Traffic Operations Performance Management Webinar, 12.16.13

Peer Agency Best Practices:
RTC-FAST, Las Vegas

RTC
rtcsnv.com
PLANNING & ENGINEERING
WORK ZONE
SPEED
FAST
RAINBOW
I5/CRAIG
I5/FLAMINGO
7
7
7

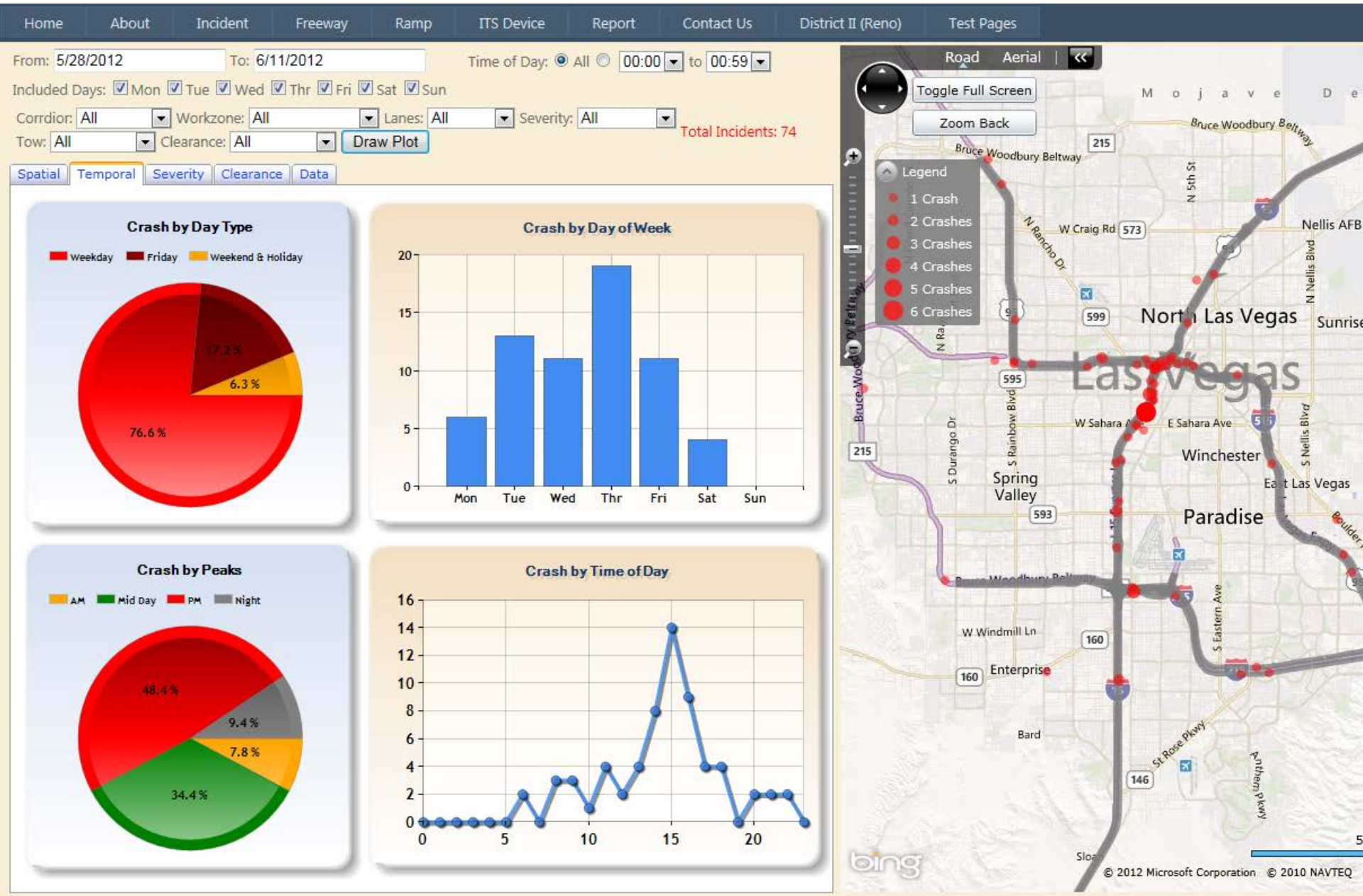
Who we are
Keys to success
Data sets and trends
Synthesis of data

Who we are: Regional Collaboration

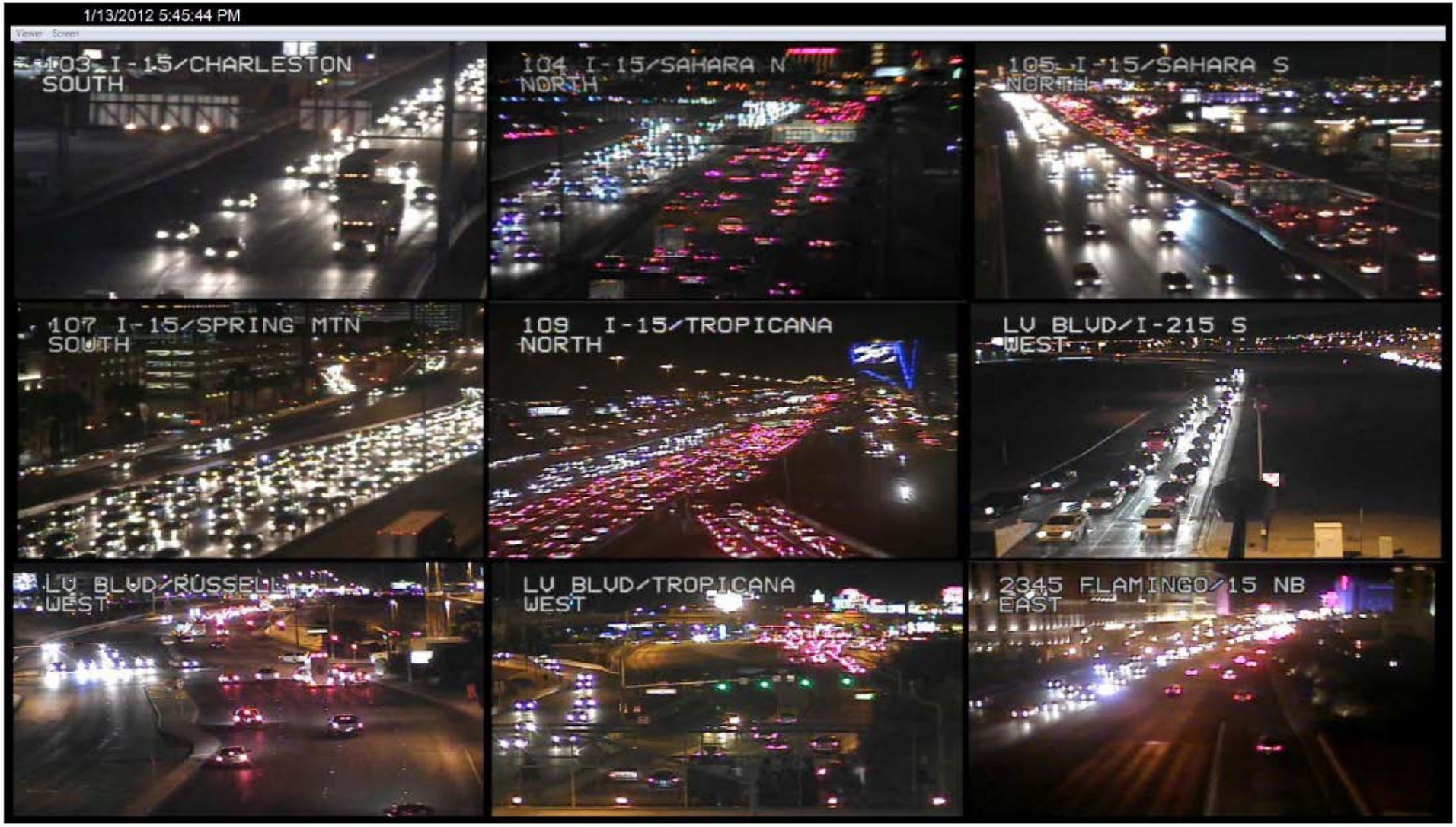
Keys to Success: ITS infrastructure

Keys: Taking care of the infrastructure

Keys: Evaluation tools

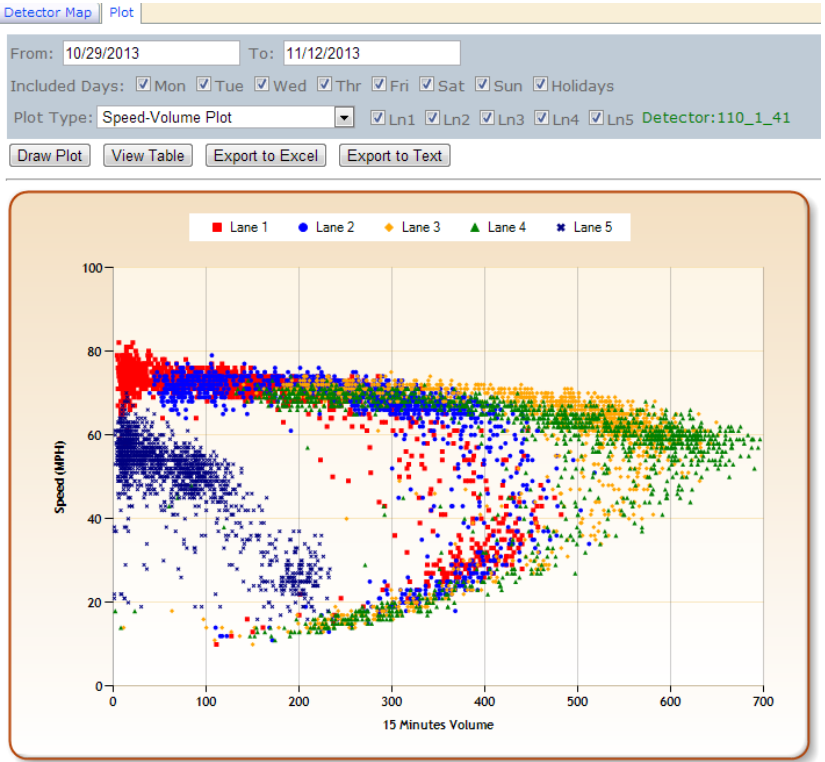


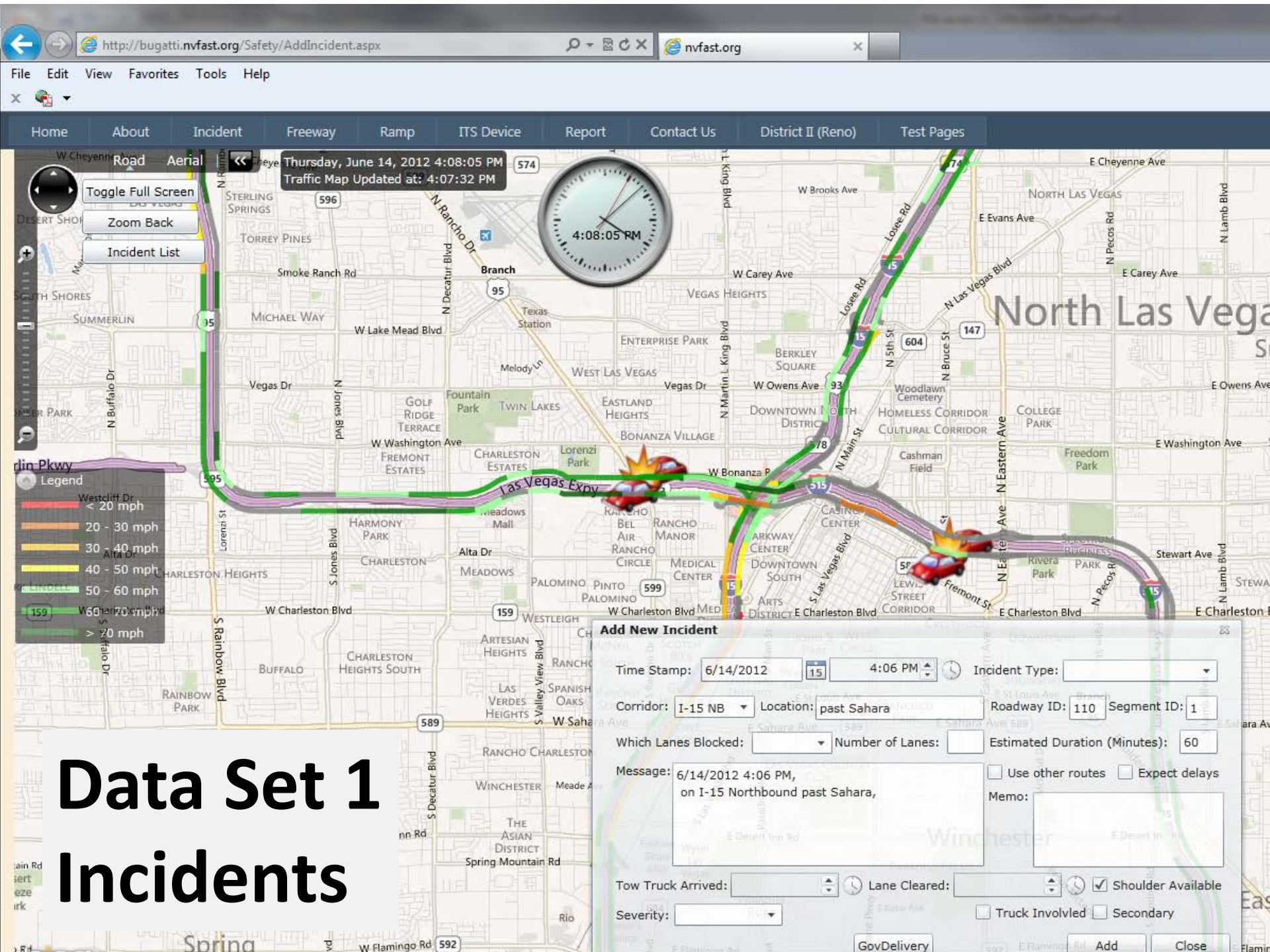
Keys: System-wide view



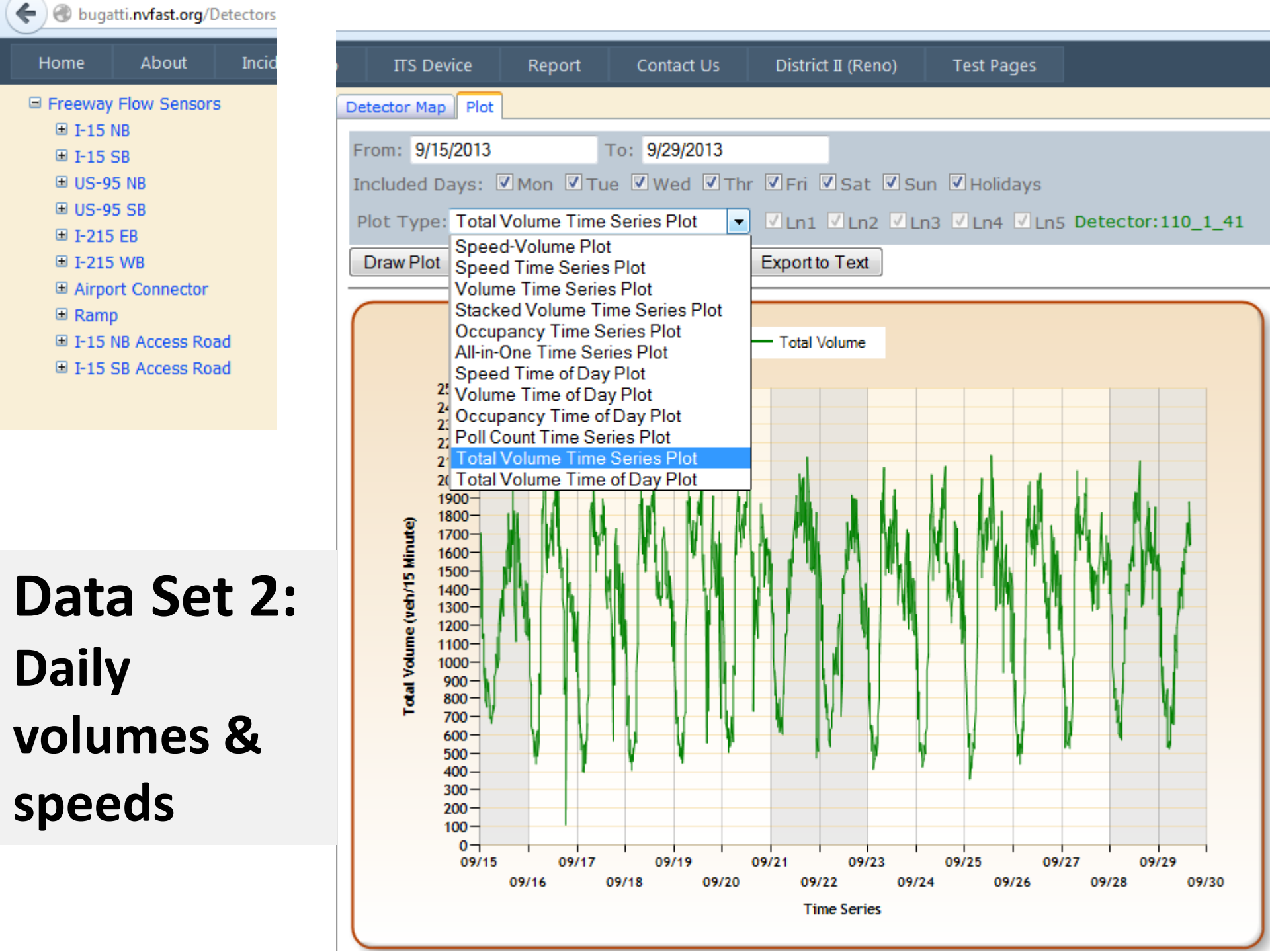
Four data sets:

incidents, travel times, daily average speed & volume, congestion





Data Set 1 Incidents



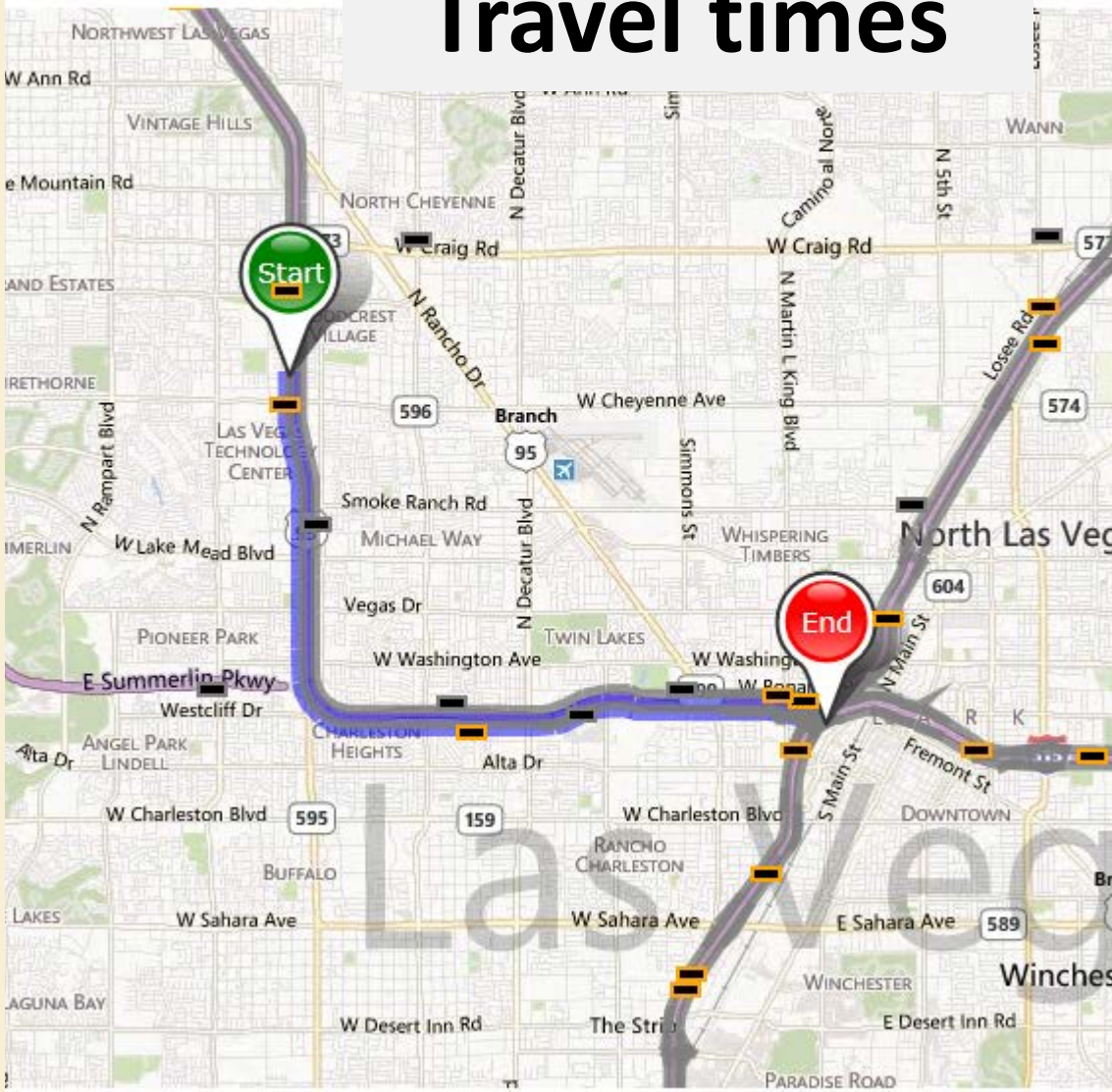
Data Set 2: Daily volumes & speeds

Data Set 3: Travel times

bugatti.nvfast.org/DMSTravelTimes.aspx

Home | About | Incident | Freeway | Ramp

- DMS#34 (US 95 NB JONES)
- DMS#35 (US 95 SB JONES)
- DMS#36 (US 95 NB @ SMOKE RANCH)
- DMS#37 (US-95 SB, South of Cheyenne)
  - DECATUR (5 miles)
  - I-15 (7.8 miles)
  - 15/SAHARA (9.5 miles)
- DMS#38 (US 95 SB @ ALEXANDER)
- DMS#39 (US 95 SB @ TROPICAL)
  - RAINBOW (6.7 miles)
  - I-15 (11.7 miles)
  - BOULDER HWY (17.4 miles)
- DMS#40 (US-95 at Search Light)
- DMS#41 (US-93 NB at Boulder City)
- DMS#42 (I-15SB South of Blue Diamond)
- DMS#43 (I-15 NB South Of Blue Diamond (WZ-CMS))
- DMS#44 (I-15 NB Gowan)
- DMS#45 (I-15 SB Alexander)
  - US-95 (4.4 miles)
  - FLAMINGO (9 miles)
  - I-215 (12.3 miles)
- DMS#46 (I-15NB at Sloan)
- DMS#47 (I-15SB North of Primm)
- DMS#48 (US-95SB at 163 (Laughlin turnoff))
- DMS#49 (US-93SB after 147)
- DMS#50 (US-93SB NV side @ Dam Bridge)
- DMS#51 (US-93NB AZ side @ Dam Bridge)
- DMS#52 (US-93NB AZ mile marker3)
- DMS#54 (I-515/US-95 SB @ Sahara)



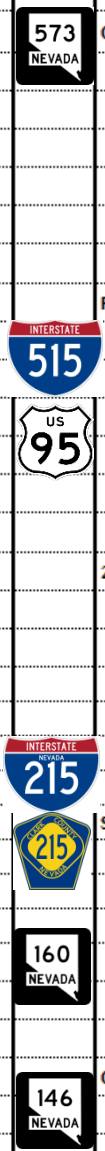
Data Set 4: Congestion Score

I-15 SB: Craig to California Stateline

	13	12	11	10	9		13	12	11	10	9
	AM						PM				
Craig-Washington											
holiday											
fall											
summer											
early summer											
spring break											
begin year											
Wash-Sahara											
holiday											
fall											
summer											
early summer											
spring break											
begin year											
Sahara-215											
holiday											
fall											
summer											
early summer											
spring break											
begin year											
215-St Rose											
holiday											
fall											
summer											
early summer											
spring break											
begin year											
St Rose-California											
holiday											
fall											
summer											
early summer											
spring break											
begin year											

I-15 NB: California Stateline to Craig

	13	12	11	10	9		13	12	11	10	9
	AM						PM				
Charleston-Craig											
holiday											
fall											
summer											
early summer											
spring break											
begin year											
Flam-Charleston											
holiday											
fall											
summer											
early summer											
spring break											
begin year											
215-Flamingo											
holiday											
fall											
summer											
early summer											
spring break											
begin year											
St Rose-215											
holiday											
fall											
summer											
early summer											
spring break											
begin year											
California-St Rose											
holiday											
fall											
summer											
early summer											
spring break											
begin year											



I-15 SB: Craig to California Stateline

	AM					PM				
	13	12	11	10	9	13	12	11	10	9
Craig-Washington										
holiday										
fall	122					133				
summer	38					20				
early summer	39					17				
spring break	21					0				
begin year	43					30				
Wash-Sahara										
holiday		121	150	76	195		198	230	240	53
fall	244	204	335	153	479	133	257	407	243	541
summer	130	277	158	231		122	220	147	276	
early summer	208	169	166	368		198	139	128	457	
spring break	154	116	133	233		214	170	143	507	
begin year	169	192	159	208		266	232	187	373	
Sahara-215										
holiday		4	27	73	30		46	189	183	102
fall	33	25	98	60	220	11	32	363	245	451
summer	0	31	65	37		20	57	364	202	
early summer	6	56	65	4		39	87	178	88	
spring break	11	10	0	16		0	47	217	110	
begin year	5	21	39	18		24	100	163	82	
215-St Rose										
holiday										
fall	0					33				
summer	4					8				
early summer	11					6				
spring break	0					0				
begin year	0					0				
St Rose-California										
holiday										
fall	0					78				
summer	3					82				
early summer	29					48				
spring break	0					72				
begin year	0					50				

I-15 NB: California Stateline to Craig

	AM					PM				
	13	12	11	10	9	13	12	11	10	9
Charleston-Craig										
holiday										
fall	450					378				
summer	132					152				
early summer	61					55				
spring break	72					93				
begin year	9					29				
Flam-Charleston										
holiday							273	382	443	428
fall						433	340	472	410	458
summer						363	397	371	422	
early summer						304	344	353	319	
spring break						357	373	430	400	
begin year						309	403	392	396	
215-Flamingo										
holiday		16	39	12	98		98	330	198	451
fall	33	14	202	55	407	22	110	354	113	510
summer	10	16	135	15		30	237	447	213	
early summer	26	41	396	51		50	146	519	225	
spring break	11	21	223	83		54	233	524	287	
begin year	7	11	173	17		77	128	267	85	
St Rose-215										
holiday										
fall	0					150				
summer	0					230				
early summer	0					33				
spring break	0					0				
begin year	0					0				
California-St Rose										
holiday										
fall	0					11				
summer	0					29				
early summer	0					7				
spring break	0					0				
begin year	0					0				

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early summer	11					6				
spring break	0					0				
begin year	0					0				
St Rose-California										
holiday										
fall	0					78				
summer	3					82				
early summer	29					48				
spring break	0					72				
begin year	0					50				

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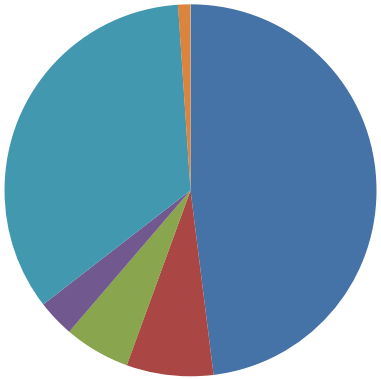
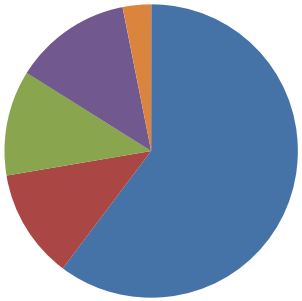
California-St Rose										
holiday										
fall	0					11				
summer	0					29				
early summer	0					7				
spring break	0					0				
begin year	0					0				

I-15 Congestion events per day: compare Fall 2009 to 2013

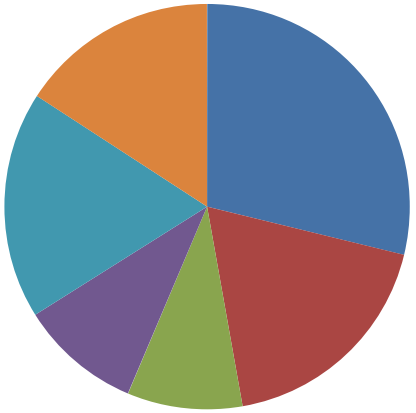
Fall 2013, PM 4.7



Fall 2012, PM 2.7

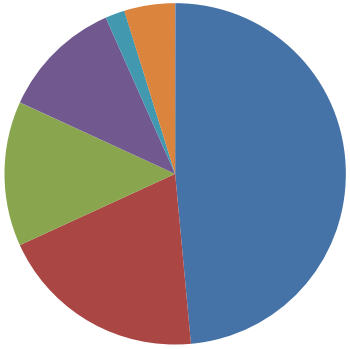


Fall 2011, PM 4.7

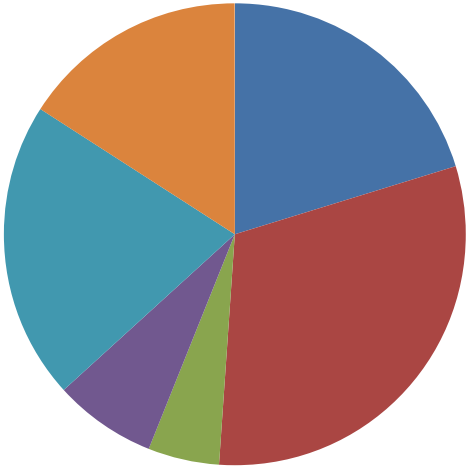


- rec
- plus +
- day NPk
- night NPk
- day const
- night const

Fall 2010, PM 3.2



Fall 2009, PM 6.2



15 NB to US 95 Fall 2013						
		mon	tue	wed	thu	fri
avg	congestion start time	14:36	14:55	14:44	14:46	14:22
	congestion duration	3:55	3:46	4:07	3:59	4:33
	avg delay (mins)	14.8	15.1	15.0	14.7	19.1
std dev	start	15.2	38.7	31.7	60.0	8.8
	duration	27.5	30.5	34.7	76.3	31.1
	delay	3.4	3.3	2.8	2.9	2.2
add'l stats	daily vol	127,900	129,800	131,400	136,100	148,800
	avg spd	66.9	65.9	66.1	65.6	64.9

104 I-15/I-215
203 95/RANCHO
WEST
209 95/TORREY
EAST
109 I-15/SPRING MTN
SOUTH
SAHARA

The End