SUPPORTING STATEMENT – PART B

B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

1. Description of the Activity

There are numerous businesses that ship commodities in the study region. Given the large number of potential survey respondents, sampling will be required; and those shipping companies identified will be provided an opportunity to complete the survey questionnaire. With the assistance of the Red River Valley Association, shipping companies will be notified and encouraged to respond to the survey. Surveys will be conducted by telephone, personal interview, and on-line submittals. These companies will be selected based on primary types and volume of commodities shipped. Response rates for navigation surveys have typically ranged from 15 to 35 percent for shippers and carriers.

Information on amount of tonnage by commodity was pulled from the 2018 Red River Navigation Report. Summary tables were generally reported by tonnage levels and are included below.

Table 1 Cargo Tons Received by Railroad by Counties of Interest by Commodity to and from Mississippi River System Hinterland States

STCC Two Digit Code	Expanded Tons
Farm Products	27,824
Nonmetallic Minerals; except Fuels	1,471,142
Food or Kindred Products	47,560
Apparel, or Other Finished Textile Products or Knit Apparel	2,000
Lumber or Wood Products; except Furniture	302,640
Pulp, Paper or Allied Products	928,800
Chemicals or Allied Products	31,560
Petroleum or Coal Products	310,404
Clay, Concrete, Glass or Stone Products	555,756
Primary Metal Products, including Galvanized; except Coating or other Allied Processing	11,040
Transportation Equipment	113,678
Miscellaneous Products of Manufacturing	400
Waste or Scrap Materials Not Identified by Producing Industry	271,728
Miscellaneous Mixed Shipments	49,600
Hazardous Materials	33,600
Total	4,157,732

Table 2: Cargo Tons Received by Railroad by Counties of Interest by Commodity from the Mississippi River System Hinterland States

STCC Two Digit Code	Expanded Tons
Farm Products	918,314
Metallic Ores	20,800
Coal	17,100
Crude Petroleum, Natural Gas or Gasoline	23,240
Nonmetallic Minerals; except Fuels	6,566,080
Ordnance or Accessories	3,672
Food or Kindred Products	839,140
Lumber or Wood Products; except Furniture	147,200
Pulp, Paper or Allied Products	106,480
Chemicals or Allied Products	528,624
Petroleum or Coal Products	92,400
Clay, Concrete, Glass or Stone Products	561,284
Primary Metal Products, including Galvanized; except Coating or other Allied Processing	1,044,600
Transportation Equipment	253,640
Waste or Scrap Materials Not Identified by Producing Industry	118,000
Miscellaneous Freight Shipments	18,008
Hazardous Wastes	49,400
Hazardous Materials	814,856
Total	12,122,838

2. Procedures for the Collection of Information
The data gathered through the survey will be tabulated using simple descriptive statistics (such as means, percentages, etc.), summary statistics, and cross-tabulations. To prepare data for review/analysis a series of data checks will be run, allowing for an exam of frequencies and means, and an assessment of the extent of data.

Estimation procedures, including logistic regression and structural equation modeling, depending on the robustness of the information gathered, will be identified depending on the specific survey items that return significant contributions to general topics identified as the focal themes of each survey.

To prepare data for review/analysis a series of data checks will be run, allowing for an exam of frequencies and means, and an assessment of the extent of data. Follow ups will be attempted to ensure all the needed information is provided. Each of the survey

instruments employed in this project are issued once to each respondent. Follows ups will be attempted to ensure all the needed data is provided.

The team will conduct an administrative review of each request and oversee technical reviews of each request to ensure data quality and soundness. All information collection instruments will be designed and deployed based upon acceptable statistical practices and sampling methodologies (if possible and where appropriate), and will be used to obtain consistent, valid data that are representative of the target populations, account for non-response bias, and achieve response rates and sample sizes at or above levels needed to obtain informative results.

3. <u>Maximization of Response Rates, Non-response, and Reliability</u>
Sufficient response rates will be determined based on share of total tonnage represented by commodity. The team will work with others who have recently completed interviews on reliable data and responses for the survey. Follow ups will occur if needed either by phone calls or personal interviews to increase response rates if needed.

The Corps will work with the Red River Valley Association (RRVA) increase submission rates through a working group created by RRVA to engage in public outreach that will help involve potential users about the survey. The survey will be available on the Tulsa District website, along with a project email address to receive completed surveys and answer questions.

4. <u>Tests of Procedures:</u>
Given the relatively small number of estimated respondents and based on the fact that the Corps has conducted numerous and similar data collection efforts including rate studies and feasibility studies, testing of potential respondents has been determined to be unnecessary.

5. <u>Statistical Consultation and Information Analysis</u>
a. Provide names and telephone number of individual(s) consulted on statistical aspects of the design.

>Glenn Fulton, USACE Economist. (918)-669-7453.
>Stuart Norvell, USACE Economist. (501) 324-7343

b. Provide name and organization of person(s) who will actually collect and analyze the collected information.

The information will be collected and analyzed by USACE economists with the Southwestern Division.