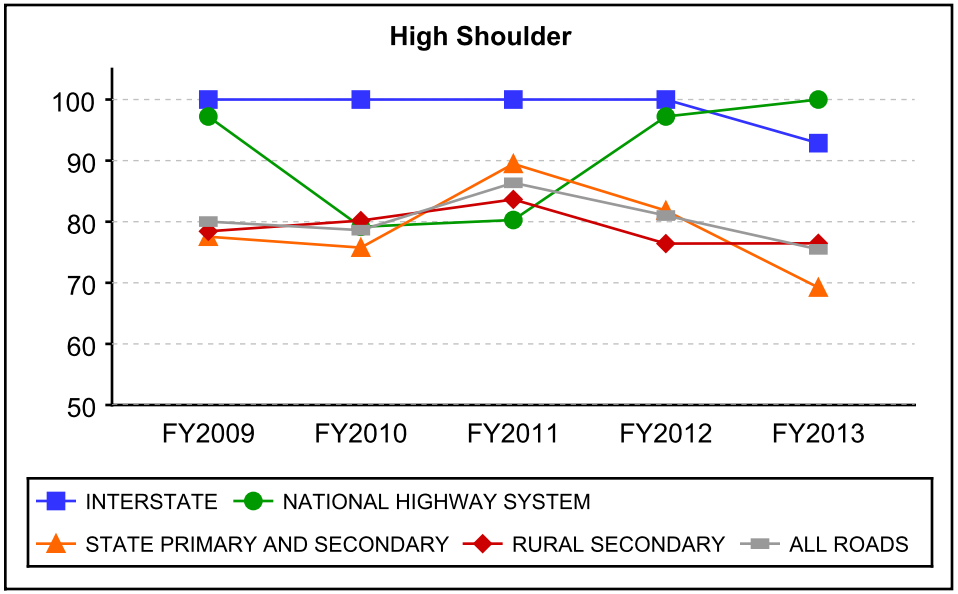
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


High Shoulder
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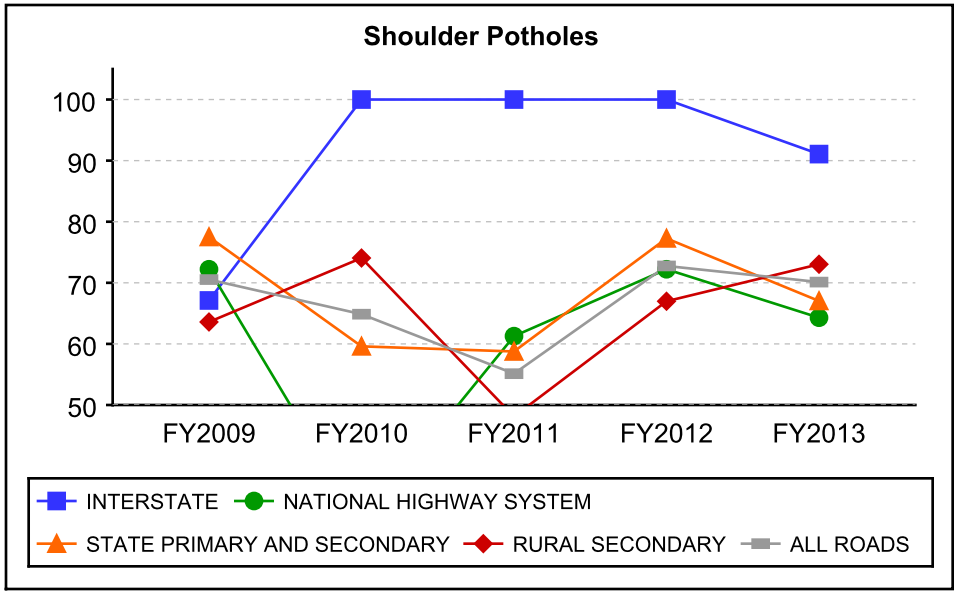
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Shoulder Potholes
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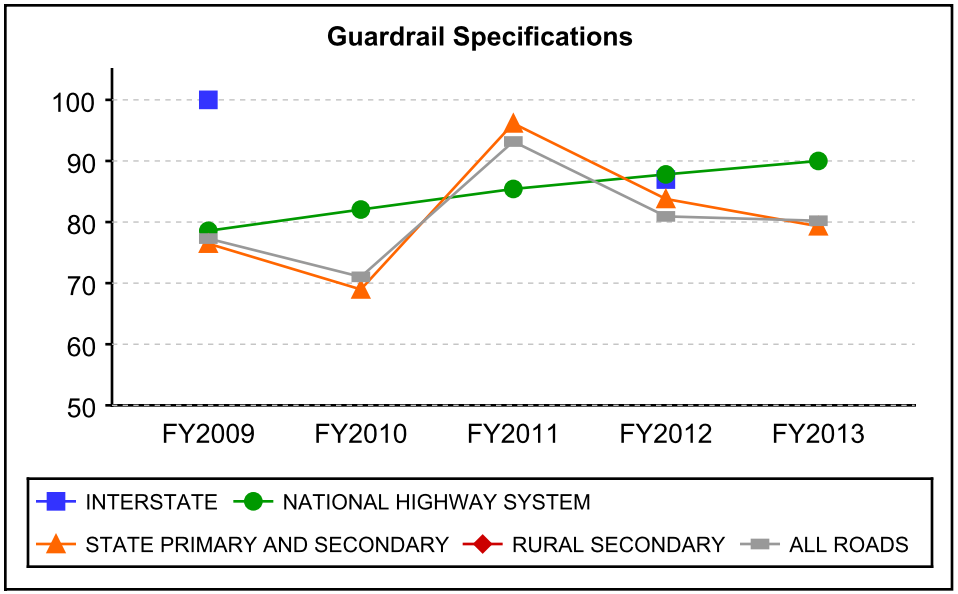
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Guardrail Specifications
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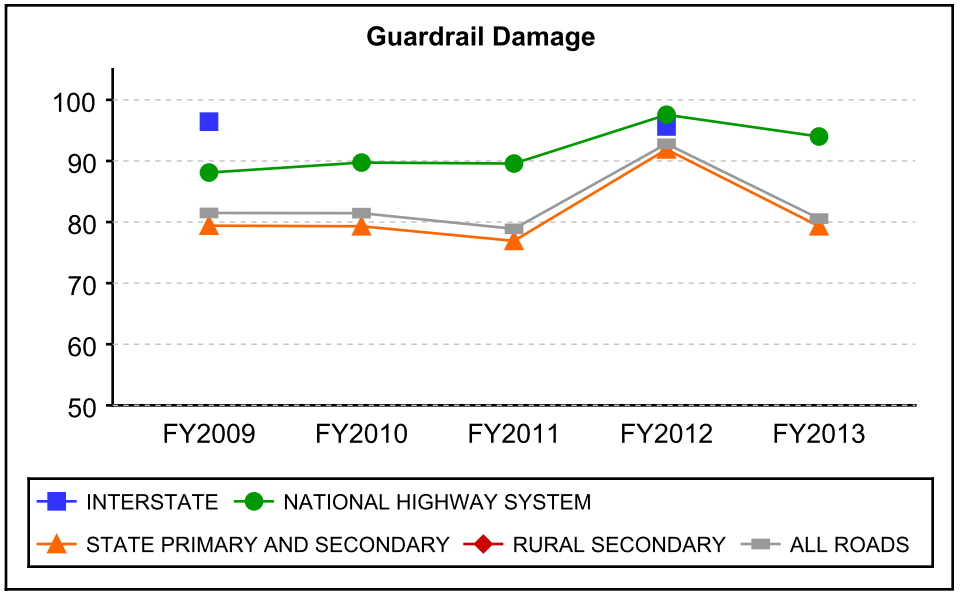
RURAL SECONDARY
ALL ROADS


Guardrail Damage
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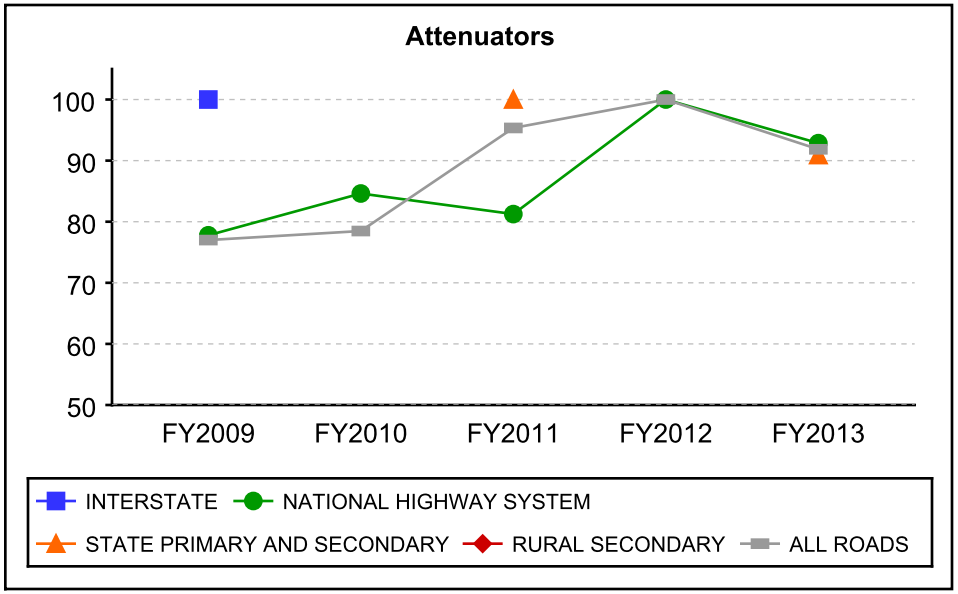
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Attenuators
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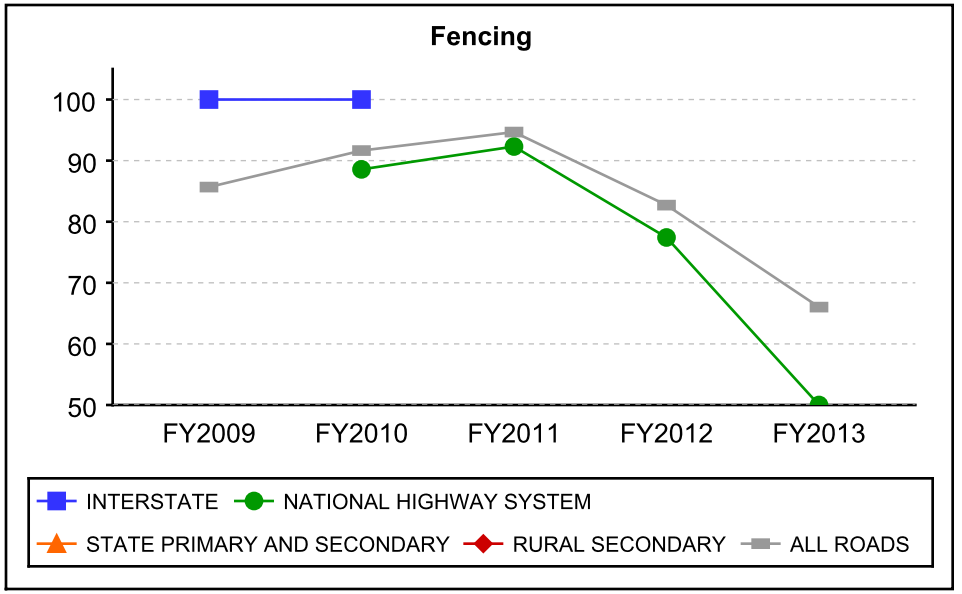
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Fencing
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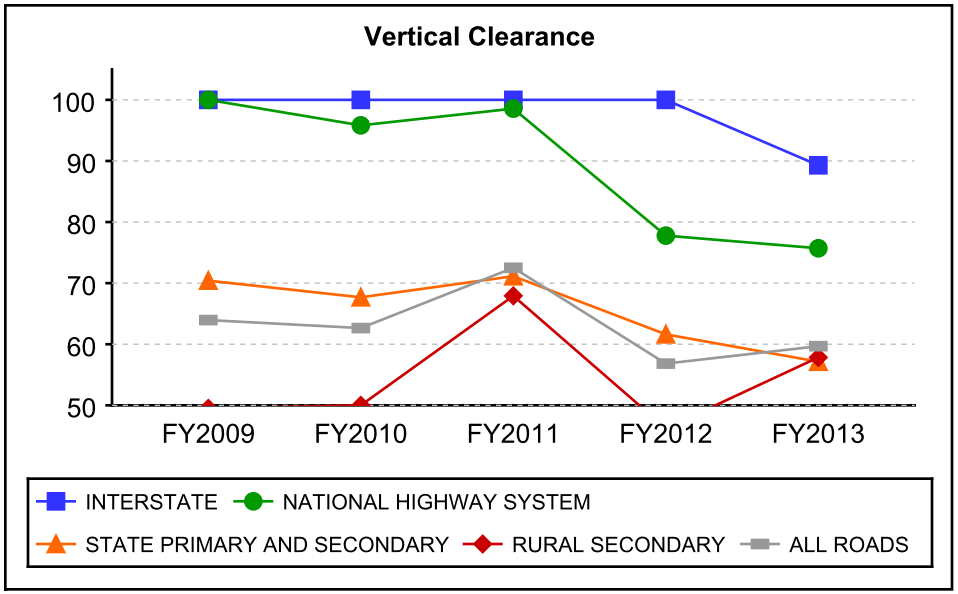
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Vertical Clearance
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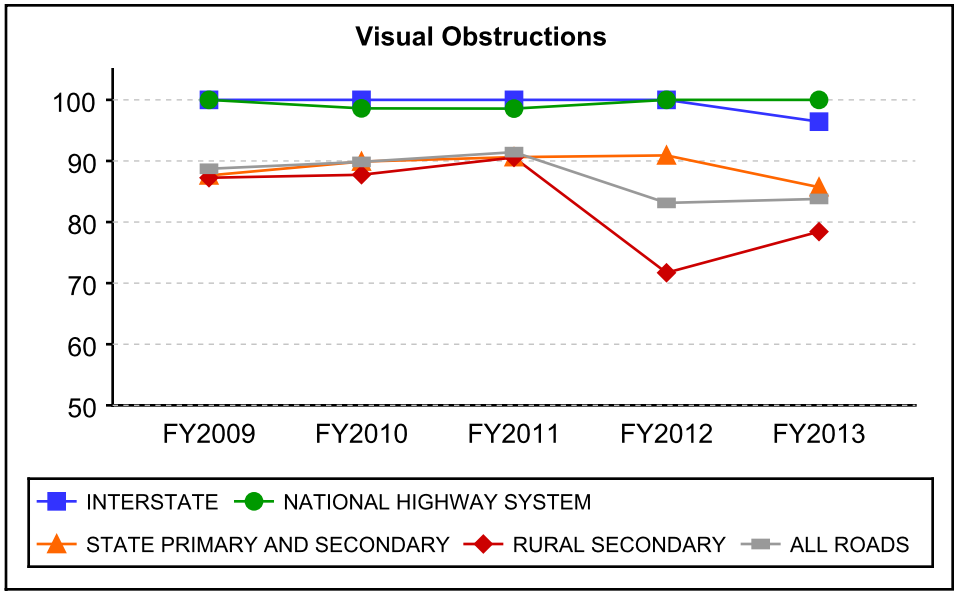
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Visual Obstructions
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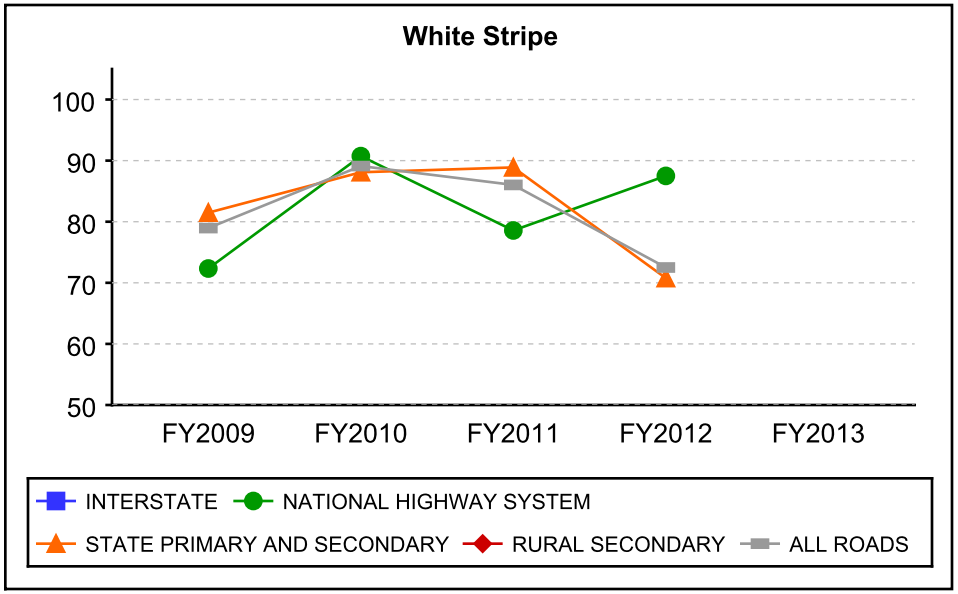
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


White Stripe
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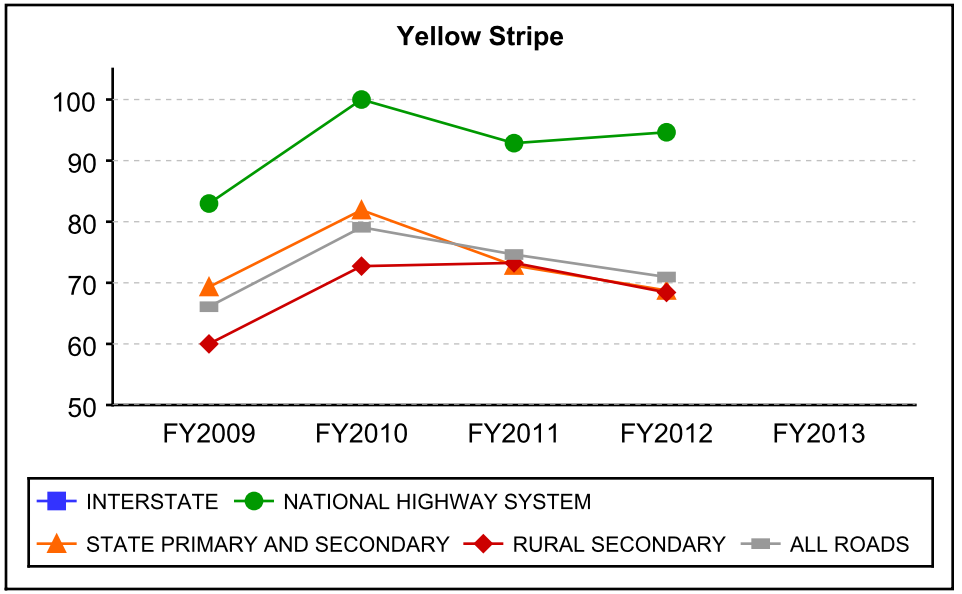
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Yellow Stripe
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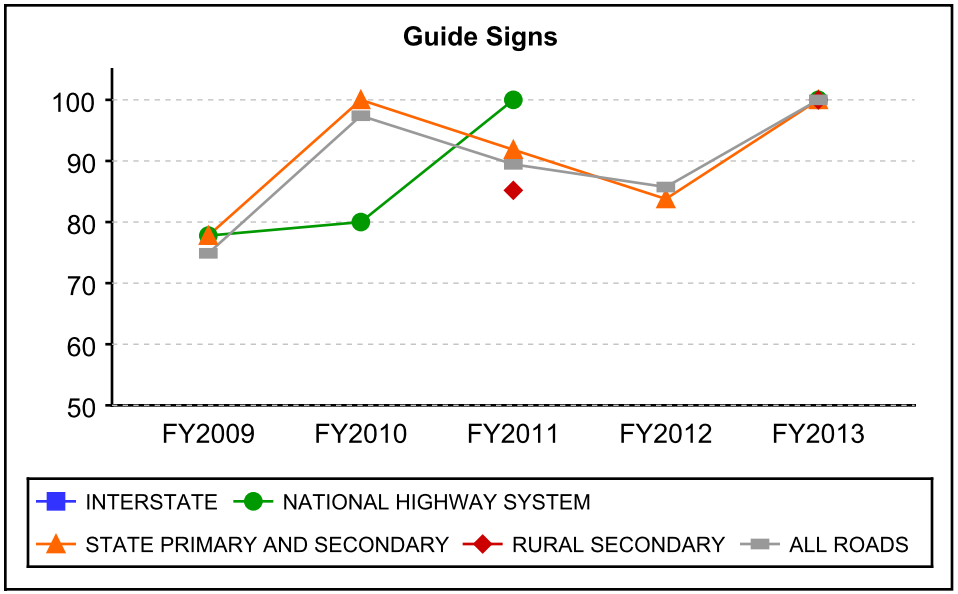
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Guide Signs
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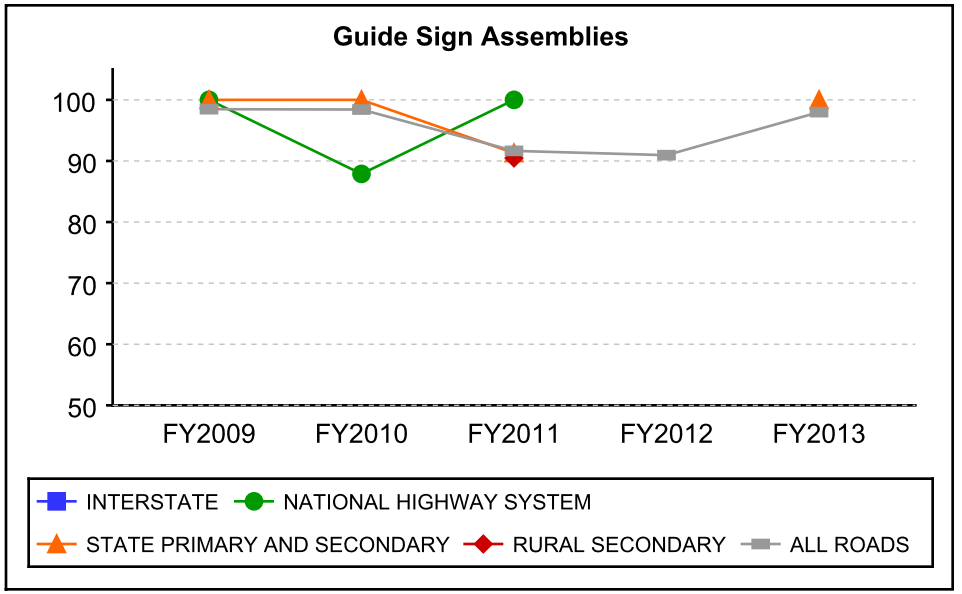
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Guide Sign Assemblies
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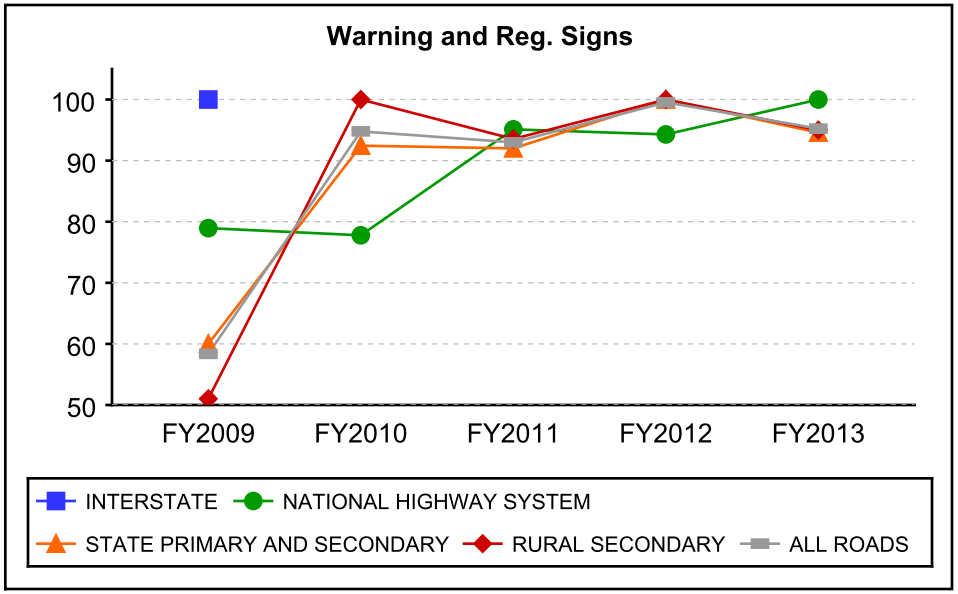
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Warning and Reg. Signs
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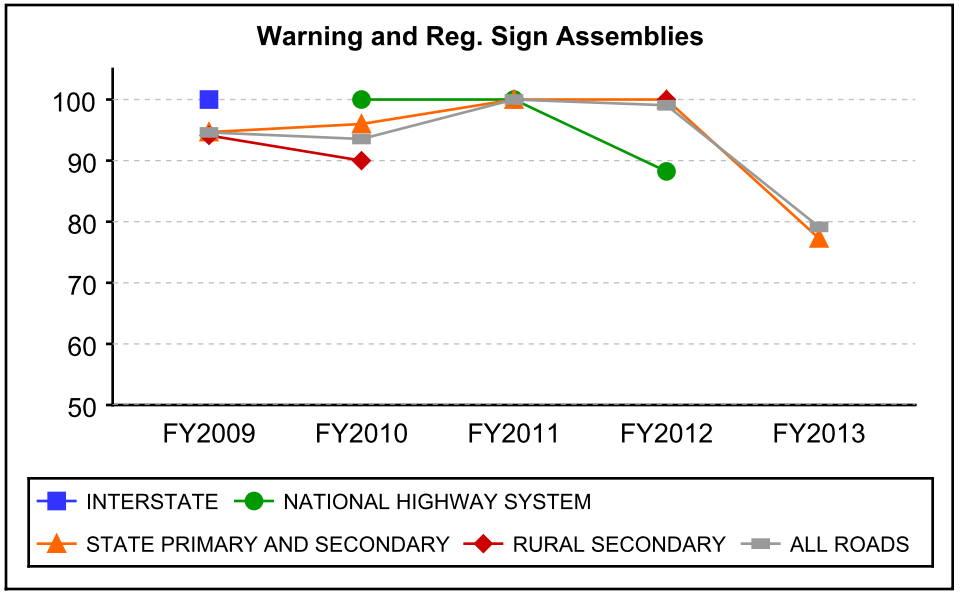
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Warning and Reg. Sign Assemblies
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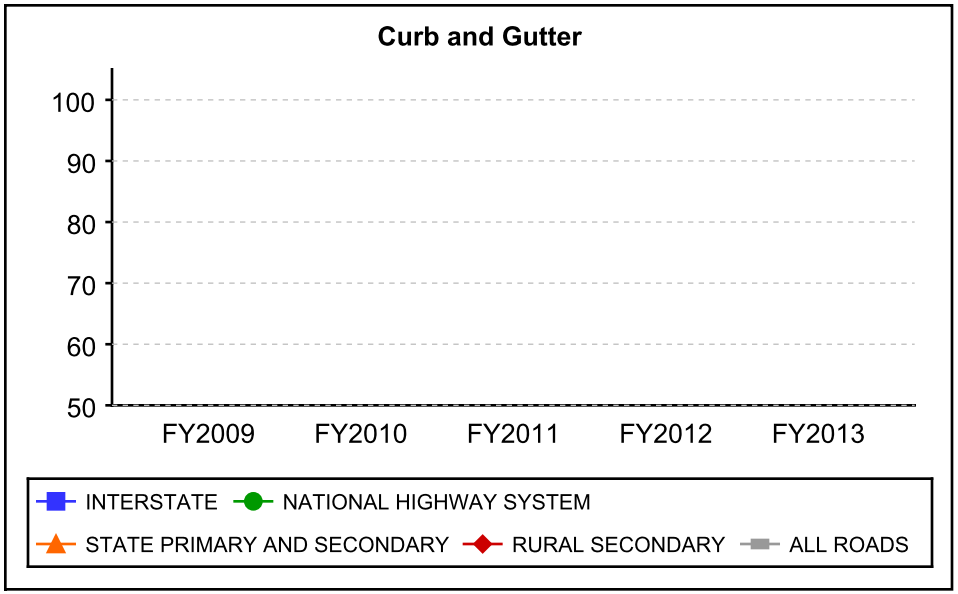
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Curb and Gutter
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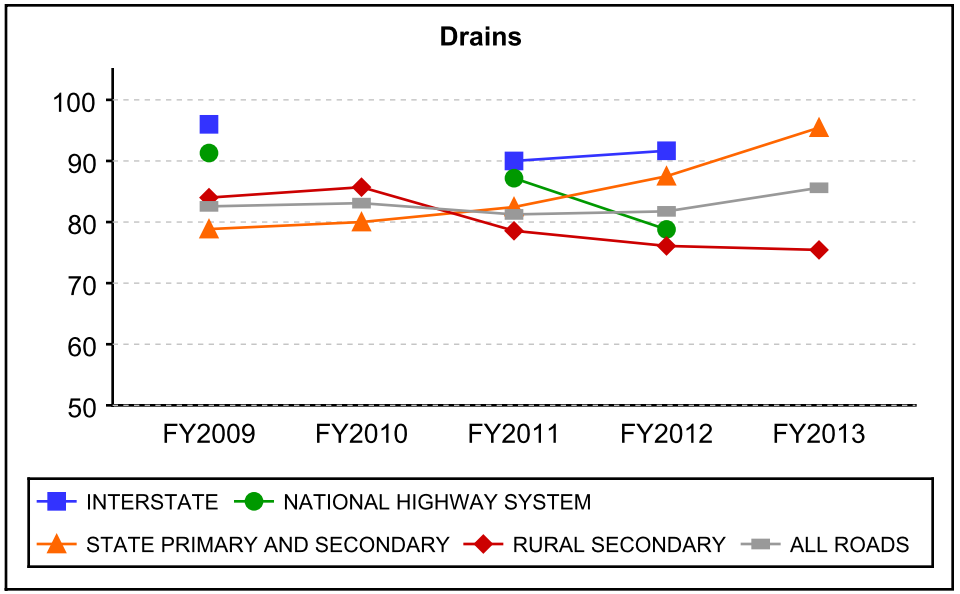
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Drains
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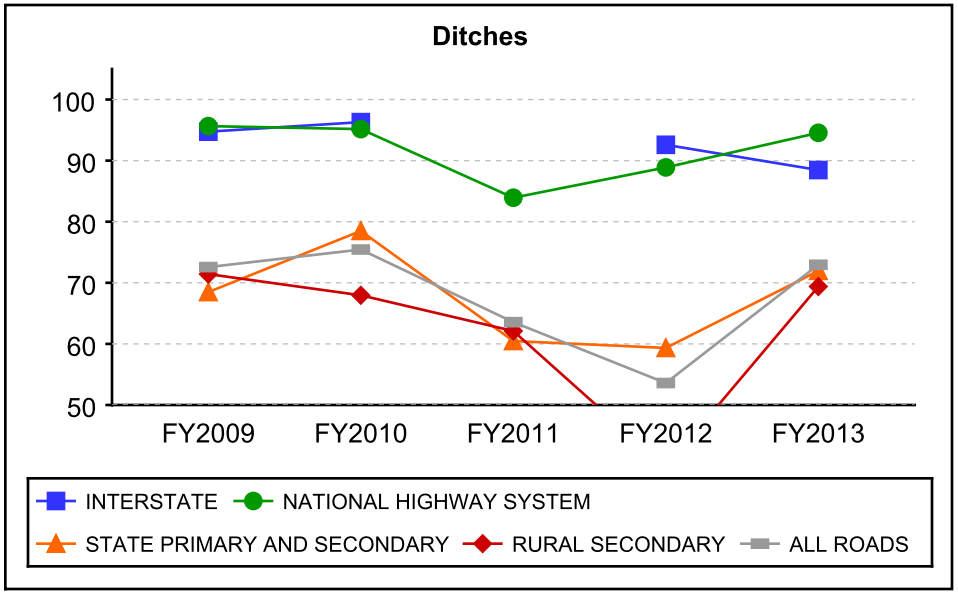
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Ditches
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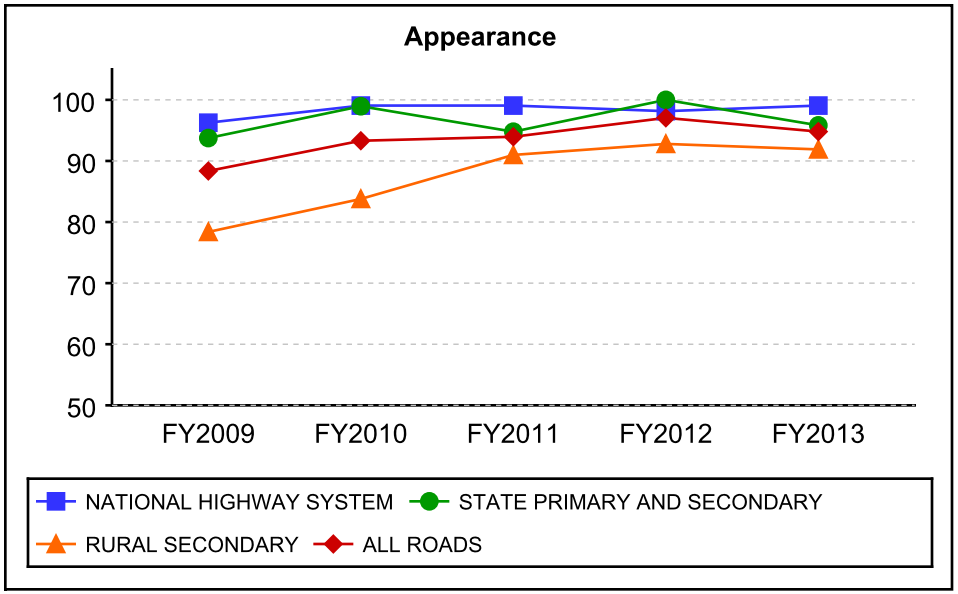
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Appearance
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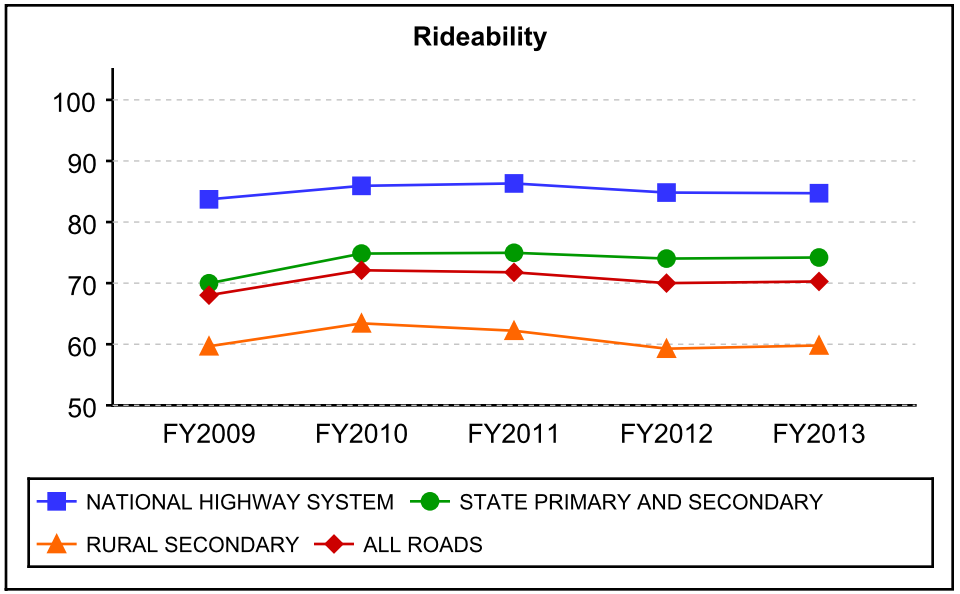
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Rideability
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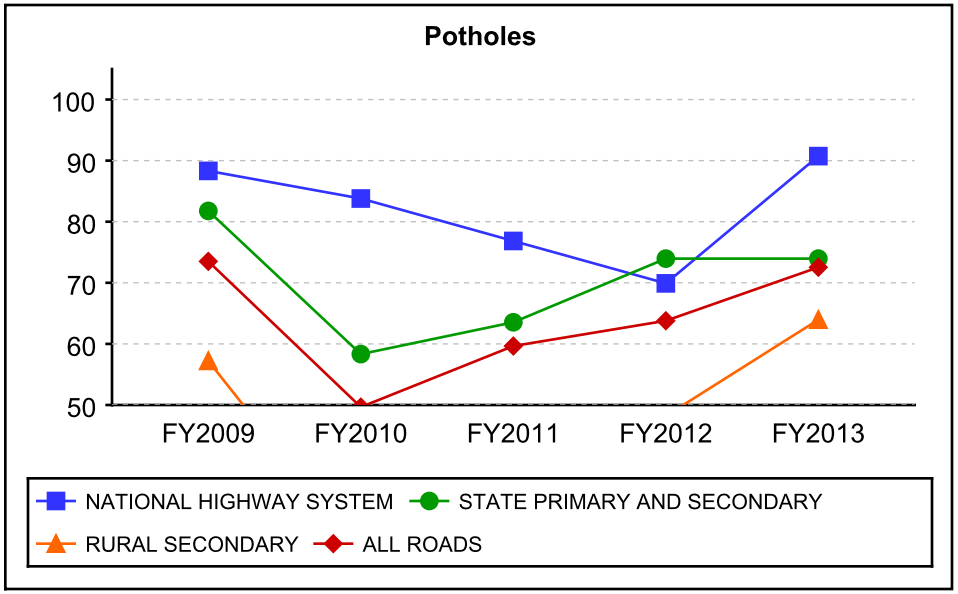
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Potholes
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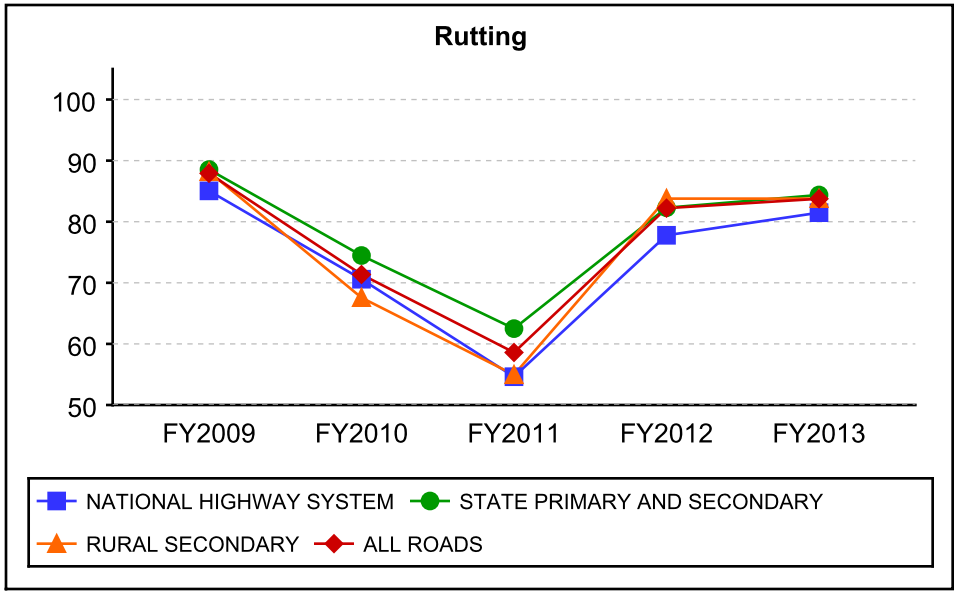
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Rutting
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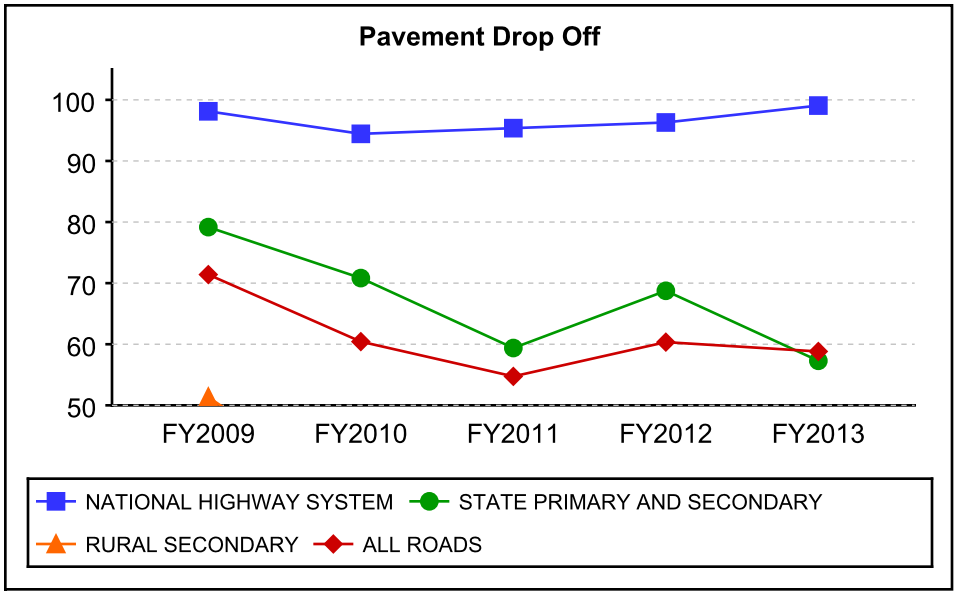
RURAL SECONDARY
ALL ROADS


Pavement Drop Off
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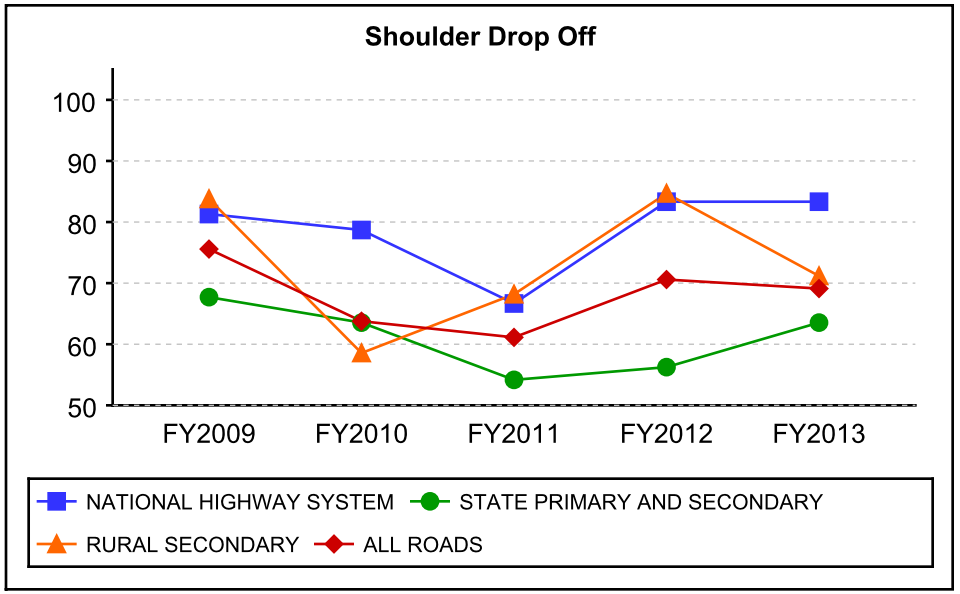
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Shoulder Drop Off
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NATIONAL HIGHWAY SYSTEM
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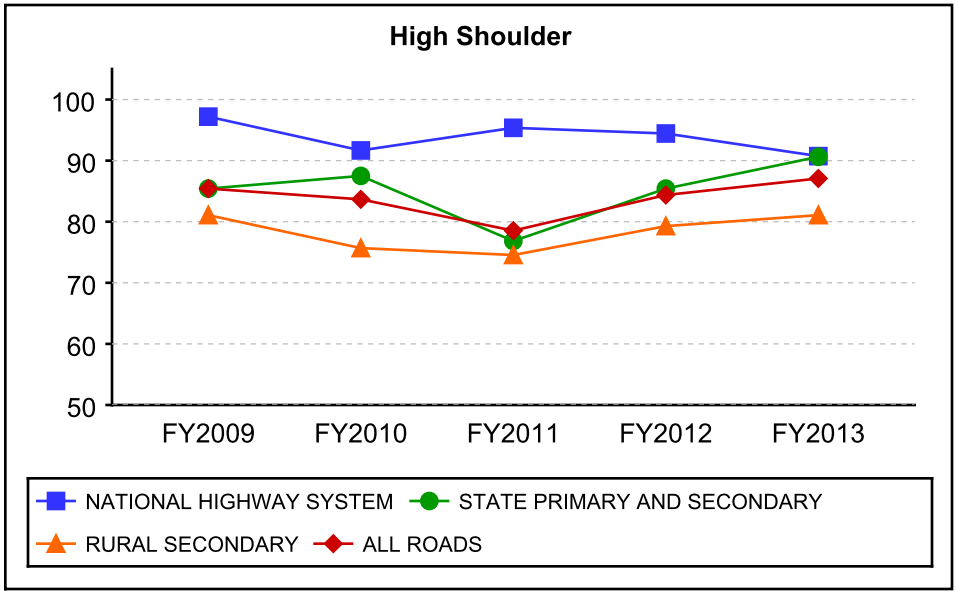
RURAL SECONDARY
ALL ROADS


High Shoulder
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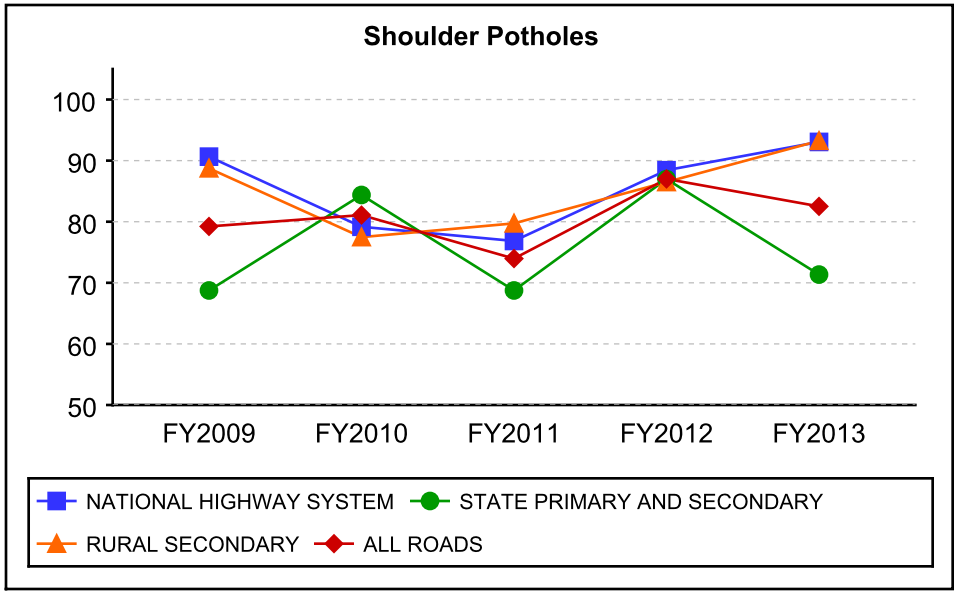
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Shoulder Potholes
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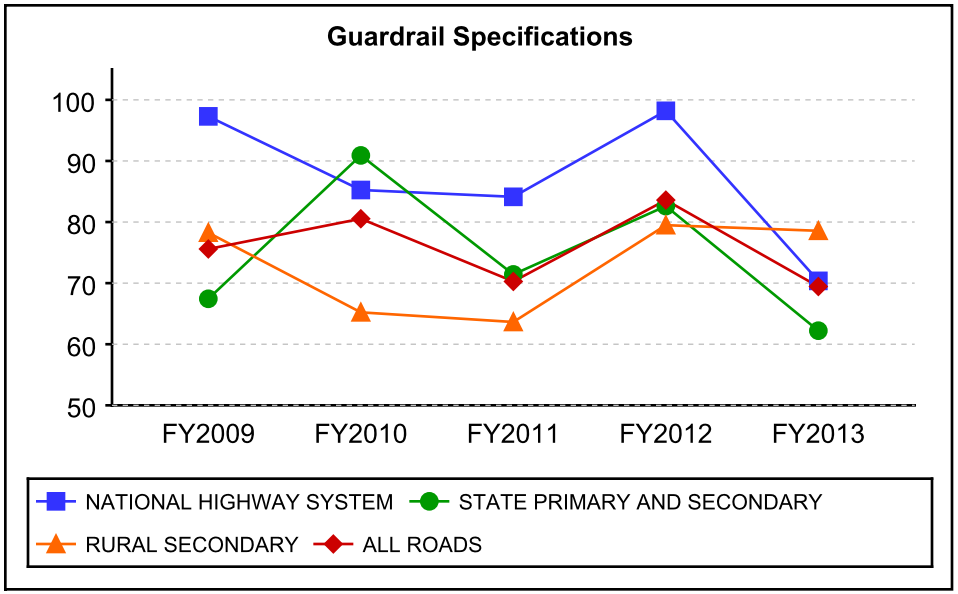
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Guardrail Specifications
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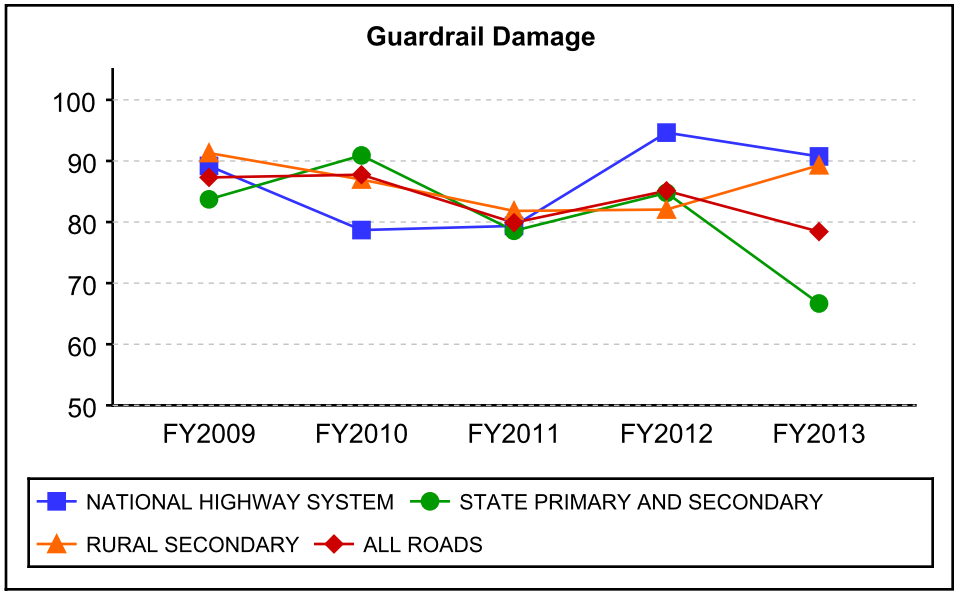
RURAL SECONDARY
ALL ROADS


Guardrail Damage
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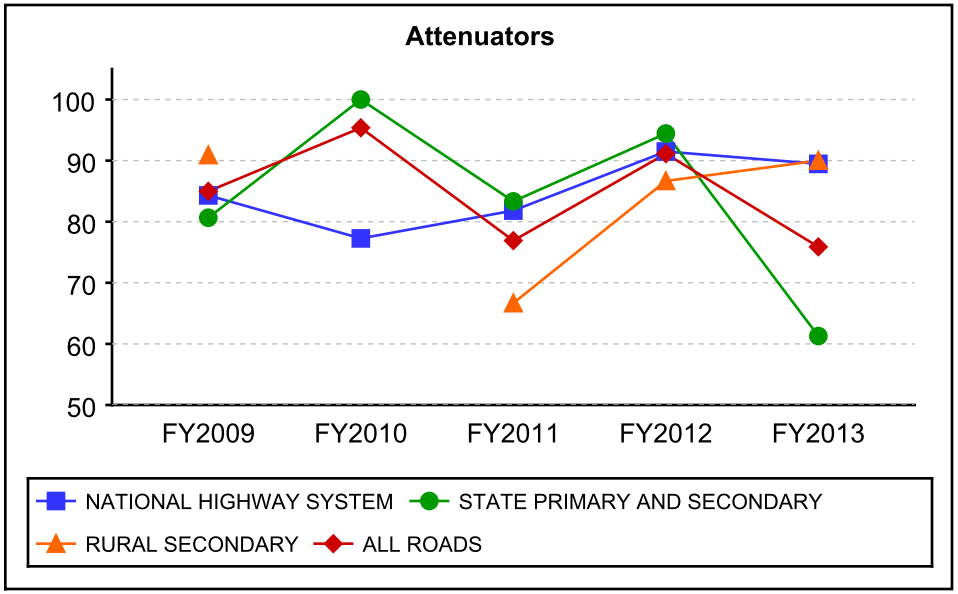
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Attenuators
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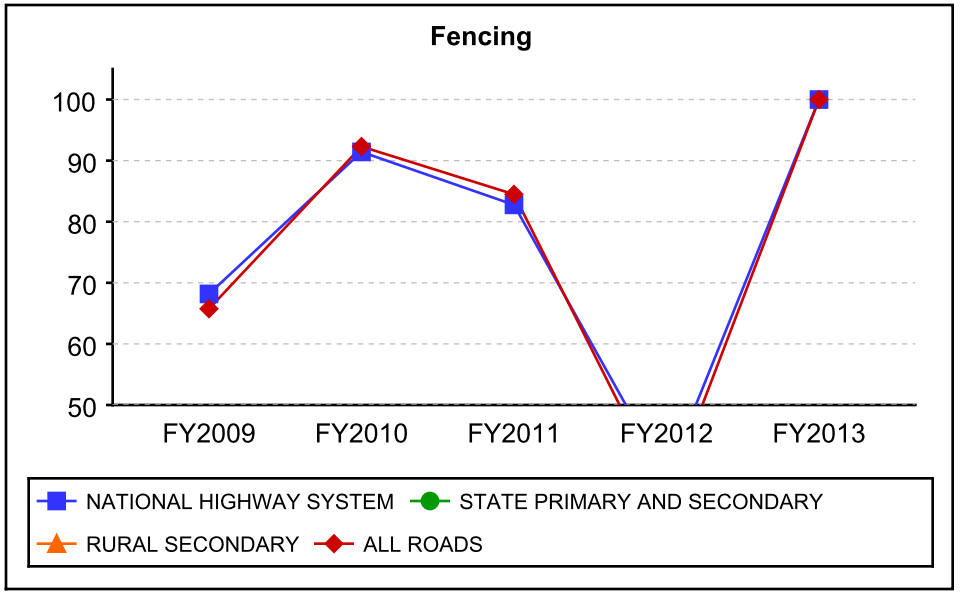
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Fencing
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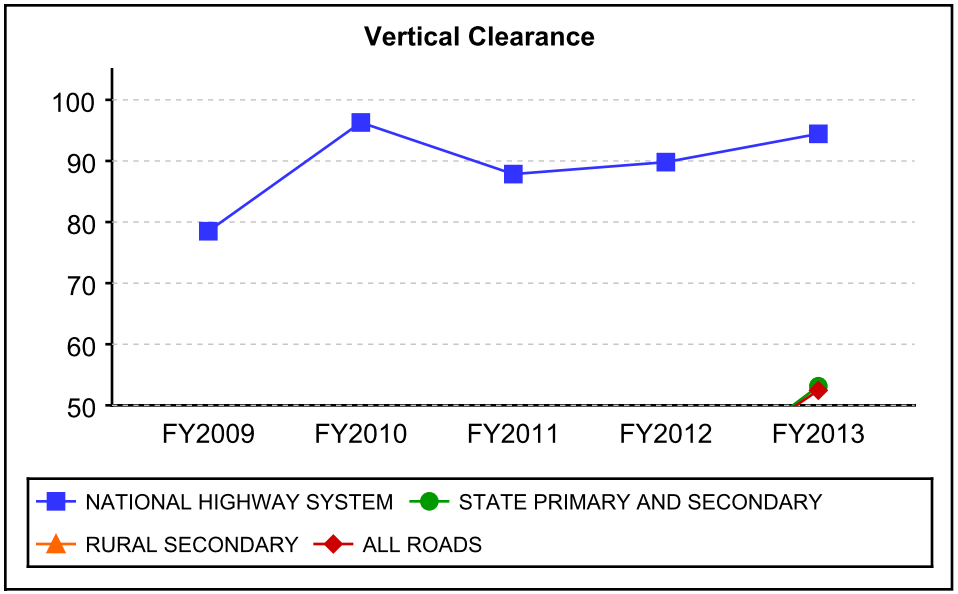
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Vertical Clearance
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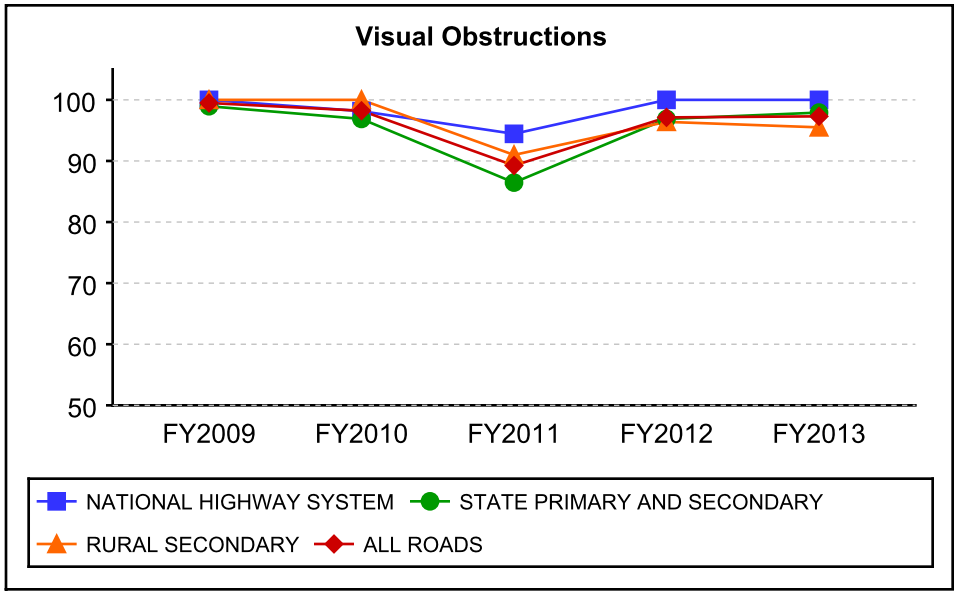
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Visual Obstructions
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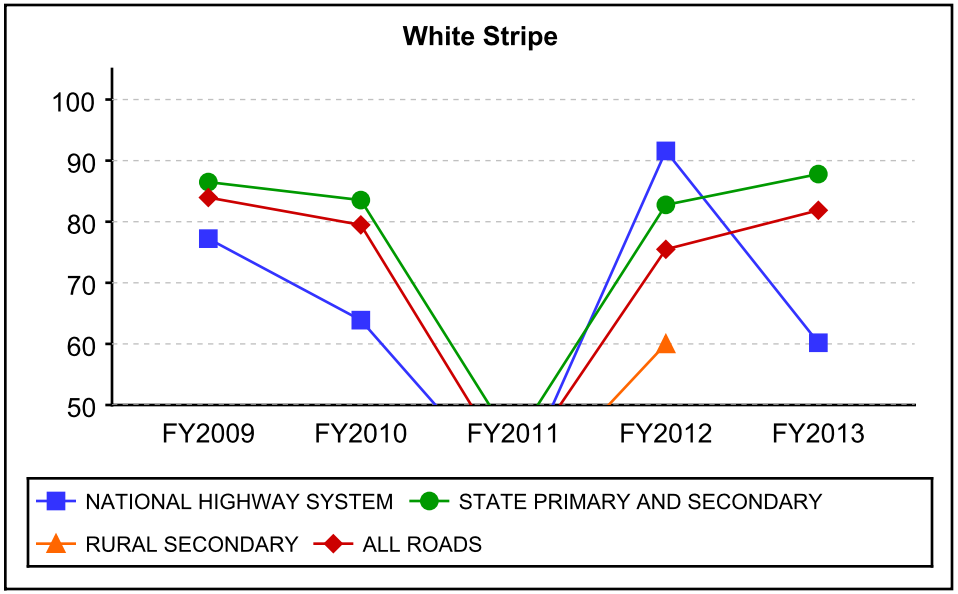
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


White Stripe
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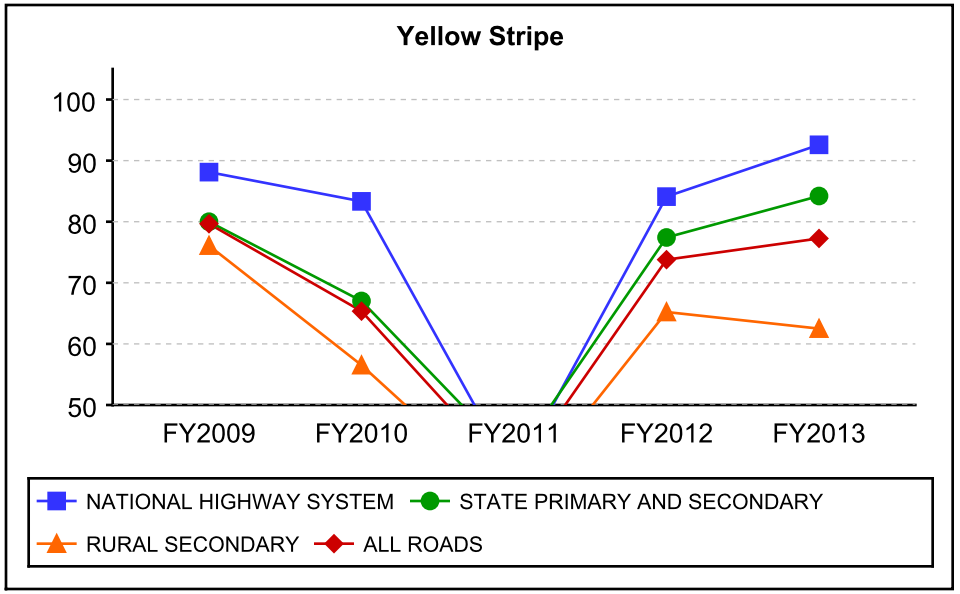
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Yellow Stripe
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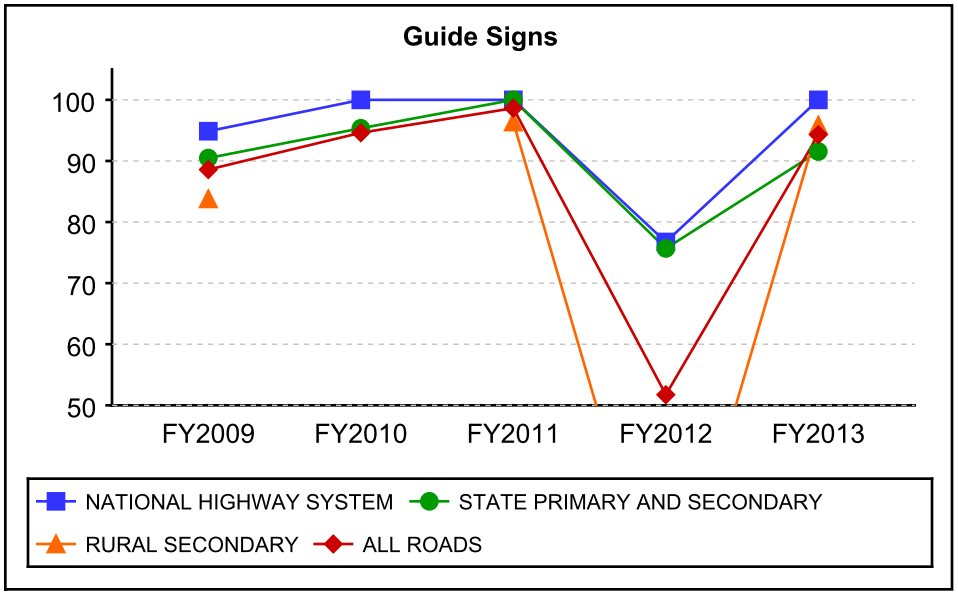
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Guide Signs
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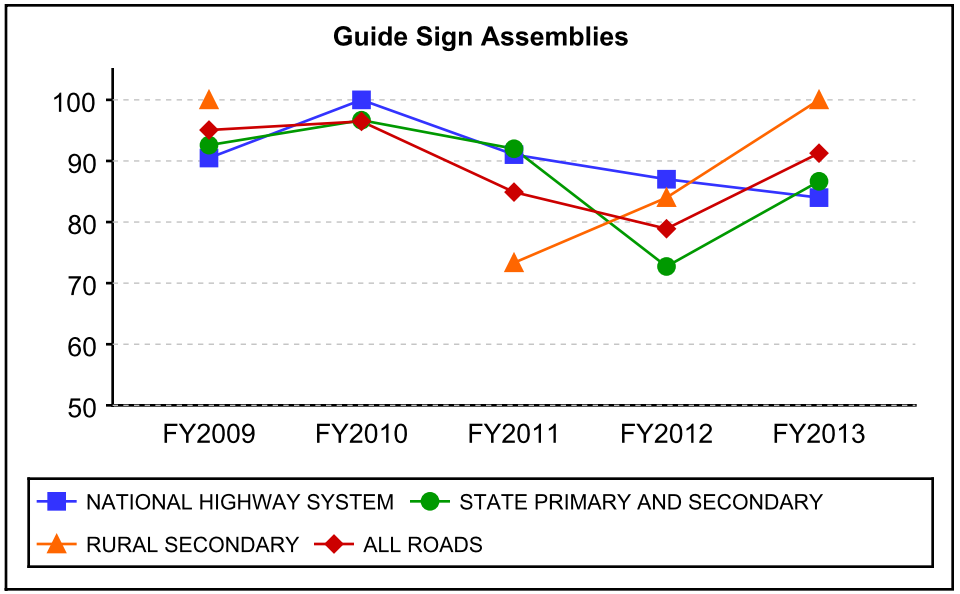
RURAL SECONDARY
ALL ROADS


Guide Sign Assemblies
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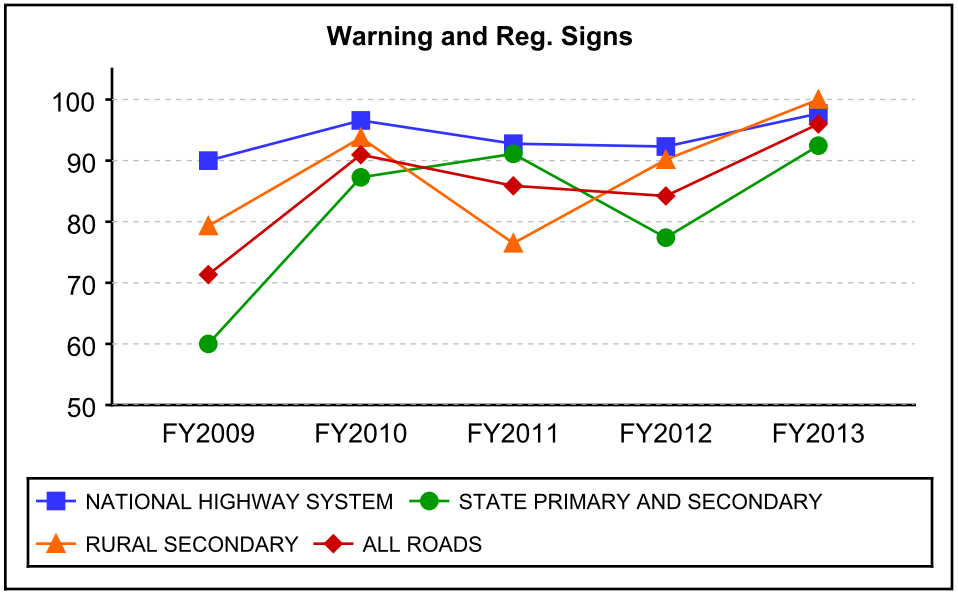
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Warning and Reg. Signs
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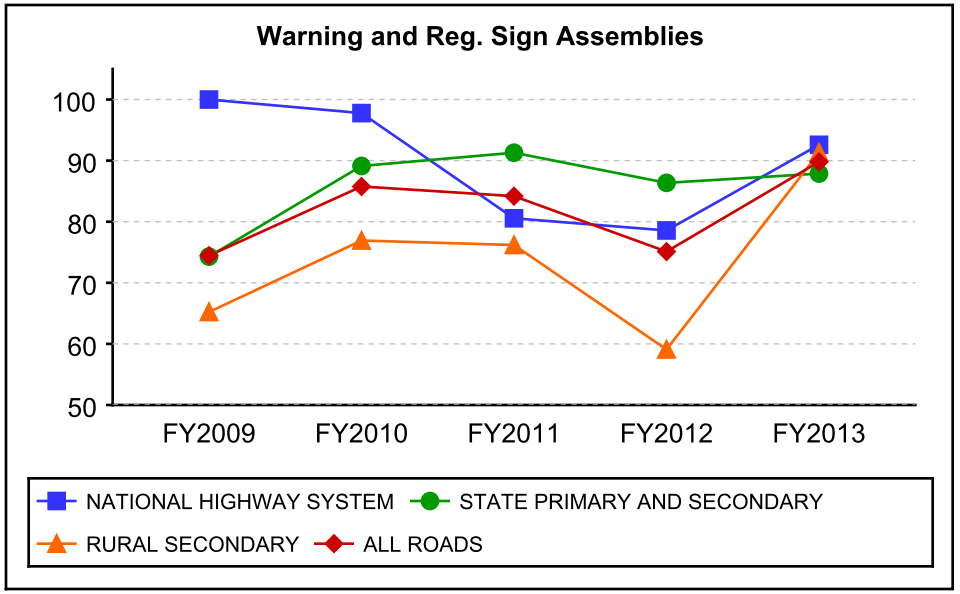
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Warning and Reg. Sign Assemblies
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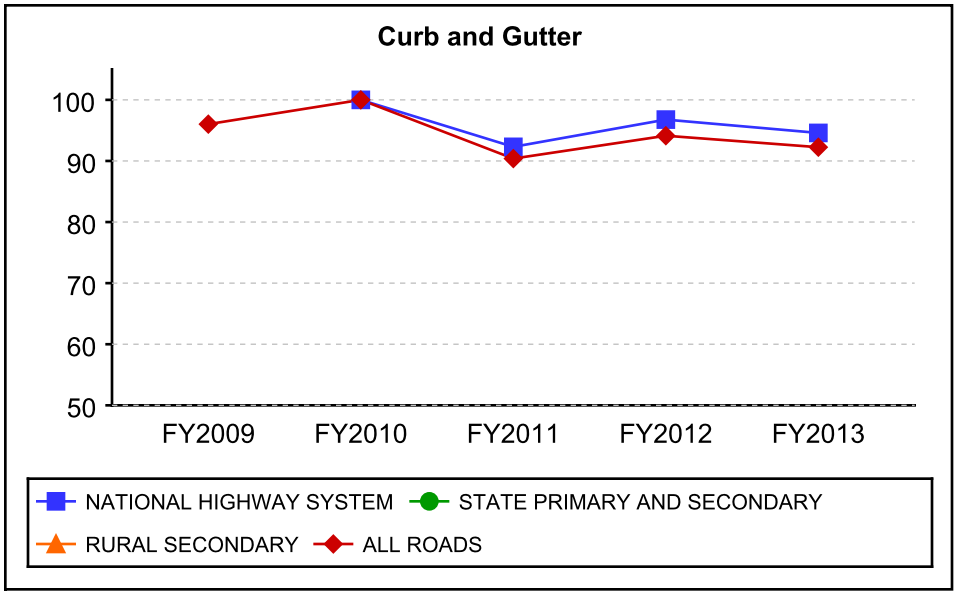
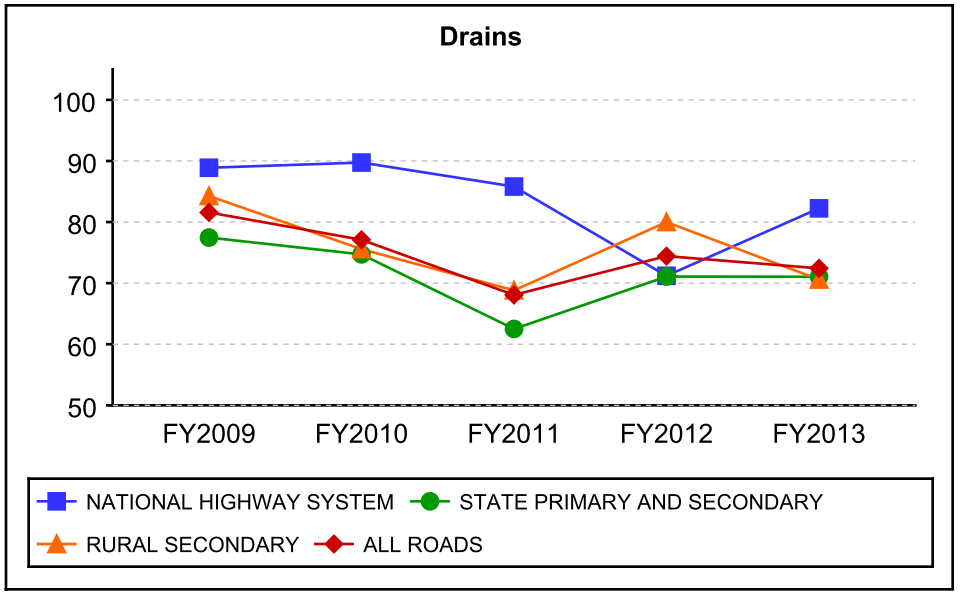
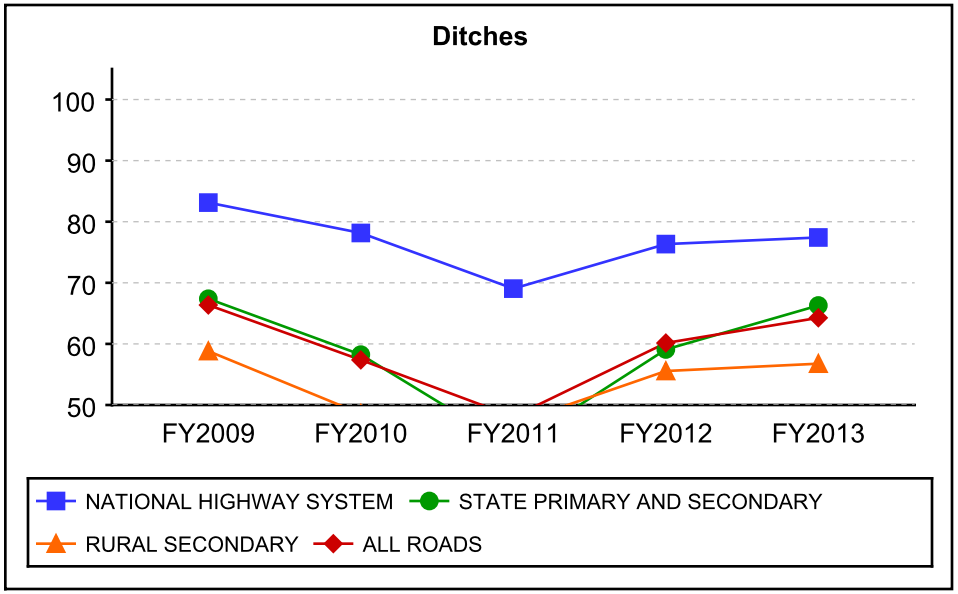
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Curb and Gutter
100
90
80
70
60
50
FY2009
FY2010
FY2011
FY2012
FY2013
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


Drains
100
90
80
70
60
50
FY2009
FY2010
FY2011
FY2012
FY2013
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS

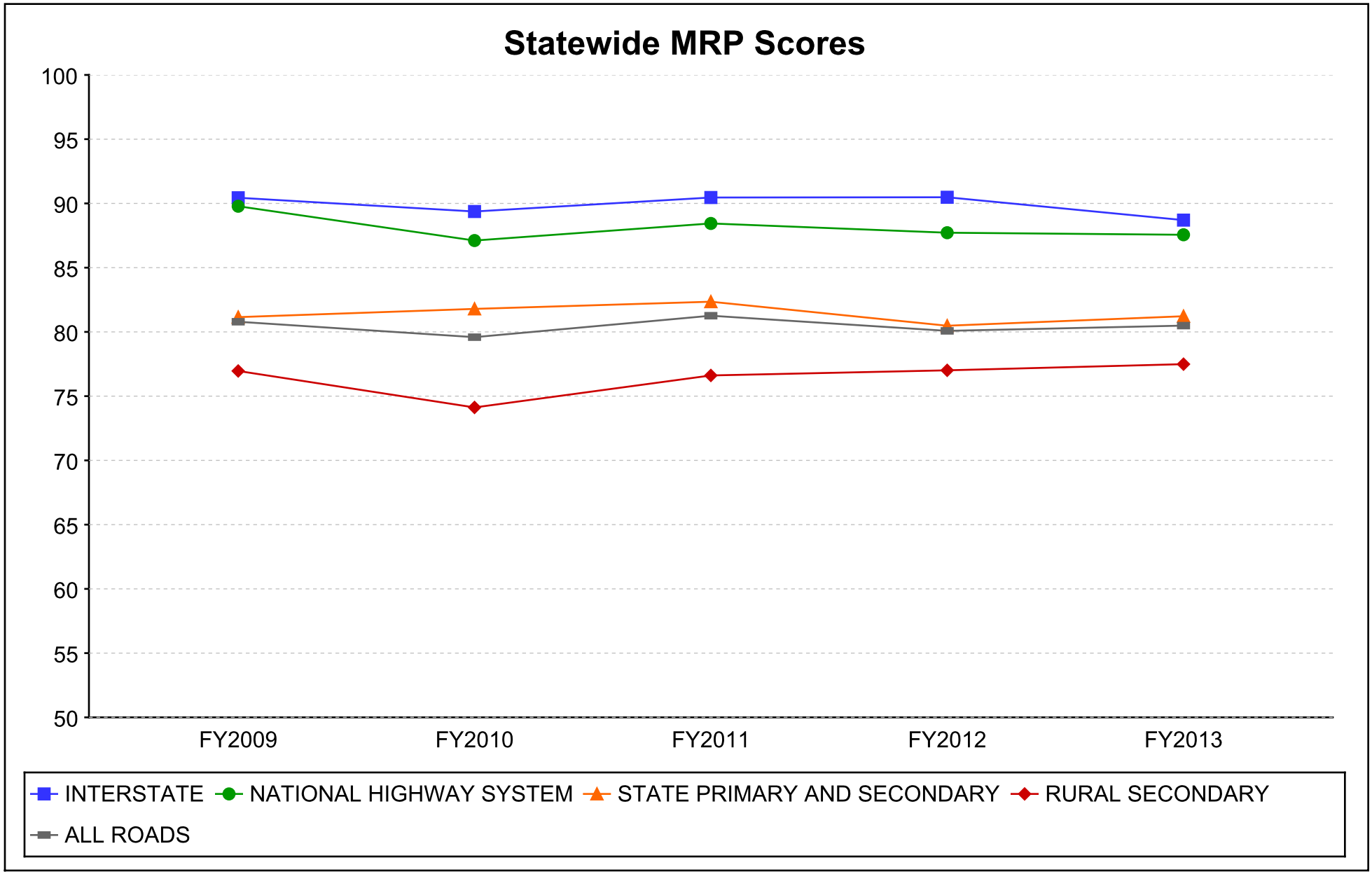

Ditches
100
90
80
70
60
50
FY2009
FY2010
FY2011
FY2012
FY2013
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS

APPENDIX IV

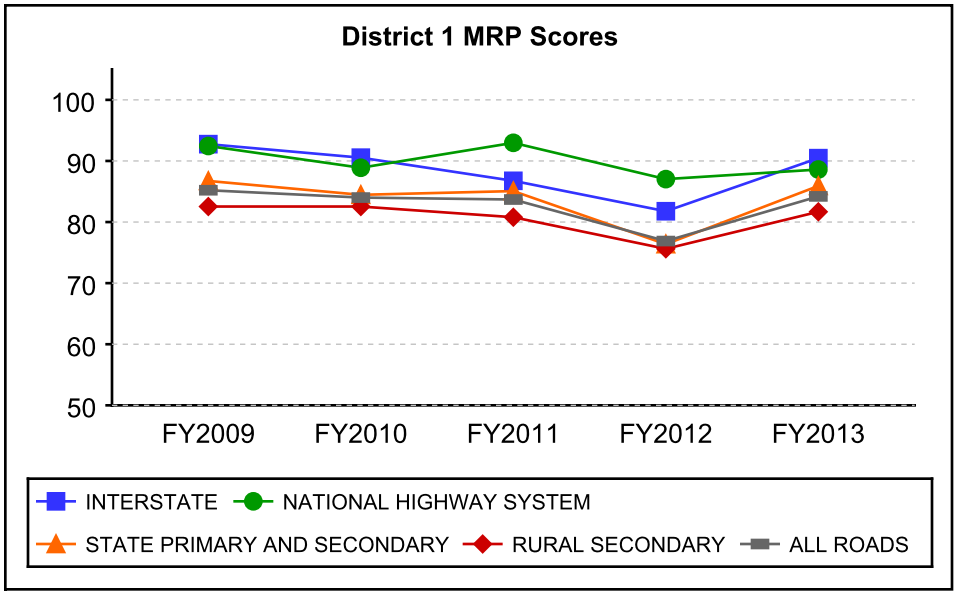
Total Scores by Road Type

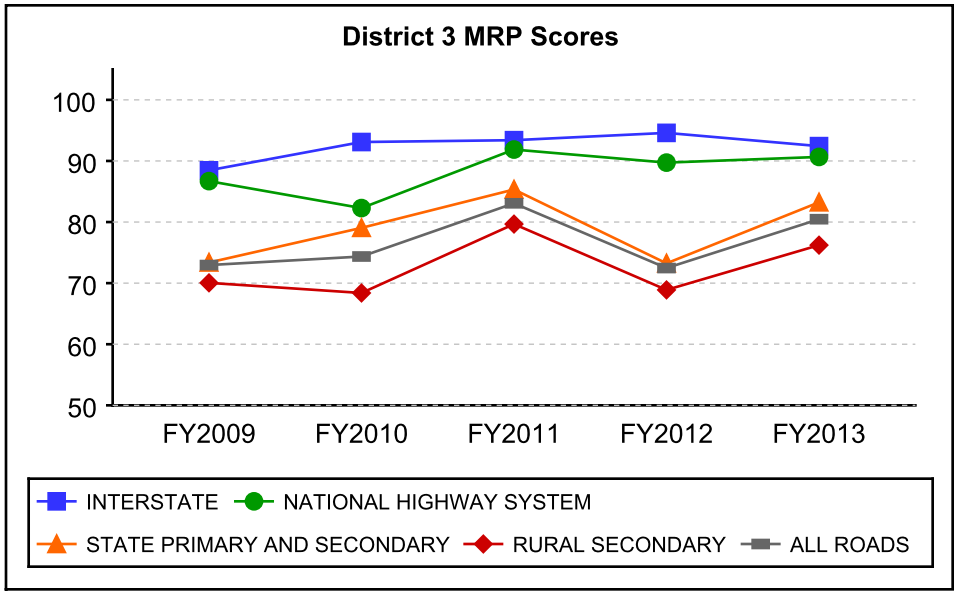
The graphs in Appendix IV illustrate the total MRP scores for each district and statewide. These are the combined scores for all roadway features. Included are the most recent MRP data and historical data for all previous four years.

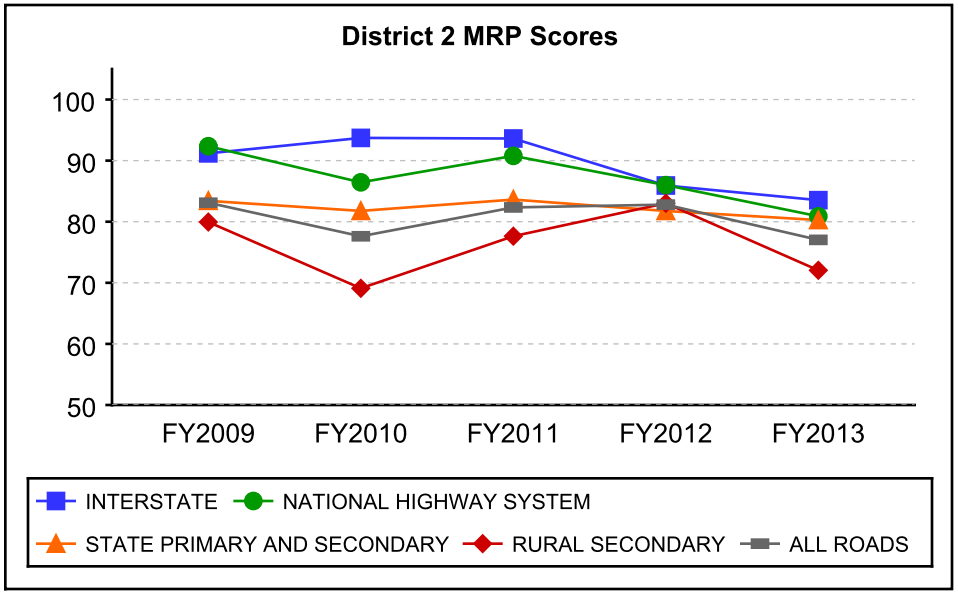
As in previous graphs, the four road types are represented by colored lines, while the overall weighted average is shown as a gray shaded area.

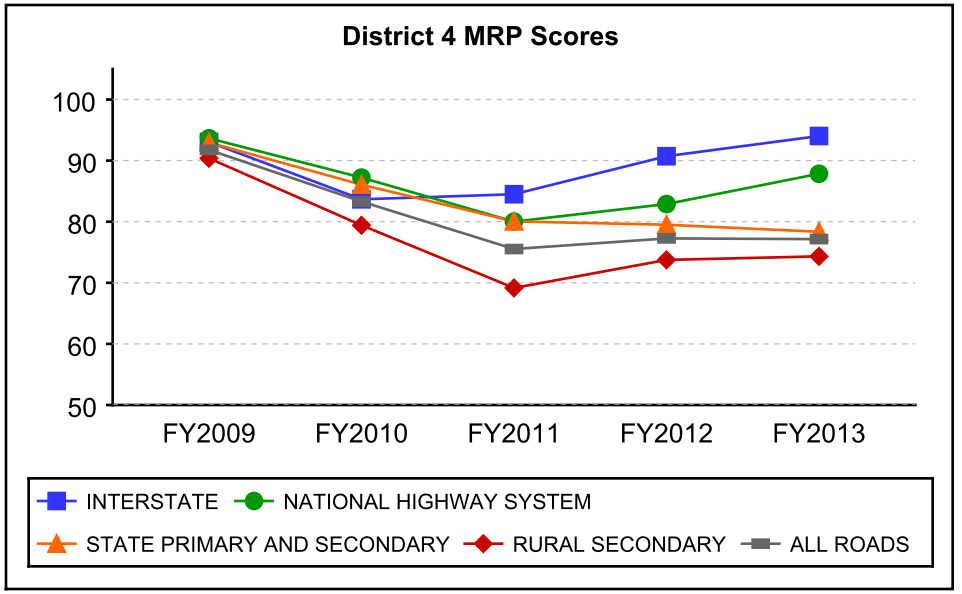


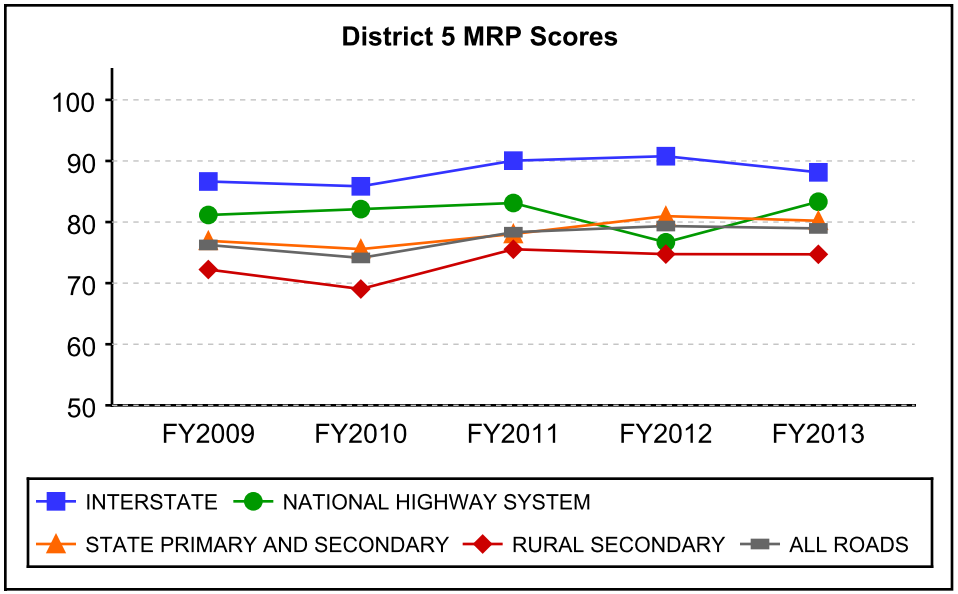
Appendix IV.1

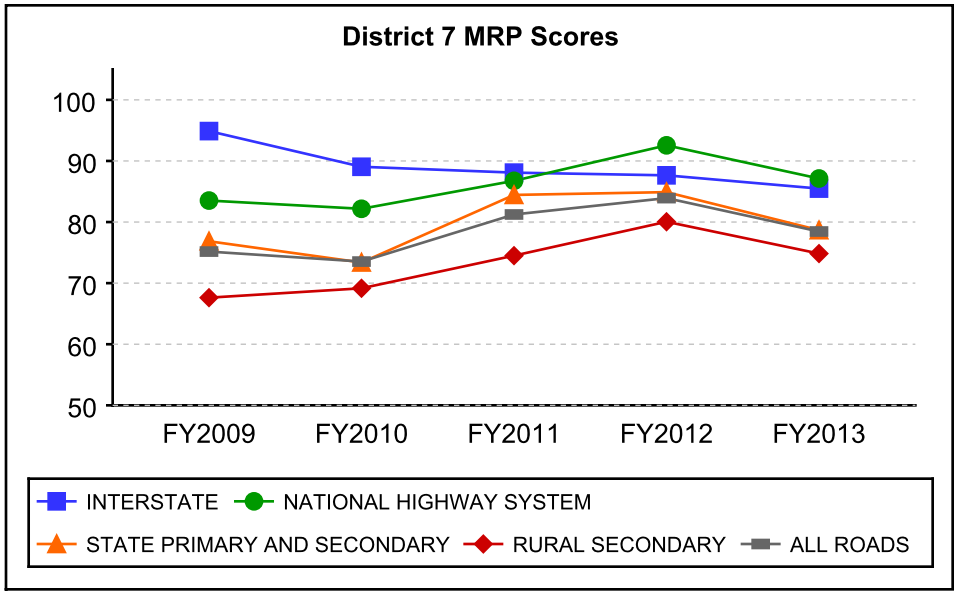

District 1 MRP Scores
100
90
80
70
60
50
FY2009
FY2010
FY2011
FY2012
FY2013
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS

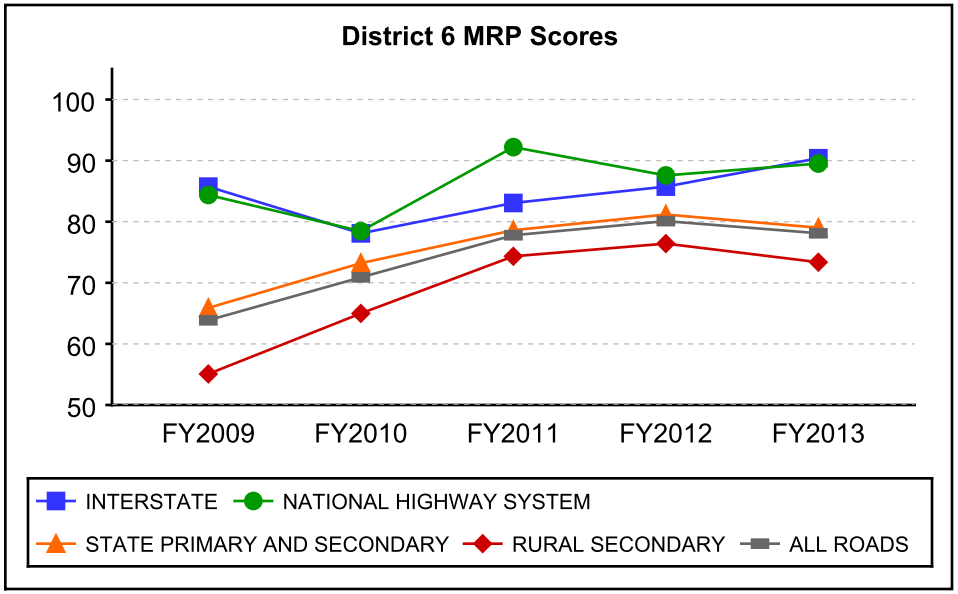

District 3 MRP Scores
100
90
80
70
60
50
FY2009
FY2010
FY2011
FY2012
FY2013
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS

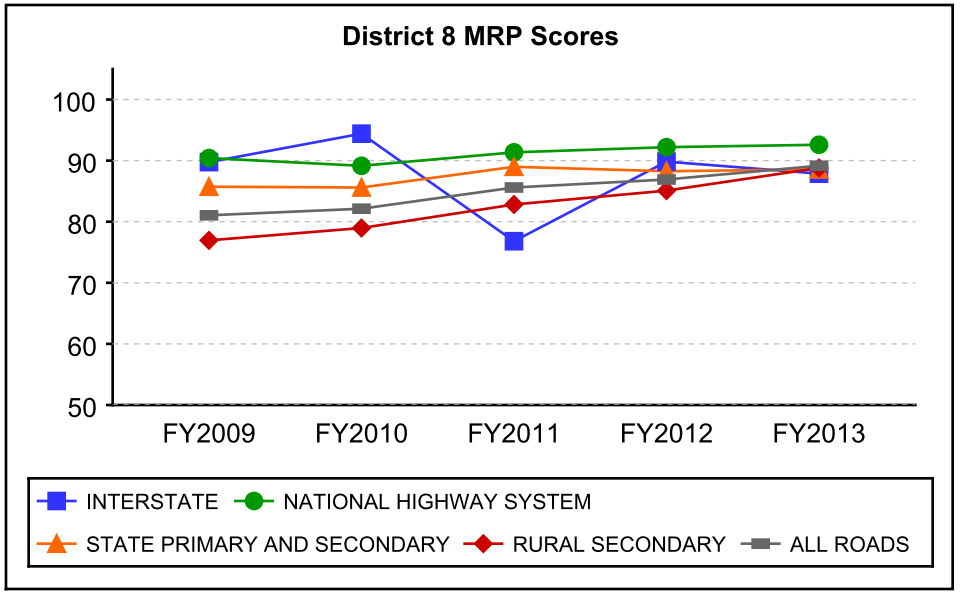

District 2 MRP Scores
100
90
80
70
60
50
FY2009
FY2010
FY2011
FY2012
FY2013
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS

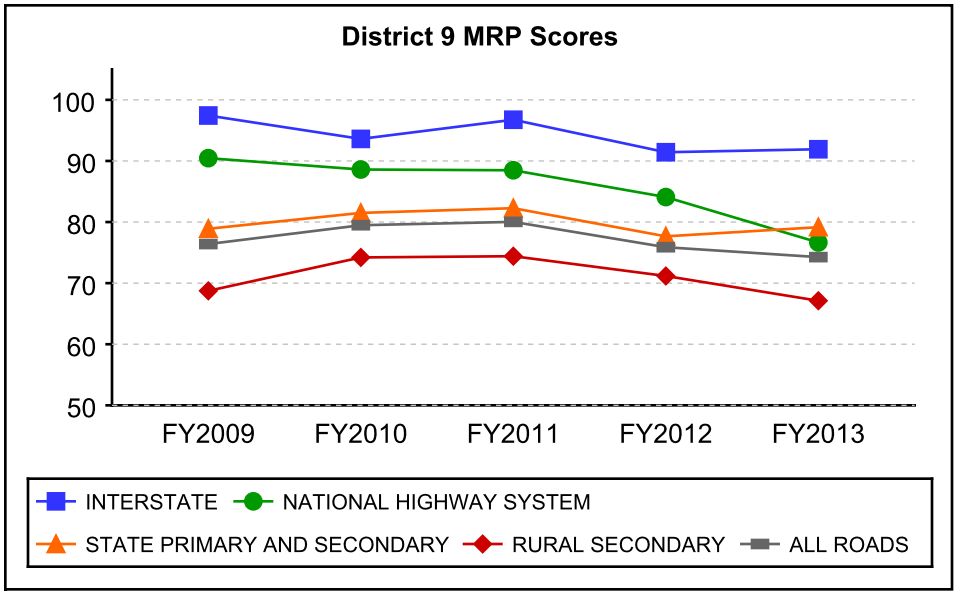

District 4 MRP Scores
100
90
80
70
60
50
FY2009
FY2010
FY2011
FY2012
FY2013
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS

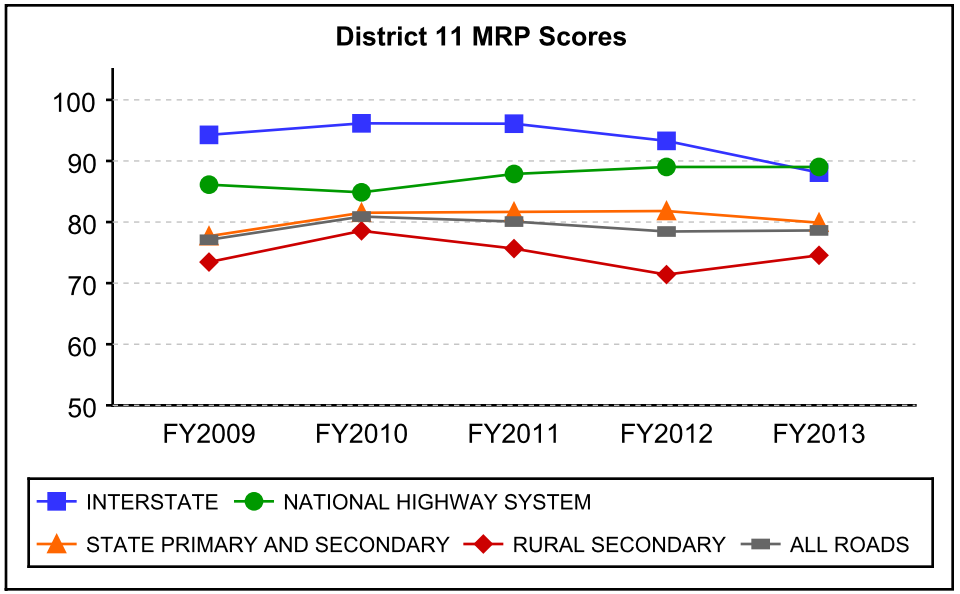

District 5 MRP Scores
100
90
80
70
60
50
FY2009
FY2010
FY2011
FY2012
FY2013
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS

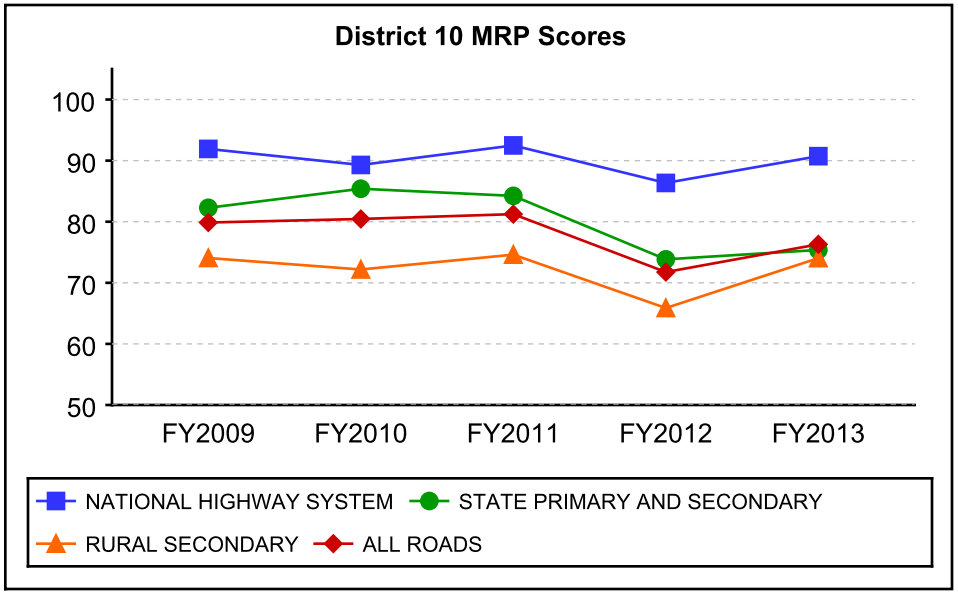

District 7 MRP Scores
100
90
80
70
60
50
FY2009
FY2010
FY2011
FY2012
FY2013
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS

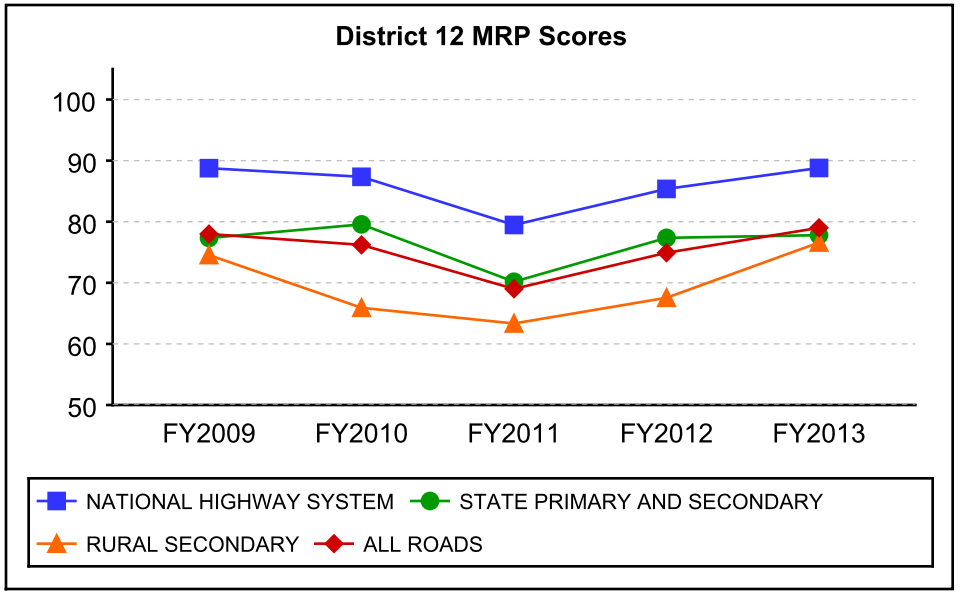

District 6 MRP Scores
100
90
80
70
60
50
FY2009
FY2010
FY2011
FY2012
FY2013
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


District 8 MRP Scores
100
90
80
70
60
50
FY2009
FY2010
FY2011
FY2012
FY2013
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


District 9 MRP Scores
100
90
80
70
60
50
FY2009
FY2010
FY2011
FY2012
FY2013
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


District 11 MRP Scores
100
90
80
70
60
50
FY2009
FY2010
FY2011
FY2012
FY2013
INTERSTATE
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


District 10 MRP Scores
100
90
80
70
60
50
FY2009
FY2010
FY2011
FY2012
FY2013
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS


District 12 MRP Scores
100
90
80
70
60
50
FY2009
FY2010
FY2011
FY2012
FY2013
NATIONAL HIGHWAY SYSTEM
STATE PRIMARY AND SECONDARY
RURAL SECONDARY
ALL ROADS

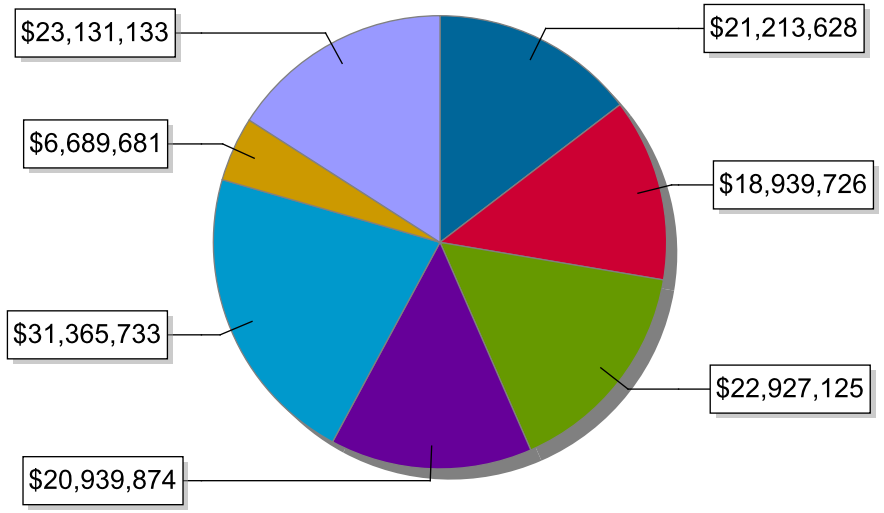
APPENDIX VI

Inspection Features

Appendix VI includes an example of the current inspection form used in data collection.

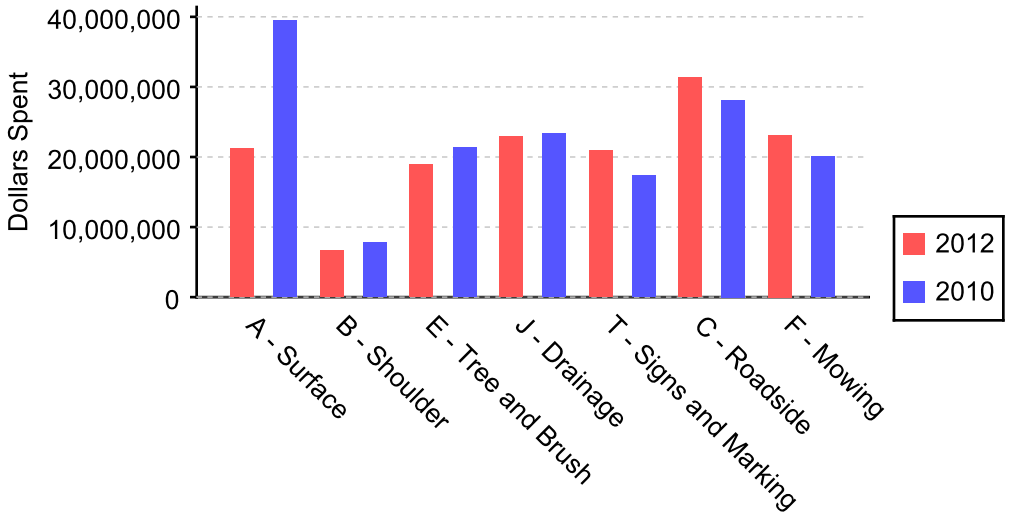
The table in Appendix VI explains the data collection of each inspection feature of the Maintenance Rating Program and how that data is converted into scoring for the report.

Statewide Maintenance Spending FY2012



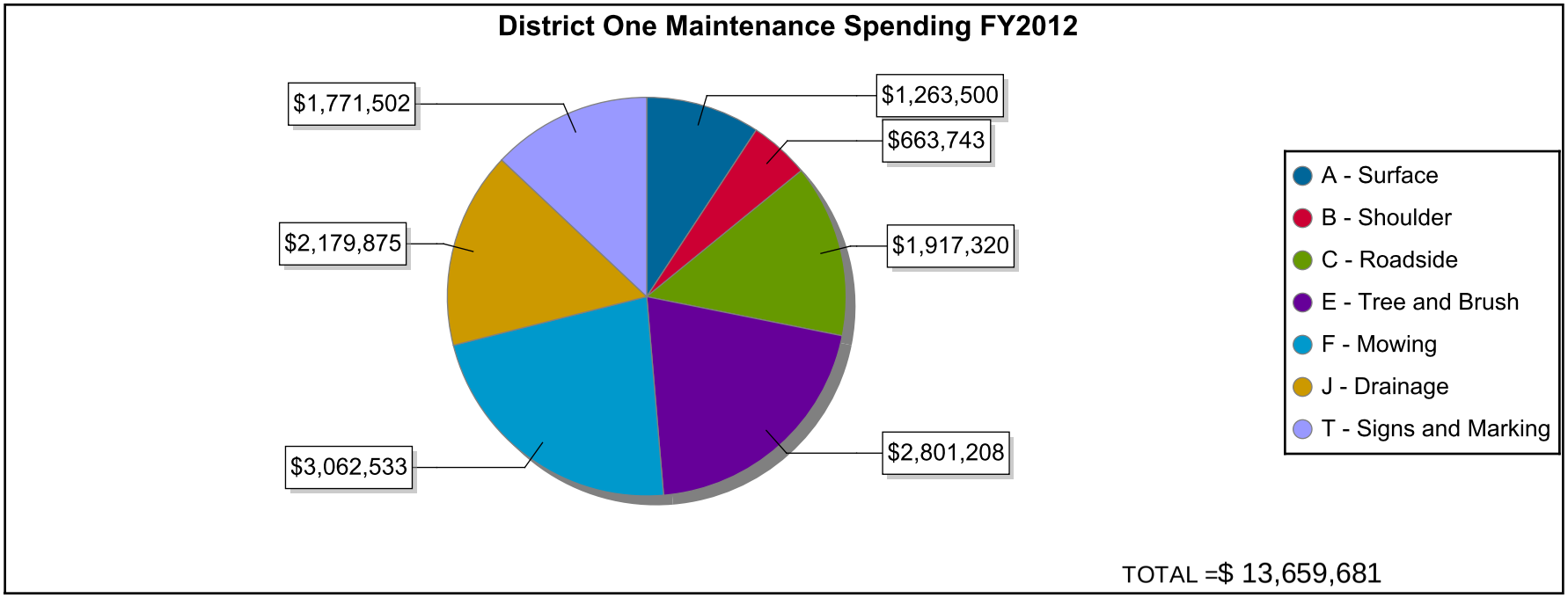
TOTAL =$ 145,206,900

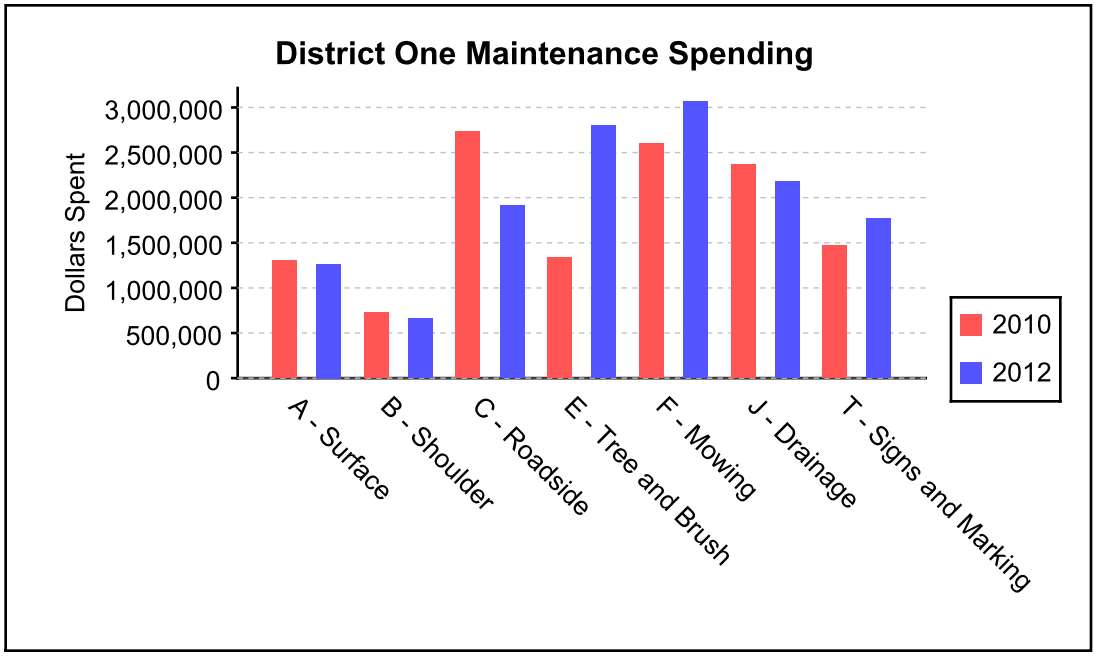
Statewide Maintenance Spending



Statewide Scores Comparison

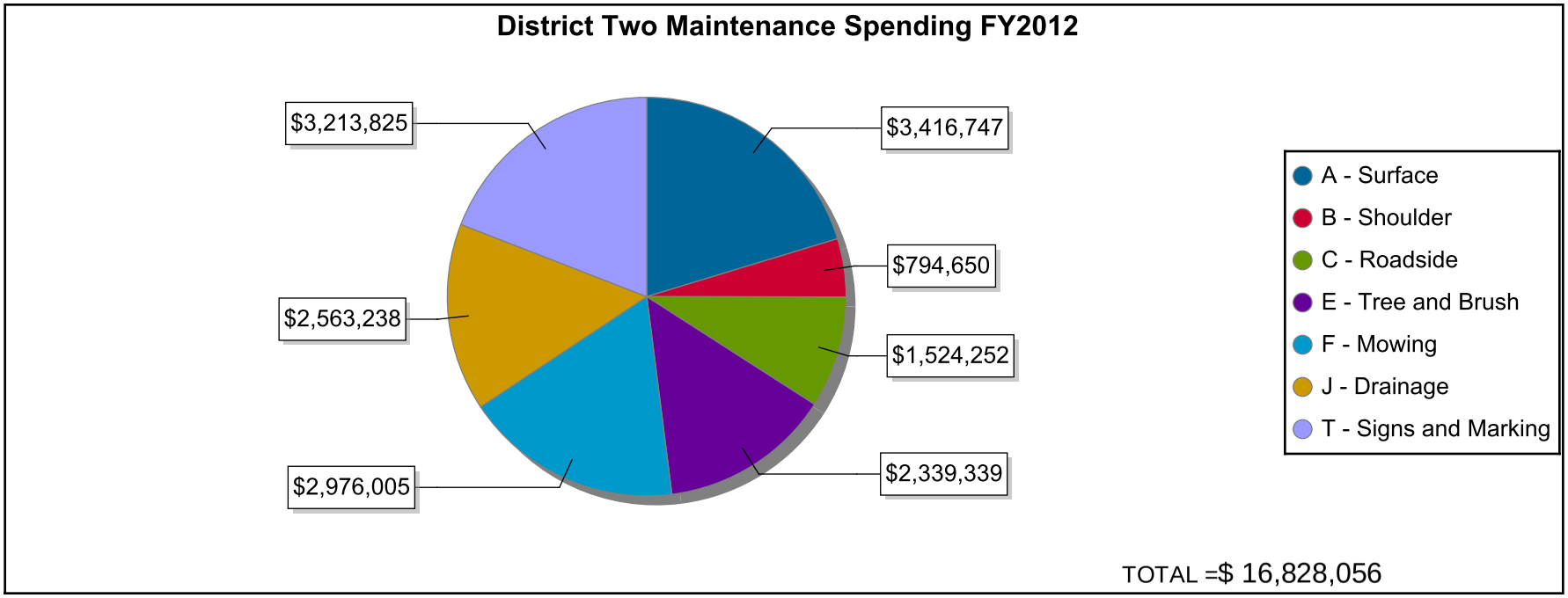
Classification	FY2011	FY2013
ALL ROADS	81.3	80.5
INTERSTATE	90.5	88.7
NATIONAL HIGHWAY SYSTEM	88.4	87.6
STATE PRIMARY AND SECONDARY	82.4	81.2
RURAL SECONDARY	76.6	77.5

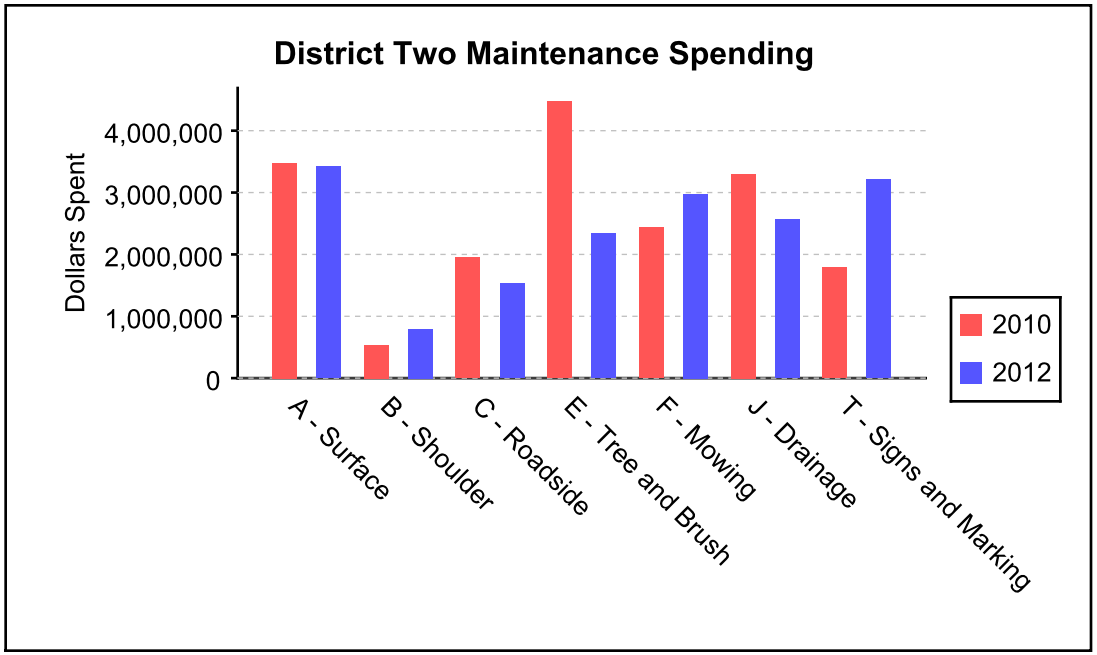




District One Scores Comparison

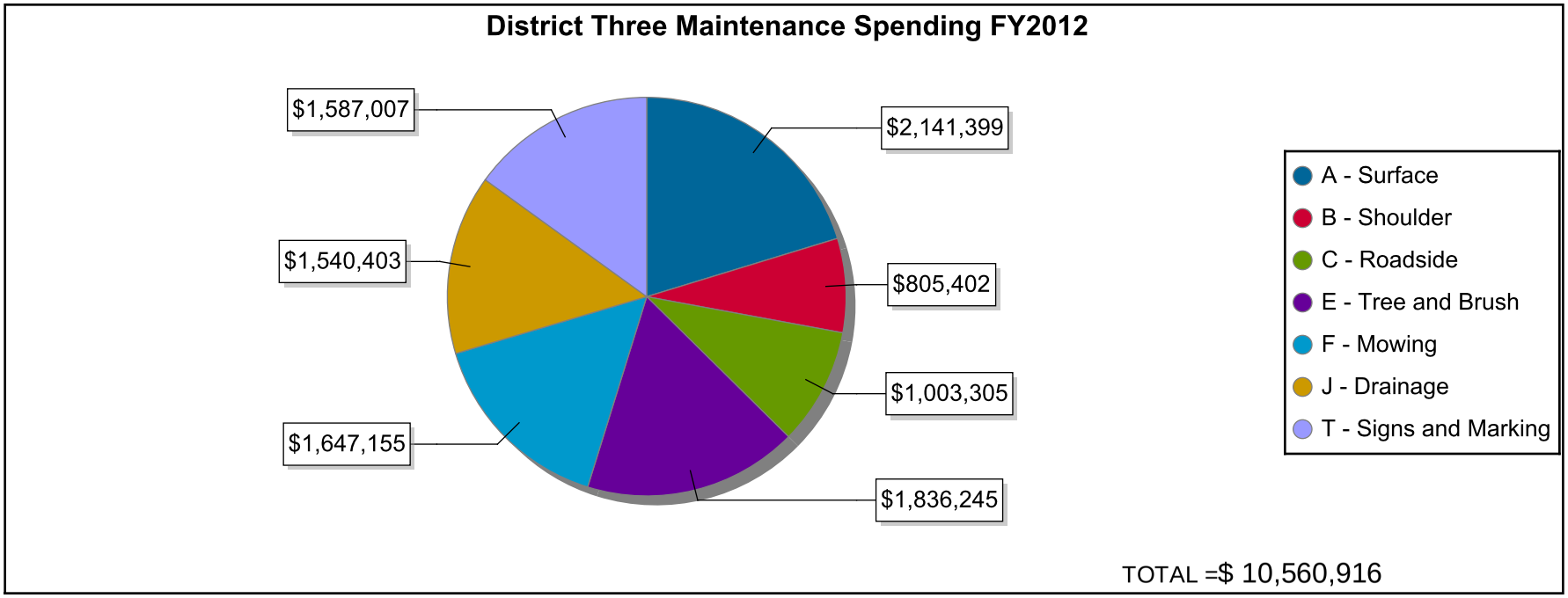
Classification	FY2011	FY2013
ALL ROADS	83.7	84.2
INTERSTATE	86.8	90.5
NATIONAL HIGHWAY SYSTEM	93.0	88.6
STATE PRIMARY AND SECONDARY	85.1	85.9
RURAL SECONDARY	80.8	81.7

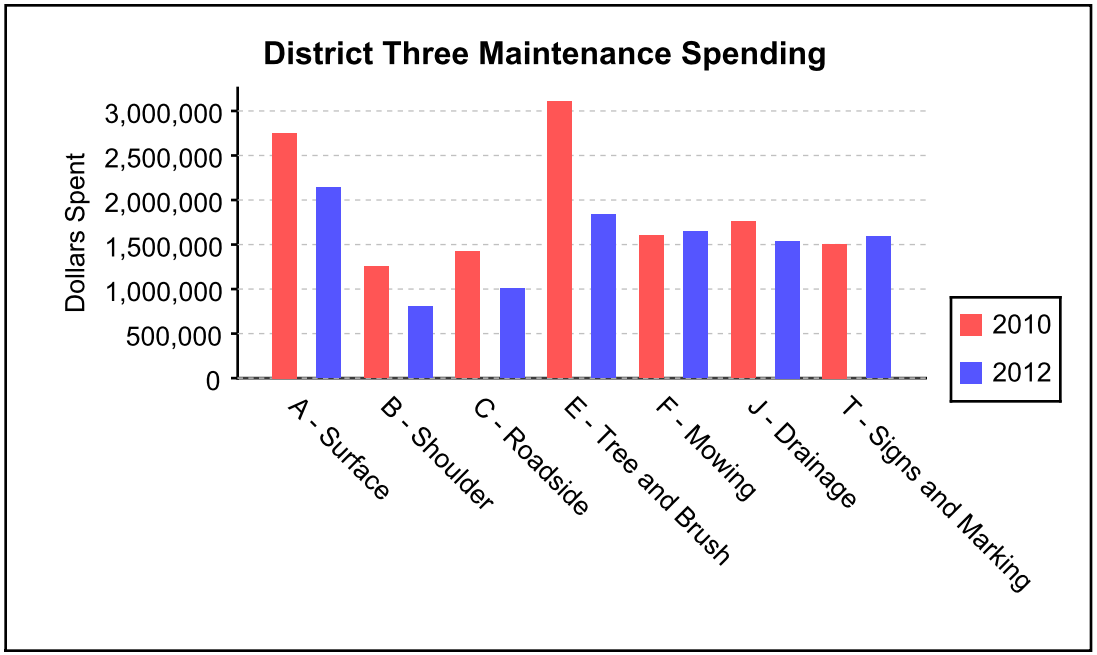




District Two Scores Comparison

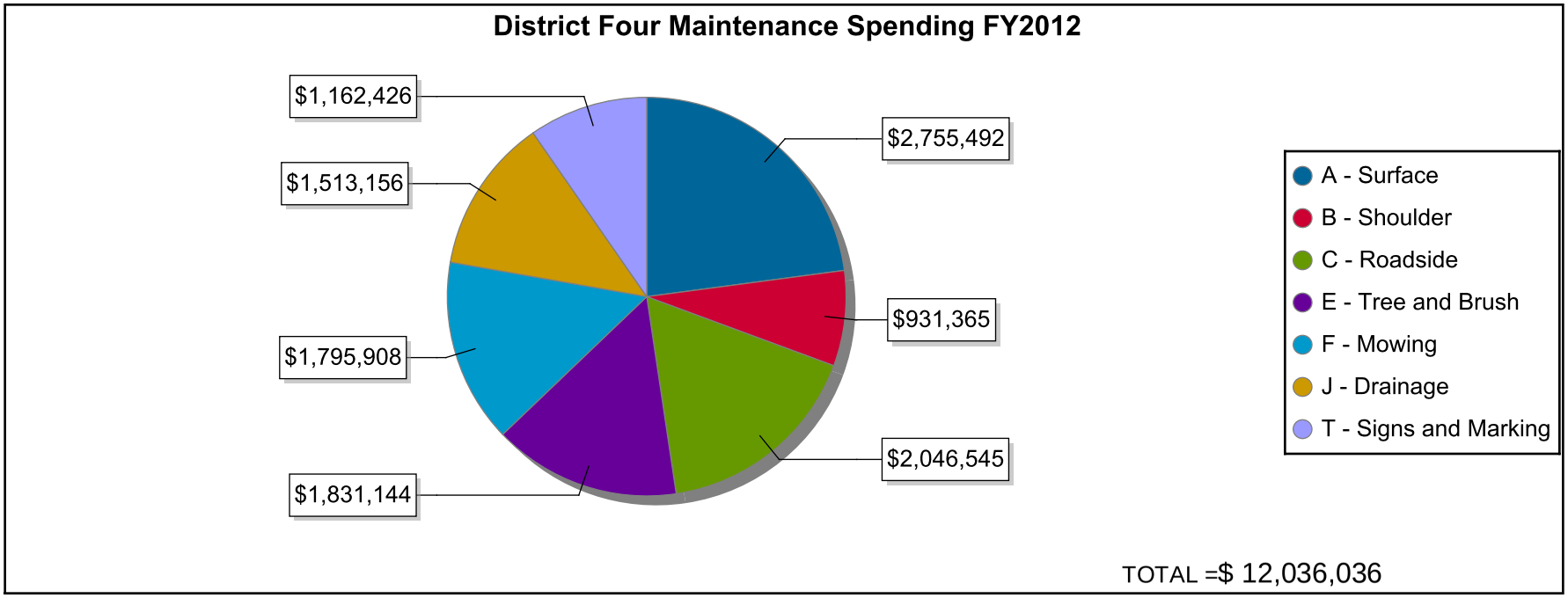
Classification	FY2011	FY2013
ALL ROADS	82.3	77.0
INTERSTATE	93.6	83.5
NATIONAL HIGHWAY SYSTEM	90.8	80.9
STATE PRIMARY AND SECONDARY	83.6	80.3
RURAL SECONDARY	77.6	72.0

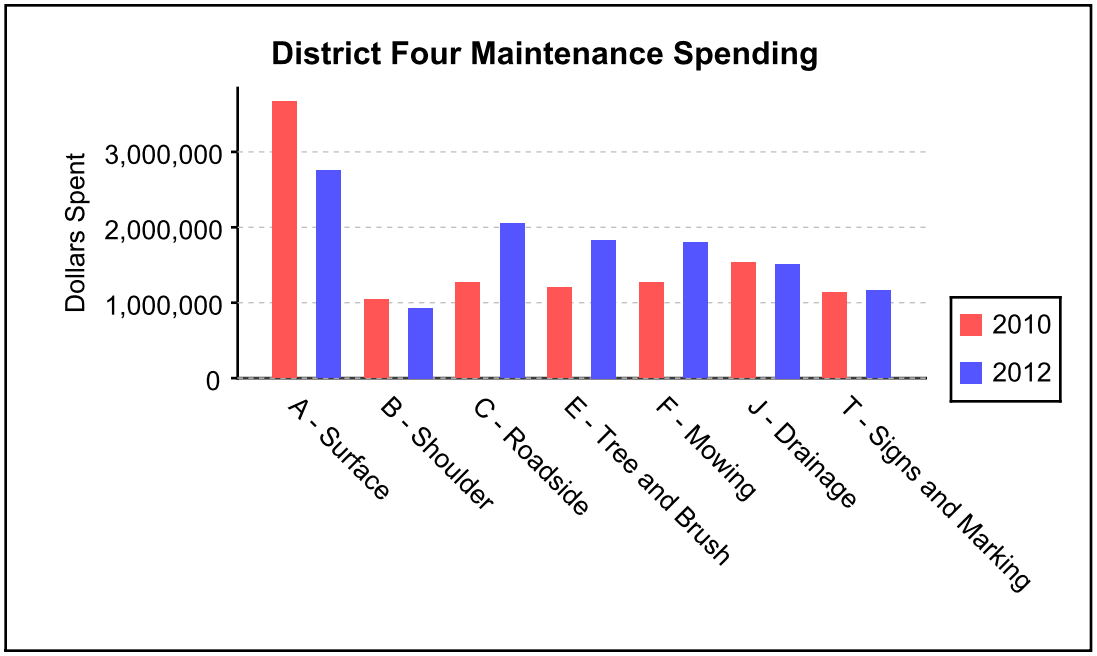




District Three Scores Comparison

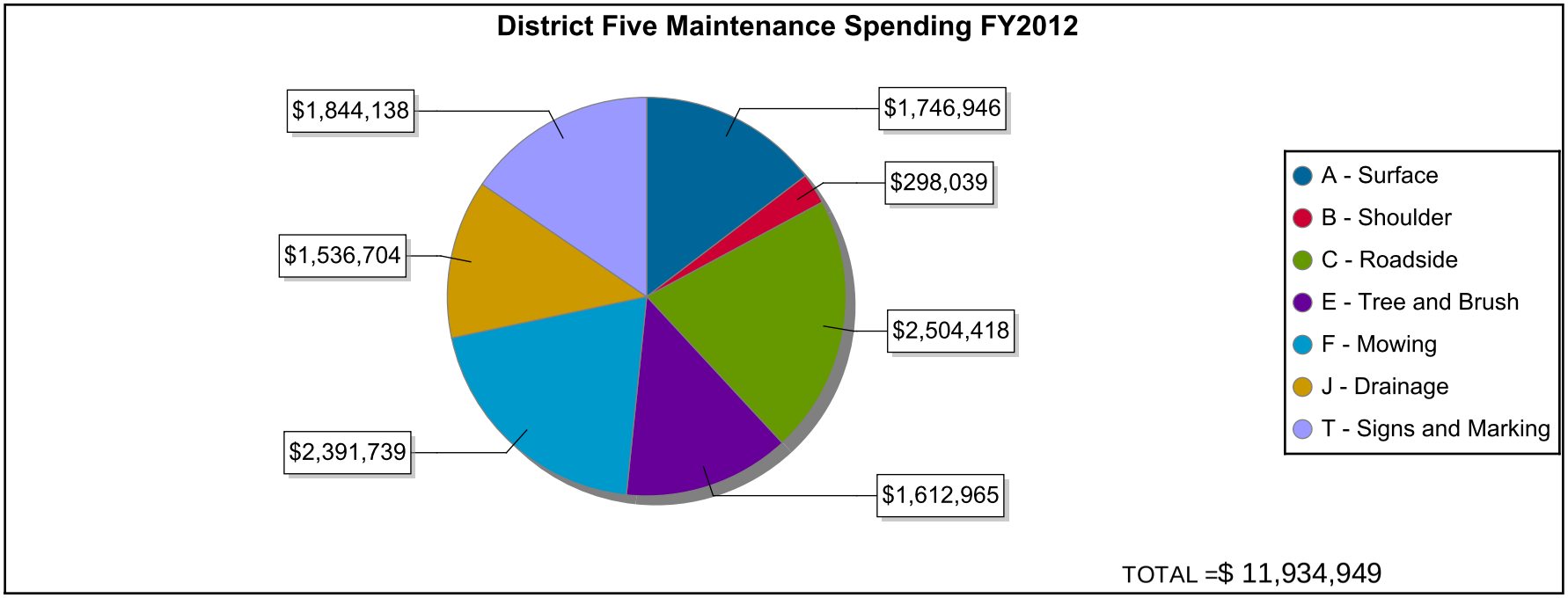
Classification	FY2011	FY2013
ALL ROADS	83.1	80.5
INTERSTATE	93.4	92.4
NATIONAL HIGHWAY SYSTEM	91.9	90.7
STATE PRIMARY AND SECONDARY	85.3	83.2
RURAL SECONDARY	79.7	76.2

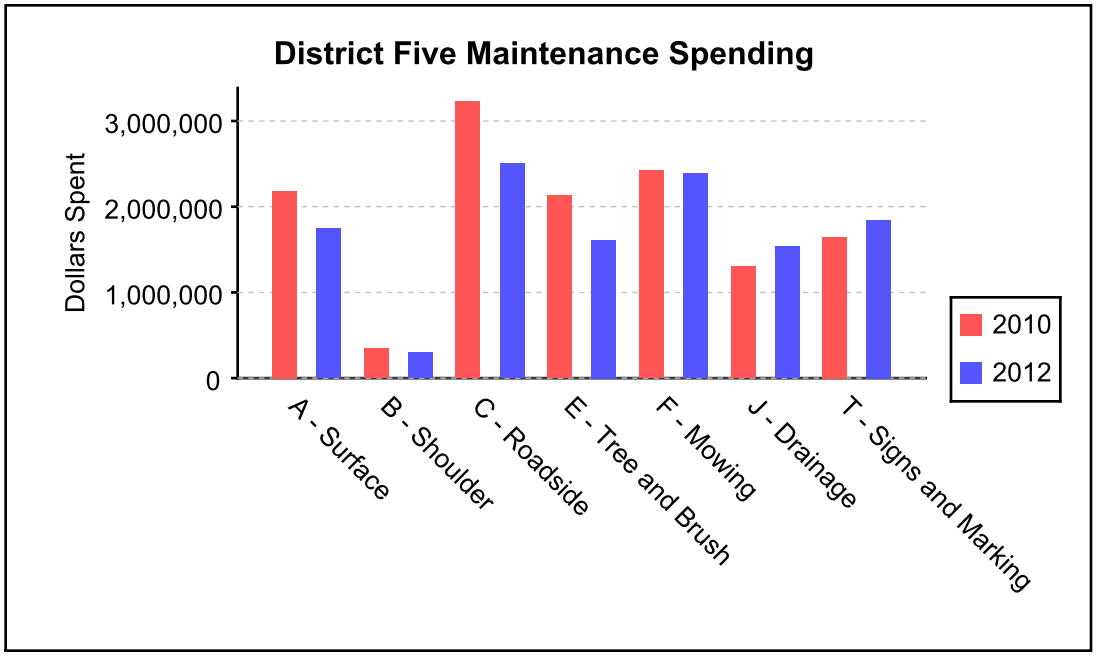




District Four Scores Comparison

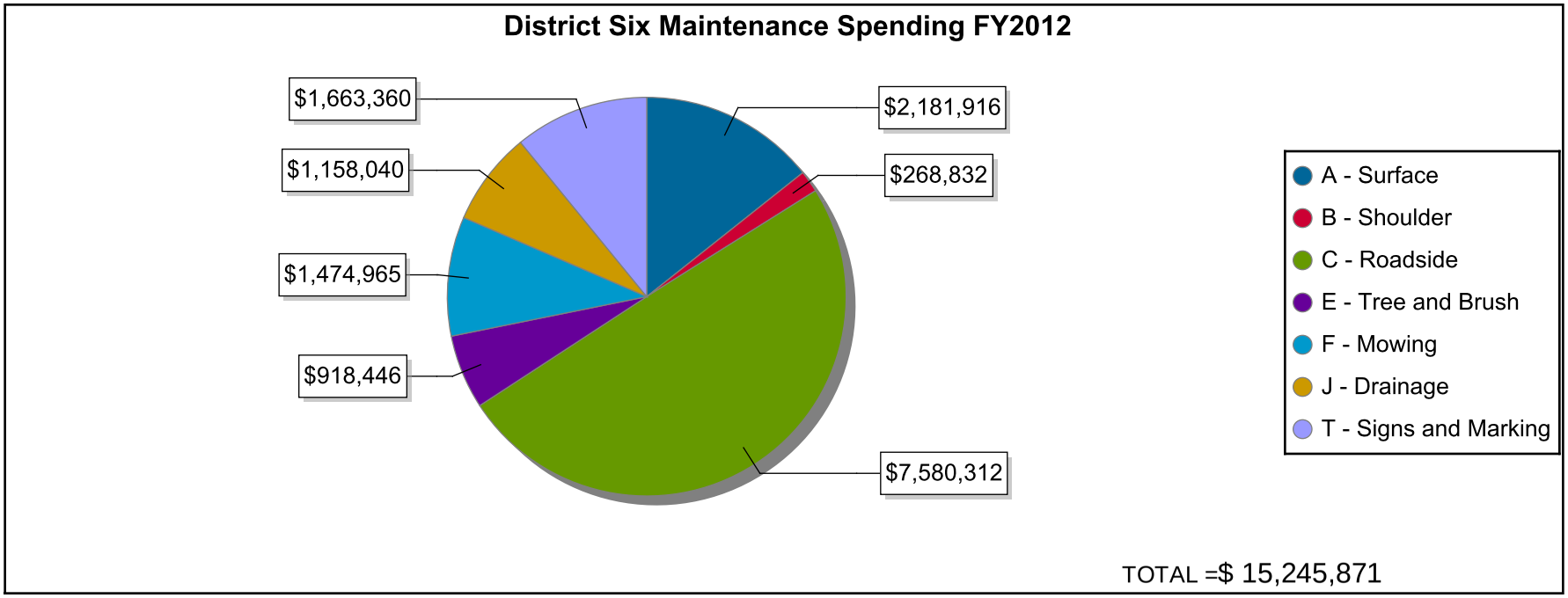
Classification	FY2011	FY2013
ALL ROADS	75.5	77.2
INTERSTATE	84.5	94.0
NATIONAL HIGHWAY SYSTEM	80.0	87.8
STATE PRIMARY AND SECONDARY	80.0	78.4
RURAL SECONDARY	69.2	74.3

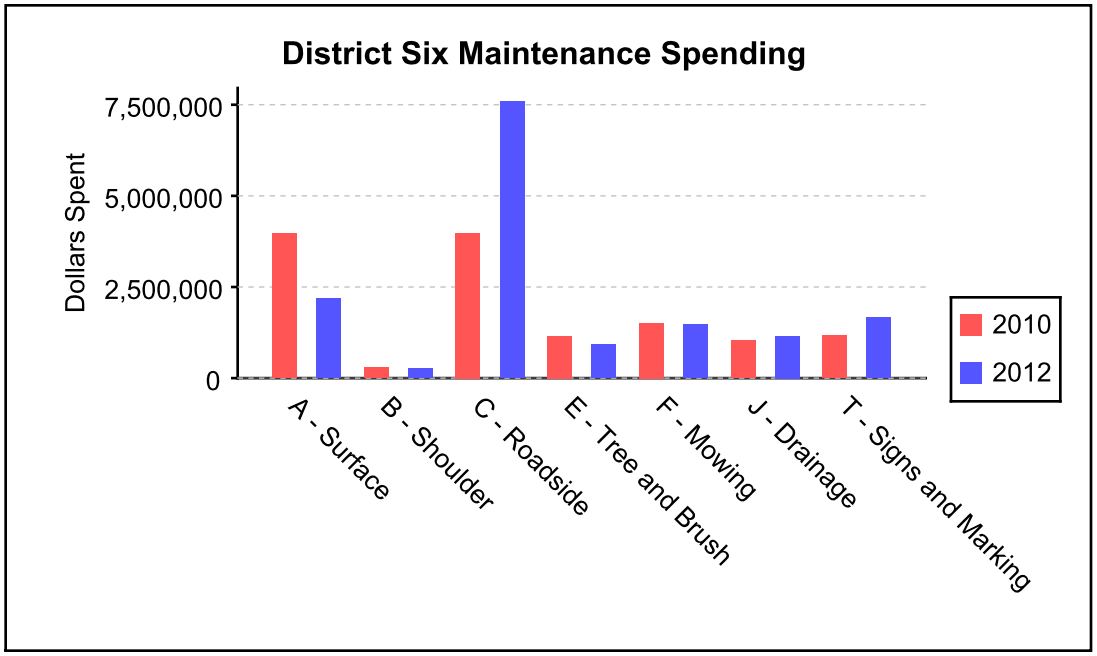




District Five Scores Comparison

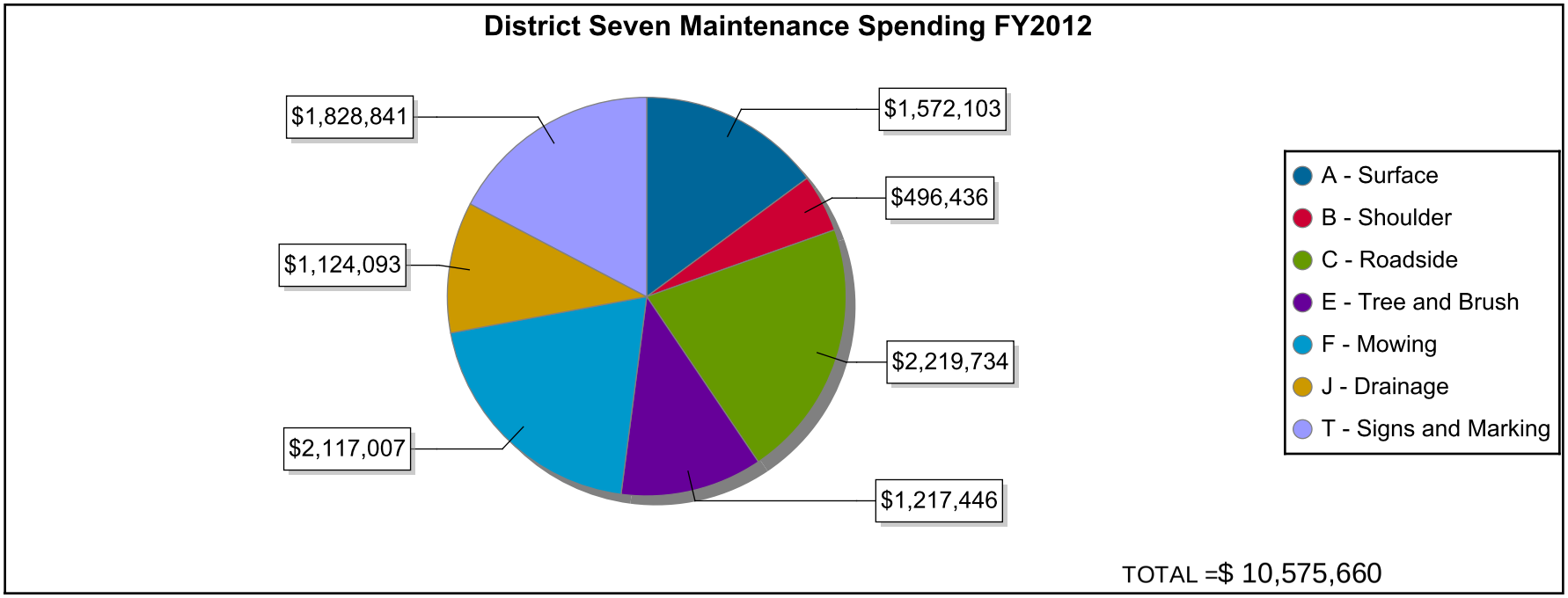
Classification	FY2011	FY2013
ALL ROADS	78.3	79.0
INTERSTATE	90.0	88.1
NATIONAL HIGHWAY SYSTEM	83.1	83.3
STATE PRIMARY AND SECONDARY	78.0	80.2
RURAL SECONDARY	75.6	74.7

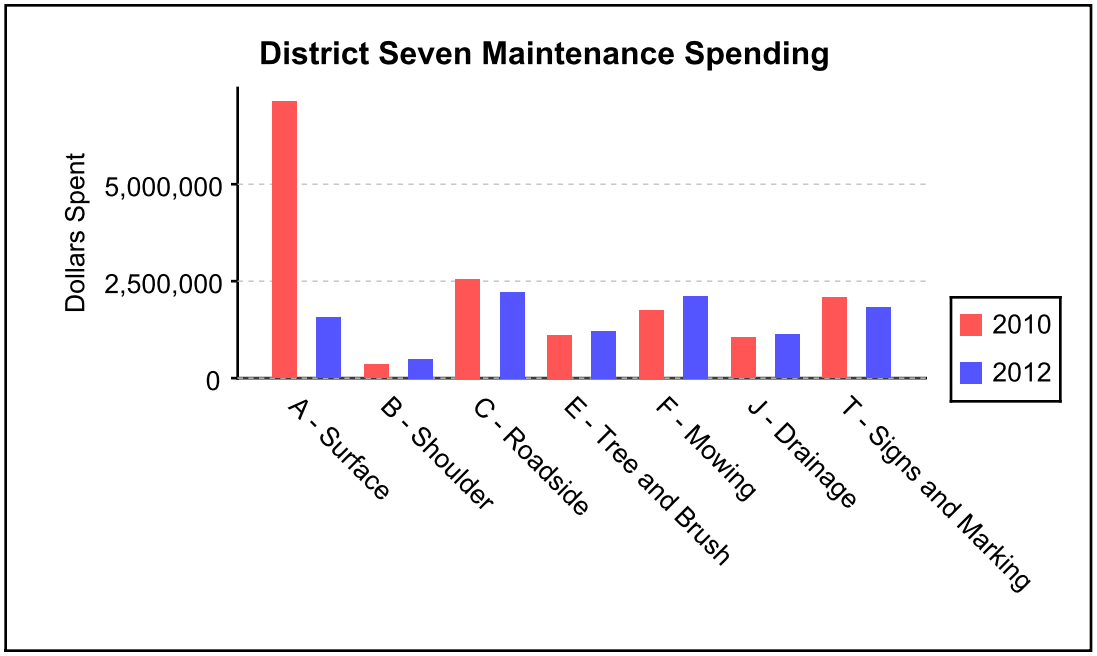




District Six Scores Comparison

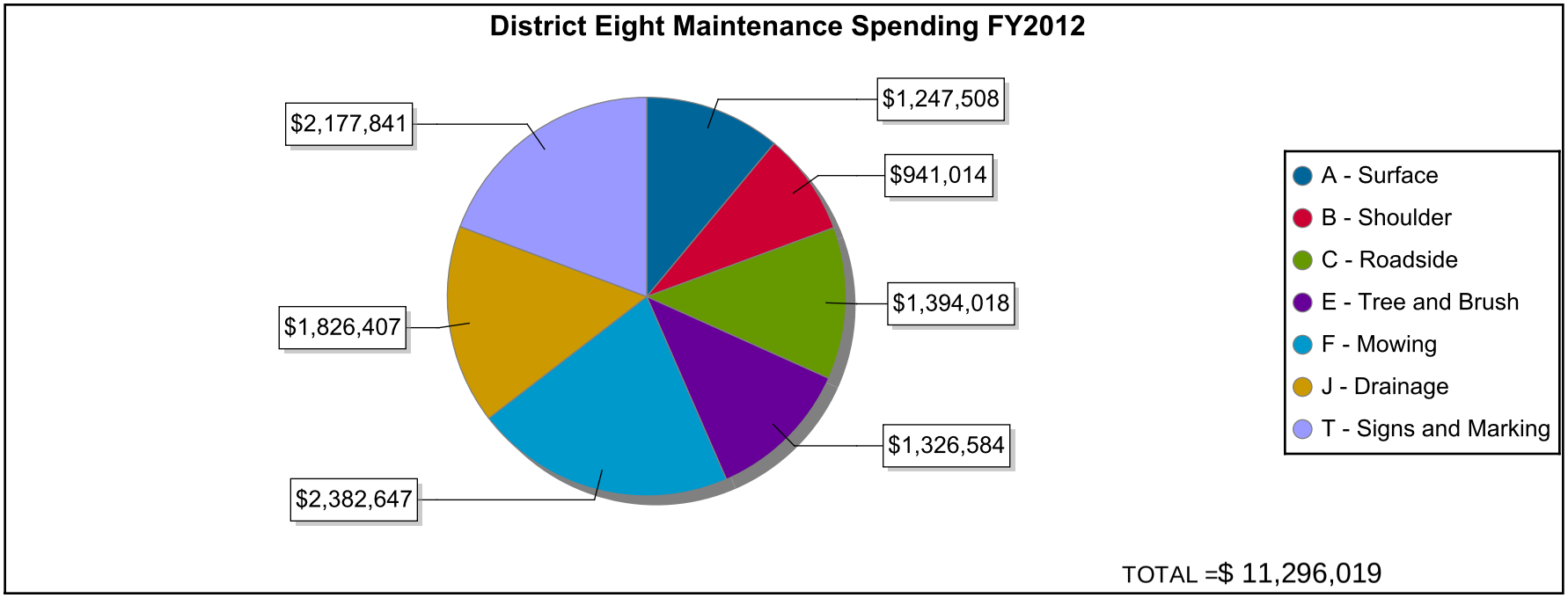
Classification	FY2011	FY2013
ALL ROADS	77.8	78.1
INTERSTATE	83.1	90.4
NATIONAL HIGHWAY SYSTEM	92.2	89.5
STATE PRIMARY AND SECONDARY	78.6	79.0
RURAL SECONDARY	74.3	73.4

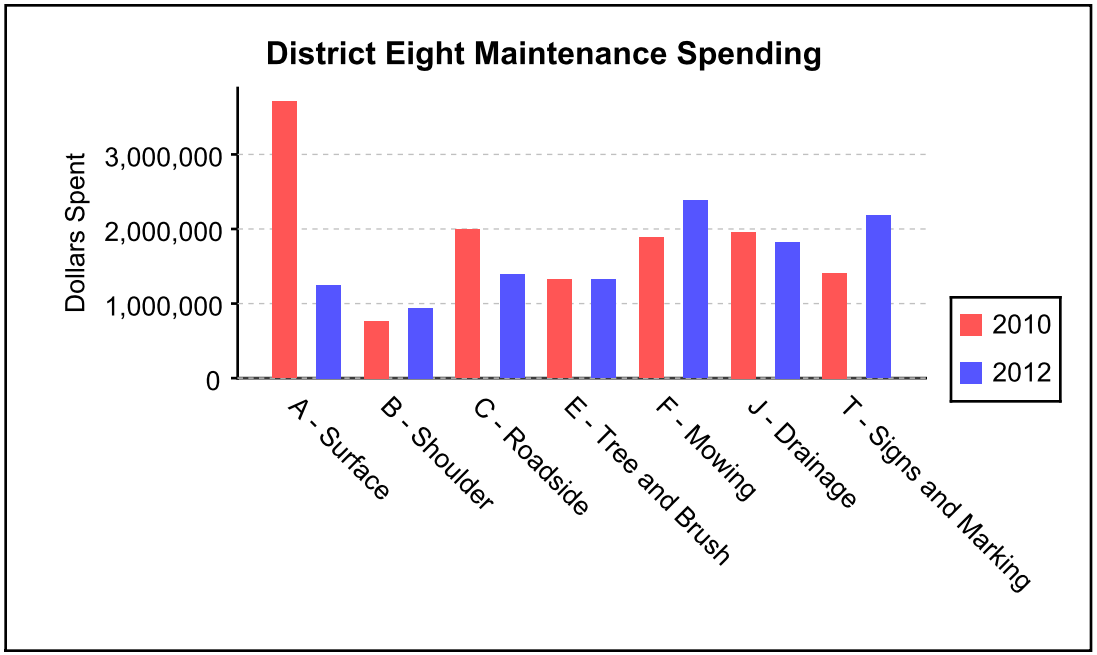




District Seven Scores Comparison

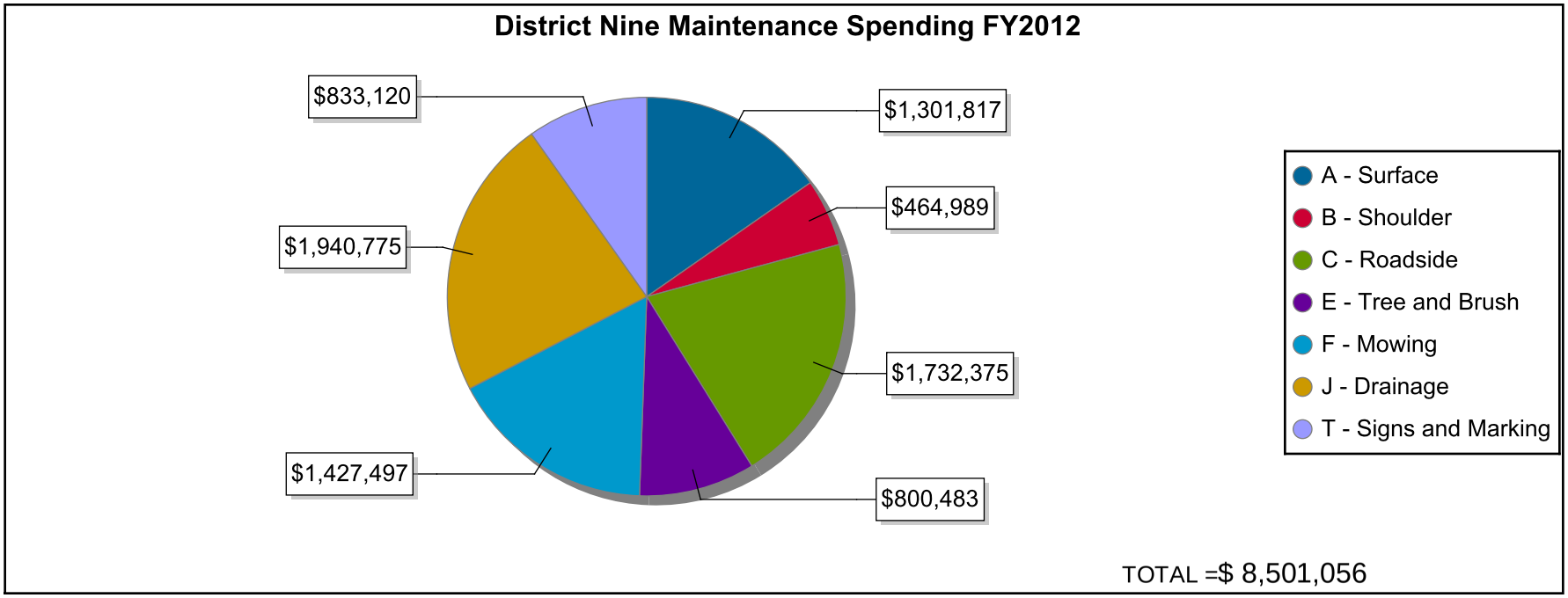
Classification	FY2011	FY2013
ALL ROADS	81.2	78.4
INTERSTATE	88.1	85.5
NATIONAL HIGHWAY SYSTEM	86.8	87.1
STATE PRIMARY AND SECONDARY	84.4	78.7
RURAL SECONDARY	74.5	74.8

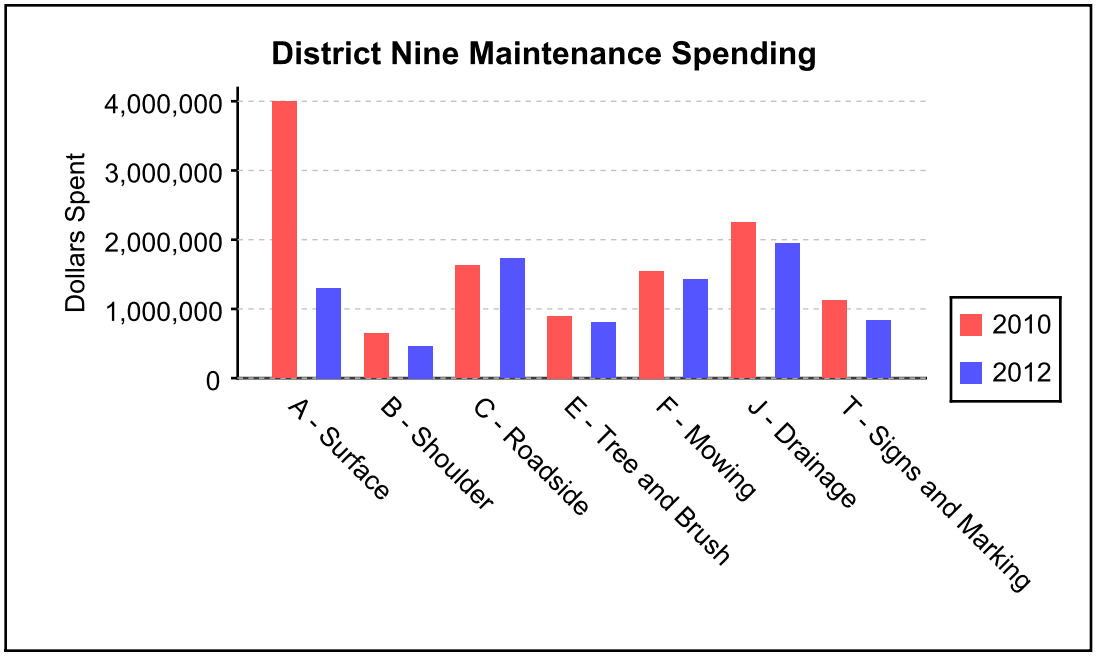




District Eight Scores Comparison

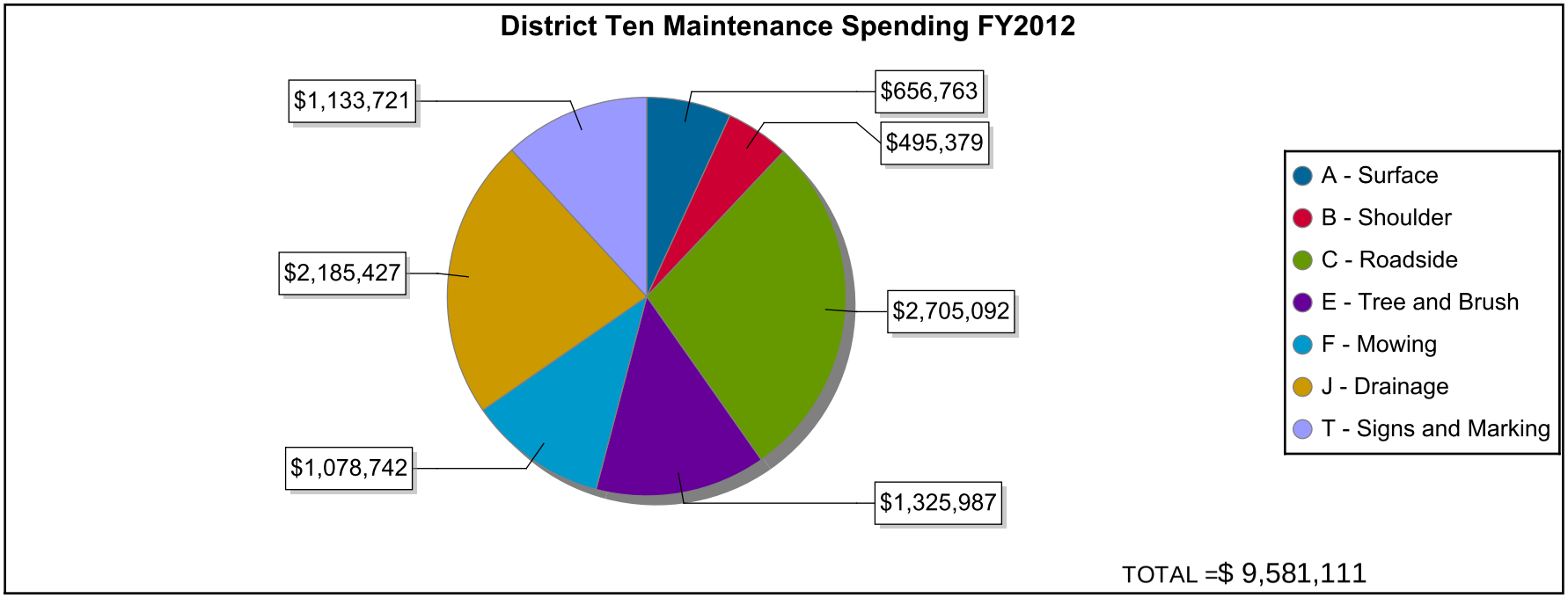
Classification	FY2011	FY2013
ALL ROADS	85.6	89.2
INTERSTATE	76.8	87.9
NATIONAL HIGHWAY SYSTEM	91.4	92.6
STATE PRIMARY AND SECONDARY	89.0	88.6
RURAL SECONDARY	82.8	88.8

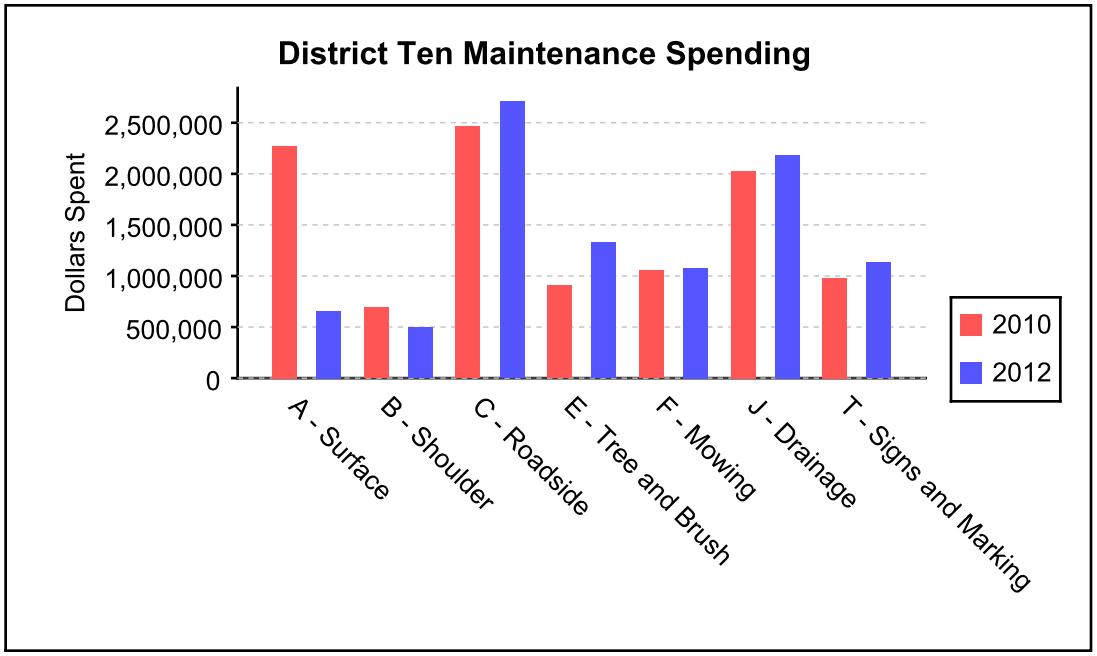




District Nine Scores Comparison

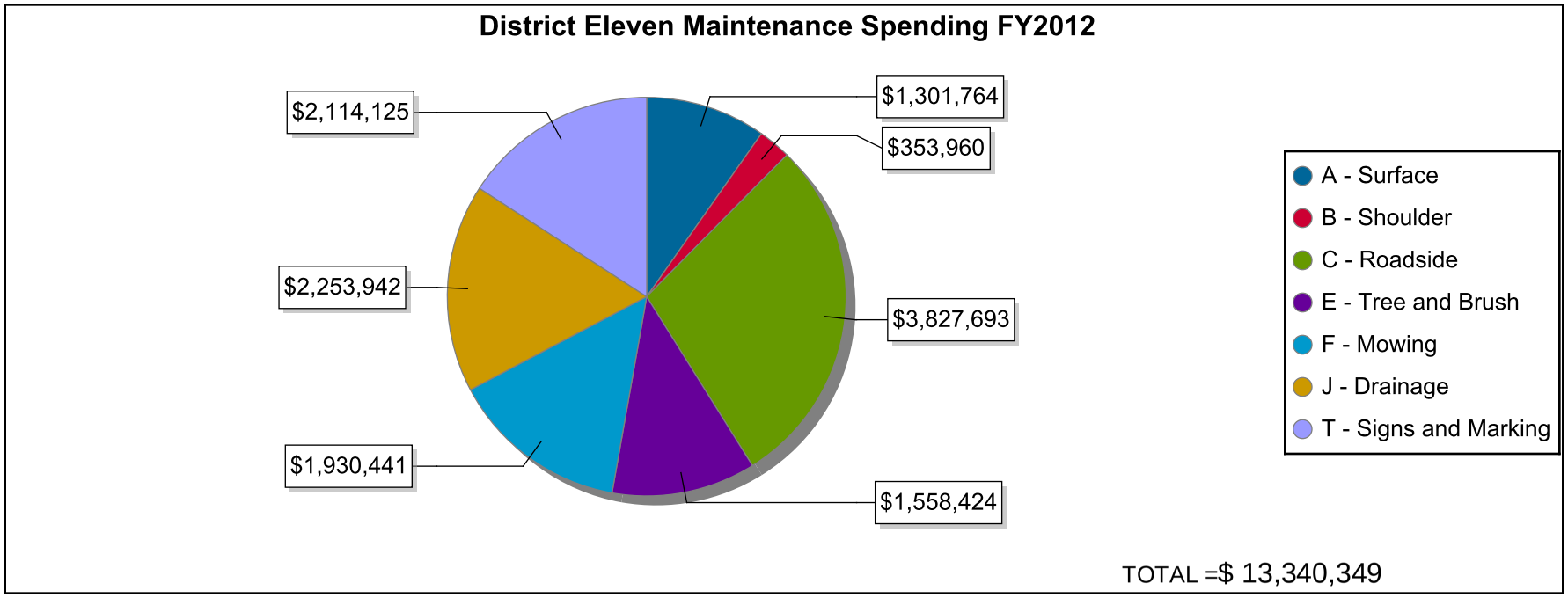
Classification	FY2011	FY2013
ALL ROADS	80.0	74.3
INTERSTATE	96.8	91.9
NATIONAL HIGHWAY SYSTEM	88.5	76.7
STATE PRIMARY AND SECONDARY	82.3	79.2
RURAL SECONDARY	74.4	67.1

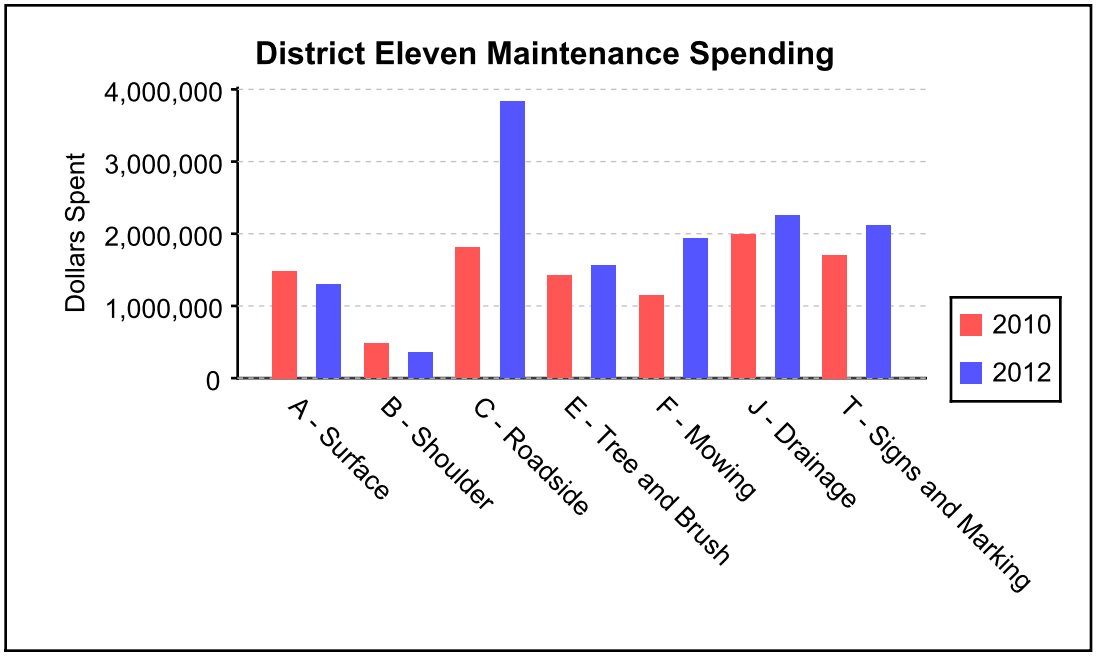




District Ten Scores Comparison

Classification	FY2011	FY2013
ALL ROADS	81.2	76.3
NATIONAL HIGHWAY SYSTEM	92.5	90.7
STATE PRIMARY AND SECONDARY	84.2	75.4
RURAL SECONDARY	74.6	74.0

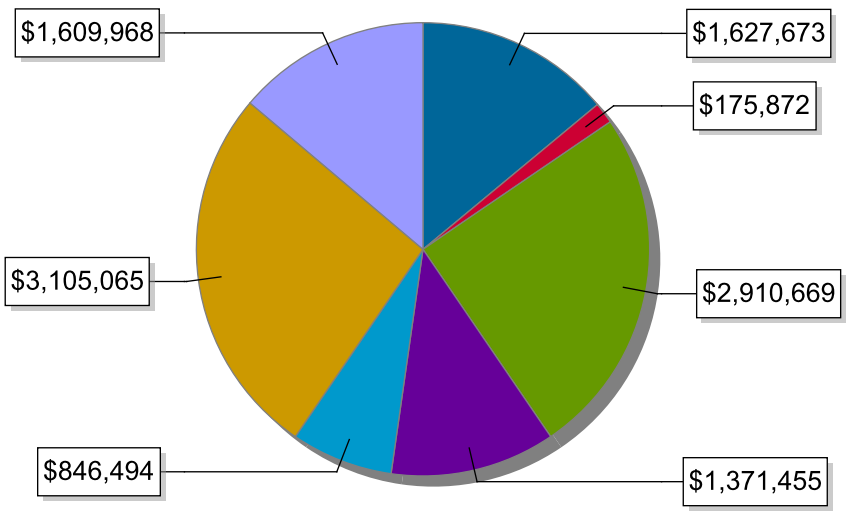




District Eleven Scores Comparison

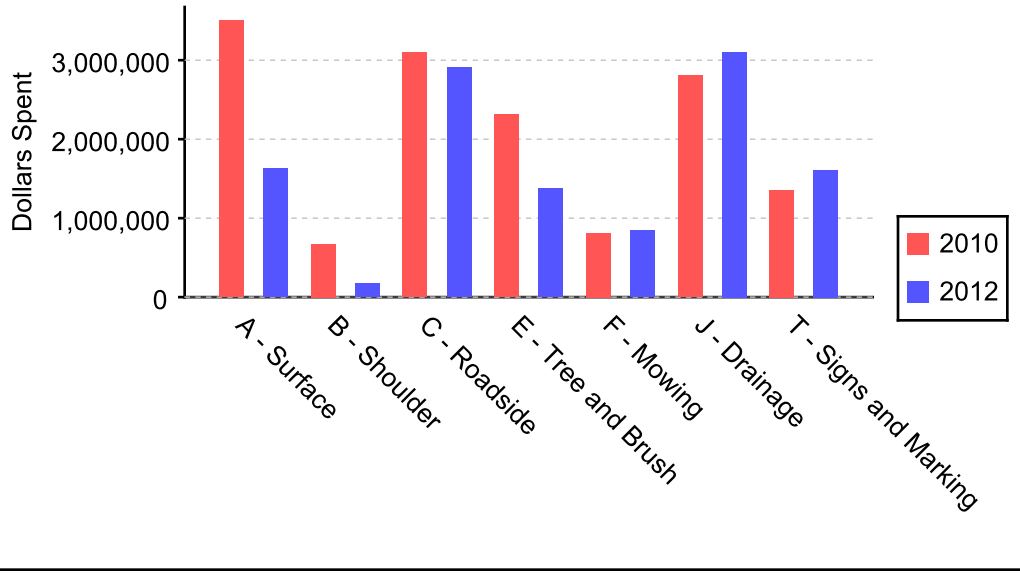
Classification	FY2011	FY2013
ALL ROADS	80.1	78.6
INTERSTATE	96.1	88.1
NATIONAL HIGHWAY SYSTEM	87.9	89.0
STATE PRIMARY AND SECONDARY	81.7	79.9
RURAL SECONDARY	75.7	74.6

District Twelve Maintenance Spending FY2012



TOTAL =$ 11,647,196

District Twelve Maintenance Spending



District Twelve Scores Comparison

Classification	FY2011	FY2013
ALL ROADS	69.0	79.0
NATIONAL HIGHWAY SYSTEM	79.5	88.8
STATE PRIMARY AND SECONDARY	70.2	77.8
RURAL SECONDARY	63.3	76.6

ACTIVITY	Roadway General	Rideability	Appearance	Vertical Clearance	Visual Obstructions	Fencing	Guardrail Out of Specifications	Guardrail Damage	Attenuators/Rail Ends	Pavement	Potholes	Rutting
A010 SUR-POT HOLE PATCH (tons)		x	x								x	
A020 MACHINE PATCH (tons)		x	x								x	x
A030 SURF-ABNORM REP (tons)		x	x								x	x
A040 SURF-REPAIR PCC (sq. ft.)		x	x								x	
A050 SURFACE-SPOT SEAL COAT (tons)		x	x									
A140 TOTAL CONTRA PATCH (tons)		x	x								x	
A150 VENDOR AIDED PATCH (tons)		x	x								x	
A710 MILLING-STATE MACH (sq. yds.)		x	x									x
A720 MILLING-VENDOR (sq. yds.)		x	x									x
B010 SHR-POT HOLE HOT (tons)			x									
B040 SHOULDER-SEAL COAT (tons)			x									
B020 SHR-MACH PATCH HOT (tons)			x									
B050 SHR - ABNORM REP (tons)			x									
B110 WEDG PAVE SHR HOT (tons)												
B120 BIT EDGE SHDL (tons)												
B130 GRADE SHRS-GRASS (Ln. Mile)												
B140 SHR TBM MAINT (tons)			x									
B150 CONTRA SHLD MAINT (tons)			x									
B210 GRADE SHOULDERS (miles)												
B220 GRADE SHR ADD MAT (tons)												
B230 GRADE SHLD UNDR GR (linear foot)												
B540 EDGE UNPAVED SHDLS (tons)												
B990 MISC SHR MAINT (hours)												
C010 ROCK FALLS AND DEBRIS (hours)			x									
C020 SLIDES/SINKHOLES & DEBRIS (hours)		x	x									
C100 LITTER CLNUP EX (hours)			x									
C110 LITTER CLEANUP (hours)			x									
C130 DEAD ANIMAL (hours)			x									
C140 SWEEP (hours)			x									
C150 CONT-MECH SWEEP (miles)			x									
C190 CRASH CUSHIONS (each)									x			
C200 REPAIR FENCES (linear foot)						x						
C300 REP ST BM GRL (linear foot)							x	x				

ACTIVITY	**Roadway General**	Rideability	Appearance	Vertical Clearance	Visual Obstructions	Fencing	Guardrail Out of Specifications	Guardrail Damage	Attenuators/Rail Ends	**Pavement**	Potholes	Rutting
C330 REP GR END TR (each)									x			
C390 CNTRCT GRAIL (hours)							x	x	x			
C400 CNTRCT GRAIL EN (hours)							x	x	x			
E010 TREE&BRUSH RMVL (hours)			x	x	x							
E020 GRADER			x	x	x							
E030 CONTR TREE-BRSH (hours)			x	x	x							
E110 TREE&SHRUB MNT (hours)			x	x	x							
E290 HERB GRAIL (miles)			x		x							
E300 SPOT SPRAY HERB (acres)			x		x							
E310 MECH SPRAY OF H (acres)			x		x							
F050 SLOPE MOWING (hours)			x	x	x							
F080 MOWER SUPPORT (hours)												
F090 HAND TRIM/LAWN MOW (hours)			x		x							
F310 MOW-STATE FORCE (acres)			x		x							
F320 MOW-CONTRACT (hours)			x		x							
J010 HAND CLN CULVRT (each)												
J020 MACH CLN CULVRT (each)												
J030 RPR CULV/PIPE (each)												
J070 PVT ENT MAINT (each)												
J110 SLOPE PROTECT (tons)												
J150 CONTRACT DRNGE (hours)												
J210 DITCH W/ GRADE (miles)												
J230 SPT DCH BOOM EQ (miles)												
J310 PAV/ ROCK DTCH (linear foot)												
J320 CLN DRAIN CHNL (hours)												
T010 CONTRACT 4" YELLOW STRIP (linear foot)			x									
T020 S.F. 4" YELLOW STRIPING (linear foot)			x									
T030 S.F. 4" WHITE STRIPING (linear foot)			x									
T040 HAND PVMT MARK (hours)			x									
T050 HAND PVMT PAINT (hours)			x									
T060 RAISED PVMT MRK (each)			x									
T110 PNT LNE&EDG LNE (miles)			x									
T200 PLCMNT SHT SIG (each)			x									
T210 RPLC SIGN & DEL (each)			x									
T240 SIGN MNT (each)			x									
T250 MNT PANEL SIGNS (each)			x									

ACTIVITY	Shoulders	Pavement Drop-Off to Shoulder	Shoulder Drop-Off to Ground	High Shoulder	Shoulder Potholes	Drainage	Drainage Structures	Ditches	Curb and Gutter	Traffic	White Stripe Reflectivity	Yellow Stripe Reflectivity	Guide Signs	Guide Sign Assemblies	Warning Signs	Warning Sign Assemblies
A010 SUR-POT HOLE PATCH (tons)																
A020 MACHINE PATCH (tons)																
A030 SURF-ABNORM REP (tons)																
A040 SURF-REPAIR PCC (sq. ft.)																
A050 SURFACE-SPOT SEAL COAT (tons)																
A140 TOTAL CONTRA PATCH (tons)																
A150 VENDOR AIDED PATCH (tons)																
A710 MILLING-STATE MACH (sq. yds.)																
A720 MILLING-VENDOR (sq. yds.)																
B010 SHR-POT HOLE HOT (tons)					x											
B040 SHOULDER-SEAL COAT (tons)																
B020 SHR-MACH PATCH HOT (tons)		x	x		x											
B050 SHR - ABNORM REP (tons)		x	x		x											
B110 WEDG PAVE SHR HOT (tons)		x														
B120 BIT EDGE SHDL (tons)		x														
B130 GRADE SHRS-GRASS (Ln. Mile)				x												
B140 SHR TBM MAINT (tons)		x	x													
B150 CONTRA SHLD MAINT (tons)		x	x	x	x											
B210 GRADE SHOULDERS (miles)		x	x	x												
B220 GRADE SHR ADD MAT (tons)		x	x	x												
B230 GRADE SHLD UNDR GR (linear foot)		x		x												
B540 EDGE UNPAVED SHDLS (tons)		x						x								
B990 MISC SHR MAINT (hours)		x	x	x	x											
C010 ROCK FALLS AND DEBRIS (hours)								x								
C020 SLIDES/SINKHOLES & DEBRIS (hours)			x					x								
C100 LITTER CLNUP EX (hours)																
C110 LITTER CLEANUP (hours)																
C130 DEAD ANIMAL (hours)																
C140 SWEEP (hours)																
C150 CONT-MECH SWEEP (miles)																
C190 CRASH CUSHIONS (each)																
C200 REPAIR FENCES (linear foot)																
C300 REP ST BM GRL (linear foot)																

ACTIVITY	Shoulders	Pavement Drop-Off to Shoulder	Shoulder Drop-Off to Ground	High Shoulder	Shoulder Potholes	Drainage	Drainage Structures	Ditches	Curb and Gutter	Traffic	White Stripe Reflectivity	Yellow Stripe Reflectivity	Guide Signs	Guide Sign Assemblies	Warning Signs	Warning Sign Assemblies
C330 REP GR END TR (each)																
C390 CNTRCT GRAIL (hours)																
C400 CNTRCT GRAIL EN (hours)																
E010 TREE&BRUSH RMVL (hours)																
E020 GRADER																
E030 CONTR TREE-BRSH (hours)																
E110 TREE&SHRUB MNT (hours)																
E290 HERB GRAIL (miles)																
E300 SPOT SPRAY HERB (acres)																
E310 MECH SPRAY OF H (acres)																
F050 SLOPE MOWING (hours)																
F080 MOWER SUPPORT (hours)																
F090 HAND TRIM/LAWN MOW (hours)																
F310 MOW-STATE FORCE (acres)																
F320 MOW-CONTRACT (hours)																
J010 HAND CLN CULVRT (each)							x	x								
J020 MACH CLN CULVRT (each)							x	x								
J030 RPR CULV/PIPE (each)							x	x								
J070 PVT ENT MAINT (each)							x	x								
J110 SLOPE PROTECT (tons)								x								
J150 CONTRACT DRNGE (hours)							x	x	x							
J210 DITCH W/ GRADE (miles)								x								
J230 SPT DCH BOOM EQ (miles)							x	x								
J310 PAV/ ROCK DTCH (linear foot)								x								
J320 CLN DRAIN CHNL (hours)							x	x								
T010 CONTRACT 4" YELLOW STRIP (linear foot)												x				
T020 S.F. 4" YELLOW STRIPING (linear foot)												x				
T030 S.F. 4" WHITE STRIPING (linear foot)											x					
T040 HAND PVMT MARK (hours)											x	x				
T050 HAND PVMT PAINT (hours)											x	x				
T060 RAISED PVMT MRK (each)											x	x				
T110 PNT LNE&EDG LNE (miles)											x	x				
T200 PLCMNT SHT SIG (each)													x	x	x	x
T210 RPLC SIGN & DEL (each)													x	x	x	x
T240 SIGN MNT (each)													x	x	x	x
T250 MNT PANEL SIGNS (each)													x	x		

APPENDIX V

Activity Spending

Appendix V tables and graphs are a summary of previous fiscal year district spending impacting current MRP scores. Spending is pulled from a combination of OMS and EMARS reports in order to include state force and contract spending.

Appendix V also contains a complete list of activities that impact features inspected by the MRP.

Inspection Date: _____

Maintenance Rating Program
Inspection Form

Evaluation Team: _____

01-0001

Wave 19 Summer 2009

District 01	County: **LIVINGSTON**	Route: **I -24**	Mile Point: **030.563**	Dir: **E**

Number of Lanes: **4** Surface: **AC** AADT: **28500** Median: **Earth** Shoulder:**AC**
Lane Width: **12** Category: **Interstates/Expressways** Median Width: **48** Shoulder Width: **10**

r1 - General Aesthetics (Grass, Vegetation, Litter & Surface) **1=Excellent 2=Good 3=Acceptable 4=Poor 5=Unacceptable**			
r2 – Is there roadway or shoulder with less than 15' vertical clearance?	**(2)**	**Y**	**N**
r3 – Are there visual obstructions of intersections, curves or signs, etc.?	**(3)**	**Y**	**N**
r4 – Is there right-of-way fencing?	**(4)**	**Y**	**N**
r5 – Is there fence not providing a positive barrier?	**(5)**	**Y**	**N**
r6 – Is there guardrail?	**(6)**	**Y**	**N**
r7 – Is there guardrail outside height specifications (25" to 29")?	**(7)**	**Y**	**N**
r8 – Is there guardrail with post or accident damage?	**(8)**	**Y**	**N**
r9 - Number of guardrail attenuators/rail ends	**(9)**	_____	
r10 - Number of attenuators/rail ends damaged	**(10)**	_____	
p1 - Number of pavement potholes 6" long, 6" wide and 1" deep or larger *(maximum = 20)*	**(11)**	_____	
p2 - Rutting - Outside wheel path at 0 feet **(circle one)** **Greater than ¼"** **Less than or equal to ¼"**			
p3 - Rutting - Outside wheel path at 100 feet **(circle one)** **Greater than ¼"** **Less than or equal to ¼"**			
s1 – Is there pavement dropoff to shoulder greater than or equal to 1.5"?	**(14)**	**Y**	**N**
s2 – Is there shoulder dropoff to ground greater than or equal to 3.0"?	**(15)**	**Y**	**N**
s3 – Is there high shoulder?	**(16)**	**Y**	**N**
s4 - Number of shoulder potholes 6" x 6" x 1" or larger *(maximum = 20)*	**(17)**	_____	
d1 - Number of drainage structures *(do not include entrance pipes)*	**(18)**	_____	
d2 – Number of drainage structures with 25% or greater flow inhibited	**(19)**	_____	
d3 – Are there ditches?	**(20)**	**Y**	**N**
d4 – Are there ditches with flow inhibited? *(include any blocked entrance pipes here)*	**(21)**	**Y**	**N**
d5 – Are there curbs and gutters?	**(22)**	**Y**	**N**
d6 – Are there curbs and gutters with flow inhibited?	**(23)**	**Y**	**N**
Striping reflectivity measurements taken 10 paces apart (Priorities: 1=Edge Line, 2=Center Line, 3=Skip Line)			
t1 - White reading #1 **(24)** _____ t2- White reading #2 **(25)** _____ t3- White reading #3	**(26)**	_____	
t4 - Yellow reading #1 **(27)** _____ t5- Yellow reading #3 **(28)** _____ t6- Yellow reading #3	**(29)**	_____	
t7 - Number of guide signs	**(30)**	_____	
t8 - Number of guide signs not conforming with sign face specifications *(damaged sign face, faded, vandalized, etc)*	**(31)**	_____	
t9 - Number of guide sign assemblies	**(32)**	_____	
t10 - Number of guide sign assemblies not conforming with specifications	**(33)**	_____	
t11 - Number of warning and regulatory signs	**(34)**	_____	
t12 - Number of warning and regulatory signs not conforming with sign face specifications *(damaged sign face, faded, vandalized, etc.)*	**(35)**	_____	
t13 - Number of warning and regulatory sign assemblies	**(36)**	_____	
t14 - Number of warning and regulatory sign assemblies not conforming with specifications	**(37)**	_____	

Comments:

Explanation and Score Equivalence of Inspection Features

Inspection Features	Explanation	Score	MRP Score
International Roughness Index	A measure that indicates smoothness and ride quality for the highway user. Note: Weighting used in sampling scheme may create variances between the MRP rideability indices and those reported for the entire population.	51 or less 52 - 90 91-129 130 – 167 168+	90 + 80 – 89.9 70 – 79.9 60 – 69.9 59.9 and below
Appearance	The general visual character (height of grass, litter, unsightly patching, etc.) of the roadway and roadside as it would be seen by the public.	100% acceptable 80% 60%	100 80 60
Vertical Clearance	Roadways and shoulders are free of any canopy (trees or other vegetation) or other obstructions for a minimum height of 15 feet.	0% obstructed 20% 40%	100 80 60
Visual Obstructions	Vegetation, structures, signage etc. cause horizontal or vertical visual obstructions of intersections, curves, signs, oncoming lanes, etc.	0% obstructed 20% 40%	100 80 60
Fencing Providing Effective Barriers	Fencing provides an effective barrier on limited access highways (Interstate, Parkways, or other highways) to deny access to people or animals. Segments with no fencing are not included in the sample.	100% effective 80% 60%	100 80 60
Guardrail Within Height Specifications	The height is at least 25 inches and not more than 29 inches.	100% in spec 80% 60%	100 80 60
Guardrail Fully Functional	Guardrails have not been damaged due to vehicular hits or other factors.	100% in spec 80% 60%	100 80 60

Inspection Features	Explanation	Score	MRP Score
Attenuators/End Treatments Undamaged	Attenuators / End Treatments have not been damaged due to vehicular hits or other factors.	100% undamaged 80% 60%	100 80 60
Pavement Potholes	A bowl shaped hole of various sizes in the pavement surface. The surface may have broken into small pieces due to cracking or localized disintegration and the material removed by traffic. A pothole has a minimum size of 6"x6"x1".	0 failed sections 10% 20% 40%	100 75 50 0
Rutting	A surface depression of pavement in the wheel paths. Ruts may be more noticeable after a rainfall when wheel paths are full with water.	0% have ruts larger than ¼" 20% 40%	100 80 60
Pavement Drop-off to Shoulder	Occurs whenever there is a decrease in elevation between the traffic lane and the shoulder. It may be due to consolidation, displacement or settlement of underlying material.	0% have drop-off larger than 1.5" 20% 40%	100 80 60
Shoulder Drop-off to Ground	An elevation difference between the improved shoulder and adjacent ground at the outside edge of the shoulder. It could be due to consolidation of material, erosion, run off or other factors.	0% have drop-off larger than 3" 20% 40%	100 80 60
High Shoulder	The opposite of pavement drop-off to shoulder. Frost heave, swelling soils or other factors can cause it. High shoulder creates ponding of water on pavement.	0% unacceptable 20% 40%	100 80 60
Shoulder Potholes	A bowl shaped hole or depression in the shoulder surface. The surface may have broken into small pieces due to the cracking or localized disintegration and the material removed by traffic. A shoulder pothole has a minimum size of 6"x6"x1".	0% failed sections 10% 20% 40%	100 75 50 0

Inspection Features	Explanation	Score	MRP Score
Drainage Structures	Drainage structures like pipes and culverts that are free of any degree of obstruction and are in good working order. Drainage structures obstructed more than 25% fail.	100% acceptable 80% 60%	100 80 60
Ditches	Ditches on the side of the road with water flow not obstructed by dirt, rock, debris, or other items or by structural damage.	0% blockage 20% 40%	100 80 60
Curbs and Gutters	Curbs and gutters with water flow not obstructed by blockage or damage.	0% blockage 20% 40%	100 80 60
White Striping Reflectivity	Measures night reflectivity of striping that provides positive guidance to motorists. Measurements equal to or exceeding 125 from retro-reflectometer pass.	100% acceptable 80% 60%	100 80 60
Yellow Striping Reflectivity	Measures night reflectivity of striping that provides positive guidance to motorists. Measurements equal to or exceeding 80 from retro-reflectometer pass.	100% acceptable 80% 60%	100 80 60
Guide Sign Faces	Includes route markers (cardinal directions, route numbers, arrows), distance/destination signs, and directions signs. (Green, brown or blue backgrounds). The standard is no visible defects that detract from effectiveness under nighttime conditions.	100% in spec 90% 80%	100 80 60
Guide Sign Assemblies	Guide signs mounted according to specifications including: not leaning more than 22.5 degrees in either direction, no bolts or rivets missing, not turned more than 45 degrees from the line of sight, etc.	100% in spec 90% 80%	100 80 60

Inspection Features	Explanation	Score	MRP Score
Warning and Regulatory Sign Faces Meeting Specifications	No visible defects that detract from sign face effectiveness under nighttime conditions. Includes red and white backgrounds (STOP, WRONG WAY, DO NOT ENTER, speed limit, etc.) and yellow backgrounds (STOP AHEAD, curve warning signs, chevrons, etc).	100% in spec 90% 80%	100 80 60
Warning and Regulatory Sign Assemblies	Warning and regulatory signs mounted according to specifications, including: not leaning more than 22.5 degrees in any direction, no bolts or rivets missing, not turned more than 45 degrees from the line of sight, etc.	100% in spec 90% 80%	100 80 60

Note: Scores for features were calculated only in segments where features were present at least nineteen times to give statistically valid results. If the feature occurred less than nineteen times, "N/A" was entered. However, it was still used for calculating weighted totals such as District Totals (including all road types), Road Type Totals (including all districts), and State Totals (including all road types and all districts).