EL CAJON BOULEVARD

Welcome!

Tonight we will be reviewing different proposed alternatives for El Cajon Boulevard from Highland Avenue to 50th Street and need your input on the preferred vision for the corridor.

||||| 08.23.2016 PUBLIC MEETING |||||

ELEMENTS TO KNOW

Bicycle Facilities

Share the Road

Inexpensive and generally requires no capital improvements to the road width. Typically reserved for streets with low traffic volumes and slower speeds as the travel lanes are shared by both vehicles and bicycles. El Cajon Boulevard is currently a "sharrow".

Bus/Bike Shared Lane

Dedicated lane solely for buses and bikes. Accommodate both modes at low speeds, moderate bus headways where buses are discouraged from passing, and bicyclists pass buses only at stops.

Bicycle Lane

Relatively inexpensive bicycle treatment that helps increase safe and convenient cycling. Given roadway conditions, particularly geometry, roadway width, traffic volume, and number of travel lanes, bicycle lanes can be installed economically. Bicycle lanes require 4' of unobstructed space not including the gutter pan.

Cycle Track

Utilizes similar applications as bicycle lanes but include a physical buffer and can facilitate two-way movement within the traveled area. Cycle tracks are often utilized for highly trafficked roads and are good for riders of all comfort levels.

Bicycle Boulevard

Similar to share the road but includes traffic calming devices that help lower the speed of vehicles and increase safety for bicyclists. Bicycle boulevards are being examined for Orange Avenue, Monroe Avenue, and Meade Avenue.

Urban Design Treatments

Full Bulb-Out

Decreases the overall crossing width of a roadway and increases the overall visibility of pedestrians by aligning them with the parking lane. This increases the safety of pedestrians entering the intersections as well as encourages slower turning corridor speeds.

Half Bulb-Out

Aligns pedestrians with the parking lane on the side street. This increases the safety of pedestrians entering the intersection on the side street as well as encourages slower turning speeds.

Parklet

Expansion of the sidewalk into one or more on-street parking spaces to create people-oriented places. Parklets introduce new streetscape features such as seating, planting, bicycle parking, or elements of play.

Monument

An artistic element that can represent the cultural heritage of an area. They can be developed in succession to create a trail. Monuments also help give a sense of place to pedestrians and can serve as wayfiding tools.

Banner

Useful tool in place-making and defining cultural districts. Cost efficient method to inform individuals of their location and helps to visually convey the cultural and historical presence of an area.

Furniture Zone

Section of the sidewalk between the curb and the pedestrian zone in which the street furniture and amenities, such as lighting, benches, newspaper kiosks, utility poles, tree pits, and bicycle parking are provided. The furniture zone may also consist of green infrastructure elements, such as rain gardens.

Rain Garden

Located at bulb-outs to take advantage of rainfall and stormwater runoff in its design and plant selection.

Median Treatments

Center Planted Median

Provides a raised 10' buffer that separates traffic in opposing directions. Plantings, monuments, branding elements are suitable for center planted medians.

Narrow Paved Median

Provides a 4' minimum raised buffer that separates traffic in opposing directions. Typically plantings are not effective in narrow medians.

Two Way Left Turn Lane

Provides shared space for opposing directions of traffic to take left turns. This allows through traffic to continue unobstructed. This application works best in areas with few conflicting driveways.

Double-Double Yellow Stripe

Indicates areas where it is illegal to cross or take left turns, much like a median.

Dedicated Turn Lane

Allows through traffic to continue unobstructed while left turners take advantage of median space.

Parking Accommodations

Angle Parking

Uses slightly more width of the road but allows for more parking per mile. Cars park diagonally to the curb. Typically, angle parking is found on slower-speed and lower-volume streets.

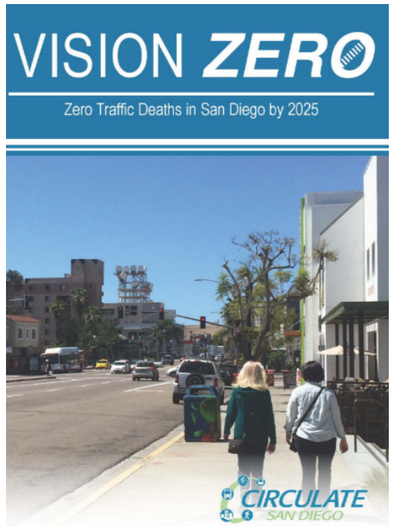
Reverse Angle Parking

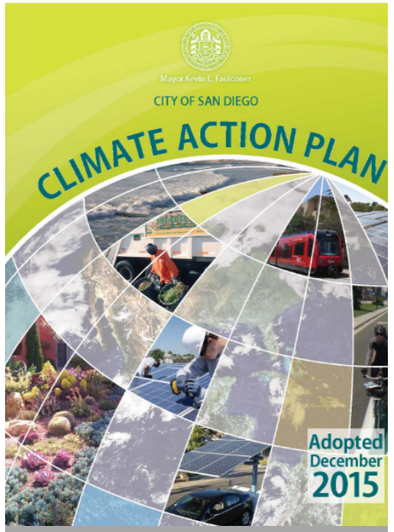
Reverse angle parking can provide additional parking efficiency. Reverse angle parking has been found safer when cyclists are present.

Peak-Hour Travel/Park Lane

A peak-hour only drive lane can operate as a dedicated bus/vehicle lane during high-volume periods and provide general curbside uses at other times. The peak-hour time period for El Cajon Boulevard is 7-9am and 4-6pm.

RELEVANT PROJECT GOALS FROM PREVIOUS PLANS





The City *of* SAN DIEGO

Vision Zero San Diego Goals

- Reduce all traffic fatalities to zero by 2025;
- Reduce dangerous speeding by building traffic calming projects; and
- Simplify the process to implement neighborhood initiated projects.

City of San Diego Climate Action Plan (CAP) Goals

- Increase the use of mass transit;
- Increase commuter walking opportunities;
- Increase commuter bicycling opportunities; and
- Increase urban tree canopy coverage.

City of San Diego General Plan Goals

Land Use and Community Planning Element

- Ensure environmental justice in the planning process through meaningful public involvement.
- Balance individual needs and wants with the public good.
- Implement development policies to protect the public health, safety, and welfare equitably among all segments of the population. Address the needs of those who are disenfranchised in the process.
- Expand public outreach on transportation policy, projects, and operations in order to get input from ethnic minorities, low-income residents, persons with disabilities, the elderly and other under-represented communities. Ensure that people who are directly affected by a proposed action are given opportunities to provide input.

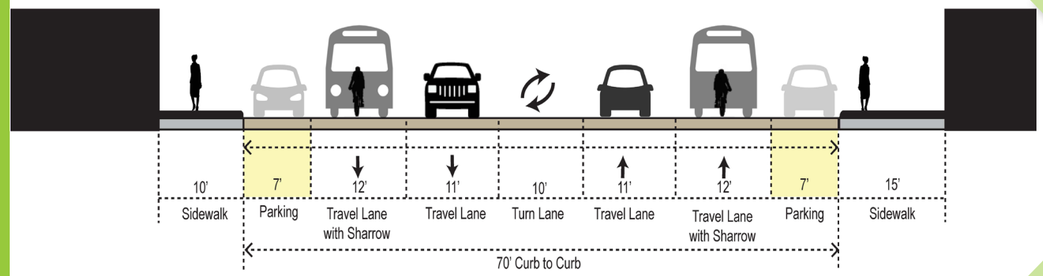
Mobility Element

- Design and operate sidewalks, streets, and intersections to emphasize pedestrian safety and comfort through a variety of street design and traffic management solutions.
- Make sidewalks and street crossings accessible to pedestrians of all abilities.
- Improve walkability through the pedestrian-oriented design of public and private projects in areas where higher levels of pedestrian activity are present or desired.
- Work closely with regional agencies and others to increase transit ridership and mode share through increased transit service accessibility, frequency, connectivity, and availability.
- Make transit planning an integral component of long range planning documents and the development review process.
- Provide adequate capacity and reduce congestion for all modes of transportation on the street and freeway system.
- Design an interconnected street network within and between communities, which includes pedestrian and bicycle access, while minimizing landform and community character impacts.
- Improve operations and maintenance on City streets and sidewalks.
- Implement best practices for multi-modal quality/level of service analysis guidelines to evaluate potential transportation improvements from a multimodal perspective in order to determine optimal improvements that balance the needs of all users of the right of way.
- Emphasize the movement of people rather than vehicles.
- Promote the most efficient use of the City's existing transportation network.
- Identify and implement a network of bikeways that are feasible, fundable, and serve bicyclists' needs, especially for travel to employment centers, village centers, schools, commercial districts, transit stations, and institutions.
- Maintain and improve the quality, operation, and integrity of the bikeway network and roadways regularly used by bicyclists.
- Provide safe, convenient, and adequate short and long-term bicycle parking facilities and other bicycle amenities for employment, retail, multifamily housing, schools and colleges, and transit facility uses.
- Provide and manage parking so that it is reasonably available when and where it is needed.
- Implement innovative and up-to-date parking regulations that address the vehicular and bicycle parking needs generated by development.
- Support innovative programs and strategies that help to reduce the space required for, and the demand for parking.

Urban Design Element

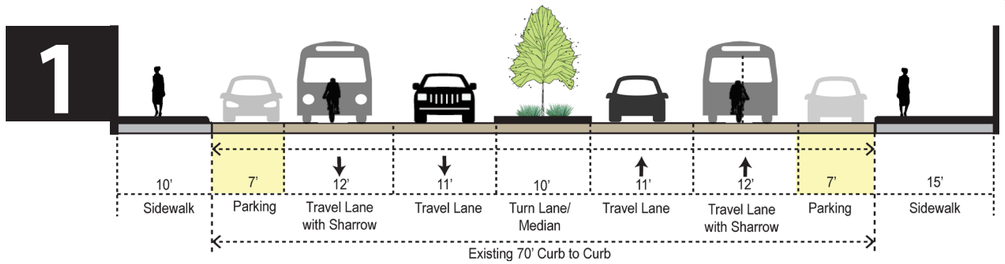
- Landscape materials and design should enhance structures, create and define public and private spaces, and provide shade, aesthetic appeal, and environmental benefits.
- Design or retrofit streets to improve walkability, bicycling, and transit integration; to strengthen connectivity; and to enhance community identity.
- Minimize the visual and functional impact of utility systems and equipment on streets, sidewalks, and the public realm.
- Design or retrofit streets to improve walkability, strengthen connectivity, and enhance community identity.
- Enhance the public streetscape for greater walkability and neighborhood aesthetics.
- Include public plazas, squares or other gathering spaces in each neighborhood and village center
- Integrate public art and cultural amenities that respond to the nature and context of their surroundings. Consider the unique qualities of the community and the special character of the area in the development of public art and programming for cultural amenities
- Use public art and cultural amenities to celebrate San Diego's diversity, history, and unique character.

EXISTING CONDITIONS



CONDITIONS	Performance	Benefits	Benefits	Drawbacks
Pedestrian crossing El Cajon Boulevard (ECB)	POOR			• Wide crossing distances. • No pedestrian refuge areas. • Spacing between controlled crossings (in some areas).
Pedestrian Mobility along ECB	FAIR	• Protected by signals or stop signs at side streets. • Parked vehicles act as buffer between pedestrians and traffic.	• Protected by signals or stop signs at side streets. • Parked vehicles act as buffer between pedestrians and traffic.	• Sidewalk conditions are poor in parts of the corridor (too narrow, cracked, uneven.) • Wide side-street crossing distances. • Unrestricted left turn movements create additional conflicts for autos, bikes, and pedestrians.
Bike Mobility	POOR			• Bikes were observed on the sidewalk. • High "Level of Stress" rating. • Limited spaces creates conflict with traffic, transit, and parked vehicles. • Signed Sharrow.
Transit Mobility	FAIR	• Bus Rapid Transit (BRT) RAPID route. • High use local transit service.	• Bus Rapid Transit (BRT) RAPID route. • High use local transit service.	• Poor transit stop connectivity. • Stop amenities only include signed bus stop and bench in some locations.
Vehicle Mobility	FAIR	• Four lanes of traffic. • Center turning lane accommodates traffic.	• Four lanes of traffic. • Center turning lane accommodates traffic.	• High traffic volume with unrestricted access reduces capacity and safety for all road users (bicycles, pedestrians and autos).
Safety	POOR	• Traffic signals are generally equally spaced.	• Traffic signals are generally equally spaced.	• Bicycles operate in mixed traffic. •Pedestrian fatality crashes high on roadway.
Urban Design Conditions	GOOD	• Some space is available for street furniture and plantings.	• Some space is available for street furniture and plantings.	• Some constrained locations. • Space is underutilized. • Limited vegetation / trees in the corridor.
Constructability	N/A	N/A	N/A	N/A
Parking	FAIR	• Both sides of street accommodate on-street parallel parking.	• Both sides of street accommodate on-street parallel parking.	• Little Saigon District has identified desire for more parking.

PROPOSED ALTERNATIVES



Four travel lanes, raised median, left turn pockets at signalized intersections, sharrows for bicycles, maintains on-street parking.

A center raised median is provided to improve vehicular, bicycle, and pedestrian safety by eliminating all left turn conflicts between signalized intersections while improving the aesthetics in the corridor. Curb extensions are provided to improve visibility of pedestrians, reduce crossing distances, and further calm traffic. On-street parking and the bicycle sharrows are maintained. This alternative provides opportunities for landscaping and urban design features in the median and on both sides of the street.

CONDITIONS	Performance	Benefits	Drawbacks	Trade-Offs	Change From Existing
Pedestrian crossing El Cajon Boulevard (ECB)	GOOD	• Enhanced "continental" crosswalks for better visiblity. • Pedestrian refuge areas in the median reducing exposure time. • Bulb-outs reduce exposure time and improve visibility.		• Bulb-outs prevent biking along curb when no vehicles are parked.	↑
Pedestrian along ECB	GOOD	• Enhanced "continental" crosswalks for better visiblity. • Bulb-outs reduce exposure time and improve visibility. • Parked vehicles add buffer for pedestrians from traffic.			↑
Bike Mobility	FAIR		• Does not provide a separate bicycle facility in both directions. • Signed Sharrow.	• Bicycle facility doesn't impact other corridor needs.	↑
Transit Mobility	FAIR	• Median improves traffic operations.			↑
Vehicle Mobility	FAIR	• Median improves traffic operations.			↑
Safety	FAIR	• Median eliminates conflicts with left turning traffic for all modes except at signalized intersections. • Bulb-out improves pedestrian safety.			↑
Urban Design Conditions	GOOD	• Potential for plantings in parking areas. • Center planted median.			↑
Constructability	GOOD	•Generally low cost, only requires striping changes. • Existing utilities not impacted.	•Signal Modifications for bicycle detection and timing.		N/A
Parking	GOOD	• Both sides of the street accommodate on-street parallel parking. • Additional angled parking to the north along Highland.			=

PROPOSED ALTERNATIVES

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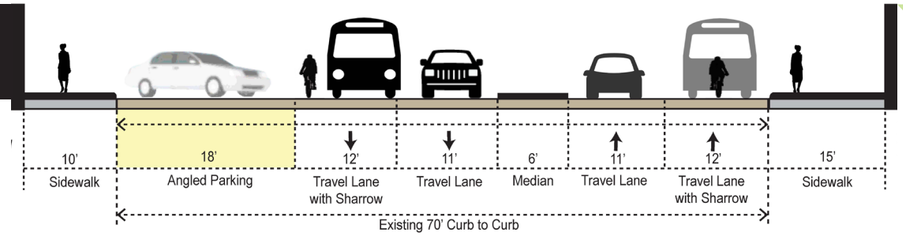

This alternative removes parking on the north side of the street and provides back-in angled parking on the south side of the street in areas where parking has been stated to be in short supply within the Little Saigon District. The median eliminates left turn conflicts between intersections but the width does not provide for a full pedestrian refuge area and reduces potential for landscaping and other urban design features in the median. Additional opportunities for landscaping and urban design features are limited to the south side of the street within the Little Saigon District. In this alternative, sharrows are provided for bicycles.

Four travel lanes, raised median, left turn pockets at signalized intersections, back in angled parking on south side of street and no parking on north side of street in Little Saigon District, sharrows for bicycles.

CONDITIONS	Performance	Benefits	Drawbacks	Trade-Offs	Change From Existing
Pedestrian crossing El Cajon Boulevard (ECB)	GOOD	• Enhanced "continental" crosswalks for better visiblity. • Pedestrian refuge areas at side streets reduce exposure time. • Bulb-outs near angled parking areas only reduce exposure time and improve visibility.	• Bulb-outs only on south side.		↑
Pedestrian along ECB	GOOD	• Enhanced "continental" crosswalks for better visiblity. • Bulb-outs on both sides of street reduce exposure time and improve visibility. • Parked vehicles add buffer for pedestrians from traffic on one side of street.		•Lose parked vehicle buffer for pedestrians on north side of ECB.	↑
Bike Mobility	POOR		• Does not provide separate bicycle facility in both directions. • Signed Sharrow.	• Angled parking space requires use of cycle track/bike lane space, and reduces space for planted median.	↑
Transit Mobility	FAIR	• Median improves mobility by eliminating conflicting movements.	• Transit operations potentially impacted by angled parking maneuvers.		↓
Vehicle Mobility	GOOD	• Median improves mobility by eliminating conflicting movements.	• The number of angled parking stalls will be reduced due to the transition area required for left-turn lanes at the signalized intersections.		↑
Safety	FAIR	• Bicycle/parking conflicts reduced on one side. • Median improves corridor safety by eliminating all left turn conflict points except at signalized intersections. • Bulb-out improves pedestrian safety.	• Angled parking conflicts with sharrow.		↑
Urban Design Conditions	GOOD	• Angled parking area has greater potential for planters in no-parking zones.	• North side of street has little to no opportunity for bulb outs and planters within the curbed area.	• Planter areas are reduced on North side.	↑
Constructability	FAIR	• Existing utilities not impacted.	• Offset roadway. • Requires signal modifications. • Median Construction. •Signal Modifications for bicycle detection and timing.	• Narrower median reduces stormwater management opportunities.	N/A
Parking	GOOD	• Slight net gain in parking (9 spaces) • Additional angled parking to the north along Highland.	• Parking only on one side of street within the Little Saigon District. • Deviate to other alternative outside of Little Saigon District.	• Angled parking on one side requires narrower median and parking removed on one side.	↑

PROPOSED ALTERNATIVES

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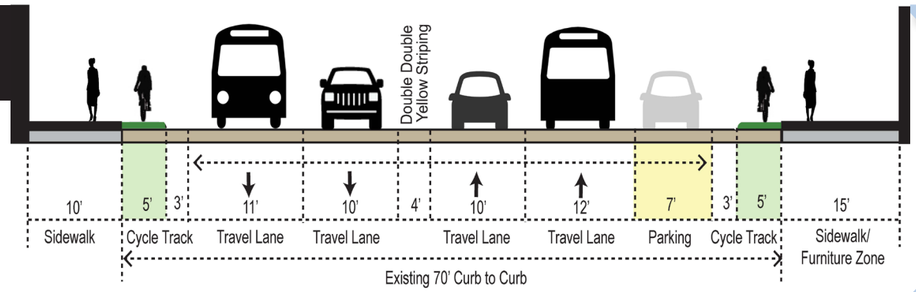
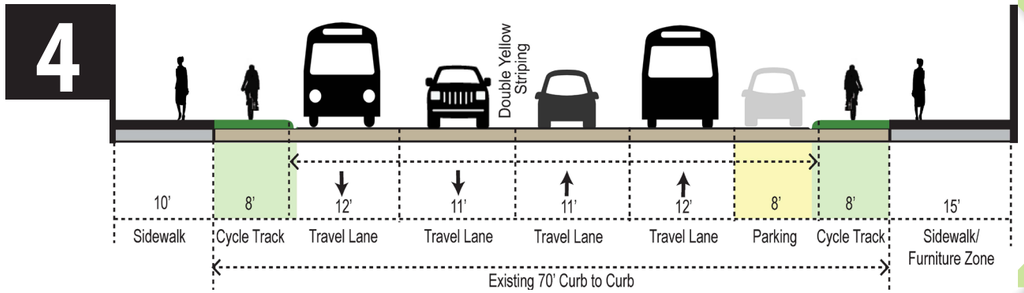


Alternative 3 removes parking from one side of the street, and restricts all left-turns to signalized intersections. This alternative provides for one-way cycle tracks within the existing curb-to-curb area. Left turn pockets at signalized intersections would require additional parking removal. This alternative is not supported by the City due to safety concerns because cyclists and pedestrians would not be protected by the painted median from left turning vehicles or when crossing El Cajon Boulevard. This alternative provides opportunities for additional landscaping and urban design features only on one side of the street.

Four travel lanes, four-foot painted median, left turns at signalized intersections, no parking on one side of street, one-way cycle track on each side of street.

CONDITIONS	Performance	Benefits	Drawbacks	Trade-Offs	Change From Existing
Pedestrian crossing El Cajon Boulevard (ECB)	POOR	• Enhanced "continental" crosswalks for better visiblity.	• No pedestrian refuge areas.	• Cycle track limits bulb-outs on one side of street.	↓
Pedestrian along ECB	FAIR	• Enhanced "continental" crosswalks for better visiblity. • Bulb-outs reduce exposure time and improve visibility.	• Pedestrians must cross cycle track from parked vehicles. • Painted median does not prevent left-turn conflicts even though they are restricted.		↑
Bike Mobility	FAIR	• 8' cycle track on both sides extending off curb.	• Not protected at alleys and driveways.	• Cycle track does not operate safely without raised median.	=
Transit Mobility	GOOD	• Bikes no longer mixed with transit vehicles in roadway.			↑
Vehicle Mobility	POOR		• No center median. • Left turns only at signalized intersections.	• Potential to divert traffic towards residential streets that are designated bike boulevards.	↓
Safety	POOR	• Separate facilities for bicycles and pedestrians.	• Potential to divert traffic towards residential streets that are designated bike boulevards. • Painted medians do not prevent left turn conflicts. • All modes at higher conflict risk.	• No median reduces safety for all road users.	↓
Urban Design Conditions	FAIR	• Space available on parking side for street furniture and vegetation.	• Reduced opportunities for planters. • No median planters.	• Cycle track limits planted curb extensions, bulb-outs and furniture zone amenities.	↓
Constructability	FAIR	• Minimal relocation of utilities. • Cycle track within existing curbs.	• Requires reworking ADA ramps and driveway aprons. •Signal Modifications for bicycle detection and timing.	• Reduced stormwater management opportunities.	N/A
Parking	FAIR	• Parking is accommodated on one side of the street. • Additional angled parking to the north along Highland.		• Reduces parking on one side.	↓

PROPOSED ALTERNATIVES



Alternative 4 removes parking from one side of the street, and provides one-way cycle tracks within the existing curb-to-curb area. This alternative is not supported by the City due to safety concerns with left-turning traffic and lack of refuge area for pedestrians and cyclists crossing El Cajon Boulevard. This alternative provides opportunities for landscaping and urban design features only on one side of the street.

Four travel lanes, double yellow line, left turns at signalized intersections, no parking on one side of street, one-way cycle track on each side of street.

CONDITIONS	Performance	Benefits	Drawbacks	Trade-Offs	Change From Existing
Pedestrian crossing El Cajon Boulevard (ECB)	GOOD	• Enhanced "continental" crosswalks for better visiblity.	• No pedestrian refuge areas.	• Cycle track limits bulb-outs.	↓
Pedestrian along ECB	FAIR	• Enhanced "continental" crosswalks for better visiblity. • Bulb-outs reduce exposure time and improve visibility.			↑
Bike Mobility	POOR	• 8' cycle track on both sides extending off curb.	• Not protected at alleys and driveways. •Exposure to left turns at all driveways and alleys	• With no median, cycle track is exposed to turning traffic.	↓
Transit Mobility	FAIR	• Bikes no longer mixed with buses. • Fewer conflicts between parking vehicles and buses on one side of the roadway.			=
Vehicle Mobility	POOR		• No center median. • Limits but does not prevent left turn conflicts in and out of driveways along the corridor.	• Cycle track versus left-turn lanes.	↓
Safety	POOR		• Does not prevent left turn conflicts at driveways along the corridor. •No separation/buffer between opposing travel directions. • All modes at higher conflict risk.	• No median reduces safety for all road users.	↓
Urban Design Conditions	POOR	• Space available on parking side for street furniture and vegetation.		• Cycle track limits planted curb extensions, bulb-outs and furniture zone amenities.	↓
Constructability	FAIR	• Minimal relocation of utilities. •Generally low cost striping improvements. • Cycle track within existing curb.	• Requires reworking ADA ramps and driveway aprons. • Requires signal modifications. •Signal Modifications for bicycle detection and timing.	• Reduced stormwater management opportunities.	N/A
Parking	FAIR	• Parking is accommodated on one side of the street. • Additional angled parking to the north along Highland.	• Parking not accommodated on both sides of the street.	• Reduces parking on one side and at intersections to accommodate left-turn lanes.	↓

PROPOSED ALTERNATIVES

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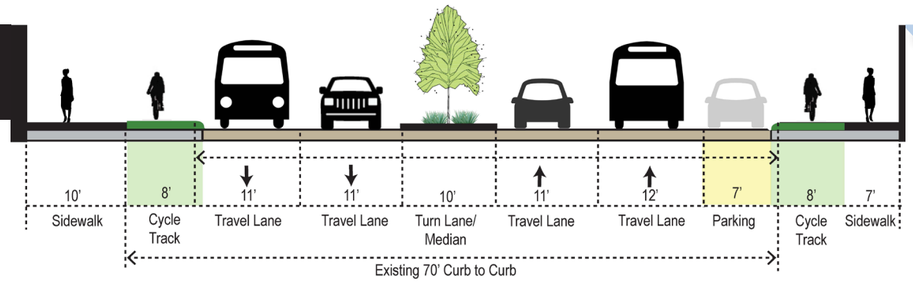

This alternative removes parking on one side of the street, and cycle tracks are provided. A center raised median is provided to improve safety by eliminating all left turn conflicts between signalized intersections while improving the aesthetics in the corridor. This alternative provides opportunities for landscaping and urban design features in the median and requires a reduction in the pedestrian space and relocation of utilities and other conflicts in the sidewalk on one side of the street.

Four travel lanes, raised median, left turn pockets at signalized intersections, no parking on one side of street and reduced sidewalk width on other side of street to provide one-way cycle tracks.

CONDITIONS	Performance	Benefits	Drawbacks	Trade-Offs	Change From Existing
Pedestrian crossing El Cajon Boulevard (ECB)	POOR	• Enhanced "continental" crosswalks for better visiblity. • Pedestrian refuge areas at side streets reduces exposure time.	• Cycle track limits bulb-outs.	• Cycle track limits bulb-out areas.	↑
Pedestrian along ECB	FAIR	• Enhanced "continental" crosswalks for better visiblity. • Median eliminates left turn in and out conflicts with pedestrians at driveways, alleys, and unsignalized intersections. • Bulb-outs reduce exposure time and improve visibility.	• Cycle track reduces sidewalk width on specific sections along ECB	• Cycle track reduces pedestrian space on one side of the street.	↑
Bike Mobility	POOR	• 8' cycle track on both sides extending off curb. •Median eliminates left turn conflicts from vehicles entering and exting driveways, alleys, and unsignalized intersections.			↑
Transit Mobility	FAIR	•Median improves transit operations. •Separated bicycle facility improves transit operations.			↑
Vehicle Mobility	FAIR	• Median improves traffic operations.			↑
Safety	GOOD	• Median improves corridor safety by reducing conflict points for vehicles, pedestrians, transit, and bicyclists. •Median reduces pedestrian exposure time. • Cycle Track improves the safety of bicyclists by removing them from vehicular traffic.			↑
Urban Design Conditions	FAIR	• Center planted median.	• Planter areas separated from pedestrians. • Limits parklet opportunities.	• Cycle track limits planted curb extensions, bulb-outs and furniture zone amenities.	=
Constructability	GOOD	• Cycle track extends off existing curb on north side from Highland to Menlo, and on south side from Menlo to 50th.	• Relocation of some utilities will be necessary. • Reduced stormwater management opportunities. • Construct median. • Requires reworking ADA ramps and driveway aprons. • Requires signal modifications. •Signal Modifications for bicycle detection and timing.		N/A
Parking	FAIR	• Parking is accommodated on one side of the street. • Additional angled parking to the north along Highland.	• Slight reduction in low use parking stalls		↓

PROPOSED ALTERNATIVES

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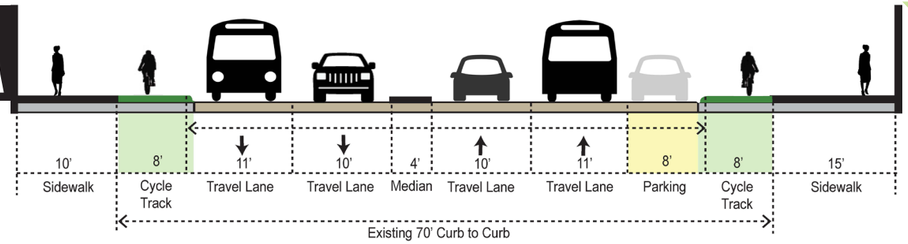
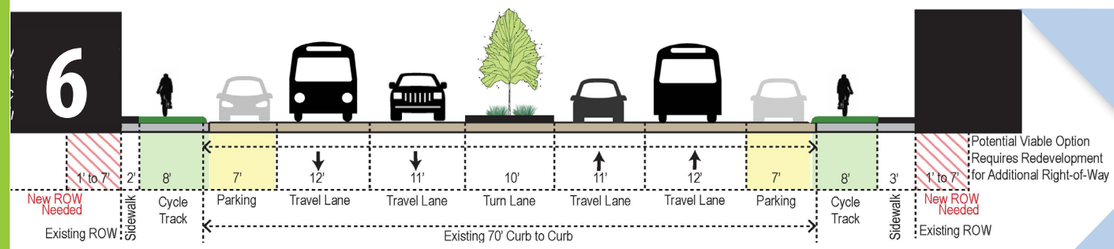


This alternative removes parking on one side of the street, and cycle tracks are provided. A center raised median is provided to improve safety by eliminating all left turn conflicts between signalized intersections. Left turns are provided at signalized intersections. By shifting the lanes and removing parking, a 10' turning lane is accommodated.

Four travel lanes, raised median,left turns at signalized intersections, no parking on one side of street.

CONDITIONS	Performance	Benefits	Drawbacks	Trade-Offs	Change From Existing
Pedestrian crossing El Cajon Boulevard (ECB)	POOR	• Enhanced "continental" crosswalks for better visiblity. • Pedestrian refuge areas at side streets reduces exposure time.	• Cycle track limits bulb-outs.	• Cycle track limits bulb-out areas.	↑
Pedestrian along ECB	FAIR	• Enhanced "continental" crosswalks for better visiblity. • Median eliminates left turn in and out conflicts with pedestrians at driveways, alleys, and unsignalized intersections. • Bulb-outs reduce exposure time and improve visibility.	• Cycle track reduces sidewalk width on specific sections along ECB	• Cycle track reduces pedestrian space on one side of the street.	↑
Bike Mobility	POOR	• 8' cycle track on both sides extending off curb. •Median eliminates left turn conflicts from vehicles entering and exting driveways, alleys, and unsignalized intersections.		• Best application is east of Euclid Avenue due to incline of street and long proposed median to the east..	↑
Transit Mobility	FAIR	•Median improves transit operations. •Separated bicycle facility improves transit operations.			↑
Vehicle Mobility	FAIR	• Median improves traffic operations.			↑
Safety	GOOD	• Median improves corridor safety by reducing conflict points for vehicles, pedestrians, transit, and bicyclists. •Median reduces pedestrian exposure time. • Cycle Track improves the safety of bicyclists by removing them from vehicular traffic.			↑
Urban Design Conditions	FAIR	• Center planted median.	• Planter areas separated from pedestrians. • Limits parklet opportunities.	• Cycle track limits planted curb extensions, bulb-outs and furniture zone amenities.	=
Constructability	FAIR	• Cycle track extends off existing curb on north side from Highland to Menlo, and on south side from Menlo to 50th.	• Relocation of some utilities will be necessary. • Reduced stormwater management opportunities. • Construct median. • Requires reworking ADA ramps and driveway aprons. • Requires signal modifications. •Signal Modifications for bicycle detection and timing. •Offset centerline..		N/A
Parking	FAIR	• Parking is accommodated on one side of the street. • Additional angled parking to the north along Highland.	• Slight reduction in low use parking stalls. • Parking at left-turn bays and transitions would be removed. • Greatest parking loss west of 47th Street..	• Total loss of 15 spaces if alternative is just applied east of Euclid	↓

PROPOSED ALTERNATIVES



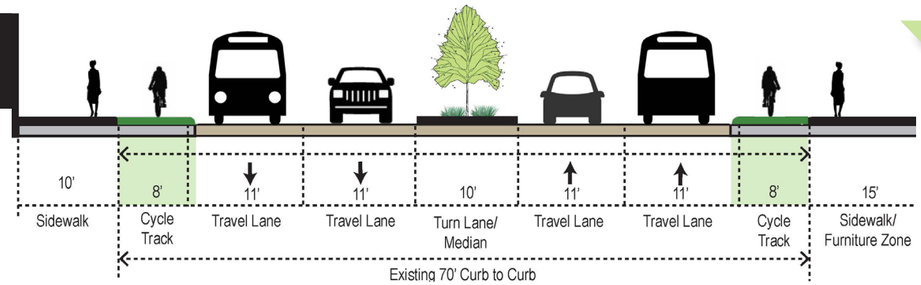
This alternative relies upon redevelopment in the corridor to accommodate the desired pedestrian, bicycle, and transit facilities, and the needed vehicle lanes to accommodate traffic that utilizes the corridor today. This alternative provides opportunities for landscaping and urban design in the median and on both sides of the street.

Four travel lanes, raised median, left turn pockets at signalized intersections, maintains on-street parking, additional right-of-way needed to provide cycle tracks and sidewalks outside the existing curb-to-curb area.

CONDITIONS	Performance	Benefits	Drawbacks	Trade-Offs	Change From Existing
Pedestrian crossing El Cajon Boulevard (ECB)	GOOD	• Enhanced "continental" crosswalks for better visiblity. • Pedestrian refuge areas at side streets reduces exposure time. • Bulb-outs reduce exposure time and improve visibility.			↑
Pedestrian along ECB	GOOD	• Enhanced "continental" crosswalks for better visiblity. • Bulb-outs reduce exposure time and improve visibility. • Parked vehicles add buffer for pedestrians from traffic. •Median eliminates left turn conflicts with pedestrians at driveways , alleys, and unsignalized intersections.	• Reduced pedestrian space in some areas, dependent upon redevelopment.		↑
Bike Mobility	FAIR	• 8' cycle track on both sides built into existing sidewalk. • Median eliminates left turn conflicts at intersections.	• Cycle track requires space outside of curb.	• Timing of redevelopment is typically not the same, so cycle track implementation may be delayed.	↑
Transit Mobility	FAIR	• Median provides mobility improvement.			↑
Vehicle Mobility	FAIR	• Median improves traffic operations.			↑
Safety	GOOD	• Median improves corridor safety by reducing conflict points for all modes and reducing exposure time for pedestrians. • Bulb-out improves pedestrian safety. • Cycle Track improves the safety of bicyclists by removing them from vehicular traffic.			↑
Urban Design Conditions	GOOD	• Potential for plantings in parking areas. • Center planted median.	• Timing of urban design treatments may lead to improvement inefficiencies.	• Cycle track limits planted curb extensions, bulb-outs and furniture zone amenities.	↑
Constructability	POOR		• Relocation of some utilities will be necessary. • Requires redevelopment for additional right-of-way. • Construction of median • Requires reworking ADA ramps and driveway aprons. • Requires signal modifications. •Signal Modifications for bicycle detection and timing.	• Timing of redevelopment is typically not the same. • Requires phased implementation based on market.	N/A
Parking	GOOD	• Both sides of the street accommodate on-street parallel parking. • Additional angled parking to the north along Highland.			=

PROPOSED ALTERNATIVES

7



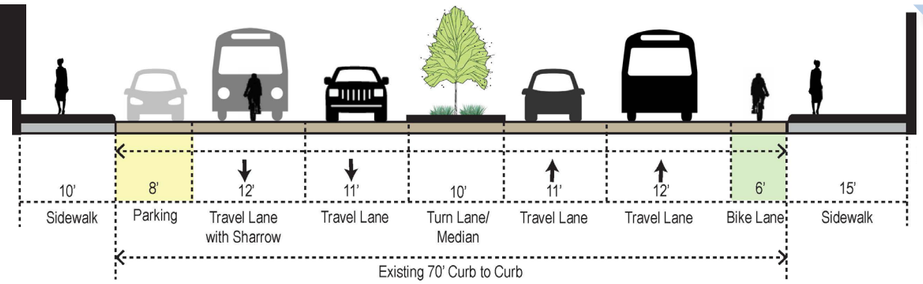
This alternative removes all parking on the corridor and re-purposes that space with one way cycle tracks. Additionally, a center raised median is provided to improve safety by eliminating all left turn conflicts between signalized intersections while also providing the opportunity for landscaping and urban design features.

Four travel lanes, raised median, left turn pockets at signalized intersections, no on-street parking on El Cajon Boulevard, one-way cycle tracks within the existing curb-to-curb area.

CONDITIONS	Performance	Benefits	Drawbacks	Trade-Offs	Change From Existing
Pedestrian crossing El Cajon Boulevard (ECB)	FAIR	• Enhanced "continental" crosswalks for better visiblity. • Pedestrian refuge areas at side streets reduce exposure time and improve visibility.	• Bike lane limits bulb-outs.	• Bike lane limits bulb-outs.	↑
Pedestrian along ECB	GOOD	• Enhanced "continental" crosswalks for better visiblity. • Bulb-outs reduce exposure time and improve visibility. • Bike lane add buffer for pedestrians from traffic reducing exposure time. • Median eliminates left turn conflicts at driveways, alleys, and unsignalized intersections.			↑
Bike Mobility	GOOD	• 8' cycle track on both sides extending off curb. • No conflict between parked vehicles and bike lane. • Median eliminates left turn conflicts at driveways, alleys, and unsignalized intersections.			↑
Transit Mobility	FAIR	• No conflict between parking and transit vehicles. • Median improves transit operations. • Conflict with bicyclists is eliminated due to separated bicyclist facility.			↑
Vehicle Mobility	POOR	• Median improves traffic operations.			↑
Safety	GOOD	• Median improves corridor safety by reducing conflict points for all modes. • Cycle Track improves the safety of bicyclists by removing them from vehicular traffic.			↑
Urban Design Conditions	GOOD	• Center planted median.	• Limits parklet opportunities.	• Cycle track limits planted curb extensions, bulb-outs and furniture zone amenities.	=
Constructability	FAIR	• Minimal relocation of utilities • Generally low cost restriping of roadway	• Reduced stormwater management opportunities. • Construct median. • Requires reworking ADA ramps and driveway aprons. • Requires signal modifications. •Signal Modifications for bicycle detection and timing.		N/A
Parking	POOR	• Additional angled parking to the north along Highland.	• No on-street parking		↓

PROPOSED ALTERNATIVES

8



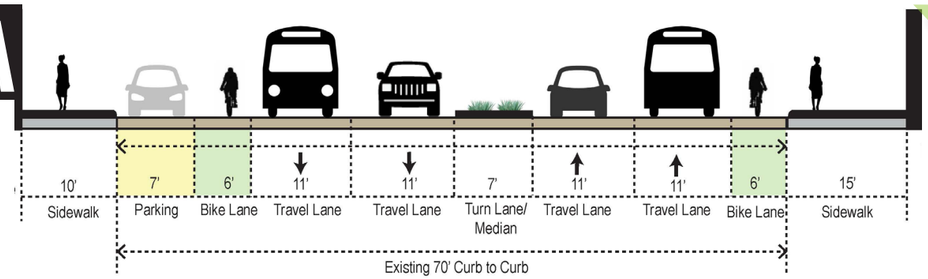
This alternative removes parking from one side of the street and re-purposes that space for an on-street bicycle lane. The opposite side of the street is maintained as a sharrow facility with bicycles in mixed traffic. This alternative has the greatest potential to be effective in the area where the elevation changes along El Cajon Boulevard east of Euclid Avenue. Additionally, a center raised median is provided to improve safety by eliminating all left turn conflicts between signalized intersections while improving the aesthetics in the corridor. This alternative provides opportunities for landscaping and urban design features in the median and on one side of the street.

Four travel lanes, raised median, left turn pockets at signalized intersections, no parking on one side of street, eastbound bicycle lane and westbound sharrows within the existing curb-to-curb area.

CONDITIONS	Performance	Benefits	Drawbacks	Trade-Offs	Change From Existing
Pedestrian crossing El Cajon Boulevard (ECB)	FAIR	• Enhanced "continental" crosswalks for better visiblity. • Pedestrian refuge areas at side streets reducing exposure time and improve visibility. • Bulb-outs on one side of ECB reduce exposure time.	• Removes a buffer (parked cars) between pedestrians and traffic on one side of street.	• Bike lane limits bulb-outs on one side of street.	↑
Pedestrian along ECB	GOOD	• Enhanced "continental" crosswalks for better visiblity. • Bulb-outs reduce exposure time and improve visibility. • Parking and bike lane provide buffer for pedestrians from traffic reducing exposure time. • Preserves existing sidewalk / furniture area. • Median eliminates left turn conflicts at driveways alleys, and unsignalized intersections.			↑
Bike Mobility	FAIR	• Signed Sharrow WB • 6' bike lane EB • Median eliminates left turn conflicts at driveways, alleys, and unsignalized intersections.		• Best application is east of 47th Street due to incline of street. • Does not provide separated bicycle facility in both directions.	↑
Transit Mobility	FAIR	• Bus Rapid Transit (BRT) Route. • Active local transit route. • Parking conflicts removed from one side.			↑
Vehicle Mobility	FAIR	• Parking obstructions removed from one side. • Median provides vehicle operations improvement.			↑
Safety	FAIR	• Median improves corridor safety by reducing conflict points. • Bulb-out improves pedestrian safety. • Bike lane improves bicyclist safety in uphill direction.	• Bicycles operate in shared space in one direction.		↑
Urban Design Conditions	FAIR	• Curb to ROW area preserved for urban design treatments. • Center planted median.	• Bike lane side-of-street reduces bulb-outs and planter/parklet opportunities.	• Curb-extension planters and bulb-outs for ECB crossings/plantings are limited on one side of street.	=
Constructability	GOOD	• Low cost restriping of roadway. • Existing utilities not impacted.	• Construct median. • Requires reworking ADA ramps and driveway aprons. • Requires signal modifications. •Signal Modifications for bicycle detection and timing.		N/A
Parking	FAIR	• Parking is accommodated on one side of the street. • Additional angled parking to the north along Highland.	• Reduction in low use parking stalls.	• Potential for more pedestrians to need to cross ECB due to parking only on one side.	↓

PROPOSED ALTERNATIVES

8A



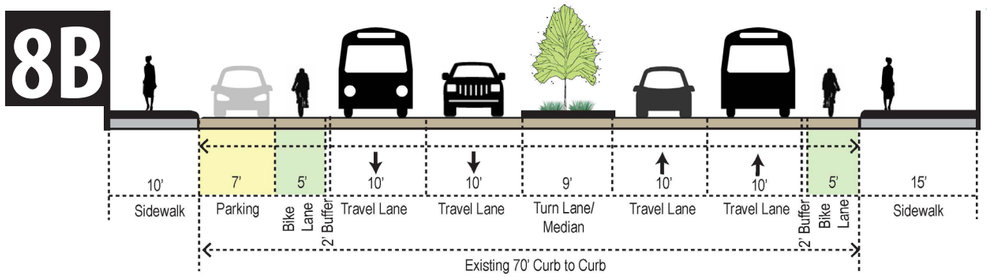
Four travel lanes, raised median, left turn pockets at signalized intersections, no parking on one side of street, bicycle lanes within the existing curb-to-curb area.

This alternative removes parking from one side of the street and re-purposes that space for an on-street bicycle lane. The opposite side of the street becomes a bicycle lane with parking. Additionally, a center raised median is provided to improve safety by eliminating all left turn conflicts between signalized intersections while improving the aesthetics in the corridor. Shifting the median to accommodate a 10' turning lane will require 86' of space in addition to the 80' turning bay storage space. Approximate total loss of parking stalls east of Euclid is 6 spaces. This alternative provides opportunities for landscaping and urban design features in the median and on one side of the street.

CONDITIONS	Performance	Benefits	Drawbacks	Trade-Offs	Change From Existing
Pedestrian crossing El Cajon Boulevard (ECB)	FAIR	• Enhanced "continental" crosswalks for better visiblity. • Pedestrian refuge areas at side streets reducing exposure time and improve visibility. • Bulb-outs on one side of ECB reduce exposure time.	• Removes a buffer (parked cars) between pedestrians and traffic on one side of street.	• Bike lane limits bulb-outs on one side of street.	↑
Pedestrian along ECB	GOOD	• Enhanced "continental" crosswalks for better visiblity. • Bulb-outs reduce exposure time and improve visibility. • Parking and bike lane provide buffer for pedestrians from traffic reducing exposure time. • Preserves existing sidewalk / furniture area. • Median eliminates left turn conflicts at driveways alleys, and unsignalized intersections.			↑
Bike Mobility	GOOD	• 6' bike lanes • Median eliminates left turn conflicts at driveways, alleys, and unsignalized intersections.		• Best application is east of Euclid Avenue due to incline of street and long proposed median to the east.	↑
Transit Mobility	FAIR	• Bus Rapid Transit (BRT) Route. • Active local transit route. • Parking conflicts removed from one side.			↑
Vehicle Mobility	FAIR	• Parking obstructions removed from one side. • Median provides vehicle operations improvement.		• Turning lane causes reduction in parking stalls near signalized intersection.	↑
Safety	GOOD	• Median improves corridor safety by reducing conflict points. • Bulb-out improves pedestrian safety. • Bike lane improves bicyclist safety in uphill direction.			↑
Urban Design Conditions	FAIR	• Curb to ROW area preserved for urban design treatments. • Center planted median.	• Non-parking side-of-street reduces bulb-outs and planter/parklet opportunities. • Narrower median may limit plant options..	• Curb-extension planters and bulb-outs for ECB crossings/plantings are limited on one side of street.	=
Constructability	GOOD	• Low cost restriping of roadway. • Existing utilities not impacted.	• Construct median. • Requires reworking ADA ramps and driveway aprons. • Requires signal modifications. •Signal Modifications for bicycle detection and timing.	•Requires deviation from City design standard.	N/A
Parking	POOR	• Parking is accommodated on one side of the street. • Additional angled parking to the north along Highland.	• Reduction in low use parking stalls. • Parking at left-turn bays and transitions would be removed. • Greatest parking loss west of 47th Street.	• Potential for more pedestrians to need to cross ECB due to parking only on one side. • Total loss of 6 spaces if alternative is applied east of Euclid	↓

PROPOSED ALTERNATIVES

8B

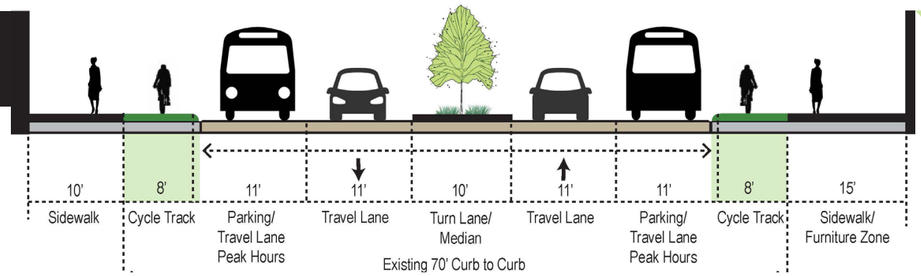


Four travel lanes, raised median, left turn pockets at signalized intersections, no parking on one side of street, bicycle lanes within the existing curb-to-curb area, narrower travel lanes.

This alternative removes parking from one side of the street and re-purposes that space for an on-street bicycle lane. The opposite side of the street becomes a bicycle lane with parking. Additionally, a center raised median is provided to improve safety by eliminating all left turn conflicts between signalized intersections while improving the aesthetics in the corridor. This alternative provides opportunities for landscaping and urban design features in the median and on one side of the street.

CONDITIONS	Performance	Benefits	Drawbacks	Trade-Offs	Change From Existing
Pedestrian crossing El Cajon Boulevard (ECB)	FAIR	• Enhanced "continental" crosswalks for better visiblity. • Pedestrian refuge areas at side streets reducing exposure time and improve visibility. • Bulb-outs on one side of ECB reduce exposure time.	• Removes a buffer (parked cars) between pedestrians and traffic on one side of street.	• Bike lane limits bulb-outs on one side of street.	↑
Pedestrian along ECB	GOOD	• Enhanced "continental" crosswalks for better visiblity. • Bulb-outs reduce exposure time and improve visibility. • Parking and bike lane provide buffer for pedestrians from traffic reducing exposure time. • Preserves existing sidewalk / furniture area. • Median eliminates left turn conflicts at driveways alleys, and unsignalized intersections.			↑
Bike Mobility	GOOD	• 5' bike lanes • 2' buffer on one side • Median eliminates left turn conflicts at driveways, alleys, and unsignalized intersections.			↑
Transit Mobility	FAIR	• Bus Rapid Transit (BRT) Route. • Active local transit route. • Parking conflicts removed from one side.			↑
Vehicle Mobility	FAIR	• Parking obstructions removed from one side. • Median provides vehicle operations improvement.			↑
Safety	GOOD	• Median improves corridor safety by reducing conflict points. • Bulb-out improves pedestrian safety. • Bike lane improves bicyclist safety in uphill direction.			↑
Urban Design Conditions	FAIR	• Curb to ROW area preserved for urban design treatments. • Center planted median.	• Non-parking side-of-street reduces bulb-outs and planter/parklet opportunities. • Narrower median may limit plant options..	• Curb-extension planters and bulb-outs for ECB crossings/plantings are limited on one side of street.	=
Constructability	FAIR	• Low cost restriping of roadway. • Existing utilities not impacted.	• Construct median. • Requires reworking ADA ramps and driveway aprons. • Requires signal modifications. •Signal Modifications for bicycle detection and timing.	•Requires deviation from City design standard.	N/A
Parking	POOR	• Parking is accommodated on one side of the street. • Additional angled parking to the north along Highland.	• Reduction in low use parking stalls.	• Potential for more pedestrians to need to cross ECB due to parking only on one side.	↓

9



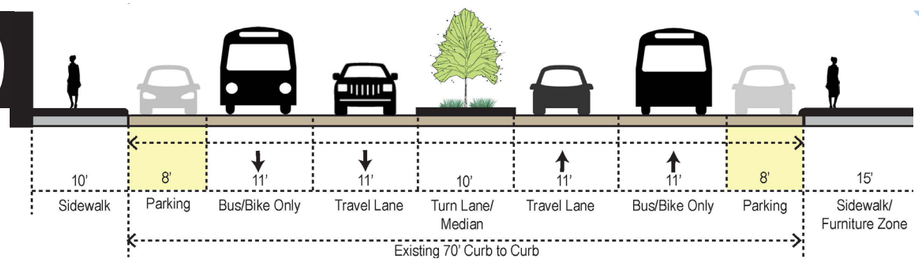
Four travel lanes during peak periods, two travel lanes and parking off-peaks, raised median, left turn pockets at signalized intersections, one-way cycle tracks within the existing curb-to-curb area.

This alternative adds cycle tracks and uses the outside lanes for parking during off-peak periods and as travel lanes during peak periods. This alternative provides opportunities for landscaping and urban design features in the median. This alternative has fatal flaws as the directional traffic volumes exceed the capacity of one lane beyond the morning and evening hours when parking is needed by the adjacent businesses and it would significantly impact the on-time performance of the Rapid buses.

CONDITIONS	Performance	Benefits	Drawbacks	Trade-Offs	Change From Existing
Pedestrian crossing El Cajon Boulevard (ECB)	FAIR	• Enhanced "continental" crosswalks for better visiblity. • Pedestrian refuge areas at side streets reduce exposure time and improve visibility.	• No bulb-outs for ECB crossings.		↑
Pedestrian along ECB	POOR	• Enhanced "continental" crosswalks for better visiblity. • Bulb-outs reduce exposure time and improve visibility. • Median eliminates left turn conflicts at alleys, driveways, and unsignalized intersections.			↑
Bike Mobility	POOR	• 8' cycle track on both sides extending off curb •Parking buffers cycle track during off peak periods •Median eliminates left turn conflicts at alleys, driveways, and unsignalized intersections.			↑
Transit Mobility	GOOD		• Potential for parked vehicles in peak period transit lane. •Transit vehicles subject to parked vehicle conflicts during off-peak hours.		↓
Vehicle Mobility	GOOD	• Raised median provides mobility benefit by removing left turn conflicts.	• Potential to divert traffic towards residential streets that are designated bike boulevards. • Operational issue with the City for enforcing and towing vehicles before the peak begins. • Higher traffic volume exists today than one traffic lane can accommodate during non-peak hours.		↓
Safety	FAIR	• Median improves corridor safety for all modes. • Cycle Tracks improve cyclist safety.	• Higher congestion levels may impact corridor safety.		↑
Urban Design Conditions	POOR	• Center planted median	• No parklets or planters extended from curb.	• Travel lane / parking lane versus urban design, bulb out and stormwater management opportuntities.	↓
Constructability	FAIR	• Minimal relocation of utilities	• Reduced stormwater management opportunities. • Construct median. •Signal Modifications for bicycle detection and timing.		N/A
Parking	FAIR	• Accommodated on both sides of the street during non-peak hours. • Additional angled parking to the north along Highland.	• Not accommodated during peak hours.		↓

PROPOSED ALTERNATIVES

10



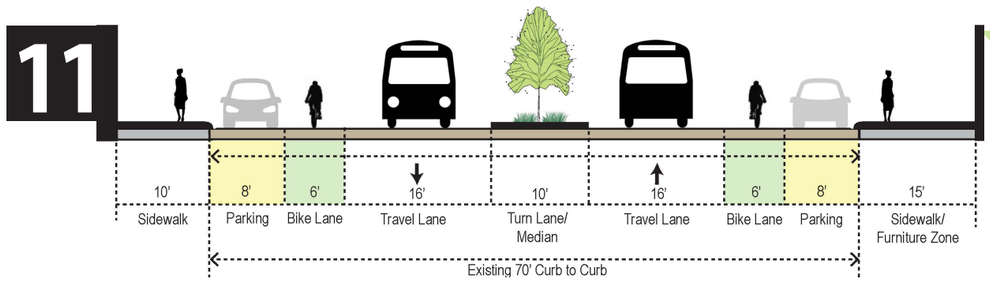
Two shared bus/bike lanes, two travel lanes, raised median, left turn pockets at signalized intersections, maintains on-street parking within the existing curb-to-curb area.

This alternative re-purposes the outside travel lanes to dedicated bus/bicycle lanes. Parking is maintained on both sides of the street and a center raised median is provided to improve safety by eliminating all left turn conflicts between signalized intersections. This alternative provides opportunities for landscaping and urban design features in the median and on both sides of the street. This alternative has a fatal flaw due to safety and operational issues associated with shared bus/bike lanes adjacent to on-street parking.

CONDITIONS	Performance	Benefits	Drawbacks	Trade-Offs	Change From Existing
Pedestrian crossing El Cajon Boulevard (ECB)	GOOD	• Enhanced "continental" crosswalks for better visiblity. • Pedestrian refuge areas at side streets reduce exposure time and improve visibility. • Bulb-outs reduce exposure time.			↑
Pedestrian along ECB	GOOD	• Enhanced "continental" crosswalks for better visiblity. • Bulb-outs reduce exposure time and improve visibility. • Bike lane add buffer for pedestrians from traffic reducing exposure time. •Median eliminates left turn conflicts at alleys, driveways, and unsignalized intersections.			↑
Bike Mobility	FAIR	• Dedicated bus/bike lane •Median eliminates left turn conflicts at alleys, driveways, and unsignalized intersections.	• Potential for "leap-frogging" with buses. • Right-turning vehicle conflicts would require weaving across bus/bike lane.		↑
Transit Mobility	POOR	• Lower bus travel lane traffic volume. • Median improves transit mobility.	• Potential for "leap-frogging" with cyclists. • Parking versus bus conflicts. • Right-turn vehicles versus bus conflicts.	• Bus operations versus parking activity.	↓
Vehicle Mobility	POOR	• Median improves traffic operations.	• Existing traffic can not be accommodated in two lanes of traffic. • High potential for diverting traffic to adjacent residential streets.	• Bus operations versus vehicle volumes.	↓
Safety	FAIR	• Median improves corridor safety by eliminating left turn conflicts at alleys, driveways, and unsignalized intersections. • Bulb-out improves pedestrian safety.	• Conflicts between bus, bike, and parking vehicles.		↓
Urban Design Conditions	GOOD	• Potential for plantings in parking areas. • Center planted median.			↑
Constructability	GOOD	• Low cost minimal restriping of roadway.	• Construct Median. •Signal Modifications for bicycle detection and timing.		N/A
Parking	FAIR	• Parking accommodated on both sides of the street. • Additional angled parking to the north along Highland.	• Parking cars must cross bus/bike only lane.		=

PROPOSED ALTERNATIVES

11



Reduction from four to two travel lanes, raised median, left turn pockets at signalized intersections, maintains on-street parking, one-way cycle tracks within the existing curb-to-curb area.

This alternative repurposes the curb-to-curb width of El Cajon Boulevard to provide one-way cycle tracks, maintain on-street parking, reduce four travel lanes to two, and provide a raised median. The center raised median improves safety by eliminating all left turn conflicts between signalized intersections. This alternative provides opportunities for landscaping and urban design features in the median and on both sides of the street. This alternative has a fatal flaw as the directional traffic volumes exceed the capacity of one lane for a significant portion of the day and would dramatically impact the on-time performance of the Rapid buses.

CONDITIONS	Performance	Benefits	Drawbacks	Trade-Offs	Change From Existing
Pedestrian crossing El Cajon Boulevard (ECB)	**FAIR**	• Enhanced "continental" crosswalks for better visiblity. • Pedestrian refuge areas at side streets reduce exposure time and improve visibility.	• Cycle track limits bulb-outs.	• Cycle track limits bulb-out areas.	↑
Pedestrian along ECB	**POOR**	• Enhanced "continental" crosswalks for better visiblity. • Bulb-outs reduce exposure time and improve visibility. •Median eliminates left turn conflicts at alleys, driveways, and unsignalized intersections.			↑
Bike Mobility	**GOOD**	• Dedicated cycle track. •Median eliminates left turn conflicts at alleys, driveways, and unsignalized intersections.		• Bicycle accommodation versus vehicle volumes and preserving pedestrian space.	↑
Transit Mobility	**POOR**		• Existing traffic can not be accommodated in two lanes of traffic which would impact transit operations.	• Bus operations versus vehicle volumes.	↓
Vehicle Mobility	**POOR**	• Median improves taffic operations but does not make up for reduced travel lane.	• Existing traffic can not be accommodated in two lanes of traffic. • High potential for diverting traffic to adjacent residential streets.		↓
Safety	**GOOD**	• Median improves corridor safety by eliminating conflict points but does not make up for reduced travel lane. • Bulb-out improves pedestrian safety.			↑
Urban Design Conditions	**FAIR**	• Potential for plantings in parking areas. • Center planted median.	• Planters in between parking areas separated cycle track. • Cycle track separates space from pedestrians that could be used for parklets.		↑
Constructability	**FAIR**	• Improvements within curbs.	• Construct Median •Signal Modifications for bicycle detection and timing.		N/A
Parking	**GOOD**	• Parking accommodated on both sides of the street. • Additional angled parking to the north along Highland.			=

SUMMARY OF ALTERNATIVES & PEQI/LTS

	Bicycle Accommodation	Pedestrian Accommodation	Transit Enhancements	Vehicle Enhancements	Safety Enhancements	Urban Design Opportunities	Parking Availability	Agency Support
Alternative 1	Sharrow	• Full bulb-outs. • Parklet opportunities. • Enhanced crossings.	• Reduced conflicts. • Stop curb extensions	• 4 travel lanes.	• 10' Raised median.	• Parklets. • Bulb-outs. • Median plantings. • Stormwater management.	• Both sides (parallel).	**Yes**
Alternative 2	Sharrow	• Full bulb-out on parking side. • Partial bulb-outs for side-street crossings. • Enhanced crossings.	• Reduced conflicts. • Stop curb extensions on parking side of street.	• 4 travel lanes.	• 6' Raised median.	• Opportunities primarily on parking side of street.	• Angled parking on one side.	**No**
Alternative 3	Cycle track	• Full bulb-out on parking side. • Partial bulb-outs for side-street crossings. • Enhanced crossings.	• Stop curb extensions on parking side of street.	• 4 travel lanes.	• 4' Painted median.	• Opportunities primarily on parking side of street.	• One side (parallel). • Parking removed where left-turn lanes are provided.	**No**
Alternative 4	Cycle track	• Full bulb-out on parking side. • Partial bulb-outs for side-street crossings. • Enhanced crossings.	• Stop curb extensions on parking side of street.	• 4 travel lanes.	• No median	• Opportunities primarily on parking side of street.	• One side (parallel).	**No**
Alternative 5	Cycle track	• Full bulb-out on parking side. • Partial bulb-outs for side-street crossings. • Enhanced crossings.	• Reduced conflicts. • Stop curb extensions on parking side of street.	• 4 travel lanes.	• 10' Raised median.	• Median plantings. • Opportunities primarily on parking side of street.	• One side (parallel).	**Yes**
Alternative 5A	Cycle track	• Full bulb-out on parking side. • Partial bulb-outs for side-street crossings. • Enhanced crossings.	• Reduced conflicts. • Stop curb extensions on parking side of street.	• 4-11-foot travel lanes.	• 4' Raised median.	• Opportunities primarily on parking side of street.	• One side (parallel). • Parking removed where left-turn lanes are provided.	**Yes**
Alternative 6	Cycle track	• Full bulb-outs. • Parklet opportunities. • Enhanced crossings.	• Reduced conflicts. • Stop curb extensions.	• 4 travel lanes.	• 10' Raised median.	• Bulb-outs. • Median plantings. • Stormwater management.	• Both sides (parallel).	**Yes, but requies redevelopment**
Alternative 7	Cycle track	• Partial bulb-outs for side-street crossings.	• Reduced conflicts.	• 4 travel lanes.	• 10' Raised median.	• Median plantings.	• No on-street parking.	**No**
Alternative 8	Bike Lane on EB side; Sharrow on WB side.	• Full bulb-out on parking side. • Partial bulb-outs for side-street crossings.	• Reduced conflicts. • Stop curb extensions on both sides of street.	• 4 travel lanes.	• 10' Raised median.	• Median plantings. • Opportunities primarily on parking side of street.	• One side (parallel).	**Yes**
Alternative 8A	Bike Lane on both sides.	• Full bulb-out on parking side. • Partial bulb-outs for side-street crossings.	• Reduced conflicts. • Stop curb extensions on both sides of street.	• 4-11-foot travel lanes.	• 7' Raised median.	• Median plantings. • Opportunities primarily on parking side of street.	• One side (parallel). • Parking removed where left-turn lanes are provided.	**Yes**
Alternative 8B	Bike Lane both sides.	• Full bulb-out on parking side. • Partial bulb-outs for side-street crossings.	• Reduced conflicts. • Stop curb extensions on both sides of street.	• 4-10-foot travel lanes.	• 9' Raised median.	• Median plantings. • Opportunities primarily on parking side of street.	• One side (parallel).	**Yes**
Alternative 9	Cycle track	• Partial bulb-outs for side-street crossings. • Enhanced crossings.	• Reduced conflicts.	• 2 travel lanes. • 4 travel lanes during morning/evening peak hours. • Capacity issues for current traffic.	• 10' Raised median.	• Median plantings. • Other planters require existing sidewalk space.	• Both sides during non-peak hours (parallel).	**No**
Alternative 10	Shared Bus/Bike Lane	• Full bulb-outs. • Parklet opportunities. • Enhanced crossings.	• Reduced left-turn conflicts. • Increased weave/parking/right-turn/bicycle conflicts.	• 2 travel lanes. • 2 dedicated bus/bike lanes. • Capacity issues for current traffic.	• 10' Raised median.	• Parklets. • Bulb-outs. • Median plantings. • Stormwater management.	• Both sides (parallel).	**No**
Alternative 11	Cycle track	• Partial bulb-outs for side-street crossings. • Enhanced crossings.	• Reduced conflicts. • Stop curb extensions on both sides of street.	• 2 travel lanes. • Capacity issues for current traffic.	• 10' Raised median.	• Bulb-outs. • Median plantings. • Stormwater management.	• Both sides (parallel).	**No**

Level of Traffic Stress (Tolerance Demographic)

- 1 (Interested but concerned - All Ages)
- 2 (Interested but concerned - Adult)
- 3 (Enthused and confident)
- 4 (Strong and fearless)

Bicycle LTS by Alternatives	LTS Score
Existing	4
Alt 1	4
Alt 5	1
Alt 5A	1
Alt 8	4
Alt 8A	3
Alt 8B	3

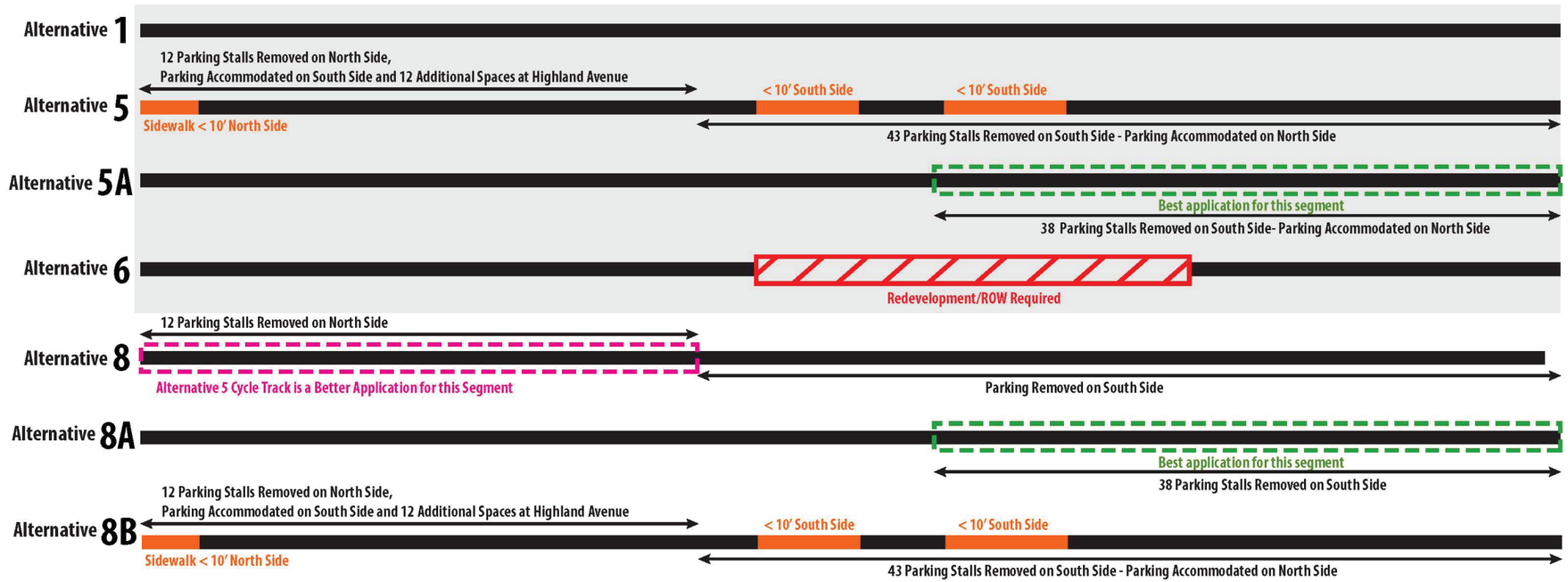
PEQI Intersection and Street Scores

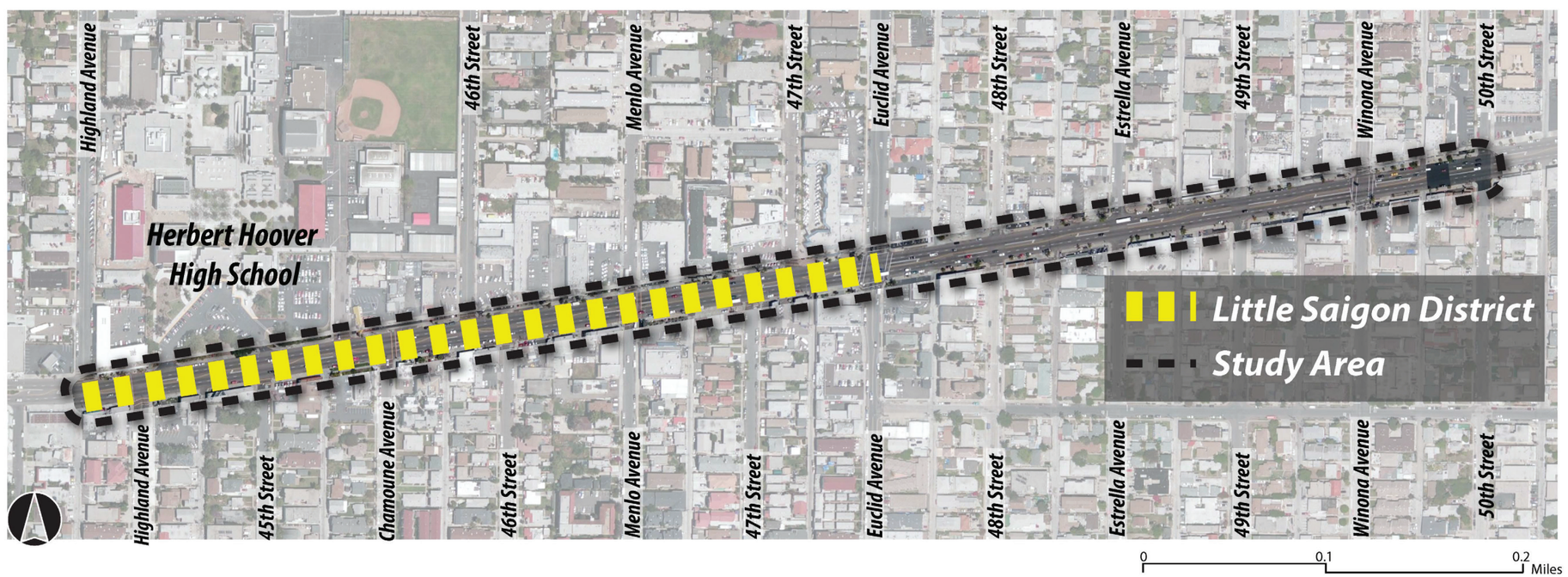
- 81-100 (Ideal pedestrian conditions exist)
- 61-80 (Reasonable pedestrian conditions exist)
- 41-60 (Basic pedestrian condtions exist)
- 21-40 (Poor pedestrian condtion exist)
- 0-20 (Environment not suitable for pedestrians)

PEQE Segment Results by Alternative				Existing		Alt 1		Alt 5		Alt 5A		Alt 8		Alt 8A		Alt 8B	
Street Name	**Cross Street 1**	**Cross Street 2**	**Side**	**SCORE**	**RATING**	**SCORE**	**RATING**	**SCORE**	**RATING**	**SCORE**	**RATING**	**SCORE**	**RATING**	**SCORE**	**RATING**	**SCORE**	**RATING**
El Cajon	Fairmount	44th	S	0.47	BASIC	0.52	BASIC	0.52	BASIC	0.55	BASIC	0.52	BASIC	0.52	BASIC	0.52	BASIC
El Cajon	44th	Highland	S	0.43	BASIC	0.52	BASIC	0.52	BASIC	0.55	BASIC	0.52	BASIC	0.52	BASIC	0.52	BASIC
El Cajon	Highland	45th	S	0.49	BASIC	0.55	BASIC	0.55	BASIC	0.57	BASIC	0.55	BASIC	0.55	BASIC	0.55	BASIC
El Cajon	45th	Chamoune	S	0.49	BASIC	0.58	BASIC	0.55	BASIC	0.58	BASIC	0.55	BASIC	0.55	BASIC	0.55	BASIC
El Cajon	Chamoune	46th	S	0.47	BASIC	0.56	BASIC	0.53	BASIC	0.56	BASIC	0.53	BASIC	0.53	BASIC	0.53	BASIC
El Cajon	46th	Menlo	S	0.49	BASIC	0.58	BASIC	0.55	BASIC	0.58	BASIC	0.55	BASIC	0.55	BASIC	0.55	BASIC
El Cajon	Menlo	47th	S	0.50	BASIC	0.59	BASIC	0.56	BASIC	0.59	BASIC	0.57	BASIC	0.57	BASIC	0.57	BASIC
El Cajon	47th	Euclid	S	0.48	BASIC	0.55	BASIC	0.55	BASIC	0.57	BASIC	0.55	BASIC	0.55	BASIC	0.55	BASIC
El Cajon	Euclid	48th	S	0.50	BASIC	0.59	BASIC	0.56	BASIC	0.59	BASIC	0.56	BASIC	0.56	BASIC	0.56	BASIC
El Cajon	48th	Estrella	S	0.52	BASIC	0.61	REASONABLE	0.58	BASIC	0.61	REASONABLE	0.58	BASIC	0.58	BASIC	0.58	BASIC
El Cajon	Estrella	49th	S	0.52	BASIC	0.62	REASONABLE	0.59	BASIC	0.62	REASONABLE	0.59	BASIC	0.59	BASIC	0.59	BASIC
El Cajon	49th	Winona	S	0.52	BASIC	0.62	REASONABLE	0.59	BASIC	0.62	REASONABLE	0.59	BASIC	0.59	BASIC	0.59	BASIC
El Cajon	Winona	50th	S	0.52	BASIC	0.61	REASONABLE	0.58	BASIC	0.61	REASONABLE	0.58	BASIC	0.58	BASIC	0.58	BASIC
El Cajon	Fairmount	44th	N	0.48	BASIC	0.50	BASIC	0.50	BASIC	0.50	BASIC	0.50	BASIC	0.52	BASIC	0.52	BASIC
El Cajon	44th	Highland	N	0.51	BASIC	0.53	BASIC	0.50	BASIC	0.50	BASIC	0.50	BASIC	0.53	BASIC	0.53	BASIC
El Cajon	Highland	Chamoune	N	0.44	BASIC	0.53	BASIC	0.53	BASIC	0.53	BASIC	0.53	BASIC	0.56	BASIC	0.56	BASIC
El Cajon	Chamoune	46th	N	0.40	POOR	0.48	BASIC	0.48	BASIC	0.48	BASIC	0.48	BASIC	0.50	BASIC	0.50	BASIC
El Cajon	46th	Menlo	N	0.43	BASIC	0.51	BASIC	0.49	BASIC	0.49	BASIC	0.49	BASIC	0.51	BASIC	0.51	BASIC
El Cajon	Menlo	47th	N	0.50	BASIC	0.58	BASIC	0.55	BASIC	0.55	BASIC	0.55	BASIC	0.58	BASIC	0.58	BASIC
El Cajon	47th	Euclid	N	0.48	BASIC	0.56	BASIC	0.53	BASIC	0.53	BASIC	0.53	BASIC	0.56	BASIC	0.56	BASIC
El Cajon	Euclid	48th	N	0.48	BASIC	0.56	BASIC	0.54	BASIC	0.54	BASIC	0.54	BASIC	0.56	BASIC	0.56	BASIC
El Cajon	48th	Estrella	N	0.51	BASIC	0.59	BASIC	0.57	BASIC	0.57	BASIC	0.57	BASIC	0.59	BASIC	0.59	BASIC
El Cajon	Estrella	49th	N	0.49	BASIC	0.57	BASIC	0.55	BASIC	0.55	BASIC	0.55	BASIC	0.57	BASIC	0.57	BASIC
El Cajon	49th	Winona	N	0.51	BASIC	0.59	BASIC	0.57	BASIC	0.57	BASIC	0.57	BASIC	0.59	BASIC	0.59	BASIC
El Cajon	Winona	50th	N	0.52	BASIC	0.61	REASONABLE	0.58	BASIC	0.58	BASIC	0.58	BASIC	0.61	REASONABLE	0.61	REASONABLE

APPLICATION OF ALTERNATIVES POTENTIAL

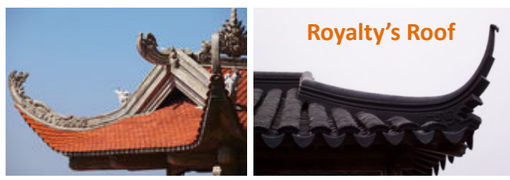
Alternative Application Potential

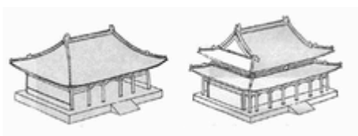


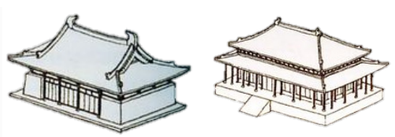


CHARACTER OF DISTRICT

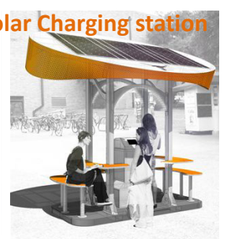
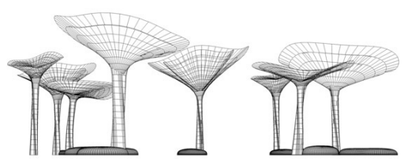
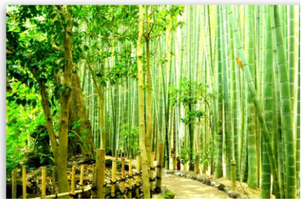
District Architecture







Smart District



Green District