

**I**n the 1990s, the Texas Department of Transportation (TxDOT) began a comprehensive travel survey program. The program, administered by the Transportation Planning and Programming Division, is charged with providing reliable information that can be utilized by transportation planners to make decisions on future road projects.

While the Travel Survey Program is comprised of four primary survey types, the **external** survey (or roadside survey) is one of the most visible. External surveys are conducted at or near the boundaries of urbanized areas in order to collect information on the amount and characteristics of vehicles traveling into, out of, and through the study area.

For roadways with low to moderate levels of traffic, external surveys generally use an intercept interview method. With this method, a traffic control plan is established and field personnel randomly stop motorists and request their participation.

For roadways with high traffic volumes (typically Interstate highways or roads with more than 20,000 vehicles per day), several methods for collecting external data are available. These methods include roadside intercept interview, roadside intercept postcard mailback, license plate match, and license plate mailout.



For more information on TxDOT's Travel Survey Program, please contact:

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Product 0-4869-P2

Project 0-4869: Design of External Station  
Survey Methodologies for High Volume Locations

Additional information on external surveys is provided in the following TxDOT research reports:

*Evaluation of External Station Survey  
Methodologies for High Volume Locations  
(Report 0-4869-1)*

and

*Summary of High Volume External Survey  
Methods for TxDOT (Report 0-4869-S)*

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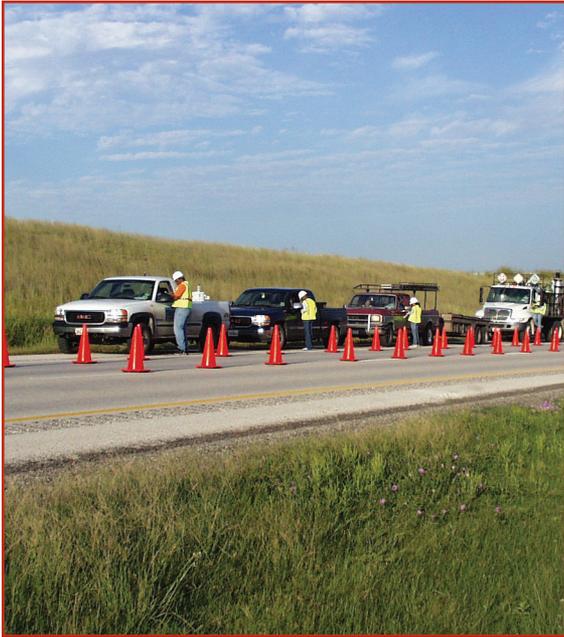


## TRAVEL SURVEY PROGRAM



## EXTERNAL SURVEYS ON HIGH VOLUME FACILITIES





### ROADSIDE INTERCEPT INTERVIEW

Roadside intercept interview surveys, sometimes called ‘roadside’ surveys, involve establishing a traffic control plan (TCP) and then randomly stopping and interviewing motorists at roadside survey ‘stations.’ While intercept interview surveys *can* be performed on the mainlanes or shoulders of high volume facilities, this method is typically not best suited for these conditions. However, intercept interview surveys may be performed at or near freeway exit ramps or at weigh stations, rest areas, or truck stops. Intercept interview surveys provide transportation planners with the most comprehensive set of data for planning and modeling purposes.

### ROADSIDE INTERCEPT POSTCARD MAILBACK

Roadside intercept postcard mailback surveys are conducted in the same manner as roadside intercept interview surveys, except instead of interviewing motorists, surveyors hand them a mailback survey to be completed and returned in the mail. Under this method, a TCP is established to direct vehicles to a point where a postcard can be handed to the

motorist. The postage-paid postcard contains questions that motorists can complete and return after they reach their destinations. The primary locations for intercept postcard mailback surveys are interchanges near freeway ramps and at toll plazas. While the intercept postcard mailback survey is not as comprehensive as the intercept interview method, it provides transportation planners with a significant amount of needed data for planning and modeling purposes.

### LICENSE PLATE MATCH

The license plate match method involves video recording license plates at two or more locations in or around the perimeter of the study area. License plates are then ‘matched’ in order to identify vehicles that traveled through the study area without stopping. This method is non-intrusive, but it also provides the least amount of useful data for transportation planners.

### LICENSE PLATE MAILOUT

The license plate mailout survey is similar to the license plate match survey in that license plates are recorded as they pass external locations around the periphery of the study area. However, with this method, motorists are mailed a survey questionnaire. In addition to the questionnaire, the survey mailout typically provides information on the purpose of the survey, assurances



that survey responses will be anonymous, a toll-free number for questions and comments, and a postage-paid return envelope.

Based on the findings of a recent TxDOT research project, the license plate mailout survey is the most commonly used method nationwide for collecting external survey data on high volume facilities. Key factors in the use of this method include the safety of field personnel and the traveling public, no disruption to motorists, and providing planners with important data for planning and modeling purposes.

### TxDOT AND TRAVEL SURVEYS

External surveys on high volume facilities can be carried out using a flexible approach in which a variety of survey methods are available. This approach allows for the most viable method or combination of methods that best suit the physical conditions of the location and consider the policies and needs of TxDOT districts and other affected agencies.

TxDOT strives to provide Texans with the safest and most efficient transportation system in the country. Information collected as part of external surveys assists transportation planners in creating traffic models of current travel patterns. These models help TxDOT identify areas where future road projects are needed. The information provided in these surveys will help TxDOT make the right choices, ensuring the efficient use of your tax dollars.