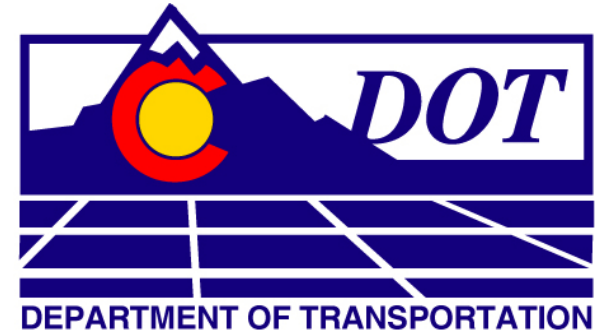
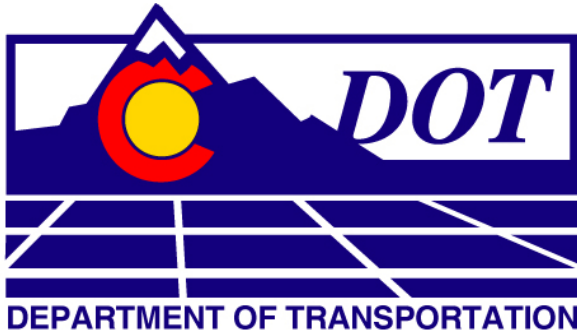


The Colorado Traffic Data Warehouse

“Sharing Traffic Data Across Governmental Agencies”



NATMEC

Improving Traffic Data Collection, Analysis, and Use

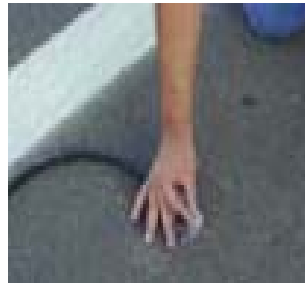
Presentation Outline

- CDOT's Current Traffic Data Program
- Expanding CDOT's Traffic Data Program
 - Research and Survey Reports
 - Colorado's Statewide Traffic Data Committee
 - Technology Solutions and Implementations
- Sharing and Integrating Data Sources
 - Standard Traffic Data Format
 - Other Agencies Traffic Data
- Accessing CDOT's Traffic Data Warehouse

CDOT's Traffic Data Analysis Mission

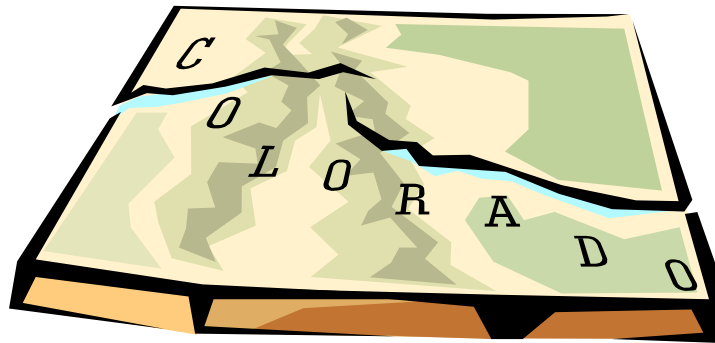
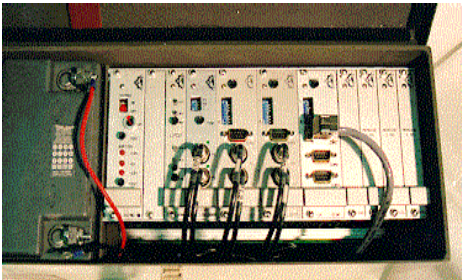
To provide traffic data customer service by disseminating the best available, most comprehensive / accurate and up-to-date traffic volume and classification data in the most efficient and effective methods as possible.

“CDOT is the steward of all traffic volume and classification data for the State”



CDOT's Internal "on-system" Traffic Program

- Over **9,100** Centerline Miles of State Highways
 - ~ **3,300** Traffic Sections
 - ~ **100** Permanent Automatic Traffic Recorders (ATRs)
 - ~ **2,500** Short Duration Counts per Year Collected
 - Other Traffic Count Data Collected



CDOT's External "off-system" Traffic Program

- ~ **74,000** Centerline Miles of "off-system" Roadways
 - ~**58,800** County Miles and ~**15,300** City Miles
 - Multiple Agencies Collecting Data
 - Opportunities to Share Data and Expand the Colorado Traffic Data Warehouse
- Over **8 Times more Miles to collect Data** than On-System

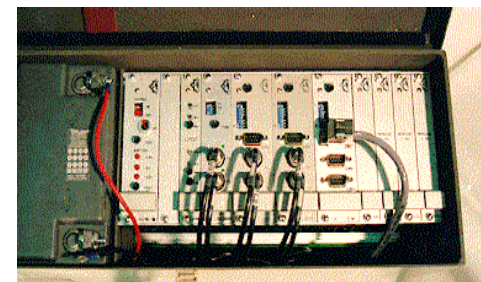




Expanding the Colorado Traffic Data Program




- TRAFFIC DATA COMMITTEE
 - Local Jurisdictional Traffic Data
 - Opportunity to share data
 - Short Duration Traffic Counts
 - Continuous Counts
 - Other Data Sources
- Software Solutions
 - Research
 - Implementation



COLORADO's Statewide Traffic Data Committee Program Vision

- To Communicate, Coordinate, Schedule, Collect and Share Statewide Traffic Count Data
- To Build a Comprehensive and Integrated Statewide Traffic Database using Multiple Traffic Count Data Sources
- To Develop Traffic Collection Training and Certification Program





**Traffic Data Committee
e-Newsletter**

(The electronic newsletter for traffic professionals throughout Colorado)

Publication # Volume 1, Issue 1
May, 2008

Welcome Letter

Dear Traffic Data Committee Contributors, Customers, and Clients:

Welcome to the first edition of the Traffic Data Committee's new great pleasure I introduce this e-newsletter! Look for more e-newsletters in the future and sign up to participate in the Colorado Statewide Traffic Committee. Many conversations and requests for integrated traffic data sources throughout the state.

If you are (or someone you know is) interested in becoming a part of the committee, please contact Elizabeth Stok at Elizabeth.stok@dot.state.co.us. Your participation could help make a difference in the way traffic data is managed, distributed, integrated, and displayed throughout the State of Colorado.

Welcome and your participation and interests are greatly appreciated!

Sincerely,
 @ElizabethJStok
 Traffic Analysis Unit Manager
 Colorado Department of Transportation
 Division of Transportation Development
 4201 East Arkansas Avenue, Sunrise Building
 Denver, Colorado 80222
 (303) 757-9495

Upcoming Events

- Traffic Data Committee Kick-off Meeting**
 Location: Denver Regional Council of Governments (DRCOG)
 Date: May 15, 2008
 Time: 9:30am – 11:30am
 For more information contact
 Elizabeth Stok at [303-757-9495](mailto:Elizabeth.stok@dot.state.co.us)
Elizabeth.stok@dot.state.co.us
- North American Travel Monitoring Exposition and Conference (NATMEC)**
 Location: Washington DC
 Date: August 6 – 8, 2008
 For More Information Contact:
 NATMEC Planning Chair - Dave Gardner, Ohio DOT at
dave.gardner@dot.state.oh.us
- Transportation Research Board Annual Meeting**
 Location: Washington DC
 Date: January 11-15, 2009
 Link for More Information:
<http://www.trb.org/meeting>

More meeting information will be forthcoming in the next edition of the Traffic Data Committee's e-newsletter.


Project Highlights

There are a number of traffic related projects going on around the State of Colorado. This section will give a brief description of some projects that are currently being managed throughout the state. This Quarter's Project Highlights include:

- CDOT develops RFP for Short-duration Contract**
 CDOT's short-duration contract is up for renewal in 2009. Currently the request for proposals (RFP) documentation is being drafted and shortly the RFP will be advertised on the State of Colorado, Department of Transportation's tender's projects list that can be found on the following website:
www.dot.state.co.us

Inside this Issue:

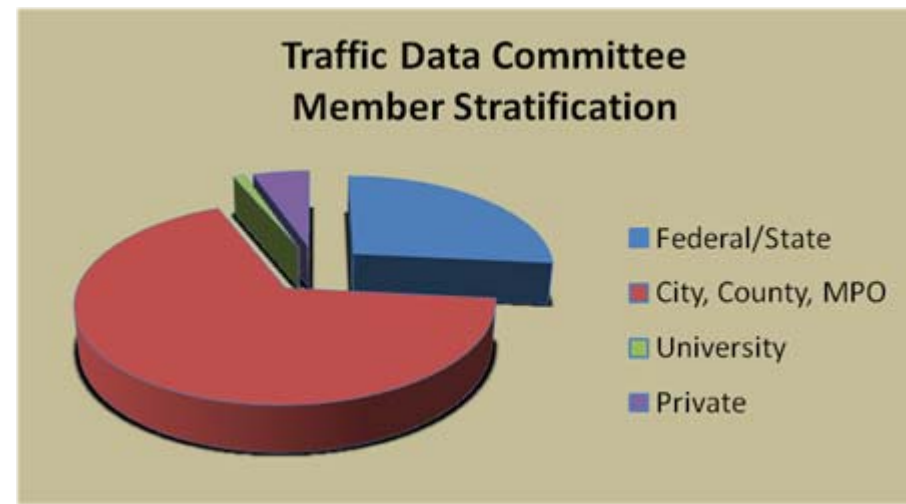
[Welcome Letter - Page 1](#)
[Upcoming Events - Page 2](#)
[Project Highlights - Page 2 - 4](#)
[Traffic Data Contacts - Page 5](#)



Key to Populating the Traffic Data Warehouse on off-system Roadways

- **Member Participation**

- 200 Members on the Distribution List
- City, County, MPO, and Other Agency Partnerships
 - 126 City/County/MPO Agency Members
 - 50 State/Federal Agency Members
 - 2 University Members
 - 10 Private Companies



Colorado's Statewide Traffic Data Warehouse

- Research
- Technology Solutions
- Data Warehouse Implementation and Integration of Data



Traffic Data Program Research Conducted by CDOT

- National Travel Monitoring Survey

- All DOT's

- November, 2007

- http://www.dot.state.co.us/App_DTD_DataAccess/Downloads/Survey/SurveyResultsFINALREPORT.pdf

- State Survey

- February, 2009

- Colorado Cities, Counties, MPO, and other Agencies

- http://www.dot.state.co.us/App_DTD_DataAccess/traffic/ColoradoTrafficSurvey_version15.pdf



TRADAS

- Traffic Data Analysis Software Solution
 - Manages All Raw Traffic Count Data
 - Creates and Calculates Traffic Statistics
 - Annual Average Daily Traffic (AADT's), Directional Distribution (DD's), Design Hour Volumes (DHV's)
 - Highway Performance Monitoring System (HPMS)

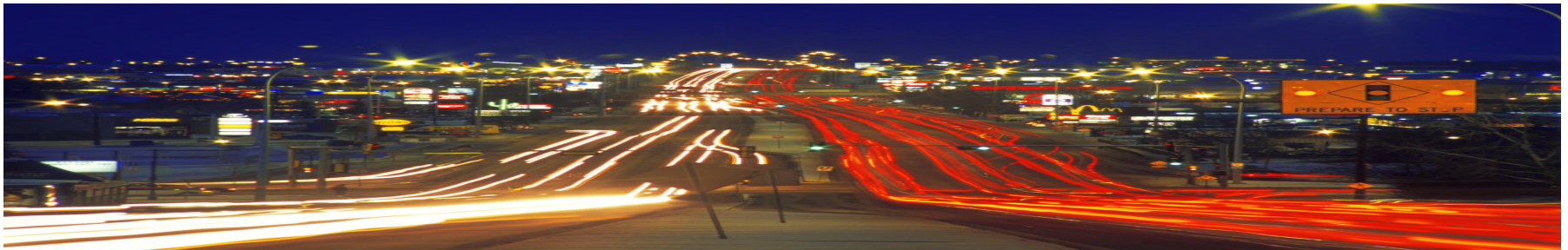


Chaparral Systems Corporation

Chaparral Systems Corporation
provides the most comprehensive
traffic data analysis software in the world

Benefits to Sharing Data

- Increase Quality of Statewide Traffic Data
- Provides More Comprehensive Traffic Data Geographic Coverage (Eliminates Gaps)
- Reduces Cost by Eliminating Duplication of Effort
- Provides an Organized Venue for Communication



2008 Traffic Data Sharing Limited Success

STANDARD SPREADSHEET FORMAT

Microsoft Excel - Presentation.xls

File Edit View Insert Format Tools Data Window Help Adobe PDF

CREATE PULL down list

Arial 10 B I U \$ %

A	B	C	D	E	F	G	H
1	1 This is the TRAFFIC DATA COMMITTEE STANDARD FORMAT for Traffic Count Data. HOURLY CLASSIFICATION DATA						
2	2 AGENCY NAME	CITY OR COUNTY		OTHER	URS		
3	3 SUBMITTAL DATE	MONTH	1	DAY	12	YEAR	
4	4 DATA SUBMITTAL TYPE	SHORT DURATION					
5	5 DATA DURATION	24					
6	6 DATA CONFIGURATION TYPE	HOURLY CLASSIFICATION					
7	7 DATA DIRECTION	BI-DIRECTIONAL					
8	8 This space reserved for Column NUMBERING BELOW						
9							
10	10 MASTER SEGMENT ID	1 Agency Segment ID	2 Other Segment ID	3 GIS Coordinates (X)	4 GIS Coordinates (Y)	5 Datum	6 Coordinat
11		201059	26.5				
12		201059	26.5				
13		201059	26.5				
14		201059	26.5				
15		201059	26.5				
16		201059	26.5				
17		201059	26.5				
18		201059	26.5				
19		201059	26.5				
20		201059	26.5				
21		201059	26.5				
22		201059	26.5				
23		201059	26.5				
24		201059	26.5				
25		201059	26.5				
26		201059	26.5				
27		201059	26.5				
28		201059	26.5				
29		201059	26.5				
30		201059	26.5				
31		201059	26.5				
32		201059	26.5				

Ready NUM

start Deleted Items - Micro... Presentation.xls TRADAS Presentation... Microsoft PowerPoint ...

Data Sharing



- 870 Traffic Counts From Local Entities in 2008 Equals “free data”
- Equivalent to 35% of CDOT Counts Collected Per Year
- The Cost for CDOT to Collect That Same Data Would Be Approximately
 - \$100/count
 - 870 counts

\$87,000 IN “FREE” DATA

2008 – Agencies that Shared Data

AGENCY	TYPE	Number of Counts
City of Denver	Continuous	13
Jefferson County	Short-duration	210
E-470 Toll Authority	Continuous	5
City of Grand Junction	Short-duration	90
La Plata County	Short-duration	282
CDOT Ramp Metering and ITS	Continuous	78
Travel Time Study and Other	Short-duration	192
	TOTAL	870

2009 – Agencies that Shared Data

AGENCY	TYPE	Number of Counts
City of Colorado Springs	Short-duration	42
Weld County	Short-duration	317
E-470 Toll Authority	Continuous	5
City of Loveland	Short-duration	40
City of Arvada	Short-duration	17
City of Pueblo	Short-duration	112
Travel Time Study and Other	Short-duration	100
Larimer County	Short-duration	1,129
National Park Service	Short-duration	300
	TOTAL	2,092

Review of Data Sharing Activities



- 2008 - 870 Traffic Counts “free data”
- 2008 - Equivalent to **35%** of CDOT Counts Collected Per Year
- 2009 – 2,092 Traffic Counts “free data”
- 2009 - Equivalent to **84%** of CDOT Counts Collected Per Year
- The Cost for CDOT to Collect That Same Data Would Be Approximately
 - \$100/count
 - 870 counts
 - 2092 counts

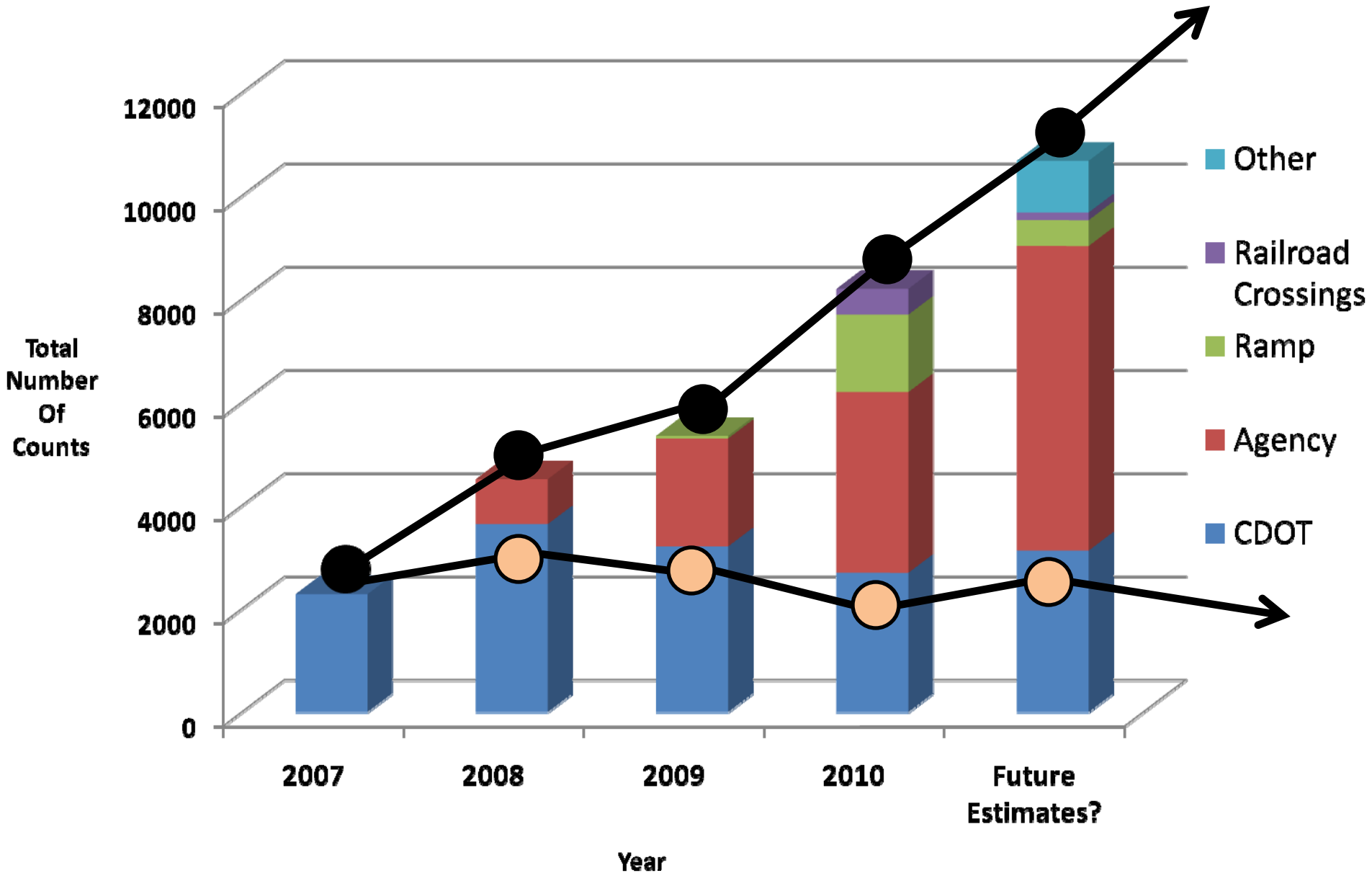
2008 - \$87,000 IN “FREE” DATA

2009 - \$209,200 IN “FREE” DATA

TOTAL to date: \$296,200

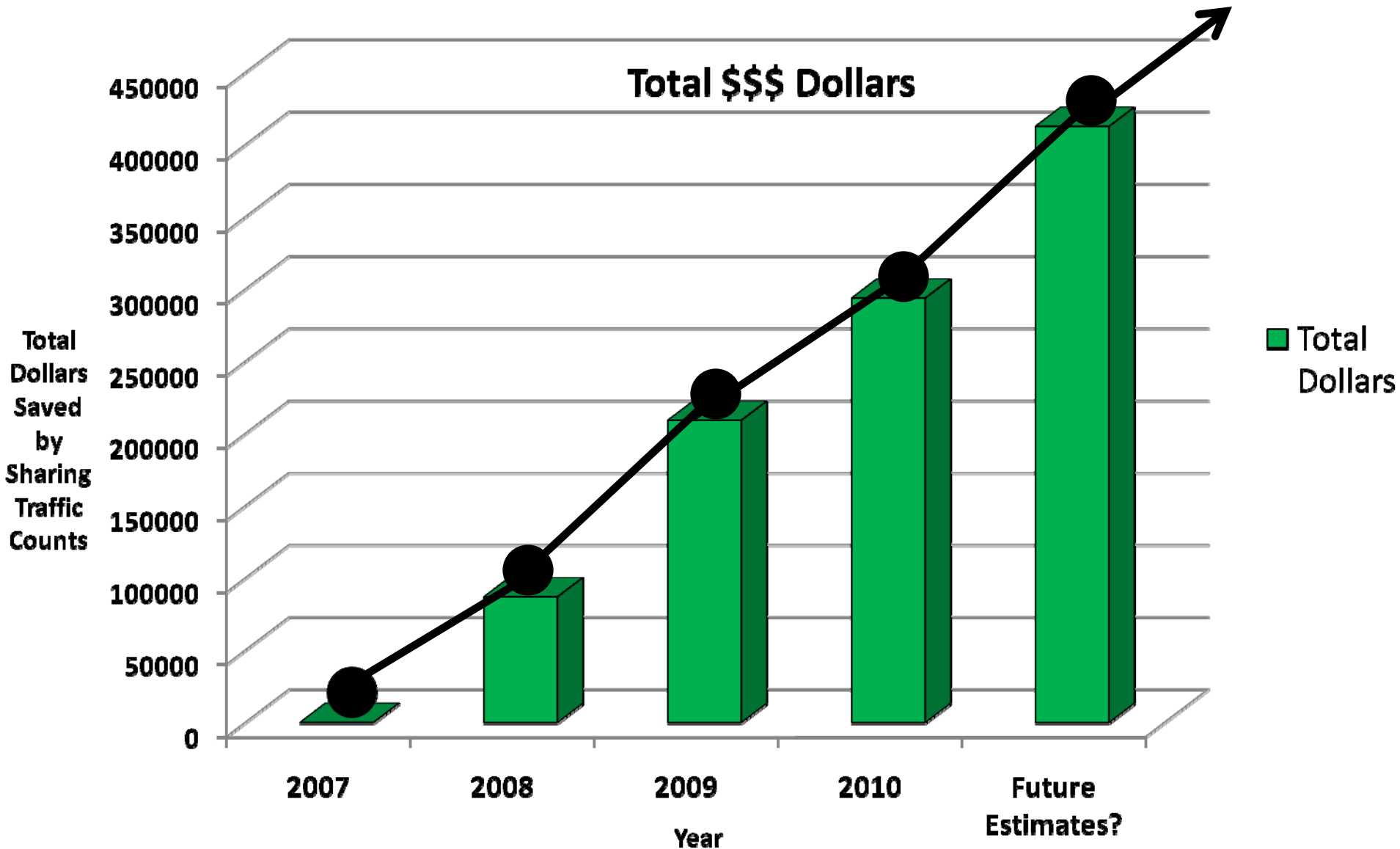
Total Short-Duration Traffic Counts

(Collected annually, and loaded into the Statewide Traffic Data Warehouse)



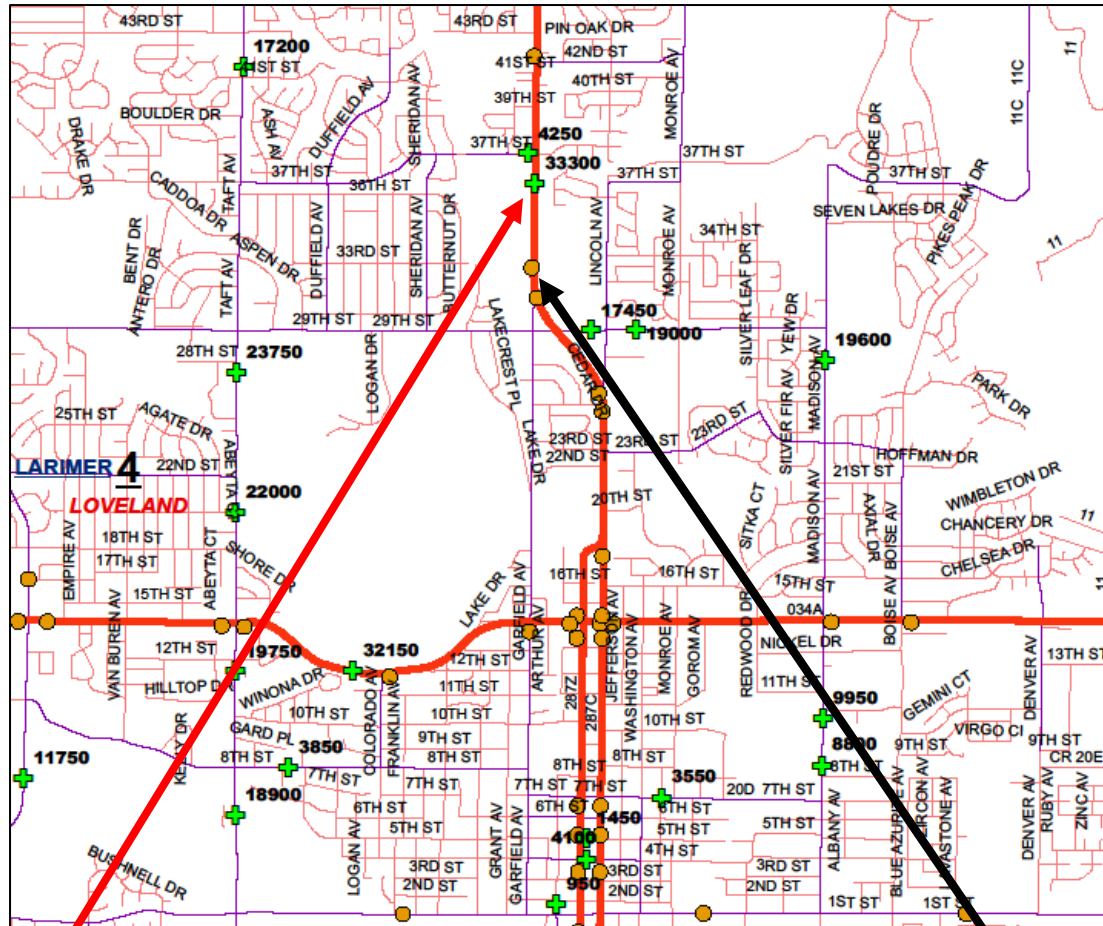
Total Return on Investment \$\$\$ (ROI)

(this ROI was calculated by using estimates for counts CDOT would not have normally acquired)



****Almost ½ Million Dollars worth or free data by the year 2011**

Sharing Data, Making a Difference



City of Loveland 2009 Traffic count with ADT of **33300**

CDOT 2008 Traffic count with AADT of **26800**

The traffic volumes are within **23%** of each other when comparing an adjusted AADT published in 2008 to an Agency (City of Loveland) raw data short-duration count

TRADAS Validity Checks

TRADAS performs numerous validity checks. These are summarized below. They are also available from the Validity Parameter interface by pressing F1. The parameters for the following checks can be set through the user interface.

1. **Axle Factor Threshold:** This validity parameter represents the thresholds for an axle factor created from the classification data. This axle factor is used for validity checking purposes only. The axle factor is defined as the total volume for the count divided by the total number of axles for the count based on the standard FHWA axles/vehicle class figures. Typical values for this parameter might be .38 to .48. This check is applied to volume data at the detail level. It is a high-alert-level message.
2. **Classification Thresholds:** The vehicle classification percentage for a given vehicle class must fall between the low and high values set for this parameter. It is applied to vehicle classification data at the detailed level. This is a high-alert-level message.
3. **Directional Split – Error:** This validity parameter represents the maximum allowable directional split. A value of '80' for this parameter means that a TRADAS high-alert-level will be generated if more than 80 percent of the traffic is one direction for the count. This check is applied to volume data at the detail level. It is a high-alert-level message.
4. **Directional Split – Warning:** This validity parameter represents the maximum allowable directional split for a TRADAS medium-alert-level message. A value of '60' for this parameter means that a TRADAS medium-



TRADAS Integrates Data Sources

SiteStatisticWorkshop

Traffic Year: 2008
Viewing All Sites

Filter Sites

- Show all sites
- Only flagged sites
- Only sites with sitestats
- Only sites with counts in year

View Options

Options

- Statistic Calculation Options

Site	Statistic Status	Flagged	AADT
000016	Copied	No	64332
000101	Copied	No	8485
000103	Copied	No	91329
000104	Copied	No	6645
000105	Averaged	Yes-Warning	19773

Severity	QC Message
Warning	AADT difference within current year (32.2...
Warning	AADT difference prior year (19.83422%) e...

Data Type	Count Type	Count Date	Duration	AADT
Volume	Continuous	1/1/2008	6192	17028
	Short-term	8/19/2008	72	22517
	Site Statistic	1/1/2008		19773

Site	Statistic Status	Flagged	AADT
000106	Copied	No	29101
000107	Plugged	No	57835
000108	Copied	No	11440
000109	Copied	No	7568
000115	Copied	No	6463
000119	Plugged	No	18914
000120	Plugged	No	42907
000124	Plugged	No	55488
000126	Averaged	No	34883
000127	Copied	No	23649
000153	Plugged	No	16984
000201	Copied	No	6120

Traffic Data Supplied on the Web

The screenshot shows a Microsoft Internet Explorer browser window displaying the Colorado Department of Transportation website. The address bar shows the URL: http://www.dot.state.co.us/App_DTD_DataAccess/Traffic/index.cfm?fuseaction=TrafficMain&MenuType=Traffic. The website header includes the Colorado Department of Transportation logo and navigation links: CDOT Homepage, State Homepage, Search, Traffic Data, Highway Data, Statistics, Maps, Geographic Data, SLD, Help, Home, and Email Us. The main content area is titled "Traffic Data" and contains the following text: "Vehicle Traffic Volumes and Truck Weights on Colorado State Highways". Below this is a link for "Instructions for getting Traffic Data" and a note: "For Report Details, hold your mouse over the [i] below". A "Select Report" table is displayed with the following options:

Select	Report
<input checked="" type="radio"/>	Traffic By Route
<input type="radio"/>	Traffic By County
<input type="radio"/>	Traffic Counts
<input type="radio"/>	Future Traffic Calculator
<input type="radio"/>	ESAL Calculator
<input type="radio"/>	Traffic Volume Maps
<input type="radio"/>	Traffic Database
<input type="radio"/>	PW ESAL Report

Below the table are three input fields: "Routes:" (with a text box), "From:" (with a text box), and "To:" (with a text box). A "Submit Query" button is located below these fields. At the bottom of the page, there is a link for "Survey Results".

http://www.dot.state.co.us/App_DTD_DataAccess/Traffic/index.cfm?fuseaction=TrafficMain&MenuType=Traffic

AADT's

http://www.dot.state.co.us/App_DTD_DataAccess/Traffic/index.cfm?display=true - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Search Favorites

Address http://www.dot.state.co.us/App_DTD_DataAccess/Traffic/index.cfm?display=true

CDOT Homepage | State Homepage | Search


Colorado
Department of Transportation

Traffic Data | Highway Data | Statistics | Maps | Geographic Data | SLD | Help

Home Email Us

Traffic Information for Highway 070

From RefPoint 0 To RefPoint 500

 [Printable Report](#)
set to landscape

Route	Ref Point	End Ref Point	Start Point Description	Annual Average Daily Traffic	AADT Year	AADT Derivation	AADT Single Trucks	AADT Comb. Trucks	Percent Trucks	20 Year Factor	Design Hour Vol (% of AADT)	Daily Vehicle Miles Traveled
070A	0	11.106	ON I-70 W/O SH 6, MACK	7,300	2007	ATR	150	1830	27.00%	1.47	11	81,088
070A	11.106	15.081	ON I-70 W/O SH 139, LOMA	8,000	2007	Actual	390	1520	23.90%	1.50	10	31,584
070A	15.081	19.444	ON I-70 W/O SH 340, FRUITA	12,700	2007	Actual	600	2360	23.30%	1.49	9	55,499
070A	19.444	25.563	ON I-70 SW/O SH 6 & SH 70 BUS RT, GRAND JUNCTION	18,000	2007	Actual	650	2560	17.80%	1.45	9	108,774
070A	25.563	27.570	ON I-70 W/O 24 RD, GRAND JUNCTION	16,200	2007	Actual	600	2410	18.60%	2.07	9	32,108
070A	27.570	31.351	ON I-70 E/O 24 RD, GRAND JUNCTION	18,600	2007	Factor	610	2490	16.70%	2.07	9	69,564
070A	31.351	36.644	ON I-70 E/O HORIZON DR, GRAND JUNCTION	22,000	2007	Actual	640	2550	14.50%	1.82	8	116,160
070A	36.644	41.578	ON I-70 E/O SH 70 BUS RT, CLIFTON	23,400	2007	Actual	660	2570	13.80%	1.43	8	115,643
070A	41.578	43.682	ON I-70 SW/O SH 6, PALISADE	19,700	2007	Factor	530	2150	13.60%	1.47	9	41,646
070A	43.682	49.015	ON I-70 N/O SH 6, PALISADE	18,400	2007	Factor	460	1860	12.60%	1.50	10	92,718
070A	49.015	61.648	ON I-70 N/O SH 65	16,300	2007	Factor	440	1780	13.60%	1.51	10	210,955
070A	61.648	64.870	ON I-70 NE/O CR 45 & CR 45 1/2, DE BEQUE	20,700	2007	Factor	600	2480	14.90%	1.42	10	66,261

Done Internet

Traffic Count Data

Select Continuous or Short-Duration

http://www.dot.state.co.us/App_DTD_DataAccess/Traffic/index.cfm?display=true - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address http://www.dot.state.co.us/App_DTD_DataAccess/Traffic/index.cfm?display=true

CDOT Homepage | State Homepage | Search

Colorado
Department of Transportation

Traffic Data | Highway Data | Statistics | Maps | Geographic Data | SLD | Help

Home Email Us

Traffic Counts Stations

[Printable Report](#)

Click the "Count Location" link to see count information.

Route	Ref Pt	Count Location	Count Type
070A	0.00	ON I-70 W/O SH 6, MACK	Continuous
070A	11.11	ON I-70 W/O SH 139, LOMA	Short Duration
070A	15.08	ON I-70 W/O SH 340, FRUITA	Short Duration
070A	19.44	ON I-70 SW/O SH 6 & SH 70 BUS RT, GRAND JUNCTION	Short Duration
070A	25.56	ON I-70 W/O 24 RD, GRAND JUNCTION	Short Duration
070A	27.57	ON I-70 E/O 24 RD, GRAND JUNCTION	Short Duration
070A	31.35	ON I-70 E/O HORIZON DR, GRAND JUNCTION	Short Duration
070A	36.64	ON I-70 E/O SH 70 BUS RT, CLIFTON	Short Duration
070A	41.58	ON I-70 SW/O SH 6, PALISADE	Short Duration
070A	43.68	ON I-70 N/O SH 6, PALISADE	Short Duration
070A	49.02	ON I-70 N/O SH 65	Short Duration
070A	61.65	ON I-70 SW/O BATTLEMENT PKWY & CR 215, PARACHUTE	Short Duration
070A	74.68	ON I-70 W/O SH 6, W/O RIFLE	Short Duration
070A	86.85	ON I-70 E/O SH 6, W/O RIFLE	Short Duration
070A	90.42	ON I-70 W/O SH 70 SPUR, 9TH ST, SILT	Continuous
070A	97.43	ON I-70 E/O SH 70 SPUR, 9TH ST, SILT	Short Duration
070A	105.26	ON I-70 E/O BRUCE RD & CR 240, NEW CASTLE	Short Duration
070A	109.00	ON I-70 E/O SH 6, CANYON CREEK RD, EXIT 114	Short Duration
070A	114.30	ON I-70 W/O SH 82, GLENWOOD SPRINGS	Short Duration
070A	116.38	ON I-70 E/O SH 82, GLENWOOD SPRINGS	Continuous
070A	118.64	ON I-70 W/O COLORADO RIVER RD, WEST DOTSERO	Short Duration
070A	134.05	ON I-70 E/O EAST DOTSERO	Short Duration
070A	139.53	ON I-70 E/O SH 6, GYPSUM	Short Duration
070A	146.65	ON I-70 SE/O SH 70 SPUR, EBBY CREEK RD, EAGLE	Short Duration
070A	156.55	ON I-70 NE/O SH 131, WOLCOTT	Continuous

Internet

Continuous Count Traffic Data

http://www.dot.state.co.us/App_DTD_DataAccess/Traffic/index.cfm?fuseaction=TrafficCountsDetail& - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites Refresh Print Mail Print Print Print

Address http://www.dot.state.co.us/App_DTD_DataAccess/Traffic/index.cfm?fuseaction=TrafficCountsDetail&TimePeriod=OneMonth&year=2008&countStationID=000104&countStationFacility=0%20&route=070A&refPt= Go Links

CDOT Homepage | State Homepage | Search

Colorado Department of Transportation

Traffic Data | Highway Data | Statistics | Maps | Geographic Data | SLD | Help

Home Email Us

Traffic Counts

Highway 070A, RefPoint 0, Station 000104
for May, 2008

[Printable Report](#)
set to landscape

Primary Direction (East)

Date	Day	Hour																								Total
		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
05/01/08	Thu	43	25	41	20	40	39	48	76	132	144	210	211	238	229	253	270	261	286	244	195	136	112	84	58	3395
05/02/08	Fri	55	33	35	27	29	36	42	68	128	187	233	248	226	278	276	298	307	311	253	230	157	133	126	83	3799
05/03/08	Sat	71	54	42	34	29	34	39	69	110	170	228	263	245	261	269	290	276	266	262	257	177	140	74	77	3737
05/04/08	Sun	43	23	39	21	32	32	26	63	110	183	285	362	426	394	439	489	505	520	408	273	224	177	113	88	5275
05/05/08	Mon	52	26	29	30	39	35	64	78	133	167	213	212	251	261	269	261	256	282	210	187	137	101	76	75	3444
05/06/08	Tue	55	20	32	38	32	40	60	85	111	154	199	218	214	237	250	258	266	266	197	169	152	102	99	57	3311
05/07/08	Wed	48	51	49	47	39	51	60	93	144	195	234	232	230	273	215	272	284	269	235	196	133	101	97	62	3610
05/08/08	Thu	52	40	48	30	36	37	50	66	138	187	219	236	265	270	271	274	267	242	233	238	159	133	101	73	3665
05/09/08	Fri	59	34	41	24	47	39	57	88	168	199	210	256	286	272	289	318	307	287	225	203	137	131	112	72	3861
05/10/08	Sat	44	40	33	16	35	36	42	86	143	174	239	231	239	234	248	269	299	283	238	193	142	146	100	65	3575
05/11/08	Sun	48	35	40	38	26	24	40	67	118	175	245	288	324	303	395	411	482	433	339	280	219	149	103	65	4647
05/12/08	Mon	47	42	36	23	28	40	49	67	137	173	213	260	226	254	274	271	263	217	236	142	114	85	86	46	3329
05/13/08	Tue	54	40	26	30	26	31	50	66	121	155	185	209	194	246	206	251	279	270	215	191	144	107	93	80	3269
05/14/08	Wed	43	36	28	35	45	39	44	98	125	168	228	215	226	215	281	277	307	268	249	198	132	113	72	82	3524
05/15/08	Thu	46	46	43	39	39	36	34	104	126	190	234	243	261	253	296	299	286	293	281	191	164	144	108	65	3821
05/16/08	Fri	54	46	47	34	39	41	56	92	148	192	224	259	268	301	290	332	303	296	278	214	211	136	112	75	4048
05/17/08	Sat	67	48	41	38	34	37	44	78	143	182	255	240	293	267	288	285	328	292	258	217	195	133	115	69	3947
05/18/08	Sun	50	37	45	32	33	28	37	72	124	206	296	332	388	398	401	437	432	380	349	263	247	195	129	78	4989
05/19/08	Mon	61	46	37	42	45	50	54	89	162	194	249	227	276	258	262	280	265	274	239	196	136	103	97	75	3717
05/20/08	Tue	69	41	31	28	35	37	46	72	135	172	214	238	252	256	289	297	288	275	230	174	159	114	106	51	3609

Done Internet

Short-Duration Traffic Count Data

http://www.dot.state.co.us/App_DTD_DataAccess/Traffic/index.cfm?fuseaction=TrafficCountsDetail& - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites Print Mail

Address http://www.dot.state.co.us/App_DTD_DataAccess/Traffic/index.cfm?fuseaction=TrafficCountsDetail&TimePeriod=OneMonth&year=2008&countStationID=102996&countStationFacility=1%20&route=070A&refPt= Go Links

CDOT Homepage | State Homepage | Search

Colorado
Department of Transportation

Traffic Data | Highway Data | Statistics | Maps | Geographic Data | SLD | Help Home Email Us

Traffic Counts

Highway 070A, RefPoint 11.106, Station 102996
for July, 2007

[Printable Report](#)
set to landscape

Primary Direction (East)

Date	Day	Hour																								Total
		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
07/11/07	Wed	91	56	40	40	57	91	113	176	194	261	247	290	281	342	349	404	388	409	307	267	207	139	143	104	4996
07/12/07	Thu	76	71	26	56	60	68	130	150	191	249	305	339	312	354	295	379	345	451	317	308	243	192	108	102	5127

Secondary Direction (West)

Date	Day	Hour																								Total
		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
07/11/07	Wed	68	48	59	78	132	121	175	263	327	358	401	373	327	358	402	390	376	383	307	282	205	178	145	91	5847
07/12/07	Thu	73	64	82	93	131	159	207	268	353	367	406	379	347	351	349	425	398	356	277	204	225	191	158	112	5975

Composite Direction (East and West)

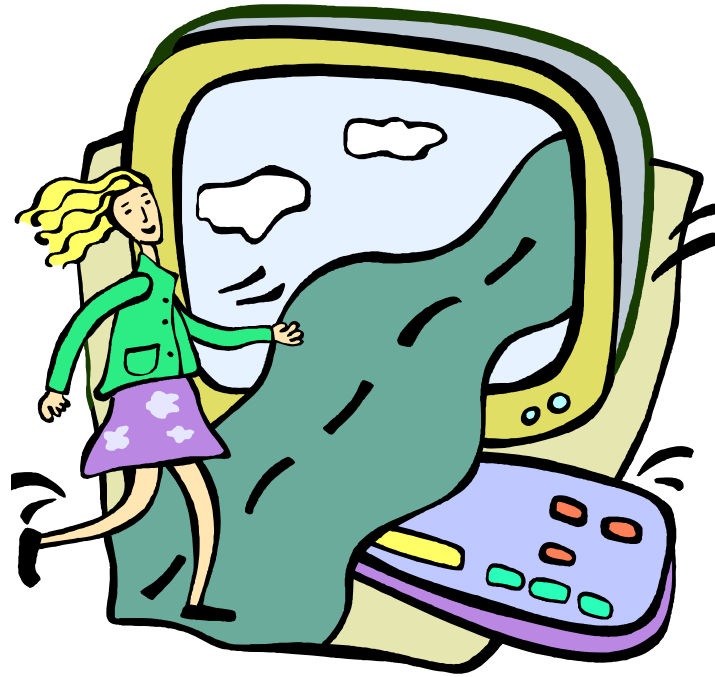
Date	Day	Hour																								Total
		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
07/11/07	Wed	159	104	99	118	189	212	288	439	521	619	648	663	608	700	751	794	764	792	614	549	412	317	288	195	10843
07/12/07	Thu	149	135	108	149	191	227	337	418	544	616	711	718	659	705	644	804	743	807	594	512	468	383	266	214	11102

If you notice an error, bug or have any questions, Please [E-mail us](#).

For comments or questions about this site, please send e-mail to: DTD

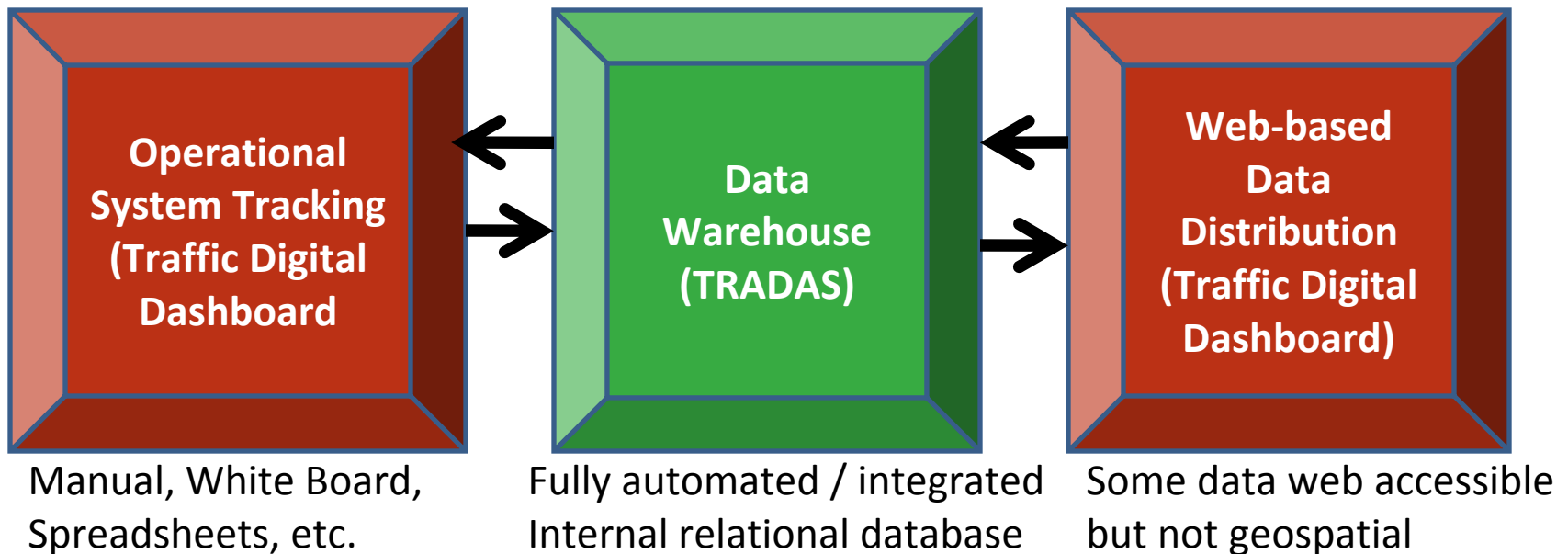
Done Internet

Where do we go from here?



Future – Traffic Digital Dashboard

- Need for Web-Based Data Distribution
- Need for Operational System Tracking



How was the Dashboard Concept developed?

2 years of Business Process Analyses Work

- ✓ Phase 1 – Results and Recommendations Report

http://www.dot.state.co.us/App_DTD_DataAccess/Traffic/index.cfm?fuseaction=TrafficMain&MenuType=Traffic

- ✓ Phase 1 – Results Diagram

http://www.dot.state.co.us/App_DTD_DataAccess/traffic/Documents/CDOT-BusinessProcessDiagram_6-30.pdf



How was the Dashboard Concept developed?

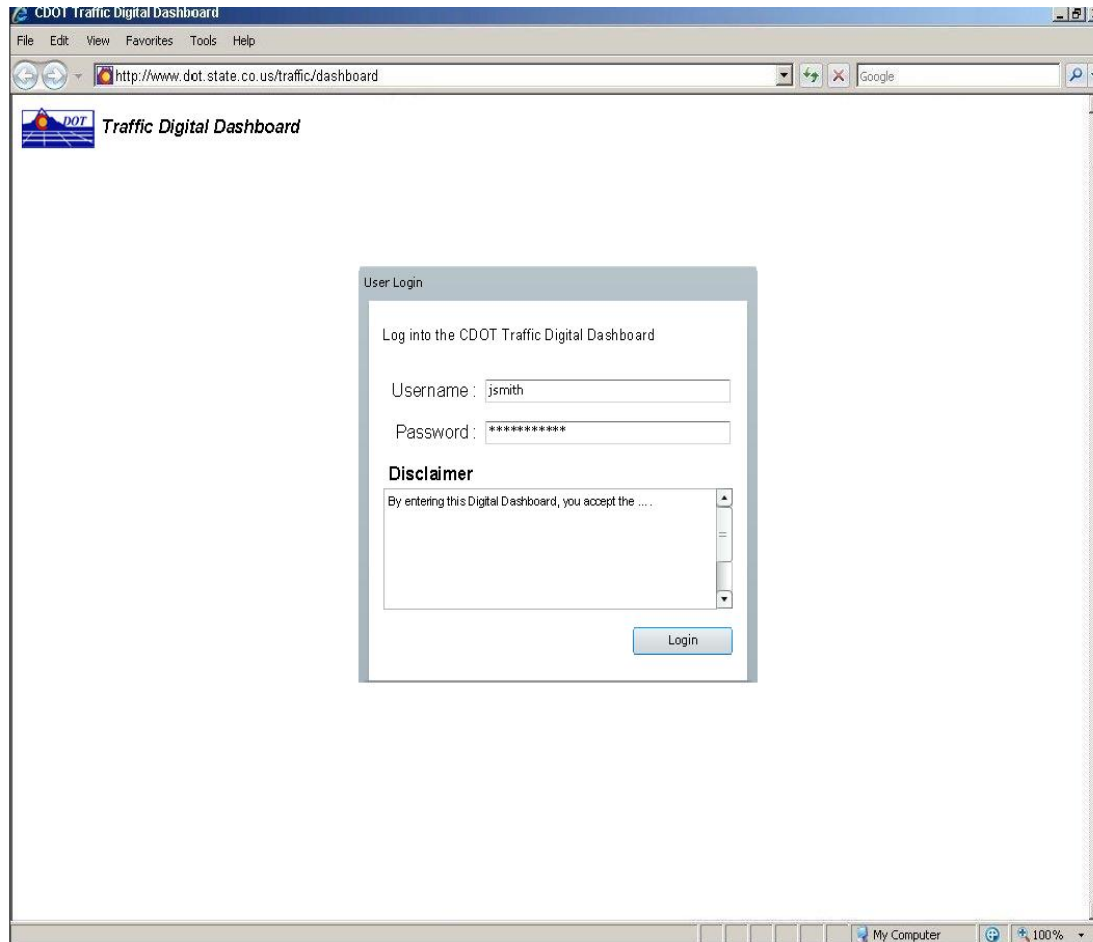
2 years of Business Process Analyses Work

- ✓ Phase 2 – Results and Recommendations Report
 - Not Posted to the Web Yet
- ✓ Phase 2 – Results Diagram
 - Not Posted to the Web Yet



Digital Dashboard Login

<http://ags.camsys.com/wireframes/cdotdashboard.htm>



The image shows a screenshot of a web browser window displaying the CDOT Traffic Digital Dashboard login page. The browser's address bar shows the URL <http://www.dot.state.co.us/traffic/dashboard>. The page features a logo for CDOT (Colorado Department of Transportation) and the text "Traffic Digital Dashboard".

The main content area contains a "User Login" form with the following elements:

- A heading: "Log into the CDOT Traffic Digital Dashboard"
- A "Username" field containing the text "jsmith".
- A "Password" field containing a series of asterisks "*****".
- A "Disclaimer" section with the text: "By entering this Digital Dashboard, you accept the ...".
- A "Login" button located at the bottom right of the form.

The browser's taskbar at the bottom shows "My Computer" and a zoom level of "100%".

CDOT Traffic Digital Dashboard
 File Edit View Favorites Tools Help
 http://www.dot.state.co.us/traffic/dashboard
 Logged in as John Smith Help
 13th November 2009 Configure

Home ATR FHWA Bike/Ped Planning Region Route Short Duration TDC Traffic WIM Messages

ATR Locations Status Board - Problems

SiteID▲▼	Location ▲▼	Type▲▼	Status	Problem
000004	SH 36 SE/O SH 170, Superior	LCL	●●	EB is out
000009	SH I-25 N/O El Huerta View	ACL	●●	Bad Piezo in Lane 3
000016	SH I-25 S/O SH 34 Loveland	LCL	●	Overlay Project
000101	SH I-25 S/O Santa Fe Trail	ACL	●●	Bad Piezo in Lane 1
000120	I-70 Idaho Springs, Twin Tun	LCL	●●	Bad Loop in Lane 1 & Bad Piezo in Lane 3
000124	SH I-25 S/O Plum Creek, Cast	ACL	●	Major construction project
000212	SH 50 E/O La Junta	ACL	●●	Bad Piezo in Lane 3, set to loop
000229	SH 24 SE/O Ute Pass, Green	ACL	●●	Bad Piezo in Lane 4 - length
000236	SH 82 Snowmass	ACL	●●	Bad Piezo - maintenance to fix 15 th Nov
001062	SH I-70 Eisenhower Tunnel E	LCL	●	Cannot communicate with ATR

Messages

Received▲▼	Subject ▲▼	From ▲▼	Priority ▲▼	Required▲▼
2-Nov	Special Data Request	Steve Howard	●	20-Nov
5-Nov	TMAS Submission Due	Dashboard	●	15-Nov
10-Nov	TRADAS Data Load	Liz Smith	●	15-Nov
11-Nov	Regular Contract	Joe Jones	●	22-Nov
12-Nov	Off System Contract	Al Pacheco	●	22-Nov
12-Nov	Special Data Request : City of Rifle	John Wayne	●	25-Nov
13-Nov	October data loaded into TRADAS	Dashboard	●	-
13-Nov	Problem retrieving data from ATR 001999	Dashboard	●	-
13-Nov	Data uploaded from Greeley County	Dashboard	●	-

CDOT Traffic Analysis Business Process

```

    graph TD
      A[Collection] --> B[Data Processing]
      B --> C[Data Management]
      C --> D[Data Analysis]
      D --> E[Reporting]
      E --> F[Data Archiving]
      B --> E
      C --> E
      D --> E
  
```

ATR Availability - Last Month

Latest News

Traffic Data Committee Update
 On August 10, 2009, the Traffic Data Committee held another quarterly meeting in Greeley, CO at the Region 4 CDOT offices. Aside from a few... [more](#)

City of Pueblo Traffic Count Program
 The City of Pueblo is located in southeastern Colorado, 35 miles south of Colorado Springs. Pueblo's current population is 104,000 with ... [more](#)

My Computer 100%

Internet | Protected Mode: On 100%

CDOT Traffic Digital Dashboard

File Edit View Favorites Tools Help

http://www.dot.state.co.us/traffic/dashboard

Traffic Digital Dashboard Logged in as John Smith [Help](#)

13th November 2009 [Configure](#)

Home ATR FHWA Bike/Ped Planning Region Route Short Duration TDC Traffic WIM Messages

Details

Site ID	000120
Name	I-70 Idaho Springs, Twin Tunnel
Type	ACL
Status	● ●
Route / Milepoint	070A / 241.13
County	Clear Creek

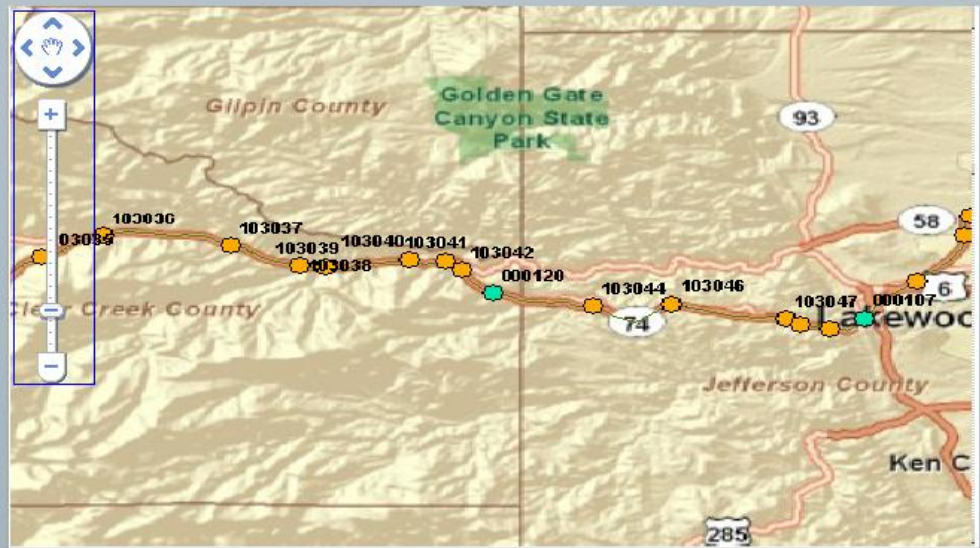
[Connect](#)

Status History

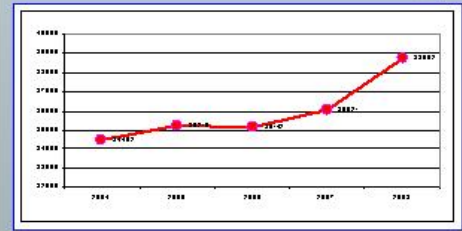
Date ▲▼	Status	Status
1-Nov-09	● ●	Bad Loop in Lane 1 & Bad Piezo in Lane 3 count only
26-Sep-09	●	Piezo Replaced
13-Sep-09	● ●	Bad Piezo in Lane 2

[Update](#)

Location



Annual Daily Traffic



Documents

Name ▲▼	Type ▲▼	Comments
Link	HTML	
Photo	JPG	West Entrance

[Add](#) [Edit](#) [Delete](#)

CDOT Traffic Digital Dashboard

File Edit View Favorites Tools Help

http://www.dot.state.co.us/traffic/dashboard

Logged in as John Smith [Help](#)
 13th November 2009 [Configure](#)

Home ATR FHWA Bike/Ped Planning Region Route Short Duration TDC Traffic WIM Messages

TVT Reports

Date	Submitted	Not Subm.	Accepted	Rejected	Vehicle Miles			
September 2009	96	6	91	5	4,400	Card	PDF	XLS
August 2009	94	7	89	5	4,399	Card	PDF	XLS
July 2009	96	5	92	4	4,450	Card	PDF	XLS
June 2009	95	6	91	4	4,300	Card	PDF	XLS
May 2009	94	6	89	5	4,350	Card	PDF	XLS
April 2009	95	5	90	5	4,300	Card	PDF	XLS
March 2009	95	5	90	5	4,200	Card	PDF	XLS
February 2009	94	6	88	6	4,300	Card	PDF	XLS
January 2009	97	2	89	8	4,400	Card	PDF	XLS
December 2008	96	3	86	10	4,100	Card	PDF	XLS

Traffic Monitoring System

SiteID	Location	Status	Submit
000003	SH 470 NW/O SH85, Santa Fe	●	<input checked="" type="checkbox"/>
000004	SH 36 SE/O SH 170, Superior	●●	<input checked="" type="checkbox"/>
000006	SH 285 SE/O Indian Wells	●	<input checked="" type="checkbox"/>
000009	SH I-25 N/O El Huerta View	●●	<input checked="" type="checkbox"/>
000011	I-70 NE/O SH 131 Wolcott	●	<input checked="" type="checkbox"/>
000015	SH 50 SE/O SH 141, Whitewa	●	<input checked="" type="checkbox"/>
000016	SH I-25 S/O SH 34 Loveland	●	<input type="checkbox"/>
000101	SH I-25 S/O Santa Fe Trail	●●	<input checked="" type="checkbox"/>
000103	SH I-25 S/O SH 7 Broomfield	●	<input checked="" type="checkbox"/>

CDOT Traffic Analysis Business Process

Search

Accepted by Month

Month	Percentage
Dec-08	90.5%
Jan-09	92.5%
Feb-09	93.5%
Mar-09	94.5%
Apr-09	94.5%
May-09	94.5%
Jun-09	96.5%
Jul-09	96.5%
Aug-09	95.5%
Sep-09	95.5%

CDOT Traffic Digital Dashboard

File Edit View Favorites Tools Help

http://www.dot.state.co.us/traffic/dashboard

Logged in as John Smith [Help](#)
 13th November 2009 [Configure](#)

Home ATR FHWA Bike/Ped Planning Region Route Short Duration TDC Traffic WIM Messages

Search

Details

Location ID	56
Name	Holly Street Bridge @ Cherry Creek, Denver, CO
Description	

Location

Pedestrian Counts

Documents

Name	Type	Comments
Project Location	PDF	Location description fro
Photo	JPG	Completed Bridge

[Add](#) [Edit](#) [Delete](#)

Data Transfer

Site ID: 107436

File: C:\Counts\SR12.xls

Format: Excel

[Upload](#)

CDOT Traffic Digital Dashboard

Logged in as John Smith | 13th November 2009 | Help | Configure

Home ATR FHWA Bike/Ped Planning Region Route Short Duration TDC Traffic WIM Messages

Contractor: All | Date Range: 14-Nov-2009 to Today | Status: All | Search

Counts

Date	Week	Station	Contractor	Type	Status
12-Nov-2009	42	102447	Acme Counts	24	In Progress
12-Nov-2009	42	100450	Smith Engineering	24	In Progress
10-Nov-2009	41	100452	CDOT	48	In Progress
9-Nov-2009	41	203474	Smith Engineering	24	In Review
9-Nov-2009	41	203080	Counts R Us	24	Accepted

CDOT Traffic Analysis Business Process

Location

Contractor Process Report

Week	Contractor	Invoice	PDF
40/2009	Smith Engineering	\$11,500	PDF
40/2009	Acme Counts	\$9,995	PDF
40/2009	Counts R Us	\$10,555	PDF
39/2009	Smith Engineering	\$10,045	PDF
39/2009	Acme Counts	\$9,575	PDF

Summary

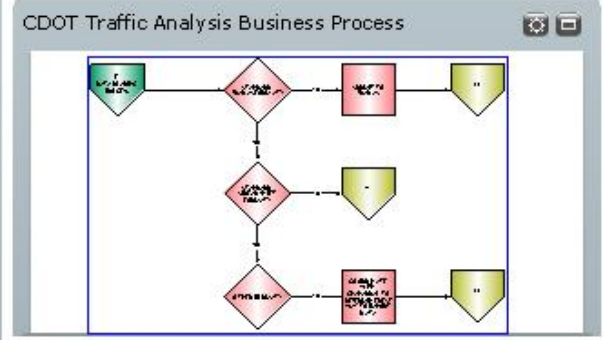
DOT Traffic Digital Dashboard

Logged in as John Smith
13th November 2009
[Help](#)
[Configure](#)

- Home
- ATR
- FHWA
- Bike/Ped
- Planning
- Region
- Route
- Short Duration
- TDC
- Traffic**
- WIM
- Messages

Scheduled Counts - Next 12 Months

Date	Site ID	Location	Comments	Agency
13-Jan-2010	106934	SR 17/10		Saguache County
20-Jan-2010	103956	US 50/25	Intersection with SR 109	Otero County
22-Jan-2010	104912	US 40/12	Between US 85 and SR 121	City of Denver
25-Jan-2010	001036	SR 7/2	Between 287 and SR 42	CDOT
26-Jan-2010	107329	SR 85/7	South of split	Greeley
26-Jan-2010	102572	SR 83/1	North of border	Douglas County
31-Jan-2010	107436	US 36/55	North of 119	Boulder County
1-Feb-2010	000194	US 40/15		CDOT
1-Feb-2010	103902	SR 86/3	West of Elbert County border	Douglas County
2-Feb-2010	101010	US 36/30	North of intersection with SR 170	City of Boulder

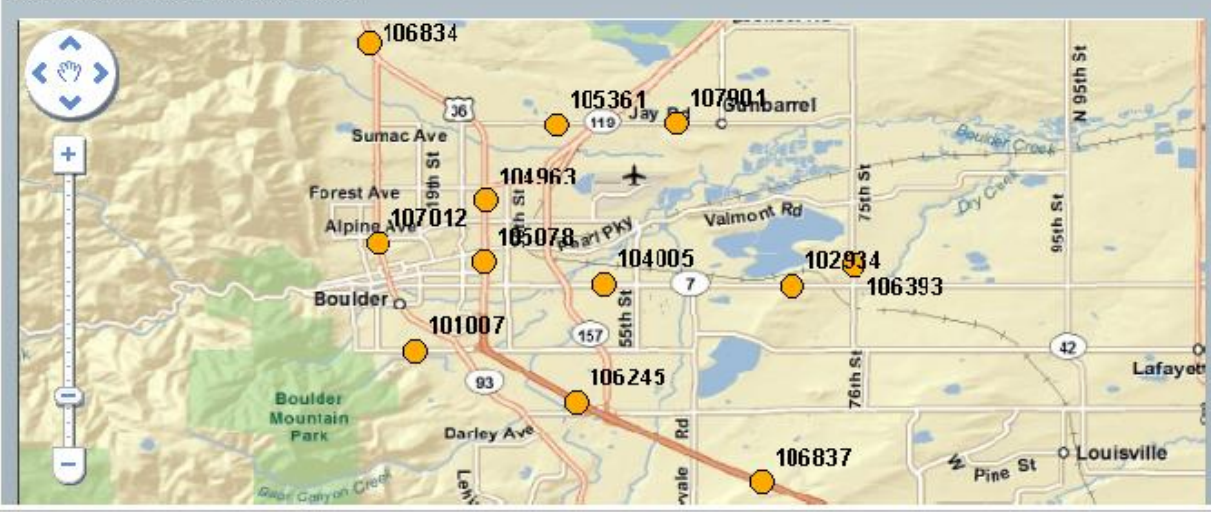
Data Transfer

Site ID:

File:

Format:

Scheduled Counts - Next 12 Months



Location Maintenance

Site ID:

Location:

Comments:

Agency:

CDOT Traffic Digital Dashboard

File Edit View Favorites Tools Help

http://www.dot.state.co.us/traffic/dashboard

Logged in as John Smith [Help](#)
13th November 2009 [Configure](#)

Home ATR FHWA Bike/Ped Planning Region Route Short Duration TDC Traffic WIM Messages

Messages

Print Export

Received ▲▼	Subject	▲▼	From	▲▼	Priority	Required ▲▼
+ 2-Nov	Special Data Request		Steve Howard		●	20-Nov
+ 5-Nov	TMAS Submission Due		Dashboard		●	15-Nov
+ 10-Nov	TRADAS Data Load		Liz Smith		●	15-Nov
+ 11-Nov	Regular Contract		Joe Jones		●	22-Nov
+ 12-Nov	Off System Contract		Al Pacheco		●	22-Nov
+ 12-Nov	Special Data Request : City of Rifle		John Wayne		●	25-Nov
+ 13-Nov	October data loaded into TRADAS		Dashboard		●	-
- 13-Nov	Problem retrieving data from ATR 001999		Dashboard		●	-

Dashboard: Could not communicate with [ATR 001999](#) for the past 24 hours.

Close

+ 13-Nov	Data uploaded from Greeley County		Dashboard		●	-
----------	---	--	-----------	--	---	---

Messages 5



Traffic Data Warehouse



- Must Be Populated With Data
- Must Allow Multiple Data Source Tracking
- Must Build a Solution That Can Be Implemented in Smaller Implementation Projects in a Phased Approach to Reduce Risk



Contact Information

Elizabeth Stolz

Elizabeth.stolz@dot.state.co.us

303-757-9495

Colorado Department of Transportation

4201 East Arkansas Avenue, Shumate Building

Denver, Colorado 80222