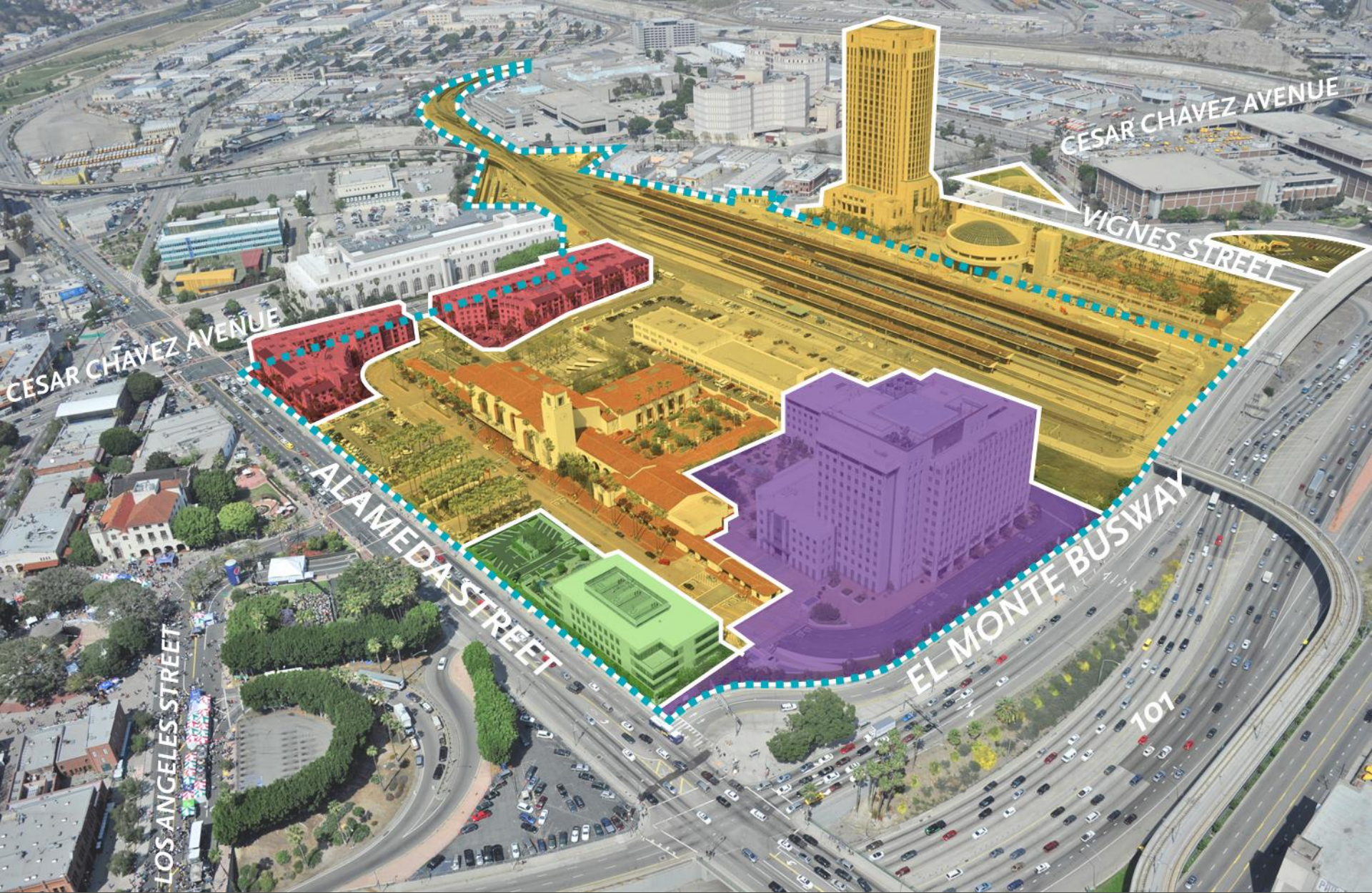




# Union Station Master Plan | An Overview

## Metro Ad Hoc Sustainability Committee | May 20, 2015



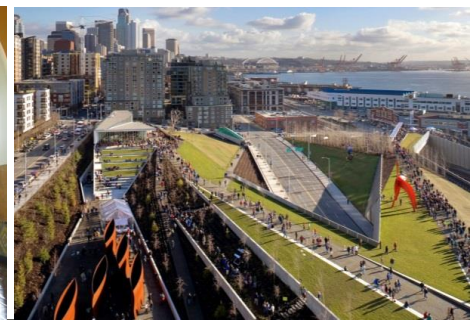


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Scope of Study

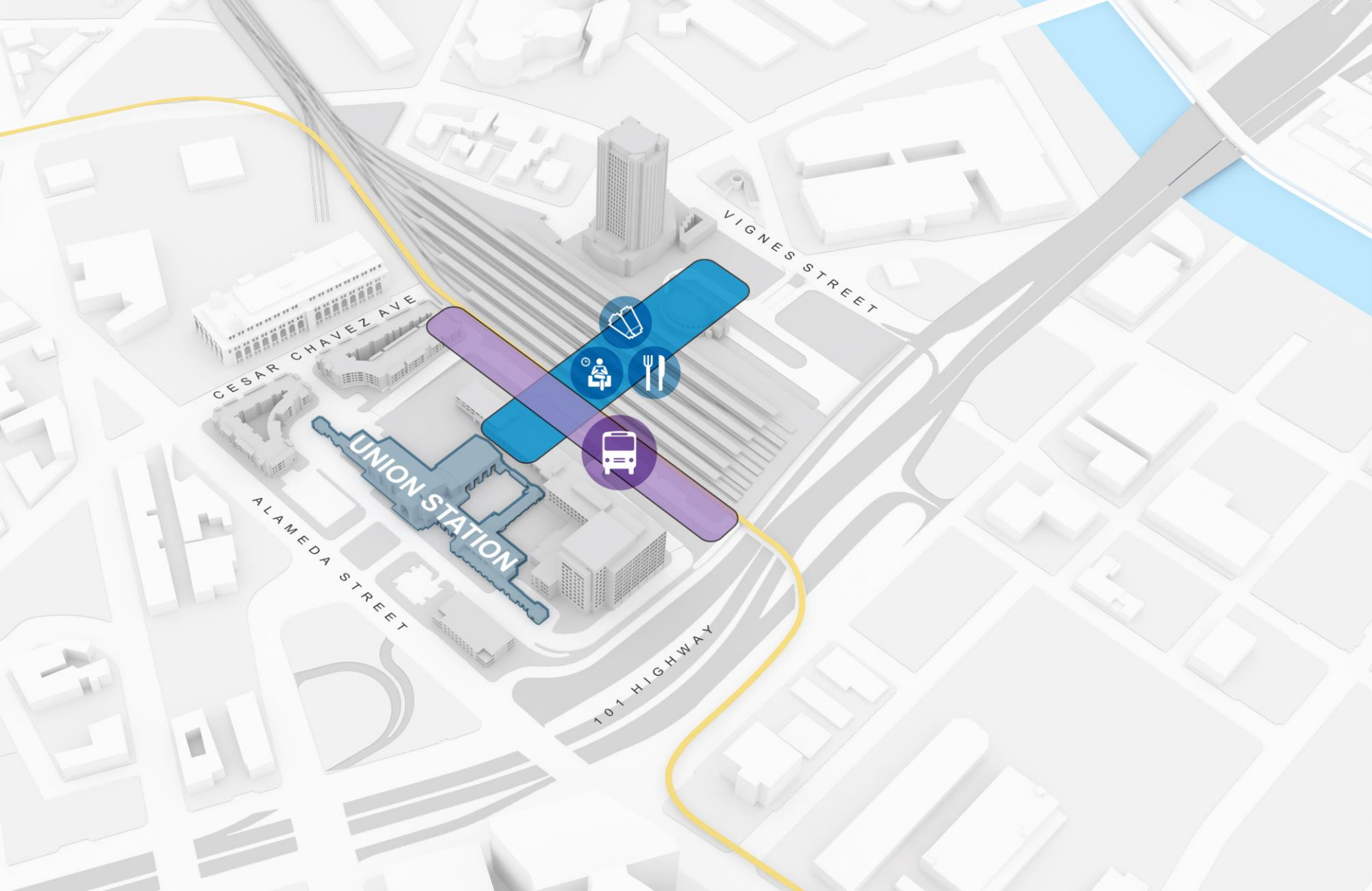


- Transit Optimization
  - Create large multi-modal concourse
  - Relocate Patsaouras Bus Plaza and co-locate bus operations
  - Plan for integration of high-speed rail
- Destination
  - Reinvigorate historic station and courtyards
  - Provide uses that support transit functions
- Connectivity
  - Reinforce neighborhood connections
  - Create clear pedestrian and bicycle routes through the site



# Transit Optimization

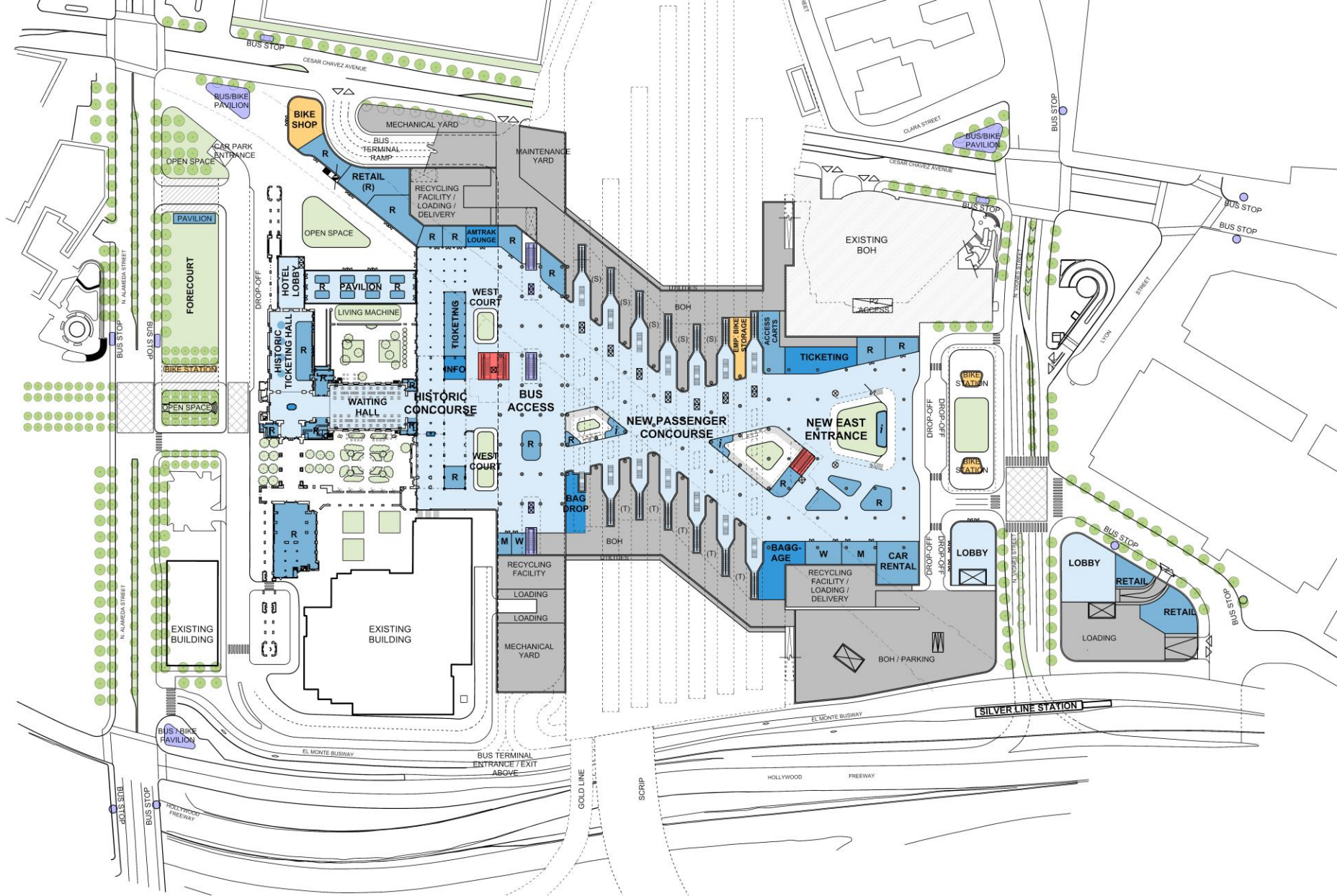




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# Key Transit Improvements

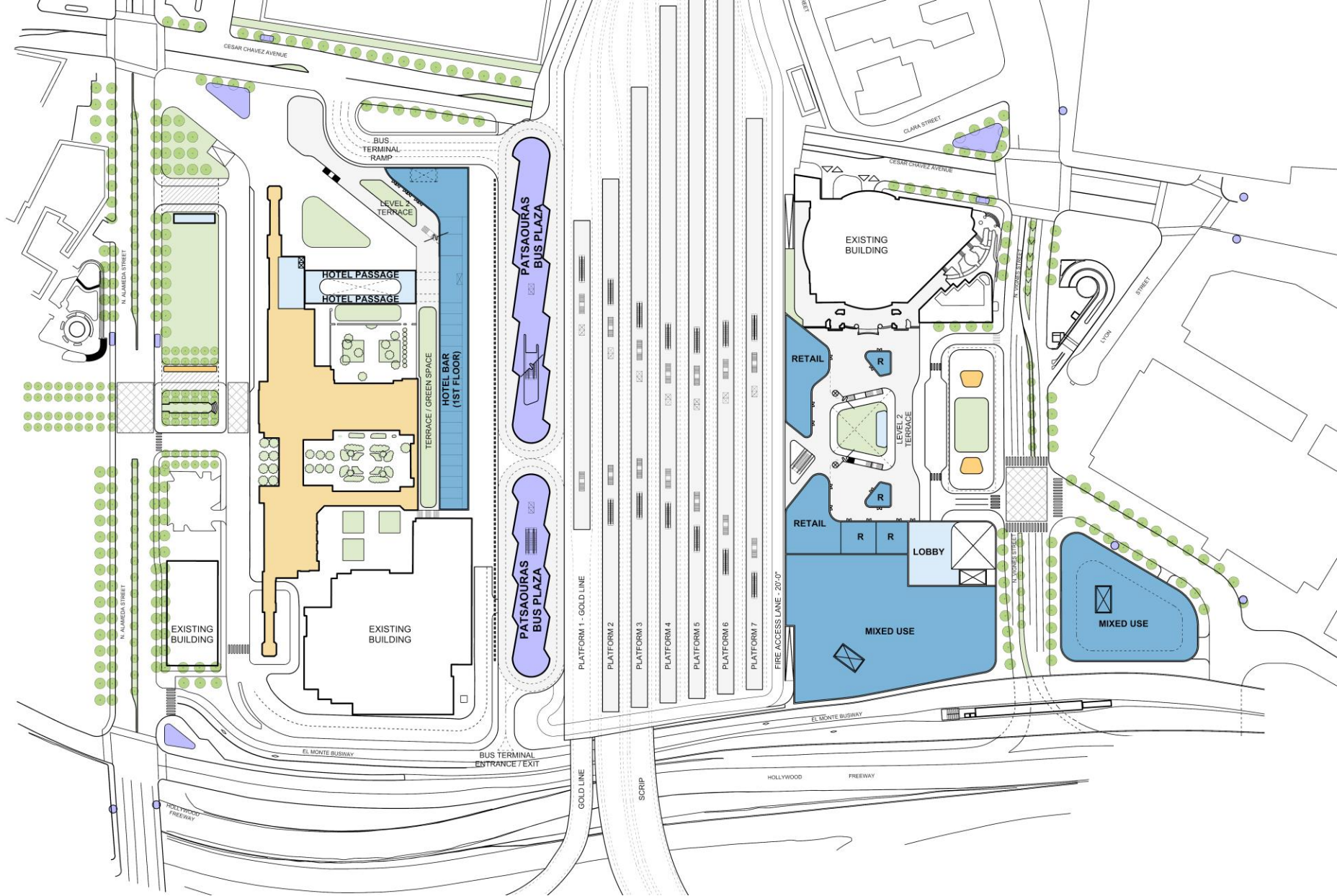




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Concourse Plan

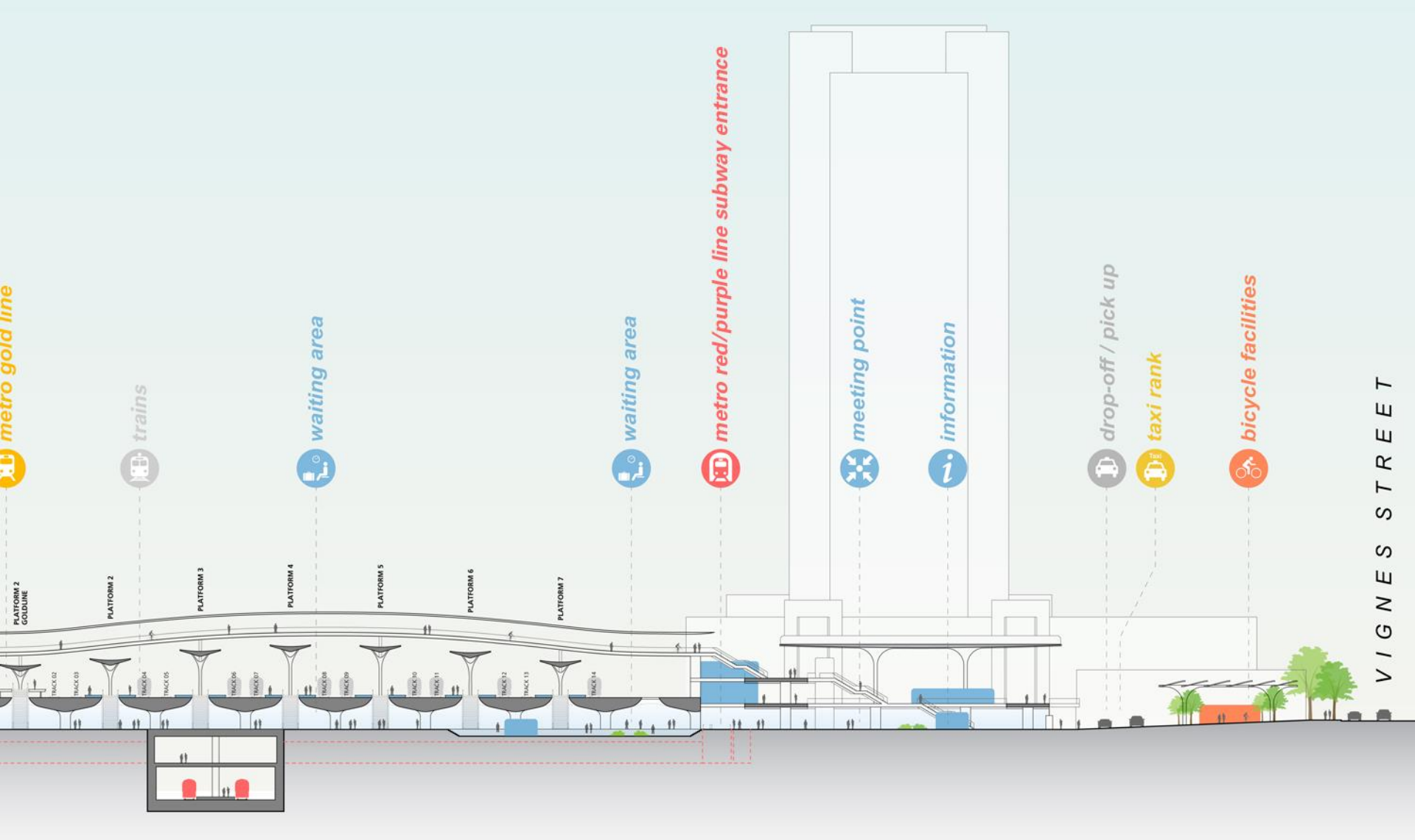




Metrolink

# Consolidated Bus Facility: Relocated Patsaouras Plaza





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Site Cross Section





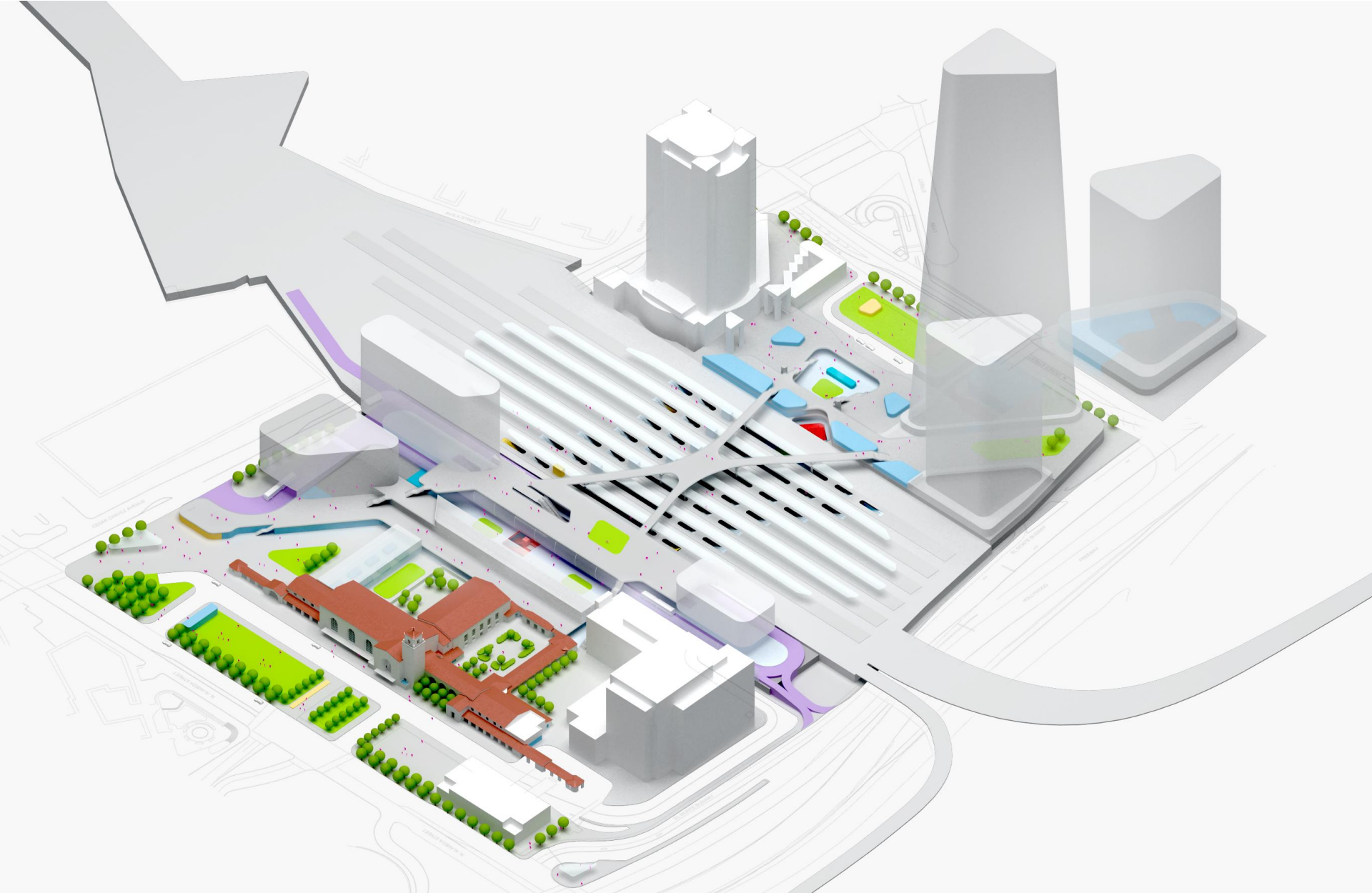
# Concourse Plan View w/HSR

Development





# Development Program @ 3.25m sf



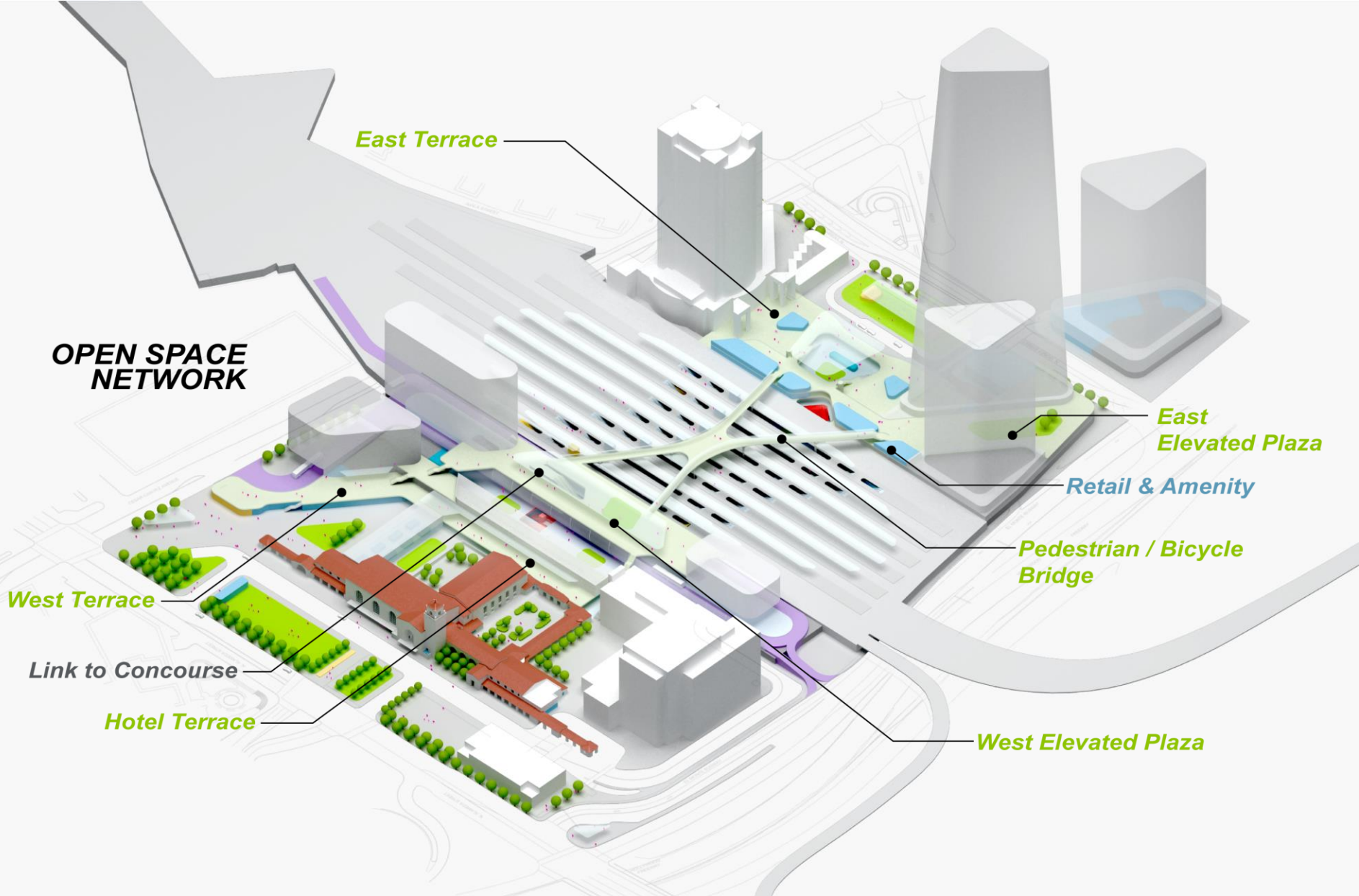
Metro

Development Program @ 3.25m sf



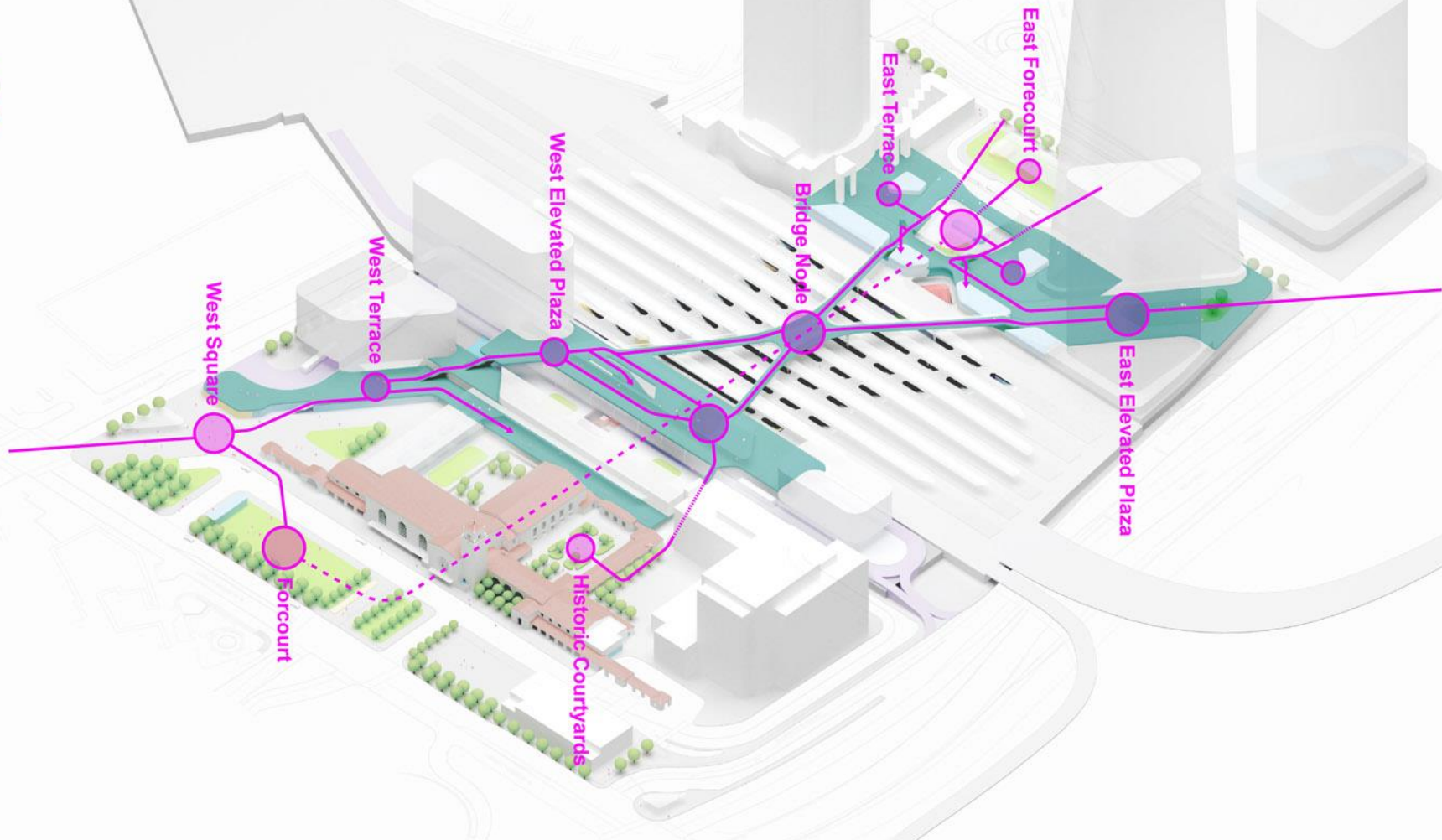


# Development Parking





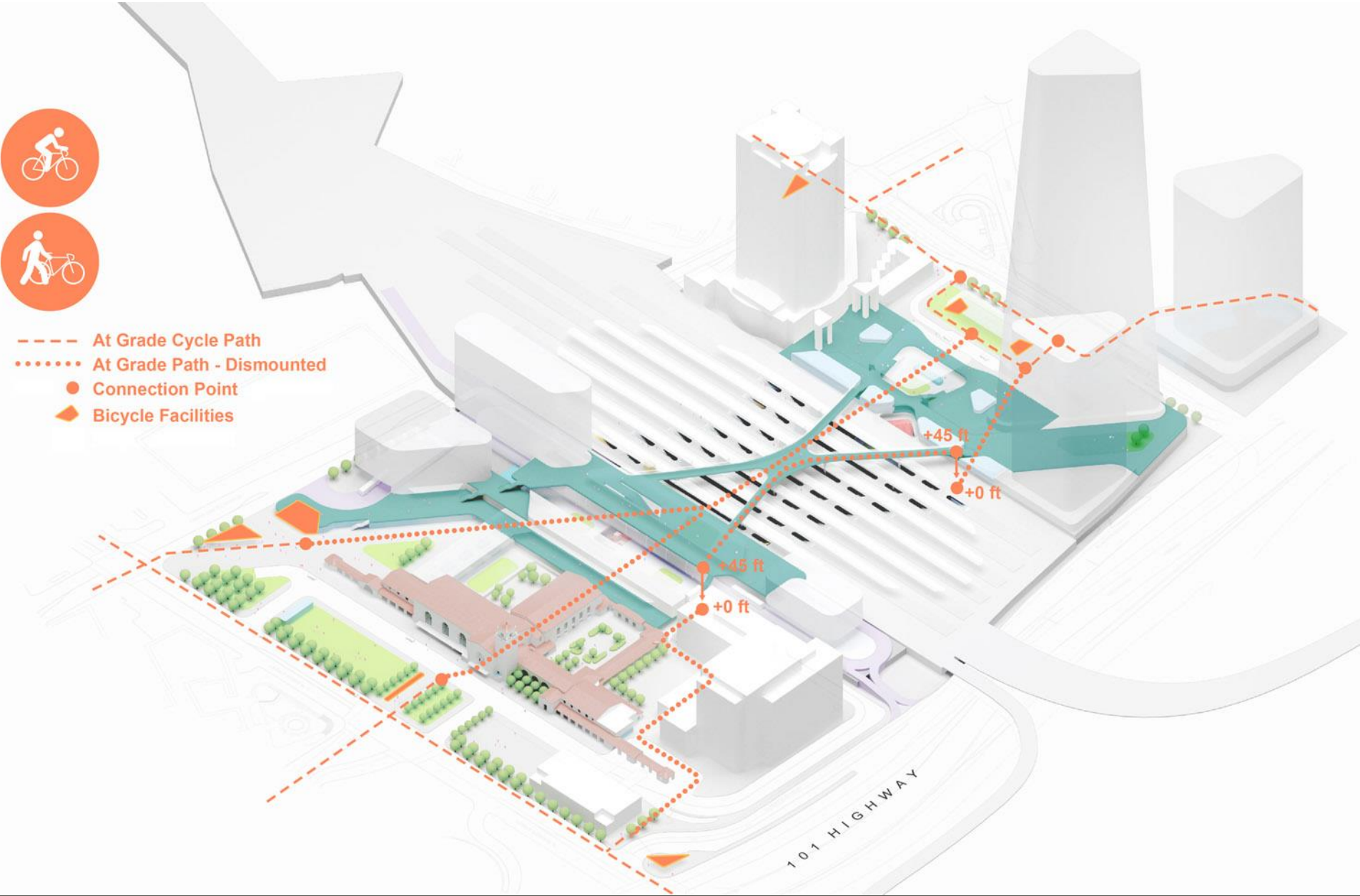
Connectivity/Open Space





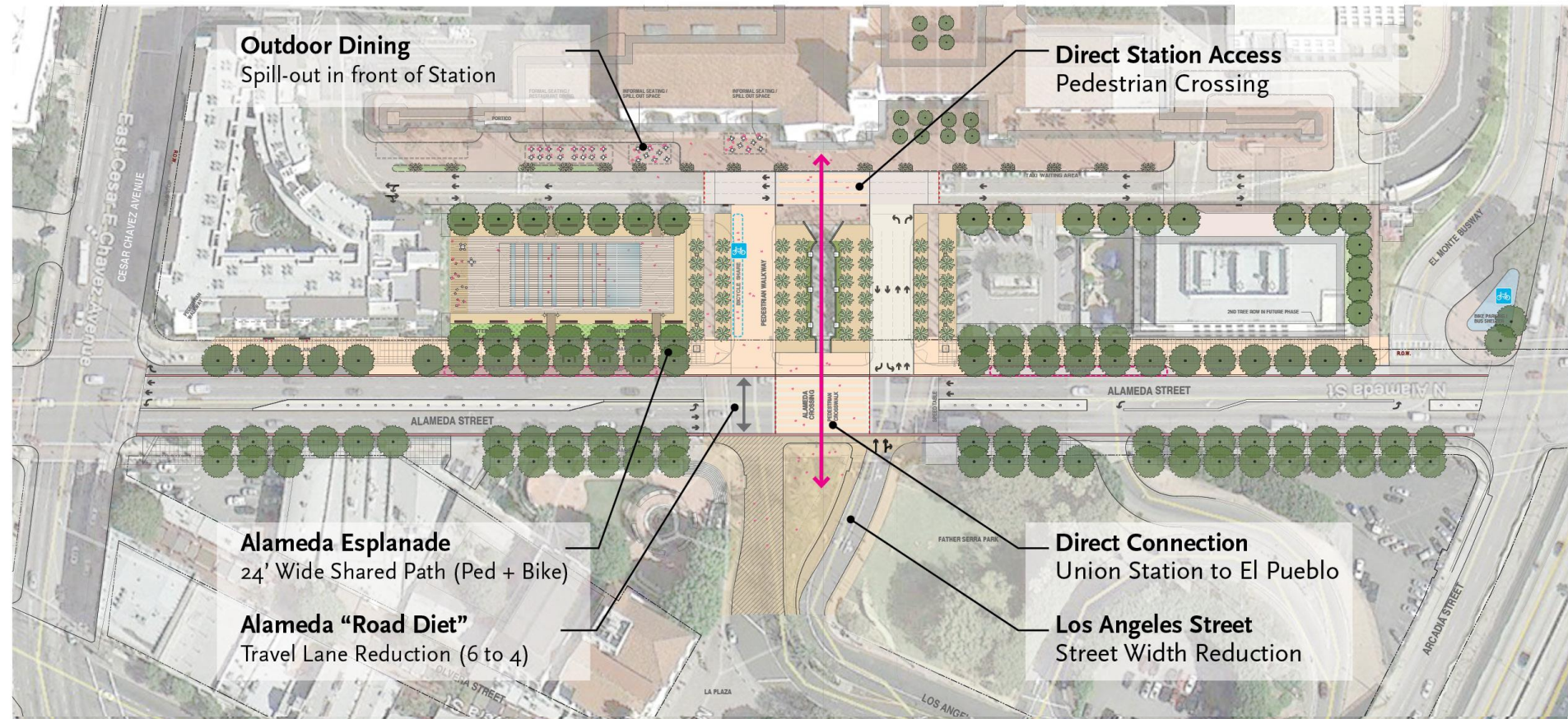


- At Grade Cycle Path
- ..... At Grade Path - Dismounted
- Connection Point
- ▲ Bicycle Facilities



# Near Term Streetscape and Forecourt Improvements











Images / Character











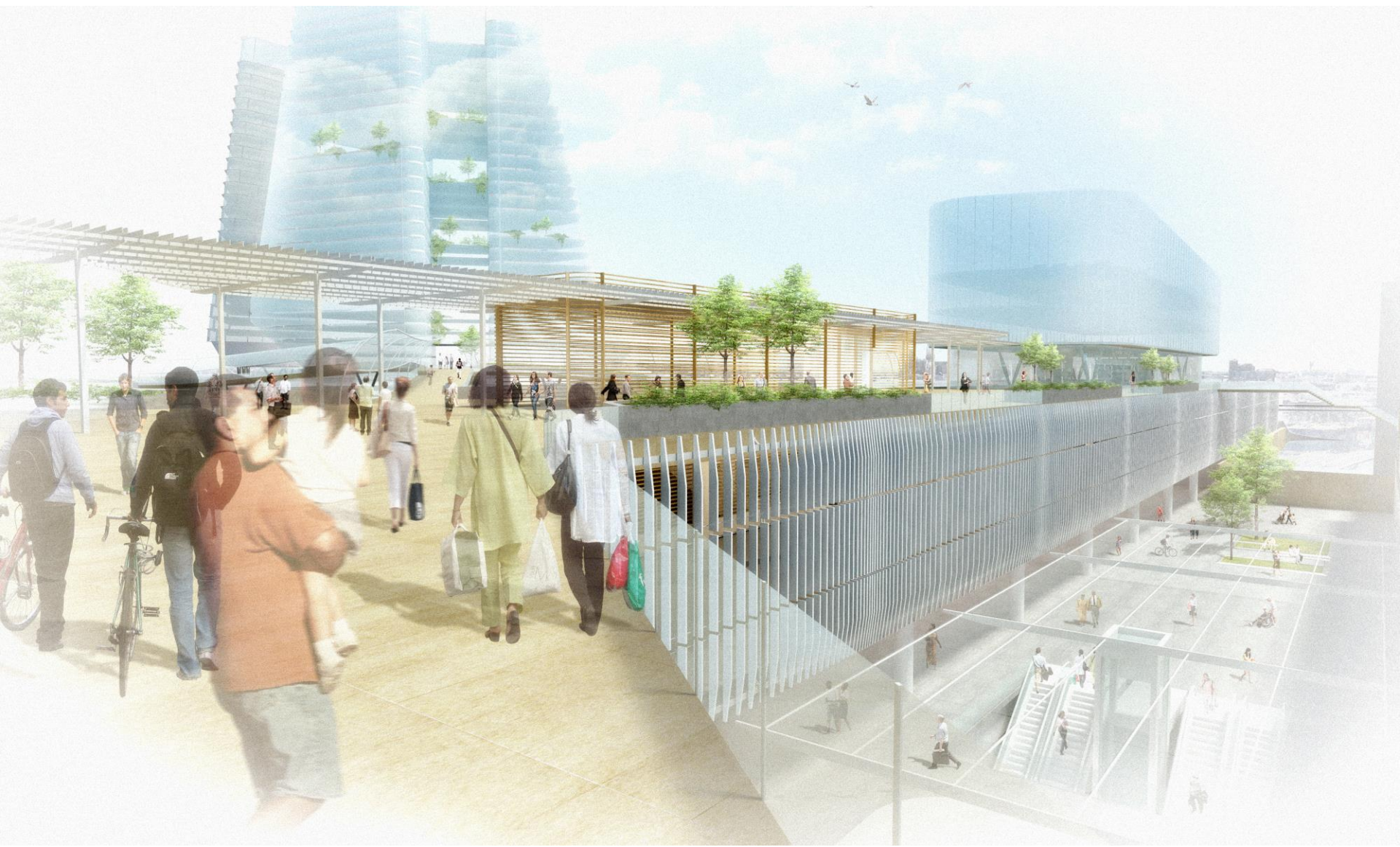












# Visualization





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Animation: Concept

Sustainability



- LEED EBOM (Existing Building Operation and Maintenance)
- LEED ND (Neighborhood Development)
  - 1<sup>st</sup> Registered Transit Station
- Global Green Sustainable Communities Technical Assistance Grant
- Pilot Projects (during Stage 1 Improvements)



10 5 7 5				Smart Location & Linkage		27 Points
Yes	Liberty	Linkage	No			
				SLL Prereq 1	Smart Location	Required
				SLL Prereq 2	Impaired Species and Ecological Communities	Required
				SLL Prereq 3	Wetland and Water Body Conservation	Required
				SLL Prereq 4	Agricultural Land Conservation	Required
				SLL Prereq 5	Floodplain Avoidance	Required
2	2	3	3	SLL Credit 1	Preferred Locations	10
1	1			SLL Credit 2	Brownfield Redevelopment	2
7				SLL Credit 3	Locations with Reduced Automobile Dependence	7
1				SLL Credit 4	Bicycle Network and Storage	1
		3		SLL Credit 5	Housing and Jobs Proximity	3
				SLL Credit 6	Steep Slope Protection	1
1				SLL Credit 7	Site Design for Habitat or Wetland and Water Body Conservation	1
				SLL Credit 8	Restoration of Habitat or Wetlands and Water Body	1
			1	SLL Credit 9	Long-Term Conservation Management of Habitat or Wetlands and Water Bodies	1
			1			

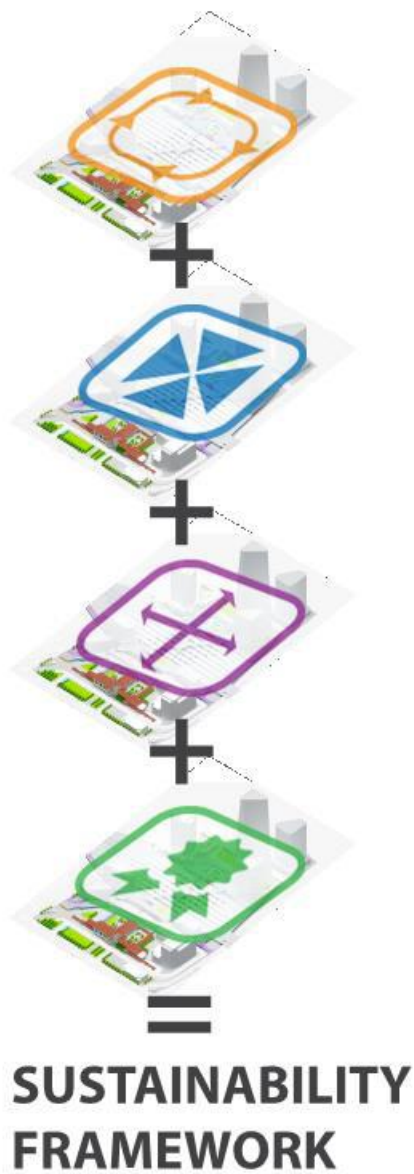
8 18 14 4				Neighborhood Pattern & Design		44 Points
Yes	Liberty	Linkage	No			
				NPD Prereq 1	Walkable Streets	Required
				NPD Prereq 2	Compact Development	Required
				NPD Prereq 3	Connected and Open Community	Required
2	6	2	2	NPD Credit 1	Walkable Streets	12
1	2	1	2	NPD Credit 2	Compact Development	8
1	1	2		NPD Credit 3	Mixed-Use Neighborhood Centers	4
2		5		NPD Credit 4	Mixed-Income Diverse Communities	7
		1		NPD Credit 5	Reduced Parking Footprint	1
		1	1	NPD Credit 6	Street Network	2
1				NPD Credit 7	Transit Facilities	1
2				NPD Credit 8	Transportation Demand Management	2
1				NPD Credit 9	Access to Civic and Public Spaces	1
		1		NPD Credit 10	Access to Recreation Facilities	1
				NPD Credit 11	Visibility and Universal Design	1
		2		NPD Credit 12	Community Outreach and Involvement	2
1				NPD Credit 13	Local Food Production	1
1	1			NPD Credit 14	Tree-Lined and Shaded Streets	1
1				NPD Credit 15	Neighborhood Schools	1

61463				Green Infrastructure and Buildings		29 Points
Yes	Liberty	Linkage	No			
				GIB Prereq 1	Certified Green Building	Required
				GIB Prereq 2	Minimum Building Energy Efficiency	Required
				GIB Prereq 3	Minimum Building Water Efficiency	Required
				GIB Prereq 4	Construction Activity Pollution Prevention	Required
3	2			GIB Credit 1	Certified Green Buildings	6
1	2			GIB Credit 2	Building Energy Efficiency	2
				GIB Credit 3	Building Water Efficiency	1
	1			GIB Credit 4	Water-Efficient Landscaping	1
1				GIB Credit 5	Existing Building Reuse	1
				GIB Credit 6	Historic Resource Preservation and Adaptive Reuse	1
1				GIB Credit 7	Minimized Site Disturbance in Design and Construction	1
2	2			GIB Credit 8	Stormwater Management	4
	1			GIB Credit 9	Heat Island Reduction	1
		1	2	GIB Credit 10	Solar Orientation	1
				GIB Credit 11	On-Site Renewable Energy Sources	3
2				GIB Credit 12	District Heating & Cooling	2
1				GIB Credit 13	Infrastructure Energy Efficiency	1
1	1			GIB Credit 14	Wastewater Management	2
		1		GIB Credit 15	Recycled Content for Infrastructure	1
1				GIB Credit 16	Solid Waste Management Infrastructure	1
			1	GIB Credit 17	Light Pollution Reduction	1

123				Innovation & Design Process		6 Points
Yes	Liberty	Linkage	No			
	1			ID Credit 1	Innovation and Exemplary Performance: TBD?	1
		1		ID Credit 1	Innovation and Exemplary Performance: Smart Grid	1
		1		ID Credit 1	Innovation and Exemplary Performance: On-site Wastewater Treatment and Reuse	1
		1		ID Credit 1	Innovation and Exemplary Performance: Solid Waste Management	1
1				ID Credit 2	Innovation and Exemplary Performance: LEED® Accredited Professional	1

13				Regional Priority Credit		4 Points
Yes	Liberty	Linkage	No			
		1		Credit 1	USGBC Regional Priority Credits zip code 99012	1
		1		Credit 1	USGBC Regional Priority Credits zip code 99012	1
		1		Credit 1	USGBC Regional Priority Credits zip code 99012	1
		1		Credit 1	USGBC Regional Priority Credits zip code 99012	1

25403312				Project Totals (pre-certification estimates)		110 Points
Certified 40-49 points Silver 50-59 points Gold 60-79 points Platinum 80-106 points						



## INFRASTRUCTURE

- WATER
- ENERGY
- WASTE/ LOGISTICS
- SYSTEMS RESILIENCE

## SOCIOECONOMIC

- SOCIAL SPACE
- SKILLS & TRAINING
- REVENUE & OCCUPANCY
- CONNECTIVITY
- DENSITY
- EQUITY & DIVERSITY

## TRANSIT

- CARBON
- SERVICES & AMENITIES
- RIDERSHIP
- AIR QUALITY
- BICYCLE & PEDESTRIAN
- WALKABILITY

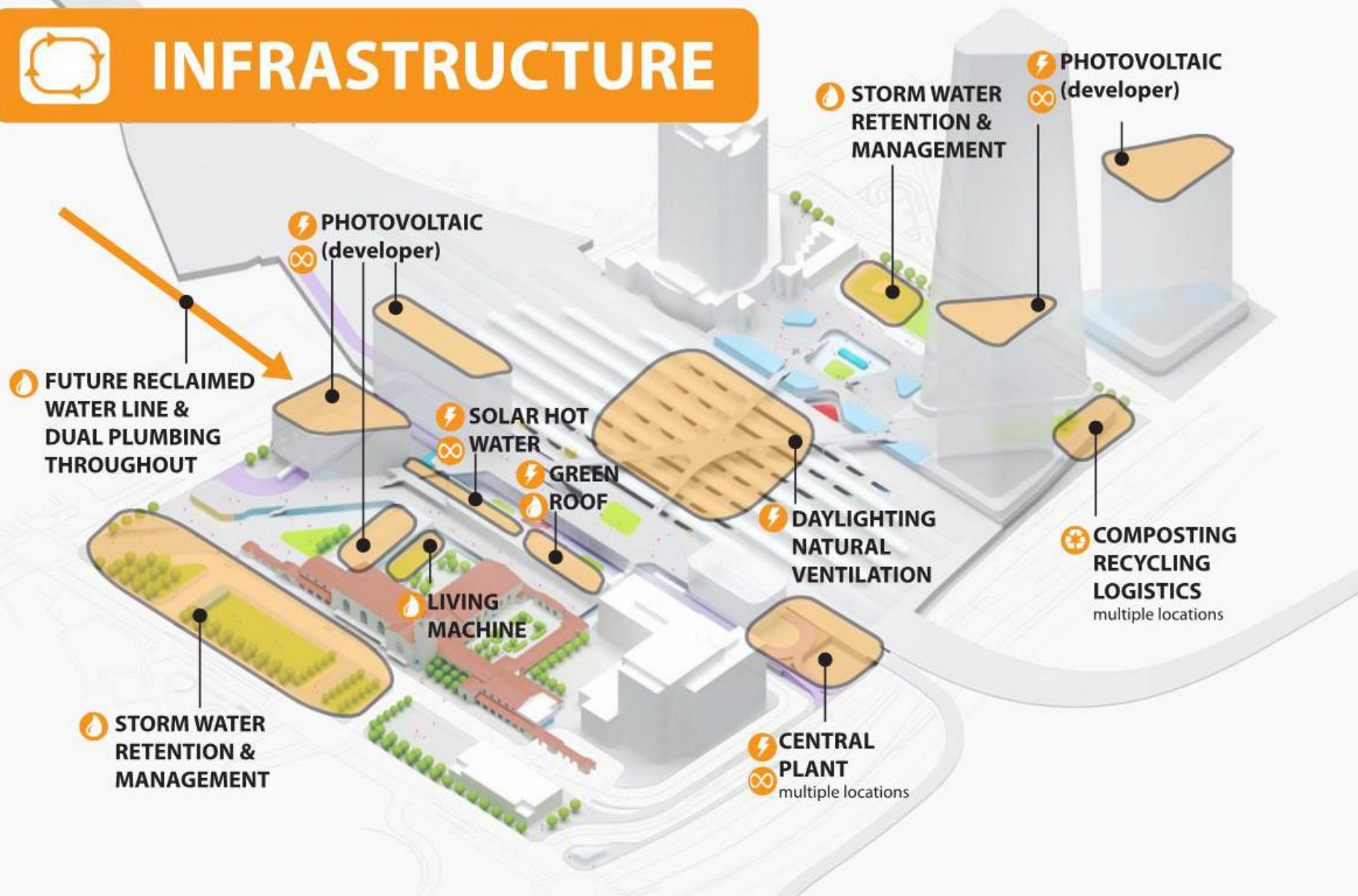
## IDENTITY

- LAND USE & ECOLOGY
- BUILT FORM
- OPEN SPACE
- COMMUNITY INVOLVEMENT





# INFRASTRUCTURE

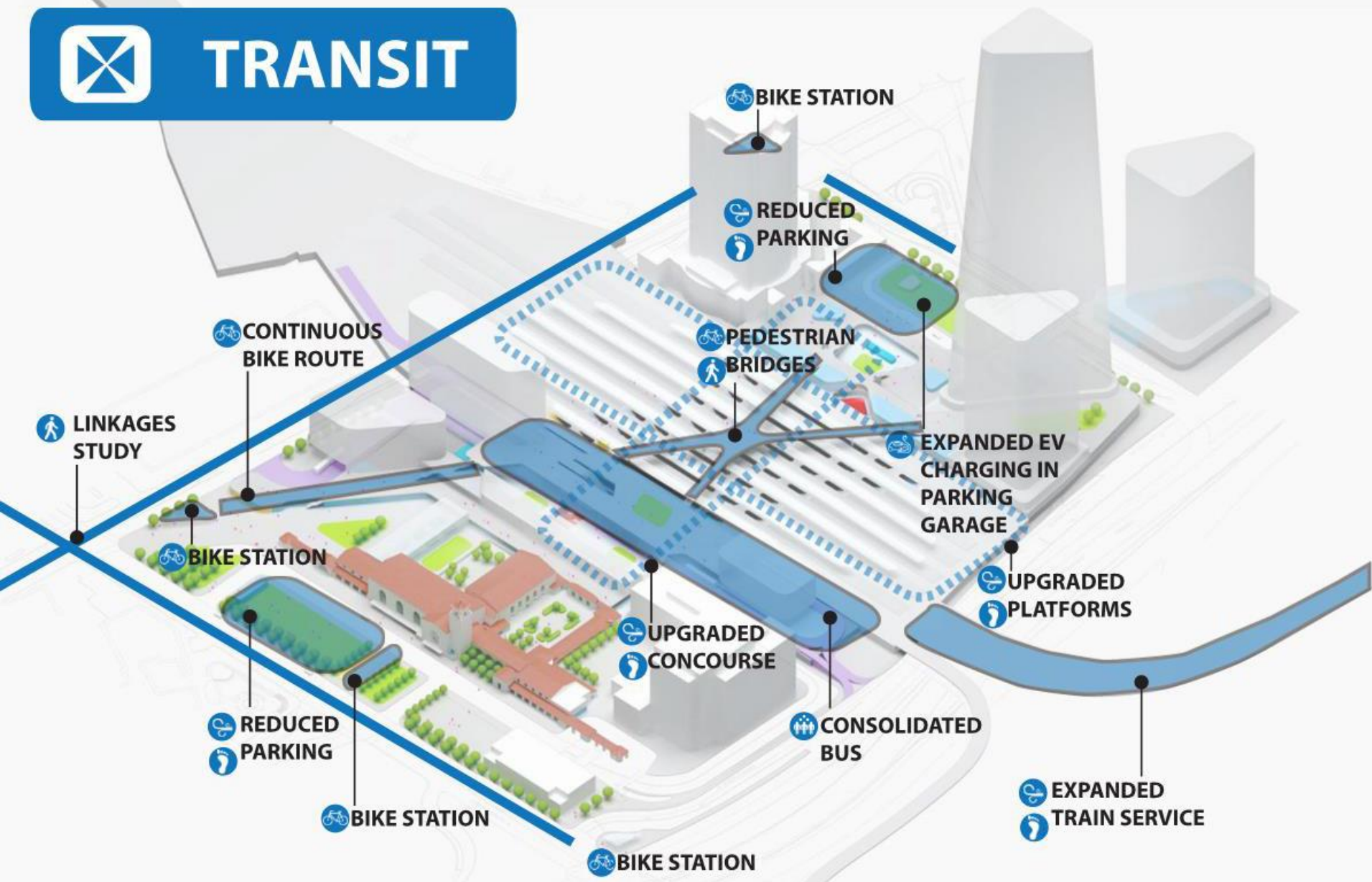


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Infrastructure



# TRANSIT



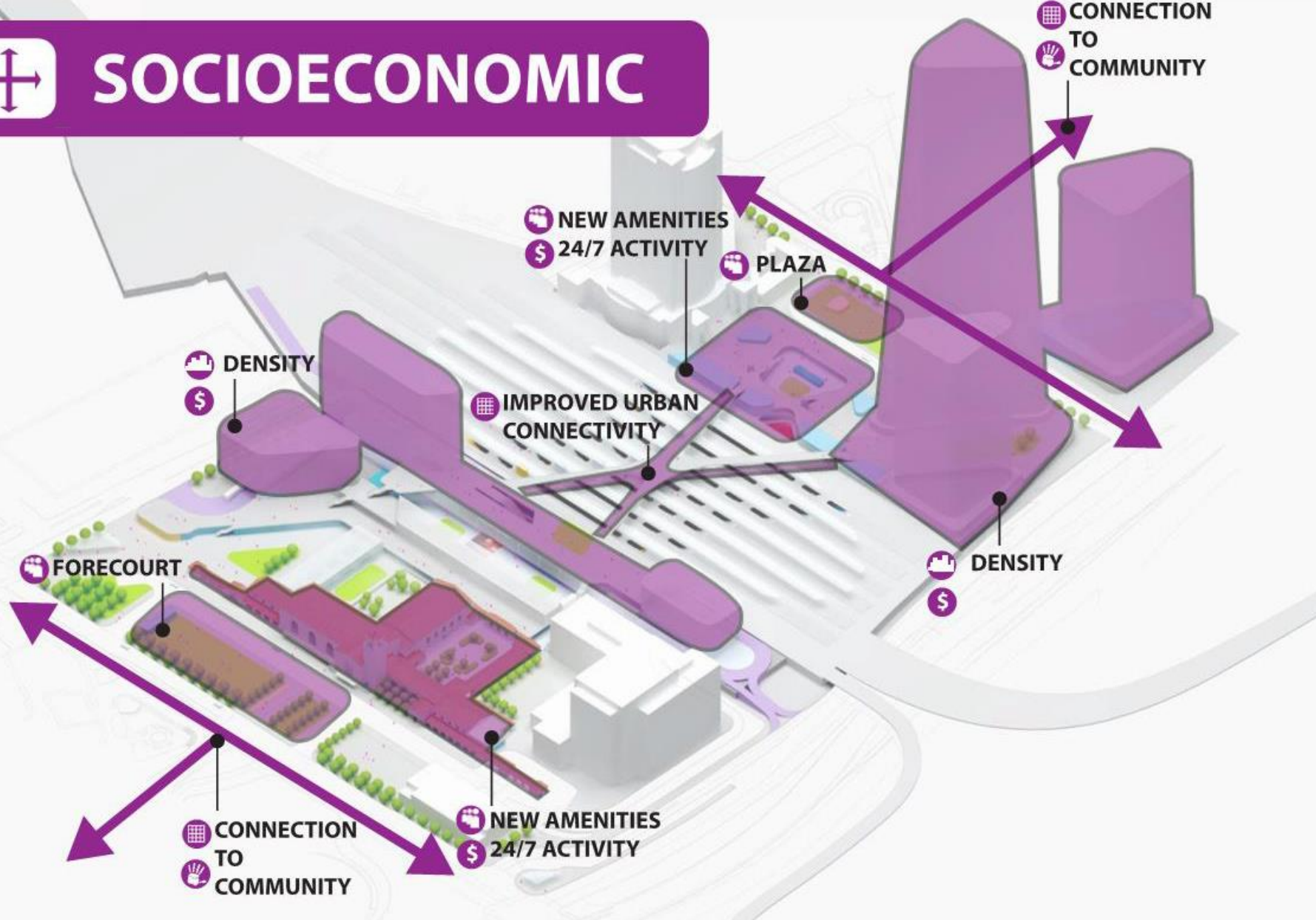
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Transit





# SOCIOECONOMIC

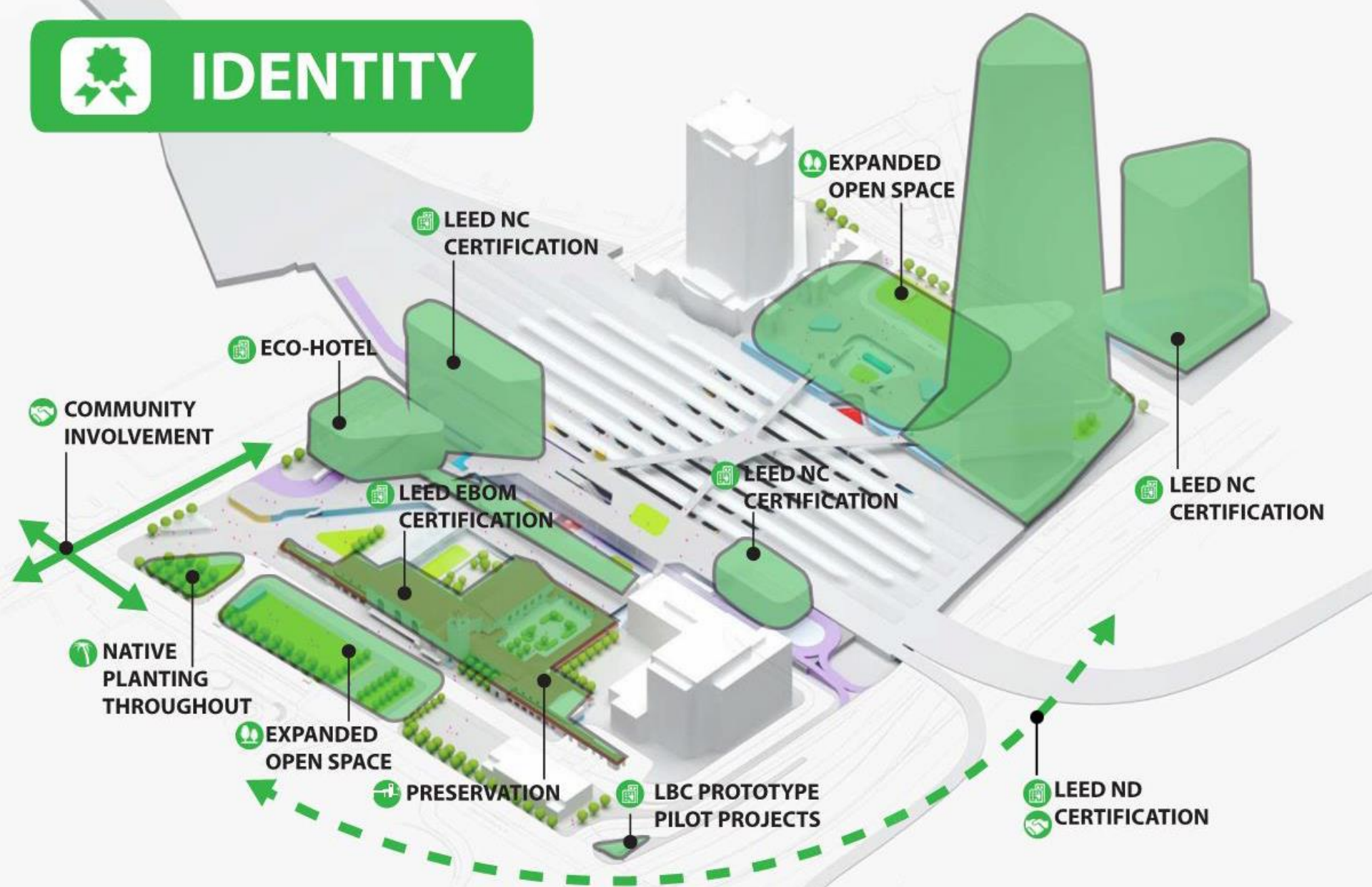


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Socio-Economic



# IDENTITY



Metro

Identity



- Program EIR
- Stage 1 Improvements:
  - Agreement with City of Los Angeles and El Pueblo to coordinate design, funding and implementation of forecourt improvements and Prop A Grant funds (\$1 M)
  - Bike Hub – \$1.2 M in funding
  - Cesar Chavez Bus Stop improvements – \$2.1 M in funding
  - Applying for 2 ATP grants in June 2015
  - Identify additional funding for sustainability pilot projects
- Coordination with SCRIP project
- Transit Improvements to be submitted for Metro Long Range Transportation Plan



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Questions?