

9-2018


## Market SEGMENT Prediction Tool

Philip L. Winters  
*University of South Florida*

Amy Lester  
*University of South Florida*

Let us know how access to this document benefits you.

Follow this and additional works at: [https://pdxscholar.library.pdx.edu/trec\\_data](https://pdxscholar.library.pdx.edu/trec_data)

 Part of the [Transportation Commons](#), [Transportation Engineering Commons](#), and the [Urban Studies and Planning Commons](#)

---

### Recommended Citation

Winters, Philip L., and Amy B. Lester. Social Marketing: SEGMENT Prediction Tool. NITC-DP-1057. Portland, OR: Transportation Research and Education Center (TREC), 2018. [https://doi.org/10.15760/TREC\\_datasets.02](https://doi.org/10.15760/TREC_datasets.02)

This Dataset is brought to you for free and open access. It has been accepted for inclusion in TREC Datasets and Databases by an authorized administrator of PDXScholar. For more information, please contact [pdxscholar@pdx.edu](mailto:pdxscholar@pdx.edu).

# Market SEGMENT Prediction Tool

Philip L. Winters and Amy Lester

University of South Florida



## Abstract

Social marketing seeks to develop and integrate marketing concepts with other approaches to influence behaviors that benefit individuals and communities for the greater social good. Social marketing is a useful transportation demand management (TDM) planning approach to promote travel-behavior change, and combines at least seven distinguishing features that sets it apart from other popular, behavior-change planning approaches, such as education and mass media campaigns. These seven features include a focus on socially beneficial behavior change; a strong consumer orientation; the use of audience segmentation techniques and the selection of target audiences; the use of marketing's conceptual framework (marketing mix and exchange theory); the recognition of competition; and continual marketing research. Of particular relevance to influencing behavior effectively is the need to segment an audience and target measures accordingly. Segmentation refers to dividing a market into groups of customers to develop different products, services, and communications to meet their specific needs and to focus resources on those segments that have the greatest potential for change.

The study 'SEGMENT: Applicability of an Existing Segmentation Technique to TDM Social Marketing Campaigns in the United States' (<https://nitc.trec.pdx.edu/research/project/1057>) replicated the European's SEGMENT methodology to determine whether their "golden questions" can be used to accurately predict segment markets in the United States. Individuals were surveyed using the long list of questions and discriminate analysis was applied to identify the most powerful questions among the segments. The results identified a unique set of questions that most accurately predict segment membership in the United States. These "golden questions" can be added to existing surveys to gather information about the proportion of individuals who belong to differing segments in an area, which will allow communities to easily classify and identify segments from which the appropriate services and incentives can be designed. As a result, adding these questions should reduce the cost, if not the need, for custom segmentation studies. As part of the study, the investigators developed a tool to provide transit agencies, transportation demand management (TDM) professionals, and others to predict market segment membership of individuals. Professionals interested in using the "golden questions" to predict segment membership can use the tool to categorize survey responses accordingly.

## Description

The Excel tool has been developed to allow users to readily identify individual segment membership based on their responses to the 'golden questions.' The Excel tool contains multiple tabs that allow the user to enter survey data and automatically generate predicted market segment membership for each survey respondent. Workbook tabs include the *Preliminary Question*, *Non-driver Segmentation* questions, and *Driver Segmentation* questions tabs, used to enter data from survey respondents and the *Discriminant Functions* and the *Coefficients* tabs used to calculate segment membership. Additional tabs are provided to help interpret the information provided in the workbook.

Users of the workbook begin with the *Preliminary Question* tab which is used to separate survey respondents into two broad segments: Drivers and Non-drivers. The question in this tab reads; "For all journeys combined, in the past 12 months, how frequently have you used a car, truck, or van as a driver?". Users are able to make a selection from the drop down menu in the cell. A definition is provided to determine whether that individual is a driver or non-driver based on the selection to; "If once a week or less, proceed to Non-driver tab, otherwise proceed to Driver tab". Using the discriminate function developed in the study, the *Non-Driver* and *Driver* tabs are used to automatically determine which segment an individual belongs to given their responses to the 'golden questions.' The *Non-Driver* tab includes 16 golden questions in the first row. Column A allows users to enter a unique ID for each individual. Users select the responses for each of the 16 golden questions in Columns B-Q. Once a score is

entered for each question in the row, a segment number is produced in Column S. Non-driver segments will produce numbers 1, 2 and 3. Similarly, the *Driver tab* includes 15 golden questions in the first row. Column A allows users to enter a unique ID for each individual. Users enter the responses for each of the 15 golden questions in Columns B-P. Once a score is entered for each question in the row, a segment number is produced in Column R. Driver segments will produce numbers 1, 2, 3 and 4.

A description of each of the seven segments is included in the *Segment Descriptions* tab. The descriptions are separated into non-driver and driver categories, with segment numbers corresponding to those produced from the *Non-Driver* and *Driver* tabs. Finally, the Excel tool also includes sheet tabs with the discriminate function and coefficient values. Again, these values are separated into non-driver and driver categories, with segment numbers corresponding to those produced from the *Non-Driver* and *Driver* sheet tabs.

Detailed instruction on how to use the tool are provided in the first tab of the workbook ('Workbook Instruction').

### **Content of File(s)**

The file is an Excel tool to be used for predicting segment membership of U.S. individuals based on their responses to the 'golden questions' identified by the research project.

### **Data Access**

Tool can be accessed here: [https://pdxscholar.library.pdx.edu/trec\\_data/2/](https://pdxscholar.library.pdx.edu/trec_data/2/)

### **DOI**

10.15760/TREC\_datasets.02

### **Persistent Identifier**

<https://archives.pdx.edu/ds/psu/26251>

### **Recommended Citation**

Winters, Philip L., and Amy B. Lester. Social Marketing: SEGMENT Prediction Tool. NITC-TT-1057. Portland, OR: Transportation Research and Education Center (TREC), 2018. [https://doi.org/10.15760/TREC\\_datasets.02](https://doi.org/10.15760/TREC_datasets.02)