

# I-405 Sepulveda Pass Improvements Project

Accelerated Road Works

June 6, 2012



FHWA Office of Operations:  
Peer Exchange Workshop

Accelerating Delivery Through Innovative  
Contracting/Scheduling/Staging



## Precept One

West Los Angeles:  
Neighborhoods Choking on Traffic



# Precept One

- In 2010, approximately 100 million vehicles traveled (north and south) on the I-405 through the Sepulveda Pass
- At the Wilshire Bl/Veteran Av intersection (west of the I-405) approximately 120,000 vehicles pass through the intersection on an average work day
- National assets near Mulholland Bridge: Getty art museum, Skirball Center, LAX, UCLA



# Precept One



View North at Route 405 / Route 10 Interchange

# Precept One

## Scale of the I-405 project increases delays

- 26 bridges (replacement and widening)
- 68 retaining walls - 927,000 SF/53,000 LF
- 27 sound walls - 27,000 LF
- Cast-in-place concrete – 110,000 CY
- Excavation - 900,000 CY
- Backfill/Embankment – 600,000 CY
- Bridge piling - 86,000 LF



## Precept One

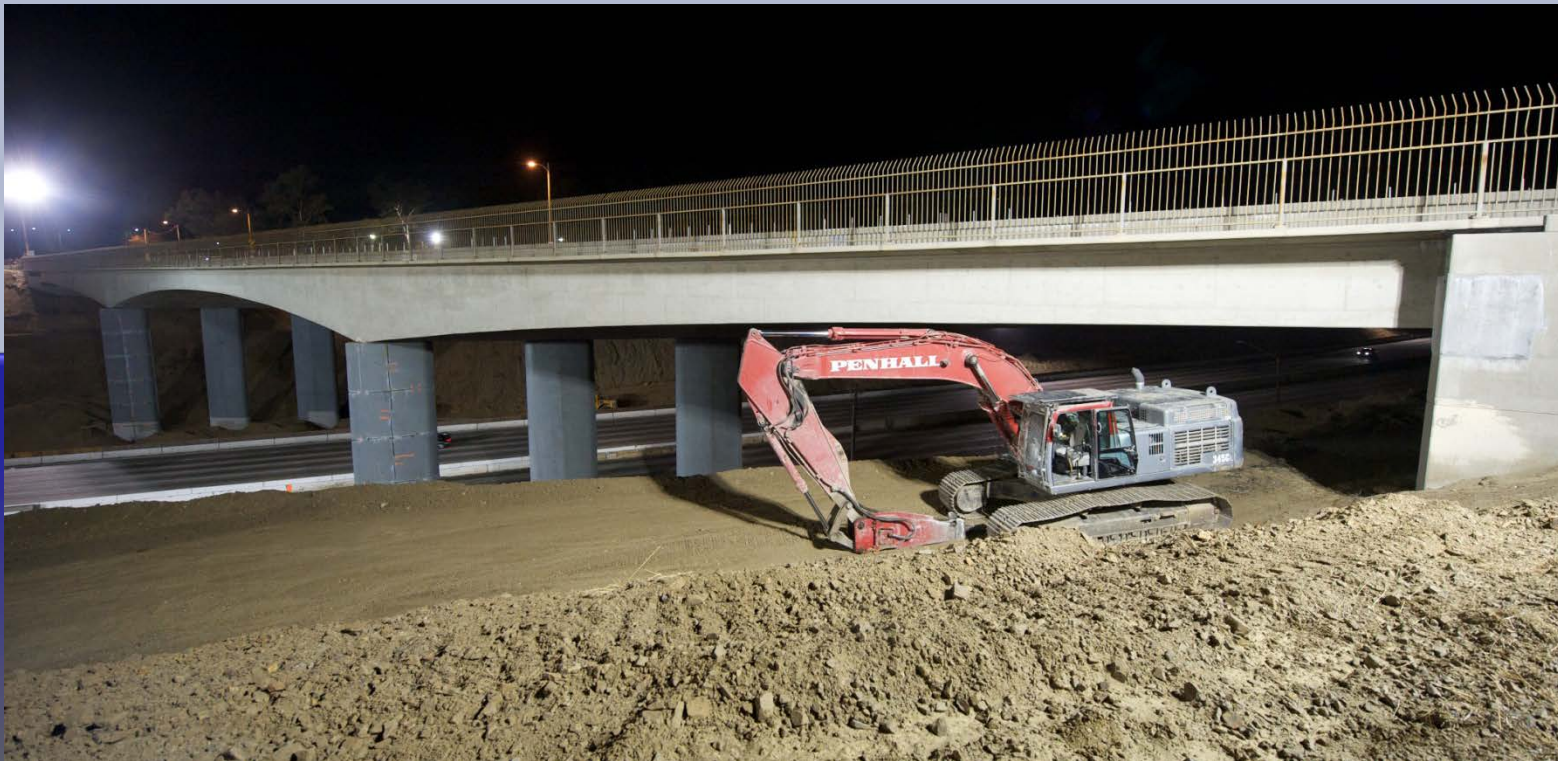
### Scale of the Mulholland Bridge demolition affected residents

- Crews started placing traffic control devices one month prior to demolition of Mulholland Bridge.
- Friday night traffic control setup required 10 crews, 28 trucks, and 5 hours.
- 2,500 cones used to close the freeway.
- 9 million pounds of concrete removed from bridge
- 1,000 cubic yards of soil placed under the bridge to protect the roadway from falling debris.



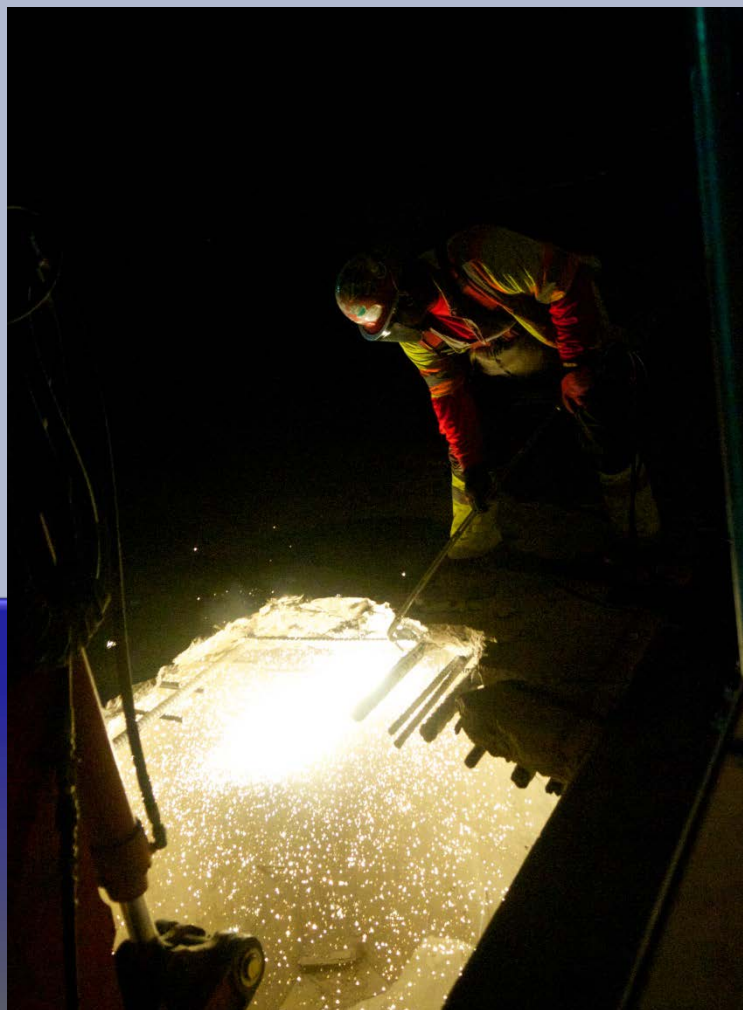
## Precept One

Demolition of north side of Mulholland Bridge finished 17 hours early





# Precept One



# Precept One



# Precept One



## Precept One

Neighborhoods surrounding the Sepulveda Pass are affluent, politically-connected, suspicious of any change to their lifestyles

A variety of agencies and political bodies exert influence on the project: Metro, Caltrans, Los Angeles Board of Supervisors, Los Angeles City Councilmembers, California legislators, Bureau of Street Services, Department of Transportation, FHWA, GSA, homeowner groups, neighborhood councils, VA



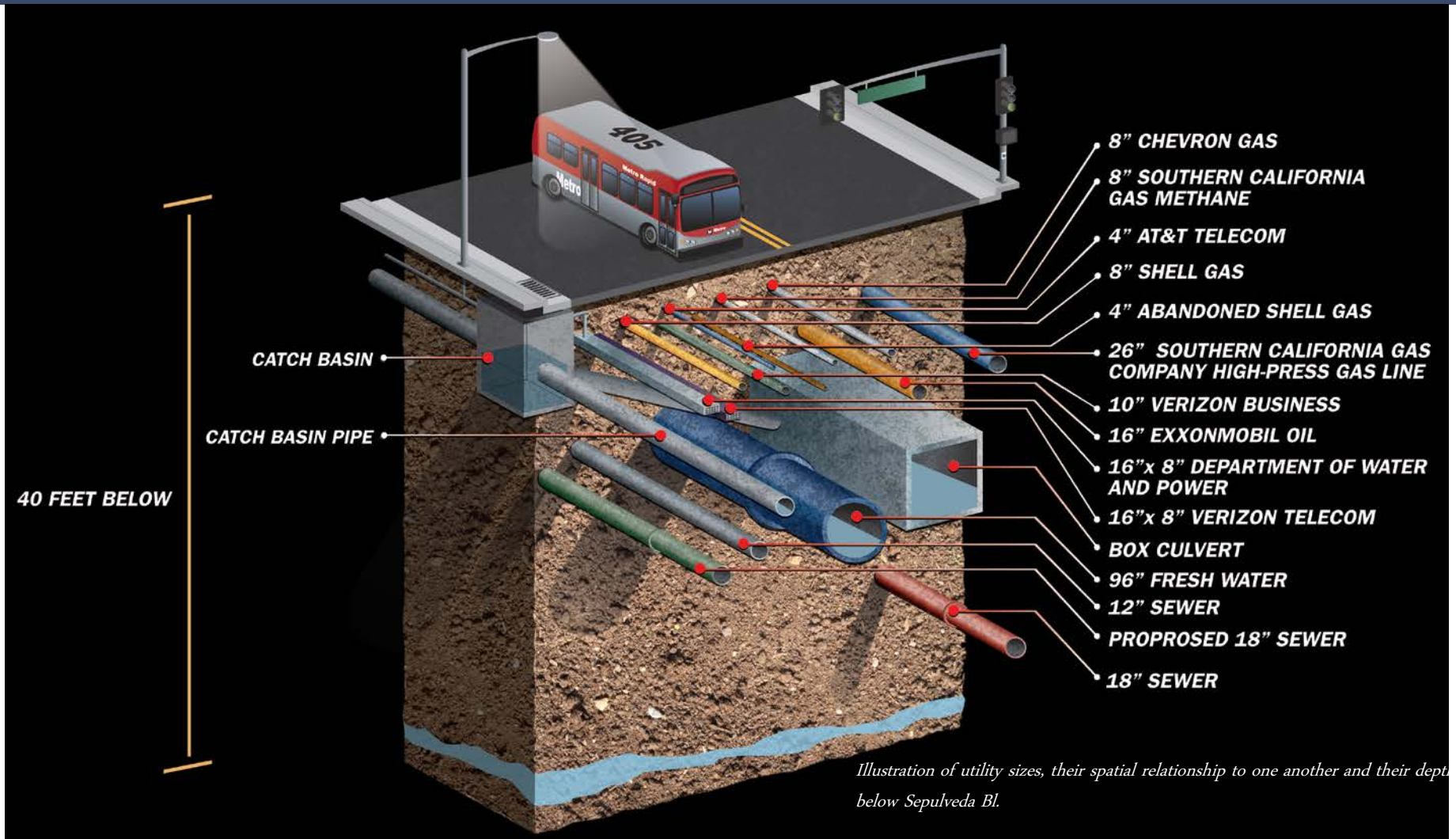
## Precept One

Stakeholders include 26 utility owners

- MWD
- Telephone companies
- SCE
- DWP
- Chevron, Exxon, Shell

# Precept One

## Logical alternative to I-405, Sepulveda Bl, stuffed with utilities



*Illustration of utility sizes, their spatial relationship to one another and their depth below Sepulveda Bl.*

## Precept One

Utilities through Mulholland Bridge delayed Carmageddon I

- Southern California Gas Company (8-inch high-pressure line)
- DWP (16-inch water line)
- SCG
- Power

## Precept Two

It Takes More Than Engineers





## Precept Two

### An extended team:

- Caltrans Operations and Caltrans Traffic
- Construction Relations, Media Relations
- Elected officials
- Local agencies (Getty, LAX, Skirball, UCLA)
- Chevron, Exxon, Shell
- Local traffic officials
- Statewide traffic officials
- Police
- Fire
- Utility relocations and risk

## Precept Three

Invite Everyone to the Table



## Precept Three

- Height, long span of Mulholland Bridge and absence of center support column required 53-hour full I-405 closure in the Sepulveda Pass
- Amount of population effected, number of agencies and government jurisdictions involved, number of hospitals and national assets nearby required a broad partnership
- Consequently, 53-hour I-405 closure coordinated through a Unified Command (LAPD, LAFD, CHP, LADOT, Metro, and Caltrans)



## Precept Three

### Caltrans commitment particularly important

- 64 fixed changeable message signs in LA, Ventura counties
- 40 fixed changeable message signs along routes 5, 99, 101, and 580, from Oregon border to San Diego
- No lane closures on all other freeways that weekend



## Precept Three

- Provide fire/emergency medical service/rescue/law enforcement/traffic control service within and around the impact area
- Manage risk
- Maintain service and response times
- Develop four geographic branches and one jurisdictional branch (CHP)



## Precept Three

- In surrounding communities, LAFD committed more than 150 firefighters and paramedics.
- LAPD committed 250 staff members during the day and 207 staff members at night.
- CHP dedicated 80 officers to the closure effort.
  
- LADOT committed 140 traffic control officers at peak, 380 traffic control officers overall.
- LADOT deployed 37 changeable message signs, each displaying traffic conditions and detour information.



## Precept Three

### Kiewit Infrastructure West Co. Planning

- Extensive demolition plan by Penhall Corporation approved by Caltrans (bridge owner)
- Hour-by-hour schedule broken into 15-minute increments
- Additional resources available; contingency plans waiting
- Kiewit furnished 46 portable message signs arrayed throughout Los Angeles County.

## Precept Four

Empower Your Community Outreach Team





# Precept Four

## Closure Weekend Outreach

- Local, regional and statewide campaign
- Media campaign
- Digital message signs
- Public announcements
- Online notices
- Applications available for download
- Social media presence



## Precept Four

- 4.6 million – impressions from print ads
- \$1 million equivalent ad value – over 300 networks reporting
- Over 450 radio ads
- 500,000 views on Metro.net/405
- Weekly email blast to over 6,000 regional stakeholder organizations
- Check inserts: Metro, City of LA, County of LA – over 150,000 employees



## Precept Four

### Vehicle Miles Traveled (VMT)

- During weekend in Los Angeles County, VMT dropped 12 percent.
- VMT in neighboring counties remained unchanged.
- Northbound I-405 at Culver Bl, traffic on Saturday, July 16 dropped 64 percent from previous Saturday.
- Southbound I-405 at Burbank Bl, traffic on July 16 dropped 56 percent from previous week.

No consultants were hired to conduct the Mulholland Bridge demolition outreach program for the I-405 project.

## Precept Four

### VMT Results for Saturday, July 16, 2011

Location	Change (%)	Change (Vehicles)
Northbound I-405 at Culver Bl	64	81,562
Southbound I-405 at Burbank Bl	56	48,396
US 101 near I-405 (northbound)	40	64,670
US 101 near I-405 (southbound)	40	68,000
I-10 near I-405 (eastbound)	25	29,527
I-10 near I-405 (westbound)	25	34,770

## Precept Four

- 50 Equivalent advertising dollars in millions Metro received from media coverage of I-405 closure and Mulholland Bridge demolition
- 571,445 Number of times the I-405 website was viewed two weeks before I-405 closure
- 200 Number of websites that added Countdown to Closure clock to their sites; Countdown to Closure clock viewed more than three million times
- 25 Presentations to community stakeholders and key institutions immediately adjacent to Mulholland Bridge



## Precept Five

Carmageddon II Will Be a Harder Sale



## Precept Five

- Success of first effort might create air of complacency
- Demolition of north side of bridge a larger task (approximately 60 percent of the bridge)



## Precept Five



- Expectation of early I-405 opening unlikely
- Elected officials want local events in nearby neighborhoods during Carmageddon II



## Precept Five

### Mulholland Bridge south side reconstruction continues



# Precept Five



# Precept Five



# Precept Five

## Completed Mulholland Bridge



# Precept Five

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[www.metro.net/405](http://www.metro.net/405)

[www.facebook.com/405project](http://www.facebook.com/405project)

Twitter: [http://twitter.com/I\\_405](http://twitter.com/I_405)

Nixle: [nixle.com](http://nixle.com)

