

**Los Angeles County
Metropolitan Transportation Authority**

Metro Facilities-Operations: Bus Division Capacity Assessment

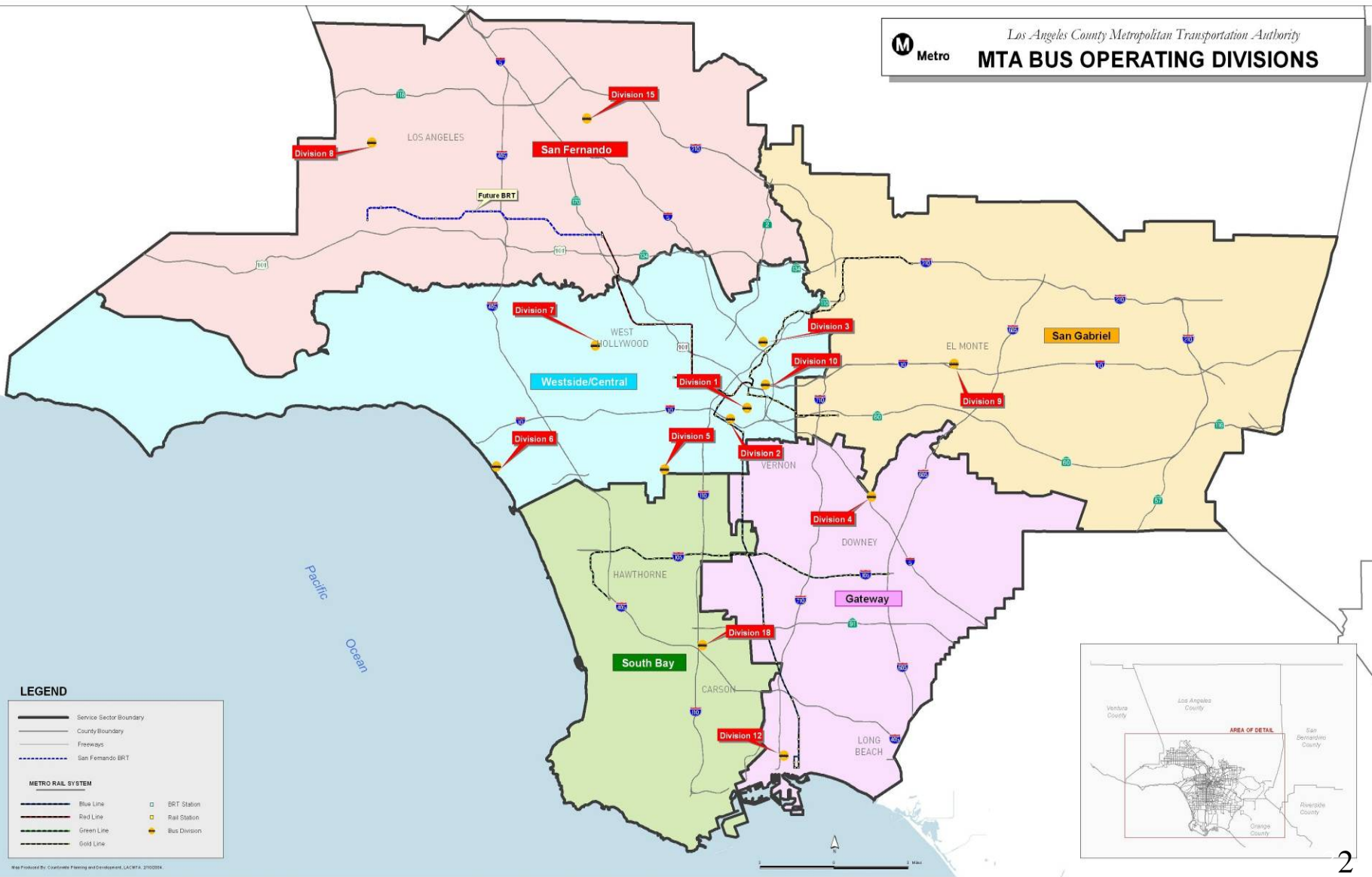


**Operations Committee
June 19, 2008**



Metro

Bus Divisions



LEGEND

- Service Sector Boundary
- County Boundary
- Freeways
- San Fernando BRT

METRO RAIL SYSTEM

- Blue Line
- Red Line
- Green Line
- Gold Line
- BRT Station
- Rail Station
- Bus Division

Map Produced By: Coordinate Planning and Development, LACMTA, 3/10/2014

Morning Roll-Out: Division 10



Morning Roll-Out: Division 10



Morning Roll-Out: Division 10



Morning Roll-In: Division 10



Morning Roll-In: Division 10



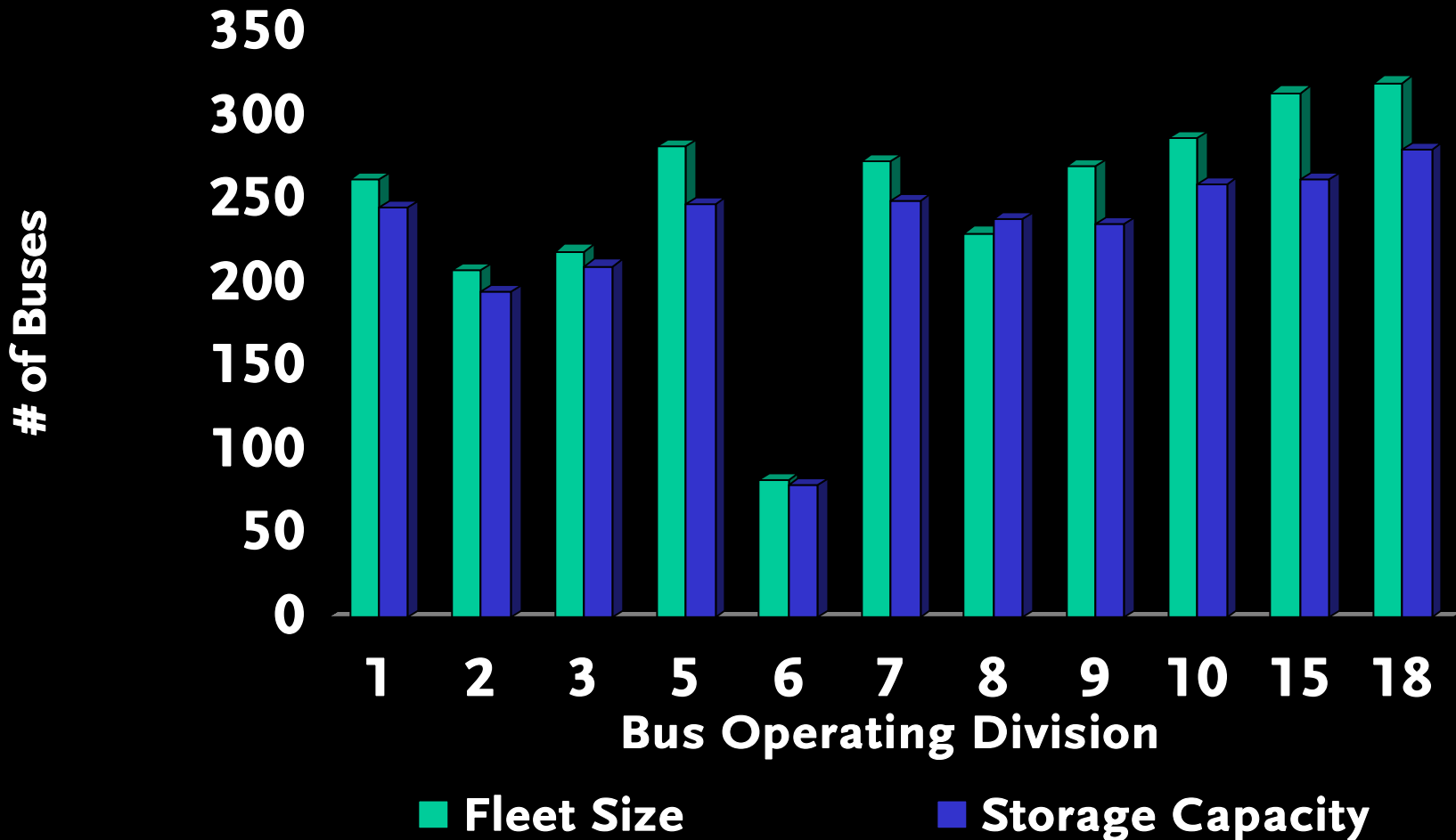
Morning Roll-In: Division 10



Overview

- **Facilities-Operations completed a staff report on bus capacity issues in May 2008**
- **11 Bus divisions are a key component to operating our fleet of 2,498 buses everyday**
- **Today we are operating 10% over systemwide capacity**
- **3 major facility issues:**
 - **Insufficient Bus Capacity**
 - **Insufficient Infrastructure Investment**
 - **Increased Ridership Growth**
- **No new bus division construction since 1984**
- **Strategy 1A: Expand/Improve Existing Bus Divisions**
- **Strategy 1B: Two New Bus Divisions – LAX and Union Division**

June 2008: All Bus Divisions At or Over Design Capacity



Budgeted Bus Acquisitions

- Currently we are 249 buses over capacity systemwide
- Over the next two years we are buying new longer buses exacerbating our capacity problem

FISCAL YEAR PROGRAM	NUMBER	TYPE
2009	130	45-Foot
2010	130	45-Foot
HOT Lanes	63	60-Foot
Orange Line Canoga Extension	22	60-Foot

Additional Bus Capacity Required for Longer Buses

- Even without expanding our fleet in the long term, buying longer 45 and 60-foot buses only makes our capacity issues worse

Bus Procurement <u>Alternative</u>	<u>Additional Bus Capacity</u>
100% 45-Foot	261
75% 45-Ft/ 25% 60-Ft	417
50% 45-Ft/50% 60-Ft	651

Insufficient Infrastructure Investment

- Historically, allocations for bus division improvements have ranged from 1.3% to 8.7%, a small percentage of the Capital Program Budget

FY 2000 – FY 2009

TOTAL (in millions)

Capital Program

\$ 6,445

**Bus Division
Improvements**

\$ 304.7

Allocation

4.7%

HASTUS 2007 Simulation Results

- Our scheduling software indicates that we need additional capacity in Downtown and the Westside to reduce inefficiencies

ADDITIONAL CAPACITY NEEDED

CENTRAL CORE

84

**WESTSIDE/ SOUTH
BAY CORE**

141

Overcrowding Leads to Inefficient Operations

ISSUE

AMOUNT/YEAR

Inefficient use of staff

\$ 2,309,392

Deadhead

\$ 4,458,301

Productivity loss

\$ 11,211,408

Outlying Divisions Leads to Excess Deadhead

SERVICE CHANGE	NON-REVENUE VEHICLE HOURS	REVENUE VEHICLE HOURS	TOTAL VEHICLE HOURS	NON-REVENUE HOURS TO TOTAL VEHICLE HOURS	ANNUAL COST OF DEADHEAD
6/30/96	1,657	18,679	20,336	8.1%	\$3,648,812
12/16/07	2,426	22,421	24,847	9.8%	\$4,458,301
% Increase	46%	20%	22%	22%	22%

Increased Ridership

- Ridership is increasing....and this trend is expected to continue

FY 07 BOARDINGS

386,260,000

FY 09 BOARDINGS

406,079,000

Master Plans and New Construction

- Division expansion and new construction of divisions has not kept pace with fleet size and vehicle growth
- If no new division capacity is added, we cannot continue to deploy longer, high capacity buses to increase seat capacity as currently planned

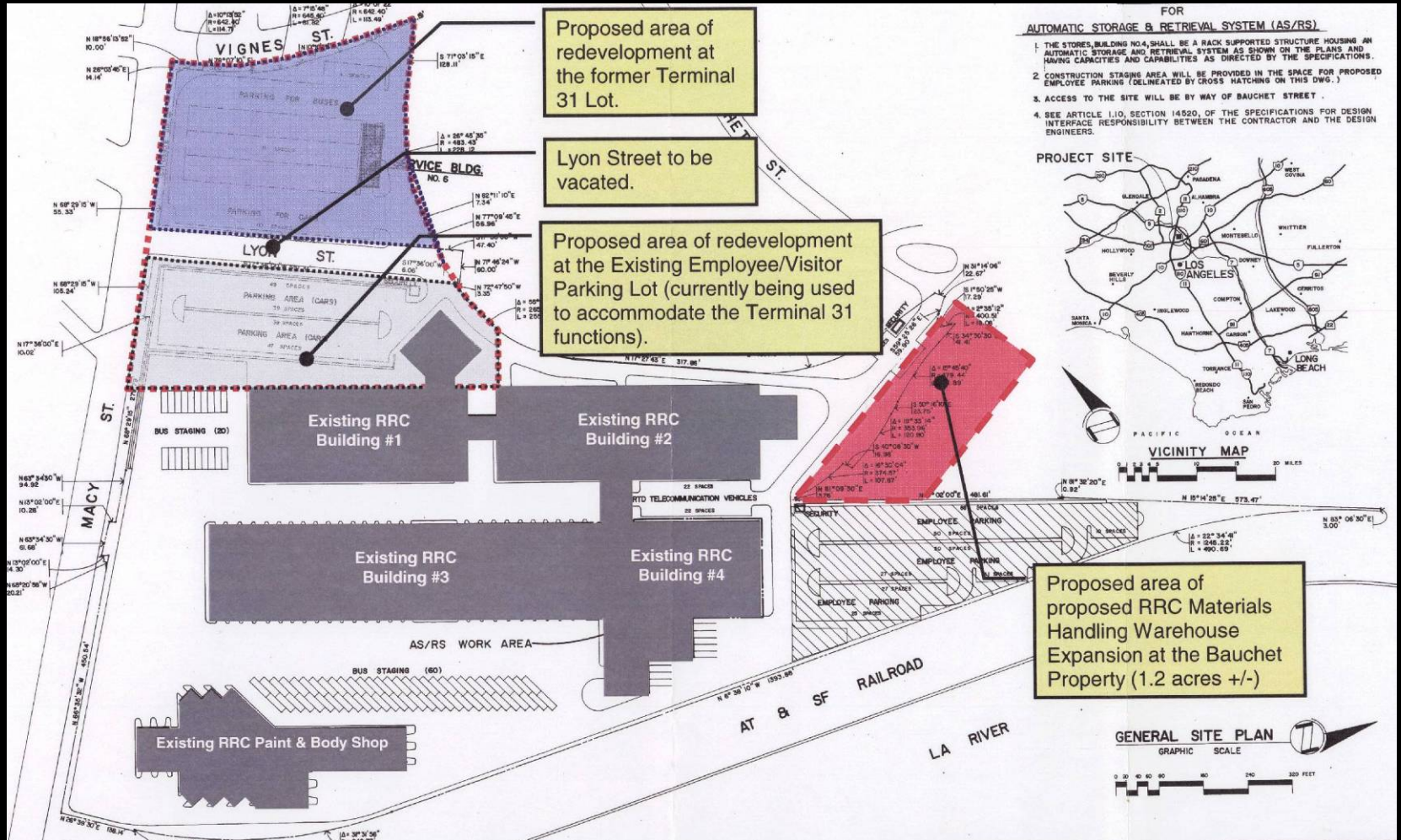
DIVISION PLANNING EFFORTS

1	Pending resolution of eminent domain
2	Proposals for Master Plan submitted
3	Construction ongoing
7	Awarded June 2008
9	Phased construction ongoing

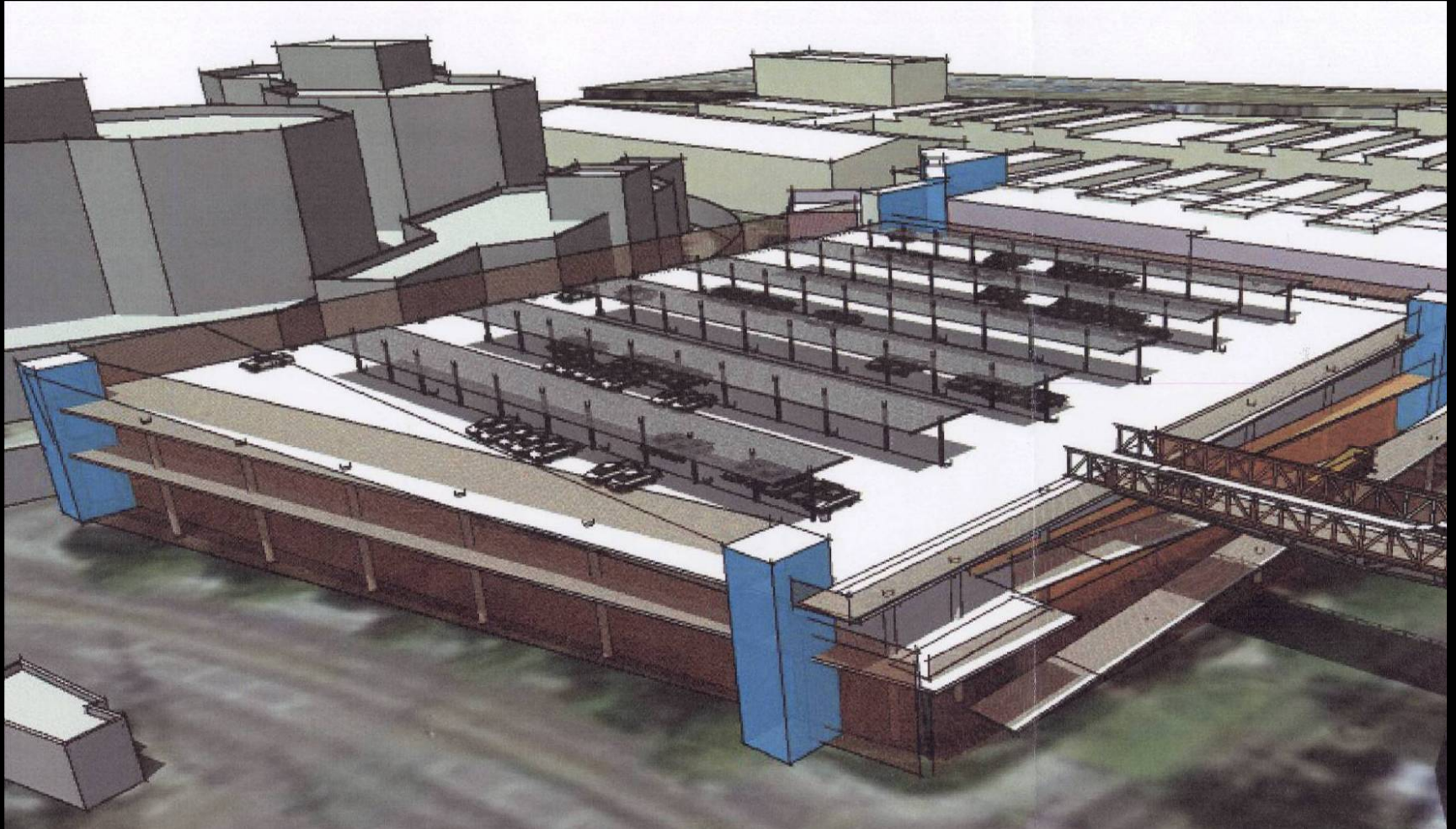
Union Division – Adds Capacity to Central

- Formerly Division 10 Expansion project
- Three-story bus maintenance and operations facility located adjacent to Metro Support Services Center
- Capacity for a mixed fleet of up to 200 buses
- Silver LEED certification
- Design concept is complete, environmental clearance will be complete July 2008
- Engineering contract went out to bid May 2008
- Construction scheduled to be complete in late 2010/early 2011
- Total life-of-project budget will be \$89.9 million, with FY09 expenditures planned at \$7.6 million
- Scheduled for Board approval in August 2008

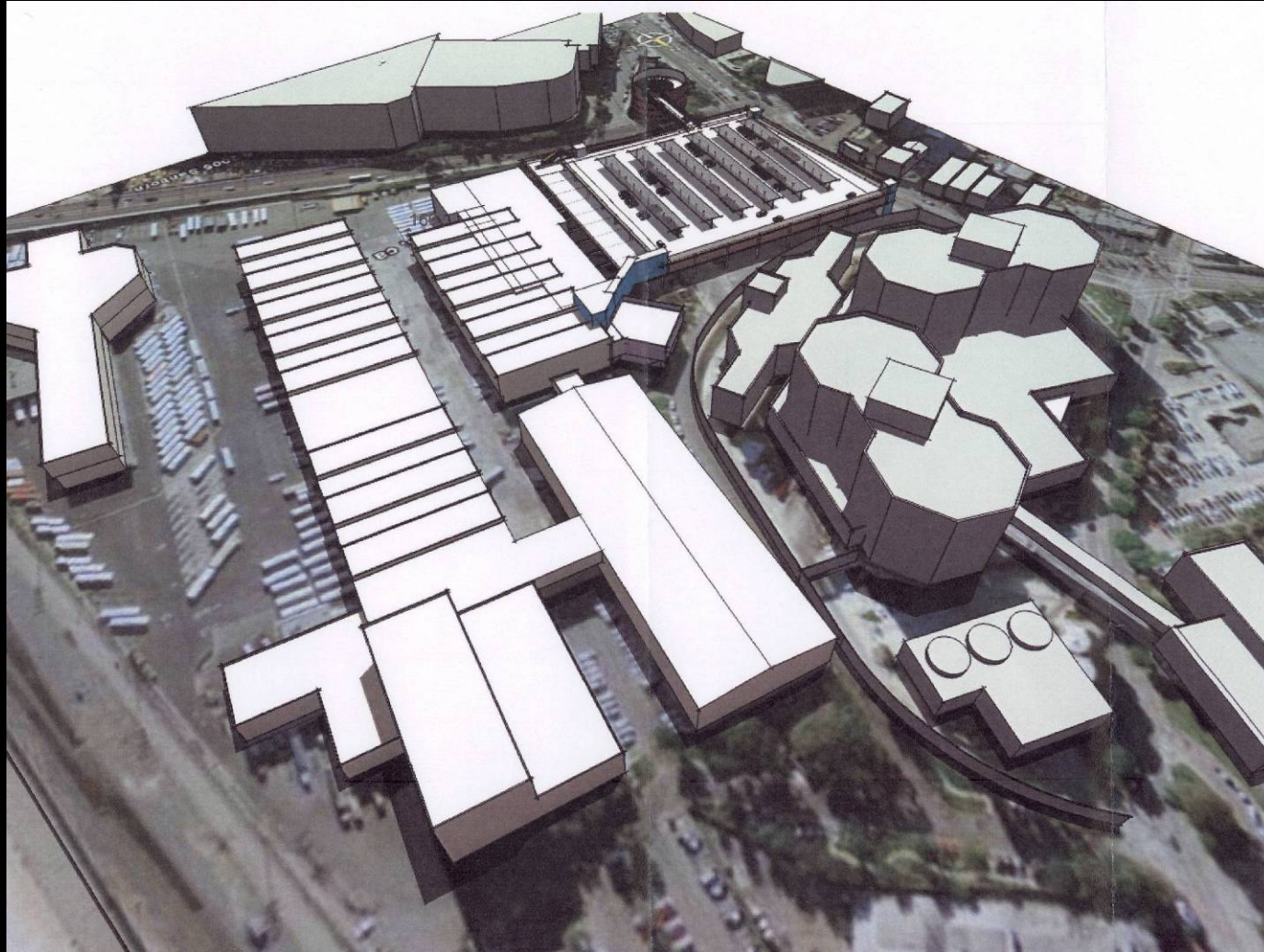
Project Location



View of Site Massing from USG



Aerial View of Site Massing



Metro

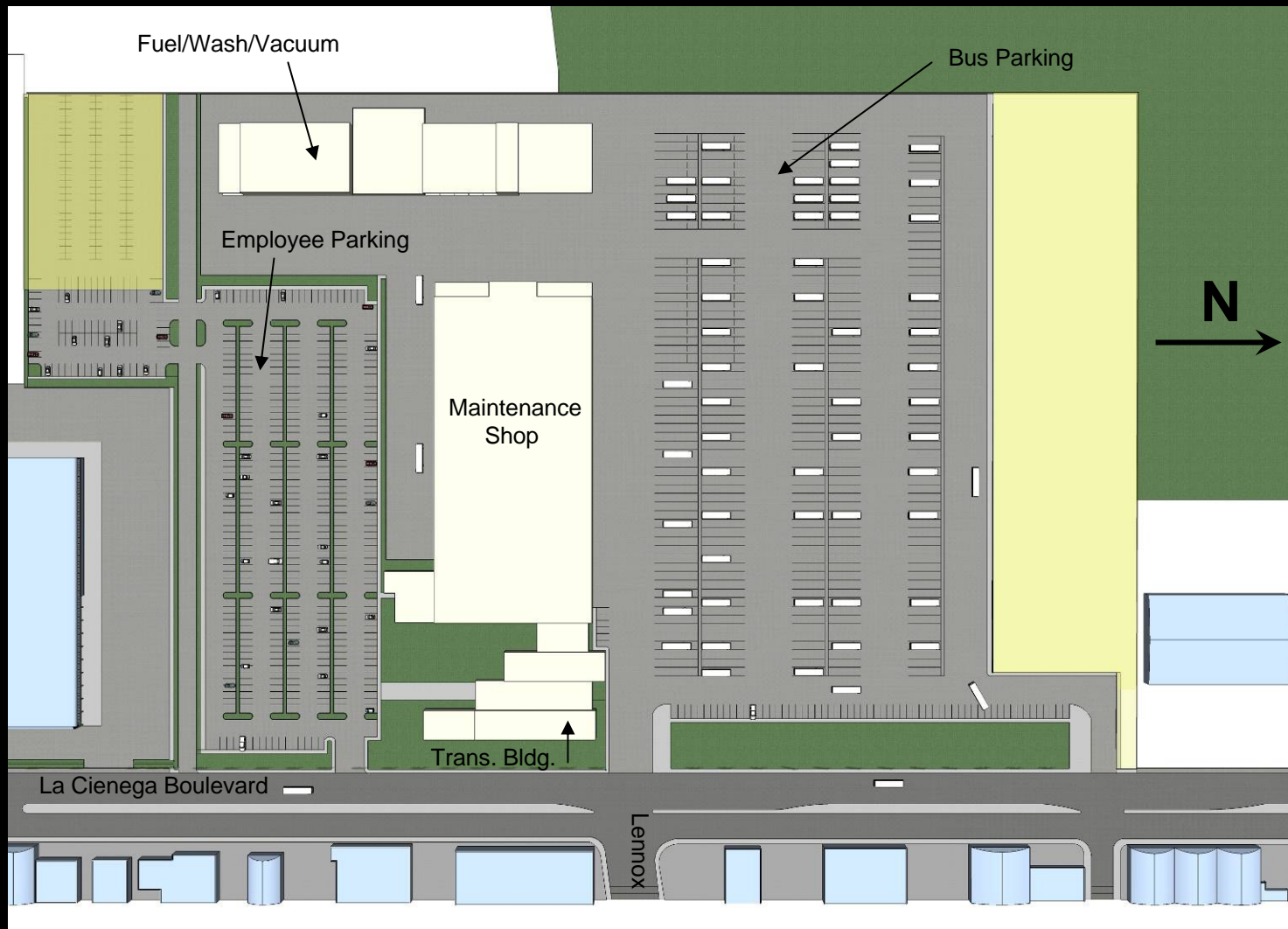
LAX Division – Adds Capacity to the Westside

- LAX Division is planned to replace Division 6 in Venice, as well as to solve capacity issues in the Westside and Southbay areas
- Site concept has been completed, the Federal Aviation Administration (FAA) has approved the site plan, and the Environmental Impact Report (EIR) is underway
- 24 acres and can accommodate a facility with a mixed fleet of 300 buses
- Planned for Silver/Gold LEED Certification
- Location of division is geographically desirable and alleviates deadhead costs systemwide
- Currently in lease negotiations with LA World Airports (likely 50 year lease per FAA rules)
- Construction costs are \$85 million, with an annual lease of approximately \$3 million.
- Proposed FY10 Expenditures are \$22 million

Aerial View of Site and Vicinity



Site Plan: Proposed LAX Bus Division



Metro

Number of
Standard Buses

207

Number of
Articulated Buses

96

Bus Equivalent
(BE) Number

351

Employee /
Visitor Spaces

480

Acres
Required

24.7

Summary

- There is currently a storage deficit of 249 buses systemwide
- This storage deficit will only get worse as we transition to purchasing only longer buses to meet ridership demands
- The storage deficit and lack of facilities in high ridership areas contributes significantly to inefficient operations
- If no new capacity is added, we cannot continue to deploy longer, high capacity buses as currently planned
- We must increase investment in existing facilities, and add two new bus divisions to the system (one Downtown, one Westside) as soon as possible to provide capacity, operational flexibility, and system efficiencies

