

Public Information as a Transportation Operation Strategy



TRAFFIC APPLICATIONS,LLC

“Collecting Road Noodles and Serving Traffic Smoothies”

A Timely Blend for Safety and Mobility

problem

Communications channels have changed!

Lack of impact-full knowledge for changing driver behavior

*many of the project status reports/emails are not formatted for
general public*

Information is not flexible for current communications channels

*trip = cross agency, multiple data locations, various formats
means of communications*

Lack of relevant and timely “to me” data

Diplomatic approach vs a strategic / tactical approach to

The Solution – (ITS)

Collect network, City / County / State project data

Make data available per segment / area

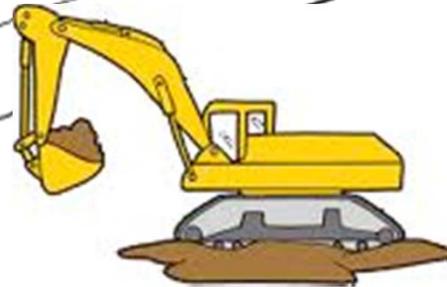
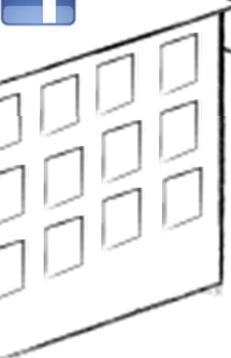
Provide data in common day-to-day applications

Provide data in current networking and media channels

Provide links for information at easy access points

Create segment knowledge

Utilize “data driven”



LATEST TWEETS

Traffic Manager
RDWRKAHD

RDWRKAHD New blocked - ID 55 mile 11.5 near Christopher St in - Aug 7 11:58 AM
13 seconds ago · reply · retweet · favorite

RDWRKAHD New blocked - KY 56 mile 23.3 near State Hwy 50 E in - Aug 7 1:58 PM
13 seconds ago · reply · retweet · favorite

RDWRKAHD New reduced to one lane - RN 135 mile 9.3 near Heritage Trl in McKinley - Aug 7 12:57 PM
about 1 minute ago · reply · retweet · favorite

RDWRKAHD New construction work - I-10 mile 219.1 near Metairie Ct in Metairie - Aug 7 12:57 PM
2 minutes ago · reply · retweet · favorite

Join the conversation



impacting.

*Construction worker
risk*

Fuel consumption

Emissions

Employee delays

Loss of business

Distracted driving

Project costs

Driver frustration

Driver risk

Lack of impact-full knowledge cost everyone \$\$\$

Rule

“The FHWA Solution”

Traffic control (TTC) strategies

Control strategies – include various traffic control approaches to accommodate road users within the work zone or the adjoining roadway in a safe manner, while providing adequate access to construction activities.

Control devices – include various traffic control devices installed for maintaining work zone traffic as outlined in the MUTCD standards.
Coordination, contracting, and innovative construction strategies – include coordination strategies with other project elements (e.g., railroad, utilities).

Traffic operations (TO) strategies

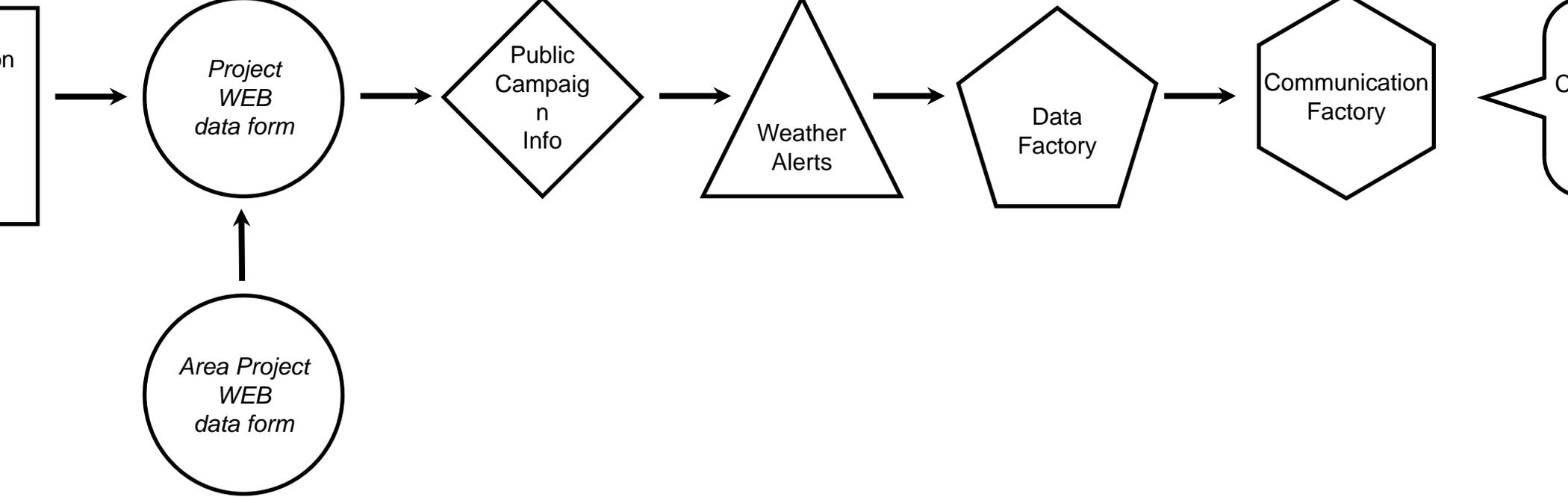
Management strategies - include various strategies intended to reduce the volume of traffic traveling through the work zone.
Network management strategies- include various traffic operations techniques and technologies to optimize traffic flow on one and adjacent roadways.

Safety management strategies – include various devices, features, and management procedures to address work zone safety.
Incident management and enforcement strategies – include various strategies to monitor traffic conditions and make adjustments to traffic operations based on changing conditions.

Information (PI) strategies

Outreach strategies - include various methods to educate and reach out to the public, businesses, and the community.
Ongoing project work zones and potential impacts.

Information strategies – provide current and/or real-time information to road users regarding the project work zone.



2:04 PM 73%

Day Week Month Year List Search

2012

Mon 28	Tue 29	Wed 30	Thu 31	Fri 1	Sat 2
● Game vs Wo... ● Game vs Has...			● Practice ● Game vs Inve...		
4	5	6	7	8	9
● Practice ● Game vs S St...			● Practice ● Game vs Has...		● Parker's grad...
11	12	13	14	15	16
● Practice					
18	19				
● Game vs Inve... ● Game vs Sho...					
25	26				
● Game vs Wo... ● Game vs Inve...					

2012 Jan Feb Mar Apr May Jun Jul Aug

Event Details Done

Search Directions 39.82754, -104.98737

Ramp closure
US 36 and...

Starts Ends

Calendar

Notes
The Ramp for 287/Federal traffic so to St...

AT&T 3G 11:45 AM

Calendars Invitations (0) Day Week Month Year List Search

19

Sunday, August 19 2012

Sun	Mon	Tue	Wed	Thu	Fri	Sat
	5	6	7	8	9	10
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

all-day events

- REDUCED TO ONE LANE - I-35 NB mile 68.44** 12 AM, Jul 30 to 7:31 AM, Aug 20
notes Concrete Rehabilitation, Grinding & Bituminous Shoulder Replacement in Rice County on TH 35 from CSAH 9 to the Heath Creek [more...](#)
- CLOSED TO TRAFFIC - I-35E mile 107.72 at I-94 in I-94** 4 AM, Aug 18 to 4:01 AM, Aug 19
notes NB & SB 35E closed for bridge construction. A posted detour is in operation. more...
- STALLED VEHICLE - I-35 NB mile 193.04** 11:14 PM to 12:02 AM
- CRASH - I-94 WB mile 238.27 at I-94 in I-94** 3:29 AM to 4:32 AM

Today Jul Aug 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 Sep

all-day events

- CRASH - I-35 NB mile 84.27 at 185th St W in 185th St W** **DISABLED VEHICLE - ...** **DE...**
- CRASH - I-35 SB mile 201...** **CRASH - I-3...** **CRASH - I-9...**
- CRASH - I-35 NB mile 61.02** **INCIDENT...** **DE...**
- STALLED VEHICLE - I-94 EB mile 214.37 at 95th Ave N in...** **I-94 EB...** **STA...**
- DEBRIS ON ROA...** **CRASH - I-35 NB mi...** **STA...**
- CRASH - I-35 SB mile 4.01**
- DEBRIS ON...**
- LEFT LANE CLOSED - I-94 EB mile 228.98 at N 3...**
- DEBRIS ON ROADWAY - I-94 WB mile 175.71** **STALLED VEH...**
- DEBRIS ON ROADWAY - I-35 NB mile 255.9 at N...**
- CRASH - I-94 WB mile 148.01 at Sand Lake Rd in...**

RSS and Blogs

US 36 Managed Lane/BRT Project

RAMP CLOSURE - June 19 11:00 pm to June 20 5:00 am

Today, April 18, 2012, 3 hours ago →

The Ramp from US 36 EB to US 287/Federal Road will be closed. All traffic so to follow the detour to Pecos St...

Displaying 1 / 1

All 1

Sort by:

▼ Date
Title

[View feed properties...](#)

Twitter

8:36 AM 69%

- RDWRKAHD** 3 mins
Cleared debris on roadway - I-694 mile 45.1 near Rice St in Shoreview - Aug 21 1:01 PM
- RDWRKAHD** 3 mins
Cleared crash - MN 36 mile 1.3 near Snelling Ave N in Roseville - Aug 21 1:13 PM
- RDWRKAHD** 18 mins
Cleared crash - I-35E mile 119.2 near Co Rd H2 E in - Aug 21 1:01 PM
- RDWRKAHD** 18 mins
Cleared crash - I-94 mile 213.7 - Aug 21 1:01 PM
- RDWRKAHD** 18 mins
Cleared crash - I-35W mile 16.2 near I- 35 in Minneapolis - Aug 21 1:01 PM
- RDWRKAHD** 18 mins
Updated crash - MN 36 mile 1.3 near Snelling Ave N in Roseville - Aug 21 1:13 PM
- RDWRKAHD** 21 mins
Added reduced to two lanes - US 10 mile 236.2 near Central Ave NE in Blaine - Aug 21 1:13 PM
- RDWRKAHD** 28 mins
Added reduced to two lanes - US 10 mile 233.9 near US Hwy 10 in Coon Rapids - Aug 21 1:06 PM
- RDWRKAHD** 33 mins
Cleared crash - MN 77 mile 3.7 near Cliff Rd in Eagan - Aug 21 12:21 PM
- RDWRKAHD** 33 mins
Added crash - I-35E mile 119.2 near Co Rd H2 E in - Aug 21 1:01 PM

Facebook

7:48 AM 50%

News Feed

Status Photo Check In

Traffic Applications
Added RIGHT LANE CLOSED - US 52 WB mile 130.34 at Lafayette Fwy in St. Paul - Aug 20 1:46 PM
Monday at 1:47pm via ScottLocal · 🌐
Like · Comment

Traffic Applications
Added RIGHT LANE CLOSED - US 52 EB mile 129.57 at Concord St in St. Paul - Aug 20 1:42 PM
Monday at 1:43pm via ScottLocal · 🌐
Like · Comment

Skip Powelson likes Mitt Romney.

Mitt Romney
To learn more visit my website: <http://www.mittromney.com/> or...
Monday at 1:11pm · Sponsored
Like Page

John Paul Thomas likes The Hay Connection.

The Hay Connection
Please post buyer, seller, or hauler first. Then your town...



Don't be distracted while driving



Hwy 169/I-494



- New:
- [Full overhead view of traffic on the new configuration](#) (36 MB, WMV file)
 - [Additional 3D visualizations](#)
 - [How to access northbound Hwy 169 from eastbound I-494 at the new interchange](#)

- Status:
Construction continues
- [Project update](#) (8-6-12 PDF)
 - [Project update](#) (7-30-12 PDF)
 - [Project update](#) (7-23-12 PDF)

- Location:
- Bloomington, Edina, Eden Prairie

- Description:
- [Eliminating signals](#)
 - [Interchange reconstruction](#)
 - [Roundabouts](#)
 - [Read the project summary](#)
 - [2012 Construction Fact Sheet](#)

- Cost:
- Approximate cost of \$125 million (design and construction)

Hwy 169/I-494 Interchange Reconstruction



Map of 169/494 Project



- Traffic Impacts
- The new Washington Avenue Bridge is closed until mid- to late August for roundabout construction on the north side of the bridge. Those on Viking Drive or Washington Avenue can use Golden Triangle Drive and W 78th Street to get around the closure. Access across I-494 will be available to the west at Prairie Center Drive.
 - The ramp from southbound Hwy 169 to westbound I-494 is closed until late summer for reconstruction. Detour: Use westbound Hwy 62/Hwy 212 to access westbound I-494
 - The ramp from W. 78th Street/Townline Avenue to southbound Hwy 169 is closed for reconstruction until approximately late July. Detour: Use local road system to travel westbound and use eastbound I-494 or Valley View Road to access southbound Hwy 169

- Ongoing
- Motorist should expect delays as the traffic signal on northbound Hwy 169 is temporarily back in operation. The signal is needed because all Hwy 169 traffic will be using the northbound lanes as the southbound lanes are reconstructed this year. The signal will allow traffic from westbound I-494 to access northbound Hwy 169 safely. The traffic may remain in operation until fall 2012.
 - Local detours are in effect at the interchange due to the "all green" traffic signals. See maps for [detour details](#).
 - Overnight lane closures on I-494 and Hwy 169 will occur as needed

- Latest Events
- C. SPORTING EVENT - Silver Pi at Cambridge St** Twins Win
2012-04
 - B. MOOSE ON ROADWAY - Charles St at Beacon St** Here moosie
2012-04
 - A. STALL IN LEFT LANE - Crosstown Hwy at 34th Ave S** my stall
2012-04

Current Construction Schedule

- What we did in 2011
- Reconstructed northbound Hwy 169
 - Constructed and opened the new Washington Ave. Bridge spanning I-494
 - Partially constructed the flyover bridge from westbound I-494 to southbound Hwy 169
 - Partially reconstructed the frontage road system and opened two roundabouts

- What we'll finish in 2012
- Reconstruct southbound Hwy 169
 - Finish remaining work on frontage roads (Washington Ave., Viking Drive, West 78th Street and Marth Road) and open remaining four roundabouts
 - Construct remaining flyover bridges, ramps and loops and open them to traffic in late summer or fall

Project Description

- Improve safety and mobility by converting this expressway to a freeway. This work includes:
- Reconstructing the interchange with six connections
 - Removing traffic signals
 - Connecting the north and south frontage roads under Hwy 169
 - Building noise walls
 - Constructing drainage and water quality facilities

Connect with us



Latest Tweets

Traffic Manager **RDWRKAHD**

RDWRKAHD New blocked - ID 55 mile 11.5 near Christopher St in - Aug 7 11:58 AM
35 seconds ago · reply · retweet · favorite

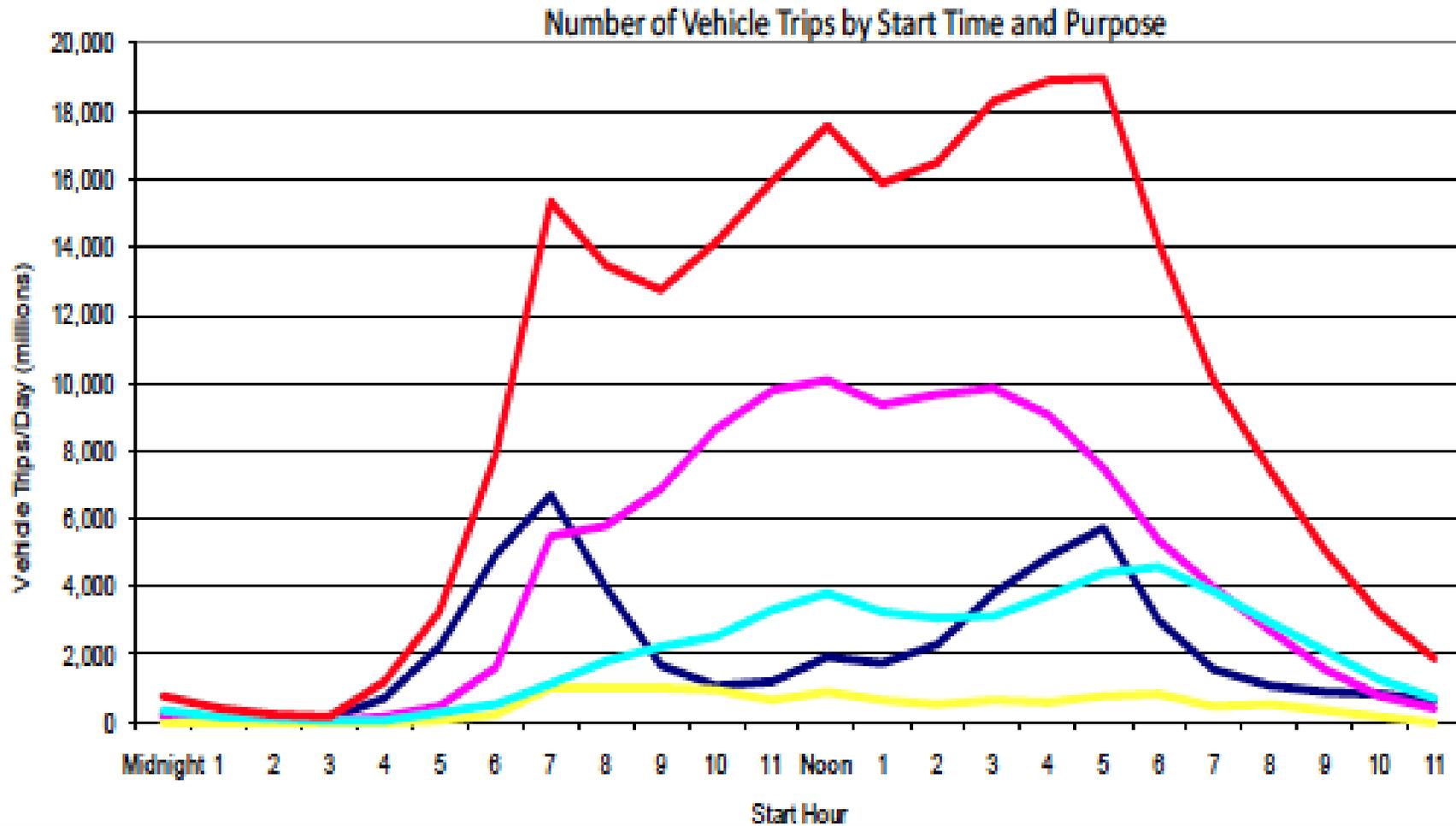
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55 seconds ago · reply · retweet · favorite

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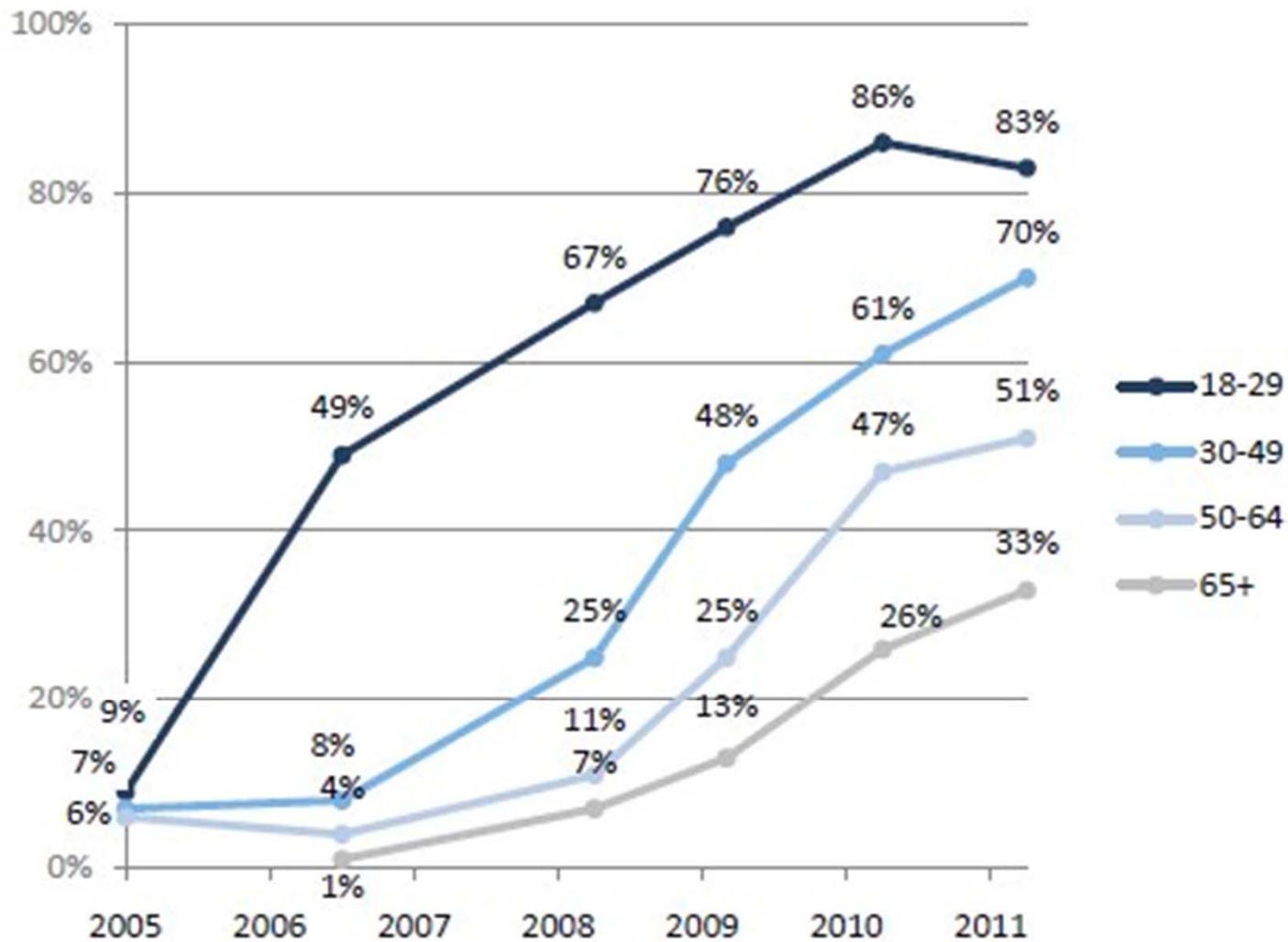
RDWRKAHD New construction work - I-10 mile 229.1 near Metairie Ct in Metairie - Aug 7 12:57 PM
2 minutes ago · reply · retweet · favorite

Join the conversation

Vehicle trips by purpose



Social network use by age





Distracted Driving

4 of the top 10

- *Texting*
- *Using a cell phone or smartphone*
- *Reading, including maps*
- *Using a navigation system*



Our Vision is to improve safety, mobility and mitigation of economic impacts associated with work zones, with best-time multi-channel communications, which will change driver behavior through knowledge.



Business Community

percent of people who use three or more digital means of research for purchases learned about the specific brand or retailer from a working site. 48% of these consumers responded to a retailers posted on Facebook or Twitter.

small business leaders use social media to get in front of customers and find new customers.



In the U.S. , social networks and blogs reach nearly 80 percent of active internet users and represent the majority of the Americans' time online

4 in 5 active internet users visit social networks and blogs
Internet users over the age of 55 are driving the growth of
social network through the Mobile Internet



In a recent survey of persons owning the specific devices, approximately 50% use a navigation system while driving, and 25% use a Smartphone for directions while driving.

Younger drivers (21-34) are 2-3 times more likely, than older, to make a call or send a text for directions or information while driving.

Less than 5% across all age groups would not consider making a call or sending a text while in a marked work zone

Questions?



TRAFFIC APPLICATIONS, LLC
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“Collecting Road Noodles and Serving Traffic Smoothies”

A Timely Blend for Safety and Mobility

Input

Information
 Project information
 Traffic Data:
 Sensors
 Data by mode:
 Bike/Car
 “aging”:
 Safety
 Driver
 Ride-share
 Commute

Combine



Output

Scheduled and event based

Location relevant

Selectable communications medium



Automated Output:

- Real-time project impact data
- maps for getting to impacted business
- alternate or “route around “ options
- best time for travel to, or avoid
- incidents and accidents near by
- travel/delay time alerts and predictions based on real-time and historical data

Connect

Traveling public

Business

