

USPS-RM2020-9-1**Public Material Supporting Comments on Proposal One****PREFACE**

USPS-RM2020-9-1 provides the public supporting materials for the analysis provided by the Postal Service and Professor Michael D. Bradley in the Postal Service's Initial Comments on Proposal One by United Parcel Service (UPS) and the Report on Certain Aspects of UPS Proposal One. It includes the analysis data, tables, and graphs used to describe the seasonal peaks in volumes and costs, and the programs that perform the cost calculations relating to UPS's proposed method.

PURPOSE AND CONTENT

The purposes of USPS-RM2020-9-1 are two-fold. First, it provides the data used to construct the graphs and tables that accurately describe the nature of the Postal Service's seasonal peak in volumes and costs. It also provides the files used to produce those tables and graphs. Second it provides the SAS programs used to calculate the various cost measures discussed in Postal Service's Initial Comments on UPS Proposal One and Professor Bradley's Report on Certain Aspects of UPS Proposal One, along with an explanation of what each program does, and the associated SAS logs and listings. Note that the SAS programs are internally self-documented.

ORGANIZATION

This Preface and the accompanying zip file present the data used to calculate the tables and graphs appearing in the Postal Service's Initial Comments on Proposal One. It also produces the data and programs used to calculate the various cost measures presented and discussed in those comments, and in Professor Bradley's Report on Certain Aspects of UPS Proposal One. The Preface indicates where all the data files and programs are located. The Preface has three descriptive sections. The first discusses the processes used to produce the descriptive tables and graphs. The second describes creating the analysis data set used to calculate the various monthly cost measures, and the third presents and discusses the SAS programs used to calculate those measures. Each of the descriptive sections indicates where the relevant data sets and programs can be found in the zip file.

Note that some of tables appearing in the Postal Service's comments also appear in Professor Bradley's report, albeit with different numbers. A concordance between the table numbers is presented below:

Concordance Between the Two Sets of
Table Numbers

Postal Service Comments	Professor Bradley's Report
4	1
5	2
6	3
7	4

I. Producing the Graphs and Tables that Accurately Describe the Seasonal Peak

A. Describe Patterns in Seasonal Costs

1. Table 1 and Figures 1 through 3 in the Postal Service's Initial Comments, and the data used to produce them, are presented in the Excel workbook entitled Peak Season Data.xlsx.
2. Table 1 and Figures 1 and 2 are produced in the tab entitled, Overtime by Month. Figure 3 is produced in the tab entitled, Hwy Transp Costs No Xmas.

B. Describe Patterns in Seasonal Volume

1. Table 2 and Figures 4 and 5 in the Postal Service's Initial Comments, and the data used to produce them, are presented in the Excel workbook entitled Seasonal Volumes.2020.xlsx
2. Table 2 is produced in the tab entitled Nov-Dec Pct Change. Figures 4 and 5 are produced in the tab entitled, Month Volume.

C. Calculate Correlations Between Monthly Changes in City Carrier Cost and Monthly Changes in Volume

1. Table 3 in the Postal Service's Initial Comments presents the correlations between monthly changes in city carrier costs and monthly changes in First-Class and competitive products volume. The correlations are calculated in the SAS program entitled Carrier Cost Volume Correlation.sas.
2. The program reads in the monthly trial balance cost from the SAS dataset entitled Trial_Balance_Costs.sas7bdat and the monthly volumes from the SAS dataset entitled, Month_Volume.sas7bdat. (The construction of these two SAS data sets is explained below.) It then combines the monthly cost with the monthly volumes and calculates the correlations. The SAS Logs and Listings (containing the results) are included in the Producing Graphs and Tables directory. The produced files are listed below:

Carrier Cost Volume Correlation.log Carrier Cost Volume Correlation.lst

3. Table 3 is produced in the Excel workbook entitled, Cost Volume Correlations.xlsx.

II. Creating the Data Used to Calculate UPS's Forecast of Monthly Costs and Actual Monthly Costs

A. Trial Balance Costs

1. Create Monthly Cost SAS Data Set

Start with the UPS file entitled, "TB Compiled.csv." Add a Postal month variable and save as an Excel file called 'TB.Costs.xlsx.'

2. The SAS program, "Reading in TB Cost Data.sas," reads in the UPS file

"TB.Compiled.xlsx" and creates the corresponding SAS data set entitled, "Trial_Balance_Costs.sas7bdat."

B. Volumes for Cost Calculations

1. Start with the UPS file entitled, "Compiled_Monthly.csv." Read into Excel, add a postal month variable, and save as an Excel file entitled, "Month Vol.xlsx."

2. The SAS program, "Create Monthly Volume for Cost Calculations.sas," reads in

"Month Vol.xlsx," creates the SAS dataset "Month_Volume.sas7bdat."

C. Cost Segment Data

The SAS program, "Reading in Cost Seg Components.sas" reads in the UPS Excel file, "CSC.Data.xlsx," and converts it to a SAS data set entitled, "Cost_Segs.sas7bdat."

D. CRA Cost Data

The SAS program, "Reading in Total and VV Costs.sas" reads in the Excel file entitled, "CSC Main Components.xlsx." The Excel file contains the annual total and volume variable costs for the main cost segments and components. The program converts the data to a SAS dataset entitled, "Total_VV_Main.sas7bdat."

III. Calculating UPS-Predicted Volume Variable and Institutional Costs and the Actual Volume Variable and Institutional Costs.

The UPS-predicted monthly costs and the actual monthly costs for clerks, city carriers, rural carriers and purchased transportation are calculated in a series of SAS programs entitled:

Predict Monthly Costs.CS03.FY19.sas
Predict Monthly Costs.CS67.FY19.sas
Predict Monthly Costs.CS10.FY19.sas
Predict Monthly Costs.CS14.FY19.sas

The SAS Logs and Listings (containing the results) are included in the Calculating Monthly Costs directory. The produced files are listed below:

Predict Monthly Costs.CS03.FY19.log Predict Monthly Costs.CS03.FY19.lst
Predict Monthly Costs.CS67.FY19.log Predict Monthly Costs.CS67.FY19.lst
Predict Monthly Costs.CS10.FY19.log Predict Monthly Costs.CS10.FY19.lst
Predict Monthly Costs.CS14.FY19.log Predict Monthly Costs.CS14.FY19.lst

The four programs perform all the same functions but do so for different cost segments. The programs perform the following functions:

1. Identify the relevant monthly accrued costs from the trial balance.
2. Calculate annual costs by mail class.
3. Calculate annual volumes by mail class.
4. Calculate annual unit costs by mail class
5. Use annual unit costs and monthly volume to calculate UPS-predicted volume variable costs by month.
6. Use monthly accrued costs and CRA variabilities to calculate monthly volume variable costs.
7. Calculate monthly UPS-predicted and actual institutional costs.
8. Calculate the monthly changes in UPS and CRA volume variable and institutional costs.

DIRECTORIES

USPS-RM2020-9-1 contains two directories.

1. Directory – Producing Graphs and Tables

This directory includes the graphs and tables in the Postal Service's Initial Comments on UPS Proposal One as well as the data used to produce them.

2. Directory – Calculating Monthly Costs

This directory includes the analysis data and SAS programs used to calculate the various measures of monthly cost discussed in the Postal Service's Initial Comments on UPS Proposal One and Professor Bradley's Report on Certain Aspects of UPS Proposal One