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REPORT NAME: Supplement to Electric Service Reliability Annual Report for 2014

COMPANY NAME: Idaho Power Company

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LISA D. NORDSTROM
Lead Counsel
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May 15, 2015

Public Utility Commission of Oregon
Filing Center
3930 Fairview Industrial Drive SE
P.O. Box 1088
Salem, Oregon 97308-1088

Re: Supplement to Idaho Power Company's Electric Service Reliability Annual Report for the Year 2014

Attention Filing Center:

Idaho Power Company herewith transmits for electronic filing a supplement to the Electric Service Reliability Annual Report for the Year 2014, previously filed on April 20, 2015. After the filing was made, an error was found on page 60 of the report. A corrected report is enclosed.

If you have any questions, please call Perry Van Patten at 208-388-5944.

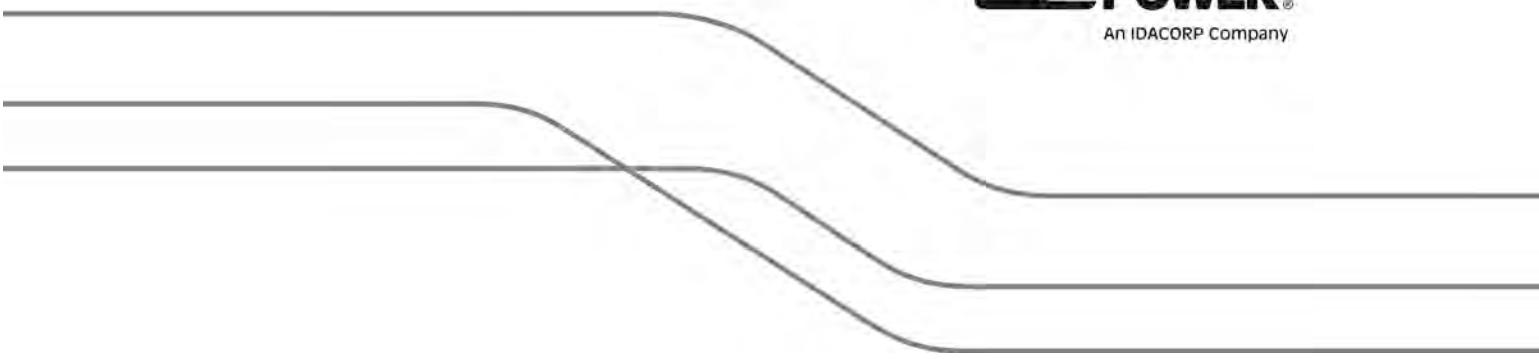
Very truly yours,

A handwritten signature in black ink that reads "Lisa D. Nordstrom".

Lisa D. Nordstrom

LDN:kkt

Enclosure



A faint, light-gray graphic of a power transmission line system is visible in the background. It consists of several horizontal lines representing power lines, some of which curve upwards to represent mountains or hills. This graphic serves as a subtle backdrop for the title text.

Idaho Power Company 2014 Electric Service Reliability Annual Report

May 2015
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EXECUTIVE SUMMARY

The information in this document presents Idaho Power's 2014 Electric Service Reliability Annual Report. The report discusses the performance of Idaho Power's Oregon electric service through a narrative summary and includes several tables and figures.

At year end 2014, Idaho Power served 18,413 customers from 63 distribution circuits served by 39 substations in the far central-eastern portion of Oregon. The composite performance of the 63 circuits in 2014 included the following:

- 806 sustained (greater than five minutes) interruption events
- 620 momentary (less than or equal to five minutes) interruption events
- 63,240 customer hours out
- System Average Interruption Duration Index (SAIDI) of 3.43
- System Average Interruption Frequency Index (SAIFI) of 1.63
- Momentary Average Interruption Event Frequency Index (MAIFI_E) of 2.48

Continuing from last year, Idaho Power used the calculation of a threshold for major event days (MED) and monitored its system for MED occurrences. All of the indices, graphs, and charts are populated with and without MEDs. The threshold for 2014 was a daily SAIDI of 13.86 hours, which was calculated based on the methods defined by the Institute of Electrical Electronic Engineers Standard 1366 (IEEE-1366). Along with the additional criterion of a daily customer average interruption duration index (CAIDI) of 300 minutes, Idaho Power experienced one major event day in its Oregon service, which is summarized in Tables 10 and 11.

In 2014, the frequency of SAIFI decreased by 0.78 interruptions from 2013; and excluding MEDs, SAIFI decreased by 0.43 interruptions from 2013. The duration of SAIDI decreased by 3.56 hours; and excluding MEDs, SAIDI decreased 1.46 hours from 2013. The frequency of MAIFI_E decreased by 1.33 interruptions; and excluding MEDs, MAIFI_E decreased by 1.08 interruptions from 2013.

The attached system charts and tables show Idaho Power's Oregon system performance over five years for the reliability indices of SAIDI, SAIFI, and MAIFI_E with and without MEDs (figures 1 through 3). Tables 1 through 3 and figures 4 and 5 show the outage event causes for the Oregon system. The last five years of SAIDI, SAIFI, and MAIFI_E are shown in tables 4 through 6 for each of the 63 circuits; while Table 7 and figures 6 through 8 display 2014 SAIFI, SAIDI, and MAIFI_E with and without MEDs for each circuit in descending order. In addition to the circuit level tables for SAIFI, SAIDI, and MAIFI_E, individual circuit level graphs are provided for the last five years.

A reference table lists all of Idaho Power's circuits in Oregon (Table 8), and Table 9 shows the last five years of line miles and customers. Summary information on the 2014 MEDs as well as

the last five years of historical major event day counts are shown in tables 10 and 11 and Figure 9. Idaho Power did not start counting MEDs in its Oregon service area until 2012.

Idaho Power continues to implement programs and projects to help improve customer service and electric service reliability. Some of the programs include the annual Oregon safety inspection/reliability patrols, line clearing program, and annual maintenance projects.

DEFINITIONS

CAIDI—Customer Average Interruption Duration Index

Institute of Electrical Electronic Engineers Standard 1366 (IEEE-1366)—The *IEEE Guide for Electric Power Distribution Reliability Indices* (2003 edition), approved on December 10, 2003, by the IEEE Standards Association (IEEE-SA) Standards Board and on April 26, 2004, by the American National Standards Institute (ANSI).

MAIFI_E—Momentary Average Interruption Event Frequency Index

Major Event—An event that exceeds the reasonable design and or operational limits of the electric power system. A major event includes at least one major event day (MED).

Major Event Day (MED)—A day when the daily System Average Interruption Duration Index (SAIDI) exceeds a threshold value (TMED). For the purposes of calculating daily system SAIDI, any interruption that spans multiple calendar days is accrued to the day the interruption began. Statistically, days having a daily system SAIDI greater than TMED are days the energy delivery system experiences stresses beyond normally expected, such as severe weather. Activities occurring on MEDs should be analyzed and reported separately.

Operating Area(s)—Idaho Power's circuits in 1) the Jordan Valley region of the reporting area served by Idaho Power's Canyon Operations Center and 2) in the reporting area serviced by Idaho Power's Western Operations Center.

Reporting Area—Idaho Power's entire service area in Oregon.

SAIDI—System Average Interruption Duration Index

SAIFI—System Average Interruption Frequency Index

TMED—A major event day (MED) identification threshold value.

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SYSTEM SAIDI, SAIFI, AND MAIFI_E DATA

System SAIDI

	2010	2011	2012	2013	2014
SAIDI	4.98	3.47	3.57	6.99	3.43
SAIDI MED excluded	NA	NA	2.27	4.62	3.16

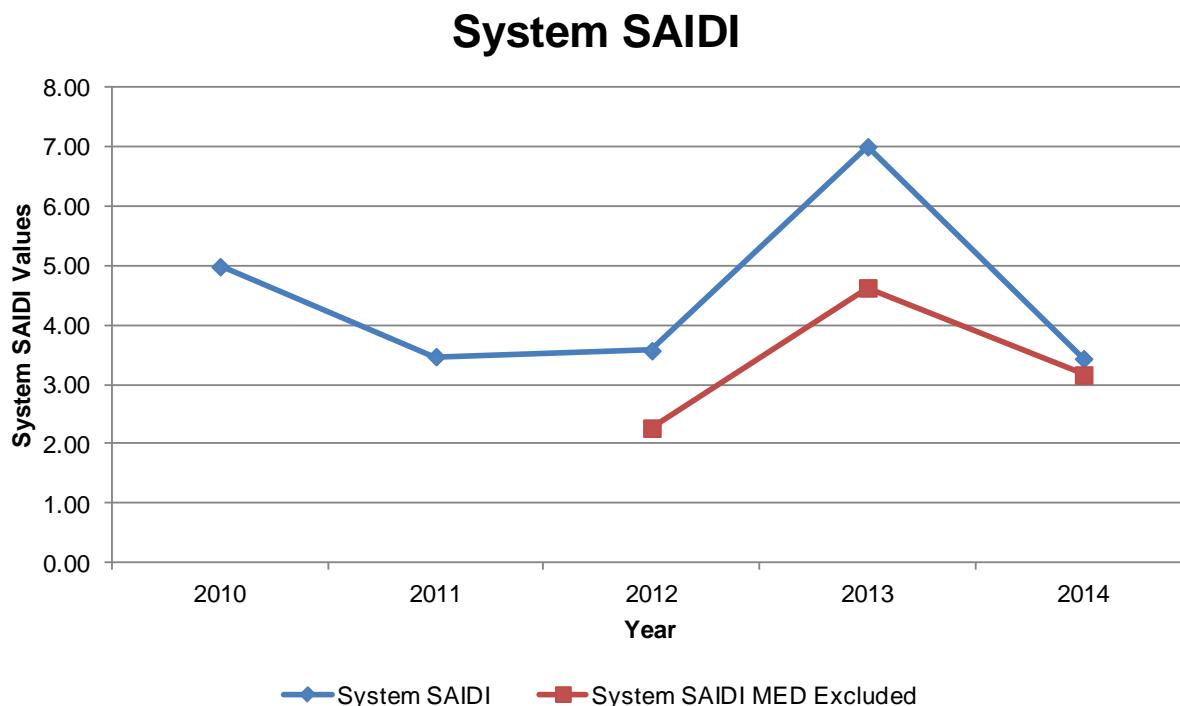


Figure 1
Five years of system SAIDI values

System SAIFI

	2010	2011	2012	2013	2014
SAIFI	1.62	1.41	1.43	2.41	1.63
SAIFI MED excluded	NA	NA	1.20	2.01	1.58

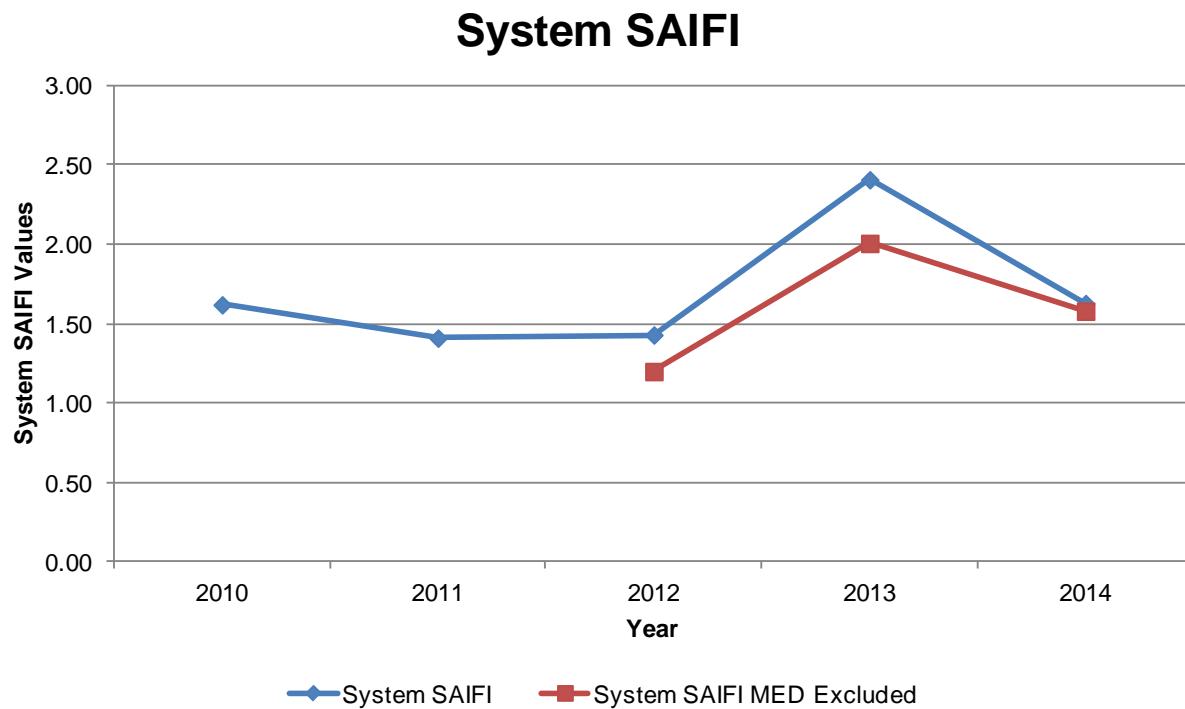


Figure 2
Five years of system SAIFI values

System MAIFI_E

	2010	2011	2012	2013	2014
MAIFI _E	3.78	3.50	4.70	3.80	2.48
MAIFI _E MED excluded	NA	NA	4.54	3.54	2.46

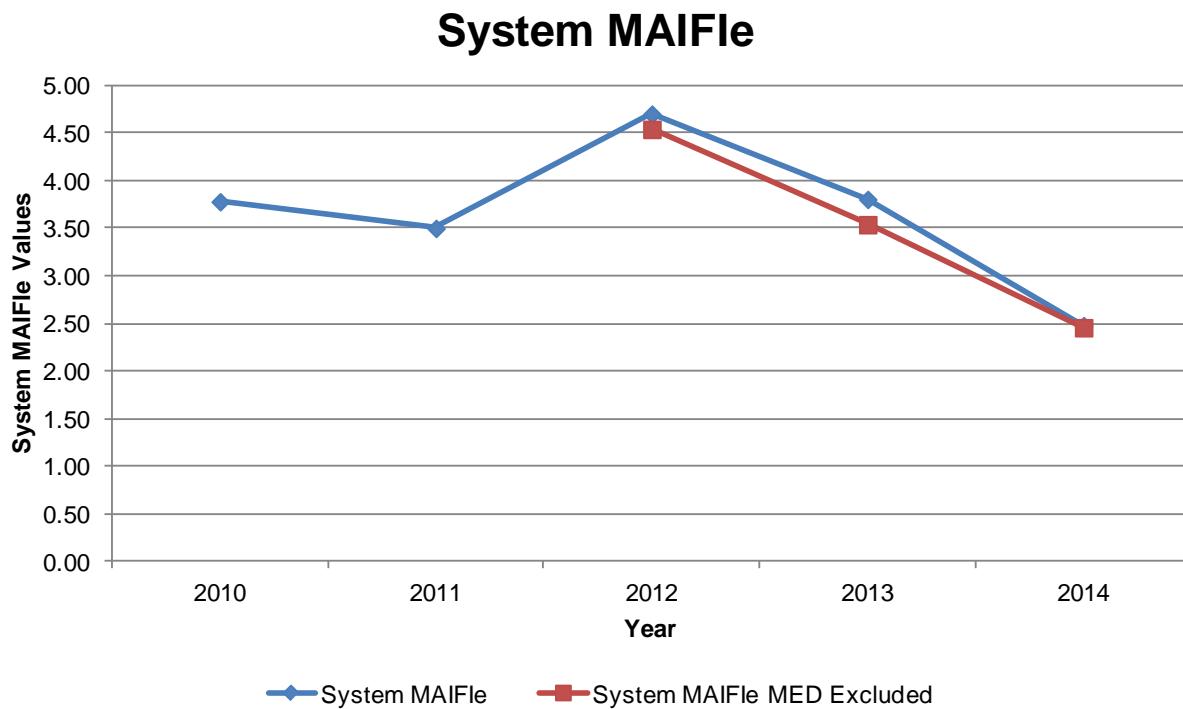


Figure 3
Five years of system MAIFI_E values

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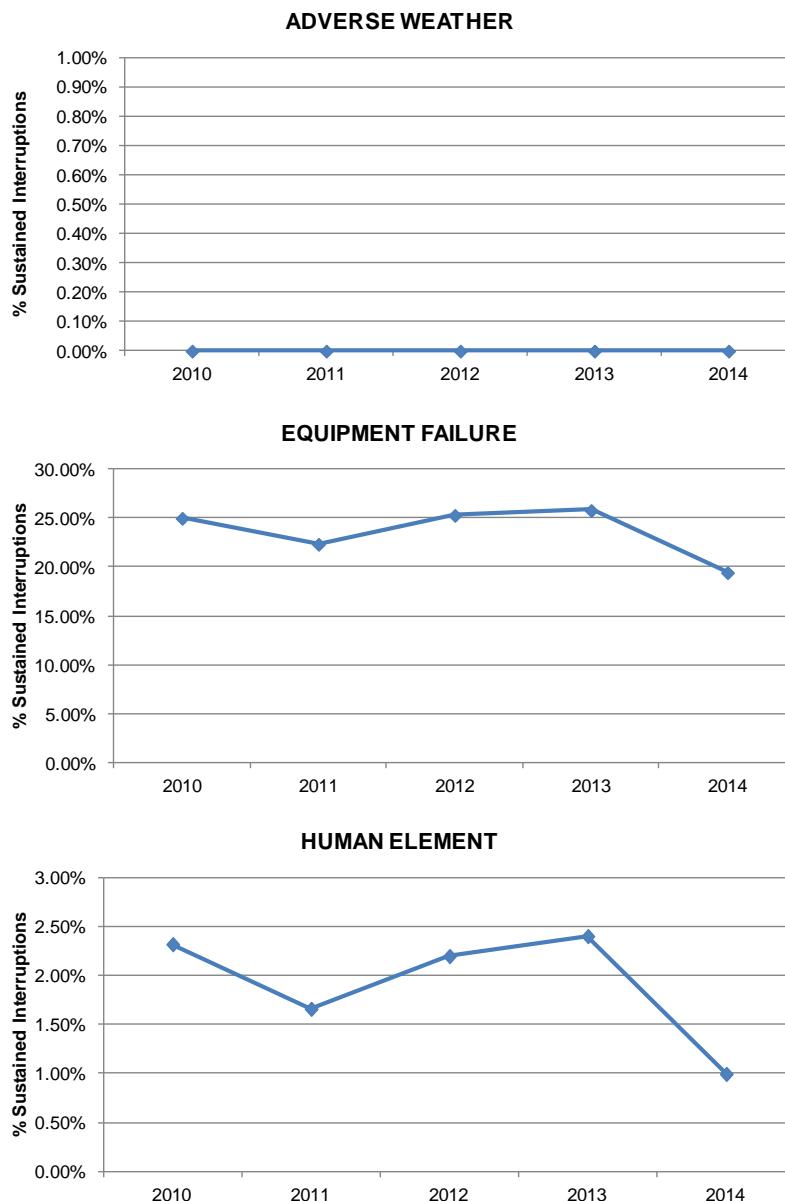
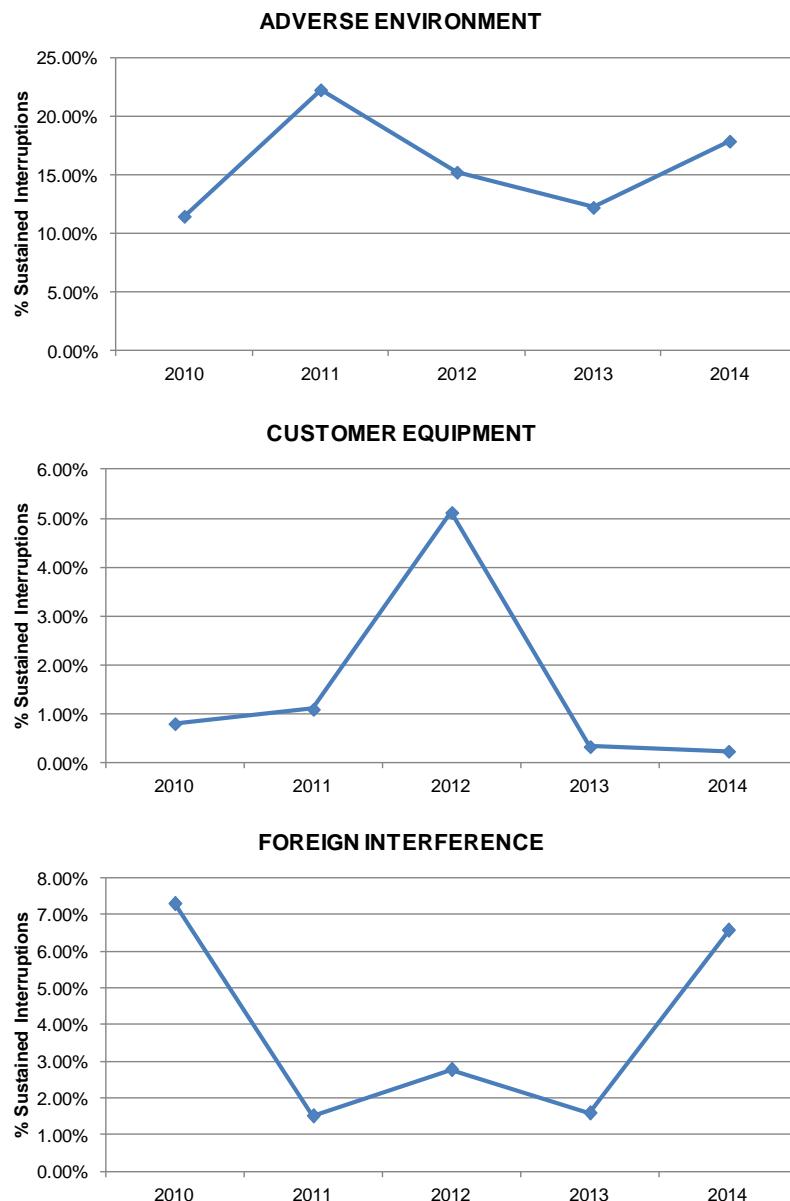
Sustained Interruption Event Causes

Table 1

Five years of sustained interruption event causes

Cause	Number of Sustained Interruption Events					Percent of Total Sustained Interruption Events				
	2010	2011	2012	2013	2014	2010	2011	2012	2013	2014
Adverse environment	99	161	104	107	144	11.5%	22.2%	15.2%	12.2%	17.9%
Adverse weather	0	0	0	0	0	0.0%	0.0%	0.0%	0.0%	0.0%
Customer's equipment*	7	8	35	3	2	NA	NA	NA	NA	NA
Equipment failure	216	162	173	226	157	25.0%	22.4%	25.3%	25.8%	19.5%
Foreign interference	63	11	19	14	53	7.3%	1.5%	2.8%	1.6%	6.6%
Human element	20	12	15	21	8	2.3%	1.7%	2.2%	2.4%	1.0%
Lightning	16	15	15	104	23	1.9%	2.1%	2.2%	11.9%	2.9%
Loss of supply	26	31	25	60	34	3.0%	4.3%	3.7%	6.9%	4.2%
MEDs*			2	5	1		NA	NA	NA	
Scheduled outages	155	149	136	192	242	18.0%	20.6%	19.9%	21.9%	30.0%
Tree/Vegetation	49	45	59	63	47	5.7%	6.2%	8.6%	7.2%	5.8%
Unknown	219	138	137	88	98	25.4%	19.1%	20.1%	10.1%	12.2%
Total	863	724	683	875	806	100.0%	100.0%	100.0%	100.0%	100.0%

*Not included in totals



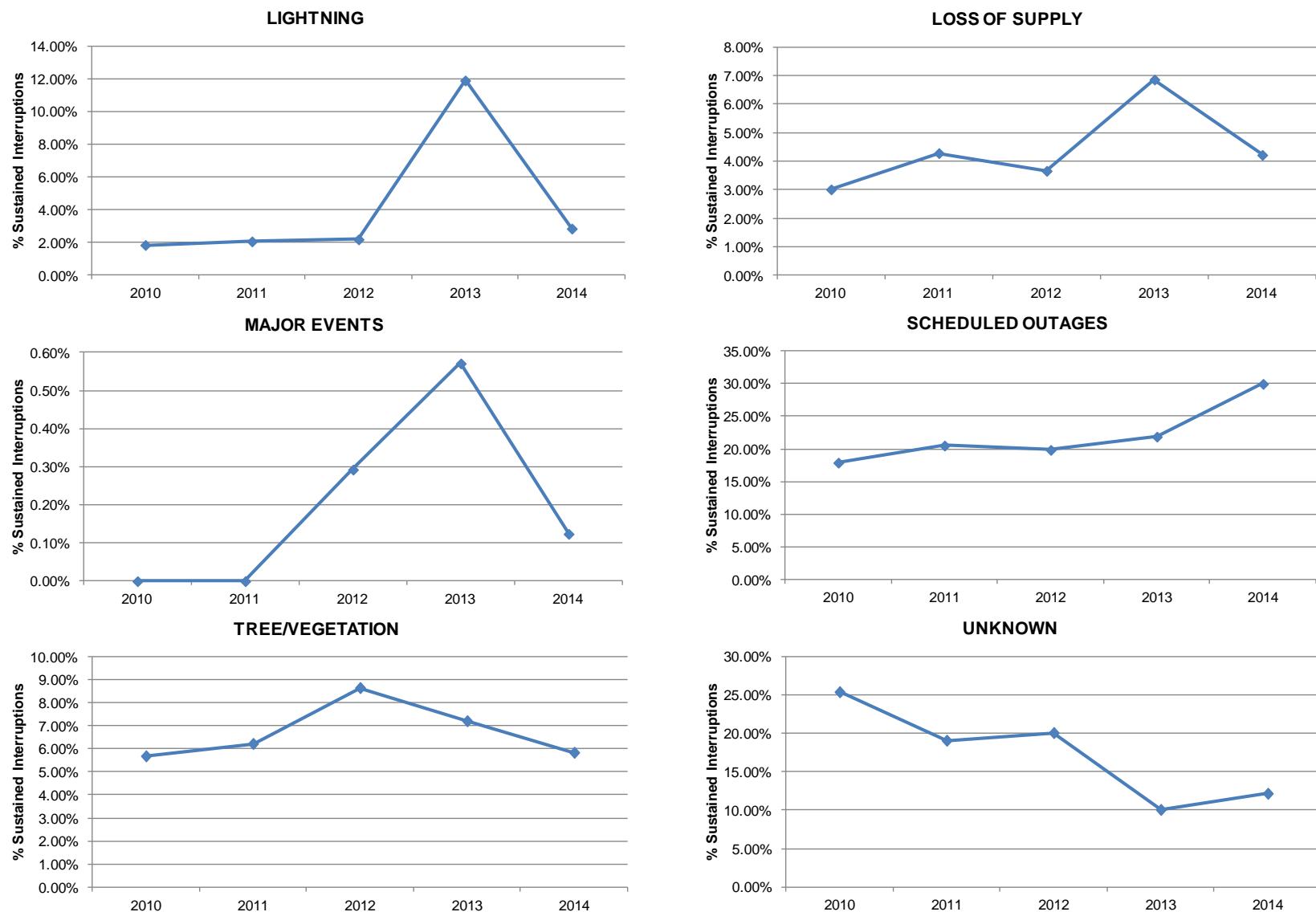


Figure 4
Five Years of Sustained Interruption Event Causes

Table 2
2014 sustained interruption event cause ranking

Cause	Events	Customer Hours Out	Event Ranking	Hours Out Ranking
Adverse weather	0	0.00	0	11
Major events*	1	0.00	0	12
Customer equipment**	2	2.91	10	10
Human element	8	382.39	9	9
Lightning	23	860.31	8	8
Loss of supply	34	12,933.20	7	2
Tree/vegetation	47	3,368.87	6	7
Foreign interference	53	6,187.22	5	5
Unknown	98	3,804.95	4	6
Adverse environment	144	9,487.63	3	4
Equipment failure	157	13,625.20	2	1
Scheduled outages	242	12,590.63	1	3
Total	806	63,240.09		

*Not included in calculations, see MED summary

**Not included in totals

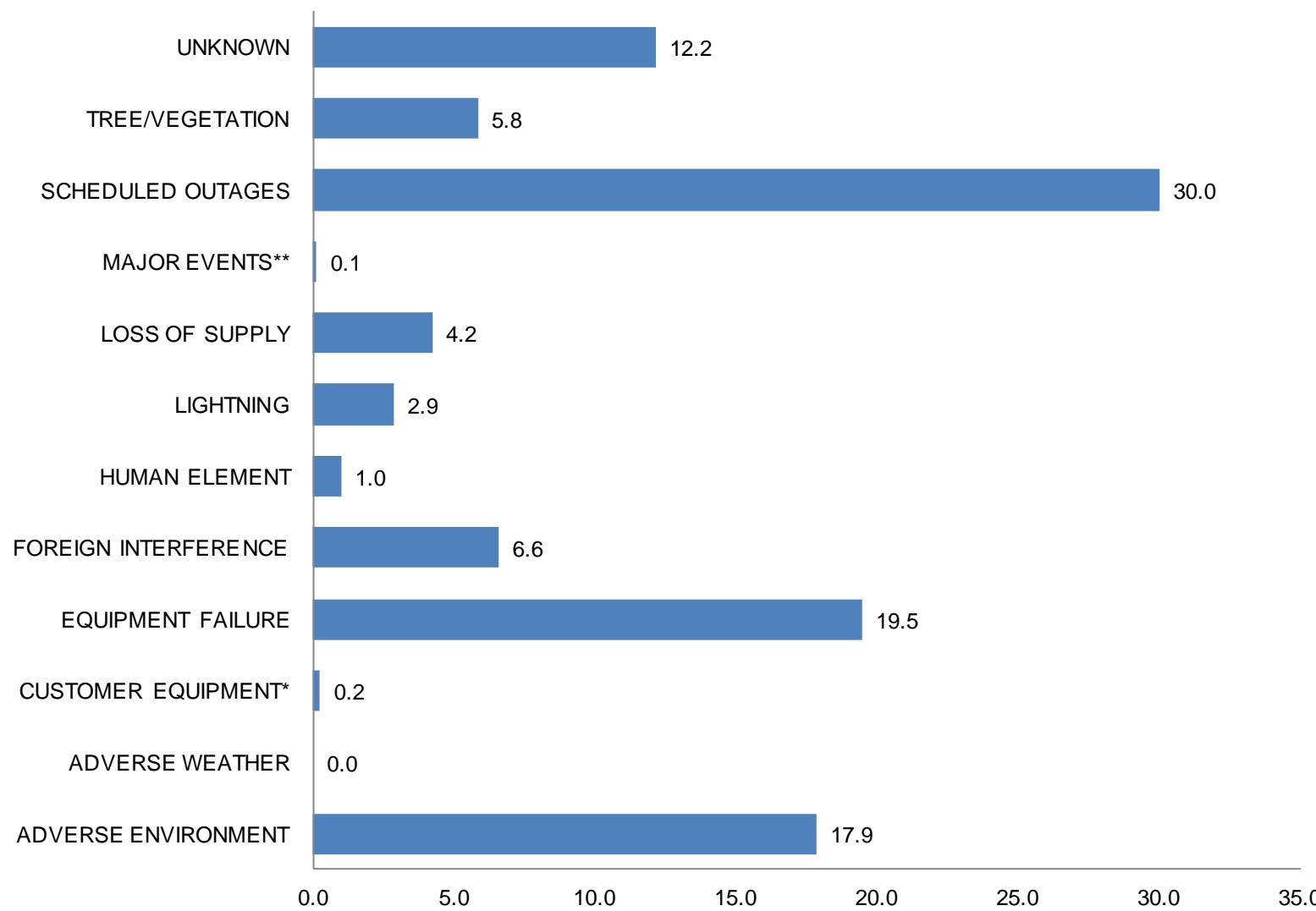


Figure 5
2014 Ranking of sustained interruption event causes

Momentary Interruption Event Causes

Table 3

2014 Momentary interruption event cause ranking

Cause	Number of Interruptions	Percent of Total	Occurrences Ranking
Unknown	611	98.55	1
Scheduled outages	3	0.48	2
Equipment failure	3	0.48	3
Customer equipment*	2	0.32	4
Lightning	1	0.16	5
Foreign interference	1	0.16	6
Human element	1	0.16	7
Adverse environment	0	0	0
Adverse weather	0	0	0
Loss of supply	0	0	0
Major events**	0	0	0
Tree/vegetation	0	0	0
Total	622	100	

*not included in calculations

**not included in calculations, see MED summary

CIRCUIT SAIDI, SAIFI, AND MAIFI_E

Table 4
Five years of circuit SAIDI data

Circuit	2010	2011	2012	2013	2014	2014 SAIDI MED Excluded
ADRN11	0.15	1.26	3.52	3.52	7.40	7.40
ADRN12	0.50	2.63	5.69	7.31	3.30	3.30
CARO11	5.48	1.26	0.39	1.54	1.91	1.91
CARO12	0.94	3.35	3.27	1.48	4.95	4.95
CARO13	1.75	0.91	1.40	0.85	0.02	0.02
CWVY11	2.98	2.86	1.88	17.05	28.03	28.03
CWVY12	50.35	7.80	11.19	22.04	11.21	11.21
DRKE11	11.67	7.41	1.95	6.25	6.42	6.42
DUKE11	0.00	9.94	9.08	9.82	4.31	4.31
DWSY11	2.37	9.50	1.63	19.03	12.29	12.29
ESTN11	9.72	0.00	6.53	4.99	9.55	9.55
HCSU11	0.00	0.00	1.17	0.00	0.00	0.00
HFWY11	21.65	9.59	10.66	41.28	6.02	6.02
HFWY12	0.18	13.12	9.72	40.71	2.60	2.60
HGTN11	15.86	2.15	7.67	1.33	14.05	3.39
HGTN12	3.86	0.13	1.82	0.03	10.62	0.10
HMDL12	2.48	0.79	3.38	9.62	0.40	0.40
HOLY11	4.48	0.84	1.56	4.02	1.73	1.73
HOLY12	2.62	0.89	1.23	3.25	0.02	0.02
HOLY13	2.24	0.50	4.56	1.64	0.66	0.66
HOPE11	5.67	3.25	1.62	8.34	9.46	9.46
HRPR11	26.48	8.45	1.41	3.53	12.42	12.42
HRPR12	11.13	7.12	5.81	11.67	26.47	26.47
JMSN11	8.24	4.78	1.79	21.53	4.95	4.95
JMSN12	4.90	0.44	13.04	17.00	19.63	19.63
JNTA11	7.81	7.19	1.57	13.45	14.74	14.74
JNTA12	9.38	5.23	5.44	13.97	18.42	18.42
JNVY11	36.95	36.21	31.27	13.73	3.83	2.66
JNVY12	44.29	38.47	31.19	15.21	2.05	2.05
JNVY31	38.77	42.42	34.08	19.33	6.24	5.07
LIME11	15.90	2.41	3.18	0.38	10.02	3.90
LIME12	25.53	8.11	0.00	0.00	0.00	0.00

Table 4 (continued)

Circuit	2010	2011	2012	2013	2014	2014 SAIDI
						MED Excluded
MRBT41	1.09	56.83	0.65	0.34	4.82	4.82
MRBT42	0.15	0.10	5.44	0.00	4.62	4.62
NYSA11	0.46	0.39	0.22	2.82	2.39	2.39
NYSA12	1.49	2.65	2.48	8.13	2.58	2.58
NYSA13	0.22	1.08	3.94	1.41	4.01	4.01
NYSA14	0.05	0.48	0.94	3.77	3.72	3.72
OBPR11	0.00	0.00	0.00	0.00	0.00	0.00
OBPR12	0.00	0.00	0.00	0.00	0.00	0.00
OIDA11	0.41	0.72	1.67	1.35	0.29	0.29
OIDA12	4.90	4.92	0.00	3.07	1.47	1.47
ONTO14	1.23	1.37	0.18	8.26	0.00	0.00
ONTO18	0.21	0.27	1.68	0.19	0.05	0.05
ONTO19	1.67	0.33	0.64	0.42	0.20	0.20
ONTO20	0.33	1.66	0.31	1.63	0.68	0.68
ONTO23	0.58	0.29	2.40	0.68	0.00	0.00
ONTO24	2.18	0.14	0.25	1.25	2.75	2.75
ONTO25	0.14	0.32	1.35	0.15	0.03	0.03
OYDM11	0.67	0.00	0.00	0.00	0.00	0.00
PNCK11	17.36	14.37	10.47	9.06	1.47	1.47
PNCK12	0.00	14.20	2.52	4.97	0.00	0.00
PRMA12	0.83	4.42	14.92	7.59	14.63	14.63
PRMA42	6.64	0.27	0.34	8.16	8.39	8.39
RKVL11	54.96	29.68	21.49	15.12	7.77	7.77
UNTY11	0.47	1.89	1.76	28.17	8.33	8.33
UNTY12	0.31	1.66	3.82	21.64	2.81	2.81
VALE11	0.75	1.08	0.99	3.23	2.53	2.53
VALE13	19.98	2.14	9.85	5.21	3.64	3.64
VALE14	2.67	5.43	0.62	0.94	4.65	4.65
VALE15	0.54	0.63	3.01	0.33	2.42	2.42
WESR13	1.52	0.35	0.40	3.57	0.24	0.24
WESR14	0.52	0.42	2.60	0.57	7.20	7.20

Table 5
Five years of circuit SAIFI data

Circuit	2010	2011	2012	2013	2014	2014 SAIFI MED Excluded
ADRN11	0.11	3.37	3.34	2.29	3.52	3.52
ADRN12	4.47	1.38	3.02	4.10	2.46	2.46
CARO11	1.07	4.27	0.29	0.58	0.91	0.91
CARO12	1.07	1.16	0.82	0.77	1.06	1.06
CARO13	0.27	1.20	0.49	1.05	0.02	0.02
CWVY11	3.17	0.47	1.13	4.07	8.13	8.13
CWVY12	4.35	2.37	2.68	4.40	5.65	5.65
DRKE11	0.00	3.48	1.07	2.34	2.19	2.19
DUKE11	1.29	3.37	2.59	8.00	1.50	1.50
DWSY11	7.00	0.00	1.23	5.76	4.16	4.16
ESTN11	0.00	0.00	4.00	5.33	3.67	3.67
HCSU11	5.14	3.51	1.00	0.00	0.00	0.00
HFWY11	0.11	4.33	2.90	11.46	2.26	2.26
HFWY12	3.29	1.69	1.71	10.44	1.21	1.21
HGTN11	1.14	0.99	2.84	0.30	2.13	1.13
HGTN12	2.34	0.55	1.04	0.02	1.04	0.06
HMDL12	3.14	1.29	1.50	2.27	0.18	0.18
HOLY11	3.27	1.28	0.43	1.28	1.45	1.45
HOLY12	2.42	1.06	0.38	2.08	0.01	0.01
HOLY13	2.24	1.87	1.46	2.05	0.35	0.35
HOPE11	8.06	3.87	0.46	3.40	4.02	4.02
HRPR11	4.37	3.25	0.29	1.77	4.61	4.61
HRPR12	3.77	4.06	1.23	3.00	7.20	7.20
JMSN11	1.48	0.24	1.21	6.92	4.45	4.45
JMSN12	3.42	3.38	2.83	5.08	5.35	5.35
JNTA11	4.30	2.06	1.37	5.05	4.80	4.80
JNTA12	8.19	7.00	1.04	5.00	4.67	4.67
JNVY11	7.56	7.43	6.18	4.14	3.20	2.20
JNVY12	8.26	7.62	6.12	4.89	1.98	1.98
JNVY31	1.94	1.32	8.36	4.51	3.73	2.73
LIME11	5.04	3.55	1.94	0.29	2.46	1.46
LIME12	1.22	1.83	0.00	0.00	0.00	0.00
MRBT41	0.10	0.10	1.15	0.11	1.58	1.58
MRBT42	0.77	0.14	1.10	0.00	1.14	1.14
NYSA11	0.95	2.01	0.13	1.12	2.03	2.03

Table 5 (continued)

Circuit	2010	2011	2012	2013	2014	2014 SAIFI MED Excluded
NYSA12	0.16	0.40	2.49	3.27	1.26	1.26
NYSA13	0.03	0.30	1.51	1.36	2.21	2.21
NYSA14	0.00	0.00	0.60	2.02	2.16	2.16
OBPR11	0.00	0.00	0.00	0.00	0.00	0.00
OBPR12	0.66	1.14	0.00	0.00	0.00	0.00
OIDA11	4.00	3.00	1.09	2.10	0.08	0.08
OIDA12	1.00	3.10	0.00	3.00	2.00	2.00
ONTO14	0.10	0.20	0.14	0.97	0.00	0.00
ONTO18	0.53	0.16	1.02	0.07	0.04	0.04
ONTO19	0.21	0.46	1.10	0.14	0.07	0.07
ONTO20	1.02	0.22	0.18	1.06	0.34	0.34
ONTO23	1.90	0.07	2.00	1.04	0.00	0.00
ONTO24	0.09	0.19	0.16	0.61	1.27	1.27
ONTO25	0.27	0.00	1.07	0.09	0.02	0.02
OYDM11	3.95	4.31	0.00	0.00	0.00	0.00
PNCK11	0.00	5.00	2.27	7.07	0.63	0.63
PNCK12	0.50	3.00	1.00	4.00	0.00	0.00
PRMA12	3.16	0.18	3.00	5.50	6.50	6.50
PRMA42	6.28	6.11	0.22	3.30	2.42	2.42
RKVL11	0.16	0.44	5.22	4.81	3.96	3.96
UNTY11	0.82	0.55	1.08	6.99	3.22	3.22
UNTY12	0.31	0.66	1.68	5.32	2.22	2.22
VALE11	3.58	0.81	1.07	2.52	2.45	2.45
VALE13	1.55	3.08	4.37	1.34	2.86	2.86
VALE14	0.23	0.56	0.59	0.68	3.13	3.13
VALE15	0.47	0.02	1.76	0.17	2.24	2.24
WESR13	0.35	0.24	0.30	0.23	0.14	0.14
WESR14	0.00	0.00	1.21	0.38	2.61	2.61

Table 6
Five years of circuit MAIFI_E data

Circuit	2010	2011	2012	2013	2014	2014 MAIFI _E MED Excluded
ADRN11	2.81	3.52	2.73	11.73	8.25	8.25
ADRN12	4.27	3.44	6.44	28.94	7.94	7.94
CARO11	3.00	1.00	7.69	3.04	1.53	1.53
CARO12	7.00	0.00	3.90	4.77	3.17	3.17
CARO13	11.62	5.71	3.00	4.00	2.00	2.00
CWVY11	6.04	1.09	6.00	10.00	11.00	11.00
CWVY12	2.00	7.00	6.13	8.31	9.31	9.31
DRKE11	19.53	18.26	11.59	3.00	5.00	5.00
DUKE11	0.00	0.00	0.00	5.00	0.00	0.00
DWSY11	0.00	0.00	12.00	22.00	21.00	21.00
ESTN11	15.60	12.75	0.00	0.00	0.00	0.00
HCSU11	9.20	14.32	0.00	0.00	0.00	0.00
HFWY11	1.20	3.00	14.15	14.00	3.35	3.35
HFWY12	0.00	2.00	3.81	13.00	0.00	0.00
HGTN11	20.03	4.52	5.00	5.00	3.27	3.27
HGTN12	1.00	0.00	0.00	5.00	2.00	2.00
HMDL12	1.00	2.00	3.50	5.00	7.33	7.33
HOLY11	1.49	1.29	2.00	4.00	3.00	2.00
HOLY12	22.17	3.22	1.00	3.00	3.00	2.00
HOLY13	17.00	0.00	3.34	3.00	3.00	2.00
HOPE11	23.07	8.27	1.44	0.00	0.00	0.00
HRPR11	13.00	0.00	0.00	0.00	4.00	4.00
HRPR12	6.00	6.38	4.99	15.38	10.82	10.82
JMSN11	19.00	17.00	6.00	8.00	5.00	5.00
JMSN12	20.00	0.00	6.18	8.00	4.00	4.00
JNTA11	6.36	16.85	12.00	0.00	23.00	23.00
JNTA12	14.00	16.00	0.00	21.98	24.73	24.73
JNVY11	19.54	21.16	6.31	8.00	8.00	8.00
JNVY12	4.77	1.25	8.00	9.00	8.00	8.00
JNVY31	2.35	0.00	9.84	11.35	12.75	12.75
LIME11	5.00	0.00	1.70	4.98	2.32	2.32
LIME12	0.00	4.00	0.00	0.00	0.00	0.00
MRBT41	0.60	0.68	0.00	0.00	0.00	0.00
MRBT42	1.08	4.07	2.00	0.00	4.00	4.00
NYSA11	0.00	0.00	0.00	8.00	2.00	2.00

Table 6 (continued)

Circuit	2010	2011	2012	2013	2014	2014 MAIFI_E
						MED Excluded
NYSA12	1.00	0.00	7.86	7.98	1.06	1.06
NYSA13	0.00	0.00	0.00	0.00	0.00	0.00
NYSA14	0.00	0.00	1.00	7.00	1.00	1.00
OBPR11	1.30	0.14	0.00	0.00	0.00	0.00
OBPR12	1.00	0.00	0.00	0.00	0.00	0.00
OIDA11	1.00	0.00	1.07	1.29	0.00	0.00
OIDA12	1.00	0.00	0.00	0.00	0.00	0.00
ONTO14	6.00	1.11	0.00	0.00	0.00	0.00
ONTO18	1.00	0.00	2.00	0.00	3.00	3.00
ONTO19	1.00	4.00	4.87	1.00	1.66	1.66
ONTO20	14.00	1.49	0.00	0.00	2.00	2.00
ONTO23	1.00	0.00	6.00	2.00	0.00	0.00
ONTO24	0.00	0.00	5.96	2.00	0.00	0.00
ONTO25	6.23	7.55	3.00	1.00	2.00	2.00
OYDM11	0.00	0.00	0.00	0.00	0.00	0.00
PNCK11	0.00	3.00	3.14	6.00	0.00	0.00
PNCK12	9.00	2.00	0.00	0.00	0.00	0.00
PRMA12	11.00	17.00	4.00	6.00	11.00	11.00
PRMA42	14.00	9.40	6.57	7.00	10.00	10.00
RKVL11	7.56	5.91	8.00	11.00	10.00	10.00
UNTY11	1.54	3.67	7.27	9.00	7.00	7.00
UNTY12	10.37	3.56	6.30	8.00	0.00	0.00
VALE11	2.00	0.00	2.68	0.00	0.00	0.00
VALE13	0.67	4.00	7.83	9.18	1.09	1.09
VALE14	3.79	0.00	9.00	0.00	0.00	0.00
VALE15	1.00	0.00	4.00	0.00	0.00	0.00
WESR13	0.00	0.00	1.00	2.00	2.44	2.44
WESR14	0.00	0.00	3.45	0.00	0.00	0.00

Table 7
2014 descending SAIDI, SAIFI, and MAIFI_E

Circuit	SAIDI		Circuit	SAIFI		Circuit	MAIFI_E	
	SAIDI	MED Excluded		SAIFI	MED Excluded		MAIFI_E	MED Excluded
CWVY11	28.03	28.03	CWVY11	8.13	8.13	JNTA12	24.73	24.73
HRPR12	26.47	26.47	HRPR12	7.20	7.20	JNTA11	23.00	23.00
JMSN12	19.63	19.63	PRMA12	6.50	6.50	DWSY11	21.00	21.00
JNTA12	18.42	18.42	CWVY12	5.65	5.65	JNVY31	12.75	12.75
JNTA11	14.74	14.74	JMSN12	5.35	5.35	CWVY11	11.00	11.00
PRMA12	14.63	14.63	JNTA11	4.80	4.80	PRMA12	11.00	11.00
HGTN11	14.05	3.39	JNTA12	4.67	4.67	HRPR12	10.82	10.82
HRPR11	12.42	12.42	HRPR11	4.61	4.61	PRMA42	10.00	10.00
DWSY11	12.29	12.29	JMSN11	4.45	4.45	RKVL11	10.00	10.00
CWVY12	11.21	11.21	DWSY11	4.16	4.16	CWVY12	9.31	9.31
HGTN12	10.62	0.10	HOPE11	4.02	4.02	ADRN11	8.25	8.25
LIME11	10.02	3.90	RKVL11	3.96	3.96	JNVY11	8.00	8.00
ESTN11	9.55	9.55	JNVY31	3.73	2.73	JNVY12	8.00	8.00
HOPE11	9.46	9.46	ESTN11	3.67	3.67	ADRN12	7.94	7.94
PRMA42	8.39	8.39	ADRN11	3.52	3.52	HMDL12	7.33	7.33
UNTY11	8.33	8.33	UNTY11	3.22	3.22	UNTY11	7.00	7.00
RKVL11	7.77	7.77	JNVY11	3.20	2.20	DRKE11	5.00	5.00
ADRN11	7.40	7.40	VALE14	3.13	3.13	JMSN11	5.00	5.00
WESR14	7.20	7.20	VALE13	2.86	2.86	HRPR11	4.00	4.00
DRKE11	6.42	6.42	WESR14	2.61	2.61	JMSN12	4.00	4.00
JNVY31	6.24	5.07	LIME11	2.46	1.46	MRBT42	4.00	4.00
HFWY11	6.02	6.02	ADRN12	2.46	2.46	HFWY11	3.35	3.35
CARO12	4.95	4.95	VALE11	2.45	2.45	HGTN11	3.27	3.27
JMSN11	4.95	4.95	PRMA42	2.42	2.42	CARO12	3.17	3.17
MRBT41	4.82	4.82	HFWY11	2.26	2.26	HOLY11	3.00	2.00
VALE14	4.65	4.65	VALE15	2.24	2.24	HOLY12	3.00	2.00
MRBT42	4.62	4.62	UNTY12	2.22	2.22	HOLY13	3.00	2.00
DUKE11	4.31	4.31	NYSA13	2.21	2.21	ONTO18	3.00	3.00
NYSA13	4.01	4.01	DRKE11	2.19	2.19	WESR13	2.44	2.44
JNVY11	3.83	2.66	NYSA14	2.16	2.16	LIME11	2.32	2.32
NYSA14	3.72	3.72	HGTN11	2.13	1.13	CARO13	2.00	2.00
VALE13	3.64	3.64	NYSA11	2.03	2.03	HGTN12	2.00	2.00
ADRN12	3.30	3.30	OIDA12	2.00	2.00	NYSA11	2.00	2.00
UNTY12	2.81	2.81	JNVY12	1.98	1.98	ONTO20	2.00	2.00
ONTO24	2.75	2.75	MRBT41	1.58	1.58	ONTO25	2.00	2.00

Table 7 (continued)

Circuit	SAIDI		Circuit	SAIFI		Circuit	MAIFI _E	
	SAIDI	MED Excluded		SAIFI	MED Excluded		MAIFI _E	MED Excluded
HFWY12	2.60	2.60	DUKE11	1.50	1.50	ONTO19	1.66	1.66
NYSA12	2.58	2.58	HOLY11	1.45	1.45	CARO11	1.53	1.53
VALE11	2.53	2.53	ONTO24	1.27	1.27	VALE13	1.09	1.09
VALE15	2.42	2.42	NYSA12	1.26	1.26	NYSA12	1.06	1.06
NYSA11	2.39	2.39	HFWY12	1.21	1.21	NYSA14	1.00	1.00
JNJVY12	2.05	2.05	MRBT42	1.14	1.14	DUKE11	0.00	0.00
CARO11	1.91	1.91	CARO12	1.06	1.06	ESTN11	0.00	0.00
HOLY11	1.73	1.73	HGTN12	1.04	0.06	HCSU11	0.00	0.00
OIDA12	1.47	1.47	CARO11	0.91	0.91	HFWY12	0.00	0.00
PNCK11	1.47	1.47	PNCK11	0.63	0.63	HOPE11	0.00	0.00
ONTO20	0.68	0.68	HOLY13	0.35	0.35	LIME12	0.00	0.00
HOLY13	0.66	0.66	ONTO20	0.34	0.34	MRBT41	0.00	0.00
HMDL12	0.40	0.40	HMDL12	0.18	0.18	NYSA13	0.00	0.00
OIDA11	0.29	0.29	WESR13	0.14	0.14	OBPR11	0.00	0.00
WESR13	0.24	0.24	OIDA11	0.08	0.08	OBPR12	0.00	0.00
ONTO19	0.20	0.20	ONTO19	0.07	0.07	OIDA11	0.00	0.00
ONTO18	0.05	0.05	ONTO18	0.04	0.04	OIDA12	0.00	0.00
ONTO25	0.03	0.03	ONTO25	0.02	0.02	ONTO14	0.00	0.00
HOLY12	0.02	0.02	CARO13	0.02	0.02	ONTO24	0.00	0.00
CARO13	0.02	0.02	HOLY12	0.01	0.01	OYDM11	0.00	0.00
HCSU11	0.00	0.00	HCSU11	0.00	0.00	PNCK12	0.00	0.00
LIME12	0.00	0.00	LIME12	0.00	0.00	UNTY12	0.00	0.00
OBPR11	0.00	0.00	OBPR11	0.00	0.00	VALE11	0.00	0.00
OBPR12	0.00	0.00	OBPR12	0.00	0.00	VALE14	0.00	0.00
ONTO14	0.00	0.00	ONTO14	0.00	0.00	ONTO23	0.00	0.00
ONTO23	0.00	0.00	ONTO23	0.00	0.00	PNCK11	0.00	0.00
OYDM11	0.00	0.00	OYDM11	0.00	0.00	VALE15	0.00	0.00
PNCK12	0.00	0.00	PNCK12	0.00	0.00	WESR14	0.00	0.00

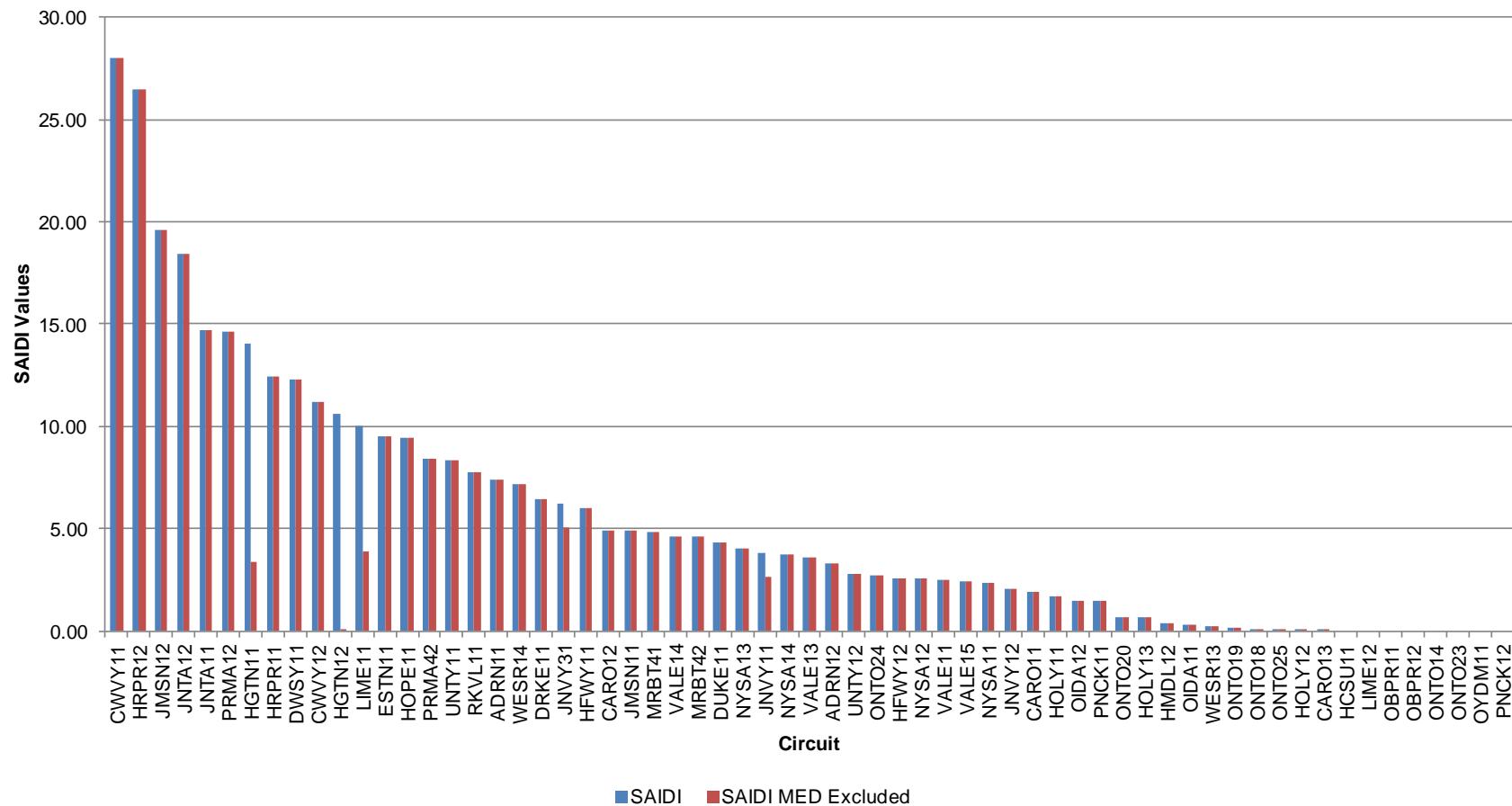
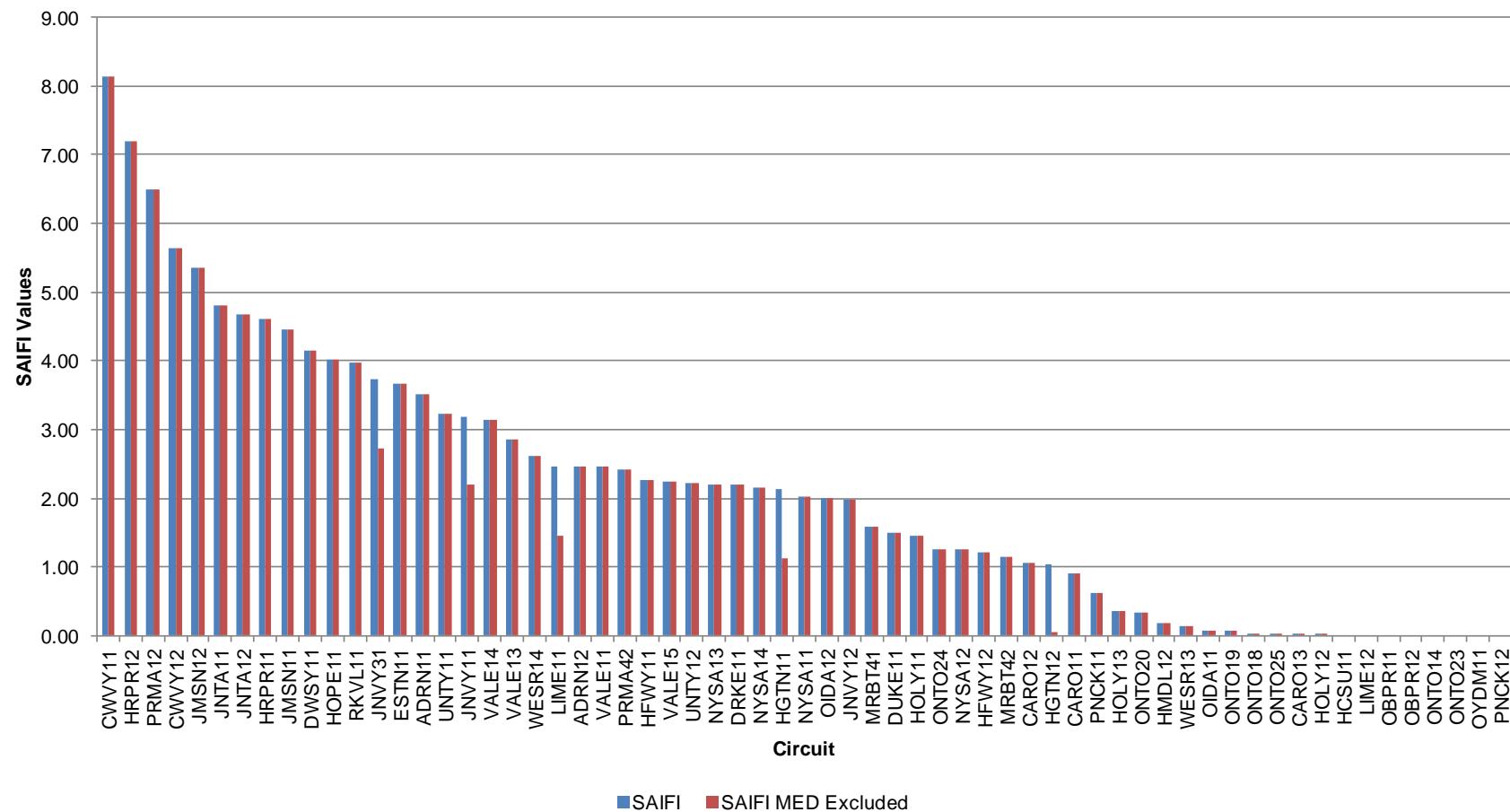
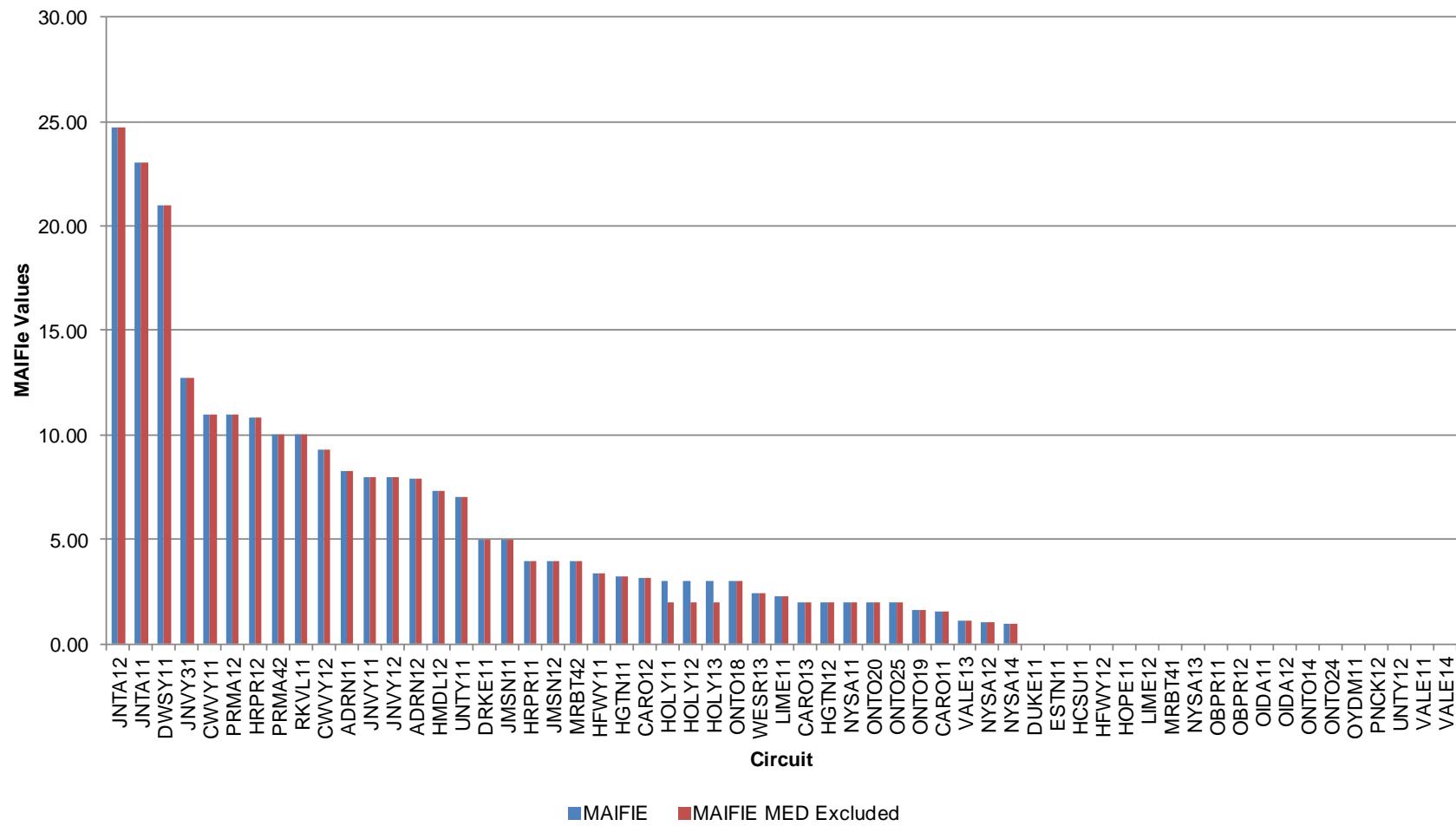


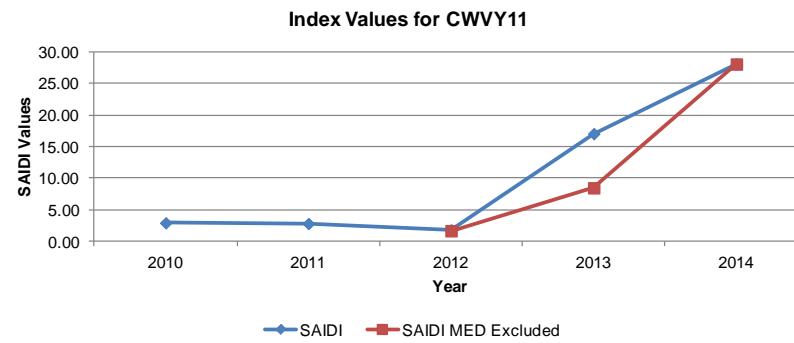
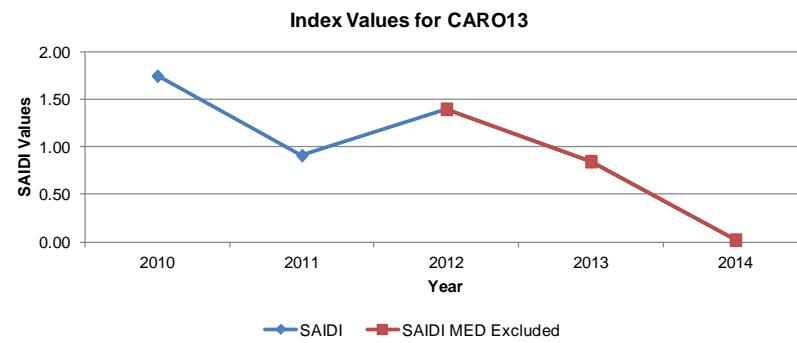
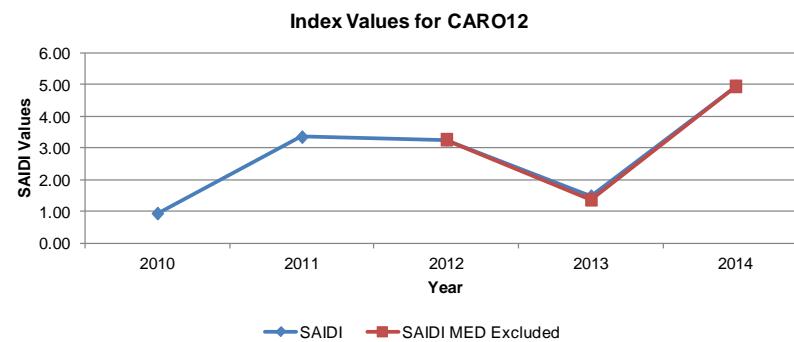
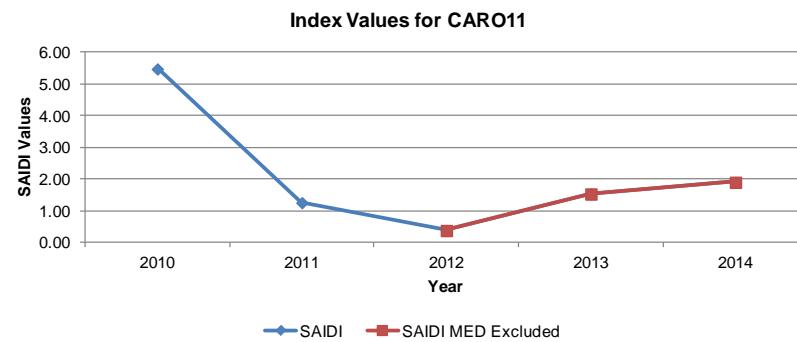
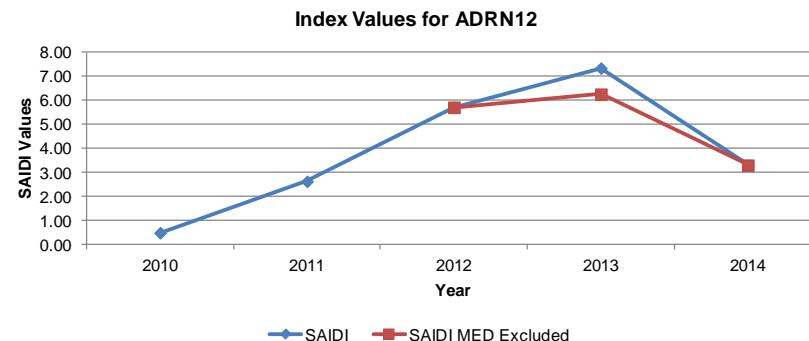
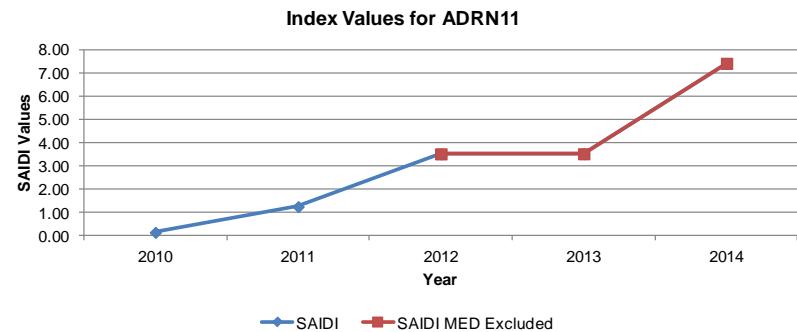
Figure 6
2014 circuit SAIDI descending values

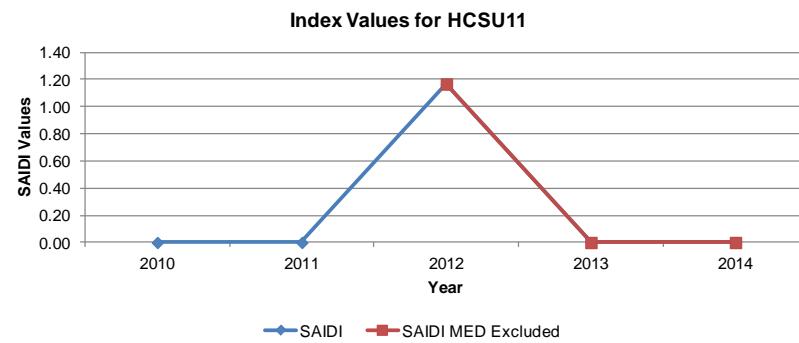
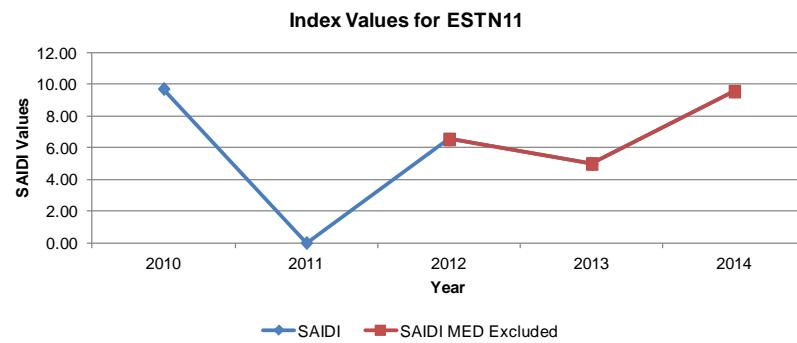
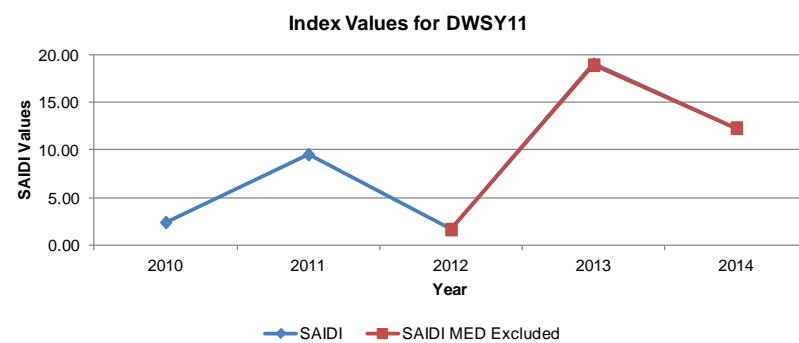
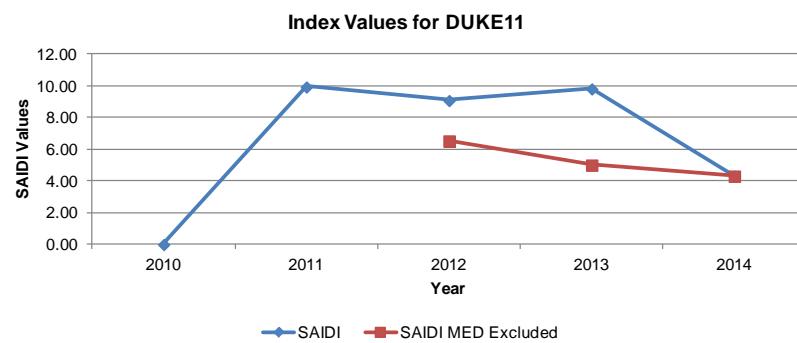
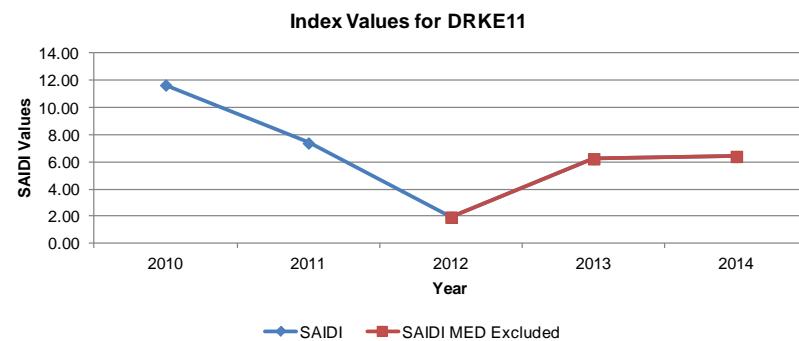
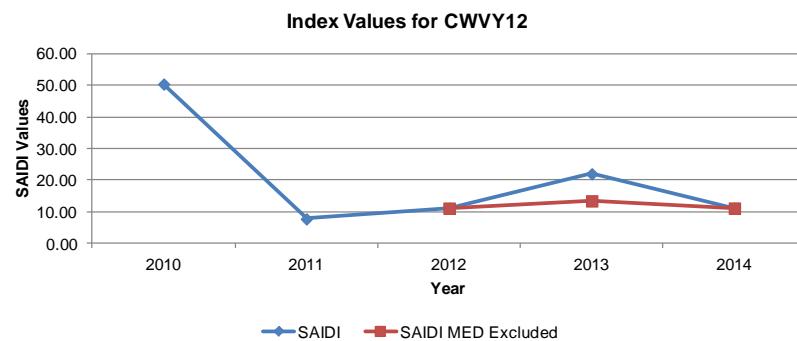
**Figure 7**

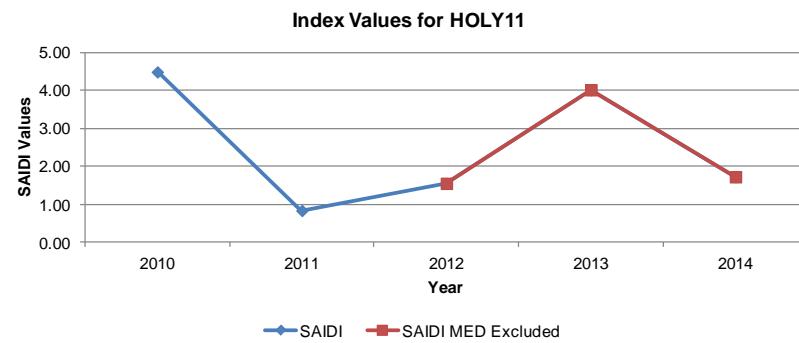
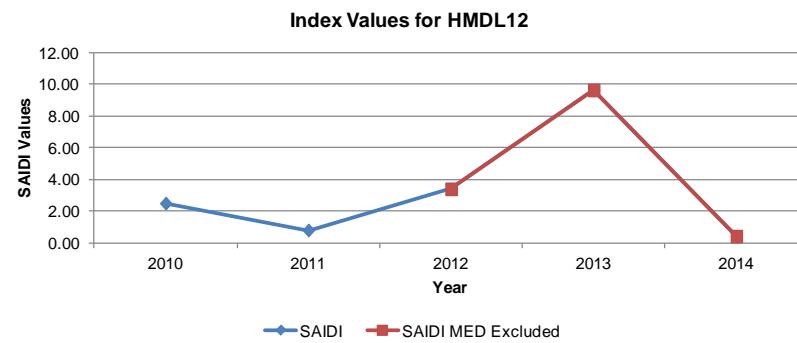
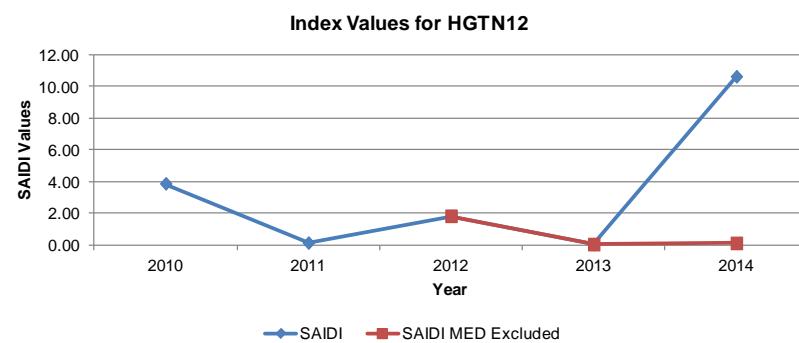
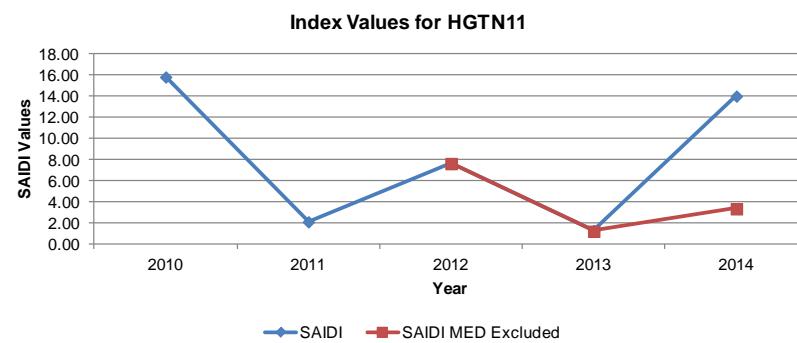
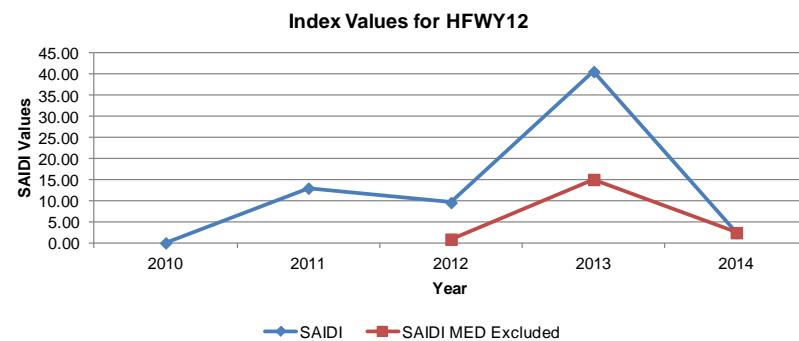
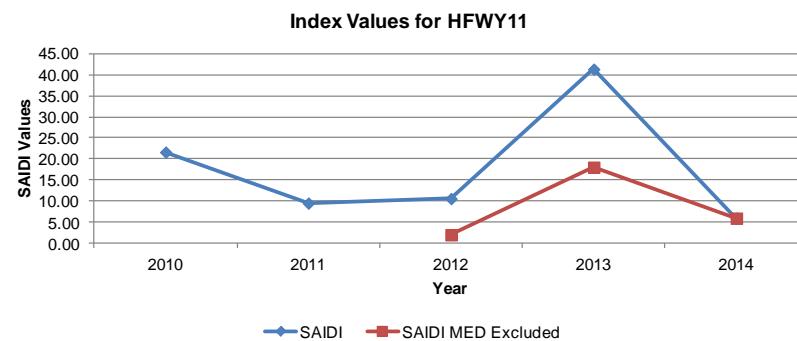
2014 circuit SAIFI descending values

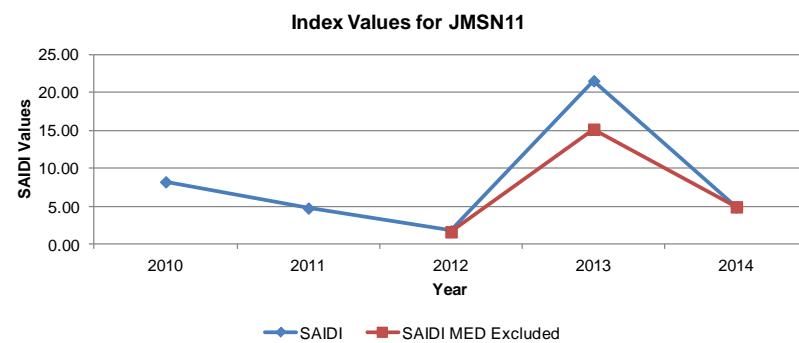
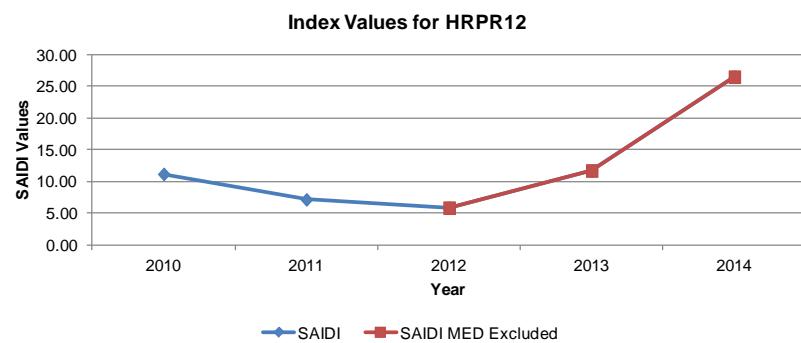
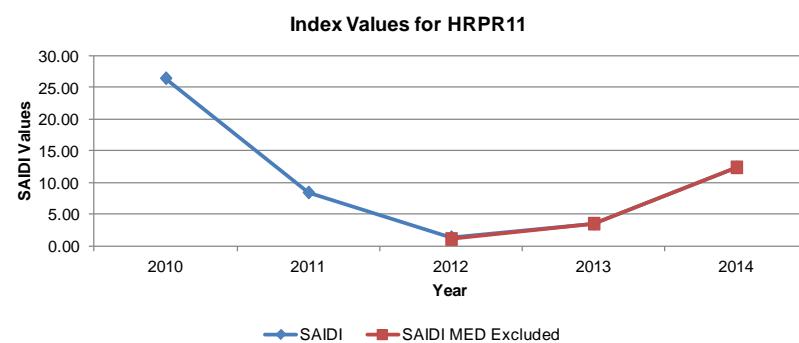
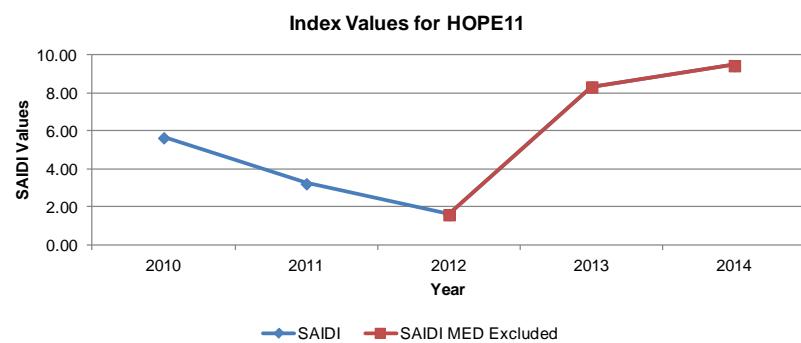
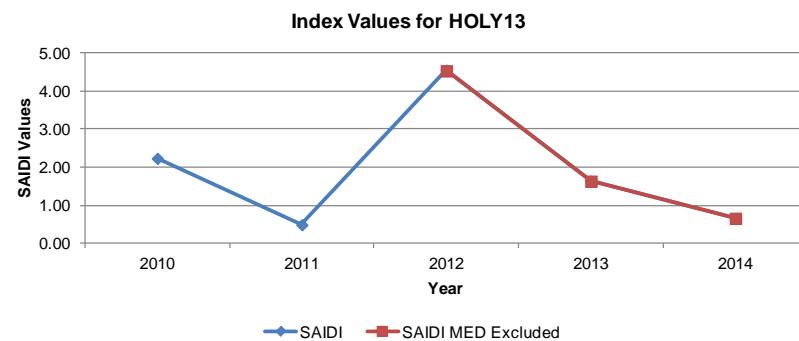
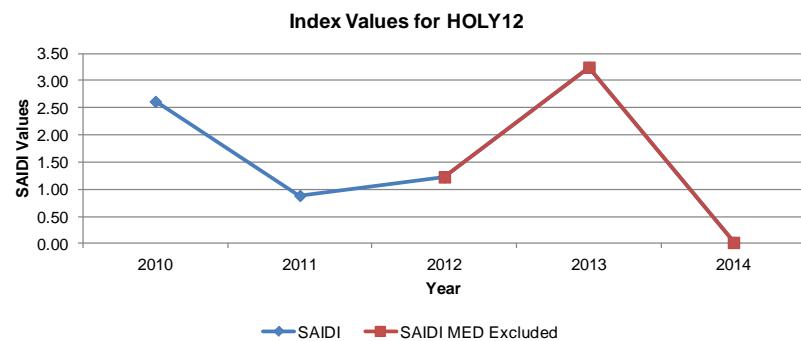
**Figure 8**2014 circuit MAIFI_E descending values

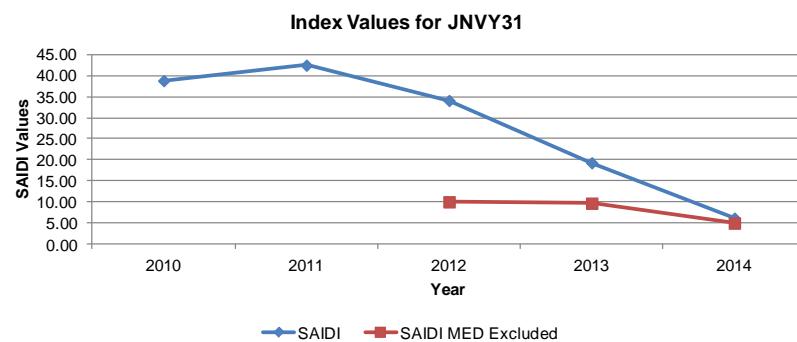
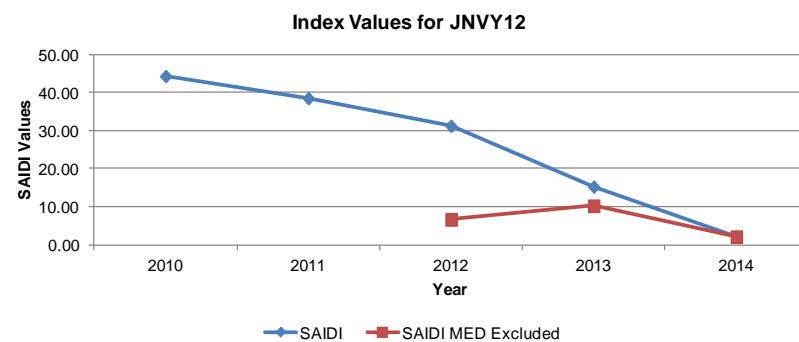
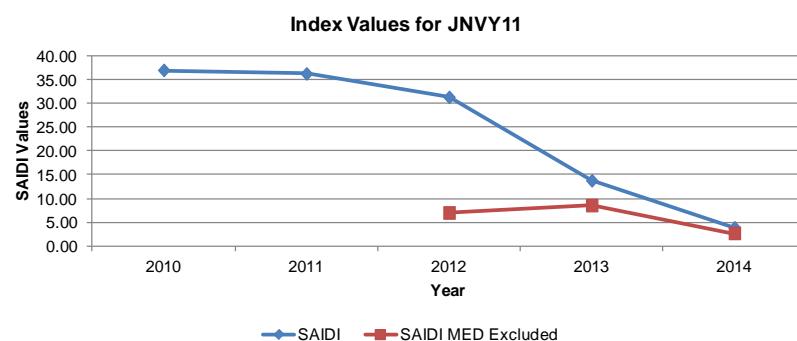
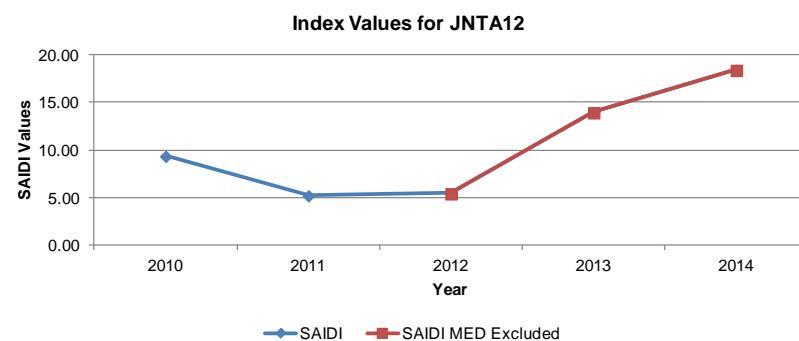
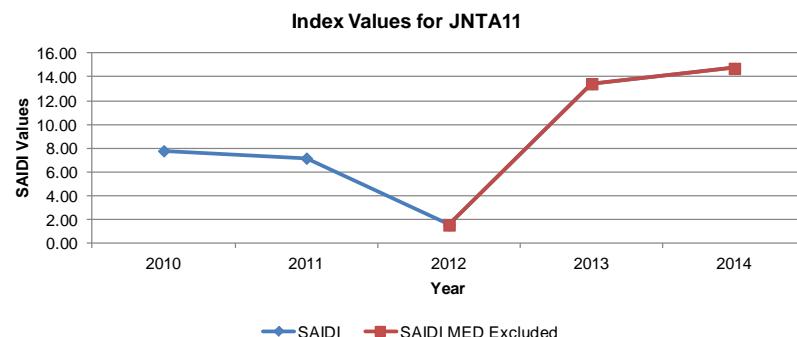
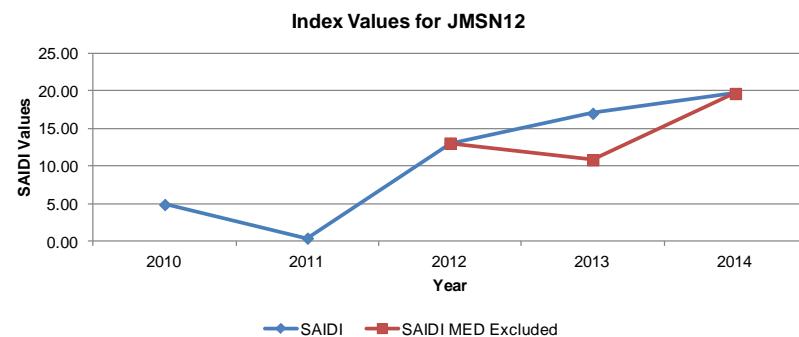
Circuit SAIDI Values

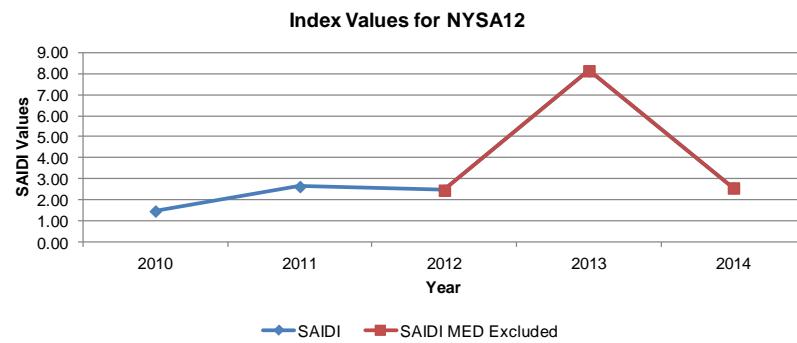
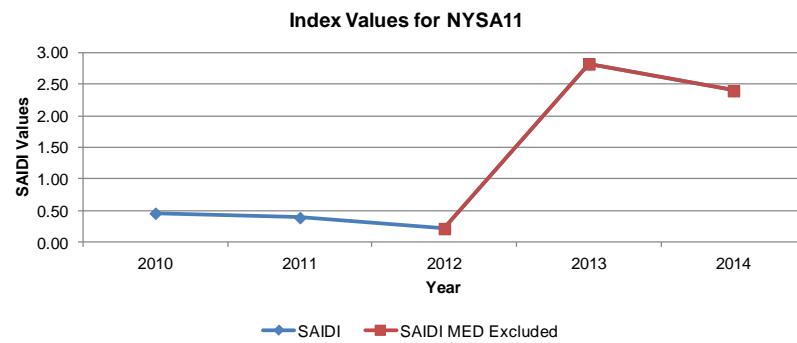
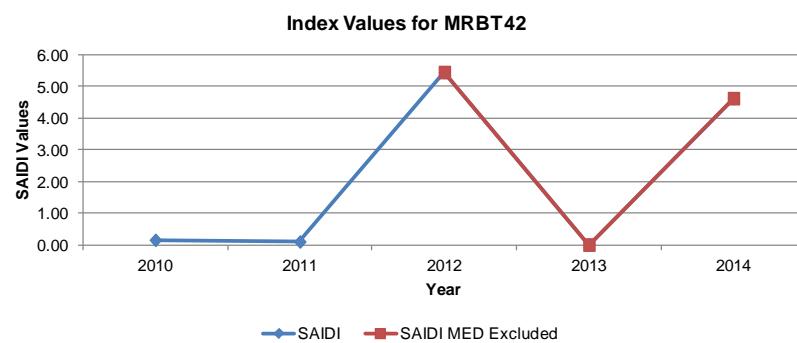
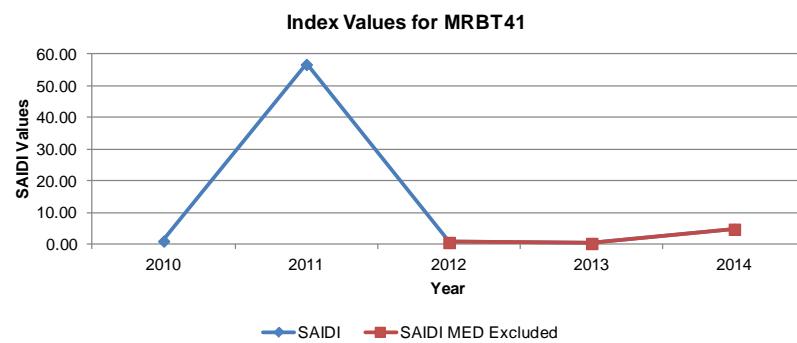
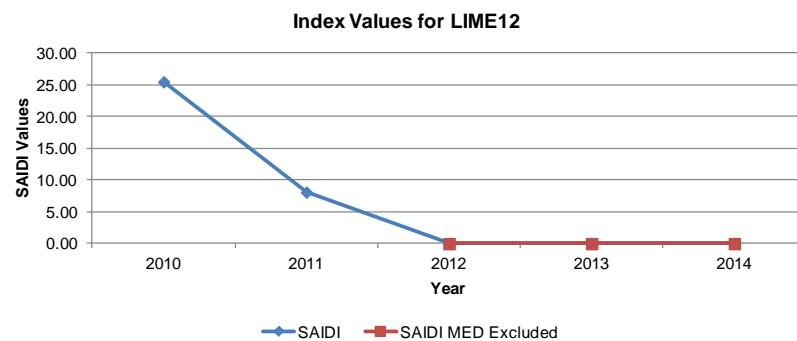
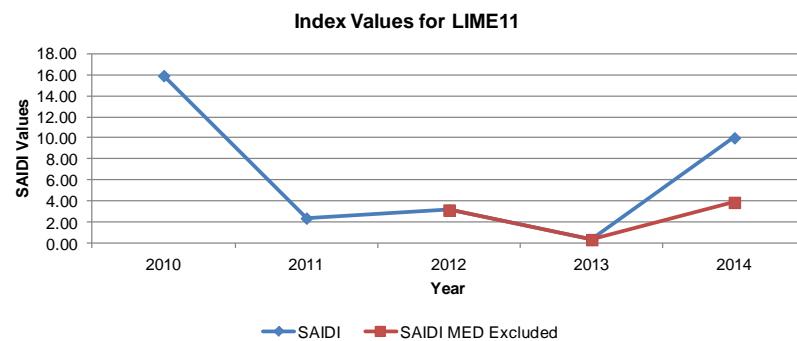


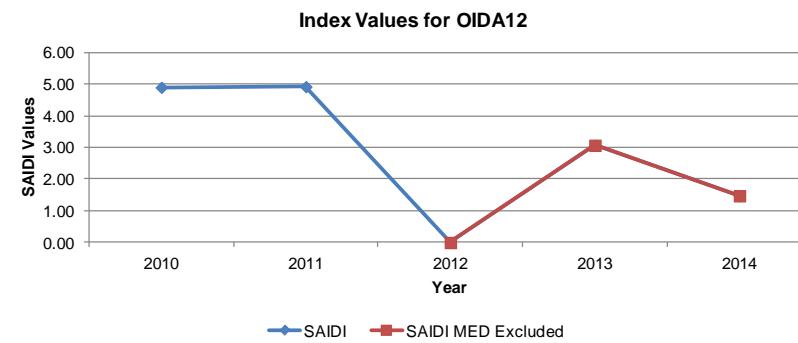
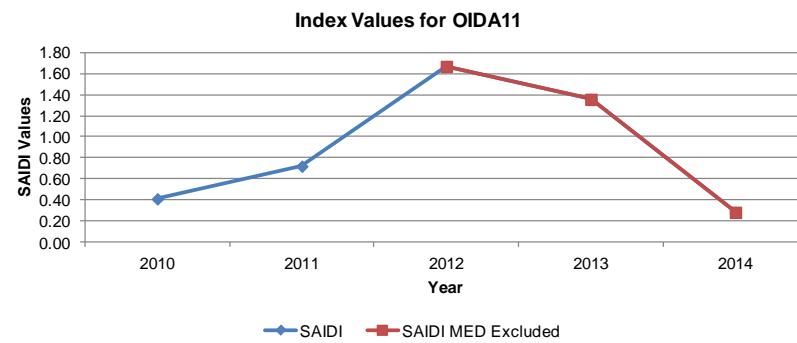
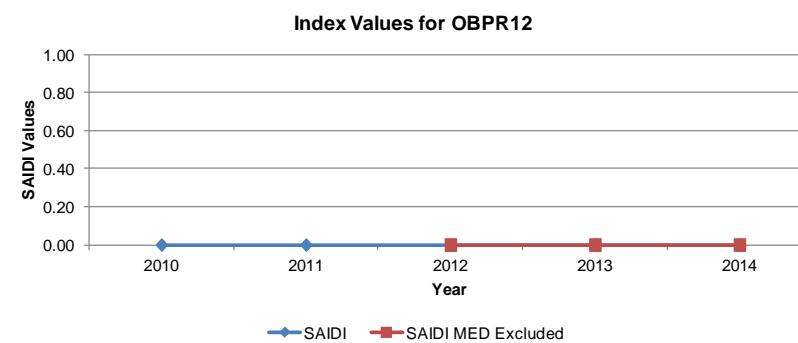
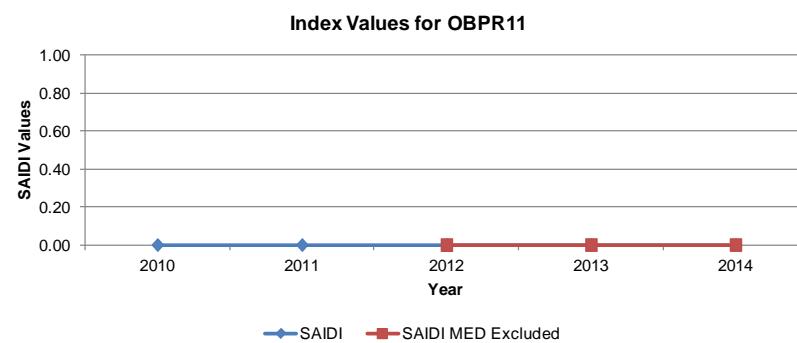
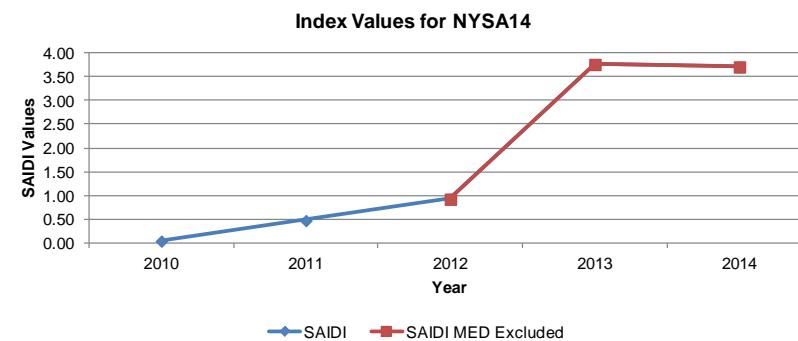
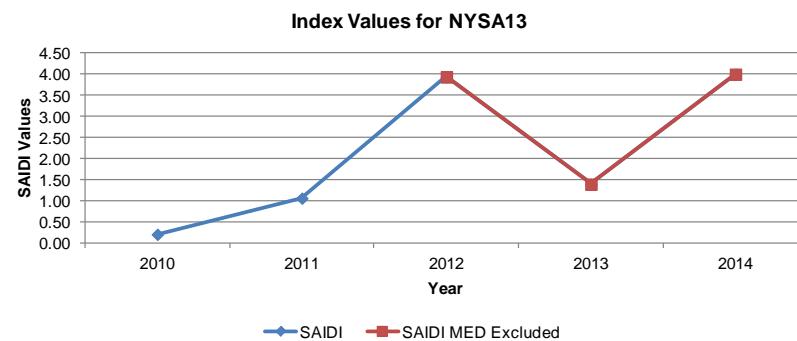


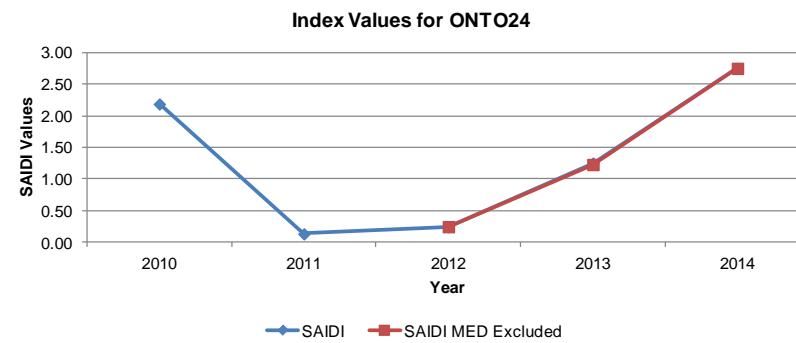
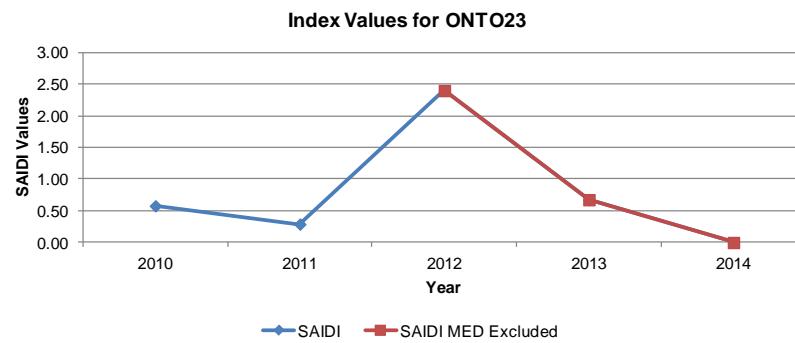
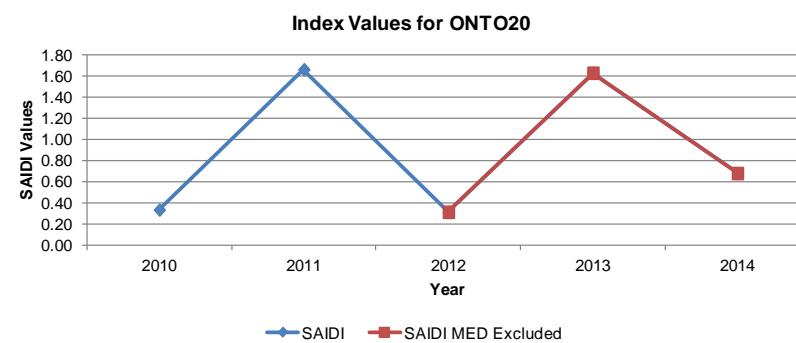
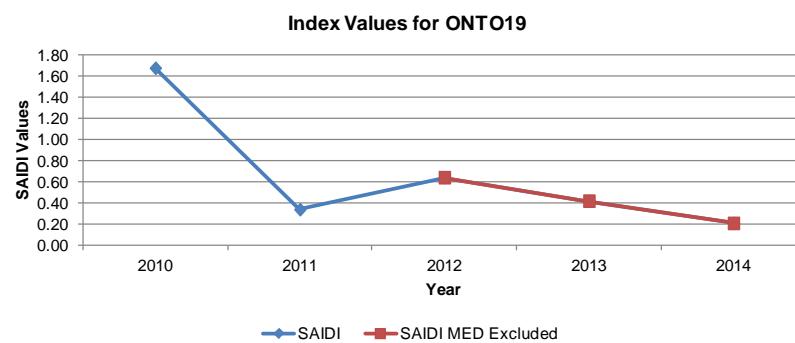
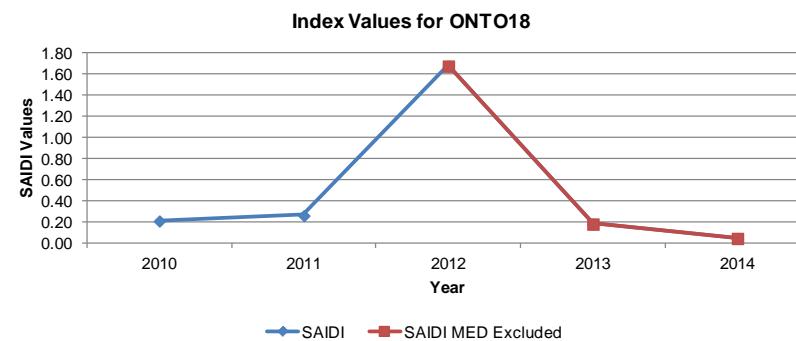
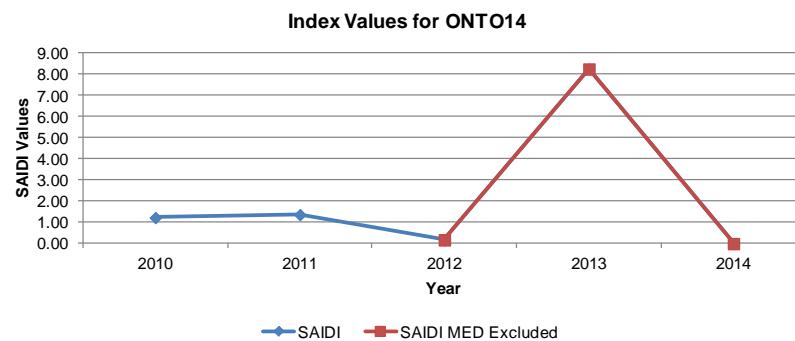


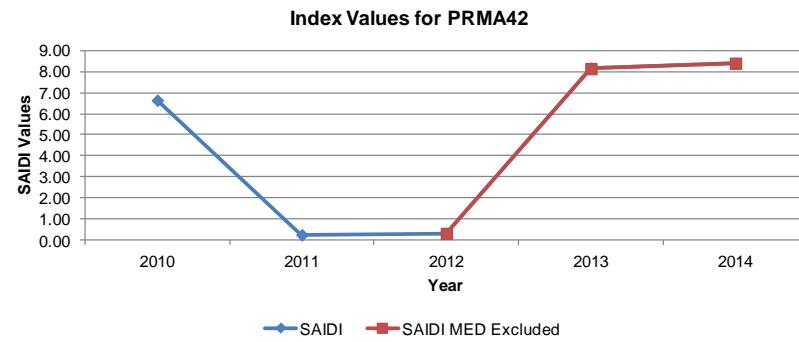
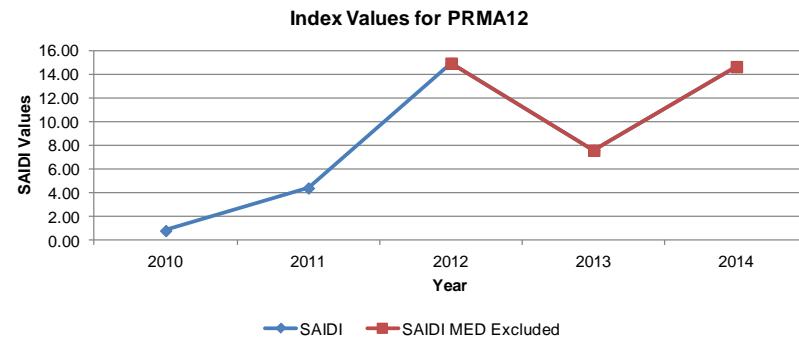
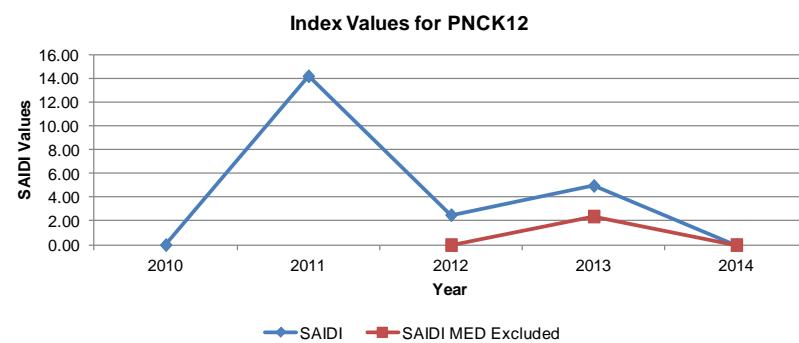
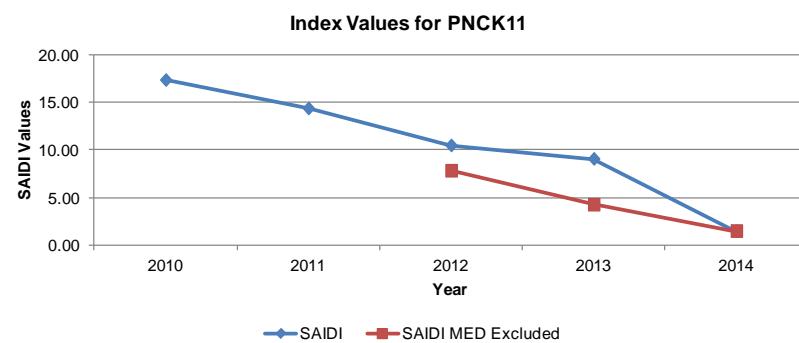
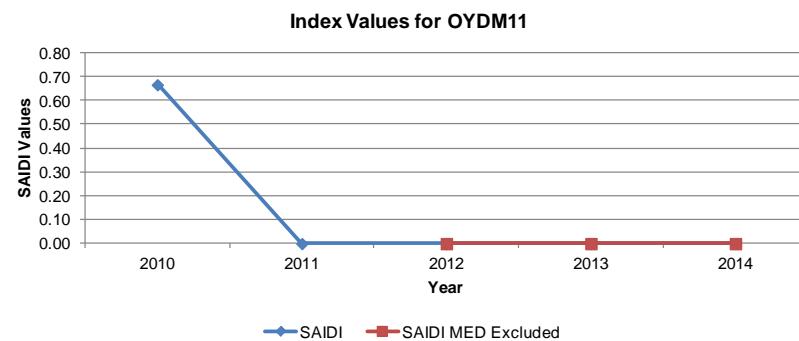
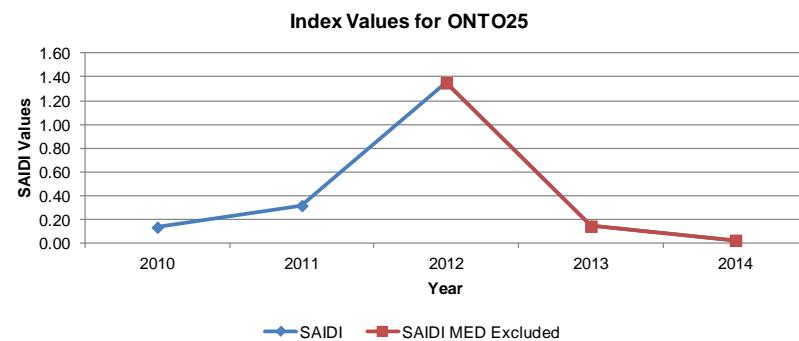


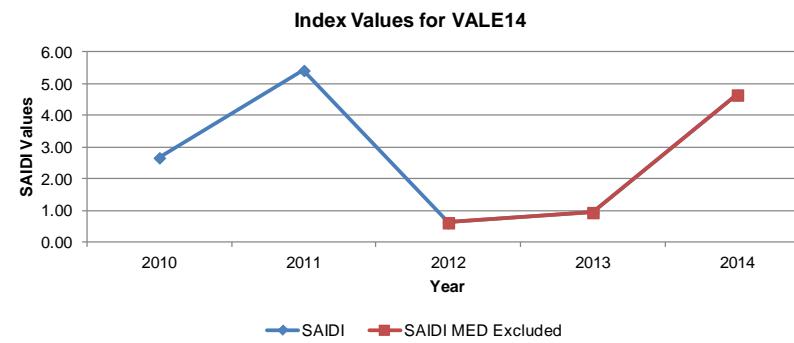
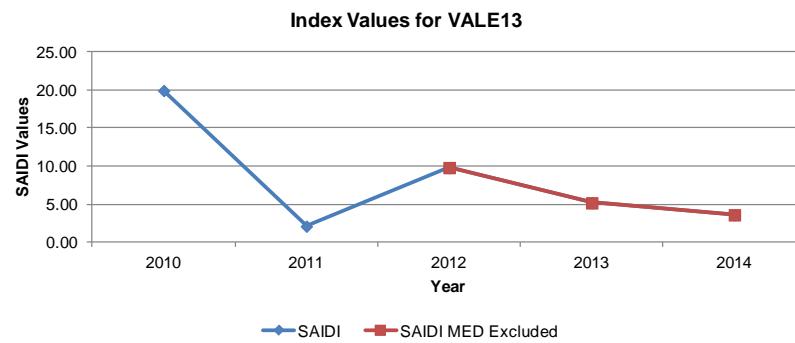
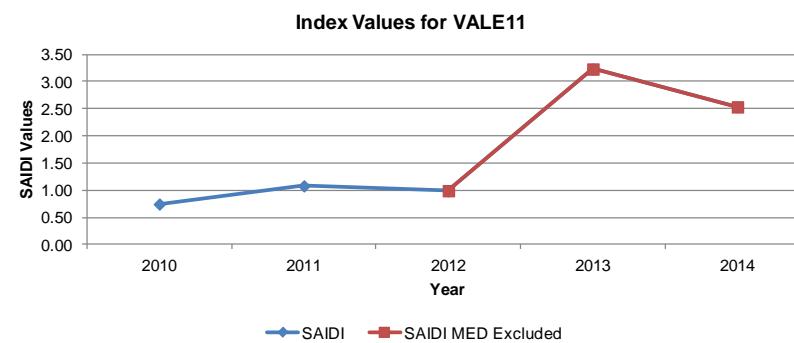
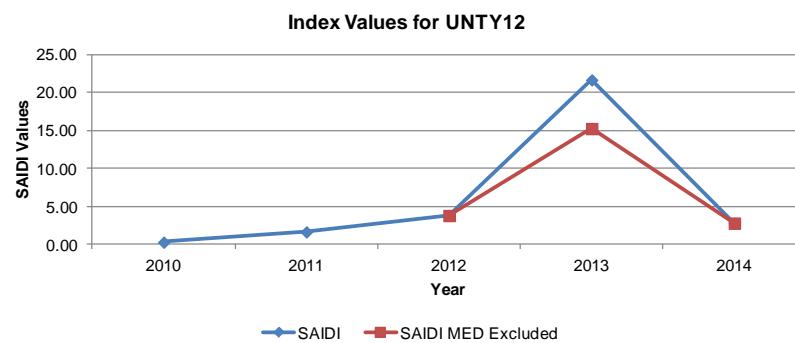
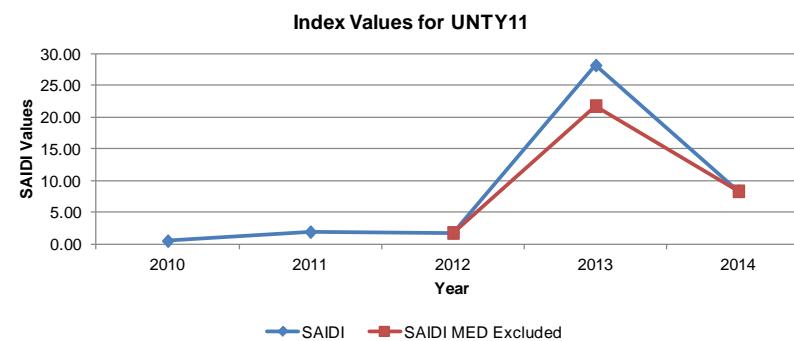
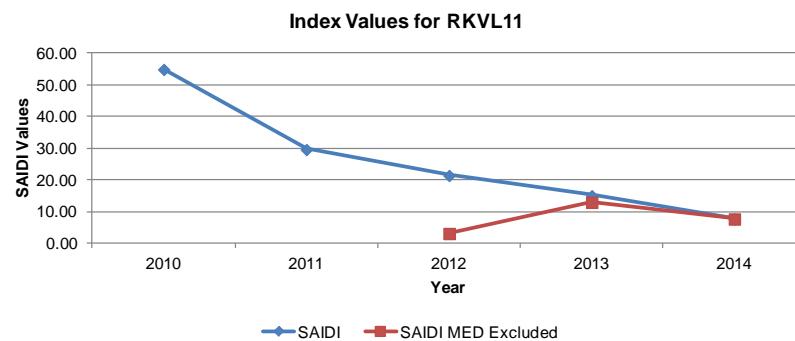


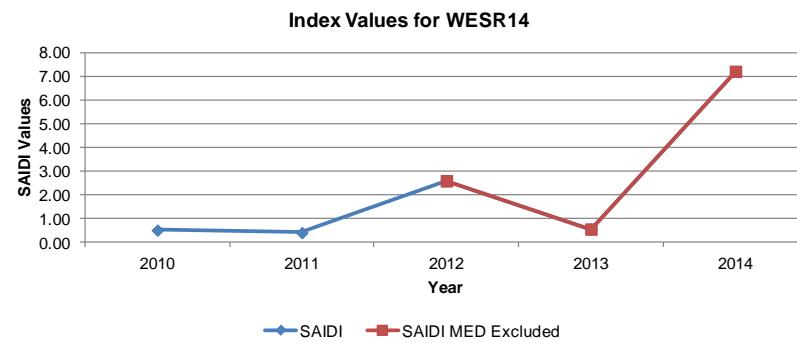
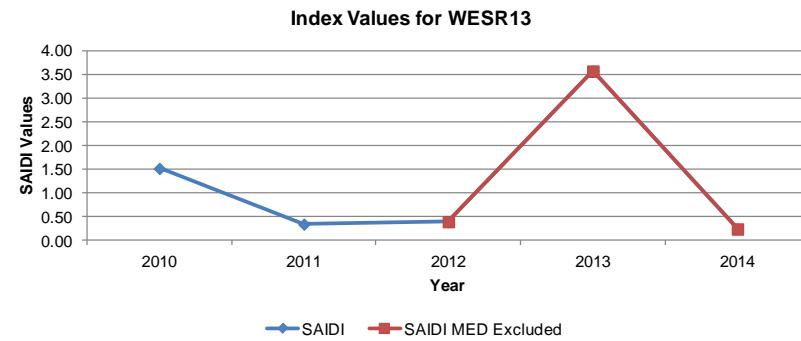
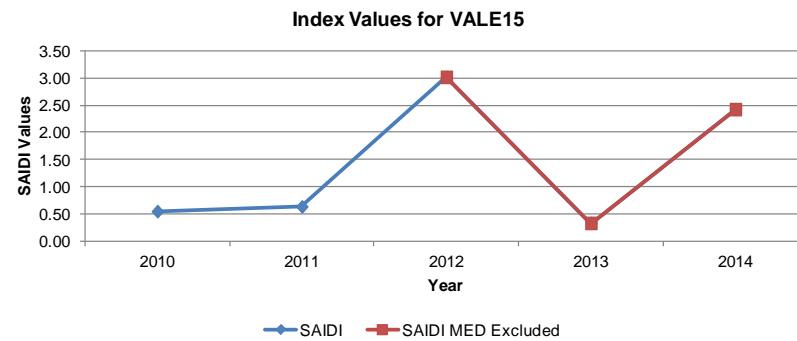




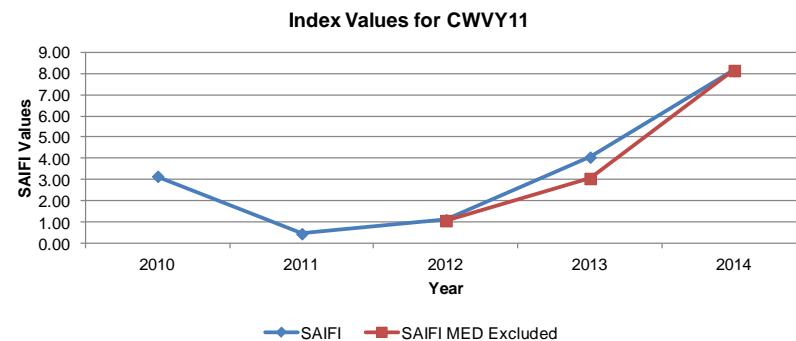
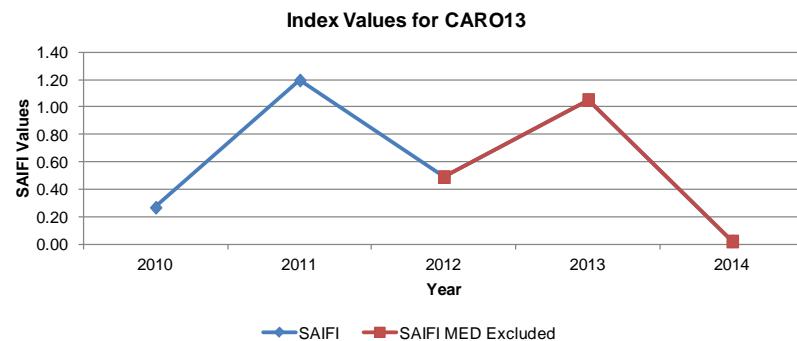
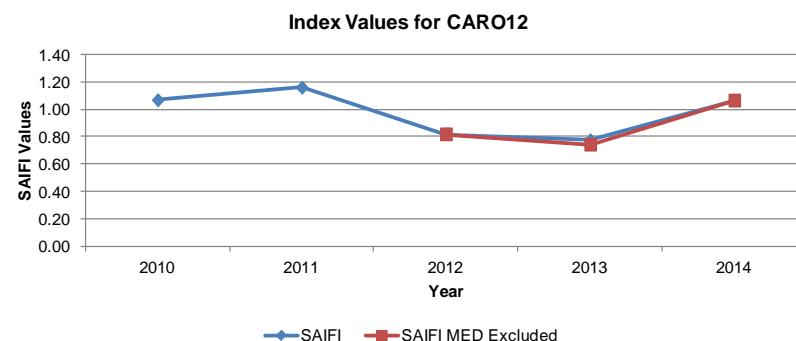
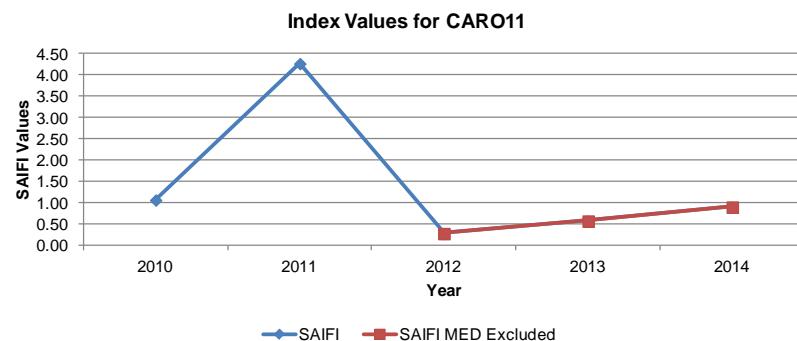
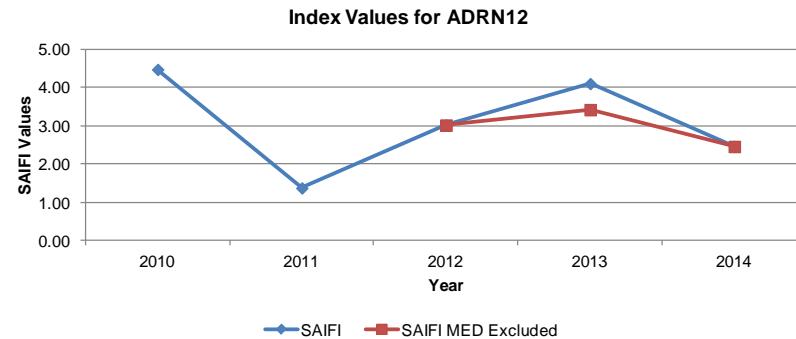
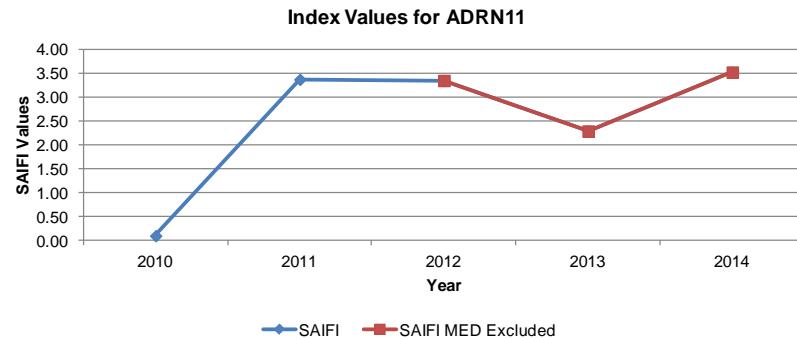




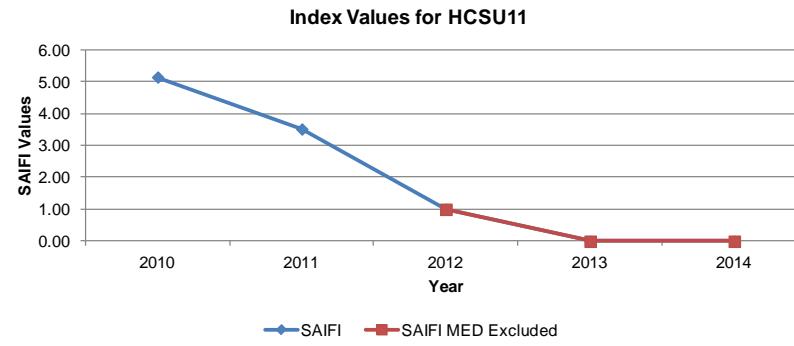
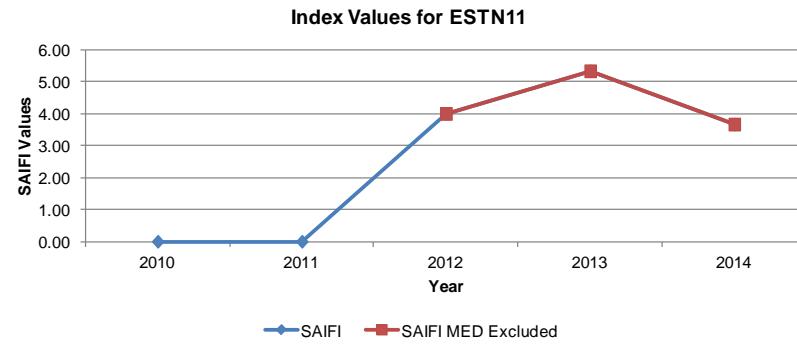
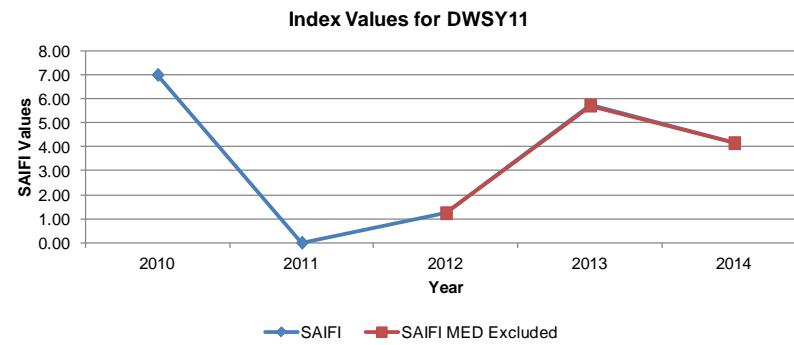
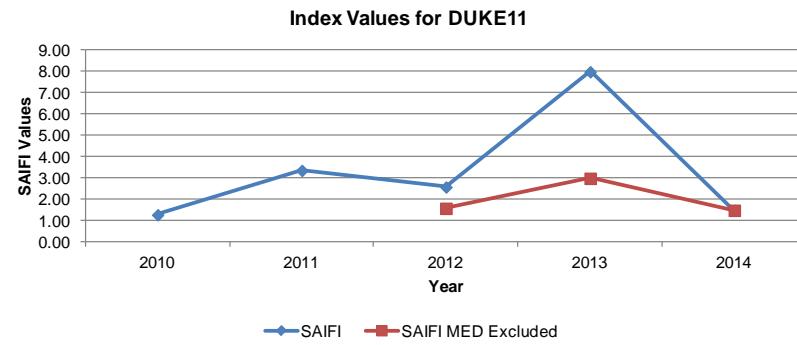
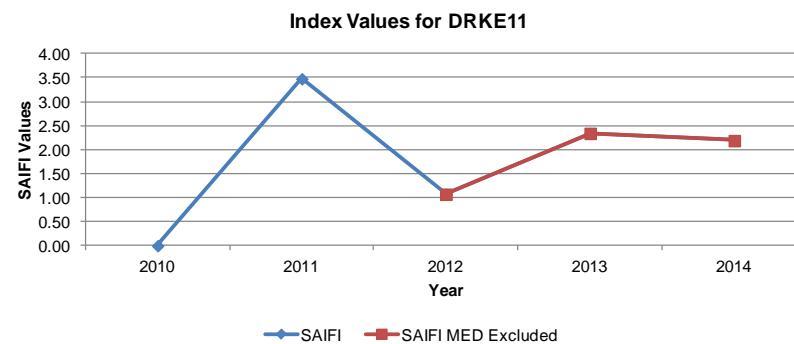
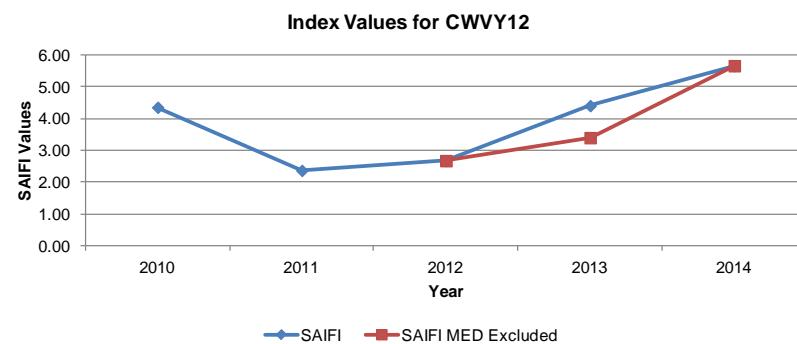


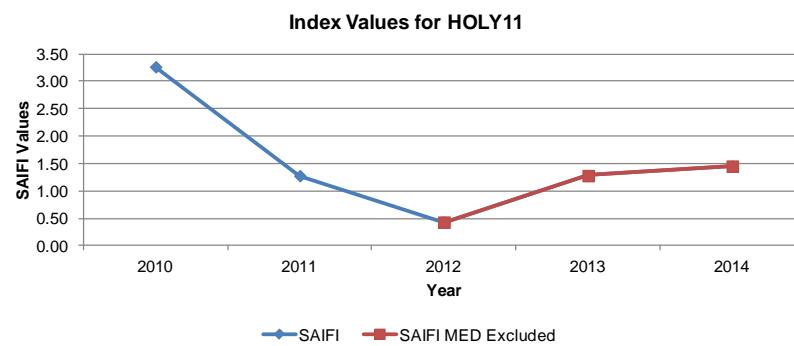
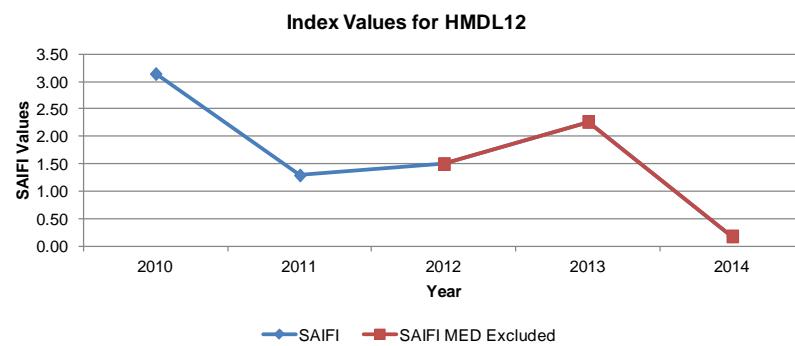
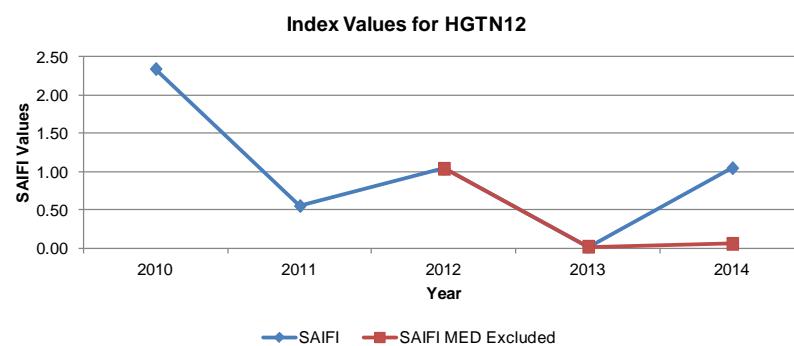
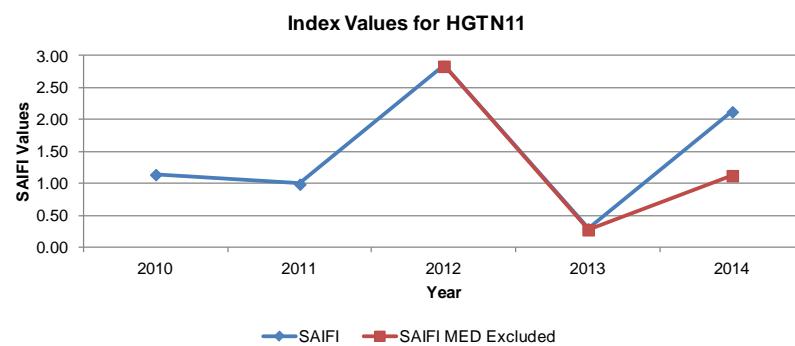
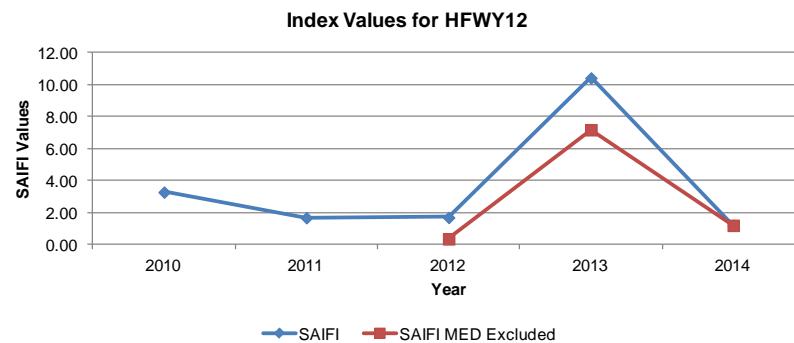
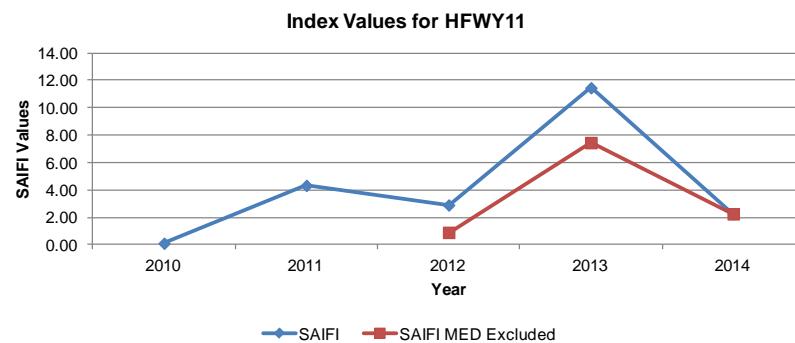


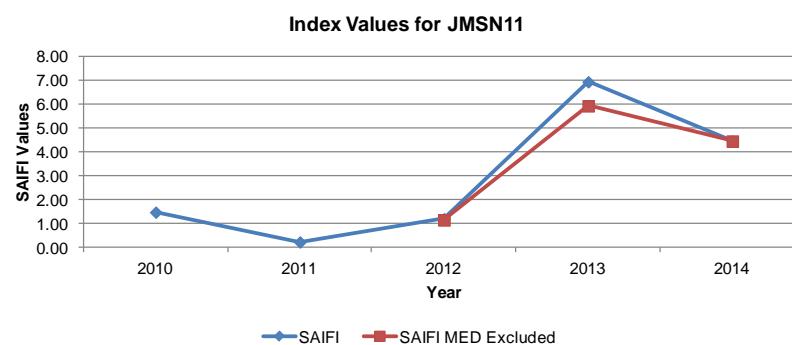
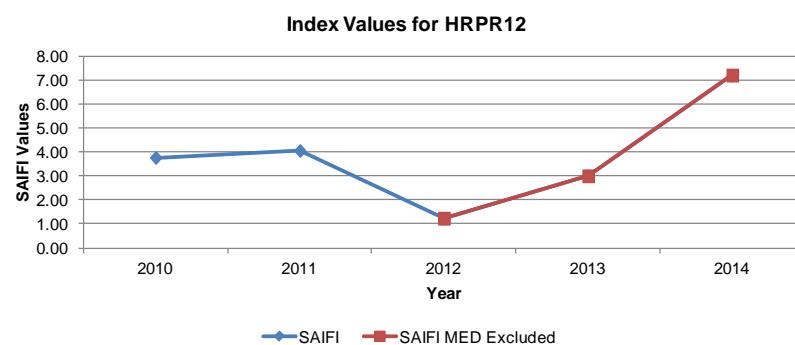
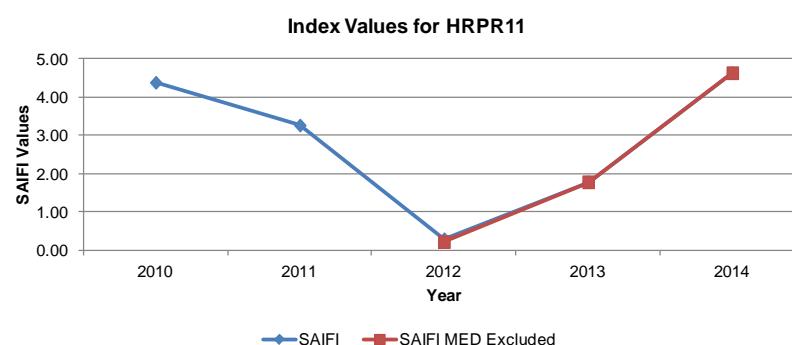
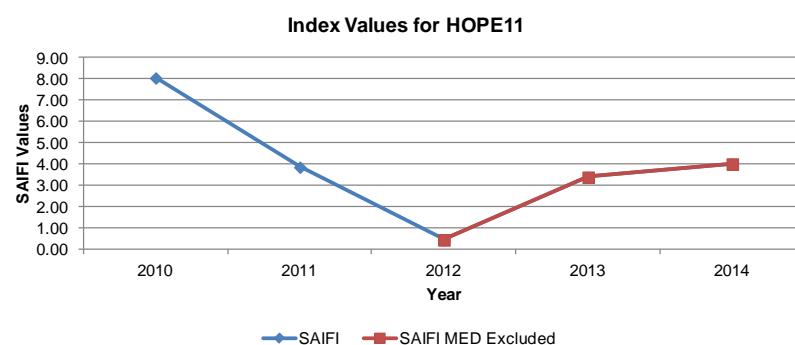
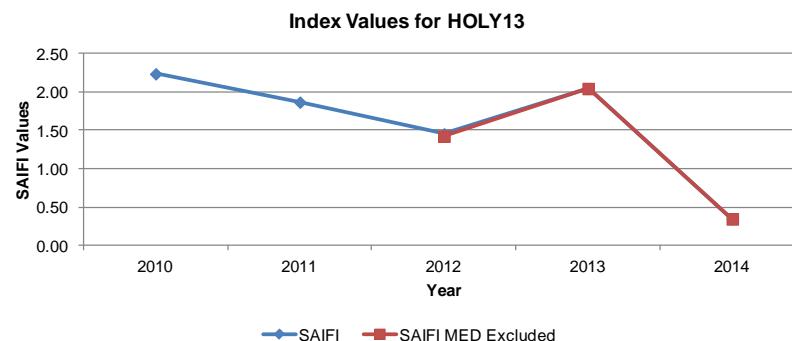
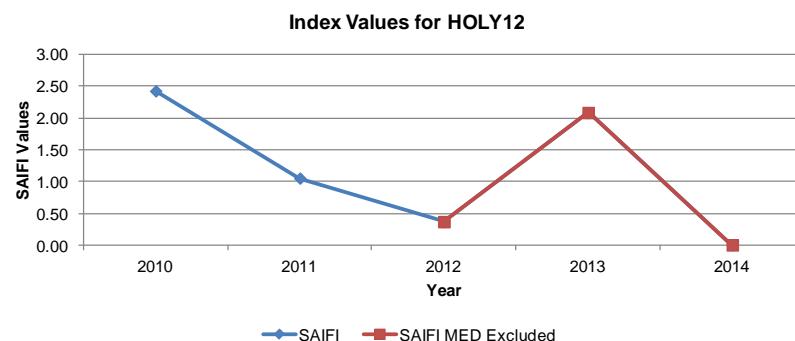
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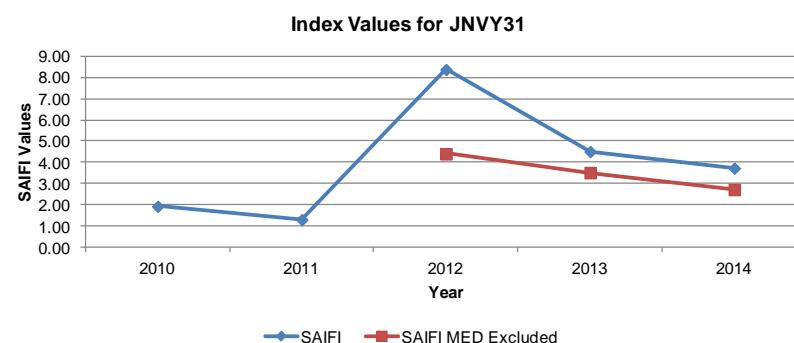
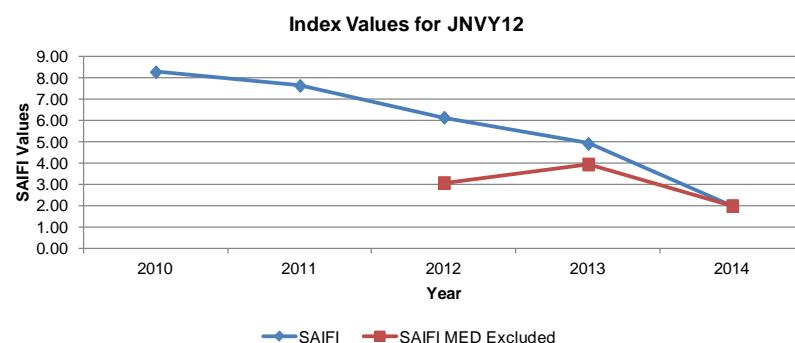
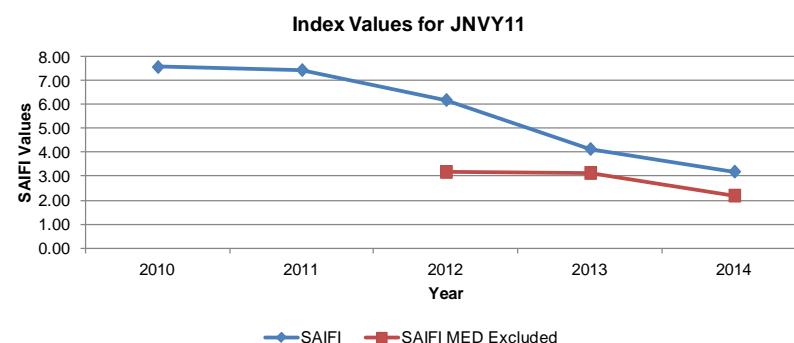
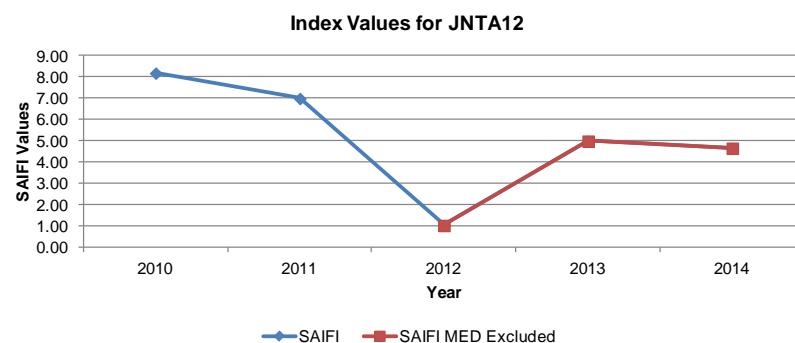
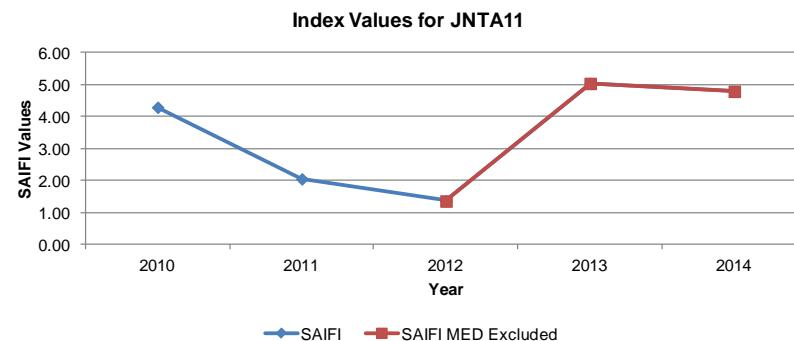
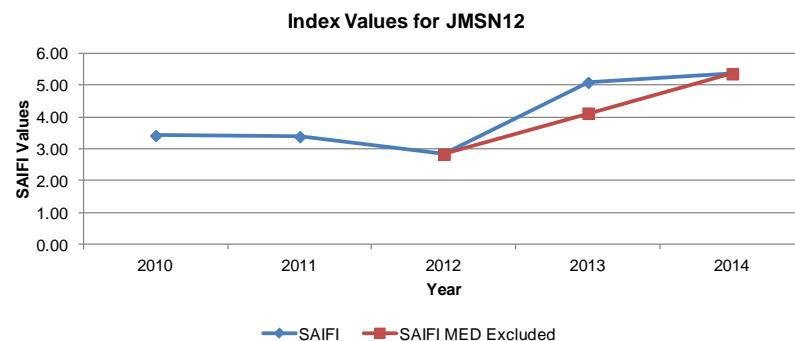


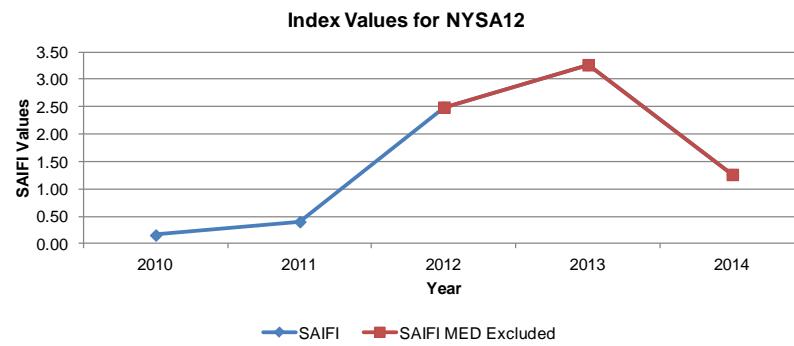
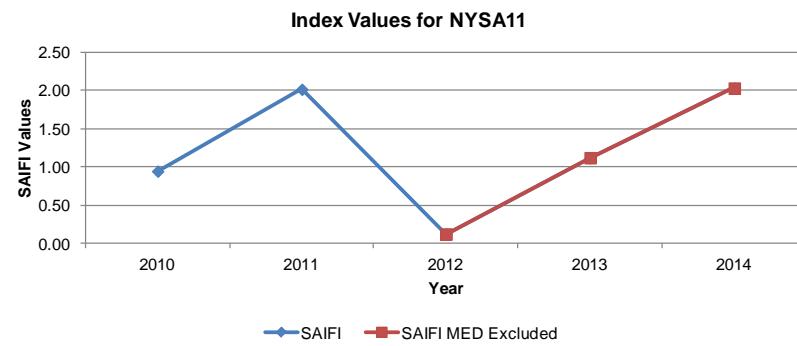
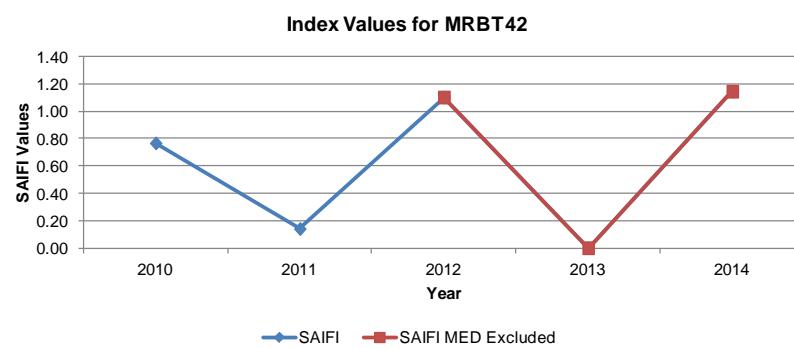
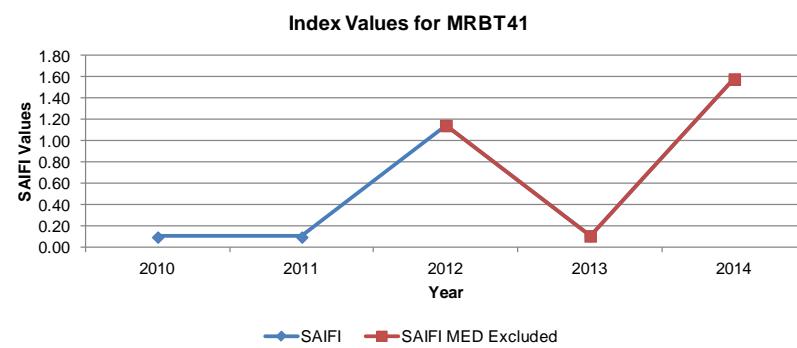
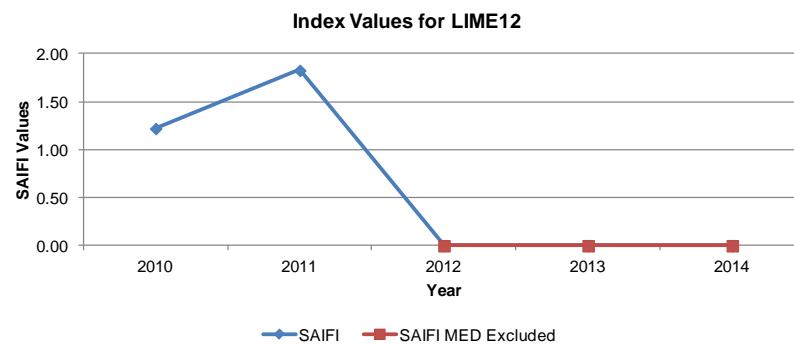
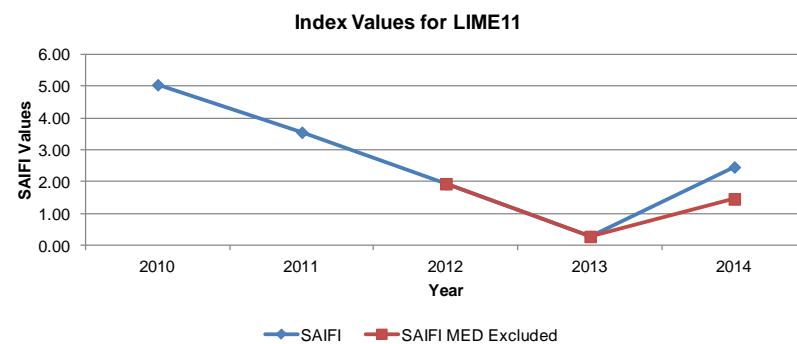
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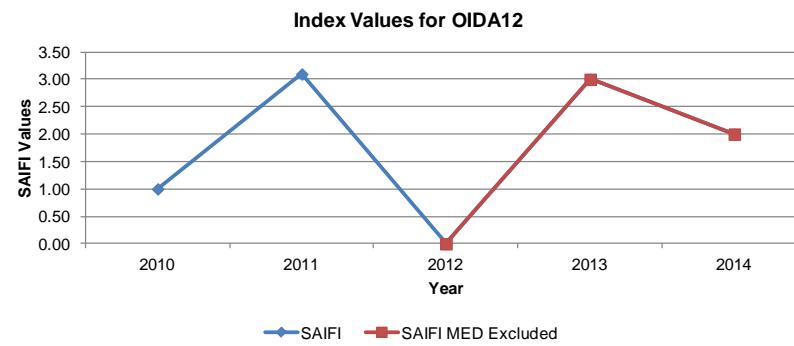
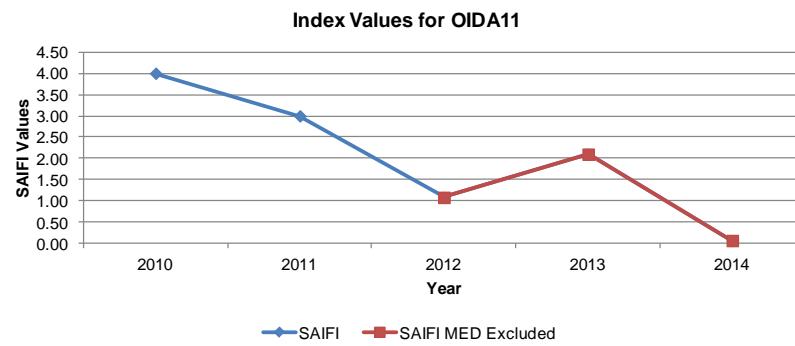
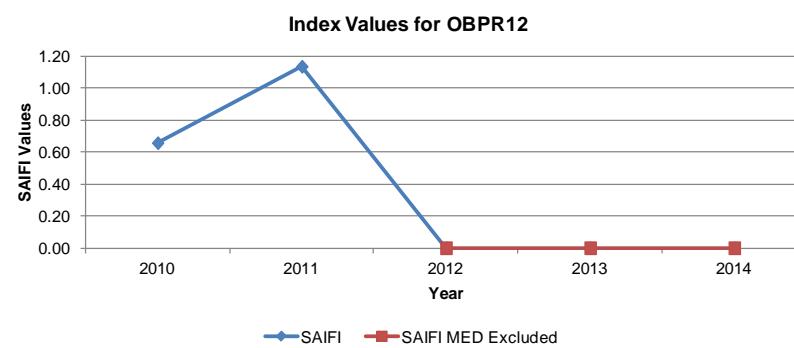
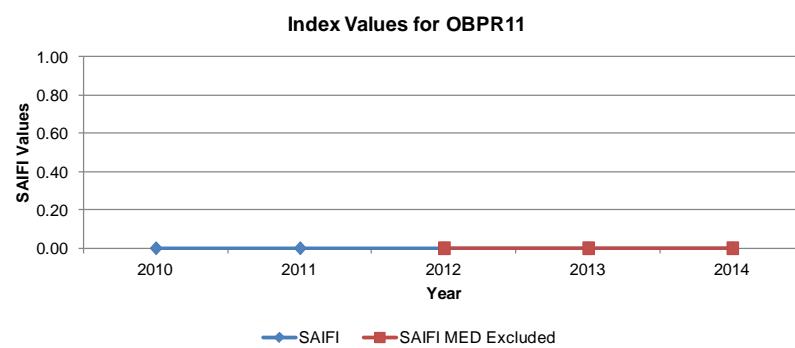
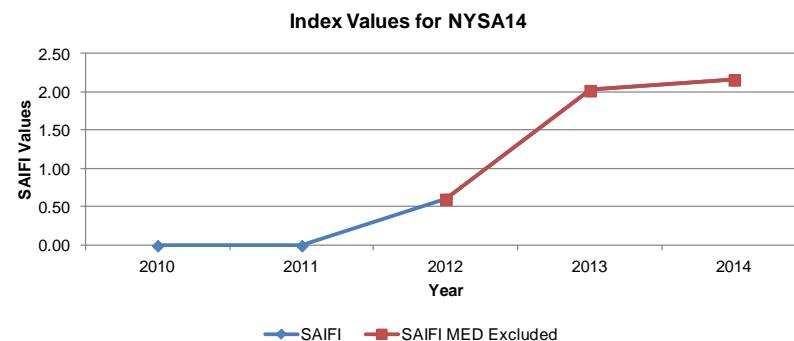
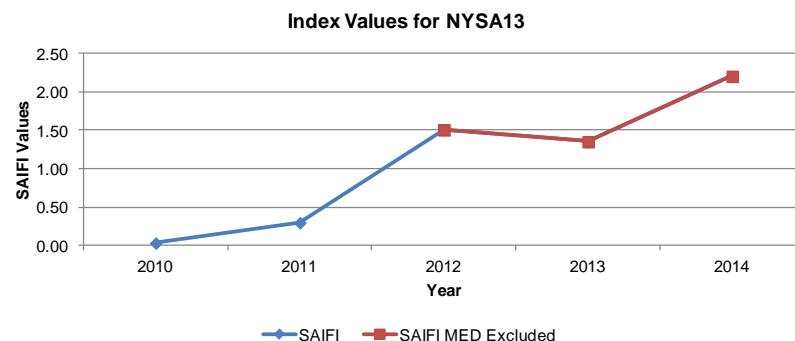


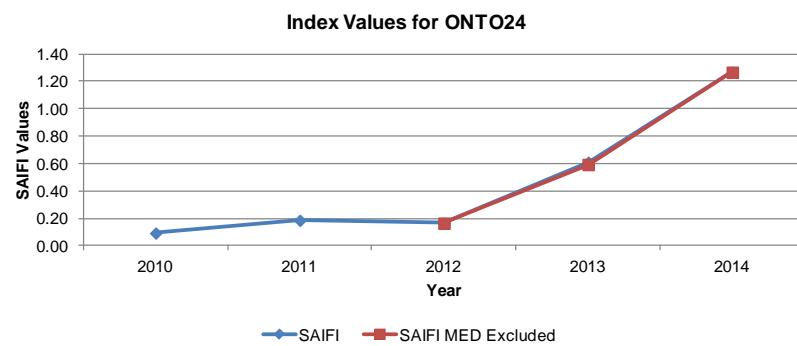
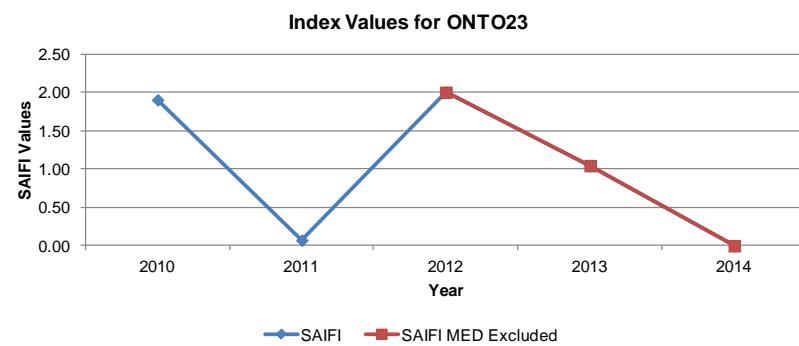
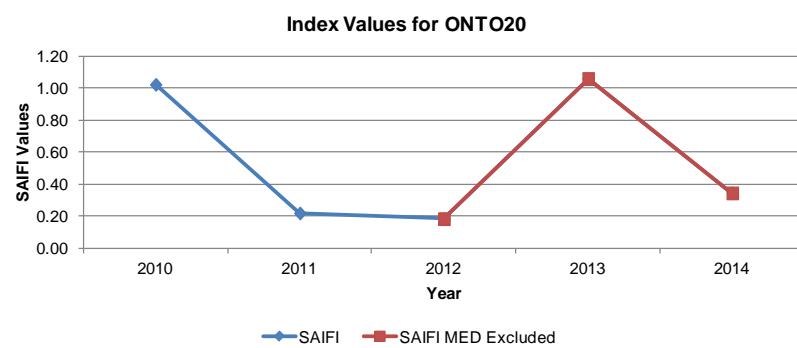
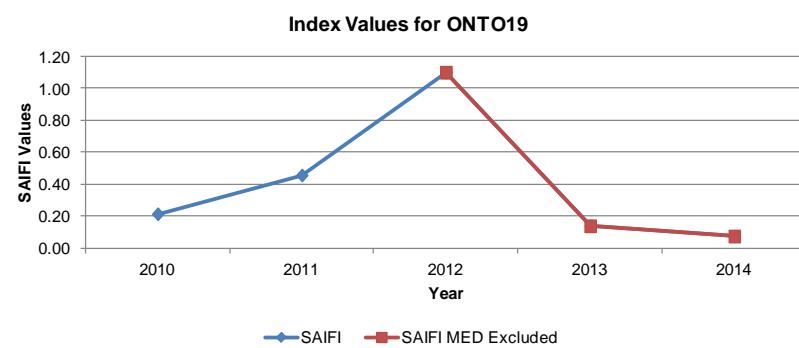
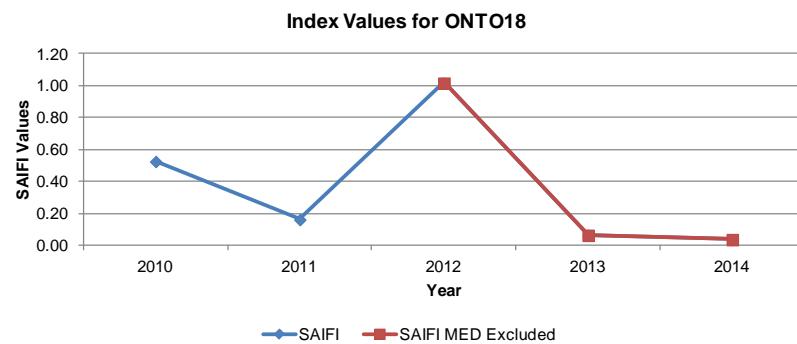
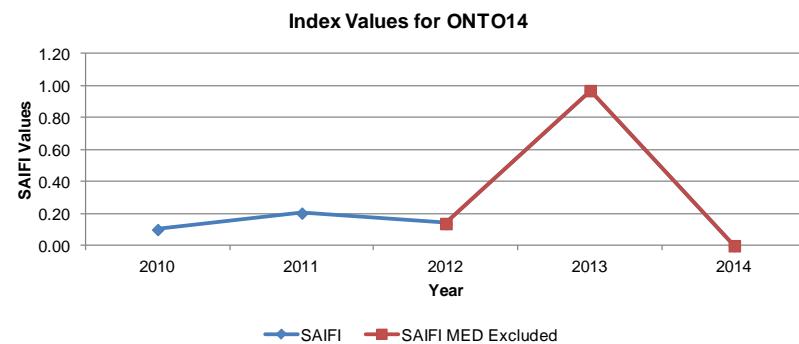


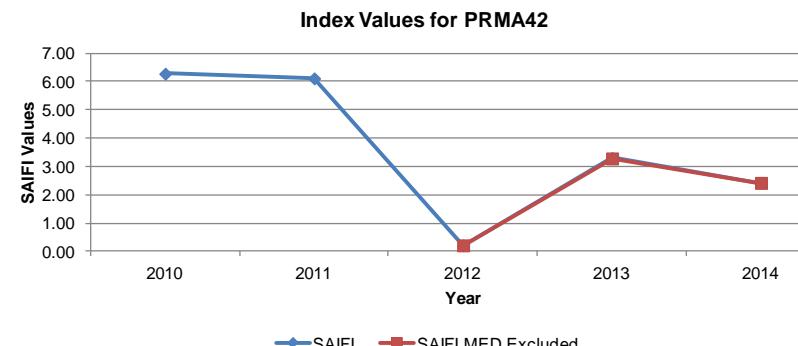
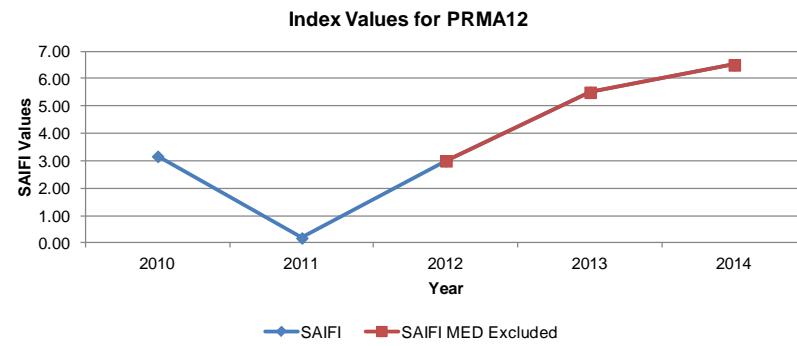
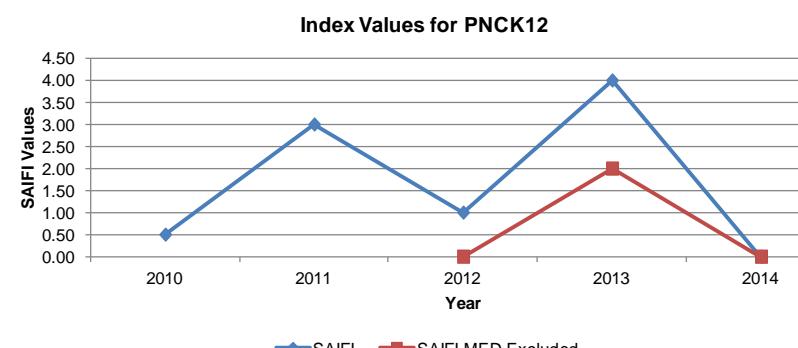
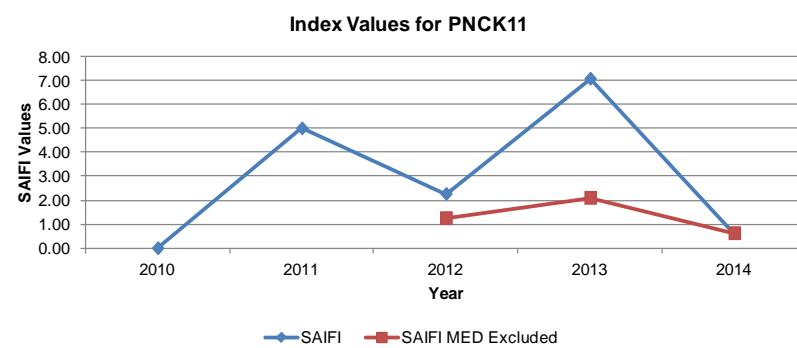
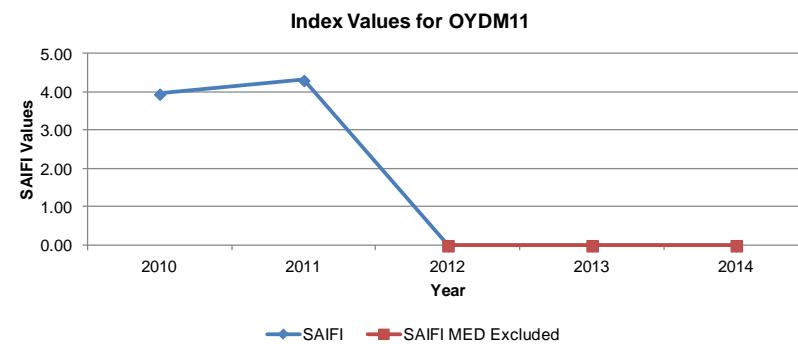
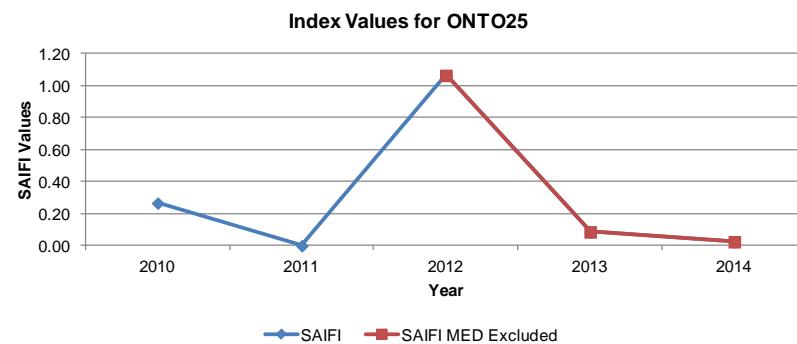


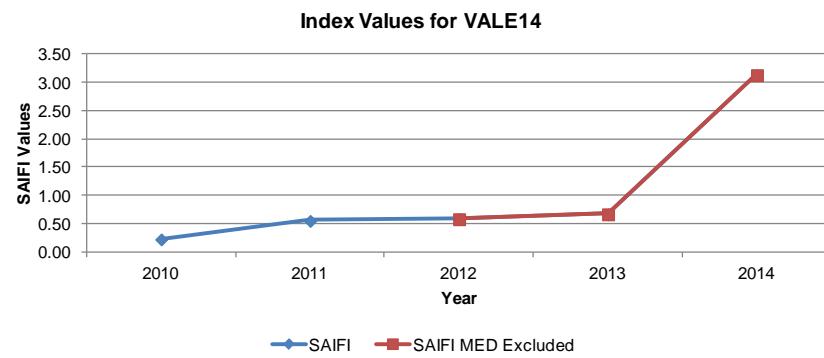
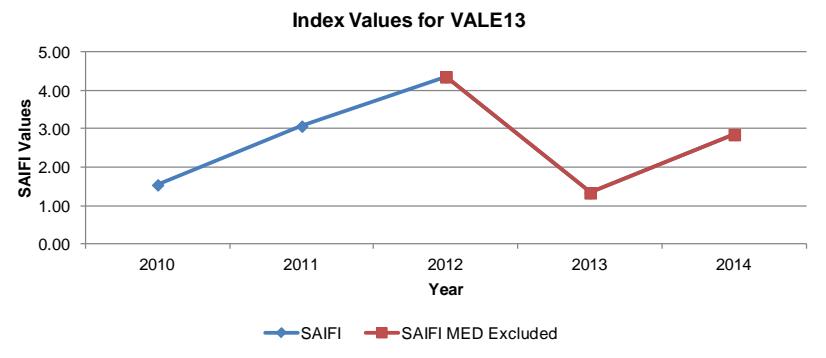
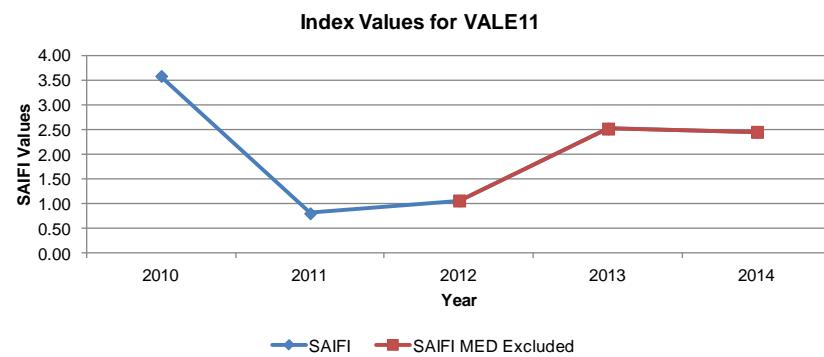
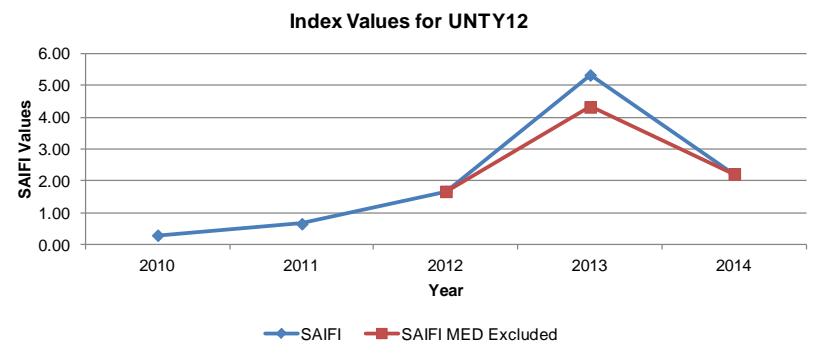
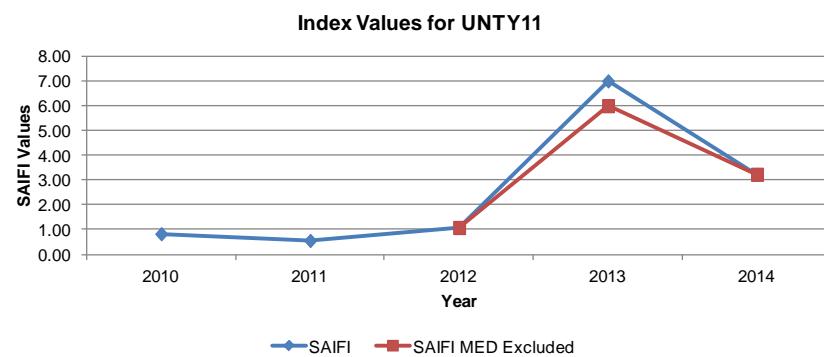
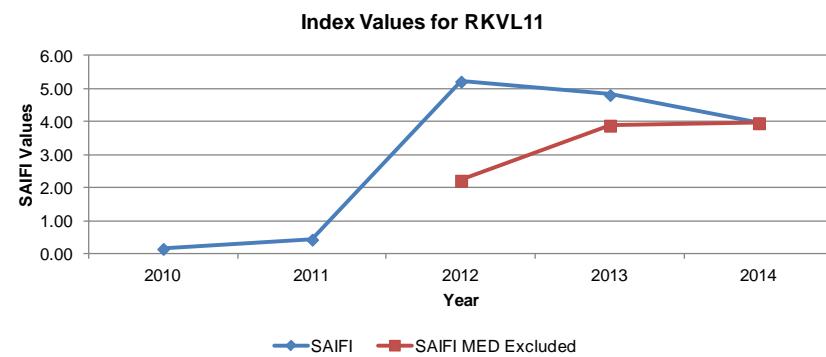


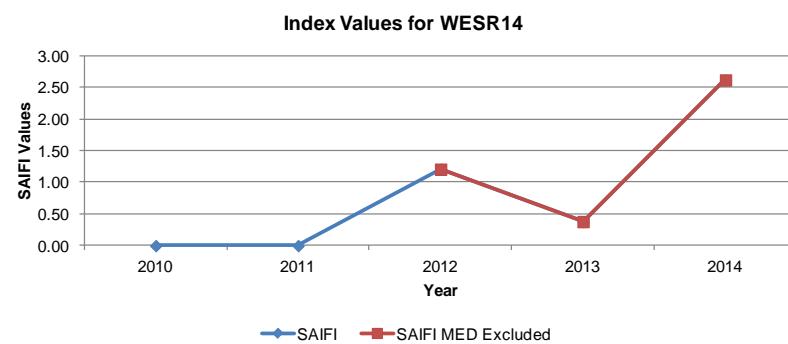
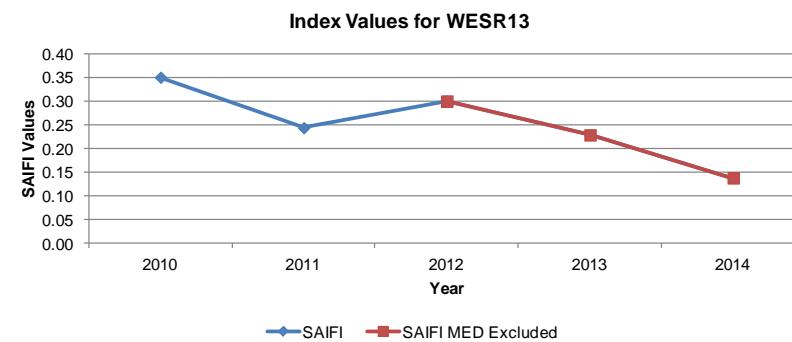
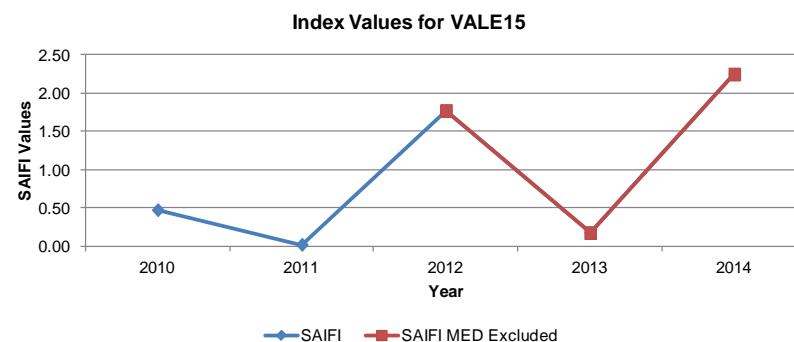




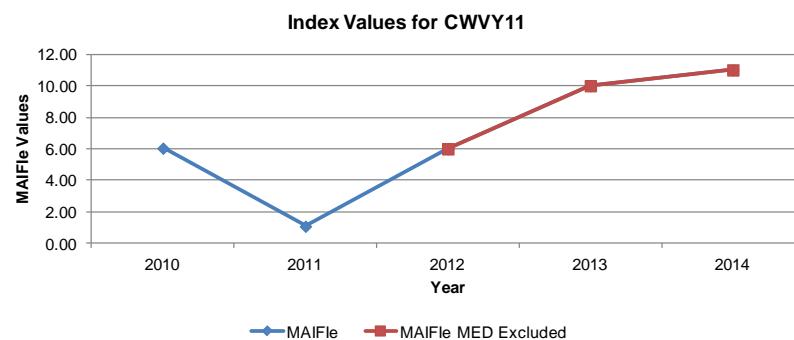
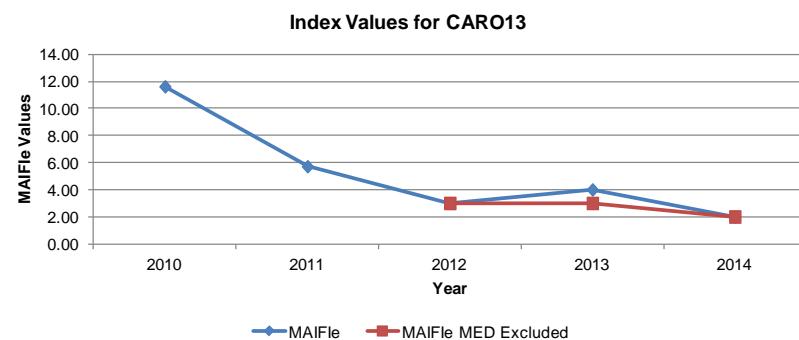
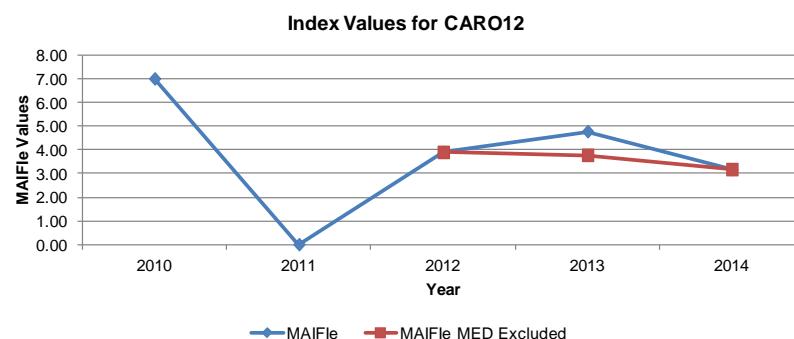
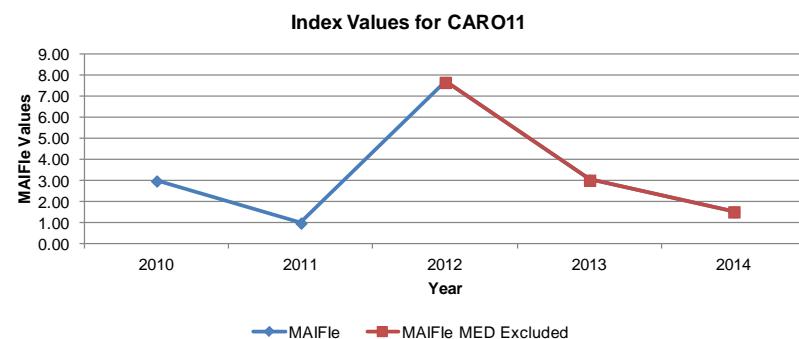
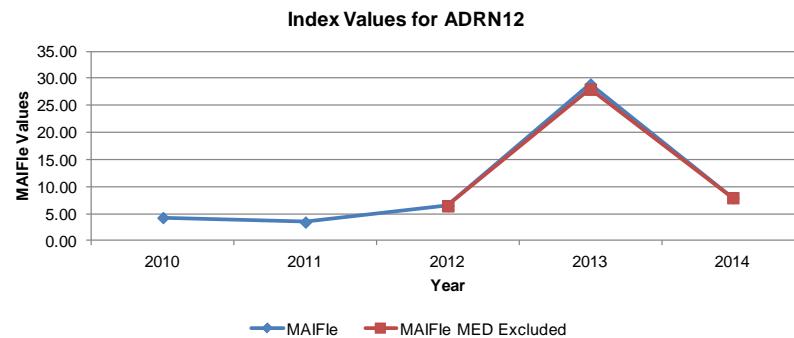
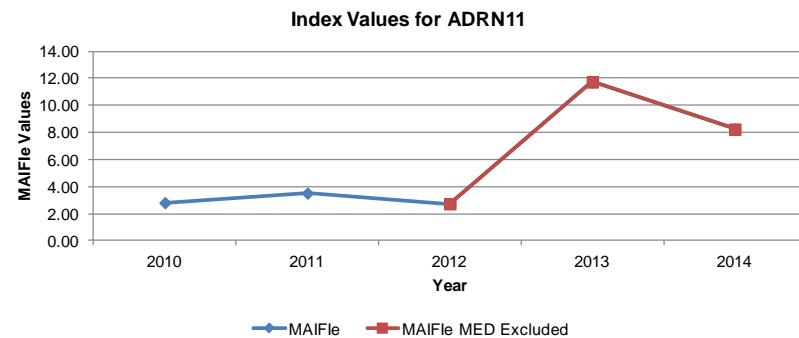


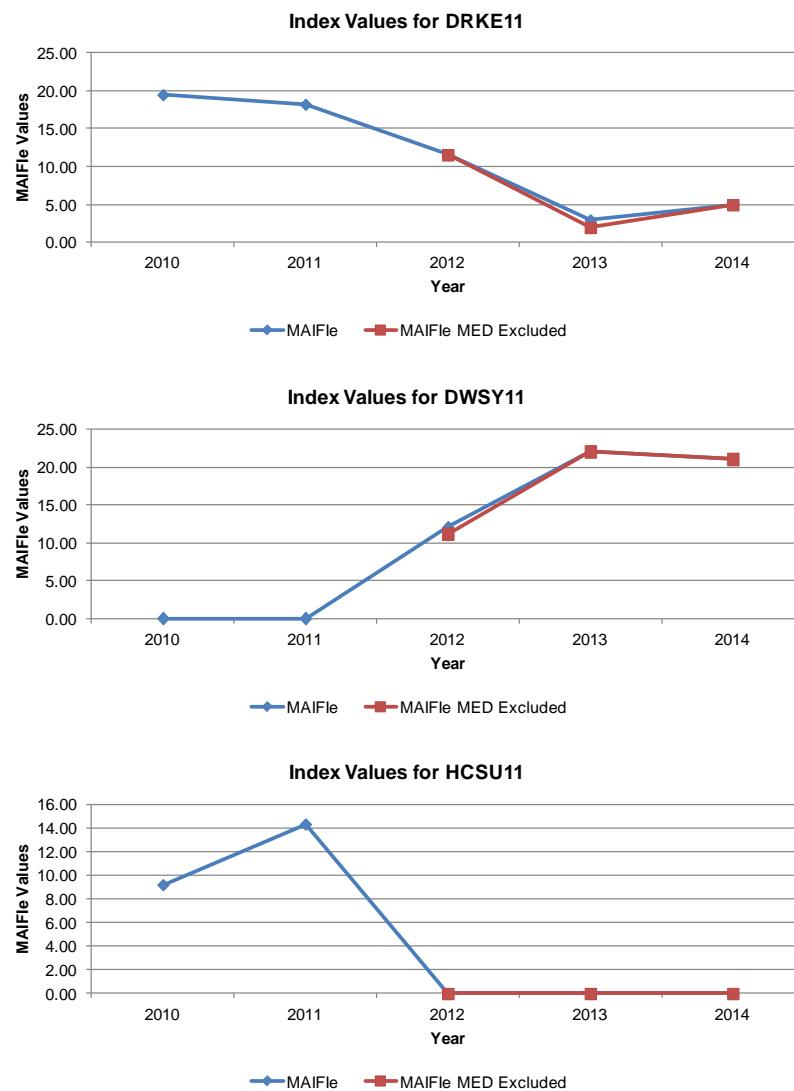
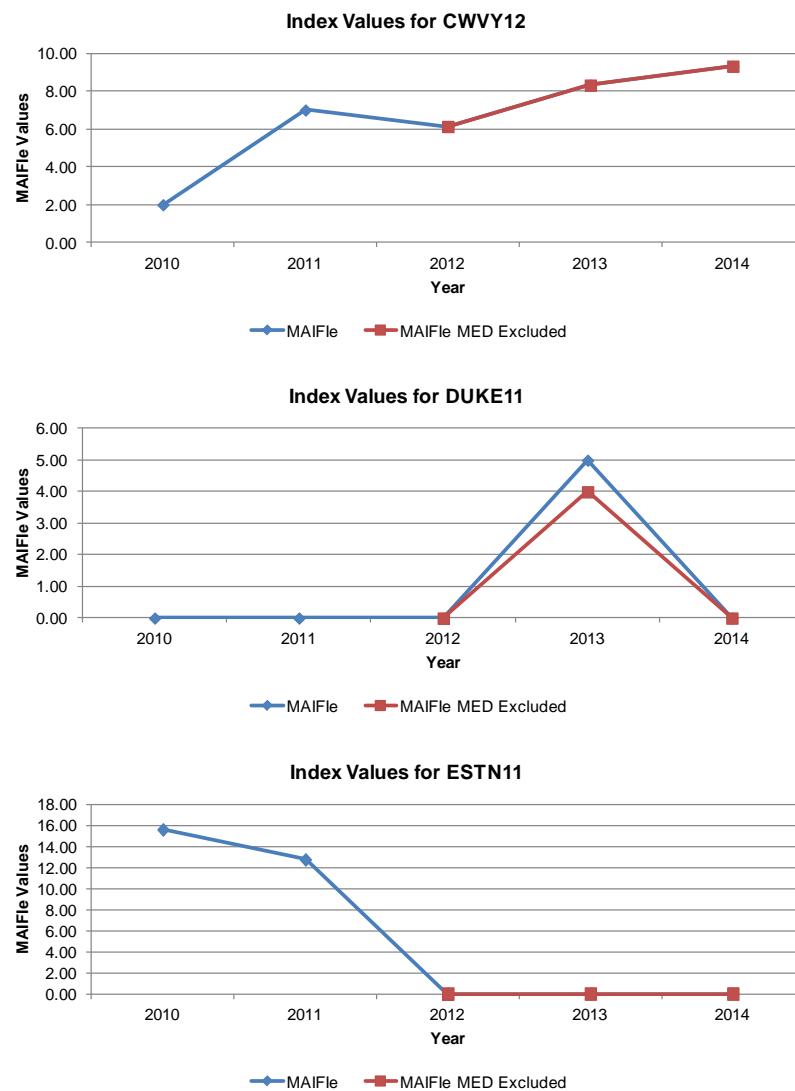


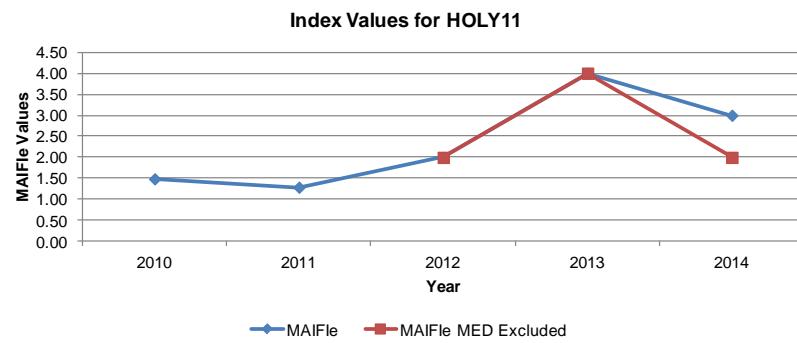
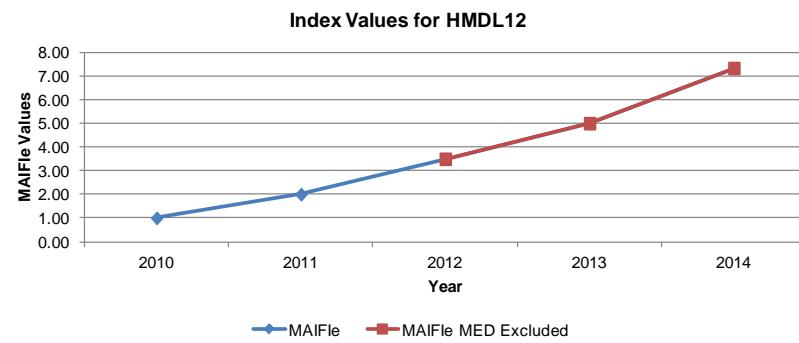
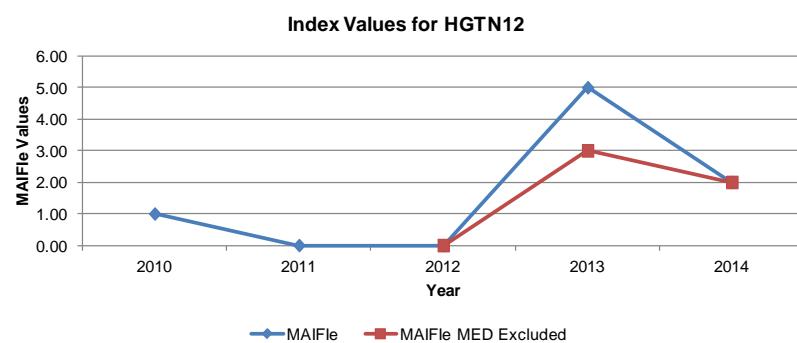
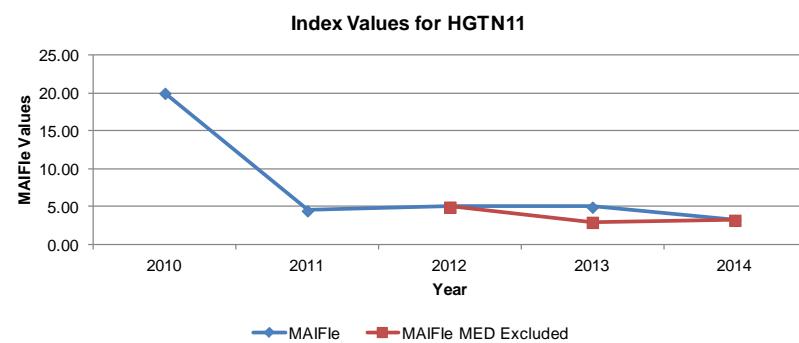
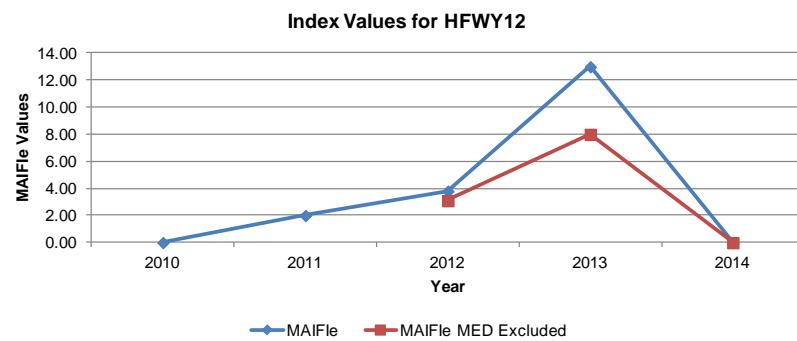
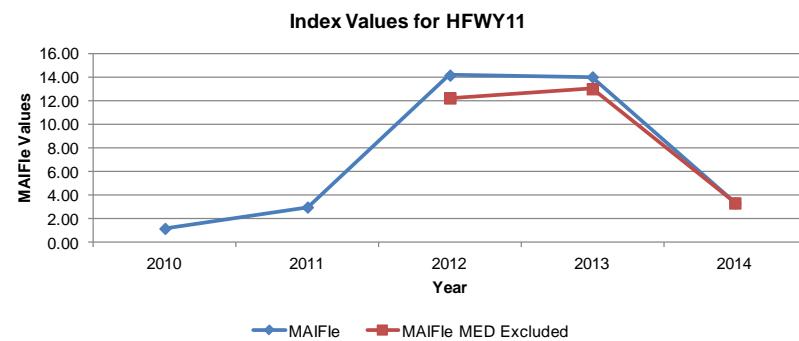


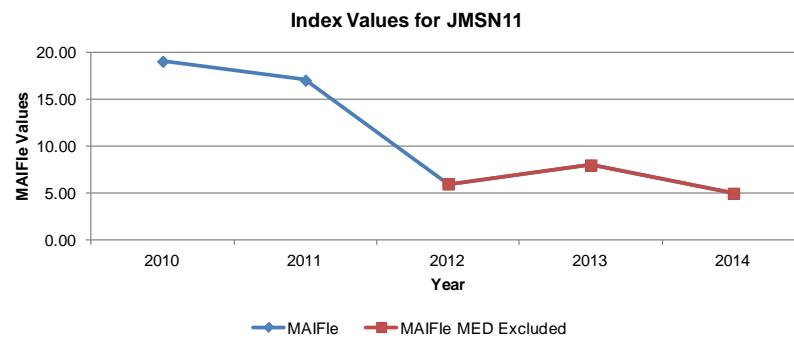
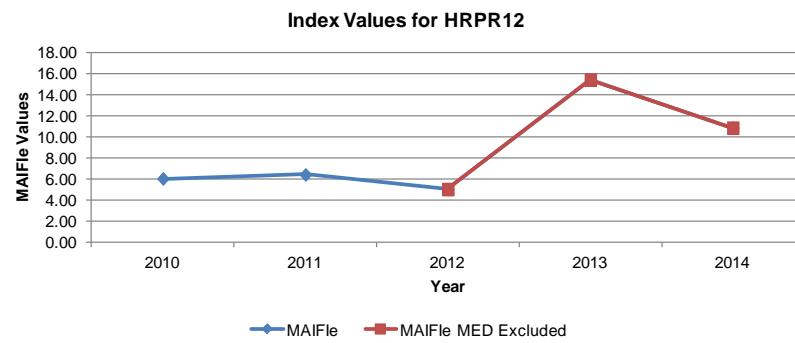
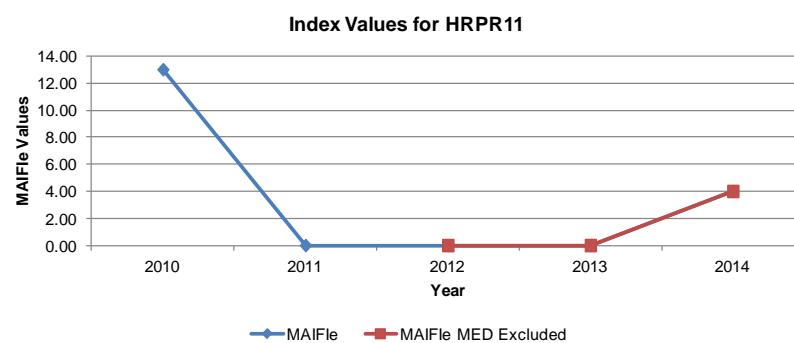
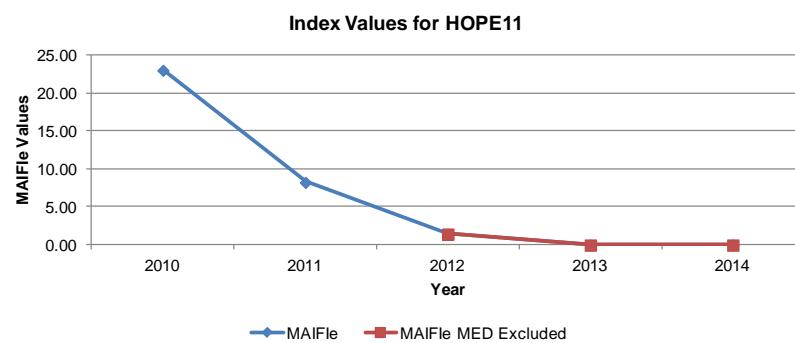
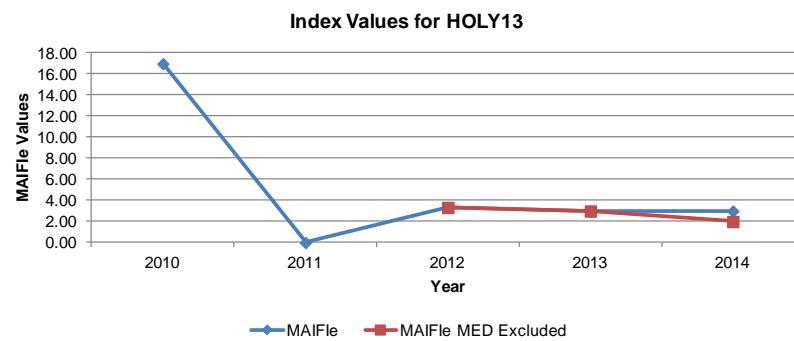
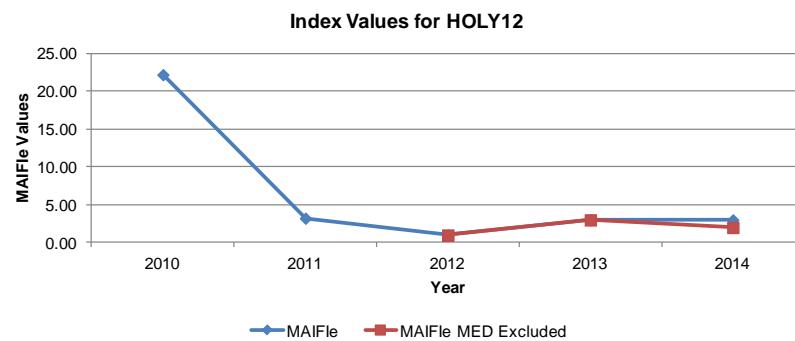


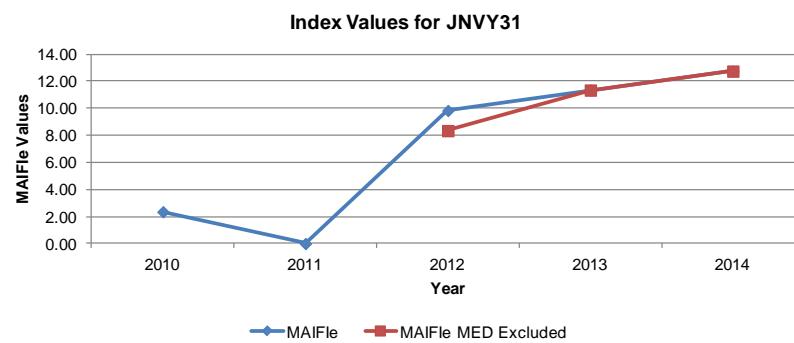
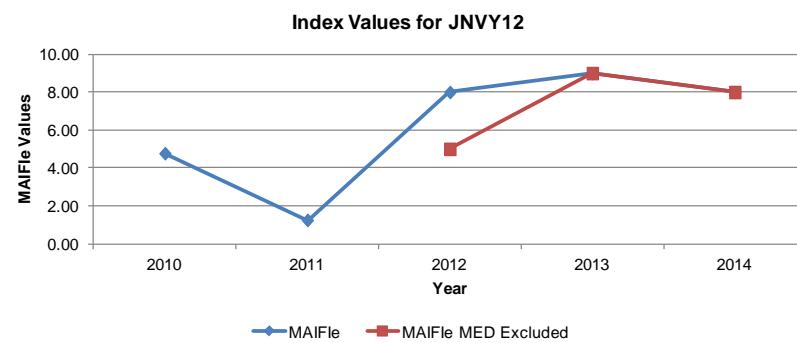
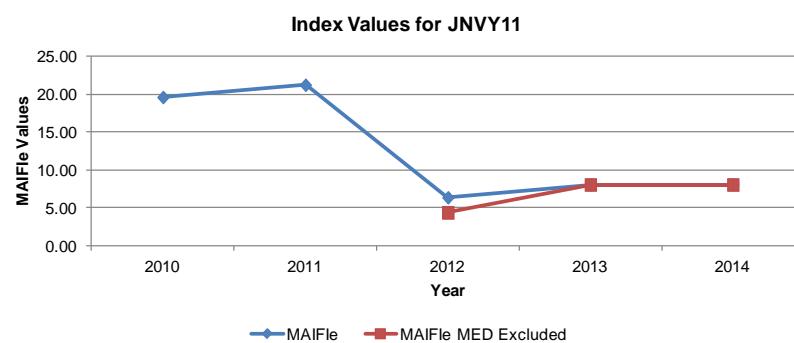
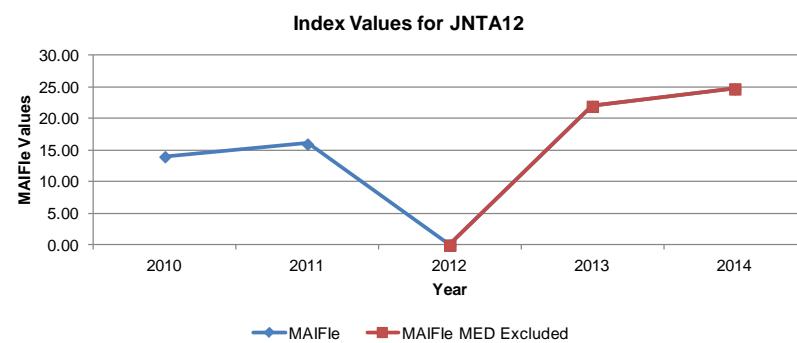
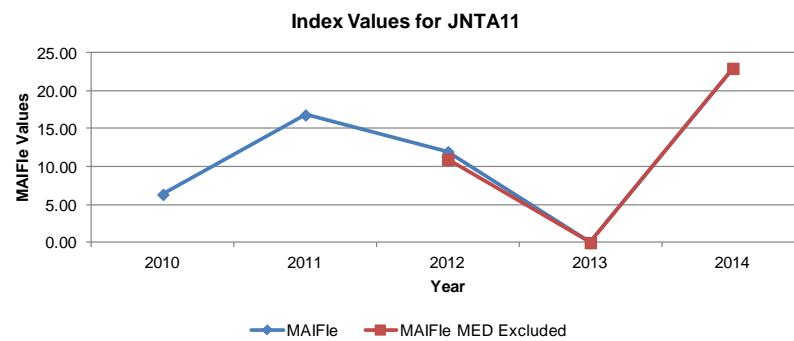
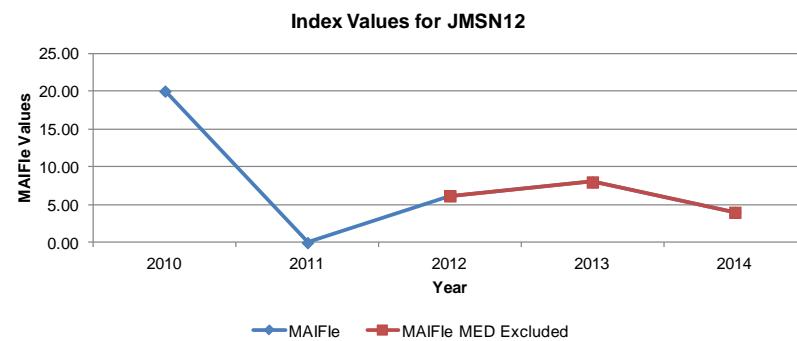
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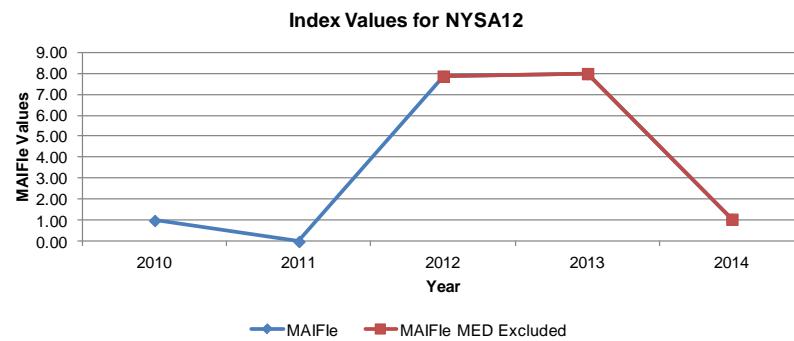
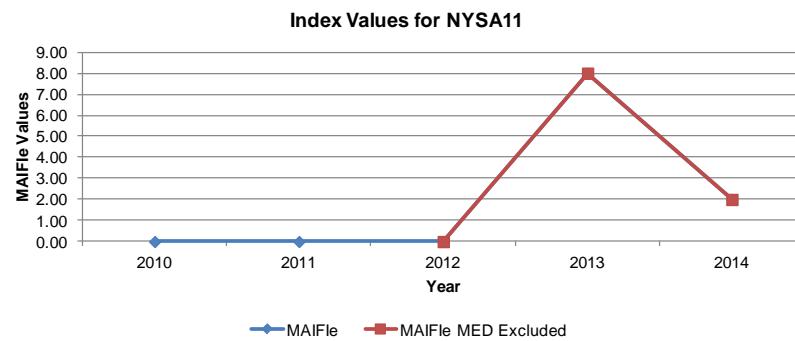
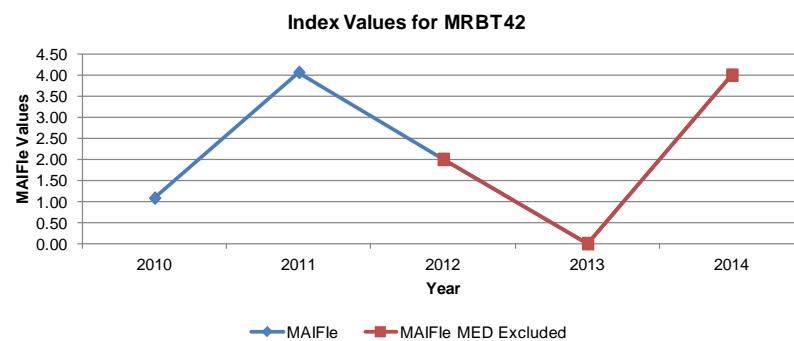
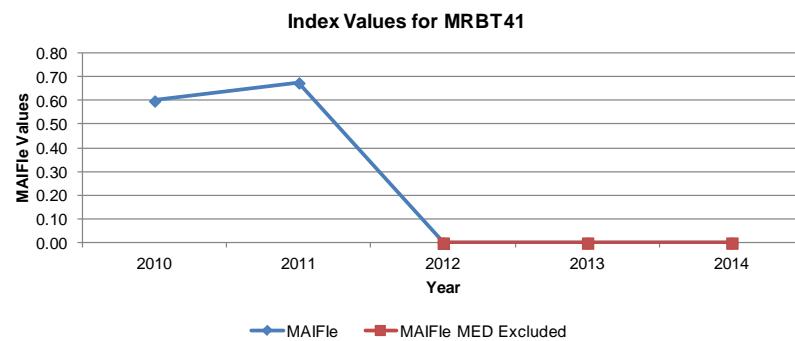
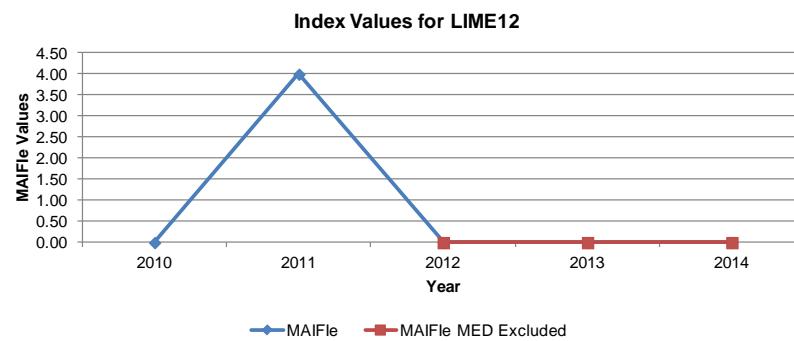
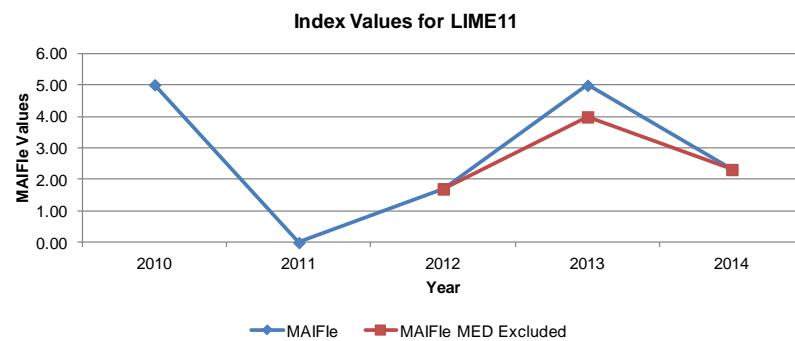


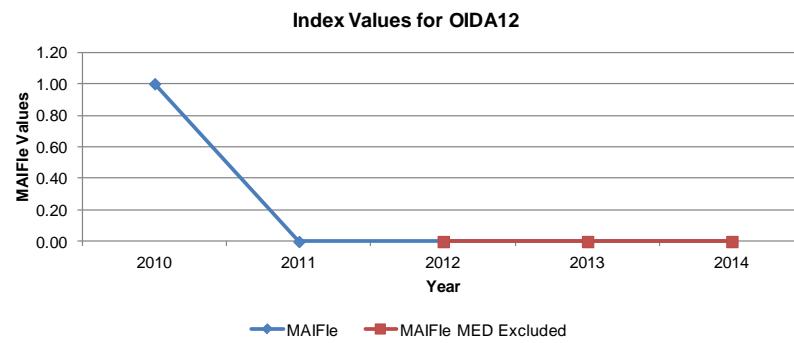
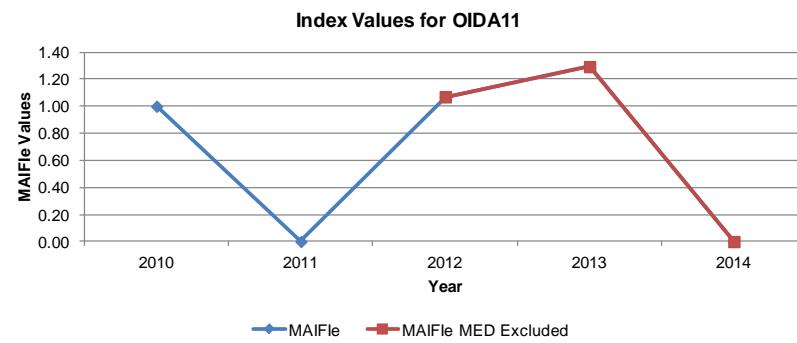
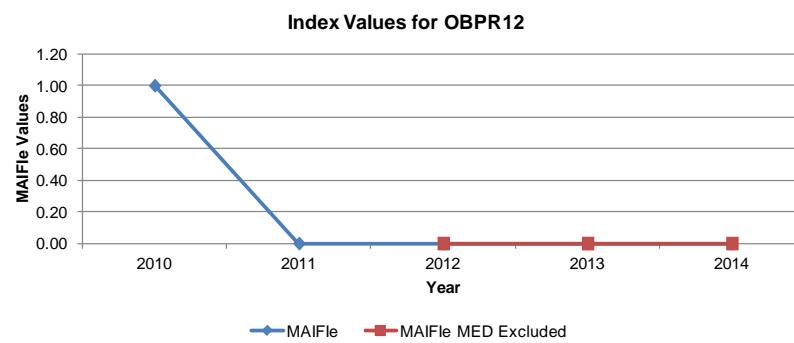
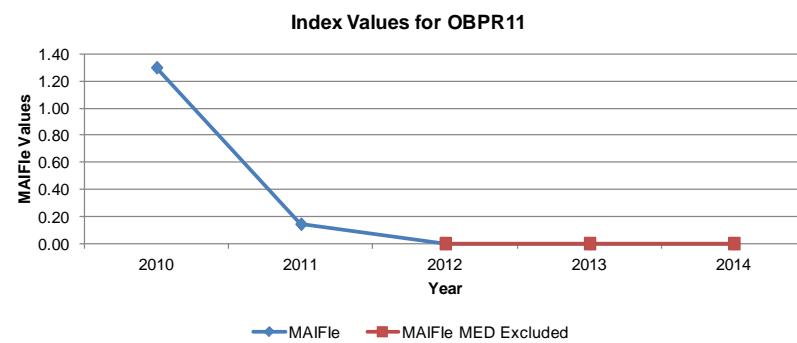
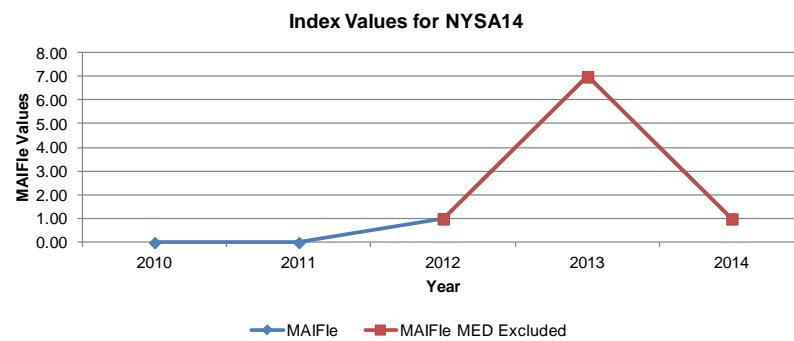
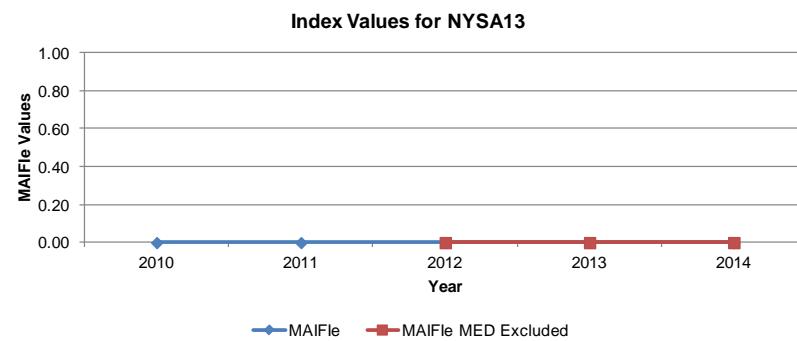


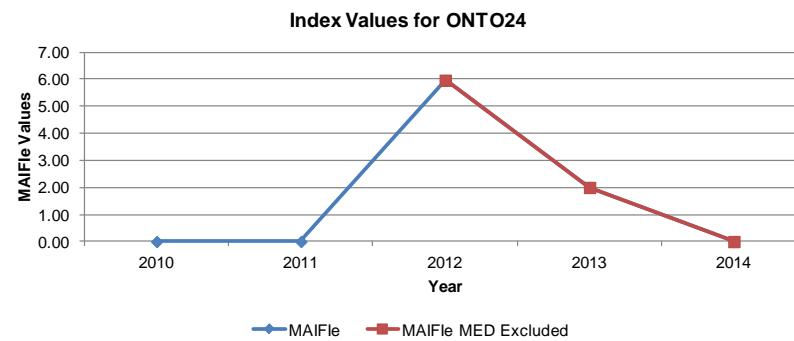
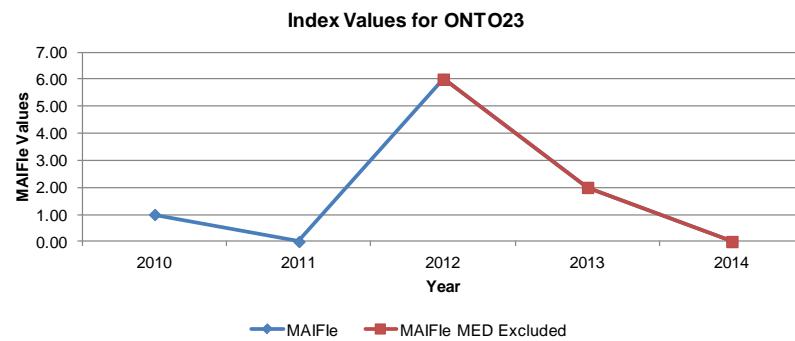
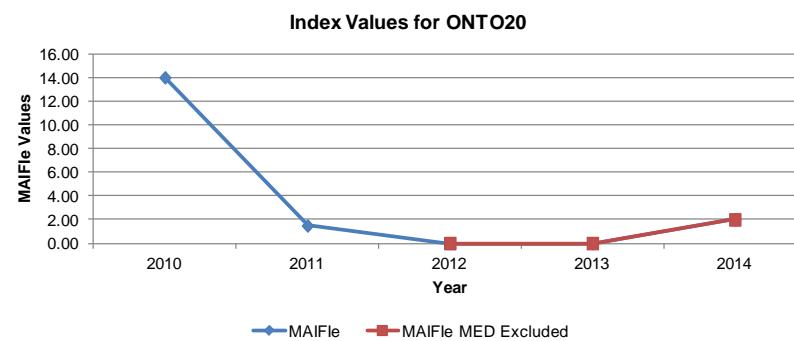
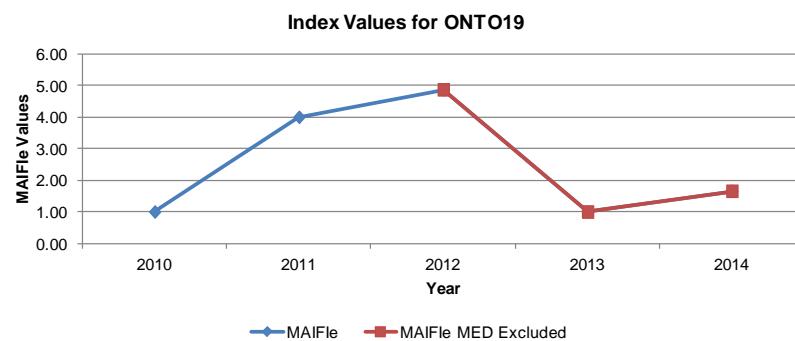
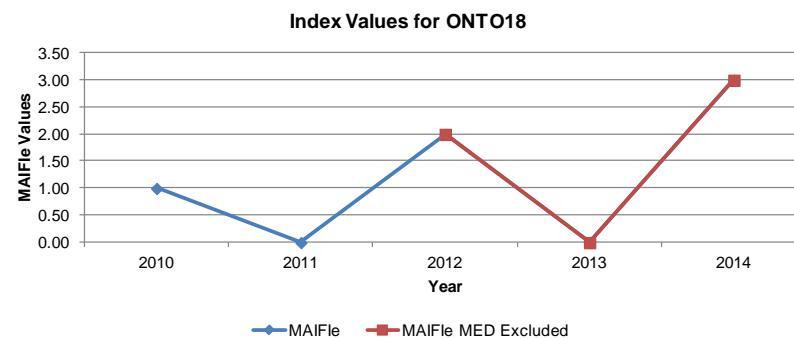
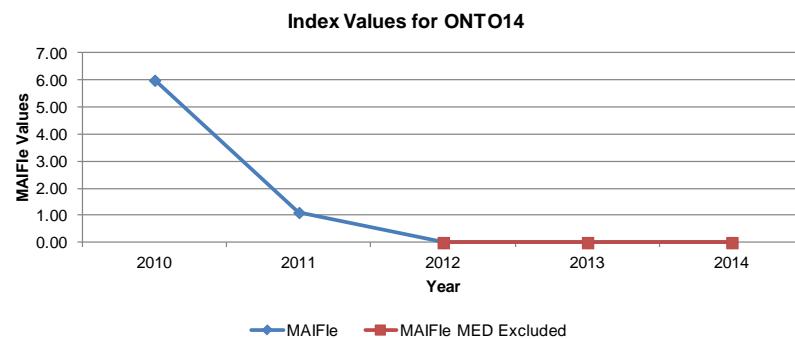


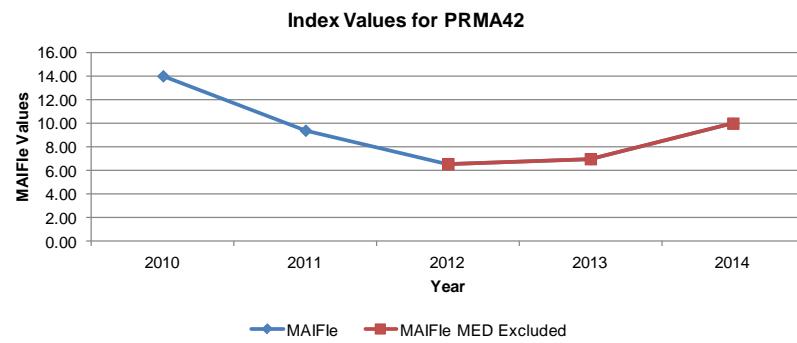
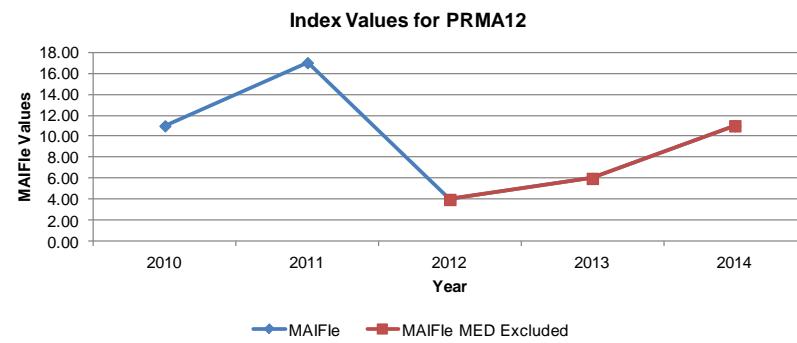
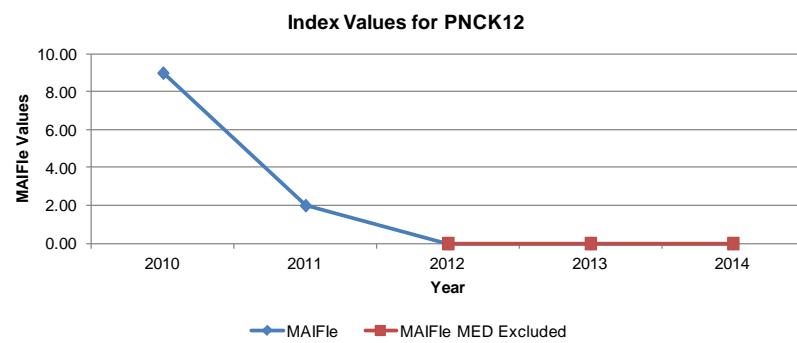
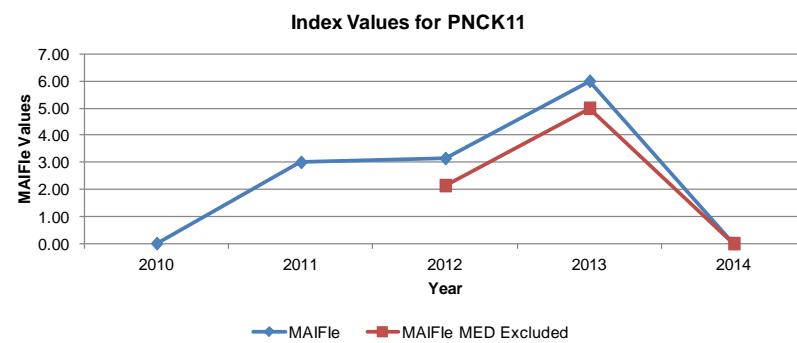
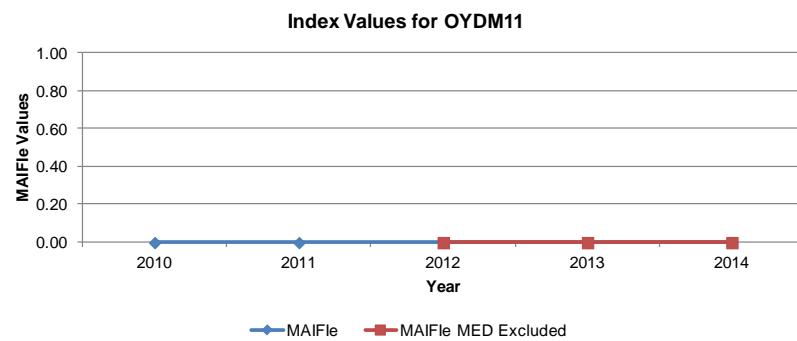
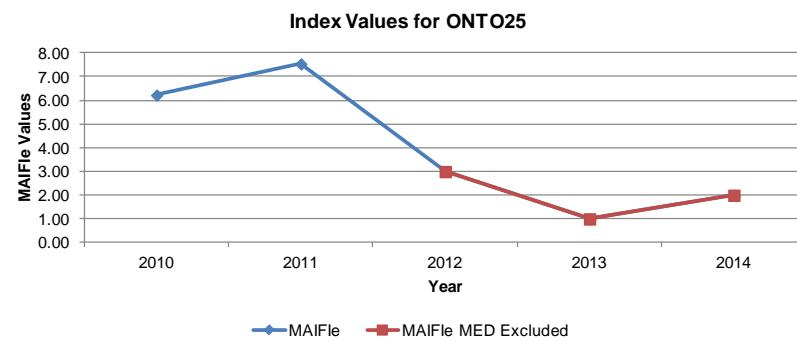


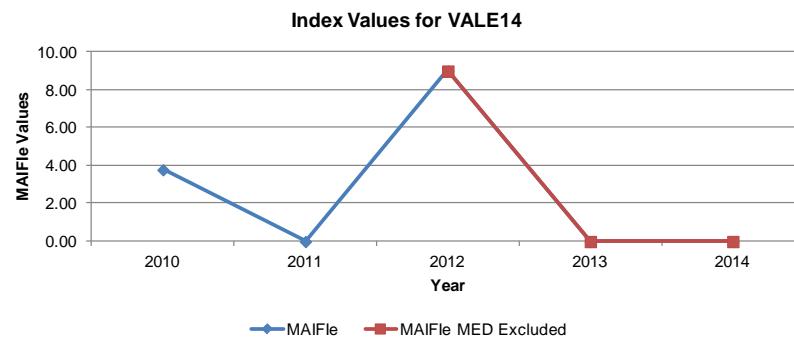
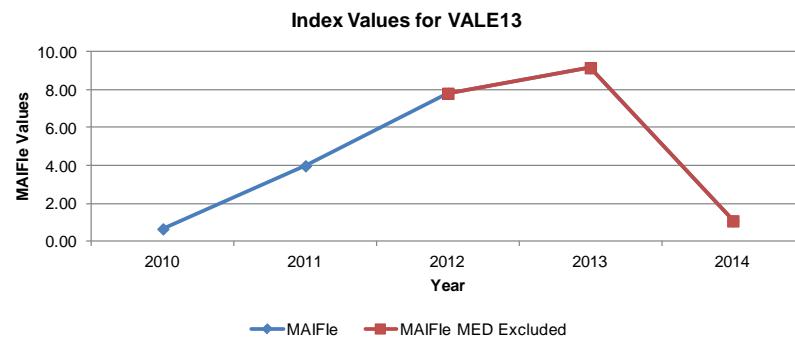
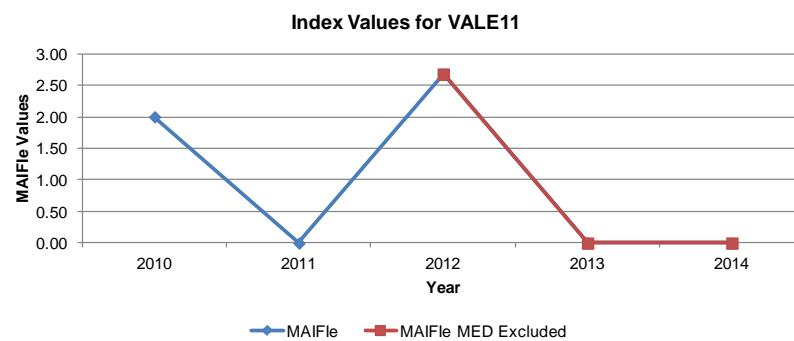
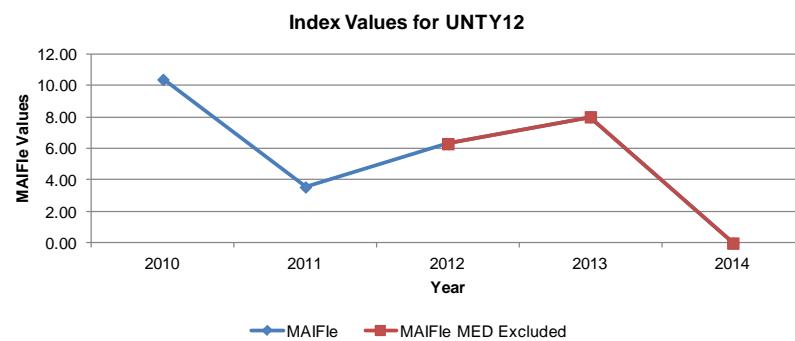
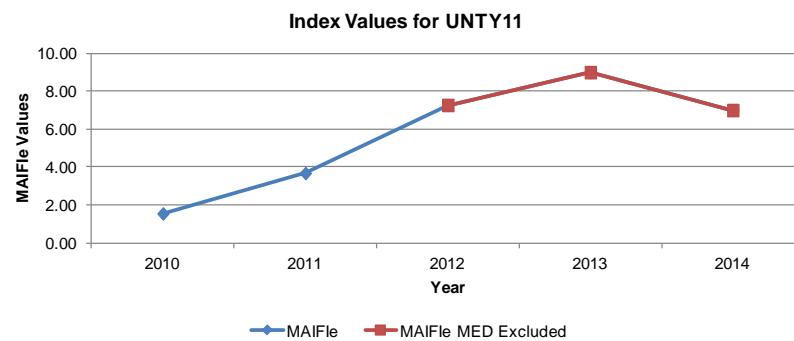
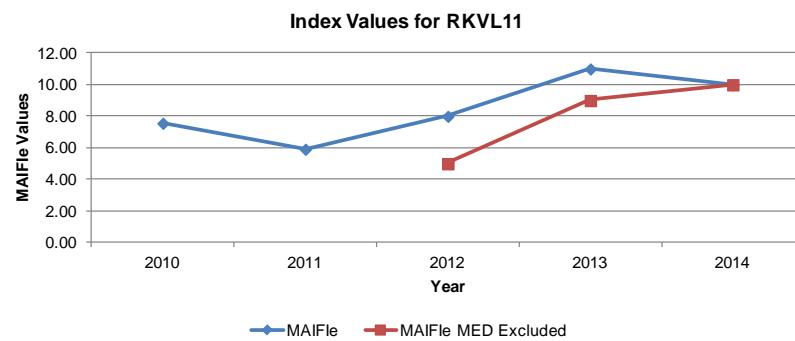


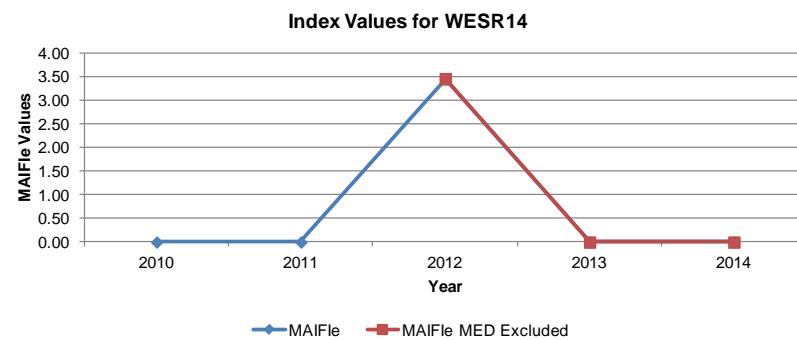
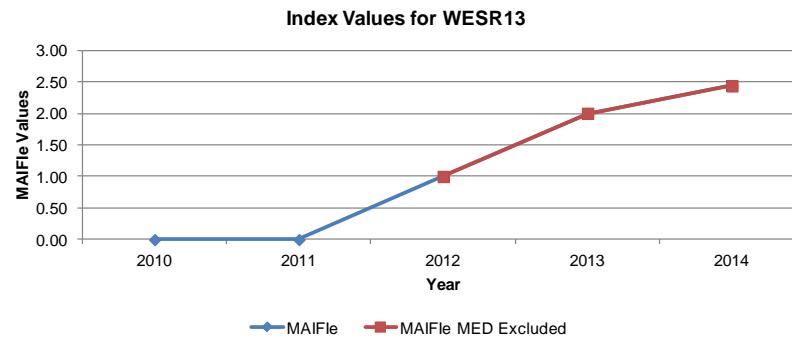
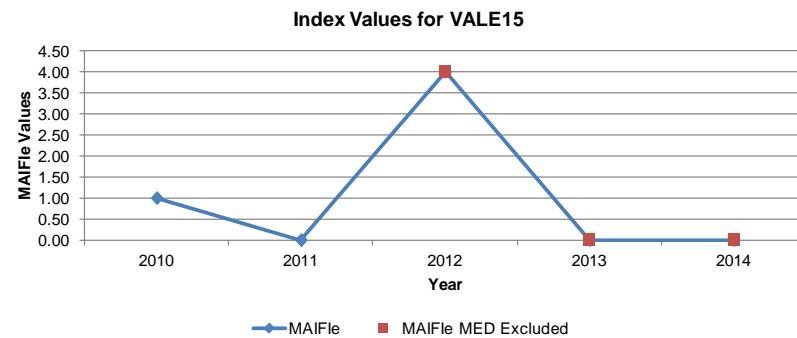












REFERENCE INFORMATION

Table 8

Customer count voltage station

Circuit	Substation	Kilovolts (kV)	Customers*
ADRN11	ADRN	12.5	365
ADRN12	ADRN	12.5	578
BACP	BACP	46 KV or Greater	1
BDPK11	BDPK	12.5	1
CARO11	CARO	12.5	1174
CARO12	CARO	12.5	93
CARO13	CARO	12.5	740
CWVY11	CWVY	12.5	45
CWVY12	CWVY	12.5	111
DRKE11	DRKE	12.5	166
DUKE11	DUKE	12.5	26
DWSY11	DWSY	12.5	173
ESTN11	ESTN	12.5	3
HCSU11	HCSU	12.5	2
HFWY11	HFWY	12.5	748
HFWY12	HFWY	12.5	531
HGTN11	HGTN	12.5	72
HGTN12	HGTN	12.5	292
HMDL12	HMDL	12.5	142
HOLY11	HOLY	12.5	176
HOLY12	HOLY	12.5	76
HOLY13	HOLY	12.5	169
HOPE11	HOPE	12.5	136
HRPR11	HRPR	12.5	96
HRPR12	HRPR	12.5	178
JMSN11	JMSN	12.5	394
JMSN12	JMSN	12.5	228
JNDY	JNDY	46 KV or Greater	2
JNTA11	JNTA	12.5	66
JNTA12	JNTA	12.5	43
JNVY11	JNVY	12.5	87
JNVY12	JNVY	12.5	83
JNVY31	JNVY	24	332
LIME11	LIME	12.5	107

Table 8 (continued)

Circuit	Substation	Kilovolts (kV)	Customers
MRBT41	MRBT	34.5	28
MRBT42	MRBT	34.5	8
NHTS	NHTS	46 KV or Greater	2
NPSS	NPSS	46 KV or Greater	1
NYSA11	NYSA	12.5	842
NYSA12	NYSA	12.5	547
NYSA13	NYSA	12.5	433
NYSA14	NYSA	12.5	244
OBPR11	OBPR	12.5	1
OIDA11	OIDA	12.5	608
OIDA12	OIDA	12.5	1
ONTO14	ONTO	12.5	34
ONTO18	ONTO	12.5	842
ONTO19	ONTO	12.5	1771
ONTO20	ONTO	12.5	1202
ONTO23	ONTO	24	44
ONTO24	ONTO	24	670
ONTO25	ONTO	24	493
OYDM11	OYDM	12.5	16
PNCK11	PNCK	12.5	97
PNCK12	PNCK	12.5	2
PRMA12	PRMA	12.5	3
PRMA42	PRMA	34.5	176
RKVL11	RKVL	12.5	28
UNTY11	UNTY	12.5	141
UNTY12	UNTY	12.5	216
VALE11	VALE	12.5	1030
VALE13	VALE	12.5	547
VALE14	VALE	12.5	340
VALE15	VALE	12.5	451
WESR13	WESR	12.5	186
WESR14	WESR	12.5	31
Total			18,471

* The customer counts represented here are not meant to match those represented on the various other charts/data as a different source was used in order to establish voltage.

Table 9

Five years of line/trench miles data

Year	Overhead (OH) Pole Miles	Underground (UG) Trench Miles	Distribution All Trench Miles	Transmission Line (Structure/Pole) Miles	Customer Counts
2014	2,116.10	95.45	2,211.55	692.49	18,413
2013	2,113.57	93.30	2,206.88	693.65	18,349
2012	2,112.38	92.65	2,205.03	686.66	18,296
2011	2,112.82	87.77	2,200.59	685.22	19,394
2010	2,114.69	92.13	2,206.82	675.12	19,447

Transmission line miles include some lines that do not directly serve customer load.

MED SUMMARY

2014 MEDs

Table 10
2014 MED feeder data summary

Date	Feeder	Customers	Customer Minutes Out	Customer Interruptions	SAIDI (Minutes)	SAIFI	CAIDI (Minutes)
9/26/2014	LIME11	109	39,977.57	109	366.77	1.00	366.77
	HGTN11	72	46,053.60	72	639.63	1.00	639.63
	HGTN12	294	188,052.20	294	639.63	1.00	639.63

Table 11
2014 MED system summary

Date	Cause	Customers	Customer Minutes Out	Customer Interruptions	SAIDI (Minutes)	SAIFI	CAIDI (Minutes)
9/26/2014	Lightning-Caused Structure Fire	18,470	274,083	475	14.84	0.03	577.02

Five Years MEDs

	2010	2011	2012	2013	2014
MEDs	NA	NA	2	5	1

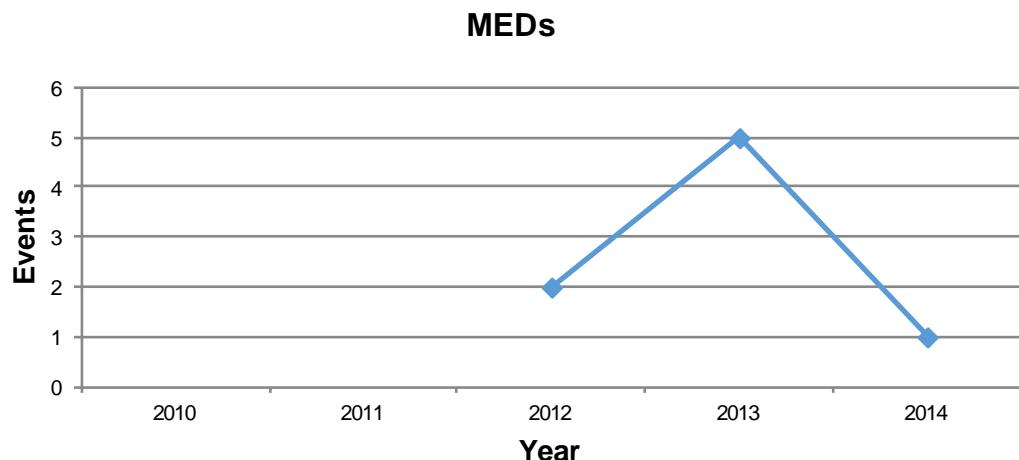
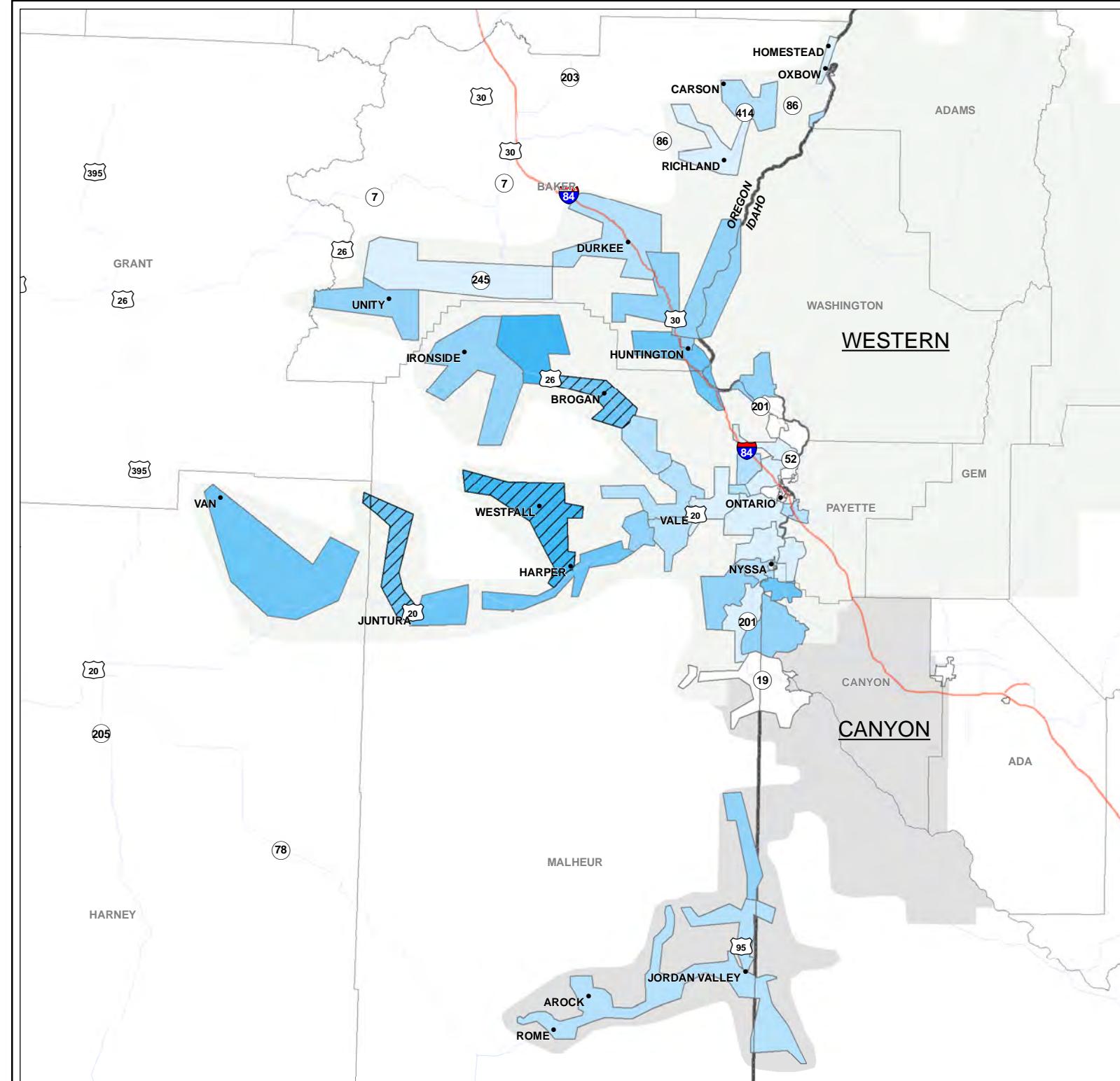
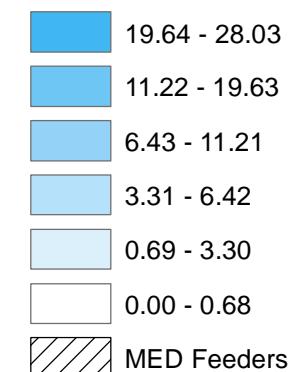


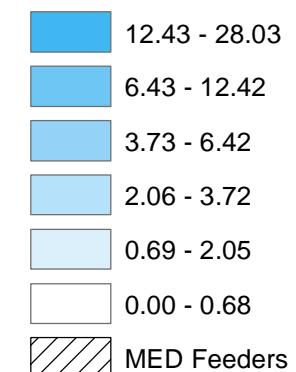
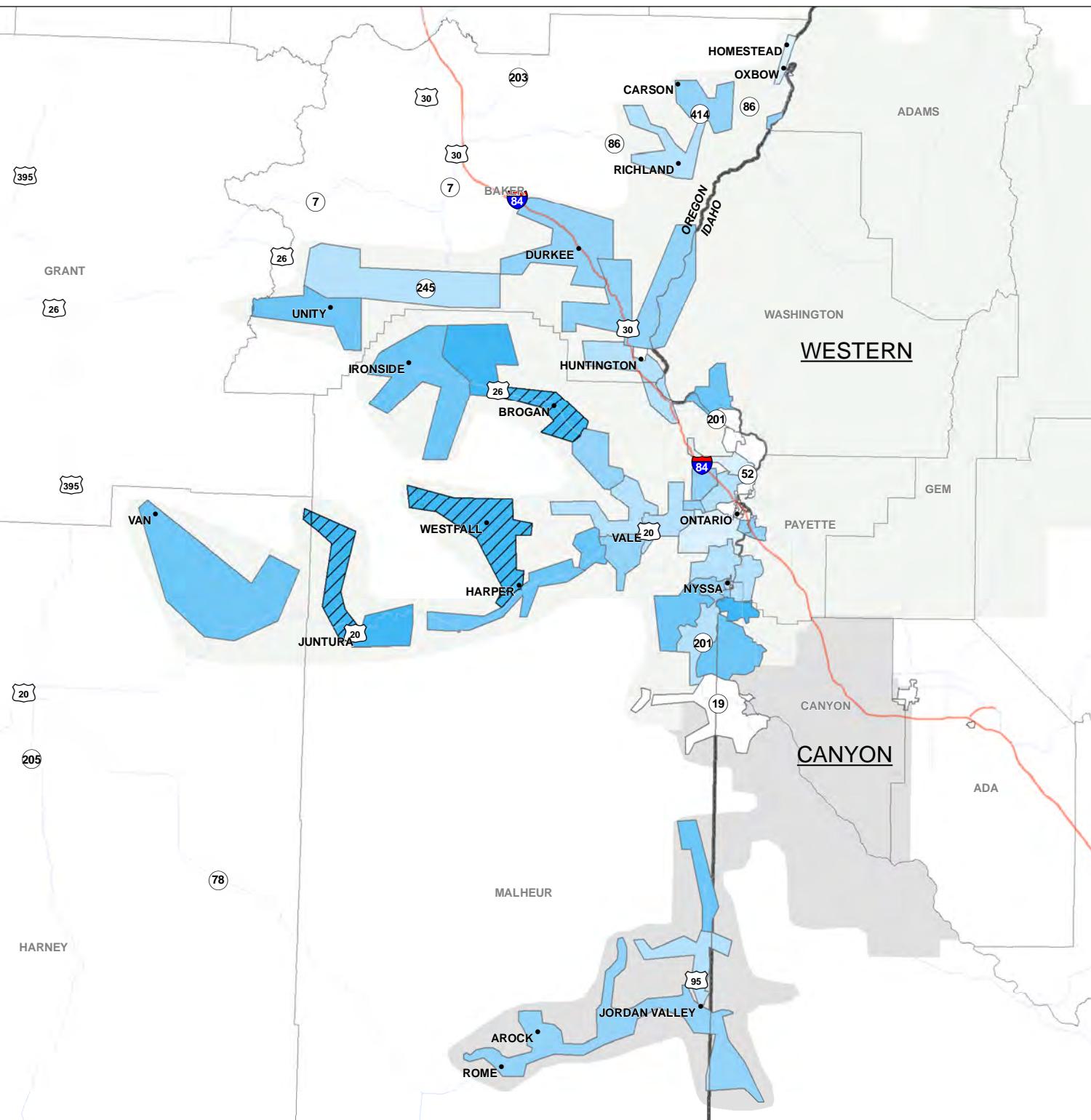
Figure 9
Five Years of MEDs

**2014 SAIDI
With MED
OREGON AREA**



3/30/2015

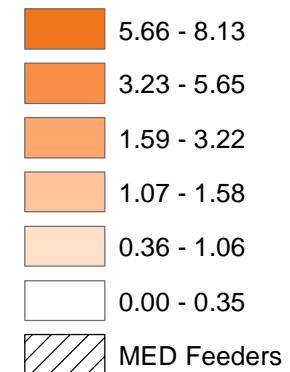
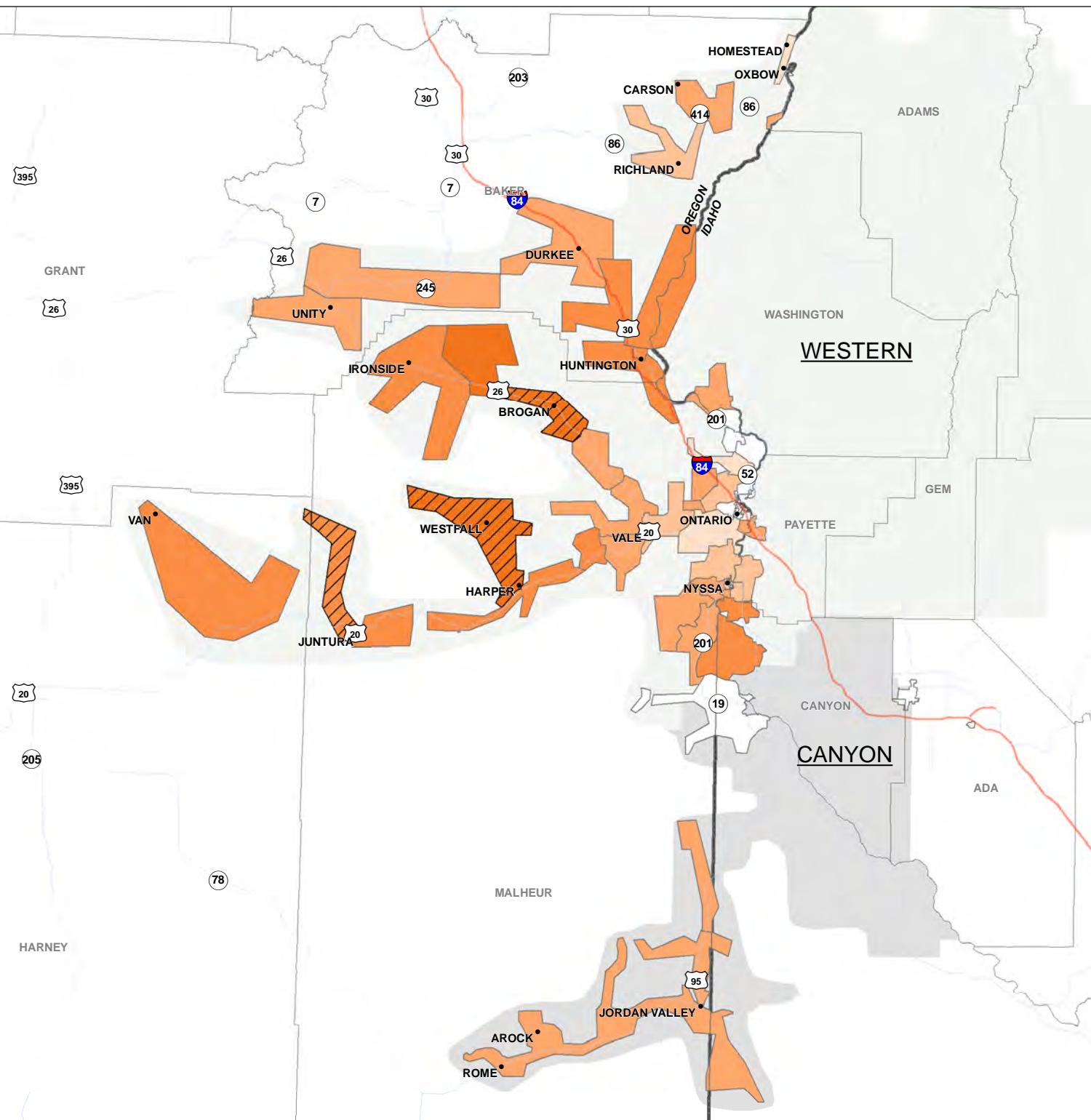
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OREGON AREA**



0 12.5 25
Miles

3/30/2015

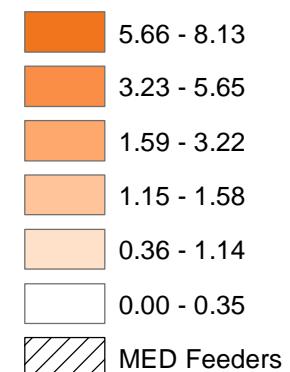
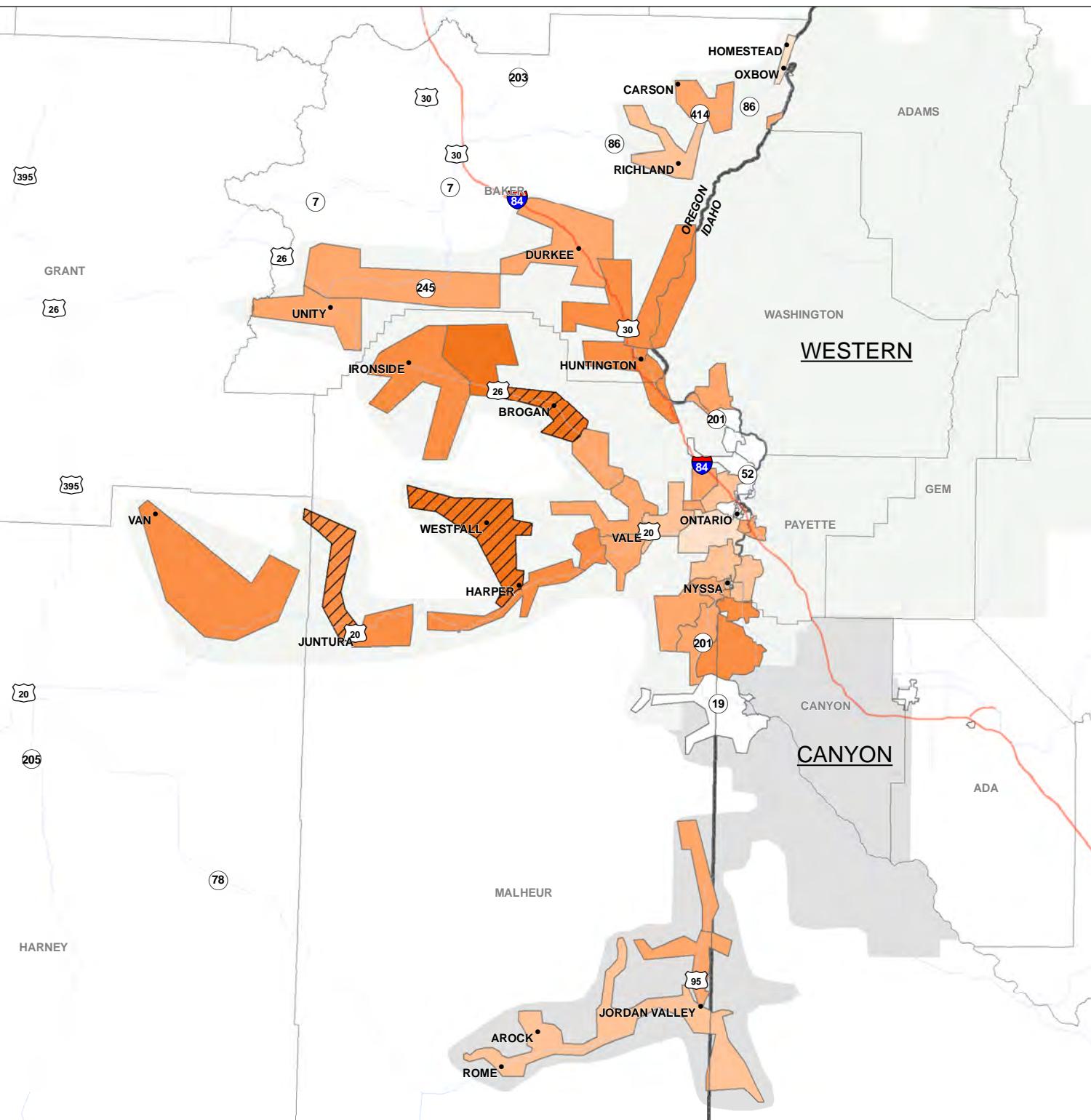
**2014 SAIFI
With MED
OREGON AREA**



0 12.5 25
Miles

3/30/2015

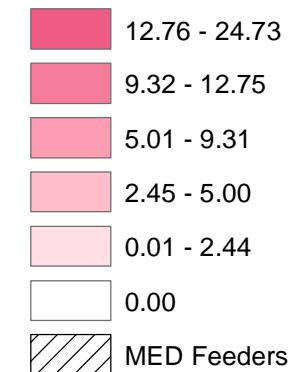
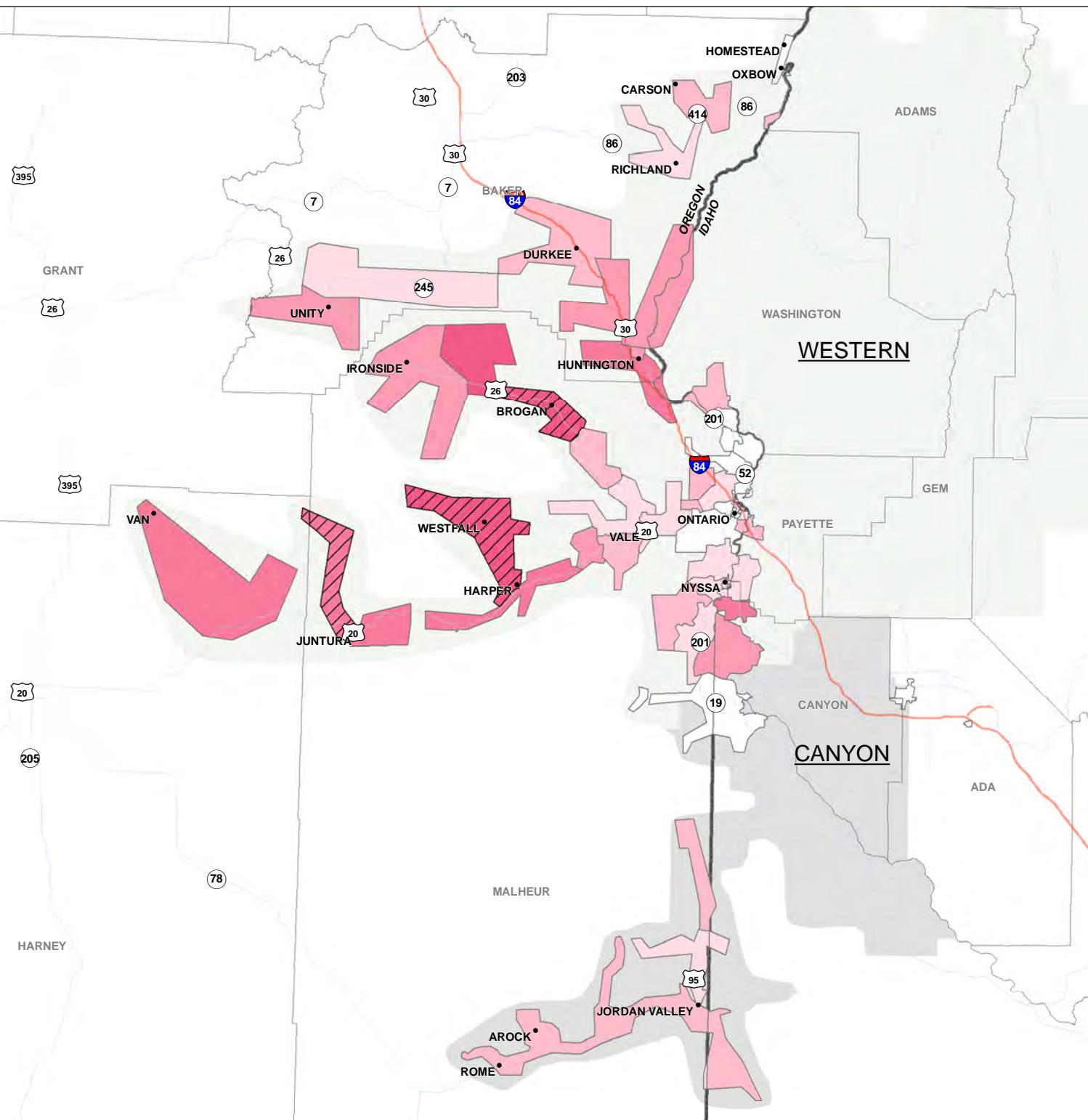
**2014 SAIFI
MED Excluded
OREGON AREA**



0 12.5 25
Miles

3/30/2015

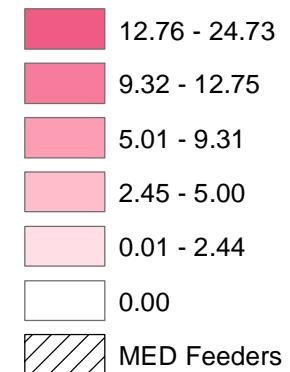
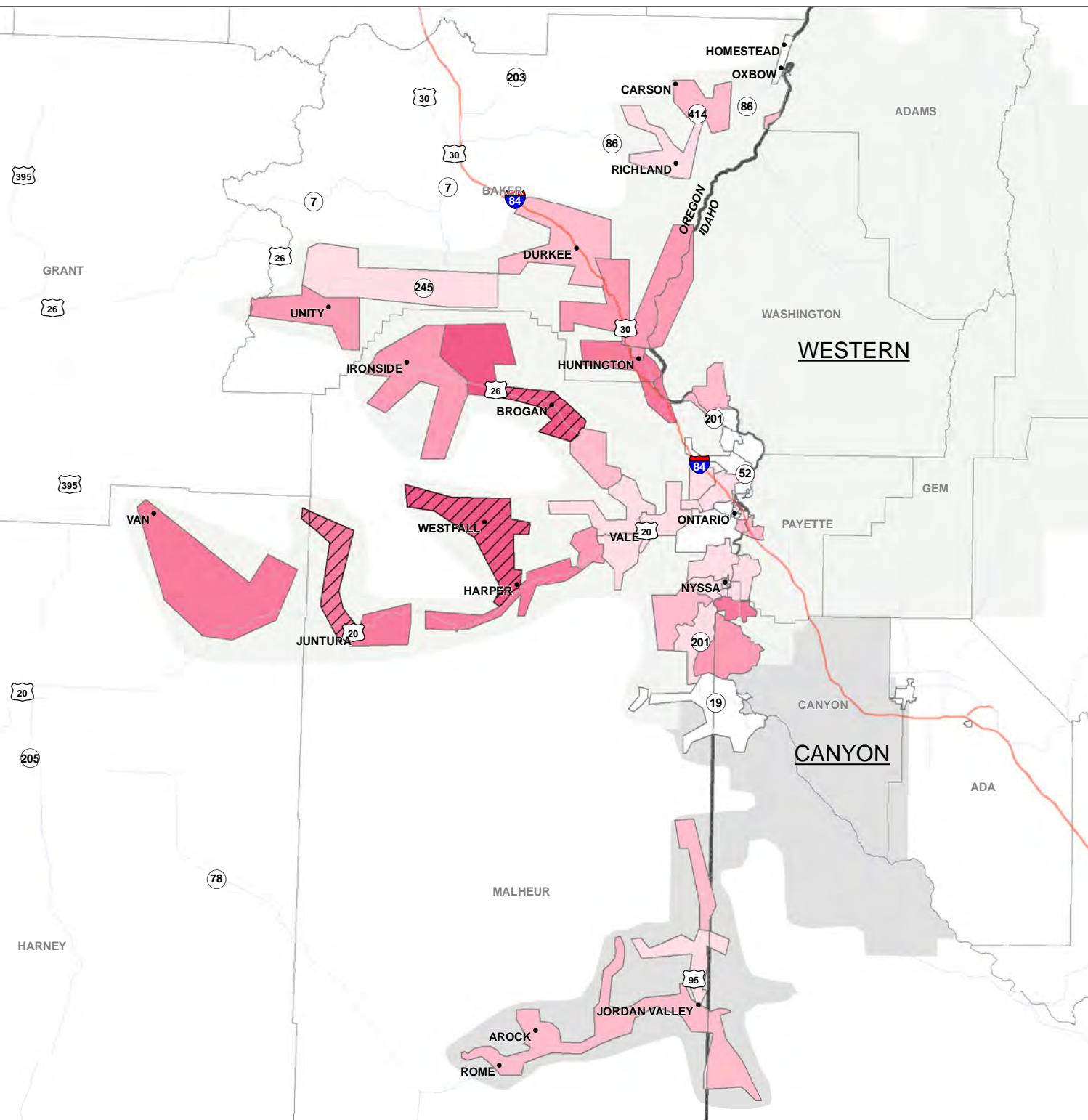
**2014 MAIFIe
With MED
OREGON AREA**



0 12.5 25
Miles

3/30/2015

**2014 MAIFIe
MED Excluded
OREGON AREA**



0 12.5 25
Miles

3/30/2015