

CITY COUNCIL COMMITTEE

INFRASTRUCTURE & FRANCHISE

Dan Helix, Chair

Edi Birsan, Committee Member

5:30 p.m.

Monday, April 11, 2016

**Building A, Garden Conference Room
1950 Parkside Drive, Concord**

AGENDA

ROLL CALL

PUBLIC COMMENT PERIOD

- 1. PRESENTATION** – Downtown Corridors Plan – Status Update. Report by Joan Ryan.
- 2. ADJOURNMENT**

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**REPORT TO INFRASTRUCTURE AND FRANCHISE COMMITTEE****TO THE HONORABLE COMMITTEE MEMBERS:**

DATE: April 11, 2016

SUBJECT: DOWNTOWN CORRIDORS PLAN – STATUS UPDATE**Report in Brief**

In early 2015, the City of Concord accepted a Priority Development Area Planning Grant to prepare a Downtown Corridors Plan. The Downtown Corridors Plan implements recommendations from the Downtown Specific Plan (2014) to design and prepare conceptual streetscape drawings and design guidelines to enhance three critical street segments or “corridors” along Oak Street, Grant Street and Salvio Street.

Work was initiated on the project in August 2015 after ARUP was selected as the City’s consultant. The project team recently hosted the second public meeting on the project. The Infrastructure and Franchise Committee (Committee) is requested to receive a status update on the project to date and provide any comments. Staff will also update the Committee regarding next steps and the remainder of the project schedule.

This item is brought forward for informational purposes. Although there is no recommendation requested from the Committee at this time, comments are welcome.

Background

On February 24, 2015, the City Council accepted a \$250,000 Contra Costa Transportation Authority (CCTA) Priority Development Area Planning Grant to prepare the Downtown Corridors Plan. The purpose of the project is to prepare conceptual streetscape drawings and design guidelines to enhance three critical corridors of the “green streets framework” described in the Downtown Specific Plan. The plan is intended to place an emphasis on pedestrian and bicycle circulation and improved landscaping to enhance connectivity and provide for better pedestrian and bicycle opportunities, linking neighborhoods to shopping and employment areas. The three street segments of initial focus include Oak Street, Grant Street and Salvio Street (Attachment 1).

Since August 2015, the project team has been focused on Tasks 1-5, shown below. Outreach to the community was initiated in September, including meetings with two community interest groups, an accessibility task force, transit agencies, and a public meeting held on November 2, 2015 to obtain input regarding existing conditions along the three segments. The project tasks include:

- Task 1: Project Initiation and Management
- Task 2: Community Outreach and Coordination
- Task 3: Existing Conditions
- Task 4: Design Guidelines
- Task 5: Conceptual Design Development of the three Corridors

The Task 3 collected information on existing conditions, including the review of existing plans and proposed development and capital improvement projects, and assessment of opportunities and constraints. The project team has held four of five scheduled technical advisory committee meetings to ensure compatibility with the ongoing work and project efforts of the various departments. The Existing Conditions report (Attachment 2) was finalized shortly after the November 2 public meeting. The opportunities and constraints section of the final report summarized the findings.

The project team is currently completing Task 4 – Design Guidelines for streetscape and intersections, street furniture, storm water facilities, pop-up/temporary uses and accessibility guidelines for the project and recently initiated Task 5 preparing conceptual design development streetscape plans for the three street segments. A draft of the Design Guidelines has been prepared and is attached (Attachment 3).

Schedule

A public review draft of the Corridors Plan should be available toward the end of April, and the project is scheduled to be completed by July 2016. The plan is scheduled for formal review by the Planning Commission and City Council in June and July. The summary timeline is shown below.

- Aug-Nov Community Outreach and Coordination
- Aug-Nov Existing Conditions Review (Report complete)
- Nov-Mar Design Guidelines (Report being finalized)
- Feb-Apr Conceptual Design Development (In process)
- Apr-May Public Review Draft
- June-July Final adoption

Discussion

Staff and the consultant hosted a variety of community outreach and coordination meetings to date, including those summarized below.

- September 15, 2015 – Community Interest Group (Developers)
- September 15, 2015 – Bike/Ped. Interest groups/Non-profits
- September 16, 2015 – BART and County Connection
- September 21, 2015 – Accessibility Task Force
- November 2, 2015 – Public Outreach meeting #1 – Existing Conditions
- November 11, 2015 – Planning Commission – Status Update on Existing Conditions
- December 10, 2015 – Design Review Board – Status Update on Existing Conditions
- February 10, 2016 – Public Outreach meeting #2 – Design Guidelines

In addition, staff has implemented a webpage specific to the project at: <http://www.cityofconcord.org/page.asp?pid=7011>

The November 2, 2015 public outreach meeting was well attended and public comments generally can be summarized as shown below. The summary meeting minutes are attached as Attachment 4.

- Improving bicycle facilities are a priority.
- Designing bike lanes and walkways for greater safety is important.
- Street furniture should be unique and consistent.

- Street pavement that is currently provided for auto traffic on Grant Street should be reduced (narrowed) in favor of bike and pedestrian circulation.
- Greater connectivity between Todos Santos Plaza and nearby destinations would help to activate downtown.

The February 10, 2016 public outreach meeting public comments generally can be summarized as shown below. The summary meeting minutes are attached as Attachment 5.

- Building high quality bicycle facilities is a top priority.
- The pedestrian environment downtown should be made more inviting.
- On-street parking can be relocated to act as a screen to protect bicyclists and pedestrians.
- Enhancing the vibrancy of Todos Santos Plaza is a priority.

Coordination with Capital Projects

The Downtown Corridors Plan is focused on the public right of way within the three street segments. The project team has been mindful of coordinating the Plan with three other related but distinct projects, two being Capital Improvement Program (CIP) projects, they include: 1) the Downtown Bicycle Lanes project, an OBAG grant-funded project, that will install bike lanes and other related improvements on several streets downtown, including a portion of Grant Street that overlaps the Corridors Plan on the Grant Street segment; 2) the Central Concord Pedestrian Improvements and Streetscape Plan, which will construct pedestrian infrastructure improvements by installing secure crossings that will connect the Monument Corridor community to the business districts along Willow Pass Road; and 3) the Bicycle, Pedestrian and Safe Routes to Transit Plan is an ongoing project which aims to develop a citywide Plan that will serve as a blueprint to help develop a transportation network meeting the needs of all users including pedestrians, bicyclists and public transit patrons, as well as motorists and fulfill the City's commitment to Complete Streets.

The Downtown Corridors plan will inform the Downtown Bicycle Lanes project to the extent feasible, given the time and budget constraints of the Downtown Bicycle Lanes project. While funding is not available to fully implement the more extensive goals of the Corridors Plans at this time on Grant Street, planned improvements to add bike lanes and pedestrian enhancements to the street will not preclude additional, incremental and more extensive improvements in the future, when sufficient funding may be available.

Fiscal Impact

The Corridors Plan is a grant-funded project. The completed plan will be used in the future to apply for implementation grants. City staff plans to initially submit an OBAG grant for a portion of the construction of the Corridors Plan. Estimates of costs are being identified over the next month as the conceptual streetscape plans progress.

Public Contact

The Infrastructure and Franchise Committee Agenda was posted.

Recommendation for Action

Staff is bringing this item forward for informational purposes. There is no action requested from the Committee at this time.

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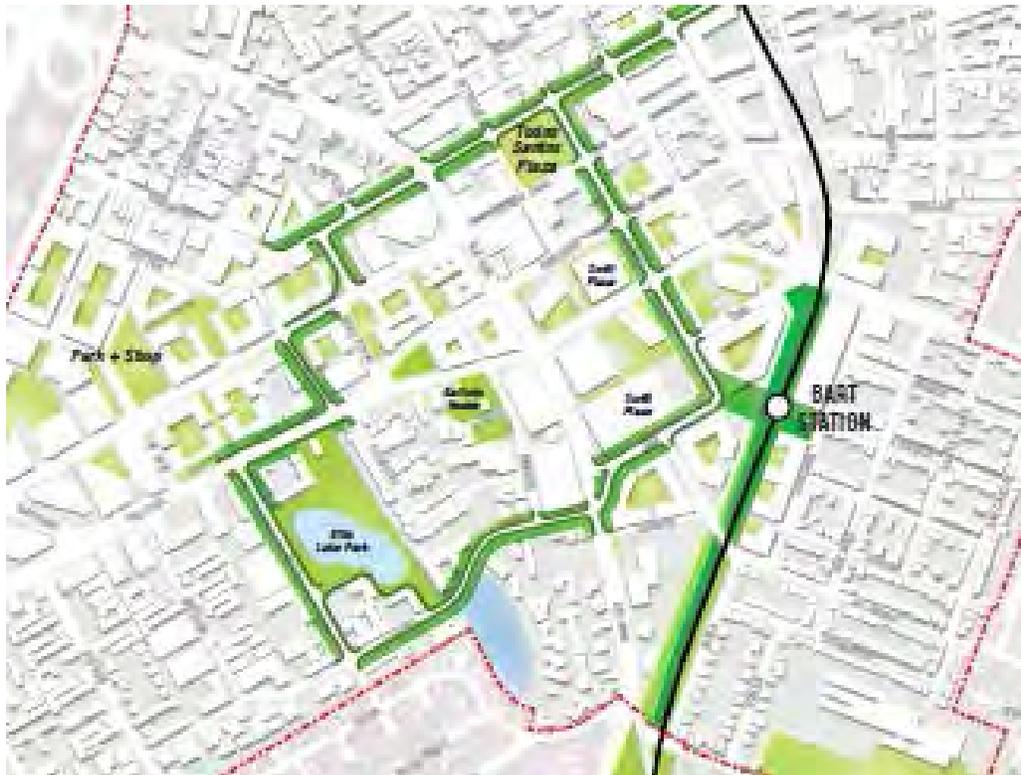
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- Attachment 1 – Corridor Plan street segments
- Attachment 2 – Existing Conditions Report
- Attachment 3 – Administrative Draft of the Design Guidelines
- Attachment 4 – Nov. 2 Summary Minutes
- Attachment 5 – Feb. 10 Summary Minutes

Downtown Corridors Plan

Project Street Segments - Oak Street, Grant Street, Salvio Street





Downtown Corridors Plan Existing Conditions

November 2015

Acknowledgements

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Architecture for the Blind

Downtown Corridors Plan

Existing Conditions

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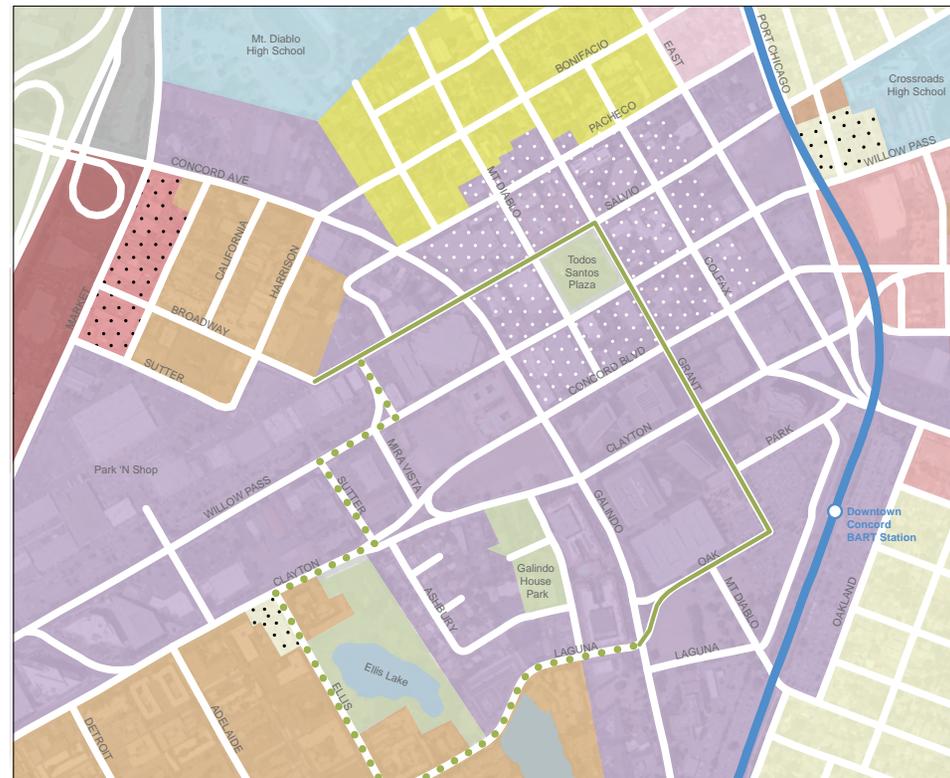
Salvo Pacheco Square provides pedestrian amenities and an active street frontage with outdoor seating.

1 Introduction

The Concord Downtown Corridors plan focuses on revitalizing Concord's downtown area by enhancing three critical corridors that connect residents and visitors to transit, retail, and employment opportunities.

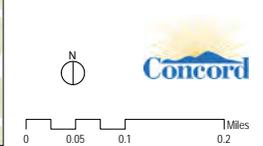
Building on the community's vision as set forth in the Downtown Specific Plan (adopted in 2014), this study focuses on enhancing the pedestrian environment in the downtown area. The three study corridors form the eastern half of the 'green frame' conceptualized in the Specific Plan: Oak Street, Grant Street from Oak Street to Salvio Street, and Salvio Street from Grant Street to Broadway. This plan will produce design guidelines and conceptual designs for the public right-of-way along the three study corridors based on the direction started in the Downtown Specific Plan.

The focus of this plan is similar to the Downtown Specific Plan, on a smaller scale. Concord has long planned for a more urban, mixed use environment around the BART station and Todos Santos Plaza. The mixed use zoning designations that pre-dated the Specific Plan are not sufficient to transform the area, to make it apparent to passengers arriving at the Concord BART station that they are in a downtown, pedestrian-friendly environment and that Todos Santos Plaza is very nearby. With zoning in place to encourage private development, the City's main focus in this study will be redesigning and transforming the public right-of-way, within the City's direct control, to support the kinds of residential, retail, and employment-generating development envisioned for the area.



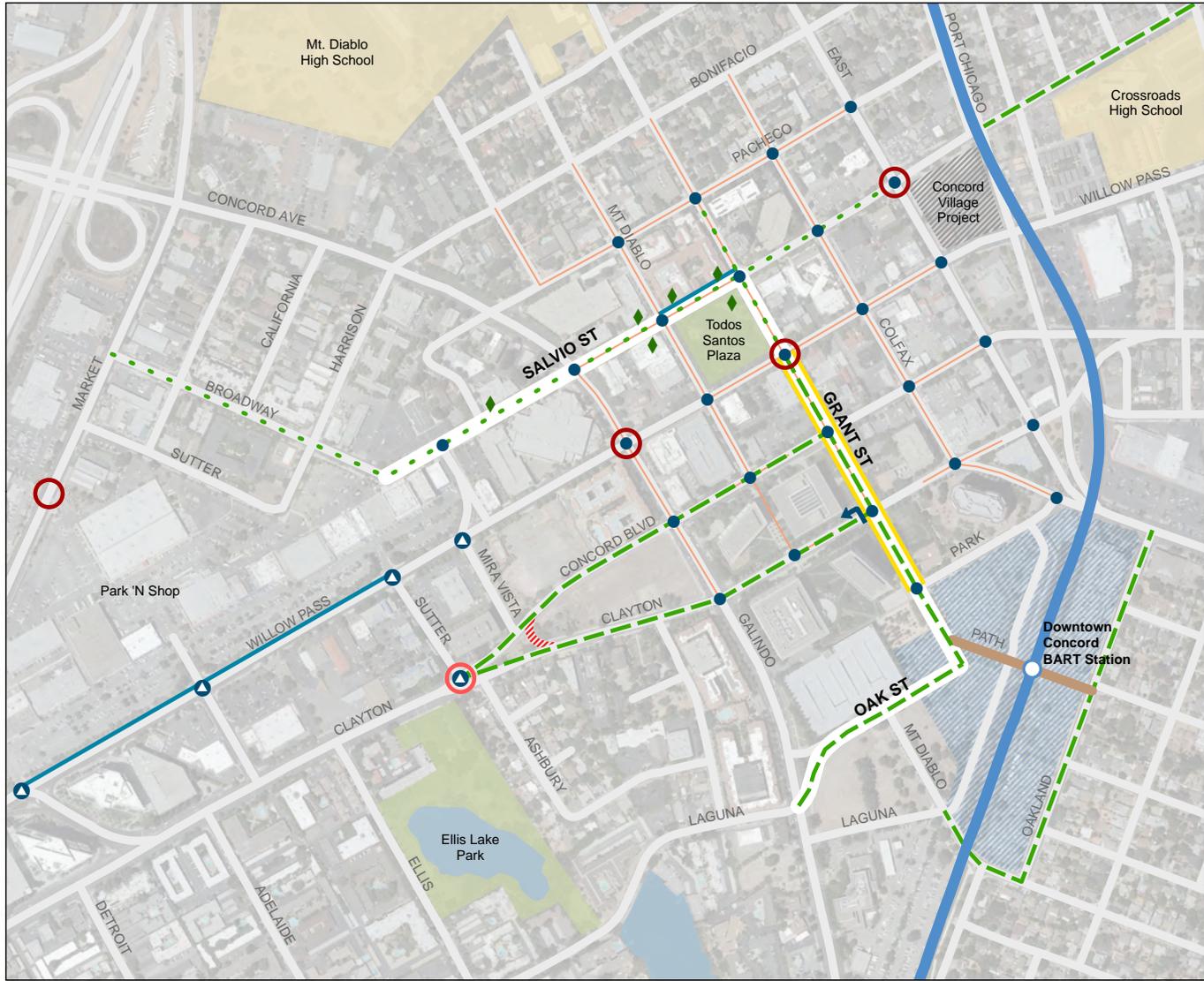
Downtown Corridors Plan Study Corridors

Zoning Designations:		Planned District (PD)	Study corridors
Downtown Mixed Use (DMX)	Single Family Residential	Residential Medium Density (RM)	BART station
Downtown Pedestrian (DP)	Community Office (CO)	Service Commercial (SC)	BART tracks
Residential High Density (RH)	Regional Commercial (RC)	Office Business Park (CBP)	Park
Public/ Quasi-Public (PQP)	North Todos Santos (NTS)		School
Remainder of Green Frame			



The study will reinforce policy from the Downtown Specific Plan, including conceptual designs for Grant Street, as well as the City's General Plan, including Complete Streets policy guidance for

all Downtown Streets (page 4), and zoning. It will also be coordinated with the progress of a number of ongoing projects and regulations (see pages 2 and 3).



Downtown Corridors Plan Ongoing Projects

Under Planning/Design

- - - Class III Bike Route (sharrows)
- - - Class II Bike Route (bike lanes)
- Grant/Clayton left turn walk phase
- Sidewalk and landscaping upgrades
- Crosswalk upgrades
- Decorative crosswalk
- Traffic Signal Upgrades
- New Traffic Signal
- Potential Development Project
- Concord/Clayton Couplet Removal

Under Implementation

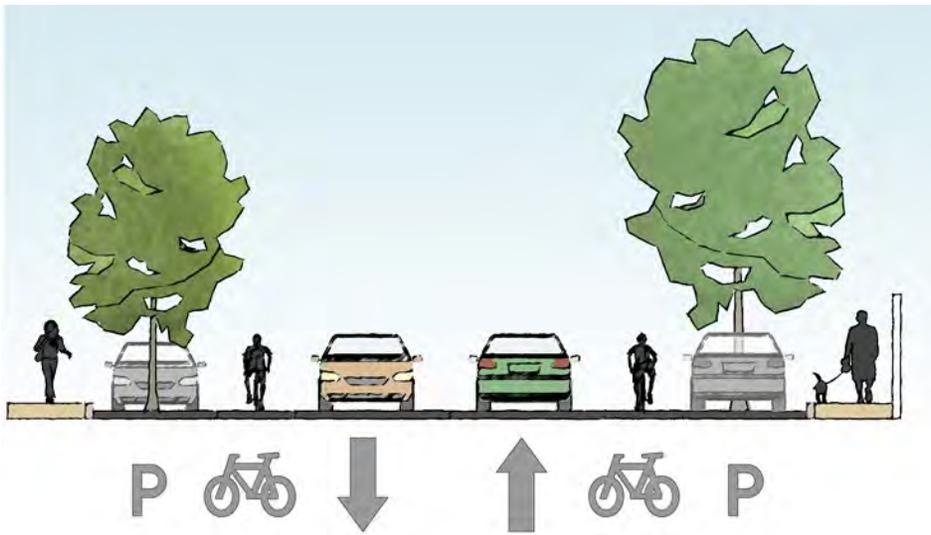
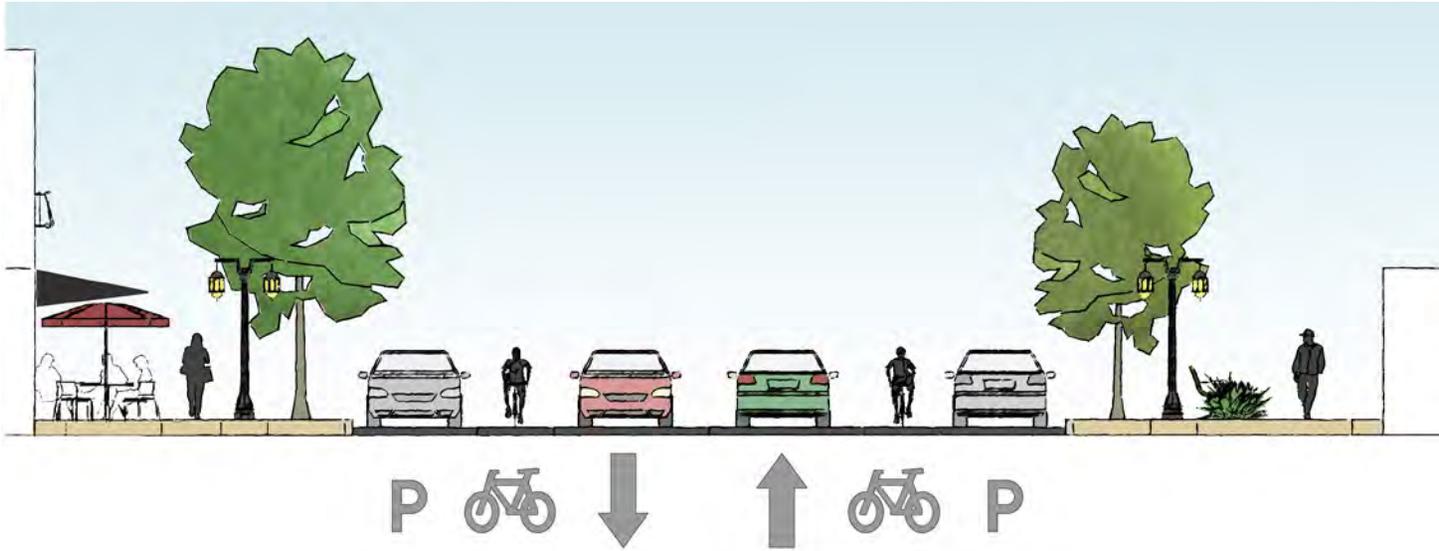
- BART Pedestrian Path
- BART Plaza Improvements
- Sewer and Streetscape Phase 2
- Tree lighting
- New bike rack

- BART station
- Park
- BART tracks
- School

Downtown Corridors Plan

Ongoing Projects

Project	Description
Central Concord Pedestrian Improvements and Streetscape Project	Rehabilitate crosswalks at 30 intersections (pothole repair, re-staining of colored concrete crosswalks), improve curb ramps on Grant and Salvio Streets, bicycle racks and lanes on Grant Street, striping and sharrows on Salvio Street, update wayfinding at BART plaza, refurbish pedestrian light poles and “twinkle” tree lighting on Grant Street.
Bicycle, Pedestrian, and Safe Routes to Transit Plan	Master plan to improve the city's bicycle and pedestrian networks and infrastructure.
Concord BART Plaza Improvements	Bicycle lanes on Grant and Oak Streets, additional pedestrian lighting along Grant Street, new pedestrian walkway from BART entrance to Grant Street, relocated taxi and Kiss ‘N Ride parking, new wayfinding signage.
Downtown Concord Bicycle Lane Improvements	Bicycle routes and lanes on Clayton Road, Concord Boulevard, Grant Street, Oakland Avenue, and Mt. Diablo Street. Sidewalk construction and widening on Clayton Road and Grant Street (east side between Concord Boulevard and Willow Pass Road).
Downtown Sewer and Streetscape Improvements	Phased replacement and rehabilitation of sewer system, street paving and striping, sidewalk repair on portions of Grant Street, selected curb replacements.
Salvio Street Improvements at Mt. Diablo Street	Remove diagonal parking along north side of Salvio Street east of Mt. Diablo Street, improved sidewalk conditions at intersection.
Salvio Street Bicycle Lanes	Bicycle sharrows on Salvio Street from Port Chicago Highway to Parkside Drive.
Willow Pass Road and Nearby Intersections Traffic Signal Upgrades	Traffic signal upgrades and new signals at a number of downtown intersections; add protected left turn phasing, ADA upgrades on Willow Pass Road.



Downtown Streets configuration options from the General Plan Complete Streets section. All three study corridors are designated as Downtown Streets, with one lane of travel in each direction, bicycle facilities, and pedestrian amenities.



Pedestrian-oriented sidewalks on Salvio Street.

2 Existing Conditions

This section describes the existing conditions along the three study corridors. Beginning with a general description of the corridors, it then discusses both the streetside (the public right-of-way extending from the property line to the curb) and the traveled way (the portion between the curbs, generally for vehicle travel).

2.1 General Character

The Grant, Salvio, and Oak Street corridors serve as important places in Downtown Concord and as multi-modal connectors that link the area to important destinations nearby. Grant and Salvio Streets host and facilitate popular community events and life, and all three corridors serve as a backbone that connects destinations such as Park 'N Shop, Todos Santos Plaza, Downtown Concord BART station, and nearby residential communities. The streets host pedestrian, bicycle, transit, and automobile traffic, and intersect a number of major arterials that move significant traffic volumes through the downtown, including Galindo Street, Concord Boulevard, and Clayton Road.

The study corridors generally include sidewalks, crosswalks, street trees, and landscaped buffers from traffic. Land uses along the corridors are mixed, and include above- and below-ground parking garages, parking lots, retail and services, eating and drinking establishments, Todos Santos Plaza, and several vacant lots. Todos Santos Plaza plays host to a number of popular community events, including a daytime farmer's

market on Tuesdays and Thursdays, a nighttime summer concert series, and a Monday night "Off the Grid" food truck festival. During Off the Grid and other events that generate heavy activity the block of Grant Street adjacent to the plaza are closed to auto traffic.

Although some portions of the corridors have well-defined street edges and continuous building frontage, particularly along the eastern portion of Salvio Street, there are many 'gaps' in the street edge where there are no active uses to generate foot traffic and vibrant street activity. This is particularly true on Oak Street, where uses include a parking garage and vacant land. The vacant land is owned by the Successor Agency to the city's former Redevelopment Agency. The land will be transferred to the City for future development, subject to the Downtown Specific Plan. Once the City is able to clear procedures required by the State of California, the City will issue a request for proposals (RFP) for a developer to build a transit-oriented project consistent with General Plan and zoning designations for the site. Gaps are compounded by numerous and large curb cuts for parking and driveway entrances.

Although multiple types of street users do use the corridor, the quality of conditions for pedestrians and cyclists varies considerably along all three corridors. Pedestrians on each of the corridors must contend with narrow, broken, uneven, and occasional missing sidewalks; long roadway crossings and auto-oriented signal timing; a lack of seating and uncoordinated street furniture; poor or nonexistent street lighting, and limited wayfinding guidance. Cyclists do not have

marked or dedicated facilities on any of the study corridors, leading many to travel on the sidewalks, and bicycle parking is limited. Transit riders face limited stop amenities, although the BART plaza project will substantially improve the area immediately around BART.



This sidewalk on Grant Street has good paving, width, lighting, shade trees, and a generous buffer from traffic.



Todos Santos Plaza is a busy, pedestrian-oriented focal point for activities in the downtown.

2.2 The Streetside

The streetside includes both sides of the street, from the curb to the property line, which often can be the building edge. The streetsides on each corridor vary in amenity and quality.

2.2.1 Sidewalk Conditions

Sidewalks on the corridors vary significantly. Generally paved in concrete, the clear path of sidewalks on the study corridors are as narrow as 4 feet or as wide as 12 feet. Sidewalks usually include buffers from street traffic. There are portions of each corridor that present challenges to pedestrians, including cracked and uneven sidewalks, as well as very long curb cuts due to driveways serving businesses along the corridors and sloped sidewalks.



Disrupted pavement like this broken bricking on Grant Street are common and are a hazard to pedestrians.



Sidewalks surrounding Todos Santos Plaza are of high quality, with smooth paving, consistent lighting, greenery, street furniture, and a sufficient buffer.



Cracked and uneven sidewalks, as shown here on Oak Street, are common along the study corridors.

2.2.2 Landscape Character

Prominent street trees within the project corridor include *Carpinus fastigiata* (European Hornbeam), *Koelreuteria paniculata* (Golden Rain Tree), *Liriodendron tulipifera* (Tulip Tree), and *Platanus racemosa* (California Sycamore). Smaller ornamental trees such as *Lagerstroemia indica* (Crape Myrtle) are used to define gateways and add vertical vegetation in raised planting areas. The majority of street trees are planted without a tree grate, using crushed fines or soil as a topdressing within the paving cutout. Thoughtful pruning of mature trees occurs throughout the corridor. Some die back and branch failure was detected in trees that display signs of irrigation reduction. *Koelreuteria paniculata* (Golden Rain Tree) displays significant drought stress in most areas, however the trees planted with tree grates appear to be in greater health. Some root girdling occurs on trees where planter space is limited and soil compaction has occurred due to pedestrian traffic.

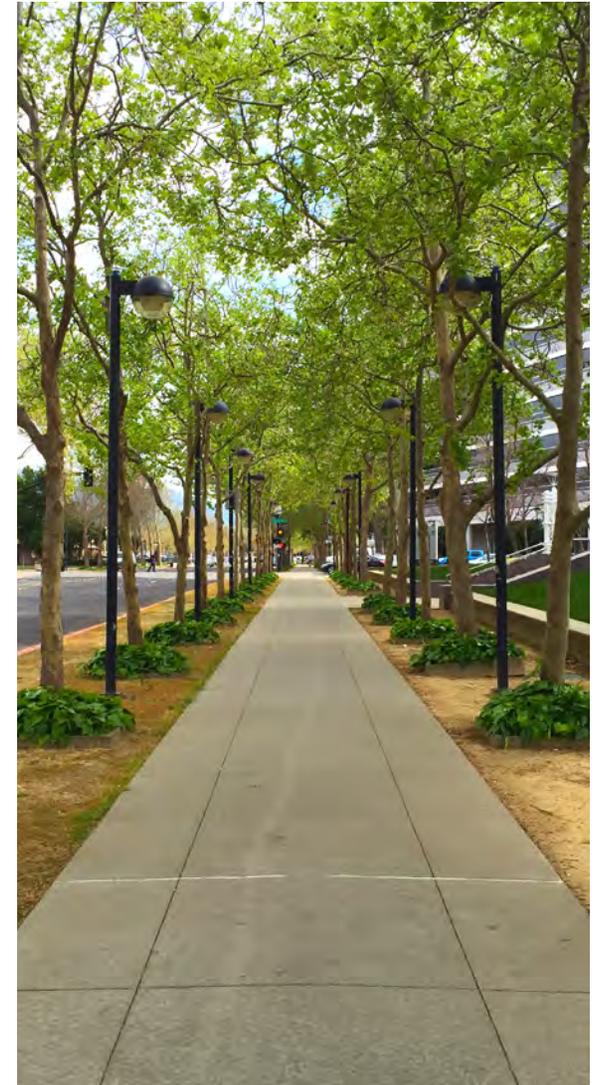
Prominent existing groundcover types along the project corridor include *Hedera helix* (Ivy), *Hemerocallis* sp (Day lily), carpet roses, *Ficus pumila* (Creeping Fig). Groundcover planting scale remains relatively low to the ground, allowing the tree planting to be the main vertical element. Many planting areas along the sidewalks have been cleared of groundcover and shrub vegetation and replaced with decomposed granite or similar material, leaving only tree planting.



Permanent planters on Salvio Street.



Common large planter style.



Trees surrounded by decomposed granite along Grant Street.

2.2.3 Wayfinding and Signage

The study corridors feature two types of wayfinding signs. Near the BART station, prominent midnight-blue fixtures point towards destinations such as Todos Santos Plaza or the BART station. Atop these distinctive fixtures are globe street lights. Closer to the plaza, decorative wayfinding kiosks list the surrounding businesses, highlight Downtown activities, and provide large lockable display cases. However, this large amount of information can make wayfinding difficult.

BART is finalizing the redesign of their plaza to improve the experience for pedestrians and bicyclists, including additional wayfinding. Construction is expected to begin in early summer 2016.



Three dark blue wayfinding signs on the BART property direct pedestrians to locations nearby.



Modern wayfinding sign near Todos Santos Plaza, including a business directory and map.

2.2.4 Lighting

All three study corridors have, at a minimum, street lighting focused on the vehicle portion of the street. There are pedestrian-scale (lower, facing the sidewalk) lights on several of the blocks on the corridors. As shown on the facing page, there is a variety of street and pedestrian lighting on the blocks in the study corridors.



Type 2 - 'Flat-round' pedestrian-scale light.



Type 4 - 'Modern' pedestrian-scale light at Todos Santos Plaza.



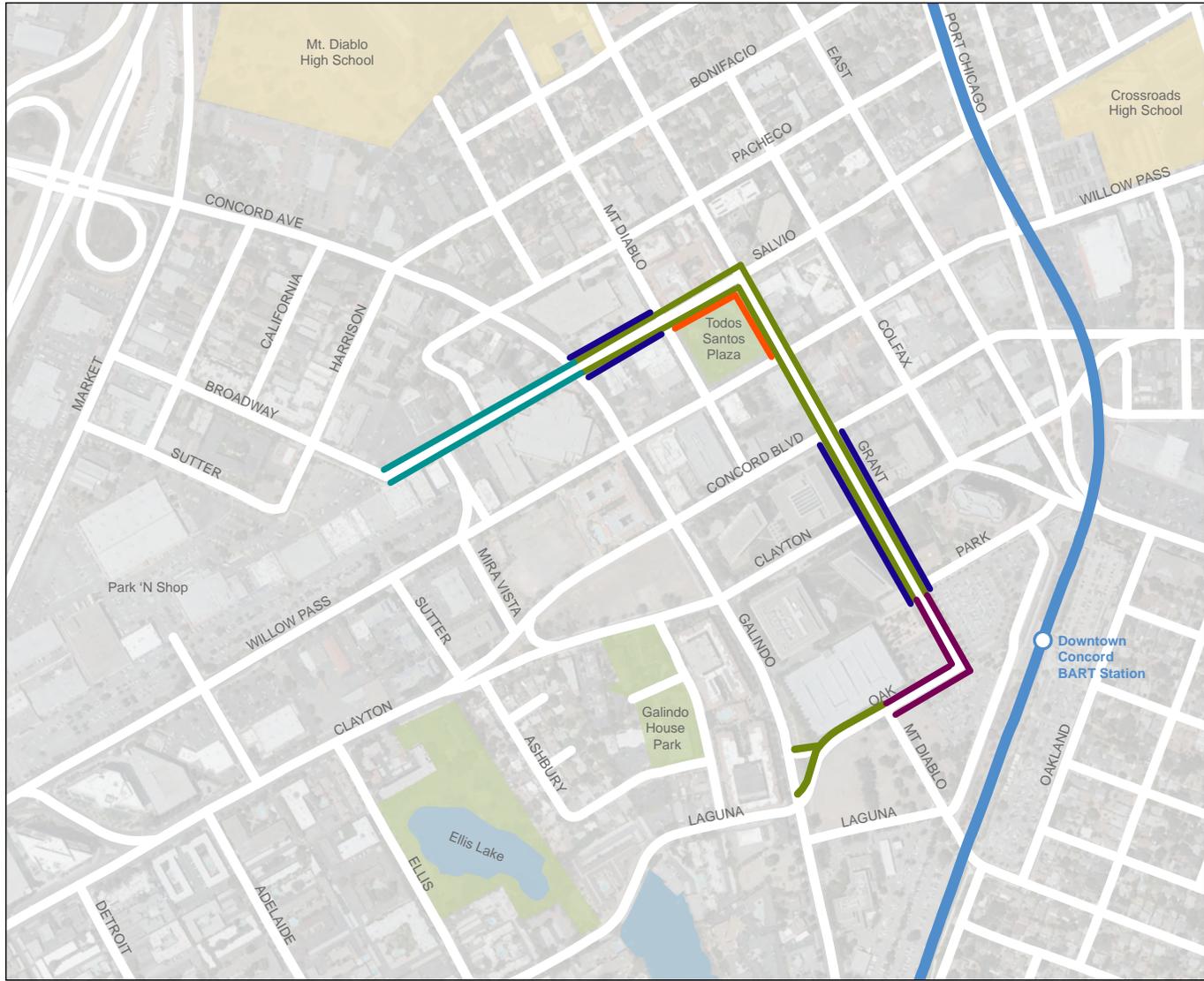
Type 1 - Cobra street light on Salvio Street.



Type 3 - 'Globe' pedestrian-scale light on Grant Street.



Type 5 - 'Half-globe' combined street and pedestrian-scale light in the BART station area.



Downtown Corridors Plan Lighting

- Street Lighting**
- Type 1 - Cobra
 - Type 2 - 'Flat-round'
- Pedestrian Lighting**
- Type 3 - 'Globe'
 - Type 4 - 'Modern'
- Combined Street and Pedestrian Lighting**
- Type 5 - 'Half-globe'
- BART station
 BART tracks
 Park
 School
 Water

Miles
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2.2.5 Street Furniture

Most of the street furniture in the study corridors is clustered on the sidewalks near Todos Santos Plaza. Immediately surrounding the plaza, benches, tables, water fountains, and the iconic clock invite passersby to slow, sit, and relax. Many of the businesses lining the plaza enliven the sidewalk with tables, planters, and signs. Farther away from the plaza, street furniture becomes sparser. The occasional planter beautifies the streetscape and may act as ad hoc seating. Trash receptacles are provided at some intersections. In general, however, street furniture is limited on Salvio Street and Grant Street and is lacking entirely on Oak Street.

Multiple types of movable street planters occur. The most prominent type is a circular grey concrete planter with blue tile inlay detailing, found mostly toward intersections and sidewalk enlargements or bulb outs. In some cases planters impede path of travel. Smaller concrete planters within the corridor in earth tone or terra cotta colors offer cohesiveness to existing architectural color palettes.



Street furniture at Todos Santos Plaza is well-used. Benches in this area are ornate metal in a deep blue finish.



Water fountain and trash receptacle at Todos Santos Plaza.



The iconic clock in Todos Santos Plaza enhances the ambiance of the area.



Salvio Street behind Park 'N Shop has limited pedestrian amenities (tree wells have been removed) and faces the 'back side' of the building.



Sidewalk café seating, common near Todos Santos Plaza, enlivens the street.



A common planter along the study corridors, typically near intersections in sidewalk enlargements or bulb-outs. In some cases, planters impede the path of travel.



Street furniture and active uses become more sparse on the southern end of Grant Street.



With more active uses and more inviting street furniture, this connecting pathway between Salvio Street and Park 'N Shop could become vibrant and busy.

2.2.6 Accessibility

Accessibility for persons with disabilities is important for the Downtown to ensure access to shopping, transportation, and services. However, it is also important for others – people with strollers, the elderly, and all people who value a comfortable pedestrian experience benefit from an accessible place, and Downtown business owners benefit from the potential for additional customers. Currently, the study corridors vary substantially in their level of accessibility and none provides a smooth, easily-navigable path from end to end. Most, but not all street corners have curb ramps however in some cases both the curb ramps and the signal buttons do not line up appropriately with the crosswalks. This condition can make it difficult for people with low or no vision to be certain they are crossing in a safe portion of the roadway. In addition, signal buttons are found at most signals intended for the visually impaired, but some signals are equipped with older models not intended to assist the visually impaired with navigation. While many intersections include truncated domes to indicate to visually impaired pedestrians that they are approaching an intersection, not all intersections have these, and not all are lined up correctly with crosswalks to assist with navigation into the crosswalk. In addition, at some private driveways along Grant and Salvio Streets there are strips of truncated domes. Since the standard is to put such warnings near places that are unsafe, these strips could cause confusion for visually impaired walkers.



Moving around this bus shelter on Concord Boulevard and Grant Street can be hazardous with the narrow passage and jagged pavement.



Not all intersections have curb cuts.



The alignment of the signal button, ramp, and crosswalk here all support navigation for visually impaired walkers.

2.3 The Traveled Way

2.3.1 Pedestrian Crossings

There are three main types of crosswalks in Downtown Concord: colored pavement, parallel painted lines, and high-visibility ladder design. Around Todos Santos Plaza, most of the crosswalks are created with colored pavement, giving drivers a visual alert that they are entering a pedestrian space. Surrounding the Downtown Concord BART station, some are high-visibility ladder crossings, and the remainder are parallel painted lines. Beyond the immediate area around Todos Santos Plaza and the BART station, crosswalks vary widely, and primarily consist of parallel lines. At some intersections, the crosswalk consists of white concrete standing out somewhat from the darker road.

Auto traffic generally has priority along the study corridors, including signal timing at major crossings such as Galindo Street, Clayton Road, and Concord Boulevard resulting in substantial waits for pedestrians traveling on the three study corridors. If pedestrians do not press the walk signal button there will be no walk signal, making walkers feel less welcome and sometimes extending a walk trip to last longer than necessary.

Surrounding Todos Santos Plaza are the most comfortable pedestrian crossings in the three corridors. Many of these crossings feature bulb-outs to slow traffic, reduce the time and distance for crossing, and increase pedestrian visibility. Some include alerts painted in the street for drivers.



Bulbouts reduce pedestrian crossing distances and improve safety.



Colored pavement crosswalk.



This crossing at Oak and Galindo is the longest of the study corridors, at over 200 feet. Crossing from the apartments opposite takes nearly three minutes, and some choose to cross directly—and illegally—instead.



Painted lines crosswalk, with ladder striping for added visibility.

2.3.2 Transit Service

The study area is served by Bay Area Rapid Transit (BART) regional commuter trains, and by County Connection. Riders of both systems access transit via the study corridors – from the west/Monument neighborhood via Laguna Street to Oak Street, and from the north via Grant Street from Todos Santos Plaza and other Downtown destinations. For this reason, both BART and County Connection are also interested and supportive of improving pedestrian, bicycle, and bus access to the BART station and nearby destinations.

BART provides service throughout the region from the Concord station, which is on the Pittsburg/Bay Point line. Service starts early on weekday mornings (just after 4 a.m.) and concludes just after midnight, with frequencies of less than ten minutes at peak commute hours and 15 minutes in the middle of the day. Service on weekends is generally every 20 minutes.

BART is currently preparing a ‘last mile’ study to facilitate access by modes other than single-passenger autos, building on its 2003 BART Station Access Guidelines, which establish a hierarchy placing walking at the top of the list, followed by transit, bicycles, pick-up/drop-off, and vehicle parking. BART expects to have some funding in the future to support access to stations following that hierarchy. The BART Plaza project mentioned in Section 1 will complement the corridor improvements proposed by the Downtown Corridors Plan, primarily through a redesign of the plaza to provide a direct

pedestrian line of travel between the station and Grant Street, as well as a more comfortable pedestrian environment and improved wayfinding in the immediate vicinity of the station.

Several County Connection transit routes run along or near the study corridors, converging at the BART station, which serves as a transfer point between routes and to the BART system. Most routes have long headways, ranging between 30 and 60 minutes, with Routes 11 and 20 attracting the most riders. Buses to Diablo Valley College are full at peak hours. Eight all-day and commuter weekday lines and three weekend lines serve the corridors. Some of these routes provide service between the BART station and Todos Santos Plaza, but with low frequency service often making it quicker to walk downtown. Transit patrons may not realize they are within a few blocks of the Plaza, due to limited signage. New signage will be installed as part of the BART plaza project.



The only bus shelter on the study corridors encroaches into the sidewalk.

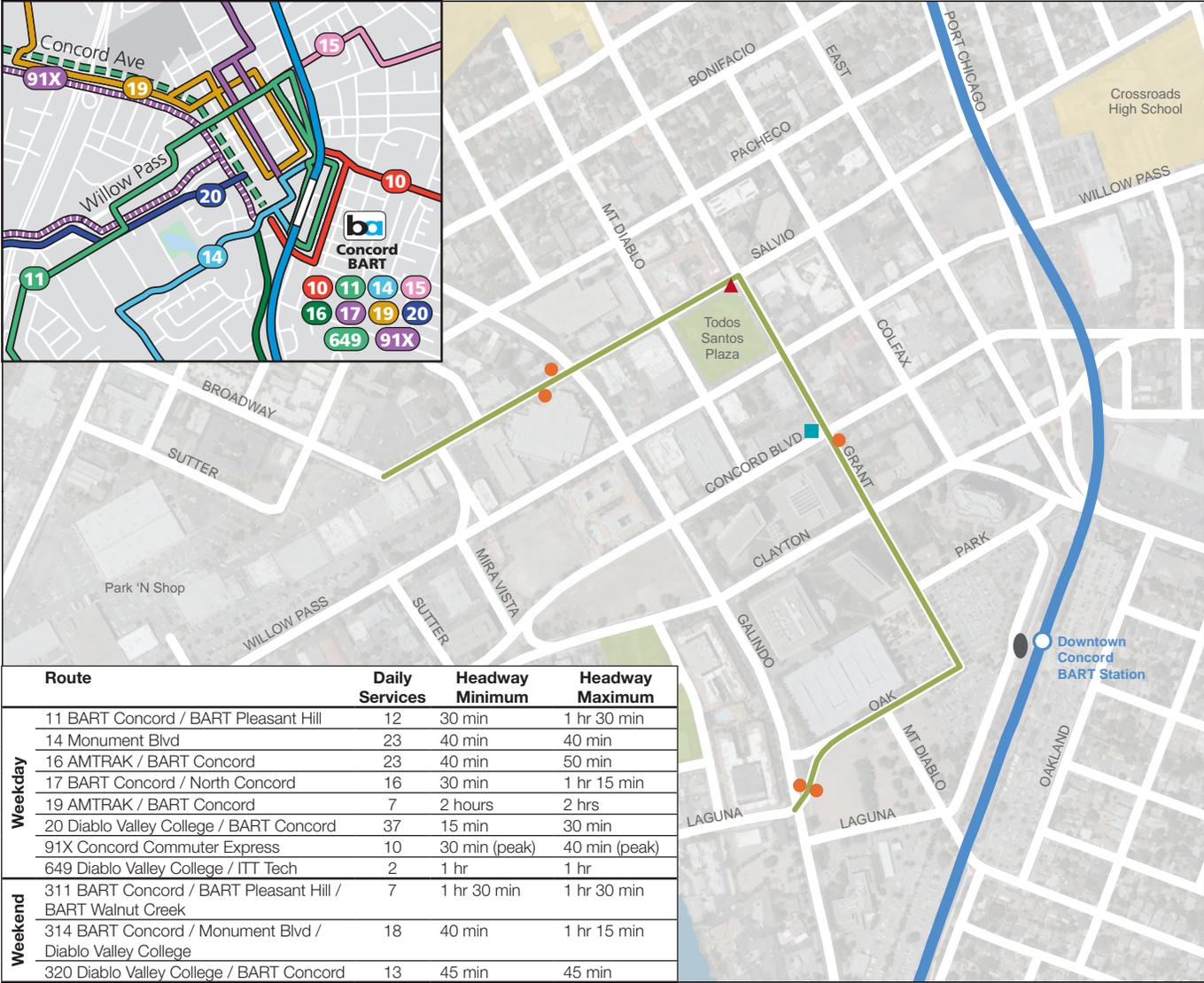


Signpost stop on Oak Street.



Bus stop including bench at Todos Santos Plaza.

Downtown Corridors Plan Transit Stops and Signage



- Transit Stop Type:**
- Bus Stop Sign Post, Typical
 - Bus Shelter
 - ▲ Bus Bench
 - Bus Transfer Station
- Map Legend:**
- Study corridors
 - BART station
 - BART tracks
 - Park
 - School

	Route	Daily Services	Headway Minimum	Headway Maximum
Weekday	11 BART Concord / BART Pleasant Hill	12	30 min	1 hr 30 min
	14 Monument Blvd	23	40 min	40 min
	16 AMTRAK / BART Concord	23	40 min	50 min
	17 BART Concord / North Concord	16	30 min	1 hr 15 min
	19 AMTRAK / BART Concord	7	2 hours	2 hrs
	20 Diablo Valley College / BART Concord	37	15 min	30 min
	91X Concord Commuter Express	10	30 min (peak)	40 min (peak)
Weekend	649 Diablo Valley College / ITT Tech	2	1 hr	1 hr
	311 BART Concord / BART Pleasant Hill / BART Walnut Creek	7	1 hr 30 min	1 hr 30 min
	314 BART Concord / Monument Blvd / Diablo Valley College	18	40 min	1 hr 15 min
	320 Diablo Valley College / BART Concord	13	45 min	45 min

N

2.3.3 Bicycle Facilities

There are no designated bicycle facilities within the corridors, although cyclists regularly visit the downtown area. Cyclists accessing downtown either ride on-street, without designated facilities, or, more frequently, on the sidewalk. For those cyclists who ride on-street, intersections present a particular challenge because right and left turns prioritizing auto movements across busy streets do not leave clear locations for cyclists to wait for lights to change or make turns themselves. A current project to provide bicycle parking in several locations along the study corridors will begin to address the lack of bicycle parking. As noted in Section 1, Concord is currently completing a bicycle, pedestrian, and last mile to transit study. The community input survey identified citywide issues for cyclists, some of which appear applicable to the Downtown area:

- Needs for: continuous, dedicated space on arterials, improved access to BART, bicycle parking at key destinations, and bicycle wayfinding.
- Important destinations included: transit, stores, parks, community centers, schools, and work.
- Primary factors discouraging cycling: lack of dedicated space and concerns about safety.

Some of the projects described in Section 1 are advancing design of bicycle facilities on the study corridors and throughout the downtown.



Cyclists have parked their bicycles with their kickstands.

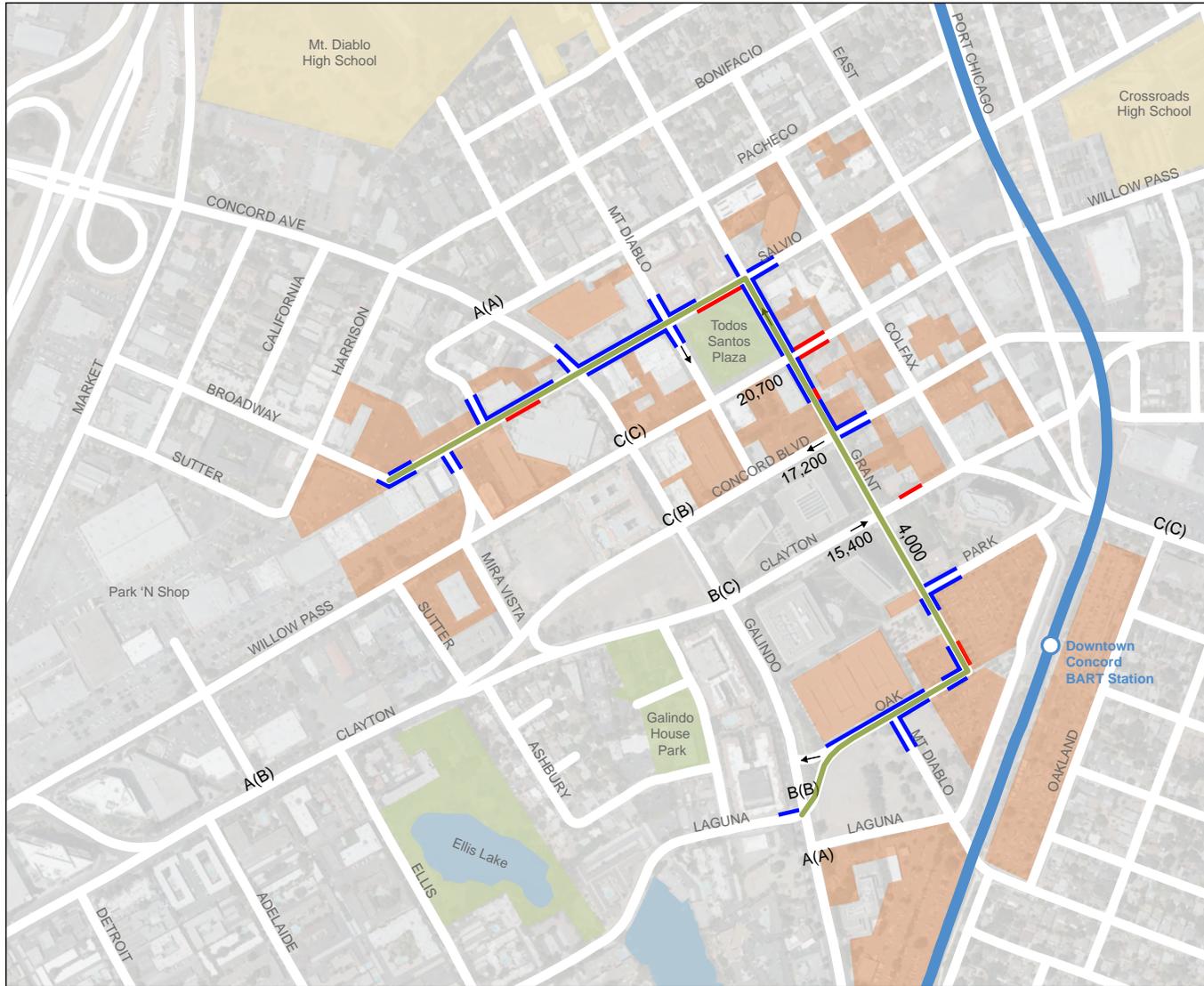


Bicyclist using the sidewalk.

2.3.4 Auto Facilities

All three study corridors are two-way, except for Grant Street on the block between Willow Pass Road and Salvio Street, framing Todos Santos Plaza. This configuration slows traffic and highlights the pedestrian uses in and around the plaza. Grant Street also intersects a one-way couplet: Concord Boulevard and Clayton Road are three-lane thoroughfares with daily traffic volumes of around 16,000 vehicles each. Grant Street has two vehicle travel lanes in each direction from where it begins at the BART station up to the short section framing the Plaza. A recent study of Grant Street counted an average of 4,000 vehicles per day. Galindo Street, which runs parallel to Grant Street and provides more connectivity, has levels of service C or better at the AM and PM peak traffic periods, according to the Downtown Concord Specific Plan Transportation Assessment (2014).

Parking is abundant along the study corridors, and throughout the Downtown area, as shown in the following Auto Movement and Parking Map. Along most streets both right lanes are reserved for non-metered parking, in some cases with a posted two-hour time limit. Within or near the corridors are several public and private parking lots and garages. Parking capacity is stretched during regular special events, such as evening concerts in Todos Santos Plaza during the Music and Market summer series.

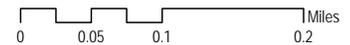


Downtown Corridors Plan Auto Movement and Parking

Parking, Roadway and Service Designations:

- ← One-Way
- ▬ On-Street Parking
- ▬ Restricted On-Street Parking
- ▬ Off-Street Parking
- X(X) Existing Level of Service: AM peak (PM peak)
- XX,XXX Average Daily Traffic Count
- ▬ Study corridors
- BART station
- ▬ BART tracks
- Park
- School

Traffic data source: Downtown Concord
Specific Plan Transportation Assessment 2014



2.3.5 Safety

Pedestrian, bicycle, and traffic safety is an important issue in Downtown Concord, where high-volume streets with 30-35 mph speed limits, such as Galindo Street, Clayton Road, Concord Boulevard, Willow Pass Road, and Port Chicago Highway, result in an elevated risk of accidents and injuries. Based on the California Highway Patrol's traffic records system (SWITRS), there were over 50 collisions along the study corridors in the period from 2008 through 2012. Of these, nearly 1/3 involved a cyclist and/or pedestrian. Study corridor intersections with the most accidents of all types include:

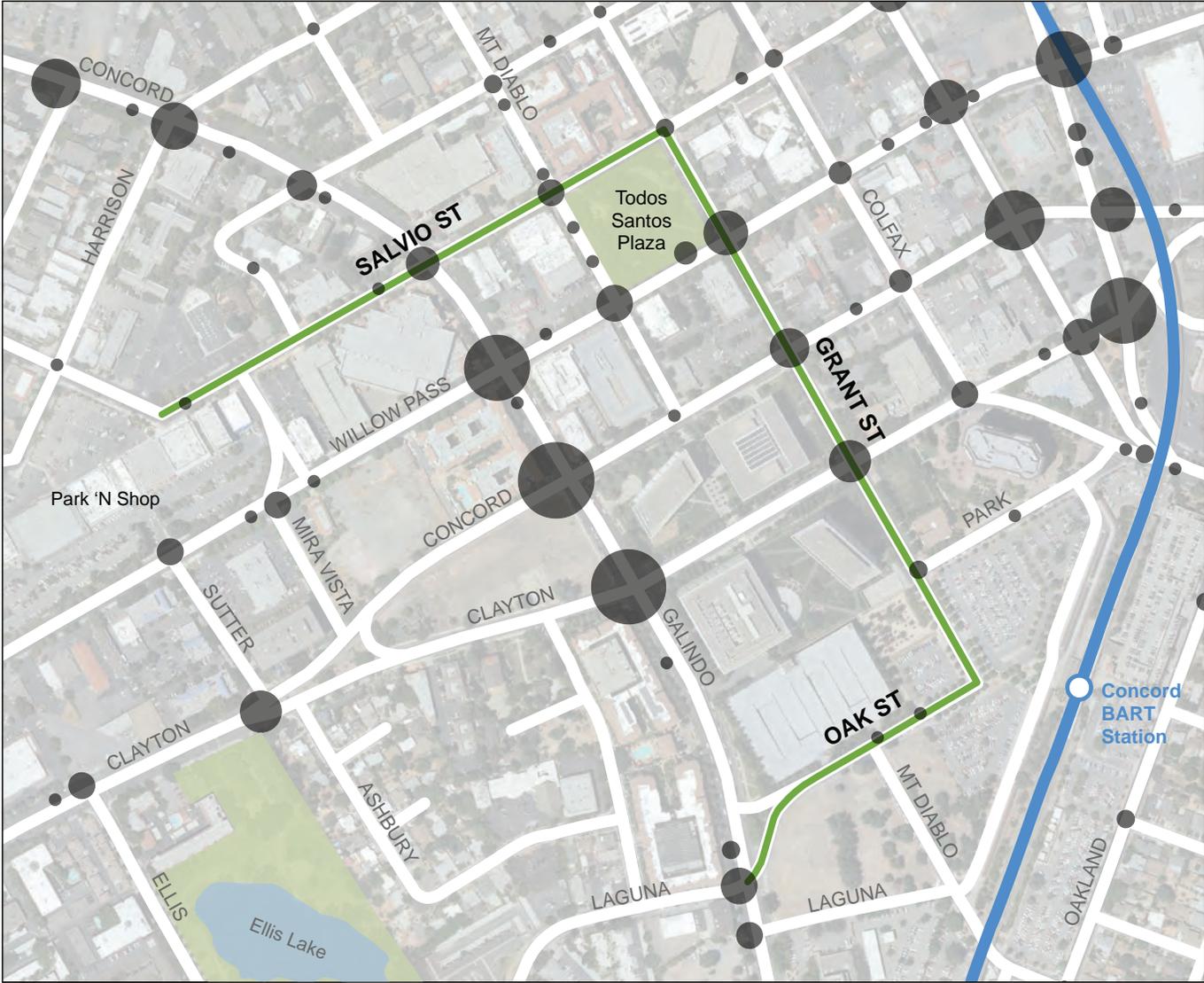
- Salvio Street at Galindo Street (6)
- Salvio Street at Mt. Diablo Street (4)
- Grant Street at Willow Pass Road (10)
- Grant Street at Concord Avenue (8)
- Grant Street at Clayton Road (9)
- Oak Street at Galindo Street (7)

Of the three study corridors, Grant Street had the most collisions, illustrating the importance of safety features for cyclists and pedestrians at Willow Pass Road, Concord Boulevard, and Clayton Road. Salvio Street had a greater incidence of accidents involving pedestrians, but fewer overall collisions of all types. The intersection of Oak and Galindo Streets was also a hotspot for accidents, including three involving bicycles.



Pedestrian and cyclist using the crosswalk to cross Willow Pass Road at Grant Street.

Downtown Corridors Plan Collisions 2008-2012



Collisions (2008-2012)

- 1
- 5
- 10

Source: California Highway Patrol SWITRS

- Study Corridors
- BART Station
- BART Tracks

N

0 0.035 0.07 0.14 Miles

2.4 Stormwater and Low Impact Development

Concord is subject to the federal Clean Water Act, which regulates discharges from municipal separate storm sewer systems (MS4s) through National Pollutant Discharge Elimination System (NPDES) permits issued to local governments in the Bay Area via the San Francisco Bay Regional Water Quality Control Board. The Bay Area's MS4 permit is currently being revised in preparation for a re-issue in the near future, but if passed in its current form would require Concord to take several additional steps beyond current practice. These include a requirement to develop Green Infrastructure Plans to define a long-term approach to retrofit from 'gray to green' infrastructure. This means transitioning from existing impervious (water cannot absorb into it) surface and storm drains to green infrastructure that slows runoff by distributing it to rain gardens and other green spaces, allowing some or all of the water to percolate into the ground or evaporate. In addition, the City would be required to take additional measures to reduce trash loads in stormwater, and implement standards for pervious (allowing water to absorb) paving.

Drainage for the three study corridors consists of standard curb and gutter systems, in conjunction with crowned roadways. These facilities appear to be sufficient to avoid flooding, and staff report no recurrent flooding issues in the downtown area. However, if the MS4 permit is renewed in a form similar to that described above, the City's storm drainage system will need to be re-evaluated. The locations of stormwater drains and water flow are shown opposite. As shown in the photos on this page, there are a range of opportunities for green stormwater facilities, which can also provide attractive greenspaces.



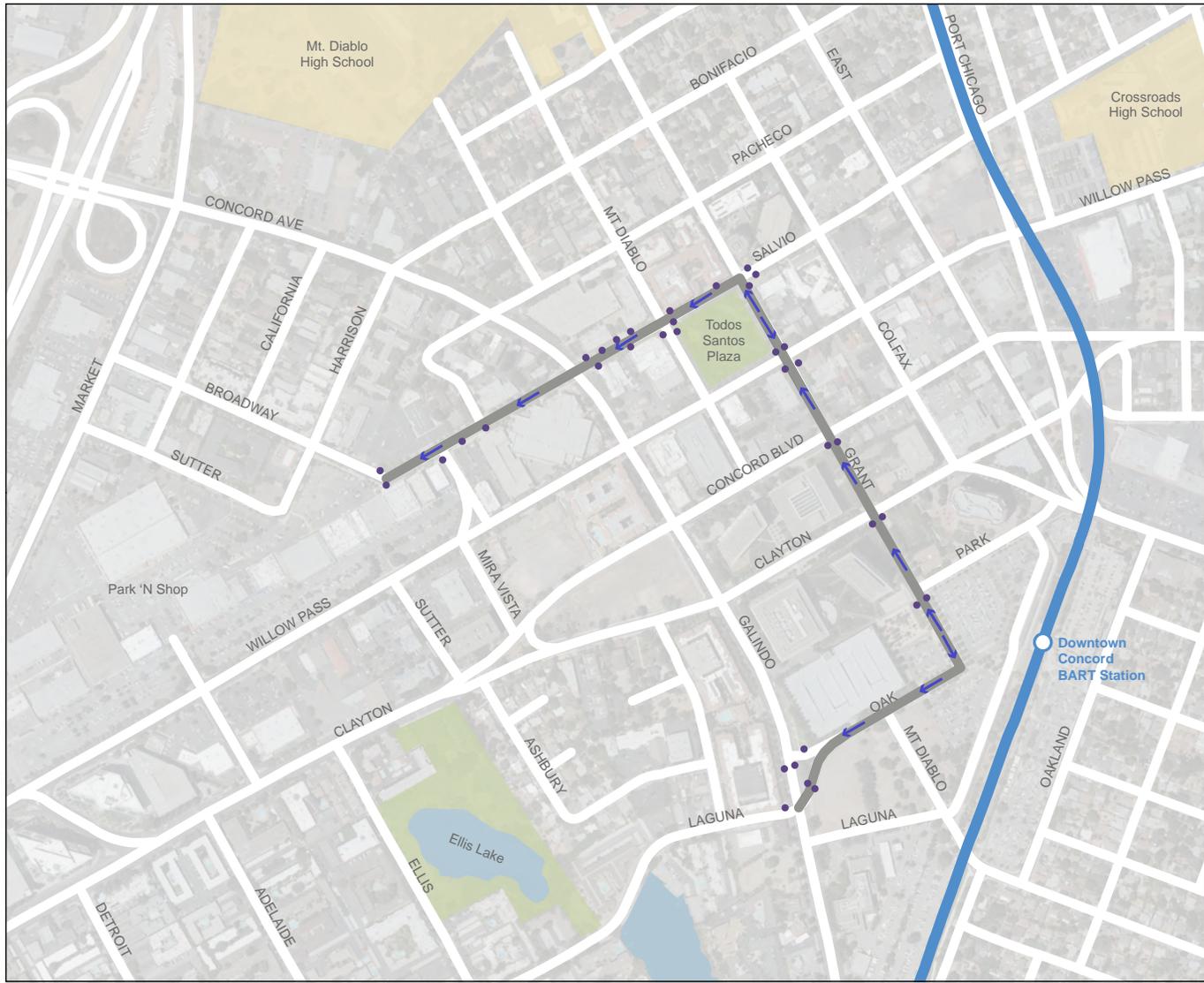
Wide corner at intersection of Salvio and Broadway Streets, at a low spot where water will tend to drain.



Existing storm drain near permeable and impermeable surfaces that present opportunities for bio-retention.



The roadway island at Oak and Galindo Streets could help mitigate potential flooding by absorbing stormwater.



Downtown Corridors Plan Existing Drain Inlets

- Observed stormwater drain inlet
- ➔ Presumed general flow direction by block

N

0 0.05 0.1 0.2 Miles

3 Opportunities and Constraints

Through the process of drafting this summary of existing conditions, as well as discussions with key stakeholders, the following opportunities for the study corridors have been identified, as well as constraints that the City will need to be aware of in developing designs for the study corridors.

3.1 Opportunities

1. Use coordinated design and other approaches to establish a sense of place for the three corridors as part of an overall strategy to implement the Downtown Specific Plan. Street design must be complementary to BART plaza design and address the current inconsistent character, which does not contribute to a sense of place in the Downtown.
 - a. Create new street furniture 'catalogue' to offer a fresh look and additional amenities to the Downtown pedestrian area.
 - b. Improve wayfinding along the corridors with elements like better directional signage, posted walking travel times, and coordinated branding.
 - c. Upgrade and install pedestrian-oriented lighting along the corridors to improve safety, security, and reduce risk of injury.
2. Build upon Todos Santos Plaza's current range of successful programming to encourage a wide array of activities in the Downtown and along the three study corridors; this includes events requiring temporary street closures.
3. Improve sidewalks for accessibility and safety.
 - a. Reconstruct and, where possible, widen sidewalks to correct sidewalk uplift, cracking, and deteriorated brick work.
 - b. Widen existing tree wells and incorporate tree grates and/or pervious pavers.
4. Implement low-impact landscaping and stormwater features to reduce water runoff, reduce maintenance, and plan for anticipated stormwater regulation changes.
 - a. Install signature landscape features that will help detain, filter, and process storm water.
 - b. Install permeable pavement in select streetside parking areas.
 - c. Identify tree and other plant species needing lower levels of maintenance.
5. Improve pedestrian crossings.
 - a. Upgrade crosswalks.
 - b. Install new pedestrian signals and curb ramps to comply with current practice for persons with disabilities.
 - c. Adjust signal timing to prioritize pedestrians at key pedestrian-focused intersections.
6. Enhance safety, security, cleaning and landscape maintenance throughout the Downtown area, including the three study corridors. This could be provided by a business improvement district, modifications to the existing maintenance district, or other mechanisms. Services could also include programs such as an ambassador service.
7. Activate Grant Street with programming to improve connection to BART station.
 - a. Implement temporary uses and events along Grant Street where wide right-of-way appears to provide more capacity than needed.
 - b. Implement bicycle facilities along the corridor to better connect to Todos Santos Plaza.
8. Establish a Downtown Circulator (shuttle) to connect BART, Todos Santos Plaza, Park-and-Shop, and other key destinations via free or low-cost, easy-to-use transit service.
9. Investigate the reconfiguration of Oak Street along the City's Successor Agency parcel to improve walking and cycling connections to residents and amenities across Galindo Street.
10. Capitalize on the Downtown's appeal as a citywide cycling destination by ensuring it is a well-connected node in Concord's bicycle network and creating a cohesive approach to cycling within the three corridors, consistent with the findings of the Bicycle, Pedestrian, and Safe Routes to Transit Plan.
11. Work with County Connection to provide additional bus shelters and other street furniture designed to improve the experience of transit riders.
12. Coordinate the design of both the public and private realms, considering the local context and the Todos Santos Design Guidelines.

3.2 Constraints

1. Balancing pedestrian and cyclist activity with automobile circulation.
 - a. Limited right-of-way is available to accomplish all desired objectives.
 - b. Major streets are barriers to pedestrians and cyclists.
2. Numerous curb-cuts for driveways serving existing businesses that interrupt pedestrian paths.
3. Some existing buildings are oriented away from the street or are designed wide with setbacks that do not contribute to a lively street experience.
4. Limited near-term potential for development of privately-owned vacant parcels.
5. High-traffic volume intersections that result in difficult pedestrian crossings at major and wide roadways such as Galindo Street, Concord Boulevard, and Clayton Road.
6. Complexity of existing utilities and lack of survey data for all streets.
7. Lack of dedicated funding source for capital improvements.
8. Safety and security are a concern, particularly at night, along the corridors and at Todos Santos Plaza.





Downtown Corridors Plan
Existing Conditions

November 2015



Downtown Corridors Plan Design Guidelines



Acknowledgements

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Downtown Corridors Plan

Design Guidelines

DRAFT

- 1. Introduction 1**
- 2. Opportunities 3**
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Todos Santos Plaza

1 Introduction

Concord envisions a lively, pedestrian- and bike-friendly downtown area, with shops, restaurants, and events in Todos Santos Plaza. The Plaza is currently very welcoming and surrounded by successful retailers. In the future, the area around the Plaza—connecting to BART and other key community destinations—could be a much more pleasant place to stroll, to bike, and to visit. This will require a transition toward the streets and public realm serving as outdoor living areas for the downtown.

Building on the community’s vision as set forth in the Downtown Specific Plan (adopted in 2014), this Downtown Corridors plan aims to enhance the pedestrian environment in the downtown area. The plan focuses on three study corridors that form the eastern half of the ‘green frame’ conceptualized in the Specific Plan: Oak Street, Grant Street from Oak Street to Salvio Street, and Salvio Street from Grant Street to Broadway.

Concord has long planned for a more urban, mixed-use environment around the BART station and Todos Santos Plaza. The mixed-use zoning designations that pre-dated the Specific Plan are not sufficient to transform the area, to make it apparent to passengers arriving at the Concord BART station that they are in a downtown, pedestrian-friendly environment and that Todos Santos Plaza is very nearby. With zoning in place to encourage private development, the City’s main focus in this study is redesigning and transforming the public right-of-way to support the kinds of residential, retail, and employment-generating development envisioned for the area.

This document provides design guidelines for the three study corridors. The guidelines are intended to support the vision established in the Downtown Specific Plan, building upon the opportunities and constraints identified in the plan’s Existing Conditions report for the study (published in November 2015). The first opportunity identified in the report is to “use coordinated design and other approaches to establish a sense of place for the three corridors as part of an overall strategy to implement the Downtown Specific Plan.” Other opportunities provide more specifics, which these guidelines are intended to document as direction for physical changes to the three study corridors.

These guidelines express a cohesive vision supported by the community, business- and property-owners, and decisionmakers. They provide direction to City staff members charged with improvements to the public right-of-way, while retaining a modest level of flexibility to respond to on-the-ground conditions. While the focus is on the three study corridors, many of the components of the street identified in these guidelines could readily be applied to other streets in the vicinity of Todos Santos Plaza. They will also intersect with the design guidelines currently underway for the private realm in the vicinity of Todos Santos Plaza.

The next step of this plan is to prepare conceptual designs for the public right-of-way along the three study corridors, furthering these design guidelines. The designs will provide enough detail for the City to seek funding for implementation, moving closer to implementation of the Downtown Specific Plan.



Salvio Street sidewalk

2 Opportunities

The three study corridors present a range of opportunities to reflect the community's vision for the Downtown Area. This vision was expressed through the Downtown Specific Plan and builds on the success of Todos Santos Plaza.

These guidelines are in turn guided by the opportunities found in the Existing Conditions report, as follows:

1. Use coordinated design and other approaches to establish a sense of place for the three corridors as part of an overall strategy to implement the Downtown Specific Plan. Street design must be complementary to BART plaza design and address the current inconsistent character, which does not contribute to a sense of place in the Downtown.
2. Build upon Todos Santos Plaza's current range of successful programming to encourage a wide array of activities in the Downtown and along the three study corridors; this includes events requiring temporary street closures.
3. Improve sidewalks for accessibility and safety.
4. Implement low-impact landscaping and stormwater features to reduce water runoff, reduce maintenance, and plan for anticipated stormwater regulation changes.
5. Improve pedestrian crossings.
6. Enhance safety, security, cleaning and landscape maintenance throughout the Downtown area, including the three study corridors.
7. Activate Grant Street with programming to improve connection to BART station.
8. Establish a Downtown Circulator (shuttle) to connect BART, Todos Santos Plaza, Park-and-Shop, and other key destinations via free or low-cost, easy-to-use transit service.
9. Investigate the reconfiguration of Oak Street along the City's Successor Agency parcel to improve walking and cycling connections to residents and amenities across Galindo Street.
10. Capitalize on the Downtown's appeal as a citywide cycling destination by ensuring it is a well-connected node in Concord's bicycle network and creating a cohesive approach to cycling within the three corridors, consistent with the findings of the Bicycle, Pedestrian, and Safe Routes to Transit Plan.
11. Work with County Connection to provide additional bus shelters and other street furniture designed to improve the experience of transit riders.
12. Coordinate the design of both the public and private realms, considering the local context and the Todos Santos Design Guidelines.

3 Streetscape Design

The Salvio, Grant, and Oak Street corridors in the future will be safe and welcoming public spaces that encourage travel throughout the Downtown Area.

The street design guidelines serve as a guide to future streetscape improvement projects in the public right-of-way. The guidelines consist of two parts: a description of the four unique 'zones' along the study corridors, and a 'toolkit' of streetscape elements that are appropriate for use in the different zones. Each zone has a different set of key elements; not all elements are appropriate for use in each zone.

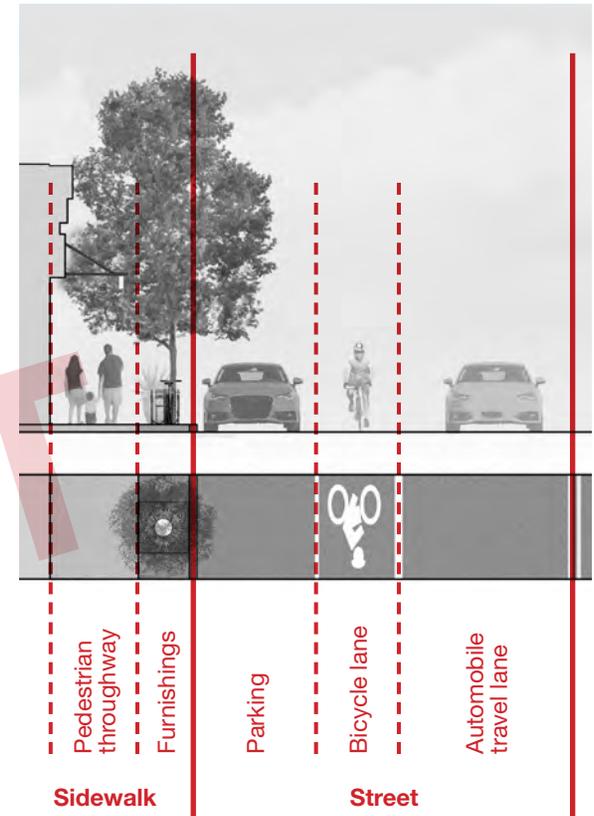
The guidelines address both the street and sidewalk realms, which each consist of several parts.

Street realm

- Parking
- Bicycle lane
- Automobile travel lane
- Turn lane

Sidewalk realm

- Pedestrian throughway
- Furnishings and landscape



Components of the street

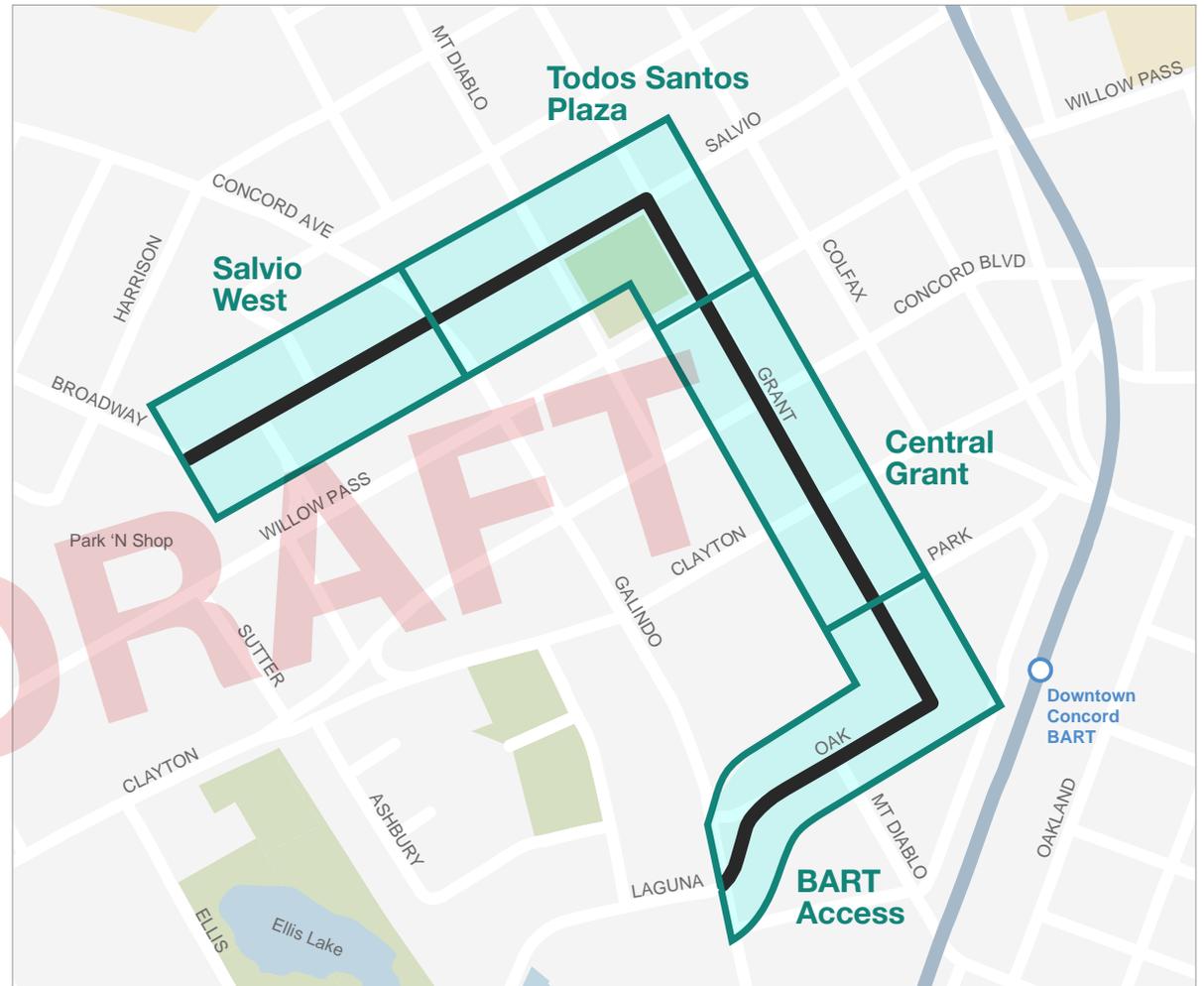
3.1 Zones

The three study corridors have been divided into four zones, based on the character and function of the streets and adjacent land uses. The zones are:

1. **Salvio West:** Salvio Street from Broadway to Galindo Street
2. **Todos Santos Plaza:** Salvio Street from Galindo to Grant Street, Grant Street from Salvio Street to Willow Pass Road
3. **Central Grant:** Grant Street from Willow Pass Road to Park Street
4. **BART Access:** Grant Street from Park Street to Oak Street, Oak Street from Grant Street to Galindo Street.

The following pages describe each zone, its desired features, and illustrate the desired 'typical' cross-section.

Conceptual designs, to be completed in the next phase of this study, will provide more specifics for each corridor, responding to the range of existing street conditions and building contexts.



Zone 1: Salvio West



Salvio West will serve as a pleasant connection for residents and visitors entering Todos Santos Plaza from the west. The character will be similar to that of the plaza area, making a clear visual connection to that popular destination.

Description

Salvio West should provide a seamless and welcoming connection between the neighborhoods surrounding Park 'N Shop and Todos Santos Plaza and the downtown core. Currently, this zone has limited pedestrian amenities, and pedestrians find themselves walking along large parking lots or the back sides of buildings. The zone varies in traffic volume, crossing multi-lane arterials and weaving through mixed density commercial areas. It has no bike lanes and crosswalks are minimal.

The Downtown Specific Plan envisions residential and retail uses in this zone, transforming much of the existing surface parking lots into residential structures. In the future, the street and sidewalk will balance vehicle access, transit accommodations, and pedestrian and bicycle mobility and safety. The redesigned street will create a boulevard feel for travelers in which sidewalk buffers, decorative crosswalks, a bike lane, and well-defined paths bring all street and sidewalk users safely together. The resulting street provides comfortable access to local and surrounding destinations for pedestrians, bicyclists, transit riders, and drivers.

Desired Features

PARKING

Parallel
Both sides

BIKE FACILITY

Bike lane
Intersection bicycle crossing markings

SIGNAL TIMING AND PHASING

Activation buttons for pedestrians
Signal cycle transition within 5 seconds of button detection
In-pavement loop bicycle signal detection

CROSSWALKS

Decorative crosswalks with full ADA features
Midblock crossing between Brenden Theatres and the street-fronting retail between Adobe Street and Concord Avenue

CURBS

Driveways – minimum width

BUS FACILITIES

Stop furniture – shelters

WAYFINDING

For all modes, focusing on connection between Park 'N Shop and Todos Santos Plaza, as well as community-wide destination (such as BART or nearby schools)

Typical Street Cross-section: Salvio West Zone

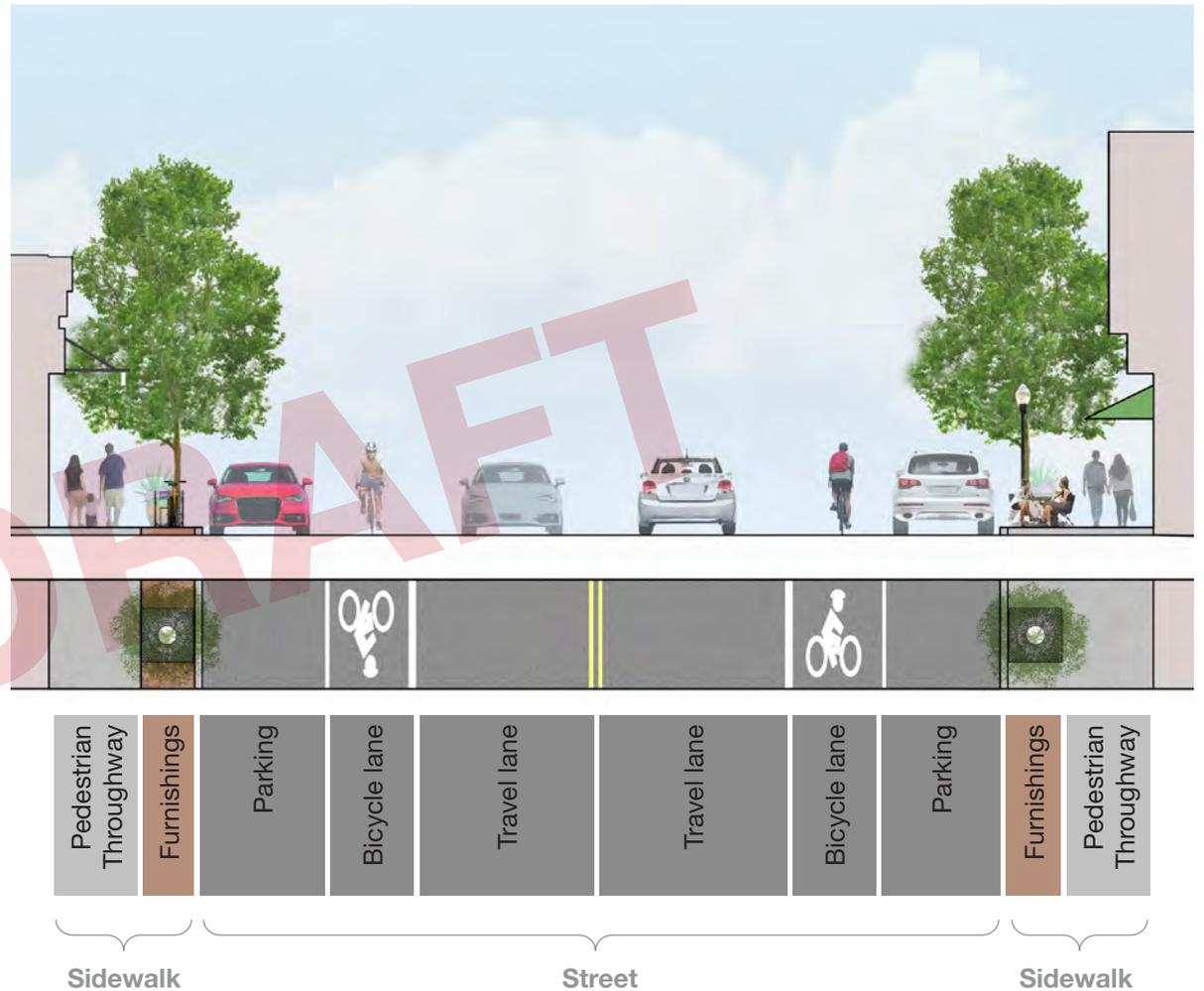
STREET FURNITURE

Bike racks on each side of the street near Brenden Theatres and the street-fronting retail between Adobe Street and Concord Avenue and at the bend into Broadway Street when the property is redeveloped in the vision of the Downtown Specific Plan

Seating – informal only

Trash bins – at Concord Boulevard/Galindo Street intersection

Lighting – new powder-coated pedestrian and street lighting



Zone 2: Todos Santos Plaza



Todos Santos Plaza will continue to be the primary destination in Downtown Concord. Its character connects the surrounding streets and buildings to create a welcoming public space that can be expanded upon in the future.

Description

Arranged in a grid along small retail blocks, streets in this zone emphasize pedestrian mobility and economic activity at the sidewalk level. With a range of events from farmers' markets to music to festivals to food truck nights, the sidewalk and plaza accommodate a wide variety of activities.

Consistent with the Downtown Specific Plan activities around Todos Santos Plaza will expand, with housing mixed with small-scale retail surrounding the plaza. The plaza will be even more walkable and aesthetically appealing with iconic street furniture, formal landscaping greening the streetscape, and wide sidewalks accommodating abundant sidewalk seating for businesses. Consistent and distinctive pedestrian lighting coupled with twinkling lights in the trees to highlight the plaza as a destination. Some parking buffering the plaza from traffic will remain, but portions of the parking lane can be used for a variety of purposes, including temporary parklets, vending and food trucks, decorative bicycle parking, informal landscaping, and more.

Desired Features

PARKING

Parallel or angle
Both sides

BIKE FACILITY

Bike lane

SIGNAL TIMING AND PHASING

Timed: 3:2 ratio with maximum 90 second cycles, 60 seconds preferred

CROSSWALKS

Decorative crosswalks at intersections with full ADA features

CURBS

Driveways – almost no driveways; back entrances preferred

Curb extensions – where possible

BUS FACILITIES

Stop furniture – benches directly on Todos Santos Plaza, otherwise shelters

WAYFINDING

For all modes, focusing on connections between Todos Santos Plaza, BART, and Park 'N Shop, as well as further-afield locations (such nearby schools) reachable by the different modes

Typical Street Cross-section: Todos Santos Plaza Zone

STREET FURNITURE

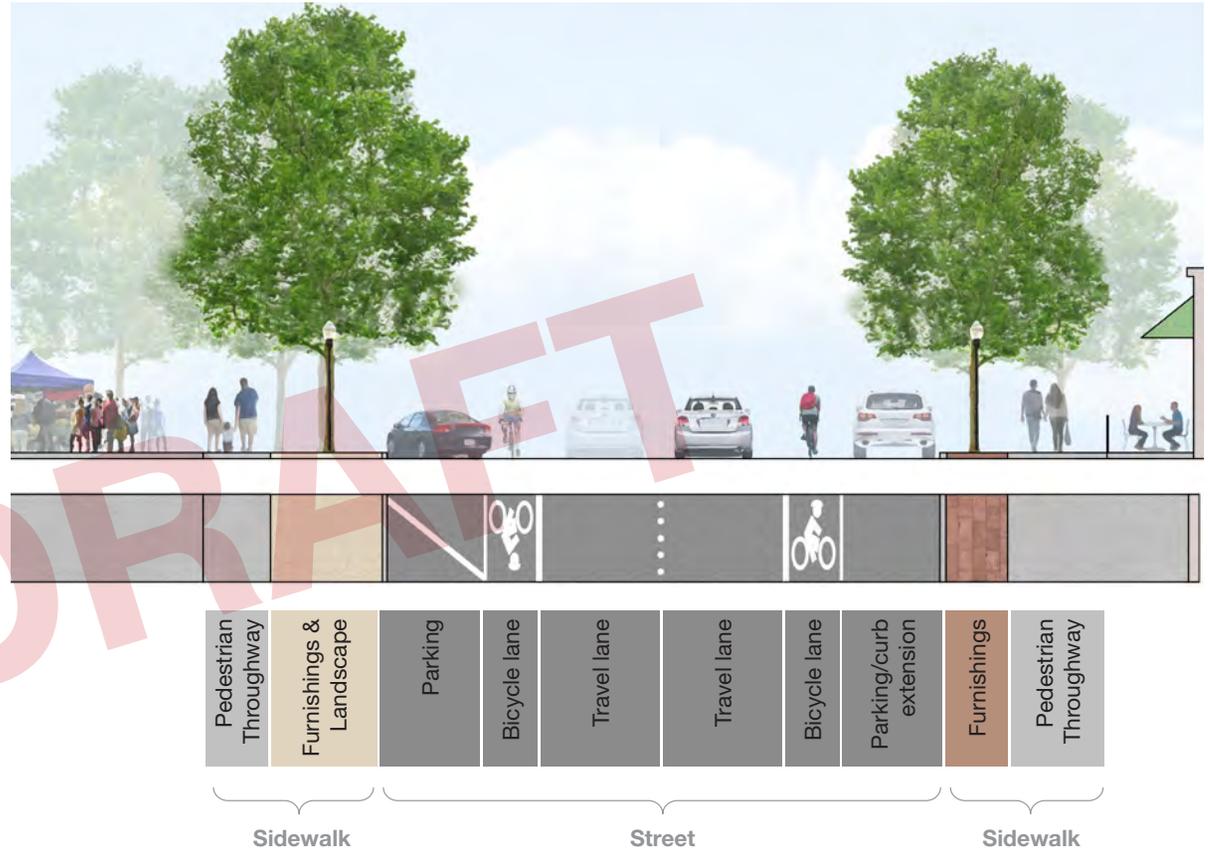
Bike racks – on every block, both sides of the street

Seating – benches and seating in abundance surrounding Todos Santos Plaza; more informal seating farther from the plaza

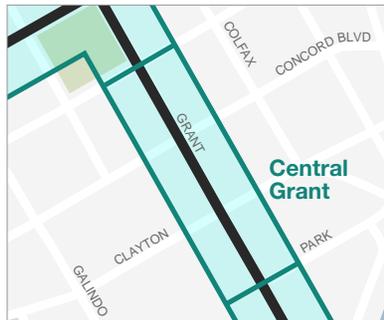
Trash bins – at the plaza and at wider intervals away from the plaza

Lighting – new powder-coated pedestrian and street lighting with an emphasis on pedestrian lighting; illuminated bollards lining the sidewalks

Drinking fountains – at the plaza



Zone 3: Central Grant



Central Grant will serve a very important function: making the transition from the BART station to Todos Santos Plaza pleasant, ensuring pedestrians and cyclists know they are on their way to a vibrant downtown destination.

Description

As the primary path between the Concord BART Station and Todos Santos Plaza, Central Grant should offer a pleasant and comfortable walking environment. Currently, Central Grant has four vehicle lanes, despite having low traffic volumes. The street has very limited street parking and no bike lanes, but does have wide planting strips, mostly consisting of unplanted soil or decomposed granite. The developed land along Central Grant is predominantly full-block office campuses that are set back some distance by a yard, typically landscaped with grass.

The Downtown Specific Plan envisions Central Grant to be mixed use space in which residential buildings sit atop ground floor retail in a mixed-use environment complementing the existing office buildings. In the future, Central Grant will prioritize bike lanes buffered with attractive planters. Wide sidewalks, landscaping, and curb extensions at intersections will create a comfortable pedestrian experience. Twinkling lights in the plentiful street trees will guide travelers down the boulevard creating a seamless connection between BART and Todos Santos Plaza.

Desired Features

PARKING

No on-street parking

BIKE FACILITY

Bike lane buffered with planter boxes
Bike boxes
Intersection bicycle crossing markings

SIGNAL TIMING AND PHASING

Timed: 3:2 ratio with maximum 90 second cycles, 60 seconds preferred

CROSSWALKS

Decorative crosswalks with full ADA features

CURBS

Driveways – minimum width
Curb extensions where possible

BUS FACILITIES

Bus bulbs at bus stops where necessary
Stop furniture – Shelters with wayfinding and other traveler information

WAYFINDING

For all modes, focusing on connection between BART and Todos Santos Plaza, as well as further-afield locations reachable by the different modes

Typical Street Cross-section: Central Grant Zone

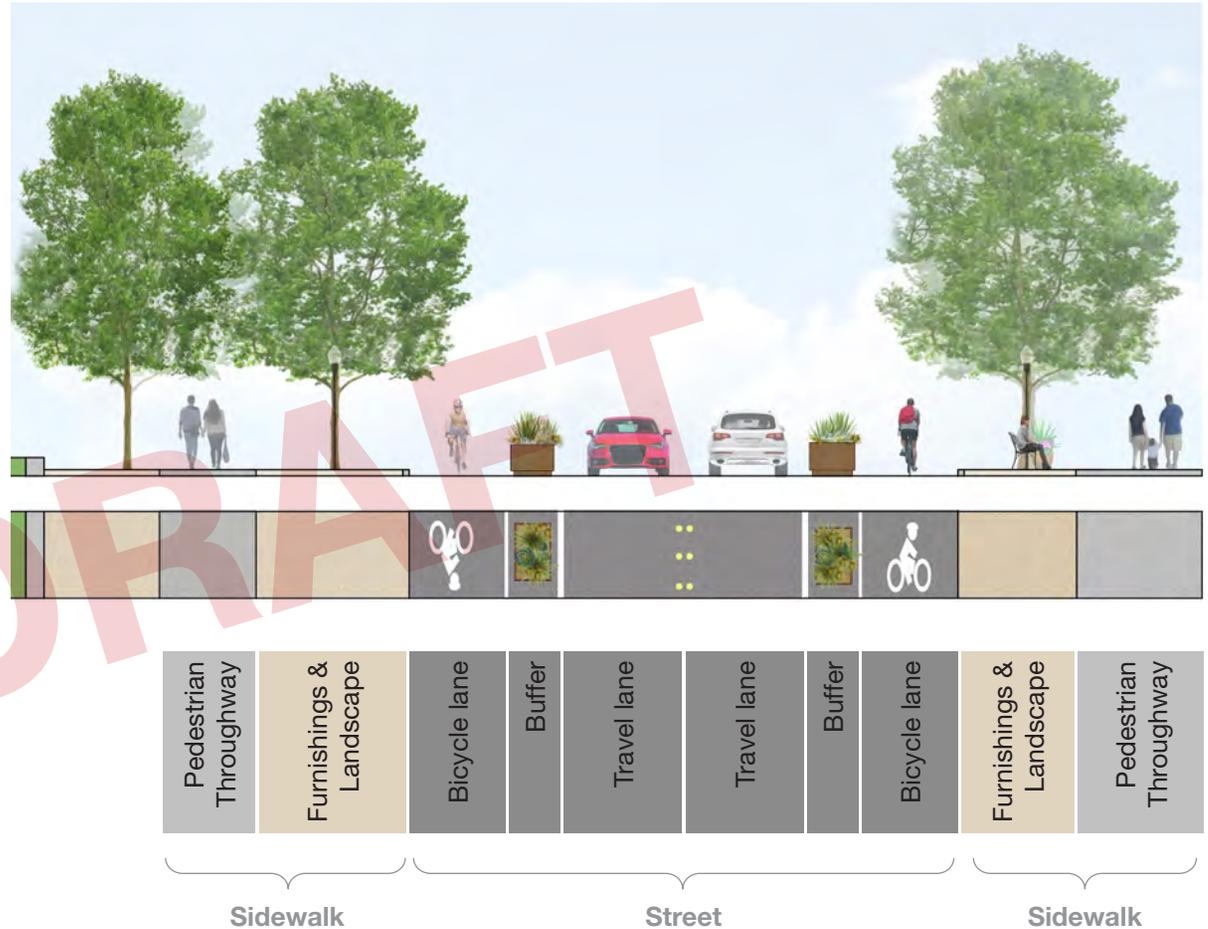
STREET FURNITURE

Bike racks – when new retail or residential uses are built, add bike racks to the sidewalk

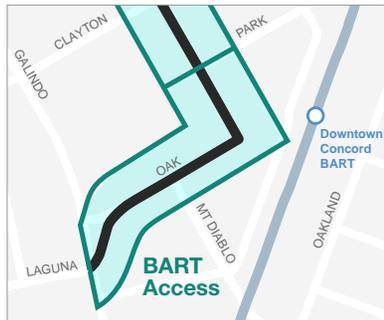
Seating – informal only

Trash bins – at intersections with Clayton Road and Concord Boulevard

Lighting – new powder-coated pedestrian and street lighting; illuminated bollards lining the sidewalks



Zone 4: BART Access



BART riders will arrive at Concord Station and experience a welcoming transition through the BART Plaza to nearby streets and destinations.

Description

The Concord BART Station provides rapid, high frequency transit service to dozens of communities throughout the region. Only a half-mile from Todos Santos Plaza, the BART station is an important connection to the heart of Downtown Concord and the neighborhoods surrounding the station. The area is split between undeveloped fields and parking lots or garages. The intersection of Oak, Galindo, and Laguna Streets at the western extent of this zone is inhospitable to pedestrians with long signal delays and crossing distances exceeding ninety feet. There are no bike lanes.

The Downtown Specific Plan envisions a complete transformation of this zone with the development of vacant parcels and parking lots into residential structures wrapped with ground floor retail. Bike lanes and well-lit sidewalks will allow safe and comfortable passage for active travelers. Transit stops will be sheltered and fully equipped with real-time arrival and wayfinding information. Although auto parking will remain, bike lanes, wide sidewalks, and comfortable transit stops will make multimodal access to the station area comfortable, pleasant, and visible.

Desired Features

PARKING

Parallel, taxi zones

Both sides on Grant Street, one side for much of Oak Street

BIKE FACILITY

Bike lane on Grant Street, buffered bike lane on Oak Street

Bike boxes

Intersection bicycle crossing markings

SIGNAL TIMING AND PHASING

Activation buttons for pedestrians

Signal cycle transition within 5 seconds of button detection

In-pavement loop bicycle signal detection at Oak Street signal

CROSSWALKS

Decorative crosswalks with full ADA features

CURBS

Driveways – minimum width

Curb extensions – significant sidewalk widening on Oak Street

BUS FACILITIES

Bus bulbs at bus stops where necessary

Stop furniture – shelters with real-time arrival and wayfinding information

Typical Street Cross-section: BART Access Zone

WAYFINDING

For all modes, focusing on connection between BART and Todos Santos Plaza, as well as further-afield locations reachable by the different modes

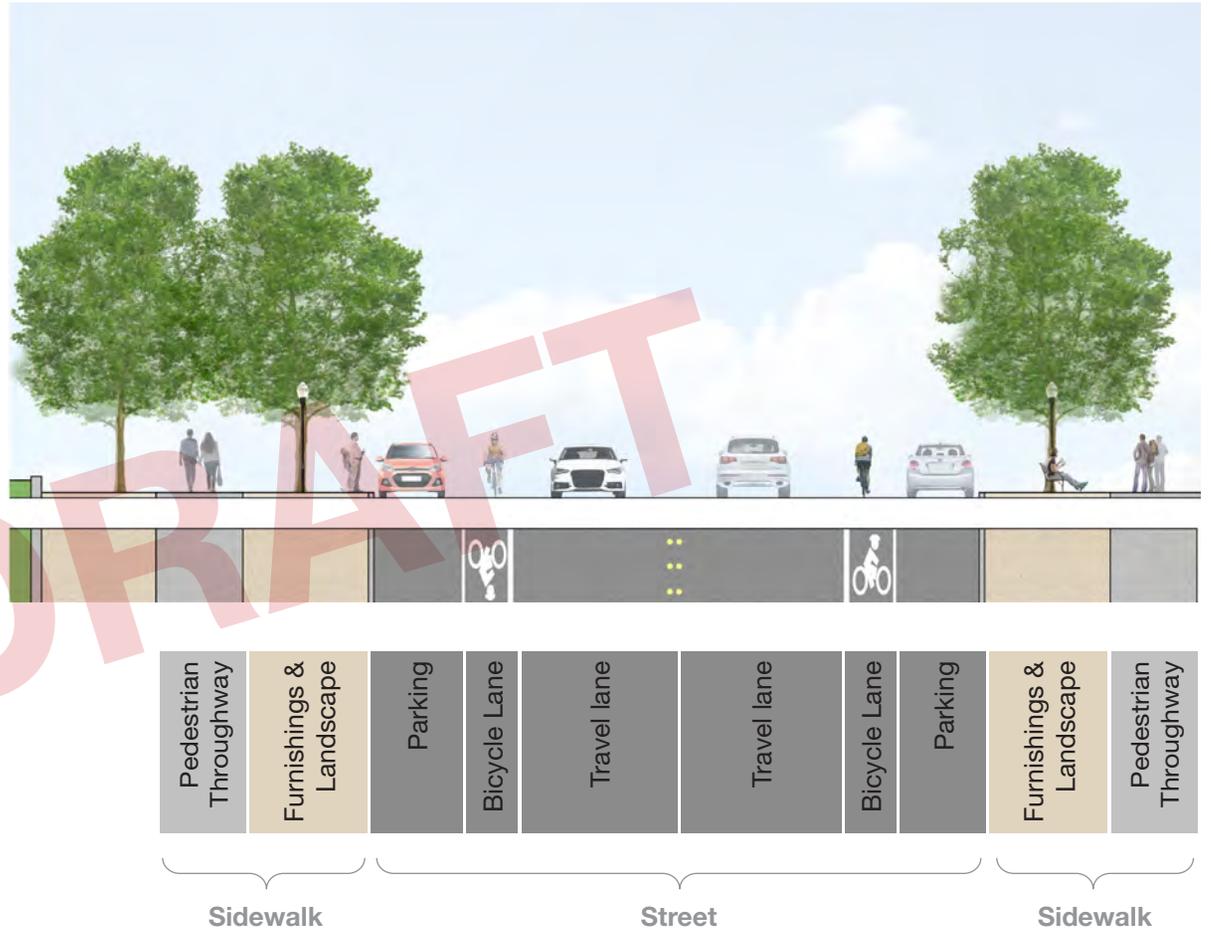
STREET FURNITURE

Bike racks – add racks at the corner where Grant Street meets Oak Street. When new retail or residential uses are built, add bike racks to the sidewalk

Seating – informal only

Trash bins – in the area immediately around the BART station, and at the intersection with Park Street

Lighting – new powder-coated pedestrian and street lighting



Summary of Zones

	Feature	Zone 1 Salvio West	Zone 2 Todos Santos Plaza	Zone 3 Central Grant	Zone 4 BART Access
Street	Parking	Parallel parking	Parallel or angle parking	No on-street parking	Parallel parking
	Bike facilities	Bike lanes and intersection bicycle crossing markings	Bike lanes	Buffered bike lanes, bike boxes, and intersection bicycle crossing markings	Buffered bike lanes, bike lanes, bike boxes, and intersection crossing markings
	Bus facilities	Shelters for all bus stops	Benches directly on Todos Santos Plaza, otherwise shelters	Bus bulbs where necessary and shelters for all stops	Bus bulbs where necessary and shelters for all stops
Intersections	Signal timing and phasing	Activation buttons for pedestrians and bicyclist detection loops	Timed signals	Timed signals	Activation buttons for pedestrians and bicyclist detection loops
	Crosswalks	Decorative crosswalks with full ADA features, midblock crossings between popular destinations	Decorative crosswalks with full ADA features	Decorative crosswalks with full ADA features	Decorative crosswalks with full ADA features
	Curbs	Minimum width driveways	Minimum width driveways, back entrances preferred; curb extensions where possible	Minimum width driveways, curb extensions where possible	Minimum width driveways; significant sidewalk widening on Oak Street
	Wayfinding	For all modes, focusing on connection between Park 'N Shop and Todos Santos Plaza	For all modes, focusing on connections between Todos Santos Plaza, BART, and Park 'N Shop	For all modes, focusing on connection between BART and Todos Santos Plaza	For all modes, focusing on connection between BART and Todos Santos Plaza
Sidewalk	Lighting	New pedestrian and street lighting	New pedestrian and street lighting with an emphasis on pedestrian lighting; illuminated bollards lining the sidewalks	New pedestrian and street lighting with an emphasis on pedestrian lighting; illuminated bollards lining the sidewalks	New pedestrian and street lighting
	Street furniture	Bike racks, informal seating, and some trash bins	Bike racks, benches, informal seating, trash bins, and drinking fountains	Bike racks, informal seating, and some trash bins	Bike racks, informal seating, and some trash bins
	Low-impact development	See Components of the Street: Low-Impact Development and Stormwater (page 33)			

3.2 Components of the Street

Streets are made from a range of key pieces. These pieces work together to create a cohesive visual experience and physical environment.

Organized into several categories, this 'toolkit' provides greater detail on the streetscape elements for use along the green frame corridors, as outlined by Zone. The key elements described here are appropriate for different zones, based on the street and development context. The toolkit is organized into the following sections:

1. Street realm
2. Intersections and Crosswalks
3. Sidewalk Realm
4. Low-Impact Development & Stormwater



Grant Street at Salvio Street

Components of the Street: Street Realm

The below table lays out the elements that can transform the study corridors into multimodal streets.

Multimodal streets balance the needs of multiple users and create safe places to walk, cycle, and drive. High-quality bicycle facilities, including buffered bike lanes where possible, provide protected and connected bicycling. Well-placed transit stops enable safer access to and from the

stops, and bus bulbs minimize merging in and out of traffic. On-street parking and auto wayfinding facilitate smooth driving in Downtown Concord. With these components integrated, the downtown area gains a network of complete streets that balance the needs of all modes of travel.

Component	Function	Guidance	Illustration
Street			
Parallel on-street parking	Provides additional parking capacity and access to parking for land uses with limited parking supply.	Use when on-street parking is necessary to either provide parking for businesses or public spaces; it can also serve to buffer a bicycle lane from vehicle traffic.	
Angled on-street parking		Install when more on-street parking is needed than can be provided with parallel parking and when there is sufficient width to transfer more than one travel lane to parking. Consider installing safer back-in angled parking.	
Auto wayfinding	Signage providing clear guidance to popular destinations, including parking.	Expand upon existing vehicle wayfinding welcoming drivers to downtown Concord and guides them to popular destinations or parking garages.	

Component	Function	Guidance	Illustration
<p>Bus stop</p>	<p>Provide a comfortable, safe place to wait for the bus. Opportunity to provide weather protection. Enables riders to clearly identify bus stop location.</p>	<p>Stop location: Install a bus stop on the far side of the intersection, which is preferred over a near-side bus stop that would require passengers to cross in front of the bus after alighting and positions passengers removing bicycles from front-mounted racks close to intersections. Add new stops to serve potential Downtown Circulator near key destinations.</p> <p>Bus bulb: Whenever the bus stop is located adjacent to a parking lane, the curb should be extended into a bus bulb to allow the bus to service the stop without merging in and out of traffic.</p> <p>Stop furniture: All transit stops should have a bench at a minimum. A bench may be sufficient at Todos Santos Plaza where there is tree cover and the bench enhances the public space. In more open locations, a shelter is preferred.</p>	 <p>The illustration shows a top-down view of a street intersection. A bus stop is located on the far side of the intersection, with a bus bulb extending into the street. A photograph below shows a bus stop shelter with a bench, located on a sidewalk next to a street.</p>

Bicycle Facilities

<p>Conventional bike lanes</p>	<p>Designates an exclusive space for bicyclists that is marked with an unbroken white painted line. Within the lane, a painted arrow and bicyclist symbol indicate the direction of travel.</p>	<p>Install bike lanes on both sides of the road where there is two-way vehicle travel. Each bike lane should be 6 feet wide and can be painted green. Paint a 6-8 inch white line bordering traffic lanes and a 4 inch white line bordering parking, if relevant. Use conventional bike lanes only when the road is too narrow for buffered bike lanes.</p>	 <p>The illustration shows a top-down view of a conventional bike lane. It features a white arrow and a bicycle symbol on the pavement. A photograph below shows a real-world bike lane with the words 'BIKE LANE' and an arrow painted on the road surface.</p>
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Source: MUTCD figure 9C-3

Component	Function	Guidance	Illustration
Buffered bike lanes	Designates an exclusive space for bicyclists that is separated from traffic by a buffer. Examples of buffers include painted cross-hatching, bollards, planters, or a parking lane.	Lane should be 6 feet wide and can be painted green. See MUTCD figure 9C-3 for icon. Buffer options in order of preference are: <ol style="list-style-type: none"> 1. Planter boxes (3 feet) 2. Parking lane (11 feet) 3. Rigid bollards (2 feet) 4. Painted stripes or cross-hatching (1.5 feet) Buffered bike lanes are the most preferred bicycle facilities for the corridors.	
Sharrows	Designates a shared lane for both bicyclists and vehicles with sharrows and bicycle icons painted in the middle of the lane. Dashed lines sometimes border the sharrow and icon. Also called shared lane markings.	Use sharrows only when a road is too narrow to accommodate a bicycle lane and consider alternatives such as narrower travel lanes or reduced parking before instituting sharrows. Install sharrow markings in the center of the travel lane using a painted “bike-and-chevron” icon.	
Bike box	Designates space in front of stopping vehicles at an intersection where bicyclists can be more visible to nearby drivers while waiting for the signal cycle. Facilitates left turns.	Install a bike box with a “no turn on red” intersection requirement. The box should be 10-16 feet deep with a bicyclist icon and ideally filled with green paint. Pavement markings preceding the bike box instruct drivers where to wait during the signal cycle.	

Source: MUTCD figure 9C-9

Source: MUTCD figure 9C-3A or B

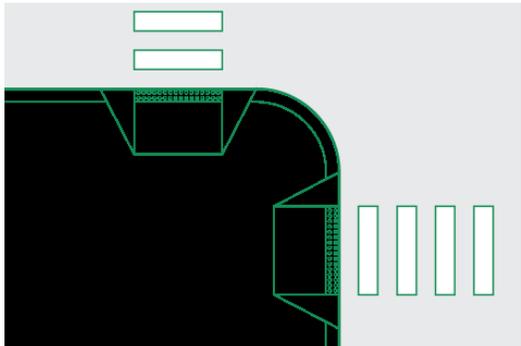
Component	Function	Guidance	Illustration
<p>Bicycle crossing across intersection</p>	<p>Ensures bicyclists have exclusive space in an intersection and alerts drivers to the presence and path of bicyclists.</p>	<p>Install in conjunction with a bike lane. Indicates the continued bicycle path through an intersection with arrows, sharrows, or bicyclist icons painted on the pavement.</p>	 <p>Source: National Association of City Transportation Officials</p>
<p>Bicycle signal detection</p>	<p>Detects bicyclists at an intersection to activate a green signal.</p>	<p>Install bicycle signal detection (using in-pavement loops, video, or other means) where possible to decrease risky or illegal behavior while increasing travel efficiency for bicyclists.</p>	 <p>Source: National Association of City Transportation Officials</p>
<p>Bicycle wayfinding</p>	<p>Signage and/or pavement markings that guide bicyclists along a route or to a destination.</p>	<p>Install bicycle wayfinding consistent with the Citywide Bicycle, Pedestrian and Safe Routes to Transit Plan.</p>	

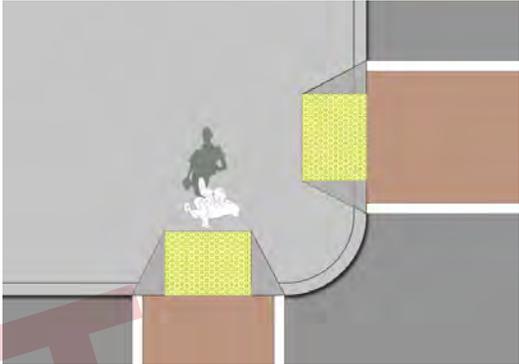
Components of the Street: Intersections and Crosswalks

The table below provides the tools to redesign intersections along the study corridors to emphasize safe pedestrian crossings with minimal delay.

Decorative crosswalks highlight pedestrian crossings throughout, and can be added to intersections where there are currently no crosswalk markings. Full-featured curb ramps allow crosswalks to be accessible to pedestrians of all abilities. Reconfigured intersection signal

cycles minimize pedestrian delay, boost pedestrian confidence that the signal will soon change, and reduce risky pedestrian behavior.

Component	Function	Guidance	Illustration
Intersections and Crosswalks			
Decorative crosswalks	Markings at intersections that facilitate safer pedestrian crossings.	Install two white retro-reflective thermoplastic stripes that delineate the sides of the pedestrian walking area and a thermoplastic covering in a brick pattern and coloring at all crosswalks along the corridors.	
Corner radius	Influences vehicle turning speeds and pedestrian intersection crossing distances.	Design curb radii to maintain vehicle turning speeds at or below 15 mph.	

Component	Function	Guidance	Illustration
Curb ramps specifications	General specifications regarding the transition from the sidewalk to the crosswalk.	Install a curb ramp at every crosswalk. The ramp should face the crosswalk, not the middle of the intersection, which may necessitate two ramps at corners. Affix truncated domes to each ramp to alert the pedestrian of the transition into traffic. Per the <i>State Of California Department Of Transportation Standard Specifications (73-1.02B)</i> , these domes should be yellow.	 <p>The diagram shows a top-down view of a street corner. A sidewalk is on the left, and a crosswalk is on the right. A yellow curb ramp is shown at the corner, with yellow truncated domes on its surface. A pedestrian silhouette is shown walking on the sidewalk towards the ramp.</p>
Curb extension	Increases pedestrian comfort and safety by physically narrowing the roadway and extending the sidewalk, usually at intersections. These reduce crossing distances, better define conflict points, and reduce turning vehicle speeds. Also called bulb-outs.	Install at intersections with long crossing times, on streets with a history of pedestrian safety issues, or in locations where neighborhood streets intersect with busier thoroughways. Install at pedestrian-oriented intersections to increase sidewalk space and pedestrian comfort.	 <p>The photograph shows a street intersection with a curb extension. A red utility pole is in the foreground on the right. The sidewalk is extended into the street, narrowing the roadway. A car is visible in the background.</p>
Midblock crossing	A midblock curb extension brings the sidewalk on both sides of the street closer to reduce pedestrian crossing distances and slow traffic.	Install in locations where there are high-traffic pedestrian destinations on both sides of the street.	 <p>The photograph shows a midblock crossing on a street. A crosswalk is visible with white stripes. Pedestrians are crossing the street. A red car is on the right side of the street. Trees with red leaves are in the background.</p>

Component	Function	Guidance	Illustration
<p>Signal timing and phasing</p>	<p>Determines when and for how long traffic in each lane (including crosswalks) is allowed to travel through an intersection. Intersection delay not only discourages walking and biking, but it also encourages risky or illegal behavior.</p>	<p>Adjust signal cycles to a maximum 60-90 seconds with a 3:2 (major street: minor street) ratio for allocated time. For pedestrians, a crossing speed of 2.5-3.5 feet per second should be assumed to calculate total crossing time.</p>	
<p>Signal activation</p>	<p>Pushing the signal activation button notifies the intersection controller system to include pedestrian signalization in the next signal cycle.</p>	<p>In general, pedestrian signals should be automatically included in the signal cycle. Pushbuttons should function as an accessibility feature, offering additional confirmation of a safe crossing, but should not be necessary to activate a pedestrian crossing signal.</p>	

Components of the Street: Sidewalk Realm

Sidewalks are the spine of the green frame. They connect the private and public realms, interact with all modes of travel, and provide the social environment of the streetscape.

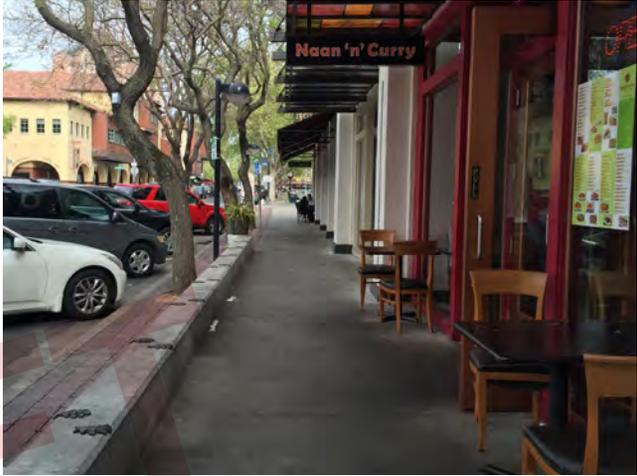
On sidewalks, people can find benches and informal seating, landscaping and street trees, a range of street lights and pedestrian lamps, bike racks, public art, drinking fountains, and so much more. The table below details those elements that can enliven the sidewalk by making the space both useful and interesting.

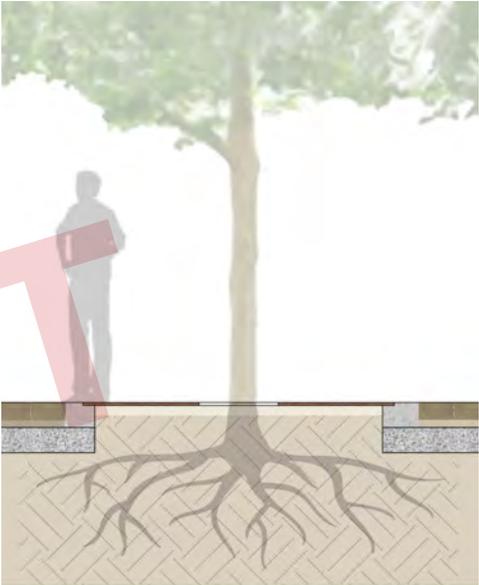
Component	Function	Guidance	Illustration
Sidewalks			
Pedestrian wayfinding	Signage that provides visual wayfinding language (destinations, directions, durations) that is easily legible by a broad diversity of passersby.	Install pedestrian wayfinding consistent with the Citywide Bicycle, Pedestrian and Safe Routes to Transit Plan. The two most common types of wayfinding include pylons in the sidewalk right-of-way and simple signs attached to poles, trees, and other vertical fixtures of the sidewalk.	
Benches and seating	Benches or chairs placed in the public realm.	Install the same ornate metal benches as those currently in Todos Santos Plaza around the plaza and other places where people gather. Informal seating throughout the corridors can provide sufficient relief for pedestrians in areas where gathering is less common. New benches should be powdercoated black; paint existing benches black as required for maintenance. These benches should be retrofit with armrests in the middle of the seat.	

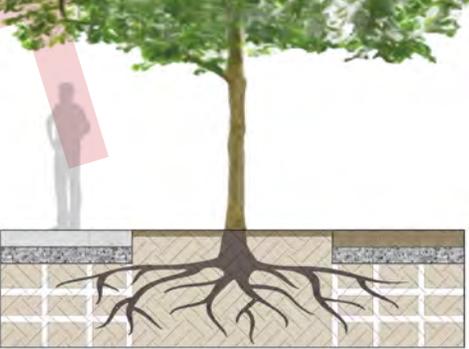
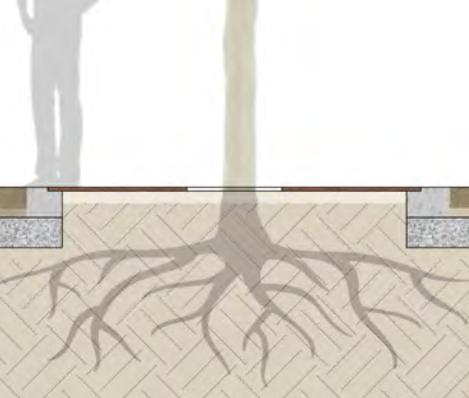
Component	Function	Guidance	Illustration
Short-term bicycle parking	Bicycle racks allowing both wheels to be secured to a structure cemented in place.	Install short-term bicycle parking throughout the corridors and particularly near restaurants, shops, and other locations with frequent visitors. Designs can include the Inverted U, Post and Ring, Tree Guard Bicycle Racks, and others that provide two points of contact. Per the City of Concord Municipal Code, bicycle parking should have a minimum allotted space of 2 feet x 6 feet and should be located within 50 feet from a building entrance, preferably within view of the entrance.	
Informal seating	Any edge or space above ground level that can be used for seating.	Incorporate informal seating such as low walls and protruding edges, that can help foster a sense of place in the public realm, particularly in plazas and parks.	
Trash bins	Trash bins that are designed in a similar style as the seating and benches.	Install trash bins near intersections and in areas with higher pedestrian volumes. Trash bins should not be located too near seating to discourage comfortable sitting. Include recyclables insert or locate recycle bins nearby. New bins powdercoated black; paint existing bins black as required for maintenance.	

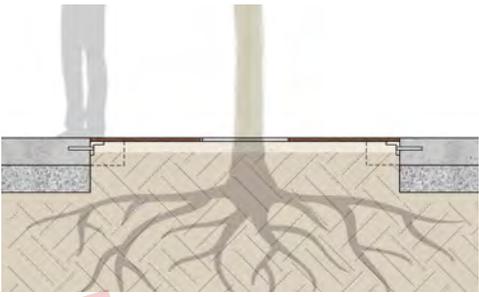
Component	Function	Guidance	Illustration
Lighting	Improves visibility and safety for pedestrians, bicyclists, and drivers and provides a more welcoming environment at night.	<p>Design: Powdercoat new lights black and paint existing lights black, as required for maintenance.</p> <p>Luminaire types: Overhead: Memphis LED Luminaire Pedestrian-scale: Granville Premier II</p> <p>Placement: Light fixture spacing should adjusted according to brightness with a typical spacing of about 80 feet for pedestrian lamps and 85-150 feet for street lighting. Light should not be obscured by street trees and plantings, but if there are too many trees for the light not to be blocked, more lights should be installed. Strive for even lighting of the street or sidewalk with staggered placement of the light. Pedestrian lamps should be as close to the curb as possible while fully lighting the sidewalk. Direct lighting downward to reduce light pollution and to more fully light the intended space.</p> <p>Brightness: Light Emitting Diode (LED) lights are approximately 50% more efficient and should be used within the corridors. The color of the light should be from 2,800-5,000 Kelvin, producing a cool white hue.</p>	 
Drinking fountains	Provide drinking water for immediate needs and filling water bottles.	Install fountains with the additional features of water bottle fillers at Todos Santos Plaza and the BART Station. Consider installations at other important bicycle or pedestrian destinations.	

Component	Function	Guidance	Illustration
Awnings	Roof or material protections that project over the sidewalk.	Where possible, existing and potential new street-fronting retail should have awnings that provide protection from the elements and enhance the aesthetic quality of the street. Per the City of Concord Municipal Code, awnings must be a minimum height of 7 feet when projecting over a sidewalk. Wooden awnings cannot be built over sidewalks. Signs on awnings cannot be illuminated.	
Utility boxes	Utility boxes in the public right-of-way can be canvases for local art.	Adopt a program or seek a local nonprofit partner to install art on the downtown utility boxes.	
Illuminated bollards	Improves sidewalk lighting.	Install illuminated bollards to enhance sidewalk lighting and to enhance the aesthetic appeal of the streetscape.	 <p data-bbox="1289 1430 1860 1450">Source: Adrian Long, "Illuminated Bollards," November 2012 (via Flickr)</p>

Component	Function	Guidance	Illustration
<p>Sidewalk maintenance</p>	<p>Preserving the structural integrity of the sidewalk to allow safe and clear passage for all pedestrians.</p>	<p>Per the City of Concord Municipal Code (12.25.030), maintenance of the sidewalk is the responsibility of any property owner whose property is adjacent to or fronts the sidewalk. Maintenance responsibilities include all costs and expenses incurred in repairing or removing any obstruction to safe passage. Maintenance tasks could include:</p> <ul style="list-style-type: none"> • Repairing surfaces • Replacing sidewalks • Removing weeds • Trimming trees and shrubs <p>The City of Concord will work with property owners to ensure they are aware of this requirement and understand how to fulfill it.</p>	
<p>Driveways and curb cuts</p>	<p>A ramp to facilitate vehicle travel over a sidewalk to access a property.</p>	<p>When installing a driveway or other non-intersection curb cut, maintain a continuous level path on the sidewalk. In general, driveways should be as narrow as possible to slow vehicles and encourage minimum of sidewalk interruption.</p>	

Component	Function	Guidance	Illustration
Landscaping			
<p>Street trees - species</p>	<p>Trees offer social, economic, and environmental benefits enhancing the aesthetic beauty of neighborhoods, moderating climate, reducing energy costs and increasing property values.</p>	<p>Tree selection criteria include: aesthetics, functionality, cultural and ecological significance, and potential conflicts with structures and utilities. The following species are successful within the study corridors:</p> <ol style="list-style-type: none"> 1. <i>Platanus racemosa</i> / California Sycamore - 25-30' O.C. Large canopy deciduous shade tree appropriate with adequate root space and no utility or structure conflicts. 2. <i>Koelreuteria bipinnata</i> / Chinese Flame Tree - 25-30' O.C. Large canopy deciduous shade tree with summer flowers and pleasant fragrance. Appropriate with adequate root space and no utility or structure conflicts. 3. <i>Tilia cordata</i> / Littleleaf Linden - 20-30' O.C. Large canopy upright deciduous street tree with strong fall color. Appropriate with adequate root space and no utility or structure conflicts. 4. <i>Lagerstroemia indica</i> / Crape Myrtle - 10-20' O.C. Can be used as a street tree, specimen tree, planted in masses, and in planters, and where there are conflicts with utilities. Has shorter mature size, late summer flowers and fall colors. 	 <p>The illustration shows a cross-section of a tree planted in a planter box. The top part shows the tree's canopy and trunk. Below the ground line, the root system is depicted spreading out horizontally within the planter box. A silhouette of a person is shown standing next to the tree for scale. The planter box is shown as a raised bed with a brick-like pattern on its sides.</p>

Component	Function	Guidance	Illustration
<p>Street trees - open area planting</p>	<p>An unpaved area of soil surrounding a tree containing existing, new or amended soil. Open soil areas reduce impervious surface and runoff.</p>	<p>An open soil area may be planted or covered with mulch. Ideally used in next to wide walking areas. Permeable paving cut-throughs allow pedestrian circulation without damaging plant material or compacting soil.</p>	
<p>Street trees - soil cells</p>	<p>Plastic structures filled with soil and covered with pavement. Tree roots grow in the uncompacted soil between structural supports. Allows for soil specification appropriate for tree species.</p>	<p>Option in new construction situations. Cells can support vehicular loads and create optimum conditions for street tree plantings and provide stormwater management through absorption, evapotranspiration, and interception.</p>	
<p>Tree grates</p>	<p>Tree planting in pavement areas, tree grate installations protect the tree from soil compaction and allow uninterrupted pedestrian circulation.</p>	<p>Match style and size of existing tree grates.</p>	

Component	Function	Guidance	Illustration
Street tree grate - retrofit	Adding tree grates to existing trees can potentially enlarge existing tree well areas, allowing for soil mediation, enhanced root growth, and safer pedestrian travel.	Tree grates require a concrete collar for support. Existing concrete tree wells can be saw cut and retrofitted with grates that are flush with the existing pavement. In the case of newer planting without an established root system, a concrete collar can be poured for grate support, as long as root damage is avoided.	
Street tree well trip hazard mitigation - organic mulch	Reduce trip hazards caused by compacted tree well soils that are not flush with the surrounding pavement.	Organic mulch, such as shredded bark, can not only reduce tripping hazards, but also improve moisture retention. Decomposed granite, which has been used within the corridors, is not recommended as it can become compacted over time and can be displaced with foot traffic, causing a maintenance issue.	
Landscape strip / permanent planter	Allow stormwater infiltration, separate pedestrian and vehicular traffic, improve aesthetics of urban environment, and reduction of heat island effect.	Use existing perennial species within the corridors for a cohesive aesthetic: <ul style="list-style-type: none"> • Dietes grandiflora / Fortnight Lily • Hemerocallis sp. / Daylily • Rosa sp. / Carpet Rose • Tulbaghia violacea/ Society Garlic Plant in large masses with few species for ease of maintenance and a stronger visual statement.	
Movable planter	Provide pedestrian buffer from vehicles, add visual interest to streetscape.	All planters require supplemental irrigation. Avoid placing in high traffic pedestrian accessible pathways. Opportunity to select annuals, special event planting, and definition of social spaces. Place perennials at the center of the planter as year-round 'anchors,' and place annuals around them.	

Components of the Street: Low-Impact Development & Stormwater

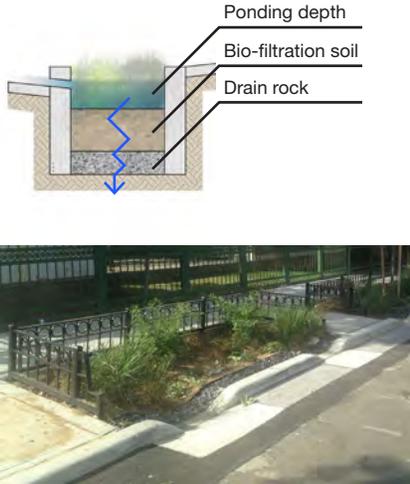
Low-impact landscape elements and stormwater features capture and treat excess runoff, as well as enhance the comfort and appeal of the pedestrian environment.

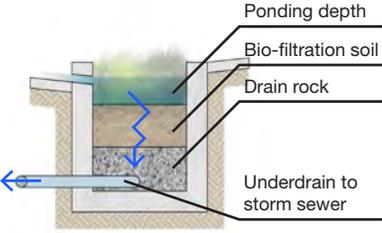
Green infrastructure design in Concord is governed by the Contra Costa Clean Water Program, and the Stormwater C.3 Guidebook. The Guidebook is written primarily to apply low-impact development principles to new construction; it prescribes optimizing a site, using pervious surfaces where feasible and rainwater harvesting before going to bio-treatment measures. Given the constraints of an existing

downtown, the most feasible green infrastructure will consist of either “Source Control” (such as pervious pavement) or “Treatment” measures (such as bio-filtration and bio-retention).

Bio-retention and bio-filtration function by diverting water from “grey” infrastructure, such as catch basins and storm sewers, and diverting it into planted areas. The water is allowed to pond (to a depth of 6”-12”), slowly seep through a minimum of 18” of specialized treatment soil, then collect in a layer of drain rock. In a bio-retention system, the treated water is allowed to infiltrate into the native soil, while in a bio-filtration system, the treated water is returned to the storm sewer. Bio-retention systems are preferred when the soil

is well-drained because they more closely mimic the natural environment, reduce the amount of water entering the storm sewer, and are less expensive to construct and maintain. Bio-filtration systems also improve the quality of stormwater, but do not reduce the quantity. As a result, these systems are preferred in poorly draining soils or close to building foundations. The Stormwater C.3 Guidebook specifies the exact dimensions, specifications, and recommended species planting list for these systems. The size of these systems is calculated using a flow and volume method per the Stormwater C.3 Guidebook, but usually is around 3% of the impervious area.

Component	Function	Guidance	Illustration
Low-Impact Development & Stormwater			
<p>Bio-retention planter (rain garden)</p>	<p>Filters stormwater naturally and allows it to soak into soil; reduces demand on storm sewer.</p>	<p>Area should be roughly 3% of the street area (on a typical block, this is roughly the size of 3 parking spaces). May integrate several along one block as opportunities allow. Place at Curb Extensions or in the Planting Strip. Choose bio-retention over bio-filtration when soil is well-drained per a geotechnical investigation. Sizing and design per the Contra Costa County Stormwater C.3 Guidebook.</p>	

Component	Function	Guidance	Illustration
<p>Bio-filtration planter (flow-through planter)</p>	<p>Filters stormwater naturally before discharging it into the storm sewer.</p>	<p>Area should be roughly 3% of the catchment area (on a typical block, this is roughly the size of 3 parking spaces). May integrate several along one block as opportunities allow. Place at Curb Extensions or in the Planting Strip. Use this option in poorly draining soils per a geotechnical investigation or when within 10 feet of a building. Sizing and design per the Contra Costa County Stormwater C.3 Guidebook.</p>	 
<p>“Signature” bio-retention or bio-filtration</p>	<p>Can function as bio-retention, or as flow-through planter. Differs from those in being larger, treating a larger area, and serving as a larger green space with additional functions.</p>	<p>Use this option for treatment to create a focal point or pocket park. Sizing and design per the Contra Costa County Stormwater C.3 Guidebook.</p>	

Component	Function	Guidance	Illustration
<p>Permeable pavement</p>	<p>Allows water to infiltrate through paved area to native soil; reduces demand on storm sewer.</p>	<p>Place in parking lane or on sidewalks outside of the main walkway to allow for easier maintenance. Not recommended in travel lanes because the weight of vehicles, especially trucks or heavy vehicles, can damage permeable pavement and increase maintenance costs. Most effective where soil will allow infiltration. Material can be pervious concrete, or permeable pavers, which can also be colored. May be constructed with an underdrain where native soils are poorly drained. Underdrain may be raised above bottom of reservoir for some storage and to slow water infiltration water following storms.</p>	<p>The illustration section contains three visual elements: <ul style="list-style-type: none"> A top cross-sectional diagram showing a pervious paver/concrete surface above a layer of drain rock. A blue wavy arrow indicates water infiltrating through the paver into the reservoir. A middle cross-sectional diagram showing a pervious paver/concrete surface above a layer of drain rock. An underdrain pipe is positioned above the drain rock, with a blue arrow pointing to the right towards a storm sewer. A blue wavy arrow indicates water infiltrating through the paver into the reservoir. A bottom photograph showing a real-world application of permeable pavement in a parking lot, with a concrete sidewalk and a gravel strip. </p>

DRAFT

4 Pop-up and Temporary Uses Guidelines

Pop-up and temporary uses can bring vibrancy to an area without a high level of investment or permanent change to the design of multi-use spaces. Concord's Farmers' Market in Todos Santos Plaza, for example, illustrates how these uses can benefit an area. Standards for design and implementation of pop-up and temporary uses will help ensure their ongoing success.

Design and Implementation

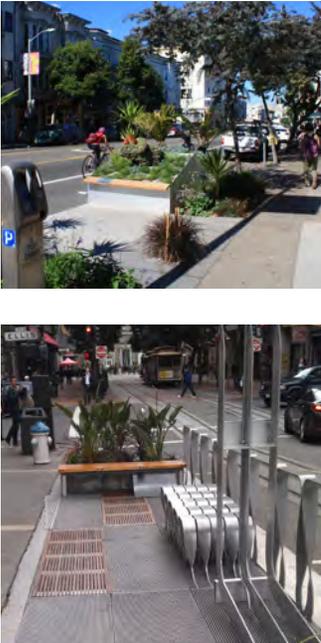
While most public realm investments can take years or even decades to materialize, pop-up and temporary uses can activate the streets nearly overnight. Temporary uses are not only quicker to construct than new development or infrastructure, they also encourage experimentation and imaginative design. They help bring planning for the future from the abstract to the concrete by allowing people to interact with and respond to transformations of the public realm. Further, temporary uses benefit surrounding neighborhoods by spurring economic development and creating fun, relaxing shared spaces.

Creative design is a foundation of pop-up and temporary uses of the street. With temporary uses, communities can suspend the highly functional element of the street in favor of creating a space that is unique and aesthetically appealing. These uses are meant as urban surprises that draw a pedestrian in to linger, socialize, and enjoy the community. By nature, these spaces should be inviting.

Pop-up and temporary uses of the street include:

- Parklets or transformations of parking spaces into public spaces
- Food trucks and other mobile food vendors
- Retail or vending in the public realm or in a shared space on private property
- Bike corrals
- Street redesign
- Public art and performance space

While the various designs of a community use should be unique, some features are consistent. Signage should communicate that the area is available for public use. Like any public space, these spaces should be accessible in compliance with the Americans with Disabilities Act. Also like any public space, temporary uses are required to obtain standard licenses detailed in the City of Concord Municipal Code (mostly covered in Chapters 12.50 and 18.200). Concord can encourage these uses by investigating ways to reduce the number and complexity of licenses, while still ensuring the uses are safe and in the public interest.

Description	Size and Type	Locations	Permitting	Maintenance	Photo
Parklets					
Semi-permanent transformations of parking spaces into public spaces	Total dimensions of one or two parking spaces	Parklets are generally located on low speed streets with high pedestrian volumes installed at least fifteen feet from an intersection. They can also be located in driveways with written consent from property owners.	<p>In Concord, the Superintendent of Streets issues permits for use of the public right-of-way. A vendor operating within a city facility, such as a street, must receive a concessionaire license from the City.</p> <p>Additional permitting could include noticing and insurance requirements. Bay Area cities with parklet programs (San Francisco, Berkeley, and Oakland) have similar requirements for community support in the area surrounding the future parklet. Once community support is demonstrated, parklet applicants are generally required to provide a maintenance plan and to detail a schedule for removal upon permit expiration. Parklet managers are required to carry insurance.</p>	The parklet manager is required to maintain the parklet and the space around it. The parklet itself should be maintained by keeping plants in good health, removing any graffiti, and keeping the structure free of debris, grime, and other litter. Parklets should never impede curbside drainage and the area underneath the structure should be regularly swept and rinsed.	

Description	Size and Type	Locations	Permitting	Maintenance	Photo
Food trucks and other mobile food vendors*					
<p>From the City of Concord Municipal Code:</p> <p>Vendor cart. A small non-motorized vehicle equipped with a container(s) for food, wares, or other merchandise, and/or services offered for sale, barter, or exchange.</p> <p>Vendor motor vehicle. A motor vehicle from which food items, wares, or other merchandise and/or services are offered for sale, barter, or exchange.</p>	<p>Food trucks: total dimensions of one or two parking spaces; Food carts: necessary sidewalk space while allowing a 3-foot clear path and access to surrounding buildings and utilities</p>	<p>Food vendors are generally located on low speed streets with high pedestrian volumes and parked least fifteen feet from an intersection. Food trucks can also be located in driveways with written consent of the relevant property owners.</p>	<p>For individual uses, the City of Concord Municipal Code would need modification to:</p> <ul style="list-style-type: none"> • Allow vending within the Downtown Pedestrian District • Adjust restrictions on food vendor group site locations (especially regarding proximity of parks and ability to park in or block parking) • Apply temporary uses and structures regulations to vendors 	<p>The food truck or cart manager is required to maintain the truck or cart and the space around it. The vehicle itself should be maintained by properly disposing of waste and keeping the area free of grime, debris, and other litter.</p>	 <p>Source: Karlis Dambrans, "Off the Grid: Fort Mason" 2014 (via Flickr)</p>
Retail or vending in the public realm or in a shared space on private property					
<p>See vendor cart and vendor motor vehicle descriptions above.</p>	<p>A temporary retail structure can be as large or small as the space in which it is located.</p>	<p>Temporary retail can be located on carts, under tents on tables, in parklets, in vacant buildings, in buildings during off hours, and more.</p>	<p>The City of Concord Municipal Code will need modification to:</p> <ul style="list-style-type: none"> • Allow vending within the Downtown Pedestrian District • Apply temporary uses and structures regulations to vendors 	<p>Like other temporary uses, retail vendors should maintain a debris-free space. The property on which they locate should be in the same condition when they arrive as when they leave.</p>	

*Individual occurrences are distinct from group events, such as 'Off the Grid,' which are permitted and organized together.

Description	Size and Type	Locations	Permitting	Maintenance	Photo
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Bike corrals

<p>Short-term bicycle parking for numerous bicycles.</p>	<p>Bike corrals can be artistic, unique, and of a variety of sizes or types. With striking design as a priority, bike parking can transform from component to highlight of the street.</p>	<p>Bike corrals can replace vehicle parking or can sit on a sidewalk or walkway large enough to preserve a minimum 3-foot clear path for pedestrians.</p>	<p>Like all bike parking, bike corrals should be located within 50 feet from a building entrance and preferably within view of the entrance.</p>	<p>Bike corrals should be maintained by the City agency that maintains other utilities and features of the public realm.</p>
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Source: VeloBusDriver, April 2009 (via Flickr)

Street redesign

<p>Transformation of the street configuration using temporary materials, such as chalk, cones, potted plants, and seating.</p>	<p>Street redesigns can expand or contract to fit the relevant function and location.</p>	<p>Street redesigns are safest on low traffic but high pedestrian volume streets.</p>	<p>Street redesigns require the same general upkeep during use and upon removal as other temporary uses of the public realm.</p>
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Source: George Kelley, "Latham Square," August 2013 (via Flickr)

Description	Size and Type	Locations	Permitting	Maintenance	Photo
Public art installations and performance space					
<p>A public art installation is any feature meant to enhance the aesthetics of a space as its primary or sole purpose. Performances can include music, theater, dance, magic, or other entertainment.</p>	<p>As small or large scale as can be imagined</p>	<p>Art installations usually benefit from being in the center of a walk space, or at least enabling a 360 degree appreciation. But since art installations can be small or placed on existing components of the street, such as utilities, they can be located anywhere. Performance spaces are slightly less flexible. Music or theater spaces tend to need a projection and a backside space, meaning that they're best organized along wide sidewalks or in parks, as is the Music and Market Series and other festivals in downtown Concord.</p>	<p>The City of Concord Municipal Code would likely classify performances under a Major Temporary Use and would require an administrative permit. Permitting for public art installations would vary widely depending on the purpose, size, and location of the installation.</p>	<p>Art installations and performance spaces require the same general upkeep during use and upon removal as other temporary uses of the public realm.</p>	 <p>[Music and Market photo]</p>

*Individual occurrences are distinct from group events, such as 'Off the Grid,' which are permitted and organized together.



Concord Farmers' Market

5 Accessibility Guidelines

Sidewalks and street crossings are used by a broad cross-section of users and should be designed to accommodate these users' broad range of needs. In fact, all road users are at some point pedestrians crossing or walking along sidewalks. Pedestrians encompass all ages and mobility needs, including people with visual or hearing impairments, people in wheelchairs or using other mobility devices, and people with strollers or carts. Pedestrians range in age from children to the elderly, and have varying walking speeds. Good design can be the first step in creating public spaces accessible to everyone. In addition to the streetscape analysis in previous chapters, especially in the Components of the Street, this chapter highlights issues of particular importance for public realm accessibility and provides more detail where relevant.

Overview

Fundamentally, the basic requirements for accessible design on streets and sidewalks are governed by the Americans with Disabilities Act (ADA). The United States Access Board provides guidelines and standards for the design and implementation of accessible routes. This section of the Design Guidelines aims to re-state a commitment to accessible design in the design of the study corridors.

Sidewalks and Obstructions

The minimum clear path along the sidewalk should be three feet. This standard also applies to driveways and pedestrian islands in street crossings. Driveways should not interrupt the clear path of the sidewalk, ideally allowing a minimum three foot wide continuous and level sidewalk. Pedestrian islands in the middle of an intersection should be a minimum of four feet long and three feet wide. If the island is raised, it should have ramps on either side.

Sidewalks should be kept clean and clear of obstructions, including both obstructions of path surface, such as heaving from tree roots, and obstructions on top of the sidewalk surface, such as brush and other debris. Per the City of Concord Municipal Code, maintenance of the sidewalk is the responsibility of any property

owner whose property is adjacent to or fronts the sidewalk. This responsibility encompasses maintenance of all sidewalk conditions.

Ideally, paving surfaces should designate the clear path by using distinct colors and textures from the furnishings zone, where parking meters, signs, utilities, street furniture, and other possible sidewalk obstructions may be located. The clear path should be a smoother texture than the adjacent areas where obstructions occur.

In addition to the sidewalk surface, the space above the sidewalk should be kept clear. A minimum 7-foot head clearance should be maintained, and no object should protrude more than four inches vertically into the clear path of the sidewalk. Elements that should be kept clear of the walkway include tree branches, leaning tree trunks, signage, awnings, lights, utilities, and street furniture.

Curb Ramp Standards and Placement

A sidewalk or curb ramp allows pedestrians with strollers or carts and people in wheelchairs or with other mobility devices to safely transition from the sidewalk to a crosswalk. Ramps should be installed at any pedestrian crossing. In the direction of pedestrian travel, the ramp should be as gradual as possible, with a slope of 8.3% at most. The cross slope (the slope perpendicular to pedestrian travel) should be no more than 2%.

The ramp should be at least three feet wide, not including the portions of the ramp perpendicular to pedestrian travel where the sidewalk transitions into the ramp (flared sides).

Ramps should alert pedestrians of roadway crossings and guide them safely into the crosswalk. The ramp should have truncated domes in contrasting colors, consistent with City policy, that extend the full width and depth of the ramp, not including the flared sides. On corners with more than one connected crosswalk, a ramp should be installed for each crosswalk. Diagonal ramps angled into the center of the intersection, rather than the center of the crosswalk, are not recommended.

Pedestrian Signals and Pushbuttons

Every signalized intersection with a pedestrian crossing but without an automatic a signal cycle for pedestrians should have a pedestrian crossing pushbutton to activate a pedestrian crossing signal. The pushbutton should be located as close to each curb ramp as possible without interfering with the clear path and should also be no more than three and a half feet high. The control face of the button should be parallel to the direction of the crosswalk to make clearer which crosswalk signal the button activates. The alignment of the front face of the pushbutton should establish an alignment within the width of the crosswalk. The pushbutton should activate an auditory signal,

which should be amplified from the pushbutton unit itself, and should articulate the different cycles of walk or wait. The “wait” cycle signal is to help the blind and visually impaired to locate the crosswalk and pushbutton. The pushbutton, when pushed and held, should identify the street that can be crossed and the parallel street (for instance, “crossing Concord Boulevard along Grant Street”). The pushbutton should vibrate and illuminate when it is time to cross, and the audible signal should contrast with the wait cycle signal.

For any intersection with a pedestrian crossing, auditory communication regarding the signal cycle enhances safety and accessibility for all pedestrians, especially pedestrians with visual impairments. All intersections with pedestrian crossings should have a uniform auditory communications system.

Street Furniture Considerations

In enhancing the streetscape, street furniture should not add barriers to pedestrian travel. The 3-foot clear path should remain clear surrounding street furniture. Set benches and other seating elements 18 inches offset from the minimum clear path so that legs, feet, and bags do not extend into the path. Where possible, alert pedestrians to the presence of street furniture via a change in ground material, and select street furniture colors that contrast with the walk surface. Public realm seating should accommodate wheelchair parking.

Tables should be high enough and drinking fountains low enough for wheelchair access without creating protruding objects. Transit shelters should include wheelchair space next to the bench.



Memorandum

ARUP

To	Joan Ryan	Date	November 6, 2015
Copies		Reference number	242935
From	Dahlia Chazan	File reference	
Subject	Downtown Corridors Plan: Community Workshop 1		

1 Downtown Corridors Workshop Summary

On November 2, 2015, the City of Concord and Arup held the first Downtown Corridors Community Workshop at Salvio Pacheco Square. The purpose of the meeting was to gain input into the opportunities and constraints in designing the public right-of-way along Salvio Street, Grant Street, and Oak Street in the downtown area. Eleven community members attended the meeting.



The meeting kicked-off with a welcome from Project Manager Joan Ryan. Following the welcome, Dahlia Chazan with Arup gave an overview of the Downtown Corridors Plan study area and goals. After the opening remarks, attendees asked questions and provided comments at the following stations:

1. Downtown Specific Plan: Experiencing the New Downtown
2. Ongoing Projects in Downtown Concord
3. Existing Conditions: Pedestrians
4. Existing Conditions: Bicycles
5. Existing Conditions: Autos & Transit
6. Street Furniture and Design Inspiration



2 What We Learned

1. Improving bicycle facilities is a priority. Preferences include:
 - a. Bike lanes protected from vehicle traffic by a parking lane or planter boxes
 - b. Bike lanes or “super sharrows” on the streets bordering Todos Santos Plaza

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- c. Bicycle detection at corridor intersections
 - d. Unique, artistic bike racks in highly visible locations
 - e. Priority to bicyclists and pedestrians on Grant Street
2. Designing for greater safety is important, with priorities such as:
 - a. Safe passage surrounding BART parking lots
 - b. Angled parking on Salvio and Broadway Streets to slow traffic
 - c. Street furniture and landscaping planters with rounded edges
 - d. Better, brighter lighting that is closer to the sidewalk
 - e. Holistically improving safety for Todos Santos Plaza workers and visitors
3. Street furniture should be unique and consistent. Examples include:
 - a. Ornate lighting fixtures
 - b. Trash cans that accommodate recycling
 - c. Parklets and other active, temporary uses
 - d. Chess, checker boards, and other integrated board games
 - e. Public restrooms at Todos Santos Plaza
 - f. Transformation of the decomposed granite on Grant Street into a designed space
 - g. Clearer wayfinding signs and fixtures
4. Community members support narrowing Grant Street.
5. Greater connectivity between Todos Santos Plaza and nearby destinations could help activate the downtown.



Memorandum

ARUP

To	Joan Ryan	Date	February 16, 2016
Copies		Reference number	242935
From	Dahlia Chazan, Tim Bates	File reference	
Subject	Downtown Corridors Plan: Public Meeting 2		

1 Downtown Corridors Meeting Summary

On February 10, 2016, the City of Concord and Arup held the second Downtown Corridors Public Meeting at the Concord Senior Center, a joint event with the related Downtown Bicycle Lanes project. The purpose of the meeting was to gain input into design guidelines for the public right-of-way along the Salvio Street, Grant Street, and Oak Street corridors in the downtown area.



These two projects are related but distinct: the Downtown Corridors project will focus on the overall design of the public realm along the three corridors, while the Downtown Bicycle Lanes project will deliver lane designs for several streets downtown, including portions of Grant Street. The Downtown Corridors plan will provide input to the Downtown Bicycle Lanes project.

The meeting kicked-off with a welcome from Downtown Corridors Project Manager Joan Ryan. Following the welcome, Dahlia Chazan with Arup gave an overview of the Downtown Corridors Plan study area, goals, existing conditions, and design guidelines. Then, Downtown Bicycle Lanes project manager Jeff Rogers summarized that project's initial designs. After the opening remarks, attendees asked questions and provided comments at the following stations:

- Downtown Bike Lanes project initial designs
- Downtown Corridors Plan
 - Zone 1: Salvio West
 - Zone 2: Todos Santos Plaza
 - Zone 3: Central Grant
 - Zone 4: Oak Street/BART Access



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2 What We Learned

1. Building high quality bicycle facilities is a top priority.
 - a. Buffered bike lanes that provide physical protection are preferred, and space for buffers should be reserved where possible.
 - b. Attendees encouraged replacing bicycle “sharrows” with separate bicycle facilities, or the use of “super sharrows” at a minimum.
 - c. Commenters expressed support for bike lanes – or at least conflict zones – to be painted green.
 - d. Wayfinding to destinations, including to bike parking, is needed.
 - e. Bicycle sensors are needed.
 - f. Opinions regarding curb bulb-outs were mixed. Attendees called for them to be either designed as places for people or to be removed in favor of better bicycle facilities.

2. The community wants a more inviting pedestrian environment downtown.
 - a. Attendees called for crosswalks with automated pedestrian signals and pedestrian sensors.
 - b. Attendees supported additional landscaping, rain gardens, and better maintenance for planter boxes and street trees.
 - c. Several commenters noted that sidewalks should be wider throughout the corridors.
 - d. Narrower lanes and raised and/or wider crosswalks could slow traffic and improve pedestrian safety.

3. On-street parking can be a resource for protecting bicyclists and pedestrians.
 - a. On-street parking was a lower priority for many attendees compared to bike lanes.
 - b. If on-street parking is to remain, use it as a protective buffer between bike lanes and vehicle travel lanes – such as on Grant Street near the BART station.



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- c. Diagonal parking could act as a traffic calming mechanism, particularly on Salvio Street west of Galindo.
- 4. Enhancing the vibrancy of Todos Santos Plaza is a priority.
 - a. The community called for more park and pedestrian amenities such as bathrooms, chess/checker tables, and midblock crossings.
 - b. A pedestrian mall (in which no motor vehicle traffic is allowed) on the streets surrounding Todos Santos Plaza could enliven the space for bicyclists and pedestrians.
 - c. Attendees expressed trepidation that the pending redevelopment of the Chevron building could draw activity away from the existing downtown area.