



TRANSFORMING LOS ANGELES UNION STATION





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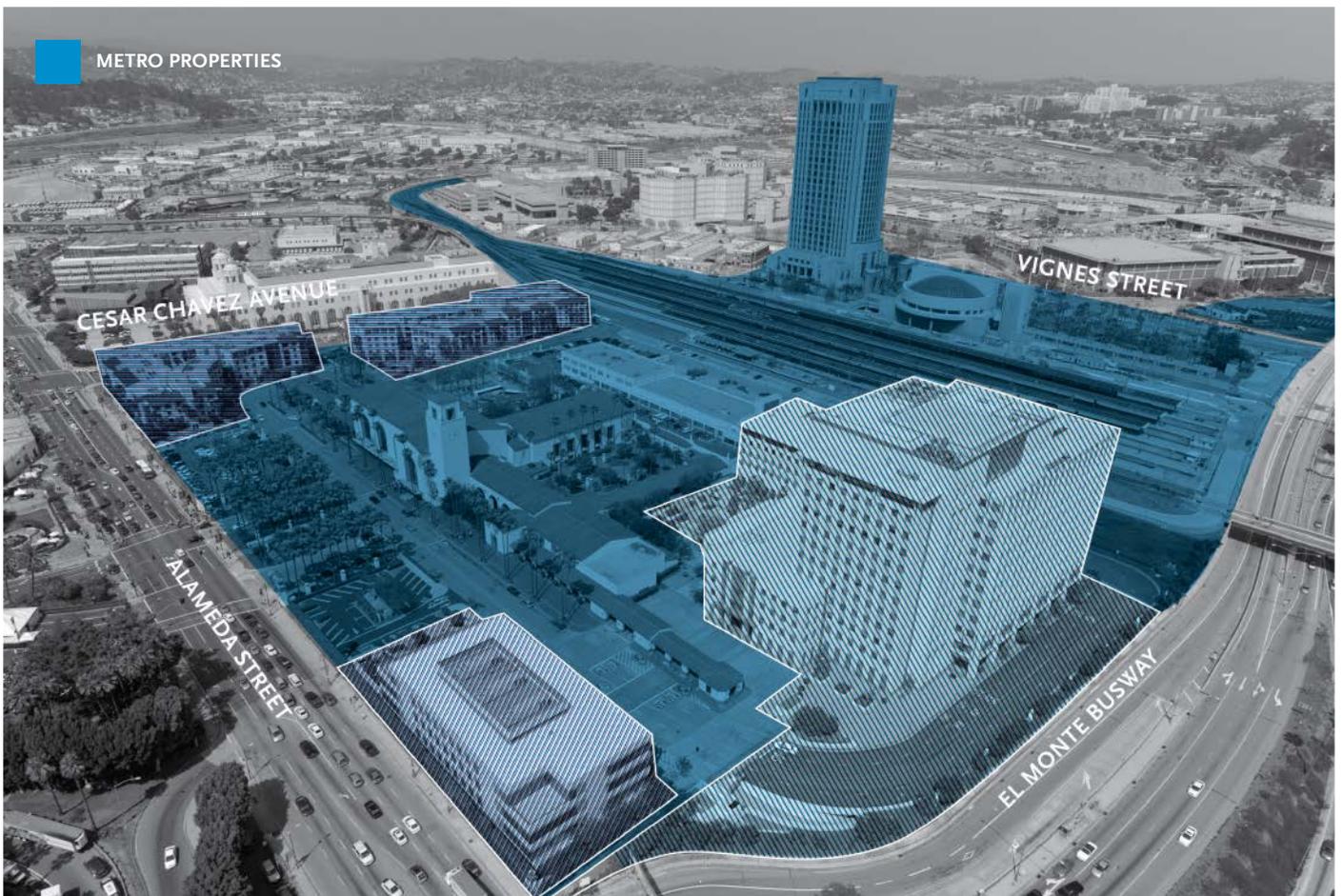
Introduction

Following the 2011 purchase of Los Angeles Union Station, Metro began a master planning process aimed at upgrading and enhancing the facility, elevating it to world-class status.

The resulting plan, the Union Station Master Plan (USMP) commenced in August 2012 and was completed in the fall of 2014. The USMP area includes Metro's properties and several adjacent non-Metro properties in close proximity to the station. Metro's current holdings include approximately 50 contiguous acres encompassing the historic station, the rail yard, associated transportation hub facilities, the Gateway Building that serves as Metro's headquarters and a nearby site currently operated by a restaurant.

Below:

The Union Station Master Plan area includes Metro's properties (in dark blue) and several adjacent non-Metro properties (in light blue).



History of the Station

The construction of Union Station marked a major milestone in the transportation history of Los Angeles. Integrating rail, public transit, automobile, and pedestrian modes of transit in a single location, Union Station became a focal point for both Los Angeles residents and visitors. Through a carefully designed sequence of spaces and experiences, Union Station introduced and reinforced important aspects central to the public perception of Los Angeles: the city's unique blend of architectural imagery, the region's benign climate, and the excitement of future possibilities. The arrival and departure procedures were as carefully choreographed as a movie production, with patrons following artfully designed pathways to waiting trains or the beginning of their Los Angeles adventure. Departing passengers came through the front door into a welcoming grand entry,

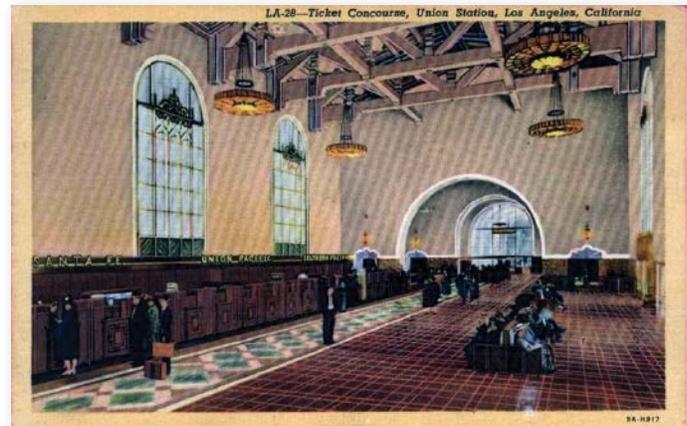
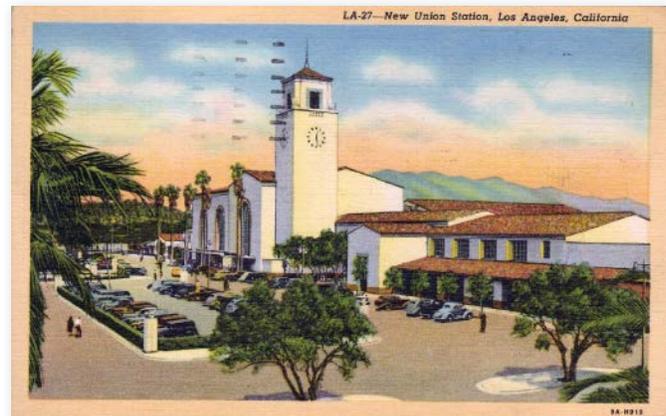
The arrival and departure procedures were as carefully choreographed as a movie production, with patrons following artfully designed pathways to waiting trains or exiting the Station and beginning their Los Angeles adventure.

Below:

Los Angeles Union Station postcards
LA 25 Postcard Publisher: Western Publishing & Novelty Co., Date postmarked 1939.

with ticketing needs taken care of in the spacious ticket hall.

Proceeding to the waiting hall, patrons were made comfortable with seating, amenities and views of sunlit patio gardens. They were then directed into a series of increasingly enclosed spaces (gates, tunnel) before emerging onto open air platforms to board trains and begin their journey. Arriving visitors enjoyed this sequence in reverse, emerging from the confines of the train through tunnels and low-ceilinged intermediary spaces into the welcoming public areas of the concourse, patio gardens, and restaurant. Public transportation (streetcar, bus, automobile, and taxi) were close at hand. Historic El Pueblo, the birthplace of Los Angeles, was through the front door and across the street. The sense of arrival in a special and distinctive place was palpable.



The Station Today

Over time, several initiatives changed the dramatic arrival. The freeway bisected downtown, creating a physical impediment where there was once connectivity. Streetcars have been removed along with the original taxi loop and baggage express removed and bus routes have been altered. Additional buildings to the south and west crowded the spacious front entry and outdoor areas and impaired the relationship to historic El Pueblo and Terminal Annex.

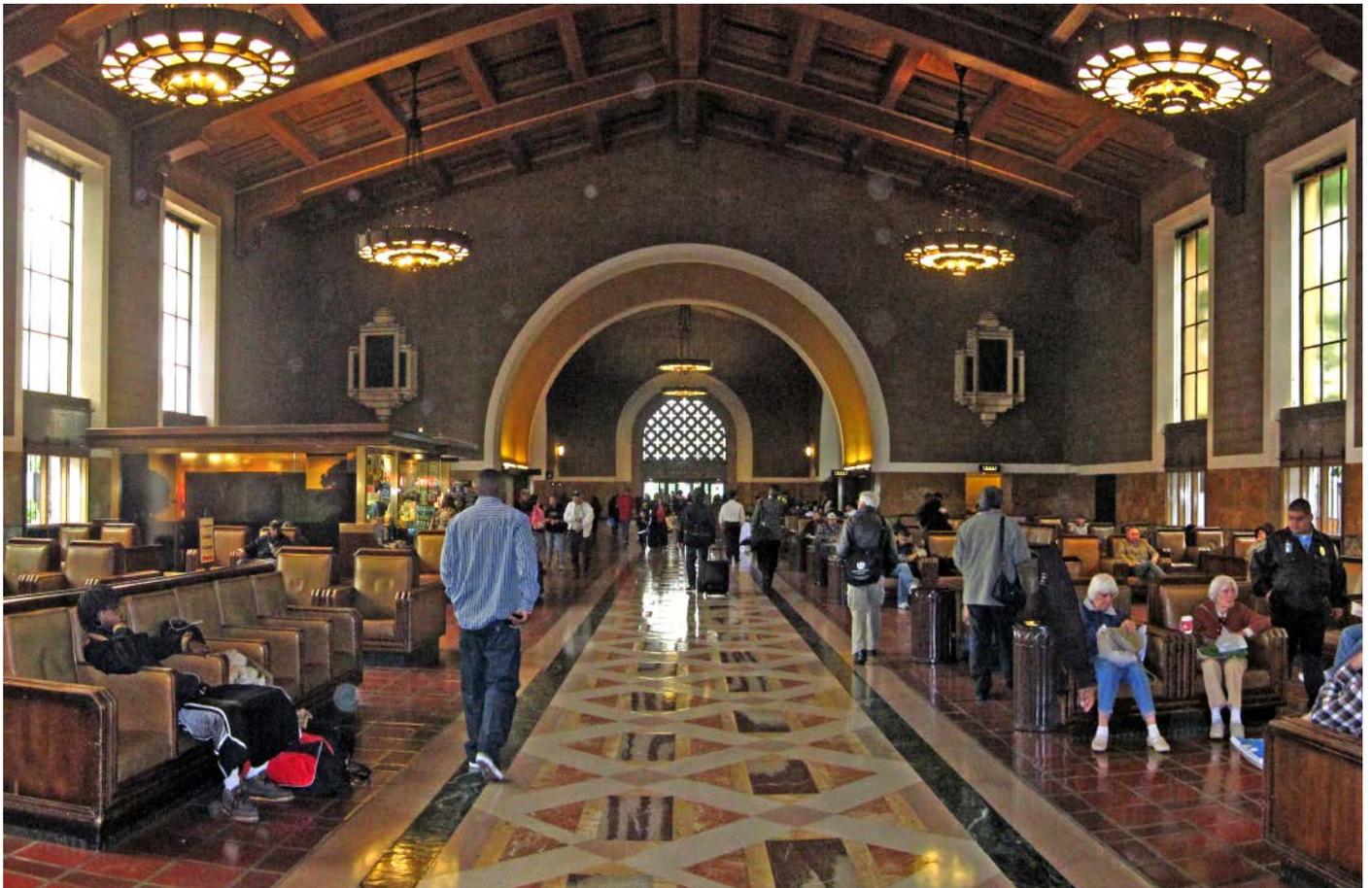
The transit functionality of Union Station changed dramatically from the original design. Whereas the original station was organized as a traditional rail station processing passengers via a straightforward sequence from the entrance to the trains, the current station functions more like an interchange between multiple modes of transport – primarily as a result of the addition of the Metro Red/Purple line and the

Whereas the original station processed passengers via a straightforward sequence from entrance to trains, the current station functions more like an interchange between multiple modes of transport.

increase in Metrolink use.

Moreover, much of the utility of the original design has been lost through the removal of the streetcar/bus loops, the dedicated taxi drop, the baggage express building and administration areas.

In 1996, the area around and including Union Station was considered in the Alameda District Specific Plan, developed to guide expanded development of the Union Station area as a mixed-use transit hub. The Plan, including the station, the Terminal Annex property, parcels east of Metro's Gateway Center and a portion of adjacent rail corridor, established regulatory controls and incentives for development on and around the property that are still relevant today.



The Station's Potential

The Union Station Master Plan has the opportunity to return this historic landmark to its former prominence with several initiatives: rehabilitation of this architectural resource through careful restoration and maintenance; invigoration of historic public spaces through uses suited to today's patrons while not compromising historic character; and better interpretation of the history of the station and its significance along with efficient movement through the property. The station was once considered the epicenter of the travel experience in Southern California. With careful planning, it can be so again. Use of the station's considerable architectural and experiential presence should guide the future, while acknowledging the importance of the past.

Union Station also has the opportunity to be part of a larger movement in which cities fundamentally reconsider how people live within and move through them. With an eye towards the future, the Union Station Master Plan has illuminated the central aspects of the station's character while reinvigorating both the station and surrounding properties as a functional transportation hub.

The formal clarity and efficient planning of the historic station remains at the core of the site today, indicating the value as well as potential for implementing current best design practices in a holistic manner. Rather than being bound by recent incremental changes, the Master Plan links major changes to operational planning and opportunities for new growth, ultimately yielding a unified composition relative to the site and the city around it.

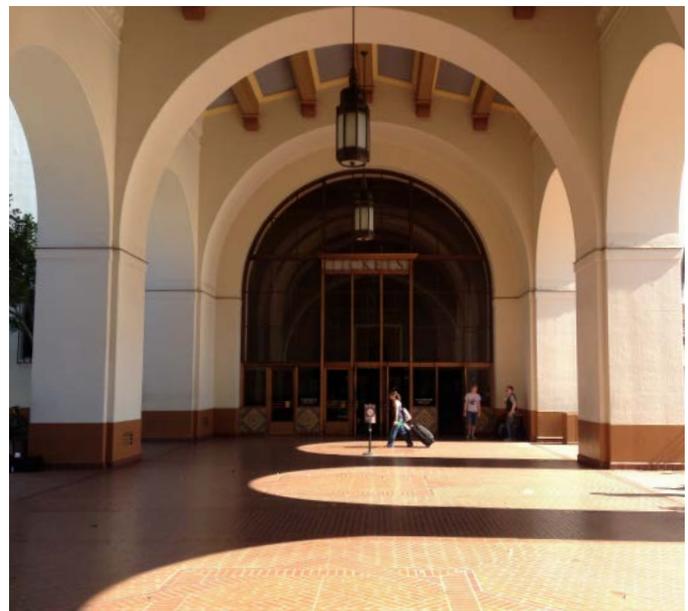
Though constructed over 75 years ago, much of the station and its historical architectural fabric has thankfully been maintained, allowing the chance to build upon the high levels of detail, quality and craftsmanship already inherent. The Master Plan is an opportunity to codify the celebrated qualities of the past while addressing the urgent needs of the future. Giving new life to the station's history will allow it to be meaningfully enjoyed by generations of Angelenos. Extending far beyond the tiny details

Below & Right:

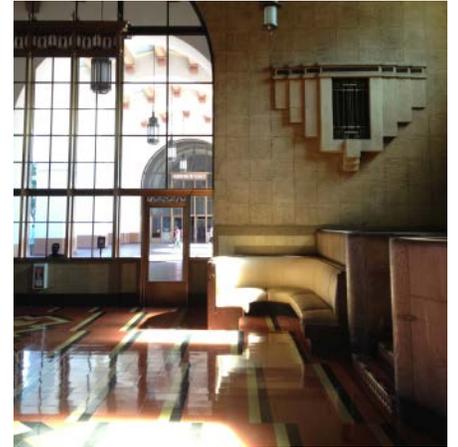
View of Union Station tower from the South Patio looking North.

View of Union Station Entrance Hall from the center arcade looking North.

Various spaces within Union Station: North Patio, Fred Harvey Restaurant, Ticketing Hall, Mosaics from the courtyards and windows from the Ticketing Hall.



The formal clarity and efficient planning of the historic station remains at the core of the site today, indicating the value as well as potential for implementing current best design practices in a holistic manner.



that enrich the station, it is an opportunity to assess the nature and sequence of important spaces both enclosed and open to the sky, bringing the best of southern California's sun, light and air to the station's courtyards, halls and arcades.

Beyond the station proper, the Union Station Master Plan confirms the potential associated with other long range opportunities that reconceive major portions of Los Angeles. While the plan for the station must remain flexible rather than be reliant on the implementation of any one analogous plan, numerous opportunities are present for restoring previous community networks and establishing new ones. As shown in the 'Connect US' plan, projects at the site's perimeter should be complementary to other projects designed to foster stronger links

between La Plaza, Chinatown, Little Tokyo, Boyle Heights, the Civic Center, Downtown and the Los Angeles River.

While the original placement and massing of the station was meant to be open and connected to the rest of the city, subsequent construction has yielded many constraints and obstacles. By better integrating the station with the city, more users will be inclined to connect with the Union Station site no matter their mode of transit, and especially if arriving on foot or bicycle. By reaching beyond the station's boundaries, the Master Plan can also find further opportunities to be a catalyst for growth, acting as a focal point for economic transformation that reinforces neighboring communities, the City of Los Angeles and all of southern California.



1 General Conclusions



General Conclusions

The Union Station Master Plan and the plan's preferred alternative were developed based upon data collection and analysis, the rigorous exploration and methodical evaluation of available alternatives, and significant public outreach. The resulting Master Plan is complex, accommodating a variety of influential inputs and opportunities.

Passenger Concourse and Reconstructed Rail Yard

The preferred alternative is centered on a new, larger passenger concourse located at the same general level as the historic station and Alameda and Vignes Streets. The concourse is sized to allow adequate space for visitor and passenger amenities, accommodate projected increases in ridership, and provide separated baggage and service functions. The multi-level concourse will run beneath the train yard, positioned strategically in the center of the area where the majority of transfers between regional rail, subways and buses occur. Aligned with the historic entrance to Union Station, passengers will navigate a seamless transition from the historic station building to a grand civic space and easily accessible transit options.

The placement of the concourse in an east to west alignment creates a spine that knits the two sides of the property that are bisected by the rail yard. It also allows for a reconfiguration of the east side of the property that can promote development. The new, more generous spaces afforded by the concourse will also free the historic station for re-programming which can create a destination separate from transit uses.

Above the new passenger concourse will lie a reconstructed rail yard, coordinated by the new Southern California Regional Interconnector Project (SCRIP). The rail yard will include new, wider platforms and a revised spacing scheme.

Below:

A new, larger passenger concourse is flooded with natural light as passengers make their way to the platforms above.



The USMP includes programmatic and project recommendations that are designed to be developed over time and guide other immediate and capital decisions at Los Angeles Union Station.



The relocated Patsaouras Bus Plaza will be directly accessible from the passenger concourse, serving passengers from two islands, one serving local routes and the other serving regional routes.



Left:

The relocated bus plaza sits at the same level as the rail platforms, above the passenger concourse below.



Relocated Patsaouras Bus Plaza

Patsaouras Bus Plaza will be relocated to the western end of the site at the same level as the rail yard. The new plaza will be directly accessible from the passenger concourse, serving passengers from two islands, one serving local routes and the other serving regional routes.

Placement of the bus plaza parallel, adjacent and on the same grade as the rail yard allows the western side of the station site to be more easily re-conceptualized as a mixed-use destination. Passengers arriving on buses can descend to the concourse below for transfer to other transit modes or shopping and dining. Passengers transferring to buses can ascend from the concourse and transit connections below. Unlike current service patterns, the new bus plaza will host buses arriving and departing Union Station, streamlining and simplifying service offerings and wayfinding.

The new facility will be accessed from both Cesar Chavez Avenue and the El Monte Busway, improving routing and minimizing street congestion while reducing conflicts between buses, private vehicles and pedestrians. The alignment and set of access points allows more flexibility to adjust the ratio and routing of local and regional buses, and also provides the greatest reduction in local street congestion due to reductions in bus traffic. The placement of the bus facility in this location also imparts the least visual impact to the historic station.

Within the new concourse and at either end, a robust mix of new and improved retail, food service and hospitality spaces will be provided

New East Entrance and Station Amenities

Within the new concourse and at either end, a robust mix of new and improved retail, food service and hospitality spaces will be provided. In the tradition of the original station building and its patios, natural light and breezes enter the concourse through strategic openings and open spaces. The mix of offerings within the concourse should reflect usage of the station, offering convenience for commuters as they move between home and employment centers and destination-worthy locations that attract business outside the pool of transit riders from both locals and visitors. The concourse is punctuated with seating areas and gathering spaces offering users a chance to relax or wait for companions in a safe, pleasant environment.

The offerings within the concourse are part of a larger effort to provide an inspiring mix of uses on site that reflects the shifting demographics of users over time. The livelier, vibrant atmosphere will improve both the function and character of the station property and the streets around Union Station. Related projects will dramatically improve pedestrian and bicycle access to adjoining neighborhoods, encouraging movement around and through the station, creating foot traffic and improving the appearance and sense that Union Station is part of the City of Los Angeles.

Below:

New amenities including retail, food service and hospitality offerings will add convenience for transit users and establish Union Station as a destination.





As Union Station adds the space and capacity needed to accommodate the future, it is poised to influence growth and change not only in Los Angeles but throughout southern California.



Left:

The development potential at Union Station is poised to influence growth and change in Los Angeles and throughout southern California.



Future Development

Several parcels to the east and west of the rail yard have been identified for future development. Given the size, function and influence of Union Station, its significance extends far beyond the boundaries of the Master Plan site. It is the epicenter of an almost \$25 billion investment in transit by Metro, serving as a regional hub capable of accommodating and encouraging further expansion of transit ridership in and around Los Angeles County. The station is already the central hub in the Metrolink commuter rail network, and boasts the fifth highest number of Amtrak passengers served in the country.

In addition to its rail prowess, the station aims to generate development and activity that will attract visitors from around the region, fostering urban transformation in the station's immediate proximity. Ideally, increased levels of activity will permeate the site, reinforcing improvements to perimeter access and circulation as well as to transportation. The station and its attendant development should emerge connected and relevant to the larger city.

The simultaneous planning of transport improvements and new development on the site will allow for both a more coordinated implementation of the Master Plan as well as flexibility to implement the destination-based mixed use program in response to market conditions. The value of all development sites should be materially enhanced through their association with Union Station. As Union Station adds the space and capacity needed to accommodate the future, it is poised to influence growth and change not only in Los Angeles but throughout southern California.



2 Process and Plan Development



Five Related Projects

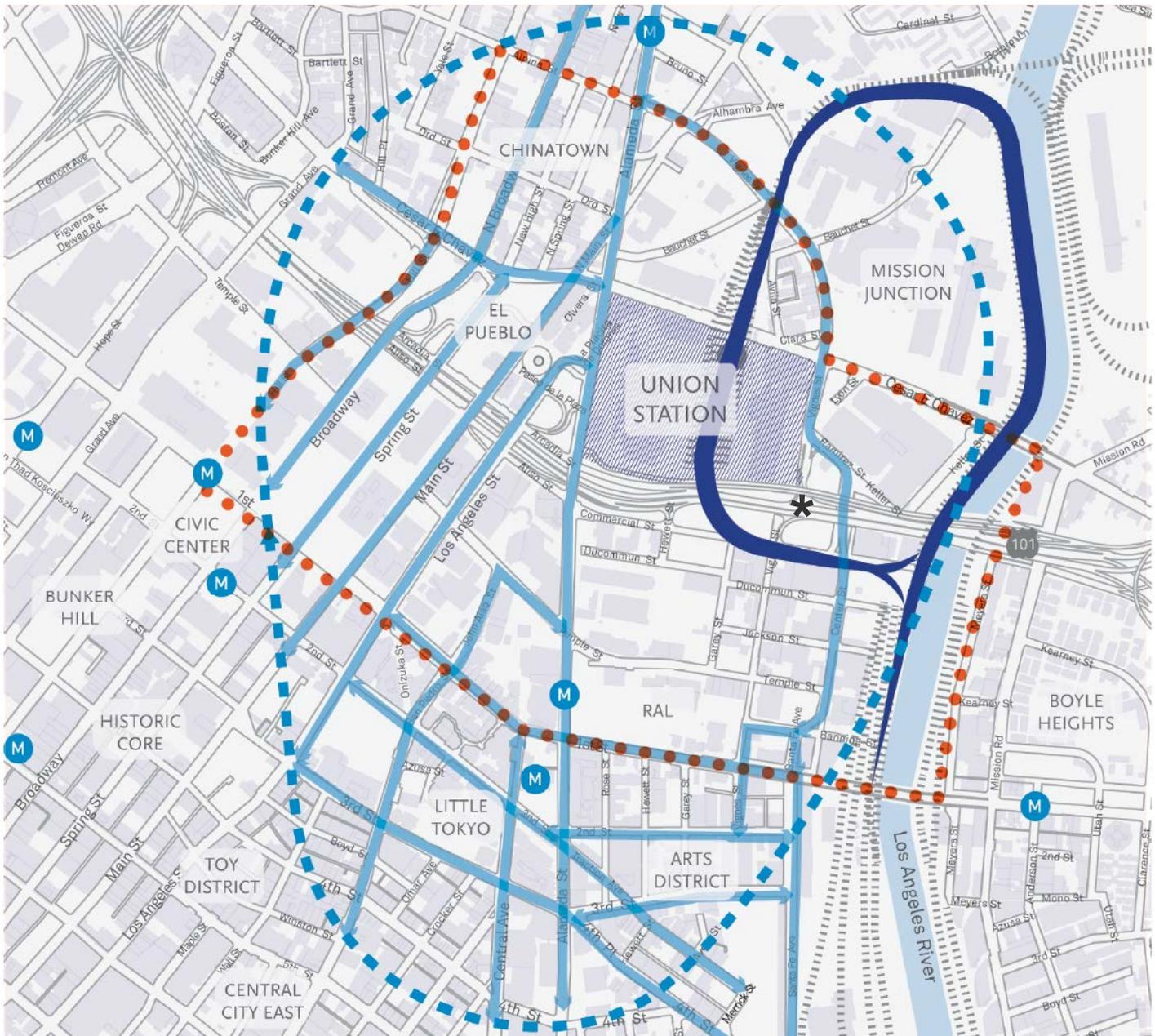
In addition to the Master Plan are five related projects happening at the site which have influence on the Master Plan. The first two are a direct response to stakeholder feedback, and all are integral parts of upgrading and modernizing the station environment.

Below:

Five concurrent projects currently overlap on the Union Station property.

Key

-  Connect US Walk Study Area (Bike study area was 1+ mile from station)
-  Key walk-bike streets to be enhanced
-  SCRIP
-  Union Station Wayfinding
-  LEED ND Sustainability Plan
-  Silver Line Station



1 'Connect US'

A public improvement plan identifying bike and pedestrian improvements to and from Union Station, the under construction Regional Connector, station at 1st Street and Central Avenue, and surrounding communities. This plan was completed at about the same time as the USMP.

2 Wayfinding

New environmental graphics and signage have been recently added to the station, including the integration of some contemporary technologies. The signage is designed to facilitate passenger movements and decrease confusion.

3 SCRIP (Southern California Regional Interconnector Project)

The Southern California Regional Interconnector Project (SCRIP) aims to reconstruct and raise the rail yard at Union Station. At its completion, the SCRIP project will allow run through rail service at the station in comparison to current, inefficient stub-end operations that require trains to enter and exit the rail yard on the same mainline spurs.

The SCRIP project, by raising the rail yard, tracks and platforms, generates the enabling work that will allow for the future expanded passenger concourse and more efficient platforms required for smooth operations. It will also necessitate the inclusion of new mechanized vertical transportation including elevators, stairs and escalators. The new platform width will accommodate these features and reduce bottlenecks that hamper passenger movements.

Below:

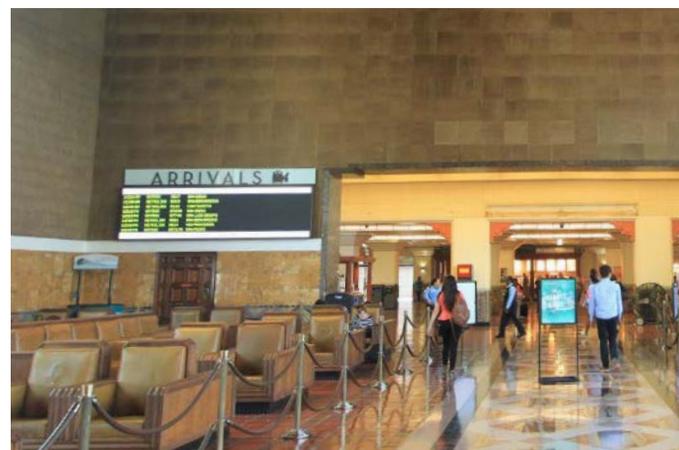
New signage and wayfinding improvements have already brought welcome additions to the station environment.

4 Silver Line Bus Rapid Transit Station

The USMP assumes completion of this previously designed project that will provide a new station along the existing El Monte Busway. It is assumed that this project will be completed prior to other transit improvements on site.

5 Sustainability

Union Station was registered for LEED ND by the Master Plan team, and the USMP includes guidelines for achieving sustainability goals. The station is also designated LEED-EBOM and a separate study was undertaken in order to expand the boundary outside of Union Station as a LEED-ND.



Outreach

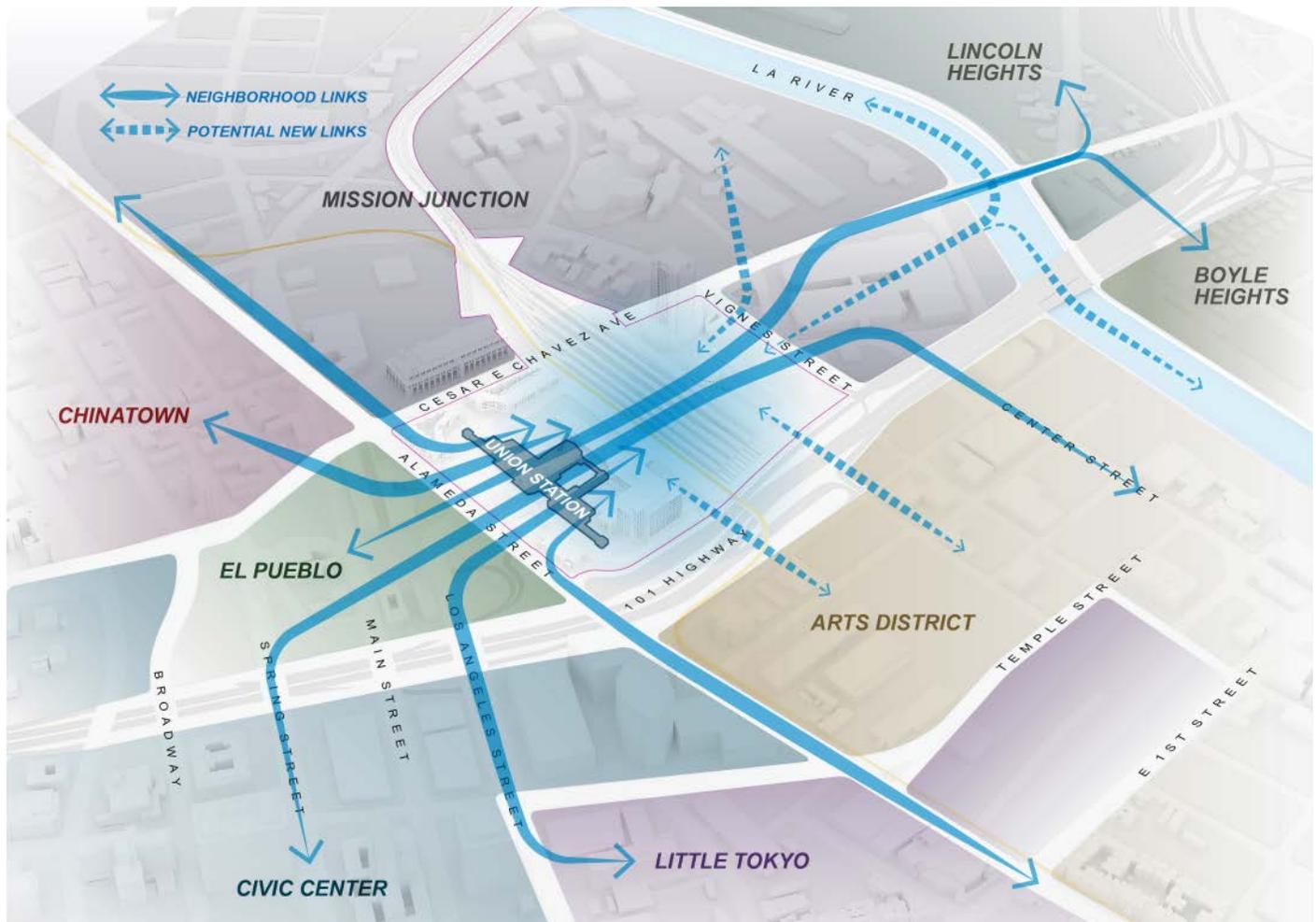
The creation of the Union Station Master Plan required an intense process of outreach and public engagement. This effort has included meetings and presentations to a wide range of stakeholder groups, offered in a number of different forums including 17 focus group meetings, four community advisory committee meetings, four technical advisory committee meetings, four community workshops, two Metro Board of Directors workshops that were open to the public, and three public Metro Board of Directors meetings. Together these sessions both acquired and dispensed valuable information integral to the creation of a complete Master Plan cognizant of the very people and neighborhoods that the station serves.

Below:

Design team members meet with community groups at a public presentation during the master planning process.

Bottom:

Union Station lies at the intersection of an array of diverse Los Angeles neighborhoods.



Refined Goals

In order to complete the Master Plan process, the design team was first tasked with refining the goals and objectives set forth by Metro in the initial Request for Proposals. In response to community and stakeholder outreach as well as intensive research undertaken at the outset of the Master Plan, a preferred alternative was developed based on the following key goals:

- accommodate a variety of transit modes now and into the future
- create an iconic place of extraordinary design as the transit hub for Los Angeles County
- enhance and protect the historic station through appropriate repurposing
- establish development opportunities that support Union Station's transit role
- ensure flexibility to allow the plan to adapt to changes in transit requirements and the needs of multi-phase commercial development
- improve access and connectivity for pedestrians and bicyclists
- incorporate sustainable best practices

These overarching goals are the framework on which the design responses in the preferred Master Plan alternative was developed.



Task 1

Key Findings

In order to develop the goals and objectives of the Union Station Master Plan, the design team conducted rigorous research to identify the constraints and opportunities present at the station and on its surrounding properties. Numerous transit issues were discovered and explored across all modes, identifying shortcomings and difficulties for both rail and bus travel, and related issues negotiating transfers between modes, accessing the perimeter of the station and moving across the site.

Access and Circulation

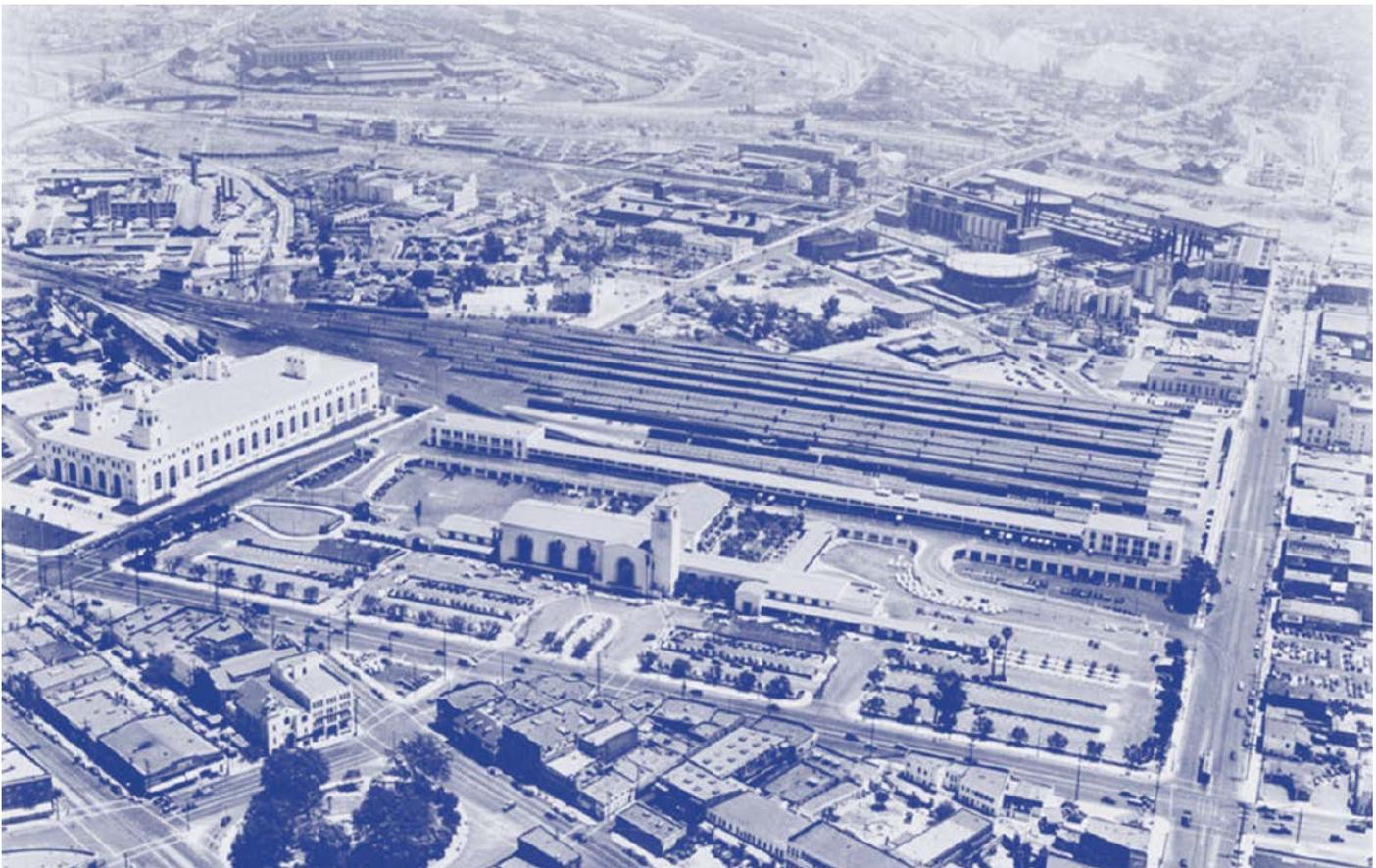
Whereas the original station was organized as a traditional rail station processing passengers via a straightforward sequence from the entrance to the trains, the current station functions more like an interchange between multiple modes of transport – primarily as a result of the addition of the Metro Red/Purple line, the Gold Line, and the increase

Below:

The traditional flow of passengers at Union Station saw riders arriving by automobile at the station's front door before proceeding to their trains.

in Metrolink commuter rail use. Moreover, much of the utility of the original design has been lost through the removal of the streetcar/bus loops, the dedicated taxi drop, the baggage express building and administration areas, notwithstanding the addition of constraining infrastructure around the edges of the site.

Primary challenges are posed by the layout and arrangement of the rail yard and its relationship to a severely constricted passenger concourse without capacity to accommodate current or future passengers. Narrow platforms, insufficient space for passenger and baggage services, and a rail yard arrangement that constricts rail operations and expansion are currently hampering the station and its functionality. The current layout is not indicative of desirable current or future service patterns, restricts potential incremental alterations and does not enhance the passenger experience.



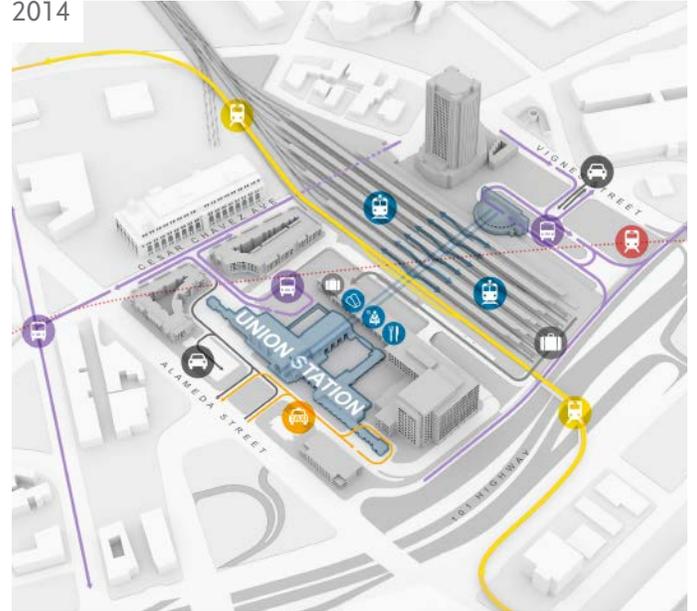
Below:

Access to Union Station has changed over time. New arrival sequences at the station will streamline access for users utilizing a variety of transport options including regional trains, buses, private automobiles, bicycles, and Metro subway and light rail lines.

1939



2014



2029



Task 1

Key Findings

Ridership

It is anticipated that Union Station will continue to handle increases in ridership across all modes of transit. Projects like the Southern California Interconnector Project will greatly expand the capacity of the station from an operational standpoint- which will accommodate even larger quantities of passengers utilizing new and expanded service. Metro anticipates that by the year 2040 Union Station will handle 196,700 trips per day. This ridership projection, based on a forecast from the Metro Systems Analysis & Research Unit, does not include potential High Speed Rail ridership that would push the number well in excess of 200,000 trips per day.

In 2040 it is anticipated that trips by bus will increase 4%, trips by Metrolink and Amtrak trains will increase 69% and trips by Metro's Red and Purple subway lines will increase by 141%. This large increase in subway ridership accounts for current expansion plans for the Purple Line. Trips by Metro's Gold Line are anticipated to decrease by 14%. This is largely because the opening of the Regional Connector in downtown Los Angeles and future realignment of Metro's Blue, Expo and Gold Lines will eliminate the need for a transfer at Union Station that is required today.

Rail and Bus Operations

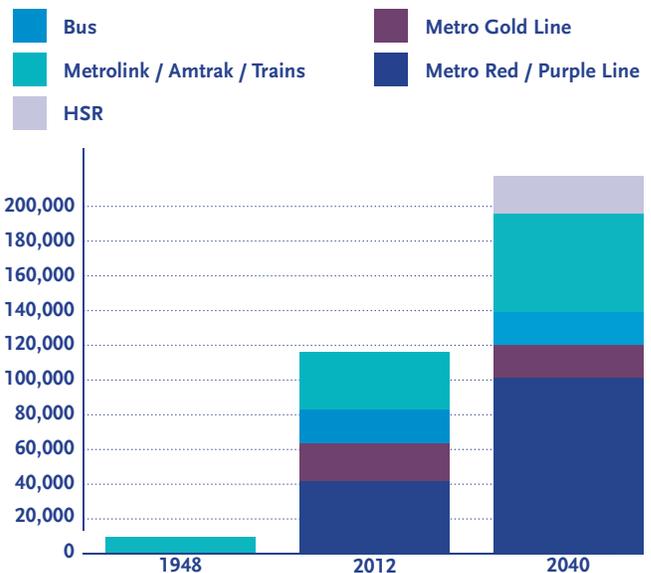
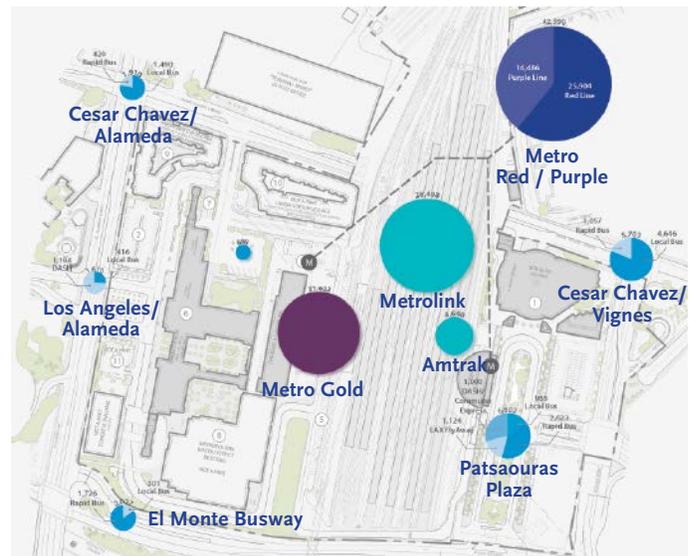
Both rail and bus service are hamstrung by shortcomings at the station including poor wayfinding and communication systems, and limited amenities that would support transit users and potentially attract visitors for non transit-related purposes. As the main entrance for most people arriving at the station, the passageway (approximately 40 feet wide and 500 feet long) is the only path connecting the two sides of the site as well as transfers between bus, subway, light rail, and commuter rail. The station has become a place where users proceed from one point to another, often non-intuitively, foregoing shopping, dining or socializing at the station in favor of departing as quickly as possible.

Bus service is currently provided at a bus plaza rife

Below:

Ridership is expected to increase to 196,700 individual trips per day at the station by 2040.

with conflicts between buses, pedestrians and autos. Pedestrians persistently cut across the plaza because the island is not a clear path of travel. Furthermore, only 40% of bus riders are boarding and alighting at the plaza, while the rest are at other locales around the station, leading to confusion and lack of clarity amongst riders as to where to find the proper bus. A simple mistake in bus location might require an arduous walk from one end of the station to another with no clear indication of a specific destination.



Task 1 Major Program Themes

Following the premise that transit must be the priority of Union Station, three major program themes were developed that would guide the study of any proposed improvements.

Transport Optimization

Addressing transit operations, access and circulation throughout the station and defining the passenger experience.

- Create large multi-modal concourse.
- Relocate Patsaouras Bus Plaza and co-locate bus operations.
- Plan for integration of high-speed rail.

Below:

Three overarching themes guided the study of all proposed station improvements: Transport Optimization, Destination Creation and Connectivity.

Destination

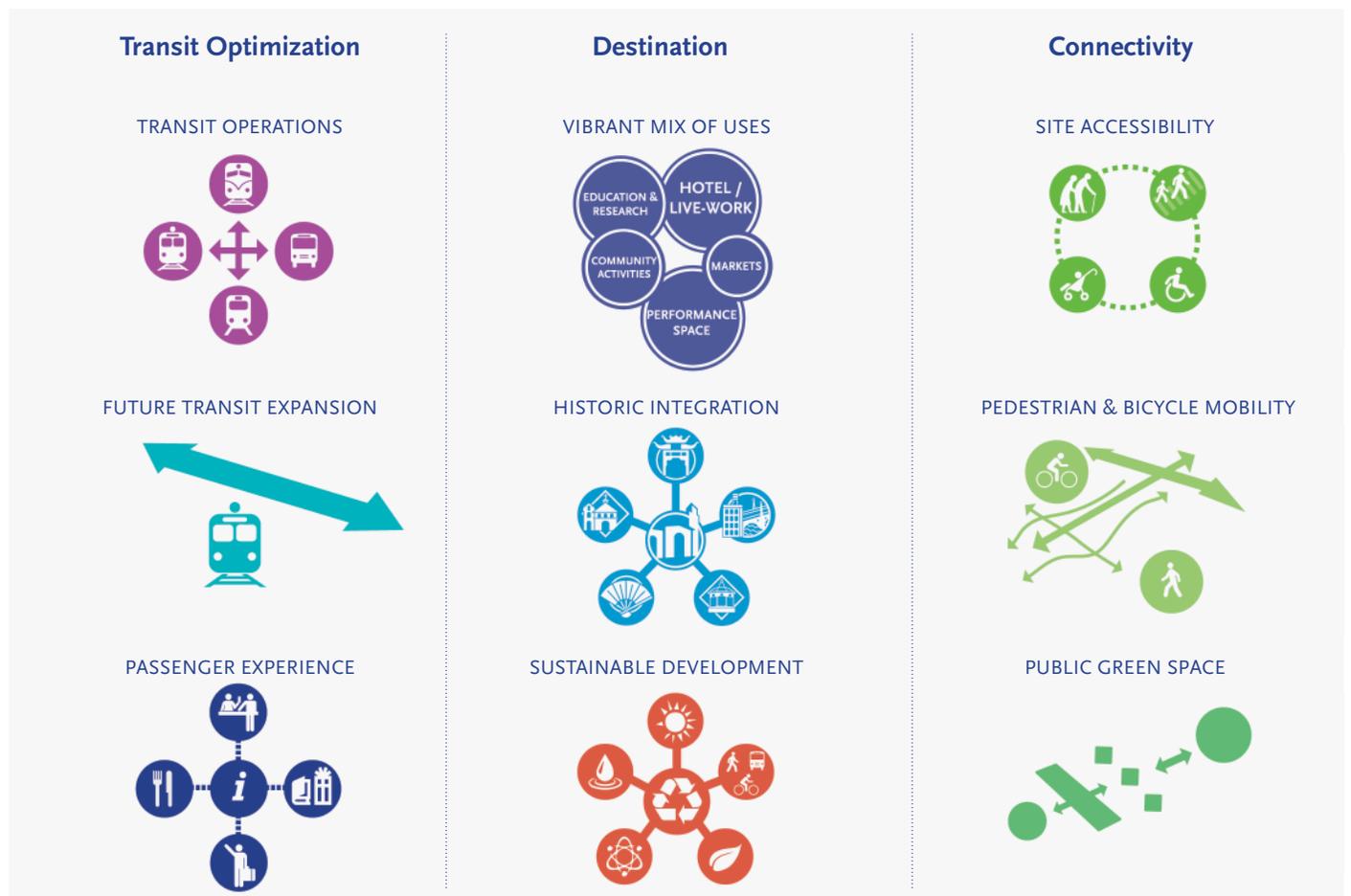
Addressing programmatic uses for the site that revitalize the historic station and lead to future sustainable development.

- Reinvigorate historic station and courtyards.
- Provide uses that support transit functions.
- Prioritize sustainability for new development

Connectivity

Addressing connections and linkages to the station from the surrounding neighborhoods as well as linkages through the site that accommodate pedestrians and cyclists.

- Reinforce neighborhood connections.
- Create clear pedestrian and bicycle routes through the site.
- Improve ease of transfers for passengers.



Task 2

Alternatives Analysis

Once the goals and opportunities were set out in Task 1, the design team embarked upon a rigorous review of the full range of options that could measurably fulfill the parameters set forth. All options were evaluated on their potential to optimize the transportation environment, improve operational conditions and enhance the user experience. The review concentrated on the most significant transit related infrastructure including the passenger concourse, a consolidated bus facility and accommodations for potential High Speed Rail service at the station.

Passenger Concourse and Relocated Bus Plaza

In order to evaluate the various options in a meaningful, coherent fashion, each of the dozens of options for each component were measured against agreed upon criteria. On a macro level, these criteria measured the impact on existing operational infrastructure, future operational feasibility for both transport and passengers, construction feasibility,

Below:

The deft integration and optimization of several transport modes and their transfer points is critical to Union Station's success.

Opposite:

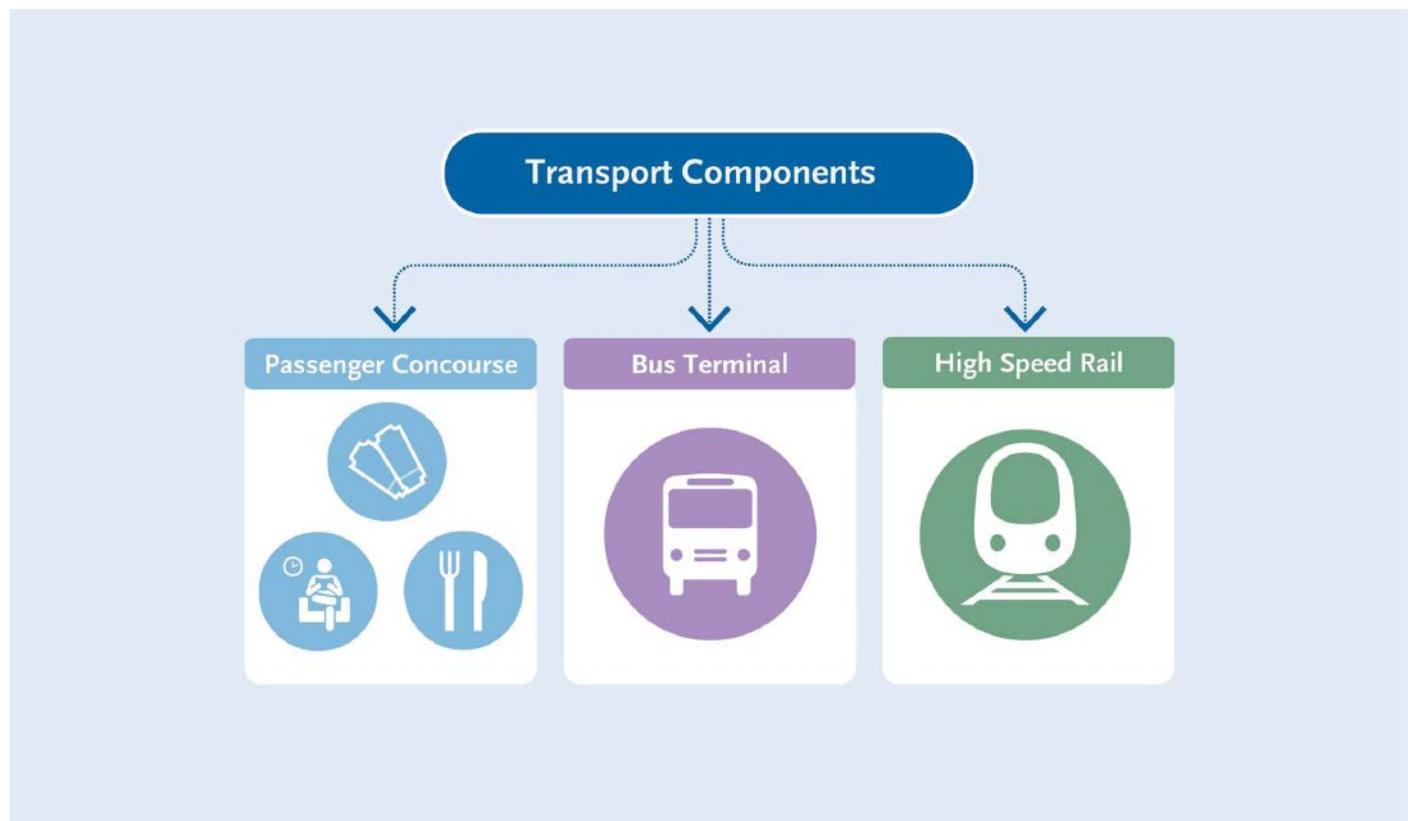
Two variations of the proposed passenger concourse and bus plaza were explored before the second option (below right) was selected for further development.

contextual impacts, land utilization and master planning opportunity. Once the options were narrowed to a smaller group, the best were then developed further before evaluation against an expanded and more detailed set of criteria. This exploration and selection process yields not only recommended results but also a recorded, annotated process that is transparent to future understanding.

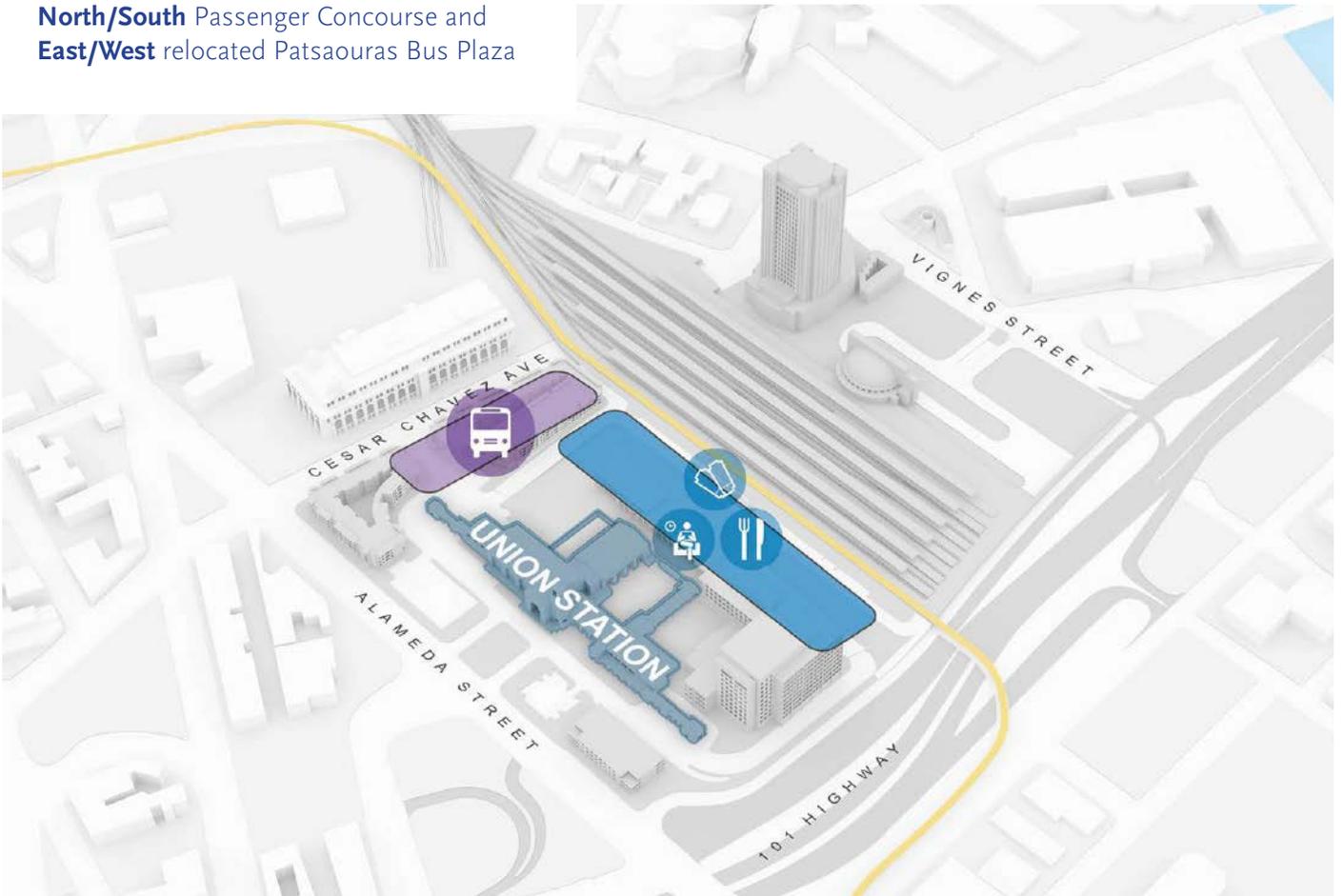
Based on the intense study of individual transport components, the next step explored various combinations and arrangements. Two possible transport alternatives were found to be suitable for further design investigation:

North/South Passenger Concourse and **East/West** relocated Patsaouras Bus Plaza

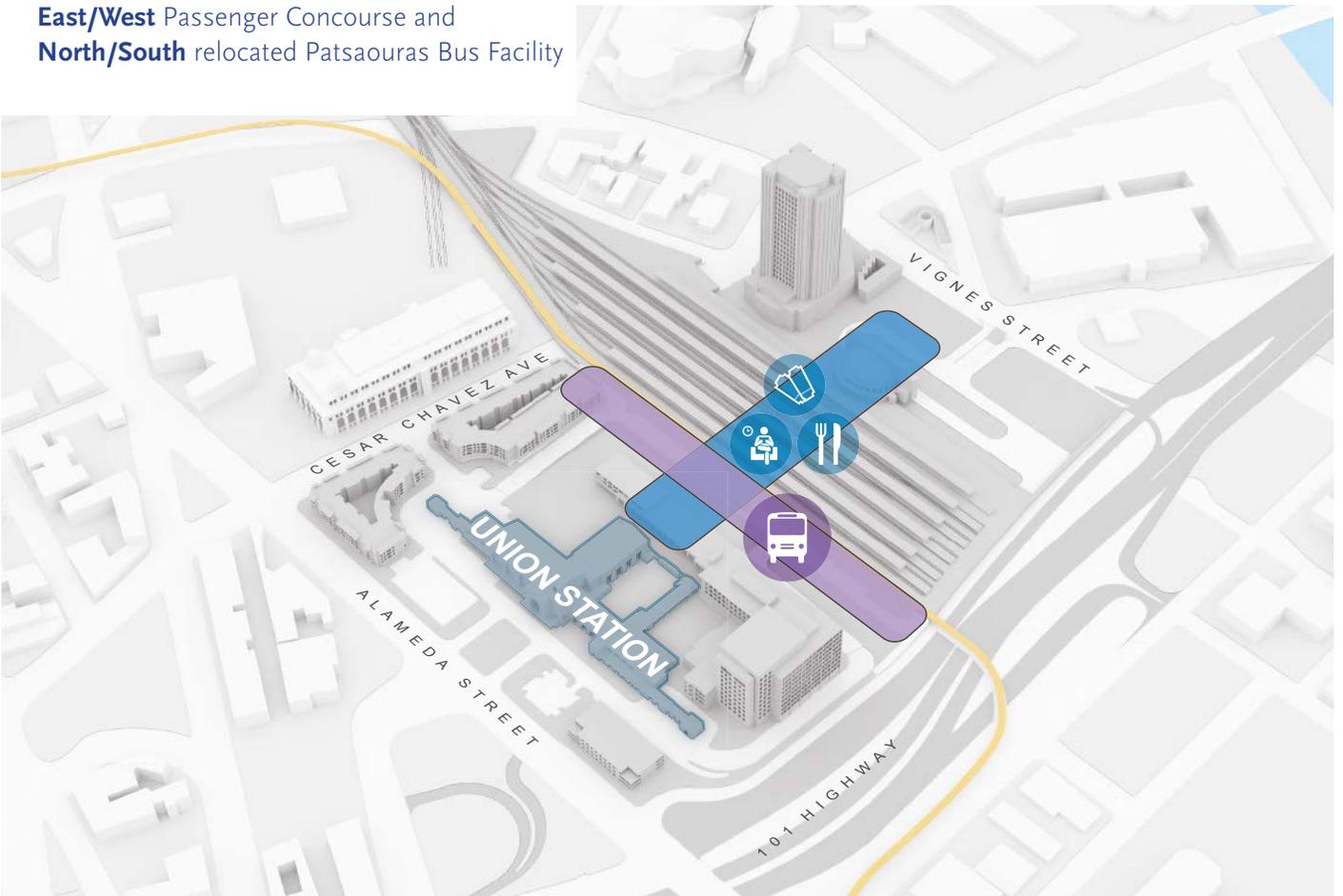
East/West Passenger Concourse and **North/South** relocated Patsaouras Bus Plaza



North/South Passenger Concourse and
East/West relocated Patsaouras Bus Plaza



East/West Passenger Concourse and
North/South relocated Patsaouras Bus Facility



Task 2 High Speed Rail Options

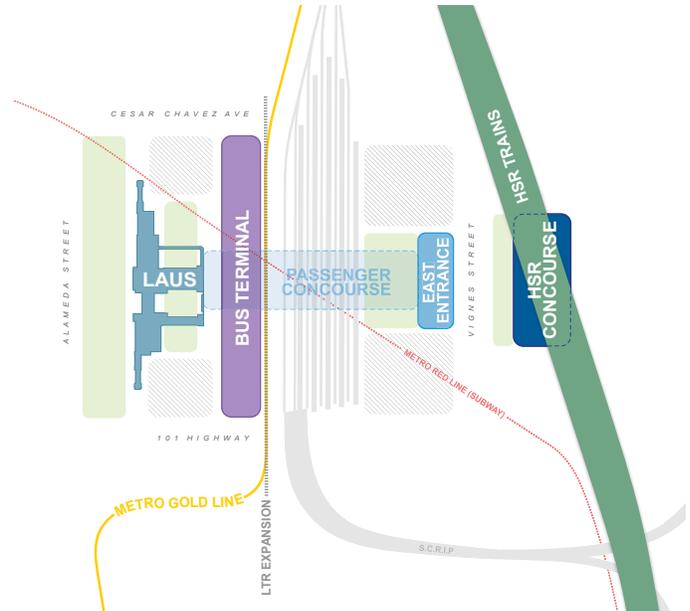
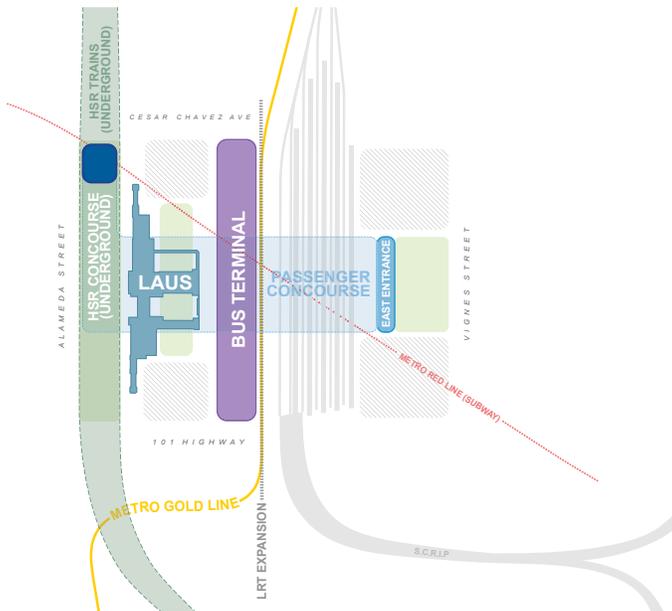
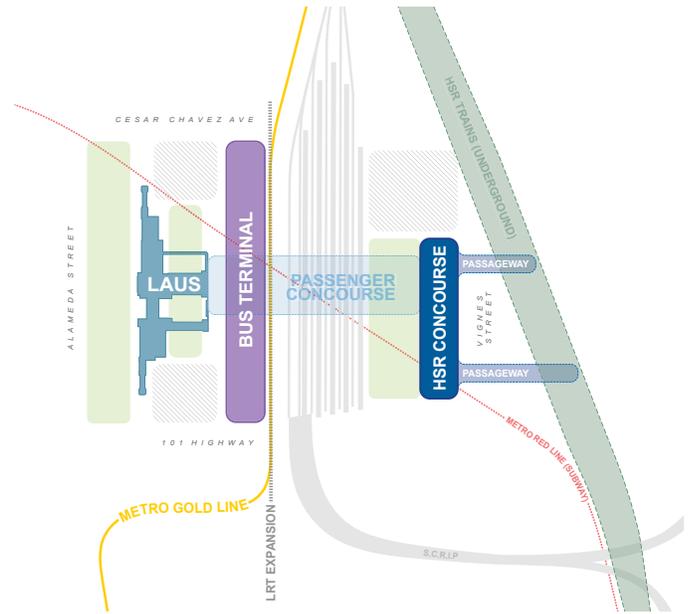
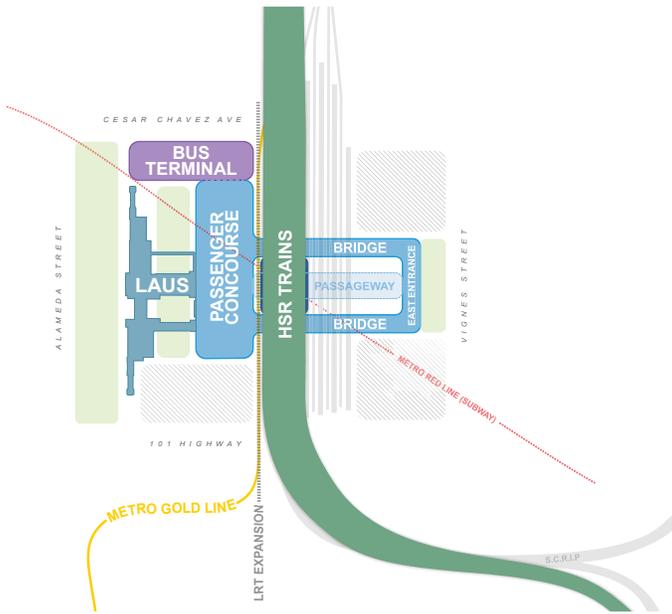
Four solutions to the placement of High Speed Rail were identified as most viable, two located on Union Station property and two outside. The degree of synergy between the general Master Plan alternates and each High Speed Rail option varied; however, there was sufficient flexibility to ensure a number of possible permutations.

Below (Clockwise from Upper Left):

Four possible locations for future High Speed Rail Integration were explored including options over the rail yard, under Vignes Street, over Vignes Street and under Alameda Street.

The four High Speed Rail approaches and options that were considered included:

- Over the Rail Yard
- Under Alameda Street
- Over Vignes Street
- Under Vignes Street



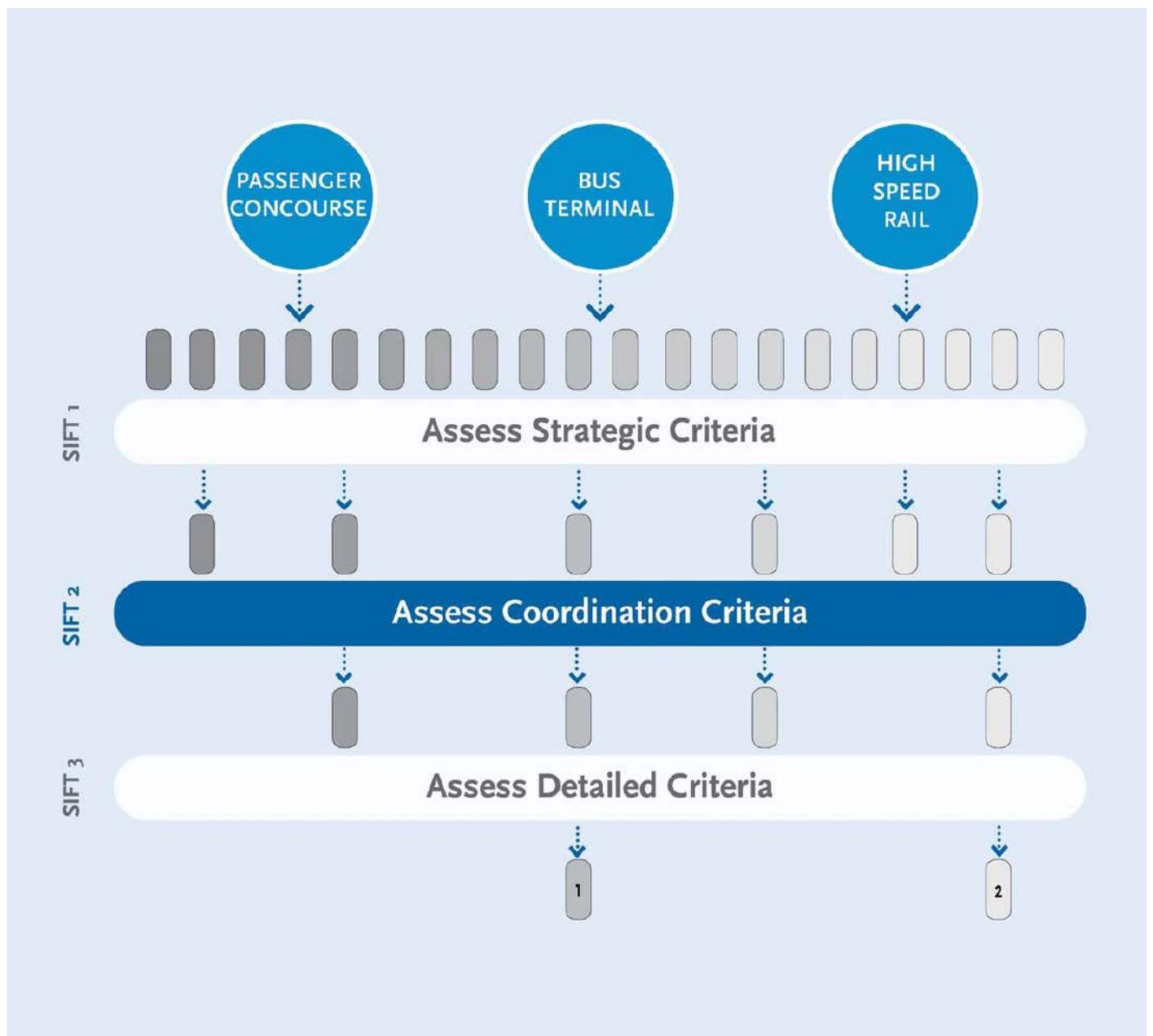
Task 2 Evaluation Process

Concurrent with planning associated with fulfilling transport goals, the team established parameters for future development on the site, taking into account the characteristics of available sites and the strength of the sites to influence transportation related activities. The transport alternatives and

Below:

Each option was checked against an extensive set of criteria before the selection of any final options.

other USMP features were presented at a Board workshop at the end of the task that led to the recommendation of preferred alternative for development in Task 3.



Task 3 Preferred Plan Development

At the conclusion of Task 2, a preferred alternative was selected that will provide an East/West passenger concourse and a North/South relocated Patsaouras Bus Facility. The third task in the endeavor challenged the design team to bring this concept to a higher level of resolution while also turning attention towards other Master Plan aspects including the development program, open space concepts and projects that could be completed in a timely manner. The findings generated in Task 3 address numerous issues including not only transit improvements but also questions of finance, governance, sustainability, safety, circulation, cost, implementation and the safeguarding of the historic station structure.

Concourse

The preferred alternative brings a coherent vision to overall strategies of transport optimization, new

Below:

Plan of passenger concourse level, below the rail platforms and bus plaza.

development and improved connectivity into adjacent neighborhoods. Underpinned by a new at-grade passenger concourse capable of accommodating present and potential ridership, the alternative provides increased passenger and visitor amenities as well as separated baggage and service functions.

The expanded Concourse accommodates new, improved vertical circulation to the platforms. The placement of the elements is driven by the need to avoid the existing Red Line subway box below. Two spacious, deep-set lounges are carved out on opposing sides of the Concourse to offer areas of repose and amenities, allowing passengers to dwell in direct proximity to their mode of transport. All modes of transport are visible and accessible. Bus, light rail and conventional rail are above and subway lines are below. Connections are quick and easy via escalators, stairs, and ADA accessible elevators at the north and south ends of each platform.



Retail, Food, Service and Hospitality Spaces

Once the station's East Portal is cleared of the current bus facility, it offers an opportunity to extend the same grade towards Vignes and new large scale developments. Within the new passenger concourse and at either end, a robust mix of retail, food service, hotels and hospitality spaces will provide amenities, goods and services to commuters and visitors alike. In this alternative, several development parcels have been identified, both to the east and west of the reconfigured rail yard. Combined, the construction and renovation of these new and repurposed spaces will allow the transformation of Union Station into an entirely new, better-connected and more active urban district.

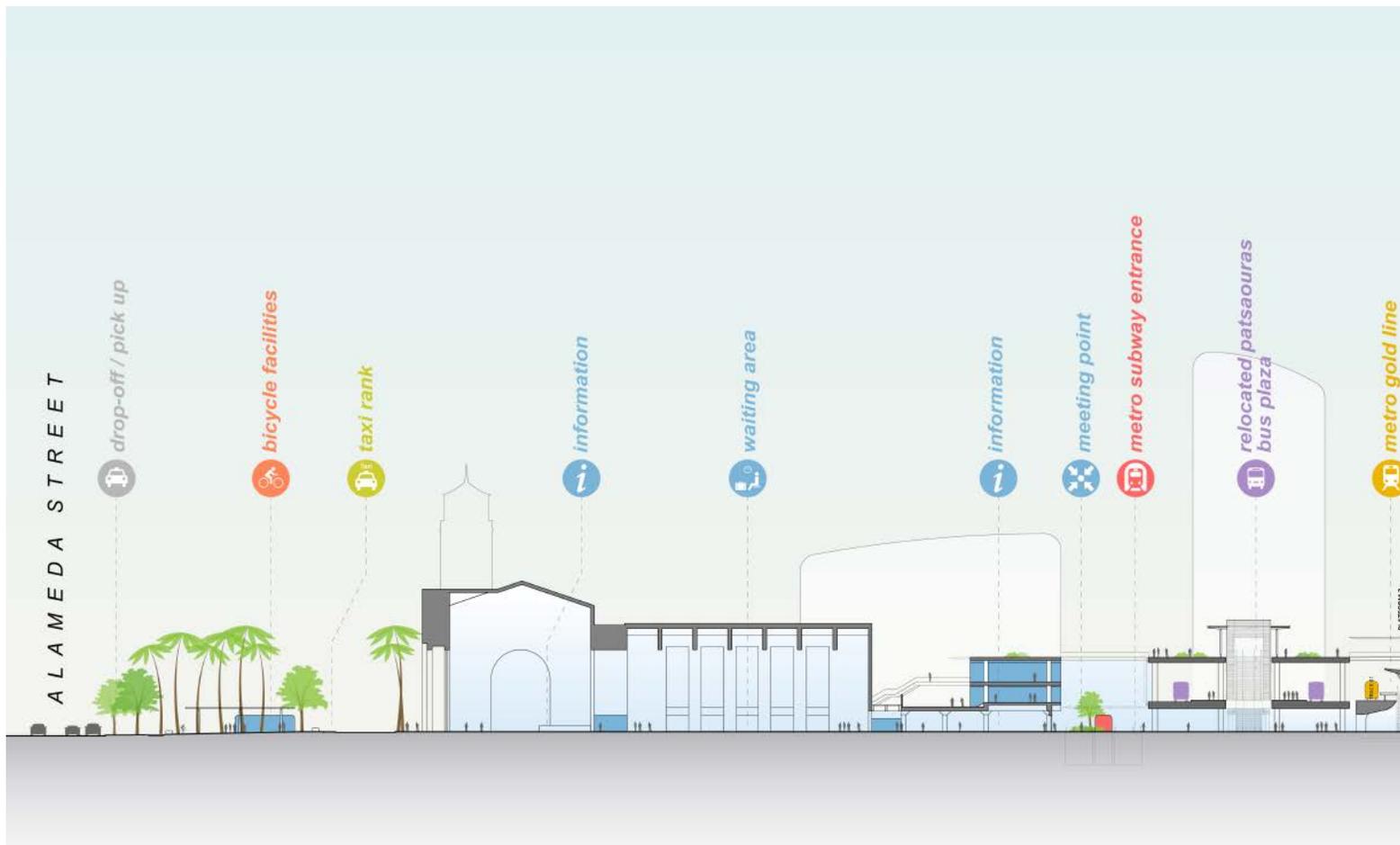
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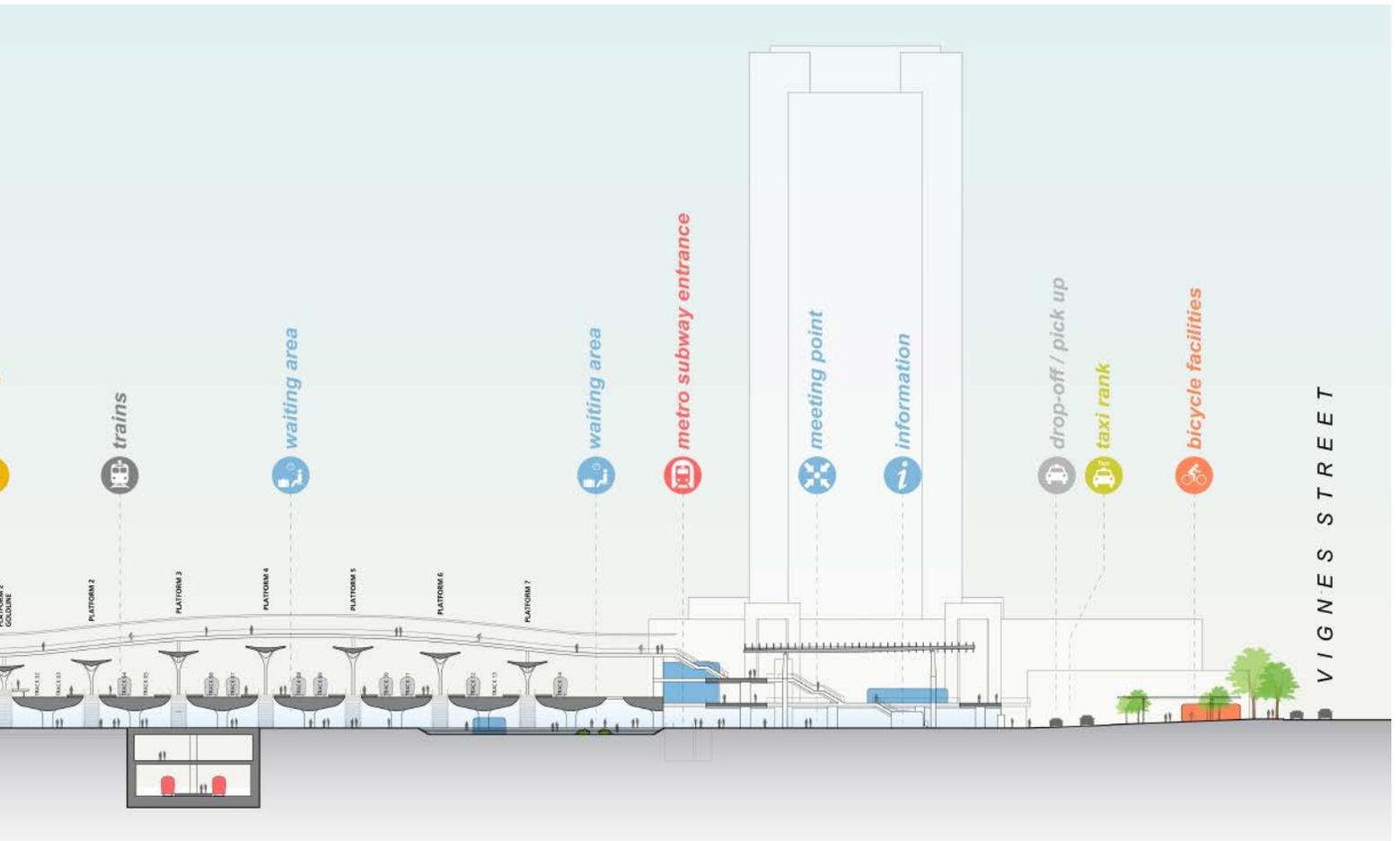
A section through the Union Station property depicts the integration of transit and amenities.

Right:

Passengers access their trains and buses from a concourse containing amenities and highlighted by natural light and plantings.

Combined, the construction and renovation of these new and repurposed spaces will allow the transformation of Union Station into an entirely new, better-connected and more active urban district.





Integration With Future High Speed Rail Service

Meetings with the California High Speed Rail Authority and further study of the options for High Speed Rail indicated three likely feasible alignments that would not impact conventional rail capacity: Over the Rail Yard, Over Vignes and Under Vignes. Pursuant to the goal of using a strategy that would support seamless but non-reliant integration of high speed rail, the final version of the Master Plan depicts the Under Vignes option. Both it and the Over Vignes option presented the best balance of connectivity between modes, flexibility of implementation and preservation of the existing station. The Under Vignes version increased the likelihood that the other planning goals for the eastern side of the station could be realized with greater benefits.

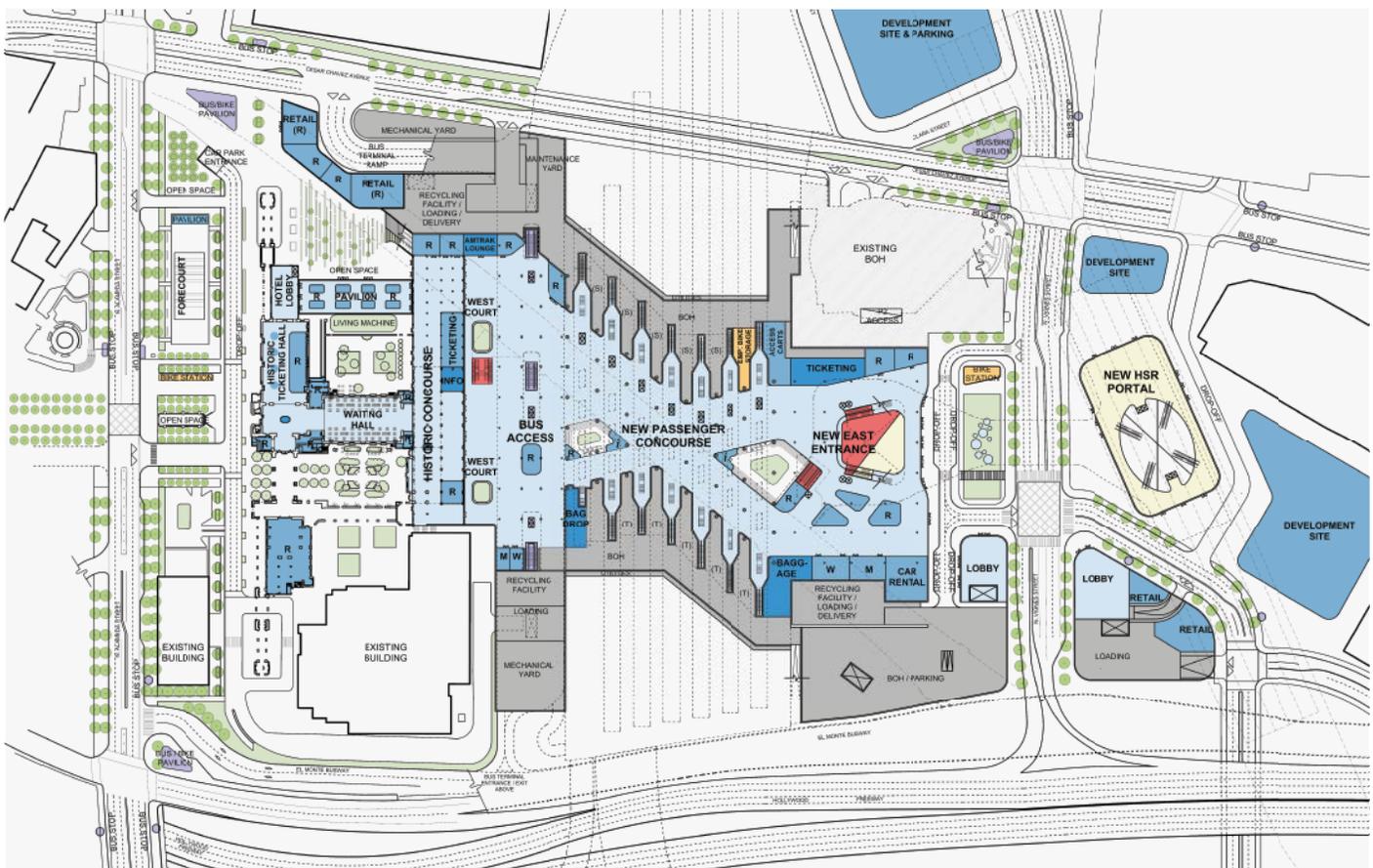
The 'Under Vignes' option would locate the HSR concourse on the east side of the Union Station

Below:

Plan of passenger concourse level with integrated High Speed Rail access. This plan assumes the High Speed Rail tracks to be located under Vignes Street to the station's east.

property with access from the west side of Vignes. This below grade alignment would be shallower than the alignment required under Alameda while still allowing for the straighter track geometry and higher train speeds that underground construction affords.

By taking advantage of the open sites on the eastern side of the site, this HSR alignment disperses infrastructure across and beyond Union Station property, alleviating pressure on the historic core and rail yard. The passenger concourse and bus terminal projects could be planned largely independent of the HSR station and no foundations would be needed for HSR in the rail yard early on. The passenger access to other modes of transport would be similar in distance to the existing Patsaouras Bus Facility. This placement scenario also allows both sides of the site to become clear entrance portals to all transportation options.



A new east entrance and associated development anchors one end of the new passenger concourse opposite the historic station to the west.



Development

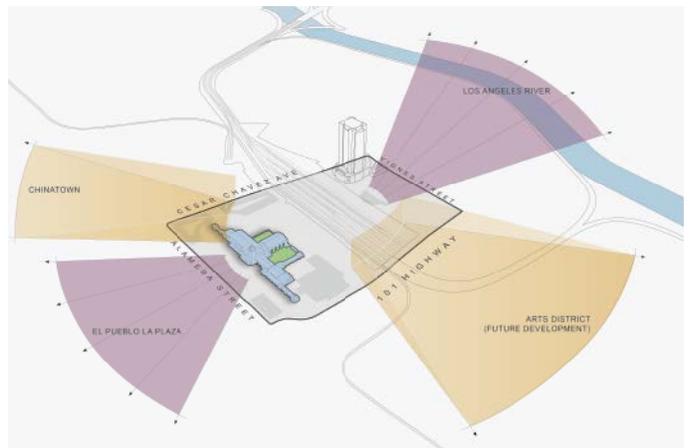
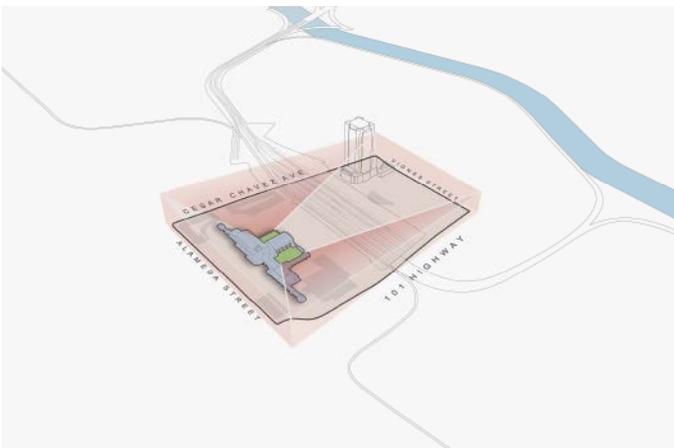
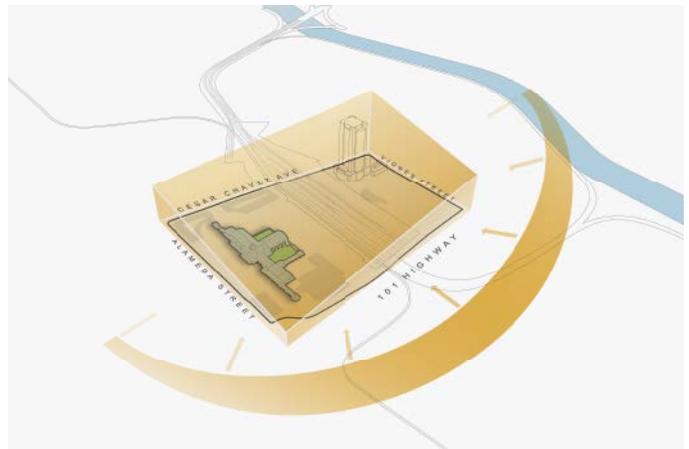
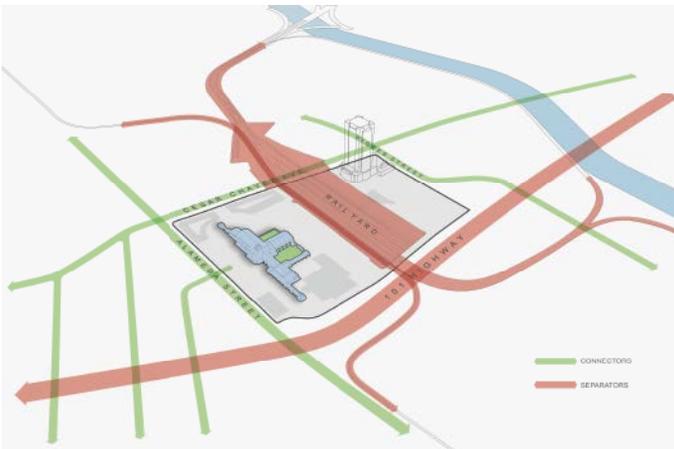
In a market study independently commissioned by Metro, strong evidence for the incorporation of appropriate transit-oriented development (TOD) into the Union Station Master Plan was revealed. The current planning identifies potential development sites that have good access and fit into the broader aims of the Master Plan without compromising the proposed transit improvements. While the scheme is not highly prescriptive in regards to the final architectural aesthetic, it begins to illustrate how up to 3.25 million square feet of development could be organized.

Below:

Potential build-out schemes include the potential for denser, taller development on the Union Station Master Plan site.

Bottom:

A variety of factors were considered including orientation when articulating sites for potential development.



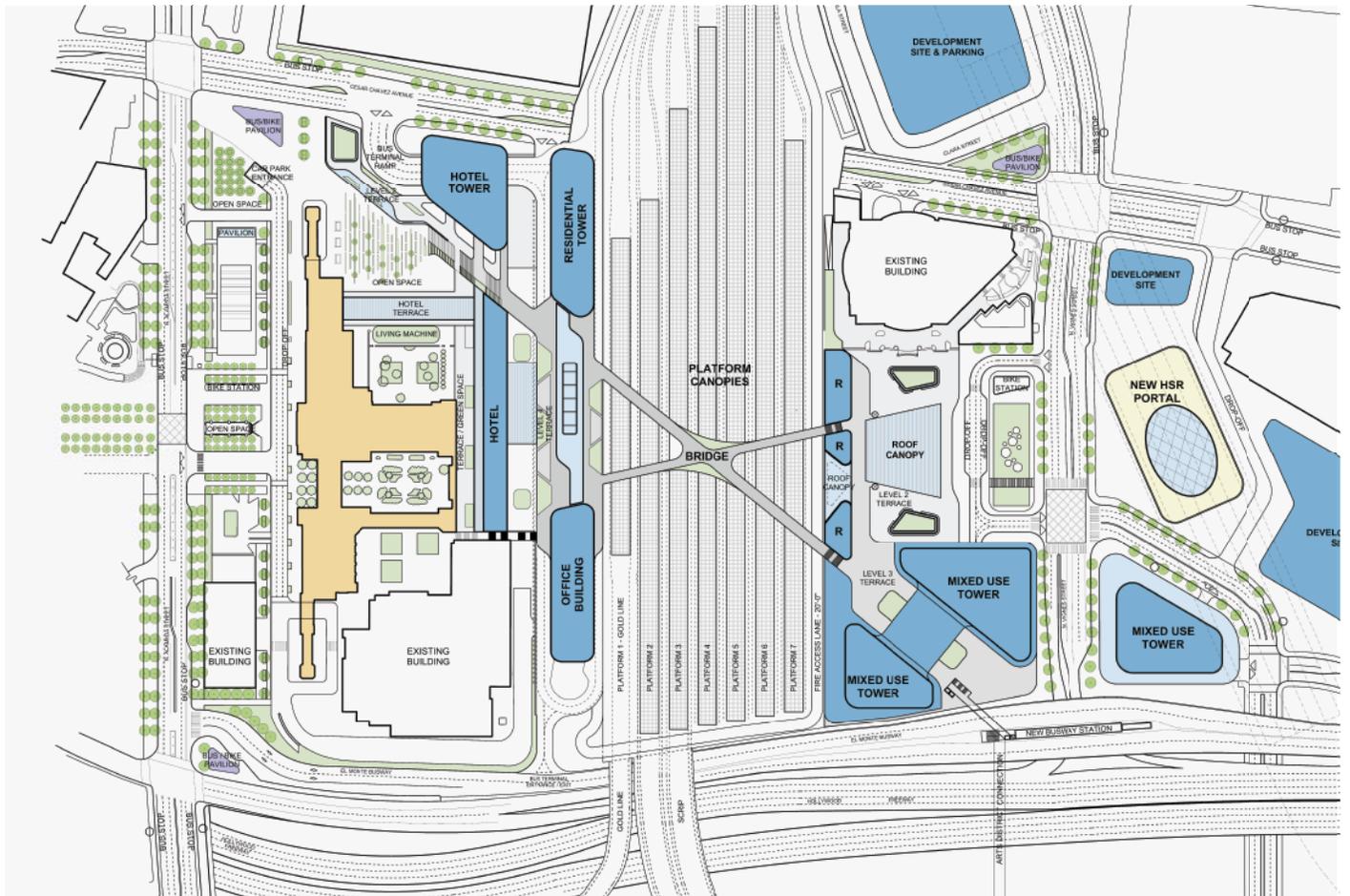
Below:

Plan depicting potential development sites in relationship to transportation options and the historic station building.

Market conditions will dictate any future development, but the Master Plan indicates a scope for considerable density and the ability to accommodate a wide range of uses ranging from hotels to mixed-use residential and commercial developments. Efforts aimed at improving the passenger and visitor experience at the station will include a substantial layer of amenities expanding and extending from the new passenger concourse and public circulation areas. These retail and dining amenities will complement the full array of passenger facilities and support spaces within and adjacent to the concourse, and extend their reach to development at the station's doorstep.

The development potential at Union Station is immense, accommodating up to 3.25 million square feet of development.

Overall, the value of available development sites should be materially enhanced through their association with the station. The influx of passengers, visitors and residents that will be drawn to the wide array of facilities and amenities at the station and nearby neighborhood activities and attractions will extend the level of activity at the station site across larger parts of the day and week. In an ideal scenario, this activity will be distributed across the site all the way to its perimeter, reinforcing the mixed-use nature of the area and reinforcing other improvements to access and circulation around and through the district.



Circulation and Connectivity

Parking and Circulation

While no new parking will be needed for the proposed transit improvements to the station, additional parking will be necessitated by future developments. In the meantime, planned improvements to the perimeter of the site will work to create a welcoming environment for pedestrians and cyclists, focusing attention on all manners of arrival and departure at the station.

Connectivity and Open Space

Addressing the isolation of Union Station from Los Angeles and its downtown neighborhoods is crucial to the success of the USMP. Concurrent studies, including *Connect US*, will forge new connections into surrounding properties including historic El Pueblo, the Arts District, and the Los Angeles River.

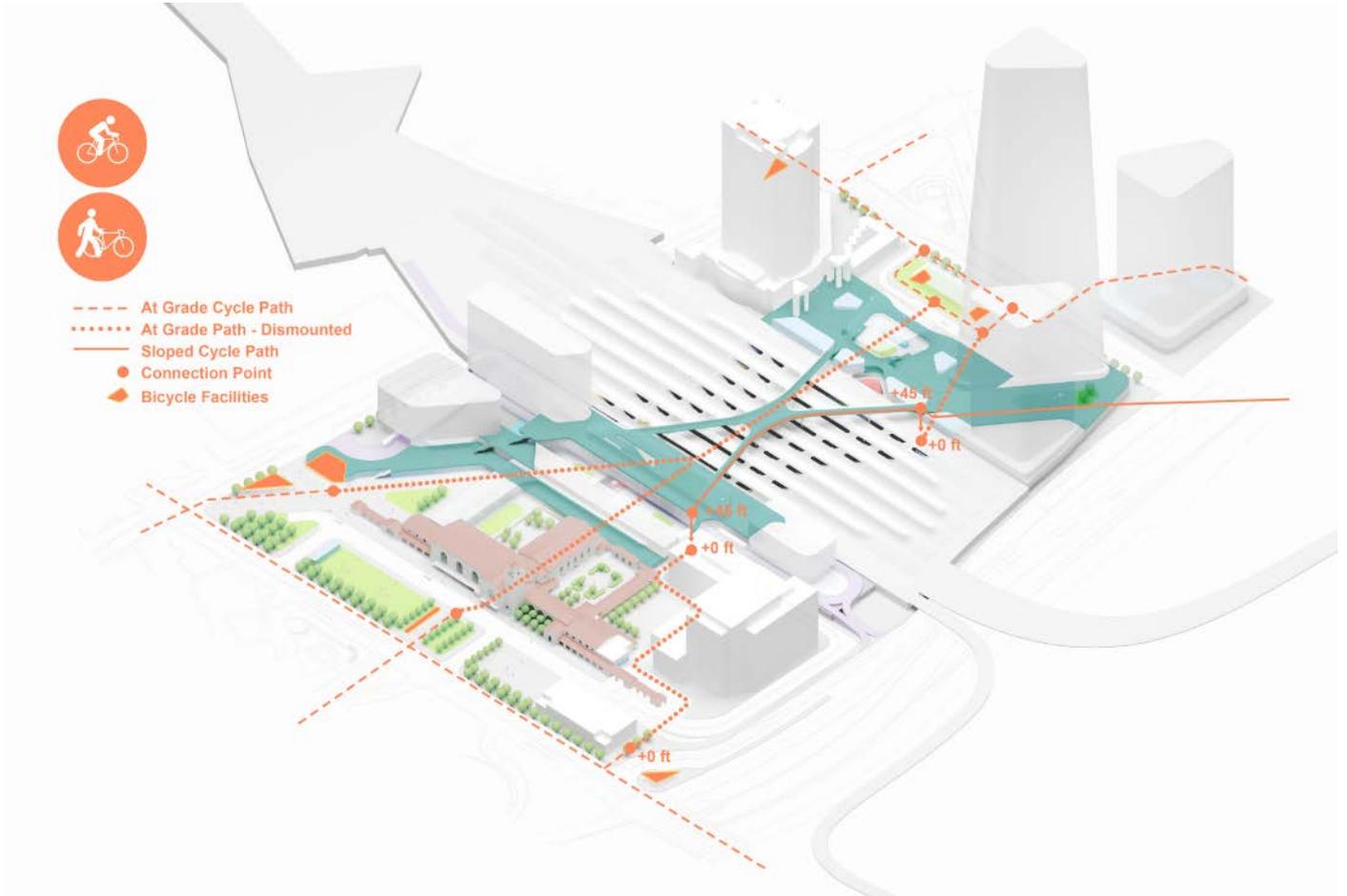
The USMP imagines two complementary pedestrian environments: one at grade that allows access to the new concourses, and another network of open space that gently follows the topography of the site. Comprised of terraces and gardens inspired by the historic station's courtyards as well as native ecologies and plantings, these new spaces can be programmed with activity and provide new amenities to be enjoyed as future development takes shape.

Below:

Open space is an important component of the Master Plan, taking advantage of the mild local climate and providing places for station users to relax and congregate.



Connectivity plans for Union Station seek to address the isolation of the station complex by opening new, safe connections for pedestrians and cyclists.



Above & Right:

Potential new links for bicycles and pedestrians to and across the Union Station site have been identified as part of the Master Plan.



Forecourt

The upgrade and development of Union Station and its adjacent properties will take place over a long period of time, though initial improvements that can be enacted today have been investigated. The renovation of the existing station forecourt is one such project, converting the space immediately in front of the station into a true civic plaza with a stronger connection to El Pueblo, the birthplace of modern Los Angeles, across the street. The Forecourt project has the potential to immediately improve connectivity to the station and signify an immediate, positive change in perception of the station. Circulation and streetscape improvements to Alameda will further enhance the station's doorstep, easing traffic and pedestrian conflicts and offering an aesthetically pleasant journey to the station's front door.

Below:

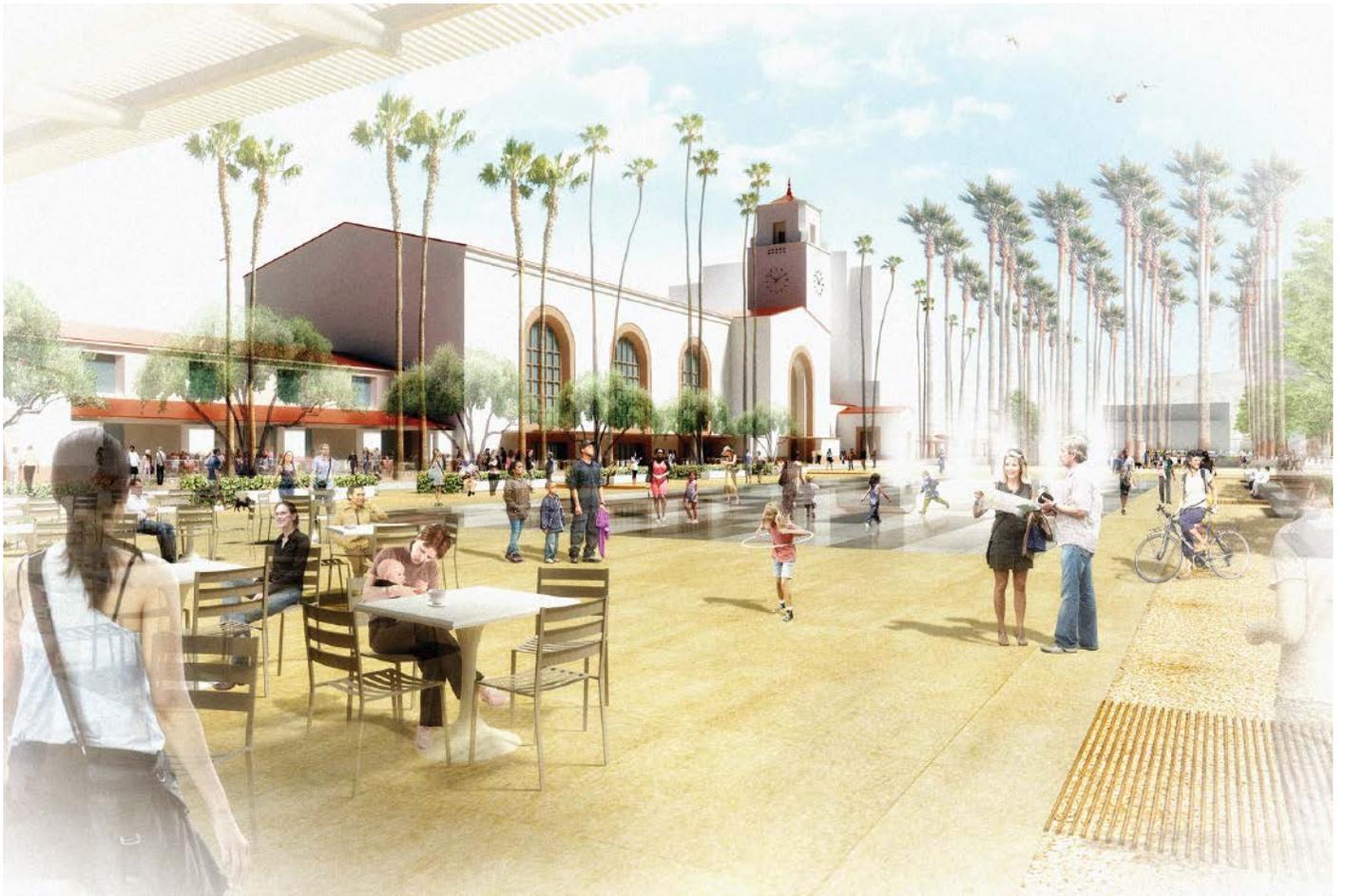
Improvements to the Forecourt of Union Station will make the formal entrance to the historic landmark both safer and more inviting.

Improvements and development at Union Station will grow and accelerate over time, but a number of influential upgrade projects can begin much sooner.

The initial phase of programming would focus on celebrating the spaces in front; addressing the relationship between the proposed interior renovations to Union Station and proposed public spaces that make up the Forecourt and connection to LA Plaza across Alameda Street.

Phase 2 will include improvements to the Forecourt to accommodate new and enhanced pedestrian use while leveraging new development potentials, over a much larger time frame.



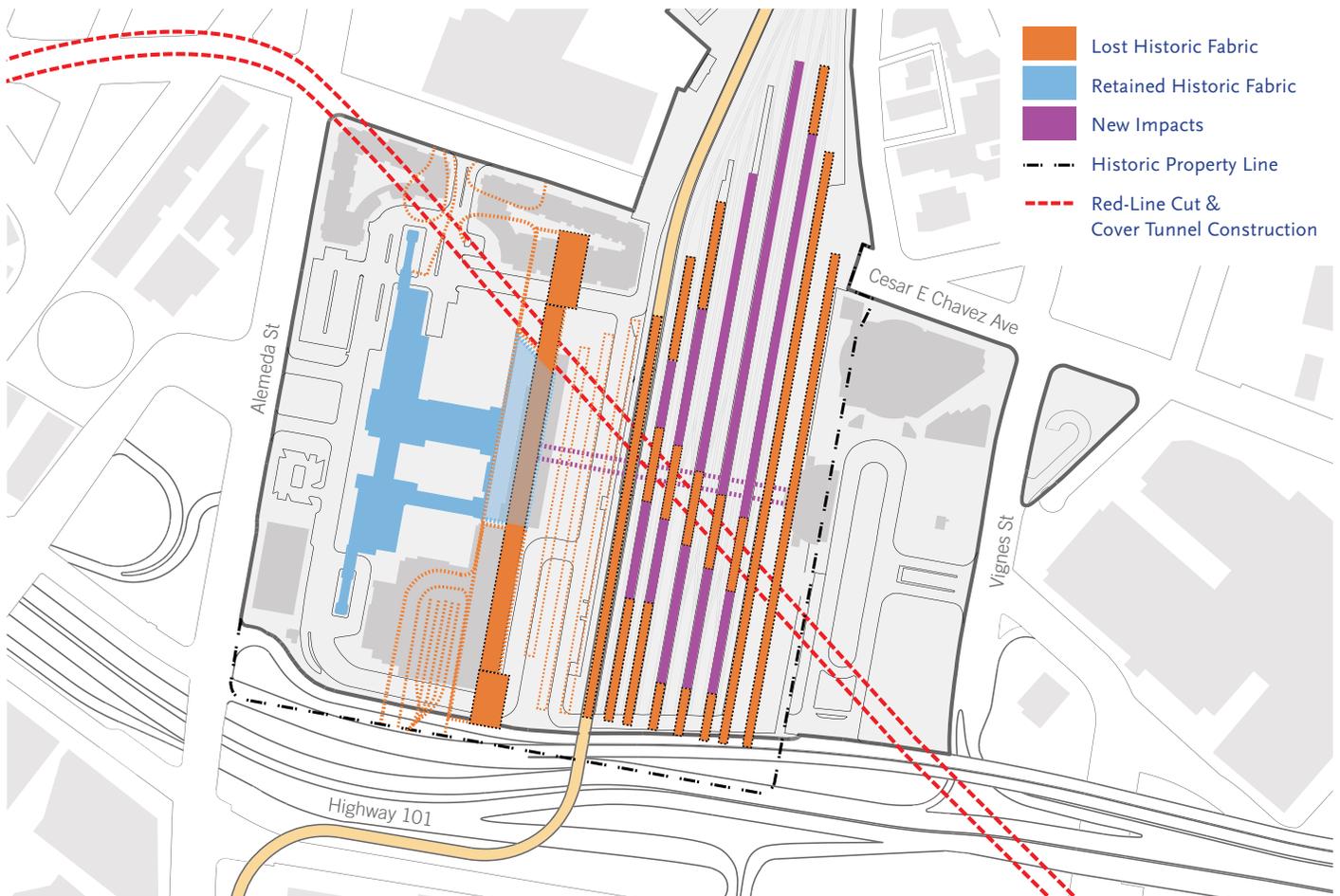


Historic Integrity

In addition to its righteous place as a Los Angeles landmark, Union Station is also on the National Register of Historic Places. The USMP calls for the preservation and revitalization of significant station features including the main entry building, ticketing hall, waiting hall, restaurant, patio and courtyards, and breezeways and arcades. The Master Plan will restore some views of Union Station from Alameda Street and strengthen its connection to El Pueblo. The Master Plan will also rely on sensitive and appropriate alterations and changes to a number of other elements including the historic concourse and passageway as well as the platforms and platform canopies. Non-historic structures including the current baggage building and the Amtrak bus yard are depicted as fully removed or transformed in the USMP.

Below:

The Union Station Master Plan protects and preserves the elements of the historic station protected under the National Register of Historic Places.



Sustainability

Sustainability is amongst the central goals for the USMP and specific measures have been adopted along four framing characteristics: infrastructure, transit, socioeconomic and identity. Each of these characteristics are further broken down into categories. In order to measure the success of this framework, the project will be certified using the LEED-ND rating system. Close coordination with a sustainability consultant has yielded additional opportunities for increasing the sustainability of the USMP. These notions will continue to guide the development of the Master Plan both now and into the future.

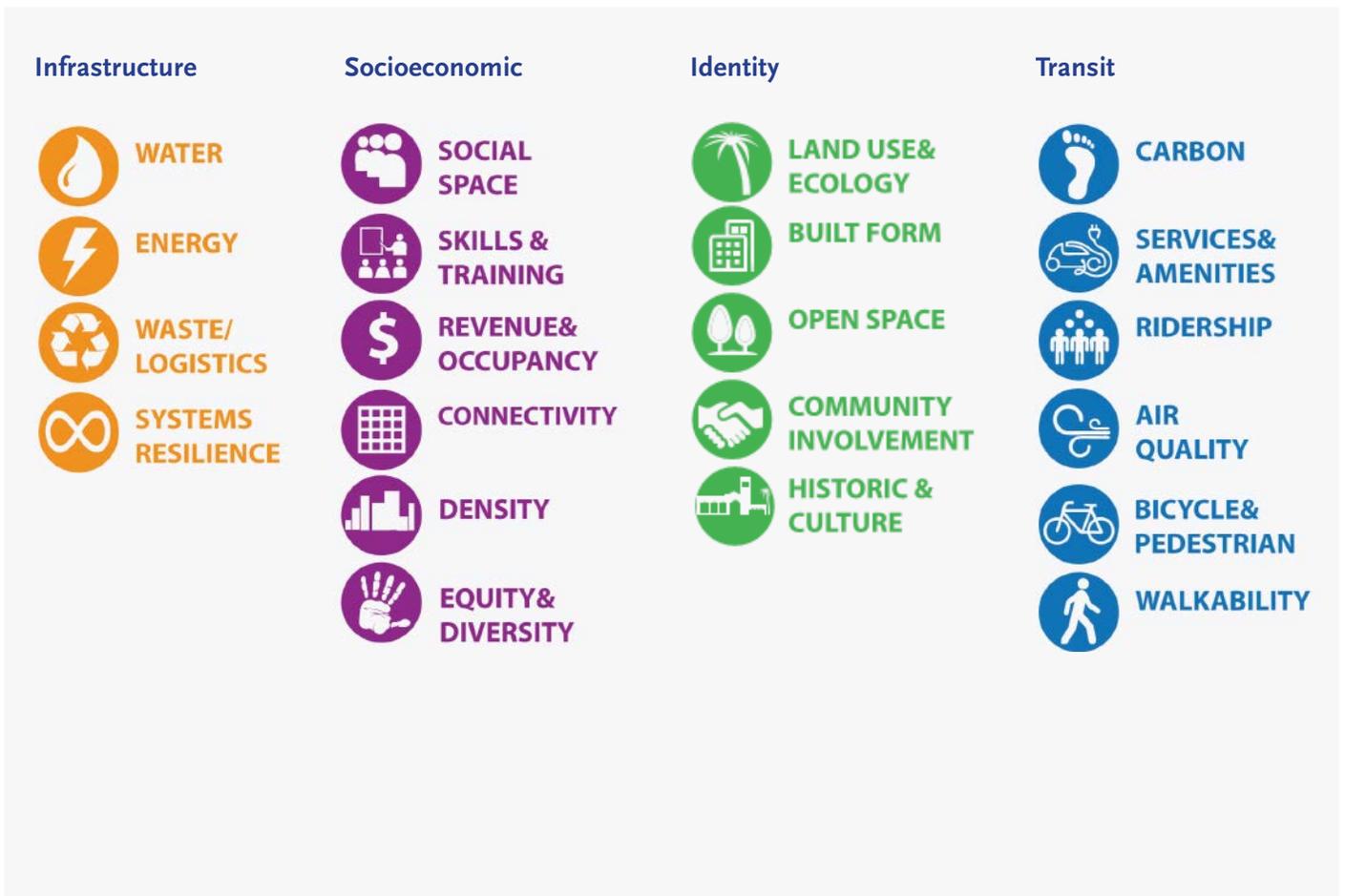
The Master Plan will undergo two processes of review under LEED ND: Precertification (Stage 2) and Certification (Stage 3). Both stages will result in the award of a level of certification (i.e., Silver, Gold,

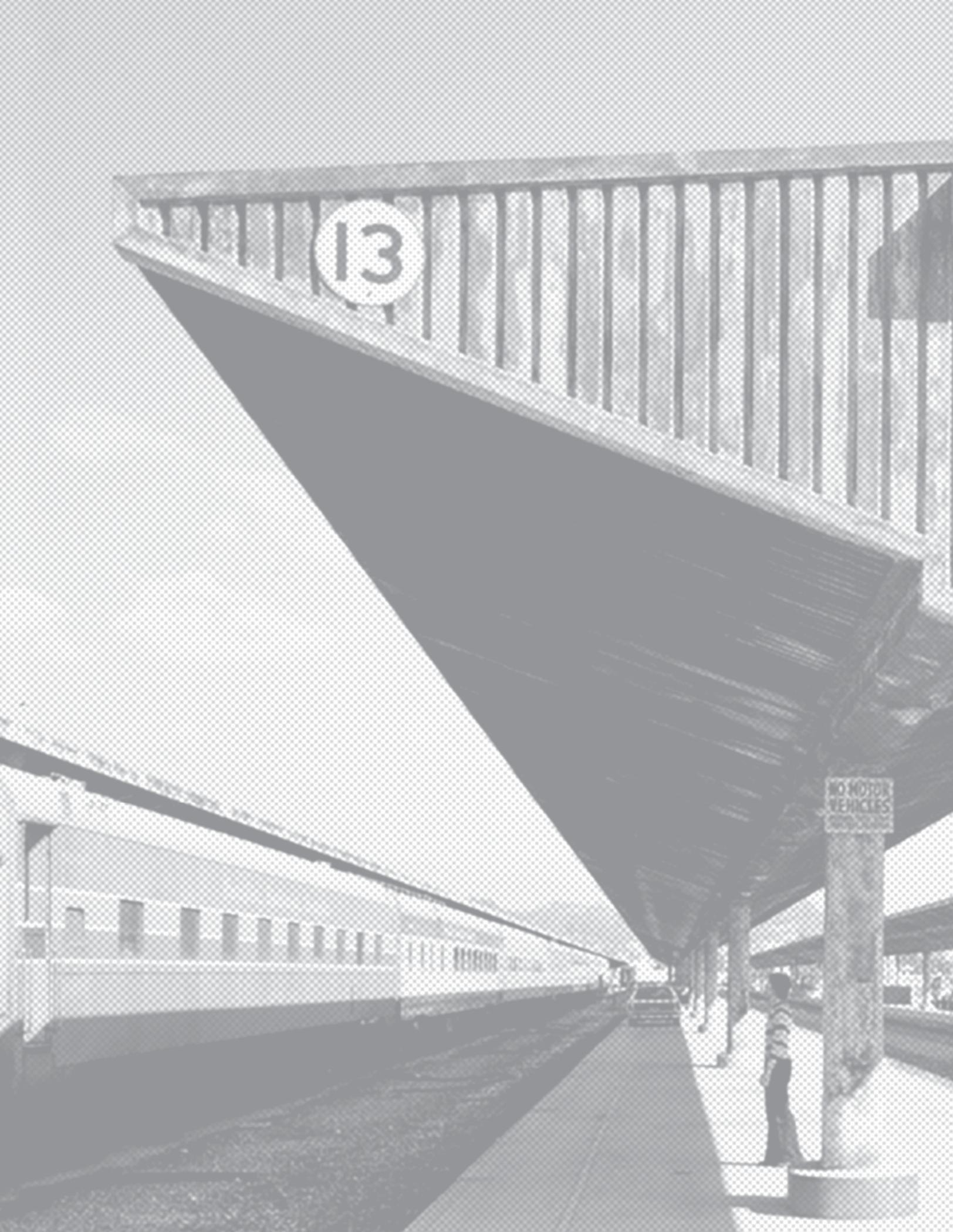
Below:

Sustainability efforts are categorized under Infrastructure, Socioeconomic, Identity and Transit in an effort to provide a more holistic sustainability.

Sustainability goals at Los Angeles Union Station are based on a framework broken down into four key categories.

Platinum). The Precertification process will take place after the Metro Board has approved the USMP Design Guidelines, as the guidelines will act as the legal binding document against which USMP can promise intent. The final Certification Process will commence once the Master Plan is constructed and the built plan will be evaluated for final certification award.





13

NO MOTOR
VEHICLES

RESTAURANT

3 Implementation

14



Implementation

The Implementation Technical Memoranda addresses the following subjects critical to the successful implementation of the USMP:

- CEQA/NEPA clearance requirements.
- Alameda District Specific Plan (ADP) modifications and amendments to Development Agreement (DA) with the City of Los Angeles.
- Financing strategy and phasing for implementation of infrastructure, access and circulation, and wayfinding components.
- Analysis of various governance approaches and strategies.
- Recommendations for access and circulation policies.

In addition, two other implementation topics are summarized below: Phasing and Cost.

Environmental Clearance and ADP Modifications

The USMP emphasizes transit improvements including improvement to the historic Union Station in the early stages of implementation with new public/private development following the transit improvements. To implement the USMP, ADP modifications would need to be made and a CEQA/NEPA strategy would be implemented that includes the preparation of a programmatic environmental document for the USMP with Metro as the lead agency. Subsequently, revisions to the ADP and its environmental document with the City of Los Angeles as the lead agency would be needed. NEPA documentation would only be required when individual federally-funded projects are being considered. USMP's recommended modifications to the ADP could potentially expand the boundary of the ADP planning area to create a more vital TOD District between Union Station and the Los Angeles River and other surrounding areas.

It will be critical for the Program Environmental Impact Report (EIR) to indicate that one of the purposes of the document will be to allow City of Los Angeles to modify mitigation measures identified in the 1996 ADP EIR for actions on property controlled (and/or acquired) by Metro. During the preparation of the programmatic EIR, Metro may choose to modify and

extend the Development Agreement with the City or wait until the ADP is prepared. Tract maps that need modifications could also be accomplished with this additional environmental clearance.

Some of the modifications in the ADP update and the DA include:

- Change of boundary to encompass Metro Gateway, Patsaouras Plaza, the Ramirez site, the Bail Bonds site and other properties determined appropriate at the time of the ADP update.
- Modify the ADP maps to reflect the revised plan.
- Replace/substitute USMP transit/transportation improvements for mitigations in the ADP.
- Change height requirements to allow for taller development east of the rail yard.
- Consider eliminating level of service (LOS) as the basis for requiring mitigation and replace with another transportation system performance metric, which may include Vehicle Miles Traveled (VMT), in coordination with the City of Los Angeles Department of Transportation.
- Review in the Development Agreement land dedication requirements and a series of additional requirements regarding affordable housing and economic opportunity programs given that Metro is a public agency with a special charter defining its purpose and performance not a private business with means to achieve either of these objectives.

Phasing

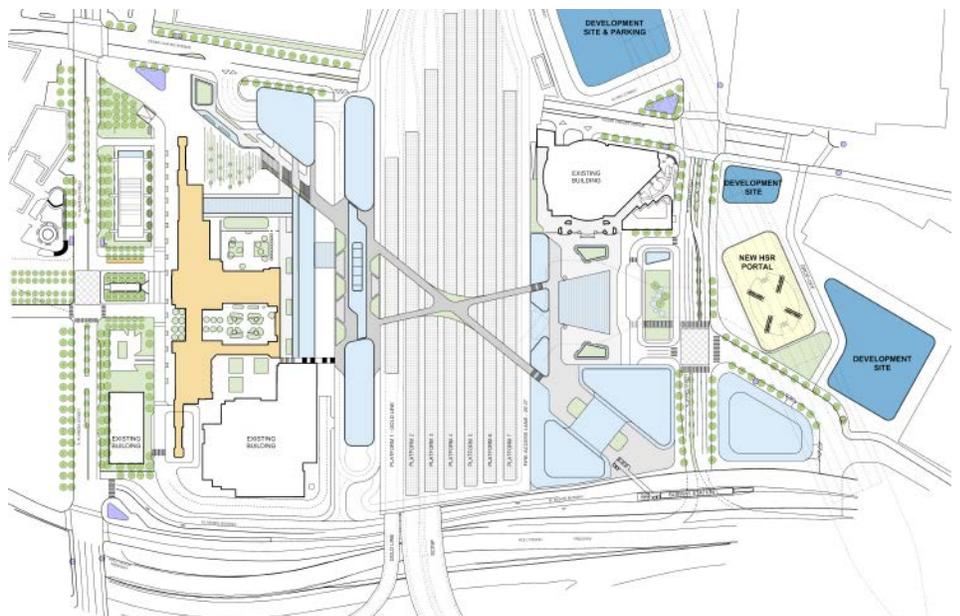
There are three primary stages of project implementation, each of which can be broken down further into sub-phases that could be realized as separate projects or sequenced and prioritized appropriately. It is imagined that these stages will be followed by a fourth stage of district-wide improvement that will result, in part, from the completion of changes to Union Station. The three primary stages are identified as:

Stage 1 Near Term Improvements (Forecourt, Perimeter Improvements)

Stage 2 Transport Projects (Concourse, Bus Plaza) and Private Commercial Development

Stage 3 High Speed Rail Integration

Right:
Plans depict phased alterations and additions to the station property beginning with improvements to the station's forecourt (upper left plan).



Cost

The Investment Plan for realizing the Union Station Master Plan is estimated to be \$1.71 billion (2014 dollars) in costs including \$1.30 billion for transit improvement and \$0.41 billion for shared public/private costs. These costs will be phased over multiple years as sources of funding are identified. The USMP is anticipated to generate \$1.3 billion in private development investment, raising the total on-property investment to \$3.01 billion.

Financing Strategy

A series of recommendations have been made in order to affect action on the funding and financing of the station improvements. These recommendations include enabling funding prioritization by including the USMP in Metro's Long Range Transportation Plan as well as the Southern California Association of Government's 2016 Regional Transportation Plan and Sustainable Communities Strategy. Another strategy is for Metro to pursue changes to the newly Enacted Infrastructure Finance District (EIFD) statute to expressly permit publically owned regional transportation hubs to form EIFD's. Once a governance strategy is determined, Metro may consider the establishment of a Los Angeles Union Station Authority to coordinate funding. There is also potential to fund and/or finance Stage 1 improvements through a matching strategy that utilizes local Metro funds to attract both regional and statewide competitive funding for the initial forecourt improvement program.

Governance Approaches

The existing Joint Management Council (JMC) structure is relevant and should be maintained as the USMP transitions from development to implementation. The JMC may play a larger role in the future, but should continue to be the focal point at this time for its current functions (including on-site property maintenance, tenant leasing/improvements, and special events), as well as other on-site elements set forth in the USMP Phase I improvement program.

It is recommended that Metro establish an 'overarching' governance structure for the real estate development aspects of the Master Plan. Focused on partnerships in placemaking, the USMP Steering Committee would first and foremost execute the

implementation plan for USMP's public and private real estate development program and determine the appropriate governance structures to maximize value capture, finance and implementation of the USMP. The Steering Committee would be intended as advisory to Metro and is recommended to bring about a more thoughtful and strategic governance structure for both USMP real estate development and other projects in the LAUS area of influence.

A 'Master Developer' for Metro's Alameda District Plan (ADP) assets within Metro ownership may be a positive contributory element in the attraction of partners and to the overall synergy of real estate activity within the Los Angeles Union Station 'area of influence'.

The most relevant governance structures to consider in implementing the real estate elements of the USMP are Denver's Union Station and San Francisco's TransBay Terminal. Similarities and opportunities include:

- Like Denver Regional Transit District (RTD), Metro can use its existing expertise and governance structure to facilitate the transportation improvements contained within the USMP.
- A lesson learned from Denver is that the value-capture that facilitated the financing of the transportation improvements was made possible by a coordinated synergy between the transportation infrastructure improvements and private development.
- At TransBay, the formation of a Joint Powers Authority (JPA) was quickly effected as each entities' vision, values, goals and objectives were in alignment.

It is critical for the USMP – as well as all of Metro's prospective 'partners' be in a synergistic venture of creating the region's most significant Transit-Oriented Development (TOD) – to take the time up-front and create the opportunity to explore partnership opportunities that will lead to a governance structure that is most appropriate for the benefit of the region.



Credits

USMP Design Team

Gruen Associates.....	Prime Consultant/Project Management/Master Planning
Grimshaw Architects.....	Design Lead/Master Planning /Architecture
Point C, LLC.....	Implementation/Funding & Entitlements
Fehr & Peers.....	Transportation Planning/Traffic Engineering/Parking/Connectivity
Sener.....	Transit Engineering for High Speed Rail
Cityworks Design.....	Urban Design
The Robert Group.....	Community Outreach
Mia Lehrer + Associates.....	Landscape Architecture
Historic Resources Group.....	Historic Restoration Consultant
Buro Happold.....	Sustainability/Building Engineering/Security
Wiltec.....	Traffic Consulting
Psomas.....	Infrastructure
VCA Engineering, Inc.....	Civil Engineering
Wagner Engineering and Survey.....	Surveying
Diaz Yourman & Associates.....	Geotechnical Consultant
Basis.....	Cost Planning
MARRS Services, Inc.....	Cost Estimating
Exponent.....	Fire/Life Safety Consulting
Selbert Perkins Design Collaborative.....	Wayfinding
Davis Blueprint.....	Reprographics

Metro

Arthur T. Leahy.....	Chief Executive Officer
Martha Welborne, FAIA.....	Chief Planning Officer
Bruce Shelburne.....	Executive Director, Rail Operations
Calvin E. Hollis.....	Managing Executive Officer, Countywide Planning and Development
Don Sepulveda, PE.....	Executive Officer, Regional Rail
Jenna Hornstock.....	Deputy Executive Officer, Countywide Planning and Development
Conan Cheung.....	Deputy Executive Officer, Operations
Ken Pratt.....	Director, Union Station Property Management
Jody Feerst Litvak.....	Director, Community Relations
Ana Vallianatos.....	Senior Marketing and Communications Officer
Casey Couchois.....	Transportation Planner

USMP Community Advisory Committee

Boyle Heights Neighborhood Council	Friends of the Los Angeles River
California Endowment	Historic Cultural Neighborhood Council
Central City Association	Little Tokyo Community Council
Central City East Association	Little Tokyo Service Center
Chinatown BID	Los Angeles Conservancy
Chinatown Service Center	Los Angeles County Arts Commission
Downtown Los Angeles Neighborhood Council	Los Angeles County Bicycle Coalition
East Los Angeles Community Corporation	Los Angeles River Artists and Business Association
El Pueblo de Los Angeles Historical Monument	Los Angeles River Revitalization Corp
Equity Residential	Los Angeles Walks
First 5 LA	Metropolitan Water District
Friends of Park 101	Olvera Street Merchants Association

USMP Technical Advisory Committee

Los Angeles County Metropolitan Transportation Authority
Metrolink
Los Angeles County Department of Regional Planning
Amtrak
Los Angeles Department of City Planning
California High Speed Rail Authority
Caltrans
Los Angeles Department of Transportation

