SAN YSIDRO MOBILITY STRATEGY

MAJOR RECOMMENDATIONS SUMMARY

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1. INTRODUCTION

This project, the San Ysidro Mobility Strategy (SYMS), is a California Department of Transportation (CALTRANS) funded project administered by the City of San Diego Planning Department. The primary purpose of this mobility strategy is to measure and evaluate existing and future vehicular, pedestrian, bicycle, and transit travel. The ultimate goal is to identify needs and deficiencies within these categories and develop mitigation measures that will improve mobility within the area and promote economic development within the community.

The San Ysidro community is located on the southern-most boundary of the City of San Diego and is comprised of approximately 1,800 acres. Due to its proximity to the international border with Mexico, there are unique characteristics to the area including significant Hispanic heritage, strong border commerce opportunities, as well as traffic and circulation issues resultant from the current freeway infrastructure.

The latest General Plan update from the City of San Diego includes smart growth strategies which have been implemented in the San Ysidro Mi Pueblo Pilot Village. This pilot program has resulted in a redevelopment plan along San Ysidro Boulevard between Cottonwood Road and I-805 on the north side of Interstate 5.

Purpose of the Study

- To study traffic circulation and how it affects sustainable long-term economic growth, revitalization, mobility and parking throughout the community of San Ysidro.
- To identify strategies and improvement measures that improve traffic circulation, address parking demand, and promote walkability, bicycling and improved accessibility to transit use for residents, visitors and business people.

Goals and Objectives of the Study

- To develop a circulation system that provides for the smooth flow of vehicular traffic while allowing for a response to the social and economic needs of the community.
- To provide for smooth traffic flow and good accessibility to and from San Ysidro and outlying communities, including Mexico.
- To develop parking strategies that support planned land uses.
- To eliminate the barriers to pedestrian activity and enhance the pedestrian environment.
- To provide for an increased use of bicycles as a major means of transportation throughout the community.
- To improve the mass transportation system and increase its accessibility for San Ysidro residents, visitors and business people.
To provide a Mobility Plan for the San Ysidro that:

- Capitalizes on current developments and the existing energy in the neighborhood.
- Encourages more business investment and development.
- Benefits the community by providing a safe pedestrian and vehicular environment, encouraging jobs, housing, and attractive open spaces.
- Protects the historical and cultural identity of the neighborhood.
- Improves the aesthetics of the environment.
- Maintains community pride.
- Is supported by the residential and business community.
- Is economically and sociologically feasible.

2. CONTEXT AND EXISTING CONDITIONS

The community of San Ysidro is a diverse community located in the southernmost part of the City of San Diego. It is perhaps the most exciting community in the region as the energy from all of the commerce and the people from Mexico and the United States intersects here. The multi-modal trolley station is an incredible place that is buzzing with people and excitement on a Saturday morning as well as a Friday night. Due to the influence of the Latin culture, there are many people that walk throughout the community. In addition, a network of small shuttle buses transport people from the border to nearby shopping areas.

As shown in the graphics below, a bulk of the community is bounded by I-5, I-805 and SR-905. There are only 8 access points where people within the subsequent triangle can travel to and from the community. In addition, the railroad/trolley right-of-way has created a large barrier that has also split the community.

The existing circulation does not result in interconnectivity due primarily to the freeways, the railroad/trolley right-of-way and the Tijuana River wetland area. In addition, the
streets are not all designed to be appropriate for existing or projected traffic volumes. Many primary thoroughfares are without sidewalks, curbs and gutters and many are much wider than they need to be.

3. Proposed Improvements

Several major recommendations are proposed as part of this study. These include major road improvements as well as several pedestrian improvements including sidewalk pop-outs, new sidewalks, new crosswalks, a new pedestrian bridge and other improvements.

Following is a discussion of the major recommendations. A matrix was placed below each recommendation graphic indicating the degree of desirability and importance of each. The reader is encouraged to evaluate each recommendation accordingly and submit their scores to the San Ysidro Transportation Collaborative.
The Green Spine

The existing rail and trolley corridor currently acts as a barrier between the north and south halves of the community as there are few places for pedestrians and vehicles to cross from one side to the other. Rather than act as a barrier, this corridor could act as a unifying element for the San Ysidro community. This green link adjacent to the railroad ROW and Beyer Boulevard would be a highly walkable natural space that would contain trees, wide walkways and bike paths and pedestrian amenities such as lighting and benches. This link potentially would extend from SR-905 to the Border.
Proposed Bicycle Routes

The current community plan does not adequately address bicycle circulation. Bicycle use must be encouraged within the community. Aside from the major Type 1 (separated bike path) bikeway proposed within the green link, most bike paths depicted in the graphic below are Type 2 and 3 located within the street right-of-ways.
Proposed Major Pedestrian Routes

In addition to the major bicycle routes, the key pedestrian routes have been identified below. Ideally, these routes would include wider sidewalks and trail and separated paths where possible.
Improvement S1 – Improvements along Dairy Mart Road

This project involves widening Dairy Mart Road by 30 to 34 feet between West San Ysidro Boulevard and Camino de la Plaza to accommodate one additional travel lane in each direction, bike lanes, and expanded sidewalks. The project would also expand the existing Dairy Mart Road intersection with the I-5 southbound on- and off-ramps and widen the Dairy Mart Road bridge over I-5. This improvement has been developed to improve connectivity between the northern and southern portions of the San Ysidro community for vehicular and non-motorized modes of travel. With the improvement, Dairy Mart Road would be considered a 4-lane collector street and is estimated to carry approximately 12,000 ADT. The improvements along Dairy Mart Road would shift some of the traffic that today uses Via de San Ysidro and Willow Road to access the southwest area of San Ysidro. By shifting traffic to Dairy Mart and eventually to Camino de la Plaza, the operations along Willow Road and Via de San Ysidro would be expected to improve. Below is a conceptual sketch depicting the improvement.

Improvement S1 will provide additional capacity for vehicular and pedestrian traffic and provide new Class II bike lanes. The additional through and turning lanes at the I-5 southbound/Dairy Mart Road intersection would be expected to reduce delay for all traffic passing through this intersection. The project is consistent with the Transportation and Circulation Element of the San Ysidro Community Plan. As part of the improvement, a new traffic signal and/or signal modifications have been assumed between West San Ysidro Boulevard and Camino de la Plaza. However, no additional right-of-way (ROW) would be required.
Improvement S2 – Relocation of Southbound Off-Ramp at Via de San Ysidro

This improvement project involves replacing the existing I-5 southbound off-ramp to Via de San Ysidro with a new off-ramp that would terminate at Calle Primera, to the west of Via de San Ysidro. The new off-ramp would be controlled by a traffic signal. This improvement has been identified to improve the operation of the five-legged I-5 southbound off-ramp/Via de San Ysidro/Calle Primera intersection. Below is a conceptual sketch of the improvement.

Improvement S2 will benefit local mobility in several ways. Removing the southbound off-ramp from the Via De San Ysidro/Calle Primera intersection is expected to reduce delay for all motorists passing through the intersection. The improvement would also remove the very short merge for traffic proceeding I-5 southbound to Calle Primera eastbound and increase storage available for southbound traffic on Via de San Ysidro, north of Calle Primera. While the new “T” intersection at I-5 southbound/Calle Primera will likely improve access for I-5 southbound traffic, it would be expected to slightly increase travel time for through traffic on Calle Primera, due to the installation of the new signal. Also, this improvement would require widening along Calle Primera between the new I-5 southbound off-ramp and Via de San Ysidro. The improvement is not identified as a recommended improvement in the Transportation and Circulation Element of the San Ysidro Community Plan.
Improvement S3 – Connection from Calle Primera to Camino de la Plaza (via new road north of Bibler Drive)

This improvement project would construct a new two-lane collector roadway between Camino de la Plaza and Via Tercero, to the north of the residential community. This improvement would provide an additional east/west linkage in the community and to provide a more direct connection between Camino de la Plaza and the I-5/Via de San Ysidro interchange. A conceptual sketch of the improvement is depicted below.

This improvement would reduce out-of-direction travel for I-5 northbound traffic en route to the residential area on the east side of Camino de la Plaza. Although the improvement would involve some additional travel distance along Calle Primera and Via Tercero, it would avoid cut-through traffic traversing the residential area. The concept for this improvement, though on a different alignment, is identified in the Transportation and Circulation Element of the San Ysidro Community Plan. It is estimated that approximately 5,000 ADT would use the new connection from Calle Primera to Camino de la Plaza via a new road north of Bibler Drive. In addition, the addition of an additional access point would provide emergency access options where there is currently only one way to access the Via Tercero area. It is recognized that there will be environmental issues with a bridge crossing a sensitive habitat. However, the bridge is recommended in the Community Plan and the safety of the people in the area is also a very important issue.
Improvement S4 – Improvements to Beyer Boulevard

This improvement project would help implement the Green Spine way described above by reconfiguring Beyer Boulevard between Dairy Mart Road and Smythe Avenue. The existing lane configuration is two through lanes in each direction with parallel parking along both sides of the roadway and no median. The revised layout would provide one lane in each direction, separated by a two-way center turn lane. Diagonal parking would be provided along the north side of the roadway only. This improvement has been developed to improve access to and from adjacent land uses and to improve the walkability along Beyer Boulevard. With the improvement, it is estimated that Beyer Boulevard would carry approximately 11,800 ADT. In addition, pedestrian improvements such as new sidewalks, trees, etc. along the south side of Beyer Boulevard would be provided as part of the improvement. Following is a conceptual sketch of the improvement.

Although the existing configuration of Beyer Boulevard provides one additional through lane in each direction, the potential capacity of these lanes is reduced by various factors (including “friction” caused by narrow lane widths and parking maneuvers). Also, vehicles wishing to make left turns into driveways block the inner lanes while awaiting gaps in opposing traffic and people who park on the south side must cross the street to access adjacent properties. Between Dairy Mart Road and Smythe Avenue, there are 17 driveways on the north side of the street. Improvement 4 will improve mobility by separating left turn movements from through traffic and by providing wider through lanes. Access to and from land uses on the north side of the roadway will benefit since diagonal parking would be provided on the north side of Beyer Boulevard and pedestrians would not have to cross at mid-block locations from the south to the north. This improvement is not consistent with the classification shown in the Transportation and Circulation Element of the San Ysidro Community Plan.

With the diagonal parking stalls provided on the north side of Beyer Boulevard and the elimination of parallel parking on the south side of Beyer Boulevard, there would be approximately 289 stalls available between Dairy Mart Road and Smythe Avenue. Under Existing Conditions, there are 309 parking spaces available. As a result, there will be a decrease of 20 parking spaces but they would all be on the side of the street adjacent to the users of the parking.
Above is a typical cross section of the Beyer Boulevard Improvements.
Improvement S5 – Improvements at Beyer Boulevard Trolley Station

This improvement project would construct a new signalized intersection at the Beyer Boulevard trolley station driveway. A new driveway would be constructed in the parking lot opposite the trolley station, and Beyer Boulevard would be restriped to provide left turn pockets for both eastbound and westbound traffic. The existing crosswalk would be shifted from its current location to the new intersection. This improvement has been developed to facilitate access to and from the trolley station. Below is a conceptual sketch of the improvement.

Improvement S5 would benefit both vehicular and pedestrian access to and from the station. The new signal would regulate traffic and pedestrian movements, stopping through traffic to allow left turns into and out of the site and pedestrians to cross the four-lane segment of Beyer Boulevard. This improvement is not identified as a recommended improvement in the Transportation and Circulation Element of the San Ysidro Community Plan.
Improvement S6 – Improvements on East Park Avenue and West Park Avenue (with Diagonal Parking)

This improvement project would re-stripe East Park Avenue and West Park Avenue from Hall Avenue to San Ysidro Boulevard. The current roadway design provides one 17-foot through lane and one 12-foot parallel parking lane. The proposed design would narrow the through lane to 12 feet and provide a 16-foot diagonal parking lane on both roadways adjacent to the San Ysidro Community Park recreational facilities. This improvement has been suggested in order to improve access to the park and to increase parking supply. A conceptual sketch of the improvement is shown below.

Improvement S6 would eliminate pedestrian crossings from the existing parking lane to the park by shifting through traffic to the outer edge of the pavement and locating the diagonal parking on the same side of the street as the park. In addition, improvement S6 would widen existing sidewalks adjacent to the park, enhancing pedestrian mobility. This improvement is not identified as a recommended improvement in the Transportation and Circulation Element of the San Ysidro Community Plan.

With the diagonal parking stalls provided on the east side of West Park Avenue and on the west side of East Park Avenue, there would be approximately 158 stalls available between Hall Avenue and San Ysidro Boulevard. Under Existing Conditions, there are 69 parking spaces available. As a result, there is an increase of 89 parking spaces.
Improvement S7 – Improvements along Hall Avenue

This improvement project would provide a curb “bulb-out” along the north side of Hall Avenue, between West Park Avenue and East Park Avenue, and an expanded sidewalk on the opposite side of the street. The bulb-out and expanded sidewalk would narrow this segment of Hall Avenue from 60 feet to 40 feet of pavement. Diagonal parking spaces would be placed within the bulb-out, and crosswalks would be provided parallel to East Park Avenue and West Park Avenue. This improvement has been suggested in order to facilitate pedestrian access in the vicinity of the San Ysidro Community Park recreational facilities. Below is a conceptual sketch of the improvement.

Improvement S7 would benefit northbound and southbound pedestrian mobility by reducing Hall Avenue’s width. The diagonal spaces within the bulb-out will also enhance parking supply in the vicinity of the park. The bulb-out is not expected to adversely impact east/west traffic flow, because the roadway alignment would match up with the segments to the east and to the west. This improvement is not identified as a recommended improvement in the Transportation and Circulation Element of the San Ysidro Community Plan.
Improvement S8 – San Ysidro Boulevard and Border Village Road Improvements

The previous concept of creating a one-way couplet in this area has been eliminated as a preferred project. However, the one-way couplet project will still be mentioned in the final report as a possible alternative. This improvement would create a pedestrian plaza at the intersection of Bolton Hall Road and East San Ysidro Boulevard by closing off the east end of the street just west of East San Ysidro Boulevard. In addition, the northeast intersection of Bolton Hall Road and East San Ysidro Boulevard would be re-configured to allow for a right angled intersection and to create a small pedestrian plaza. There are also several locations where sidewalk pop-outs and wider sidewalks could enhance the pedestrian experience without compromising vehicular movement. Below is an illustration of this concept.

This is an important commercial area and disrupting vehicular traffic could be detrimental to the success of the surrounding businesses. However, pedestrian activity is also vital to the commercial success of the area. No business would have access eliminated and those vehicles going north on Border Village Road and then south on East San Ysidro Boulevard can still do so. They just will not be able to take the current shortcut. This area currently lacks a central focus and developing these plazas would create a focus that would help enhance the character and commercial viability of the area.
Improvement S9 – New I-5 and I-805 on-ramp at Camino de la Plaza

This improvement would maintain the existing on-ramp from East San Ysidro Boulevard to I-5 northbound and the off-ramp from I-5 northbound to East San Ysidro Boulevard immediately north of the US/Mexico International Border. A new I-5 and I-805 on-ramp would be created from the Camino de la Plaza bridge. It is anticipated that a widened pedestrian oriented bridge would be created just south and adjacent to the existing Camino de la Plaza bridge as part of the GSA International Border Crossing improvements. The intent of this improvement is to reduce vehicle/pedestrian conflicts at the multi-modal station and to minimize the need for traffic to travel south on East San Ysidro Boulevard in order to gain access to the I-5 and I-805 northbound on-ramps. This improvement would require additional bridge widening to accommodate 2 new northbound left turn lanes. Below is a conceptual sketch of improvement S9.

Improvement S9 would improve pedestrian mobility by minimizing conflicts between vehicles and pedestrians on the roadway segment between East San Ysidro Boulevard and the I-5 northbound on-ramp. Data collection suggests this location has among the highest pedestrian volumes in San Diego County (excluding special events). This improvement is not identified as a recommended improvement in the Transportation and Circulation Element of the San Ysidro Community Plan.
Improvement S10 – Smythe Avenue Crossing

This improvement would construct traffic signals at both ends of Smythe Crossing (Beyer Boulevard and South Vista Avenue). Both new traffic signals would be coordinated with the Smythe Avenue and Beyer Boulevard traffic signal for optimum level of service. The intent of this improvement is to reduce the conflicts amongst the trolley, bicyclists, pedestrians, and vehicular traffic. In addition to the traffic signal constructions, the improvement would include the construction/repair of the existing sidewalk surrounding both intersections. A conceptual sketch of improvement S10 is shown below.

Improvement S10 would improve pedestrian mobility by separating the vehicles, bicyclists, pedestrians, and trolley traffic. With the construction of the two new signals and proper coordination between the signals and trolley, the improvements would increase safety and operations at the intersections. This improvement is not identified as a recommended improvement in the Transportation and Circulation Element of the San Ysidro Community Plan.
Improvement S11 – Trolley Line Sidewalk

This improvement would construct and improve the sidewalk along Seaward Avenue just west of the trolley line and along the west side of the trolley line just south of Seaward Avenue. The intent of this improvement is to enhance the pedestrian connectivity between the Beyer trolley station and East and West Park. Below is a conceptual sketch of improvement S11.

Improvement S11 would improve pedestrian mobility by enhancing the connection between Beyer Boulevard and East and West Park. A constraint with the improvement is the need for a retaining wall along the west side of the trolley line just south of Seaward Avenue. The construction of the retaining wall is needed in order to accommodate the new and expanded sidewalk. This improvement is not identified as a recommended improvement in the Community Plan.
Improvement P1 – West San Ysidro Boulevard Pedestrian Improvements

This segment of West San Ysidro Boulevard is lacking in sidewalks and pedestrian amenities. The road is much wider than it needs to be and in fact, a rather large area of street paving is striped to not allow vehicular access on it. This project will move the exiting curb out to the edge of the traveled way and a new sidewalk will be constructed within the old pavement right of way. New pop-outs will be constructed on each side of the driveways but access to the driveways will remain. This will provide a sidewalk where there currently one does not exist.
Improvement P2 – Otay Mesa Road Sidewalk Improvements

Although this project is out of the community plan area, it is critical to the pedestrian mobility of the San Ysidro residents. Currently, Otay Mesa Road from Beyer Boulevard north to just south of Crescent Drive does not have a sidewalk adjacent to it. This is a major route from San Ysidro to San Ysidro High School and students need a safe place to walk to and from school. The south side of the road is very steep and as such would require extensive grading and retaining walls to construct a sidewalk. Accordingly, a sidewalk is proposed for the north side of the road only.
Improvement P3 – Seward Avenue/West Park Sidewalk

This project is similar to project S11. A much stronger and better connection needs to occur between the trolley station and the proposed East and West Park Avenue area and to the proposed Pilot Village area beyond. This project would widen the sidewalk along this corridor.
Improvement P4 – new pedestrian bridge over tracks at Del Sur Boulevard

This project will provide a much needed pedestrian link between the north and south sides of the track at Del Sur Boulevard. The grades at this location are favorable for the construction of a pedestrian bridge as the grades on the north side of the tracks would allow for the bridge to meet the existing grade flush. The bridge would then turn southeastward and gradually ramp down to the existing grade at a vacant lot at Vista Lane south of the tracks. The graphic below indicates the location of the proposed bridge.
Improvement P5 – Various street and sidewalk improvements.

There are numerous locations within the community that require sidewalk improvements such as new wheelchair ramps, new sidewalks, existing sidewalk repair, traffic lights, enhanced crosswalks and other pedestrian and street amenities. The graphic below indicates the locations of these improvements and the following page illustrates what some of these improvements might look like.
Examples of types of P5 projects