

## Overview

The public use version of the DVRPC Onboard Survey Database 2010-2012 is intended to allow individuals and organizations access to the results of the surveying efforts without compromising the anonymity of survey participants. To this end street address information has been purged from the records, leaving city and state as well as origin and destination traffic analysis zone (TAZ) data.

For full documentation and commonly desired tabulations please see the forthcoming DVRPC Report “Philadelphia Regional On-Board Transit Survey” (Publication Number: 14040)

For assistance or issues, please contact DVRPC’s Office of Modeling and Analysis (Responsible Staff: Reuben MacMartin, rmacmartin@dvrpc.org)

## Requirements for Use

The Public Use Onboard Survey Database was built in MS Access 2010 and may not function properly if opened in earlier versions of the software. Use of the database requires basic knowledge of MS Access.

## Citation

When using data from this database please cite: “DVRPC Transit On-Board Survey 2010-2012, Public Use Database”

## License

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## Tables:

Descriptions of fields in the tables listed below can be found by opening the table in Design View in MS Access.

**2010 Ridership per Line** – Contains 2010 daily ridership and number of surveys distributed on the line for all lines surveyed

**Destination Alightings Data** – Contains data on final alighting stop, including distance to destination. These points were derived by determining the most proximate stop serving the last line used to the stated ending address on the survey. Stop point and node numbers correspond to TIM 2 model network.

**Linked and Unlinked Exp Factors by SurveyID** – Contains expansion factors for weighting surveys. These factors are based on time period ridership and (in the case of Linked expansion) number of lines used.

**Origin Boardings Data** – Contains data on origin boarding location. For users who were surveyed on the first service they used this will be the same as their written response. For those surveyed on their second, third, or fourth service this was determined by finding the nearest boarding location for their stated first line to their stated origin address. Stop point and node numbers correspond to TIM 2 model network.

**Survey Data: Raw Data** – Table of results from the surveying effort. Several of the fields in this table are populated with numerical values that correspond to other tables containing the long answer.

**Survey ID to TAZ Correspondence** – Contains origin and destination Traffic Analysis Zone (TAZ) values for the TIM 2 model network. These values were determined using the origin and destination point locations.

**Surveys to Time Period** – Allows for the aggregation of survey results to time period specific targets for checking the TIM 2 model results for AM, Midday (MD), PM, and Night (NT).

**tblChoiceLookup** – Contains the long answers to survey question 12 “reason for using transit”

**tblCount** – Contains long answer values for household (HH) size

**tblCountWithNone** – Contains long answer values for number of workers and number of vehicles per HH

**tblFrequencyLookup** – Contains long answer values for how frequently the respondent uses transit

**tblIncome** – Contains long answer values for HH income range

**tblLastMode** – Contains long answer values for first and last mile modes for the surveyed trip

**tblLocationLookup** – Contains long answer values corresponding to home or activity type locations

**tblOccupation** – Contains long answer values for survey respondents’ occupation

**tblPatcoTicket** – Type of ticket used for PATCO service by riders surveyed on the PATCO line

**tblSeptaTicket** – Fare instrument used to pay for ride by riders surveyed on SEPTA services

## How to Use Expansion Values

**Unlinked Expansion Factors** – Unlinked expansion factors are used for analyses at the level of the line as they are derived from daily line ridership. In the example below we see that after expansion the income distribution for Broad Street Subway users displays a difference from the distribution of raw survey responses, this is because the unlinked expansion factors are based on time period boardings and each period has a different unlinked expansion factor which is dependent on the number of surveys returned for that period.

Transitline	Income Range	Surveys	% Surveys	Unlinked Exp Factor	% Unlinked
BSS	Under \$25,000	188	28%	41,097.37	32%
BSS	\$25,000-\$34,999	129	19%	24,555.62	19%
BSS	\$35,000-\$49,999	109	16%	19,579.69	15%
BSS	\$50,000-\$74,999	114	17%	18,660.57	15%
BSS	\$75,000-\$99,999	70	10%	12,948.03	10%
BSS	\$100,000-\$149,999	38	6%	7,619.18	6%
BSS	\$150,000-\$199,999	14	2%	2,182.17	2%
BSS	\$200,000 and over	10	1%	1,819.03	1%

Other analyses suited to use of Unlinked Factors are: Rates and percentages of boardings by purpose on a line, automobile ownership rates for riders on a given line, fare medium usage rates for riders of a given line, reason for choosing transit for riders of a given line, etc.

**Linked Expansion Factors** – Linked expansion factors are used when analyzing system-level patterns of trips. The linked expansion factor is determined by dividing the unlinked factor by the number of transit lines used. The table below shows the income distribution for all travelers.

Income Range	Surveys	% Surveys	Linked Exp Factor	% Linked
Under \$25,000	4540	23%	317,467.97	34%
\$25,000-\$34,999	2428	13%	158,764.13	17%
\$35,000-\$49,999	2189	11%	125,469.52	14%
\$50,000-\$74,999	3160	16%	131,784.87	14%
\$75,000-\$99,999	2202	11%	77,260.44	8%
\$100,000-\$149,999	2639	14%	64,631.89	7%
\$150,000-\$199,999	1204	6%	29,822.85	3%
\$200,000 and over	987	5%	21,927.77	2%

Other analyses suited to use of Linked Factors are: Rates and percentages of trips by purpose within the system, number of transfers within the system, automobile ownership by transfer rates within the system, etc.