



CPUC Public Agenda 3375

Thursday, April 7, 2016 9:30 a.m.

San Francisco, CA



Commissioners:
Michael Picker, President
Michel Peter Florio
Catherine J.K. Sandoval
Carla J. Peterman
Liane M. Randolph

www.cpuc.ca.gov





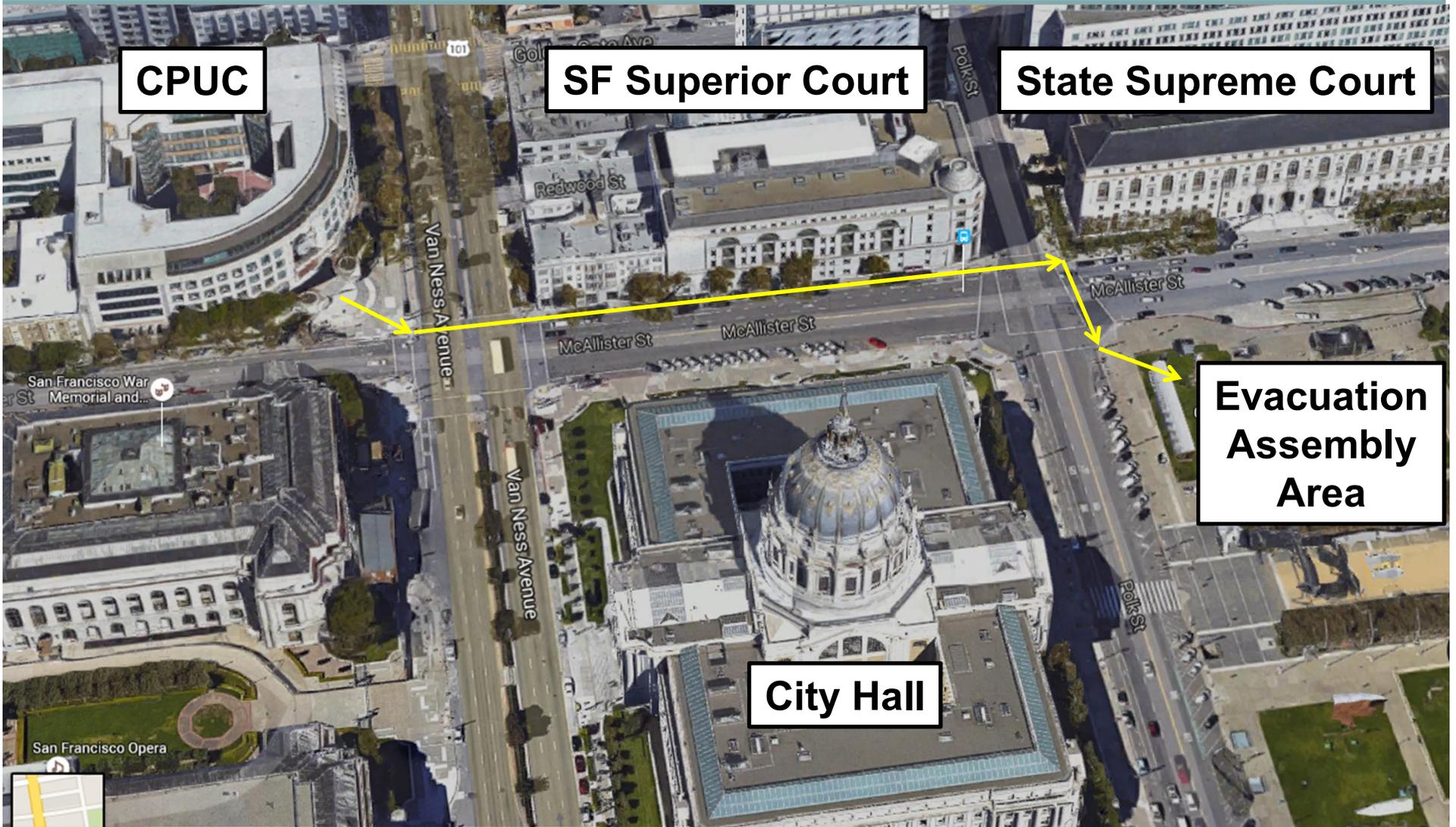
The Pledge of Allegiance



“I pledge allegiance to the Flag of the
United States of America,
and to the Republic for which it stands,
one nation under God,
indivisible,
with liberty and justice for all.”



Evacuation Assembly Location





Public Comment

- Per Resolution ALJ-252, any member of the public (excluding parties and their representatives) who wishes to address the CPUC about matters before the Commission must sign up with the Public Advisor's Office table before the meeting begins. If an individual has signed up using the electronic system on the Commission's website, they must check in with the Public Advisor's Office on the day of the meeting, by the sign-up deadline.
- Once called, each speaker has up to 3 minutes at the discretion of the Commission President. Depending on the number of speakers, the time limit may be reduced to 1 minute.
- A sign will be posted when 1 minute remains.
- A bell will ring when time has expired.
- At the end of the Public Comment Section, the Commission President will ask if there are any additional individuals who wish to speak. Individuals who wish to speak but did not sign up by the deadline, will be granted a maximum of one minute to make their comments.

Public Comment is not permitted on the following items:

- **36**
- All items on the Closed Session Agenda





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- Once called, each speaker has up to 2 minutes at the discretion of the Commission President. Depending on the number of speakers, the time limit may be reduced to 1 minute.
- A sign will be posted when 1 minute remains.
- A bell will ring when time has expired.
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Public Agenda Changes

Items shown on the Consent Agenda will be taken up and voted on as a group in one of the first items of business of each CPUC meeting.

- Items on Today's Consent Agenda are: **1, 4, 5, 7, 10, 11, 12, 14, 15, 18, 20, 21, 23, 24, 25, 26, 27, 28, 29, 31, 32.**
- Any Commissioner, with consent of the other Commissioners, may request an item from the Regular Agenda be moved to the Consent Agenda prior to the meeting.
- **Items 38am, 39x, 40ag** from the Regular Agenda has been added to the Consent Agenda.
- Any Commissioner may request an item be removed from the Consent Agenda for discussion on the Regular Agenda prior to the meeting.
- **No Item** has been moved to the Regular Agenda.
- **Items 37, 38 (except Sub-Item 38am), 39 (except Sub-Item 39x), 40 (except Sub-Item 40ag)** have been withdrawn.
- The following items have been held to future Commission Meetings:
 - Held to 4/21/16: **2, 3, 6, 8, 9, 13, 16, 17, 19, 22, 34, 35.**
 - Held to 5/12/16: **30, 33, 33a, 33b.**





Regular Agenda

- Each item on the Regular Agenda (and its alternate if any) will be introduced by the assigned Commissioner or CPUC staff and discussed before it is moved for a vote.
- For each agenda item, a summary of the proposed action is included on the agenda; the CPUC's final decision may, however, differ from that proposed.
- The complete text of every Proposed Decision or Draft Resolution is available for download on the CPUC's website: www.cpuc.ca.gov.
- Late changes to agenda items are available on the Escutia Table.





Regular Agenda - Orders Extending Statutory Deadline

Item # 36 [14754] – Order Extending Statutory Deadline

C10-10-010

Michael Hetherington and Janet Hetherington vs. Pacific Gas and Electric Company.

Adjudicatory

Comr Florio - Judge Roscow

PROPOSED OUTCOME:

- Extends statutory deadline for completion of this proceeding until October 13, 2016.

SAFETY CONSIDERATIONS:

- There are no safety considerations implicated with this Order Extending Statutory Deadline.

ESTIMATED COST:

- There are no costs associated with this Order Extending Statutory Deadline.





Commissioners' Reports





Commissioner Sandoval's Report



Commissioner Catherine Sandoval California Public Utilities Commission

April 7, 2016





Visiting East Porterville resident in neighborhood where most wells have run out of water. Water is trucked to tanks through cooperation among the State of California, the Tulare County Office of Emergency Services, Tulare social services, churches, non-profits, volunteers, and Cal Water which supplies water for emergency tanks.

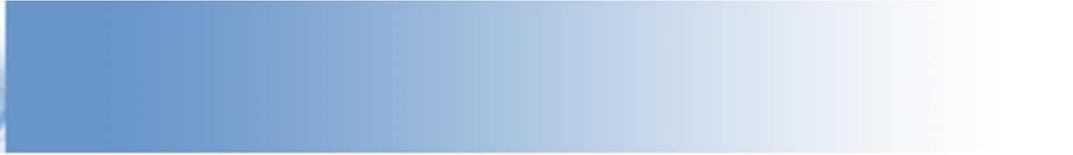




Drought Emergency facilities offering showers and a hand washing station in East Porterville area where most wells have run dry. Drought Assistance Center provides information on the CPUC Energy Savings Assistance Program and Department of Water Resources programs to save water & energy.

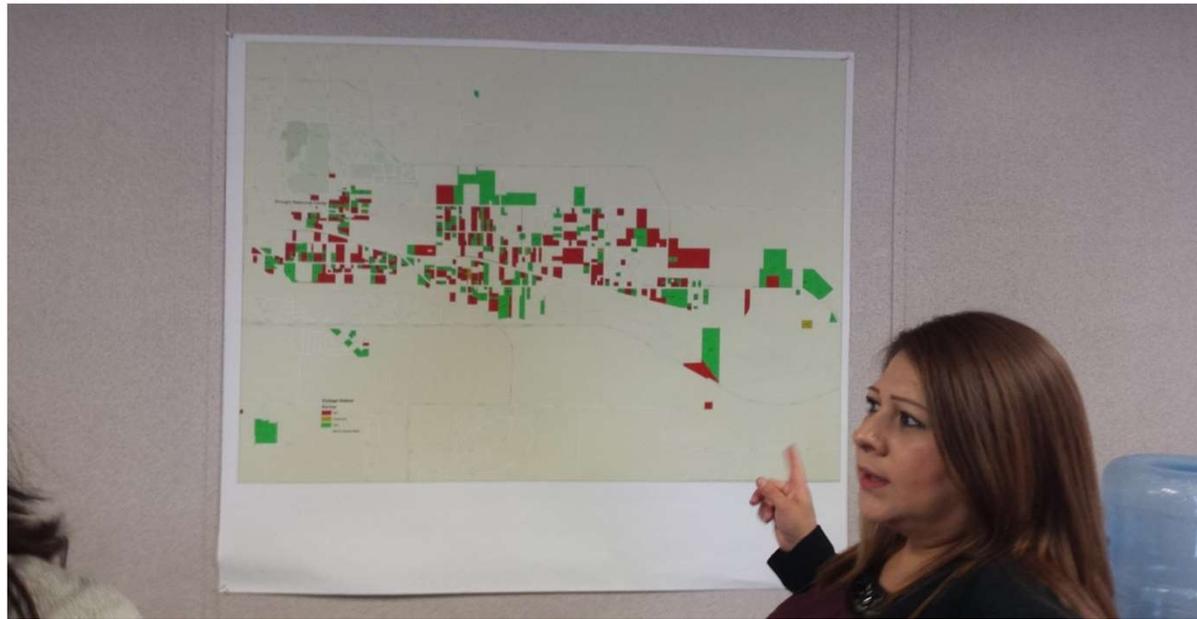






Emergency drinking water for East Porterville residents who have run out of water during the drought.





Map indicates area of water issues in East Porterville. This is an early 2015 map of East Porterville's water availability. Green indicated areas that received a water survey and emergency service. Red areas still needed to be surveyed *at the time of the map's creation in early 2015.*





Telephone & electric lines for water treatment plant in Kern Valley Area with no reliable cell service. Phone line provides alarm and connection to plant treating water for contaminants including uranium and selenium.





**Lake Isabella.
5th greatest post-
Karina dam risk in
the USA, per Army
Corps of
Engineers. Area
now has
evacuation sirens
for potential dam
breach.**





Cal Water treatment plant supervisor in Bodfish area of Kern Valley with vessels that filter contaminants from local groundwater including uranium, selenium, arsenic, and fluoride.





Commissioner Sandoval and Jamie Ormond meeting with the Eastern Sierra Connect Broadband Consortium. Due to the area's limited Internet facilities and constrained microwave backhaul, The Kern Valley Hospital can't simultaneously conduct a telemedicine session, such as a patient consultation with the U.C. Davis burn unit, and send or receive X-rays.





The Kern River Valley. SCE Hydroelectric facilities are upriver. All communications backhaul out of the Valley is done through Microwave and has limited capacity.





Low telephone wire approximately 5 feet from the ground in Campbell, CA neighborhood.





Commissioners' Reports





Management Reports





Regular Agenda – Management Reports and Resolutions

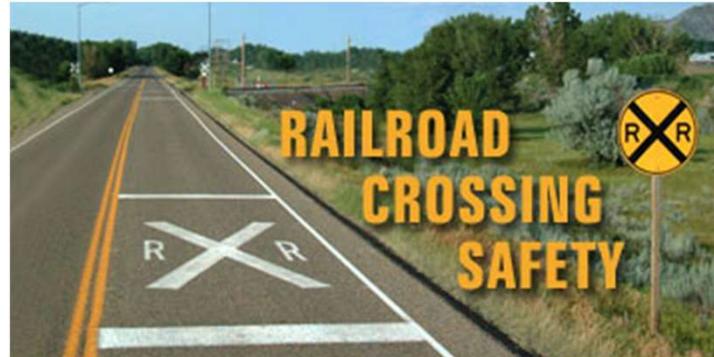
Item # 41 [14681]

**Report and Discussion by Safety and Enforcement Division
on Recent Safety Program Activities**



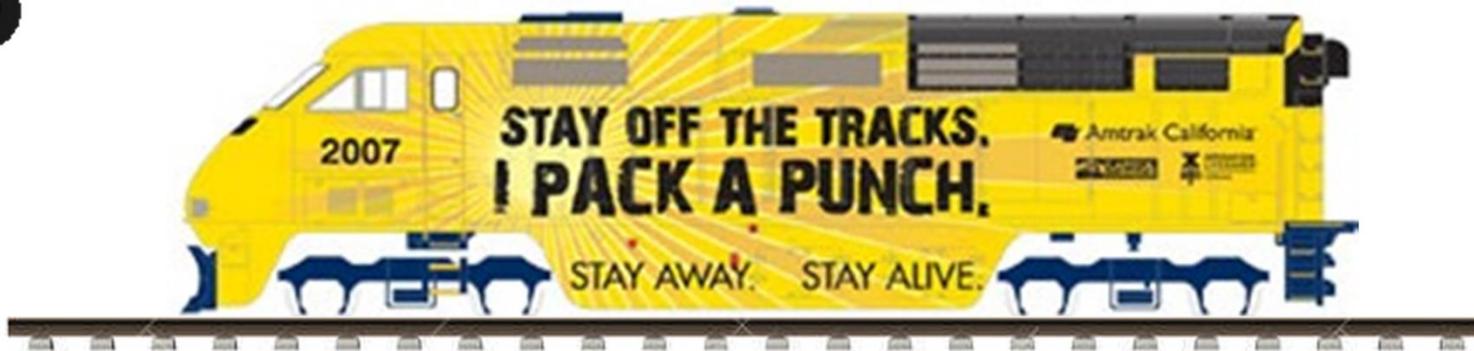
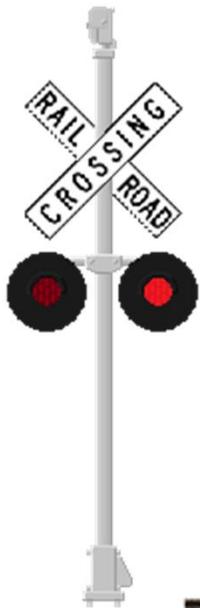


California Public Utilities Commission



Office of Rail Safety Safety and Enforcement Division California Public Utilities Commission

April 7, 2016



**Portions of this presentation provided by Transpo, Industries, Inc.*

Highway-Rail Crossing Safety Issues



Problem Statement:

- Improving safety at railroad / rail transit grade crossings has challenges, one being to the need to coordinate rail crossing design and technological advancements with:
 - Highway / street design
 - Operating within constraints of stakeholder budgets
 - Obtaining cooperation among the various stakeholders.

Statistics for California Highway-Rail At-Grade Public Crossings:

- Highway-rail at-grade public crossings are the most deadly locations that the California Public Utilities Commission (CPUC) regulates.
- There were 83 vehicle-train accidents at California public highway-rail crossings in 2015, resulting in 7 deaths and 31 injuries.
- There were 43 pedestrian accidents at such crossings in 2015; resulting in 23 deaths and 7 injuries.

Integrated Pavement Markings and Signage Improvements for At-Grade Crossings



Integration of pavement markings and Manual on Uniform Traffic Control Devices (MUTCD)-consistent signage upgrades represents a relatively inexpensive approach to enhancing crossing safety.

Example: The approaches of this Florida grade crossing have a total of seven railroad (RR) crossing signs and two areas of RR crossing pavement markings.

A 2014 Federal Department of Transportation (DOT) study found that vehicles were driven more safely in the vicinity of a crossing after visual upgrades were made in pavement markings and signage.



DEGARROUTE Area Marking



US DOT 2014 Report

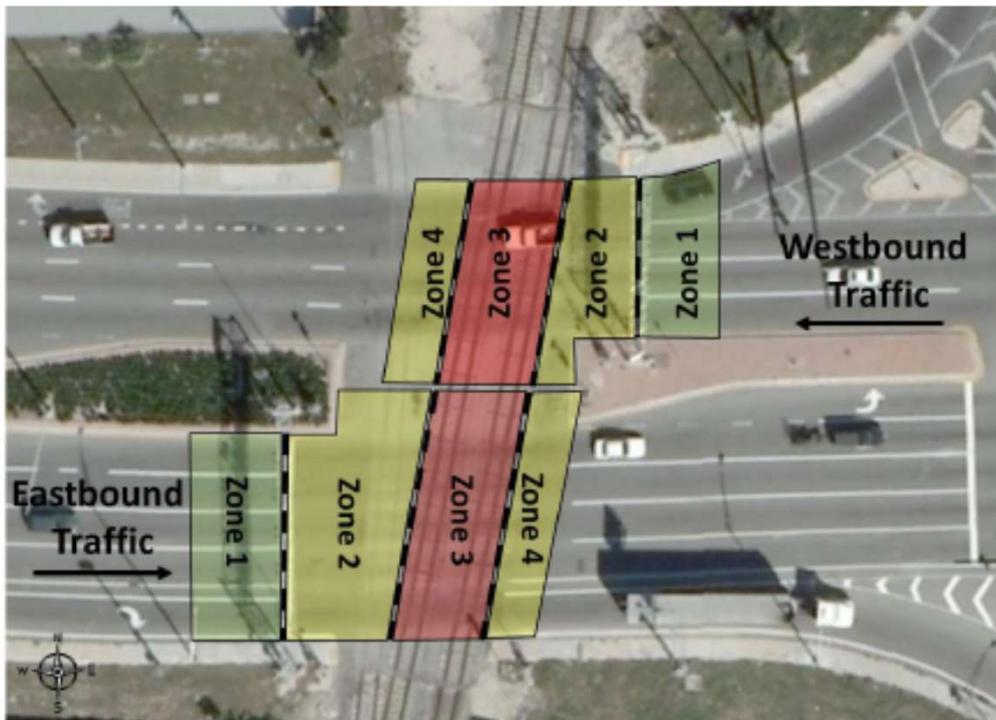


Effect of Dynamic Envelope Pavement Markings on Vehicle Driver Behavior at a Highway-Rail Grade Crossing

US DOT Report #: DOT-VNTSC-FRA-13-05; US DOT/FRA Report #: DOT/FRA/ORD-14/04

- The study evaluated the effectiveness of colored pavement markings applied in the Dynamic Envelope and signage of an at-grade-railroad crossing by examining:
- Driver stopping behavior, and;
- Corrective actions drivers took before and after application of pavement markings and signage.
- The study utilized a Zone system to identify four potential hazard areas where cars stop in front of and behind railroad crossings.
- The study concluded that the changes in pavement markings and signage resulted in an increase in driver safe stopping behavior.
- The study was primarily geared toward driver, rather than pedestrian, behavior.

What Stopping Behavior Is Safe?



Commercial Blvd & FECR crossing. Picture and graphic from Page 19, Figure 14, DOT Report: DOT/FRA/ORD-14/04

Zone 1 (not dangerous): A motorist who stops in Zone 1 has stopped before the stop line where the gate descends during an activation. Motorists stopping in this zone are behaving safely.

Zone 2 (moderately dangerous): A motorist who stops in Zone 2 has stopped after the stop line, but before the dynamic envelope. Motorists stopping in Zone 2 would be stuck inside of a descended gate but not struck by a train.

Zone 3 – Dynamic Envelope Zone (very dangerous): A motorist who stops in Zone 3 has stopped in the most dangerous part of the crossing—the dynamic envelope zone. In this zone, a train and vehicle would collide.

Zone 4 (moderately dangerous): A motorist who stops in Zone 4 has stopped past but adjacent to the dynamic envelope zone. Motorists stopping in Zone 4 would not be struck by a train.

Driver Behavior



- The crossing was filmed for over 80 hours before, and 80 hours after the installation of pavement markings and improved signage.
- Over 6,000 vehicles and associated stopping and corrective behaviors were observed in each phase (12,000 total).
- Driver stopping behavior was observed before and after improvements.
- Driver corrective behavior was observed before and after improvements.

Findings of DOT Study



- Initial results show a positive effect on driver behavior after installation of pavement markings and signage.
- There was a 9% increase in vehicles stopped in safest position (Zone 1).
- After installation there was a 45% decrease in vehicles stopping on the tracks (Zone 3).
- Descending violations (when motorists continue under a gate arm while it is descending but not yet horizontal) were reduced by 50%. There were no horizontal violations (when motorists drive around or through a gate arm) that occurred during the time of this study. They were prohibited by the length of the gate arms.
- There was a 36% decrease in vehicles stopping in Zone 4, slight decrease in Zone 2.
- There was effectively no-change in the actions taken by drivers who found themselves in the marked area, they initiated the same types of actions (back-up, change lanes).
- The study's executive summary cautions that only one crossing has been studied.

"The results of this study provide initial evidence that dynamic envelope pavement markings with signage can produce an increase in safe stopping behaviors"

-Federal Railroad Administration

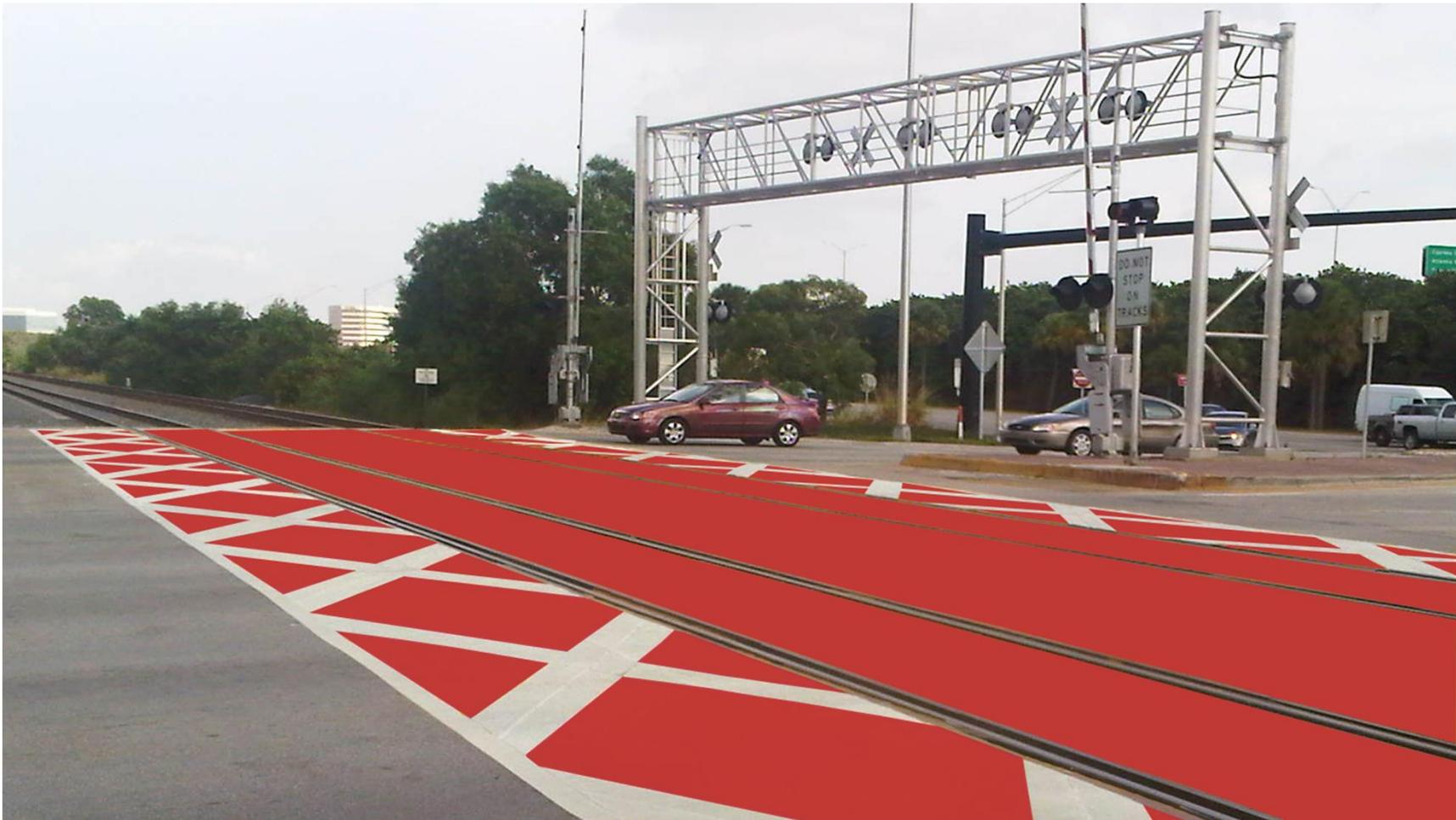
"The installation of the pavement markings elicited significant change in behavior"

-Federal Railroad Administration

A Cost-Efficient Proposal for Safety: Integrated Pavement Markings and Signage Improvements for At-Grade Crossings



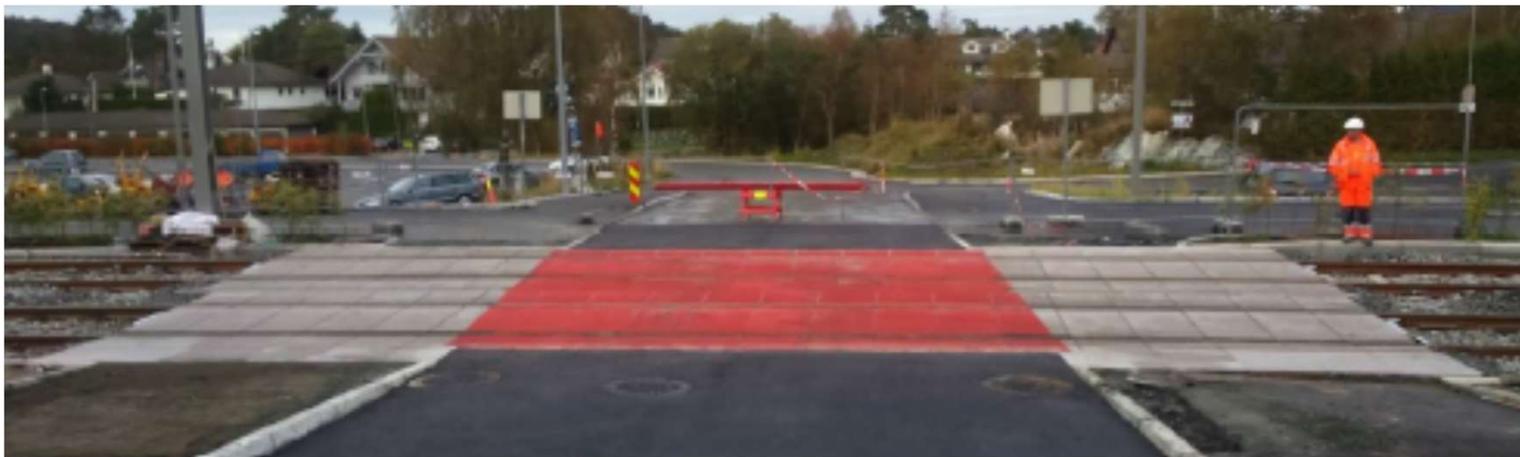
Example: Commercial Blvd & Florida East Coast Railway (FECR), Ft Lauderdale, FL



Railroad Crossing utilizing "Color-Safe® Pavement Marking for Dynamic Envelope

**Photo property of Transpo Industries, Inc..*

BODAN® Highway-Rail Grade Crossing Surface



Examples of "BODAN" concrete system in "RED" with train and driver views.

NYC MTA Highway-Rail Grade Crossing Evaluation of Pavement Markings



Excerpts from:

Highway-Rail Grade Crossing Review

Prepared by CTC, Inc., for Metro-North Railroad

October 2, 2015 NY, Valhalla

Cleveland St **DOT # 529904J, MP 24.40** River Subdivision

5.9 Pavement Markings

- Evaluate the railroad pavement markings in advance of the highway-rail crossing.** The railroad crossing pavement marking symbol should be refreshed and evaluated for appropriate placement in accordance with MUTCD Chapter 8, Section 8b.27. The advance railroad warning signs may need to be relocated based on the placement of the railroad pavement marking symbols.
- Extend edge lines and double yellow centerline through the crossing.**

5.10 Pedestrians

- Consider providing designated pedestrian pathways and encourage pedestrians to traverse within the areas allotted.**



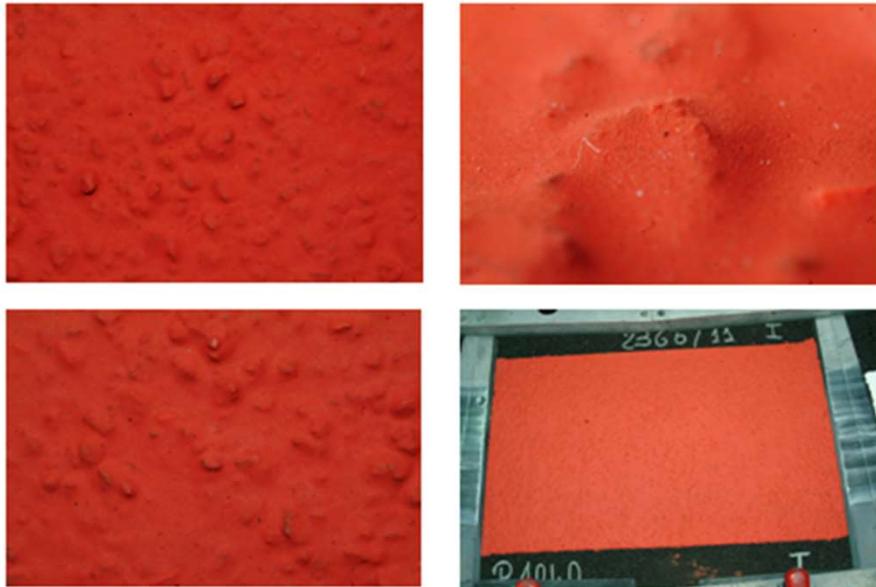
Faded Cleveland Street pavement markings

Turntable Test Acrylic MMA Visual Consistency

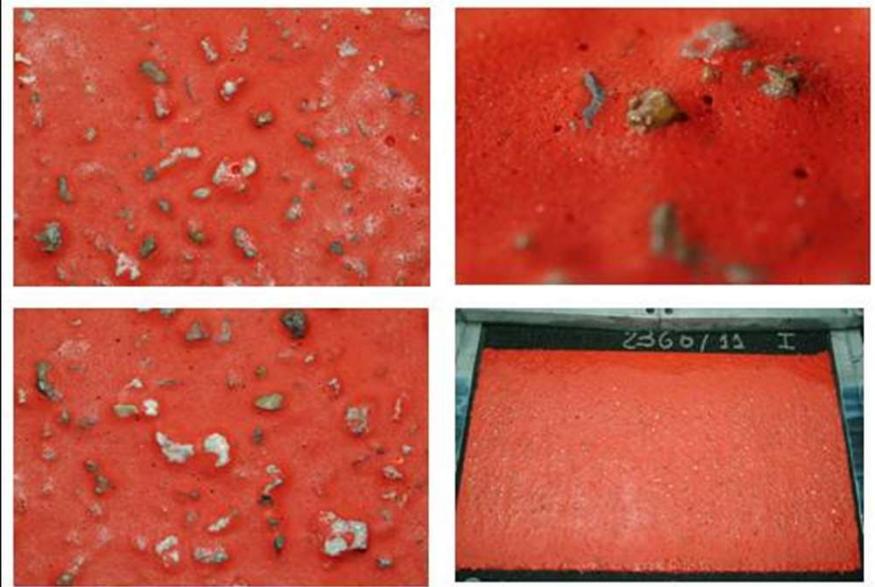


Visual consistency:

Pictures taken at the beginning
(prior to test run)



After 8,000,000 wheel passages



Conclusions



- New ideas in grade crossing safety should be the top priority of all parties (the general public, railroads, state and local agencies).
- These innovative grade crossing dynamic envelope pavement marking designs illustrate a low cost option for improving grade crossing safety.
- A CPUC initiated dynamic envelope pavement marking study would be beneficial.



Caltrain & Future High Speed Rail Crossing
Located at 16th Street and Mississippi Street (I-280 Overpass)
in San Francisco.



Ft Lauderdale pedestrian gate arm and
“Do Not Stop On Tracks” sign with flashing warning device



California Public Utilities Commission



Thank you!

For Additional Information please contact me or visit our webpage:

<http://www.cpuc.ca.gov/rail/>



Roger Clugston
Deputy Director
Office of Rail Safety
Safety and Enforcement Division (SED)
California Public Utilities Commission
320 W 4th Street, Suite 500
Los Angeles, CA 90013
roger.clugston@cpuc.ca.gov
(213) 308-7698



Regular Agenda – Management Reports and Resolutions

Item # 41 [14681]

**Report and Discussion by Safety and Enforcement Division
on Recent Safety Program Activities**





Regular Agenda – Management Reports and Resolutions

Item # 42 [14678]

Management Report on Administrative Activities





Management Reports





The CPUC Thanks You For Attending Today's Meeting

**The Public Meeting is adjourned.
The next Public Meeting will be:**

**April 21, 2016 at 9:30 a.m.
in San Francisco, CA**

