ATP Travel Demand, Accident Data and Benefit-Cost Analysis Tools

1. Estimating Current and Future Bicycle and Pedestrian Travel Demand

The Caltrans ATP website has a 34-page presentation titled "Tools and Strategies for Predicting and Documenting Bicycling/Walking Rates" available at: http://www.dot.ca.gov/hq/LocalPrograms/atp/training/Module-5-Tools Strategies to Document-sml.pdf

The document describes where to locate existing data sources to estimate bicycle and pedestrian rates, and methods for collecting new data. Examples from successful applications is also included. Please note that Pages 22 and 23 of the presentation on Benefit Cost Analysis is no longer relevant as Caltrans has recently developed a new Cal B/C tool for ATP projects described in Section 3 of this handout.



Further guidance is available from the Pedestrian and Bicycle Information Center (pedbikeinfo.org) in the white paper titled "Bicycle and Pedestrian Forecasting Tools: State of the Practice" (July 2015) available at: <u>http://www.pedbikeinfo.org/cms/downloads/PBIC_WhitePaper_Forecasting.pdf</u>

The paper summarizes the state of the practice of bicycle and pedestrian forecasting tools and includes a sketch planning method case study that estimated the number of new bicycle trips and the impact of a new bicycle facility on reducing vehicle miles traveled in Seattle, Washington. Additional information on this study is available at: https://www.fhwa.dot.gov/publications/research/safety/pedbike/98166/sec2.3.cfm

2. Accident Data

Accident data is required not only for the ATP Benefit-Cost Analysis but also important for demonstrating project need in ATP applications. The University of California, Berkeley Transportation Injury Mapping System (TIMS) has developed a tool designed to support the California ATP. The tool utilizes interactive collision maps to allow users to track and document pedestrian and bicycle collisions and generate data summaries within specified project and/or community limits.



Accident location diagrams developed by TIMS

The TIMS ATP tool is available at: https://tims.berkeley.edu/tools/atp/

First-time users of this tool are encouraged to view/print the step-by-step help instructions and follow along with them as they complete the steps within the tool. The instructions are available at:

https://tims.berkeley.edu/help/ATP_Colsn_Map_Viewer.php

In addition to the TIMS system, accident data may be obtained from local agency police departments and from the California Highway Patrol (CHP) Statewide Integrated Traffic Records System (SWITRS) website. Local police departments will have more recent accident data but usually do not provide the mapping capabilities available from TIMS. It is best to use five years of accident data when analyzing bicycle and pedestrian projects.

3. Benefit-Cost Analysis

ATP applications require that applicants conduct a benefit-cost analysis of proposed projects. Caltrans developed the ATP Cal B/C Tool for this purpose and available at: http://www.dot.ca.gov/hq/tpp/offices/eab/benefit_cost/files/Cal-BC62AT.xlsm

The complete Cal-B/C ATP User's Guide is available at: <u>http://www.dot.ca.gov/hq/tpp/offices/eab/benefit_cost/files/Cal-</u> <u>BCActiveTransportationUserGuidev15.pdf</u>

A project example is provided beginning on page 23 (Attachment A) of the User's Guide.



Caltrans conducted two Cal-B/C Workshops (webinars) to explain and demonstrate all Cal-B/C models using project examples. Both workshops are available to view online. The first workshop occurred on December 21, 2017 and available at:

http://svgcstream01.dot.ca.gov/webcast/calsta/vod_calsta.asp?vodfilename=2017_12_21_SB1_Worksh op_AM.mp4

The discussion of the Cal-B/C ATP Tool begins at 1:40:00 of the webinar.

The second workshop occurred on January 16, 2018 and available at:

http://svgcstream01.dot.ca.gov/webcast/calsta/vod_calsta.asp?vodfilename=20180116_CAL_B_C_Wor kshop_AM.mp4

The discussion of the Cal-B/C ATP Tool begins at 1:41:30 of the webinar.

Questions regarding the model or questions regarding the analysis of specific projects should be directed to Caltrans Economic Analysis Branch staff by email at eab@dot.ca.gov

The Powerpoint presentation prepared for the Workshops is available at: http://www.dot.ca.gov/hq/tpp/offices/eab/benefit_cost/Cal-BCTrainingDecember2017v14.pptx

The description of the ATP Cal B/C Tool begins on page 49 of the Powerpoint presentation, and a Bike/Ped. Upgrade and Expansion project example begins on page 61.