

## Files Required for Documentation of Transportation Cost System (TRACS) Estimation Process

Below is a brief explanation of the use of each program. For more detailed descriptions of the use of the files, see USPS-FY08-36, Transportation Cost System (TRACS) Statistical and Computer Documentation. Some field identifiers (NASS code, for example) have been encrypted.

Readme\_TRACS(PublicVersion)\_FY08.pdf

This document. Lists programs and data files on the CD with brief description of each.

USPS-FY08-36.pdf

Transportation Cost System (TRACS) Statistical and Computer Documentation (Public Version).

Programs used to develop quarterly TRACS distribution keys:

	<u>CD-ROM name</u>	<u>Mainframe name</u>	
Commercial Air	airkeys2_PQq08	Tracssmn.expand.commail.PQq08.cntl(airkeys2)	* qtrs 1 & 2
Commercial Air	keyair1_PQq08	Tracssmn.fedex.pq08.cntl(keyair1)	* qtrs 3 & 4
Highway	zexp_PQq08	Tracssmn.hwyq08.editexp.cntl(zexp)	
Rail	railexp_PQq08	Tracssmn.expand.rail.PQq408.cntl(railexp)	
Network Air			
FedEx Day	keyday5_PQq08	Tracssmn.fedex.PQq08.cntl(keyday5)	
FedEx Night	keynit5_PQq08	Tracssmn.fedex.PQq08.cntl(keynit5)	
UPS	key5x5_PQq08	Tracssmn.fedex.PQq08.cntl(key5x5)	

Input SAS files used to develop quarterly TRACS distribution keys (all CD-ROM SAS files have 'sas7bdat' extension):

	<u>CD-ROM name</u>	<u>Mainframe name</u>	
Commercial Air	pop_p [1] <sup>1</sup>	Tracssmn.expand.commail.PQq08.sasdata(pop_pm_p_hi)	
	sample [2]	Tracssmn.expand.commail.PQq08.sasdata(sample)	* qtrs 1 & 2
	cair_PQq08 [3]	Tracssmn.air.zfile.PQq08.cair	* qtrs 3 & 4
Highway	form3c [4]	Tracssmn.highway.PQq08.edited.data(form3c)	
	form3l [5]	Tracssmn.highway.PQq08.edited.data(form3l)	
	pallet [6]	Tracssmn.highway.PQq08.edited.data(pallet)	
	sample [7]	Tracssmn.highway.PQq08.edited.data(sample)	
Rail	rail_zfile_PQq08 [8]	Tracssmn.expand.rail.PQq08.sasdata(raildata)	
Network Air			
FedEx Day	daynet.PQq08 [9] <sup>2</sup>	Tracssmn.daynet.PQq08.zfile	
FedEx Night	nitnet.PQq08	Tracssmn.nitnet.PQq08.zfile	
UPS	net5x.PQq08	Tracssmn.net5x.PQq08.zfile	

Input flat files used to develop quarterly TRACS distribution keys:

<sup>1</sup> See numbered reference tables that follow.

<sup>2</sup> All three Network Air files are documented in 9.

Mailcode file contains mail codes and surface density factors:

	<u>CD-ROM name</u>	<u>Mainframe name</u>
All modes	mailcode.FY08.txt [10]	Tracssmn.mailcode.flat.code.fy08

Cubic feet by container type:

	<u>CD-ROM name</u>	<u>Mainframe name</u>
Highway	cube_feet.txt [11]	Tracssmn.cuft.default.text.fy08

### 1) Commercial Air pop\_p (qtrs 1 & 2)

<u>Variable</u>	<u>Type</u>	<u>Description</u>
FIRST_STAGE_STRATA	Char (8)	3 strata types-Inbound, Outbound, Domestic
ITEM_STRATA	Char (1)	Act tag type
POP_P_HI	Num (8)	Pounds for HI

### 2) Commercial Air sample (qtrs 1 & 2)

<u>Variable</u>	<u>Type</u>	<u>Description</u>
FIRST_LEG_AIRLINE	Char (6)	Commercial airline
FIRST_LEG_DESTINATION	Char (6)	Air destination
FIRST_LEG_FLIGHT	Char (6)	Flight number
FIRST_LEG_FLIGHT_DATE	Date.	Flight date
FIRST_LEG_FLIGHT_ORIGIN	Char (6)	Flight origin
FIRST_STAGE_STRATA	Char (8)	3 strata types-Inbound, Outbound, Domestic
ITEM_NUMBER	Num (8)	Item number
ITEM_STRATA	Char (1)	Act tag type
ITEM_TYPE	Char (1)	Item type
MAILCODE	Num (3)	Mail code
MAILSHPE	Char (1)	Mail shape
NASS	Char (5)	Facility NASS code
POP_P_HI	Num (8)	Total population pound by strata and act tag
POP_P_HLI	Num (8)	Total population pound by strata act tag and flight
POP_P_I	Num (8)	Total population pound by act tag
POP_P_I_IN_SAMPLE	Num (8)	Total population pound by act tag in sample
POP_P_REGION_I	Num (8)	Total pound by region and act tag
POP_P_RHLIK	Num (8)	Total population pound category r mail in item k
P_RI_ADJUST	Num (8)	Total population pound ratio in sample
REGION	Char (2)	Region
TESTID	Char (7)	Test id

### 3) Commercial Air cair (qtrs 3 & 4)

<u>Variable</u>	<u>Type</u>	<u>Description</u>
CLAS	Char (1)	D&R Act Tag Code (mail class)
DEVICEID	Char (13)	Transaction Concentrator (TC) ID

H1	Num (8)	1 <sup>st</sup> -stage post-strata lb-based size component
H1C	Char (3)	1 <sup>st</sup> -stage post-strata – Size and mail class combination
H2C	Char (23)	2 <sup>nd</sup> – stage post-strata – Device ID and work-station combination
MAILCODE	Char (3)	Sample mail piece category
MAILPCS	Num (8)	Sample mail pieces
MAILSHPE	Char (1)	Sample mail piece shape
MAILWT	Num (8)	Sample weight (lbs)
NPOPH1C	Num (8)	1 <sup>st</sup> stage post-stratum PSU frame count
NPOPWS	Num (8)	2 <sup>nd</sup> stage post-stratum SSU frame count
NSAMPH1C	Num (8)	1 <sup>st</sup> stage post-stratum PSU sample count (effective size)
NSAMPWS	Num (8)	2 <sup>nd</sup> stage post-stratum SSU sample count (effective size)
NET	Char (5)	Network air mode – CAIR
POP	Num (8)	Subpopulation
PSU	Char(27)	1 <sup>st</sup> stage sampling unit
TESTDATE	Date9.	Test date
TESTID	Char (7)	Test ID
TESTSITE	Char (5)	NASS facility code (encrypted)
TIMESEG	Char (9)	Time segment component of PSU
W	Num (8)	Frame record lbs – Clas : Wrksta (same as WCWS)
WCDV	Num (8)	Frame control lbs – Mail class and Device ID combination
WCWS	Num (8)	Frame control lbs – Mail class and work-station combination
WH1CI	Num (8)	Frame control lbs – PSU ( I ) level
WPOP	Num (8)	Frame control lbs – Subpopulation level
WPOPC	Num (8)	Frame control lbs – Mail class and subpopulation combination
WPOPH1C	Num (8)	Frame control lbs – Mail class, subpopulation & stratum combination
WRKSTA	Char (10)	D&R tagging workstation identifier

#### 4) Highway form3c

<u>Variable</u>	<u>Type</u>	<u>Description</u>
BEGIN	Char (5)	Origin facility code of the leg (segment)
CAPACITY	Num (8)	Truck capacity in cubic-feet
CON_TYPE	Char (9)	Contract type (InterBMC, IntraSCF....)
CONTNO	Num (3)	Container number
COST	Num (8)	Cost of trip through segment for IntraSCF
COSTCFM	Num (8)	Cost/CFM for non-IntraSCF
CTYPE	Char (1)	Containerized item type
DCODE	Char (5)	Test facility code
EMPTY	Num (3)	Percentage of truck empty
EMPTYCON	Num (2)	Percent of container empty
EMPTYEQU	Num (3)	Percentage of truck space taken by empty equipment
END	Char (5)	Destination facility code of the leg (segment)
EXPRESS	Num (3)	Percentage of unloaded loose Express Mail
FACCAT	Num (8)	Stratum number
FCODE	Char (5)	Origin facility code of the item (where the item loaded onto the truck)
FRMCOUNT	Num (8)	Number of stop-days in the stratum
LASTLEG	Num (8)	Indicator for the last leg ('1' = the last leg)
LEG	Num (8)	Leg (or segment) index (referred to as 's' in the formulas, s=1,2,...,S)
MAILCODE	Char (2)	Mail category (referred to as 'r' in the formulas)
MILES	Num (8)	Highway miles on the leg
NOFORM3	Num (8)	No H3 form for the test
NOITEMS	Num (3)	Number of items (of same type) in the container
NUMFAC	Num (8)	Number of stops (segments) on the trip (referred to as 'S')
OCODE	Char (5)	Origin facility code of the last leg

OCODE(1-17)	Char (5)	The 1 <sup>st</sup> , 2 <sup>nd</sup> , ... 17 <sup>th</sup> origin facility code on the trip (referred to as 'o')
OTHER	Num (3)	Percentage of unloaded other loose items
PALLETS	Num (3)	Percentage of unloaded pallets
PERCONT	Num (3)	Percent of container taken up by item type (referred to as 'p')
PERWEEK	Num (8)	Number of times per week the trip runs
REMAIN	Num (3)	Percentage of truck that had mail remaining
ROUTE	Char (5)	Highway contract route number
SACKS	Num (3)	Percentage of unloaded loose sacks
SEGIN	Num (8)	Trip segment index
SETASIDE	Num (3)	Set-A-Side type (container type, loose item type)
TESTID	Char (7)	Unique code identifying a particular test
TOTWT	Num (8)	Gross weight of the sampled item
TRIP	Char (5)	Trip number on the contract route
UNLOADED	Num (3)	Percentage of truck unloaded
WHEELED	Num (3)	Percentage of unloaded wheeled container
WT	Num (8)	Net weight of mail

### 5) Highway form3I

<u>Variable</u>	<u>Type</u>	<u>Description</u>
BEGIN	Char (5)	Origin facility code of the leg (segment)
CAPACITY	Num (8)	Truck capacity in cubic-feet
CON_TYPE	Char (9)	Contract type (InterBMC, IntraSCF...)
COST	Num (8)	Cost of trip through segment for IntraSCF segments
COSTCFM	Num (8)	Cost/CFM for non-IntraSCF (per day)
DCODE	Char (5)	Test facility code
EMPTY	Num (3)	Percentage of truck empty
EMPTYEQU	Num (3)	Percentage of truck space taken by empty equipment
END	Char (5)	Destination facility code of the leg (segment)
EXPRESS	Num (3)	Percentage of unloaded loose Express Mail
FACCAT	Num (8)	Stratum number
FCODE	Char (5)	Origin facility code of the item (where the item loaded onto the truck)
FRMCOUNT	Num (8)	Number of stop-days in the stratum
ITEMNO	Num (3)	Item number
LASTLEG	Num (8)	Indicator for the last leg ('1' = the last leg)
LEG	Num (8)	Leg (or segment) index (referred to as 's' in the formulas, s=1,2,...,S)
MAILCODE	Char (2)	Mail category (referred to as 'r' in the formulas)
MILES	Num (8)	Highway miles on the leg
NCTYPE	Char (1)	Noncontainerized item type
NOFORM3	Num (8)	No H3 form for the test
NUMFAC	Num (8)	Number of stops (segments) on the trip (referred to as 'S')
OCODE	Char (5)	Origin facility code of the last leg
OCODE(1-17)	Char (5)	The 1 <sup>st</sup> , 2 <sup>nd</sup> , ... 17 <sup>th</sup> origin facility on the trip (referred to as 'o')
OTHER	Num (3)	Percentage of unloaded other loose items
PALLETS	Num (3)	Percentage of unloaded pallets
PERWEEK	Num (8)	Number of times per week trip runs
REMAIN	Num (3)	Percentage of truck that had mail remaining
ROUTE	Char (5)	Highway contract route number
SACKS	Num (3)	Percentage of unloaded loose sacks
SEGIN	Num (8)	Trip segment index
SETASIDE	Num (3)	Set-Aside type (container type, loose item type)
TESTID	Char (7)	Unique code identifying a particular test
TOTWT	Num (8)	Gross weight of the sampled item

TRIP	Char (5)	Trip number on the contract route
UNLOADED	Num (3)	Percentage of truck unloaded
WHEELED	Num (3)	Percentage of unloaded wheeled containers
WT	Num (8)	Net weight of mail

## 6) Highway pallet

<u>Variable</u>	<u>Type</u>	<u>Description</u>
BEGIN	Char (5)	Origin facility code of the leg (segment)
CAPACITY	Num (8)	Truck capacity in cubic-feet
CON_TYPE	Char (9)	Contract type (InterBMC, IntraSCF....)
COST	Num (8)	Cost of trip through segment for IntraSCF segments
COSTCFM	Num (8)	Cost/CFM for non-IntraSCF
DCODE	Char (5)	Test facility code
EMPTY	Num (3)	Percentage of truck empty
EMPTYEQU	Num (3)	Percentage of truck space taken by empty equipment
END	Char (5)	Destination facility code of the leg (segment)
EXPRESS	Num (3)	Percentage of unloaded loose Express Mail
FACCAT	Num (8)	Stratum number
FPCODE	Char (5)	Origin facility code of the item (where the item loaded onto the truck)
FRMCOUNT	Num (8)	Number of stop-days in the stratum
HEIGHT	Num (8)	The height of the pallet (referred to as 'H')
LASTLEG	Num (8)	Indicator for the last leg ('1' = the last leg)
LEG	Num (8)	Leg (or segment) index (referred to as 's' in the formulas, s=1,2,...,S)
LENGTH	Num (8)	Length of the pallets (referred to as 'L')
MAILCODE	Char (2)	Mail category (referred to as 'r' in the formulas)
MILES	Num (8)	Highway miles on the leg
NOFORM3	Num (8)	No H3 form for the test
NUMFAC	Num (8)	Number of stops (segment) on the trip (referred to as 'S')
OCODE	Char (5)	Origin facility code of the last leg
OCODE(1-17)	Char (5)	The 1 <sup>st</sup> , 2 <sup>nd</sup> , ... 17 <sup>th</sup> origin facility on the trip (referred to as 'o')
OTHER	Num (3)	Percentage of unloaded other loose items
PALLETNO	Num (8)	Pallet number
PALLETS	Num (3)	Percentage of unloaded pallets
PERCENT	Num (8)	Percent of mail on the pallet by mail category (referred to as '%p')
PERWEEK	Num (8)	Number of times per week trip runs
REMAIN	Num (3)	Percentage of truck that has mail remaining
ROUTE	Char (5)	Highway contract route number
SACKS	Num (3)	Percentage of unloaded loose sacks
SEGIND	Num (8)	Trip segment index
SETASIDE	Num (3)	Set-ASide type (container type, loose item type)
TESTID	Char (7)	Unique code identifying a particular test
TRIP	Char (5)	Trip number on the contract route
UNLOADED	Num (3)	Percentage of truck unloaded
WHEELED	Num (3)	Percentage of unloaded wheeled containers
WIDTH	Num (8)	Width of the pallet

## 7) Highway sample

<u>Variable</u>	<u>Type</u>	<u>Description</u>
CAPACITY	Num (8)	Truck capacity in cubic-feet
CON_TYPE	Char (9)	Contract type (InterBMC, IntraSCF....)

COST	Num (8)	Cost of trip through segment for IntraSCF
COSTCFM	Num (8)	Cost/CFM for non-IntraSCF
EMPTY	Num (3)	Percentage of truck empty
EMPTYEQU	Num (3)	Percentage of truck space taken by empty equipment
EXPRESS	Num (3)	Percentage of unloaded loose Express Mail
FACCAT	Num (8)	Stratum number
FRMCOUNT	Num (8)	Number of stop-days in the stratum
NOFORM3	Num (8)	No H3 form for the test
OTHER	Num (3)	Percentage of unloaded other loose items
PALLETS	Num (3)	Percentage of unloaded pallets
PERWEEK	Num (8)	Number of times per week trip runs
REMAIN	Num (3)	Percentage of truck that had mail remaining
ROUTE	Char (5)	Highway contract route number
SACKS	Num (3)	Percentage of unloaded loose sacks
SEGIND	Num (8)	Trip segment index
TESTID	Char (7)	Unique code identifying a particular test
TRIP	Char (5)	Trip number on contract route
UNLOADED	Num (3)	Percentage of truck unloaded
WHEELED	Num (3)	Percentage of unloaded wheeled containers

## 8) Rail raildata

CONTNO	Num(8)	Container number
COUNTABL	Num(8)	Sampled item countable or not
CVOLUME	Num(8)	Standard container volume
EXPRCNT	Num(8)	Number of sampled Express Mail items
FOOTPRINT	Num(8)	Footprint area
ITEMSEQ	Num(8)	Container number
ITEMVOLUME	Num(8)	Standard Item volume
MAILCODE	Char(3)	Mail code
OTHRHGT	Num(8)	Other container height
OTHRPCT	Num(8)	Percent of offloaded: Other
PCREMAIN	Num(8)	Percentage of the container not taken by any item
PCTAKEN	Num(8)	Percent of container taken by each item type
PERCENT	Num(8)	Percentage taken by mailcode within the item
PHEIGHT	Num(8)	Pallet height
PLENGTH	Num(8)	Pallet length
PLLCNT	Num(8)	Number of sampled pallets
PLLPCT	Num(8)	Percent of offloaded: Pallet
PLLTSCNT	Num(8)	Number of sampled pallet
PSUCOST	Num(8)	Total cost for the PSU
PWIDTH	Num(8)	Pallet width
RECORDABLE	Num(8)	Item is recordable
SACKHGT	Num(8)	Sack height
SACKPCT	Num(8)	Percent offload: Sack
SMPLGRP	Char(1)	Container/Item type (third stage stratum ID)
TESTID	Char(7)	Test ID
WEIGHT	Num(8)	Mail weight
WHLDCNT	Num(8)	Number of sampled wheeled containers
WHLDPCT	Num(8)	Percent of offloaded: Wheeled containers
WHLDCNT	Num(8)	Number of sampled Wheeled containers

## 9) Network Air sample

Field	Type	Description
COUNT	Num(8)	Number of tests
DEPTDATE	Num(8)	Test date
FRMFAC_P	Num(8)	Frame pounds for facility (PQ) and ACT tag
FRATAG_P	Num(8)	Frame pounds for nation (PQ) and ACT tag
FRMTRIP_P	Num(8)	Frame pounds for facility-day and ACT tag
MAILCLAS	Char(1)	DNR (ACT) tag code
MAILCODE	Char(3)	Mail category code
MALSHPE	Char(1)	Sample mail piece shape
NASSCODE	Char(5)	Facility NASS Code
NET	Char(5)	Network (FXDAY, FXNIT, AIR5X)
STRATUM	Char(3)	Sampling stratum
TESTID	Char(8)	Test ID
TESTMC_P	Num(8)	Sampled data mail category pounds
TESTMC_PCS	Num(8)	Sampled data mail category pieces
TEST_P	Num(8)	Sampled data total pounds
TEST_PCS	Num(8)	Sampled data total pieces

## 10) Mailcode File

<u>Variable</u>	<u>Type</u>	<u>Position</u>	<u>Description</u>
MAILCODE	Character	\$ 3-5	Mail category code
MAILSHPE	Character	\$ 7	Mail shape
CRAGRP	Character	\$ 9-10	Group 1
ICRAGRP	Character	\$ 11 -12	Group 2
MAILDESC	Character	\$ 13-67	Mail Description
DENS2	Character	70-77	Density

## 11) Cubic\_Feet File

<u>Variable</u>	<u>Type</u>	<u>Position</u>	<u>Description</u>
SETASIDE	Character	9-10	Set-A-Side type for a container
CONTCUFT	Numerical	14-19	Default cubic-feet for the container
CTYPE	Character	30	Item type
ITEMCUFT	Numerical	32-36	Default cubic-feet for the item