

# TDP Committee Meeting

## Green Build Update – February 6, 2012

Item 8



San Diego International Airport

# The Green Build

*Moving Forward. Soaring Higher.*



# Green Build Site



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# Terminal



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# Terminal



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# Sunset Cove



*Courtesy of HNTB*



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# Sunset Cove



San Diego International Airport

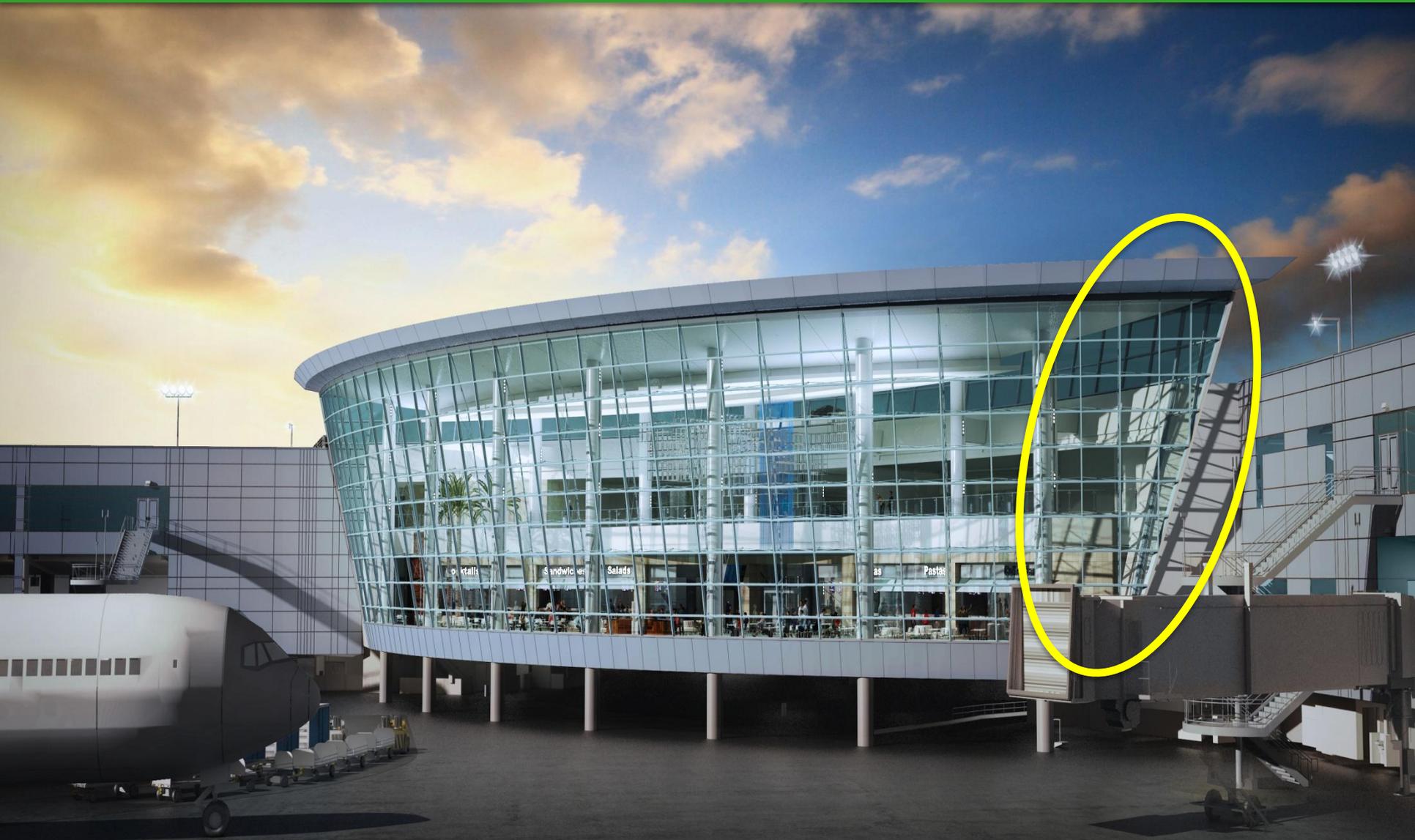
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# Curtain Wall



Courtesy of HNTB

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# Curtain Wall Testing

Los Angeles, California



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# Curtain Wall Mock-up

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## Cycle # 1: Water Intrusion

Wind and no wind to test for leaks

## Cycle # 2: Pressure

Glass deflection

Followed by water re-test

## Cycle # 3: Lateral Movement – 7 Inches

Followed by water and pressure re-tests

## Cycle # 4: Lateral Movement – 12 Inches





# Curtain Wall Testing

## Cycle # 1: Water Intrusion (Static & Dynamic)

1. 5 gallons/hour/square foot for 15 minutes
2. 5 gallons/hour/square foot for 15 minutes with 68 mph wind velocity
3. No leaks allowed



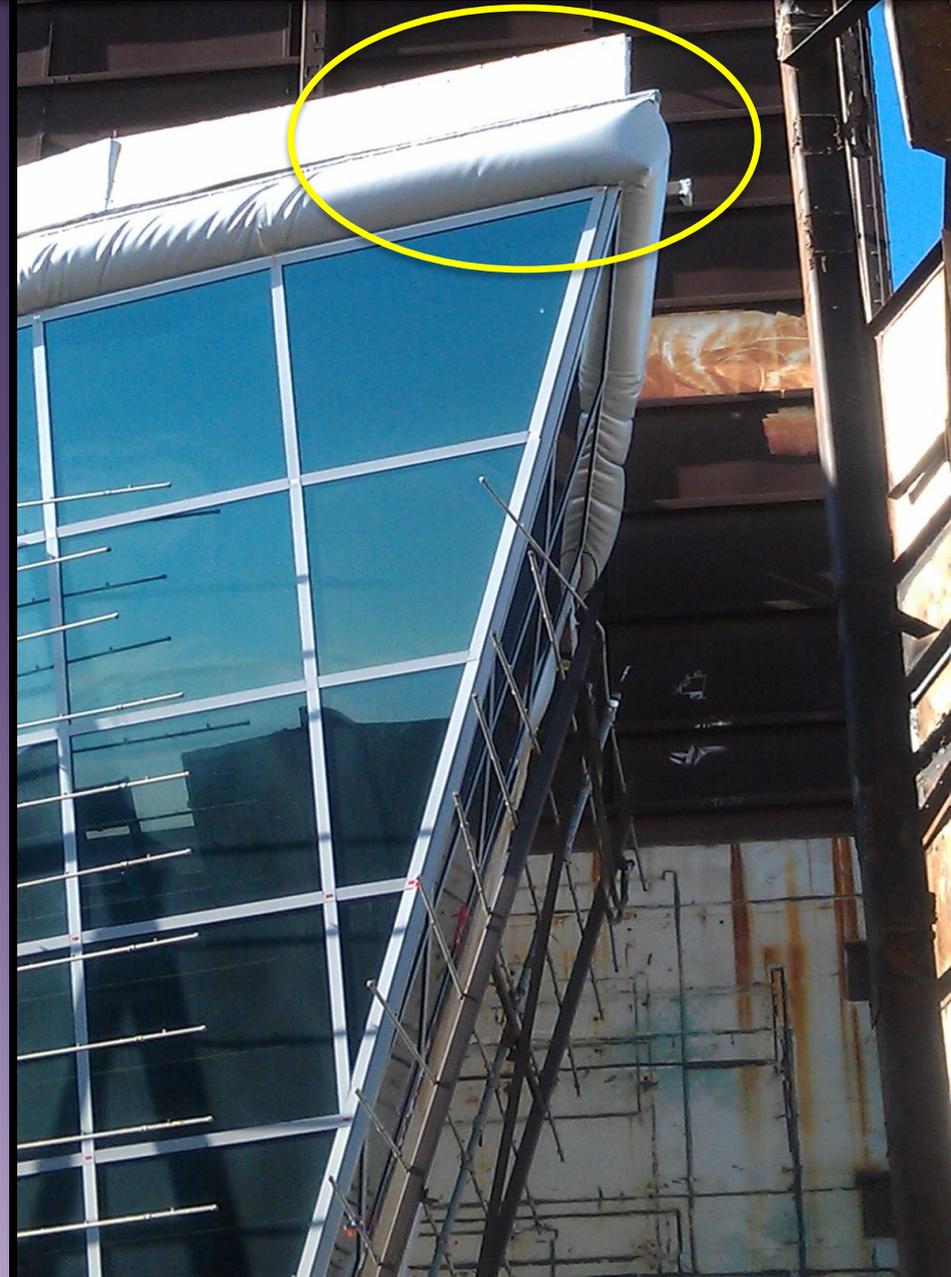


## Cycle # 2:

### Pressure (Positive & Negative)

1. 25 pounds of pressure per sq. ft. for 10 seconds
2. Deflection - **1/175** inch maximum allowed

Followed by retest for water penetration





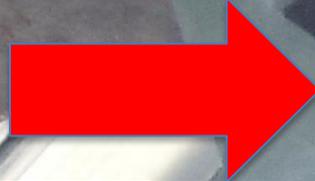
**Movement Occurs Here**



12.27.2011



**Lateral Movement Occurs Here**



**Vertical Movement Occurs Here**



12.27.2011



## Cycle # 3: Lateral Movement

1. Building structure  
“racked” 7 inches in each  
direction
2. No damage to curtain wall  
allowed

Followed by water and pressure  
re-tests





## Cycle # 4: Lateral Movement

1. Building structure  
“racked” 12 inches in  
each direction
2. No curtain wall glass can  
“pop” out
2. No retesting



**We Passed!**



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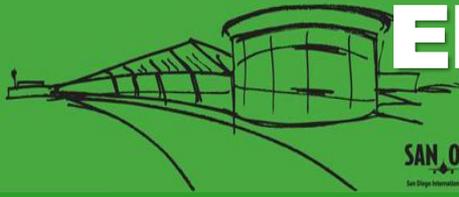
# Landside



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# Elevated Departures Roadway

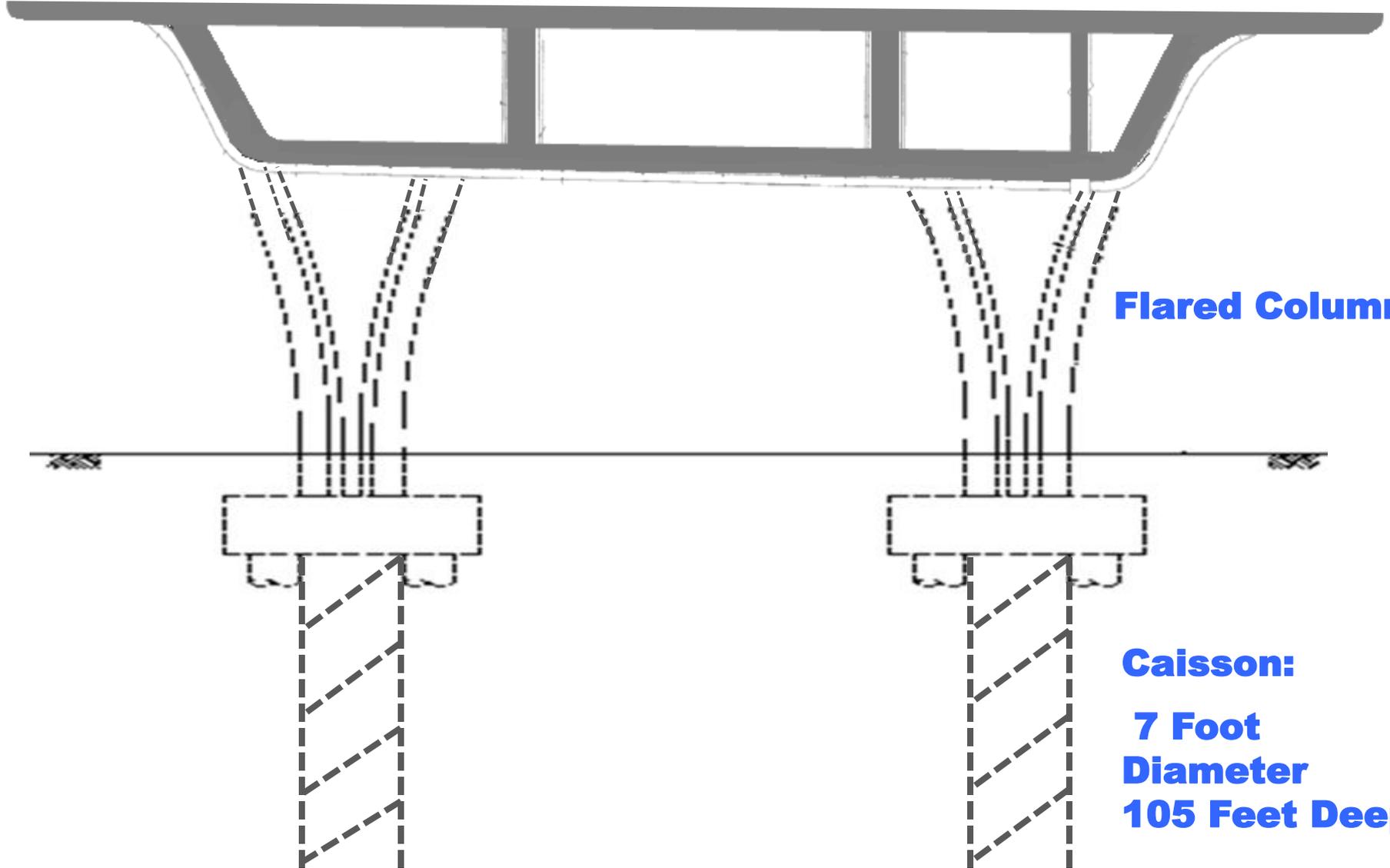
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# EDR Structure

← 48 Feet →



**Flared Columns**

**Caisson:  
7 Foot  
Diameter  
105 Feet Deep**

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# CIDH Operation



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# Columns Forms



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# Roadway Columns



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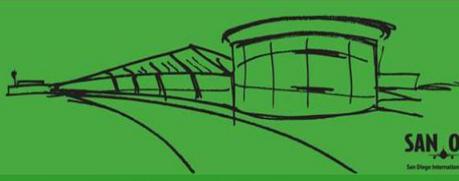
# Scaffold for Bridge Deck



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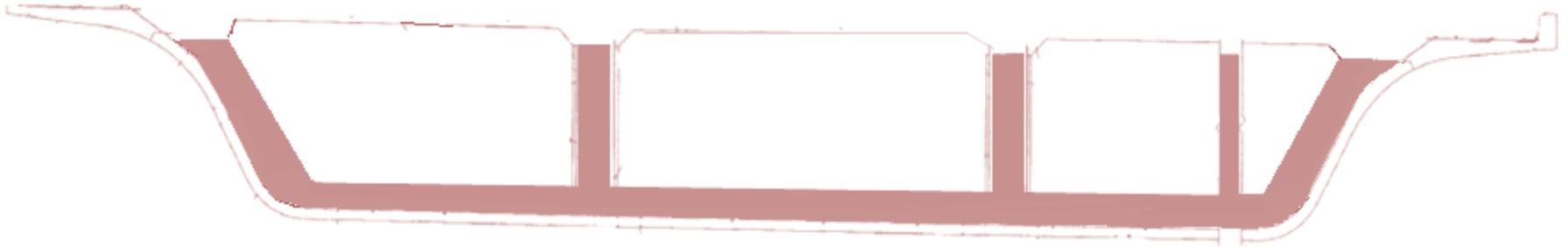
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# Plywood Bridge Deck





# Roadway Cross Section



**Pour #1 - Soffit, Stems and Base**

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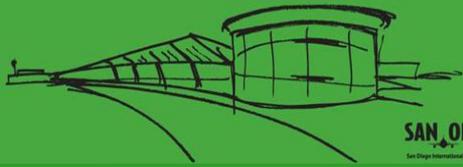
# Soffit Forms



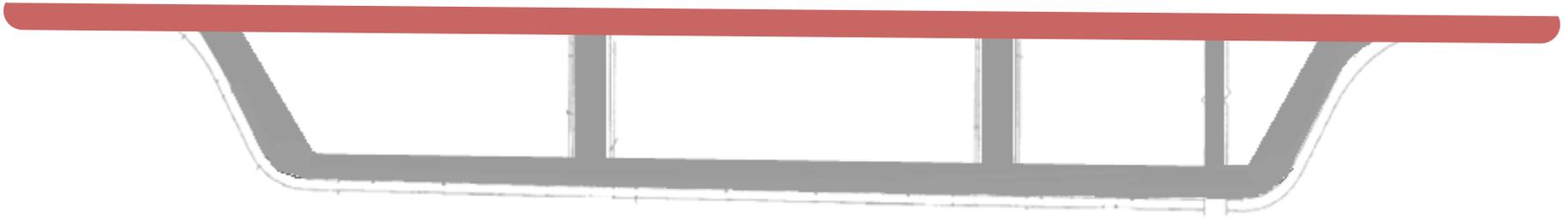
12/16/2011



**USO/PMO**



# EDR Cross Section

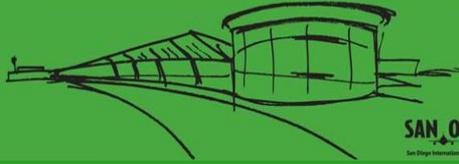


*Pour #2 – Bridge Deck*

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# Bidwell Paving Machine





# Construction Status

100

90

80

70

60

50

40

30

20

10

0

■ **Planned**  
■ **Actual**

**33%**

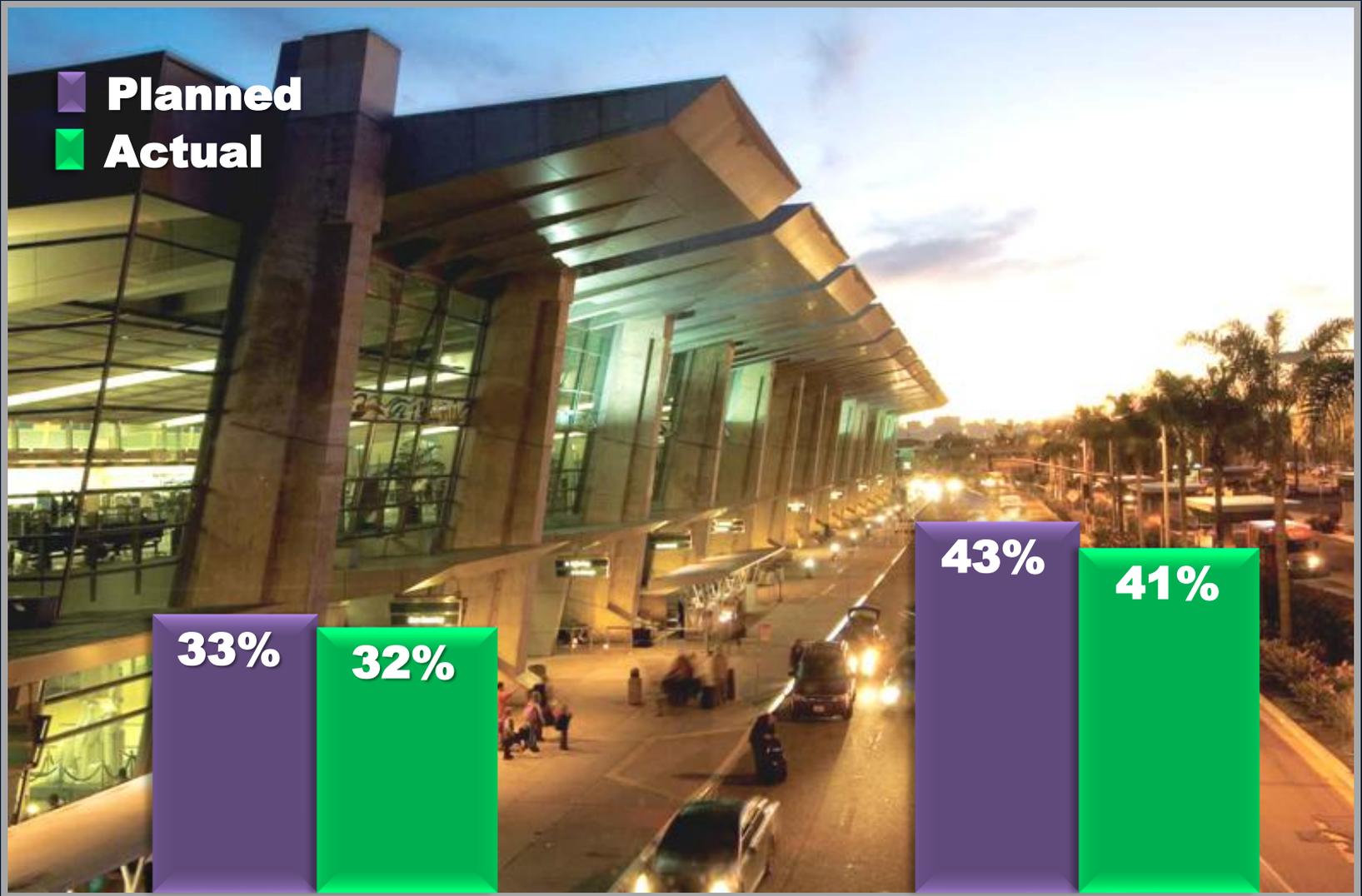
**32%**

**43%**

**41%**

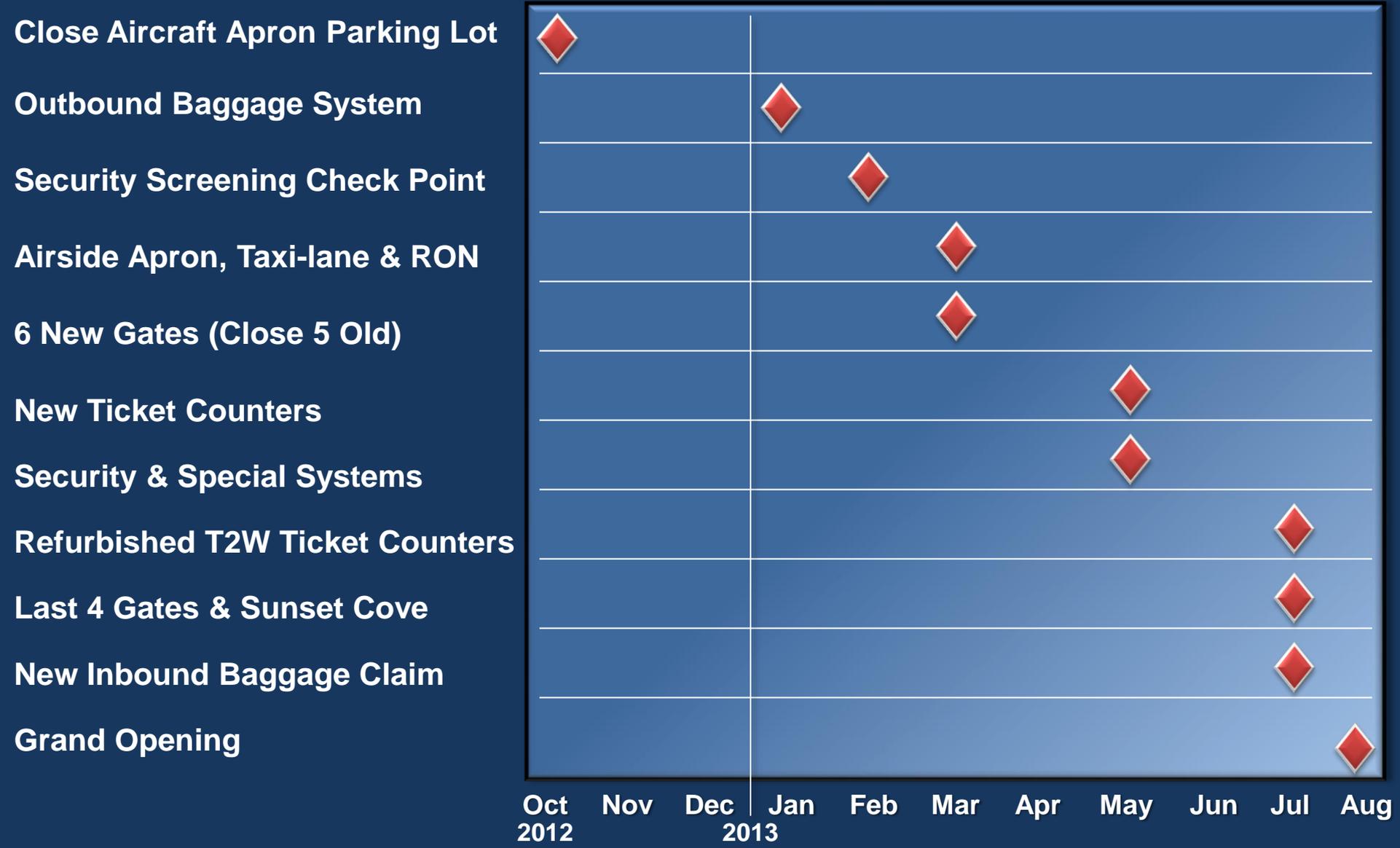
**C1 - Airside/Terminal**

**C2 - Landside**





# C1 Key Milestones





# C2 Key Milestones

Parking Management Office (PMO)



United Service Organization (USO)



700 Short Term Parking Spaces



East & West Smart Curbs



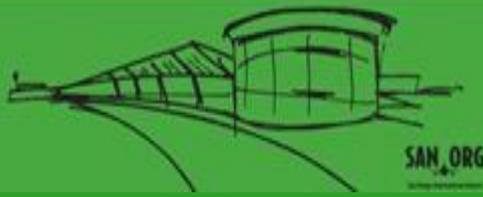
Remaining 600 Short Term Spaces



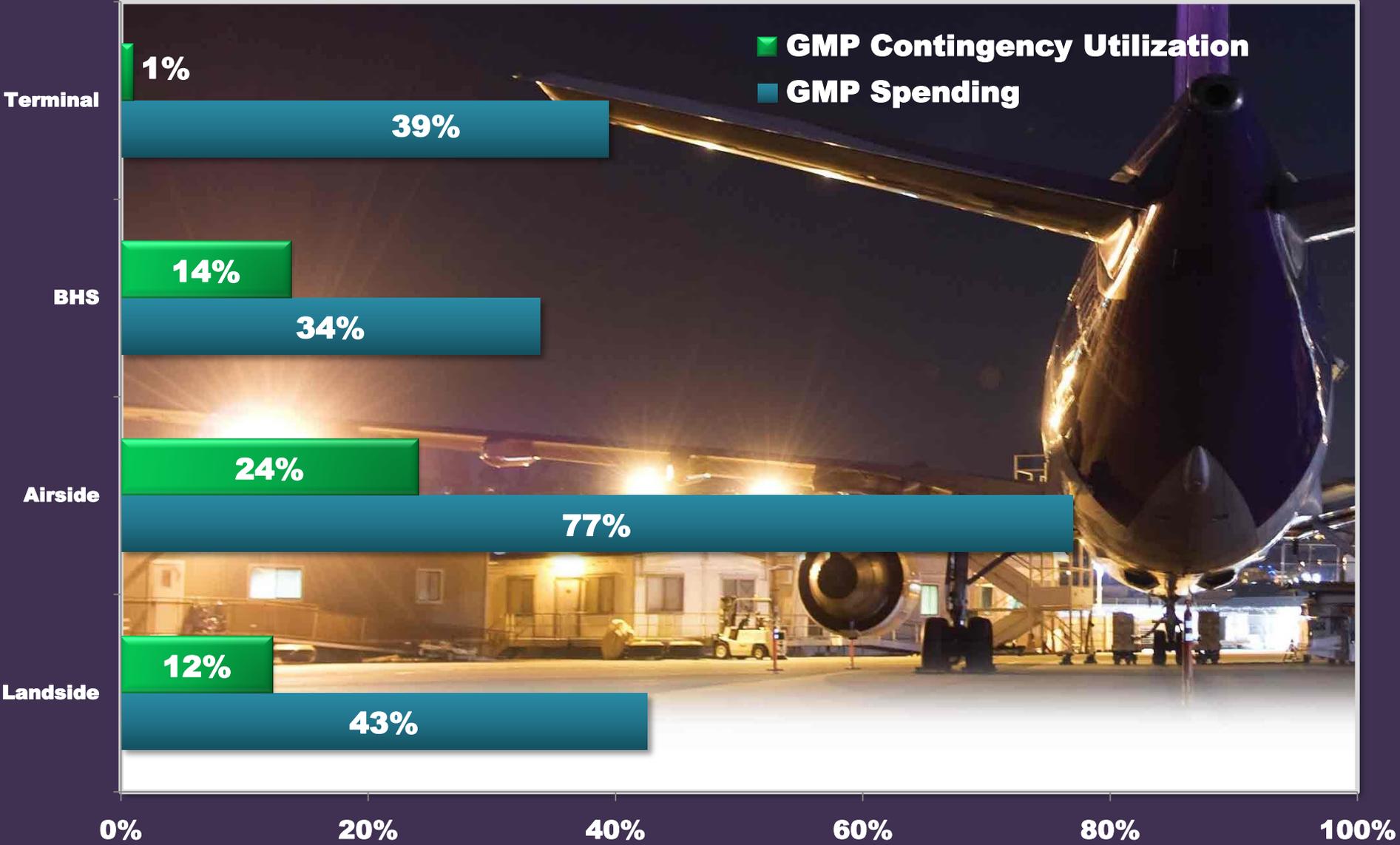
Open Bridges & Roadway



Sept 2012   Oct   Nov   Dec   2013   Jan   Feb   Mar   Apr   May   Jun   Jul



# Contingency Utilization





\$1000

\$900

\$800

\$700

\$600

\$500

\$400

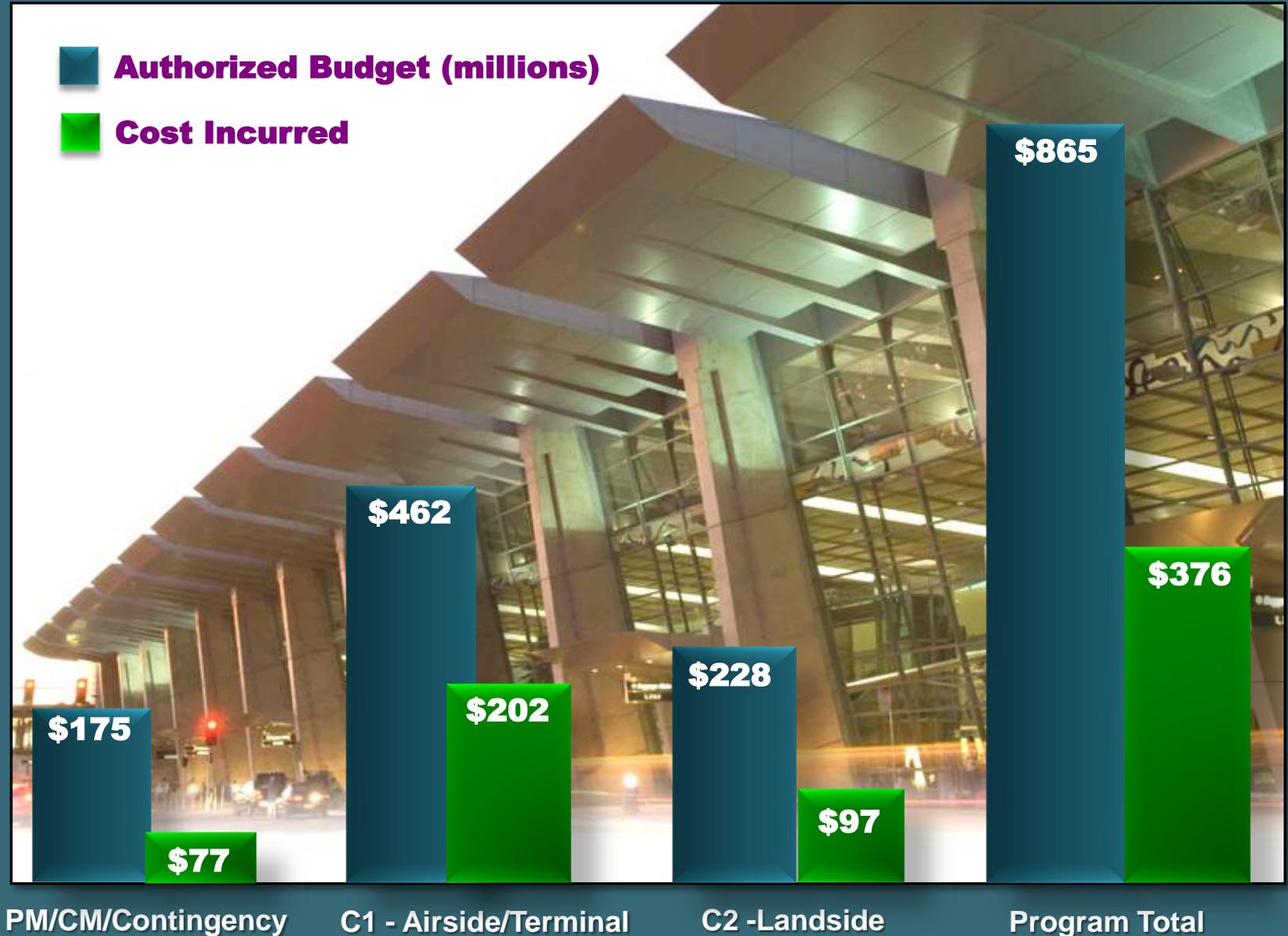
\$300

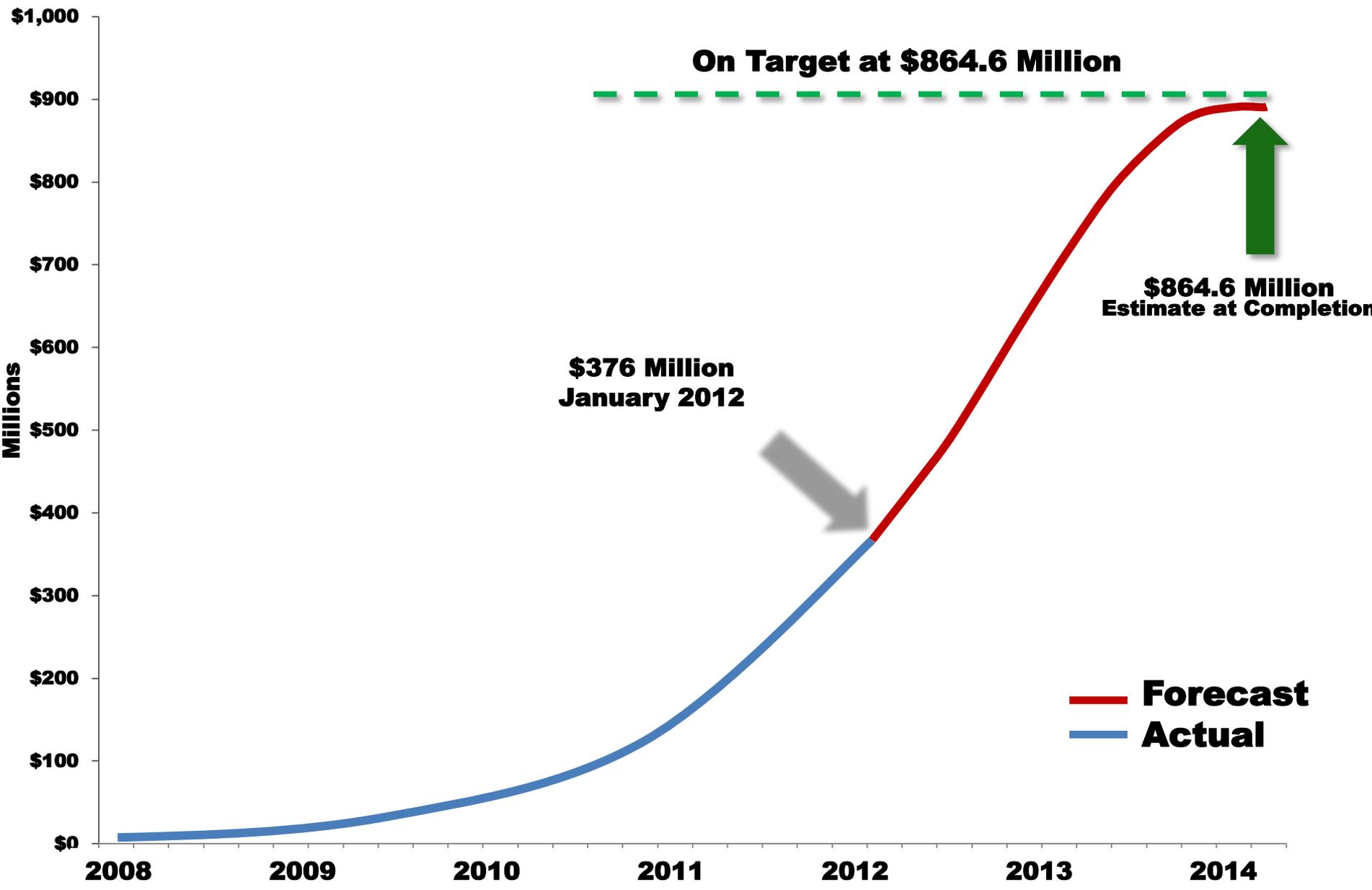
\$200

\$100

\$0

■ **Authorized Budget (millions)**  
■ **Cost Incurred**





A scenic view of a city skyline reflected in a body of water. The sky is a clear, vibrant blue with a bright sun in the upper right corner, creating a lens flare effect. The city skyline is visible in the distance, with various buildings and structures. The water in the foreground is calm, reflecting the sky and the city skyline. The overall scene is bright and clear, suggesting a sunny day.

# Questions?