Overview of FDOT District 7 Safety Programs and Initiatives in Tampa Bay, FL

2013 Safety Summit

Florida Department of Transportation – District 7

April 2, 2013

Peter Hsu, P.E.

District Safety & Special Projects Engineer

Why are we here?

- Tampa Bay ranked among the **worst for pedestrian safety** in "Mean Streets"/ Dangerous by Design Report 2010 and 2011
- District 7 alone has **more pedestrian fatalities than 34 other states**.
- Pinellas County is ranked #1 most dangerous large population County in FL in terms of severe bike crashes.
- Addressing "severe" crashes requires COORDINATION between FDOT and locals.

Engineering, Education & Enforcement
3E Approaches

HEADS UP! FOR SAFETY

DISTRICT 7 Community Traffic Safety Teams

hillsborough + pasco + pinellas + west central florida (citrus & hernando counties)

www.d7ctst.org

walkwisetampabay.com

CLICK IT OR TICKET FLORIDA

You Drink & Drive. YOU LOSE FLORIDA

Safety Engineering Programs

- Crash Data Management System
- Road Safety Audit (RSA)
- Design Build Push Button Contract
- District-wide Pedestrian Countdown Signals
- District-wide High Emphasis Crosswalk Program
- District-wide Audible Pavement Marking Program
- District-wide Bike Safety Engineering Program
- "Qwick Kurb" Program
- School Speed Feedback Signs & Flasher Program
- Bright Stick Enhanced Sign Post Program
- Local Agency Engineering Support Program
- Safety Engineering Workshops & Info. Sharing

and more…

Engineering Support using D/W contracts

- Local Agency Engineering Support Program
- RSAs for local roads as well as state roads
- District Wide Design Contract for approved off-system safety projects
- In-house support for engineering issues (in Pasco for 18 months)
- Initial help with CDMS setup
- Safety Ambassadors

Safety Ambassadors

- Have safety questions along the way?
- Ambassadors are <u>here to help you</u> get your project approved and funded!
- The GO-TO contacts for this D7 safety programs

John Temple, P.E.
Agencies in Pasco, Hernando & Citrus Counties

Keith Crawford, P.E.
Agencies in Pinellas & Hillsborough Counties

LAP Assistance

- Inform locals for safety funding
- Coach locals for LAP process
- Bridge between FDOT & Locals for LAP concerns
- Work with FDOT D7 to create necessary LAP process training & user guides for safety project funding application

Design Build Push Button Contract

"Fast Response" Design & Construction using Safety Funds – up to 270 Days!
Handled more than 500 intersections & highway segments along State Highways in the Pedestrian Safety, Lane Departure & Intersection Safety areas.

Florida Department of Transportation – District Seven

D/W Countdown Pedestrian Signals & Push Button Plaques

10,000+ Pedestrian Countdown Signals & Plaques were purchased!
Provided to all local agencies for all roadway intersections.

D/W High Emphasis Crosswalk & Audible Pavement Marking Program

Using DBPB contract to speed up the safety improvements.
Handled more than 500 signalized & un-signalized intersections along State Highways.
More than 80 miles of Rural state highways have the Audible Pavement Markings!

D/W Bike Safety Engineering Program

-- Install "Watch for Turning Vehicles" signs at 100+ driveways. Proven to be effective to reduce 26%+ bike crashes

-- Mark 50+ highway miles of Paved Shoulders with Bike Lane Symbols & Wrong Way Riding Signs

Florida Department of Transportation – District Seven

D/W Qwick Kurb, Solar Powered Speed Feedback Sign & Flasher Programs

Millions of $$ in Federal Safety Funds were used in the last 5 years!
More than 200 Speed Feedback Signs + 200 School & 24/7 Flashers were purchased.
Qwick Kurb Won the National Roadway Safety Award in year 2007 for the quick response to address access safety concerns.

GREAT JOB PASCO!

"Bright" Stick Study: Pasco County

- Pasco Study is a **NATIONAL best practice example** & shows this is the **most cost-effective safety improvement available** today.
- Pasco studied three locations: Ehren Cutoff Rd., Bellamy Brothers Rd, Shady Hills Rd.
- Biggest **PROVEN "bang for the buck" to reduce crashes** – 41%!

Local Agency Engineering Support & Off-System Safety Projects

FDOT provides FREE engineering analysis, RSA & engineering support! More than $15M worth of off-system safety projects were approved to address intersection, vulnerable users, lane departure, high risk rural highway, safe routes to school projects in the past 4 years!

Florida Department of Transportation – District Seven

FREE Safety & Traffic Engineering Workshops & Information/Award Sharing!

More than 20 Safety & Traffic Engineering workshops (more than 100 PDH credits) were offered through FHWA or District 7 Safety office.

Peter Hsu shares at least ONE e-mails/week☺ with local engineering & MPO agencies for the latest Safety & Engineering info. from FHWA & FDOT.

Numerous agencies were nominated in the statewide awards as the safety partners.

Road Safety Audits (RSA) Team Work

- Formal safety performance examination
- Existing/future road segments or intersections
- Proactive
- Low cost
- Overall safety improvements to roadways
- More than 130 RSAs done for all phases of projects

County-wide Ped. & Bike Safety Action Plans (PSAP & BSAP)

- Effort began in 2009 with Pinellas County PSAP
  - Hillsborough – PSAP 2010, BSAP 2012
  - Pasco PSAP– 2012
- Engineering
- Education
- Enforcement

FHWA Spotlights on Pedestrian Safety -- Tampa B

http://readperiodicals.com/201201/2591446121.l

Help with Crash Data
Crash Data Management System (CDMS)

- Crash data analysis software
- Significantly reduce time required to pull crash data

New Engineering Techniques

- RRFB
- R10-15 (Turning Vehicles Yield to Pedestrians)
- LOOK message
- Transit Pedestrian study
- Access Management study

RRFB video

D7 Design Safety Prompt List

- Is safety being addressed in design process?
- Incorporates safety into each project.

Design Safety Prompt List

Back to Table of Contents

Arterials and Streets

KEY POINT: Arterials typically feature closely spaced signalized intersections. Good access management and good traffic signal coordination and operations are essential for arterials to operate well.

- Is the design speed close to the anticipated operating speed?
- Are there railroad crossings along the corridor? If so, will the railroad preempt traffic signals on the corridor? Is the design set up to minimize the likelihood of vehicles getting stuck on the tracks)?
- Are there school zones along the corridor? Have they been accounted for in the coordinated signal timing plans?
- Is there a fire station along the corridor? Is there an emergency signal? Will emergency

Safety Education Programs

Walk Wise, Bike Smart program

Teen Traffic Safety program

Safe Routes to School Education Program

CTST Safety Education Tip Cards & Publications

Gulf Boulevard Flag Program

Safety Education Programs

Walk Wise and Bike Smart, Teen Safety

Safe Routes to School Education Program

Yearly School **Walking & Biking** Safety Education budget: $330,000+.
Four (4) agencies covering Hillsborough, Pinellas, Pasco, Hernando Counties.
More than 25,000 students in 50+ Elementary & Middle schools were taught yearly.

Safety Education Tip Cards & Publications

Created more than 30+ safety education material -- Bookmarks R Us☺
Pedestrian Safety Posters for more than 1000 County & School Buses.
Rest room pedestrian safety advertisement in major local restaurants.

Florida Department of Transportation – District Seven

Gulf Boulevard Flag Program

Coordinated effort with Big-C & Pinellas MPO in year 2010.
More than 50 mid block crossings along Gulf Blvd.
Purchased 5,000 flags by FDOT.
Big-C restocked flags.

Safety Enforcement Programs

Enforcement Safety Tip Card Program

Pedestrian Safety Enforcement Overtime Program

"Warehouse" of the safety education material & goodies

Enforcement Safety Tip Card Program

Help Law Enforcement to talk to citizens -- Hernando & Citrus Counties

Florida Department of Transportation – District Seven

destrian Safety Enforcement Overtime Program

12 law enforcement agencies in Hillsborough, Pinellas & Pasco Counties!
More than $800,000 State & Federal funds were allocated.
Additional $500K per year requested for 2013/2014.

Month	Citations
July	367 Warnings
August	399
September	358
October	305
November	281
December	227
January	265

Florida Department of Transportation – District Seven

"Warehouse" of the safety education material & goodies for Law Enforcement

Effectiveness of FDOT D7 Bike/Ped Safety Program:

nce 2009…

- **Pedestrian crashes have dropped 20%**
- **Bike crashes have dropped 10%**

	2005	2006	2007	2008	2009	2010	2011
Crashes	1256	1312	1197	1246	1215	1139	977
PDO	100	95	91	[illegible]	93	79	[illegible]
Possible Injury	292	266	286	274	[illegible]	[illegible]	176
Injury Crashes	784	864	731	804	792	701	597
Fatal Crashes	80	87	89	81	72	74	80

Florida Department of Transportation – District Seven

oint Safety Efforts – THANKS!

Enforcement Light Program Starting in Year 2004

ellas & Hillsborough Countywide Pedestrian Safety Action Plans in 2009 & 2010.

Hillsborough Countywide Bicycle Safety Action Plan in 2011.

mmunity Traffic Safety Teams in Citrus/Hernando/Pasco/Pinellas/Hillsborough for 15+ years!