

A stylized graphic at the top of the slide features a yellow-to-blue gradient background. On the left, a white outline depicts a city skyline with various building shapes. On the right, a white outline shows a streetcar or trolley moving towards the left. The streetcar has 'DOWNTOWN LA' written on its front.

# Restoration of Historic Streetcar Services in Downtown Los Angeles

Alternatives Analysis  
Community Update Meeting

November 3, 2011

# Introduction

- Local lead agency: Metro
- Federal lead agency: Federal Transit Administration (FTA)
- Partners:
  - City of Los Angeles
  - Community Redevelopment Agency of the City of Los Angeles (CRA/LA)
  - Los Angeles Streetcar, Inc.

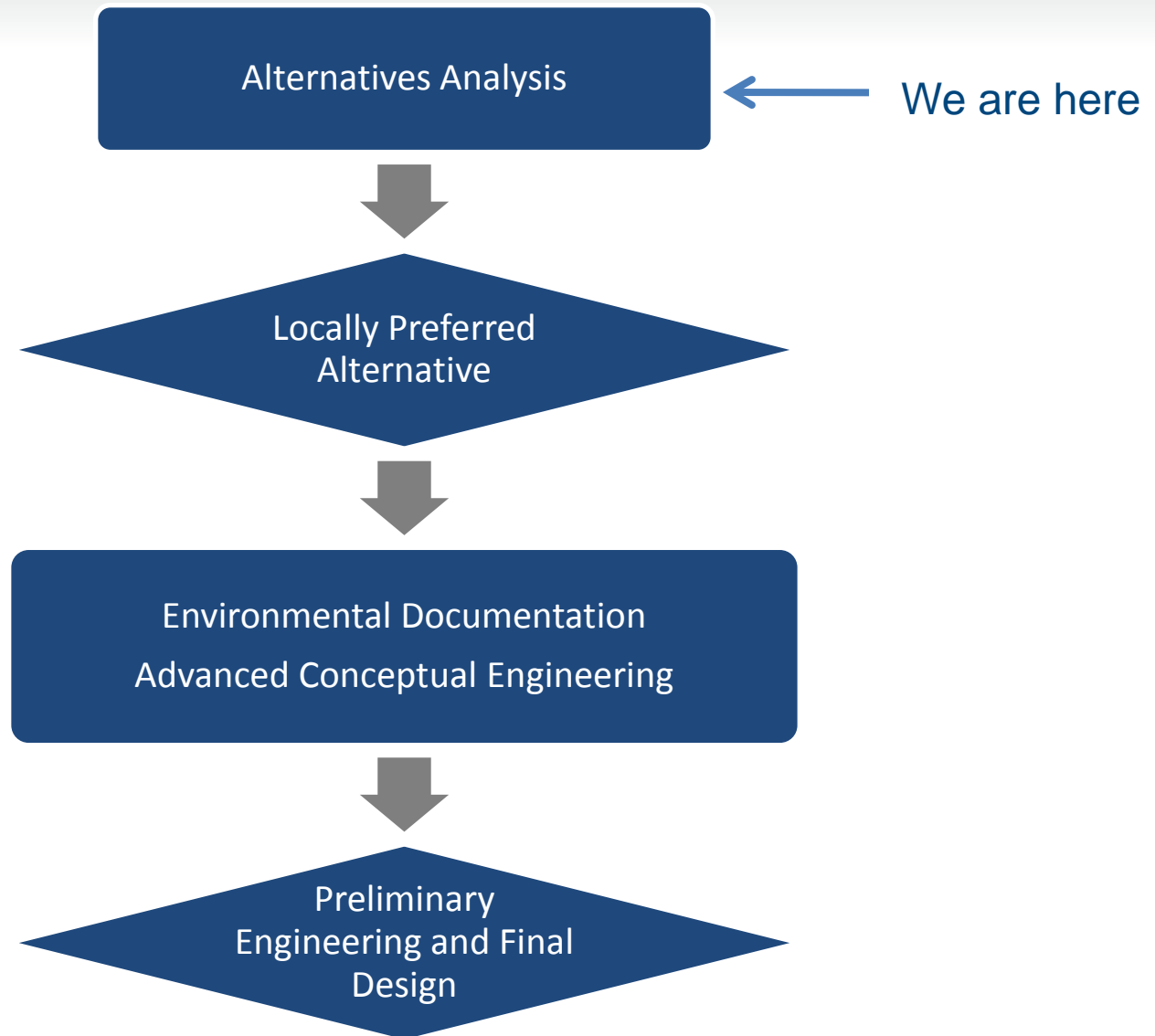


# Project Study Area

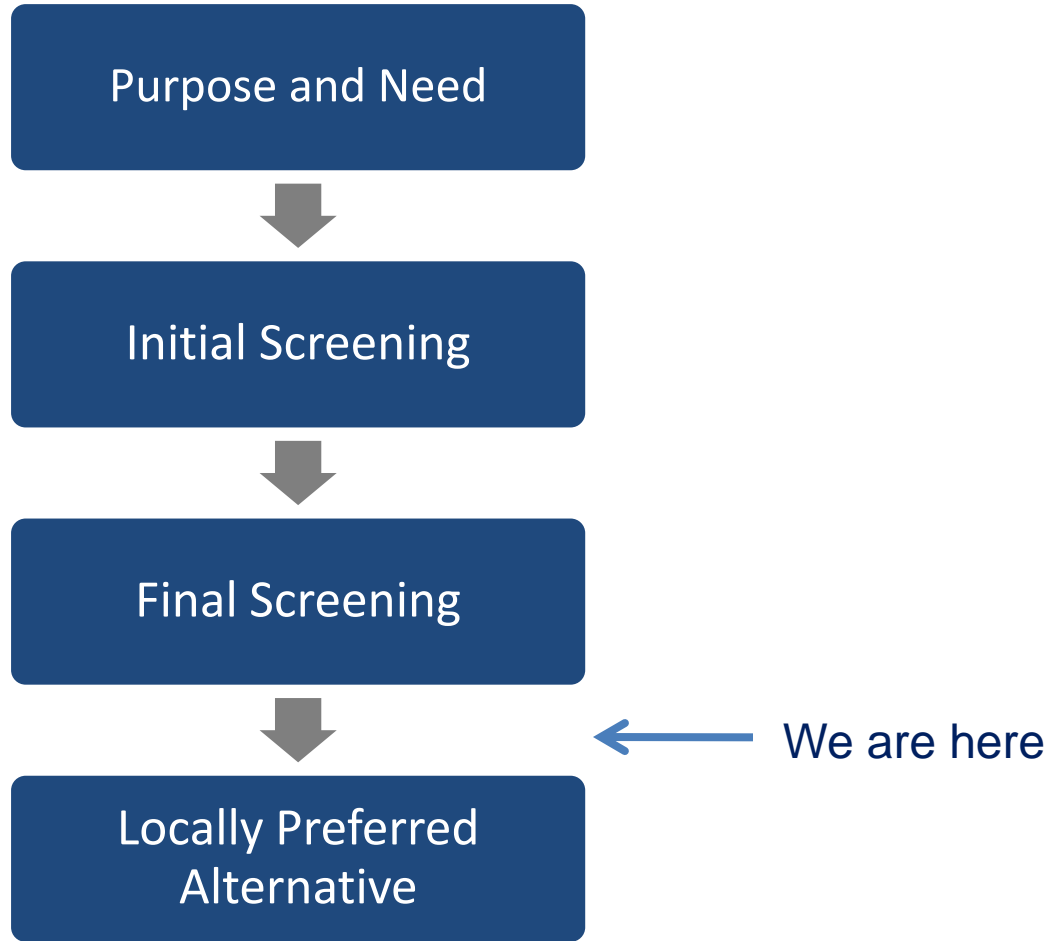


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# Planning Process



# Alternatives Analysis Process



# Purpose and Need

## Enhance Mobility and Transit Circulation in Downtown

- Connect activity centers and districts
- Expand transit coverage & circulation
- Provide simple, localized, high frequency service
- Alleviate traffic & parking demand
- Serve transit-dependent populations
- Improve transit accessibility

## Support the Growth and Revitalization of Downtown

- Restore historic streetcar service
- Reactivate isolated, depressed areas
- Support smart, sustainable growth
- Foster a more livable downtown
- Create a more favorable investment environment
- Strengthen downtown's economic competitiveness



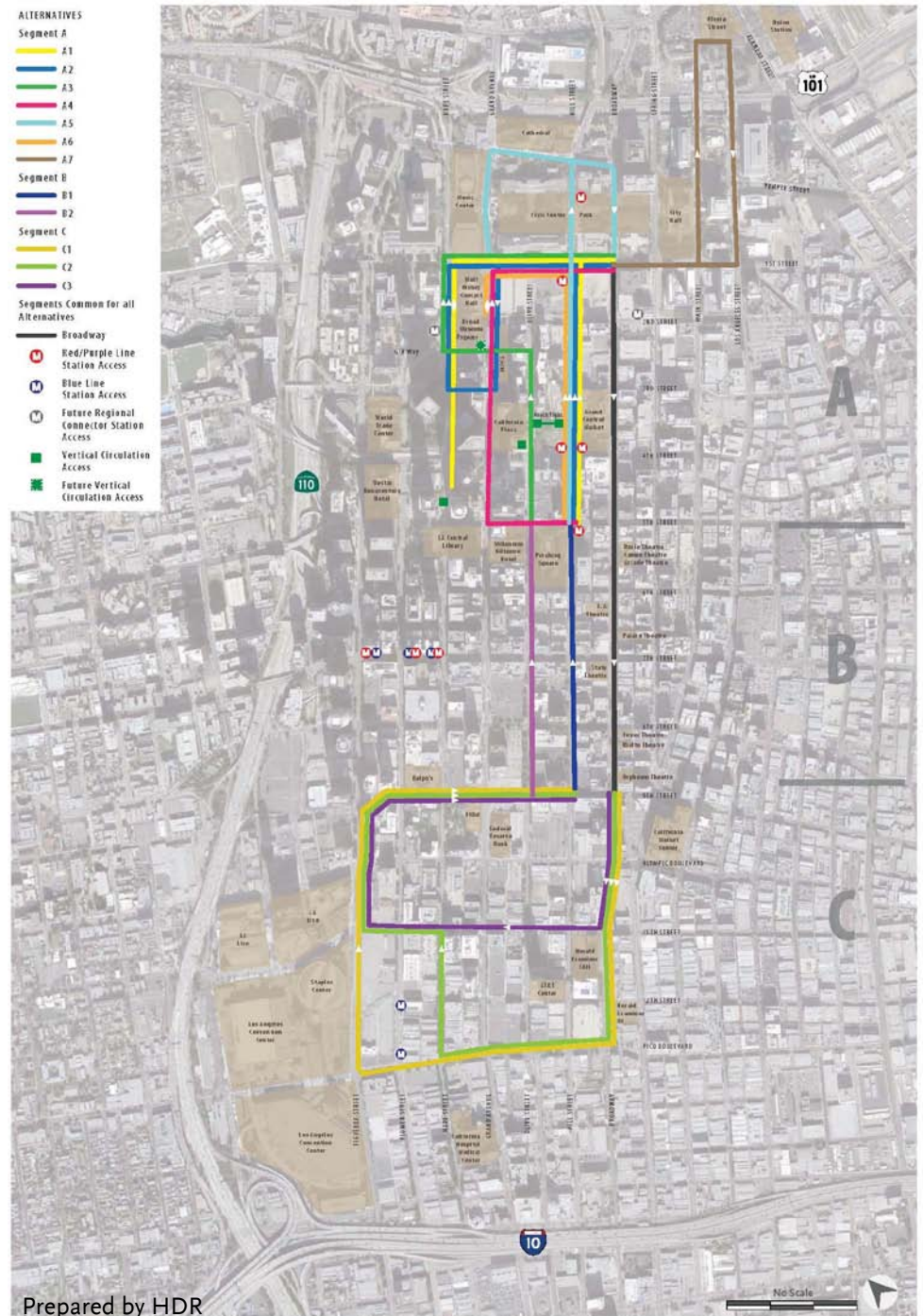
# What is a Streetcar?

- Fixed-guideway electric rail system
- Operates in mixed traffic or pedestrian zones
- Can be articulated for tight turns
- Compatible with on-street parking
- Shares lanes and stops with buses
- Can be low floor with multiple doors
- Bicycles accommodated on board
- Capacity ranges from 80 to 130 passengers/vehicle



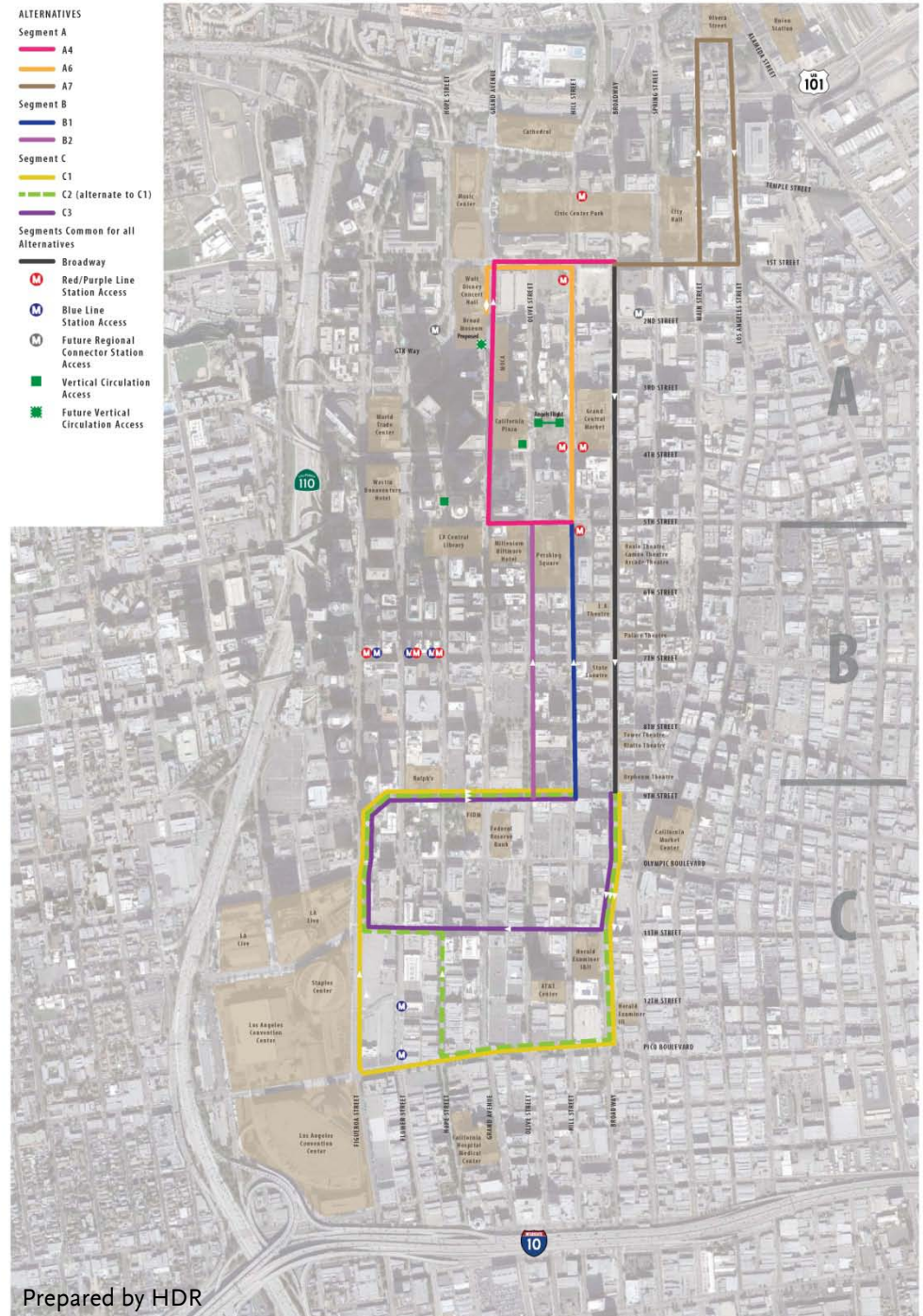
# Initial Screening Alternatives

- PSA was segmented
  - Bunker Hill/Union Station
  - Historic Downtown
  - South Park
- Differences between fewer alternatives became more clear
- Would have had 42 combinations



# Initial Screening Results

- ALTERNATIVES**
- Segment A
    - A4
    - A6
    - A7
  - Segment B
    - B1
    - B2
  - Segment C
    - C1
    - C2 (alternate to C1)
    - C3
  - Segments Common to all Alternatives
    - Broadway
    - Red/Purple Line Station Access
    - Blue Line Station Access
    - Future Regional Connector Station Access
    - Vertical Circulation Access
    - Future Vertical Circulation Access



Prepared by HDR

## -Planning Criteria

- Connectivity
- Travel Time
- Ridership Potential
- Expandability
- Historic Integrity

## -Implementation Criteria

- Cost
- Plans/Guidelines
- Street Grade
- Traffic/Parking
- Community Support



# Alternatives for Final Screening



1



2



3



4



5



6



7

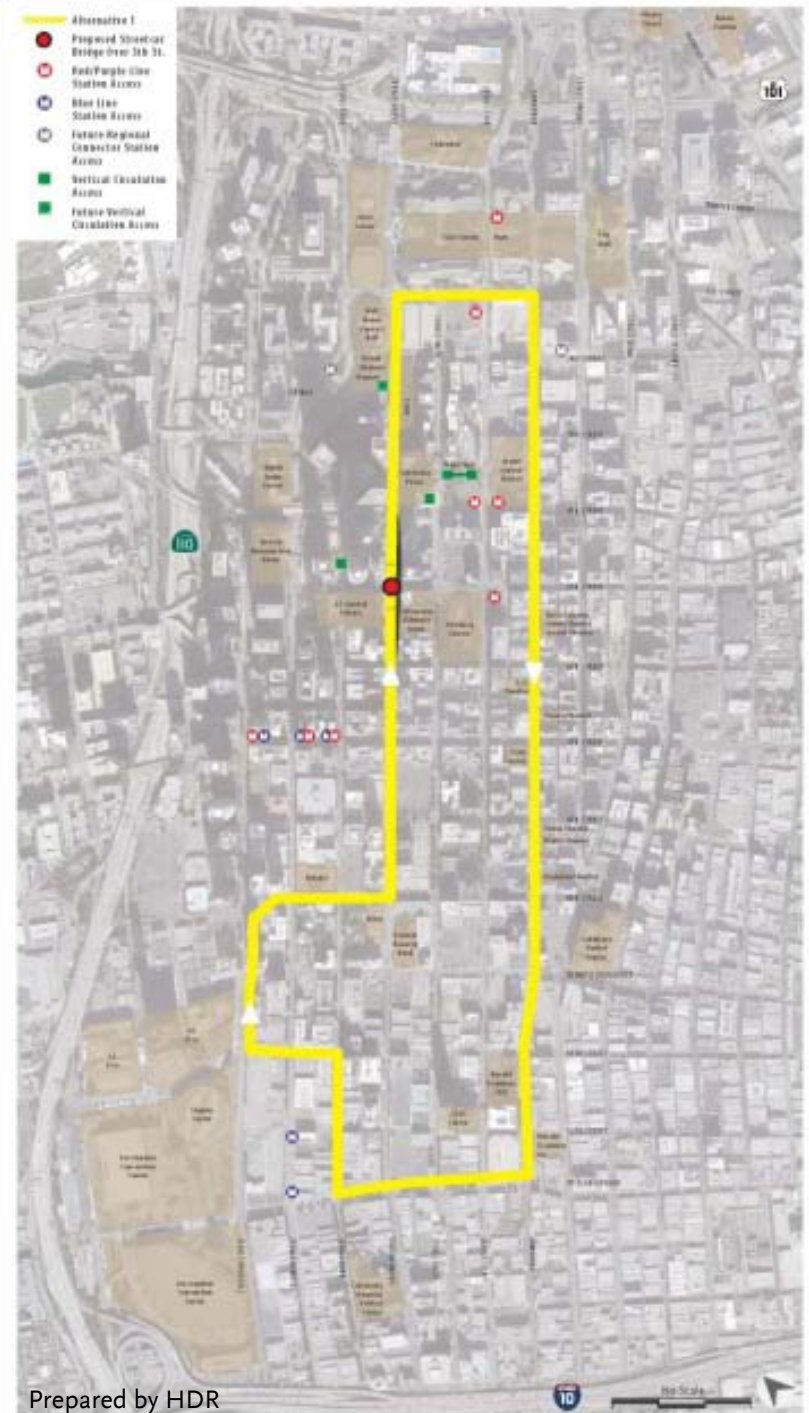
- Used quantitative evaluation criteria
  - Ridership
  - Operating characteristics
  - Cost estimates
  - System configuration
  - Design
  - Environmental impacts
  - Land use and economic development
  - Community support



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# Alternative 1

- 3.83 Miles, 25 Stops
- 9,090 Daily Boardings
- \$115.5M Capital Cost
- Modified to avoid crossing the Blue/Expo lines on Pico Blvd
- Elevated structure for streetcar on Grand Ave between 6<sup>th</sup> St to 4<sup>th</sup> St
- Slope of track would not allow stops on Grand Ave between 6<sup>th</sup> St and 3<sup>rd</sup> St
- Streetcar would be opposite existing traffic on Grand Ave between 9<sup>th</sup> St and 5<sup>th</sup> St
- Requires modification to “Upper Grand” bridge
- Serves Bunker Hill



# Alternative 2

- 3.32 Miles, 21 Stops
- 7,390 Daily Boardings
- \$107.8M Capital Cost
- Elevated structure for streetcar on Grand Ave between 6<sup>th</sup> St to 4<sup>th</sup> St
- Slope of track would not allow stops on Grand Ave between 6<sup>th</sup> St and 3<sup>rd</sup> St
- Streetcar would be opposite existing traffic on Grand Ave between 9<sup>th</sup> St and 5<sup>th</sup> St
- Requires modification to “Upper Grand” bridge
- Less economic development potential than alternatives that reach Pico Blvd
- Serves Bunker Hill







# Alternative 5

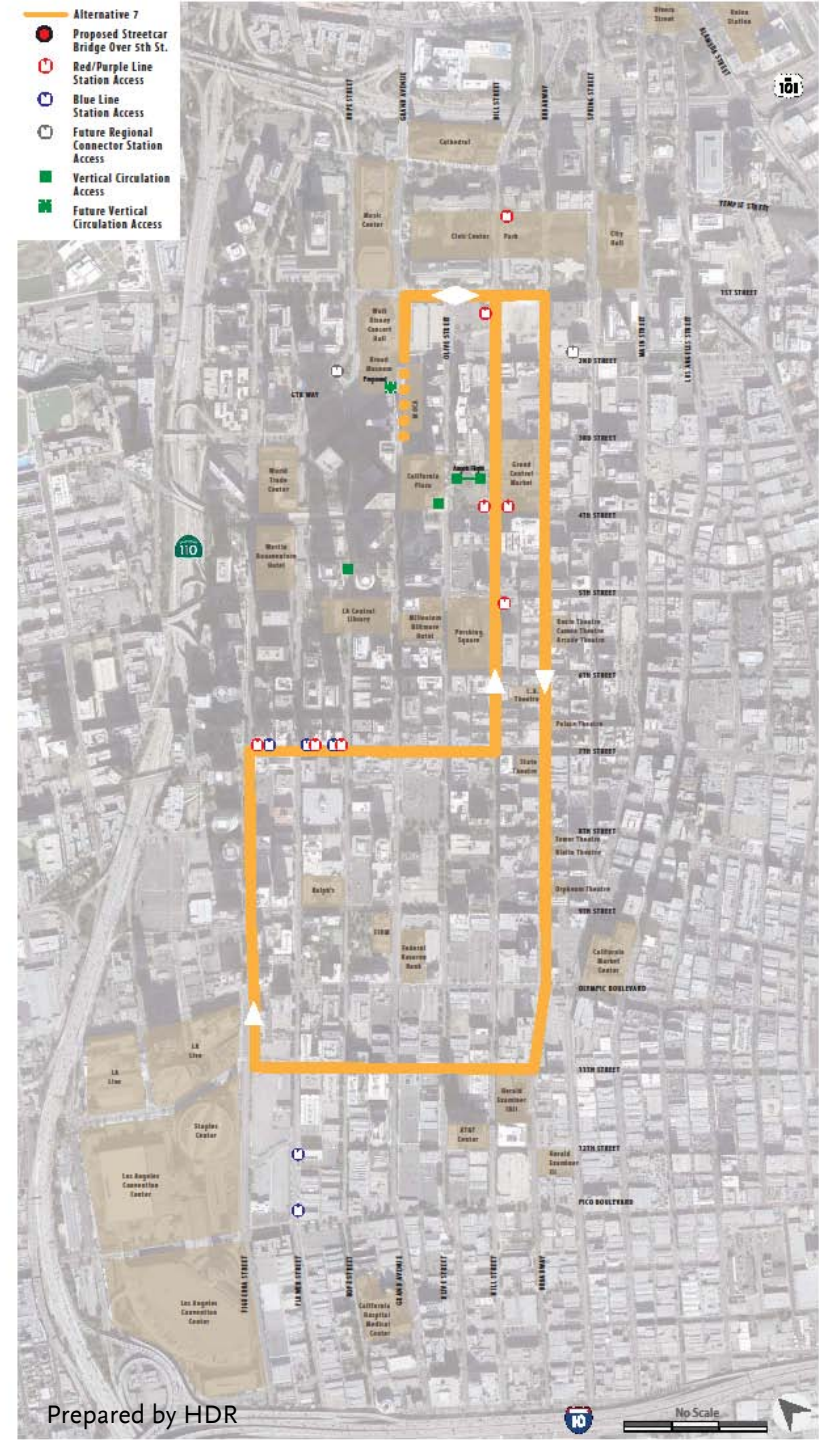
- 5.16 Miles, 34 Stops
- 11,190 Daily Boardings
- \$137.9M Capital Cost
- Modified to avoid crossing the Blue/Expo lines on Pico Blvd
- Requires modification to bridges over 101 freeway
- Longest route, highest boardings, highest capital and operating cost
- Serves Union Station





# Alternative 7

- 3.79 Miles, 25 Stops
- 8,390 Daily Boardings
- \$106.8M Capital Cost
- Added in response to public comment received
- Requires coordination with City of LA Bike Plan
- Less economic development potential than alternatives that reach Pico Blvd
- Serves Bunker Hill
- Provides service to the Financial District and 7th Street/Metro Center Station



# Final Screening Quantitative Results

Alternative	Daily Boardings	Boardings Per Mile	Capital Cost	Annual O&M Cost	Cost per User
1- Yellow	9,090	2,370	\$115,499,000	\$5,318,000	\$1.28
2- Blue	7,390	2,230	\$107,807,000	\$5,318,000	\$1.52
3- Red	9,880	2,300	\$119,053,000	\$6,148,000	\$1.28
4- Green	8,180	2,160	\$106,367,000	\$5,318,000	\$1.36
5- Purple	11,190	2,170	\$137,895,000	\$7,442,000	\$1.34
6- Light Blue	9,500	2,040	\$130,438,000	\$6,916,000	\$1.48
7- Orange	8,390	2,210	\$106,761,000	\$5,318,000	\$1.33

Note: Cost per User = (Annualized Capital Cost + Annual O&M Cost) / Boardings

# Final Screening Rankings

Criteria	Alternative						
	1	2	3	4	5	6	7
Ridership	1	3	1	3	2	2	1
Capital Costs	2	2	2	1	3	3	1
O&M Costs	1	1	2	1	3	3	1
Cost/Benefit	1	3	1	1	1	3	1
Destinations	1	1	1	1	1	1	1
Circulation	3	3	2	1	3	3	1
Design	3	3	2	1	3	3	1
Environmental	3	3	2	2	2	2	2
Economic Development	1	2	1	2	1	2	2
<b>Total</b>	<b>16</b>	<b>21</b>	<b>14</b>	<b>13</b>	<b>19</b>	<b>22</b>	<b>11</b>
<b>Rank</b>	<b>4</b>	<b>6</b>	<b>3</b>	<b>2</b>	<b>5</b>	<b>7</b>	<b>1</b>



# Next Steps

- January 2012- LA City Council
- February 2012- LPA to Metro Board
- Late 2012- Draft Environmental Document Released

# Please Comment

- To provide everyone an opportunity, please limit your comments to 2 minutes
- Additional opportunities to provide public comment:
  - Email: [streetcarservice@metro.net](mailto:streetcarservice@metro.net)
  - Voicemail: (213) 922-3000
  - Mail: Metro, c/o Laura Cornejo, One Gateway Plaza, 99-22-2, Los Angeles, CA 90012
- For more information, please visit the project website: [www.metro.net/streetcar](http://www.metro.net/streetcar)

