

4. Implementation

“A great street should be the most desirable place to be, to spend time, to live, to play, to work, at the same time that it markedly contributes to what a city should be. Streets are settings for activities that bring people together.”

—Allan B. Jacobs, “Great Streets”

“Connect US Now!”

The preliminary analysis undertaken by the Connect US team suggests that every project in the Action Plan is doable, provided there is funding and LADOT’s final traffic/engineering analyses confirm that the project meets their design criteria. Each one can be constructed or installed within the existing public right-of-way; none require the dedication or acquisition of additional right-of-way.

Esplanades

Esplanades require the most design and construction work: the curb on the east side of each of the three esplanade streets needs to be moved into the roadway to accommodate the new two-way bike path and parkway next to the existing sidewalk. Moving the curb will require either reconstructing a portion of the roadway or reconstructing the entire sidewalk to maintain 6-inch curbs. New bicycle/pedestrian signals have to be installed at intersections and the lanes restriped. Some utilities may be required to be relocated.

Cycle Tracks and Standard Bicycle Lanes

Cycle tracks do not require curbs to be moved, they only require the installation of a series of raised buffers to separate the bike lanes from the vehicle lanes, as well as new bicycle/pedestrian signals and lane restriping. Bicycle lanes typically only require restriping.

Almost All Projects

Almost all projects include infill street trees in either parkways or big tree wells (5’ x 10-12’) to provide more shade for pedestrians and cyclists.

All parkways should be designed to collect and infiltrate stormwater runoff from the sidewalk. A slight swale and permeable soil will allow parkways to collect the initial runoff, which is most important to capture. Where it is feasible and effective, parkways should also be designed to collect and to infiltrate and/or treat stormwater runoff from the street (“street water”). Street water can be treated in a bioswale and released through most parkways; the bioswale parkway on the east side of Hope Street just south of 11th Street in South Park is currently Downtown Los Angeles’s best example: water in the street gutter flows into the parkway through an inlet at one end, runs through plants that are good at collecting pollutants, and returns to the gutter through an outlet at the other end. Some water is infiltrated as well. To infiltrate more water and return it to the groundwater requires more work, both in the design and construction of the parkway.

Some Projects

Some projects include new ornamental street lights and/or pedestrian lights. Many streets already have them and just need a few additional lights.

Implementation Process

The Connect US Action Plan was envisioned and developed as an implementation tool. The road to implementation requires ongoing engagement, collaboration, and the tenacious will to secure and solidify public private partnerships and funding for design, implementation, and maintenance.

The first step in the implementation process is getting the Connect US Action Plan provisions incorporated into the Mobility Plan 2035 and then adopted by the City of Los Angeles. Implementation can then occur through City-initiated infrastructure projects or incrementally in conjunction with private development.

Street Standards and Streetscape Plans

The City of Los Angeles has adopted Street Standards that guide the allowable improvements that can take place on the public right-of-way. Street standards dictate the roadway widths, materials, and other elements that are either standard (allowed through regular ministerial permitting processes) or non-standard (those that require a special permit; Revocable Permit, A-Permit, or B-Permit).

Similarly, adopted streetscape plans call out the required infrastructure improvements along a specific geographic corridor. While streetscape improvements in this document do not always match the City's adopted street standards, they can be approved by the City but are allowable for the specified corridor through a discretionary process that is thoroughly vetted. Such a streetscape corridor plan typically includes a long-term maintenance plan.

Incorporating the proposed improvements from the Connect US Action Plan through the adoption of streetscape plans can facilitate implementation by creating predictability in the development process and clearly identifying responsible parties and long-term maintenance strategies.

Some examples of where this has worked are discussed below:

Broadway Streetscape Master Plan

A community-driven streetscape plan for Broadway between 2nd Street and Olympic Boulevard was adopted by the City Planning Commission in 2013. The plan is a major component of the Bringing Back Broadway initiative to revitalize the historic Broadway corridor in Downtown Los Angeles. While the City pursues implementation of the plan through a mix of grants and new development requirements, a “dress rehearsal” of the adopted plan was implemented in 2014 by extending the sidewalk via the installation of temporary design elements like planters, bollards and special paving. This “Dress Rehearsal” in place, affecting the full reconfiguration of the roadway, allows the Streetscape Plan to be built out incrementally, or block-by-block, over time as funding becomes available.

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Downtown Street Standards

The Downtown Street Standards were adopted by City Council in 2009 and cover the Central City Community Plan area. The Downtown Street Standards apply to any project that triggers the R3 Ordinance in the Central City Community Plan Area. The Standards establish definitive future curb lines and property lines for all Downtown streets, and, in some locations, additional required average sidewalk easements. The Standards focus on recognizing neighborhood context, improving pedestrian sphere and circulation, and creating certainty in the development process.

Development Agreements

The City of Los Angeles enters into Development Agreements for some discretionary or publicly funded development projects. As part of these agreements, the City can require developers to provide for public benefits, including infrastructure improvements, in areas adjacent to the subject property. With the adoption of the Connect US Action Plan, the City can create predictability around infrastructure needs and have a clear, implementable, community-driven strategy in place to improve multi-modal mobility options for areas within the Connect US Action Plan target area. This would facilitate the incremental implementation of identified improvements.

City Departments and Roles

Adoption of Connect US Action Plan, in its entirety or/and as part of individual streetscape plans, will require coordination with Mayor Garcetti's Office, including his Transportation and LARiverWorks teams in his Office of City Services, the Department of City Planning, Bureaus of the Department of Public Works, the Department of Transportation, and the City Council.

Implementation will also require coordination as the proposed Action Plan improvements touch on many different departments. To ensure coordination and efficiency, it will be key for a "project manager" to be identified from within the City family to bring all key stakeholders together to inform further development and implementation of the Action Plan. The Department of Transportation has purview over road configuration (curb to curb) and the Department of Public Works has purview above the curb and all elements requiring civil engineering. Other key departments responsible for designing and/or reviewing and approving other elements: Bureau of Street Lighting (BSL) for street lights, Bureau of Street Services (BSS) for street furniture, street trees and parkways, and Bureau of Engineering (BOE) for paving, utilities and stormwater infiltration.

Funding

Obtaining funding and implementing the Connect US projects will require the collective efforts of the City, Metro and the Community Partners. In order to maintain focus and momentum, the City and Metro will meet quarterly to review their progress and will update the Union Station and Regional Connector Community Councils once or twice a year.

The City of Los Angeles has been very successful in securing grant dollars for public improvements from an array of sources including State of California Active Transportation Program (ATP), Safe Routes to School, Metro Call for Projects,

Proposition A and C, Federal Transportation Authority, among others. Eligibility for grant funding typically requires that a plan be adopted by the local jurisdiction. For this reason, it is imperative that the Connect US Action Plan be adopted by the City of Los Angeles. It is also commonplace for grantors to require that applicants secure local match dollars as part of their application package. Grants typically fund design and construction activities but can almost never be used for ongoing project maintenance. Therefore it is important to identify long-term funding for maintenance or revisions to the City's street standards; this will be discussed in further detail in the maintenance section below.

The City can also explore new funding opportunities that are geared towards improving transit access. The State of California's Cap and Trade Program (C&P Program) came into effect in 2012. The C&P Program was enabled by Assembly Bill 32, the California Global Warming Solutions Act of 2006. AB32 developed goals for reducing greenhouse gas emissions in the State to 1990 levels by 2020. The C&P Program is a market-based regulation tool that works towards achieving the 1990 targets. The C&P Program consists of three categories; Sustainable Communities and Clean Transportation, Energy Efficiency and Clean Energy, and Natural Resources and Water Division.

Senate Bill 375, Sustainable Communities and Climate Protection Act of 2008, further defines Sustainable Communities and mandates that each Metropolitan Planning Organizations (MPO) develop a Sustainable Community Strategy for their respective regions. The Southern California Association of Governments (SCAG) is the MPO for among others, Los Angeles County, and has defined the Sustainable Community Strategy for the region in the Regional Transportation Plan and Sustainable Communities Strategy (2012-2035) which was adopted in 2012.

Enhanced Infrastructure Financing Districts (EIFD's) are also new opportunities that the City can explore to fund implementation. Enacted by Senate Bill 628, EIFD's allow cities or counties to create Enhanced Infrastructure Financing Districts to fund infrastructure development and community development, including implementation of Sustainable Community Strategies. SB 628 takes effect on January 1, 2015 and thus the ability to develop EIFDs.

Some Connect US projects will be implemented using funding from the following sources:

Eastside Access Project Measure R Funds

- 1st/Central Station Area (Little Tokyo and Arts District Linkages). Valued at approximately \$5 million.

State of California Active Transportation Program (ATP) Grants

- Cesar E. Chavez Connections (Chinatown, El Pueblo)
- Eastside Pedestrian Linkages, Phase II (Boyle Heights)
- Little Tokyo Pedestrian Safety Project
- A combined value of approximately \$7 million (\$10 million with matching funds).

Tiger Grant

- Walk-Bike Projects (1st/Central Station area). Valued at approximately \$11.8 million.

Further Analysis

A typical project will require the following steps to be performed: community involvement, traffic analysis, and survey and engineering analysis. In some cases, the first two steps will be undertaken prior to seeking funding for a specific project. In other cases, funding for projects in a geographic area may be obtained first and the specific projects selected after the funding has been obtained.

Community Involvement

Even though the Action Plan has been a community driven process, before implementation takes place, there needs to be further meetings with the community to provide education about the improvements and regular updates and communications on project progress and next steps. This is key to ensure long-term project success.

Traffic Analyses

The projects described in the Action Plan have been analyzed to evaluate potential traffic effects through a two-step process.

First, peak hour traffic counts were collected, and the peak hour one-way traffic volumes were reviewed and compared with per-lane traffic capacity thresholds. Generally speaking, streets operate well when carrying volumes of less than 1,000 vehicles per lane per hour. This threshold was used for the initial screening to determine locations where more detailed operational analysis would be beneficial to quantify the expected traffic effects of the project.

Second, in locations with higher peak hour per-lane traffic volumes and/or complex signal operations, intersections that would be affected by the project were analyzed using the Highway Capacity Manual (HCM) methodologies using the Synchro software. This analysis provides an average delay and level of service for the intersection both with and without the changes associated with the project (e.g. a removal of a travel lane to implement bike lanes on a street).

The analysis included key intersections on 1st Street, Alameda Street, North Broadway, and Vignes Street.

Going forward, additional analyses for these projects may need to be conducted by LADOT depending on the timing of the implementation of a project (if considerable time passes, the analysis should be updated), changes to intersection lane configurations, new development that would generate much more traffic along the project corridor, etc. The two-step screening process described above can be used going forward to determine that particular projects will not affect vehicular traffic operations to an undue level.

Survey and Engineering Analyses

The esplanades, potential stormwater infiltration, and any other projects that include moving the curb, will require preliminary engineering studies.

The esplanades and other projects that relocate curbs will require surveys to determine how the roadway and sidewalk will have to be reconstructed, and if any modifications to drainage (relocating catch basins) are needed. While moving the

curb will not typically affect subsurface utilities, the presence of subsurface utilities may affect the location and extent of parkways, particularly those designed to provide stormwater infiltration.

Stormwater Infiltration

In the case of stormwater infiltration, an initial analysis will determine the feasibility. Soil testing and subsurface utility surveys will typically be required. There are a number of criteria that typically must be met to consider infiltration to the groundwater table:

- **Groundwater** The groundwater table must be at least 10 feet below the bottom of the infiltration “gallery” in the parkway, which is typically about three feet deep.
- **Permeability** The soil must be permeable so water can move from the surface down to the groundwater table. Often the soil is too clayey or there is a layer of bedrock above the groundwater table that prevents water from infiltrating.
- **Structures** Adjacent buildings must typically be at least 10 feet from the edge of the parkway.
- **Utilities** If there are utilities (storm drain, sewer, water, gas, and/or electrical lines) directly under the parkway, it is typically not feasible to infiltrate stormwater.
- **Contaminants** If the groundwater is contaminated with certain pollutants, it may not be appropriate to add more water.



Examples of stormwater infiltration treatments

Storm Water Filtration An alternative to stormwater infiltration if the above criteria can not be met is stormwater filtration. Flow-through planters and “Vegetated Storm Water Curb Extensions” can cleanse water as it moves through plant materials before the water returns to the storm drain. (See Bureau of Engineering standard plan for vegetated storm water curb extensions.)



Example of stormwater infiltration treatment

Project Detailed Design

Once a project has been deemed feasible, the next step is to prepare the detailed design plans needed for construction. Along with preparation of detailed designs, final responsibility for maintenance must be determined. For street lighting improvements, the City requires that a simple majority of property owners, weighted based on benefit, agrees to be assessed for the cost of maintaining and operating the new street lights. For street trees, the City requires adjacent property owners or a community organization to agree to water the trees for at least five years. For other landscape improvements (ground level planting and irrigation) and other “non-standard” improvements, for example, permeable pavers, the City requires adjacent property owners or a community organization to agree to maintain the improvements in perpetuity.

Final Construction Documents and Approvals

The final step in the design process is the preparation of final construction documents, with final sign-off by LADOT, BOE, BSL and BSS. If the project lead is a community group, property owner or developer, an A or B permit from BOE is required. In addition, if there are any non-standard elements or any landscaping or irrigation, a revocable permit and maintenance agreement may be required. The Department of Public Works’ Office of Community Beautification may help community groups obtain these permits. If the City is constructing the improvements, the Permit Process may be waived.

Construction

Once a project has been designed and fully funded, it can be constructed. City projects will be constructed by the Department of Public Works. Project initiated by private entities, such as Developers or Business Improvement Districts (BIDs), will be constructed by a contractor hired by the private entity.

Maintenance

The City of Los Angeles does not have capacity or resources to maintain trees, other landscaping or any other improvements that are “non-standard” in its public rights-of-way, other than infrequent tree pruning (currently every 10 years). Property owners or community groups must take on that responsibility. The Chinatown BID, for example, maintains the street trees in Chinatown. As noted above, in order for a project to be approved, a maintenance program must be in place. For example street trees must be watered regularly for at least five years, other planting must be irrigated and pruned, and irrigation systems requires routine maintenance.

Conceptual Costs for Planning Purposes

A conceptual construction cost estimate was prepared by Lenax Construction Services, Inc. (5/21/14) based on concept plans for the proposed Connect US projects. The estimate captured rough order of magnitude (ROM) costs that will be used for project funding applications. The ROM cost includes general contractor's general conditions and mark-up, tax design contingency, and construction contingency. Soft costs can increase project costs anywhere between 20-30%. The following eighteen projects were estimated (costs shown below are rounded to the nearest hundred-thousand dollars). The project names and scope vary from those referenced in Section 3 due to when the cost estimate was prepared. **The information contained in the ROM cost estimate can be used to “repackage” different projects as needed for funding applications.**

Fundamental Pedestrian Improvements for study area	\$2.6 million
Los Angeles St. Plaza from Alameda St. to the Plaza	\$3.0 million
Los Angeles St. Esplanade from the Plaza to 2nd St.	\$4.4 million
Alameda-North Spring St. from Cesar Chavez Ave. to Roundout St.	\$3.2 million
Alameda St. from Arcadia St. to 1st St.	\$2.6 million
Paseo Luis Olivares/Spring St./Cesar E. Chavez Ave.	\$1.3 million
Cesar E. Chavez Ave. from Alameda St. to N. Spring St.	\$1.3 million
North Broadway from Cesar E. Chavez Ave. to Bernard St.	\$1.4 million
1st St. from Los Angeles St. to Mission St.	\$3.1 million
Vignes-Ramirez-Center-Santa Fe Spine	\$6.8 million
3rd St. from Alameda to Spring – 2-way cycle track on south side	\$2.8 million
Central Ave. from 1st to 3rd Sts.	\$0.4 million
Judge John Aiso/San Pedro St. from Temple to 3rd Sts.	\$0.8 million
2nd/Traction Sts. at Alameda St.	\$1.5 million
North Broadway from Bernard St. to Avenue 19	\$3.3 million
Alameda St. – US 101/Arcadia St. to Cesar Chavez Ave.	\$2.3 million
Cesar Chavez Ave. – Alameda St. to Vignes St.	\$2.9 million
North Main St. at El Pueblo	\$1.1 million

Cost estimating criteria included in the ROM cost estimate and should be reviewed carefully for cost basis and assumptions such as reference sources, sales tax, bidding, inclusions, exclusions and escalation. The estimate assumes construction start of mid-2015 with work proceeding over 2 years and completion in 2016—the soonest possible timeframe for a project with secured funding that is ready to move into implementation.

Cost escalation is a key consideration assuming that the projects will be implemented incrementally as funding is obtained. Given that reality the project costs were estimated in 5, 10, 15 and 20-year increments.

