



Traffic Operations Performance Management Webinar, 12.16.13

Peer Agency Best Practices:
RTC-FAST, Las Vegas





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: System-wide view

1/13/2012 5:45:44 PM

Viewer: Screen

103 I-15/CHARLESTON SOUTH



104 I-15/SAHARA N NORTH



105 I-15/SAHARA S NORTH



107 I-15/SPRING MTN SOUTH



109 I-15/TROPICANA NORTH



LU BLVD/I-215 S WEST



LU BLVD/RUSSELL WEST



LU BLVD/TROPICANA WEST

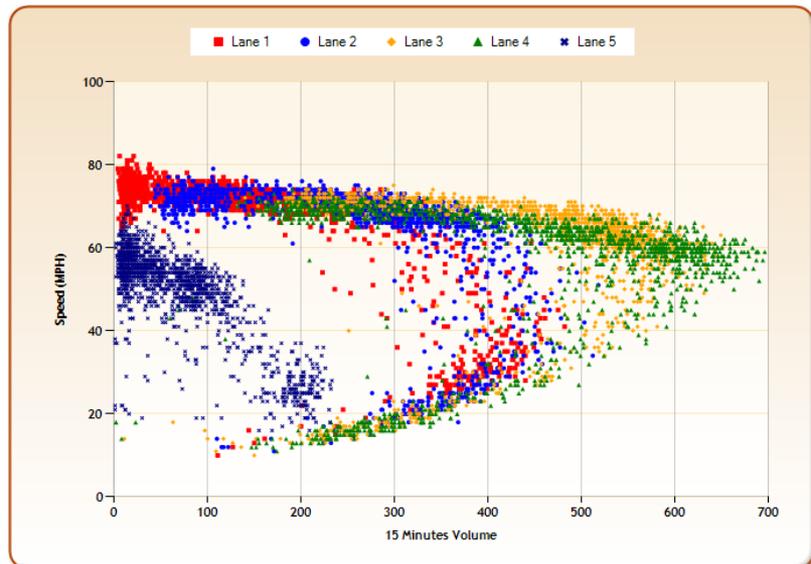
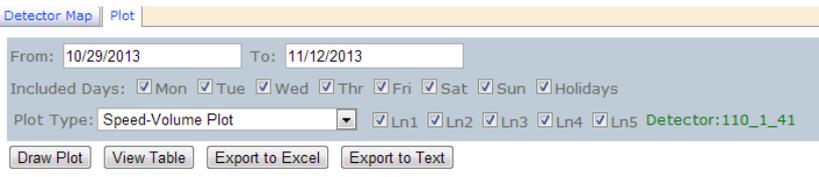


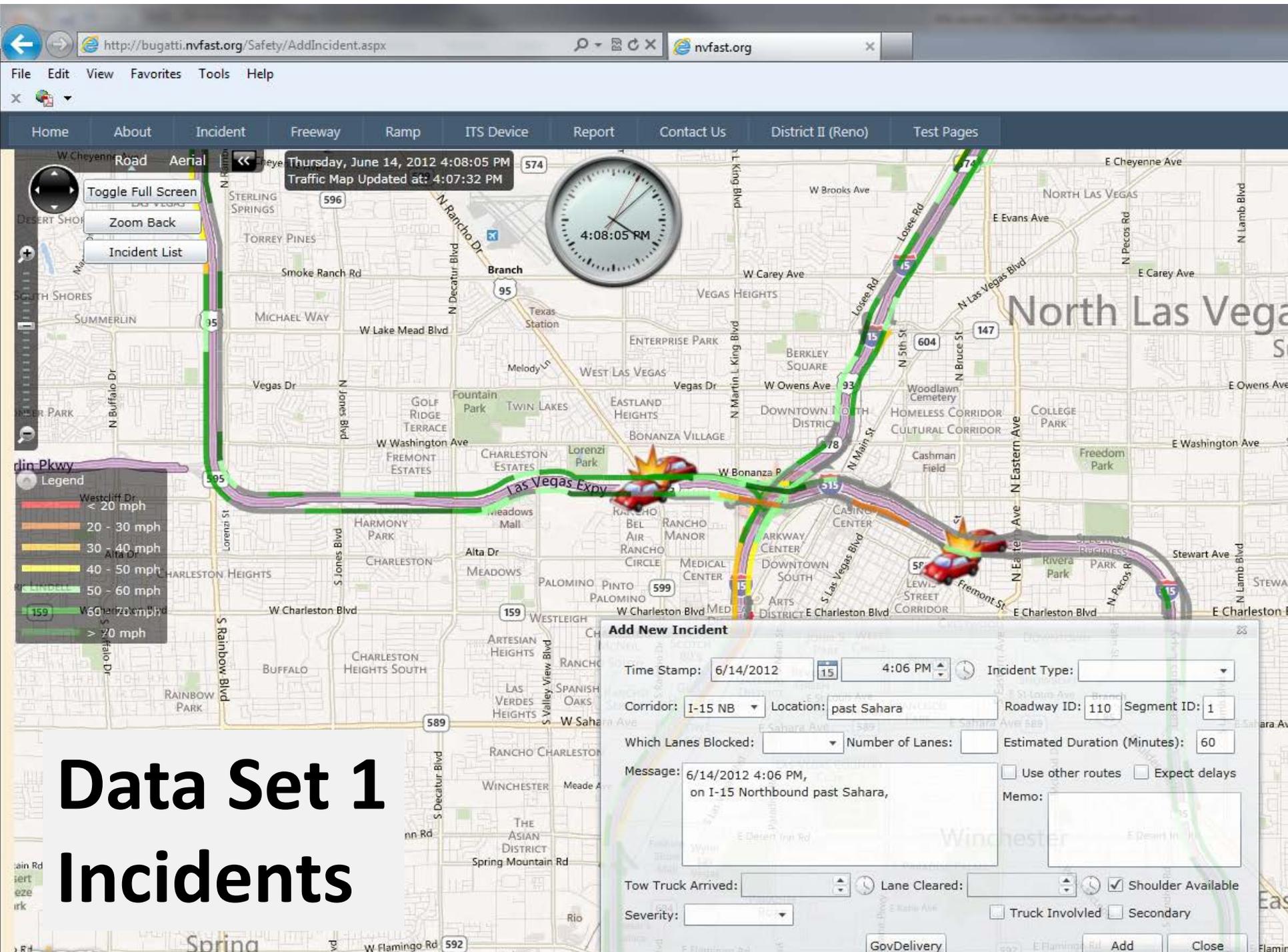
2345 FLAMINGO/15 NB EAST



Four data sets:

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





Road Aerial
 Toggle Full Screen
 Zoom Back
 Incident List

Thursday, June 14, 2012 4:08:05 PM
 Traffic Map Updated at: 4:07:32 PM



Legend

- Westcliff Dr < 20 mph
- 20 - 30 mph
- 30 - 40 mph
- 40 - 50 mph
- 50 - 60 mph
- 60 - 70 mph
- > 70 mph

Add New Incident

Time Stamp: 6/14/2012 4:06 PM Incident Type:
 Corridor: I-15 NB Location: past Sahara Roadway ID: 110 Segment ID: 1
 Which Lanes Blocked: Number of Lanes: Estimated Duration (Minutes): 60
 Message: 6/14/2012 4:06 PM, on I-15 Northbound past Sahara,
 Use other routes Expect delays
 Memo:
 Tow Truck Arrived: Lane Cleared: Shoulder Available
 Severity: Truck Involved Secondary

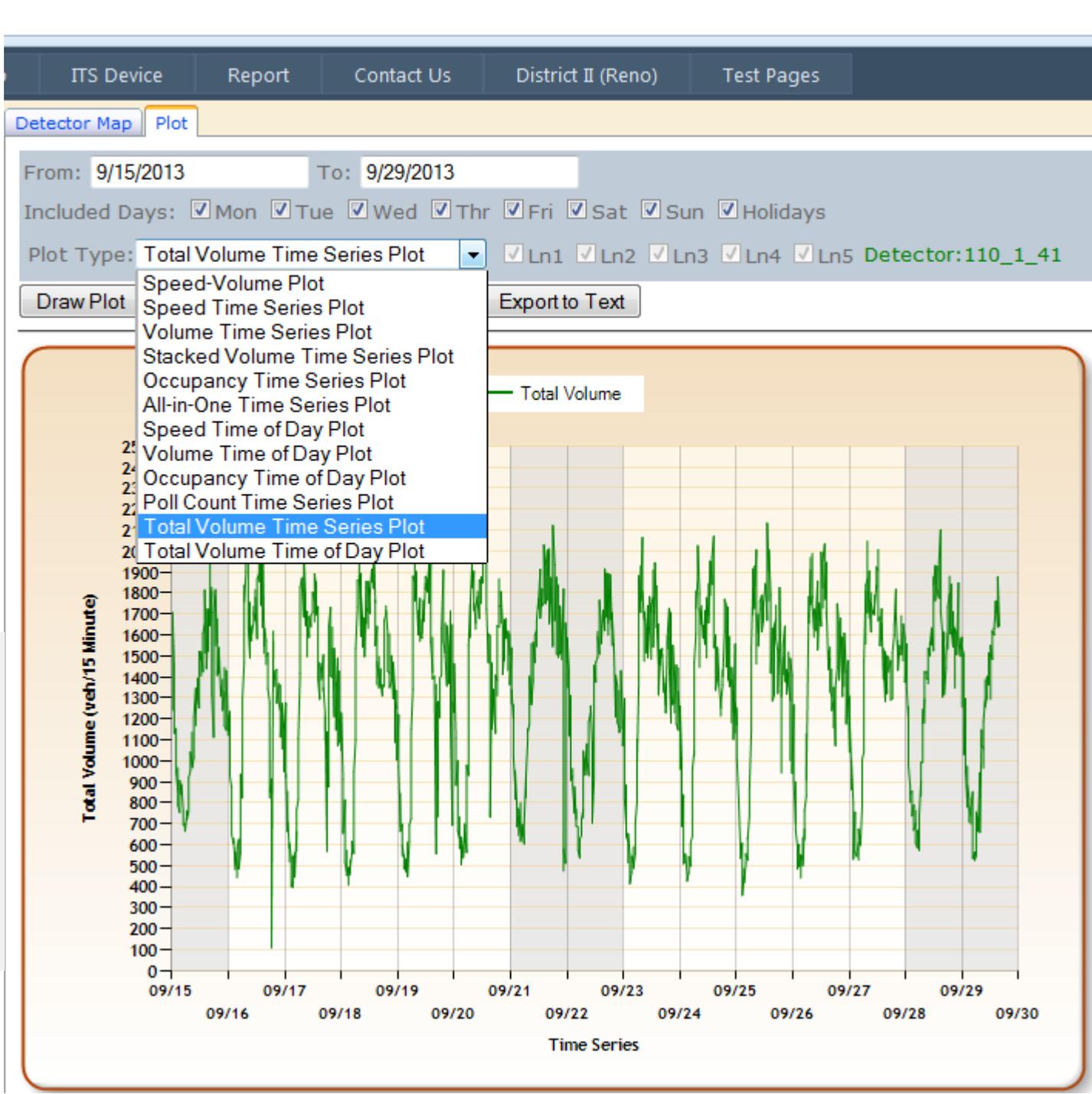
Data Set 1

Incidents

Freeway Flow Sensors

- + I-15 NB
- + I-15 SB
- + US-95 NB
- + US-95 SB
- + I-215 EB
- + I-215 WB
- + Airport Connector
- + Ramp
- + I-15 NB Access Road
- + I-15 SB Access Road

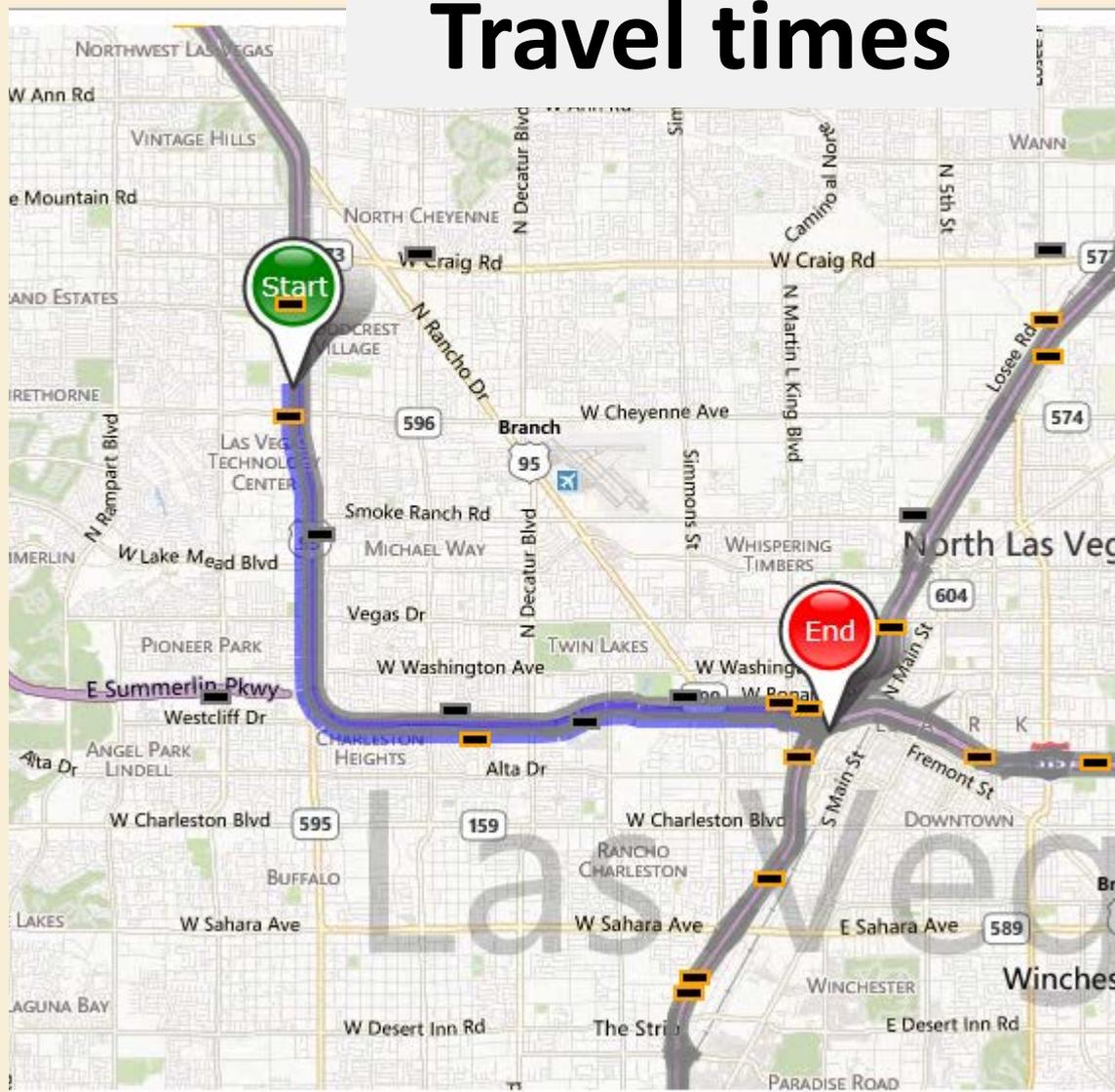
Data Set 2: Daily volumes & speeds





- ⊕ 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)

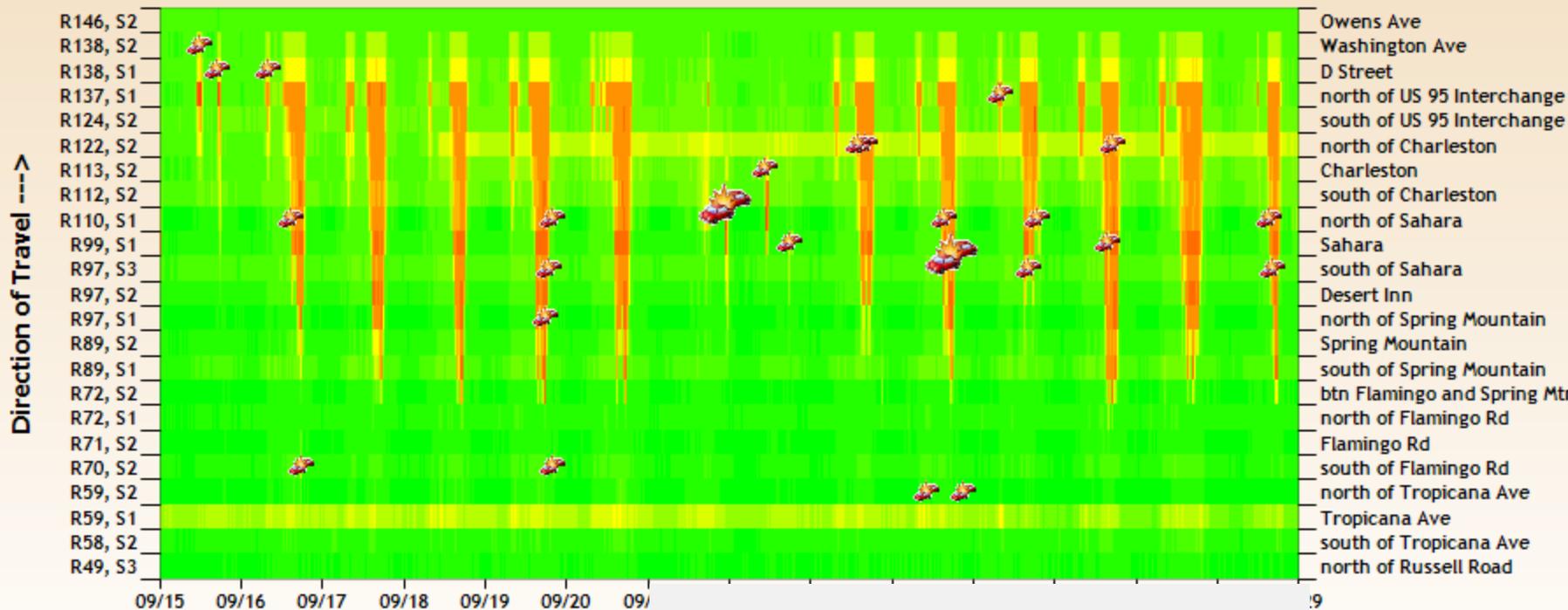
Data Set 3: Travel times



Route: I-15 NB From: north of Russell Road To: Owens Ave
 From: 9/15/2013 To: 9/28/2013 Measure: Average Speed Segment List Show Incident

Draw Plot View Table Export to Excel Export to Text << < > >>

Segment Average Speed Contour Plot



no data 0-5 5-10 10-15 15-20 20-25 25-30 30-35

0-65 65-70 70-75

**Data Set 4:
Congestion Score**

I-15 SB: Craig to California Stateline

I-15 NB: California Stateline to Craig

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



Charleston-Craig

Flam-Charleston

215-Flamingo

St Rose-215

California-St Rose

I-15 SB: Craig to California Stateline

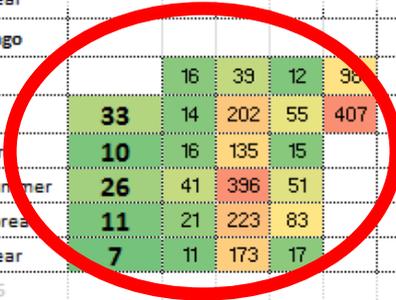
I-15 NB: California Stateline to Craig

	13	12	11	10	9	13	12	11	10	9		13	12	11	10	9	13	12	11	10	9	
	AM					PM						AM					PM					
Craig-Washington												Charleston-Craig										
holiday												holiday										
fall	122					133						fall	450					378				
summer	38					20						summer	132					152				
early summer	39					17						early summer	61					55				
spring break	21					0						spring break	72					93				
begin year	43					30						begin year	9					29				
Wash-Sahara												Flam-Charleston										
holiday		121	150	76	195		198	230	240	53		holiday						273	382	443	428	
fall	244	204	335	153	479	133	257	407	243	54		fall					433	340	472	410	458	
summer	130	277	158	231		122	220	147	276			summer					363	397	371	422		
early summer	208	169	166	368		198	139	128	457			early summer					304	344	353	319		
spring break	154	116	133	233		214	170	143	507			spring break					357	373	430	400		
begin year	169	192	159	208		266	232	187	373			begin year					309	403	392	336		
Sahara-215												215-Flamingo										
holiday		4	27	73	30		46	189	183	102		holiday		16	39	12	98		98	330	198	451
fall	33	25	98	60	220	11	32	363	245	451		fall	33	14	202	55	407	22	110	354	113	510
summer	0	31	65	37		20	57	364	202			summer	10	16	135	15		30	237	447	213	
early summer	6	56	65	4		39	87	178	88			early summer	26	41	396	51		50	146	519	225	
spring break	11	10	0	16		0	47	217	110			spring break	11	21	223	83		54	233	524	287	
begin year	5	21	39	18		24	100	163	82			begin year	7	11	173	17		77	128	267	85	
215-St Rose												St Rose-215										
holiday												holiday										
fall	0					33						fall	0					150				
summer	4					8						summer	0					230				
early summer	11					6						early summer	0					33				
spring break	0					0						spring break	0					0				
begin year	0					0						begin year	0					0				
St Rose-California												California-St Rose										
holiday												holiday										
fall	0					78						fall	0					11				
summer	3					82						summer	0					29				
early summer	29					48						early summer	0					7				
spring break	0					72						spring break	0					0				
begin year	0					50						begin year	0					0				
St Rose-California												California-St Rose										
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summer	3					82						summer	0					29				
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spring break	0					72						spring break	0					0				
begin year	0					50						begin year	0					0				

I-15 SB: Craig to California Stateline

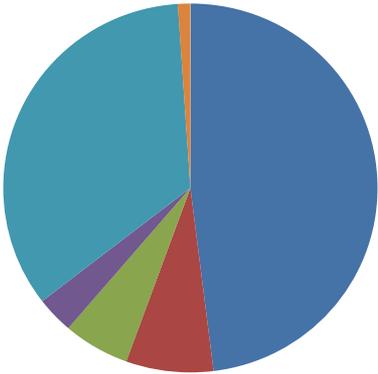
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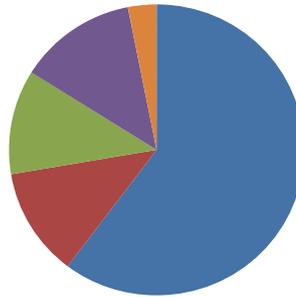


I-15 Congestion events per day: compare Fall 2009 to 2013

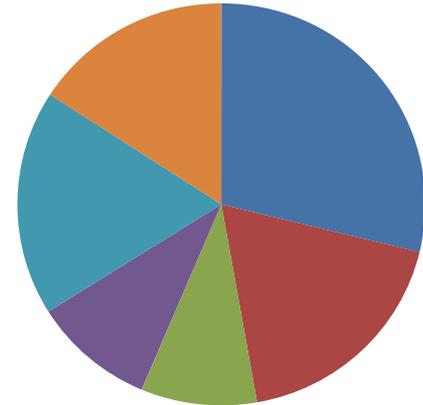
Fall 2013, PM 4.7



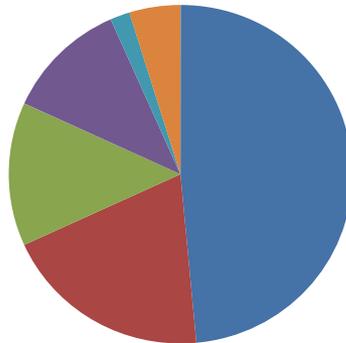
Fall 2012, PM 2.7



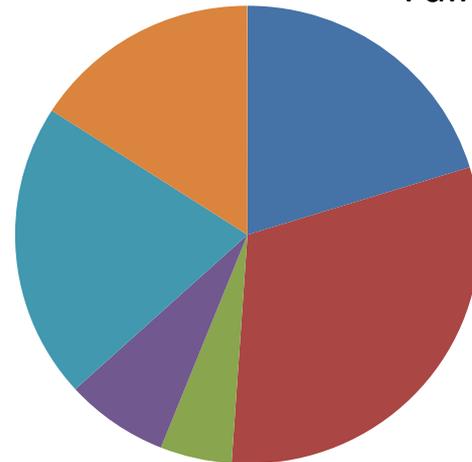
Fall 2011, PM 4.7



Fall 2010, PM 3.2



Fall 2009, PM 6.2



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

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

