

## **SCOPE OF WORK: FRESNO COUNTY REGIONAL TRANSIT ON-BOARD SURVEY**

### **PURPOSE:**

The purpose of this project is to develop the first Countywide on-board transit survey for the Fresno region. Along with service related questions, the survey will also include rider demographics, origin and destination, transfers, customer travel characteristics, customer satisfaction, customer preferences for receiving communications, and other transit trip information. The data collected from the survey will be used to update the transit components of the Fresno COG's activity-based model (ABM) and improve the transit ridership forecast. The survey will also assist the local transit operators to plan for future services by integrating feedback from existing riders. The survey will be conducted in 2020, to align with the 2020 Census.

### **TASKS:**

The primary service required of the consultant will be to conduct the countywide transit on-board survey in a manner that allows for regional reporting as well as individualized reporting for each local transit agency. The survey will collect data on transit trip origins and destinations, transfers, trip characteristics, rider demographics, customer satisfaction, and other key metrics. Work will be accomplished with input from an advisory committee consisting of staffs from the Fresno COG and the three local transit operators.

## **1. Development of the Work Plan**

### **1.1 Consultant kick-off meeting with the advisory committee (Meeting #1)**

- The consultant will hold a kick-off meeting with the advisory committee. Members of the advisory committee will include the Fresno Council of Governments (Fresno COG), Fresno Area Express (FAX), Clovis Transit, and Fresno County Rural Transit Agency (FCRTA). With input from the advisory committee, the consultant will identify transit services and routes, racial/ethnic groups served, and English and non-English speaking riders throughout the County.

### **1.2 Survey plan by the Consultants**

- The consultant will develop a plan that identifies the specific products, schedules, and staffing required for the survey along with the quality control of the surveyed data, including Title VI reporting.
- The federal government does not directly regulate how public agencies should conduct the origin-destination surveys; however, the Federal Transit Administration (FTA) of the US Department of Transportation (USDOT) offers guidance on Title VI federal laws and regulations that impact frequency, content, and delivery of passenger surveys. Title VI of the 1964 Civil Rights Act protects people from discrimination based on race, color, and national origin in programs and activities receiving federal financial assistance. The 2012 [FTA Circular 4702.1B: Title VI Requirements](#) (FTA Title VI Circular) outlines current Title VI 4 guidance and regulations for transit providers. The Circular provides guidance on the types of information transit agencies should collect, including information through passenger surveys, to ensure they are compliant with Title VI.

<b>Task</b>	<b>Deliverable</b>
1.1	<i>Meeting summary</i>
1.2	<i>Work plan for the survey on field</i>

## **2. Design of the Survey and Sampling Plan**

### **2.1 Design of the Survey and Sampling Plan**

- The consultant will design the comprehensive and explicit survey questionnaires with the focus on origin-destination and transfers, and in accordance to the input from advisory committee. The survey will build upon the FAX 2018 Bus Customer Satisfaction Survey, and will be conducted according to nationally-recognized on-board travel survey guidelines.
- The survey will be developed including a strategic limited English proficient (LEP) approach. The survey should be in multiple languages (at least English, Spanish, and Hmong) in order to interview a wide range of both English and non-English speaking transit riders.
- The survey will be designed with a statistically representative sample (such as +/- 3% to 5% at the 95% confidence level, variable rate sampling depending on route volume) of transit riders from each of the partnering transit agencies as well as the overall Fresno region.
- The consultant will also collect boarding and alighting data including the transfers on the sampled routes and develop a weighting strategy for expansion of the data set and an approach for maximizing response of low-income and hard-to-reach population, including the use of incentives to increase response rate.

### **2.2 Advisory committee Meeting #2**

- The advisory committee will review the survey and sampling plans, developed by the Consultant in the Task 2.1 and will recommend the changes if necessary.

<b>Task</b>	<b>Deliverable</b>
2.1	<i>A Memo that documents the final survey design and sampling plan</i>
2.2	<i>Meeting summary</i>

### 3. Design of Survey Instrument

- The consultant will design a survey instrument in multiple languages (English, Spanish, potentially Hmong, and possibly other languages), with the programming of the questionnaires on tablet or other data collection technologies proposed by the consultant.
- The consultant will develop the interview training manual documenting the roles and responsibilities of the interviewer including the strategy for the proper execution of the survey in the field.

Task	Deliverable
3	<i>A memo that documents the Survey Instrument and methodology. An Interview training manual</i>

### 4. Conduction of the survey on the field

#### 4.1 Pilot/Test Survey

- The Consultant will conduct a pilot study in-order to test the survey methodology, instruments, and the recording devices covering the transit services from each of the partnering transit agencies.

#### 4.2 Advisory Committee meeting # 3

- The consultant will evaluate the results and make recommendations to advisory committee for revisions to the survey instrument, sampling plan, and interview approach, if necessary.

#### 4.3 Final Survey

- The survey procedure will be finalized by addressing the proposed changes (if any in Task 4.2) in the methodology and instruments.
- The Consultant will conduct the final in-person interviews by employing the human resources supplemented with the data collection technologies proposed in Task 3.

Task	Deliverable
4.1	<i>Pilot study results; recommended revisions</i>
4.2	<i>Meeting summary</i>
4.3	<i>Final survey results; raw data</i>

### 5. Data Processing and Analysis

### 5.1 Data Verification and Quality Control

- The raw survey records will be verified for its accuracy, checked for logic and consistency of the answers, entered into the database, and cleaned using already developed quality control measures. The database will be designed for compatible interface with the Fresno COG ABM.

### 5.2 Data Processing and Analysis

- The cleaned database will be processed in a logical order establishing multiple tiers within the single attribute.
- Analysis of the datasets stating the relationship of various attributes with the transit ridership.
- From the surveyed data, the various attributes' weightages will be computed in-order to expand the results for the population of transit ridership for each of the partnering transit agencies as well as the overall Fresno region.

### 5.3 Advisory Committee Meeting #4

- The consultant will present the data and finding to the Advisory Committee.

<b>Task</b>	<b>Deliverable</b>
5.1	<i>Quality control measures; final data and final survey database</i>
5.2	<i>Data processing steps and final results</i>
5.3	<i>Meeting Summary</i>

## **6. Reports and Presentation**

### 6.1 Prepare the final data files and final report

- The consultant will prepare the final data files for the activity based model that can be used by Fresno COG to update the model.
- The consultant will analyze the transit datasets and prepare individualized draft reports, including executive summaries, for each of the three transit agencies and for the region for review by the advisory committee members (four reports in total). It is desirable that the reports utilize graphics and other visualization techniques to help readers understand the survey results.
- The consultant will revise the reports based on input from the advisory committee, and submit the final reports to Fresno COG and the local transit agencies.

### 6.2 Presentations

- The consultant will present the final reports to Fresno COG's Transportation Technical Committee (TTC), Policy Advisory Committee (PAC), and Policy Board for acceptance. The TTC and PAC meetings take place on the 2<sup>nd</sup> Friday of the month and the Policy Board meeting is on the evening of the 4<sup>th</sup> Thursday of the month.

<b>Task</b>	<b>Deliverable</b>
6.1	<i>Processed data files; four final report including Regional report for Fresno COG, and individualized reports for FAX, Clovis Transit, and FCRTA, including executive summaries</i>
6.2	<i>Presentations</i>

## **7. Project Management**

- The consultant will work closely with the Fresno COG project manager and provide the monthly progress reports.
- The monthly progress report will document the activities for the billing cycle and planned activities for the next month.

<b>Task</b>	<b>Deliverable</b>
7	<i>Monthly Progress Reports</i>