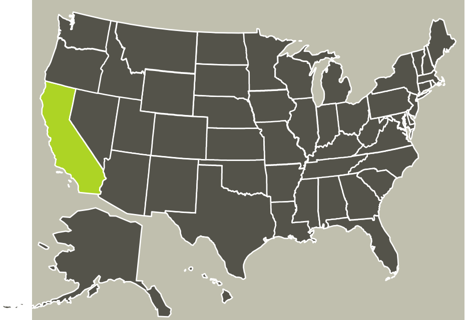
- ✓ TOLL REVENUE
- ✓ PRIVATE FINANCING
- ✓ COMPLEX CONSTRUCTION
- ✓ CALIFORNIA PROJECT
- ✓ TIFIA LOAN
- ✓ ENVIRONMENTAL SENSITIVITY

SOUTH BAY EXPRESSWAY



SAN DIEGO, CA

The South Bay Expressway ("SBX", formerly known as SR-125) project was the first public private partnership ("P3") in California, developed pursuant to California's AB 680 legislation passed in 1989. This was also the first toll road in San Diego.

BACKGROUND + PROJECT DRIVERS

SBX had been in California's transportation plans since the 1950's. In 1976, SBX was removed from the state highway system plan when funding could not be identified for the project. In 1984, the San Diego Association of Governments ("SANDAG") added SBX to the Regional Transportation Plan, but as before, funding for the entirety of the project was never identified.

The need for the project was driven by:

- Observed and expected population growth around the city of San Diego
- Observed and expected commercial traffic growth in the south east part of San Diego County, an area of expanding trade with Mexico at the Otay Mesa Port of Entry
- Observed and expected economic growth and activity in Chula Vista and Otay Mesa, which at the time were largely undeveloped

SBX was expected to achieve the following goals:

- Complete a missing link in the San Diego freeway network
- Reduce traffic congestion in the suburbs of San Diego including the city of Chula Vista, where significant population growth was expected
- Reduce travel time by 34% from Otay Mesa to San Diego and by 75% in the reverse direction
- Improve regional mobility in the South Bay; and
- Give residents and businesses access to employment centers on both sides of the US-Mexico border

FINANCIAL CLOSE
23 May 2003

OPENED TO TRAFFIC
November 2007

DELIVERY METHOD
DBFOM, 35 years

CAPITAL VALUE
$635 million

FINANCING
Private, toll revenue

TOLL RATES
Fastrak: 50 cents to $2.75
Cash/Credit: $2 to $3.50

ROUTE
10 miles in length
Connects SR 905 to SR 54

REVENUE
$32.0m in 2015

RIDERSHIP
44,200 AADT in 2016
40,378 AADT in 2015

POPULATION (2013)
3.15m San Diego County
476,896 South Region

MEDIAN INCOME (2013)
$67,753 San Diego County
Approximately $52,000 South Region

UNEMPLOYMENT (2013)
9.54% San Diego County
11.97% South Region

DELIVERY METHOD ASSESSMENT

There is no indication that other delivery alternatives aside from a toll road were seriously considered for the SBX project, or that any affordability analysis was conducted for the project. However, industry literature from the late 1980's and responses to the ideas proposed therein suggests a strong, growing interest and coalescing of public opinion around the idea of using public private partnerships to deliver badly needed infrastructure.

In 1989, a framework for delivery using private funding was established in California in the form of AB 680. The bill's aims were to introduce private capital in cash-strapped California, to introduce private sector efficiency to infrastructure delivery, and to reduce congestion while providing "reasonable profit" to the state's potential private partners. AB 680 was model legislation in that it provided a framework not only to regulate concessions before any were even in the negotiation phase, but also in that it provided testing grounds for the concession model that was being used to deliver infrastructure in Virginia and overseas in Australia and Europe.

In 1988, a half-cent sales tax was implemented in San Diego County called "TransNet" which resulted in sufficient funds being raised to fund the "GAP/Connector" road, which would be needed to link SBX with Route 54. The parties agreed to include acquisition, design and construction of the GAP/Connector in the SBX Franchise Agreement. This GAP/Connector portion was constructed with public funds and the parties agreed the public's use of the GAP/Connector would always be toll-free.

While the TransNet sales tax increased available transportation funding, the county estimated that the funded needed to build SBX under a traditional delivery model would not be available until 2020.

Benefits

Using a public private partnership, the County was able to open a new highway facility 13 years earlier than a traditional delivery model.

PROCUREMENT APPROACH

AB 680 generated great interest in a private toll road option, and in 1989 Caltrans issued an Request for Qualifications ("RFQ") to firms who were interested in designing, permitting, building, operating, and maintaining SBX as a toll road as permitted by AB 680. Under the franchise agreement, the private developer would assume responsibility for raising capital for the project and constructing the road in exchange for a 35-year toll concession. Caltrans would retain ownership of the highway, but lease the road back to the franchisee. In all, 13 firms responded to the RFQ. The competitive procurement process ended at the RFQ stage. Rather than shortlisting firms to respond to an RFP with detailed project specifications, Caltrans selected a respondent to proceed with the development of the project.

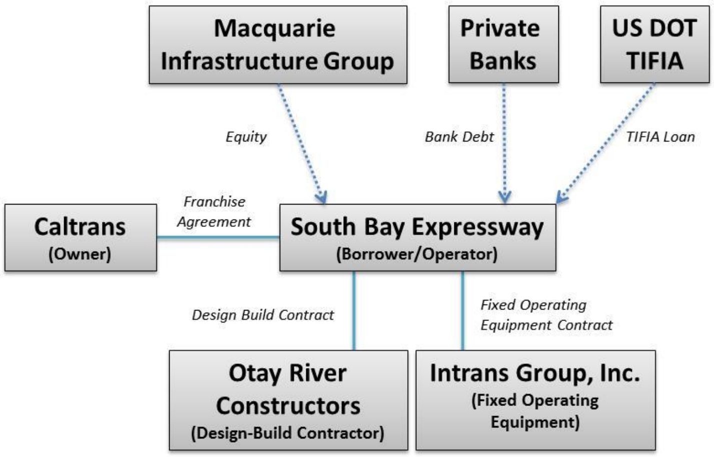
California Transportation Ventures ("CTV," now SBX LLC, was then an equal partnership among Parsons Brinckerhoff, Inc., Transroute International S.A., Fluor Daniel Corporation, and Prudential Bache Capital) was selected to develop the long-planned extension of SBX as a toll facility. In January 1991, Caltrans and CTV signed a franchise agreement for the project, which allowed CTV to finance and construct the roadway with title transferring to Caltrans upon construction completion. Caltrans also leased back the operational rights for a 35-year concession period. Toll rates would be set by the concessionaire, subject to a cap on its rate of return. The agreement also prohibited Caltrans from building any competing roads that could divert traffic away from the SBX.

Under the franchise agreement, CTV was to develop and submit final environmental documentation for the project by December 1997 with Caltrans acting as the lead agency for the environmental process. After delays due to legal challenges, unanticipated complications, shifting responsibilities, and other factors, the project finally received environmental approval in 2003, 12 years after the franchise had been awarded to CTV in principle.

Under the franchise agreement with the state, CTV's "reasonable return" on investment was capped at 18.5% over the 35-year period of the lease. At financial close in 2003, the project's capital requirement was $635 million, more than 50% higher than the projected $400 million project cost in 1990. CTV cited that $40-50 million of the project's increased costs were needed to cover environmental mitigation expenses, including research and maintenance of endangered butterfly and owl species, acquiring 1000 acres of land to be used as an open space preserve, and building and maintaining local parks, playing fields, campgrounds, etc. In addition, the franchise was responsible for approximately $5 million per year in property taxes throughout the time period of the agreement, as well as road maintenance and enforcement costs.

CTV struggled to finance the project without access to the tax-exempt markets. However, in 2003, just after the environmental permits were issued, CTV awarded a design-build contract for the project and shortly thereafter was acquired by Macquarie Infrastructure, who established SBX LP as the new concession company implementing the project.

ORGANIZATION CHART



FINANCING

- A $340m term loan and accompanying interest rate swaps with a tenor of 18.5 years was provided by Spanish bank Banco Bilbao Vizcaya Argentaria (BBVA) and Irish bank DEPFA Bank, plc. The loan was backed by toll revenue.
- A $140m TIFIA loan was provided by FHWA, one of the first 5 loans to be issued by the TIFIA program. The rate on the TIFIA loan was 4.46%. The TIFIA loan was also backed by toll revenue.
- Donated right-of-way was valued at $48m.
- Investor equity of $130m was contributed to the project for construction.

CONSTRUCTION

Following financial close, construction began in May 2003 and SBX was substantially completed in November 2007, roughly one year behind the original schedule.

The project's construction cost overruns were significant. One of the most striking features of the expressway is the Otay River Bridge. It is one of only two precast segmental bridges in the state, stretching three quarters of a mile and towering 18 stories high. Several sources cite increased costs of the Otay Mesa Bridge due to the requirement to accommodate future light rail as a major source of additional costs. However, other sources cite micromanagement by Caltrans that slowed the design approval and construction processes, added environmental mitigation costs, legal costs, and interface issues arising from the separation of the design-build and tolling operations contracts as other significant contributors to the project's overall financial welfare.

OPERATIONS

The highway opened to traffic in November 2007 in the height of the subprime mortgage crisis. Chula Vista and Otay Mesa were among the areas hardest hit in the global financial crisis, with unemployment levels in the area quoted by some sources to be as high as 18%. The severe impact of the economic downturn took a major toll on the suburban communities the expressway was built to serve, and ridership on the newly opened SBX was far below expected projections for commuter, casual, and commercial traffic.

Electronic tolling on SBX began in January 2008 following delays in activating the tolling system for the facility. Toll revenue forecasts failed to materialize. In 2008, the road's $22m in toll revenue was 30% below projections. In 2009, the road's $21m in revenue was 50% below projections.

Despite financial distress and reorganization, the road has operated continuously and remained open to traffic since that time.

In March 2010, SBX LP filed for bankruptcy. During the bankruptcy, the court reviewed over 62 claims totaling more than $1 billion that were made against the Concessionaire, nearly all of which were found to be invalid according to court filings. According to FHWA, while the primary cause of the bankruptcy filing was ongoing litigation related to claims by the contractor that built the SBX project, toll revenue collections on SBX had also fallen well short of the original projections.

SBX's reorganization plan was confirmed by the bankruptcy court in April 2011. It settled the outstanding litigation with the contractor and established a new concession company ("SBX LLC") under the ownership of TIFIA and project's commercial lenders, who would share future toll revenues.

To avoid further lawsuits after SBX emerged from bankruptcy, a consideration was paid to the contractor as part of the bankruptcy settlement out of the project company's existing cash pool. This settlement amount was not made public.

ENR reported that the contractor was obligated to write off over $95m in unsuccessful claims following the conclusion of the bankruptcy process. Other sources reported that the equity investor and the contractor together had amassed bills for legal advice of over $80m through the duration of the construction period and the bankruptcy process. These funds were paid by the private sector.

CURRENT STATUS

SBX LLC emerged from bankruptcy in April 2011, owned by the private lenders and TIFIA lender, with a restructured and reduced debt burden. The franchise agreement remained in place and unchanged.

SANDAG purchased the SBX franchise from the new owners. The rationale for the purchase was that lowering the tolls on the road would encourage additional ridership and alleviate traffic on nearby highways. Under the terms of the $344.5 million sale, which closed in December 2011, the private lenders' restructured loans were repaid and the TIFIA loan remained in place. The TIFIA program issued a new loan under the same terms as in the reorganization plan and received a cash distribution of $15.4 million.

Soon after completing the sale of SBX, SANDAG lowered toll rates on the facility to attract more local and through traffic and relieve congestion on I-805, a parallel route. Control of SBX is scheduled to revert to Caltrans in 2042 under the terms of the original franchise agreement.

According to SANDAG, the road is performing above expectations and a rating upgrade is expected from Fitch. SANDAG has found the road is profitable and demonstrates the agency's successful investment in a road that it purchased for a price below the cost of the highway's construction.

The public sector agencies in the SBX story have, by all accounts, fared well. It is not uncommon for claims to be filed by contractors against Caltrans (and other public entities) on publicly-funded projects. Public records of Caltrans' claims liability were not found.

In 2009, the State strengthened California's public-private partnership law to reduce Caltrans' claims liability exposure, which deserves further consideration in the context of the typical risk allocations in a public private partnership and the roles that agencies like Caltrans play in facilitating (or hindering) progress on complex construction projects.

SANDAG was able to acquire a profitable and important highway link for 54% of the construction price and discussions with SANDAG officials suggest that SANDAG is pleased with the road's performance. The TIFIA lender's repayment terms have been adjusted from the 2003 loan agreement with the intent of allowing USDOT to recover all of the principal and capitalized interest that were originally contemplated back when the loan closed.

ROLES + RESPONSIBILITIES

RISK	OBLIGATIONS ASSUMED BY CALTRANS	OBLIGATIONS ASSUMED BY CONCESSIONAIRE
Design and Construction	Oversight	Yes
Financing		Secure financing
Traffic and Revenue	10 year franchise extension to be entertained if 18.5% equity IRR cannot be achieved	Full revenue risk assumed by Concessionaire
Toll Rate Setting		At Concessionaire's discretion subject to an 18.5% cap on equity return
O&M and Major Maintenance		Yes, services contracted to Caltrans
Insurance		Yes
Change in Law (discriminatory)	Yes	
Environmental Permitting & Licensing		Yes
ROW Acquisition	Reasonable Assistance	Yes
Hand-back	Oversight	Yes
Police and Emergency Services		Yes
Environmental		Yes
Termination for Convenience	Not applicable	
Protection from Competitive Transportation Facilities	Yes	
Federal Requirements	Reasonable assistance	Yes
Force Majeure	Shared	Shared

APPLICABILITY TO HWY 37

At the time of its passage AB 680 was considered groundbreaking legislation to enable private involvement in developing public-use highway infrastructure. However, the bill placed nearly all project risks on the private sector and precluded the use of public funding for the project. Sources cite these restrictions as terminal for two of the projects originally planned under the act and for causing the severe delays observed in SBX's construction.

One criticism that has been leveled at the SBX project parties is that the government did not play a sufficient role in defining the project or in assisting bidders in understanding the needs of the government or the project rationale. This resulted in a wide range of proposed alternatives from the large number of pre-qualified bidders. While not specifically referenced in any of the reviewed sources, we suspect that there was difficulty in evaluating and comparing the bids which were responding to different interpretations of the project definition. In current P3 transactions, one on one meetings with bidders are frequently using during a procurement to enable bidders to ask questions and for government to provide clarifications.

The environmental clearance process was arduous, expensive, and exhausting to the project parties. A key takeaway from the experience on SBX is that the public sector is best qualified to manage the risks of the CEQA process. Some sources that were reviewed alluded to an environmental clearance process that was stymied and slowed by a public that was strongly opposed to tolls and suspicious of private participation in public infrastructure delivery. In our experience, most credible potential private sector partners will avoid investing in P3 initiatives that have not already achieved environmental clearance, primarily because it is viewed as a high-risk effort that requires message management and leadership from government.

The same can be said for obtaining other public agency permits for the project, and for securing land for right-of-way. Public sector sponsors of these projects can better manage the risks of dealing with other public permitting agencies or acquiring property by using its powers of eminent domain. Having public sector partners involved in or being fully responsible for these functions will reduce project risks for private sector partners and thereby enhance the attractiveness of the P3 project to the private sector, which in turn will improve competitive tension among bidders.

Public opinion is generally against new toll facilities, and one of the important lessons from the SBX experience is that public message management is critical to the success of a project. Support among local agencies for an improvement in service and travel alternatives is a case that needs to be made to the public and to decision-makers in a way that is strategic and credible.

WHAT LEGISLATION NEEDS TO BE ENACTED TO PERMIT A SIMILAR EFFORT FOR HWY 37?

P3 enabling legislation should be more flexible in defining the roles and responsibilities of public and private sector partners. For a project of the size and complexity that is anticipated for Hwy 37, particularly in an area where users may not be accustomed to paying tolls, a real toll risk option may discourage competitive tension. Some public backstop for debt repayment, whether that is in the form of some type of payment guarantee, a minimum revenue payment or a full availability payment, there are several proven alternatives that warrant maintaining payment mechanism flexibility in new legislation for Hwy 37.

Other state P3 statutes permit the use of both public and private sector funding and allow the partners to assume different roles and responsibilities for the project commensurate with the risks and potential for return from the project proceeds. Many of the financial hurdles that existed when SBX was financed have been removed. Private Activity Bonds are now a commonplace tax-exempt option used in many P3 transactions. New legislation should contemplate the use of tax-exempt financing to achieve the lowest possible cost of capital.

SOURCES OF INFORMATION

http://www.infra-deals.com/deals/316061/sr-125-south-highway.thtml; Accessed August 8, 2016

http://www.fhwa.dot.gov/ipd/project_profiles/ca_southbay.aspx; Accessed August 8, 2016

In Re South Bay Expressway, LP, 434 B.R. 589 (Bankr. S.D. Cal. 2010) United States Bankruptcy Court, S.D. California July 28, 2010

In Re South Bay Expressway, Lp, 455 B.R. 732 (Bankr. S.D. Cal. 2011) United States Bankruptcy Court, S.D. California June 27th, 2011

South Bay Expressway Emerges from Bankruptcy, The San Diego Union-Tribune, April 14, 2011

https://www.transportation.gov/policy-initiatives/build-america/south-bay-expressway-sr-125-san-diego-ca; Accessed August 11, 2016

http://www.leginfo.ca.gov/pub/05-06/bill/sen/sb_0451-0500/sb_463_cfa_20060825_155617_asm_comm.html; Accessed August 11, 2016

https://theses.lib.vt.edu/theses/available/etd-01172009-185137/unrestricted/Final_02_10_09.pdf; Accessed August 10, 2016

Poole, Robert W; Private Tollways: Resolving Gridlock in Southern California; 5/98

Tollway Exits Chapter 11; Jensen, Randall; The Bond Buyer, May 5 2011

Poole, Robert W., Reason Foundation; Reducing Risks in Transportation Mega-Projects; Accessed August 12, 2016

Case Studies of Transportation Public-Private Partnerships in the United States; US Department of Transportation Federal Highway Administration July 7, 2007

San Diego County Demographics Profile, South Region 2013 Population Estimates, September 2015; County of San Diego Health & Human Services Agency, Public Health Services, Community Health Statistics Unit

South Bay Expressway 2015 Audited Financials

Toll Road Operator Files for Chapter 11, Steve Schmidt, The San Diego Tribune March 23, 2010

http://libraryarchives.metro.net/DB_Attachments/100331_Southbay_Expressway_reorganization_update.pdf Accessed August 16, 2016

http://www.sdgis.com/documents/SouthBayExpresswayBankrupcy.pdf; Accessed August 16, 2016

https://books.google.com/books?id=oPg0AQAAMAAJ&printsec=frontcover&dq=sr-125+environmental+volume+1&hl=en&sa=X&ved=0ahUKEwj8mZyg0N3OAhUO4mMKHd2BAf0Q6AEIHjAA#v=onepage&q&f=false