San Ysidro Intermodal Transportation Center Study

Final Report
June 2014

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1.0 Executive Summary

In October 2012, SANDAG and the City of San Diego, in collaboration with Caltrans, the Metropolitan Transit System (MTS), and the community, initiated a study to identify a multimodal concept for an Intermodal Transportation Center (ITC) in the vicinity of the San Ysidro Port of Entry (POE). The San Ysidro Intermodal Transportation Center (SYITC) concept is intended to serve as a welcoming gateway to the world's busiest land border crossing, and to mitigate mobility impacts generated by the major expansion of the POE currently underway. The study area is shown in Figure 1 below, while Figure 2 provides a regional context for the facility.

Figure 1 - Study Area Boundary

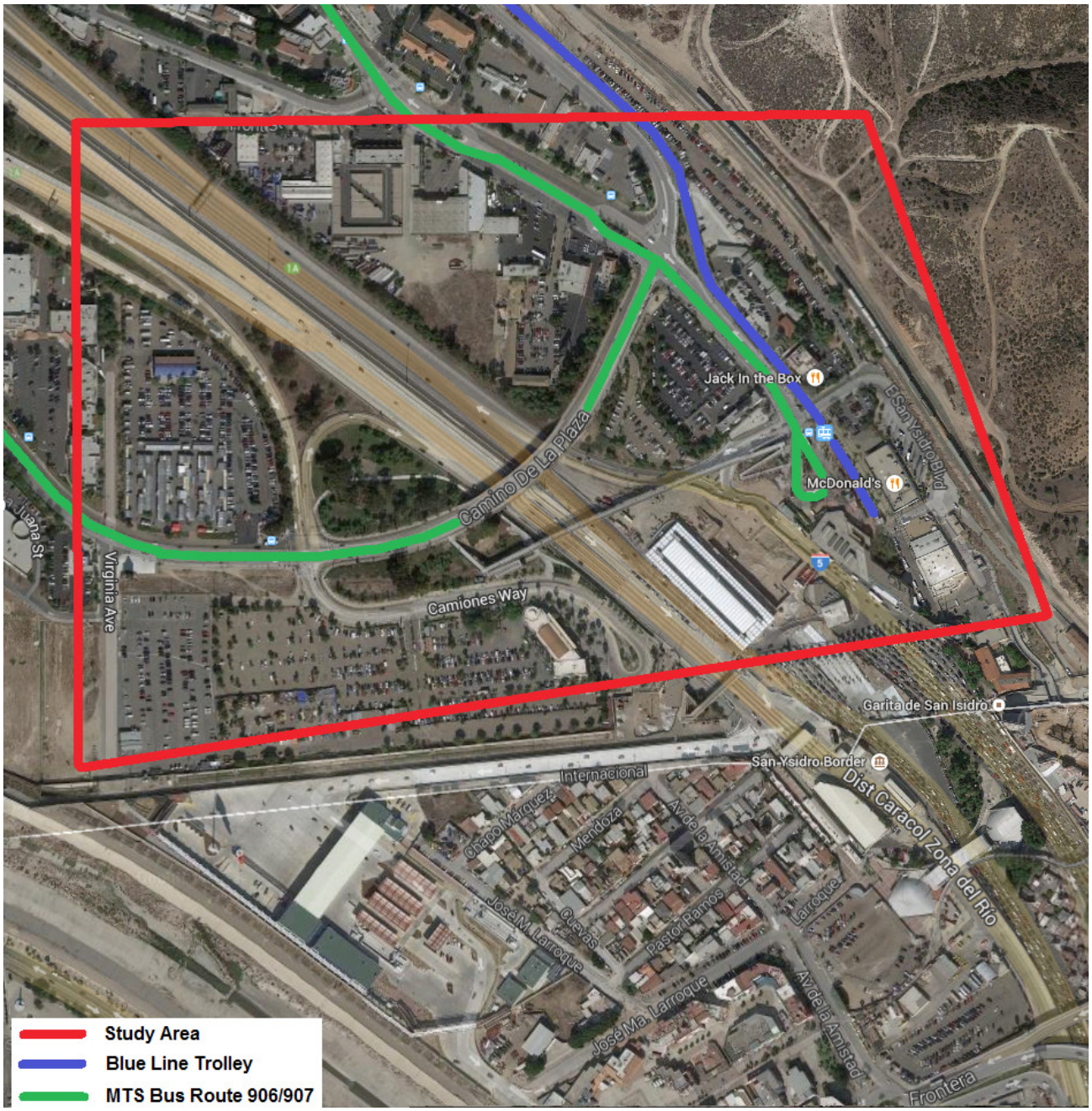

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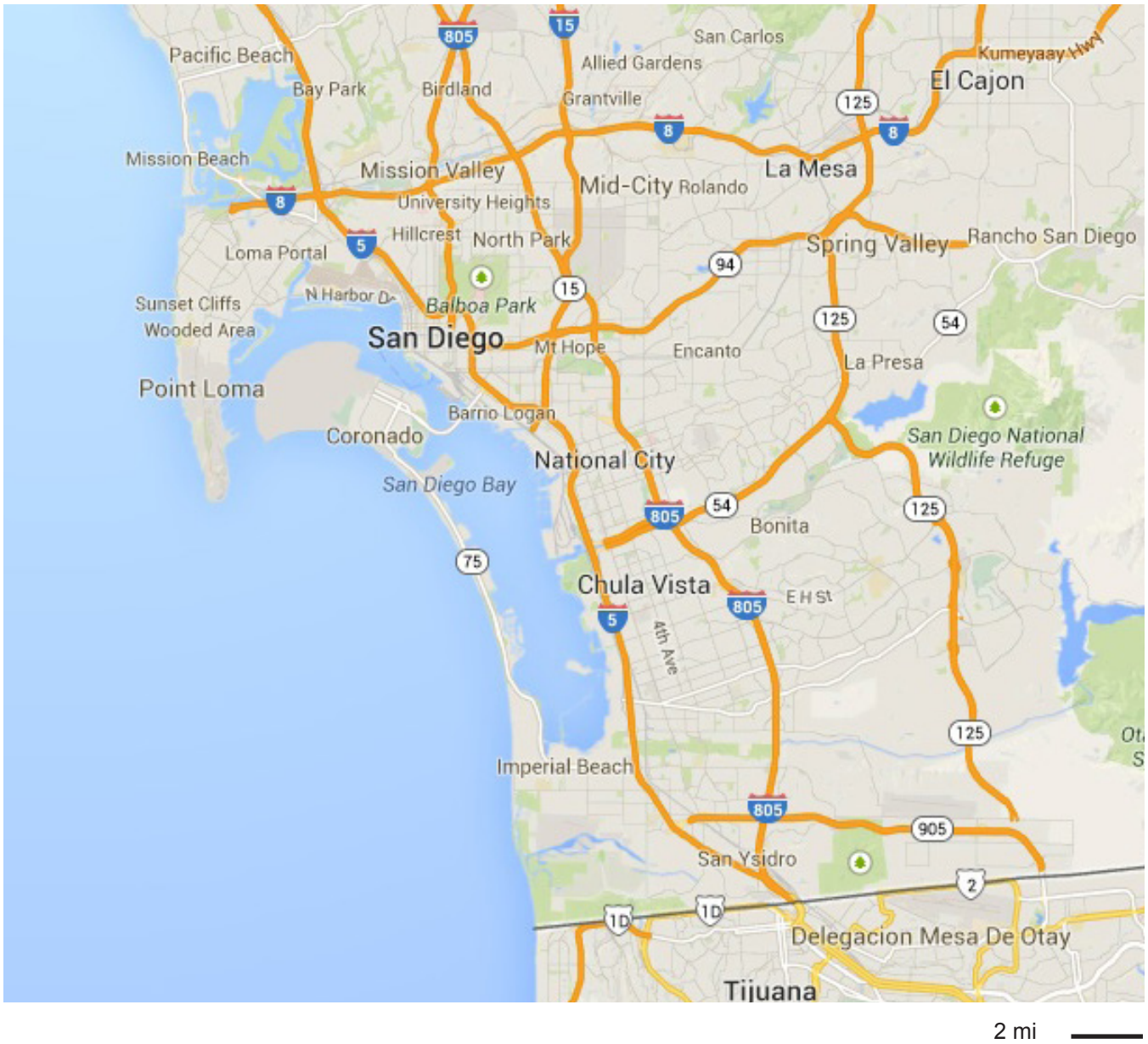
Figure 2 - Study Vicinity Map



A future SYITC would be an integral part of the San Ysidro-Puerta Mexico/Virginia Avenue-El Chaparral Port of Entry, providing the key transportation hub on the United States side of the border. It is difficult to overstate the economic, social and cultural importance of the San Ysidro POE to the San Diego-Tijuana Megaregion and to the local, regional and national economies on both sides of the border – and equally difficult to understate the critical need for improved mobility and access in this area. The United States Federal Government is investing about $600 million to improve and expand the POE facility. Mexico also has made considerable investments in the El Chaparral facilities.

Of the six POE's along the California-Baja California border region, San Ysidro consistently accommodates about half of the total vehicle and pedestrian crossings *(Source: California-Baja California Border Master Plan, Caltrans, September 2008).* In 2013, the San Ysidro POE complex on both sides of the border served approximately a million bus passengers, over 38 million passengers in private vehicles, and almost 16 million pedestrians (*Source: San Diego-Baja California Border Crossing and Trade Statistics, SANDAG, 2014)* – and these figures are still significantly below their pre-recession peaks. The more than 55 million people who crossed the border

here in both directions in 2013 is greater than three times the 18 million passengers who passed through San Diego International Airport (SDIA) in 2013 (Source: SDIA News Release, January 2014), and rivals the 67 million passengers who passed through Los Angeles International Airport in the same year (Source: 10-year Passenger Statistics, Los Angeles World Airports Authority). These comparisons reveal the importance of the SYITC not only to the community of San Ysidro and the City of San Diego, but to the region as a whole.

The purpose of the study is to produce a mobility and economic/fiscal feasibility analysis for a SYITC concept for evaluation and consideration as part of the comprehensive San Ysidro Community Plan update process. The study consisted of several key analyses and products, including:

- A comprehensive plan of **community involvement** in identifying key concerns and crafting a preferred SYITC concept (Task 2.1: Public Outreach Strategy Technical Memorandum, January 2013)
- A survey of **comparable** ITC facilities around the world to provide inspiration and lessons-learned (Task 4.0: Comparables Technical Memorandum, January 2013)
- A comprehensive analysis of **existing and future conditions** including a review of past studies and current projects in the area (Task 3.1: Prior/Ongoing Studies Technical Memorandum, March 2013), site constraints and opportunities; a real-estate market analysis of complementary on-site retail, commercial, and institutional uses that could enhance the SYITC as a community amenity and generate revenue for the project's construction (Task 5.0 Market Overview of ITC Potential Commercial and Institutional Uses, July 2013); and a demand and supply analysis for off-street parking facilities associated with the SYITC concept (Task 5.1: Off-Street Parking Analysis, June 2013).
- The development of two **alternative SYITC concepts** distilled from the work products above as well as concepts developed by the community at interactive sessions (Task 6.0: Development of SYITC Alternatives Technical Memorandum, August 2013)
- An **evaluation** of the concepts based on key criteria including transit operations; the transit customer experience; access, circulation and parking; traffic impacts; engineering elements; land use elements and development support; public-private partnership support; and cost estimates (Task 8.0: Evaluation of Options Technical Memorandum, September 2013)
- The development of a **preferred SYITC concept** that blends the best features of the preceding two concepts, and was refined based on stakeholder and community input (Task 9.2: Strategy for Implementing the Preferred ITC Alternative and Off-Street Parking Resources, Technical Memorandum, April 2014)
- A financial analysis to identify strategies for **funding and implementing** the SYITC, including both short-term and long-term actions to move the project from concept to reality (Task 9.2 Memorandum previously cited)

The preferred SYITC option developed in this study is illustrated in Figures 3-5, and its key attributes are as follows:

- Expanded Trolley platforms at-grade in approximately the current location
- A combined MTS / Intercity Bus Center in an extended elevated platform to the east of the Trolley platforms, taking advantage of the existing natural grade difference.
- A passenger automobile Pick-up and Drop-off (PPUDO) facility situated on the former MTS bus loop in front of the Station Plaza between the Trolley tracks and the POE, plus additional area for PPUDO further north along San Ysidro Boulevard. Provision for a cell-phone waiting lot in the ground floor of an on-site parking structure.
- A Bike Center situated in the pedestrian plaza with direct access to and from dedicated bike lanes on San Ysidro Boulevard.
- Pedicab pick-up/drop-off location adjacent to the public plaza and Bike Center.
- Station retail opportunities situated between the Trolley platforms and the Bus Station
- Ticketing, baggage-handling and passenger waiting facilities associated with the Intercity bus operations, in the space between the Trolley platforms and the Bus Station, at the southern end of the ITC, closest to the POE.
- Opportunities for street-front retail along San Ysidro Boulevard with improved streetscaping.
- Relocation of the Trolley tracks to the north of the SYITC, eliminating conflicts between vehicles/ buses and the Trolley, and providing space for private development of the northern parcel including a paid-parking structure.
- Spatial separation of the public station and the private development parcels, which implies more flexibility in terms of timing of the different capital investments by the public and private sectors and a simpler property arrangement.
- An expanded and inviting pedestrian plaza with landscaping, wayfinding information, public art and water features, that ties all the SYITC elements together and links the facility to the surrounding San Ysidro community.

The key transportation elements are summarized below:

Transportation Mode	Existing Conditions	Requirements
MTS Trolley	2 tracks; 3 platforms, 270’ long	3 tracks; 4 platforms, 360’ long
MTS Bus	3 service and layover bays	Up to 9 service and layover bays
Bike Station and Pedicab Stand	100 bike racks	Minimum of 40’x40’ facility
Pick-up/Drop-off (PPUDO) & Taxi Loop	3 designated taxi spaces; white-curb zone on E. San Ysidro Boulevard for approximately 6 vehicles	30 vehicles (20’ each)
Private Bus	10 bus bays	30 bus bays
Paid Parking and cell-phone waiting zone for passenger pick-ups	None	Provision for 560 space-structure and cell-phone waiting zone

Figure 3 – Transportation-related Facilities of Preferred Option

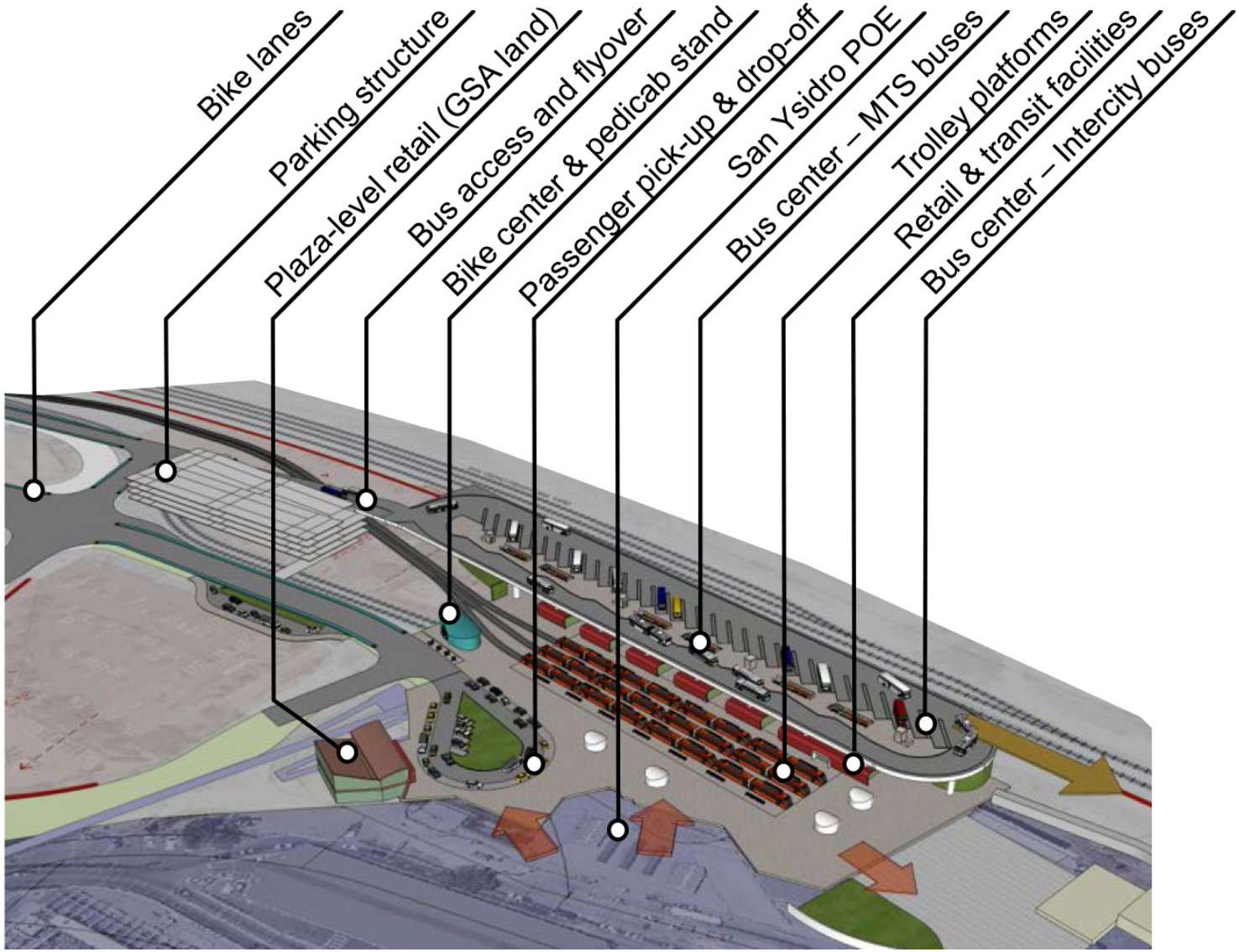


Figure 4 – Build-out Aerial View of Preferred Option

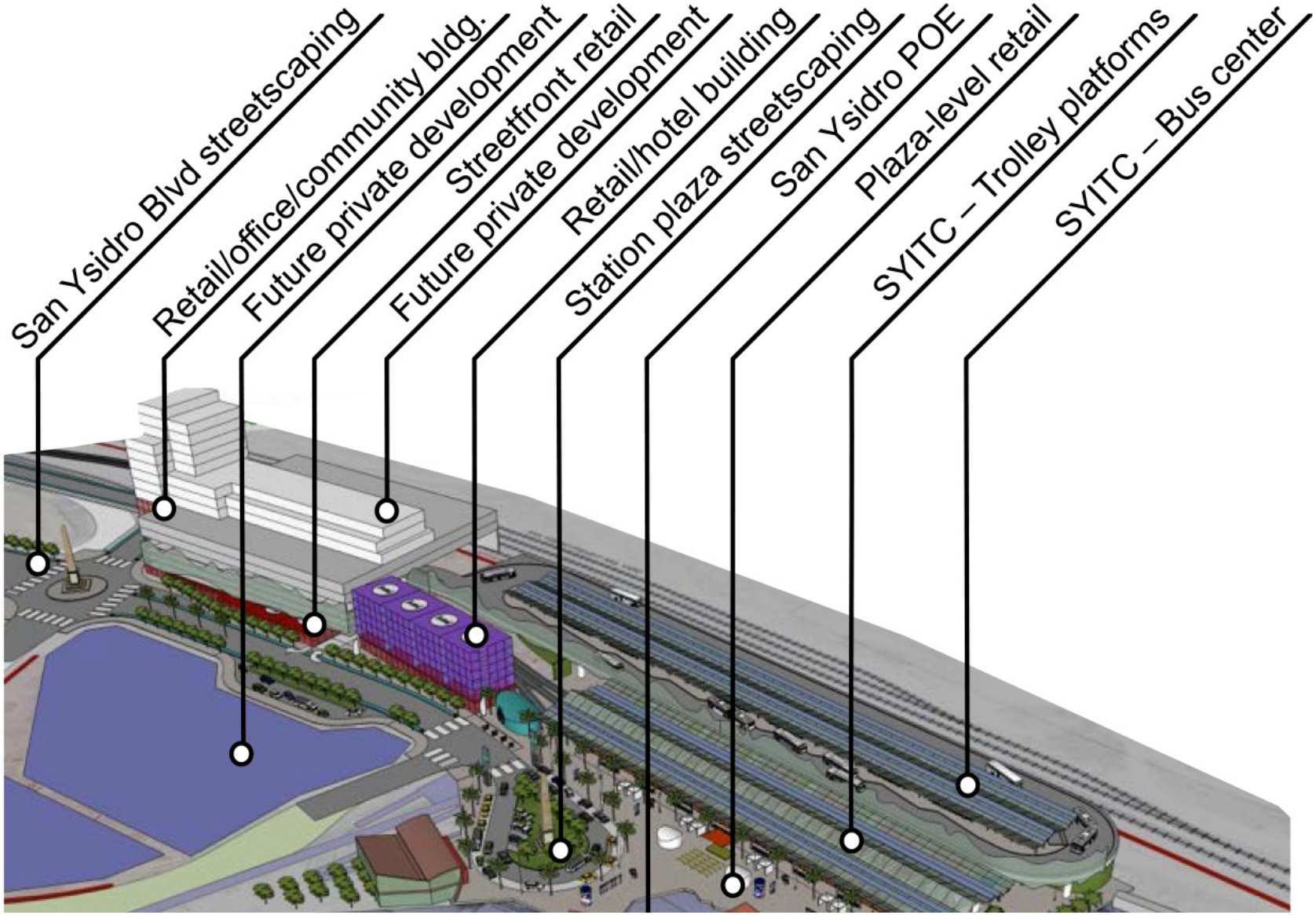
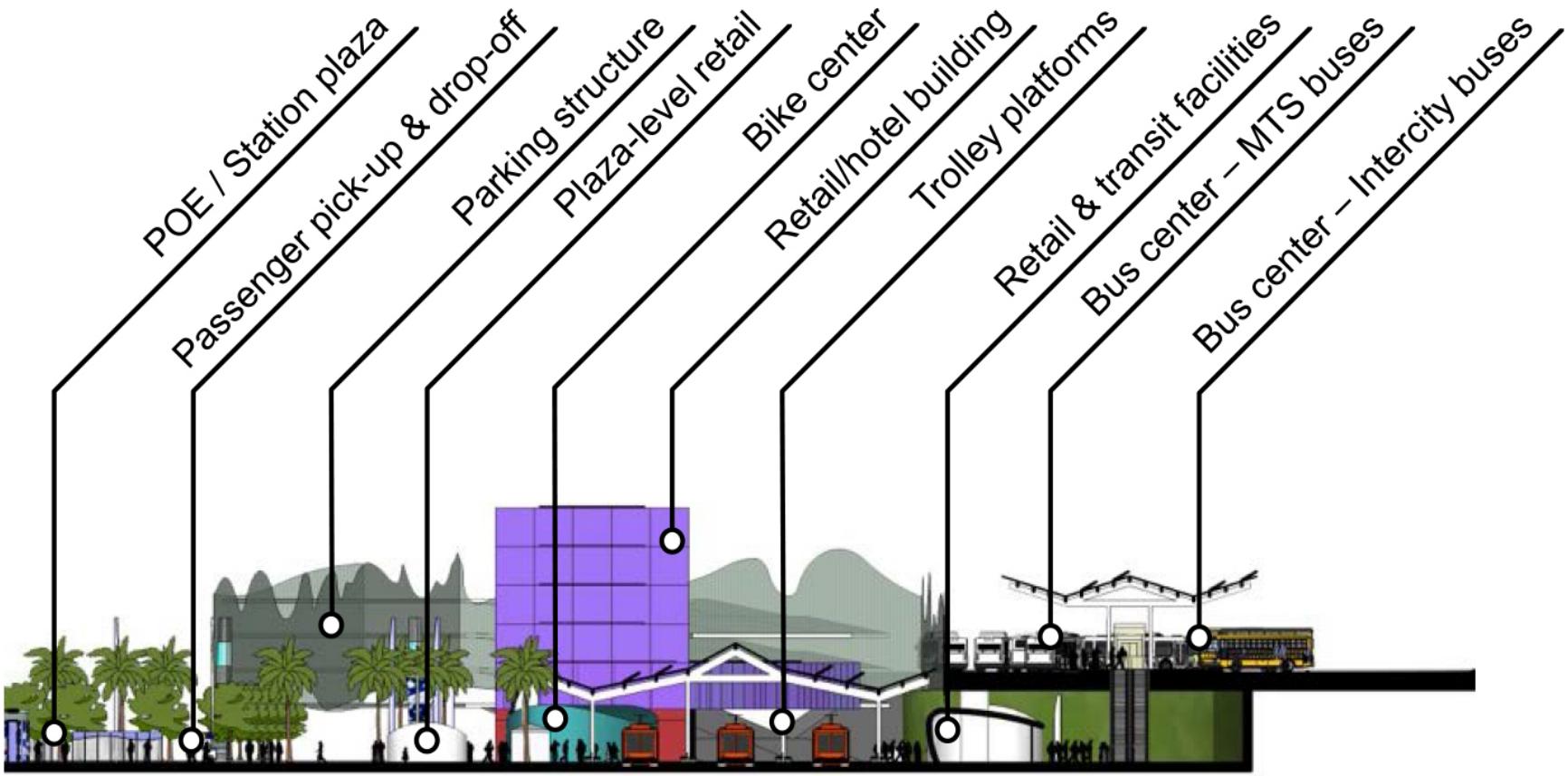


Figure 5 – Cross Section of Preferred Option



The total cost of the facility is estimated to be in the $125M to $150M range. The 2050 Regional Transportation Plan identifies $50 million in future funding for the transportation components of the SYITC; however, no funds are currently programmed for the SYITC. The biggest challenge facing the project is in identifying and securing a local/regional source of funding that will leverage other public and private revenue streams to create a full funding stream to construct and operate the facility.

A related challenge is that, even if significant funds are identified in the next 2-3 years, a new SYITC is highly unlikely to be completed in this decade, given the scope of land acquisition and construction required. The extensive meetings held in the San Ysidro community regarding this project have revealed significant interest in moving a project forward. The continued support and active participation of the community and stakeholder groups such as the San Ysidro Chamber of Commerce, San Ysidro Smart Border Coalition, Border Transportation Council, and local landowners and business owners, will be vital in advocating for and championing a local/regional funding source for the project.

To meet these related challenges, a multi-pronged strategy is recommended. It is suggested that the staff from the agencies involved in the development of the SYITC Study – Caltrans, the City of San Diego, MTS and SANDAG – is the appropriate group at the staff level to advance these efforts. Immediate efforts would focus on identifying and securing funding for the following actions:

Project Prospectus- Develop a SYITC Project Prospectus to highlight the key features and benefits of the project and its role in addressing local, regional, and interregional mobility. This would support several initiatives below.

Thought-Leader Engagement- Continue to engage key transportation and advocacy groups in discussing the possibility of a multimodal “Transportation Gateways” component to a future countywide funding initiative, positioning the project for state and federal funding opportunities and/or featuring the SYITC project as a key component in the emerging Border Infrastructure initiatives.

Public-Private Partnerships (P3)- Continue to explore the potential to use the P3 mechanism to accelerate project delivery and potentially reduce life-cycle costs. Evaluate strategies for involving current landowners as partners in a P3 venture, for example through equity partnership or long-term ground leases, and for offering current businesses the opportunity to carry on operations in the new facility.

Continued Conceptual Design. Continue conceptual design of the project in concert with the community, potentially including an international Design Competition to gather creative ideas for the look-and-feel of this significant Gateway to San Ysidro, San Diego, California and the United States of America. As stated above, it will be vital to continue to engage the San Ysidro community and its key interest groups in shaping the design of the facility.

Demonstration Projects. Consider low-cost demonstration projects to begin to demonstrate visible improvements to the ITC ahead of the larger project, sustaining community enthusiasm for seeing further improvements in the area. While the need to purchase significant right-of-way and relocate the Trolley tracks limits the amount of hard infrastructure work that can be undertaken in the near term, projects can be undertaken that will improve the area without investing in significant permanent infrastructure. Demonstration project ideas include:

- The SYITC could include improved signage and wayfinding to better guide pedestrians to their connecting modes as well as to the Border Village area.
- The new SYITC area could highlight a “facelift” to the overall look and feel of the area, including treatments to enhance pedestrian safety by designating walking paths, using low-cost and relocatable urban design elements borrowed from the “Tactical Urbanism” movement, which seeks to make small-scale, quick interventions to immediately improve the urban environment.
- The project might sponsor an international Design Competition to enlist creative ideas for the look-and-feel of this significant Gateway to San Ysidro, San Diego, California and the United States of America.
- In an effort to manage traffic accessing the facility, low-cost traffic engineering and/or Intelligent Transportation Systems solutions using light infrastructure (e.g. minimal, mobile on-site infrastructure; use of smart-phone apps to disseminate information) for managing traffic. A sample project could include a short-term lease on nearby available land for a “cell-phone waiting lot” to reduce auto circulation and idling in the immediate SYITC area, coupled with a before-and-after traffic study to gauge the benefits of improved auto pick-up/drop-off facilities in reducing conflict and congestion at the site.

Advance the Project Through the Preliminary Engineering and Environmental Clearance Phase. SANDAG has often employed a successful strategy of using local funds to advance a project into the design and environmental clearance phase, so it is more “shelf-ready” and competitive for State or Federal funds that may become available. Responding to a request made by several stakeholders, this could include consideration of a design variation whereby the Trolley is elevated through the site.

The following sections summarize the key points from each step of the study. Background information and further detail may be found in the Technical Memoranda as referenced in each section.

2.0 Community Involvement

Source: Task 2.1: Public Outreach Strategy Technical Memorandum, January 2013

Community involvement for the SYITC was integral and critical to the development of the preferred SYITC concept. The effort focused on providing outreach information to stakeholders, creating ample opportunities for stakeholders to provide input and ask questions, and maximizing inclusion of stakeholders in public meetings. Reflecting the bilingual and bicultural nature of the San Ysidro community, public outreach materials and project information was made available in both English and Spanish, and translators were available at all public meetings.

Based on these three imperatives, the following activities and their accompanying strategies were employed:

	Strategic Approach
1. Public Meetings	Aligned public meetings with the regularly scheduled meetings of the San Ysidro Community Plan Update Advisory Committee.
2. Research	Prepared for and augmented outreach efforts with appropriate surveys and with a series of interviews with community leaders.
3. Outreach Materials	Provided materials that describe the vision of what the SYITC can be, beyond improving transportation services. Updated materials as necessary from meeting to meeting to reflect development of alternatives and other progress.
4. Stakeholder Database Development	Ensured the complete development of stakeholder lists that included not only an in-house project team list but also databases maintained by community organizations, SANDAG, and the City of San Diego.
5. Notifications	Generated notifications in multiple ways that ensured all interested stakeholders had an opportunity to respond. Worked with community organizations to widen the distribution of notifications and materials.
6. Website and Social Media	Provided easy-to-access project materials on the SANDAG website and included links to a variety of project information.
7. Community Group Liaisons	Stayed connected with various groups and organizations with a specific interest in both the Land Port of Entry and the ITC.

2.1 Public Meetings

Four public meetings for the SYITC study were held in conjunction with the regular meetings of the San Ysidro Community Plan Update Advisory Committee. Each meeting was documented in a meeting report that captured information delivered as well as comments and questions received from the public. A Spanish-speaking interpreter provided translation for limited-English speaking community members. Attendee contact information, including email and postal addresses were collected at sign-in to build on the database of interested community members. Below is a description of the four meetings and their results:

PUBLIC MEETING SCHEDULE	
January 9, 2013 -- #1: Project Initiation	
Content Description	**Objective: Define the project, present similar projects from other communities around the world, acquire initial public input.** The presentation provided an overview of the study effort. An interactive portion using the "Turning Point" public participation survey system was used to interactively gather anonymous opinions on different ITC elements and design, through the use of hand held polling devices. Results of each question were displayed after attendees answered. A short paper survey was also used to determine the preferences or priorities for a potential future SYITC.
Meeting Format	Project Team presentation; theater-style seating with a Q&A session followed by the Turning Point interactive session. *Note: this information was also shared during a Casa Familiar community meeting workshop on February 28, 2013.*
March 13, 2013 -- #2 Alternatives Development	
Content Description	**Objective: Create a vision of what the SYITC can become. Complete creative input session for participants, registering their expectations for the project.** The team presented a summary of the project concerns and priorities gleaned at the first meeting through the "Turning Point" and paper surveys, and information from the real-estate market assessment that was undertaken.
Meeting Format	Break-out groups brainstormed ideas and discussed the desired ITC elements revealed by the survey results and how they could be incorporated in the SYITC design. Six groups (three conducted in English, three conducted in Spanish) at separate tables were given templates to visually create (interactive Lego block style) SYITC options on a site map. Six concepts were developed, and one meeting participant arrived with a pre-prepared concept, for a total of seven SYITC concepts. Short reports from each group were then given and documented. *Note: this exercise was subsequently repeated with San Ysidro High School students on April 11, 2013, and at a Casa Familiar Sin Límites workshop on April 18, 2013, yielding 25 additional concepts.*
July 10, 2013 -- #3: Alternatives Analysis	
Content Description	**Objective: present options and get public feedback on them.** Two SYITC concepts were presented for community feedback.
Meeting Format	Open House: following the presentation, stations for alternatives and various elements were presented on boards with team members at each station to answer questions. Input was gathered by using comment cards, and by an exercise whereby participants could place color-coded stickers on the exhibits to indicate project elements the liked and did not like. *Note: the concepts were shared and input was also sought at a Casa Familiar Sin Límites workshop on July 11, 2013.*
November 13, 2013 -- #4: Preferred Alternative	
Content Description	**Objective: Present Option Three and record questions and comments.** Option 3, a hybrid option incorporating the best features from the first two options based on feedback from the previous public meeting and stakeholder meetings, was presented, including information on how it fits the project criteria and also how public input influenced the choice. Next steps in the study were discussed.
Meeting Format	Presentation followed by Open House: following the presentation which featured a question-and-answer session, participants were encouraged to view the exhibits, interact with staff, and note their comments on comment cards.

2.2 Research

Parking demand and utilization counts and intercept surveys helped determine the sources of the parking demand and project the future parking needs for the area. This supporting parking information is included in the Technical Appendices to the study.

Two parking surveys of existing demand were completed:

- Existing Parking Demand and Turnover Utilization (data collected on 11/14/12 and 11/17/12), 12 hours each day
- Parking Intercept Surveys (conducted on 11/17/12 and 11/28/12), 400 surveys total, conducted in English and Spanish

Real Estate Market Demand

To ascertain the potential market for retail, institutional and commercial uses on the ITC site, the following outreach efforts were undertaken:

- Face-to-face interviews with approximately 20 San Ysidro business entities (including associations, property owners and real estate professionals), and about 10 government, educational and health-care entities, who have a potential interest in the ITC site
- Face-to-face interviews with about 10 Tijuana-based business entities interested in expanding or establishing operations in the San Ysidro area
- In-person or telephone interviews with about 25 retailers in the Border Village area (centered on San Ysidro Boulevard between Camino de la Plaza and I-805) for insights into unmet retail market needs in the area

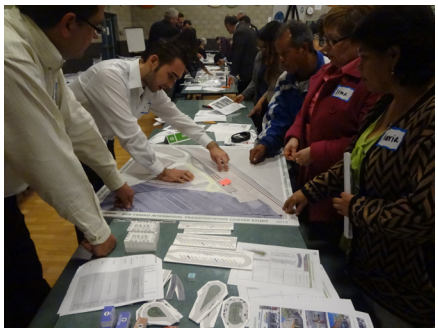
In addition, as part of the continuing San Ysidro Community Plan Update process, a series of 14 in-person and telephone interviews with a diverse cross section of San Ysidro community stakeholders, including property owners, were completed through November 26, 2012.

Pedestrian Survey

To obtain information and feedback from pedestrians who regularly cross the border from Mexico to the United States, a bilingual survey was developed and given at the San Ysidro POE to almost 500 northbound pedestrians in May and August 2013. The survey was given during daylight hours and balanced over weekends, weekdays and time of day. The survey collected the following information:

- Demographic and travel-pattern information
- Frequencies and reasons for crossing the border
- Shopping expenditures – amount and type of retail establishment
- Use of travel modes including Trolley, taxi, local bus, intercity bus, and automobile
- Approximately 15 to 18 questions that would take 4 to 5 minutes to complete
- Recommendations for facility improvements at the SYITC

2.3 Outreach Materials



A project fact sheet was developed for the project and updated as appropriate to reflect progress as indicated in the meeting topics above. In addition, postcard mailings advertising the public meetings were produced and mailed to property owners and residents within a one-mile radius. Meeting information and notifications were distributed through the San Ysidro Chamber of Commerce regular emails to members. Newsletter stories were included in the distributions by the San Ysidro Business Association. Finally, press releases were distributed to both English- and Spanish-language media that serve the San Ysidro area.

2.4 Stakeholder Involvement

In addition to individuals throughout the community, the following groups played roles in the ongoing study:

- Border Transportation Council
- Casa Familiar
- San Ysidro Smart Border Coalition
- San Ysidro Chamber of Commerce
- San Ysidro Business Association
- South County Economic Development Council
- San Ysidro Community Planning Group Update Advisory Committee
- San Ysidro School Board
- San Ysidro Transportation Collaborative
- Southwestern College, San Ysidro Campus

Project staff partnered with Casa Familiar to gather community input via its Sin Límites Workshops. At the February 28, 2013 workshop, SANDAG staff presented information on the study and gathered community input through a visual preference survey, and written survey. At the April 18, 2013 workshop, SANDAG staff shared information on the survey results, commercial market analysis, and off-street parking projections. The approximately 65 workshop attendees also participated in the interactive building-block activity and created five San Ysidro ITC concepts. At the July 11, 2013 workshop, input was received on Options 1 and 2.

Project staff also worked closely with two Committees of the San Ysidro Chamber of Commerce and Business Association throughout the study. The San Ysidro Smart Border Coalition (SBC) is a Chamber Committee composed of border-oriented business owners, landowners and transportation providers who advocate to the City, County, State and Federal governments regarding improvements to the border area. The SBC provided input on Options 1 and 2 at its August 8, 2013 meeting, and on Option 3 at its October 30, 2013 meeting.

The Border Transportation Council (BTC) is a Chamber Committee composed of private transportation providers who serve the border area. The BTC provided input on Options 1 and 2 at its meeting on May 14, 2013, and into Option 3 on November 12, 2013.

On August 6, 2013, project staff also presented Options 1 and 2 and solicited input at a meeting of the South County Economic Development Council, which brings together business and community leaders to promote education and encourage economic development in the South San Diego County Region.

2.5 Agency Direction and Policy Input

Staff from Caltrans, the City of San Diego, MTS and SANDAG provided continuous technical oversight and policy direction to the project team. In addition, high-level direction was received from the following governing bodies at key points in the study:

SANDAG Transportation Committee

- May 3, 2013: Initial study update including outreach and technical analysis undertaken to-date (Information)
- September 20, 2013: Presentation of Options 1 and 2 (Discussion)
- December 13, 2103: Approved Option 3 as the San Ysidro Intermodal Transportation Center concept to be analyzed in the study implementation plan and funding strategy.
- May 2, 2014: Funding and Implementation Strategy (Discussion)

SANDAG Borders Committee

- February 22, 2013: Initial study update including outreach and technical analysis undertaken to-date (Information)
- July 26, 2013: Presentation of Options 1 and 2 (Discussion)
- November 15, 2013: Presentation of Option 3 (Discussion)
- April 25, 2014: Funding and Implementation Plan Strategy (Discussion)

City of San Diego Planning Commission

- December 5, 2013: Option 3 (Discussion)

MTS Board

- October 10, 2013: Presentation of Options 1, 2, and an early draft of Option 3 (Input)

Input was also sought from other agencies working in the San Ysidro POE area to ensure the emerging plans for the SYITC were congruent with adjacent projects. Contacts were made with the United States Government Services Administration (GSA) staff working on the expansion of the San Ysidro POE, and the Secretariat of Infrastructure and Urban Development of Baja California (SIDUE) staff involved in the expansion of the El Chaparral and Puerta Mexico facilities, including a new intermodal center at the border.

3.0 Survey of Comparable ITC Facilities

Source: Task 4.0: Comparables Technical Memorandum, January 2013

To provide a guide as to best-practices in ITC facilities, five projects from around the world were analyzed in such key areas as:

- The mix of public transit modes served, as well as the transfer paths between modes
- The incorporation of urban development including commercial, retail and residential uses
- Accommodation for the automobile including access, circulation, parking and pick-up/drop-off areas
- The manner in which each project was financed, planned and constructed, particularly the use of public-private partnerships

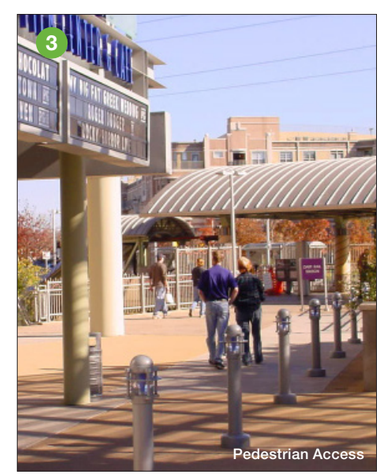
The table on the following page indicates the key features and lessons learned from the five case studies.

PPP Intermodal Transportation Stations Comparables

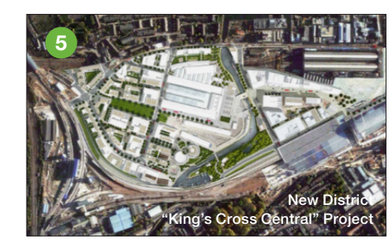
	1 Pico/San Vicente	2 Mexipuerto	3 Mockingbird	4 Central World	5 St. Pancras
PPP Type	Joint Venture	Finance-Build-Operate-Transfer	Parallel Venture	Parallel Venture	Finance-Build-Operate-Transfer
Location	Los Angeles, California	Mexico City, Mexico	Dallas, Texas	Bangkok, Thailand	London, United Kingdom
Public Sector Stakeholder	Metro/CRA/LA	Government of the State of Mexico/Municipality of Ecatepec	DART (coordination only)	Bangkok Mass Transit System	British Government
Private Investor/Developer	CIM Investments	Grupo Carso/Grupo Prodi/Homex	Hughes Development	Central Pattana (CPN)	London and Continental Railways
Public Investment/Contribution	$28 million loan to developers + 49% of sales tax to repay the loan	Land lease to private investors/developers	N/A (just station capital costs)	$0 (system was already built)	Land and existing station and buildings; transportation infrastructure
Private Investment/Contribution	$131 million est.	$62 million	$105 million (only private development)	$870 million	N/A
Total Investment	$168 million	$62 million	$105 million (only private development)	$870 million	$1.3 billion
On-site Transit Modes Served	6 bus lines on 11 bays	1 metro line/1 BRT line in 4 elevated platforms/multiple local bus and microbus lines in 27 bus bays	3 light-rail lines/6 bus lines on 7 bays	2 elevated metro lines/26 bus lines along 4,200 ft of sidewalks	International, regional, and commuter rail on 11 surface and 4 underground platforms/6 subway lines/12 bus routes on 3 bus stops
On-site Commercial Development	17,000 sq.ft. one-level streetside shops + 313,000 sq.ft. two-level stacked power center = 350,000 sq.ft.	185,000 sq.ft. two-story shopping mall with hospital, language school, government offices, and cinemas	211 apartments + 150,000 sq.ft. office + 183,000 retail + 20,000 sq.ft. est. cinema = 600,000 sq.ft.	5.6 million sq.ft. shopping center (retail, restaurants, cinemas) + 925,000 sq.ft. hotel + 825,000 sq.ft. office + 175,000 sq.ft. convention center = 7.5 million sq.ft.	180,000 sq.ft. est. shopping arcade at ground floor of main station + 90,000 sq.ft. est. hotel = 270,000 sq.ft. est.
On-site Parking	1,100 cars in surface and 3-story standalone structured parking	600 cars in three upper floors of building	735 cars in surface parking (station)/140 cars in surface parking (development)/1,300 cars in 5-story standalone structured parking (development)	7,000 cars in multistory structured parking underground	315 cars in multistory structured parking under railway tracks
Total Land Area	11.5 acres	4.7 acres	10 acres	27 acres	14 acres est.
Location of Transfer Facilities	At grade within private lot	Multistory facility within privately-leased public lot (buses)/on public ROW (light rail)	Sunken/at grade on public property adjacent to private lot	On public ROW at 1/4 mile of private lot (elevated metro rail)/at grade within the private lot (buses and taxis)	Multistory facility within privately-leased public lot
Transfer Passengers Per Day	4,000	130,000	3,560	45,000 (only elevated metro rail)	112,500
Non-passenger Commercial Retail Patrons	N/A	120,000 est.	43,000 est.	N/A	37,500
Total Users Per Day (Passengers and Non-passengers)	N/A	250,000 (Phase I)	46,000 est.	150,000	150,000
Retail Dependency on Transfer Passengers	Very Low	High	Very Low	Low	Very High
Project Status	Phase I Built (2007), Phase II Built (2012)	Phase I Built (2009), Phase II Planned	Built (2001)	Original Project Built (1990), Re-opening (2006)	Station Built (2007), Hotel Built (2011)

Planned Residential Development

Rendering of Shopping Mall


Pedestrian Access

Pedestrian Bridge at Night


New District "King's Cross Central" Project

4.0 Existing and Future Conditions at the SYITC

Sources: Task 3.1: Prior/Ongoing Studies Technical Memorandum, March 2013; Task 5.0 Market Overview of ITC Potential Commercial and Institutional Uses, July 2013; Task 5.1: Off-Street Parking Analysis, June 2013.

To provide reference material to support the creating of new concepts for the SYITC, IBI Group reviewed the site conditions, prior and ongoing studies, and conducted real-estate market and parking assessments.

4.1 Site Assessment

The general site identified in the SYITC Study is approximately 14 acres located along the northern edge of the San Ysidro Land Port of Entry (LPOE), south of Camino de la Plaza, east of Interstate 5, and west of the freight railroad tracks. The area has potential for several improvements to the access and circulation for the modes of transportation that serve border crossers as well as opportunities to create a dynamic mixed-use urban environment.

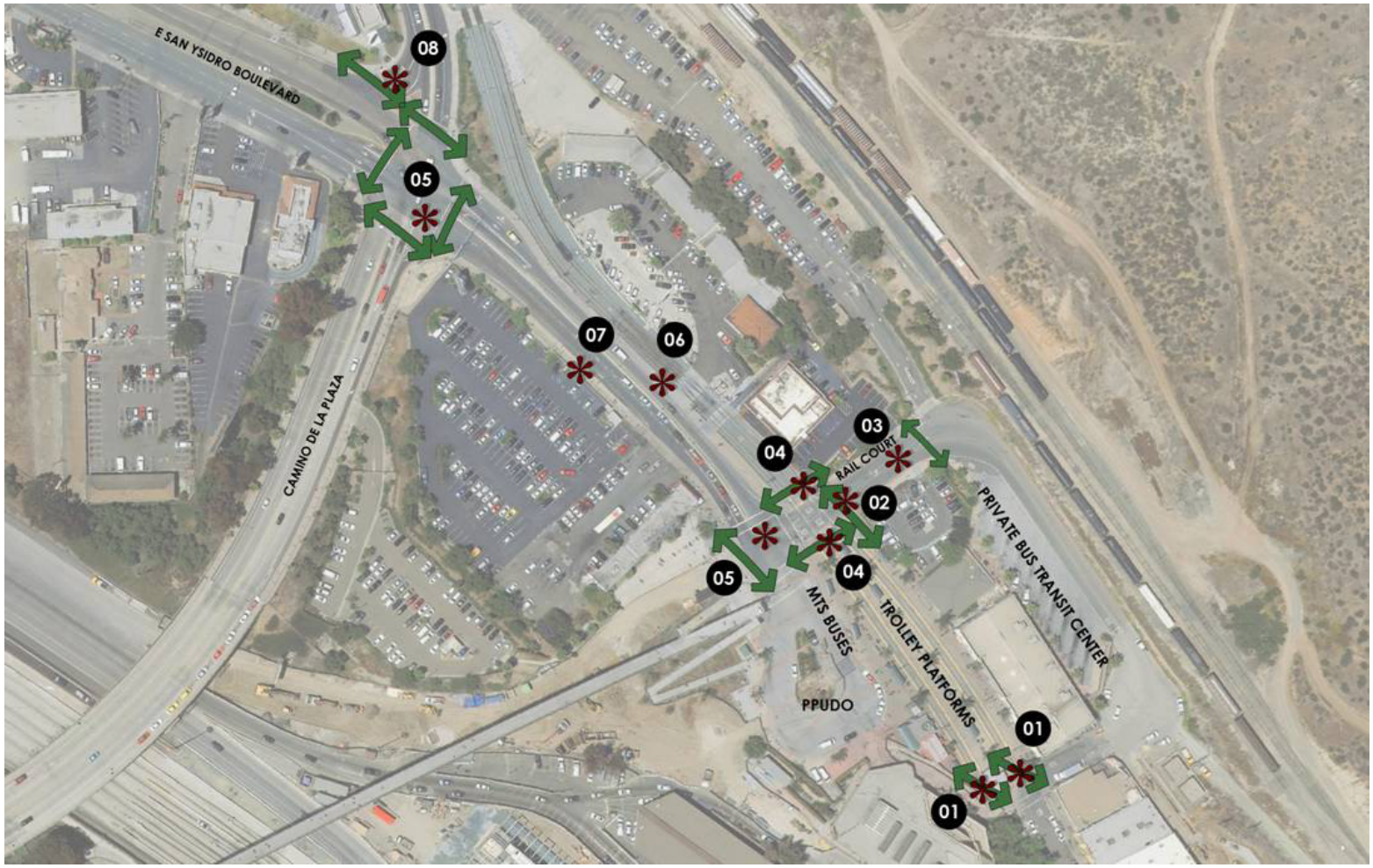
Opportunities

- San Ysidro POE is the busiest land POE in the world with more than 30 million people entering the United States every year
- Opportunity for this area to serve as a catalyst for the San Ysidro Border commercial area
- Direct access to MTS Trolley and local and long-distance bus services after crossing the border
- Opportunity for placemaking for a successful urban mixed-use development
- Opportunity to enhance the pedestrian environment and reduce conflicts with other modes of transportation

Constraints (see Figure 6)

- Constricted and often confusing space for pedestrian flow
- Informal midblock pedestrian crossing that conflicts with private bus and vehicular traffic
- Traffic congestion caused by private buses and passenger drop-off / pick-up that also conflicts with midblock pedestrian crossings
- Pedestrian conflict with Trolley
- Large curb radius and channelized turn lanes encourage high speed turns creating a significant impediment to pedestrians
- Trolley tracks cut off property from the street preventing pedestrian-friendly development
- Undesirable sidewalk environment

Figure 6 - Existing Conditions Constraints Diagram



(1) Constricted Pedestrian Flow

(2) Pedestrians Crossing Midblock Conflicting with Traffic

(3) Traffic Congestion by Private Buses and Passenger Drop-Off/Pick-Ups

(4) Pedestrian Conflict with Trolley

(5) Large Curb Radius Encourages High Speed Turns

(6) Trolley Tracks Cut Off Property from the Street

(7) Undesirable Sidewalk Environment

(8) Channelized Turn Lane Encourages High Speed Turns

4.2 Existing Circulation and Roadway Network

The circulation network surrounding and within the potential SYITC site is Camino de la Plaza, Beyer Boulevard, E. San Ysidro Boulevard, Rail Court, and Interstate 5. While Interstate 5 provides direct access from the SYITC site, the current configuration and function of the on-ramp results in traffic constraints to the network by being the primary access to Interstate 5 North used by not only the future SYITC but also other businesses along E. San Ysidro Boulevard and Camino de la Plaza. The portion of E. San Ysidro Boulevard leading up to Interstate 5 North on-ramp currently experiences long queues with passengers using the block as a drop-off/pick-up area, and it serves as the only access for several paid parking lots.

The Trolley tracks are located just east of E. San Ysidro Boulevard with paid parking lots, fast food restaurants, and other small retail operations adjacent to the tracks. Rail Court also bisects the tracks providing access to private bus operations behind the McDonald's restaurant, and currently serves as an informal and unintended passenger drop-off/pick-up area. This creates several at-grade crossing conflicts between Camino de la Plaza and Rail Court with conflicts for Trolley, vehicular, and pedestrian interactions.

The primary transportation challenges include:

- Adequately serving the access and circulation needs of the future SYITC for all modes of transportation
- Limiting pedestrian conflicts with vehicular traffic and the Trolley
- Providing safe, comfortable, and convenient access for cyclists and pedestrians to and from a future SYITC

4.3 Review of Previous and Ongoing Studies

A set of 13 planning documents were reviewed in order to produce a summary of pertinent information as it relates to the SYITC, an initial assessment of the components of the existing proposals for the SYITC, and a summary of community goals for the SYITC as articulated in prior documents. The planning documents reviewed included:

- San Ysidro LPOE Improvements Project, United States General Services Administration, ongoing
- Virginia Avenue Intermodal Transportation Center Project, SANDAG, ongoing
- Otay Mesa POE Project, SANDAG, ongoing
- San Ysidro Mobility Strategy, City of San Diego, January 2009
- San Ysidro POE Reconfiguration Mobility Study, City of San Diego, January 2010
- San Ysidro Redevelopment Plan, City of San Diego, 1996
- Second San Ysidro Redevelopment Area Implementation Plan 2001-2006, City of San Diego, 2003
- Third San Ysidro Redevelopment Area Implementation Plan 2006-2011, City of San Diego, 2008
- San Ysidro Community Plan, City of San Diego, 1990
- San Ysidro Community Plan Update Process, City of San Diego, ongoing
- Background Conditions Assessment and Market Analysis, City of San Diego, March 2012
- 2050 San Diego Regional Transportation Plan, SANDAG, October 2011
- California-Baja California Border Master Plan, Caltrans, September 2008.

4.4 Real Estate Market Assessment

The market assessment for the SYITC analyzed the market potential based upon 2035 projections for border crossing traffic, existing commercial business surveys, the ongoing San Ysidro Community Plan update market study, transit ridership projections, and other economic factors to estimate retail, lodging, meeting space, office and institutional uses. In 2035, the following uses could be supported by the SYITC:

Retail: By 2020, at least approximately 30,000 square feet and up to a maximum of 105,000 square feet of retail, consisting of a range of dining, other food services, specialty retail, along with services targeted primarily at pedestrian border crossers. By 2035, increased border crossings may support an additional phase of development that would result in a total of at least approximately 40,000 square feet to nearly 170,000 square feet of retail, in the same categories.

Lodging: Up to an approximately 75-room midscale limited service and/or extended stay hotel, potentially occupying up to 50,000 square feet (exclusive of parking).

Meeting Space: Up to 3,000 square feet of meeting and event space, most likely developed in conjunction with new lodging and operated in conjunction with the lodging facility.

Office and Institutional Space: Up to 30,000 square feet of office and institutional space targeted at two sets of users. The first set of users could be smaller office spaces targeted at businesses involved in cross-border trade as well as financial institution branches. The second set of users could be educational institutions, such as Southwestern College, looking for spaces suitable for classroom and educational uses. Supporting the upper end of the range could require attracting at least two educational institutions; the timing of the institutional demand is more likely to be driven by institutional needs than by market conditions.

Both phasing and placemaking are important elements of creating a successful mixed-use urban environment at the SYITC. The market assessment notes the importance of providing high quality public spaces to encourage people to gather, relax or spend more time at the SYITC and patron the commercial businesses.

4.5 Parking Assessment

Sources: Task 5.1: Off-Street Parking Analysis, June 2013; Parking and Occupancy Counts, November 2012; Border Parking Lot Survey Report, December 2012.

The development of a reasonable forecast of future parking needs for the project study area is an important component in the planning for the SYITC. The parking assessment for the SYITC study area encompassed a review of the existing parking supply and demand at paid parking facilities both east and west of Interstate 5 as well as intercept surveys of 400 parking lot patrons regarding their parking preferences and typical parking behavior. The existing parking lot surveys, which were conducted in November 2012 indicated a 44 percent weekday occupancy and 78 percent weekend occupancy.

In order to develop a future parking demand for the SYITC, the parking demand was evaluated for both east and west of Interstate 5. The future 2030 off-street parking demand forecasts were then developed using the following factors:

- Existing and Future Border Crossers (San Ysidro LPOE and future Virginia Avenue LPOE)
- Local Land Uses within ¼ mile of the potential SYITC
- Land Uses at the Future ITC (high-end estimates were used)
- Existing and Future Transit Facilities
- Walkshed
- Shared Parking Opportunities

Using these factors an estimated 2030 parking demand was developed as shown in Table 1. The estimates in the table do not reflect what must be accommodated at the SYITC but give an indication of the potential off-street parking demand for the study area at buildout. Table 1 also shows a parking deficit for both the weekday and weekend demand. This deficit is due to the anticipated loss of over 900 parking spaces with the development of Phase 3 of U.S. General Services Administration's (GSA) San Ysidro POE reconfiguration and expansion project west of Interstate 5.

Table 1 - 2030 Future Parking Demand

Location	Supply after GSA Phase 3	Peak Utilization	
		Weekday	Weekend
East of I-5	537	1,350	1,470
West of I-5	415	528	577
Total	**952**	**1,878**	**2,047**
Parking Deficit	**-**	**(926)**	**(1,095)**

It should be noted that the parking supply both east and west of Interstate 5 is based on the existing off-street public parking supply and does not include additional parking that may be provided as part of the SYITC or redevelopment of the study area. It is anticipated that the future parking supply and demand would be phased over time and accommodated by a combination of off-street public parking at the SYITC as well as off-site. The off-street public parking resources and strategies for the area would include surface lots and / or structures, operational and / or pricing strategies, wayfinding signage, digital message signs for real-time parking availability, etc.

The SYITC project itself could provide additional parking supply east of Interstate 5 by adding above ground parking structures – it is estimated that a 560 space structure can be accommodated within the site. While this would help meet a portion of the demand for the land uses within the SYITC as well as the border crossers that utilize the paid parking facilities, it is unlikely that the full deficit can be addressed within the SYITC site alone.

The additional future parking demand could be met by converting the surface parking lots east and west of Interstate 5 to above ground parking structures. There are a number of paid parking lots owned by private entities in the area, and if the right market conditions are in place, they may choose to invest in parking structures or other parking strategies. Nevertheless, given the build out nature of the study area, the options to relocate parking are limited, further necessitating the need for parking management strategies for the study area. The only other location within the general vicinity that has sufficient parking supply is The Outlets at Las Americas. The parking facilities at the SYITC could negotiate a leasing agreement with The Outlets at Las Americas for a set number of parking spaces that could be utilized in the future to accommodate future parking demand through parking management strategies such as valet parking. Table 2 below describes a range of parking supply and management strategies suitable for consideration in the San Ysidro border area.

Table 2 – Recommended Parking Management Strategies

Strategy	Action Plan	When to Implement
PRICING		
Monthly Fee	• Determine parking charge per month for use of spaces • Determine payment method and if automatic renewal system will be an option • Start with 6-9 month pilot project. Evaluate and modify program as necessary following the trail period	More suitable in the long-term when parking demand reaches or exceeds capacity.
Time of Day Charges	• Determine discounted rates for most underutilized time of day. • Increase parking rates during most heavily used time of day	Low-cost to implement; could be implemented near-term.

Strategy	Action Plan	When to Implement
Short-Term Parking	• Identify areas best suited for short-term parking • Determine turn-over rate from parking utilization study (ex. 2-3 hours) • Consider payment methods such as metered spaces	Could be implemented near-term but includes up-front costs of meter technology or personnel enforcement to monitor spaces.
OPERATIONS		
Staffed Facilities/ Enforcement	• While many of the privately-owned lots do currently have staff on-site, consider extra security during peak hours • Install security camera or hire enforcement personnel • Possibly increase parking fees to cover extra costs	May be costly, but would be beneficial for safety and enforcement and desired by survey respondents; could be implemented near-term.
Valet Parking	• Contract a private valet operator to manage and operate the service	Typically implemented when parking demand far exceeds the supply. Would be ideal within a new paid-parking structure at the SYITC when future retail development is developed on-site.
Passenger Amenities	• Provide passenger amenities such as coffee shops, car wash services, etc. • Identify available space for these services within the parking lot	Could be implemented near-tern if there is space available. In the future, the lot owners would need to dedicate space to these amenities.
Variable Use Spaces (carpool, energy efficient)	• Identify potential parking spaces that would be designated as reserved for special use • Start with 6-9 month pilot project. Evaluate and modify spaces as necessary following the trial period	Suitable when parking demand reaches or exceeds capacity. Would be a consideration in a new on-site paid-parking structure at the SYITC.
TECHNOLOGY		
Web-Based Parking Info	• Coordinate with potential host site(s) to identify parking lot locations, costs, availability, etc.	Suitable for long-term implementation once a host site is identified and parking demand reaches or exceeds capacity.
On-Site or District-wide Real-time Parking Guidance/Availability Signage	• Conduct a cost-benefit analysis of implementing parking guidance technology	Costly to implement; more suitable for long-term when parking demand exceeds capacity.
Advanced Reservations and Payment	• Identify the type of smart parking system best suited for the parking lot and area • Coordinate with potential host site(s) to manage information	Could be costly to implement; more suitable for long-term when parking demand reaches or exceeds capacity. Interested lot owners can begin research into different technology options.
LAND USE		
Shared Parking	• Develop SYITC retail and other land uses with the understanding that they will all participate in a shared use parking agreement • Conduct parking study upon development of the site to determine parking demands and peak parking occupancy of the surrounding land uses	Suitable when the parking demand reaches or exceeds capacity and when the SYITC land uses are developing.
Off-Site or Remote Parking Facility	• Explore parking opportunities off-site that would be supplemented by shuttle service or valet parking	Suitable when the parking demand reaches or exceeds capacity and when the SYITC land uses are developing.

5.0 Preliminary SYITC Concepts

Source: Task 6.0: Development of SYITC Alternatives Technical Memorandum, August 2013

Based on the prior tasks and information discussed in the preceding sections, and the input received from the community outreach meetings, IBI Group developed two conceptual plans for an ITC at the San Ysidro Land POE.

The effort involved the creation of design concepts for the site's development, including the specifics of ground transportation and transit facilities such as the Trolley light rail service, MTS fixed-route bus service, private bus, taxis and jitneys, parking and including pedestrian and bicycle circulation and access. The site layouts also included the provision for a commercial/ retail component of the SYITC based on square footage estimates developed under the market assessment study.

The development of the two SYITC concepts was also informed by the insight from individual meetings with MTS, California Highway Patrol, the State of Baja California Secretariat of Infrastructure and Urban Development (SIDUE), as well as public input collected between meetings and surveys from the following:

- Visual Preference Survey & Survey Monkey Results, January 9, 2013
- San Ysidro Community Plan Update Public Meeting, March 13, 2013
- San Ysidro High School, April 11, 2013
- Casa Familiar Sin Límites Public Meetings, February 28, April 18 and July 11, 2013.

SYITC Site Requirements

The basis for the SYITC alternatives concept process began with the understanding that the SYITC facility must accommodate the following transportation elements. These transportation elements were used as the starting point for developing SYITC concepts and shared as such with all groups that participated in the development of design concepts.

Site Requirements	
Trolley	3 Tracks, 360' Long
MTS Bus Bays	3 45' Bus Bays; 1 Articulated; 1 Layover
Bike and Pedicab Station	40'x40'
Taxi Station	15-20 taxis in staging area
Passenger Pick-up and Drop-off Zone (PPUDO)	10-15 private vehicles
Private Bus Bays	At least 16; more are desirable
Ticket Vending Machine Area	12 TVMs (similar space to existing)

*Taxis and PPUDO zone can be combined.

5.1 Alternative Concepts from Public Input

The formation of two concepts for the SYITC was developed based on public input, stakeholder input and review of the site constraints and opportunities. The public outreach efforts to gain input on the concepts included several public meetings which allowed attendees to participate in an interactive design exercise using scaled blocks to create a model of the future SYITC. These design concepts were reviewed and used to develop the two

options, as appropriate.

Public Input Design Concepts Summary

A matrix with all the design concepts summarized for each group is shown on the following pages. The matrix shows the similarities and differences between all the group participants. Common themes and similarities between the groups were:

- Trolley platform at-grade
- Trolley at its current location or moving it further east away from E. San Ysidro Boulevard
- MTS and Private Bus Bays at-grade or below
- Taxi and Passenger Pick-Up / Drop-Off at-grade
- Accommodate parking both on- and off-site at-grade or structure
- Small to medium intensity retail uses
- Other uses commonly accounted for:
  - Medical facilities
  - Multi-story atrium
  - Public restrooms
  - Bike Center
  - Park and Plaza

These group design concepts were used as part of the guiding principles to develop the two options. In addition to the design concepts presented above, there were additional concepts developed by San Ysidro High School students. These concepts are also summarized in the following matrix.

IBI GROUP SAN DIEGO SAN YSIDRO INTERMODAL TRANSPORTATION CENTER STUDY

Group Design Concepts Matrix		SY Community Plan Update Meeting March 13th Teams							Casa Familiar April 18th Teams					San Ysidro High School April 11th Teams																			
														Classroom 1				Classroom 2				Classroom 3				Classroom 4				Classroom 5			
Teams		3	4	6	7	9	10	X	1	2	3	4	5	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Trolley Platform Location																																	
Vertical	Grade	3		6	7	9			1	2	3	4	5			3	4	1			4	1		3		1					2	3	
	Below		4																2	3			2							1			
	Above						10	X						1	2										4								
Horizontal	Same			6			10		1	2	3	4	5	1		3	4		2				2		4					1	2		
	East	3	4			9		X							2			1		3	4			3		1							
	West																																
	North				7			X														1										3	
Other Modes of Transportation																																	
MTS Bus	Grade	3				9	10	X	1	2	3	4	5	1				1		3		1	2	3	4					1		3	
	Below		4	6	7																4					1							
	Above																																
Private Bus	Grade	3				9	10		1	2	3	4	5	1				1	2	3		1	2	3	4					1	2	3	
	Below		4	6	7			X													4					1							
	Above																																
Taxi & PPUDO	Grade	3	4	6	7	9	10		1	2	3	4		1	2		4	1	2	3	4	1	2	3	4					1	2	3	
	Below																									1							
	Above							X																									
On-Site Parking	Grade		4				10		1	2		4		1	2	3	4	1	2	3			2	3	4						2		
	Below																				4	1	2										
	Above		4	6			10	X	1	2				1	2	3	4		2	3					4								
Off-Site Parking	Grade	3		6	7	9	10		1	2		4		1	2	3				3		1	2	3	4	1				1	2	3	
	Below										3		5						2		4												
	Above	3		6	7	9	10		1			4		1	2	3				3		1	2	3		1				1	2	3	
Other Uses	Grade	3	4	6			10		1	2	3	4	5	1	2	3		1	2	3	4	1	2	3		1				1	2	3	
	Below						10																										
	Above		4	6				X				4	5	1	2				2	3	4	1	2								2	3	

TEAM 3

TEAM 4

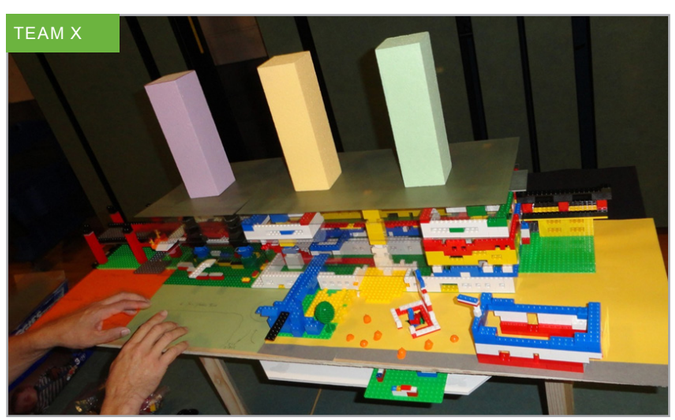
TEAM 6

Group Design Concepts Matrix		SY Community Plan Update Meeting March 13th Teams							Casa Familiar April 18th Teams					San Ysidro High School April 11th Teams																			
														Classroom 1				Classroom 2				Classroom 3				Classroom 4				Classroom 5			
Teams		3	4	6	7	9	10	X	1	2	3	4	5	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Land Uses at Trolley Station																																	
Retail	Small	3				9	10		1	2	3	4			2	3		1		3				3						1	2		
	Medium			6	7							4	5					1	2			1	2			1						3	
	Large		4					X					5	1			4				4												
Office			4		7		10	X						1			4					1								1	2		
Non-Profits					7																												
Cinema																										1							
Hotel			4	6	7			X							2	3															2		
Hotel Meeting			4	6				X											2														
Education			4	6		9											4														2		
Government	Miscellaneous									2	3			1						3		1				1							
	USPS		4																														
	Police/Fire	3				9	10				3										4												
	Employment					9																											
	Information Center					9					3		5			3		1	2														
	DMV					9																											
	Library					9																											
Medical	Clinic			6			10				3		5		2		4	1	2		4	1									2	3	
	Large																																
Multi-Story Atrium			4	6	7			X	1				5	1		3		1	2		4	1	2	3		1					2	3	
Public Restrooms		3						X	1	2	3	4	5	1	2	3	4	1	2	3	4	1	2	3		1				1	2	3	
Bike Center			4	6	7	9		X	1	2	3		5	1		3	4	1	2	3	4	1	2	3		1					2	3	
Rec Center					7			X			3						4	1													2		
Green Roof			4					X																									
Park		3	4		7			X	1	2		4				3	4	1	2		4	1				1					2		
Plaza		3		6	7	9		X		2		4				3	4			3	4	1	2			1					2		
Residential								X	1								4																

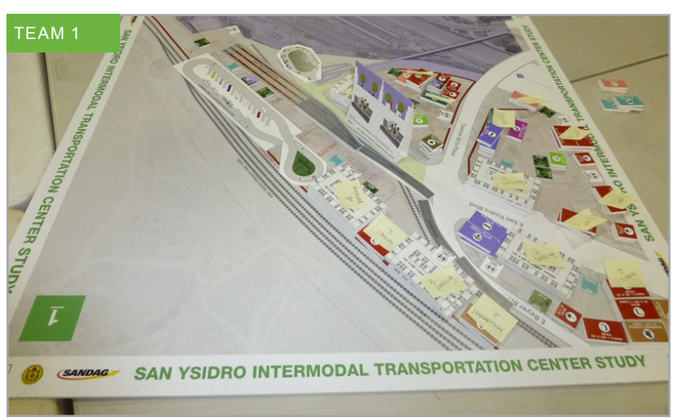
IBI GROUP SAN DIEGO SAN YSIDRO INTERMODAL TRANSPORTATION CENTER STUDY

Group Design Concepts Matrix		SY Community Plan Update Meeting March 13th Teams							Casa Familiar April 18th Teams					San Ysidro High School April 11th Teams																		
														Classroom 1				Classroom 2				Classroom 3				Classroom 4				Classroom 5			
Teams		3	4	6	7	9	10	X	1	2	3	4	5	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Transportation Uses on Triangular Block Between San Ysidro Blvd., Camino de la Plaza, and I-5 On-Ramp																																	
Parking	Small		4							2									2	3	4			3		1							
	Medium	3		6		9	10		1			4						1				1								1			
	Large				7						3		5										2									3	
	Grade								1	2		4								3		1	2	3		1				1		3	
	Below										3		5					1	2		4												
	Above								1			4								3		1	2	3		1				1		3	
MTS Bus	Grade														2		4		2												2		
	Below																																
	Above																																
Private Bus	Grade									2					2		4														2		
	Below																																
	Above																																
Taxi & PPUDO	Grade											4	5						2														
	Below																																
	Above																																
Land Uses on Triangular Block Between San Ysidro Blvd., Camino de la Plaza, and I-5 On-Ramp																																	
Retail	Small			6						2	3		5				4			3		1			4								
	Medium	3	4						1	2				1									2			1							
	Large											4				3		1															
Cinema						9																											
Office	Small	3		6		9	10		1			4							2						4								
	Medium									2																							
	Large																																
Apartments/Condos	Small	3																	2		4				4								
	Medium		4																														
	Large			6																													
Hotel						9							5	1				1	2	3			2	3									
Hotel Meeting						9							5	1							4		2	3							2		
Education							10		1					1					2						4								

TEAM X



TEAM 1



TEAM 2

IBI GROUP SAN DIEGO SAN YSIDRO INTERMODAL TRANSPORTATION CENTER STUDY

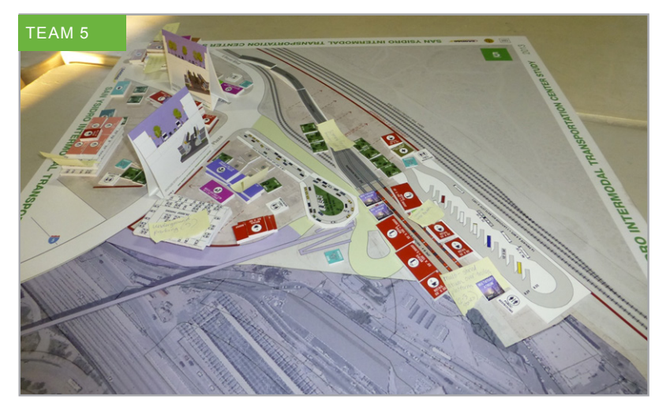
Group Design Concepts Matrix		SY Community Plan Update Meeting March 13th Teams							Casa Familiar April 18th Teams				
Teams		3	4	6	7	9	10	X	1	2	3	4	5
Government	USPS												
	Police/Fire								1				
	Employment												
	Information Center												
	DMV												
	Library												
Medical	Clinic	3											
	Large					9			1				
Multi-Story Atrium		3							1				
Public Restrooms		3				9			1		3	4	5
Bike Center			4				10		1			4	
Rec Center				6			10		1				5
Green Roof				6									
Park		3		6			10		1	2	3	4	5
Plaza		3				9	10		1	2	3	4	5

Group Design Concepts Matrix		San Ysidro High School April 11th Teams																													
		Classroom 1				Classroom 2				Classroom 3				Classroom 4				Classroom 5			
Teams		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Government	USPS																				
	Police/Fire									1											
	Employment																				
	Information Center			3		1															
	DMV																				
	Library																				
Medical	Clinic	1			4					1	2										
	Large																				
Multi-Story Atrium		1												1							
Public Restrooms		1		3	4	1				1	2	3		1				1	2		
Bike Center			2	3	4	1				1	2	3									
Rec Center								3	4												
Green Roof																					
Park						1	2	3		1	2	3		1					2		
Plaza		1		3	4	1		3		1	2	3	4	1					2		

TEAM 3

TEAM 4

TEAM 5



5.2 The Two Design Concepts

As a result of these efforts, two design concepts were developed. Both alternatives optimize circulation to reduce the number of conflicts without negatively impacting MTS Trolley or bus operations. Both concepts also feature extensive public spaces and amenities, a re-established walking connection to the greater San Ysidro community and San Ysidro Boulevard in particular, and the ability to add paid-parking, retail, office, institutional, hospitality and, potentially, residential development as the market matures over time. The two options are summarized below.

Option 1

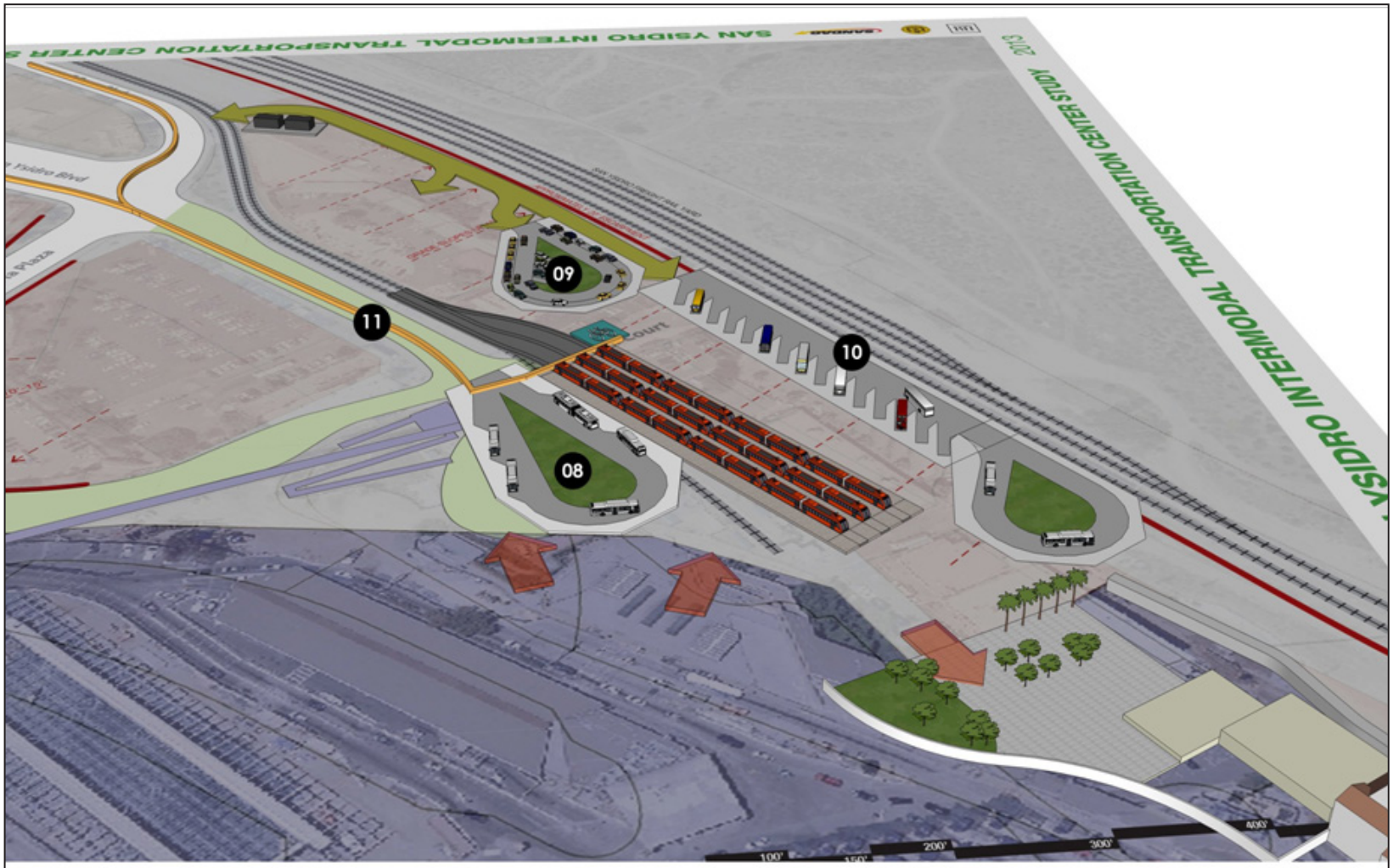
Option 1 would leave the Trolley station at-grade near its current location, providing a third track and extending the platform to allow for a four-car train. The MTS bus facility would remain at-grade in its current location. A passenger pick-up and drop-off (PPUDO) area for use by the general public would be provided east of E. San Ysidro Boulevard and north of Rail Court with access from E. Beyer Boulevard. Taxis would be relocated to it. Intercity buses would essentially remain in the same location elevated above the Trolley and MTS bus facility (via the existing natural grade change) with additional bays provided and the turnaround area being moved a short distance to the south.

Paid parking facilities would also be provided east of E. San Ysidro Boulevard in the current location of the hotel/paid parking lot with shared access from E. Beyer Boulevard. A plaza with retail and services would be provided west of the tracks. Future development could also be provided on levels above the paid parking structures. The station design would also allow for a Grand Central Station concept, with an atrium roof over the Trolley and space for retail uses within and above the atrium. The conceptual layout of the transportation elements and station amenities for Option 1 is shown in Figures 8 and 9. Figures 10 and 11 show the ultimate buildout of the site with commercial development and a profile of the proposed option, respectively.

A summary of the transportation elements for Option 1 is shown below.

Transportation Modes:	
MTS Trolley	3 tracks; 4 platforms, 360’ long
MTS Bus	4 bus bays, 1 layover bay
Bike Station	Minimum of 40’x40’
Pick-up/Drop-off (PPUDO) & Taxi Loop	30 vehicles (20’ each)
Private Bus	16-20 bus bays
Paid Parking	Provision for 560 space-structure (not in cost estimate)

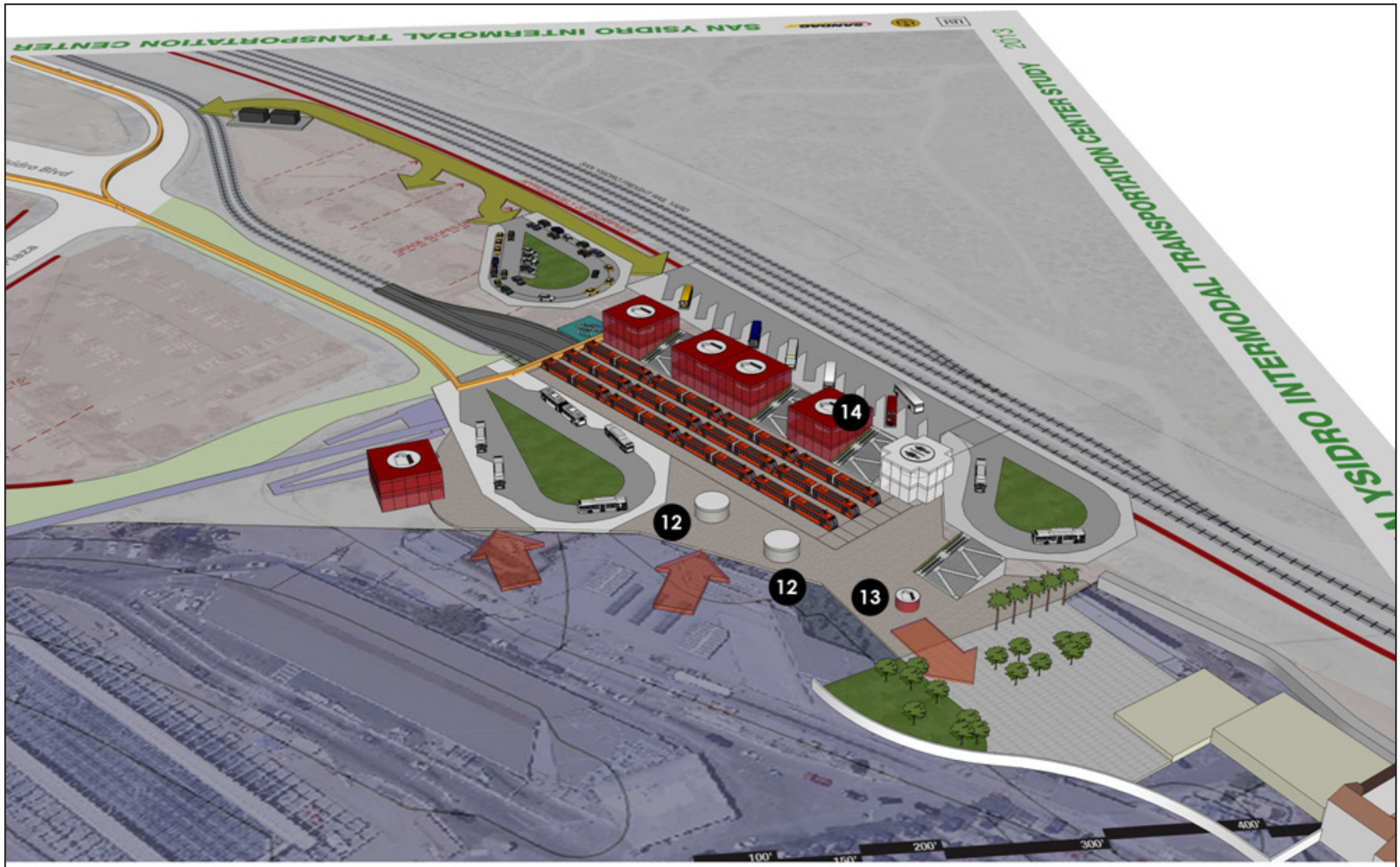
Figure 7 - Option 1 Transit Facilities



VIEW 6 - BUS BAYS AND PPUDO

08 MTS Buses
09 Passenger Pickup and Drop Off (PPUDO)
10 Private Buses
11 Bike Route

Figure 8 – Option 1 Transit Station Amenities



OPTION 1 VIEW 7 - VERTICAL CIRCULATION AND STATION AMENITIES

12 Long-Haul Ticketing, Information and Security
13 Duty Free Kiosk
14 Long-Haul Buses Waiting Area, Baggage

Figure 9 – Option 1 Ultimate Development

Figure 10 – Option 1 Profile

Option 2

The second alternative features an enclosed, iconic station concept with the Trolley platform moved east and the bus transit center (public and private buses) located beneath the Trolley platforms. Option 2 would relocate the Trolley station and tracks to the east adjacent to (but still below) the freight tracks as part of a multi-level transportation center. This option includes significant grading to put the Trolley station and tracks at its current elevation at-grade and providing an enclosed MTS and intercity private bus transit center below-grade. Like Option 1, the Trolley station would include a third track and extended platform to accommodate four-car trains. The station design would follow a Grand Central Station concept, with an atrium roof and space for retail uses within the atrium and street-fronting stores on E. San Ysidro Boulevard.

Structured parking would be provided in the same location as Option 1, but access would be provided from E. San Ysidro Boulevard. Option 2 places the taxis into a new PPUDO accessible to the general public where the existing MTS bus loop is located, slightly reconfigured, at the end of E. San Ysidro Boulevard. Conceptual layouts of Option 2 transportation elements, station amenities and commercial development opportunities are provided in Figures 11 through 15.

Option 2 offers the same basic transportation elements as Option 1, which are shown below.

Transportation Modes:	
MTS Trolley	3 tracks;4 platforms, 360’ long
MTS Bus	4 bus bays, 1 layover bay
Bike Station	Minimum of 40’x40’
Pick-up/Drop-off (PPUDO) & Taxi Loop	30 vehicles (20’ each)
Private Bus	16-20 bus bays
Paid Parking	Provision for 560 space-structure (not in cost estimate)

Figure 11 – Option 2 Below-Grade Bus Facilities

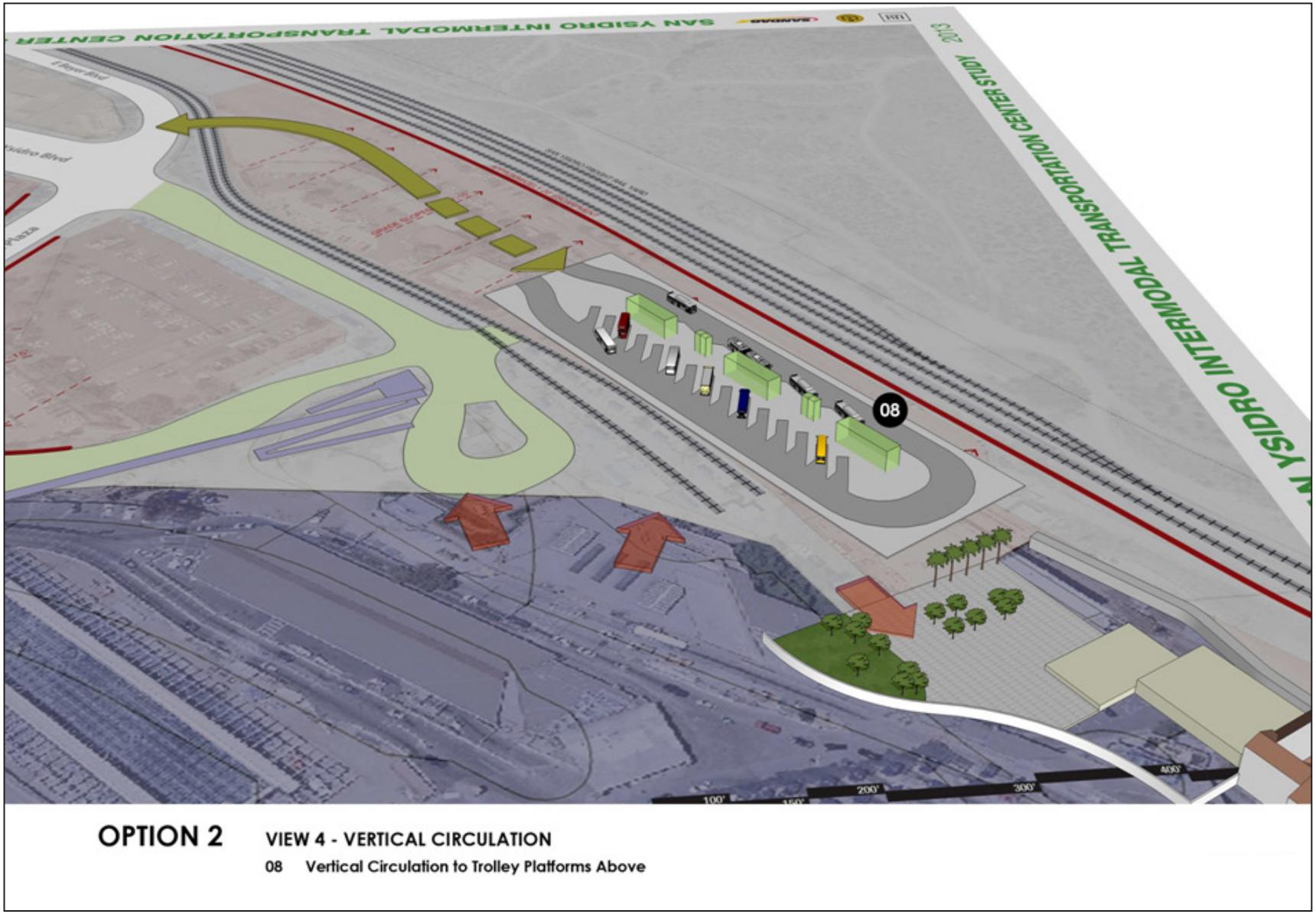
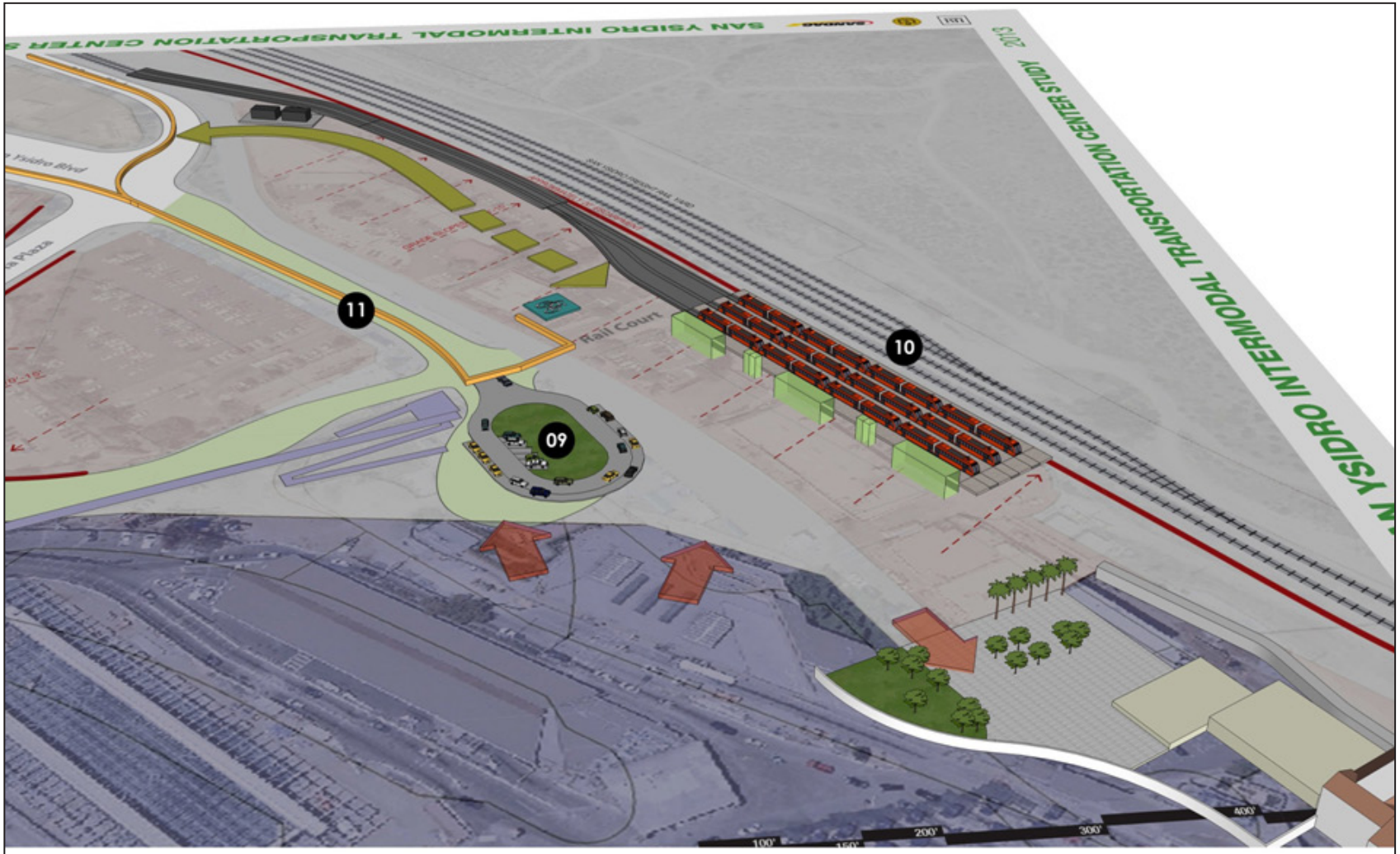


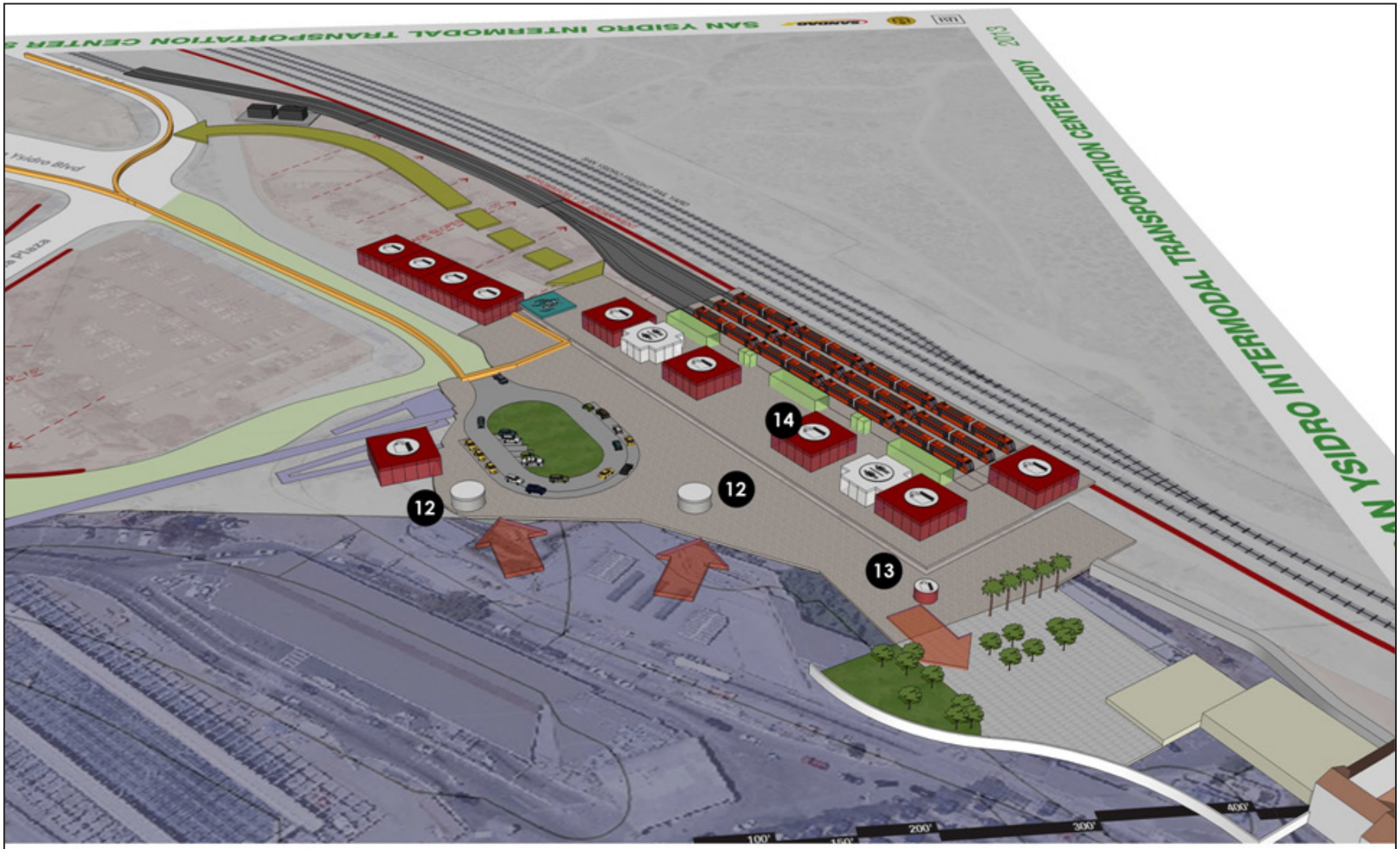
Figure 12 – Option 2 At-Grade Trolley Facilities



VIEW 5 - TROLLEY PLATFORMS AND PPUDO ABOVE GRADE

09 Passenger Pickup and Drop Off (PPUDO)
10 Trolley Platforms
11 Bike Route

Figure 13 – Option 2 Transit Station Amenities



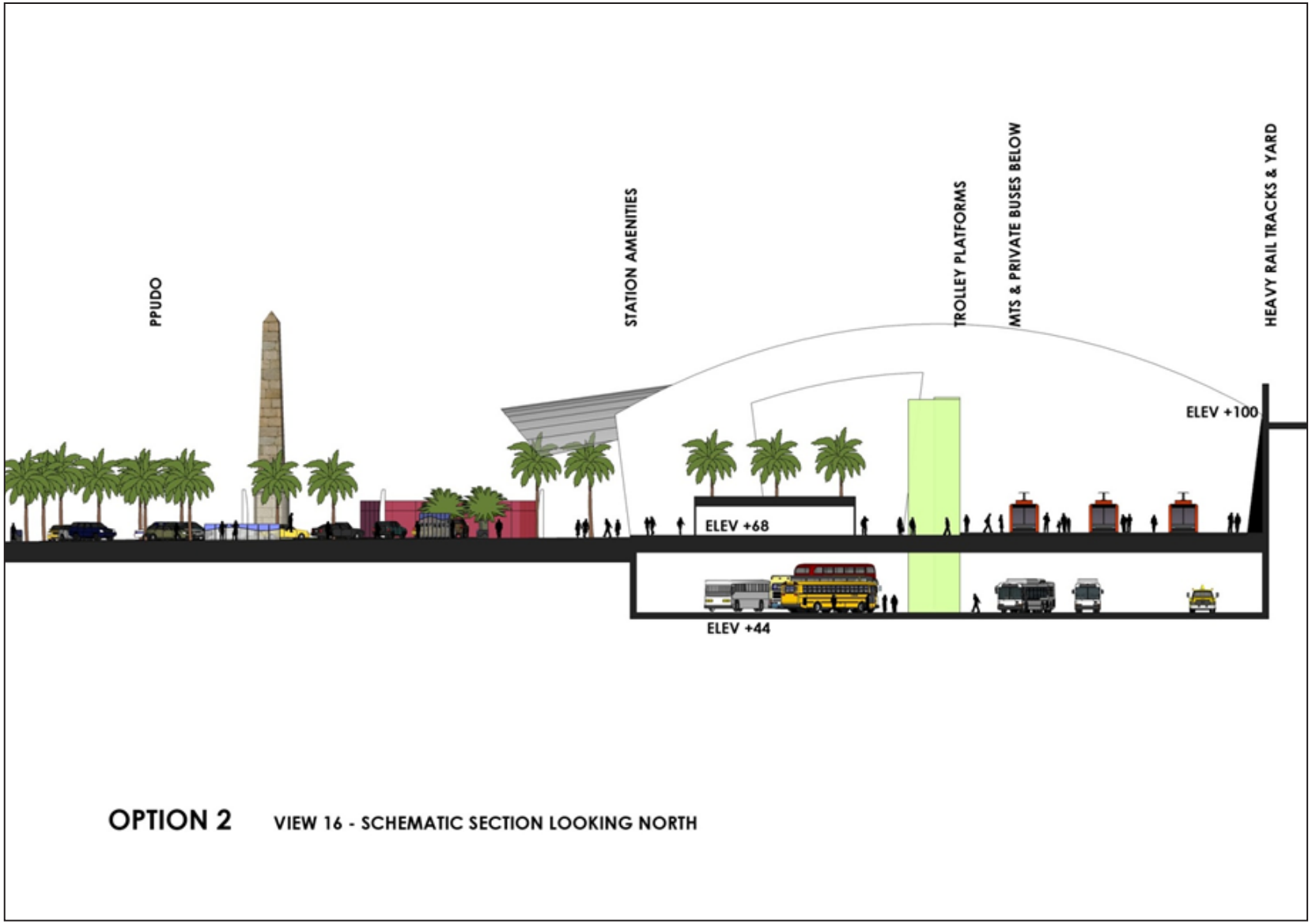
VIEW 6 - STATION PLAZA AND AMENITIES

12 Long-Haul Ticketing, Information and Security
13 Duty Free Kiosk
14 Long-Haul Buses Waiting Area, Baggage

Figure 14 – Option 2 Ultimate Development

VIEW 11 - POSSIBLE FUTURE PRIVATE DEVELOPMENT

Figure 15 – Option 2 Profile



6.0 Preliminary SYITC Concept Evaluation

Source: Task 8.0: Evaluation of Options Technical Memorandum, September 2013

Following their development, the two SYITC concepts were subjected to a rigorous technical evaluation considering the following major performance measures:

- transit operations
- the transit customer experience
- access, circulation and parking, including traffic impacts
- engineering elements
- land use elements and development support
- public-private partnership support
- cost

The alternatives and the evaluation were reviewed with Caltrans, the City of San Diego, MTS, and SANDAG, and were presented to the public at the July 10, 2013 public meeting, at a Casa Familiar Sin Limites workshop on July 11, 2013 and presented at a meeting of the South County Economic Development Commission on August 6, 2013. The two options were also presented to the Border Transportation Coalition on May 14, 2013 and to the San Ysidro Smart Border Coalition on August 8, 2013. This input helped to shape the Preferred Concept which is described in the next section.

7.0 The Preferred Concept

Source: Task 9.2: Strategy for Implementing the Preferred ITS Alternative and Off-Street Parking Resources, Technical Memorandum, April 2014

After review of the concepts by the transportation agencies and community stakeholders, it was apparent that although both options had key elements in common, each option also had several key elements that stood out as desirable, as noted below:

Option 1

- Keeps the Trolley platform in its existing “prime” location, close to the POE
- Contains costs by keeping all elements at-grade and working with the existing site topography

Option 2

- Moves the Trolley tracks to open up space for street-fronting retail along San Ysidro Boulevard
- Eliminates at-grade crossings with vehicles/buses and the Trolley
- Provides a larger passenger pick-up and drop-off (PPUDO) area and locates it closer to the POE
- Improves the driveway entrance for buses on E. Beyer Boulevard
- Allows for private development to occur independently of station construction and operations

In addition, members of the San Ysidro community expressed an interest in seeing:

- More intercity bus bays than currently included in the two options, up to 25-30 bays
- Expanded facilities for vans, jitneys, pedicabs, taxis, bicycles and private vehicles
- Potentially elevating the Trolley to a second level

Based on this input, the consultant team designed a third option with the objective of including the expressed desirable elements. The result is Option 3, the preferred option, which is depicted in Figures 16, 17, and 18. On December 13, 2013, the SANDAG Transportation Committee approved Option 3 as the concept to be analyzed further in the implementation plan and funding strategy task.

Option 3

Key attributes of the preferred option are:

- Maintenance of the expanded Trolley platforms at-grade in approximately the current location
- Location of the combined MTS / Intercity Bus Center in an extended elevated platform to the east of the Trolley platforms, taking advantage of the existing natural grade difference.
- Station retail opportunities situated between the Trolley tracks and the Bus Station.
- PPUDO situated on the former MTS bus loop in front of the Station Plaza between the Trolley tracks and the POE, plus additional area for PPUDO further north along San Ysidro Boulevard.
- A Bike Center situated in the pedestrian plaza with direct access to and from dedicated bike lanes on San Ysidro Boulevard.
- A pedicab stand adjacent to the public plaza and Bike Center.
- Opportunities for street-front retail along San Ysidro Boulevard with improved streetscaping.
- Relocation of the Trolley tracks to the north of the SYITC that allows eliminating conflicts between vehicles/buses and the Trolley, and the private development of the north parcel including a paid-parking structure.
- Spatial separation of the public station and the private development parcels, which implies more flexibility in terms of timing of the different capital investments by the public and private sectors and a simpler property arrangement.

Table 3 below provides a summary evaluation of the three options.

Table 3 – SYITC Options Evaluation Matrix

OPTION 1 Trolley Tracks Near Existing Location	OPTION 2 Trolley Tracks Relocated to the East with Underground Bus Facility	OPTION 3 Trolley Tracks Near Existing Location with Second Level Bus Facility
Transit Operations and Customer Experience		
✓	✓ ✓	✓ ✓ ✓
- Facilities for all transit modes expanded "in place" - Bus/rail/auto conflict at grade crossing remains	- Facilities for all transit modes expanded - Bus/rail/auto conflict removed - Trolley platforms move further away from POE doors - All buses combined into one facility	- Facilities for all transit modes expanded - Bus/rail/auto conflict removed - Trolley platforms stay in existing location - All buses combined into one, expandable facility
Access, Circulation and Parking		
✓	✓ ✓	✓ ✓ ✓
- Auto and taxi pick-up and drop-off (PPUDO) circulation is out-of-the-way - Longer walk from PPUDO to Port of Entry (POE)	-Circulation for all modes is clear and straightforward	-Circulation for all modes is clear and straightforward
Constructability		
✓ ✓	✓	✓ ✓ ✓
- All at-grade construction - Relocation of at-grade crossing could be a California Public Utilities Commission issue	- Significant excavation and structures needed	- Site constraints may require some design exceptions
Land Use Elements and Community Development Support		
✓	✓ ✓ ✓	✓ ✓
- Leaves tracks along San Ysidro Boulevard - limits opportunities	- Provides largest plaza space for community amenities	- Provides same plaza space as Option 1 while relocating tracks off San Ysidro Boulevard
Public Private Partnership Support		
✓	✓ ✓ ✓	✓ ✓
- Complicates "deal" by mixing all commercial and transportation uses in same space	- Provides most space for commercial development	- Space for commercial development somewhat constrained
Capital Costs		
$90-120M	$144-200M	$125-170M

Figure 16 – Transportation-related Facilities of Preferred Option

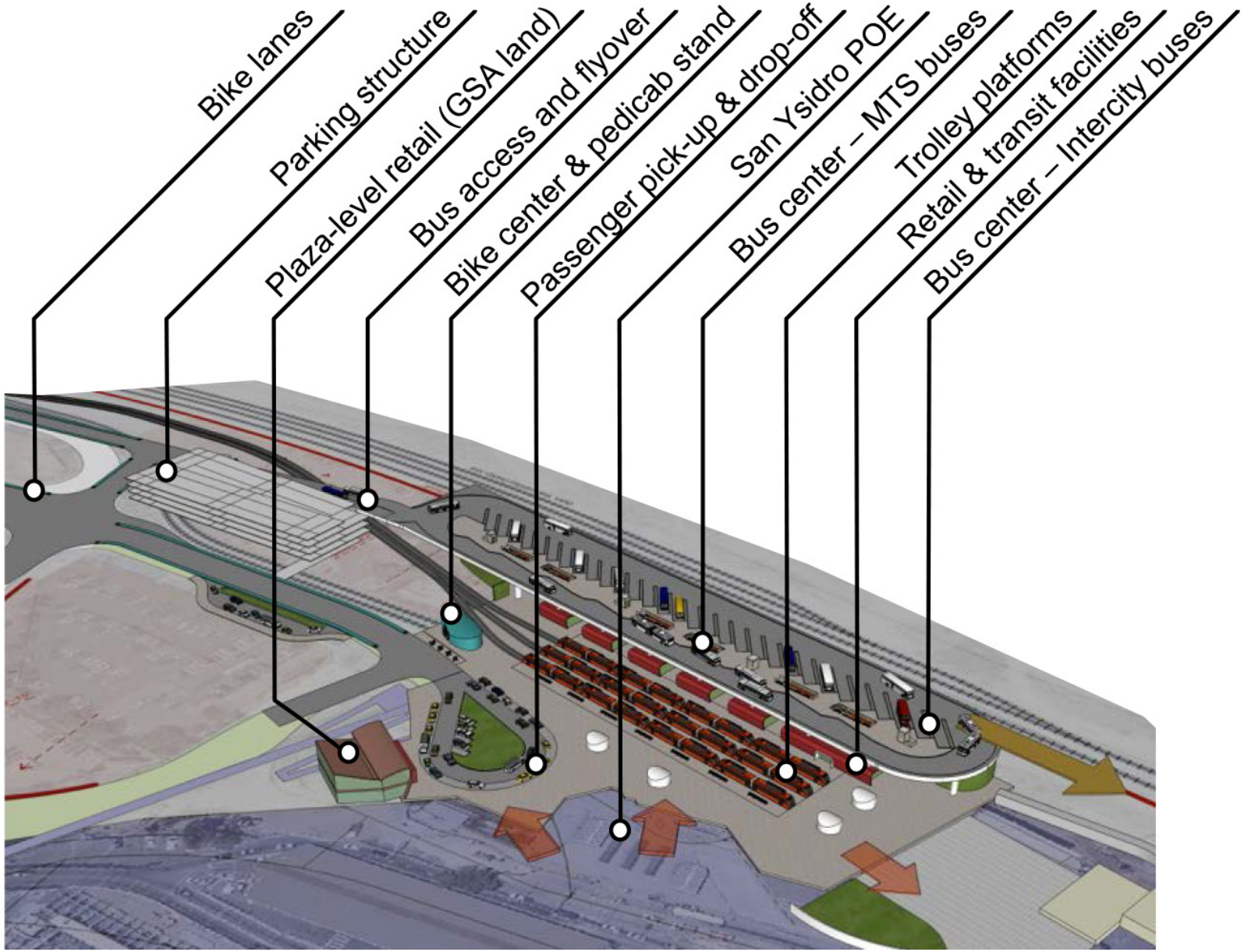


Figure 17 – Build-out Aerial View of Preferred Option

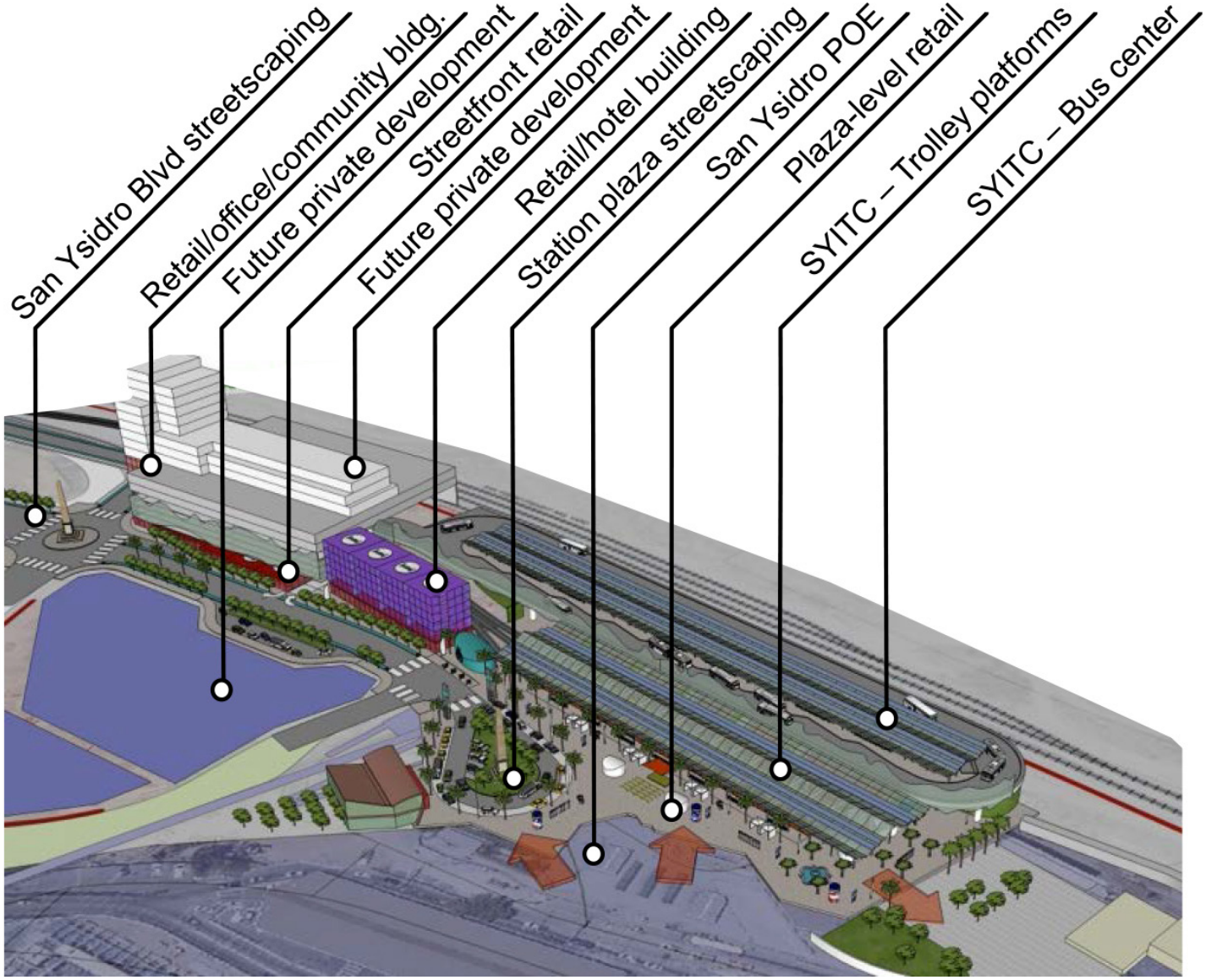
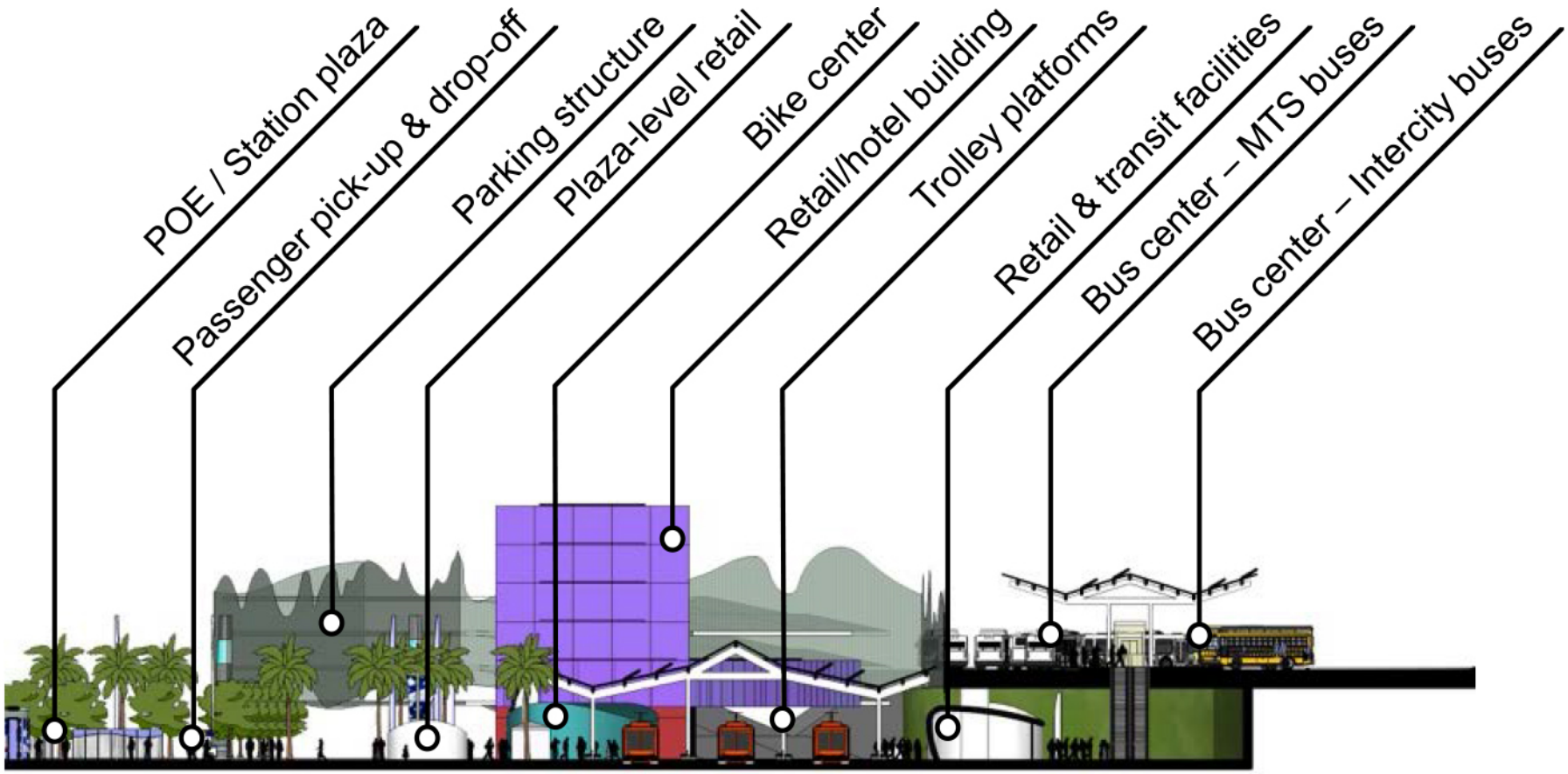
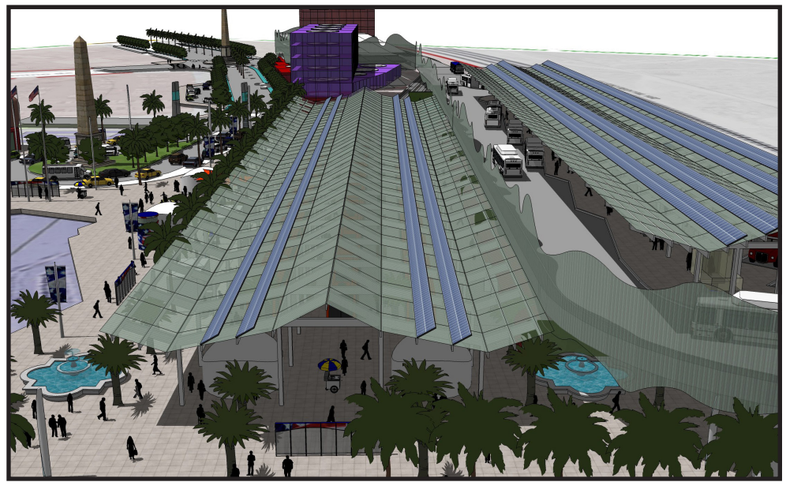
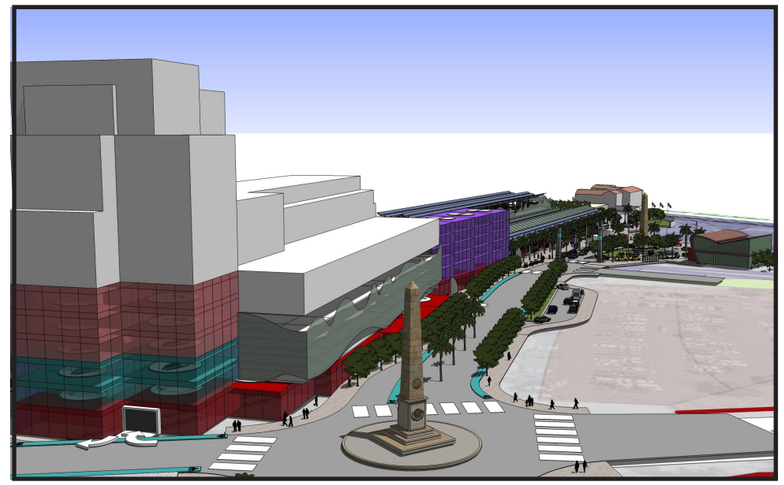


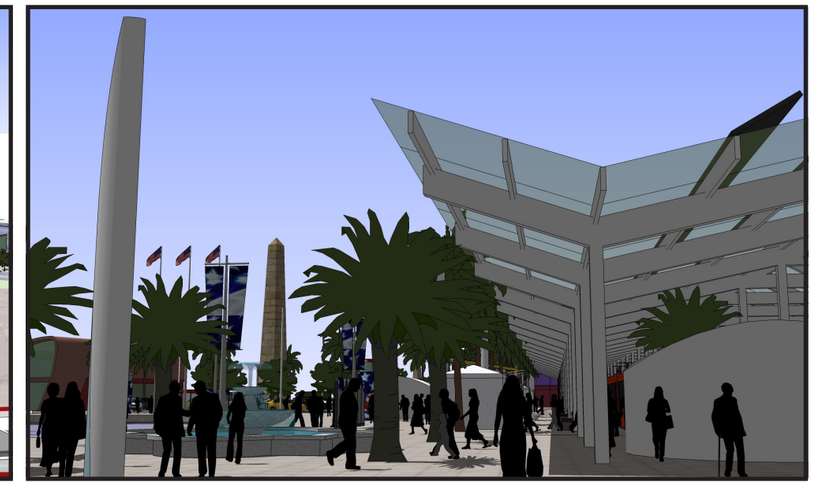
Figure 18 – Cross Section of Preferred Option

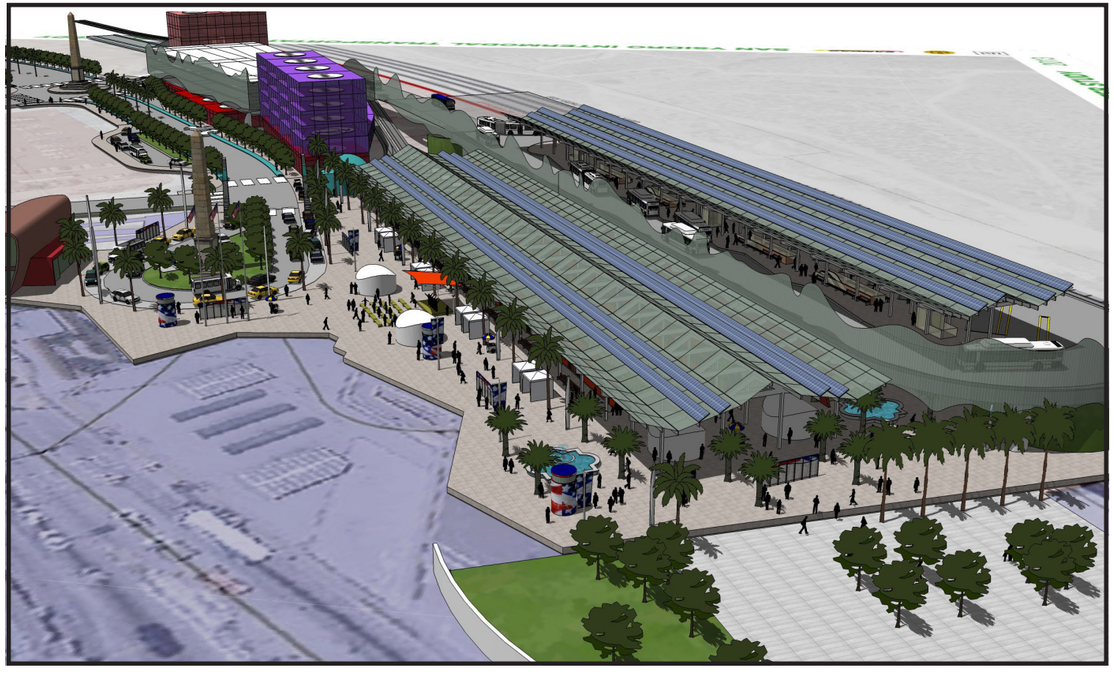


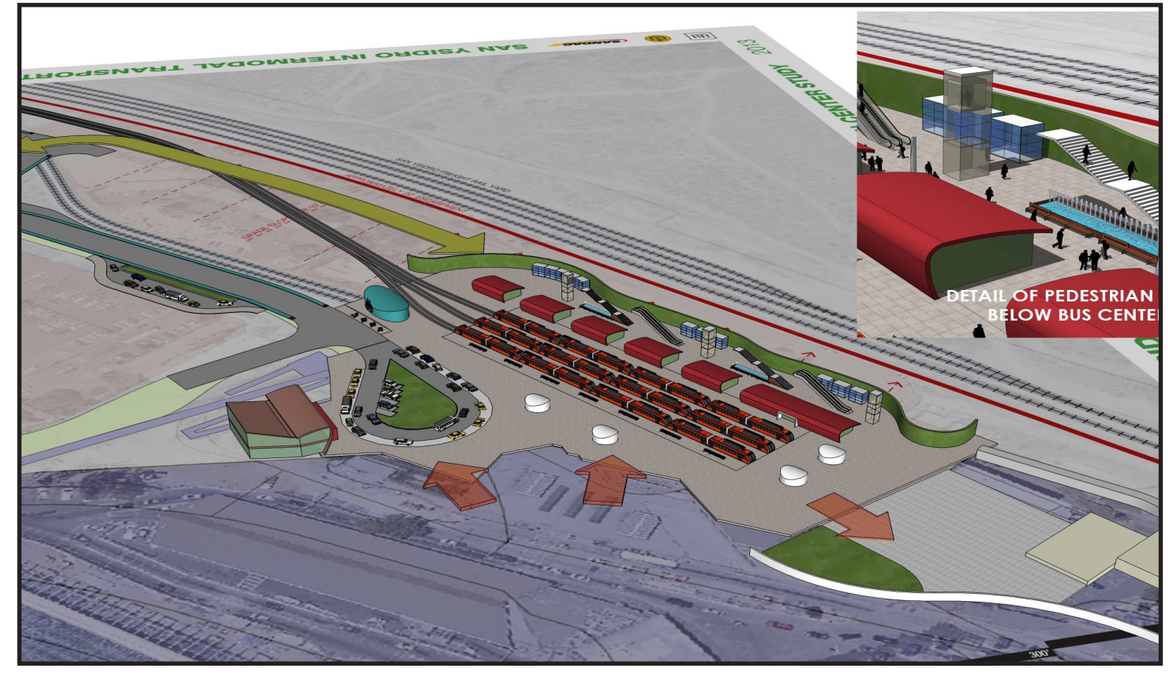
Sample Renderings











7.1 Phasing

An initial phasing strategy was devised based on the following factors:

- A logical construction sequencing process;
- Minimizing, as much as possible, the required investment in the first phase so as to begin implementation as early as possible;
- The need to maintain operations for the existing multimodal station elements.

Further to the last point above, due to the very high ridership levels experienced at this station – one of the highest in the Trolley system - during construction, Trolley and bus services will need to maintain near-continuous access to the San Ysidro Transit Center. Although the Trolley may be able to be shut down on occasional weekends with the use of bus bridges, the station must be accessible on all weekdays and on most weekends.

In all, there are three phases for the future SYITC project. The first two involve building out the public transportation elements, while the last one corresponds to private development. However, dependent on market conditions, Phase III may occur concurrently with Phase II.

The sections below outline the components of each of the three phases. Although the components are listed in the most likely order of execution, many of these may be implemented earlier than the ones listed before, or concurrently with them, subject to funding availability.

Phase I – Initial Public Facility

Phase I lays the groundwork for the ITC and begins to provide tangible operational, customer, and community benefits. Beyond site acquisition, the key component of this phase is the relocation and expansion of the Trolley tracks eastward, which allows for the use of the north parcel – in this phase for an interim Bus Center – and eliminates crossing conflicts between the Trolley and other vehicles. A significant street- and landscaping effort extending from San Ysidro Boulevard to the Station Plaza improves walkability and the quality of the public realm, and connects the ITC to the surrounding community to the north. Figure 19 illustrates conceptually the components of this phase.

Phase I is composed of:

- **Land acquisition.** Although MTS owns large pieces of property surrounding the current Trolley platforms, the basis for the redevelopment of the ITC is only made possible by the acquisition of an additional estimated 139,000 square feet of property. Most of it is located to the east and north of the current station. The consolidated ITC parcel is required for public purposes - circulation, station, passenger facilities and construction staging/lay-down. Once construction of the necessary transportation elements is complete, there will be excess land fronting San Ysidro Boulevard that may be sold or leased-out for private development
- **Earthwork and retaining wall**. In order to extend the number of Trolley platforms to three and prepare the land for the inclusion of the Bus Center in Phase II, grading of the station area will be needed. Preliminary technical and financial analysis determined that it would be necessary to do all the earthwork at once, rather than in two phases, because the space will likely be needed for construction staging/ lay-down, including potentially the need for temporary “shoo-fly” tracks to maintain Trolley service during construction. In subsequent design phases, it may be possible to reduce the earthwork (and cost) of Phase I.
- **Expanded LRT platforms.** Once the grading is done, Trolley station facilities can be expanded to three platforms that accommodate four-car trains.
- **Relocated LRT tracks**. Concurrent with the previous activity, Trolley tracks will be relocated eastwards from their current location along the San Ysidro Boulevard frontage. The relocation of tracks follows criteria set forth by MTS.

Figure 19 – Illustrative Plan of Phase I Components

Phase I

Initial Public Facility

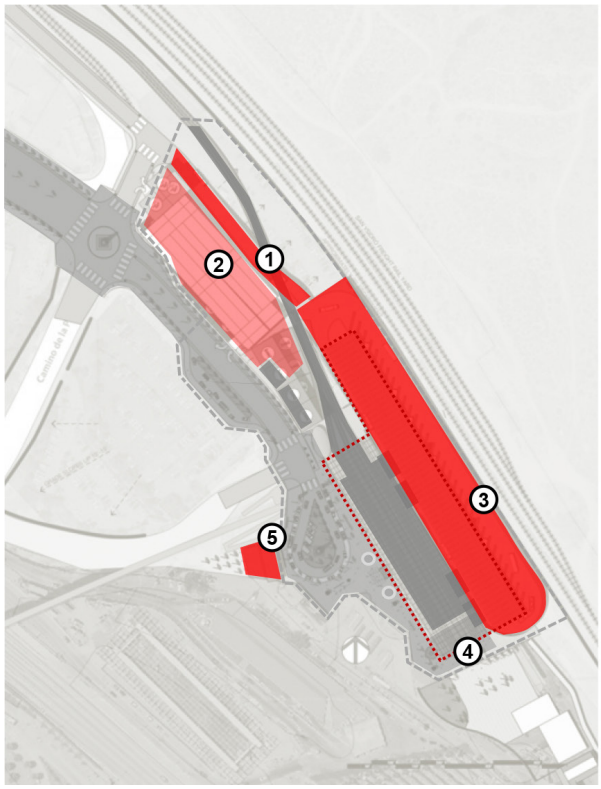
1. Land acquisition
2. Earthwork and retaining wall
3. Relocated LRT tracks
4. Expanded LRT platforms
5. Prefab retail at LRT platforms
6. Interim at-grade bus bays
7. Prefab retail at bus bays
8. Bike center
9. Streetscape of San Ysidro Blvd
10. Streetscape of plaza and PPUDO
11. Plaza-level retail (non-GSA land)

- **Prefabricated retail units at LRT platforms.** To serve passengers with station-level retail such as food and drink and other service facilities such as information / ticketing, moveable prefabricated "retail units" will be placed along the eastern edge of the Trolley tracks. Visualized as high-quality, modular retail opportunities, they should offer the ability to be moved when the Bus Center is constructed during Phase II, while also allowing for a longer cost amortization time period. Conceivably, these should be highly transparent, self-contained units that offer user access from at least two sides and use durable, higher-end materials such as glass and steel.
- **Interim at-grade bus bays.** Both MTS and Intercity bus operations will be shifted during Phase I to an at-grade facility in the northern parcel between San Ysidro Boulevard and the relocated Trolley tracks. While temporary, these facilities should improve passenger experience, provide lightweight canopies at the different bus bays, and be enhanced by passenger amenities.
- **Prefabricated retail units at bus bays.** To serve bus passenger needs, two or more prefabricated retail units such as the ones described above should be placed to the north of the Trolley platforms on the pedestrian pathway that link these to the interim Bus Center. One of these units would serve as an interim ticketing facility for the intercity operators. In order to begin the transformation of San Ysidro Boulevard, these units should be aligned as street-fronting retail. These units would remain in place until the area is redeveloped by the private sector to include a formal building (see Phase III). The intercity ticketing facility would move to its permanent location when the Bus Center is built in Phase II.

Figure 20 – Illustrative Example of the Prefabricated Retail Units (from New York City East River Waterfront project)

- **Bike Center.** Complementing the other modes of transportation present at the ITC, a new facility housing bike parking, rental, and repair will be located at the visible location between the north parcel and the Trolley tracks, where San Ysidro Boulevard changes its alignment. A pedicab station will be located on the sidewalk in front of the Bike Center.
- **Streetscape of San Ysidro Blvd.** The planning process showed great community interest in converting the auto-oriented environment along San Ysidro Boulevard into a more pedestrian-friendly, urban atmosphere. The public realm of this street should be transformed by implementing a streetscaping plan that includes sidewalk widening, pedestrian crossings, tree planting, lighting, and other urban furniture elements.
- **Streetscape of plaza and private-vehicle pick-up/drop-off.** As a continuation of the previous effort, streetscaping needs to continue seamlessly into the Station Plaza, morphing from a linear public space along a vehicular street to a vehicle-free area with both active and passive pedestrian areas. This activity also involves the conversion of the previous MTS bus turnaround into a passenger drop-off and pick-up area, combined with taxi and jitney spaces.
- **Plaza-level retail (non-GSA land).** In addition to the other retail opportunities described previously, a few smaller scale retail elements can be placed in the Station Plaza, along the pedestrian path from the POE to the Trolley tracks. Likely, these retail opportunities will include ticketing, tourist information, and duty free services.

Figure 21 – Illustrative Plan of Phase II Components



Phase II

Ultimate Public Facility

1. Bus access and flyover
2. At-grade car parking
3. Bus center and access to plaza
4. Station canopy
5. Plaza-level retail (GSA land)

Phase II – Ultimate Public Facility

In Phase II, the ITC as a transit facility is completed. The major element of this phase is the construction of the final Bus Center to the east of the Trolley tracks, which frees up the north parcel for private development, including a parking structure serving the area as well as border-crossers. Figure 21 illustrates conceptually the components of this phase.

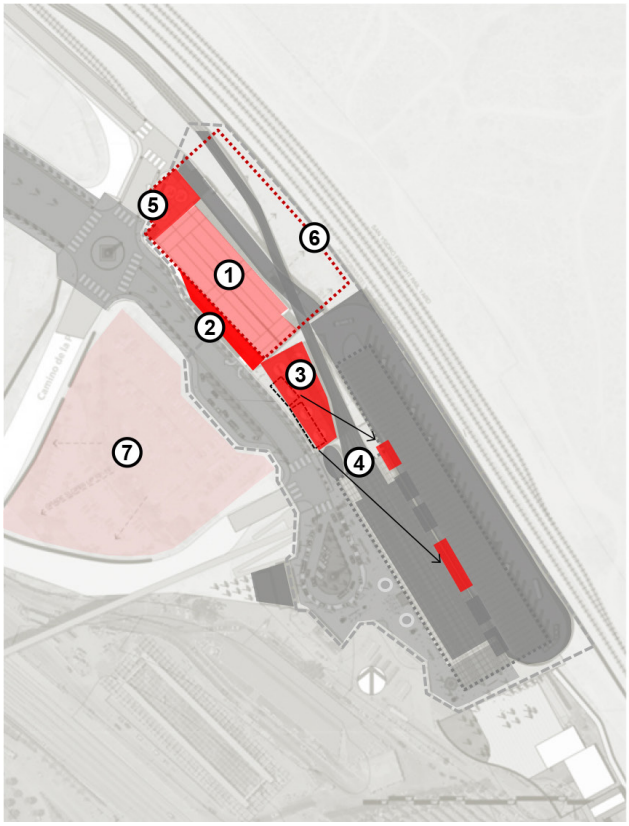
The components of Phase II are:

- **Bus center and access to plaza level.** The formal Bus Center will be transferred in this phase from the at-grade interim facility in the north parcel to its final location to the east of the Trolley platforms, and elevated over plaza-level to respond to the natural grade changes and minimize the implementation costs. The new and extended Bus Center will have nine sawtooth bays for MTS buses and commercial deliveries to the retail below, as well as 30 berths for Intercity buses.
- **Bus access and flyover**. In order to eliminate a circulation conflict between the buses accessing the new Bus Center and the Trolley operations, a new bus-only flyover will be required in the eastern border of the north parcel.
- **Parking.** Movement of the bus bays to the final Bus Center alongside the Trolley tracks allow the use of a large portion of the north parcel for parking that will serve both people crossing the border on foot (leaving their car behind) and destination traffic to the different new private development buildings. This could be in the form of a surface parking lot at first; although if the ITC is built at the same time or later than Phase III of the POE expansion, a structure may be needed on Opening Day for the ITC.
- **Station canopy.** A major element that will give scale, distinction, and identity to the SYITC is a grand canopy covering both the Trolley platforms as well as the bus center. While only conceptual at this stage, the station canopy should be transparent and use high-quality materials such as steel and glass. It may also present an opportunity for sustainable building practices, e.g., solar cells or wind energy generation.
- **Plaza-level retail (GSA land).** Contingent on GSA approval, a larger retail facility at the Station Plaza may be constructed on the west end of the ITC parcel near the landing of the pedestrian bridge and the POE.

Phase III – Private Sector Development

Once the north parcel is available after the transfer of the Bus Center to the ITC, it can be developed by the private sector, most likely around a central structured parking facility. Figure 22 illustrates conceptually the different components of this phase.

Figure 22 – Illustrative Plan of Phase III Components



The components of Phase III are:

- **Street-level retail.** In order to make the San Ysidro Boulevard frontage more pedestrian-friendly, a shallow one- or two-story "liner building" should be added along the western façade of the parking structure. This, together with the already existing prefabricated retail units left from Phase I would complete the streetfront on the eastern side of San Ysidro Boulevard, activating the walkable public realm.
- **Retail + hotel building.** Concurrently or at a later point in time to the construction of the parking structure, the private developer of the north parcel may consider an intensification of the triangular piece of lot between the parking structure and the bike center. Initial estimates of the consultant team assume a ±70,000 square feet, 6-story building containing retail on the ground floor and lodging on the upper floors, but market conditions will determine the final size and use of the building.
- **Prefabricated retail units moved to station.** In case the retail + hotel building is constructed, the prefabricated retail units from Phase I will need to be moved, potentially to a location within the SYITC station.
- **Retail + office + community building.** Analogous to the retail + hotel building, a similarly-scaled building at the northern tip of the parking structure may be developed by the private project stakeholder, this one potentially containing retail, office, and community uses, such as educational or institutional facilities. The importance of this building resides in its linking function between the ITC and the commercial areas to the north along Beyer and San Ysidro Boulevards, having the potential of being a catalyst for this area's revitalization. The uses and the estimated area of about 45,000 square feet for this building may vary according to market conditions.

- **Future phase IV expansion.** Conceivably, if enough market demand is available, the private developer may increase the size of the private portion of the project, potentially building on top of the other two buildings, the parking structure, and/or the Trolley tracks.
- **Private development outside project.** Although outside the SYITC parcel, the block to the west across San Ysidro Boulevard is important for the holistic development of the area and the completion of a coherent, compact, and walkable San Ysidro Boulevard.

7.2 Implementation Costs

The project cost estimates for Phases I and II are summarized in Tables 4 and 6, respectively. Tables 5 and 7 provide the cost of the key project development steps. Phase I has an estimated cost of $95 million, of which about $20 million (including contingency) corresponds to the acquisition of land. Note that while all of the land is initially required to construct the transportation elements and provide sufficient space during construction to keep the Trolley and other services operating, once construction is complete there will be excess land fronting San Ysidro Boulevard that would be sold or leased for private development, lowering the “net” cost of Phase 1.

Table 4 – Summarized Cost Estimates for Phase I

Item	Total Price	% of Total Cost
Land acquisition	$15,300,000	16%
Site and street work	$21,600,000	23%
Trolley platforms	$5,100,000	5%
Landscaping and street furniture	$4,000,000	4%
Temporary bus facility	$2,000,000	2%
Rail modifications	$6,500,000	7%
Utilities	$1,600,000	2%
Project Development Costs*	$11,800,000	12%
Mobilization	$5,300,000	6%
Contingency	$21,800,000	23%
Total Phase I cost estimate	**$95,000,000**	**100%**

*Includes Environmental Clearance, Preliminary and Final Design, Construction Management and General Project Administration

Table 5 – Phase I Costs by Project Development Phase

Milestone	Cost
Preliminary Engineering and Environmental Clearance	$3,500,000
Final Design	$8,000,000
Land Acquisition	$20,000,000
Construction	$63,500,000
Total Phase I cost estimate	**$95,000,000**

Phase II has an estimated cost of $43 million. Building costs for Phase III are not shown as they would be borne by the private sector.

Table 6 – Summarized Cost Estimates for Phase II

Item	Total Price	% of Total Cost
Final bus center and grade-separated bus access	$23,700,000	55%
Rail modifications	$200,000	0.5%
Utilities	$1,200,000	2.5%
Project Development Costs	$5,200,000	12%
Mobilization	$3,000,000	7%
Contingency	$9,900,000	23%
Total Phase II cost estimate	**$43,200,000**	**100%**

Table 7 – Phase II Costs by Project Development Phase

Milestone	Cost
Preliminary Engineering	$1,500,000
Final Design	$3,800,000
Construction	$37,900,000
Total Phase I cost estimate	**$43,200,000**

8.0 Funding Strategy

Source: Task 9.2: Strategy for Implementing the Preferred ITS Alternative and Off-Street Parking Resources, Technical Memorandum, April 2014

The current ITC facility generates approximately $180,000 annually from retail leases and fees from intercity bus service providers, These funds are utilized to pay for a portion of the approximately $330,000 annual maintenance and security costs for the current ITC facility.

The current SANDAG Revenue-Constrained Regional Transportation Plan includes $50 million (in 2010 dollars) toward the public transportation elements of a future ITC. However, funding sources remain to be identified for this project. A list of potential funding sources for each phase is identified below. For competitive grant programs, assumptions were made based on previous awards; for new programs an assumption was developed based on the amount of potential funding and the SYITC being one of a number of eligible projects in San Diego County. The remaining funding shortfall is assumed to be addressed through an allocation of funding sources in a future Regional Transportation Plan, along with any future new revenue sources. Table 8 summarizes the project elements and associated potential revenue sources, by phase.

Table 8 - Funding Source Summary Matrix

	PHASE 1	Land Acquisition	Demolition & Site Work	Streets/Streetscape [a]	Rail Modifications	Transit Stations [b]	PHASE 2	Bus Access Flyover	Transit Center	Pedestrian Circulation	Parking
FEDERAL											
Competitive Funds											
- USDOT TIGER Discretionary Grants [a]			X		X	X					
- Active Transportation Program [b]					X	X					
STATE											
Competitive Funds											
- Greenhouse Gas Reduction Fund (Cap&Trade)						X		O	O	O	
REGIONAL											
- SANDAG - Other Future RTP To Be Determined								O	O	O	
- Future Local Revenue Source								O	O	O	
LOCAL											
- City of San Diego - San Ysidro Public Facility Financing Plan [e]				X							
- Infrastructure Finance District - supportable bond amount, with City ok											
- SB142 Public Transit Assessment District - supportable bond amount [f]											
PRIVATE											
- Potential land / air rights sales to private								O	O	O	O
- Sponsorships / Naming Rights											
- Passenger Facility Charge / Taxi Use Fee [g]											

[a] Assumes Congressional authorization for subsequent TIGER rounds (or equivalent) after current FY2014 funding round.
[b] New State program combining several MAP-21 sources.
[c] Assumes project eligibility pursuant to future State guidelines to implement this AB32 program.
[d] Assumes SANDAG decision to allocate formula funds, or new funds (e.g. transportation sales tax measure) to this project in a future RTP update.
[e] Street improvements pending City mobility analysis, refinement per feasibility analysis. Streetscape improvements vetted per design element.
[f] Privately owned or used properties (including air rights/possessory interest) south of Camino de la Plaza, assuming 0.01% of assessed value rate.
[g] Potential fee charged per long-distance bus traveler and/or per taxi trip from SYITC (latter requires City approval).

Phase I includes funds from competitively awarded grants, including funds from a potential future round of federal TIGER grants, funds from State Transportation Alternative Program funding that is not part of the STIP (per MAP-21), and funds from the AB32 Greenhouse Gas Reduction Fund (also known as “Cap-and-Trade”). Funding from competitively awarded sources cannot be guaranteed.

The other Phase I source involves a shift of street reconfiguration and reconstruction and new streetscape costs to the City of San Diego, for inclusion in its San Ysidro Public Facility Financing Plan that will be developed as part of the current San Ysidro Community Plan update. The City has expressed preliminary willingness to consider including these costs in its plan, pending mobility analysis and feasibility-based refinement for street improvements, and vetting streetscape improvements pursuant to its urban design element; however, no commitment has been made. The City will also seek to identify a source of revenues to fund ongoing maintenance of new streetscape, which could be accomplished by a Maintenance Assessment District or other type of assessment district.

Phase II funding includes the sale or ground lease of sites for private development and a paid-parking structure adjacent to the station. Due to the lack of other project-generated revenues, the remaining funding relies (aside from Phase III generated revenues) on two sources. The first source is a future update of the SANDAG Revenue-Constrained Regional Transportation Plan (RTP), funded from the various federal and State grant sources from which the RTP derives funding. The second source would be a future local revenue source that could include the SYITC, consistent with how similar ITC facilities in Anaheim and Denver were funded; this funding could also serve as the local match for state/federal funds provided through the RTP.

Phase III includes revenues realized from the use of an Infrastructure Finance District (IFD) and SB142 Public Transit Assessment District for properties in the portion of the study area east of I-5 and south of Camino de la Plaza, where properties receive the greatest direct benefit from the SYITC. The amounts that would be

raised from an IFD or SB142 Public Transit Assessment District would be too small to justify a stand-alone bond issuance; however, it is assumed these revenue sources could be incorporated into a larger bond for similar public improvements, with the corresponding share of bond proceeds allocated to SYITC improvements (or alternatively, these sources could be used to fund operating costs). The timing of these revenues will be based on market conditions, and could be spread over Phases I and II. It could also be possible to shift the costs of the retail units in the station to the private sector by providing a long-term right of use that spans both Phases I and II.

Project T

Convert Metrolink Station(s) to Regional Gateways that Connect Orange County with High-Speed Rail Systems

Description:
This program will provide the local improvements that are necessary to connect planned future high-speed rail systems to stations on the Orange County Metrolink route.

The State of California is currently planning a high-speed rail system linking northern and southern California. One line is planned to terminate in Orange County. In addition, several magnetic levitation (MAGLEV) systems that would connect Orange County to Los Angeles and San Bernardino Counties, including a link from Anaheim to Ontario airport, are also being planned or proposed by other agencies.

Cost:
The estimated Measure M share of the cost for these regional centers and connections is $226.6 million.

8.1 Ideas for A New Regional Source of Funding for the San Ysidro ITC and Related Facilities

Based on the above analysis, the emerging funding strategy would appear to hinge first and foremost on a single new regionally-based funding source. This source would provide a significant portion of the needed funds – likely the single biggest portion – but, as importantly, would be used to leverage private-sector funds and other existing local, regional, state and Federal sources as shown above.

Orange County adopted this approach when it included a “Regional Gateways” program in its transportation sales tax extension ballot (called Renewed Measure M), which became the predominant funding source for the Anaheim Regional Intermodal Transportation Center.

Orange County’s program was competitive and available to any city that met certain criteria for hosting a regionally significant hub. The “Gateways” project, part of a broad program of highway, transit, bicycle and pedestrian projects, was approved by 68.5% of voters.

Ballot Language for Orange County Renewed Measure M “Gateways” Program

It is possible to imagine a similar program of “Transportation Gateways” or regional hubs in San Diego, for example in North County Coastal at an Amtrak/COASTER Station, North County Central along the future High Speed Rail route, or in Central County at the San Diego International Airport. Such a strategy could potentially be pursued in a future regional funding program.

Another strategy would be to link the San Ysidro Intermodal Transportation Center to a broader Border Infrastructure funding strategy, as a vital component of improving all of San Diego’s border infrastructure – infrastructure which supports not only regional, but also national economic vitality and development. Information about the SYITC and its regional and national benefits would be included in briefing materials used by SANDAG in its Federal and State advocacy efforts on Border infrastructure issues.

8.2 Timing of Fund Availability

Although Table 8 identifies how the overall project could be funded, the timing of when funds would be available likely will not match when they would need to be expended. This means there could be a substantial shortfall in Phase I that would need to be addressed for that phase of work to be completed.

This type of funding gap is common in municipal funding strategies, particularly when revenues associated with new development are needed to fully fund the project. This type of timing shortfall is often addressed by internal borrowing from available funds, to be repaid from future receipts. Further consideration would be needed as to whether SANDAG could arrange such an internal borrowing, and the appropriateness of doing so considering the potential risks associated with repayment. However since this is not a *TransNet* project, this source of funding is unlikely.

Another potential option to addressing the funding gap by phase is to consider a Public Private Partnership arrangement whereby a private entity would finance the design, construction and operation of the facility in exchange for Availability Payments when the facility opens. Funds to cover the Availability Payments would come from the same sources already discussed. Therefore the funding strategy is basically the same whether the project is developed conventionally or as a P3, except the timing of funds/cash flow would be different.

9.0 Conceptual Implementation Timeline

Source: Task 9.2: Strategy for Implementing the Preferred ITS Alternative and Off-Street Parking Resources, Technical Memorandum, April 2014

Based on the phasing and funding considerations above, the following are two conceptual implementation timelines for the San Ysidro Intermodal Transportation Center. The first is for a conventional publicly-financed procurement. The second is for a Public-Private Partnership procurement.

9.1 Scenario 1: Traditional Publicly-Financed

In this scenario, the project is carried out in the two phases described previously, to lessen the burden on public finances.

The timeline for Phase I is built on the following parameters and assumptions:

- Given the scale of the project and the need to acquire significant property, a six-and-a-half-year project-development cycle is assumed, i.e.:
  - Two years for preliminary engineering (PE)/design development and environmental clearance
  - Two years for land acquisition, final design/construction drawings and bidding
  - Two-and-a-half years for construction and commissioning

Table 9 – Phase I Timeline

Milestone	Dates
Continued Conceptual Design and Demonstration Projects	18 months
Preliminary Engineering and Environmental Clearance	24 months
Final Design	18 months
Land Acquisition	12 months
Construction Funds Programmed	1 month
Construction Contract Bidding and Award	6 months
Construction and Commissioning	30 months

It should be noted that the above schedule is conservative. Even without employing the P3 options or Construction/Manager/General Contractor, it is possible that the development schedule and possibly the total cost of the facility could be reduced by using alternative project delivery methods such as Design-Build.

Subject to funding availability, project development for Phase II can overlap with Phase I. It is assumed that the Phase I Environmental Clearance document would cover both Phases I and II, and that the design effort would be shorter due to the smaller scope of work of Phase II. However, it is also assumed that at least four years would be required to amass the necessary funds to commit to the construction of Phase II.

Table 10 – Phase II Timeline

Milestone	Dates
Preliminary Engineering	7 months
Final Design	12 months
Construction Funds Programmed	1 month
Construction Contract Bidding and Award	6 months
Construction and Commissioning	30 months

As discussed in the phasing section, the private development of Phase III can occur after or in parallel with Phase II, subject to market demand.

9.2 Scenario 2: Public-Private Partnership with Single-Phase Construction

In this scenario, the project is carried out in a single phase, as the P3 consortium would carry the financing of the project. It is assumed that the entire project carried out in a single phase using the design-build method would take 4 years to design and construct, which is consistent with P3 industry feedback.

Table 11 – P3 Timeline

Milestone	Dates
Continued Conceptual Design and Demonstration Projects	18 months
Preliminary Engineering and Environmental Clearance	24 months
Land Acquisition	12 months
P3 Contract Bidding and Award	12 months
Design, Construction and Commissioning	36 months

The obvious advantage of the P3 approach relative to the traditional is that the major cash-flow requirements are deferred into the future for the implementing agency, allowing the entire facility to open at approximately the same date as only the Phase 1 facility in the traditional approach. A value-for-money analysis, done as part of the due diligence in any P3 process, would determine if the premium paid to the P3 consortia (in terms of a higher cost-of-money versus public financing) is warranted by the accelerated schedule and cost-certainty of the P3 approach. However, this analysis has shown that there are potential benefits to a P3 procurement approach for the SYITC project, and the strategy should be further studied as the project moves forward.

10.0 Public Comments on Draft Report

A draft version of this report was released for public review on May 2, 2014, providing a two-week comment period. The Draft Report was also presented to the San Ysidro Border Transportation Council on May 13, 2014, and to the San Ysidro Smart Border Coalition on May 14, 2014.

In addition to oral comments received at the two meetings, one comment was received through the on-line comment facility provided by SANDAG's project webpage, and the following entities provided written comments via letters: the San Ysidro Smart Border Coalition, the office of City of San Diego Councilmember David Alvarez, and McDonald's USA, LLC. The latter entity has operated a McDonald's restaurant at the San Ysidro border crossing since 1983. The main comments received may be summarized as follows:

General Support/Agreement with Necessity of the Project: Numerous comments, underscored the importance of this project to the San Ysidro community, the City of San Diego, and the region. They also reinforced that it needs to be a world-class facility, and some comments supported the idea of an international design competition, which is listed in the next steps section, to ensure the highest quality of design.

Consideration of existing landowners as partners in the new facility. Some comments referenced the many long-standing land and business owners active in the area, and expressed a strong desire that they have the opportunity to be involved in any future SYITC project. McDonald's USA, LLC also stated its strong interest in maintaining its presence at the border under any SYITC development scenario. The recommendation to explore Public-Private Partnerships has been expanded to reflect these concerns.

Consideration of a modified layout that would move the Trolley to an elevated level. Some comments expressed a desire to study an alternative whereby the Trolley would be elevated. This alternative could be considered in the future Environmental Documentation phase of the project, and this has been documented in the "Recommended Implementation Steps" in the closing section of the report.

Use of the ground floor of the paid-parking structure at the SYITC as a designated passenger pick-up area. One commenter suggested splitting the passenger pick-up and drop-off functions, using the turnaround facility nearest the border exit solely for drop-offs, and the ground floor of the parking structure for pick-ups. While operationally it may be difficult to enforce such operating rules, the description of Option 3 has been modified to reserve space in the parking structure to support this idea – a cell-phone waiting lot on the ground floor of the parking structure is suggested, to reduce the volume of passenger vehicles wishing to idle at the passenger pick-up/drop-off site while waiting for their passengers.

11.0 Recommended Implementation Steps

Source: Task 9.2: Strategy for Implementing the Preferred ITC Alternative and Off-Street Parking Resources, Technical Memorandum, April 2014

The previous sections have demonstrated that there is a feasible path to constructing the new San Ysidro Intermodal Transportation Center (SYITC). However, they have also shown that the path will be challenging. The biggest challenge is identifying and securing a local/regional source of funding that will leverage other public and private revenue streams.

A related challenge is that, even if significant funds are identified in the next 2-3 years, a new SYITC is highly unlikely to be completed in this decade. The extensive meetings held in the San Ysidro community regarding this project have revealed significant interest in moving a project forward. The continued support and active participation of the community and stakeholder groups such as the San Ysidro Chamber of Commerce, San Ysidro Smart Border Coalition, Border Transportation Council, and local landowners and business owners, will be vital in advocating for and championing a local/regional funding source for the project.

To meet these related challenges, a multi-pronged strategy is recommended. It is suggested that the staff from the agencies involved in the development of the SYITC Study – Caltrans, the City of San Diego, MTS and SANDAG – is the appropriate group at the staff level to advance these efforts. Immediate efforts would focus on identifying and securing funding for the following actions:

Project Prospectus- Develop an SYITC Project Prospectus to highlight the key features and benefits of the project and its role in addressing local, regional, and interregional mobility. This would support several initiatives below.

Thought-Leader Engagement- Continue to engage key transportation and advocacy groups in discussing the possibility of a multimodal "Transportation Gateways" component to a future countywide funding initiative, positioning the project for state and federal funding opportunities and/or featuring the SYITC project as a key component in the emerging Border Infrastructure initiatives.

Public-Private Partnerships- Continue to explore the potential to use the P3 mechanism to accelerate project delivery and potentially reduce life-cycle costs. Evaluate strategies for involving current landowners as partners in a P3 venture, for example through equity partnership or long-term ground leases, and for offering current businesses the opportunity to carry on operations in the new facility.

Continued Conceptual Design- Continue conceptual design of the project in concert with the community, potentially including an international Design Competition to gather creative ideas for the look-and-feel of this significant Gateway to San Ysidro, San Diego, California and the United States of America. As stated above, it will be vital to continue to engage the San Ysidro community and its key interest groups in shaping the design of the facility.

Demonstration Projects- Consider low-cost demonstration projects to begin to demonstrate visible improvements to the ITC ahead of the larger project, sustaining community enthusiasm for seeing further improvements in the area. While the need to purchase significant right-of-way and relocate the Trolley tracks limits the amount of hard infrastructure work that can be undertaken in the near term, projects can be undertaken that will improve the area without investing in significant permanent infrastructure. A total budget of $5-$8 million for such a program is estimated.

Some ideas include:

- The SYITC could include improved signage and wayfinding to better guide pedestrians to their connecting modes as well as to the Border Village area.
- The new SYITC area could highlight a “facelift” to the overall look and feel of the area, including treatments to enhance pedestrian safety by designating walking paths, using low-cost and relocatable urban design elements borrowed from the “Tactical Urbanism” movement, which seeks to make small-scale, quick interventions to immediately improve the urban environment.
- The project might sponsor an international Design Competition to enlist creative ideas for the look-and-feel of this significant Gateway to San Ysidro, San Diego, California and the United States of America.
- In an effort to manage traffic accessing the facility, low-cost traffic engineering and/or Intelligent Transportation Systems solutions using light infrastructure (e.g. minimal, mobile on-site infrastructure; use of smart-phone apps to disseminate information) for managing traffic. A sample project could include a short-term lease on nearby available land for a “cell-phone waiting lot” to reduce auto circulation and idling in the immediate SYITC area, coupled with a before-and-after traffic study to gauge the benefits of improved auto pick-up/drop-off facilities in reducing conflict and congestion at the site.

Advance the Project Through the Preliminary Engineering and Environmental Clearance Phase.
SANDAG has often employed a successful strategy of using local funds to advance a project into the design and environmental clearance phase, so it is more “shelf-ready” and competitive for State or Federal funds that may become available. This could include consideration of a design variation whereby the Trolley is elevated through the site.