UNIVERSITY OF CALIFORNIA Los Angeles

Lower Los Angeles River Revitalization:

An Inclusive Approach to Planning, Implementation, and Community Engagement

A comprehensive project submitted in partial satisfaction for the requirements of the degree Master of Urban and Regional Planning

By

Delia Arriaga Ana Bonilla Lily Brown Paige Colton Babak Dorji David Fenn Samah Itani Kevin Johnson Johnny Le Alex Linz Jacqueline Martinez Sarah Mercurio Uday Ram Tony Tonnu Julie Wedig

Client: Urban Federal Waters Partnership Faculty Chair of Committee: Diana Varat

2017

Disclaimer: This report was prepared in partial fulfillment of the requirements for the Master in Urban and Regional Planning degree in the Department of Urban Planning at the University of California, Los Angeles. It was prepared at the direction of the Department and of the Urban Federal Waters Partnership as a planning client. The views expressed herein are those of the authors and not necessarily those of the Department, the UCLA Luskin School of Public Affairs, UCLA as a whole, or the client.

ACKNOWLEDGEMENTS

We are sincerely grateful for the guidance of our faculty instructor Diana Varat as well our Special Reader Rebecca Crane for their unending support, guidance, and patience. Thank you for pushing our work to be the very best it could be and for believing in us.

We would like to extend our thanks the UCLA Luskin Department of Urban Planning for hosting and sponsoring this Comprehensive Project, as well as the UCLA Institute of Transportation Studies, for their financial support of this project. This project was supported by a generous grant from UCLA's Lewis Center for Regional Policy Studies and the Luskin Center for Innovation.

We would also like to thank the many people who shared their knowledge and experience with us, including city officials, scholars, activists, researchers, advocates, and many others:

Sean Ashton, Maddie Brozen, Tamika Butler, Ryan Butler, Andre Comandon, Dee Corhiran, Eddie De La Riva, Debbie Enos, Silvia Gonzalez, Emma Huang, Jonathan Kraus, Paul Lange, Tanya Lyon, Brandon Araujo, Kelsey Jessup, Stephen Mejia, Jim Meyer, Chhandara Pech, Christopher Piña, Jessica Prieto, James Powell, Paul Ong, Phil Serpa, Dan Sharp, Anastasia Loukaitou-Sideris, Chanda Singh, Mark Stanley, and the Tetra Tech team.

Thank you for telling us your stories about the river and your hopes and dreams for its future.

Finally, we would like to thank our client, Pauline Louie of the Urban Waters Federal Partnership, for providing periodic feedback on our research, identifying and introducing us to stakeholders and subject matter experts, and granting us whatever Working Group resources we requested.

Thank you all. Our work would not have existed without your help.







EXECUTIVE SUMMARY

In 2015, Assembly Speaker Anthony Rendon (D-CA-63) introduced Assembly Bill 530 (AB 530) in the California State Legislature to establish the Lower Los Angeles River Working Group (Working Group) and develop a revitalization master plan specifically addressing river-adjacent communities. The bill drew attention to the complex jurisdictional issues surrounding the Lower LA River and invited 39 public agencies, non-profit organizations, and 14 river-adjacent cities to transform the channel into a community asset. At the end of the process, the Lower Los Angeles River Revitalization Master Plan (LLARRMP) will be incorporated into a revised County Master Plan for the entire LA River, an effort that is currently spearheaded by River LA.

The current Working Group planning process is the latest in a series of river-related revitalization efforts. Prompted by growing public interest in river restoration during the 1980s, the LA County Board of Supervisors established an Advisory Committee to examine opportunities to transform the LA River from flood control channel to a regional and community asset. This in turn led to the creation and adoption of the 1996 Los Angeles River Master Plan, which (in addition to addressing flood control issues) provided guidance on improving river aesthetics, creating additional green space, promoting economic development, and maintaining environmental assets

In 2007, the City of Los Angeles released the Los Angeles River Revitalization Master Plan. Building on the County's work a decade earlier, the City of Los Angeles placed stronger emphasis on community engagement and development, addressing issues of gentrification and the need to equitably distribute the proposed 240 projects along the 32-mile stretch of the LA River passing through its jurisdiction. The Working Group's mandate expands upon the goals of these previous plans, and the forthcoming LLARRMP has the potential to become a model plan for the region and critical component of an updated LA River Master Plan.

This report was prepared for the Urban Waters Federal Partnership, a member of the Working Group, by students in the Masters in Urban and Regional Planning program at the UCLA Luskin School of Public Affairs. The Urban Waters Federal Partnership (the Partnership), a consortium housed in the United States Environmental Protection Agency that includes several federal, state, regional, and county agencies as well as selected nonprofit and non-governmental organizations, focuses on the entire length of the LA River and plays a strong role in coordinating planning activities along the Lower LA River with ongoing river-adjacent initiatives in the City of Los Angeles. Our project scope and objectives below reflect consultations with Pauline Louie, the Partnership's former Ambassador to the LA River Watershed.

REPORT OBJECTIVES

The purpose of this report is to inform the Working Group's river planning efforts by exploring the context in which Lower LA River revitalization is taking place and presenting implementation strategies to sponsor equitable development among river-adjacent cities between Vernon and Long Beach. As investment and development in the Lower LA River Cities increase, the risk of gentrifying existing communities and displacing residents and/or businesses grows. Both bottom-up and top-down planning strategies that include extensive community engagement will be required to address these concerns.

To that end, we aim to provide the Working Group with background and analysis for: (1) understanding the relationship between large-scale infrastructure investments and gentrification, (2) identifying local requirements and fostering community-driven project planning, and (3) promoting inclusive, collaborative, and sustainable governance mechanisms among stakeholders during the master planning and implementation processes.

Specifically, this report seeks to answer the following research question: *How can the Lower LA River Revitalization Master Plan and Implementation Strategy promote equity, improve well-being, and foster engagement among the communities along the Lower LA River?* We address this question in three sections.

- 1. Gentrification and Displacement: This section forms the foundation of our analysis. We attempt to quantify and visualize the potential threat of gentrification and displacement that large infrastructure developments and investments along the Lower LA River can bring to existing communities. We analyze the causes, effects, and potential impacts of gentrification on both residents and small businesses in the Lower LA River cities.
- 2. **Community Access & Amenities**: This section begins by identifying gaps in existing amenities along the river and barriers to accessing both the River and River Amenities. It then provides information and suggests strategies to empower local communities to promote a bottom-up planning and implementation process informed by community driven interventions to promote interim improvements,

counter gentrification forces, and plan and implement projects outside a strictly formal governance model.

3. Planning, Implementation & Governance: This section draws findings from the two previous comprehensive river revitalization planning efforts – the 1996 *Los Angeles River Master Plan* and the 2007 *Los Angeles River Revitalization Master Plan* – and examines challenges and opportunities currently facing the Working Group. We then present recommendations based on our findings to guide the Working Group in developing more effective governance mechanisms during the implementation phase of the forthcoming master plan.

GENTRIFICATION & DISPLACEMENT

Gentrification refers to the process of neighborhood transformation that occurs in historically disinvested urban districts that are typically inhabited by low-income people of color. It is characterized by physical, economic, and cultural shifts that simultaneously attract more affluent and more educated residents. This shift in demographics – towards a more educated, affluent population – can change the social character and culture of a neighborhood and lead to rising rents and property values.

IMPACT ON RESIDENTIAL COMMUNITIES

The process of gentrification often is tied to large-scale urban revitalization projects that attempt to improve neighborhood appeal in locations that have been historically stifled by racism and disinvestment. As a result, low-income communities of color are disproportionately affected when large-scale infrastructure investments are made by government policies, private developers, and public-private partnerships. When left unchecked, gentrification can cause displacement of long-term residents and small businesses as these populations are priced out of neighborhoods.

We applied a *Residential Displacement Vulnerability Index* (Index) to determine which communities along the Lower LA River are most vulnerable to displacement due to river-related gentrification forces. Although we cannot predict exactly where gentrification will occur, we can identify communities that would be less resilient to upward pressures on housing prices. The Index is intended to establish a baseline of residential displacement risk to inform the Lower LA River Working Group planning activities as well as future gentrification-related research regarding these communities. The communities of Maywood, Bell, Cudahy, Bell Gardens (see Focus Area 1) and Long Beach (Focus Area 2) are most vulnerable to displacement if major river-related investment were to occur.



ES Figure 1. Vulnerability Index & Population Density, Focus Area 1.



ES Figure 2. Vulnerability Index & Population Density, Focus Area 2.

To protect the most vulnerable residents along the river, Lower LA River cities and the Working Group must consider strategies that can mitigate the potential consequences of river-related investments at the outset. Due to the complex process of gentrification, we recommend a combination of several mitigation and prevention tools. Our recommendations aim to support and protect existing renters as well as identify ways to fund and expand affordable housing options. Since gentrification is a slow process where long-term effects are not always apparent, we suggest creating policies or programs that can help protect vulnerable communities before gentrification has taken place. We have grouped our recommendation into three categories:

- 1. Foundational Actions: These strategies lay the groundwork for protecting tenants and generate funds for affordable housing development before gentrification begins to unfold.
 - Adopt a Rent Stabilization Ordinance: Rent control measures can help preserve the existing stock of affordable housing, especially in areas where there is not enough available land for new developments. They can also help maintain long-term housing security for low-income renters.
 - Establish Rent Review Boards/Programs: Rent review boards can address the rapid increase in rents and protect tenants who may be negatively affected by such an increase. Rent review boards (also known as rent mediation programs) can help support tenants by giving them a platform to voice concerns over rapid rent increases.
 - Create Community-Led Community Land Trusts (CLTs): CLTS are nonprofit
 organizations that are managed through a "dual-ownership model" where
 multiple owners are held equally responsible for all business decisions.
 They preserve affordable housing, stabilize communities, and foster
 investment by allowing local organizations to merge as a single property
 owning entity.
 - Adopt Linkage Fee Ordinances: Linkage fees provide a mechanism for cities to raise revenue to fund the development of affordable housing. These ordinances are typically accompanied by the creation of an Affordable Housing Trust Fund to allocate funds in support of new affordable developments or rehabilitation of existing affordable projects.

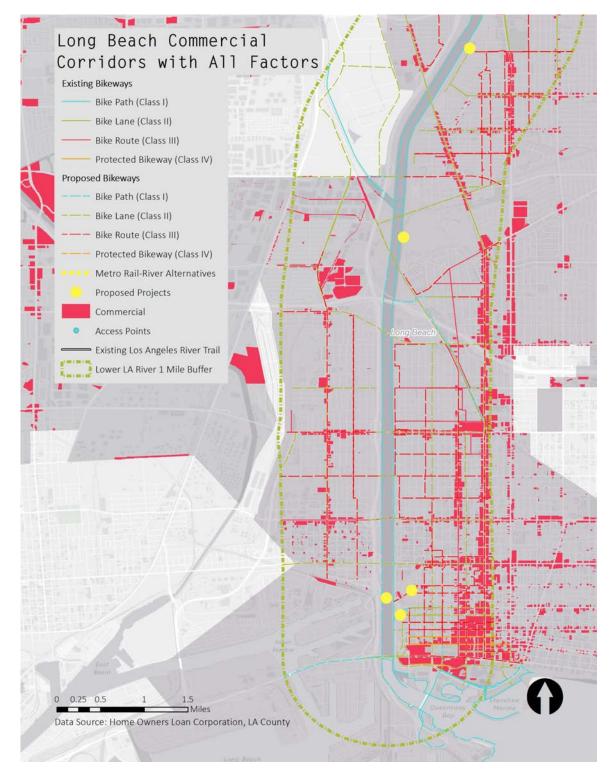
- Adopt an Inclusionary Zoning Ordinance: Inclusionary zoning mandates that developers build a certain percentage of affordable units within a market-rate development. Inclusionary zoning programs are most successful when they are coupled with incentives to offset costs for developers, including density bonuses and fast-track permitting.
- 2. **Supportive Programs:** These programs are meant to educate and create resiliency for low-income renters of color.
 - Develop or Expand Rental Assistance Programs: Rental assistance programs can provide low-income renters with the financial resources – such as assistance with security deposits, rent, or other related housing costs – needed to obtain safe and quality housing and to remain in their current homes during times of particular economic hardship.
 - Develop or Bolster Rental Rights Counseling Programs: Rental rights counseling can help educate tenants of their rights covered by state and local laws, which is particularly important for low-income renters of color who might have less access to this type of information.
 - Partner with and Support the Development of Renters Advocacy Groups: Cities should work with renters advocacy groups representing at-risk residential populations and ensure they are included in planning discussions. In cases where organizations are not present, cities can cultivate local leaders within communities through community-based training to prepare residents to effectively participate in the revitalization process.
- 3. **Policy Enhancements:** Policy Enhancements are meant to expand on existing State laws to further promote affordable housing development and increase housing supply.
 - Adopt a Strategic Density Bonus Policy: The LA River Cities should consider adopting aggressive density bonus ordinances to create incentives that encourage production of affordable housing units. The incentive structure should go above and beyond the State Density Bonus Law, presenting greater increases in incentives as more affordable units are set aside.
 - Encourage the Development of Accessory Dwelling Units (ADUs): Given the urgent need for additional housing both in the Lower LA River cities and

the greater Southern California region, river-adjacent cities should promote the development of ADUs. Producing small-scale infill developments on single-family parcels can meet a range of housing needs and provide a new revenue stream for property owners.

IMPACT ON SMALL BUSINESSES

Small businesses are not immune to gentrification forces or potential displacement. A neighborhood that begins to see significant shifts in its demographic and economic profile can cause small businesses to lose their core customer base. However, these changes can be beneficial if small businesses are agile enough to respond to the tastes of a new customer base and are thus able to compete with new businesses that may come in. If they are unable to keep up with new consumer preferences, small businesses may become irrelevant in a changing economic environment or they may be priced out due to increases in rents associated with an increasingly affluent area. Given that small business owners are likely to live in the same neighborhoods they serve, adverse impacts on community economies can have a compounding effect.

There are several risk factors that can indicate small business displacement potential: whether small business owners lease space, if leasing agreements are informal rather than contractual, and whether small business owners are aware of available resources to assist in expansion. Small business owners may have one, two, or all of these risk factors. To understand the spatial context of these risks, we mapped three criteria to identify commercial corridors that are most vulnerable to displacement: (1) communities that have experienced historic trends of disinvestment; (2) areas in close proximity to an existing LA River access point and Lower LA River related active transportation; and (3) areas in close proximity to proposed LA River related park developments. As depicted in the map below, the commercial corridors most vulnerable to gentrification and displacement facilitated by Lower LA River investments and improvements are located in Downtown Long Beach, Long Beach Boulevard (South of San Antonio Drive), Atlantic Avenue in Long Beach (From Market Street to Harding), and Atlantic Boulevard in Maywood.



ES Figure 3. Long Beach Commercial Corridors with All Factors.

Addressing the negative consequences of gentrification and displacement is complex and requires ongoing proactive and reactive strategies. To that end, we have framed our recommendations with respect to when – either during the planning phase or implementation phase – the Working Group and Lower LA River Cities should pursue particular initiatives.

- 1. **Planning Phase Strategies:** We recommend that communities especially Long Beach and Maywood employ the strategies outlined below during the planning phase.
 - Increase Data Collection: Data collection and analysis are critical to influencing decision-makers and shaping policy. Populations that are not studied are at a disadvantage when competing for resources or when the right solution needs to be implemented. Cities should begin to identify metrics and devise ways to collect data in a systematic way.
 - Conduct Small Business Assistance Outreach: Small businesses often lack the resources to keep up with the economic trends, technological shifts, or demographic changes that impact their businesses. The County and the cities along the Lower LA River offer a range of services and programs to support small businesses including an incubator program, workshops on negotiating leases, and loan services.
- 2. Implementation Phase Strategies: Cities should begin to explore strategies to mitigate displacement that can be carried out during plan implementation that focus on building resilience and creating opportunities for continued property ownership.
 - Building Resilience through Co-operative Ownership Models: A cooperative ownership model allows individuals to aggregate and subsequently increase their market power. These business models differ from traditional business models in that co-operatives represent an autonomous association of persons who unite voluntarily to meet common economic, social, and cultural needs and aspirations through a jointly owned and democratically controlled enterprise.
 - *Preserve Legacy Businesses through a Stabilization Fund:* Access to capital often may be out of reach for small businesses. As a result, small businesses may be unable to keep up with trends or expand to serve the

growing needs of their local communities. We recommend that cities explore policies that can leverage impact fees as a way to raise revenue for a stabilization fund.

COMMUNITY SPACE & ACCESS

The communities adjacent to the Lower LA River are some of the most underserved areas in the County in terms of access to quality parks and open space. The Lower LA River was designed in a way that has kept people from accessing its potential benefits for decades. Access points to the existing River Path and adjacent parks are not all accessible across user types, unevenly distributed, and hindered by physical barriers including limited bridges across the river and a patchwork bicycle and pedestrian infrastructure network. Due to these barriers, it is difficult to determine what demand there might be for new Lower LA River amenities. The Working Group is currently soliciting feedback from members of the community in order to inform the long-term planning process and introduce a revitalized and accessible riverfront. However, determining what accessibility means can be complex in that the removal of barriers for one user group has the potential to create barriers for another group. For instance, increasing the presence of police may make some users feel safer while alienating others. Improving infrastructure and amenities for pedestrians may create barriers to use of the River Path by longdistance cyclists (and vice-versa). Creating greater recreational access to the river channel could serve to drive out users who currently make use of the channel precisely because it is an unpopulated area.

One way to improve community-member access to park space, better understand existing local resident needs, and reduce the potential for gentrification and displacement that may come from large-scale revitalization efforts, is to implement lowcost, community-led, small-scale changes along the river (which are referred to as "tactical urbanism" interventions in this report). Tactical urbanism serves as a way to create incremental change, while monitoring the effects of these changes over time. Unsuccessful or controversial projects can be removed, while popular interventions can be made permanent or operationalized. To understand what kind of projects to begin with, it is necessary to first identify the current users of the river, assess user accessibility to river right-of-way, and determine what amenities exist.

CURRENT USERS

People use the Lower LA River right-of-way in a variety of ways. Residents that live nearby are the most frequent users of the river. They primarily use this space as a linear park where they can exercise or relax as well as a route for non-motorized transportation. Existing users find security, cleanliness, and the need for more amenities to be the main barriers to increased river engagement. Conflicts between different user groups are also a concern. To identify unintended consequences of any revitalization efforts or projects along the river, planners must involve all existing user groups identified below:

- **Bicyclists:** Many people bicycle along the River Path, which is a shared use, uninterrupted bike path called a Class I Bikeway. The River Path provides a route separated from traffic and appeals to those who may not feel comfortable riding in other contexts.
- Businesses: Many businesses including warehouses, storage facilities, construction companies, and freight companies, operate adjacent to the Lower LA River. Metro also operates its Blue Line Yard in Long Beach along the river. In addition to large-scale operations, many small businesses operate near the river, including restaurants and retail.
- Equestrians: There are at least four equestrian communities near or adjacent to the Lower LA River, located in Long Beach, Compton, Paramount, and South Gate. Equestrians ride their horses on the equestrian trail that runs parallel to the LA River Bike Path on the east side of the river, which extends from Long Beach to the confluence of the Rio Hondo and LA River in South Gate.
- **Park Users:** People use the River Path to access adjacent or nearby parks.
- **Sports and Recreational Users:** People along the Lower LA River engage in an array of sports and recreation activities, including soccer, basketball, tennis, golf, baseball, skateboarding, walking, bicycling, and go-karting.
- **Pedestrians:** People walk along the River Path for a variety of reasons, including recreation, commuting, exercise, and running errands.
- Nearby Residents: Many neighborhoods with single-family homes, multi-unit dwellings, and mobile home parks are located close or adjacent to the Lower LA River. As an amenity in their backyard, residents gather along the river and nearby parks with family and friends for meals, conversations, and camaraderie.
- People Experiencing Homelessness: A number of people experiencing homelessness live along the LA River. The Los Angeles Homeless Services Authority (LAHSA) and the Los Angeles County Sheriff's Department (LASD) identified at least 200 homeless encampments, or around 700-800 people, along the LA River and its tributaries in 2015 via aerial survey.

- **People Engaging in Illicit Activity:** A variety of people engage in illegal activity along the Lower LA River right-of-way, which may be more common than in other public spaces due to limited police patrols.
- Federal and County Agencies: The United States Army Corps of Engineers (USACE) maintains the river channel north of Southern Avenue in South Gate. The County's Department of Public Works (LACDPW) maintains the LA River's concrete channel, drain system, and sediment and vegetation buildup from Southern Avenue in South Gate to Long Beach. Additionally, LACDPW operates numerous pump stations along this stretch, which pump water into the levee system during rain events and operates a groundwater recharge basin within this reach.
- Local City Governments. Local governments maintain properties adjacent to the Lower LA River, including public parks and schools. While local police do not actively patrol the area, they respond to community issues along and around the river.
- Wildlife. The LA River is home to 140 protected bird species, 20 mammal species, more than 1,000 types of plants, and a few non-native fish species. Two distinct areas along the Lower LA River provide particular havens for wildlife, including the Dominguez Gap Wetlands and the Willow Street Estuary in Long Beach.

COMMUNITY AMENITIES

Based on the 2016 Los Angeles Countywide Comprehensive Parks and Recreation Needs Assessment, the cities along the Lower LA River have a high need for more and better parks. The LA River right-of-way is not itself designated as park space, yet it serves as open space for many of the communities adjacent to it and as a conduit between nearby parks. On average, there is park space every one to two miles along the length of the Lower LA River. Out of the fourteen open spaces along the right-of-way, six have ample amenities (such as bathrooms, water fountains, and sports fields), six are solely open lawn or turf areas, and two are natural areas with walking paths. To supplement the findings of the Needs Assessment, we inventoried a range of additional existing physical amenities along the Lower LA River:

• Water Fountains & Bathrooms: There is not a single public bathroom or water fountain directly along the River Path, making the River right-of-way less

hospitable than it might be if these amenities were included. The closest public bathrooms and water fountains are located in river-adjacent parks.

- **Seating:** Seating along the River Path is limited and rarely shaded. The distribution of dedicated seating skews southward with 22 benches in the City of Long Beach and only four benches in communities between Vernon and Compton.
- Lighting: The Lower LA River right-of-way has limited lighting infrastructure. We observed only two light poles along a 17-mile stretch.
- Signage: There are 73 wayfinding signs and 14 regulatory signs along the roughly 17 miles of the River Path. Street names at crossings are usually the only signs to help users orient themselves, and over a third of the signage observed on the River Path is illegible due to graffiti or small font sizes.
- Tree Cover & Shade: Rights-of-way with relatively high levels of tree-cover include: South Gate (just north of the Rio Hondo confluence), the area between Lynwood and South Gate adjacent to Hollydale Regional Park, the area adjacent to Dills Park in Paramount, and in Long Beach along the length of Deforest Park and between Willow Street and Anaheim Street crossings. Areas with the lowest levels of tree-cover are Vernon between Downey Road and Atlantic Boulevard as well as Long Beach between Long Beach Boulevard and the I-405 crossing.
- Wildlife Habitats: The river right-of-way is generally bare or paved-over, but trees and shrubs provide habitat for birds, pollinators, and other small animals when present. Within the LA River channel, wildlife tends to concentrate in areas where waters converge, pool, or spread, such as the Rio Hondo and Compton Creek confluences and near river crossings.

COMMUNITY ACCESS

Amenities are only useful if people are able to access them. Many people who come to the Lower LA River live in the surrounding communities and are therefore more likely to be affected by access issues. While local residents will likely benefit from improvements, river right-of-way enhancements will benefit regional users as well. Regardless of where they are coming from, users travelling by bike, bus, or car to use the river will face different challenges relating to access.

RIVER ACCESS POINTS

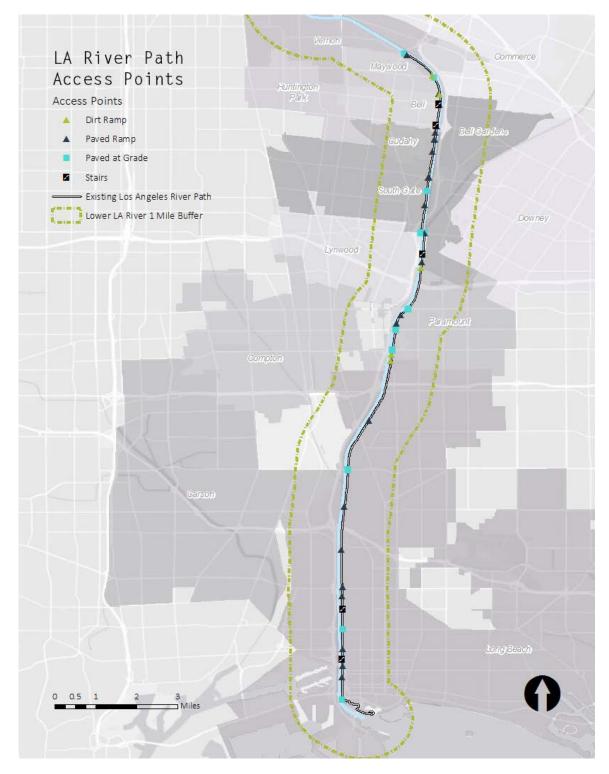
We identified 52 access points over the 17 miles of River Path from Atlantic Avenue in the City of Vernon to its southern terminus in the City of Long Beach. In many instances, ramps connect the River Path to both sides of a roadway overpass. This allows users to access either side of that roadway. We counted locations where a street is accessible from multiple distinct ramps, pathways, or staircases separately. When access points that provide connectivity to the same street, often different sides of the same overpass, are considered together, the 52 total access points provide access to 43 general locations. In general, access to the river path is more frequent along the portion of the River Path north of the City of Long Beach. In this river segment, 37 access points are distributed across approximately nine miles of the river. On the other hand, Long Beach accounts for just under half of the River Path (eight out of 17 miles) but less than a third of the access points (15 out of 52).

Finally, not all access points are accessible to all users. Six of the 52 access points feature stairs, which are unusable or challenging for bicyclists, equestrians, people in wheelchairs, or families with strollers. Moreover, an additional five access points are dirt ramps, which might be appropriate for equestrian users, but can be problematic for wheeled users

PEDESTRIAN NETWORK

In many places the roads connecting to the river access points are not comfortable or safe for bicyclists or pedestrians. While additional ramps and stairways are not without costs, additional access points could be installed more quickly and for a fraction of the cost of more ambitious river revitalization projects, such as entirely new parks and bridges. Moreover, additional River Path access points could be designed and developed in partnership with the specific neighborhoods that they would connect to, potentially resulting in access points that are customized to meet specific needs identified by the neighborhoods they are intended to serve. There is precedent for this approach with Cal Poly Pomona's Community Constructed Participatory Design-Build projects, as well as the process underway with the Disney-funded Rio Vistas project along the Upper LA River.

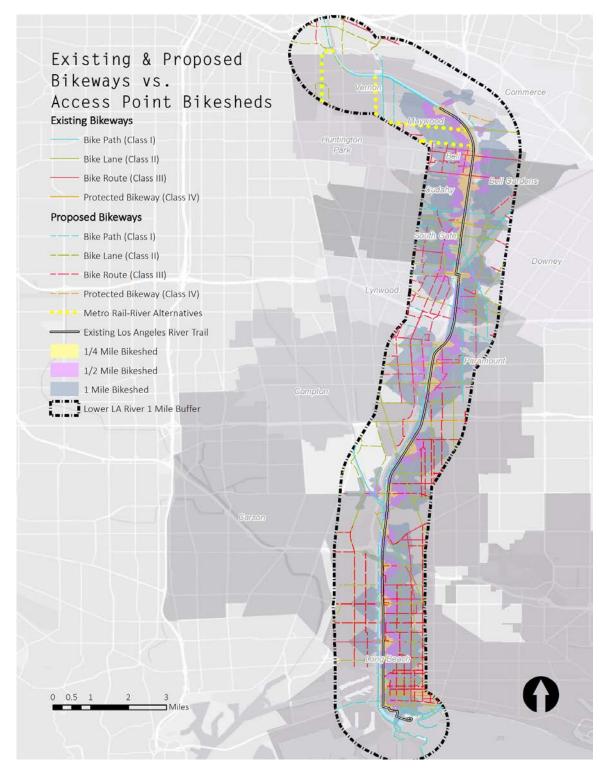
ES Figure 4. LA River Path Access Points.



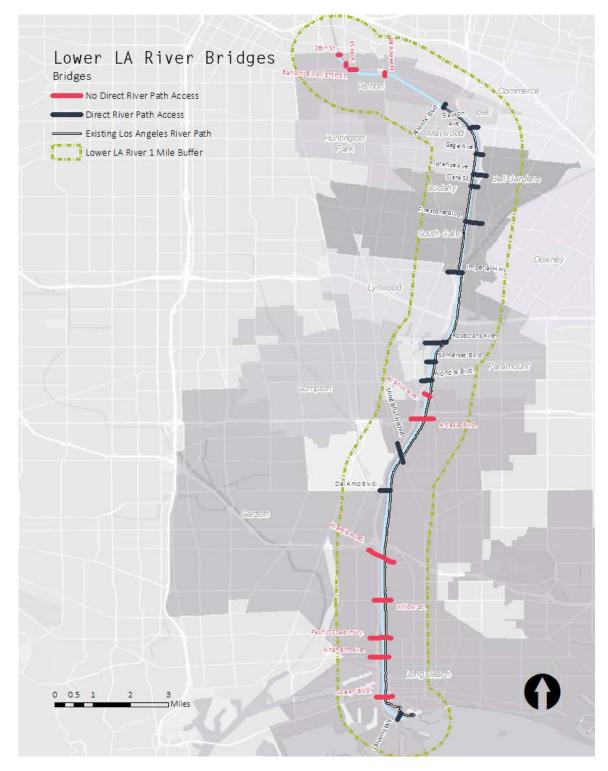
Bicycle Accessibility

Existing bike infrastructure is more prevalent along the southern portion of the river in the City of Long Beach. Multiple bike paths, bike lanes, bike routes, and protected bikeways are accessible in this area while bicycle connections north of Long Beach are sparser. Lower LA River cities without updated bike master plans should consider developing new plans to close remaining gaps and position themselves for funding. It may be advantageous to adopt integrated active transportation plans to promote both biking and walking while fulfilling state bike master plan guidelines. Plans adopted going forward should be river-oriented and consider access to existing access points as well as opportunities for additional access points to maximize local and regional investments along the River.

ES Figure 5. Existing & Proposed Bikeways vs. Access Point Bikesheds.



ES Figure 6. Lower LA River Bridges.



Bridges

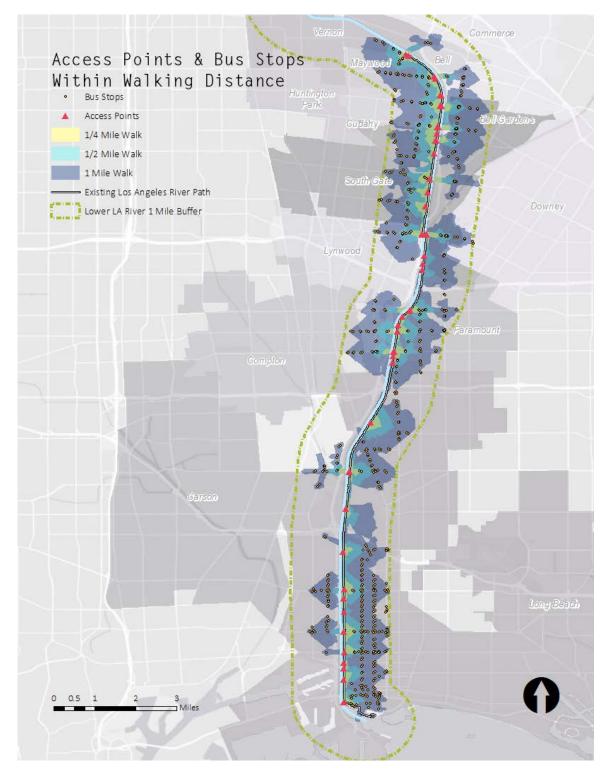
Bridges along the Lower LA River are too far apart which creates a barrier for users seeking to cross to the other side of the river. Though 24 bridges span the Lower LA River (excluding railroad/freeway bridges) only 19 provide direct access to the River Path. This scarcity of bridges providing bicycle and pedestrian access across the channel to the other often forces River Path users to walk or ride a relatively long way to cross. Even where they do exist, bridges providing access across the river are spaced unevenly. Considering that a given destination on the opposite bank of the river will likely be an additional distance north, south, or west of a given crossing, the distances between bridges on the Lower LA River clearly create a significant barrier to walking and biking in the area. Furthermore, some of the bridges are especially long as they cross over the river rights-of-way and River Path as well as adjacent utility corridors and the I-710.

TRANSIT NETWORK

Use of the Lower LA River for recreation or active transportation is dependent on travel to and from the river, in part through the public transit network. If users do not live within walking or biking distance to river access points, they must drive or use public transit. One predictor of transit access to the river is the proximity of bus stops. Bus stops that are a quarter-mile, half-mile and one mile from river access points are well distributed across communities north of Long Beach, whereas in Long Beach bus stops more than a half-mile from river access predominate. There are no bus stops within a quarter-mile of the river in Commerce, Bell Gardens, and very few in Compton or South Gate. Although there are many stops within one-mile of river access in Long Beach, there are many fewer within a half-mile, and only eight within a quarter-mile. Our fieldwork also found that certain areas that can be reached by walking a certain distance or for a certain time, also known as "walksheds," between access points and transit stops have gaps in signage and sidewalks that could make walking difficult for some users.

The planning and provision of transit services usually require more coordination between different city agencies than does the installation of an isolated or temporary amenity such as a bench or shade structure, so changes to these systems may be harder to implement. Some transit services offered by local agencies could possibly be slightly altered to provide greater access to the River Path without much disruption system-wide, perhaps as part of a weekend alternative schedule. As part of special programming, a community may decide to arrange transportation from a more central location to a river access point.

ES Figure 7. Access Points & Bus Stops Within Walking Distance.



EQUESTRIAN TRAIL NETWORK

Equestrian trail users face a unique set of challenges. Stabling and exercising horses requires large and heavy equipment, and the horses themselves are susceptible to physical injury and may exhibit unpredictable behavior from interactions with pedestrian, bicycle, or other river users. The most common areas for potential conflict between equestrian and other users are intersections and underpasses where horses, cyclists, and pedestrians converge. Clearly delineating these spaces or designating additional equestrian rights-of-way may improve the experience of the river for people and horses alike. Horse trailers and other equipment may require additional special facilities, including parking, to accommodate these users.

TACTICAL URBANISM

Tactical urbanism can be defined as:

A deliberate approach to neighborhood building that uses scalable, short-term interventions to catalyze long-term change. It can be a low-cost and low-risk way to test out a project or plan and gather data before making large political or financial investments. These locally focused and community-led projects help develop social capital between citizens and build organizational capacity between public-private institutions, nonprofits, and their constituents. Also important, they create an accessible way for people in communities to experience proposed planning ideas and react with their opinions regarding the future of their community space.¹

The table below outlines how a tactical urbanism approach can be used to address many of the community access and amenity issues along the Lower LA River.

A TACTICAL URBANISM APPROACH TO REVITALIZATION						
lssue	Potential Project Solutions	Feasibility/Legal Challenges				
Limited Access Points	 Access point micro-parks New gates Stairs or other amenities to formalize existing access 	 Bike Path connections: Los Angeles County Permits required Off-path/neighborhood portions: Municipal permits/approval 				

ES Table 1. A Tactical Urbanism Approach to Revitalization.

Lack of Lower LA River Crossings	 Low-flow crossings Enhanced Pedestrian/Bicycle amenities along existing crossings Better signage directing pedestrians/cyclists to nearby crossings 	 Impact to flood capacity of channel: Army Corps of Engineers Section 408 Permit required
Legal Access to Lower LA Riverbed	Seasonal Recreation Zones	 Memorandum of Understanding (MOU) required between the USACE, the County Flood Control District, and the State (Rivers and Mountains Conservancy) Rivers and Mountains Conservancy would enter a potential liability partnership with individual cities
Rest and Reprieve	 Low-cost benches Shade structures - trees Modifications to existing benches 	 Because improvements are unlikely to impact the channel structure or flow, no USACE permits are needed, only LA County permits.
Lack of Identity/Design	 Murals on river walls Murals on retaining walls Decoration of existing bike path benches 	 Murals in the channel would require Army Corps approval Murals outside of the channel would require county or municipal permits Special care to use non-toxic paints should be taken for murals within the channel itself
Bike/Pedestrian conflicts	 Warning Signage/Murals Educational handouts Events that build understanding between users 	 Signs along the River Path itself would require the County's approval Signs in the surrounding communities would require municipal permits Special care to use non-toxic paints should be taken for murals within the channel itself
Orientation	Wayfinding Signage	 Signs along the trail itself would require the County's approval

•	Destination signage that gives trip time estimates Signage indicating individual	•	Signs in the surrounding communities would require municipal permits
	city borders		

PLANNING, IMPLEMENTATION & GOVERNANCE

The development of the Lower LA River Master Plan presents several challenges and opportunities. Given the potential unintended consequences of river revitalization, community-led efforts (or "bottom-up" planning) need to be coupled with "top-down" planning governance mechanisms to effectively counter gentrification forces. To determine how the Working Group can develop such mechanisms, we assessed previous revitalization planning and implementation efforts, identified historical and current challenges that must be addressed, and drafted recommendations to guide the Working Group as it creates the Lower LA River Revitalization Master Plan and looks forward to implementation.

The 1996 Los Angeles River Master Plan

The 1996 Los Angeles River Master Plan (1996 Plan) marked the first time the County attempted to expand the role of the LA River from a flood control channel to a multipurpose greenway. Prompted by increasing public interest – largely due to advocacy by Friends of the Los Angeles River (FoLAR) – in transforming the LA River and Tujunga Wash into community resources, Mayor Tom Bradley established a task force to examine revitalization opportunities for the river's entire 51-mile stretch in 1989. This led to the creation of an Advisory Committee by the County Board of Supervisors in 1992 and comprised 13 river-adjacent cities, several agencies, and a few non-profit/community groups. Over the course of the next four years, the Advisory Committee drafted strategies to address eight overarching goals:

- 1. Ensure flood control and public safety needs are met.
- 2. Improve appearance of the river and the pride of local communities in it.
- 3. Promote the river as an economic asset to the surrounding communities.
- 4. Preserve, enhance, and restore environmental resources in and along the river.
- 5. Consider stormwater management alternatives.
- 6. Ensure public involvement and coordinate Master Plan development and implementation among jurisdictions.
- 7. Provide a safe environment and variety of recreational opportunities along the river.
- 8. Ensure safe access to, and compatibility between the river and other activity centers.

The authors of the 1996 Plan acknowledged that the river was more than a piece of infrastructure to manage seasonal flooding. Rather, they argued, the LA River had the potential to add value to adjacent communities and play a broader positive role in the region. Our review of the 1996 Plan yielded five key findings:

- Finding #1: The 1996 Plan was the first of its kind to establish a formal, inclusive, and ongoing process to engage a diverse set of stakeholders along the LA River. Prior to 1991, non-profit groups like FoLAR and entire communities were on the margins of the planning process. That the County recognized that river revitalization relied not only on administrative bodies, but technical experts, advocates, and general citizens as well, deserves credit.
- Finding #2: The 1996 Plan provided the impetus for cities to include river-related improvements in their general plans. Several cities that updated their general plans following the release of the 1996 Plan to include recommended projects or plan elements. This suggests there was significant buy-in by stakeholder cities.
- Finding #3: It is difficult to create new government bodies to manage implementation, and there is a danger is assigning important cross-jurisdictional responsibilities to such entities. The 1996 Plan promoted the formation of a Joint Powers Authority (JPA) to "pool resources to address funding, security, maintenance, and other issues faced by each jurisdiction." Given the difficulties in establishing a new government entity across local, regional, state, and federal jurisdictions, a JPA never emerged and these issues remain primary challenges today.
- Finding #4: The absence of prescribed and/or concrete feasible crossjurisdictional collaboration mechanisms yielded missed opportunities. The need for coordination is mentioned, several hypothetical cases are presented, and potential tools are listed, but there is no discussion of which tools are appropriate under what circumstances, nor what the benefits and costs would be of pursuing any one tool to address a specific issue area.
- Finding #5: Funding became a city rather than regional responsibility for improvements along the river right-of-way, which inhibited many projects from being realized. Most of the projects – with some County-led exceptions – listed in the 1996 Plan were capital projects delegated to cities for implementation. Coupled with the fact that most available funding did not cover maintenance and

operations, many of these cities had limited planning capacity and resources to initiate and fund projects unilaterally.

THE 2007 LOS ANGELES RIVER REVITALIZATION MASTER PLAN

The City of Los Angeles developed the 2007 Los Angeles River Revitalization Master Plan (2007 Plan) to create a more coherent vision for the 32-mile stretch of the river that passes through its jurisdiction. Building on community interest to repurpose Taylor Yard into a 40-acre state park and the objectives laid out in the 1996 Plan, the Los Angeles City Council established the Ad Hoc Committee on the Los Angeles River (Council Committee) in 2002 to formalize the revitalization process. Several regional, state, and federal entities were engaged in projects along the river by this time, but there was no institutionalized process to coordinate these activities. In 2003, the Council Committee created the Los Angeles River City Department Task Force – akin to the contemporary Lower LA River Working Group – to interface with County departments, State conservancies, USACE, and other key stakeholders. This Task Force identified four broad principles to guide plan development, which mirrored and expanded upon the aesthetic, social, and economic goals established in the County's 1996 Plan:

- 1. To revitalize the LA River through ecological restoration and the creation of green spaces in the channel.
- 2. To green the neighborhoods through reconnecting the LA River to adjacent communities (and communities to each other).
- 3. To capture community opportunities by encouraging enhancement, empowerment, and reinvestment where appropriate.
- 4. To create value by equitably distributing revitalization opportunities among underserved, river-adjacent communities.

The 2007 Plan aimed to translate these goals into a long-range vision, specific short- and long-term projects, and a practical implementation strategy. Most notably, the 2007 planning process improved on many of the community engagement and outreach efforts described in the 1996 Plan and demonstrated the City's interest in understanding the range of revitalization impacts on neighborhoods. Our review of the 2007 Plan yielded four key findings:

• Finding #1: A phased project-by-project implementation schedule is not only more feasible, but fosters "quick wins" and elicits community buy-in. Since the City of Los Angeles has to acquire parcels of land only when they became available, large-scale infrastructure projects that span long stretches of the river

take longer and are more difficult to complete. Instead, the City of Los Angeles focused on sponsoring projects that could be completed quickly, generating more community interest in the river.

- Finding #2: Community engagement was extensive during the planning process and continued through implementation. Given the fact that the City of Los Angeles prioritized public participation during the planning process through various means, communities remained engaged as the river revitalization transitioned to the implementation phase. Communities took ownership of projects where barriers were low and were vocal in opposition to projects they deemed damaging to their interests.
- Finding #3: The 2007 Plan reflected an awareness of social and economic pressures facing certain communities adjacent to the river and addressed these concerns accordingly. Social issues and equity had a pronounced presence throughout the 2007 Plan. For example, where the 1996 Plan highlighted increased property values and resulting tax revenues as potential benefits of river revitalization, the 2007 Plan pointed to possible gentrification forces impacting existing populations. The 2007 Plan balanced the potential benefits of river revitalization with an acknowledgment of potential unintended consequences.
- Finding #4: A Joint Powers Authority may not be the most feasible administrative body for plan implementation. As was the case in 1996, the proposed JPA mentioned in the 2007 Plan (i.e., the Los Angeles River Authority) was never formed. Consequently, the permitting process between LACFCD and USACE remained separate and a mechanism to secure funding for projects along the river did not emerge. The River Cooperation Committee helped with the consistency of projects along the river, but the complexity of the permitting and funding processes remains.

THE LOWER LA RIVER WORKING GROUP

The Working Group faces a number of challenges in finalizing and implementing the LLARRMP. Based on a review of previous Working Group and Implementation Plan Element Committee meetings, stakeholders raised the following three key challenges: coordinating ongoing river-related initiatives, funding revitalization efforts, and gaining stakeholder buy-in through sustained community engagement.

COLLABORATION

The revitalization of the Lower LA River is inherently a multi-jurisdictional process that requires coordination between a host of different entities: the cities themselves, USACE, and the County. The LLARRMP's implementation depends on effective coordination among these entities to leverage limited resources and ensure consistency, but previous plans have faced challenges in creating deep and lasting collaboration mechanisms. Given the challenges associated with creating a Joint Powers Authority following the release of the 1996 and 2007 Plans, the Working Group may want to consider two coordination options that respect the sovereignty of stakeholder agencies and jurisdictions while still providing a forum for ongoing collaboration:

- Option #1: Lower LA River Coordination Committee. Although the City of Los Angeles formed the RCC in 2010 as a result an inability to create the JPA recommended in the 2007 Plan, the RCC has proved to serve a useful function. The committee acts as a clearinghouse of information for project developers by identifying appropriate points of contact in regulatory agencies, providing technical expertise, and ensuring that proposed projects adhere to the principles laid out in the 2007 Plan. Such a coordination mechanism would be beneficial to the Lower LA River Cities adjacent to the river, especially given the complexity of navigating a cross-jurisdictional environment.
- Option #2: Lower LA River Implementation Working Group. In the event stakeholders do not wish to form a new committee, the existing Working Group could transition into an Implementation Working Group following the approval of the Lower LA River Revitalization Master Plan. This would eliminate the barriers inherent in creating a new implementation body and ensure continuity between plan development and implementation.

FUNDING

As in the previous two planning efforts, stakeholder cities and agencies face the challenge of securing funding for revitalization efforts. In general, public agencies find it easier to acquire funding for the *creation* of parks than to operate and maintain those parks. Many grants allow project funds to be used on capital projects, such as building parks and developing open space, but in order to fund projects or amenities like educational programs, cities require flexible funding sources. In this section, we present three options to address funding:

- Option #1: State Funding. At the state level, California voters have approved many general obligation bonds that have funded water- and river-related projects over the years. Generally, state bonds are split among different regions that disburse the money to local agencies and developers through a competitive grant process. Funding Lower LA River projects through bond measures would reduce the impact on the local community, as it does not require river-adjacent cities to collect revenue solely from their constituents to adequately fund their projects.
- Option #2: LA River Recreation and Park District. Senate Bill 1374 (SB 1374) was introduced by Senator Lara in the 2015-2016 Session of the California State Legislature. The bill authorizes the creation of the Lower LA River Recreation and Park District, which would allow cities to band together to create a new public agency governed by an appointed Board of Directors. If formed, the Recreation and Park District would have the ability to levy taxes, borrow money, acquire property in the district by eminent domain (with approval from the affected jurisdiction's City Council).
- Option #3: Enhanced Infrastructure Financing Districts (EIFDs). In 2015, the Legislature enacted Assembly Bill 313 (AB 313), which authorizes municipalities to form Enhanced Infrastructure Financing Districts (EIFDs). EIFDs have the power to finance public projects through tax increment funding, which estimates future property tax increases on all properties in the district and diverts the increase in property taxes towards funding capital projects. That said, while the EIFD may have a substantial impact on the scale and type of new development in any given jurisdiction, it should not be the sole source of funding because new property values may not increase to anticipated levels and may not generate enough revenue for river-related projects.

SUSTAINED COMMUNITY ENGAGEMENT

The proposed community outreach process for the current plan is more extensive and multifaceted compared to the 1996 and 2007 Plans. One of the Working Group's goals is to achieve local buy-in for river revitalization efforts and encourage community-led projects. The stakeholder cities are home to different populations with different needs, and the conventional approach would be to let these cities conduct their own civic engagement efforts. The consequence of maintaining this status quo is that some communities may not have their voices heard or their needs adequately met when it

comes to plan implementation. The Working Group should consider two options to improve outreach:

- Option #1: Community Engagement Officer. One option to is to designate a Community Engagement Officer (EO) to oversee all river-related community engagement efforts. The EO would be the main point of contact for members of the public to voice concerns during the project planning and implementation processes. To ensure that communities are still engaged during the implementation stage, the EO would work with local agencies to inform residents about the progress of river-related projects and relay input from the community back to the appropriate agencies. The EO could be housed within any of the jurisdictions overseeing the river – the County (DPW or FCD), River LA, or the Recreation and Parks District (if formed).
- Option #2: Community Stakeholder Advisory Committee. Similar to the Citizens Advisory Committee established in the 1996 Plan, the Working Group should consider establishing a Community Stakeholder Advisory Committee to work with the LLARRMP's designated project manager, implementation body, and/or relevant government agencies. The Lower LA River Community Stakeholder Advisory Committee would be composed of representatives from different neighborhoods, community groups, non-profit organizations, and related entities throughout the 14 cities. This committee would serve as a public forum for the community stakeholders to gather and contribute their input into the project planning and implementation processes. During the planning and implementation process, each representative would be able to advocate community concerns to implementation bodies and relay back information to their communities for their feedback on proposed projects and initiatives.

RECOMMENDATIONS

After examining the 1996 and 2007 Plans and assessing the Working Group's current activities, we recommend the following three principles to guide the remainder of the planning and implementation processes:

1. Prioritize Local Needs through Sustained Community Engagement: The level of community engagement has increased with each successive plan since 1996, but community engagement is just as crucial during implementation to meet the community's ongoing needs. For example, specific LLARRMP project recommendations may change in scope over time (due to funding or time

limitations). Project developers and regulatory agencies must communicate regularly with community stakeholders and establish a formal channel for them to remain an active part of the process. Ultimately, community engagement is vital for successful revitalization of the LA River because it allows local voices to be heard and may play a significant role in minimizing gentrification and displacement.

- 2. Advocate for Increased State Funding: Even though there are several funding opportunities individual jurisdictions can pursue alone, these funds cannot fully cover the costs of projects and continued operations and maintenance. If the jurisdictions adjacent to the Lower LA River try to charge sales taxes or charge for river-related services, they may alienate local communities and squander good will for revitalization efforts. If the jurisdictions form an EIFD, funding will depend on whether a predicted increase in property taxes will materialize. For a project to serve the long-term interests of its users, jurisdictions need a steadier source of funding. The most reliable way to accomplish a steady funding stream, then, would be through state-sponsored rather than local or even regional mechanisms.
- 3. Establish Realistic and Appropriate Cross-Jurisdictional Coordination Mechanisms: Previous efforts to establish a JPA to oversee the implementation of river-related revitalization projects have fallen short twice in the past 20 years. This is understandable. Stakeholder agencies and jurisdictions do not wish to cede authority, especially in cases where new institutions or mechanisms may infringe on their sovereignty. The Working Group would benefit from promoting a more modest approach to cross-jurisdictional collaboration, where different mechanisms can be used to address different issues. The establishment of an informal coordination body or public forum like the RCC in the City of Los Angeles may be the most appropriate model for the Lower LA River given the number of jurisdictions, agencies, and other stakeholders involved.
- 4. Pursue Small-Scale, Short-Term Projects First: Historically, limited funding and a lack of cross-jurisdictional collaboration have been barriers to implementing large-scale revitalization projects in a timely manner. The longer it takes for the community to see projects move from early concept designs to completion, the less likely it is for local populations to politically or financially support subsequent projects. Small-scale interventions that do not require involved operations and maintenance such as the establishment of seasonal recreation zones,

installation of simple, strategically placed benches, or the commission of public artwork – can be low-cost ways to demonstrate progress on plan implementation. Engaging the community at the outset, either through planning education programs to explain how to pursue community-conceived projects or by convening workshops at the earliest stages of project design, can foster buy-in for both additional short-term projects, as well as larger and more costly projects later on.

CONCLUSION

The Los Angeles River is on the eve of an unprecedented transformation, and addressing the issues presented in this report will be no easy task. Yet, we challenge the cities along the Lower LA River to become models of social justice and equity. We encourage the Working Group to continue engaging Lower LA River communities and seeking novel ways to engage local institutions and communities in the planning process. In leading by example, the Working Group and the Lower LA River Cities can move the needle in ensuring that all communities have a fair and equitable chance to thrive.

TABLE OF CONTENTS

Acknowledgements	i
EXECUTIVE SUMMARY	ii
Table of Contents	xxxviii
List of Figures	xl
List of Tables	xliii
INTRODUCTION	
The Lower LA River	
Report Objectives	4
CHAPTER 1: GENTRIFICATION & DISPLACEMENT	6
Defining The Problem	6
Impact on Residential Communities	8
The Housing Market in the Lower LA River Cities	9
Residential Displacement Vulnerability Index	
Discussion and Recommendations	
Impacts on Small Businesses	27
The Importance of Small Businesses	
Context	
Demographic and Economic Effects	
Identifying High Priority Commercial Corridors	
Discussion and Recommendations	43
CHAPTER 2: COMMUNITY SPACE & ACCESS	47
Introduction	47
Current Users	48
Methodology	
Survey Results	51
User Types	53
Existing Amenities & Accessibility	61
Community Spaces	63
Amenities	64
Accessibility	81
Solutions Discussion	
Tactical Urbanism	113
Defining Tactical Urbanism and its Connection to other Challenges	

Tactical Urbanism Solutions for the Lower LA River	114
Strategies and Lessons Learned in Similar Case Studies	116
Conclusion	130
CHAPTER 3: PLANNING, IMPLEMENTATION & GOVERNANCE	132
Introduction	
Methodology	133
The Los Angeles River Master Plan (1996)	
Planning Phase	
Community Engagement	
Implementation Phase	137
Funding	139
Outcomes	140
Findings	142
The Los Angeles River Revitalization Master Plan (2007)	144
Planning Phase	146
Community Engagement	146
Implementation Phase	147
Funding	148
Outcomes	149
Findings	154
The Lower Los Angeles River Working Group	155
Planning Phase	155
Community Engagement and Outreach	157
Implementation Challenges and Opportunities	157
Recommendations	165
CONCLUSION	168
P. Guine and	1.00
References	
Appendices	177
Appendix A: Public Outreach from Bicycle and Pedestrian Master Plans	177
Appendix B: Survey and Observational Counts	185
Appendix C: 1996 Los Angeles River Master Plan Stakeholders	204
Appendix D: 2007 Los Angeles River Master Plan Stakeholders	205
Appendix E: 2017 Working Group Members	207

LIST OF FIGURES

Figure 1. Map depicting the Lower LA River cities 2
Figure 2. Median Rent: LA County & Lower LA River Cities (2011-2015) 10
Figure 3. Household Incomes in LA County and Lower LA River cities. Source
Figure 4. Vulnerability Index & Population Density
Figure 5. Vulnerability Index & Population Density, Focus Area 1
Figure 6. Vulnerability Index & Population Density, Focus Area 2
Figure 7. 2014 Dot Density Map of Jobs in LA County
Figure 8. Commercial corridors within 1-mile of the Lower LA river
Figure 9. Historic trends of disinvestment
Figure 10. Existing & Proposed Bikeways, Access Points, and Commercial Land Use 40
Figure 11. Commercial Corridors & Proposed Projects
Figure 12. Long Beach Commercial Corridors with All Factors
Figure 13. Graphic depiction of the Lower LA River Right-of-Way 48
Figure 14. Map of survey locations
Figure 15. Community members take survey on Tuesday, April 25, 2017
Figure 16. Survey respondent home zip code
Figure 17. Cyclists ride along the Lower LA river, April 2017
Figure 18. Commercial property separated from River Path by fence, barbed wire, and lighting
Figure 19. Equestrians ride along the trails that run parallel to the LA River Bike Path, April 2017
Figure 20. Residential properties adjacent to the Lower LA River, January 2017

Figure 21. Bike Path users on motorized vehicles, which is not allowed on the path, April 2017)
Figure 22. Bird flies over the Lower LA River, April 2017	1
Figure 23. Map of parks directly adjacent to and accessible from the LA River right-of-way	
Figure 24. Dominguez Gap Wetlands70)
Figure 25. Most common example of benches found along the Lower LA River	2
Figure 26. Shaded bench in Dominguez Gap Wetlands adjacent to bike path	3
Figure 27. LA River Path Benches74	1
Figure 28. Mile marker in Long Beach	ŝ
Figure 29. Cross-street signage at Rosecrans Avenue in Paramount, CA	7
Figure 30. Example of Los Angeles River Bikeway regulatory signage with graffiti	3
Figure 31. Density analysis of tree canopy within 300 feet of the River Path)
Figure 32. Map of Access Points to the Lower LA River Path	3
Figure 33. Access points by type	1
Figure 34. Unpaved access point at Hollydale Park and Century Boulevard	1
Figure 35. Stairway access point at Ralph C. Dills Park	5
Figure 36. Gates and fencing mark the LA River Path access point at Somerset Boulevard.	
Figure 37. Narrow access point adjacent broken glass and railroad tracks at Atlantic Blvd	
Figure 38. Bikesheds and existing and proposed bike infrastructure surrounding the Lower LA River	3
Figure 39. Metro's project map for the I-710 corridor bike path project	3
Figure 40. Picture of a 180 degree turn to access the Imperial Highway Bridge	Э

Figure 41. Narrow space for bicyclists on the Imperial Highway between two fences 99
Figure 42. Bridges along the Lower LA River and their access to the River Path 101
Figure 43. Above protected Bike Lanes on the Artesia Boulevard Bridge 102
Figure 44. River access points within walking distance of bus stops
Figure 45. Equestrian facilities along the Lower LA River
Figure 46. Local students work in a design charrette
Figure 47. A local student's park design proposal
Figure 48. Potential locations for Rio Vista parks
Figure 49. Low-flow crossings along the Cheonggyecheon
Figure 50. River goers enjoy the Seasonal Recreation Zone in Elysian Valley 122
Figure 51. "Community Living Room" Benches by Union de Vecinos and Steve Rasmussen Cancian and various community members around the City of Los Angeles
Figure 52. Graffiti artists from all over the globe coming together at the West Coast "Meeting of Styles."
Figure 53. Bell del Rio project team traffic mural in the City of Bell
Figure 54. Walk [Your city] signs installed on light poles in Raleigh, North Carolina and San Jose, California. Source: Walk [Your City]
Figure 55. 1996 Plan Management Structure
Figure 56. LA River Channel Jurisdictions

LIST OF TABLES

Table 1. Household Incomes in LA County and Lower LA river cities. Source. U.S. Censu Bureau; American Community Survey 2011-2015, 5-year business estimates	
Table 2. Risk Factors for Small Businesses	. 32
Table 3. Indicators for High Priority Areas.	. 35
Table 4. Park Needs in LA River-Adjacent Communities	. 64
Table 5. River Adjacent Park Amenities. Source. Los Angeles Countywide Parks & Recreation Needs Assessment	. 65
Table 6. Existing and proposed bicycle infrastructure accessible from Lower LA River access points	. 91
Table 7. Equestrian facility amenities along the Lower LA River	106
Table 8. Tactical Urbanism Approach to Revitalization.	114
Table 9. Number of Recommended Projects by City	139
Table 10. River-related projects along the Lower LA River since 1996	141
Table 11. 2007 Plan Task Force Member Agencies.	145
Table 12. Summary of LACFCD Permitting Requirements.	151
Table 13. Summary of USACE Permitting Requirements	152
Table 14. Plan Element Committees and Purposes.	156
Table 15. Current River-Adjacent Initiatives.	159

INTRODUCTION

This report was prepared for the Urban Waters Federal Partnership (the client), a member of the Lower Los Angeles River Working Group (Working Group), by students in the Masters in Urban and Regional Planning program at the UCLA Luskin School of Public Affairs. The Working Group, established by Assembly Bill 530 (AB530), is a planning body of diverse community stakeholders tasked with creating a plan for the revitalization of the Los Angeles River (LA River) from Vernon to Long Beach. At the time of this writing, the Working Group is nearly one year into the planning process. This report examines three key issue areas: the potential for gentrification and displacement, the benefits of employing small-scale, short-term interventions, and the need for sustainable, collaborative, and inclusive governance of River planning and implementation processes. It also offers strategies to further promote equity, improve well-being, and foster engagement of communities along the Lower LA River.

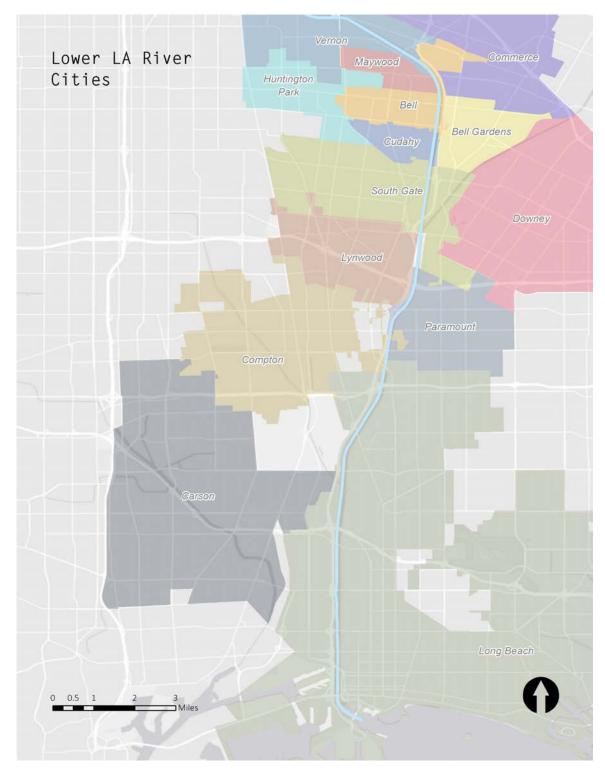


Figure 1. Map depicting the Lower LA River cities.

The channelization of the LA River in 1938, fundamentally altered the discussions and decisions made regarding the river's future. Subsequent years saw the rise of an

industrial landscape as stockyards, slaughterhouses, oil facilities, and automobile manufacturing proliferated along the riverside.² As manufacturing business grew, the river became the center of an industrial corridor. The Lower River has retained much of its industrial functions well into the 21st century, which has kept river-adjacent communities from viewing the river as a potential recreational asset.

The river-adjacent cities experienced a major demographic shift in the 1970s as manufacturing businesses closed or relocated. White middle-class employees who once lived near their jobs found opportunity elsewhere, while working-class communities of color remained. An influx in Hispanic and Latino immigrant populations occurred in the 1990s through the early 2000s.³ Today, the Lower LA River region is characterized by significant populations of Hispanic and Latino residents, low-income households, and residents with low educational attainment.

The Lower LA River Cities in our study area stretch across the lower 21 miles of the river and include the cities of Vernon, Huntington Park, Maywood, Bell, Commerce, Bell Gardens, Cudahy, South Gate, Downey, Lynwood, Paramount, Compton, Carson, Long Beach, and unincorporated Los Angeles County. (see Figure 1)

THE LOWER LA RIVER

The current Working Group planning process is the latest in a series of River-related revitalization efforts. Prompted by growing public interest in river restoration during the 1980s, the LA County Board of Supervisors established an Advisory Committee to examine opportunities to transform the LA River from merely a flood control channel to a regional community asset. This in turn led to the creation and adoption of the 1996 Los Angeles River Master Plan, which (in addition to addressing flood control issues) provided guidance on improving River aesthetics, creating additional green space, promoting economic development, and maintaining environmental assets.⁴ In 2007, the City of Los Angeles released the Los Angeles River Revitalization Master Plan. Building on the County's work a decade earlier, the City of Los Angeles placed stronger emphasis on community engagement and development, addressing issues of gentrification and the need to equitably distribute the proposed 240 projects along the 32-mile stretch of the LA River passing through its jurisdiction.

In 2015, Assembly Speaker Anthony Rendon (D-CA-63) introduced Assembly Bill 530 (AB 530) in the California State Legislature to establish the Working Group and develop a revitalization plan specifically addressing river-adjacent along the lower LA river.⁵ The bill

drew attention to the complex jurisdictional issues surrounding the Lower LA River, and invited 39 public agencies, non-profit organizations, and the 14 river-adjacent cities to transform the channel into a community asset. The Working Group's goal is to develop a revitalization plan that addresses the many needs of the different communities surrounding the Lower LA River with an emphasis on watershed education programs and conservation efforts. At the end of the process, the new revitalization plan is intended to be incorporated into a revised County Master Plan for the entire LA River, an effort that is currently spearheaded by River LA.⁶ The Rivers and Mountains Conservancy (RMC) and the Los Angeles County Department of Public Works (LACDPW) serve as the lead Working Group agencies, provide staffing and resources, and coordinate with consultants Tetra Tech and MIG to develop the revitalization plan itself.

One of the key members of the Working Group - and our client - is the Urban Waters Federal Partnership (the Partnership), a consortium housed in the United States Environmental Protection Agency that includes eight federal agencies, several state and county agencies, four cities within the watershed, the Gateway Cities Council of Governments (COG), the San Gabriel and Los Angeles Rivers and Mountains Conservancy (RMC), and selected non-profit and non-governmental organizations. The Partnership focuses on the entire length of the LA River and plays a strong role in coordinating planning activities along the Lower LA River with ongoing river-adjacent initiatives in the City of Los Angeles. Our project scope and objectives below reflect consultations with Pauline Louie, the Partnership's former Ambassador to the LA River Watershed.

REPORT OBJECTIVES

The purpose of this report is to inform the Working Group's river planning efforts by exploring the context in which Lower LA River revitalization is taking place and presenting implementation strategies to sponsor equitable development among river-adjacent cities between Vernon and Long Beach. As investment and development in the Lower LA River Cities increase, the risk of gentrifying existing communities and displacing residents and/or businesses grows. Both bottom-up and top-down planning strategies that include extensive community engagement will be required to address these concerns.

To that end, we aim to provide the Working Group with background and analysis for: (1) understanding the relationship between large-scale infrastructure investments and gentrification, (2) identifying local requirements and fostering community-driven project planning, and (3) promoting inclusive, collaborative, and sustainable governance

mechanisms among stakeholders during the master planning and implementation processes.

Specifically, this report seeks to answer the following research question: How can the Lower LA River Revitalization Master Plan and Implementation Strategy promote equity, improve well-being, and foster engagement among the communities along the Lower LA River? We address this question in three sections:

- Gentrification and Displacement: This section forms the foundation of our analysis. We attempt to quantify and visualize the potential threat of gentrification and displacement that large infrastructure developments and investments along the Lower LA River can bring to existing communities. We analyze the causes, effects, and potential impacts of gentrification on both residents and small businesses in the Lower LA River cities.
- 2. Community Access & Amenities: This section begins by identifying gaps in existing amenities along the River and barriers to accessing both the River and River Amenities. It then provides information and suggests strategies to empower local communities to promote a bottom-up planning and implementation process informed by community driven interventions to promote interim improvements, counter gentrification forces, and plan and implement projects outside a strictly formal governance model.
- 3. Planning, Implementation & Governance: This section draws findings from the two previous comprehensive river revitalization planning efforts the 1996 *Los Angeles River Master Plan* and the 2007 *Los Angeles River Revitalization Master Plan* and examines challenges and opportunities currently facing the Working Group. We then present recommendations based on our findings to guide the Working Group in developing more effective governance mechanisms during the implementation phase of the forthcoming master plan.

Addressing the issues presented in this report will be no is no easy task. Yet, we challenge the cities along the Lower LA River to become models of social justice and equity. In leading by example, the Lower LA River Cities can move the needle in ensuring that all communities have a fair and equitable chance to thrive.

CHAPTER 1: GENTRIFICATION & DISPLACEMENT

This purpose of this chapter is to assesses the potential for gentrification and subsequent displacement within the Lower LA River Cities as a possible consequence of river-related investment and provide recommendations to mitigate adverse effects. Our examination of the vulnerability for gentrification and displacement within the Lower LA River cities can function as a building block from which the Working Group or community stakeholders can position their advocacy, organizing, and dialogue when pursuing antigentrification strategies and anti-displacement policies. This chapter is divided into three sections:

Defining the Problem: Presents background on and definitions of gentrification and displacement drawn from previous gentrification studies in the Los Angeles metropolitan region, as well as those produced by leading anti-gentrification organizations, to develop initial definitions for gentrification and displacement.

Impact on Residential Communities: Investigates the potential impacts that river-related investments may have on residential communities, introduces a *Residential Displacement Vulnerability Index* for the Lower LA River Cities to assess which residential tracts are most at risk for displacement, and recommends counter-gentrification and anti-displacement measures.

Impact on Small Businesses: Examines how gentrification adversely affects small businesses and identify whether small businesses in the Lower LA River Cities are at risk of displacement; locates corridors that are most vulnerable to displacement; and recommends counter-gentrification and anti-displacement measures.

DEFINING THE PROBLEM

Los Angeles County (the County) has a history of disinvestment, racial segregation and environmental toxicity at the periphery of the urban core. The Lower LA River Cities fall within this marginal geography, where majority low-income communities of color occupy an area that lacks adequate parks and open space and has a poor bicycle and pedestrian network. The Lower LA River Revitalization Master Plan (LLARRMP) seeks to promote investment in amenities along the river, such as providing more (or enhancing existing) parks and open space, improving multi-use transportation infrastructure, and restoring river ecology. These investments and large-scale projects can be beneficial to riveradjacent communities, but such investments also may put the same communities at risk of gentrification and displacement.

Studies have found that proximity to parks and open space increases property values (in some cases, an increase of five to ten percent).^{7,8} Furthermore, research has identified both public and private large-scale developments as investments that may rapidly alter the landscape of a neighborhood, thus accelerating gentrification and displacement.^{9,10} In particular, new park space can cause an increase in surrounding property values by making neighborhoods more desirable.^{7,11,12} Active transportation infrastructure projects could also make areas more attractive places to live as they can help connect to important destinations, such as downtown job centers.¹³ Changes that occur within disinvested communities can lead to negative associations with otherwise beneficial civic improvements.

Our analysis looks at the potential impacts of neighborhood change in residential and commercial areas as a result of large-scale river-related projects. We consider Lower LA River Cities' vulnerability to gentrification and displacement by focusing on long-term renters and "mom-and-pop" shops that could be most affected by rising property values. Our research identifies where these vulnerable communities are located, and we provide strategies for confronting gentrification and displacement while delivering much needed amenities such as green space, improved transportation infrastructure, and access to a healthy ecosystem.

Coined in the 1960s, the term "gentrification" rose to prominence in academic circles during the 1970s and 1980s, yet definitions remain imprecise.⁹ One issue is determining whether the process of gentrification has either positive or negative outcomes. Gentrification can carry a positive connotation when referring to an increase in property values, an upgrade to housing stock, and the perception of increased safety and aesthetic appeal.¹⁴ Negative connotations refer to decreased social diversity, disruption of social networks, an increase in housing costs, and for low-income residents in particular, displacement.¹⁴

Given such ambiguities, we recognize that Working Group members and stakeholders in the Lower LA River Cities may not share the same definition of gentrification. Therefore, in order to analyze the potential for Lower LA River investments to result in gentrification and displacement, we must first define how we use these terms:

• Gentrification

We use the term gentrification to identify a process of neighborhood transformation that occurs in historically disinvested urban districts that are typically inhabited by low-income people of color. It is characterized by physical, economic, and cultural shifts that simultaneously attract more affluent and more educated residents. This shift in demographics - towards a more educated, affluent population - often in changes to the social character and culture of a neighborhood, as well as facilitate increases in rents and property values. The process of gentrification often is tied to large-scale urban revitalization projects that attempt to improve neighborhood appeal in locations that have been historically stifled by racism and disinvestment. As a result, low-income communities of color are disproportionately affected when large-scale infrastructure investments are made by government policies, private developers, and public-private partnerships.^{9,15,16}

• Displacement

Displacement is a negative outcome of gentrification. Direct displacement occurs when rising housing costs or land values price out existing residents and businesses. Indirect displacement occurs when a community loses vital and essential goods and services from the area, namely jobs, health care, social services, and community supports, such as family and cultural institutions. For businesses, indirect displacement may occur when newer and more well-resourced competing businesses come in, or when their customer base has moved and they are unable to cater to new clients. These types of rent increases, unaffordability, and changing conditions are often outside of the control of an individual, family, or business owner.^{9,16,17}

We believe that the definitions presented here align closely the principles adopted by the Working Group; furthermore, framing gentrification and displacement in these terms will allow us to examine approaches to mitigating their effects on vulnerable communities along the Lower LA River.

IMPACT ON RESIDENTIAL COMMUNITIES

Large infrastructure investments can improve overall quality of life and result in public health and environmental benefits for residents. The challenge, however, is to make sure that existing residents are able to enjoy these benefits even as property values and housing costs increase. Studies have found that residential populations most at risk for displacement are low-income renters of color because they are the most vulnerable to market pressures.^{16,18} Residents of color have fewer choices in the housing market because they tend to have "lower incomes, more limited access to mortgage credit, and [face] discrimination."^{16,18} Given the high percentage of low-income renters of color in the Lower LA River Cities, these communities are especially vulnerable to displacement.

In this section, we first analyze how increases in property values associated with riverrelated investments could impact the housing market in the Lower LA River cities. Then, we utilize a Residential Vulnerability Index to identify the communities along the Lower LA River where residents are most at risk of displacement. Finally, we discuss strategies to mitigate and prevent gentrification and displacement in the residential context.

THE HOUSING MARKET IN THE LOWER LA RIVER CITIES

Maintaining affordability in the housing market has been a challenging task due to steadily increasing rents across the region over the past five years. Average rents in the Lower LA River Cities increased by 10 percent between 2011 and 2015, which mirrors County rent increases over the same period. Still, average rents in the Lower LA River Cities are about 14 percent lower than the County average (Figure 2). This suggests that as rents throughout the County rise, areas with lower rents like the Lower LA River cities could become more attractive to new residents priced out of other areas. Households with relatively higher incomes can more easily afford to pay rents in an expensive housing market compared to existing low-income residents. The introduction of new or improved amenities could further increase the competitiveness of the housing market in the Lower LA River Cities. Consequently, existing low-income residents could struggle to compete in the new housing market and would be at risk of being displaced.

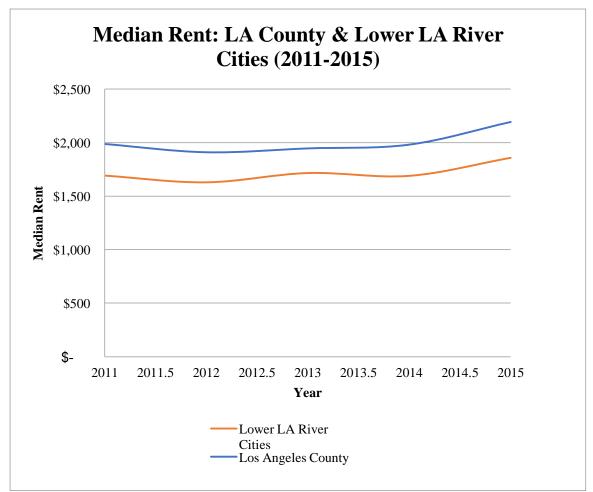
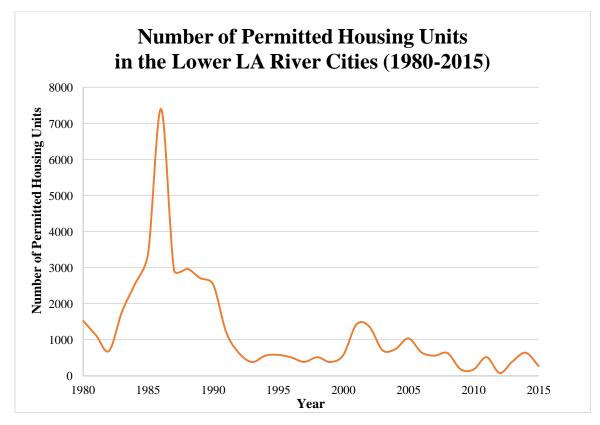


Figure 2. Median Rent: LA County & Lower LA River Cities (2011-2015).* Source. Zillow

*Shown in inflation-adjusted 2015 dollars

High demand for housing places further pressure on an already expensive market. Between 1980 and 2015, the population in the Lower LA River cities and County increased by approximately 30 percent. However, the Lower LA River cities have an average population density of 12,160 people per square mile compared to the County's population density of approximately 2,500 people per square mile. Some cities along the Lower LA River, like Huntington Park, have an even greater population density of 20,000 people per square mile. Problematically, the supply of housing stock has not kept pace with demand. Since the 1990s, the number of permitted housing units has decreased significantly. Between 1980 and 1990, an average of 2,500 housing units were constructed annually in the Lower LA River Cities, whereas between 1991 and 2015 the annual average of permitted housing units was about 580 (see Figure 3).





An increase in the affordable housing stock is necessary to ensure existing low-income residents are able to remain in their communities in tight housing markets. This is particularly important in the Lower LA River Cities, since the number of households earning less than \$35,000 increased by 22 percent between 1990 and 2015 while the number of middle-income households declined by five percent (Table 1). The Lower LA River Cities also have a high percentage of households that are substantially rent-burdened; about 32 percent of households spend more than 50 percent or more of their income on rent.

LOWER LA RIVER CITIES HOUSEHOLD INCOME							
	1990		2015		Change from 1990 to 2015		
	Number of Households	Percent of 1990 Total	Number of Households	Percent of 2015 Total	Growth in Households	Percent of Household Growth	
Less than \$34,999	100,606	30%	122,804	35%	22,198	22%	
\$35,000 to \$74,999	116,203	35%	113,831	33%	-2,372	-2%	
\$75,000 to \$149,999	88,391	27%	83,534	24%	-4,857	-5%	
\$150,000 or more	22,270	8%	26,713	8%	-1,057	-4%	
Total Households	332,970		346,882			4%	

Table 1. Household Incomes in LA County and Lower LA river cities. Source. U.S. CensusBureau; American Community Survey 2011-2015, 5-year business estimates.

RESIDENTIAL DISPLACEMENT VULNERABILITY INDEX

The *Residential Displacement Vulnerability Index* (henceforth referred to as "the Index") assesses communities along the Lower LA River to determine which communities are most vulnerable to displacement due river-related gentrification forces. Although we cannot predict exactly where gentrification will occur, we can identify communities that would be less resilient to upward pressures on housing prices. The Index is intended to establish a baseline of residential displacement risk to inform the Lower LA River Working Group planning activities as well as future gentrification-related research regarding these communities. In addition, the Index identifies which residential areas along the Lower LA River LA River Could benefit from interventions that minimize the potential for displacement due to future investment.

The Index builds on the methodology and data of the Urban Displacement Project (UDP), a UC Berkeley and UCLA collaborative research initiative measuring gentrification and displacement around major public transit-related project. UDP's methodology is based on existing knowledge of the demographic characteristics of communities where gentrification has already occurred as well as on an earlier report by the Center for Community Innovation titled *Mapping Susceptibility to Gentrification: The Early Warning Toolkit.*¹⁹ This report identified risk factors in the Bay Area; the UDP team adapted that knowledge to identify the factors that are most impactful in the context of Los Angeles County.

For our analysis, we first used UDP's demographic data to map residential vulnerability factors by census tract based on the following four indicators:

- Median Household Income (MHI): The median household income for the County is \$55,909.¹ We identified census tracts with a MHI less than 80 percent of the County median (i.e., less than \$44,727). We used this indicator because 80 percent of the County median income is a standard definition of low-income.²⁰ Additionally, low-income households are less able to thrive in expensive housing markets.
- Percent of Renters: The median percent of renters for the County is 53 percent. We identified any census tracts with more than 53 percent renter households. We used this indicator, because the Lower LA River Cities have a high percentage of renters. Additionally, renters tend to have lower incomes than homeowners and are less likely to be able to adapt to housing price increases.^{16,21}
- 3. Percent College Education: Thirty percent of Los Angeles County adult residents have a bachelor's degree or higher. We identified all census tracts with less than 30 percent of adult residents with a bachelor's degree. High educational attainment correlates positively with income, therefore those with low educational attainment tend to have lower-incomes, which limits their options in the housing market.
- 4. **Percent Non-White:** Non-white residents comprise 81 percent of the total Los Angeles County population. We identified all census tracts with more than 81 percent non-white residents. Non-white includes all race categories except non-Hispanic white. We used this indicator because people of color tend to correlate with a lower socioeconomic status.

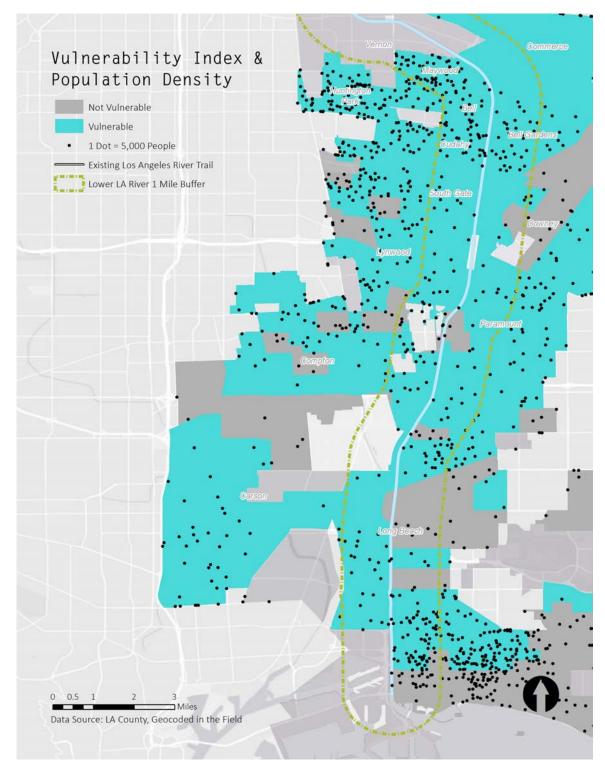
A neighborhood comprising low-income non-white renters without a college degree is more vulnerable to increasing housing costs. In other words, if a census tract meets at

¹ We used data compiled by the Urban Displacement Project, American Community Survey 5-year estimates 2013. All demographic numbers are from this data year.

least three of the four indicators described above, it would be considered vulnerable to gentrification and displacement. We also depict population density by census tract to indicate where there is a *higher concentration* of vulnerable residents. In our estimation, areas with higher density are likely to have multi-family residences or overcrowded single-family homes.

The following maps demonstrate that the majority of communities along the Lower LA River are vulnerable to displacement if property values begin to increase (see Figure 4). We identified these vulnerable areas by mapping population density within a half-mile of the Los Angeles River. The communities of Maywood, Bell, Cudahy, Bell Gardens (see Figure 5) and Long Beach (see Figure 6) are most vulnerable to displacement if major river-related investment were to occur. While it is clear that almost all communities near the Lower LA River need to implement policies to protect vulnerable populations from displacement, the communities we identify via this analysis are more likely to experience negative impacts in relation to Lower LA River investment if there are no protections in place and improvements result in property value increases. The following section discusses several policy options these communities could implement to proactively protect vulnerable residential populations from displacement.





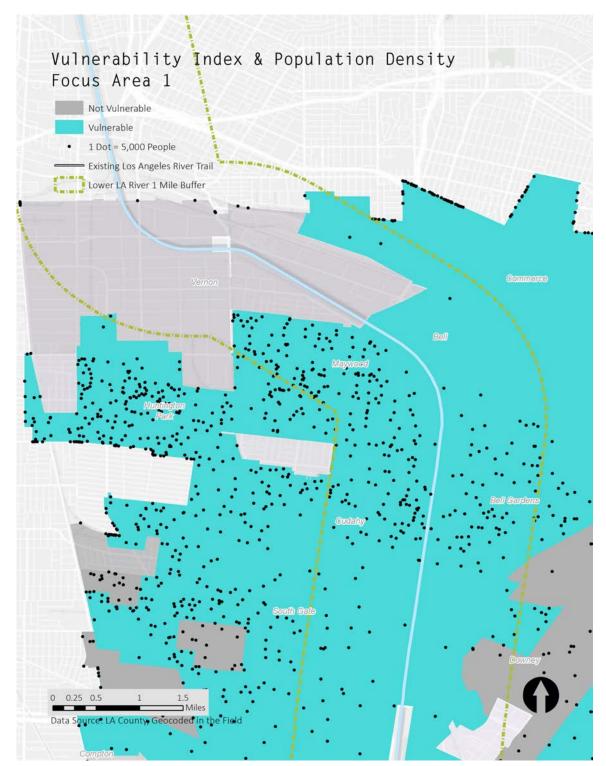


Figure 5. Vulnerability Index & Population Density, Focus Area 1.

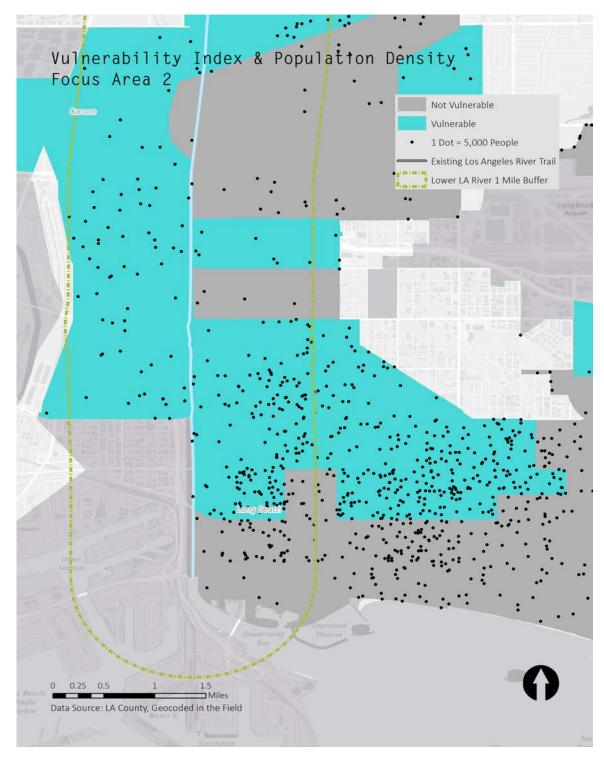


Figure 6. Vulnerability Index & Population Density, Focus Area 2.

DISCUSSION AND RECOMMENDATIONS

To protect the most vulnerable residents along the river, Lower LA River cities and the Working Group must consider strategies that can mitigate the potential consequences of river-related investments at the outset. Due to the complex process of gentrification, we recommend a combination of several mitigation and prevention tools. Our recommendations aim to support and protect existing renters as well as identify ways to fund and expand affordable housing options. Since gentrification is a slow process where long-term effects are not always apparent, we suggest creating policies or programs that can help protect vulnerable communities before gentrification has taken place. We have grouped our recommendation into three categories:

- Foundational Actions: These are strategies lay the groundwork for protecting tenants and generate funds for affordable housing development before gentrification begins to unfold. This helps reduce the risk of displacement for low-income renters before river-related investments are established and impact local housing costs.
- **Supportive Programs:** These programs are meant to educate and create resiliency for low-income renters of color.
- **Policy Enhancements:** Policy Enhancements are meant to expand on existing State laws to further promote and incentivize the development of affordable housing unit, while also increasing the overall supply of housing.

FOUNDATIONAL ACTIONS

• Adopt a Rent Stabilization Ordinance

Rent stabilization ordinances (also known as rent control) can help preserve the existing stock of affordable housing, especially in areas where there is not enough available land for new developments.¹⁰ Rent-stabilized units can also help maintain long-term housing security for low-income renters.²² Under rent control, rents are either fixed at a certain dollar amount or allowed limited yearly increases. The rent increases are typically decided on by a board or tied to the rate of inflation. There are also restrictions on what types of units rent control policies can apply to. Due to California's *Costa-Hawkins Act*, buildings constructed after 1995 cannot be covered by rent control measures. There is also a provision known as vacancy decontrol, which allows landlords to place a rent controlled unit at a market-rate price once a tenant has vacated the unit. Once a unit ceases

to be rent stabilized, it removes crucial units from the affordable housing stock. Therefore, vacancy decontrol can incentivize landlords to forcibly remove tenants (or harass existing tenants) to lease units to new tenants at market prices.

Rent stabilization ordinances work best when paired with other tenant protection policies, such as anti-harassment policies or rent review programs, which allow tenants to have landlord-tenant disputes reviewed by an impartial review board. Rent control policies have had mixed results in effectively mitigating displacement; some researchers have explained this is caused by a lack of eviction protections.²³ Additionally, rent control may limit the supply of rental housing because developers or landlords are not able to fully realize a return on their investment. Nevertheless, rent control ordinances can help preserve the existing affordable housing stock, especially in areas that are the most vulnerable to gentrification. For these reasons, we recommend that the Lower LA River cities with at-risk residential communities consider adopting rent control policies and tenant protection measures.

Establish Rent Review Boards/Programs

Several cities in the Bay Area, like San Leandro and Concord, have recently established rent review boards to address the rapid increase in rents and to protect tenants who may be negatively affected. Rent review boards (also known as rent mediation programs) can help support tenants by giving them a platform to voice concerns over rapid rent increases.

In both cities, the board is designed to act as a mediator between tenants and landlords whenever there are issues over rent increases and encourages the two parties to come to a voluntary agreement. However, since the board only acts as a mediator, their decisions are usually non-binding. Typically, the board is comprised five members: two tenants, two landlords and one city resident that is neither a tenant nor a landlord, who are all appointed by the city council. In the City of Concord, landlords who own properties with three or more rental units are mandated to participate in the rent review program, but single-family homes, accessory dwelling units, condominiums, and mobile homes are exempt from participating.²⁴ The City of San Leandro, allows the landlord or tenant to initiate a review concerning a rent increase that either exceeds 10 percent of the base rent, is greater than \$75 a month, or where the rent has been raised more than once in a 12-month period.²⁵

Both cities mandate that landlords notify tenants of the rent review program or else the rent increase is void. Additionally, there are steps that can be taken in both cities to resolve the issue that are facilitated by a professional mediator before it is reviewed by the rent review board, such as face-to-face mediation meetings between the landlord and tenant. However, if an agreement is not made before the dispute is reviewed by the board, then the board makes the final decision on how to resolve the problem.

Rent review programs can be resource intensive, which can pose implementation challenges for cities with limited funding sources. City staff would need to be designated to manage the program, and the city would need to hire professional mediators, both of which can be costly. In order to cover the costs of the program, the City of Concord requires landlords to pay an annual fee of \$16 per unit. This program could also potentially drive up the cost of housing if landlords are allowed to pass the costs onto tenants; cities should consider restricting landlords from doing so. Nonetheless, this program is important in establishing accountability for landlords seeking to maximize profits in a booming housing market. Rent review programs can help reduce a tenant's risk for displacement by giving them crucial resources to dispute unanticipated rent increases.

Create Community-Led Community Land Trusts

Many non-profit organizations and grassroots organizers view Community Land Trusts (CLTs) as one of the most effective ways of maintaining control over the affordability of housing in low-income neighborhoods.²⁶ CLTS are non-profit corporations holding 501(3)(c) status that are managed through a "dualownership model" wherein multiple owners are held equally responsible for all business decisions ("one-share, one-vote"). Land ownership allows CLTs to control property listing prices. Buildings are then leased to residents or landlords. CLTs also often provide other community benefits, such as community gardens and workforce training.

New development is rare since CLTs typically rehabilitate existing single-family homes, apartment buildings, condominiums, and commercial properties. Within residential properties, a variety of housing types can be established, including shared single-family homes and multi-family properties modeled as co-operatives. In any model, tenants are typically below the regional average median income (AMI). In the Northern California CLT, tenants are eligible for shared units if their household income is 25% to 45% AMI, condominiums at 60% to 80% AMI, and single-family at 65% to 100% AMI. CLTs support flexible and innovative housing types that meet the needs of a range of income circumstances.

While each CLT develops its own financial strategy, funding is usually through City and State mechanisms, although private foundations may provide additional support. The Community Land Trust Network suggests drawing support from federal programs such as the HOME Investment Partnership Program (HOME), as well as using the Low-Income Housing Tax Credit Program (LIHTC). Other models have sought funding through reallocating funds from Community Development Block Grants (CDBG) via the annual Notice of Funding Availability process.

CLTs preserve affordable housing, stabilize communities, and empower local organizations to merge as property owners who invest in their own neighborhoods. We recommend that existing and emerging community organizations establish CLTs to prepare for opportunities to acquire available property. At the same time, we recommend that cities openly support the creation of CLTs, reallocate funding mechanisms for CLT use, and recognize these corporations as priority developers within the community.

• Adopt Linkage Fees

While our research indicates that the Lower LA River cities need additional housing overall, cities have to provide sufficient funding mechanisms to allow for the production of low-income affordable homes. Linkage fees provide a mechanism for cities to raise revenue to fund the development of affordable housing, though they come with a set of considerations for city-by-city implementation.

First, individual cities determine fee schedules through a nexus study, which in and of itself can be cost-prohibitive. The nexus study analyzes the relationship between commercial and market-rate housing development projects. To develop a fee schedule, a nexus study considers the new employment required to support businesses, the households needed for new workers, the incomes distributed, and an estimate of those households that will need affordable housing.²⁷ Fees are then applied to new commercial projects to offset the development of affordable housing.

Furthermore, linkage fee ordinances are typically accompanied by the creation of an Affordable Housing Trust Fund account within which to deposit incoming fee payments, and from which to allocate funds in support of new affordable developments or rehabilitation of existing affordable projects. Both the nexus study and administrative resources needed to operate an Affordable Housing Trust Fund require capital and capacity. Therefore, our recommendation is specifically for cities that feel they are capable of pursuing a linkage fee program.

For cities that have a history of disinvestment, it may feel counterintuitive to impose fees upon much needed investment and development. Yet linkage fees are an effective tool in producing affordable housing in the Lower LA River Cities. Pursuing the establishment of linkage fees *now* would earmark funds for affordable housing in the future. For example, the City of Los Angeles estimated it would generate between \$75 million and \$92 million per year through affordable housing linkage fees.

Given these considerations, we recommend that cities immediately pursue a nexus study as a first step toward adoption of a linkage fee. Where a Lower LA River City finds that such an ordinance would not infringe upon investment opportunities and the political will to pursue such an ordinance is present, we recommend establishing linkage fee ordinances on all commercial and industrial developments.

• Adopt an Inclusionary Zoning Ordinance

Inclusionary zoning mandates that developers build a certain percentage of affordable units within a market-rate development. Where housing markets are strong, mandates for inclusion tend to produce more affordable units than voluntary programs.²⁸ Inclusionary zoning programs are most successful when they are coupled with incentives to offset costs for developers, including density bonuses and fast-track permitting.²⁸ In addition, providing flexible compliance options such as off-site production and in-lieu fees can reduce barriers for potential developers.²⁸

Inclusionary zoning signals a city's commitment to developing affordable housing, but California law limits inclusionary zoning to for-sale single-family homes and condominiums. Were new for-sale projects to be developed, having an inclusionary zoning policy in place would secure affordable units and support a mixed-income demographic. We recognize that the policy may be more beneficial were it to apply to multi-family rental properties. Therefore, while we recommend assessing potential and existing municipal programs to develop a comprehensive inclusionary zoning policy for for-sale properties, the result may not be as significant in producing an adequate quantity of affordable housing units.

SUPPORTIVE PROGRAMS

• Develop or Expand Rental Assistance Programs

Rental assistance programs can provide low-income renters with the financial resources needed to obtain safe and quality housing and to remain in their current homes during times of particular economic hardship. These programs offer short-term financial assistance services that can help low-income tenants pay for security deposits, rent, or other housing costs. The most common form of rental assistance includes Section 8 housing vouchers, but programs such as California's Low-Income Home Energy Assistance Program, which disburses financial aid towards paying utilities, can help lower overall housing costs. We recommend that State or Federal funding grants be developed for rental assistance programs that prioritize funding for the Lower LA River communities at risk for displacement and assist existing residents adjust as rents potentially increase.

The City of South Gate is one example of a jurisdiction currently receiving the Community Development Block Grant, which provides federal funding for local housing activities and community development. South Gate has used these funds for efforts such as assisting people who are at risk of becoming homeless in finding homes, holding educational workshops on tenant and landlord rights, and providing other general housing assistance. These types of grants can help build the capacity for the Lower LA River Cities to provide their residents with important rental assistance programs.

• Develop or Bolster Rental Rights Counseling Programs

Rental rights counseling can help educate tenants of their rights covered by state and local laws, which is particularly important for low-income renters of color who might have less access to this type of information. Counseling can give tenants the necessary knowledge to combat unjust housing practices and better prepare them in taking the appropriate steps in contesting any issues with their landlords or leases, such as rent increases. Landlords should also be eligible to receive counseling so that they aware of their rights and responsibilities under state and local law. This can help encourage the maintenance of safe and legal housing standards for the properties they own or manage. Most rental rights counseling services are administered by non-profit organizations. We recommend that cities create partnerships with these organizations in order to collaboratively deliver counseling services to tenants and landlords.

• Partner with and Support the Development of Renters' Advocacy Groups Partnering with community organizations and advocacy groups in the early stages of planning builds pathways to projects that meet the needs of vulnerable populations. Partnerships go beyond the standard legal requirements of public engagement events and strategies. The practice involves ensuring that organizations representing at-risk residential populations have adequate opportunity and accessibility to all planning discussions and that they share power to make decisions. Communities may not have such organizations established within the Lower LA River Cities. In cases where organizations are not present, cities can cultivate local leaders within communities through community-based training for residents that prepare citizens for effective participation in the revitalization process.¹⁸ Additionally, cities should actively and openly seek input from local community organizations or, more specifically, renter advocacy groups that work in housing rights.

We recommend that the Lower LA River cities build relationships these organizations as soon as possible to invite critical dialogue about the Lower LA River Revitalization Plan and any subsequent projects to improve river amenities. As an anti-gentrification tool, empowering community members increases their capacity to take action and builds trust between city and citizen.²⁹

POLICY ENHANCEMENTS

• Adopt a Strategic Density Bonus Policy

For many years, the State has encouraged the development of affordable housing by allowing cities to grant a density bonus to developers that reserve a certain number of affordable units for low-income residents. In 2017, the Legislature amended the State Density Bonus Law to expand upon eligible housing types, streamline the process of density bonus review, and clarify implementation of replacement units when affordable housing is demolished to prepare for a new development.

Although the State Density Bonus Law encourages the development of affordable housing, some argue that greater incentives should be provided by cities to encourage enough development to address the State's current housing shortage.³⁰ We recommend that the LA River Cities consider adopting a more

aggressive density bonus ordinance to create incentives that encourage production of affordable housing units. The incentive structure should go above and beyond the State Density Bonus Law, presenting greater increases in incentives as more affordable units are set aside. Cities should prioritize projects adjacent to amenities such as parks, rails-to-trails, river access points and transit stations to safeguard accessibility to affordable housing near civic amenities and services.

• Encourage the Development of Accessory Dwelling Units

Senate Bill No. 1069 took effect on January 1, 2017 and has been credited as a law that further reduces barriers, streamlines approval, and expands capacity to accommodate the development of accessory dwelling units (ADUs) throughout California.³¹ These types of housing, (also known as secondary units, in-law units, or "granny flats,") are dwelling units built on property of existing single-family homes. The units may be attached or detached from the primary home, or may be repurposed from existing space within the primary home or accessory structures.

Producing small-scale infill developments can meet a diverse range of housing needs (for example, by students, elderly, or young professionals) and provide a new revenue stream for property owners. The Terner Center for Housing Innovation at University of California Berkeley identifies three actions that can lead to successful ADU implementation:

- Reform zoning regulations (particularly minimum lot size and floor area), design review, and owner occupancy requirements,
- o Waive permit or utility connection fees, and
- o Provide education technical assistance to homeowners.

Homeowners face financial challenges when initiating an ADU project. Of the ADU homeowners surveyed, the Terner Report finds that only 4% used loans and, of that small percentage, a majority were from regional banks and credit unions. As national banks are less likely to loan against future values of unbuilt ADUs, local lenders are situated to understand the regional context of ADU development and therefore have the most potential to support an influx in ADU construction financing.

Given the urgent need for additional housing both in the Lower LA River cities, we recommend that river-adjacent cities pursue code enforcement strategies while

also promoting the development of ADUs. Many of the Lower LA River Cities have limited capacity and may not be able to regularly conduct resource intensive practices such as ADU code enforcement. Therefore, we recommend focusing on the habitability of existing ADUs to protect those that reside in secondary units from unsafe living conditions. Promotion of ADUs could consist of outreach materials to inform residents of the opportunities and benefits of adding ADU to their homes.

IMPACTS ON SMALL BUSINESSES

Most studies on gentrification focus on the effect on residents and housing markets. At the same time, small, locally-owned businesses are an integral component of the character of a neighborhood and face similar threats when neighborhoods gentrify. Small business act as community hubs, provide informal services (such as offering small lines of credit and other less-tangible social and cultural capital to community members), and are invested in their neighborhoods as residents and business owners.^{32,33} On average, 60 percent of businesses in the Lower LA River cities have between 1 and 4 employees, and nearly 80 percent have between 1-9 employees (for the purposes of this report, these enterprises will be referred to as "small" businesses).³⁴

There are many ways to identify the early signs of gentrification in the commercial context: the attraction and introduction of larger retail chains and national franchises, the introduction of small boutique stores, increasing land values, or an increasing number of projects to beautify the streets or building facades. No one factor alone is indicative of imminent neighborhood gentrification. In fact, any of the aforementioned factors can individually be identified as the revitalization of a neighborhood and of investments in a neighborhood that are needed. The danger of unchecked revitalization concerns the potential negative impact on existing small business owners.

In this section of our report, we examine the risks associated with gentrification in small business communities and along commercial corridors in the Lower LA River Cities. Next, we employ a mixed-methods approach to explore the current state of small businesses along the Lower LA River and assess whether they align with the risk factors identified in the literature. From this, we then analyze which commercial corridors are specifically at risk of gentrification and displacement due to historical factors, proposed amenities, and projected river related improvements and developments. Finally, we recommend measures to mitigate gentrification and displacement of small businesses in the Lower LA River cities and support the business assets that are presently in the community.

THE IMPORTANCE OF SMALL BUSINESSES

Small business owners are invested in their communities as both business owners and as residents since they are more likely to live in the same neighborhoods that they serve.³⁵ That means that when small businesses are hurting, community residents are hurting too.

Women and minorities, two groups that are typically underrepresented in the business environment, are well represented in the Lower LA River Cities. Women-owned businesses account for 40.5 percent of all firms in the Lower LA River Cities and minorityowned businesses account for 72 percent of all firms.³⁶ While the proportion of womenowned businesses in the Lower LA River cities is only slightly higher than the County (38 percent), the proportion of minority-owned businesses is well above the County rate.³⁷

The health of small businesses and commercial corridors can serve as a litmus test for the economic health of a neighborhood and as a measure of economic empowerment. Overall, these cities represent tremendous opportunities to strengthen populations that are historically disadvantaged if resilience and equity can be successfully integrated into the Lower LA River Revitalization planning, outreach, and implementation process.

CONTEXT

Some small businesses may experience gentrification differently compared to others. Those that can remain in place as neighborhoods gentrify will be able to enjoy increased revenues from a more affluent customer base. Others will struggle to meet the demands of a new customer base and may ultimately be displaced by their inability to compete with new businesses that cater to evolving tastes. In addition, some may be unable to afford the increasing rents that may result from rising local property values. In order to understand how gentrification could unfold in the Lower LA River Cities, we present the context and historical events that have created the conditions we see today. Next, we analyze the mechanisms through which gentrification and displacement operate in the commercial environment. Finally, we present the risk factors that make small businesses more vulnerable displacement as neighborhoods gentrify.

The way in which gentrification impacts and affects a neighborhood is contingent upon the history and context of a place. Here we present three key conditions that have helped to form the social, economic, and physical landscape that is present in the Lower LA River Cities today:

1. A History of Disinvestment

In the 1930s, the Home Owners Loan Corporation (HOLC) created a set of maps that guided real-estate investments and deemed certain neighborhoods safe or unsafe for investment. The rating system created a systematic way to undervalue neighborhoods that were dense, racially/ethnically mixed, and aging.³⁸ In LA County, several neighborhoods fit this description. As a result, families that lived in areas that were "redlined" (i.e., deemed by the HOLC unsafe for investment), were prevented from obtaining loans to purchase homes. Over time, this mortgage discrimination contributed to the racial/ethnic segregation of neighborhoods and facilitated the decay of "redlined" neighborhoods, affecting residents and businesses alike. Families in "redlined" areas were unable to accumulate wealth through the housing market, meanwhile families that benefitted from these loans were living in the suburbs and enjoying a growing tax base and increase in property values. These actions created the conditions where investment avoided redlined communities, creating lasting concentrations of racial minorities and poverty.

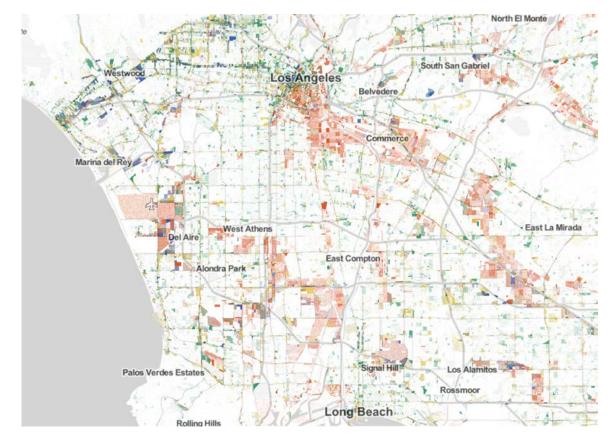
2. Land Values are Lower Relative to the Region

As stated earlier in this report, the median price for a home among the Lower LA River Cities ranges from \$357,800 in Compton to \$550,600 in Long Beach, which is below the median LA County home price for a home of \$563,400.³⁹ There are similar trends in the price per square foot for retail properties. In LA County, the median asking price per square foot for retail space is \$25.89, whereas the median asking price per square foot for retail space in the Lower LA River Cities is generally lower; for example, the median asking price per square foot for retail space in Cudahy is \$19.52.⁴⁰ Lower LA River investments, improvements and developments may begin to drive up these costs and make it increasingly challenging to afford to run a business in this area.

3. Proximity to the Downtown Urban Core and Jobs

The major job centers in the region are located in and around Downtown Los Angeles, near the Los Angeles Airport, and along the Wilshire Corridor into Santa Monica (see Figure 7). LA County residents are putting a higher price on living in urban environments and being closer to jobs. Even the mere planning of projects (months or years before their anticipated completion dates) that seek to fill the gaps in the transit network along the Lower LA River, namely bike routes, can draw interest to an area. Indeed, the top reasons people move are associated with increased amenities & services, proximity to work, and proximity to mass transit.⁴¹ Completion of LA River-related mass transit and active transportation projects will create a more desirable neighborhood with easier access to regional job centers.¹³ Of critical importance is the Los Angeles River Bike Path Gap Closure Project, which will close a major gap in the river bike path that will eventually connect the Lower LA River to Downtown Los Angeles.⁴² The ability for workers to commute along the LA River Bike Path can drive up demand for housing in these areas from the region.

Figure 7. 2014 Dot Density Map of Jobs in LA County. Source. Robert Manduca, Where are the jobs?



DEMOGRAPHIC AND ECONOMIC EFFECTS

A business owner may decide to open their establishment where they feel there is an unmet need that they can serve or where they see future promise for a customer base.⁹ However, gentrification processes can disrupt the initial calculus made by business owners. A neighborhood that begins to see significant shifts in the demographic and economic profile of the community means that small businesses can potentially lose their

core customer base. However, these changes can be beneficial if small businesses are agile enough to respond to the tastes of a new customer base and are thus able to compete with new businesses that may come in. If they are unable to keep up with new consumer preferences, small businesses may become irrelevant in a changing economic environment or they may be priced out due to increases in rents that are associated with an increasingly affluent area.³³ The following two mechanisms summarize the ways in which gentrification can manifest in the small business environment.³³

• Changes in Consumer Demand

Retail preferences are closely linked to wealth, education, and race/ethnicity. Shifts in any of these characteristics could spur changes in the neighborhood consumer demand. For some small businesses, changing demographics in the neighborhood could bring in a much-needed revenue stream to keep their doors open. For others, they may become irrelevant and thus lose business when their targeted consumer base is displaced.

• Increases in the Cost of Doing Business

Higher rents are one of the initial changes that will make it more expensive to operate a business in a gentrifying neighborhood. Running a business could become unsustainable if revenues do not rise to cover leasing costs. High costs in rent can also deter entry into a neighborhood, which could result in vacancies remaining vacant for longer periods of time.

DISPLACEMENT RISK FACTORS

To find out how gentrification pressures affect businesses, researchers have examined data at the establishment level and studied the turnover rates of businesses in gentrifying areas.^{33,43} Studies suggest that there are several risk factors that can measure small business displacement potential:^{13,44,45} whether small business owners lease space, if leasing agreements are informal rather contractual, and whether small business owners aware of available resources to assist in expansion (Table 2).⁴⁶ Small business owners may have one, two, or all of these risk factors. The next section will examine the indicators that demonstrate that gentrification may already be occurring in a neighborhood.

Table 2. Risk Factors for Small Businesses

RISK FACTORS FOR SMALL BUSINESSES	
Business Owners as Tenants	Business owners that lease their properties are vulnerable to changes in the real estate market and property values.
Informal Leasing Arrangements	Business owners in surrounding communities have revealed that they lack a formal lease agreement or have been denied a formal lease with their landlord. Business owners in this situation may be at a disadvantage if or when these handshake / verbal agreements are contested.
Unawareness of Available Resources	A survey women- and minority-owned small businesses conducted by the Long Beach Innovation team found that several business owners are not aware of the local resources that may be available to them to help their business grow and thrive. (Long Beach surveys) A lack of knowledge of businesses resources can be make small businesses vulnerable when markets begin to change and they are unable to gain access to resources that can assist them in meeting new consumer demands.

FINDINGS

In order to understand the experience of small businesses in the Lower LA River Cities, we conducted surveys and informal interviews with small businesses along commercial corridors located within one-mile of the Lower LA River. We chose to examine businesses within this boundary to align with the one-mile boundary used by the Working Group. We focused on businesses that were in walkable commercial corridors, which have been linked to gentrification.⁴⁷ Walkable neighborhoods generally are characterized by streets that have minimal setbacks, and where there is a strong sense of enclosure that can be facilitated by trees, structures, or the overall urban design of a place.⁴⁸

We asked business owners, managers or knowledgeable employees to take a brief survey. Given that several of the small businesses we encountered were family-run or had fewer than four employees, persons running the store were generally knowledgeable enough to answer the survey questions. If they declined for any reason, we asked to conduct an informal interview. These survey and interviews yielded five key findings:

1. Lease terms are relatively short and relationships and agreements with property owners are often predicated on informal, handshake deals.

Survey respondents indicated that they rented their commercial space. Most small business owners indicated that they were either on a month-to-month lease or had a one-year lease. This type of lease agreement makes small businesses more vulnerable to rent increases and market changes. For example, one small business owner's 3-year lease recently expired and now she is on a month-tomonth agreement with her landlord. Recently, the landlord served notice to increase her rent; since the small business owner would be unable to pay the new rent amount right way, the landlord agreed to incrementally increase the monthly rent to the desired amount over the span of several months. An employee of this same business expressed that the landlord believes the area is quickly going to become desirable and attract new businesses in the coming year. Several other business owners stated they have informal arrangements or agreements with their landlords as well, which can lead to almost immediate displacement if the landlords choose to ask for increasingly higher rents.

2. Rents continue to increase despite a high number of vacancies.

Most major corridors in the Lower LA River Cities feature several commercial vacancies. Businesses in these areas have weathered many challenges in recent years such as the recession in 2008 and immigration raids that have scared away clientele. Despite the slow growth of the economy, several small business owners said that rents continue to rise. To pay these higher rents, some business owners work second jobs or are using earnings from their spouse's income.

Commercial corridors with vacant storefronts (and resulting low property values) invite real estate speculation from outside investors. One business owner shared that his landlord was excited about new construction and new businesses coming into the neighborhood, which would make the area boom. Other landlords may feel the same way and could potentially be sitting on vacant properties waiting until they can lease to tenants that can afford higher rents.

3. Business owners are concerned about the cost of permits and city related fees.

Another common theme concerned the various permitting costs they incurred to start a business or conduct daily operations. Some small business owners expressed that they felt that the city is finding ways to impose new fees to raise municipal revenue. One woman expressed that the city was recently imposing new fees on practices that were previously allowed. Others felt that cities were motivated by profit and that new permits for mobile vendors could unfairly hurt their brick and mortar business.

4. Small business owners live in the same communities that they serve.

An overwhelming majority of small business owners that we spoke with live in the same neighborhoods they serve. Several have lived in these communities for well over 10 years.

5. Small business owners are unaware of Small Business Associations (SBAs) and/or are unable to access financial resources and capital.

Most interviewees were unaware of available small business resources or support services in their cities. One small business owner talked about the vicious cycle of trying to apply for a loan to update her merchandise in her store. In order to complete a successful application for a loan, a business owner would need to prove they earn enough in revenue to pay back the loan, yet the business owner can't earn more in revenue without updating the store's merchandise. Small business owners feel that the cities currently are not serving their needs. This sentiment was also reflected in a previous survey of women- and minority-owned small businesses in Long Beach, conducted by the City of Long Beach's Innovation Team, that found that 43 percent of those surveyed expressed that the city was doing a poor job of supporting small businesses.⁴⁹

IDENTIFYING HIGH PRIORITY COMMERCIAL CORRIDORS

We use three criteria to identify commercial corridors that are most vulnerable to displacement (Table 3): (1) communities that have experienced historic trends of disinvestment; (2) areas in close proximity to an existing LA River access point and Lower LA River related active transportation; and (3) areas in close Proximity to proposed LA River related park developments. These corridors are classified as high priority areas and are mapped below.

Table 3. Indicators for High Priority Areas.

INDICATORS FOR HIGH PRIORITY AREAS		
Historical Trends of Disinvestment	Historic redlining maps produced by HOLC in the 1930s is a proxy to represent areas that witnessed significant periods of disinvestment. The redlining maps categorized communities in one of four ways: A) First grade (best); B) Second grade (still desirable); C) Third grade (definitely declining); D) Fourth grade (hazardous). ³⁸ Areas that received a C or D were included on the map.	
Existing and Proposed LA River-Related Active Transportation Investments	Business owners in surrounding communities have revealed that they lack a formal lease agreement or have been denied a formal lease with their landlord. ⁵⁰ Business owners in this situation may be at a disadvantage if or when these handshake / verbal agreements are contested.	
Proposed LA River Related Developments and Investments	A survey women- and minority-owned small businesses conducted by the Long Beach Innovation team found that several business owners are not aware of the local resources that may be available to them to help their business grow and thrive. ⁴⁹ A lack of knowledge of businesses resources can be make small businesses vulnerable when markets begin to change and they are unable to gain access to resources that can assist them in meeting new consumer demands.	

First, we identified the commercial corridors that fell within a 1-mile boundary of the LA River. (Figure 8) Retail corridors were identified by isolating land uses that included commercial, retail, and mixed urban uses from an LA County land use inventory map. We chose the 1-mile boundary with the assumption that these are the businesses that will most directly feel the impacts of river-related investments and developments. The Lower LA River Working Group is also utilizing a 1-mile buffer in their planning projects and proposals. There are still key corridors that fall within a 1-mile buffer from the river in the cities of Long Beach, Bell Gardens, Bell and Maywood. This map shows the locations of commercially zoned properties and where there may be an abundance or scarcity near the river.

The next map (Figure 9) depicts areas that were deliberately targeted for systemic disinvestment based on the classifications created by HOLC. Lending practices by HOLC based on these maps had implications for the entirety of neighborhoods beyond the housing market. An inability for communities of color that moved into these neighborhoods to build wealth and the loss of an affluent tax base due to white flight to the suburbs created a spiral of decay in these communities that affected all aspects of the neighborhood, including commercial and retail environments.³⁸ There is significant

clustering of areas that are redlined in the cities of Long Beach, Lynwood, parts of South Gate, Huntington Park, and Maywood.

The following map shows the current Lower LA River access points, the existing bikeway network, and LA County Metro's proposed Rail-to-River project (Figure 10). This map represents the current and proposed improvements to the active transportation network. These types of improvements can make an area more attractive to the region. With this map we are demonstrating the ways in which active transportation is expected to grow. River access points are clustered near Downtown Long Beach. A second cluster of access points are near Paramount, Lynwood, and South Gate. Current Rail-to-River projects, which will connect the LA River bike path to the nearest Metro Blue Line stations via bike lanes are clustered in the northern section near Vernon, Bell, and Maywood. These are significant developments given the ways in which they can potentially serve as a gateway to connect to the City of Los Angeles, more specifically the downtown area jobs.

Areas that are rich in both river access points and commercial land uses, such as Downtown Long Beach, have not received such attention from Metro. However, the City of Long Beach is spearheading the creation and extension of an extensive bike network in the City.

The next map (Figure 11) shows where there are currently planned developments or improvements related to the Lower LA River. The creation of parks and open space has been linked to increases in land values.⁸ Therefore, we examine where these projects are planned along the Lower LA River. Of the seven currently proposed projects, five are within the City of Long Beach with a small cluster of three near the mouth of the River. The two other projects are in or near the City of South Gate.

The final map (Figure 12) provides a snapshot of where gentrification and displacement may occur. The LLARRMP process is currently underway and is a dynamic process that may foster further improvements or projects along the river. The final map combines all of the factors presented throughout this section to visually identify high priority areas. We conclude that commercial corridors most vulnerable to gentrification and displacement facilitated by Lower LA River investments and improvements are:

- 1. Long Beach
 - a) Downtown Long Beach
- 2. Maywood
 - a) Atlantic Boulevard

This analysis is not a prediction nor does it suggest a foregone conclusion. Rather, our approach provides the Working Group and the cities along the Lower LA River with a starting point to anticipate possible outcomes and ensure small businesses are resilient to changes that may come with river revitalization.

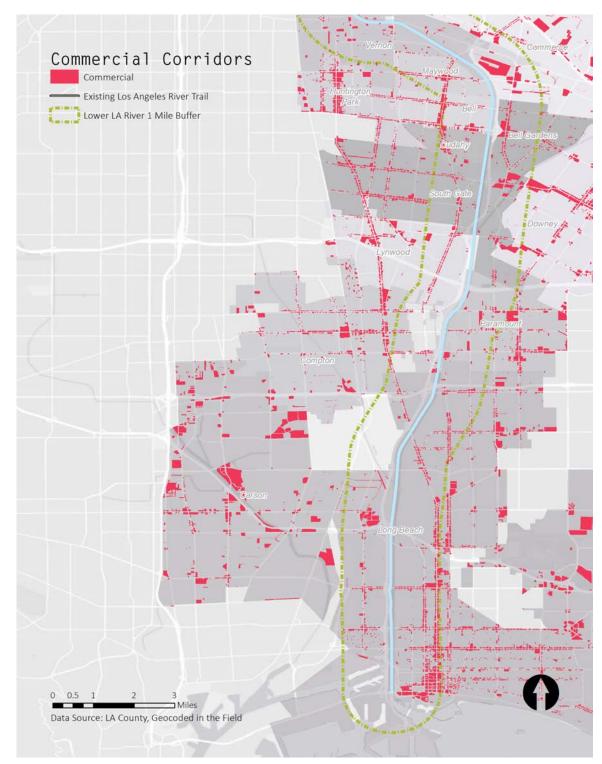
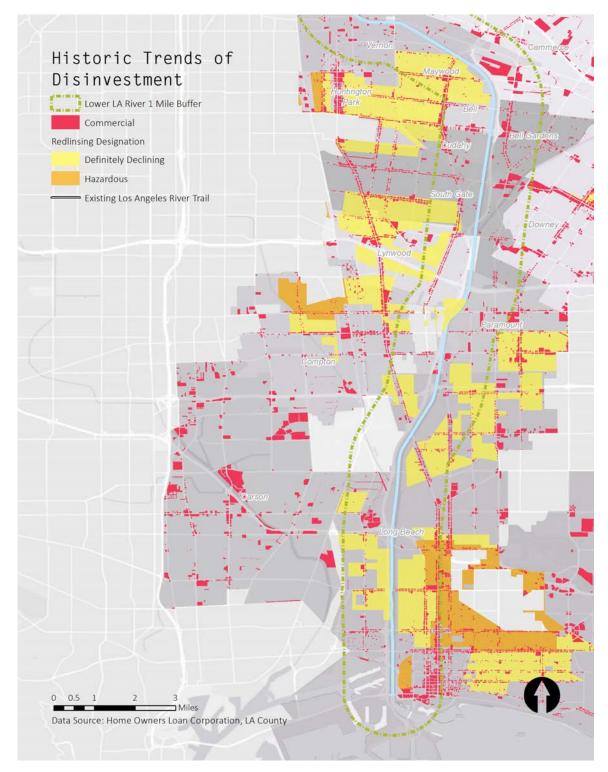


Figure 8. Commercial corridors within 1-mile of the Lower LA river.

Figure 9. Historic trends of disinvestment.



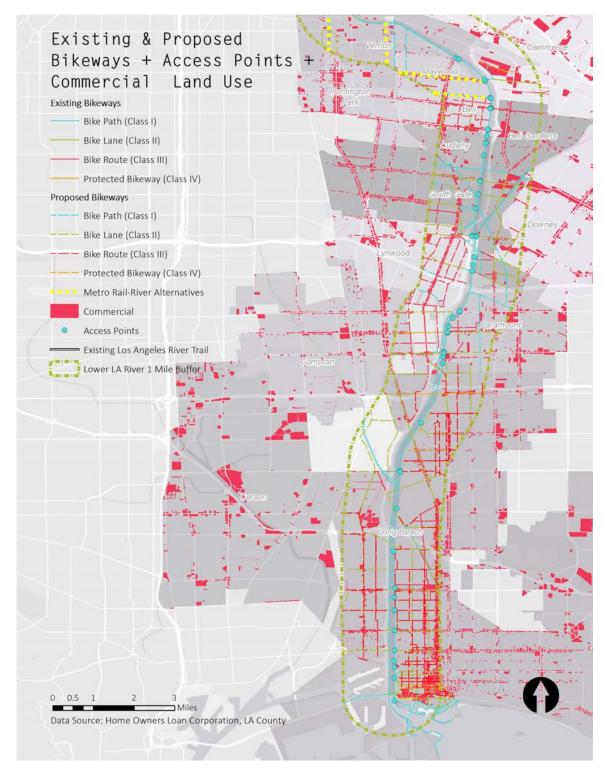
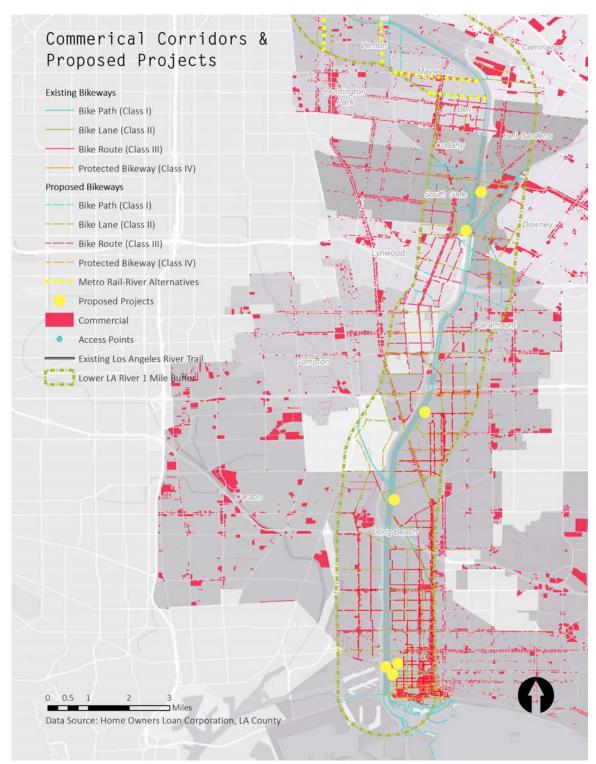


Figure 10. Existing & Proposed Bikeways, Access Points, and Commercial Land Use.





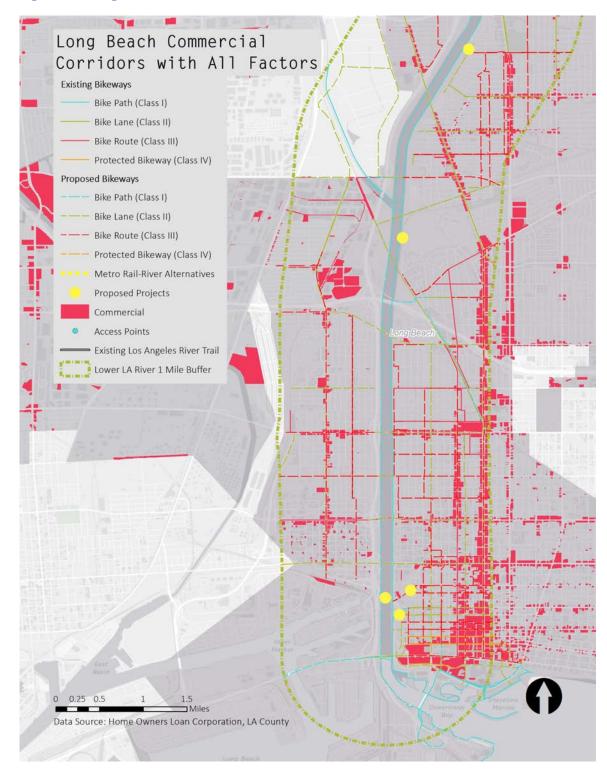


Figure 12. Long Beach Commercial Corridors with All Factors.

DISCUSSION AND RECOMMENDATIONS

Addressing the negative consequences of gentrification and displacement is complex and requires ongoing proactive and reactive strategies. To that end, we have framed our recommendations with respect to when – either during the planning phase or implementation phase – the Working Group and Lower LA River Cities should pursue particular initiatives. Additionally, we acknowledge that there is no "one size fits all" approach. Cities that are concerned with gentrification should use these recommendations as a guide and adapt strategies to local contexts. Cities should begin with an analysis of the potential risks in their own communities and subsequently identify the strategies that will help them achieve their desired goals.

PLANNING PHASE STRATEGIES

From our assessment of priority areas, we have determined that Long Beach and Maywood have commercial corridors that may experience increased gentrification pressures during the Lower LA River Revitalization process. We recommend that these communities make a concerted effort to employ as many strategies outlined below during the planning phase.

• Increase Data Collection

Data collection and analysis are critical to influencing decision-makers and shaping policy. Populations that are not studied are at a disadvantage when competing for resources or when the right solution needs to be implemented. Cities can begin to identify metrics and devise ways to collect data in a systematic way. Some suggestions for data collection include:

- o Inventory of small businesses
- o Current lease status (e.g., active, expired or month-to-month, none)
- o Average and median rents for small businesses including trends over time
- o Length of small business tenancy
- o Reasons for leaving or relocation

• Conduct Small Business Assistance Outreach

Small businesses often lack the resources to keep up with the economic trends, technological shifts, or demographic changes that impact their businesses. The County and the cities along the Lower LA River offer a range of services and programs to support small businesses, including an incubator program, workshops on negotiating leases, and loan services. In addition, the County has

centers to support small business development called Small Business Development Centers (SBDCs). SBDCs are located throughout the County, opening doors for emerging and long-time small businesses through individual consultations on how to navigate the permitting process and low-cost training services that help businesses remain competitive.

Organizations such as Leadership for Urban Renewal Network (LURN), LA Más, and the LA Food Policy Council are actively engaging with small businesses in their respective communities. Through ongoing efforts to organize and engage small business owners, these types of organizations have insight into issues facing small businesses. In conversation with LURN Executive Director, Rudy Espinoza, we found that while services and programs exist, many small business owners are unaware of the opportunities available to them.⁵¹ Similarly, our conversations with business owners revealed that they often find it difficult to navigate municipal permitting and licensing requirements.

We believe that deepening the conversation between individual business owners as well as between businesses and municipalities will contribute to thriving commercial districts that don't put existing businesses at risk. We agree with LURN that municipalities and other economic development stakeholders should "prioritize outreach workers, community organizers, and even public relations positions in departments as important as City Planning"⁵² to elevate the role that small businesses play in the local economy. LA Más, with the support of LA City Councilmember Joe Buscaino, recently developed a similar model that employed community organizers and outreach workers to talk to small businesses.⁵³ From their conversations, they collaboratively devised ways in which businesses can improve their presence or take actions to promote their business.⁵³

Cities could assist small business owners in commercial corridors near Lower LA River projects in becoming more resilient, providing door-to-door outreach and organizing workshops. We also recommend these outreach efforts include a marketing component via technology (e.g., social media) or through partnerships among the corridor's businesses.

IMPLEMENTATION PHASE STRATEGIES

Even the best planning efforts will not able to account for all of the impacts of a given project. Cities should begin to explore strategies to mitigate displacement that can be carried out later in the planning and well into the implementation phase of the LLARRMP.

The following recommendations primarily focus on building resilience and creative ways to for opportunities for property ownership.

• Building Resilience through Co-operative Ownership Models

Property ownership can build the wealth of small business owners, as well as provide security when property values begin to rise. However, our interviews also found that many small business owners have no intention to buy their building; more research needs to be done to explore the reasons why business owners are renting versus buying their commercial spaces. The fact remains that as renters, they remain vulnerable to gentrification and displacement.

A co-operative ownership model allows individuals to aggregate and subsequently increase their market power.⁵⁴ These business models differ from traditional business one in that they operate on a "one-member, one-vote" basis, giving equal power to each member of the enterprise. Co-operative ownership sources capital from a democratic body of owners who are typically invested as residents of the neighborhood or members of the community. The International Co-operative Alliance (Alliance) defines a co-operative as an autonomous association of persons united voluntarily to meet their common economic, social, and cultural needs and aspirations through a jointly owned and democratically controlled enterprise.⁵⁴

An example of effective co-operative ownership is the NorthEast Investment Cooperative (NEIC) in Minneapolis. The NEIC began with 39 founding members who "were tired of looking at poorly used property in their neighborhood."⁵⁵ Six years later, the co-operative has grown to over 200 members, owns three properties, and supports 25 jobs. Their properties include a Recovery Bike Shop, brewery, and a bakery, with more commercial space open for lease at the time of this writing. The NEIC provides members with a modest return on investment, while improving a community's social and economic capital and making long-term, stabilizing, and strategic investments that help transform the NorthEast community.⁵⁶

• Preserve Legacy Businesses through a Stabilization Fund

As identified from our interviews with small business owners, access to capital often may be out of reach for small businesses. As a result, small businesses may be unable to keep up with trends or expand to serve the growing needs of their local communities. San Francisco has devised strategies to preserve legacy businesses, which are businesses that have served the area for a certain number of years and are considered to be an essential component of the neighborhood. In 2005, the SoMa Community Coalition (part of the South of Market Community Action Network) lobbied the City to establish a stabilization impact fee and the Soma Community Stabilization Fund (Fund). The South of Market Community Action Network awards property acquisitions via the Stabilization Fund grants.

The following year the city amended the ordinance to establish a Community Advisory Committee composed of seven appointed members of the SoMa community. Committee members advise the Mayor's Office of Housing and Community Development on the administration of the Fund through Committee generated strategic plans. We recognize that cities along the Lower LA River may find it challenging to impose conditions that require setting aside funds for stabilization programs. In anticipation of future developments, we recommend that cities explore these types of policies and ways in which they can utilize strategies such as impact fees as ways to raise revenue for a stabilization fund.

There is still much that needs to be learned about how gentrification will impact small businesses in the Lower LA River cities. Given that this is a nascent field of inquiry, it is challenging to predict how these infrastructure developments and the introduction of new parks and open space will impact this area. Future studies can consider working with data that is at the establishment level such as the National Establishment Time-Series (NETS) data or the Gateway Cities COG business data. Future factors to consider analyzing include: trends in property values, and an inventory of architecturally and historically significant landmarks in these commercial corridors. In conjunction with field surveys and interviews, such data can provide a fuller understanding of the state of small businesses in the Lower LA River cities.

CHAPTER 2: COMMUNITY SPACE & ACCESS

INTRODUCTION

As described in the previous section, gentrification and displacement are real concerns facing the communities along the Lower LA River as revitalization efforts gain traction across LA County. These communities are also some of the most underserved areas in the County in terms of park and open space, access, and quality. One way to improve community-member access to park space, better understand existing local resident needs, and reduce the potential for gentrification and displacement that may come from large-scale revitalization efforts, is to implement low-cost, community-led, small-scale changes along the river. We refer to these short-term interventions as "tactical urbanism."

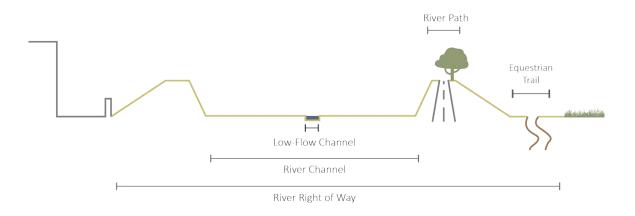
The goal of this chapter is to provide community groups and cities adjacent to the Lower LA River with information on existing barriers that discourage or prevent local residents from using the Lower LA River right-of-way, and to identify possible tactical urbanism projects to improve the river's role as a linear park space serving local communities. We define the Lower LA River "right-of-way" as the physical space encompassing the river channel itself, the LA River Bikeway, and any other land, dirt paths, or vegetation that exist between the Bikeway and where buildings, parks, or private property begins. (See Figure XX) We refer to the LA River Bikeway in this document as the "River Path," as it serves a variety of users in addition to bicyclists. We have divided our research in this chapter into three sections:

Existing Users: Identifies who currently uses the Lower LA River, how they are using it, and what might prevent them from using it more.

Existing Amenities and Access: Documents and analyzes existing amenities and access to determine what works well, what doesn't work well, and what opportunities could improve the user experience.

Tactical Urbanism: Highlights different types of tactical urbanism solutions that best address the user, amenity, and access challenges we identify in the Existing Users and Existing Amenities and Access sections and fits them within the existing legal framework that currently affects the implementation of these projects.

Figure 13. Graphic depiction of the Lower LA River Right-of-Way.



CURRENT USERS

The first step in understanding what tactical urbanism interventions will best serve and involve the cities along the Lower LA River in the revitalization effort is to understand who currently uses the Lower LA River right-of-way in its current form. The right-of-way is a hub of activity, attracting cyclists, pedestrians, equestrians, and various additional users. Residents from both surrounding cities and all over LA County come to recreate and relax along the LA River.

Methodology

We collected both quantitative and qualitative information to form a picture of how people are using the Lower LA River right-of-way including user counts, open and closed-ended survey questions, and interviews. Taken together, these efforts helped illuminate broad physical and socio-cultural use patterns of public space.⁵⁷ Overall, we collected information in four ways:

- 1. Literature review. To get a baseline understanding of who uses the river, we examined newspaper articles, online databases, bicycle and pedestrian master plans (see Appendix A: Public Outreach from Bicycle and Pedestrian Master Plans), academic research, and data from Google Earth.
- 2. Interviews. To gain a more in-depth understanding of user needs and barriers, we interviewed river stakeholders who represent different river user groups.

- **3.** In-person observations. We visited the River Path several times in order to collect data and observe use patterns.
- 4. Survey and user counts. During the last week of April 2017, we counted users along the Lower LA River at two locations: near the access point next to Hollydale Regional Park in South Gate and near the access point near Del Amo Boulevard in Long Beach (Figure 14 shows the locations more specifically). We chose the locations because of their proximity to river access points. Every third person we encountered on the river path was asked to respond to a five-minute survey. We conducted counts and surveys in the morning and evening of Saturday and Sunday (April 22 and 23), and during rush hour from 5–8 pm on Tuesday, April 25.

Our goal of counting and interviewing passersby was to intercept a variety of users along the Lower LA River to better understand: 1) who is using the Lower LA River right-of-way, 2) how people use the Lower LA River right-of-way, and 3) what people think of the Lower LA River right of way and their barriers to using it (see Appendix B: Survey and Observational Counts for details on survey methodology, the survey questions, observational count data, and detailed survey responses).

Figure 14. Map of survey locations.



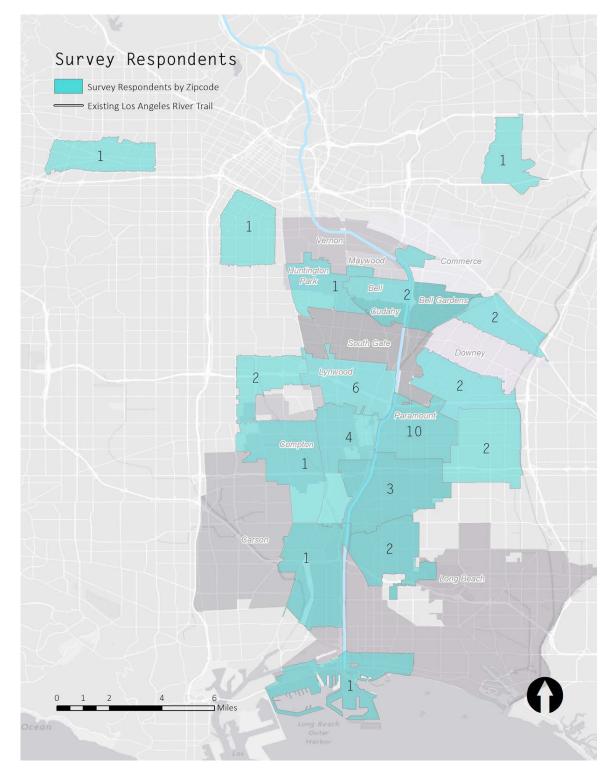
Figure 15. Community members take survey on Tuesday, April 25, 2017.



SURVEY RESULTS

Our goal in conducting a user survey was to gain a broad understanding of how people currently engage with the Lower LA River and the factors that discourage people from doing so. Sixty-four Lower LA River right-of-way users completed the April 2017 survey. The majority of respondents were male (84 percent) and identified as Hispanic / Latino (78 percent), with varying ages and income levels. Most respondents either walked or biked to the Lower LA River right of way (78 percent), live relatively close to the river (Figure 16 below), and reported coming to the river regularly (82 percent at least one day a week). More than half of respondents (57 percent) use the trail on both weekends and weekdays.

Figure 16. Survey respondent home zip code.



Almost half of respondents (46 percent) indicated being at the river for health and exercise purposes. A quarter were there for recreation. Only six percent were commuting, and nine percent were traveling to a park. A little more than a third of respondents were bicycling (34 percent), and a little less than a third were jogging (31 percent) and walking (31 percent) respectively. However, cyclists were much less likely to stop and fill out a survey. In fact, over two-thirds (67 percent) of the users we counted while in the field were cyclists. People riding motorized vehicles were also observed, as well as walking a dog, hanging out in the river bed, and those experiencing homelessness.

Respondents overall said that they enjoyed coming to the LA River because it is a tranquil, quiet place, without cars. Respondents stated that the river was a place to relax and exercise (walk, run, bike), bring a dog and children, provides enjoyable scenery, and an opportunity to be in nature and get fresh air. Alternatively, some respondents were discouraged by the lack of cleanliness of the trail and the absence of amenities, such as benches, shade, lighting, and bike racks. Safety and security also appeared to be a primary concern. Almost a third of respondents indicated that they felt unsafe. This included 15 percent of respondents who said that they were worried about the high speeds of people cycling and 14 percent who reported that other users were seen riding motorbikes.

When asked if they could change the Lower LA River in any particular way, respondents said they would like more opportunities to rest and reenergize while on the River Path (e.g., benches, shaded areas, drinking water, bathrooms). Many would enjoy a cleaner River Path and river, and an environment with less crime. Others would like to see improved access points and access to the river channel itself. Overall, respondents wanted better security (43 percent), improved maintenance (27 percent), and more amenities (27 percent).

The primary takeaway from the survey is that people treat the Lower LA River right-ofway as a local, linear park, traveling often from nearby cities for exercise and relaxation. Top priorities for existing users are improving security and cleanliness, and adding amenities.

USER TYPES

The following list of user groups illustrates how we observed people using the space in and near the Lower LA River right-of-way. Current infrastructure and amenities along the river might lend themselves well to some uses while hindering opportunities for other types of use. There are conflicts between users, and reducing the barriers of use for one user group could increase the barriers for another. For example, some pedestrians believe bicyclists and those on motorized vehicles go too fast, while these riders enjoy the space precisely because they can go fast without interference from cars. Many users expressed that they feel uncomfortable with the encampments created by people experiencing homelessness, while according to interviews with representatives of homeless service agencies, these individuals like the river precisely because it has few restrictions.⁵⁸ While security, cleanliness, and lack of amenities discourage many from engaging with the river, increasing police patrols along the river to improve safety may discourage others from using the river.

BICYCLISTS.

Many people bicycle along the River Path, which is a shared use, uninterrupted bike path called a Class I Bikeway.⁵⁹ Sixty-six percent of people we counted along the Lower LA River in April 2017 were on bicycles, and the majority of these cyclists were men. Bicycling was a primary activity of a third of April 2017 survey respondents, and a third arrived at the River Path on a bike. In fact, surveys from both the 2016 Long Beach Bicycle Master Plan 2040 and the 2015 Bellflower-Paramount Bike & Trail Master Plans found that the nearer city residents live to the LA River, the more likely they are to use the River Path (see Appendix A, City of Long Beach and Paramount). In other words, the River Path acts as a key local amenity in addition to the regional connectivity it provides (see Appendix A: Public Outreach from Bicycle and Pedestrian Master Plans for a summary of user input about bicycling along the Lower LA River during the development of the various Lower LA River cities' bicycle and pedestrian master plans).

The River Path is an important and well-used resource for community residents who bicycle for both recreation and transportation. For example, 66 percent of almost 500 respondents to the Long Beach Bicycle Master Plan 2040 survey used either the beach or River Path in the past six months (see Appendix A, City of Cudahy, Downey, Long Beach, and Paramount). The River Path provides a route separated from traffic and appeals to those who may not feel comfortable riding in other situations. The River Path also appeals to long distance riders. Respondents to the 2015 Bellflower-Paramount Bike & Trail Master Plan survey found that the River Path is used more for recreation than commuting or running errands (See Appendix A, City of Paramount).

In prior surveys conducted by Lower LA River cities during the development of their bicycle master plans, city residents identified three major barriers to using the River Path as cyclists:

- 1. Safety. Both Long Beach and Compton residents raised concerns about safety for cyclists along the Lower LA River. In Compton, underpasses and access points were perceived as problem areas, and the Compton Bike Master Plan recommended installing security cameras at these locations. In Long Beach, residents raised the need for more lighting at night (see Appendix A, City of Long Beach and Paramount).
- 2. Connections and access. Residents of Downey, Long Beach, and South Gate wanted improved connections to the Lower LA River Bike Path, whether that involved adding new connections or improving existing access points (See Appendix A, City of Long Beach and Paramount).
- 3. Conflicts between cyclists and pedestrians. Based on concerns raised by residents regarding cyclist and pedestrian conflicts, the 2015 Bellflower-Paramount Bike & Trail Master Plan recommended education to promote mutual respect between bicyclists and pedestrians (see Appendix A, City of Paramount).



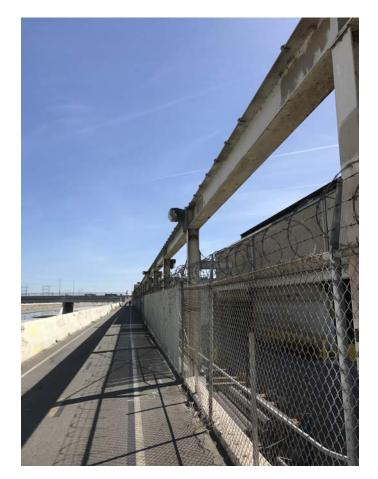
Figure 17. Cyclists ride along the Lower LA river, April 2017.

COMMERCE AND INDUSTRY.

Many businesses including warehouses, storage facilities, construction companies, and freight companies, operate adjacent to the Lower LA River. Metro also operates its Blue Line Yard in Long Beach along the river. In addition to large-scale operations, many small businesses operate near the river, including restaurants and retail shops.

Most commercial uses are separated from the river by a fence or simply the back of a building with no access point to connect to the river. Some commercial buildings have elaborate security infrastructure along the river-adjacent side of their property, including lighting shining on the path and barbed wire at the top of tall fences (Figure 18). However, it seems plausible that at least some employees of these businesses located along the river commute to work via the River Path given their proximity to this grade-separated regional active transportation corridor.

Figure 18. Commercial property separated from River Path by fence, barbed wire, and lighting.



Equestrians

There are at least four equestrian communities near or adjacent to the Lower LA River, located in Long Beach, Compton, Paramount, and South Gate. These communities consist of anywhere from a cluster of homeowners with stables for rent in their backyards to extensive equestrian centers funded and maintained by a city, such as the 72nd Street Arena and Park in Long Beach.

These communities and other area equestrians ride their horses on the equestrian trail that runs parallel to the LA River Bike Path on the east side of the river, which extends from Long Beach to the confluence of the Rio Hondo and LA River in South Gate. See the section on Equestrian Trail Networks for more information on equestrian amenities and facilities along the river.

Needs of these riders in the Lower LA River right-of-way include: parking lots for horse trailers; safe connections between the River Path and their stabling facilities; safe underpasses beneath freeways without conflict with cyclists; wayfinding for those unfamiliar with the safest ways to cross roads; and a way to ensure dirt paths are not encroached upon by private property owners.⁶⁰

Figure 19. Equestrians ride along the trails that run parallel to the LA River Bike Path, April 2017.



PEOPLE EXPERIENCING HOMELESSNESS

A number of people experiencing homelessness live along the LA River. The Los Angeles Homeless Services Authority (LAHSA) and the Los Angeles County Sheriff's Department (LASD) identified at least 200 homeless encampments, or around 700-800 people, along the LA River and its tributaries in 2015 via an aerial survey.⁶¹ Those without homes choose to live along the river because it is "less restrictive, more secure, and has a stronger sense of community than other alternatives."⁵⁸ During the winter season, however, the risk of floods resulting from major storms can create an inhospitable and dangerous environment.⁶¹

LOCAL CITY GOVERNMENTS

Local governments maintain properties adjacent to the Lower LA River, including public parks and schools. While local police do not actively patrol the area, they respond to community issues along and around the river.

LOS ANGELES COUNTY DEPARTMENT OF PUBLIC WORKS

The County's Department of Public Works (LACDPW) maintains the LA River's concrete channel, drain system, and sediment and vegetation buildup from Southern Avenue in South Gate to Long Beach. Additionally, LACDPW operates numerous pump stations along this stretch, which pump water into the levee system during rain events and operates a groundwater recharge basin within this reach. In the Dominguez Gap Wetlands and soft-bottom areas in Long Beach, the County also trims trees and plants, and mows vegetation to prevent overgrowth. LACDPW also maintains the bike path for the entirety of the Lower LA River.⁶²

PARK USERS

People use the River Path to access adjacent or nearby parks. Out of those we surveyed, eight percent were using the River Path to access a park. See the discussion of amenities along the River Path below for more information about river-adjacent parks.

PEDESTRIANS

People walk along the River Path for a variety of reasons, including recreation, commuting, and running errands (see Appendix A, City of Paramount). Out of those counted during observational counts, 22 percent of users were pedestrians and six percent were joggers.

NEARBY RESIDENTS

Many neighborhoods with single-family homes, multi-unit dwellings, and mobile home parks are located close or adjacent to the Lower LA River (Figure 20). As an amenity in their backyard, residents gather along the river and nearby parks with family and friends for meals, conversations, and camaraderie.

Figure 20. Residential properties adjacent to the Lower LA River, January 2017.



PEOPLE ENGAGING IN ILLICIT ACTIVITY

A variety of people engage in illegal activity along the Lower LA River right-of-way, which may be more common than in other public spaces due to lack of police patrol (Figure 21).

The most common illegal users of the Lower LA River right-of-way are most likely those who trespass in the river channel itself. Due to liability concerns, the County forbids use of the river channel at all times.⁶² People use the river channel for a variety of reasons. Users have been observed bathing, flying kites, hanging out, riding bicycles, and riding motorized vehicles. People also use the Lower LA River right-of-way for other illegal activities including drug use, graffiti, riding motorized vehicles along the path, and living along the river right-of-way. Anecdotally, we acknowledge that safety concerns such as theft and gang violence may also be a concern along the river.

Figure 21. Bike Path users on motorized vehicles, which is not allowed on the path, April 2017.



SPORTS AND RECREATIONAL USERS

People along the Lower LA River engage in an array of sports and recreation activities, including soccer, basketball, tennis, golf, baseball, skateboarding, walking, bicycling, and go-karting.⁶³

U.S. ARMY CORPS OF ENGINEERS (USACE)

Along the Lower LA River, USACE maintains the river channel north of Southern Avenue in South Gate.⁶⁴

WILDLIFE

The LA River is home to 140 protected bird species (Figure 22), 20 mammal species, more than 1,000 types of plants, and few non-native fish species.⁶⁵ Two distinct areas along the Lower LA River provide particular havens for wildlife, including the Dominguez Gap Wetlands and the Willow Street Estuary in Long Beach.

Figure 22. Bird flies over the Lower LA River, April 2017.



Although the largest user group does appear to be cyclists, people use the Lower LA River right-of-way in a variety of ways. Residents that live near the river appear to be the most frequent users of the river. They primarily use this space as a linear park where they can exercise and recreate, and as a route for transportation. Existing users find security, cleanliness, and the need for more amenities to be the main barriers to river engagement. Conflicts between different user groups are also a concern. It is possible that addressing the needs of one user group may increase the barriers to use of another. It is therefore important that planners involve all existing user groups and carefully consider unintended consequences of any revitalization efforts or projects.

EXISTING AMENITIES & ACCESSIBILITY

In order to inform governance processes or address social issues in the Lower LA River community, it is fundamental to understand the people who occupy this space as well as its physical form. If people using the river space are primarily locals, how are amenities and access points serving or failing them? It is important to keep these users in mind when conducting a study from outside the community. An outsider may experience the River Path as a confusing novelty, but the cyclists and other regular users of the space often describe its tranquility and do not often mention confusion about signage, for example. Determining what physical features should be added to, maintained, or removed from the river will involve tradeoffs of funding, space, political energy, and

social outcomes. Who should decide how the physical environment is altered to resolve conflicts between pedestrians and cyclists? Is an intervention always necessary? For example, there are opportunities in constructed spaces to increase people's sense of security without instituting a policy of increased policing, but it is up to the users and their government to guide the process.

The following sections provide a physical survey complementary to the investigation of existing users. Specifically, this section creates a spatial inventory of existing amenities along the Lower LA River right-of-way, identifying the parks and community spaces that are connected by the River Path, as well as the features and amenities in those parks. We then analyze the ability of nearby communities to access these parks, community spaces, and the right-of-way itself.

• Community Space Amenities

- o Parks
- o Water Fountains & Bathrooms
- o Seating and Benches
- o Lighting
- o Signage
- o Tree Cover / Shade
- o Wildlife

• Accessibility (to river access points and / or parks)

- o River Path Access Points
- o Bikeway Network
- o Pedestrian Accessibility Challenges
- o Transit Network
- o Equestrian Network

We compiled four main sources of data to examine the topics listed above:

1. Publically available data. We found data related to bus stops and bikeways from Metro's Active Transportation Strategic Plan, bikeway and transit data from the City of Long Beach data portal, trail and equestrian facilities data from the Los Angeles County Department of Recreation and Tetra Tech, park conditions from the Los Angeles County Department of Parks and Recreation, and general jurisdiction boundaries and river flow lines from the Los Angeles County data portal.

- 2. Field work data. We collected data in the field by visiting the river in late April 2017 during which an access and amenities inventory was collected by taking geolocated mobile phone pictures.
- 3. Geocoded data from Google Maps and Esri satellite and aerial imagery. Aerial imagery was used for quality control of data collected in the field or compiled from existing data sources. Errors due to location accuracy on data collected in the field were corrected using aerial imagery and some features were traced using aerial imagery and field observations.

We made the compiled spatial data collected on each topic listed above available online at <u>http://www.thelosangeleriver.place/</u>. Our hope is that local community groups and cities can use this information as a starting point for any projects or changes they would like to make along the Lower LA River right-of-way. The information is intended to empower community groups and interested individuals. It is not intended to be used in a vacuum or as a replacement for community outreach as local resident and community knowledge will be indispensable to the river revitalization process.

COMMUNITY SPACES

Parks

Based on the 2016 Los Angeles Countywide Comprehensive Parks and Recreation Needs Assessment, the cities along the Lower LA River have a high need for more and better parks.⁶⁶ On average, there are 3.3 acres of park space per 1,000 residents in LA County, and the County's goal is to provide four acres of park per 1,000 residents.

PARK NEEDS IN LA RIVER-ADJACENT COMMUNITIES				
Very High Need (< 0.7 Acres Park Space / 1,000 Residents)	High Need (1.6 Acres Park Space / 1,000 Residents)	Moderate Need (11.5 Acres Park Space / 1,000 Residents)	Low Need (> 11.6 Acres Park Space / 1,000 Residents)	
 Maywood Bell Bell Gardens Cudahy South Gate Paramount Unincorporated East Rancho Dominguez West Long Beach 	 Downey Lynwood North Long Beach South Long Beach 	• Commerce	 Central Long Beach Vernon (no parks within City boundaries but very small residential population) 	

Table 4. Park Needs in LA River-Adjacent Communities.

On a more local scale, we found that within a one-mile buffer around the river, there are only 1.5 acres of park per 1,000 residents, which is significantly lower than the countywide average and goal.

The LA River right-of-way is not designated as park space in the Countywide Needs Assessment, yet it serves as open and recreational space for many of the communities adjacent to it. The linear course of the river banks and channel, though lacking in many amenities, is also used for active transportation as well as travel between existing adjacent parks in the area.

RIVER CHANNEL AND RIGHT OF WAY

For this section, we consider the Lower LA River "right-of-way" to include the river channel itself, the River Path, and any other land or vegetation that exists between the path and where buildings, parks, or private property begins.

Amenities

Moving from the large-scale analysis in the previous section, which identifies a high need for parks, especially in the areas within one mile of the river channel, the following

inventory of physical amenities takes a closer look at what people see and interact with when they are on the River Path or in adjacent parks. This includes signs that tell people where to go and how to use the public space, areas of seating and shade, and what features are available at the parks adjacent to the Lower LA River.

Parks

The park spaces adjacent to the Lower LA River (**Error! Reference source not found.**) are complementary amenities to the river right-of-way. They physically and visually increase the amount of connected public space and provide more amenities to the Lower LA River. Yet, they are not evenly distributed along the Lower LA River corridor and they range in size, amenities, and condition. Table 5 below lists the characteristics of the green spaces that are adjacent to and can be accessed by the River Path.

RIVER ADJACENT PARK AMENITIES *				
Name of Park	City	Size (in Acres)	Distance to Nearest Park (in Miles)	Amenities
Maywood Riverfront Park	Maywood	5.15	~ 0.8 from start of path	 Open lawn/turf area in good condition Two basketball courts in good condition Eight picnic shelters, one playground in good condition One restroom in good condition Water fountains
Cudahy River Road Pocket Park	Cudahy	0.30	~ 1.48	 Open lawn/turf area in fair condition Benches Pedestrian path Native plants

Table 5. River Adjacent Park Amenities. Source. Los Angeles Countywide Parks &Recreation Needs Assessment.

Cudahy Park	Cudahy	8.33	~ 0.20	 Open lawn/turf area in fair condition One tennis court in poor condition Three basketball courts in fair condition and one in poor condition Two baseball fields in poor condition, one multipurpose field in fair condition One skate park in fair condition One playground in fair condition One splash pad in poor condition One community recreation center in fair condition One restroom in fair condition, and water fountains
Hollydale Regional Park	South Gate	48.00	~ 2.40	 Open lawn/turf area in fair condition Two tennis courts in good condition Two basketball courts in fair condition One baseball field in fair condition One baseball fields in fair condition Three soccer fields in fair conditions One fitness zone in poor condition One picnic shelter in good condition One playground in good condition and one playground in fair condition One dog park in good condition Two restrooms in fair condition Water fountains

Ralph C. Dills Park	Paramount	12.60	~ 1.00	 Open lawn/turf area in fair condition Two multipurpose fields in fair condition Two fitness zones in good condition Two playgrounds in good conditions One restroom in good condition, and water fountains
Deforest Park	Long Beach	27.56	~ 2 .00	 Open lawn/turf area in poor condition Two tennis courts in fair conditions One basketball court in good condition Two multipurpose fields in fair condition One playground in fair condition One community recreation center Two bathrooms in poor condition Water fountains
51st Street Greenbelt	Long Beach	1.02	~ 0.6 0	• Open lawn/turf area in poor condition
Dominguez Gap Wetlands	Long Beach	37.00	~ 0.15	 Native plants Benches Trails for hiking, biking, bird- watching and horseback riding
Wrigley Greenbelt	Long Beach	9.80	~ 1.00	BenchesWalking trails
Willow and Golden South	Long Beach	1.12	~ < 1.00	Open lawn/turf area with trees
21st to Hill Mini park (also known as South Wrigley & Avila Park)	Long Beach	0.91	~ 1.00	 Open lawn/turf area in fair condition One playground in fair condition
Cressa Park	Long Beach	0.61	~ 0.25	• Open lawn/turf area in fair condition

Cesar E. Chavez Park	Long Beach	9.07	~ 1.00	 Open lawn/turf area in fair condition Two basketball courts in fair condition Two playgrounds in fair condition One community rec center in fair condition One restroom in fair condition, and water fountains
Golden Shore Marine Biological Reserve Park	Long Beach	7.39	~ 0.17	• Open lawn/turf area in fair condition

* From Los Angeles Countywide Parks & Recreation Needs Assessments



Figure 23. Map of parks directly adjacent to and accessible from the LA River right-of-way

On average, there is park space every one to two miles along the length of the Lower LA River. Out of the fourteen open spaces along the right-of-way, six have ample amenities (such as bathrooms, water fountains, and sports fields), six are solely open lawn or turf areas, and two are natural areas with walking paths. The most recent additions are Maywood Park, completed in 2006, and the Dominguez Gap Wetlands (Figure 24), which opened in 2008. Maywood Park, which has a wide range of amenities, doubled the amount of park space in the City of Maywood.⁶⁷ The mile-long Dominguez Gap Wetlands was the first of its kind project in LA County. The wetlands maintain the integrity of flood protection while recharging the groundwater, restoring native habitat, and providing recreational trails.⁶⁸

Figure 24. Dominguez Gap Wetlands.



There are some stark differences between park space in the northern and southern portions of the Lower LA River. Five of the six parks in the northern 10 miles of the corridor have ample amenities. By contrast, only one of the eight open spaces in the southern seven miles includes a bathroom, water fountains, seating, and sports facilities. Additionally, half of the parks in the southern seven miles of the corridor, which are primarily in the City of Long Beach, are one acre or smaller. These small parcels are not quite parks, but rather plots of undeveloped land. The parks vary widely in size. The smallest is only 0.2 acres (Cudahy Road Pocket Park) and the largest is 48 acres (Hollydale Regional Park). In summary, even though there is a river-adjacent park within or near each river-adjacent city, the size and quality of each is dramatically different.

WATER FOUNTAINS AND BATHROOMS

There is not a single public bathroom or water fountain directly along the River Path, making the River right-of-way less hospitable than it might be if these amenities were included. The closest public bathrooms and water fountains are located in river-adjacent parks. Only six parks along the Lower LA River have both bathrooms and water fountains; the remaining parks have neither. The six parks with amenities are not evenly distributed along the river. However, five of these parks are located between Vernon and North Long Beach. Heading south from Deforest Park in Long Beach, there are no water fountains or bathrooms until Cesar Chavez Park, which is located near the mouth of the river, which suggests that the need for additional water fountains and bathrooms is more acute along the southern portion of the Lower LA River

SEATING & BENCHES

Seating along the River Path is limited and rarely shaded. Users rely on benches as places to relax, take in and enjoy their surroundings, recharge, and check their recreational equipment. As such, benches and other seating are aesthetic and functional priorities. The seating design for all but a handful of seating areas featured along the River Path includes a basic concrete bench, a structure for informational signage, but no shade except where tree cover is present (see Figure 25 below). We mapped the location of seating in the river right-of-way and adjacent parks and found that the distribution of seating skews southward with 22 benches in the City of Long Beach and only four benches in communities between Vernon and Compton (See Figure 27). In many places, we observed bike path users sitting on low walls and embankments where no formal seating was available.

Figure 25. Most common example of benches found along the Lower LA River.



The rest area seating on the path itself, including the design pictured in Figure 25, though minimal and exposed to direct sunlight, is robustly constructed and so requires minimal maintenance. Seating near the Dominguez Gap Wetlands (see Figure 26 below) is more abundant and placed near trees that provide shade. Seating areas in Long Beach, where benches are most abundant, are spaced about three quarters to one and a half miles apart.

Figure 26. Shaded bench in Dominguez Gap Wetlands adjacent to bike path.



North of Long Beach, seating along the river right-of-way is sparse. There are only four rest areas with seating along a nearly ten-mile stretch of the pathway. Along the entire length of the study area, few seating areas are shaded. In addition, only one of the benches in the study had a back rest. Benches are generally spaced too far apart to accommodate less-mobile users and do not seem coordinated with scenic areas or points of interest.

Figure 27. LA River Path Benches.



LIGHTING

The Lower LA River right-of-way has limited lighting infrastructure. We observed only two light poles along a 17 mile stretch. While it may seem like there is not a need for lights since the path is officially closed from dusk to dawn, the users that we surveyed, as well as residents in numerous news articles, have expressed the desire for lighting during late evening and early morning hours to foster a sense of safety. The Lower Los Angeles River Revitalization Plan has also called for adding and upgrading lighting along the River Path.

SIGNAGE

Signs orient users in public space and communicate regulations that guide public behavior. They are also an inexpensive way to add meaning to and augment the utility of nearby amenities, connections, and destinations. These signs can inform users of the existence of these nearby points of interest as well as how to access them. In some cases, signage can educate users of a destination or point of interests, connection to a local community, or historical narrative. We inventoried the type and distribution of existing signage on or near the River Path:

- 1. Wayfinding signs include those designating or indicating the location of the bike path with arrows, street names at river crossings, and a series of "Los Angeles River Bikeway" informational signs. The LA River Bikeway signs show distances to nearby access points relative to the bike path, limited transit connection information, and select points of interest. Although the surface of the bikeway is stamped with mile markers (Figure 28), we did not include these as wayfinding signs.
- 2. Regulatory signage includes instructions for yielding to bikes, pedestrians, and equestrians, signs indicating city services and contact information for maintenance, keeping dogs on leash, "no swimming" and "no trespassing signs," and more.

In our observations, we recorded 73 wayfinding signs and 14 regulatory signs along the roughly 17 miles of the River Path. It is possible we overlooked some signs in our field research.

Figure 28. Mile marker in Long Beach.



Regulatory signage used to keep people away from sensitive habitat in areas like the Dominguez Gap Wetlands appear to be effective, but this may be the result of many social and design cues other than signage that deter people from entering the wetlands. Signage alone does not deter users from entering the river channel. In the case of the Dominguez Gap Wetlands, embankments densely vegetated with marshy grasses create a visual association with animal habitat and simultaneously create a physical barrier to human entry. One rarely observes people swimming, recreating, or otherwise entering the water feature of the wetlands. On the other hand, the river channel itself – while technically off-limits to the public – is often accessed despite the "no trespassing" signs posted along the river. The design of the river channel, while not aesthetically inviting, makes it possible for people to access the concrete bottom. There is also little enforcement of trespassing laws regarding the river channel in general. It is difficult to determine whether public behavior is influenced more by signage or custom, but it is useful for community planners and urban designers to utilize design elements other than signage to guide the use of public space. Signs and design elements such as landscaping

or marked entry or exit points, as well as programming such as kayaking on the Upper LA River are a way to create social norms that make the river a safer and more enjoyable space.



Figure 29. Cross-street signage at Rosecrans Avenue in Paramount, CA.

As the grade separated River Path looks fairly similar throughout and is separated from typical landmarks like businesses and street signs, it can be difficult for users, especially new users, to know where they are along the river once in the right-of-way. Over a third of the signage observed on the River Path is illegible due to graffiti or small font sizes (Figure 30). Street names at crossings are usually the only signs to help users orient themselves. When the pathway is interrupted at a crossing due to construction or maintenance, signs that describe detours appear to be insufficient and confusing. There are also obstructions in the bike lane, such as movable concrete barriers, which are not marked and present a hazard to cyclists, especially during early morning or early evening hours.



Figure 30. Example of Los Angeles River Bikeway regulatory signage with graffiti.

Tree Cover & Shade

Trees can remove air pollution and lower temperatures, improve water and habitat quality, and increase psychological well-being and community cohesion.⁶⁹ As an amenity along the Lower LA River, urban trees provide shade and shelter for bike path users and are a critical element in improving the natural habitat along the river and within the channel. However, urban tree canopy is not distributed evenly among along the river.

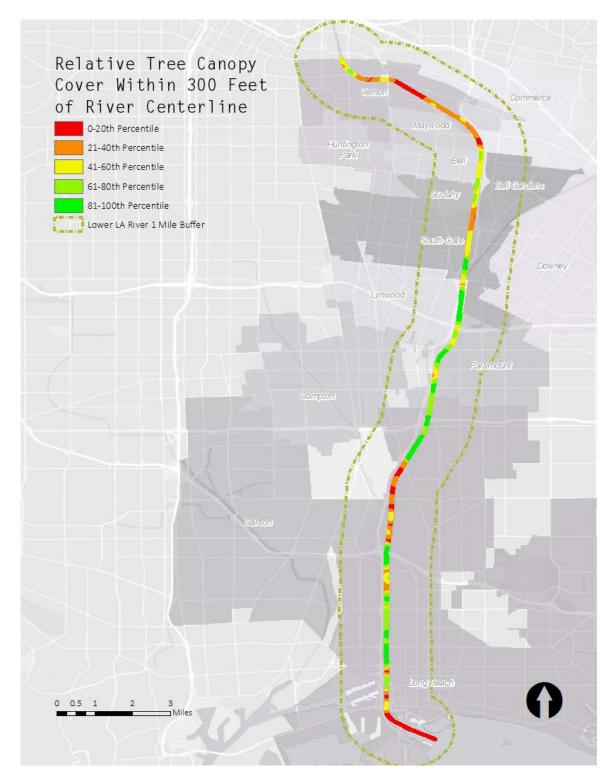
Using tree canopy cover data collected in 2006 and 2011 from the Los Angeles County GIS Portal we mapped tree canopy data within 300 feet of the River Path.⁷⁰ The result is a canopy density analysis that shows areas of relatively high and low tree cover along the length of the path (see Figure 31). Our spatial analysis included tree cover information from within the study area only and compared portions of the study area to each other

rather than to an objective standard. Therefore, although many areas are displayed in green on the map below, they should not be assumed to have outstanding shade or urban forest compared to an absolute standard for good or insufficient tree cover. There are areas of high and low tree cover within the physical boundary of the study and areas shown in green can be assumed to have more cover than areas shown in red, including shade trees for the River Path.

Rights-of-way with relatively high levels of tree-cover (in the 80th percentile or higher) include South Gate, just north of the Rio Hondo confluence, the area between Lynwood and Southgate adjacent to Hollydale Regional Park, adjacent to Dills Park in Paramount, Long Beach along the length of Deforest Park, and Long Beach between Willow St. and Anaheim St. crossings. Areas with more tree cover tend to be near parks and in the softbottom, vegetated section of the river. In these locations, especially in the morning and afternoon when shadows lengthen, trees are more likely to shade River Path users.

Areas with the lowest levels of tree-cover (the 0-20th percentile in the study area) are Vernon between Downey Road and Atlantic Boulevard, and Long Beach between Long Beach Boulevard and the I-405 crossing. Though the latter includes the verdant Dominguez Gap wetlands, the sunken slough does not provide tree-cover that reaches the River Path itself.





Note: The analysis shows that areas adjacent to the mouth of the river have low relative tree-cover. This is not actually the case. The GIS analysis covered a fixed buffer around the LA River channel. As the channel itself widens and fills with water close to Long Beach, more of that buffer area is covered with water surface than vegetation. This causes the GIS analysis to symbolize a red area, with low vegetation compared to other areas along the river. In reality, the banks on the east side of the river in Long Beach are adjacent to many trees planted in parks or along the road.

WILDLIFE

Public parks along the river serve as habitats for several plant and animal species. The Dominguez Gap Wetlands in Long Beach and Ralph C. Dills Park in Paramount are prominent examples. The river right-of-way is generally bare or paved-over, but trees and shrubs provide habitat for birds, pollinators, and other small animals when present. Within the LA River channel, wildlife tends to concentrate in areas where waters converge, pool, or spread, such as the Rio Hondo and Compton Creek confluences and near river crossings. Towards the mouth of the river in Long Beach, especially south of the Willow St. crossing, sedimentation and high tides increase water levels and vegetation in the channel. Unplanned and undeveloped parcels and infrastructure rights-of-way (freeways, power lines, etc.) provide significant acreage of plant and animal habitat in aggregate. These lots and unpaved areas allow for rainwater infiltration through permeable soil, which is also a substrate for the growth of shrubs, flowers, and other animal habitats. Although these areas are not contiguous, animals (and plant pollinators) are often able to move between multiple territories.

Plant life is much more abundant in soft-bottom areas of the river, such as the Glendale Narrows north of this study area, but similar plant communities can be found in riparian parks in the Lower LA River and in the sedimented tidal area near the river mouth in Long Beach.

ACCESSIBILITY

The amenities described earlier are only useful if people are able to access them. Our surveys suggest that many people who come to the Lower LA River live in the surrounding communities and are therefore more likely to be affected by access issues such as poor sidewalks leading to the river and incomplete bikeway networks. While local residents might benefit more from improvements, which address access issues, doing so will also benefit regional users. Others travel by bike, bus, or car to use the river and face different challenges relating to access. In this section, we analyze the distribution of bike

and bus networks in river-adjacent communities to determine how those networks relate to access points for the river.

RIVER ACCESS POINTS

We identified specific access points through field observations and aerial photographs. Combined with data from the Friends of the LA River and LA County Department of Parks and Recreation Trail Access point datasets, we were able to compile a comprehensive list of access points. We subsequently mapped and categorized these access points to detect geographic clustering and identify areas that are poorly served or well served by river access. We also examined spatial relationships between these access points, existing and planned bikeways, and transit stops. We analyze bike access to and from the river, as well as access to transit stops in this section.

We identified 52 access points over the 17 miles of River Path from Atlantic Avenue in the City of Vernon to its southern terminus in the City of Long Beach. In many instances, ramps connect the River Path to both sides of a roadway overpass. This allows users to access either side of that roadway. We counted locations where a street is accessible from multiple distinct ramps, pathways, or staircases separately. When access points that provide connectivity to the same street are considered together, the 52 access points effectively provide access to 43 general locations (Figure 32). In general, access to the river path is more frequent along the portion of the River Path north of the City of Long Beach. In this section, 37 access points are distributed across approximately nine miles of the river.

Along the Long Beach portion of the River Path access is infrequent. Just under half of the River Path runs through Long Beach (eight out of 17 miles), but less than a third of the access points (15 out of 52) are located along this stretch. Within Long Beach, nine of the 15 access points are concentrated on the southernmost three miles of River Path. The northern portion of Long Beach has some of the longest distances between access points along the entire River Path. The longest stretch without an access point is located here, a stretch of 1.5 miles between 72nd Street and Deforest Park.





Six of the 52 access points feature stairs, which are unusable or challenging for bicyclists, equestrians, people in wheelchairs, or families with strollers. Moreover, an additional five access points are dirt ramps, which might be appropriate for equestrian users, but can be problematic for wheeled users (see Figure 33). The remaining access points include 25 paved ramps and 16 more or less at grade with the River Path.

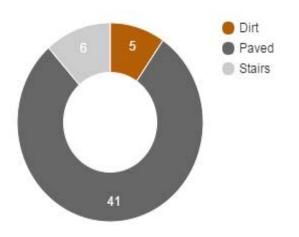


Figure 33. Access points by type.

Figure 34. Unpaved access point at Hollydale Park and Century Boulevard.



Figure 35. Stairway access point at Ralph C. Dills Park.



Regardless of the connection type itself, many access points lead to roadways or facilities that are ill-equipped to accommodate various types of LA River users. Three access points lead to streets without any sidewalks and 16 access points lead to streets with at least one missing sidewalk or sidewalks that are intermittent. Only one of the access points connects to a street with bike lanes: the Southern Avenue access point in the City of South Gate. According to the bike master plans of river-adjacent cities bikeways are planned for the streets adjacent to 26 of the 40 access points which connect directly to streets. The other 12 access points connect to the street network indirectly, as they connect to parks or other trails that, in turn, connect to the street network.

In addition, many of the access points are narrow with gates, trash, vandalism, or other conditions that make them less welcoming (see Figure 36 and Figure 37). Some of these gates are locked from dusk to dawn when the River Path and adjacent parks are closed, which may trap people along the River Path. While this may remain a recurring problem for as long as the River Path remains closed at night, additional and more obvious warning or regulatory signage would be helpful to reduce the likelihood of users being trapped along the River Path.

Figure 36. Gates and fencing mark the LA River Path access point at Somerset Boulevard.



Figure 37. Narrow access point adjacent broken glass and railroad tracks at Atlantic Blvd. Image from Google Streetview.



BIKEWAY NETWORK

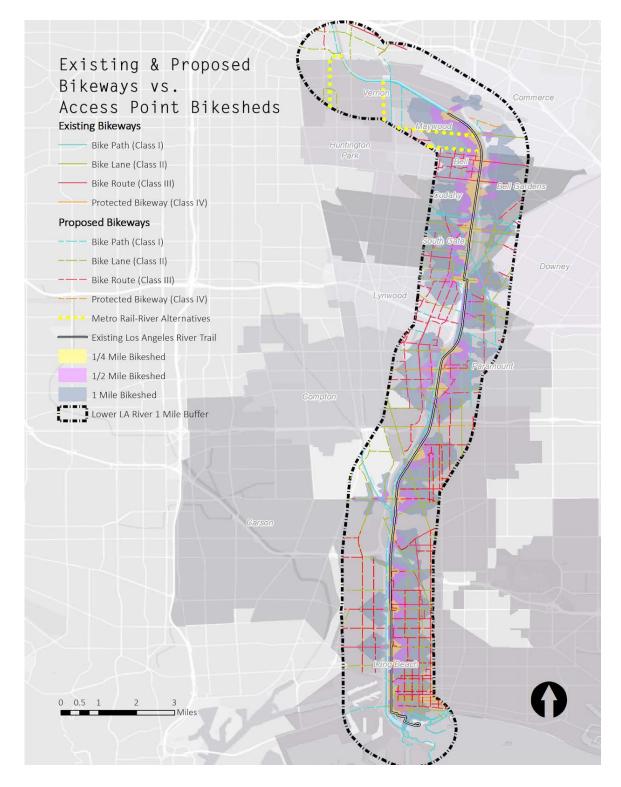
Bicyclists are one of the main user groups of the River Path. Dedicated bikeways like this are rare in the cities surrounding the Lower LA River. Bikeway types analyzed include bike paths, bike lanes, bike routes, and protected bikeways, each of which are defined for this analysis as follows:

- **Bike Paths** are dedicated off-street pathways/trails that typically only allow nonmotorized users.
- **Bike Lanes** are dedicated space within a street right-of-way for bicyclists, typically demarcated from automobile traffic with a painted stripe, buffer, or coloring as well as a bike lane symbol and/or text reading "Bike Lane."

- Bike Routes are corridors without dedicated space for bicyclists where bicyclists must share the road with automobiles. Often marked with signs indicating bicycle-friendly routes, "sharrow" roadway markings, or "Share the Road" signs. Some bike routes receive additional traffic calming/bike boulevard treatments like roundabouts, curb extensions, chicanes, etc. to reduce vehicle speeds to a level where bicyclists are more comfortable riding alongside them.
- **Protected Bikeways** (also known as cycletracks) create dedicated space within a street right-of-way for bicyclists similar to bike lanes, but with additional physical barriers like curbs or bollards to protect bicyclists from adjacent vehicle traffic.

We mapped both existing and proposed bikeways to provide a single, publicly-available dataset to inform future public and community group decisions about bicycle and pedestrian connectivity. We then compared these bikeways to the locations of river access points to provide a baseline of bicycle connectivity to the river corridor. After excluding unpaved access points and those that use stairways we used GIS to create "bikesheds": the area someone could conceivably reach by traveling along the street network for a given distance from each access point. One mile, half-mile, and quarter-mile bikesheds were created from each access point to analyze distance between dedicated bikeways apart from those immediately adjacent to a given access point. Figure 38 is a map of these bikesheds including existing and proposed bikeways respectively.

Figure 38. Bikesheds and existing and proposed bike infrastructure surrounding the Lower LA River.



Contrary to what we see with access points, existing bike infrastructure is more prevalent along the southern portion of the Lower LA River in the City of Long Beach. Multiple bike paths, bike lanes, bike routes, and protected bikeways are accessible within each of the distances analyzed.

Perhaps the clearest takeaway from our bikeshed analysis is the relative sparsity of bikeways within all three bikeshed distances in the area north of the City of Long Beach. Many of the cities along the Lower LA River have recognized this shortcoming and have adopted new or updated bicycle master plans – a critical step towards securing state and regional active transportation funding for bicycle improvements (see Appendix A). The only existing bikeways within any of the access bikeshed distances north of the City of Long Beach are the Southern Avenue bike lanes in the City of South Gate and bike routes on Alondra Boulevard and Greenleaf Boulevard in the City of Compton. While bike routes are argued to be better than nothing, studies have also shown that they are less effective at encouraging bicycling and promoting safety as compared to dedicated facilities like bike lanes, bike paths, and protected bike lanes.⁷¹ As the Working Group and individual cities along the river continue to plan bike and pedestrian improvements to coincide with river revitalization efforts, we recommend that decision-makers prioritize dedicated bicycle facilities whenever possible.

Table 6 below summarizes access to existing and proposed bike infrastructure from the river access points in each river-adjacent city from north to south. Proposed bikeways were geocoded from the bike master plans detailed in Appendix A: Public Outreach from Bicycle and Pedestrian Master Plans or extracted from bikeway data from Metro⁷² and the City of Long Beach.⁷³ Most of the major gaps in bikeway accessibility to and from the River Path will be addressed by proposed and planned bikeways with the major exceptions in the cities that have not completed bike master plans of their own or whose bike master planning efforts are still in progress.

Table 6. Existing and proposed bicycle infrastructure accessible from Lower LA River access points.

EXISTING & PROPOSED BICYCLE INFRASTRUCTURE ACCESSIBLE FROM LOWER LA RIVER ACCESS POINTS				
City	Existing Bikeway Access	Proposed Bikeway Access		
Vernon	The only portion of the Lower LA River without an adjacent bike and pedestrian path is the stretch of the LA River from Atlantic Blvd. in the City of Vernon northwards to the City of Los Angeles.	 Multiple plans call for the extension of the existing LA River Path through the City of Vernon⁷⁴ and on into the City of Los Angeles. Phase II of Metro's Rail- to-River bike trail project includes a bikeway in the City of Vernon as one of the alternatives under study. 		
Maywood	No existing bikeways apart from the River Path within one mile of river access points.	 Phase II of Metro's Rail- to-River bike trail project includes two alternatives in the City of Maywood (one on the border with the City of Bell) which are under study. 		
Bell	No existing bikeways apart from the River Path within one mile of river access points.	 A number of bike routes and bike boulevards are proposed in the western portion of the City of Bell and would be accessible from all three bikeshed distances from river access points. Phase II of Metro's Rail- to-River bike trail project includes a bikeway along the border with the City of Maywood as one of the alternatives under study. 		

		 An off-street bike path is proposed from Slauson Ave to Rickenbacker Rd. in the eastern portion of the City of Bell and would be accessible within a quarter-mile of the Slauson Ave. access point. A protected bike lane is proposed on Rickenbacker St. accessible within a mile of the Slauson Ave. access points.
Commerce	No existing bikeways apart from the River Path within one mile of river access points.	 Proposed bike lanes on Slauson Avenue would connect directly to existing access points on Slauson Ave.
Bell Gardens	No existing bikeways apart from the River Path within one mile of river access points.	 Proposed bike routes on Gage Ave. and Florence Ave. would be accessible within a quarter-mile of the river access points on those respective streets. An additional proposed bike route on Cherry Ave./Garfield Ave. would be accessible within a mile of river access points.
Cudahy	No existing bikeways apart from the River Path within one mile of river access points.	 No known proposed route. However, Cudahy is included in the LACBC Southeast Cities Active Transportation Plan.
South Gate	Bike lanes exist on Southern Ave. from the existing river access point for just	 Proposed off-street bikeways along the West

	over half a mile before transitioning to an existing bike path at Burke St. No other existing bikeways apart from the River Path.	 Santa Ana Branch rail corridor (a former Union Pacific Railroad spur) and brief off-street paths that connect bike routes and bike lanes within the city would improve bicycle access directly from the River Path. Proposed bike lanes on Wright Rd., Imperial Hwy., and Firestone Blvd. would be accessible within a quarter-mile of river access points. Proposed bike lanes on Tweedy Blvd. and a variety of bike routes would be accessible within a half-mile. Proposed bike lanes on Abbot Rd. and additional bike routes would be accessible within a mile from river access points.
Downey	No existing bikeways apart from the River Path within one mile of river access points.	 Proposed bike lanes on Old River School Rd., Imperial Hwy., Gardendale St., and Firestone Blvd. would be accessible within a mile of river access points.
Lynwood	No existing bikeways apart from the River Path within one mile of river access points.	 The proposed Gardendale St./Las Flores Blvd. and MLK Jr. Blvd./Century Blvd. Bike/Ped bridges would provide new river crossings and river access points on the west side of the channel greatly improving river

		 access to and from the City of Lynwood. Proposed bike lanes on Imperial Hwy. and a variety of proposed bike routes would be accessible within a quarter-mile of the Imperial Hwy. access points.
Paramount	Excluding the River Path, the City of Paramount has no existing bike infrastructure except a short segment of a bike path that extends into the city from neighboring Bellflower and a short segment of bike lane that run on Orange Ave. along the border with the City of Long Beach. Only the Orange Ave. bike lanes are within a one mile bikeshed of a river access point. Despite this lack of existing bike infrastructure, Paramount is relatively rich in River Path access points with connections at Alondra Blvd., Somerset Blvd., and Rosecrans Blvd. as well as access to neighborhood streets through the river- adjacent Ralph C. Dills Park.	 Off-street bike paths are proposed for the former Pacific Electric and utility corridor rights-of-way in the City of Paramount with the former connecting to the River Path directly at a new access point. Proposed bike lanes on Alondra Blvd. and Somerset/Compton Blvd. along with proposed bike routes on San Antonio Ave., San Marcus Ave., San Jose Ave., and San Vicente Ave. would be accessible within a quarter-mile. of Paramount river access points. Additional bike routes would be accessible within a half-mile and a mile.
Compton	Bike routes on Alondra Blvd. and Greenleaf Blvd. are accessible within one mile of River Path access points.	 Protected bike lanes are proposed for Compton Blvd. and Alondra Blvd. and would be accessible within a quarter-mile of river access points along with proposed bike lanes

		 on Rosecrans Ave., and a new off-street trail connecting Alondra Blvd. to a proposed bike boulevard on Gibson Ave. Within a half-mile and a mile of river access points, bike lanes on Atlantic Ave. and additional bike routes would become accessible.
Carson	No existing bikeways apart from the River Path within one mile of river access points.	 The proposed Dominguez Gap bicycle/pedestrian bridge and Compton Creek off-street bike trail would greatly improve access to the City of Carson to and from the river and the City of Long Beach with new access points and river crossings. The only existing access points that would provide bikeway access to and from the City of Carson are the access points on Del Amo Blvd. Proposed buffered bike lanes or a bike route with sharrows on Del Amo Blvd. would be accessible directly from those access points. An additional proposed buffered bike lane on Santa Fe Ave. would be accessible within a mile of the Del Amo Blvd. access points.

Long Beach	Long Beach has a much more	Every existing river
	developed existing bikeway network	access point in Long
	than many of its neighbors, but has	Beach would benefit
	relatively few River Path access points	from a proposed
	for its size,	bikeway within a
		quarter-mile.
	Within a quarter-mile of Long Beach	Access improvements to
	river access points, bike routes are	the portion of Long
	accessible on 27th St. and Pacific Coast	Beach west of the LA
	Highway and off-street bike path	River will rely heavily on
	connections are available at West 7th	the proposed Hill St.
	St. and the path terminus. Within a	bike/ped. bridge, bike
	half-mile, of Long Beach river access	and pedestrian
	points, an additional bike route on	improvements to the
	Harding St., bike lanes on 7th St. and	existing bridges across
	6th St., and a protected bikeway on	the river, and the
	Seaside Way can be reached. Within a	proposed off-street bike
	mile of Long Beach river access points,	trail on the western bank
	additional bike lanes on Harding St.,	
	- · ·	of the LA River.
	Atlantic Ave., Pacific Ave., Chestnut Pl.	
	and Bixby Rd.; a number of bike routes,	
	and protected bike lanes on 3rd St. and	
	Broadway can be reached.	

While the bikeways proposed in a bike master plan may not be implemented until funding becomes available, adopting a plan is an important first step to be competitive in the California Active Transportation Grant Program (ATP), which provides dedicated state and federal funding for bicycle and pedestrian projects. The ATP program currently screens applications for consistency with regional transportation plans and emphasizes projects that are "prioritized in an adopted city or county bicycle transportation plan" and intends "to make consistency with an approved active transportation plan a requirement for large projects" in future funding cycles.⁷⁵ Given the increased potential to secure state and federal funding with an adopted bike master plan, we suggest all Lower LA River cities without bike master plans adopt them as soon as possible. As river revitalization efforts will seek to promote other users, such as pedestrians and runners, it may be advantageous to adopt integrated active transportation plans to holistically promote both biking and walking while fulfilling state bike master plan guidelines. Both bike, pedestrian, and combined active transportation plans adopted going forward should be river-oriented and consider access to/from existing access points as well as opportunities for additional access points.

Ongoing planning efforts will likely close many of the gaps in the proposed bikeway network relative to river access points, including the City of Vernon Bike Master Plan and the Southeast Cities Active Transportation Plan (coordinated by the Los Angeles County Bicycle Coalition with partner agencies including the cities of Bell, Bell Gardens, Commerce, Cudahy, Huntington Park, Lynwood, Maywood, South Gate, and Vernon^{/b}). However, it is uncertain until those plans are adopted and released. Moreover, major regional active transportation projects are also underway that will address many of the most pressing bicycling accessibility issues. For example, Measure M recently funded Metro's Los Angeles River Gap Closure Project that will extend the LA River Bike Path eight miles north from its current terminus in Vernon to the terminus of the Upper River trail in Elysian Valley in the City of Los Angeles. This will greatly improve bicycle accessibility through the City of Vernon in the process.⁴² The Metro Active Transportation Rail to River Corridor will connect the Crenshaw and Blue light rail lines to the LA River bike path along an abandoned rail right of way on the Slauson Blvd. corridor and one of four alternatives in the Cities of Vernon, Huntington Park, Maywood, and Bell.⁷⁷ Finally, the I-710 Corridor Bike Path Project will provide an additional 10 mile bike path along the west bank of the LA River from Pacific Coast Highway in Long Beach to Imperial Highway in Southgate, a two mile bike path along Compton Boulevard from Martin Luther King Transit Center to the LA River in the City of Compton, and a seven mile bike trail from the end of the Harbor Freeway in Long Beach to the Rio Hondo Bike Trail in South Gate.⁷⁸ Metro's project map for the I-710 Corridor Bike Path Project is included below.

Figure 39. Metro's project map for the I-710 corridor bike path project.





Even locations where bikeways currently exist can pose barriers to users. For example, the Imperial Highway crossover appears to be difficult and confusing for users to navigate as they must ride past the bridge, make a sharp 180 degree turn circling back on themselves, and navigate a narrow corridor between two fences on the Imperial Highway bridge as the path transitions to the opposite bank and connects with the Rio Hondo Trail (Figure 40 and Figure 41). Long-term improvements to this condition might include a wider space for trail users on the bridge or less obstructive fencing. In the short-term,

we recommend adding clear and visible wayfinding signage on the approach to and at the bridge itself to improve the user experience.

Figure 40. Picture of a 180 degree turn to access the Imperial Highway Bridge.



Figure 41. Narrow space for bicyclists on the Imperial Highway between two fences.



BRIDGES

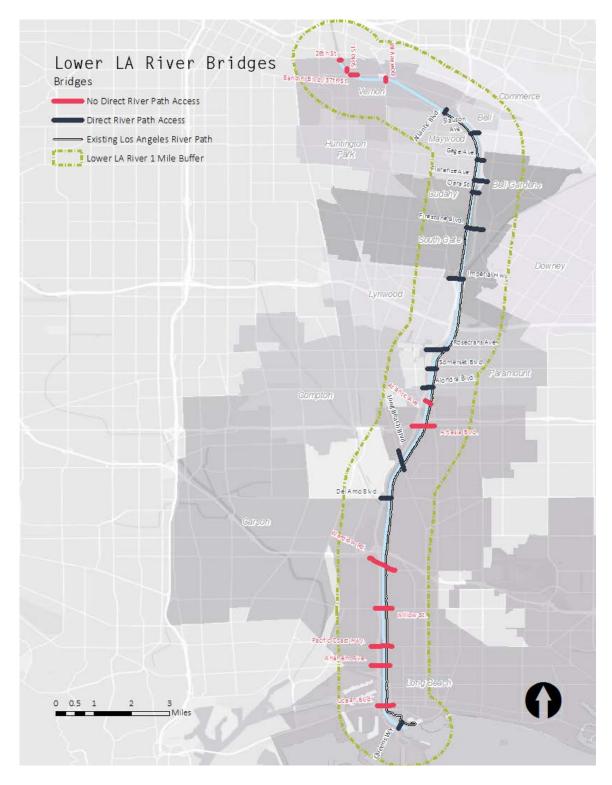
Bridges along the Lower LA River are not close enough to one another, which creates a barrier for non-motorized users seeking to cross to the other side of the river. This scarcity of bridges providing non-motorized access from one side of the channel to the other often forces River Path users to walk or ride a relatively long way to cross. Because the existing River Path transitions from the west bank to the east bank of the Lower LA River at Imperial Highway, the River Path is significantly easier to access from the west bank *north* of Imperial and the east bank *south* of Imperial because the river channel

itself presents a barrier to accessing the opposite bank. The aforementioned proposed bike path along the west bank from Imperial Highway south may mitigate this situation somewhat, though the I-710 will still present a major barrier to accessing either the existing or proposed path. To assess the condition of bridges and crossings, the project team mapped each of the Lower LA River bridges, apart from freeway and railroad bridges, along with access points adjacent to each bridge.

Bridges that provide non-motorized access from one bank of the river to the other are relatively scarce. Of the 24 bridges that span the Lower LA River apart from freeway and railroad bridges, only 19 cross the portion of the LA River where the River Path currently exists (Figure 42). As the path does not currently extend north of Atlantic Boulevard, no access can be expected from the 26th Street, Soto Street, 37th Street, and Street Downey Street bridges. The remaining 19 bridges that cross the River Path are spaced an average of .89 miles apart, which may be a significant distance for some people to walk. Of those 19 bridges River Path, only 13 provide direct access, resulting in an average distance of 1.4 miles between accessible river crossings along the River Path.

Even where they do exist, bridges providing access across the river are spaced unevenly. The length of the bike path segments that do not have direct access to bridges vary considerably, from 6.15 miles between the Queens Way and Del Amo Boulevard bridges in the City of Long Beach, to just .31 miles between the Clara Street and Florence Avenue bridges in the Cities of Cudahy and Bell, respectively. In addition to that north-south distance, some of the bridges are especially long as they cross over the river, the bike path, utility corridors, and the I-710. For example, the distance to cross the Lower LA River and I-710 on Rosecrans Avenue from the River Path access ramp to the first neighborhood entrance on the west bank is just short of a half-mile. Considering that a given destination on the opposite bank of the river will likely be an additional distance north, south, or west of a given crossing, the distances between bridges on the Lower LA River clearly create a significant barrier to walking and biking in the area.

Figure 42. Bridges along the Lower LA River and their access to the River Path.



Even if origins and destinations are within reasonable walking or biking distance, additional barriers may prevent users from crossing the river. For example, the Shoreline Drive and Ocean Boulevard bridges ban pedestrians as they cater primarily to high-speed vehicles and cargo traffic serving the Port of Long Beach. Most bridges crossing the river are unwelcoming to non-motorized users as they typically feature narrow sidewalks with no bike lanes. The Pacific Coast Highway bridge only has a sidewalk on the eastbound side and the Downey Road bridge only has a sidewalk on the westbound side. The notable exceptions to this rule are the Imperial Highway and Long Beach Boulevard bridges which both feature bike lanes. Similarly, the Artesia Boulevard and Queens Way bridge feature protected bike lanes.





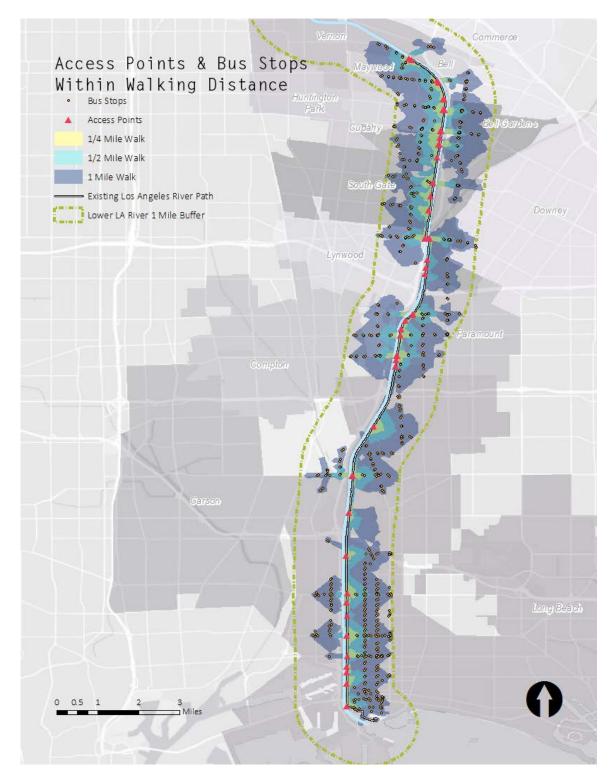
In addition to the conditions on the bridges themselves, infrastructure considerations for non-motorized users immediately before/after bridges are often subpar, presenting an additional barrier for non-motorized users hoping to cross the river, especially around I-710. Sidewalks and crosswalks at I-710 ramps are often intermittent, further reducing bike and pedestrian accessibility. For example, following a wayfinding sign across the Del Amo Boulevard Bridge to the Del Amo Blue Line station leads to a location where highspeed vehicles enter and leave the freeway without the benefit of crosswalks or signage alerting motorists that there might be pedestrians attempting to cross. Sidewalks in this area are narrow and intermittent, often replaced with dirt tracks. There are also only intermittent sidewalks on the Atlantic Avenue and Wardlow Road bridges. Among the bridges that include ramps to the I-710, crosswalks exist across all of the ramps only at Willow Street, Long Beach Boulevard, Imperial Highway, and Florence Avenue with all other bridges with freeway ramps missing at least one crosswalk. Improvements to the bridges themselves must be coordinated with improvements to streets leading up to the bridges to effectively reduce the combined barriers imposed by river crossings that are unwelcoming towards non-motorized users in their existing condition.

In 2014, the Los Angeles County Metro Board of Directors requested a feasibility study to close the eight mile gap in the existing River Path from Elysian Valley to the City of Vernon. Completed in 2016, the LA River Bike Path Gap Closure Feasibility Study notes that environmental mitigation for Metro's I-710 Expansion project will provide "opportunities to improve streets and intersections for people walking and biking" since "most of the arterial street bridges that cross the LA River in this area will be reconstructed as part of this project." The existing bridge at Firestone Boulevard has already been undergoing expansion and reconstructed crossings will include sufficient bike infrastructure, Caltrans is legally required to consider complete streets solutions and promote bicycling and walking for all planning and construction projects.⁷⁹

TRANSIT NETWORK

Use of the Lower LA River for recreation or active transportation is dependent on travel to and from its amenities, in part through the public transit network. There are 36 clusters of formal access points and 52 distinct access points to the river between Vernon and Long Beach. If users do not live within walking or biking distance to one of these points, they must take a car or use public transit. A GIS analysis was conducted to determine where bus stops are located around the Lower LA River and how many stops can be reached by a quarter-mile, half-mile, or one-mile walk/bike to or from a river access point (Figure 44). Data was collected from Metro⁸⁰, the City of Long Beach⁸¹, and other communities in the Lower LA River study area where applicable and available.^{82–90} According to this analysis, there are 45 bus stops within a quarter-mile of Lower LA River access points, 211 stops within half-mile, and 728 stops within one mile.





Bus stops that are a quarter-mile, half-mile and one mile from river access points are well distributed across communities north of Long Beach, whereas in Long Beach bus stops more than a half-mile from river access predominate. There are no bus stops within a quarter-mile of the river in Commerce, Bell Gardens, and very few in Compton or South Gate. Although there are many stops within one-mile of river access in Long Beach, there are many fewer within a half-mile, and only eight within a quarter-mile. Our fieldwork also found that certain areas that can be reached by walking a certain distance or for a certain time, also known as "walksheds," between access points and transit stops have gaps in signage and sidewalks that could make walking difficult for some users.

Examination of the walksheds, shows that the I-710 impedes walking to transit. When the freeway is located on the east side of the river, the walksheds tend to extend further on the west side. The reverse is true when the I-710 is on the west side of the river. Whichever side of the river the freeway is on, the ramps, pylons, and long stretches of massive structure interrupt the sidewalk and create obstacles that take a long time to walk around.

Users who are able and willing to walk up to one mile between a bus stop and a river access point are generally well served across the communities in the study area. There are many bus stops within one mile of a river access point. For people who would prefer to walk about a half-mile, there are only about one-third as many bus stops available, but they are also well distributed across communities north of Long Beach.

The planning and provision of transit services usually requires more coordination between different city agencies than does the installation of an isolated or temporary amenity such as a bench or shade structure, so changes to these systems may be harder to implement. It is possible that some transit services offered by local agencies could be slightly altered to give greater access to the River Path without much disruption systemwide, perhaps as part of a weekend alternative schedule. As part of special programming, a community may decide to arrange transportation from a more central location to a river access point. As has been mentioned elsewhere in this report, simply providing more and better information about the location of services and amenities could greatly improve the community's user experience of the river as it exists today.

EQUESTRIAN TRAIL NETWORK

There is approximately 13 continuous miles of dedicated grade-separated equestrian trail running parallel to the River Path. The equestrian trail is located on the east side of the river, extending from the Wrigley neighborhood in Long Beach, at Willow Street, to the confluence of the Rio Hondo and LA River in South Gate. At the confluence the equestrian trail diverts from at the LA River to continue along the Rio Hondo. There are 25 access points to the equestrian trail along the Lower LA River (Figure 45).

There are a variety of equestrian facilities located near or directly adjacent to the river (Table 7). In addition to private stables, there are also equestrian centers, which include city-funded and maintained arenas with training areas, show arenas, restrooms and parking lots to locations with trainer programs and horse stabling. Additionally, there are trailer parking lots, which are specially designed to accommodate large horse trailers.

EQUESTRIAN FACILITY & AMENITIES ALONG THE LOWER LA RIVER				
Name	Location	Туре	Size (in Acres)	Amenities
Imperial Equestrian Center	South Gate	Private equestrian center	~ 9.0	Full service boarding and training facility
Tanzanite Stable	Paramount	Private equestrian center	~ 7.0	Full service boarding and training facility
72nd Street Staging Area	Long Beach	Funded and managed by Los Angeles County Department of Parks and Recreation	~ 3.0	Coral pen, arena, bleacher area and building for viewing and judging special events
Deforest Park Trailhead	Long Beach	Public trailer parking lot	N/A	Parking
Virginia Vista Court Rest Area	Long Beach	Public trailer parking lot	N/A	Parking and shade structure
Rancho Rio Verde Riding Club	Long Beach	Private equestrian center	~ 8.0	Full service boarding and training facility

Table 7. Equestrian facility amenities along the Lower LA River.

Lisa Wall Training Facility	Long Beach	Private equestrian center	~ 8.0	Full service boarding and training facility
Dreamcatcher of Los Angeles Therapeutic Riding Center	Long Beach	Private equestrian center	~ 14.00	Full service boarding and training facility
Unknown	Long Beach	Private equestrian center	~ 1.3	Unknown
Unknown	Long Beach	Private equestrian center	~ 8 .0	Unknown

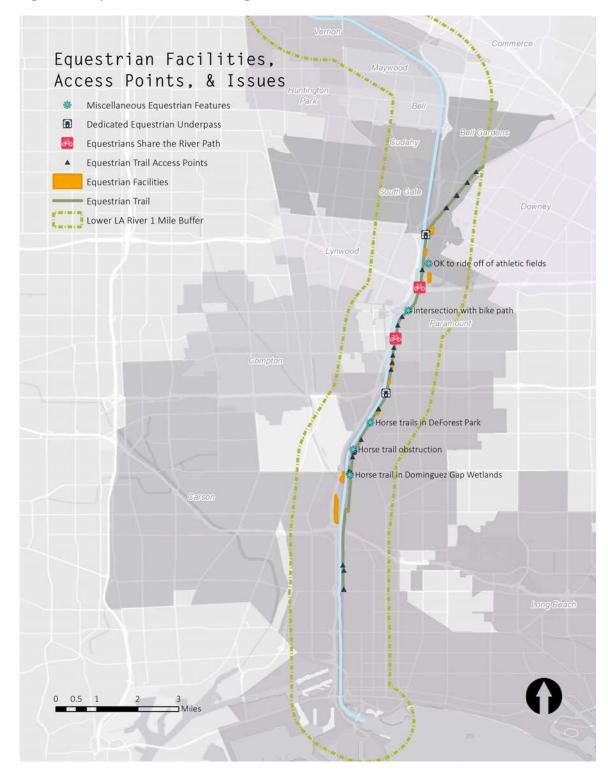


Figure 45. Equestrian facilities along the Lower LA River.

Freeway and Railroad Crossing

Out of the 12 freeway and railroads that cross the Lower LA River between Long Beach and South Gate, six are problematic for equestrians for three main reasons:

- Equestrians must ride on the sidewalk and cross over the road to continue onto the path.
- Equestrians are diverted to share an underpass with bicyclists. Many equestrians are uncomfortable with the speed at which cyclists ride and worry that the horses will be spooked.
- Under the Blue Line rail underpass, an additional concern is the loud noise the train makes passing over.

River Crossing

There are at least two equestrian centers and multiple nearby equestrian communities on the west side of the river in the cities of Long Beach and Compton. Riders from those communities do not have clear or easy connections to the trails on the east side of the river. Some riders ride on the road to access trails, which can be dangerous for both equestrians and drivers.

Location of Park Horse Trailers

Equestrian riders who do not stable their horses along the river, or would like to access a different stretch, have limited parking options along the river. In some stretches, surrounding neighborhoods actively oppose the parking of horse trailers along residential streets.⁶⁰

SOLUTIONS DISCUSSION

AMENITIES

As described in the previous sections, Lower LA River amenities are not evenly distributed along the corridor, and in some instances, certain amenities are completely lacking and/or in poor condition.

Parks

There is a lot of potential to enhance existing open spaces and add new parks along the river. In the spaces that are lacking in amenities, a short-term improvement would be to plant more native plants to beautify and add more habitat. Although these parks are currently lacking some amenities, they are already designated as open space, and

therefore cannot be developed. Upgrades such as lawns, benches, tables, or simple play structures are a relatively cheap and easy way to provide more amenities. In areas where there are larger gaps between the existing parks, excess river right-of-way space could be landscaped and amenities such as benches or small play structures could be added. Increasing the density and evenly distributing low-cost amenities and landscaping along the river can have a big impact in creating a more park-like environment and providing more space for people to enjoy and recreate in.

Water Fountains and Bathrooms

While adding new water fountain and bathroom facilities is a longer-term task, installing interim wayfinding signage would be beneficial to users. Signage informing users of bathroom facilities and water fountains should go outside of parks where those amenities are present. Wayfinding signs should also be installed along the path that tell the distance between facilities or warn that there are no facilities for the remainder of the path. In addition, we recommend installing signs to inform people where water fountains and bathrooms are located outside of the path. In the future, installing water fountains would be a low-cost way to improve the user experience along the river path.

Seating and Benches

Another deficiency that is relatively cheap to address is the quantity and quality of seating along the river path. Existing structures could be shaded with awnings, and temporary additional seating could be added to the path.

Lighting

Users have expressed the desire for more lighting. Adding more lighting in the long-term is a necessary investment to improve visibility and the perception of safety.

Signage

Adding more wayfinding and signage is one of the best ways to activate and give meaning to public spaces. Custom, community-oriented, and contextualized signage can help identify nearby points of interest to river path users including local businesses, restaurants and/or community and cultural resources. Regulatory signage in its current state does not appear effective in preventing river users from accessing the flood channel. Instead, signage could be installed to make people aware of the risks they face should they decide to enter the channel. In general, engaging and community-driven signage is one of the lowest-cost ways to highlight the amenities already present in the built-environment.

Tree Cover and Shade

The final major deficiency is a lack of tree-cover and shade, which can be addressed by planting more trees and installing shade structures, both of which can be done in the short-term and long-term. An important consideration is that even mature trees only provide shade in certain areas at certain times of day, so structures providing shade with different orientations may be desirable.

ACCESS POINTS

While there are ample access points, they are not distributed evenly and are difficult to cross due to lack of bridges. Existing access points are not suited to all user groups. To remedy this situation, considerations should be made to retrofit existing access points and design new access points to ensure they are accessible to all river users

River Trail Access Points

In many places the roads connecting to the river access points are not comfortable or safe for bicyclists or pedestrians. While additional ramps and stairways are not without costs, additional access points could be installed more quickly and for a fraction of the cost of more ambitious river revitalization projects, such as entirely new parks and bridges. Moreover, additional River Path access points could be designed and developed in partnership with the specific neighborhoods that they would connect to. There is precedent for this approach with Cal Poly Pomona's Community Constructed Participatory Design-Build projects, as well as the process underway with the Disney-funded Rio Vistas project along the Upper LA River.

Bridges, access points, and junctions along the Lower LA River are prime opportunities for future wayfinding improvements. Effective wayfinding signage could begin to improve the recreational experience along the Lower LA River before long-term revitalization efforts are complete or the proposed bike network built out by improving user confidence, navigation, perceived accessibility, and sense of place for relatively little investment. Wayfinding also could be used to direct River Path users to neighborhood shops and restaurants to promote local businesses and encourage broader economic resiliency in river-adjacent communities. While new bridges or the conversion of railroad bridges to bike and pedestrian use may reduce the barrier imposed by river crossings in the long-term, interim solutions like low-flow crossings within the river channel could improve access in the short-term at a fraction of the cost. Low-flow crossing are less costly than bridges spanning over the river channel because low-flow crossings only cross the low-flow channel at the center of the channel floor.

Pedestrian and Bike Network

While many of the river-adjacent cities have plans to improve their bicycle infrastructure, north of the City of Long Beach there are few bikeways for cyclists to get to the Lower LA River. Generally, the river is well served by transit, but this can be improved by reducing the distance people must walk from bus stop to river. Long-term bike and pedestrian network improvements can be relatively expensive compared to other interim improvements and often require more rigorous technical analysis for implementation. For example, the three new bike paths proposed by the I-710 Corridor Bike Path project are expected to begin environmental studies in 2017 with expected construction costs of \$53 million, \$15 million, and \$49 million respectively. However, as described in our section on Signage, wayfinding signage represents a potential interim improvement that can be relatively low-cost and easy to implement while improving the human experience of interacting with the river regardless of mode. The Pedestrian and Bicycle Information Center, an arm of the University of North Carolina Highway Safety Research center funded by the Federal Highway Administration, estimates that a typical trail/wayfinding sign costs between \$500-\$2000.

Transit Network

The provision of transit services requires more long-term coordination and investment than does the installation of an isolated or temporary amenity. It is possible that some transit services offered by local agencies could be slightly altered to give greater access to the River Path without much disruption system-wide, perhaps as part of a weekend alternative schedule. As part of special programming, a community may decide to arrange transportation from a more central location to a river access point. Providing more and better information about the location of services and amenities could greatly improve the user experience of interacting with the river as it exists today.

Equestrian Network

Equestrian trail users face a unique set of challenges. Stabling and exercising horses requires large and heavy equipment, and the horses themselves are susceptible to physical injury and may exhibit unpredictable behavior from interactions with pedestrian, bicycle, or other river users. The most common areas for potential conflict between equestrian and other users are intersections and underpasses where horses, cyclists, and pedestrians converge. Clearly delineating these spaces or designating additional equestrian rights-of-way may improve the experience of the river for people and horses alike. Horse trailers and other equipment may require additional special facilities, including parking, to accommodate users.

Implications for interim improvements related to each of the issues raised in this section are analyzed in the following tactical urbanism section.

TACTICAL URBANISM

This section looks at scalable, short-term, community-led interventions as a potential strategy for mitigating some of the issues defined previously in our report. Our decision to study tactical urbanism was three-fold: these types of interventions are not yet being explored extensively by the Lower LA River Working Group, "people-first" planning and inclusive engagement are useful strategies in designing amenities that do not encourage displacement, and the uniquely complex governance structure of the Los Angeles River has created barriers to project implementation that are potentially lowered by projects that are temporary, low-cost, and community-led.

DEFINING TACTICAL URBANISM AND ITS CONNECTION TO OTHER CHALLENGES

The term "tactical urbanism" generally refers to a spectrum of short-term and scalable interventions to address urban challenges ranging from the unsanctioned re-use of existing infrastructure, to institutionally backed projects that are constructed using semi-temporary materials. Tactical urbanism can be defined as:

A deliberate approach to neighborhood building that uses scalable, short-term interventions to catalyze long-term change. It can be a low-cost and low-risk way to test out a project or plan and gather data before making large political or financial investments. These locally focused and community-led projects help develop social capital between citizens and build organizational capacity between public-private institutions, nonprofits, and their constituents. Also important, they create an accessible way for people in communities to experience proposed planning ideas and react with their opinions regarding the future of their community space.¹

The Lower LA River has been designed in a way that has kept people from accessing its potential benefits for decades. Due to these barriers, it is difficult to determine what demand there might be for new Lower LA River amenities. The formal process can be limited in the number of people it can reach and how many people are willing to attend meetings to voice their opinions. The power dynamic inherent in community outreach can be potentially restructured by community-led projects. Many groups, including the Working Group, have already attempted to solicit feedback from members of the

community in order to inform the long-term planning process. There may still be additional lessons to be learned from observing community-led tactical urbanism projects implemented along the river.

As described earlier in in the Current Users section, the removal of barriers for one user group has the potential to create barriers for another group. For instance, increasing the presence of police may make some users feel safer, while alienating other users. Improving infrastructure and amenities for pedestrians may create barriers to use of the River Path by long-distance cyclists, and vice-versa. Creating greater recreational access to the river channel could serve to drive out users who currently make use of the channel precisely because it is an unpopulated area.

Changes to the built environment often have unintended consequences. Tactical urbanism serves as a way to create incremental change, while monitoring the effects of these changes over time. Unsuccessful or controversial projects can be removed, while popular interventions can be made permanent or operationalized.

TACTICAL URBANISM SOLUTIONS FOR THE LOWER LA RIVER

Many of the issues identified in sections on *Current Users* and *Existing Amenities & Accessibility* can be addressed through tactical urbanism (Table 8). In the following chart, the first column identifies the issues and barriers to use of the River Path, the second column provides a list of potential solutions for each issue, and the third column identifies Lower LA River-specific legal challenges to implementing solutions. Following the chart, we further analyze proposed solutions through case studies.

A TACTICAL URBANISM APPROACH TO REVITALIZATION				
lssue	Potential Project Solutions	Feasibility/Legal Challenges		
Limited Access Points	 Access point micro-parks New gates Stairs or other amenities to formalize existing access 	 Bike Path connections: Los Angeles County Permits required Off-path/neighborhood portions: Municipal permits/approval 		

Table 8. Tactical Urbanism Approach to Revitalization.

Lack of Lower LA River Crossings	 Low-flow crossings Enhanced Pedestrian/Bicycle amenities along existing crossings Better signage directing pedestrians/cyclists to nearby crossings 	 Impact to flood capacity of channel: Army Corps of Engineers Section 408 Permit required
Legal Access to Lower LA Riverbed	Seasonal Recreation Zones	 Memorandum of Understanding (MOU) required between the USACE, the County Flood Control District, and the State (Rivers and Mountains Conservancy) Rivers and Mountains Conservancy would enter a potential liability partnership with individual cities
Rest and Reprieve	 Low-cost benches Shade structures - trees Modifications to existing benches 	 Because improvements are unlikely to impact the channel structure or flow, no USACE permits are needed, only LA County permits.
Lack of Identity/Design	 Murals on river walls Murals on retaining walls Decoration of existing bike path benches 	 Murals in the channel would require Army Corps approval Murals outside of the channel would require county or municipal permits Special care to use non-toxic paints should be taken for murals within the channel itself

Bike/Pedestrian conflicts	 Warning Signage/Murals Educational handouts Events that build understanding between users 	 Signs along the River Path itself would require the County's approval Signs in the surrounding communities would require municipal permits Special care to use non-toxic paints should be taken for murals within the channel itself
Orientation	 Wayfinding Signage Destination signage that gives trip time estimates Signage indicating individual city borders 	 Signs along the trail itself would require the County's approval Signs in the surrounding communities would require municipal permits

STRATEGIES AND LESSONS LEARNED IN SIMILAR CASE STUDIES

CREATING MORE ACCESS POINTS

• Project Example: Rio Vistas in Elysian Valley

Collaboration between Elysian Valley Residents, RiverLA, Walt Disney, NELA Waterfront Collective

Providing access to the LA River from the surrounding area is often a matter of getting buy-in from residents along streets that dead-end at the river. While access to the river is an amenity, it also raises safety, traffic, and parking concerns from local residents. One way of tackling this challenge is to use collaborative planning and design to include residents in the process from the beginning and garner their support for new access points.⁹¹ Access point parks are a good candidate for a tactical urbanism response because their success relies on a community-driven process and they can be relatively low-cost projects.

A bottom-up planning model was utilized for access point parks by River LA in their recent "Rio Vista" project in the Elysian Valley. River LA was able to secure \$1 million in micro-grant funding from the Walt Disney Corporation in order to design and implement three "Rio Vista" parks that provide access and green space for local residents. Local students from nearby schools were invited to learn about the design process by attending lectures and classes from experts in the fields of landscape architecture, art, civil engineering, community planning, and community organizing.⁹² The students then became part of a charrette to produce designs for the parks.

Three parks are currently under construction, but there are 27 more dead-end streets in Elysian Valley that could be potential future locations for Rio Vista parks.⁹³ The Rio Vista project presents a relatively inexpensive way of improving access points, which can be replicated in the Lower LA River. Once a community buy-in process has been established, the actual infrastructure that creates an access point can be scaled depending on funding.

Figure 46. Local students work in a design charrette. Source: KCET.



Figure 47. A local student's park design proposal. Source: KCET.

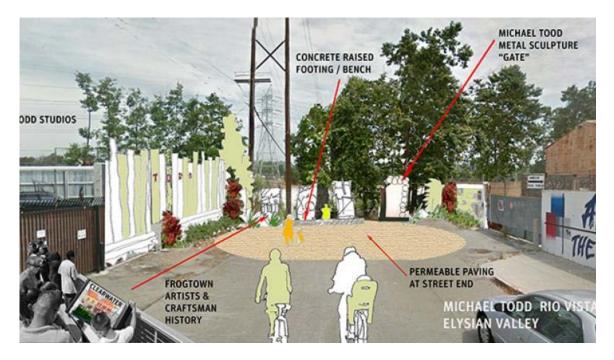
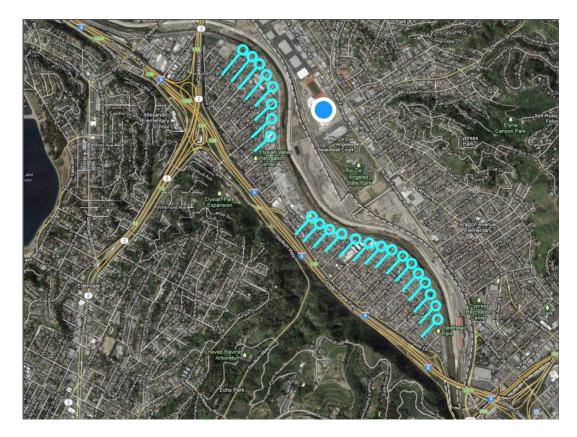


Figure 48. Potential locations for Rio Vista parks. Source: Huffington Post.



Building community buy-in for River access is a heavy lift, and the Rio Vista project appears to be successful in building support through their community/student led design process. As a next step, the County could potentially approve a 'kit-ofparts' that community members can then use to build their own project initiatives without worrying about specific legal challenges. Rules about temporary infrastructure should be established beforehand to limit the liability of individuals and speed up the implementation process. River LA and the LARiverWorks are working on passing guiding legislation for the river within the City of Los Angeles to limit liabilities. Capital for River LA and the LARiverWorks project was raised independently, however the City of Los Angeles is still responsible for maintenance. A potential maintenance partnership could be clarified with community partners through an MOU if there was a maintenance budget concern from individual cities.

CREATING RIVER CROSSINGS

Project Example: Low-flow River Crossings – Seoul, South Korea

The Cheonggyecheon river revitalization shares many similarities to the LA River and its relationship with surrounding communities. In the 1940's the Cheonggyecheon river was used primarily for sewage and flood control. In the 1950's it was concretized, sometimes used as a freeway, and largely ignored by Seoul residents aside from the occasional dumping or other illicit activity. In 2002, President of Korea, Lee Myung-Bak, approved rehabilitating the channel as part of an urban greening initiative to give residents more recreation space and connect them with the river.⁹⁴

At the time of this writing the Cheonggyecheon river project has been undergoing revitalization for three years and has cost Seoul \$360 million⁹⁵, certainly bringing the project beyond our working definition of tactical urbanism. A closer look reveals that some elements of the project were relatively low-cost, and therefore could be applied in a tactical urbanism context, such as low-flow crossings.

While new bridges or the conversion of railroad bridges to bike and pedestrian use may reduce the barriers imposed by a lack of river crossings in the long-term, interim solutions like low-flow crossings within the channel could improve access in the short-term at a fraction of the cost. Low-flow river crossings only require a bridge at the center of the channel floor. The low-flow crossings developed in the Cheonggyecheon river project were designed to inspire a sense of play while also creating crucial river crossing connections for pedestrians. The low-flow crossings in Cheonggyecheon utilize large stones which allow for easy crossing of the river without impeding the flow of water. Unlike a bridge that requires infrastructure and engineering to be suspended above water, these stones rest on the river bed and require virtually no further construction. Using simple and cheap materials, these crossings provide access across the river during low-flow season.

Figure 49. Low-flow crossings along the Cheonggyecheon. Source: Smart-Magazine.





LEGAL ACCESS TO LOWER LA RIVER BED

Project Example: Seasonal Recreation Zone – Elysian Valley Partnership between the City of Los Angeles, Mountains Recreation and Conservation Authority, Friends of the LA River

What started as permits for temporary access to the LA River for a clean-up day became a push by the Friends of the Los Angeles River to formally recognize public access to the LA River. During eight months of the year, when flood danger is negligible, access has been granted in select areas for recreation. This 'Seasonal Recreation Zone' was established in 2013 in the wake of Senate Bill 1201, which designated the LA River as a 'navigable waterway' and legalized it as a potential recreation area.

A Memorandum of Understanding was reached between the City of Los Angeles, the Army Corps, and the Mountains Recreation and Conservation Authority, which allowed the public to access the LA River and released the County Flood Control District and the Army Corps of potential liability. Liability as well as management of the program was assumed by the City of Los Angeles and the MRCA as a partnership and approved by City Council via Council File 14-0222.⁹⁶ The Seasonal Recreation Zone has proven popular with kayakers as well as people looking to hike, fish, bird watch, and explore the LA River.

Figure 50. River goers enjoy the Seasonal Recreation Zone in Elysian Valley. Source: City of Los Angeles.



Since implementation of the recreation zone, there has been less harassment of people using the LA River by police, even outside of the recreation season. There is less potential for someone to be pulled from the LA River at random as the blanket "No Trespassing" laws that govern the river channel can be enforced at any time. Additionally, the designation of the LA River as a recreation area or 'park' has given the police a clearer protocol for responding to events and emergencies in the LA River area. However, the Seasonal Recreation Zone is not without its challenges; as with any natural site open to the public, making sure people respect the ecology of the area has been challenging. There have also been water quality concerns as treatment plants upstream could potentially discharge large amounts of wastewater at random, putting the LA River users at risk.⁹⁷ A Seasonal Recreation Zone in the lower river channel could potentially face similar challenges.

REST AND REPRIEVE

As mentioned in the section on amenities, seating is a scarce amenity along much of the Lower LA River. Based on our user surveys of cyclists and pedestrians, there is a need for added benches at several points along the river. Particularly impacted areas could use benches that are designed and installed by the adjacent communities. Securing local input ensures that resources are tailored towards the specific needs of the community and allow for a form of expression and self-determination that is the goal of tactical urbanism. By collaborating with local communities on projects like benches and seating, agencies can engage communities and encourage their participation in the short- and long-term planning process.

• Project Example: Union de Vecinos "Community Living Room" – City of Los Angeles

One example of this type of seating/bench improvements is a project led by Union de Vecinos. Based in Boyle Heights, Union de Vecinos is a community organization that has been successful with its approach of gathering the community. They call these community-led improvements and projects "DIY Social Spaces." They summarize the main purpose of these spaces.

Los Angeles' social connectedness deficit is rooted in our poorly maintained car dominated streets, alleys and neighborhoods. Most Angelenos wish for a more walkable, safer, neighborly environment, but see no way they can make a change when even the simplest public space project seems to take years and hundreds of thousands of dollars. We think we have found a solution: DIY social spaces created by volunteers in a few months for a few thousand dollars.⁹⁸

Working in collaboration with architect Steve Rasmussen Cancian, Union de Vecinos designed sidewalk benches that were recommended by the community, which they called "Community Living Rooms." These benches were placed at bus stops around the City of Los Angeles. By having these benches designed and built by community members, the process provided a way for the community and Union de Vecinos to express themselves and engage with one another. Depending on the governance structures of Lower LA River cities, or the capacity of community groups interested in the builtenvironment, it may be cheap and easy to provide more and better seating along the River Path. Existing structures could be shaded with awnings and temporary or low-impact additional seating could be brought to the River Path. Murals and other visual or playful engagement could be added to existing seating areas to make them feel more connected to that neighborhood. Lastly, precautions should be taken to ensure that any alterations do not interfere with or block the River Path.

Figure 51. "Community Living Room" Benches by Union de Vecinos and Steve Rasmussen Cancian and various community members around the City of Los Angeles. Source: Simpson, 2015.



LACK OF IDENTITY/DESIGN

To bring the aesthetic of the riverbanks and bike paths to life, communities can tap into the creativity of local artists to adorn these public spaces with culturally relevant works of art that reflect the variety of preferences of these communities. When local communities are involved with determining the aesthetic of the area, they will be more engaged with the river. Murals and graffiti art are forms of expression that appeal to local communities, and come with the benefit of being relatively low-cost. The alternative is the hiring of an outside design firm to implement a long-term plan that fails to capture the spirit of what makes these cities and communities along the Lower LA River unique.

• Project Example: West Coast Meeting of Styles

Partnership between The Crewest Gallery, Friends of the Los Angeles River (FoLAR) and Man One.

The Crewest Gallery, Friends of the Los Angeles River (FoLAR) and Man One collaborated to organize the "West Coast Meeting of Styles." The concept for the event was formed because of the perceived perceptions by authorities in the Los Angeles region in regards to graffiti along the LA River. This event took place in the Fall of 2008, in the Downtown section of the LA River, south of Figueroa Avenue. For a total of two days, it brought together more than 200 graffiti artists that are based locally and internationally. The vision was to paint in the LA River banks near the Arroyo Seco Confluence in Highland Park and transform a 10,000 square foot section of grey concrete walls.

The art was inspired by scenes from throughout the City of Los Angeles. One mural represented the wildlife of the LA River by featuring a green spotted pacific tree frog and white egret next to a storm drain cover and a city worker dressed in orange.⁹⁹ As a result of this event, Man One and FoLAR have continued working on projects together. One of these projects is a self-funded mural by Man One called "#FacesLA," this will include portraits of Angelenos.

We recommend an increase in support from agencies by providing funding for public art along the river for creative individuals to express themselves and be more connected to the river. While graffiti along the LA River and in other parts of the City of Los Angeles is subject to fines, by bringing together artists at a cultural event and securing permits, this type of self-expression is supported rather than criminalized. This could be achieved by a non-profit or the County, by establishing a program to encourage local artists to provide art along the river. Figure 52. Graffiti artists from all over the globe coming together at the West Coast "Meeting of Styles." Source: Guanuna, 2015.



BIKE/PED CONFLICTS

As discussed previously in the section on User Types, one of the primary challenges for the River Path is mitigating potential conflicts between user groups, especially between cyclists and pedestrians. In our surveys, we found evidence to suggest that cyclists and pedestrians have different preferences for the shared River Path. For example, pedestrians value accessibility and safety while cyclists prioritize efficiency and speed in navigating the River Path. One solution could be to address both viewpoints simultaneously by utilizing user's intimate familiarity with the River Path to introduce short-term mitigation efforts such as low-cost, hand painted designs.

• Project Example: Community Constructed: Participatory Design-Build in Lower Los Angeles River Communities

606 Studio - California State Polytechnic University, Pomona Landscape Architecture

In 2016, a group of 11 third-year graduate landscape architecture students from the 606 Studio at California State Polytechnic University, Pomona worked together with Lower LA River adjacent communities within a half-mile of the Lower LA River using a participatory design model. Their goal was to have the community's needs and ideas at the center of the planning and design process. These communities included Maywood, Bell, Bell Gardens, Cudahy, and South Gate. Their final projects were aimed at designing and building improvement projects in each neighborhood.

For the Bell del Rio neighborhood in the City of Cudahy, the team collaborated with community members to develop several design concepts that were later presented to the City. The mural designs incorporated patterns in a vibrant color palette that the community felt was representative of the local character. The intention of these murals was to slow traffic and direct attention to the intersections where the designs were located.

Figure 53. Bell del Rio project team traffic mural in the City of Bell. Source: 606 Studio.



There were a few challenges that occurred during the engagement process. First, working with the City was a complicated experience that affected the team's potential to launch their projects and begin construction on time while also meeting community needs and design objectives. The challenges were due to various back-and-forth with City staff and the required procedures for acquiring permits. According to the project report, the traffic mural project was a creative and innovative idea to reduce the previous traffic incidents that occurred at the intersection. This is one example of the many low-cost projects that can be implemented along the Lower LA River to help reduce accidents and create safer recreational spaces. When conducting participatory design along the Lower LA River or adjacent to the Lower LA River, organizations and community members should plan on involving city representatives early on in the process.

WAYFINDING SIGNAGE

The adjacent communities to the Lower LA River are much more familiar with the surrounding amenities and businesses. Therefore, locally designed signage can be a low-cost way of increasing accessibility for cyclists and pedestrians along the Lower LA River who may not be from the surrounding area. Based on the fieldwork we conducted, we identified a lack of signage, including signs that highlight local attractions, businesses and river-related amenities. Locally designed signage can be accomplished with the help of a community organization, which can leverage local expertise to create signage in the short-term as an example of what might be adapted as an official wayfinding system.

• Project Example: Wayfinding - Walk [Your City] (formally known as WalkRaleigh) In January 2012, the downtown area in the City of Raleigh, North Carolina was rapidly getting denser, but residents noticed that pedestrian activity had not increased. A group of residents came together and wanted to find out why people weren't walking more. The most common answer was that things were just too far. As a result, this group of residents decided to post 27 informal directional signs in the downtown area to start a conversation and get people more involved, calling it WalkRaleigh. These signs were produced by professionals and were easy to install. Due to the popularity of the signs and the positive feedback that was received, the project turned into a formal pilot project and was adapted into the City's Comprehensive Pedestrian Plan.¹⁰⁰

Today, WalkRaleigh is known as Walk [Your City]. It has turned into an international movement, where communities have the opportunity to customize directional signs by designing them online. Walk [Your City] will make the signs and ship them to community members to install. Pedestrians are able to scan the signs for specific directions. Walk [Your City]'s sign format has helped to boost walkability in communities by clearly showing distance in minutes to surrounding amenities.

Installing wayfinding and signage throughout the LA River, along the bike path and in surrounding areas could be a short process with relatively little investment. Bridges, access points, and junctions along the LA River could be prime opportunities for future wayfinding improvements. This could begin to improve the recreational experience along the River Path long before long-term revitalization efforts are complete. Personalized and contextualized signage can be more responsive to the surrounding environment and could better convey to users what points of interest are nearby, such as a local restaurant or cultural resource. Such signage would create a benefit to the local businesses and may produce broader economic resiliency in Lower LA River-adjacent communities. Lastly, engaging and community-driven signage is one of the lowest-cost ways to highlight the amenities already present in the built-environment.

Figure 54. Walk [Your city] signs installed on light poles in Raleigh, North Carolina and San Jose, California. Source: Walk [Your City].





CONCLUSION

The Lower LA River is used by people of all ages, across all modes, and socio-economic status. The river already functions as a local linear park for many surrounding communities, but challenges remain. Some users and community members feel unsafe or are discouraged by trash, vandalism, or inappropriate behavior among other river users along the River Path. Public restrooms, water fountains, seating, lighting, shade and wayfinding are all sparse and unevenly distributed. While providing additional and improved amenities of all types would be preferable, we recommend focusing improvement efforts in in the areas most lacking. Additionally, experimenting with a potential solution such as new wayfinding standards could allow for more robust public engagement by trying it out on a smaller scale and temporary basis to receive feedback. This process can help ensure that the solutions selected for longer-term, more comprehensive projects meet community needs while allowing for tweaks in design and implementation strategies to address any unexpected conflicts or oversights.

Similarly, access to the Lower LA River right-of-way is currently limited and unevenly spaced along the river. Many access points are inaccessible by bicycle or wheelchair, and connect to incomplete bicycle and pedestrian networks in the adjacent communities. Bicycle and pedestrian access to the river will improve as local active transportation plans are implemented, but care should be taken to prioritize active transportation projects that increase access to the growing cluster of regional and local parks and recreation spaces along the Lower LA River. Moreover, higher quality bike and pedestrian facilities that have been proven to be more effective at attracting users who might not otherwise walk or bike should be prioritized and implemented where feasible. Transit access near the river is already abundant, but only if users are able and willing to walk up to a mile to a bus stop. Local transit authorities should provide stops adjacent to, or as close as possible to the River Path, river-adjacent parks, and open spaces whenever possible.

Tactical urbanism – i.e., low-cost, short-term and often community-led interventions – could be a powerful way to address many barriers to greater community engagement with the Lower LA River. These types of interventions may also be a way to better understand what users want and need from the river and river-adjacent community spaces. Removing barriers for one type of user may increase barriers for another. Before making unalterable changes to the river fabric, tactical urbanism projects can help the community and local agencies prioritize which barriers to remove and experiment with how a proposed intervention might play out before committing to implementing it in a permanent, widespread, or relatively expensive fashion.

Local community groups and cities adjacent to the Lower LA River can use the data we have compiled on existing amenities and access to the river right-of-way, as well as tactical urbanism strategies for short-term interventions and engagement, that can lead to long-term changes along the river.

CHAPTER 3: PLANNING, IMPLEMENTATION & GOVERNANCE

INTRODUCTION

The development of the Lower LA River Master Plan presents several challenges and opportunities. Previous chapters of this document identified the unintended effects of river revitalization, as well as the use of community-led efforts (or "bottom-up" planning) as one way of countering gentrification forces. This chapter focuses on "top-down" planning considerations to inform the Working Group as it finalizes its conceptual recommendations for revitalization efforts along the Lower LA River.

The purpose of this chapter is threefold: (1) to assess previous revitalization planning and implementation efforts and present key findings; (2) to identify historical and current challenges to be considered during plan development and provide options for addressing them; and (3) to present principles to guide the Working Group as it creates the Lower LA River Revitalization Master Plan and looks forward to implementation. This chapter is divided into five sections:

Methodology: Presents the research methods used to analyze previous LA River master plans and identify current challenges facing the Working Group in the development and implementation of a Lower LA River Revitalization Master Plan.

The Los Angeles River Master Plan (1996): Provides an overview of the purpose, goals, approach and implementation mechanisms of the County's 1996 Plan and presents key findings relevant to Lower LA River planning.

The Los Angeles River Revitalization Master Plan (2007): Provides an overview of the purpose, goals, approach and implementation mechanisms of the City's 2007 Plan and presents key findings relevant to Lower LA River planning.

Current Challenges and Opportunities: Outlines challenges to be addressed by the Working Group and provides options to stakeholders to meet these challenges.

Guiding Principles: Presents overarching principles that we recommend the Working Group incorporate into their approach to planning, implementation, and governance.

Methodology

This section describes the steps we took to analyze previous river-related plans, legislation, and relevant research. We began our research by assessing the 1996 Los Angeles River Master Plan (1996 Plan) and the 2007 Los Angeles River Revitalization Plan (2007 Plan) to understand the context of the current planning process. Of particular interest were the plans' purpose and scope, planning and implementation processes, community outreach and engagement, proposed funding mechanisms, and finally, plan outcomes. Given the similarity in scope to the Working Group's current planning and implementation mandate, we placed special attention on collecting and analyzing an inventory of projects resulting from the 1996 Plan. Finally, we synthesized this information into findings to inform our guiding principles.

In addition to reviewing the plans themselves, we conducted stakeholder outreach to gain better insight into past and contemporary planning/implementation initiatives. Team members attended a series of Working Group general meetings in early 2017 on March 2, April 6, and May 4 as well as Implementation Plan Element Committee sessions on March 22 and April 26. In addition, we interviewed representatives individually from the Los Angeles County Department of Public Works (LACDPW), United States Army Corp of Engineers (USACE), Friends of the Los Angeles River (FoLAR), the City of Los Angeles Department of City Planning (LA River Works), and UCLA's Luskin Center for Innovation. We also had several informal discussions and/or email exchanges with representatives from Tetra Tech, the Watershed Conservation Authority, the Urban Waters Federal Partnership, the Office of Assembly Speaker Anthony Rendon, and officials from cities adjacent to the Lower LA River. All of these communications informed our understanding of what aspects of the 1996 and 2007 Plans could be relevant to current planning and implementation efforts along the Lower LA River.

THE LOS ANGELES RIVER MASTER PLAN (1996)

The 1996 Los Angeles River Master Plan (1996 Plan) marked the first time the County attempted to expand the role of the LA River from a flood control channel to a multipurpose greenway. Prompted by increasing public interest - largely due to advocacy by Friends of the Los Angeles River (FoLAR)¹⁰¹ - in transforming the LA River and Tujunga Wash into community resources, Mayor Tom Bradley established a task force to examine revitalization opportunities for the river's entire 51-mile stretch in 1989.¹⁰² This led to the creation of an Advisory Committee by the County Board of Supervisors in 1992 and comprised 13 river-adjacent cities, several agencies, and a few non-profit/community groups (See Appendix C).

Over the course of the next four years, the Advisory Committee drafted strategies to address eight overarching goals:¹⁰²

- 1. Ensure flood control and public safety needs are met.
- 2. Improve appearance of the river and the pride of local communities in it.
- 3. Promote the river as an economic asset to the surrounding communities.
- 4. Preserve, enhance, and restore environmental resources in and along the river.
- 5. Consider stormwater management alternatives.
- **6.** Ensure public involvement and coordinate Master Plan development and implementation among jurisdictions.
- **7.** Provide a safe environment and variety of recreational opportunities along the river.
- **8.** Ensure safe access to and compatibility between the river and other activity centers.

The authors of the 1996 Plan acknowledged that the river was more than a piece of infrastructure to manage seasonal flooding. Rather, they argued, the LA River had the potential to add value to adjacent communities and play a broader positive role in the region. The following sections provide an overview of the planning and implementation processes of the 1996 Plan, the extent of community engagement in these processes, how the 1996 Plan addressed funding, and finally plan outcomes. In addition, we present five key findings to inform the Working Group in its planning and implementation efforts.

PLANNING PHASE

The Board of Supervisors established a three-tiered management structure for the development of the 1996 Plan (Figure 55). At the top, the Board retained the power to approve plan elements and decide which plan components would be implemented. The Advisory Committee sat below the Board and served as the coordination body among the political, environmental, technical, and community stakeholders (as selected by the committee). The County's Department of Public Works (LACDPW) served as the project manager for the master planning effort in conjunction with the Departments of Parks and Recreation and Regional Planning.¹⁰²





The Advisory Committee established and oversaw six programmatic sub-committees (demonstration project and implementation committees were later added) that addressed key plan elements: aesthetics, economic development, environmental quality, flood management and water conservation, jurisdiction and public involvement, and recreation. Each of these sub-committees provided the context for their respective issue areas and developed their own set of goals, objectives, and recommendations. These recommendations ranged from conceptual (e.g. the creation of artistic works along the river) to specific (e.g. the development of a commercial "Sports Center" at the confluence of the LA River and Los Angeles River Improvement Overlay District, or LARIO, trails). The subcommittees also addressed the prospective changes in policy that would be required to translate their sections' visions to reality.

The County's Department of Public Works created a seven-phase schedule (or "Blue Print for Action") for plan development, which consisted of the following components:¹⁰²

- Phase A Outreach and Document Review: In this first phase, LACDPW identified affected LA River stakeholders that would ultimately be included in the Advisory Committee. In addition to soliciting input, securing stakeholder commitment to the project served as an important step in achieving buy-in. This also aided LACDPW in collecting information on all previous, concurrent, and future planning initiatives, right-of-way and ownership issues, and case studies relevant to the river.
- Phase B Analysis of Resources, Uses, Issues, and Goals: This phase occurred at the same time as Phase A and laid the foundation for project-oriented tasks. In addition to the analysis of resources, uses, and issues, the Advisory Committee built on the City of Los Angeles Task Force's work in identifying goals and objectives, as well as determining evaluation criteria for whether certain uses

should be incorporated into the final master plan. Finally, this phase included tasks oriented toward financing and funding of potential projects.

- Phase C Master Plan Formulation: The goal of this phase was to conduct extensive community outreach to identify which locations were most in need of revitalization and determine what kinds of projects would add value to the surrounding community. These efforts would be conducted along each of the five reaches of the LA River and address the six issue areas designated to the subcommittees.
- Phase D Implementation Strategy Development: Following the first three stages of research and plan development, the Advisory Committee turned its attention to implementation and formed an implementation subcommittee. Here, the Advisory Committee, in conjunction with the Board of Supervisors and implementing agencies, would decide upon priority projects, identify funding sources, and establish an implementation timeline.
- Phase E Environmental Review: The original "Blue Print for Action" identified the need to conduct an environmental impact assessment of the proposed plan in accordance with the California Environmental Quality Act (CEQA). The County analyzed the potential environmental impacts of the 1996 Plan, concluding that it would not have any significant impacts under CEQA. As such, the County adopted a Negative Declaration in February 1996.
- Phase F Master Plan Adoption: The 1996 Plan was formally presented to the 13 stakeholder cities through public hearings. Once approved by the cities, the 1996 Plan received final approval by the County Regional Planning Commission and Board of Supervisors in June 1996.
- Phase G Master Plan Implementation: As will be discussed in later in this report, the Advisory Committee issued four "demonstration project" plans for immediate implementation to be jointly carried out by LACDPW and either the City of Los Angeles or the City of Long Beach (depending on the project). In addition, the implementation of the 1996 Plan would include a monitoring program for the rest of the recommended projects, as well as a feedback system to account for any changes to the implementation plan.

COMMUNITY ENGAGEMENT

Although community outreach during the planning phase may seem modest by current standards, it was the first time the public participated in such a wide-ranging and comprehensive planning initiative along the river. Outreach efforts began in 1993 with a series of public workshops (totaling 200 participants) and two public subcommittee meetings to develop initial ideas and garner support for the effort.¹⁰² These efforts were eventually formalized through the creation of a Citizen's Advisory Committee (CAC) to participate in the implementation phase of the plan. The CAC's role was to "assist with project development at the community level; contribute to building public support for river enhancement; assist with safety education; and work on issues such as maintenance, safety, and security."¹⁰² The Department of Public Works also issued a semi-annual newsletter to update the public on plan development. However, it is unclear how widely the County distributed this newsletter. Plan notes indicated that the newsletters were distributed to only "400 interested parties." Individuals from river-adjacent cities had to take an active interest in long-range planning and make an effort to opt-in to the process, limiting overall potential public engagement.

IMPLEMENTATION PHASE

The Advisory Committee and Board of Directors did not mandate that cities implement the recommended projects that fell under their jurisdiction. That said, the 1996 Plan did highlight four "demonstration projects" that would be carried out—two in Los Angeles and two in Long Beach—to showcase the kind of redevelopment that would "best exemplify a long-term Master Plan project."¹⁰² The demonstration project sub-committee considered several projects and solicited community feedback on the types of interventions that would be of most interest. Although a framework was included in the 1996 Plan to guide how a project would be selected, two of the four demonstration projects (Tujunga Wash and Wrigley Greenbelt) did not appear on the list of prospective options. Rather, the 1996 Plan does not discuss the details behind the final selection process for the four projects. In the end, the subcommittee on demonstration projects chose the following four projects:

• **Tujunga Wash / Hansen Dam Interpretive Site:** Located at the Hansen Dam, where the Big and Little Tujunga Wash meet in the San Fernando Valley, the project focused on creating educational signs regarding water conservation resources. Additionally, the project would provide accommodations for the public, such as

bike racks, benches, and telescopes. The 1996 Plan assigned USACE and LACDPW to implement the project, which was completed in 1996.

- Los Feliz Riverwalk: Located along the east bank of the LA River between Los Feliz Boulevard and Colorado Avenue, the project allows pedestrian access in this area, creating access points, educational signage, and a walking path. The Los Feliz Riverwalk would also connect to the proposed Glendale Riverwalk and extend further south to create a seven-mile trail. USACE and the City of Los Angeles carried out implementation and completed the project in 1994.
- Dominguez Gap Environmental Enhancement: Located in the Dominguez Gap Spreading Grounds in northern Long Beach, the project would improve the wildlife habitat for birds by removing non-native plants, planting more native plants, and installing educational signs identifying bird species. The implementation agencies would be USACE and LACDPW, who completed the project in 2008.
- Wrigley Greenbelt Trail Enhancement: Located on Deforest Avenue between Wardlow Road and Willow Street in Long Beach, the project would improve the trail along that section of the LA River, providing signs and fencing, as well as connect the trail to the Los Angeles River Improvement Overlay District (LARIO) trails. Since the LACFCD scheduled the Los Angeles County Drainage Area (LACDA) project along the trail, the 1996 Plan did not designate the specific parties with implementing the project, anticipating project initiation would start at a later date. Currently, the project is still ongoing.

The Advisory Committee tasked the County Department of Public Works to serve as the designated project manager for the implementation of the demonstration projects with support from a newly created Implementation Team (comprised of members of the Master Plan's Implementation Subcommittee), as well as input from the previously mentioned Citizens Advisory Committee. The LA River Master Plan Advisory Committee would remain intact indefinitely and provide high-level guidance on new project development and evolving implementation strategies.

In addition to the demonstration projects, the 1996 Plan included several "recommended projects" for each city under a section entitled, "Mapping Component."¹⁰² The mapping component for each city provides a brief demographic background of each community, states the issues specific to the jurisdiction, and then recommends projects consistent with the plan's eight goals (Table 9). Since the 1996 Plan's scope only included cities

directly adjacent to the river, current Lower LA Working Group members Downey and Huntington Park were not included.

NUMBER OF RECOMMENDED PROJECTS BY CITY	
City	Number of Projects
Long Beach	7
Carson	2
Compton	4
Paramount	5
Lynwood	2
South Gate	7
Bell Gardens	5
Cudahy	3
Bell	7
Long Beach	7

Table 9. Number of Recommended Projects by City

Funding

The framers of the 1996 Plan recognized the need to address funding, but did not identify individual funding sources on a project-by-project basis. Instead, an appendix was provided with a list of 27 possible funding sources from federal, state, and local entities and outlines the requirements and possible uses for these sources.¹⁰² Acknowledging that navigating government funding applications can be cumbersome, the appendix begins with a list of private funding sources, including foundations, individuals, corporations, and service clubs, and also mentions in-kind contributions. The 1996 Plan encouraged cities to share costs when appropriate (as in intercity projects such as connecting trails), although particular mechanisms for doing so are not discussed in detail.¹⁰²

The 1996 Plan acknowledged that funding is difficult to acquire, especially for operations and maintenance. If cities are fortunate enough to secure funding, many of these grants can only be used to cover initial capital costs. Of the 27 funding sources listed in the 1996 Plan appendix, only six applied to maintenance costs; of those six, two sources restrict maintenance to a 10 percent maximum allowance of the total award. This may have discouraged cities to undertake much needed projects like the construction of public parks and other similar recreational facilities in areas that lack open space. Operation costs are treated similarly, and none of the funding sources listed in the 1996 Plan may be used for operational purposes. That said, there is some limited funding through the County's Proposition A (which allows for a maximum grant of \$500,000) and assorted state and federal sources.

Outcomes

Out of the four demonstration projects, three were successfully implemented and realized the goal of fostering further revitalization efforts.¹⁰³ The original project designated for Tujunga Wash was completed shortly after the 1996 Plan's release and prompted several follow-up projects: the Lower Tujunga Wash Greenway and Bikeway (sponsored by the City of Los Angeles), the Tujunga Wash Hydrodynamic Study (sponsored by the Trust for Public Land), the Tujunga Wash Restoration (sponsored by the Los Angeles County Flood Control District), and a bridge widening and bikeway construction project at Laurel Canyon Boulevard (sponsored by the City of Los Angeles). In addition, USACE and LACDPW introduced new pedestrian amenities, landscaping, and interpretive signage across the Tujunga Wash project area in line with 1996 Plan directives. Similarly, the Los Feliz Riverwalk was completed in 1999 (sponsored by Northeast Trees) and resulted in a follow-up project to connect the existing pedestrian and equestrian trails on either side of the channel.

In Long Beach, the Dominguez Gap Environmental Enhancement (renamed the "Wetlands Project") was completed by LACDPW in 2008 and deemed by one County official to have a "measurable impact on water quality and return enough water to the groundwater system to meet the supply demands for 900 families of four for one year."⁶⁸ In addition to the environmental benefits, the Dominguez Gap Wetlands project serves as an anchor and exemplar project for the Long Beach RiverLink revitalization plan released in 2007. Also included in the RiverLink plan is the Wrigley Greenbelt Enhancement, though this project is still in the conceptual design phase due to difficulties with scheduling the Los Angeles River Drainage Area project and acquiring the property.¹⁰⁴

In terms of the recommended projects for each city, the listings for San Gabriel and Lower Los Angeles Rivers and Mountain Conservancy (RMC) and LACDPW Watershed Projects indicate that 53 river-related projects are either complete or in-process along the Lower LA River. Of the 12 Lower LA River Cities included in the 1996 Plan, Long Beach, South Gate, and Bell have implemented the most projects (Table 10). The following list is not exhaustive, as cities may have implemented (or may be implementing) projects that are not captured by the RMC and Watershed Project databases.

RIVER-RELATED PROJECTS ALONG THE LOWER LA RIVER SINCE 1996			
City	Implemented	In-Progress	Total Projects
Long Beach	19	0	19
Carson	0	0	0
Compton	4	0	4
Paramount	3	0	3
Lynwood	3	0	3
South Gate	10	1	11
Downey*	0	0	0
Bell Gardens	1	0	1
Cudahy	2	1	3
Bell	4	1	5
Huntington Park*	0	1	1
Maywood	3	0	3
Commerce	0	0	0
Vernon	0	0	0
Total	49	4	53

Table 10. River-related projects along the Lower LA River since 1996.

* Not included in 1996 Plan

The County Department of Public Works also worked with cities to implement three cross-jurisdictional projects. Phases I and II of the Los Angeles River Sign Implementation Project introduced a uniform destination/interpretive signage system between Vernon

and Long Beach, satisfying one of the few projects from the 1996 Plan to span the entire stretch of the Lower LA River. The department also improved the conditions of the bike path along Southern Avenue between Vernon and South Gate. Although modest in nature, these projects demonstrated that it is possible for cities to collaborate on regional initiatives that pass through their jurisdictions.

Findings

From our review and analysis of the 1996 Plan, we identified five key findings:

- Finding #1: The 1996 Plan was the first of its kind to establish a formal, inclusive, and ongoing process to engage a diverse set of stakeholders along the LA River. Although it can be tempting to find fault in what the 1996 Plan did *not* achieve over the past two decades (hence necessitating AB 530 to revisit the Lower LA River planning process), it is important to place the Plan's development in context. Prior to 1991, the County included governmental decision-makers, technical experts, advocates, and citizens in the process, but communities and non-profits were on the margins. The 1996 planning process also served as a template for what would become the 2007 Los Angeles River Revitalization Master Plan process, and it continues to influence how the Working Group approaches the river today.
- Finding #2: The 1996 Plan provided the impetus for cities to include river-related improvements in their general plans. It is not clear whether the cities themselves provided the Advisory Committee with a list of river-related projects they were already planning to pursue or whether the 1996 plan influenced their visions. That said, several cities that updated their general plans after 1996 included some or all of the 1996 Plan's recommended projects in their respective general plans (namely Bell, Compton, Cudahy, South Gate, Long Beach, Maywood, Paramount, and Vernon). This suggests there was significant buy-in among stakeholder cities. For the cities that did not update or expressly incorporate aspects of the 1996 Plan into their general plans, it is possible that a lack of capacity, resources, and/or political will were factors; the extent to which any of these factors are indeed responsible requires further research.
- Finding #3: It is difficult to create multijurisdictional entities to manage implementation, and there is a danger in assigning important cross-jurisdictional responsibilities to such entities. In addition to the creation of the CAC and the designation of LACDPW as the implementation project manager, the 1996 Plan

promoted the formation of a Joint Powers Authority (JPA) to "pool resources to address funding, security, maintenance, and other issues faced by each jurisdiction."¹⁰² While the JPA is an ideal mechanism to address complex crossjurisdictional issues in theory, in practice it is difficult to encourage individual jurisdictions and agencies to cede sovereignty and even more so when attempting to create a new entity composed of local, regional, state, and federal authorities. Because of these challenges, a JPA was never formed. Not surprisingly, regional funding, security, and maintenance issues remain some of the most pressing challenges facing the Working Group today.¹⁰⁵

- Finding #4: The absence of prescribed and/or concrete feasible cross-• jurisdictional collaboration mechanisms yielded missed opportunities. Aside from the recommendation regarding the JPA, the 1996 Plan did not provide extensive analysis of other cooperation measures. The 1996 Plan mentions the need for coordination, presents several hypothetical cases of possible cross-jurisdictional coordination, and lists potential tools. However, the 1996 Plan does not specify which tools would be appropriate under what circumstances, nor does it explain the benefits and costs of any given collaboration tool.¹⁰² This is unfortunate as several cities seemed to express interest in joint projects. South Gate, Cudahy, and Bell Gardens, for example, each promoted a rail-to-trail project among the three cities as a recommended project. In another case, Bell Gardens wanted an improved wildlife habitat at a proposed city park with plantings along an easement in Bell and on South Gate property. Neither project was implemented, indicating continued challenges to the implementation of cross-jurisdictional projects due to an inability for the cities to reach cooperation agreements.
- Finding #5: Funding became a city rather than a regional responsibility for improvements along the river right-of-way, which prevented many projects from being realized. Most of the projects listed in the 1996 Plan—with the exception of the aforementioned County-led projects—were capital projects delegated to the cities for implementation. Applying for government grants may have proved excessively labor-intensive and time-consuming given the limited planning capacity among the majority of the Lower LA River Cities. Coupled with the fact that most available funding did not cover maintenance and operations, cities would see little reason to aggressively invest in new projects if they could not provide the requisite upkeep. Targeting private donors may not be an adequate strategy either. Studies show that an over-reliance on private philanthropy could lead to longer-term issues since monies are distributed for shorter-term periods

and may not provide enough funding on their own to cover capital, much less long-term operations and maintenance, costs.¹⁰⁶

THE LOS ANGELES RIVER REVITALIZATION MASTER PLAN (2007)

The City of Los Angeles created the 2007 Los Angeles River Revitalization Master Plan (2007 Plan) to create a more coherent vision for the 32-mile stretch of the River that passes through its jurisdiction. Building on community interest to repurpose Taylor Yard into a 40-acre state park and the objectives laid out in the 1996 Plan, the Los Angeles City Council established the Ad Hoc Committee on the Los Angeles River (Council Committee) in 2002 to formalize the revitalization process.¹⁰⁷ Several regional, state, and federal entities were engaged in projects along the River by this time, but there was no institutionalized process to coordinate these activities. In 2003, the Council Committee created the Los Angeles River City Department Task Force (Task Force; Table 11) – akin to the contemporary Lower LA River Working Group – to interface with County departments, State conservancies, USACE, and other key stakeholders (Appendix D).

Table 11. 2007 Plan Task Force Member	Agencies.
---------------------------------------	-----------

2007 PLAN TASK FORCE MEMBERS AGENCIES		
City Engineer (Chair) Mayor's Office Council District 1 Council District 4 Council District 5 Council District 9 Council District 13 Council District 14 Office of the City Attorney Board of Public Works Bureau of Engineering Bureau of Sanitation Bureau of Street Services Chief Administrative Officer Chief Legislative Analyst Community Development Department Community Redevelopment Agency	Department of Building and Safety Department of City Planning Department of Cultural Affairs Department of Recreation and Parks Department of Transportation Environmental Affairs Department Housing Department Los Angeles Department of Water and Power Los Angeles County Department of Public Works Los Angeles Police Department Recreation and Parks Department City of Burbank City of Glendale City of Long Beach Los Angeles County Department of Public Works U.S. Army Corps of Engineers	

This Task Force identified four broad principles to guide plan development, which mirrored and expanded upon the aesthetic, social, and economic goals established in the County's 1996 Plan:¹⁰⁸

- **1. River Revitalization:** To revitalize the LA River through ecological restoration and the creation of green spaces in the channel.
- 2. Neighborhood Greening: To green the neighborhoods through reconnecting the LA River to adjacent communities (and communities to each other).
- **3.** Community Opportunities: To capture community opportunities by encouraging enhancement, empowerment, and reinvestment where appropriate.
- **4.** Value: To create value by equitably distributing revitalization opportunities among underserved, river-adjacent communities.

The 2007 Plan aimed to translate these goals into a long-range vision, specific short- and long-term projects, and a practical implementation strategy. This section provides an overview of the City's planning and implementation processes, the extent of community

engagement in these processes, how the plan addressed funding, and plan outcomes. The section also presents four key findings to inform the Working Group in its planning and implementation efforts.

PLANNING PHASE

The Council Committee - chaired by Councilmember Ed Reyes who was joined by five additional councilmembers - played a pivotal role in laying the foundation for the planning process. In addition to serving a leadership role in establishing policies, commissioning studies, and promoting public outreach campaigns, the Council Committee was particularly effective in securing the initial funding for revitalization efforts. Such early efforts included raising \$500 million for LA River restoration by supporting the passage of Proposition O, allocating \$650 million toward 50 river-adjacent projects, and obtaining \$25 million via the support of California State Proposition 50.¹⁰⁸

The Task Force served as the project manager of the planning process and - in addition to coordinating planning activities with other stakeholders - formulated goals to address each of the four principles listed above (i.e., river revitalization, neighborhood greening, community opportunity capture, and value creation).¹⁰⁸ Although these four principles primarily focus on social, economic, and environmental virtues of river revitalization, the 2007 Plan places these issues in physical (e.g., hydrological constraints and flood control requirements), regional transport (e.g., demand for increased rail capacity), and larger policy (e.g., existing homelessness) contexts.¹⁰⁸

COMMUNITY ENGAGEMENT

The 2007 planning process improved on many of the community engagement and outreach efforts described in the 1996 Plan and demonstrated the City's interest in understanding the range of revitalization impacts on neighborhoods. For example, the 1996 Plan highlighted increased property values and resulting tax revenues as potential benefits of river revitalization.¹⁰⁸ In contrast to the 1996 Plan, the 2007 Plan included a section addressing gentrification and potentially adverse effects on existing populations as a result of such "benefits" to the community. As a result, the 2007 Plan included several pages dedicated to engagement strategies.

The Task Force took a more dynamic and multi-tiered approach to soliciting ideas from the community as compared to efforts by the 1996 Plan Advisory Committee.¹⁰⁸ As noted earlier, public participation for the 1996 Plan was limited to two subcommittee meetings and a series of workshops in 1993, which included a total of 200 participants. Stakeholder

engagement in the City of Los Angeles between 2004 and 2007 included two subcommittees, accessible and timely workshops throughout the planning phases (held through 2006), community events, a youth conference, partnerships with non-profit groups, and surveys that garnered nearly 800 responses. Moreover, the Task Force acknowledged a broader collection of stakeholders than the 1996 Advisory Committee and included not only more non-profit organizations, but also educational institutions, neighborhood councils, and cultural groups. Outreach efforts were more regular and extensive as well; an interactive website and email newsletters supplemented more traditional modes of communication such as press conferences and printed newsletters.

IMPLEMENTATION PHASE

The Task Force created an ambitious implementation schedule, governance structure, and management plan. In addition to establishing 240 new projects to be carried out over the near- and long-term, the 2007 Plan identified 20 "opportunity areas" and suggested five specific areas for detailed study. These "opportunity areas" served a similar function to the "demonstration projects" proposed in the 1996 Plan – to provide a public example of the LA River's potential to be a multi-purpose space that adds value to communities. The 2007 Plan was more transparent about how the Task Force selected these 20 areas, as compared to the 1996 Plan's brief discussion of the criteria for demonstration projects. The Task Force partnered with communities to develop evaluation criteria (i.e., the potential of the area to successfully demonstrate the 2007 Plan's four principles) for prospective opportunity areas and then develop the five detailed studies.¹⁰⁸ The five opportunity areas that warranted detailed studies (each of which included two alternatives) in the 2007 Plan were:

- **Canoga Park:** To demonstrate "how river revitalization might be accomplished in a densely-settled, largely single-family residential neighborhood." The community expressed a desire for more open space, stormwater capture, and the opportunity to "celebrate" the location as the LA River's starting point.
- **River Glen:** To demonstrate "the type of revitalization that may be possible within heavily-industrial areas." Such possibilities included improved water treatment, the restoration of riparian habitats, and safer public spaces.
- **Taylor Yard:** To demonstrate how to "create a cost-effective, beneficial use for a contaminated site." In addition to the creation of more recreational space, the site could exemplify high-capacity water treatment for the region and also partially restore the natural bed of the river.

- Chinatown-Cornfields: To demonstrate how an area "hidden at the back of a neighborhood" could be transformed by making the river a feature. Key improvements would include the restoration of a naturalized channel, water recreation opportunities, and the creation of a new wildlife habitat that could be linked to similar habitats further upstream.
- **Downtown Industrial Area:** To demonstrate "options for revitalization in an area where access to the river is severely constrained by rail lines, and where surrounding neighborhoods are seeking to reconnect to the river and to each other." The community expressed interest in more green space and ways to connect neighborhoods on either side of the LA River.

The 2007 Plan recommended that three new entities be established to jointly address the 2007 Plan implementation: the Los Angeles River Authority, the Los Angeles River Revitalization Corporation, and the Los Angeles River Foundation. The Los Angeles River Authority was intended to be a joint powers authority (JPA) between the City and the County–with USACE participating through a Memorandum of Understanding (MOU)–with the primary responsibility of carrying out the master plan. The Los Angeles River Revitalization Corporation, a non-profit organization, was tasked with the "planning, design and implementation of lands for parks, trails, open spaces and habitats." Finally, the Los Angeles River Foundation was originally intended to be a non-profit 501(c)(3) entity tasked with programmatic and fundraising responsibilities.¹⁰⁸

Funding

The 2007 LA River Revitalization Master Plan dedicates a chapter to funding river improvements and projects. Unlike the 1996 Plan, the 2007 Plan addressed government funding as the first "typical financing tool" and provided a list of local, regional, state, and federal government sources. Like the 1996 Plan, the 2007 Plan encourages public-private partnerships (rather than relying solely on government funds), but the 2007 Plan has more detailed information about how funding can be used and also discusses federal appropriations, local tax capture, and zoning incentives. Still, even the 2007 Plan focuses primarily on capital projects and does not comprehensively address the funding issues related to ongoing maintenance and operations or river projects. The 1996 Plan included a table of funding sources and stated whether that particular funding source could be used for operations and maintenance; the 2007 Plan does not provide such information.

By 2016, more than half of the money funding Upper LA River Projects had come from state sources (\$119 million), the other half coming from local sources (\$91 million) such

as the half-cent sales tax Measure A.¹⁰⁹ Because the 2007 Plan focuses primarily on the City of Los Angeles (rather than multiple jurisdictions), the plan focused more on outside funding than the different mechanisms a city could use to fund projects and improvements.

Outcomes

The results of the 2007 Plan's governance structure over the past decade have been mixed. The Los Angeles River Revitalization Corporation, established in 2004 and rebranded as River LA in 2011, is the only implementation arm to emerge from the 2007 Plan. River LA is focused primarily on the technical design aspects of river revitalization, hiring the consulting services of architect Frank Gehry, landscape architecture firm Olin, and Geosyntec Consultants. At the same time, River LA acts as the public face of LA River revitalization and maintains a clearinghouse of information on the LA River Index website. The extent to which the organization is soliciting ongoing community feedback is minimal, and design collaboration with outside entities has been limited to date.¹¹⁰

Neither the Los Angeles River Authority nor the Los Angeles River Foundation gained traction following the release of the 2007 Plan. According to one Department of City Planning official, the 2008 recession froze funding that was dedicated to the Authority and to establishing the Foundation, and agency priorities shifted to match available capacity and resources.¹¹¹ Although many of the functions that were to be assigned to the Foundation were later absorbed by River LA, the Authority would have helped oversee the implementation of the 2007 Plan in a way that would have streamlined the approvals process between USACE and the City and County.

The complexity of these two bodies exists because both USACE and LACFCD have jurisdiction over portions of the LA River (Figure 56). The County owns the LA River, but USACE maintains the segment of the River north of Southern Avenue to Vernon and LACFCD maintains the segment south of Southern Avenue to Long Beach. Depending on the location of the project, developers may file a permit application through the LACFCD, who then passes it onto USACE after approval. However, in the portion maintained by USACE, the developer must go through both USACE and LACFCD simultaneously. The Flood Control District process takes between four to six weeks in most cases (shorter timelines exist for temporary events)¹¹² and requires the project developer to pay permitting fees (that can cost thousands of dollars to cover relevant plan reviews) and obtain \$1,000,000 in liability insurance (Table 12).¹¹³ The complexity and cost of the

existing permitting mechanism may have deterred smaller community-based projects from getting off the ground.

Figure 56. LA River Channel Jurisdictions.



LACDPW PERMITTING PROCESS			
	Application Form	Storm Drain Connectors	
		Catch Basin Relocation	
		Channel Crossings	
		Overbuilds	
Required		Utility Crossing	
Documents		Duration of Use	
	Application Letter Request		
	Permit Fee		
	Liability Insurance		
	Best Practice Management Acknowledgement Form		
	Use/Maintenance Agreement		
	USACE Approval (408 Permit)		
Other Considerations	Fee or Easement Property Rights for Flood Control District		
	Local Jurisdictional Approval		
	CEQA Compliance		
Permit Process	2 weeks for simple requests		
Time Span	4-6 weeks for extensive projects		
Permit Types	One permit for modifying, altering, and occupying existing USACE projects		

Table 12. Summary of LACFCD Permitting Requirements.

The corresponding USACE 408 permitting schedule is more involved and can last up to 18 months (Table 3.5).¹¹⁴ This process includes five stages and requires a more labor-intensive and costly collection of documentation (Table 13). Due to the fact that each agency requests different information for any given project type, it is not always clear to

project developers what studies must be completed or who to contact within each of the two agencies, which departments within the two agencies must be contacted, or whether the two processes can be conducted concurrently.

USACE PERMITTING PROCESS			
	Formal Written Request		
	408 Permit Application Form		
Required Documents		Civil Engineering Analysis	
	Technical Analysis and Design	Geotechnical Analysis	
		Structural Analysis	
		Hydrologic and Hydraulic System Performance Analysis	
	Environmental Compliance		
	Real Estate Requirements		
	Discussion of Executive Order 11988 Considerations	of Executive Order 11988 Considerations	
	Operations and Maintenance		
Permit Process Time Span	Not stated. Dependent on Project Scope.		
Permit Types	One permit for modifying, altering, and occupying existing USACE projects		

Table 13. Summary of USACE Permitting Requirements.

Although the JPA was never formed, the City of Los Angeles was able to establish two coordination mechanisms to address river-related issues pertaining to USACE and LACFCD. In 2010, the City formed a joint working group called the River Cooperation Committee (RCC), which included representatives from various City and County departments, along with USACE participating in an advisory role.¹¹⁵ While RCC does not wield approval authority over projects, the organization reviews and recommends projects that align with the 2007 Plan, ensuring consistency along the river. In addition, developers can solicit subject matter expert advice, and earn an early endorsement from

a multilateral group with visibility over all river-adjacent project development within the City of Los Angeles.¹¹¹

The establishment of Seasonal Recreation Zones in the Sepulveda Basin and Elysian Valley, which was conceived by FoLAR and jointly implemented in 2013 by the City, USACE, LACDPW, and the Santa Monica Mountains and Rivers Conservancy (SMMC), encouraged more in-channel projects and activities.⁹⁷ The MRCA, in coordination with the City and County of Los Angeles and USACE, opened up portions of the river to public usage, allowing members of the public to walk adjacent to the river, fish in the river, and kayak down the river from sunrise to sunset. These recreational zones gave community members a legal and safe way to engage with the river and requires minimal permitting procedures, as there are no structural changes made to the channel.

Increased levels of community engagement during the 2007 planning process led to additional local efforts to implement smaller projects. The case of the Valleyheart Riverwalk in Studio City was a prime example on how a community-conceived project (one that was not included in the 2007 Plan implementation schedule) could come to fruition.¹¹⁶ A non-profit group called the Village Gardeners worked with local community members to develop a plan to beautify a half-mile stretch of the LA River. The citizens group partnered with the City and County throughout the process – from the earliest conceptual design stages in 2008 to the public opening six years later. Since the project focused on only the banks of the LA River, USACE did not need to be involved, which simplified the permitting process considerably. The key to success was achieving buy-in from community members and public stakeholders for a modest project and securing funding through LACFCD at the project outset.

Increased community engagement can also help identify and change projects to be more consistent with the community's needs. Community meetings for the reconstruction of the Sixth Street Bridge began in 2007, and it was only eight years later, in 2015, when the City was able to reach consensus with the community.¹¹⁷ To the credit of the City of Los Angeles, public hearings were held from 2007 through 2016 to provide a forum for community members to provide input on an ongoing basis.¹¹⁸

Given the 32-mile scope (or 64 miles if considering both banks of the River) of the project, the City of Los Angeles has had more success with a project-by-project approach rather than major river-long interventions (such as a uniform bike path). As Councilmember Mitch O'Farrell explained in July 2016, "We've approached this in a way to get the low-hanging fruit."¹¹⁹ For instance, the 11-mile USACE-led Alternative 20 project (which runs between Griffith Park and Downtown Los Angeles) is being developed

in stages as the City acquires the parcels of land needed to form a continuous greenway. Even the newly obtained 41-acre parcel (formerly known as G2) comprises just a section of the Taylor Yard "opportunity area."¹²⁰ Projects that can be implemented quickly - or at least show signs of progress - are more likely to build buy-in by the community and other stakeholders for future projects. As was discussed in the previous chapter, this may be especially true with small, low-cost tactical urbanism interventions.

Findings

The description and our assessment of the 2007 Plan yield four key findings:

- Finding #1: A phased project-by-project implementation schedule is not only more feasible, but fosters "quick wins" and elicits community buy-in. Since the City of Los Angeles has to acquire parcels of land only when they became available, large-scale infrastructure projects that span long stretches of the river take longer and are more difficult to complete. Instead, the City of Los Angeles focused on sponsoring projects that could be completed quickly, generating more community interest in the river.
- Finding #2: Community engagement was extensive during the planning process and continued through implementation. Given the fact that the City of Los Angeles prioritized public participation during the planning process through various means, communities remained engaged as the river revitalization transitioned to the implementation phase. Communities took ownership of projects where barriers were low and were vocal in opposition to projects they deemed damaging to their interests.
- Finding #3: The 2007 Plan reflected an awareness of social and economic pressures facing certain communities adjacent to the river and addressed these concerns accordingly. Social issues and equity had a pronounced presence throughout the 2007 Plan. For example, where the 1996 Plan highlighted increased property values and resulting tax revenues as potential benefits of river revitalization, the 2007 Plan pointed to possible gentrification forces impacting existing populations. The 2007 Plan balanced the potential benefits of river revitalization with an acknowledgment of potential unintended consequences.
- Finding #4: A Joint Powers Authority may not be the most feasible administrative body for plan implementation. As was the case in 1996, the proposed JPA mentioned in the 2007 Plan (i.e., the Los Angeles River Authority) was never

formed. Consequently, the permitting process between LACFCD and USACE remained separate and a mechanism to secure funding for projects along the river did not emerge. The River Cooperation Committee helped with the consistency of projects along the river, but the complexity of the permitting and funding processes remains.

THE LOWER LOS ANGELES RIVER WORKING GROUP

In 2015, Assembly Speaker Anthony Rendon (D-CA-63) introduced Assembly Bill 530 (AB 530) in the California State Legislature to establish the Working Group and develop a revitalization plan specifically addressing the Lower LA River Cities adjacent to the river.¹²¹ The bill drew attention to the complex jurisdictional issues surrounding the Lower LA River, and invited representatives from public agencies, non-profit organizations, and the 14 river-adjacent cities to transform the channel into a community asset.¹²¹

The Working Group's goal is to develop a revitalization plan that addresses the many needs of the different communities surrounding the Lower LA River with an emphasis on watershed education programs and conservation efforts. At the end of the process, the new revitalization plan is intended to be incorporated into a revised County Master Plan for the entire LA River, an effort that is currently spearheaded by River LA.⁶ The Rivers and Mountains Conservancy (RMC) and LACDPW serve as the lead Working Group agencies, provide staffing and resources, and coordinate with consultants Tetra Tech and MIG to develop the revitalization plan itself.¹²¹ This section addresses issues related to the development and implementation of the Lower LA River Revitalization Master Plan (LLARRMP) in the context of the 1996 and 2007 Plans.

PLANNING PHASE

AB 530 mandated that the Secretary of the California Natural Resources Agency appoint the members of the local working group with consideration of requests from representatives of local agencies to participate in the working group. Currently, there are 39 members in the Working Group (Appendix E), five Plan Element Committees (Table 14), and three River Segment Committees (upper, middle, lower) to address specific issues and geographic areas, respectively.¹²²

DESCRIPTION OF PLAN ELEMENT COMMITTEES		
Plan Element Committee	Purpose/Description	
Community Engagement	Ensuring participatory planning and community involvement opportunities	
Community Economics, Health, and Equity	Examining local workforce development opportunities and social equity (e.g. gentrification)	
Water and Environment	Continuing best practices of flood management, water supply, and habitat restoration	
Implementation	Focusing primarily on funding and financing, along with cross jurisdictional management and operations	
Public Realm	Looking at accessibility and connectivity for people and businesses and the integration of local plans	

Table 14. Plan Element Committees and Purposes.

The Working Group's planning process is divided into three phases:

- 1. Project Organization/Vision, Goals, Issues, and Opportunities: In this phase, the Working Group conducts research to frame the scope of the work, such as inventory, mapping, and analysis. This includes the formation of the committees.
- 2. Concept Plan Development: Subcommittees develop their specific goals, objectives, and projects for the revitalization plan and begin conducting community outreach.
- **3. Draft and Final Plan:** The draft is completed and presented to the community for public comment; if the community approves, the plan advances to Los Angeles County for final review and adoption.¹²³

Currently, the Working Group is in the Concept Plan Development phase and has begun community outreach through an online survey and several community events and activities along the river.

COMMUNITY ENGAGEMENT AND OUTREACH

In comparison to the 1996 Plan and the 2007 Plan, the Working Group has provided more opportunities for local communities to become involved with the planning process. The Working Group created the Community Engagement Plan Element Committee that focuses on building support and outreach within local communities. Similar to the community engagement process from the 2007 Plan, the Community Engagement Plan Element Committee is working with cities and community-based organizations to host events and workshops to obtain residents' ideas and feedback. The Working Group advertises these events through its members and their social and professional networks. In addition, the Working Group has developed an interactive online tool that allows people living near the Lower LA River to indicate where they live, how they use the river, and where they would like to see future amenities.¹²⁴

All Working Group meetings are open to the public, allowing residents to directly communicate with stakeholder members, consultants, and local officials. That said, members of the public do not have a vote in the decision-making process. Overall, community outreach during the planning process for the Lower LA River Plan has been much more extensive than previous efforts and have already included River clean-up events and weekly newsletters distributed by LACDPW. Proposed activities include outdoor movie and "celebration" events, trails usage education, youth and family group bicycle/outreach events, sidewalk engagement and pop-up events, community workshops, and door-to-door campaigns

IMPLEMENTATION CHALLENGES AND OPPORTUNITIES

The Working Group faces a number of challenges in finalizing and implementing the Lower Los Angeles River Master Plan (LLARRMP). Based on a review of previous Working Group and Implementation Plan Element Committee meetings, stakeholders raised the following three key challenges: coordinating ongoing river-related initiatives, funding revitalization efforts, and gaining stakeholder buy-in through sustained community engagement.¹²⁵ In the following section, we describe these issues in further detail and present different options for consideration.

COLLABORATION

The revitalization of the Lower LA River is inherently a multi-jurisdictional process that requires coordination between a host of different entities: the cities themselves, USACE, and the County. The LLARRMP's implementation depends on effective coordination

among these entities to leverage limited resources and ensure consistency, but previous plans have faced challenges in creating deep and lasting collaboration mechanisms. This section raises three issues that must be addressed before implementation begins: ongoing river-related initiatives already underway, overlapping permitting processes, and the need for a cross-jurisdictional safety and public education program. For each issue, a range of options are presented; these options are not mutually exclusive and may be considered collectively. By addressing these issues and assessing potential options during the planning phase, stakeholders will be better equipped to realize a common vision for the Lower LA River and minimize obstacles during implementation.

Ongoing Initiatives

Several agencies and organizations are already in the midst of river-related and/or riveradjacent improvement projects (Table 15). To avoid duplication of effort, the Working Group should build upon current projects, incorporate the principles informing broader initiatives, and be sure that the implementation of these projects and initiatives conform to the Working Group's overall revitalization goals. Given that the lead agencies for the improvement projects listed in the table below already sit on the Working Group, there is strong coordination at this stage of the planning process. However, these projects will continue long after the LLARRMP is released, and the Working Group must ensure that a more long-term coordination mechanism emerges once LLARRMP implementation begins.

CURRENT LOWER LA RIVER-ADJACENT INITIATIVES		
Lead Organization	Description of Activities	
River LA	River LA is working with Gehry Partners, OLIN, and Geosyntec to develop the <i>Greenway 2020 Plan</i> that will connect 51 miles of trails and promote investments in public infrastructure.	
Watershed Conservation Authority	The Water Conservation Authority, the Gateway Cities Council of Governments, and the North East Trees are currently working together to develop the <i>Gateway Cities and Rivers Urban</i> <i>Greenway Plan</i> , which focuses on identifying project opportunities, developing concept designs to engage communities and investors, and identifying implementation strategies and funding opportunities.	
Los Angeles County Metro	Metro is leading the I-710 Corridor Project, in conjunction with the Gateway Cities Council of Governments, which focuses on improving mobility, reducing congestion, and improving quality of life on the corridor and in surrounding communities.	
City of Long Beach	The City of Long Beach is in the process of developing the Long Beach RiverLink, an integrated network of greenways, linkages and open spaces that provide community benefits including enhanced identity and opportunities for education and engagement with nature.	

Permitting

As noted in the 2007 Plan's section on permitting, both USACE and LACFCD have different mandates and operational jurisdictions in the LA River. Any proposed improvement that will require modifications to the existing Army Corps-constructed structure must secure a Section 408 permit from the Army Corps. Section 408 permits require applicants to prove that the proposed alterations meet the Corps' standards, are not contrary to public interests, and do not impede the structure's ability to perform its intended purpose–namely flood control. For the portion of the Lower LA River where the Army Corps performs maintenance and operations work north of Southern Avenue, Section 408 permit applications are typically referred directly to the Los Angeles District of the Army Corps. South of Southern Avenue, where the LACFCD performs operations and maintenance, applicants must seek approval from the LACFCD who will then refer their application to the Army Corps for additional subsequent approval. In addition to LACFCD and Army Corps permits, applicants may need permits from individual municipalities if they are proposing improvements within the jurisdiction of one of the 14 cities along the Lower LA River. Each of these cities is free to set and change their own requirements and fees that govern projects within their respective jurisdictions.

Safety and River Education

Currently, no unified river safety-related education program exists; much of the educational efforts are spearheaded by non-profits such as FoLAR, which holds clean-up events in portions of the river, and LA County Bike Coalition (LACBC), which holds annual LA River Rides.^{126,127} The California State Assembly is currently considering a bill that would address some of the concerns regarding safety and river education. If passed, Assembly Bill 1558 (AB 1558) would mandate that the RMC and the SMMC develop a "river rangers" program to improve public safety and educational outreach for the river and engage the community on river-related issues.¹²⁸ On May 31, 2017, the bill was approved by the House and sent to the Senate.¹²⁹ According to the bill analysis, the development of the plan will cost the RMC \$500,000, with minor costs to SMMC, the California Department of Parks and Recreation, and the California Conservation Corps.¹³⁰ The bill does not state how much it would cost to implement the river rangers program, but if passed, it is unclear if it will involve the cities, as the bill only says that the conservancies must "solicit the participation" of river-adjacent cities.

Options

Given the challenges associated with creating a Joint Powers Authority following the release of the 1996 and 2007 Plans, the Working Group may want to consider two coordination options that respect the sovereignty of stakeholder agencies and jurisdictions while still providing a forum for ongoing collaboration:

• Option #1: Lower LA River Coordination Committee. Although the City of Los Angeles formed the RCC in 2010 as a result an inability to create the JPA recommended in the 2007 Plan, the RCC has proved to serve a useful function. The committee acts as a clearinghouse of information for project developers by identifying appropriate points of contact in regulatory agencies, providing technical expertise, and ensuring that proposed projects adhere to the principles laid out in the 2007 Plan. Such a coordination mechanism would be beneficial to the Lower LA River Cities adjacent to the River, especially given the complexity of navigating a cross-jurisdictional environment. Like the RCC for the City of Los Angeles, stakeholders would include USACE, LACDPW, and relevant jurisdictions. One proposed addition to this committee – a Community Engagement Officer – will be discussed in the Community Engagement section below.

While a JPA provides the possibility minimizing overlap between USACE and LACDPW permitting processes, for example, it is unlikely these two separate tracks would merge even in this case given separate state and federal mandates. The next best option then is to provide cities and non-governmental project developers an opportunity to interact with these two agencies in one place. While the RCC in the City of Los Angeles does not require that project developers seek their counsel, a Lower LA RCC could mandate that all projects of a certain size must be submitted for review.

Option #2: Lower LA River Implementation Working Group. In the event stakeholders do not wish to form a new committee, the existing Working Group could transition into an Implementation Working Group following the approval of the Lower LA River Revitalization Master Plan. This would eliminate the barriers inherent to creating a new implementation body and ensure continuity between plan development and implementation. The Implementation Working Group could serve a more limited role than the Lower LA River Master Plan Implementation Team – which itself emerged from the 1996 LA River Master Plan Implementation subcommittee – supporting the LACDPW, the designated implementation project manager. Rather than convening regularly, the Implementation Working Group could identify longer-term implementation strategies and provide as-needed input depending on the scope of proposed projects.

FUNDING

As in the previous two planning efforts, stakeholder cities and agencies face the challenge of securing funding for revitalization efforts. In general, public agencies find it easier to acquire funding for the *creation* of parks than to operate and maintain those parks.¹³¹ Many grants allow project funds to be used on capital projects, such as building parks and developing open space, but in order to fund projects or amenities like educational programs, cities require flexible funding sources. In this section, we present three options to address funding:

• **Option #1: State Funding.** At the state level, California voters have approved many general obligation bonds that have funded water- and river-related projects over the years. These propositions include Proposition 84 (1996), Proposition 13

(2000), Proposition 12 (2000), Proposition 50 (2002), and Proposition 1 (2014). Generally, state bonds are split among different regions that disburse the money to local agencies and developers through a competitive grant process, as in Proposition 84, which split \$823 million across 11 regions.¹³² Funding Lower LA River projects through bond measures would reduce the impact on the local community, as it does not require river-adjacent cities to collect revenue solely from their constituents to adequately fund their projects; rather the bond payments would be spread across the whole state to minimize the impact on any one jurisdiction or population while benefiting watershed-related projects statewide. The bonds can also be issued over a period of years, which could help maintain a consistent stream of funding for projects.

- Option #2: LA River Recreation and Park District. Senate Bill 1374 (SB 1374) was introduced by Senator Lara in the 2015-2016 Session of the California State Legislature. The Bill authorizes the creation of the Lower LA River Recreation and Park District, which would allow cities to band together to create a new public agency governed by an appointed Board of Directors comprised of ten representatives from ten cities along the Lower LA River, two public members appointed by the Los Angeles County Board of Supervisors, and one appointed representative to represent the cities of Commerce, Downey, Montebello, and Pico Rivera.¹³³ Under SB 1374, the Recreation and Park District would be obligated to:
 - 1. Promote the development of open space and parks along the Lower LA River.
 - 2. Identify funding and resources to promote the revitalization of the Lower LA River and open spaces along the river for the benefit and enjoyment of local communities.
 - **3.** Acquire, construct, improve, maintain, and operate parks and open space along the Lower LA River.

SB 1374 also states that the Lower LA River Recreation and Park District would work in coordination with the Lower LA River Working Group and the RMC to promote open space and to "acquire, construct, improve, maintain, and operate parks and open space along the Lower Los Angeles River."¹³³ If formed, the Recreation and Park District would have the ability to levy taxes, borrow money, acquire property in the district by eminent domain (with approval from the

affected jurisdiction's City Council).¹³³ The powers in the statute also give the Recreation and Park District the power to acquire personal or real property outside the district and to create a leasehold interest in that property, but it is unclear what the implications would be for the Lower LA River.¹³³

Given the number of jurisdictions represented by the Board of Directors, the Recreation and Park District would require significant coordination between all the member agencies. The bill itself does not guarantee that the named cities will participate. According to the Senate's analysis of the bill, only the cities of Bell Gardens, Compton, Lynwood, Maywood, Paramount, and South Gate expressed approval of the bill; the other cities did not express approval or opposition.¹³⁴ Therefore, it is not clear what the boundaries of the district would be or if all river-adjacent cities will be included. Moving forward, it is unclear how the SB 1374 process fits into the Working Group process, if at all.

• Option #3: Enhanced Infrastructure Financing Districts (EIFDs). In 2015, the Legislature enacted Assembly Bill 313 (AB 313), which authorizes municipalities to form Enhanced Infrastructure Financing Districts (EIFDs). EIFDs have the power to finance public projects through tax increment funding, which estimates future property tax increases on all properties in the district and diverts the increase in property taxes towards funding capital projects. Eligible uses include roads, highways, and bridges; parking facilities; transit stations; sewage and water facilities; flood control and drainage projects; and other uses. Some Working Group members have raised the possibility of using EIFDs to raise funds that help combat gentrification. For example, an EIFD can stipulate that developers create a specific plan to replace affordable housing units affected by their projects and assure that any persons displaced will be offered relocation assistance. That said, while the EIFD may have a substantial impact on the scale and type of new development in any given jurisdiction, it should not be the sole source of funding because new property values may not increase to anticipated levels and may not generate enough revenue for river-related projects.¹³⁵

SUSTAINED COMMUNITY ENGAGEMENT

As demonstrated earlier in this section, the proposed community outreach process for the current plan is more extensive and multifaceted compared to the 1996 and 2007 Plans. One of the Working Group's goals is to achieve local buy-in for river revitalization efforts and encourage community-led projects. The stakeholder cities are home to different populations with different needs, and the conventional approach would be to let these cities conduct their own civic engagement efforts. Given varying planning capacities and resources among the Lower LA River Cities, such an approach will most likely lead to uneven community engagement and outreach once the Working Group releases the LLARRMP. The consequence of maintaining this status quo is that some communities may not have their voices heard or their needs adequately met when it comes to plan implementation. The Working Group should consider two options to improve outreach:

- Option #1: Community Engagement Officer. One option to foster greater community involvement during the project planning and implementation stages is to designate a Community Engagement Officer (EO) to oversee all river-related community engagement efforts. The EO would be the main point of contact for members of the public to voice concerns during the project planning and implementation processes. To ensure that communities are still engaged during the implementation stage, the EO would work with local agencies to inform residents about the progress of river-related projects and relay input from the community back to the appropriate agencies. The EO could be housed within any of the jurisdictions overseeing the river the County (DPW or FCD), River LA, the Recreation and Parks District (if formed), or a JPA (if formed).
- Option #2: Community Stakeholder Advisory Committee. Similar to the Citizens Advisory Committee established in the 1996 Plan, the Working Group should consider establishing a Community Stakeholder Advisory Committee to work with the LLARRMP's designated project manager, implementation body, and/or relevant government agencies. The Lower LA River Community Stakeholder Advisory Committee would be composed of representatives from different neighborhoods, community groups, non-profit organizations, and related entities throughout the 14 cities. This committee would serve as a public forum for the community stakeholders to gather and contribute their input into the project planning and implementation processes. During the planning and implementation process, each representative would be able to advocate community concerns to implementation bodies and relay back information to their communities for their feedback on proposed projects and initiatives.

RECOMMENDATIONS

After examining the 1996 and 2007 Plans and assessing the Working Group's current activities, we recommend the following three principles to guide the remainder of the planning and implementation processes:

1. Prioritize Local Needs through Sustained Community Engagement

The level of community engagement has increased with each successive plan since 1996, but community engagement is just as crucial during implementation to meet the community's ongoing needs. For example, specific LLARRMP project recommendations may change in scope over time (due to funding or time limitations). Project developers and regulatory agencies must communicate regularly with community stakeholders and establish a formal channel for them to remain an active part of the process. As demonstrated across all three planning processes, holding public meetings, workshops, and events in different areas along the river can help attract and encourage residents to become a part of the planning process. Additionally, interactive mapping websites, social media, and emerging technologies are becoming increasingly important platforms for soliciting community member feedback on proposed plans and projects. This outreach should continue during implementation. Ultimately, community engagement is vital for successful revitalization of the LA River because it allows local voices to be heard and may play a significant role in minimizing gentrification and displacement.

2. Advocate for Increased State Funding

Even though there are several funding opportunities individual jurisdictions can pursue alone, these funds cannot fully cover the costs of projects and continued operations and maintenance. If the jurisdictions adjacent to the Lower LA River try to charge sales taxes or charge for river-related services, they may alienate local communities and squander good will for revitalization efforts. If the jurisdictions form an EIFD, funding will depend on whether a predicted increase in property taxes will materialize. For a project to serve the long-term interests of its users, jurisdictions need a steadier source of funding. The most reliable way to accomplish a steady funding stream, then, would be through state-sponsored – rather than local or even regional – mechanisms. State funding, while competitive, can be earmarked for a certain amount per year. The state already funds two conservancies that currently address river-related improvements, has passed legislation to form a Recreation and Park District, and is considering further legislation to form a River Rangers program. Providing a steady funding stream to address river revitalization would only help leverage these efforts and support the mandate behind AB 530.

3. Establish Realistic and Appropriate Cross-Jurisdictional Coordination Mechanisms Previous efforts to establish a JPA to oversee the implementation of river-related revitalization projects have fallen short twice in the past 20 years. This is understandable. Stakeholder agencies and jurisdictions do not wish to cede authority, especially in cases where new institutions or mechanisms may infringe on their sovereignty. The Working Group would benefit from promoting a more modest approach to cross-jurisdictional collaboration, where different mechanisms can be used to address different issues. The 1996 Plan presented a number of ways for jurisdictions to interface with each other: coordination agreements, memoranda of agreement, memoranda of understanding, and several others. While these may work in bilateral cases, the establishment of an informal coordination body or public forum like the RCC in the City of Los Angeles may be the most appropriate model for the Lower LA River given the number of jurisdictions, agencies, and other stakeholders involved (especially in terms of ensuring project compatibility with LLARRMP principles). As trust builds among committee members, deeper coordination on larger and more expansive projects along the Lower LA River may emerge over time.

4. Pursue Small-Scale, Short-Term Projects First

Historically, limited funding and a lack of cross-jurisdictional collaboration have been barriers to implementing large-scale revitalization projects in a timely manner. Given the nature of large-scale projects, the opportunities for meaningful and constructive community engagement are often minimal. Furthermore, the longer it takes for the community to see projects move from early concept designs to completion, the less likely it is for local populations to politically or financially support subsequent projects. Therefore, achieving quick wins is instrumental for a successful revitalization implementation.

This serves multiple purposes. Small-scale interventions that do not require involved operations and maintenance – such as the establishment of seasonal recreation zones, installation of simple, strategically placed benches, or the commission of public artwork – can be low-cost ways to demonstrate progress on plan implementation. These tactical urbanism-type projects also have the advantage of a smoother permit approval process, especially if they do not require any alteration to the river channel itself or do not require a permit from USACE at all. Engaging the community at the outset, either through planning education programs to explain how to pursue community-conceived projects or by convening workshops at the earliest stages of project design, can foster buy-in for both additional short-term projects, as well as larger and more costly ones later on.

CONCLUSION

The communities along the Lower LA River are at a critical juncture as they begin to realize the potential of the river that weaves them together. While planned projects along the banks of the Lower LA River present opportunities for much-needed recreation and community spaces, implementing these projects are not without risks. The imperative of balancing these risks and opportunities in the LLARRMP planning process falls to the Working Group as a whole, but the responsibility for maintaining this balance in the implementation phase falls to the individual member agencies and jurisdictions. In both cases, local leaders must take precautions to ensure that equity, community well-being, and inclusivity continue to guide the LLARRMP process.

This report proposes recommendations to address the threat of gentrification and displacement; ways to promote small-scale, short-term interventions; and the need for sustainable, collaborative, and inclusive governance of river planning and implementation processes. The Working Group must align regional goals with local needs during plan development by identifying concrete measures to ensure that revitalization improvements benefit long-standing residents and small businesses in the river-adjacent communities. While specific strategies to minimize gentrification and displacement will likely differ by community, it is important to recognize and respond to potential threats early in the planning process, as well as when implementation is underway. By committing to sustained community engagement and empowerment, river-adjacent cities have an excellent opportunity to showcase the Lower LA River as both a local and regional reflection of community pride.

REFERENCES

- 1. *Tactical Urbanism Materials and Design Guide*. (n.d.). Retrieved from http://tacticalurbanismguide.com/
- 2. Los Angeles Flood of 1938: Cementing the River's Future. (2012, February 28). Retrieved from https://www.kcet.org/history-society/los-angeles-flood-of-1938-cementing-the-rivers-future
- 3. Beacon Economics. (2016). Central 710 Freeway Corridor: An Asset Based Analysis.
- 4. Senate Rules Committee. Third Reading: AB 530, Pub. L. No. AB 530 (2015).
- 5. , Pub. L. No. AB 530, § Chapter 684, California Statute (2015).
- 6. About Us. (n.d.). Retrieved from http://www.riverla.org/about_us
- American Planning Association. (2007). How cities use parks for...Economic Development (City Parks Forum Briefing Papers). Retrieved from https://planning-org-uploadedmedia.s3.amazonaws.com/legacy_resources/cityparks/briefingpapers/pdf/economicdevelopment. pdf
- Garcia, R., & White, A. (2006). *Healthy parks, schools, and communities: mapping green access and equity for the Los Angeles region*. The City Project. Retrieved from https://www.cityprojectca.org/ourwork/mappinggreenaccess/documents/Healthy_Parks_Schools _Communities_textonly.pdf
- Brown, S. (2014). Beyond Gentrification: Strategies for Guiding the Conversation and Redirecting the Outcomes of Community Transition. Joint Center for Housing Studies of Harvard University. Retrieved from http://www.jchs.harvard.edu/sites/jchs.harvard.edu/files/w14-12_brown.pdf
- Zuk, M., Beirbaum, A. H., Chapple, K., Gorska, K., Loukaitou-Sideris, A., Ong, P., & Thomas, T. (2015). *Gentrification, Displacement and the Role of Public Investment: A Literature Review* (Community Development Investment Center: Working Paper Series No. 2015:05). San Francisco: Federal Reserve Bank of San Francisco.
- 11. Wolch, J. (2014). Urban green space, public health and environmental justice: The challenge of making cities "just green enough." *Landscape and Urban Planning*, *125*, 234–244.
- 12. Curran, W. (2012). Just Green Enough: contesting environmental gentrification in Greenpoint, Brooklyn. *The International Journal of Justice and Sustainability*, 17(9), 1027–1042.
- 13. Maurrasse, D. J. (2006). *Listening to Harlem: Gentrification, Community, and Business*. New York: Taylor & Francis Group, LLC.
- 14. Dale, A., & Newman, L. (2009). Sustainable development for some: green urban development and affordability. *Local Environment*, *14*(7), 669–681.
- 15. Galambos, C. (2007). SAJE Learnings Defining the Issues and Demystifying Jargon. Retrieved from http://www.reimaginerpe.org/node/1187

- 16. Bates, L. K. (2013). *Gentrification and Displacement Study: Implementing an Equitable Inclusive Development Strategy in the Context of Gentrification*. Portland, Oregon: City of Portland Bureau of Planning and Sustainability.
- 17. Big plans, and concerns surround L.A. River's revitalization. (2014, May 24). Retrieved from http://www.latimes.com/local/la-me-lariver-development-20140524-story.html#page=1
- 18. Causa Justa::Just Cause. (2015). Development Without Displacement: Resisting Gentrification in the Bay Area.
- Chapple, K. (2009). Mapping Susceptibility to Gentrification: The Early Warning Toolkit. Center for Community Innovation. Retrieved from https://communityinnovation.berkeley.edu/reports/Gentrification-Report.pdf
- 20. Freeman, L. (2005). Displacement or Succession? Urban Affairs Review, 40(4), 463-491.
- 21. Gentrification Index. (n.d.). Retrieved from https://www.voorheescenter.com/gentrification-index
- 22. Affordable Housing and Anti-Displacement Policies. (n.d.). Retrieved from https://www.scag.ca.gov/Documents/ComprehensiveGuideToLocalAffordableHousingPolicy.pdf
- Crispell, M. (2016). *Rent Control Policy Brief* (Urban Displacement Project). University of California, Berkeley. Retrieved from http://www.urbandisplacement.org/sites/default/files/images/urbandisplacementproject_rentcon trolbrief_feb2016_revised.pdf
- 24. Simpson, L. (2017, May 2). Staff Report to the Concord City Council. Retrieved from http://cityofconcord.org/pdf/citygov/agendas/council/2017/0502/6A.pdf
- 25. Rent Review Program Summary. (n.d.). City of San Leandro. Retrieved from http://www.sanleandro.org/civicax/filebank/blobdload.aspx?blobid=23762
- 26. Davis, J. E. (2007). *Starting a community land trust: organizational and operational choices*. Burlington, VT: Burlington Associates in Community Development.
- 27. BAE Urban Economics. (2016). Los Angeles Affordable Housing Linkage Fee Nexus Study.
- 28. Sturtevant, L. (2016). Separating fact from fiction to design effective inclusionary housing programs (National Housing Conference). The Center for Housing Policy.
- 29. Mandarano, L. (2015). Civic Engagement Capacity Building: An assessment of the citizen planning academy model of public outreach and education. *Journal of Planning Education and Research*, *35*(2), 174–187.
- 30. Galperin, R. (2017). Audit of income-restricted affordable housing units in Los Angeles: A review of the city's density bonus program and overall oversight. Los Angeles: Los Angeles City Controller.
- California Department of Housing and Community Development. (2016). Accessory Dwelling Unit Memorandum. Retrieved from http://www.hcd.ca.gov/policy-research/docs/2016-12-12-ADU-TA-Memo.docx.pdf
- Komakech, M. D., & Jackson, S. F. (2016). A Study of the Role of Small Ethnic Retail Grocery Stores in Urban Renewal in a Social Housing Project, Toronto, Canada. *Journal of Urban Health*, 93(3), 414–424. https://doi.org/10.1007/s11524-016-0041-1

- Meltzer, R. (2016). Gentrification and Small Business: Threat or Opportunity? *Cityscape*, 18(3), 57– 85.
- 34. Gateway COG Site Selection Tool. (2017). Retrieved from http://www.gatewaycog.org/gateway/site-selection-tools
- Bank of America. (2017). Spring 2017 Small Business Owner Report. Retrieved from http://newsroom.bankofamerica.com/files/press_kit/additional/Small_Business_Owner_Report_-_Spring_2017.pdf
- 36. UNITED STATES Quick Facts from the U.S. Census Bureau. (2012). Retrieved from https://www.census.gov/quickfacts/
- Los Angeles County Commission for Women. (2016). 2016 Report on the Status of Women in Los Angeles County. Retrieved from http://laccw.lacounty.gov/LinkClick.aspx?fileticket=iZfSTtldj4c%3D&portalid=10
- Nelson, R. K., Winling, L., Marciano, R., & Connolly, N. (n.d.). *Mapping Inequality* (American Panorama). Retrieved from https://dsl.richmond.edu/panorama/redlining/#loc=4/36.71/-96.93&opacity=0.8
- 39. Los Angeles County Home Prices & Values. (2017). Retrieved from https://www.zillow.com/losangeles-county-ca/home-values/
- 40. Los Angeles, CA Market Trends. (2016). Retrieved from http://www.loopnet.com/Los-Angeles_California_Market-Trends
- 41. Demand Institute. (2015). *Location Matters: Where America is Moving*. Retrieved from http://demandinstitute.org/demandwp/wp-content/uploads/2015/01/location-matters.pdf
- 42. Los Angeles River Bike Path Gap Closure Project. (n.d.). Retrieved from https://www.metro.net/projects/lariverpath/
- Zukin, S., Trujillo, V., Frase, P., Jackson, D., Recuber, T., & Walker, A. (2009). New Retail Capital and Neighborhood Change: Boutiques and Gentrification in New York City. *City & Community*, 8(1), 47–64.
- 44. Bloom, J. (n.d.). *Commercial District Gentrification* (Revitalizing Main Street: A practitioner's guide to commercial district revitalization). Main Street America. Retrieved from http://www.mainstreet.org/main-street/resources/public/RMS_Gentrification.pdf
- 45. Sutton, S. A. (2010). Rethinking Commercial Revitalization: A Neighborhood Small Business Perspective. *Economic Development Quarterly*, *24*(4), 352–371.
- 46. Deener, A. (2007). Commerce as the Structure and Symbol of Neighborhood Life: Reshaping the Meaning of Community in Venice, California. *City & Community*, *6*(4), 291–314.
- 47. Alfonzo, M. (2015, May 8). Making the Economic Case for More Walkability. *Urban Land*. Retrieved from https://urbanland.uli.org/sustainability/houston-economic-case-walkability/
- 48. Ewing, R. (2013, March 7). Eight Qualities of Pedestrian-and Transit-Oriented Design. *Urban Land*. Retrieved from https://urbanland.uli.org/industry-sectors/infrastructure-transit/eight-qualities-of-pedestrian-and-transit-oriented-design/

- Ruhl, A. (2016, May 13). Long Beach Innovation Team Focuses on Entrepreneurs. Long Beach Gazette. Retrieved from http://www.gazettes.com/news/long-beach-innovation-team-focuses-onentrepreneurs/article_6b19ce9e-1935-11e6-af19-830016fe61c2.html
- 50. CDTech. (2016, August 11). Letter from CD Tech to the Los Angeles Planning Commission. Retrieved from http://clkrep.lacity.org/onlinedocs/2016/16-1058-S3_pc_z_11-1-16.pdf
- 51. Espinoza, R. (2017, March 15). Interview with Rudy Espinoza, Executive Director at LURN [Phone Interview].
- Leadership for Urban Renewal Network. (2016). Disrupting the City: Overview and Recommendations (Planning & Land-Use Strategies Summit (Plus 2)). Retrieved from http://lurnetwork.org/wp-content/uploads/2016/07/LURN-PLUS2-Report-2016.pdf
- LA Mas. (2016). on Avalon Boulevard: Project Roadmap for 2016 and beyond (on Avalon Boulevard). Retrieved from https://issuu.com/mas4la/docs/160120 strategic roadmap e74a54bb40175f
- Anderson, E., & Pierson, T. (2016). Cooperatives in Minneapolis: An Inventory and an Assessment. Minneapolis Office of Community Planning and Economic Development. Retrieved from http://www.minneapolismn.gov/www/groups/public/@cped/documents/webcontent/wcmsp-178487.pdf
- 55. NorthEast Investment Cooperative. (n.d.). Retrieved from http://www.neic.coop/
- 56. FAQ. (n.d.). Retrieved from http://www.neic.coop/faq/
- McCormack, G., Rock, M., Toohey, A., & Hignell, D. (2010). Characteristics of urban parks associated with park use and physical activity: a review of qualitative research. *Health & Place*, 16(4), 712–726.
- Stricklin, A. (2016). River Talk: Building Trust Among LA River Community Stakeholders Through a Collaborative Revitalization Dialogue (Master's Client Project). Retrieved from http://en.calameo.com/books/004812455fa82a65099d3
- 59. California Department of Transportation. (2016). Chapter 1000: Bikeway Planning and Design. Retrieved from http://www.dot.ca.gov/hq/oppd/hdm/pdf/chp1000.pdf
- 60. Meyer, J. (2017, March 16).
- 61. Bogado, A. (2015, December 15). Homeless Angelenos call the riverbank home. What will happen when El Nino hits? *Grist*. Retrieved from http://grist.org/cities/homeless-angelenos-call-the-riverbank-home-what-will-happen-when-el-nino-hits/
- 62. Sharp, D. (2017, March 13).
- 63. Personal observations, February and April. (2017).
- 64. P. Sherpa, personal Communications, May 1. (2017).
- 65. City of Los Angeles, Tetra Tech Inc., & US Army Corps of Engineers. (2007). *Final Programmatic Environmental Impact Report/Programmatic Environmental Impact Statement For The Los Angeles River Revitalization Master Plan.* Retrieved from

http://boe.lacity.org/lariverrmp/CommunityOutreach/LARiverFinalPEIRPEIS_one_larger_file_0430 07.pdf.pdf

- 66. LA County Department of Parks & Recreation. (2016). Los Angeles Countywide Comprehensive Parks & Recreation Needs Assessment. Retrieved from http://lacountyparkneeds.org/wpcontent/uploads/2016/06/FinalReport.pdf
- 67. Maywood Riverfront Park. (n.d.). Retrieved from https://www.tpl.org/our-work/maywoodriverfront-park#sm.005m4axs11gictl116c1wcgy55qnk
- 68. Los Angeles County Flood Control District Opens Historic LA River Wetlands Project. (n.d.). Retrieved from http://dpw.lacounty.gov/wmd/documents/DominguezGap_article.cfm
- USDA Forest Service. (2011). Assessing Urban Forest Effects And Values: Los Angeles' Urban Forest. Newtown Square, PA: Northern Research Station. Retrieved from https://www.nrs.fs.fed.us/pubs/rb/rb_nrs47.pdf
- 70. Tree Cover Data. (2017). Retrieved from https://egis3.lacounty.gov/dataportal/
- Ferenchak, N. N., & Marshall, W. E. (2016). The relative (in)effectiveness of bicycle sharrows on ridership and safety outcomes. Presented at the Transportation Research Board 95th Annual Meeting (No. 16-5232).
- 72. Los Angeles County Metropolitan Authority. (2016). Active Transportation Strategic Plan Data Download - GIS Shapefiles. Retrieved from https://docs.google.com/spreadsheets/d/1GLoQczVjnlarSOUfWkZ44UrRLuafLumzHKQSW-Z0T3A/edit#gid=0
- 73. City of Long Beach. (2016). City of Long Beach Bikeways & Proposed Bikeways. Retrieved from http://datalb.longbeach.gov/datasets?q=bicycle&sort_by=relevance
- 74. Los Angeles County Metropolitan Authority. (2016). *Los Angeles River Bike Path Gap Closure Feasibility Study*.
- 75. California Transportation Commission. (2017). Active Transportation Program Guidelines.
- 76. Los Angeles County Bicycle Coalition. (n.d.). Southeast Cities Active Transportation Plan.
- 77. Active Transportation Rail to River Corridor. (2017). Retrieved from https://www.metro.net/projects/r2r/
- 78. Los Angeles County Metropolitan Authority. (n.d.). I-710 Corridor Bike Path Project.
- 79. Caltrans. (n.d.). Caltrans Deputy Directive DD-64-r2. Retrieved from http://www.dot.ca.gov/hq/tpp/offices/ocp/docs/dd_64_r2.pdf
- 80. Los Angeles County Metropolitan Authority. (2017). "Download GIS Data," Metro Developer. Retrieved from http://developer.metro.net/introduction/gis-data/download-gis-data/
- 81. Long Beach Transit. (2017). LBT GIS Data Catalog. Retrieved from http://54.214.20.6/GIS/
- 82. City of Commerce. (2017). Commerce, CA Official Website Transportation. Retrieved from http://www.ci.commerce.ca.us/index.aspx?NID=90
- 83. City of Bell. (2017). Transit Services. Retrieved from http://www.cityofbell.org/?NavID=72

- City of Bell Gardens. (2017). City Of Bell Gardens California Fixed Route Bus Stops. Retrieved from http://www.bellgardens.org/CITYSERVICES/Transportation/FixedRouteBus/FixedRouteBusTopDep arture.aspx
- City of Cudahy. (2017). City of Cudahy Public Transit. Retrieved from http://www.cityofcudahy.com/uploads/5/3/9/9/53994499/cart_map.pdf
- 86. City of South Gate. (2017). Transit Services. Retrieved from http://www.cityofsouthgate.org/217/Transit-Services
- 87. City of Lynwood. (2017). Lynwood Trolley / Breeze Schedule. Retrieved from http://lynwood.ca.us/lynwood-trolley-breeze-schedule/
- 88. City of Paramount. (2017). Transportation. Retrieved from http://www.paramountcity.com/ps.services.cfm?ID=8
- City of Downey. (2017). Downeylink Transit System. Retrieved from http://www.downeyca.org/services/cs/transit/downeylink_transit_system.asp
- 90. City of Compton. (2017). Compton Renaissance. Retrieved from http://www.comptoncity.org/visitors/cpttrans.asp
- 91. RiverLA. (2016). River LA and Disney Break Ground On Three "Rio Vista" Parks In Elysian Valley.
- 92. Seo, M. (2016, April 15). The LA River as Community Infrastructure. Retrieved from http://www.huffingtonpost.com/michael-seo/the-la-river-as-community_b_9701710.html
- 93. Rio Vista Project: Northeast Los Angeles Riverfront. (2016, February 10). Retrieved from https://www.kcet.org/northeast-la-riverfront/rio-vista-project-northeast-los-angeles-riverfront
- 94. Posts about Cheong Gye Cheon on LA Creek Freak. (n.d.). Retrieved from https://lacreekfreak.wordpress.com/tag/cheong-gye-cheon/
- 95. How the Cheongyecheon River Urban Design Restored the Green Heart of Seoul. (2014, November 18). Retrieved from http://inhabitat.com/how-the-cheonggyecheon-river-urbandesign-restored-the-green-heart-of-seoul
- Council File: 14-02222. (n.d.). Retrieved from http://cityclerk.lacity.org/lacityclerkconnect/index.cfm?fa=ccfi.viewrecord&cfnumber=14-0222
- 97. Mejia, S. (2017, May 5). Interview with Stephan Mejia from Friends of the Los Angeles River.
- Simpson, C. (2015). An Overview and Analysis of Tactical Urbanism in Los Angeles. Urban and Environmental Policy Institute, Occidental College. Retrieved from https://www.oxy.edu/sites/default/files/assets/UEP/Comps/Simpson%20Final%20-%20Copy.pdf
- 99. Guanuna, L. (n.d.). South East L.A. Reclaims Their Part of the Los Angeles River. Retrieved from https://www.kcet.org/confluence/south-east-la-reclaims-their-part-of-the-los-angeles-river
- 100.Walk [Your City]. (n.d.). Retrieved from https://walkyourcity.org
- 101.Gumprecht, B. (1999). *The Los Angeles River: Its Life, Death, and Possible Rebirth*. Baltimore: The Johns Hopkins University Press.

- 102.Los Angeles County Department of Public Works. (2002). *Los Angeles River Master Plan*. Retrieved from http://ladpw.org/wmd/Watershed/LA/Larmp/LARMP-03%20II.%20Introduction.pdf
- 103.Los Angeles River Watershed Project Listing. (n.d.). Retrieved from http://ladpw.org/wmd/watershed/LA/projects/index.cfm?sort=Upper(City)
- 104.Wrigley LA River Greenway. (n.d.). Retrieved from http://ladpw.org/wmd/watershed/LA/projects/project_view.cfm?projid=34
- 105.Implementation Plan Element Committee Meeting (2017).
- 106.Walls, M. (2014). Private Funding of Public Parks: Assessing the Role of Philanthropy. *Resources for the Future*, (Issue Brief 14-01).
- 107.Letter by Ed Reyes introducing the Los Angeles River Revitalization Plan. (n.d.).
- 108. City of Los Angeles Department of Public Works. (2007). Los Angeles River Revitalization Master Plan: Los Angeles.
- 109.Los Angeles River Bonded Projects. (2016). Watershed Conservation Authority.
- 110.Presentation by Omar Brownson (RiverLA Executive Director) at Lower LA Working Group meeting. (2017, May).
- 111. Pina, C. (2017, March 22).
- 112.Guidance for Flood Control Permits. (n.d.). Retrieved from http://dpw.lacounty.gov/ldd/lib/forms/Guidelines/LACFCD%20Flood%20Permit%20Guidance%20v 4.2.1.pdf
- 113.Los Angeles County Department of Public Works Land Development Division 2016-2017 Fee Schedule (effective July 1, 2016). (n.d.).
- 114. United States Army Corps of Engineers Section 408 Permitting Process Information. (n.d.). Retrieved from http://www.spl.usace.army.mil/Missions/Section-408-Permits/
- 115.Los Angeles River Cooperation Committee Fact Sheet. (2011, March). Retrieved from http://boe.lacity.org/lariver/rcc/River_Cooperation_Committee_Fact_Sheet_rev_03102011.pdf
- 116.UCLA Luskin Center for Innovation. (2016). Los Angeles River Greenway Guide.
- 117.Jao, C. (2015, November 25). What's Taking Los Angeles River Revitalization So Long? Retrieved from https://www.kcet.org/confluence/whats-taking-los-angeles-river-revitalization-so-long
- 118.City of Los Angeles Bureau of Engineering Sixth Street Viaduct Replacement Project. (n.d.). Retrieved from http://www.sixthstreetviaduct.org/outreach
- 119.Chiland, E. (n.d.). 11-Mile Makeover of the LA River is Moving Right Along. Retrieved from https://la.curbed.com/2016/7/2/12064494/la-river-restoration-alternative-20-army-corps
- 120.Zahniser, D. (2017, January 27). L.A. to acquire property known as "crown jewel" in river revitalization strategy. *Los Angeles Times*.
- 121.CA Assemb. 530, Chapter 684 (Cal. Stat. 2015-2016). (n.d.).
- 122. Working Group. (n.d.). Retrieved from http://lowerlariver.org/working-group/

- 123.Lower Los Angeles River Revitalization Plan. 2016. Conceptual Planning Process Roadmap. (n.d.). Retrieved from http://lowerlariver.org/wp-content/uploads/2017/01/20170103-Planning-Process-Roadmap.pdf
- 124.Online Community Survey. (2017). Retrieved from http://lowerlariver.org/survey/
- 125. Working Group Meeting Minutes #3: Summary Report. (2016, July 6). Lower Los Angeles River Working Group.
- 126. Join the Clean-up. (2017). Retrieved from https://folar.org/action/#join-the-cleanup
- 127.17th Annual Los Angeles River Ride Benefitting LACBC. (2017). Retrieved from http://www.labike.org/riverride
- 128.Assemb. Bill 1558 (2017-2018 Reg. Sess.). Unchaptered/in progress. (n.d.).
- 129.AB-1558 Los Angeles river: river ranger program (2017-2018) Votes. (2017). Retrieved from https://leginfo.legislature.ca.gov/faces/billHistoryClient.xhtml?bill_id=201720180AB1558
- 130.AB-1558 Los Angeles river: river ranger program (2017-2018) Bill Analysis 05/30/2017 Assembly Floor Analysis. (2017). Retrieved from https://leginfo.legislature.ca.gov/faces/billAnalysisClient.xhtml?bill_id=201720180AB1558
- 131.ChangeLabSolutions. (2015). Local Agency Strategies for Funding the Development and Maintenance of Parks and Recreation Facilities in California. Retrieved from http://www.changelabsolutions.org/sites/default/files/Parks-Financing_White-Paper_FINAL_20150713.pdf
- 132. Proposition 84. (n.d.). Retrieved from http://www.water.ca.gov/irwm/grants/prop84index.cfm
- 133.PRC § 5786 5786.31, Cal. Senate B. 1374 (2015-2016), Chapter 486 (Cal. Stat. 2016). (n.d.).
- 134.SB 1374 Senate Analysis. (2016). Retrieved from https://leginfo.legislature.ca.gov/faces/billAnalysisClient.xhtml?bill_id=201520160SB1374
- 135. HR&A Advisors. (2016). *LA River Enhanced Infrastructure Financing District Revenue Yield Analysis*. Retrieved from http://clkrep.lacity.org/onlinedocs/2014/14-1349_misc_11-30-2016.pdf

APPENDICES

APPENDIX A: PUBLIC OUTREACH FROM BICYCLE AND PEDESTRIAN MASTER PLANS

				User Data Related	to River		
City	Year	Plan / Study	Data Collecte d	Bicyclists	Pedestri ans	Other	Other Relevan t Info
Bell	2016	City of Bell Bike Master Plan	Online and in- person survey (online, Feb - June, 2016 and in- person Bell 5K Run on Feb 21 and Bell Walk and Roll Festival, May 21, 2016)	N/A	N/A	N/A	"City of Bell maintai ns the Los Angeles River path and contrac ts out a daily mainte nance and graffiti remova I service" (pg. 12).
Bell Gardens	-	Will be included in upcomin g Southeas t Cities Active Transpor tation Plan	-	-	-	-	-

Carson	2013	Carson Master Plan of Bikeways	Public worksh ops, online mappin g tools and surveys, Facebo ok page comme nts, commu nity events/ bike tour outreac h, and sending other comme nts to City staff	N/A	N/A	N/A	N/A
Comme rce	-	-	-	-	-	-	-
Compto n	2015	City of Compto n Bike Master Plan	Online survey (2015) series of booths at local events, jurisdict ion- wide worksh ops, a web- based feedbac k portal	*73 percent of survey respondents rated improving bicycle access to existing trails (e.g., Compton Creek, LA River, etc.) as "very important" (higher than accessing other destinations, such as school/campus and Compton Station) (Appendix C: Survey Results, pg. 16) *"many respondents see personal security as their primary concern when bicycling around Compton. The risk of theft or violent confrontation makes many potential bicycle riders		-	

				uneasy and less willing to ride a bicycle. Existing Class I shared use paths along Compton Creek and the Los Angeles River were identified as problem spots, particularly around undercrossings and access points that tend to attract non-travelers" (pg. 62). Plan recommends security cameras "monitored by the Los Angeles County Sheriff's Department and should be accompanied by enhanced enforcement efforts around camera locations."		
Cudahy	2014	Bicycle and Pedestri an Counts in Cudahy: Results from Automat ed Counts in 2013- 2014 Bicycle Plan will be included in upcomin g Southeas t Cities Active Transpor tation Plan	Counte d bicyclist s and pedestr ians 24 hours /day over a month- long period in Septem ber 2014 using bicycle and pedestr ian counter s	LA River found to be important part of bicycle network. Highest volumes of bicycle traffic in city found on Clara Street (210 per day), which connects to the river. Other sites had 60-80 bicyclists per day, and Clara Street counts were the fourth highest out of 35 sites counted by the DPH during the same time period	-	-

Downey	2015	City of Downey Bike Master Plan	*outrea ch at events *four commu nity worksh ops in 2014 *bicycli ng needs assess ment survey (232 respon dents)	 Common theme that came up during public outreach events: adding connections to river bike paths (p. 32) 23 percent of survey respondents said river bike paths were their favorite places or routes to bike (appendix A) 	-	_	-
Gatewa y City Council of Govern ments	2016	Gateway Cities Strategic Transpor tation Plan Active Transpor tation Element	*Three commu nity worksh ops in 2013	-	-	-	-
Hunting ton Park	2014	City of Huntingt on Park Bicycle Transpor tation Master Plan	-	-	-	-	-
Long Beach	2017	Long Beach Bicycle Master Plan 2040	*survey of residen ts (469 respon dents) *Gather ed feedbac k at eight	*Survey respondents who lived closer to the LA River Bike Path were more likely to use path *66 percent of respondents used either the beach or river path in the past six months *Needs identified along river: - Walk bike bridge - Lighting needed			

1						1
		commu nity events *Focus groups of bicyclist s	 Doesn't feel safe Need connection to Metro Improve access or improve wayfinding to access to LA River from Pacific Coast Highway Improve 6th Street access from LA River Add connections to LA River Bike Path at all streets Improved wayfinding signage to the LA River Path Safety improvements to LA River Path and access points Improve all river crossings Install lights under all bridges cyclists and pedestrians must use to cross I-710/LA River More police on the LA River 			
			(image above, pg. 45)			
Lynwoo d	Will be included in upcomin g Southeas t Cities Active Transpor tation Plan	•	•	•	•	•

Maywo od		Will be included in upcomin g Southeas t Cities Active Transpor tation Plan	•	•	•	•	•
Paramo unt	2015	Bellflow er- Paramou nt Bike & Trail Master Plan	*Comm unity survey conduct ed online and at Novem ber 2014 events *Comm unity comme nts from Novem ber 2014 pop-up events	*Majority of survey respondents use shared paths (LA River Bicycle Path, Gabriel River Trail, and Bellflower Pedestrian and Bicycle Trail) for both bicycling and walking, and for bicycli transportation *24.8 percent of Bellflower resident responding to the survey use the LA River Bike Path, and 47.2 percent of Paramount residents *24.4 percent of Paramount resident said the LA River Bike Path is a "desi destination to reach by bike", lower parks (55.3 percent) and schools (43 percent), but higher than grocery str commercial areas, work, the Bellflow Bicycle and Pedestrian Path, Metro Green Line, etc. *Education needed for bicyclists and pedestrians to reduce conflicts / "promote mutual respect" along sha use paths *Los Angeles River Bicycle Path / Alc had high bicycle volumes (only higher intersection was San Gabriel River Tr and Flora Vista Street). Observations students walking bicycles home from school (biking to school in the morn from Compton.	, San th ling ats A f nts sired r than 3.1 tores / ower ad hared- londra her Trail ns of m	*two percent of Paramou nt survey respond ents use shared paths for skateboa rding, two percent for rollerbla ding, and two percent for wheelch air / other mobility device	•

<figure></figure>	
*66 percent of Paramount residents who responded to the survey bicycle along the shared use paths for recreation and 20 percent for transportation / errands who respond ed to the survey walk along shared use paths for recreatio n, 28 percent for running / jogging, and 16	

					percent for transpor tation / errands		
South Gate	2012	City of South Gate Bicycle Transpor tation Plan	2011 online and printed survey	Two percent of respondents would like to see new or improved connections to the the LA River, pg 2-11	•	-	-
Vernon	In Prog ress	-	-	-	-	-	-

APPENDIX B: SURVEY AND OBSERVATIONAL COUNTS

B.1 Survey Methodology

We based the survey and project design primarily on two sources. We referenced the *Trail User Survey Workbook*, published in 2005 by the Rails-to-Trails Conservancy, a prominent trails advocacy and land management organization in the trails planning field. We also referenced a survey recently conducted along the North Beach Trail in Santa Monica by the City of Santa Monica and Alta Planning + Design, a well-known bicycle and pedestrian planning consulting firm. The City of Santa Monica is planning to make improvements to the North Beach Trail, and therefore surveyed trail users about their experience along the trail and what improvements they would like to see.

Two people were stationed at each of two access points (where people enter and exit the river path) along the Lower LA River. Both those who entered and exited the river and those who passed by on the LA River Bicycle Path were counted, and mode of transportation being used was recorded (e.g., scooter or walking). Each person who passed by was asked to fill out a survey. We conducted the count and survey in the morning and afternoon on a weekend day to understand how people may use the right-of-way recreationally. We also conducted the count and survey on a weekday afternoon to understand how people may use the right-of-way to commute to work or school. Table C.1 below shows when counts and surveys were conducted.

	10am - 12pm	5-7pm
Hollydale Park	Sunday (4/23)	Sunday (4/23)
(southernmost pathway between Hollydale Park and LA River	Tuesday	Tuesday
Bicycle Path)	(4/25)	(4/25)
Del Amo Blvd	Saturday	Saturday
(southern entrance to the river path)	(4/22)	(4/22)

Table B.1 Survey and observational count location and times

B.2 SURVEY QUESTIONS

B.2.1 ENGLISH VERSION

LOWER LOS ANGELES RIVER: User Survey

Description: As part of a UCLA capstone class, we are conducting a survey of path and river users along the Lower Los Angeles River to determine what improvements (if any) should be made to the trail and river. Your cooperation in completing this survey will be greatly appreciated.

HOW YOU USE THE PATH / RIVER

1. How did you get to the Los Angeles River Bicycle Path? (check all that apply)

- Drive Walk
- Public
 transit
 Other
- Bike

2. How often do you come to the Los Angeles River Bicycle Path / river? (check one)

- 4 + days
 - Less than once per month
 - per week This is my first time
- 1-3 days per week
- Several times per month
- 3. Generally, when do you use the trail? (check one)
 - Weekends Both
 - Weekdays
- 4. What is your primary activity along the trail / at the river today? (check one)
 - Walking Riding a motorized vehicle

- Biking
- Swimming
- Jogging / Skateboarding
 running
 Other_____
- Riding a horse

5. What is the purpose of your trip today? (check all that apply)

- Recreation
- Health and exercise
- Commuting to work or school
- Attend a social gathering
- Running errands / shopping
- To get to a park
- Other_____

WHAT YOU THINK OF THE PATH / RIVER

6. Why do you like coming to the Los Angeles River Bicycle Path / river?

7. Does anything discourage you from using the Los Angeles River Bicycle Path / the river? (check all that apply)

- It is hard for me to get to the path / river (either by walking, biking, taking transit, or driving)
- People on wheels go too fast
- I feel unsafe along the path / river
- Trail / river is poorly maintained
- Trail / river is not clean
- Lack of amenities along the path (i.e., benches, shade, bike racks, lighting)
- Too crowded
- Other:_____

8. Are there specific improvements you'd like to see? (check all that apply)

- Wider path
- Better signage
- Improved maintenance
- Improved access to the path
- More amenities (.e.g, benches, shade, bike racks)
- Better security (e.g., lighting, police patrols, etc.)
- Easier access to the Los Angeles River Bike Path / river
- None, good as is
- Other:

9. If you could change the river in one way (e.g., add benches, more parks along the river, or access to the riverbed made easy) what would you choose?

ABOUT YOU

10. What is your home zip code? _____

11. How many are in your group at the river today?

- 12. How old are you? (check one)
 - 18-24 40-50
 - 25-30
 - 31-40

13. What is your gender? (check one)

- Female
- Male
- Transgender

14. What is your total household income? (check one)

- Less than \$10,000
- \$10,000 to \$19,999
- \$20,000 to \$29,999
- \$30,000 to \$39,999
- \$40,000 to \$49,999
- \$50,000 to \$59,999

• \$60,000 to \$69,999

50-60

60+

- \$70,000 to \$79,999
- \$80,000 to \$89,999
- \$90,000 to \$99,999
- \$100,000 to \$149,999
- \$150,000 or more

15. What ethnic or racial group do you identify as? (check all that apply)

• Hispanic/Latino

• Caucasian/White

- African American/Black
- Asian or Asian American
- Native American

- Multi-racial
- Other:_____

B.2.2 SPANISH VERSION

ENCUESTA SOBRE EL RÍO DE LOS ÁNGELES

Descripción: Como parte de una clase de UCLA, estamos llevando a cabo una encuesta de los usuarios del sendero y el río a lo largo del río Lower Los Angeles para determinar qué mejoramientos (si los hay) deben hacerse al sendero y al río. Su cooperación para completar esta encuesta será muy apreciada.

CÓMO UTILIZA USTED EL CAMINO / RÍO

1. ¿Cómo llegó al Camino de la Bicicleta del Río Los Ángeles? (marque todo lo que corresponda)

- Manejar Caminar
- Tránsito público Other_____
- Bicicleta

2. ¿Con qué frecuencia viene al Camino de la bicicleta / al río? (marque uno)

• 4 + días a la semana

- Menos de una vez al mes
- Ésta es mi primera vez
- Varias veces al mes

• 1-3 días a la semana

3. Generalmente, ¿cuándo usa el camino / río? (marque uno)

• Fines de semana

• Ambos

• Entresemana

4. ¿Cuál es su actividad principal a lo largo del sendero / en el río hoy? (marque uno)

- Para caminar
- Ciclismo
- Correr
- Montando un caballo
- Andar en un vehículo motorizado
- Nadando
- Andar en patineta
- Otro_____

5. ¿Cuál es el propósito de su viaje hoy? (marque todo lo que corresponda)

- 1. Recreación
- 2. Salud y ejercicio
- 3. Ir a trabajo o a la escuela
- 4. Ir a una reunión social

- Hacer mandados / ir de compras
- Para llegar a un parque
- Otro_____

SUS Opiniones SOBRE EL CAMINO / RIO

6. ¿Por qué le gusta venir al Río de Los Ángeles?

7. ¿Algo le desanima de utilizar el camino de la bicicleta del río de Los Ángeles / el río? (marque todo lo que corresponda)

- Es difícil para mí para llegar a la ruta / río (sea a pie, en bicicleta, tomando tránsito, o manejando)
- 2. La gente sobre ruedas van demasiado rápido
- 3. Me siento inseguro por el camino / río
- 4. Camino / río está mal mantenido

- Camino / río no está limpio
- La falta de servicios a lo largo del camino (es decir, bancos, sombra, estacionamiento para bicicletas, iluminación)
- Demasiado lleno de gente
- Otros: _____
- 8. ¿Hay mejoramientos específicas que le gustaría ver? (marque todo lo que corresponda)
- 1. Camino más amplio
- 2. Mejor señalización
- 3. Mantenimiento mejorado
- 4. Mejor acceso al camino
- 5. Más amenidades (por ejemplo, bancos, sombra, estacionamiento para bicicletas)
- 1. Mejor seguridad (por ejemplo, iluminación, patrullas policiales, etc.)
- Acceso más fácil al camino de la bici del
 - río de Los Ángeles/ el río
- 3. Ninguno, bueno como es
- 4. Otros: _____

9. Si pudiera cambiar el río de una manera (por ejemplo, agregar bancos, más parques a lo largo del río, o acceso al cauce del río), ¿qué elegirías?

ACERCA DE TI

10. ¿Cuál es el código postal de su casa? _____

11. ¿Cuántos hay en su grupo hoy?_____

12. ¿Cuántos años tiene? (marque uno)

- 1.18-241.40-502.25-302.50-60
- 3.
 31-40

 3.
 60+

13. ¿Cuál es su género? (marque uno)

- 1. Hembra
- 2. Masculino
- 3. Transgender

14. ¿Cuál es el ingreso total de su hogar? (marque uno)

- 1. Menos de \$10,000
- 2. \$10,000 a \$19,999
- 3. \$20,000 a \$29,999
- 4. \$30,000 a \$39,999
- 5. \$40,000 a \$49,999
- 6. \$50,000 a \$59,999

- \$60,000 a \$69,999
- \$70,000 a \$79,999
- \$80,000 a \$89,999
- \$90,000 a \$99,999
- \$100,000 a \$149,999
- \$150,000 o más

15. ¿Qué grupo étnico o racial te identificas como? (marque todo lo que corresponda)

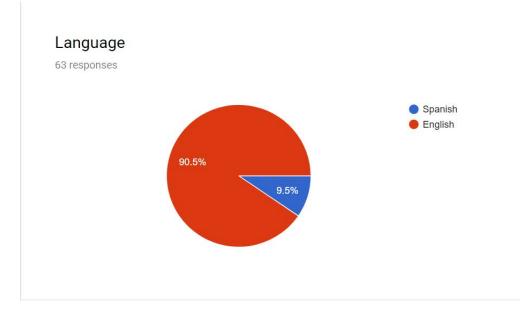
- 1. Hispano / latino
- 2. Afroamericano / Negro
- 3. Asiático o asiático americano
- 4. Nativo americano

- 1. Caucásico / Blanco
- 2. Multirracial
- 3. Otro: _____

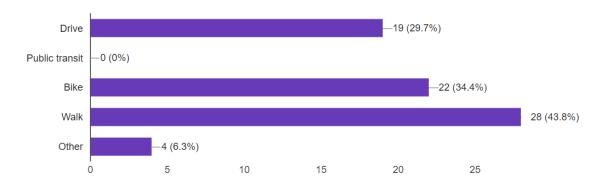
B.3 Observational Count Data

	Wee ken d AM Holl ydal e	Per cen t	Wee ken d PM Holl ydal e	Per cen t	Wee ken d AM Del Am o	Per cen t	Wee ken d PM Del Am o	Per cen t	Wee kda y PM Holl ydal e	Per cen t	TO TA L	PER CEN T TOT AL
Bicyclists	117	81 %	39	58 %	109	89 %	37	49 %	31	34 %	33 3	67%
Walkers/ Pedestria ns	17	12 %	17	25 %	8	7%	12	16 %	31	34 %	85	17%
Runners	11	8%	6	9%	-	-	13	17 %	20	22 %	50	10%
Sports/R ecreation	-	-	2	3%	-	-	-	-	-	-	2	0%
Equestria ns	-	-	1	1%	-	-	6	8%	1	1%	8	2%
Illicit activity users	-	-	-	-	-	-	2	3%	6	7%	8	2%
Homeles s	-	-	-	-	3	2%	4	5%	-	-	7	1%
Motorize d Vehicles	-	-	-	-	2	2%	1	1%	1	1%	4	1%
Others (please list)	-	-	2	3%	-	-	-	-	-	-	2	0%
TOTAL	14	5	6	7	12	2	7	5	9	0	49 9	

B.4 Survey Response Data

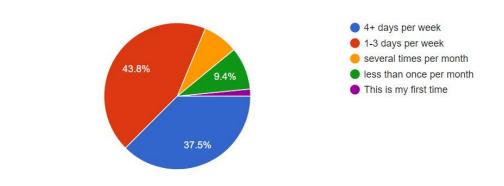


How did you get to the Los Angeles River Bicycle Path? (check all that apply) 64 responses

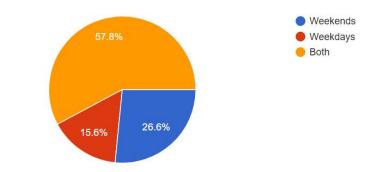


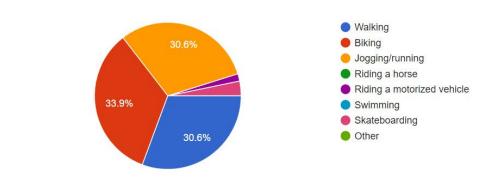
How often do you come to the Los Angeles River Bicycle Path / river? (check one)

64 responses



Generally, when do you use the trail? (check one)

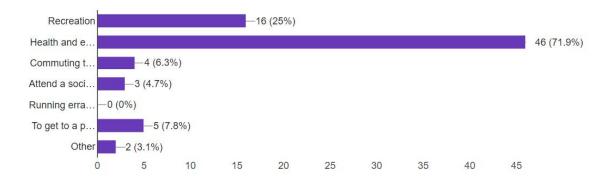




What is your primary activity along the trail / at the river today? (check one) 62 responses

What is the purpose of your trip today? (check all that apply)

64 responses



Why do you like coming to the LA River Bike Path / river?

The fresh air, river needs light at night

I like me the river to walk and biking

porque quiero disfrutarme y cambiar de rutina despues de trabajar toda la semana (because l want to enjoy myself and walk as part of a routine after work during the week)

It give me a peace of mind to relax

Get away from cars, safe bicycling route, get close to nature

big park -> hollydale

it is safe, no traffic; share hobbies with similar people because it is empty free of traffic long beach trail peaceful, quiet, fresh a coreer (to run) get out see nature i love it uninterrupted traffic no cars safe from cars, some scenery space / safety to exercise exercise exercise it's good for everyone to chill and watch sunset dog park to skate the LA River to skate to skate the LA River to skate to ride the bike with the kids it's a good place to run/bike. very relaxing, and sometimes bike to Long Beach there is no other place to run long distance near by nature, not much around because i like to walk very much! I like to come here because it is very fun to count the things I see. plus it is very nice to walk here.	exercises	ot, it's very secure / for my physical health)
because it is empty free of traffic long beach trail peaceful, quiet, fresh a coreer (to run) get out see nature i love it uninterrupted traffic no cars safe from cars, some scenery space / safety to exercise exercise exercise it's good for everyone to chill and watch sunset dog park to skate the LA River to skate the LA River to skate to ride the bike with the kids it's a good place to run/bike. very relaxing, and sometimes bike to Long Beach there is no other place to run long distance near by nature, not much around because i like to walk very much! I like to come here because it is very fun to count the things I see. plus it is very nice to walk here.		fier chore hobbies with similar people
free of traffic long beach trail peaceful, quiet, fresh a coreer (to run) get out see nature i love it uninterrupted traffic no cars safe from cars, some scenery space / safety to exercise exercise exercise exercise it's good for everyone to chill and watch sunset dog park to skate the LA River to skate the LA River to skate the LA River to skate to ride the bike with the kids it's a good place to run/bike. very relaxing, and sometimes bike to Long Beach there is no other place to run long distance near by nature, not much around because i like to walk very much! I like to come here because it is very fun to count the things I see. plus it is very nice to walk here.		
long beach trail peaceful, quiet, fresh a coreer (to run) get out see nature i love it uninterrupted traffic no cars safe from cars, some scenery space / safety to exercise exercise exercise it's good for everyone to chill and watch sunset dog park to skate the LA River to skate the LA River to skate the LA River to skate to ride the bike with the kids it's a good place to run/bike. very relaxing, and sometimes bike to Long Beach there is no other place to run long distance near by nature, not much around because i like to walk very much! I like to come here because it is very fun to count the things I see. plus it is very nice to walk here.		ipty
peaceful, quiet, fresh a coreer (to run) get out see nature i love it uninterrupted traffic no cars safe from cars, some scenery space / safety to exercise exercise exercise it's good for everyone to chill and watch sunset dog park to skate the LA River to skate the LA River to skate the bike with the kids it's a good place to run/bike. very relaxing, and sometimes bike to Long Beach there is no other place to run long distance near by nature, not much around because i like to walk very much!		
a coreer (to run) get out see nature i love it uninterrupted traffic no cars safe from cars, some scenery space / safety to exercise exercise exercise exercise it's good for everyone to chill and watch sunset dog park to skate the LA River to skate the LA River to skate to ride the bike with the kids it's a good place to run/bike. very relaxing, and sometimes bike to Long Beach there is no other place to run long distance near by nature, not much around because i like to walk very much! I like to come here because it is very fun to count the things I see. plus it is very nice to walk here.		
get out see nature i love it uninterrupted traffic no cars safe from cars, some scenery space / safety to exercise exercise exercise it's good for everyone to chill and watch sunset dog park to skate the LA River to skate the LA River to skate to ride the bike with the kids it's a good place to run/bike. very relaxing, and sometimes bike to Long Beach there is no other place to run long distance near by nature, not much around because i like to walk very much! I like to come here because it is very fun to count the things I see. plus it is very nice to walk here. it's cool calm and not many cops		
i love it uninterrupted traffic no cars safe from cars, some scenery space / safety to exercise exercise exercise it's good for everyone to chill and watch sunset dog park to skate the LA River to skate the LA River to skate to ride the bike with the kids it's a good place to run/bike. very relaxing, and sometimes bike to Long Beach there is no other place to run long distance near by nature, not much around because i like to walk very much! I like to come here because it is very fun to count the things I see. plus it is very nice to walk here.	•	
uninterrupted traffic no cars safe from cars, some scenery space / safety to exercise exercise it's good for everyone to chill and watch sunset dog park to skate the LA River to skate the LA River to skate to ride the bike with the kids it's a good place to run/bike. very relaxing, and sometimes bike to Long Beach there is no other place to run long distance near by nature, not much around because i like to walk very much! I like to come here because it is very fun to count the things I see. plus it is very nice to walk here.	get out see natu	ire
no cars safe from cars, some scenery space / safety to exercise exercise exercise it's good for everyone to chill and watch sunset dog park to skate the LA River to skate the LA River to skate the LA River to skate to ride the bike with the kids it's a good place to run/bike. very relaxing, and sometimes bike to Long Beach there is no other place to run long distance near by nature, not much around because i like to walk very much! I like to come here because it is very fun to count the things I see. plus it is very nice to walk here.	i love it	
safe from cars, some scenery space / safety to exercise exercise it's good for everyone to chill and watch sunset dog park to skate the LA River to skate the LA River to skate the LA River to skate to ride the bike with the kids it's a good place to run/bike. very relaxing, and sometimes bike to Long Beach there is no other place to run long distance near by nature, not much around because i like to walk very much! I like to come here because it is very fun to count the things I see. plus it is very nice to walk here.	uninterrupted tra	affic
space / safety to exercise exercise it's good for everyone to chill and watch sunset dog park to skate the LA River to skate the LA River to skate to ride the bike with the kids it's a good place to run/bike. very relaxing, and sometimes bike to Long Beach there is no other place to run long distance near by nature, not much around because i like to walk very much! I like to come here because it is very fun to count the things I see. plus it is very nice to walk here.	no cars	
to exercise exercise it's good for everyone to chill and watch sunset dog park to skate the LA River to skate the LA River to skate to ride the bike with the kids it's a good place to run/bike. very relaxing, and sometimes bike to Long Beach there is no other place to run long distance near by nature, not much around because i like to walk very much! I like to come here because it is very fun to count the things I see. plus it is very nice to walk here.	safe from cars,	some scenery
exercise it's good for everyone to chill and watch sunset dog park to skate the LA River to skate the LA River to skate to ride the bike with the kids it's a good place to run/bike. very relaxing, and sometimes bike to Long Beach there is no other place to run long distance near by nature, not much around because i like to walk very much! I like to come here because it is very fun to count the things I see. plus it is very nice to walk here.	space / safety	
it's good for everyone to chill and watch sunset dog park to skate the LA River to skate to skate to ride the bike with the kids it's a good place to run/bike. very relaxing, and sometimes bike to Long Beach there is no other place to run long distance near by nature, not much around because i like to walk very much! I like to come here because it is very fun to count the things I see. plus it is very nice to walk here.	to exercise	
to chill and watch sunset dog park to skate the LA River to skate to ride the bike with the kids it's a good place to run/bike. very relaxing, and sometimes bike to Long Beach there is no other place to run long distance near by nature, not much around because i like to walk very much! I like to come here because it is very fun to count the things I see. plus it is very nice to walk here. it's cool calm and not many cops	exercise	
dog park to skate the LA River to skate to ride the bike with the kids it's a good place to run/bike. very relaxing, and sometimes bike to Long Beach there is no other place to run long distance near by nature, not much around because i like to walk very much! I like to come here because it is very fun to count the things I see. plus it is very nice to walk here.	it's good for eve	ryone
to skate the LA River to skate to ride the bike with the kids it's a good place to run/bike. very relaxing, and sometimes bike to Long Beach there is no other place to run long distance near by nature, not much around because i like to walk very much! I like to come here because it is very fun to count the things I see. plus it is very nice to walk here. it's cool calm and not many cops	to chill and wate	ch sunset
to skate to ride the bike with the kids it's a good place to run/bike. very relaxing, and sometimes bike to Long Beach there is no other place to run long distance near by nature, not much around because i like to walk very much! I like to come here because it is very fun to count the things I see. plus it is very nice to walk here. it's cool calm and not many cops	dog park	
to ride the bike with the kids it's a good place to run/bike. very relaxing, and sometimes bike to Long Beach there is no other place to run long distance near by nature, not much around because i like to walk very much! I like to come here because it is very fun to count the things I see. plus it is very nice to walk here. it's cool calm and not many cops	to skate the LA	River
it's a good place to run/bike. very relaxing, and sometimes bike to Long Beach there is no other place to run long distance near by nature, not much around because i like to walk very much! I like to come here because it is very fun to count the things I see. plus it is very nice to walk here. it's cool calm and not many cops	to skate	
there is no other place to run long distance near by nature, not much around because i like to walk very much! I like to come here because it is very fun to count the things I see. plus it is very nice to walk here. it's cool calm and not many cops	to ride the bike	with the kids
nature, not much around because i like to walk very much! I like to come here because it is very fun to count the things I see. plus it is very nice to walk here. it's cool calm and not many cops	it's a good place	e to run/bike. very relaxing, and sometimes bike to Long Beach
because i like to walk very much! I like to come here because it is very fun to count the things I see. plus it is very nice to walk here. it's cool calm and not many cops	there is no othe	r place to run long distance near by
I like to come here because it is very fun to count the things I see. plus it is very nice to walk here. it's cool calm and not many cops	nature, not muc	h around
here. it's cool calm and not many cops	because i like to	walk very much!
		ere because it is very fun to count the things I see. plus it is very nice to walk
it provides the perfect running workout	it's cool calm ar	d not many cops
	it provides the p	erfect running workout

i enjoy coming to the riverbed for a short walk

it's quiet and peaceful

convenient

walk in peace

no hay trafico de darres

nice for walking and bike riding

it serves as a place to meditate and run. overall very peaceful.

ejercicio (exercise)

to walk and run, mostly for recreation and walking the dog

best place for running

it's nice and peaceful. it helps relax the mind.

its relaxing

yes

very nice still needs work

I find it interesting. certain geometric starkness that's beautiful. you can projects upons like to see infrastructure surprising moments of natural beauty

it's quiet

trail = nice view

privacy and no car traffic

on/off street

no traffic

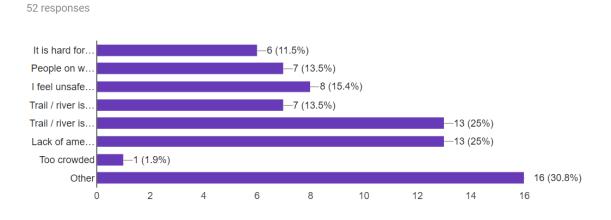
exercise

usually is a non-issue, but in the last year, motorized equipment is found along the bike path, but no police around

no calls no lights

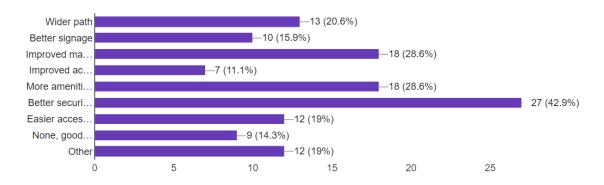
exercise, socialize, and network

Does anything discourage you from using the Los Angeles River Bicycle Path / the river? (check all that apply)



Are there specific improvements you'd like to see? (check all that apply)

63 responses



If you could change the river in one way (e.g., add benches, more parks along the river, or access to the riverbed made easy) what would you choose?

add benches
mas seguridad y limiesa (more security and clean)
more parks
safe access from Los Cerritos Park in Long Beach
park improvements are cool
es beautiful (it's beautiful)
mas parques, mas banos (more parks, more bathrooms)

benches, grass

I would clean river path. section from slauson to imperial, remove graffitti and debris

bigger passager way

benches and good drinking water

add benches

access to the river

like it is fine

north on commute, cross imperial -> more debris (gage, slauson); anaheim & pch -> debris/encampments; connect upper & lower river (ride the bed) -> when I get to Maywood / Atlantic, bad traffic

less of concrete wasteland, river more natural

nonstop to WeHo

access

add benches, water fountains

parks along side

make benches

benches to sit

the road

benches

benches to skate

wider

benches so there are more places to rest when needed

wider walking area

benches

i would change nothing

benches

better policing/security. the major problem for me is the speeding bikes (motorized bikes)

signage in spanish

add benches

more access to the river bed

more benches more restrooms

mas parques

resting area

definitely more water fountains, perhaps more restrooms availablility

mas parques y acceso

more benches and walkways

more benches could be cool, many old people use this path for exercise or to go to work

lights

more soft bottom channel

a lot of crime at night, very unsafe

security

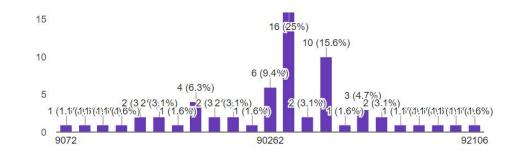
trees!

benches and water

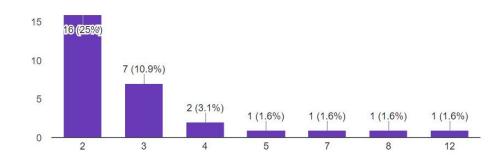
more shaded areas to rest along the bike path

add more benches

What is your home zip code?

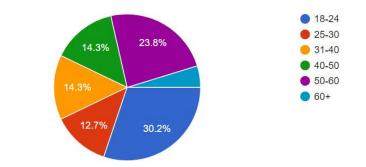


How many are in your group at the river today?

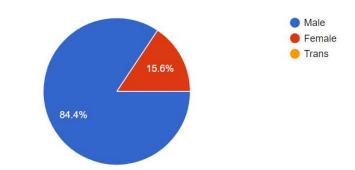


How old are you?

63 responses

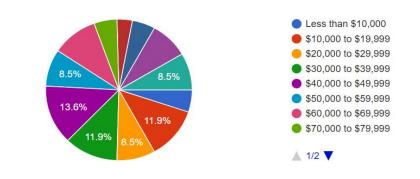


What is your gender?

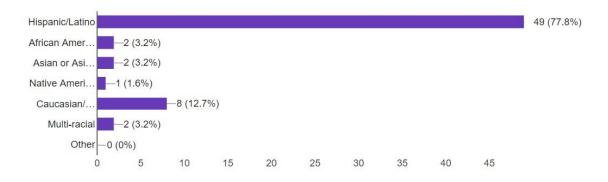


What is your household income?

59 responses



What ethnic or racial group do you identify as?



APPENDIX C: 1996 LOS ANGELES RIVER MASTER PLAN

STAKEHOLDERS

County

Chief Administrative Office Department of Parks and Recreation Department of Public Works Department of Regional Planning

Cities

Bell **Bell Gardens** Burbank Carson Commerce Compton Cudahy Downey Glendale Long Beach Los Angeles Lynwood Maywood Paramount South Gate Vernon

Federal

National Park Services, Western Region US Army Corps of Engineers US Forest Service

State

Department of Fish and Game Department of Parks and Recreation Department of Transportation Mountains Recreation and Conservation Authority Rivers and Mountains Conservancy Santa Monica Mountains Conservancy

Local Agencies

Gateway Cities Council of Governments Los Angeles Regional Water Quality Control Board Metropolitan Transportation Authority Metropolitan Water District Southern California Association of Governments

Environmental/Non-Profit Groups

American Institute of Architects Friends of the Los Angeles River Hollywood Beautification Committee Los Angeles and San Gabriel Rivers Watershed Council Los Angeles County Bikeway Coalition North East Trees Rails to Trails Conservancy The River Project Trust for Public Land

APPENDIX D: 2007 LOS ANGELES RIVER MASTER PLAN

STAKEHOLDERS

County

Department of Public Works First Supervisorial District Third Supervisorial District

Cities

Burbank Glendale Long Beach Los Angeles

Federal

National Park Services, Western Region US Army Corps of Engineers

State

California State Parks Coastal Conservancy Mountains Recreation and Conservation Authority Rivers and Mountains Conservancy Santa Monica Bay Restoration Commission Santa Monica Mountains Conservancy

Local Agencies

Boyle Heights Neighborhood Council Canoga Park Neighborhood Council Echo Park Neighborhood Council Encino Neighborhood Council Greater Silverlake Neighborhood Council MacArthur Park Neighborhood Council Lincoln Heights Neighborhood Council Los Angeles Regional Water Quality **Control Board** Metropolitan Transportation Authority Metropolitan Water District Mountains Recreation and Conservation Authority Reseda Neighborhood Council Silverlake Neighborhood Council Southern California Association of Governments Svlmar Neighborhood Council Tarzana Neighborhood Council

Environmental/Non-Profit/For-Profit Groups

Alianza de los Pueblos del Rio Alliance for a Livable LA American Institute of Architects American Society of Landscape Architects Anahuak Youth Soccer Association Apollo Alliance Arts Community Land Activism Audubon Center, North East Los Angeles Audubon Society, Los Angeles Chapter **BNSF** Rail CARECEN Center for Law in the Public Interest/The City Project Central City East Association Central City Association Central City Neighborhood Partners Clinica Msr. Oscar A. Romero Collective Space, Macarthur Park Cypress Park and Glassell Park Community Design Ordinance Committee Economic Alliance of the San Fernando Valley Economic Alliance of the Valley El Centro del Pueblo, Echo Park El Pueblo de Los Angeles Historic Monument Elysian Valley United Fernandeno Tataviam Band of Mission Indians Friends of Atwater Village Friends of the Los Angeles River Gabrieleno/Tongva Band of Mission Indians of San Gabriel Heal the Bay Highland Park Heritage Trust Inner City Arts Korean Culture Center Latino Urban Forum Lincoln Heights Pedestrian Study Little Tokyo Business District Livable Places Los Angeles Area Chamber of Commerce Los Angeles and San Gabriel Rivers Watershed Council Los Angeles Chamber of Commerce Los Angeles County Bicycle Coalition Los Angeles Downtown Arts District Los Angeles First Five Los Angeles Neighborhood Land Trust Los Angeles River Water Master, Upper Region

Winnetka Neighborhood Council

Colleges

Los Angeles Valley College University of California, Los Angeles University of Southern California California State University, Northridge

High Schools

Bishop Mora Salesian High School Cals Charter High School Canoga High School Cathedral High School Community Charter High School **Compton Unified School District** Daily High School Eagle Rock High School Foshay Learning Center Franklin High School Grant High School Holy Family High School John Marshall High School La Salle High School Lincoln High School Manuel Arts High School Pilgrim Day High School Ramona Convent High School Reseda High School Roosevelt High School

Los Angeles Trails Project Mary Loquvam Mujeres de la Tierra National Hispanic Education Council Natural Resources Defense Council North East Trees Not a Cornfield San Fernando Valley Historical Society Sierra Club Southern California Institute of Architecture Southern California Wetlands Recovery Project Wetlands **Recovery Project** The Nature Conservancy The River Project TreePeople Trust for Public Land United Chambers of Commerce of the San Fernando Valley Urban Land Institute Valley Industry & Commerce Association Verde Coalition Westlake Arroyo Seco Foundation William C. Velásquez Institute

APPENDIX E: 2017 WORKING GROUP MEMBERS

Businesses – Chamber of Commerce	Heal the Bay
California Assembly District 63, Speaker Rendon	Long Beach Conservation Corps
City of Bell	Los Angeles Conservation Corps
City of Bell Gardens	Los Angeles County Bike Coalition
City of Cudahy	Los Angeles County 1st District
City of Downey	Los Angeles County 2nd District
City of Huntington Park	Los Angeles County 4th District
City of Long Beach	Los Angeles Neighborhood Land Trust
City of Los Angeles	Prevention Institute
City of Lynwood	Public Counsel
City of Maywood	Regional Water Quality Control Board
City of Paramount	River LA
City of South Gate	The Nature Conservancy
City of Vernon	The Trust for Public Land
Council of Watershed Health	Trails4All
East Yard Communities for Environmental Justice	Urban Waters Federal Partnership
Friends of the LA River (FoLAR)	Water Replenishment District
From Lot to Spot (FLTS)	Watershed Conservation Authority
Gateway Cities COG	Watts Reimagined
Gateway Water Management Authority	