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# Central Florida Regional Planning Model Version 6.1 Final Draft SubArea Application

Prepared for the Florida Department of Transportation



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#### A. SUBAREA APPLICATION SCRIPTS

# **List of Acronyms**

**CFRPM** Central Florida Regional Planning Model **FDOT** Florida Department of Transportation

**GUI** Graphical User Interface

MPO Metropolitan Planning Organization

**SERPM** South East Florida Regional Planning Model

TAZ Transportation analysis zone

**TPO** Transportation Planning Organization



### 1. SUBAREA APPLICATION

The FDOT District 5 requested a Sub Area application be incorporated into the CFRPM v6.1 to allow users to reduce model run times. A review of models in the state found that the SERPM v6.5.4 already had a good sub area application in it therefore it was used the basis for this new application.

The following sections describe how the SubArea application was created in the CFRPM and how to use it.

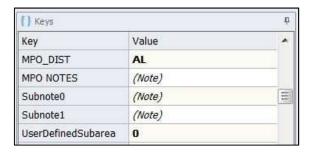
### 1. Catalog Keys

There are 3 new keys required for the SubArea application which include 2 note keys and 1 "check box" key. 2 other keys are used in the application that already exist and were documented in the *Graphical User Interface & MPO Reporting Tech Memo*. The existing keys are shown as the first 2 keys below. The 5 keys used in the SubArea application are described and shown in Table 1-1 and are found in the model as shown in Figure 1-1.

Table 1-1: SubArea Application Catalog Key Definitions

Key	Definition
MPO_DIST	Key used to designate how the user wishes the districting to be run. Setup as a drop down list to avoid errant entries in the GUI.
MPO NOTES	Note key used to define the districting options for selection in the MPO_DIST key in the GUI.
Subnote0	New Note key used as a heading for the User-Defined Subarea/Windowed Network section of the GUI.
Subnote1	New Note key used to define the steps the user must take to execute their own Subarea for selection.
UserDefinedSubarea	New key used to select the users Defined Windowed Subarea step in the GUI.

Figure 1-1: SubArea Application Keys





## 2. Design and Use of the SubArea Application in the Updated GUI

In order to implement the new SubArea application, the design of the GUI needed to be updated. This section discusses those updates and explains how to use the new application.

#### 1. Design of the Updated GUI

The implementation of the 5 keys of the SubArea application immediately follow the "MODEL SETUP" note on Page 1 of the GUI and are shown in Figure 1-2.

Central Florida Regional Planning Model (CFRPM), Version 6.0 Alternative Information (Avoid using any special characters) CFRPM Version 6.1 Study Area Name: Year 2010 Base, Including Polk County 2010 Base Please select a letter that identifies the Model Alternative: Please select the last two digits of the model year: Model Setup To Apply a User-Defined Subarea/Windowed Network: I.Open the "Unloaded\_{Alt}{YEAR}.NET" file . Define a polygon for the subarea of interest [Polygon/New or Polygon/Rest . Select "NODE/COMPUTE" DETAIL=1 for the subarea (All Itmes Inside Polygon NOW) then click "A Save the network and check the "Use My Defined Windowed Subarea" Box Select Model Steps you want to Run: Cluster (Select if running any steps from Distribution thru Assignment) Trip Generation Distribution Transit Networks and Paths Mode Choice Transit Assignment Save Close Next... Back... Run

Figure 1-2: SubArea Application GUI Page 1

#### 2. Use of the SubArea Application

The SubArea section of the GUI allows the user to select how the districting is implemented during the model run.

The model can be run 4 different ways and is accomplished through a drop down list for the first 3 options and through a polygon procedure for the last.

- 1. The user can select a specific MPO/TPO area. Once selected, the MPO/TPO area is run as TAZs with the rest of the model run as districts. See Table 1-2.
- 2. The user can select the entire region as TAZ. Once selected, the whole model area is run as TAZs.
- 3. The user can select the entire region as districts. Once selected, the whole model area is run as districts.
- 4. The user can define their own SubArea. Once selected, the model is run with the selected SubArea as TAZs with the rest of the model run as districts.

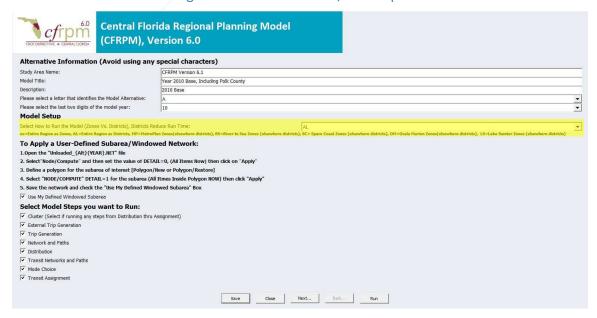


Table 1-2: MPO DIST Catalog Key Definitions

Key Value	Definition
xx	This selection runs the Entire Region as Zones.
AL	This selection runs the Entire Region as Districts.
MP	This selection runs MetroPlan as Zones and the rest of the model area as Districts.
RS	This selection runs River to the Sea TPO as Zones and the rest of the model area as Districts.
SC	This selection runs Space Coast TPO as Zones and the rest of the model area as Districts.
OM	This selection runs Ocala/Marion TPO as Zones and the rest of the model area as Districts.
LS	This selection runs Lake/Sumter MPO as Zones and the rest of the model area as Districts.

To run the model by MPO, the entire region as DISTRICTS or TAZs the user simply selects that option from the drop down menu. As an example, Figure 1-3 below shows the selection of "AL" to run the entire model as Districts.

Figure 1-3: Select District/Zone Option



To run the model with a user Defined Windowed SubArea the user follows the instructions located under the heading "To Apply a User-Defined Subarea/Windowed Network". Figure 1-4 shows these steps.



Figure 1-4: User Defined Subarea Steps

#### To Apply a User-Defined Subarea/Windowed Network:

- 1.Open the "Unloaded\_{Alt}{YEAR}.NET" file
- 2. Select"Node/Compute" and then set the value of DETAIL=0, (All Items Now) then click on "Apply"
- 3. Define a polygon for the subarea of interest [Polygon/New or Polygon/Restore]
- 4. Select "NODE/COMPUTE" DETAIL=1 for the subarea (All Itmes Inside Polygon NOW) then click "Apply"
- 5. Save the network and check the "Use My Defined Windowed Subarea" Box
- ✓ Use My Defined Windowed Subarea

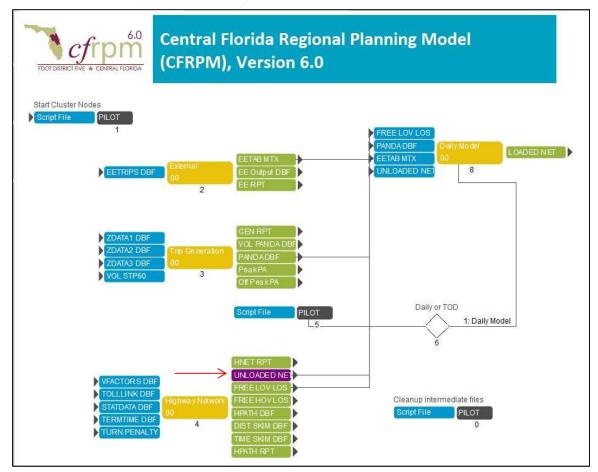
Table 1-3 shows the values for the UserDefinedSubarea Key.

Table 1-3: UserDefinedSubarea Catalog Key Definitions

Key Value	Definition
0	Does not run the User Defined Subarea scripts
1	Runs the User Defined Subarea scripts

Figures 1-5 through 1-7 show steps 1-4.

Figure 1-5: User Defined Subarea Step 1

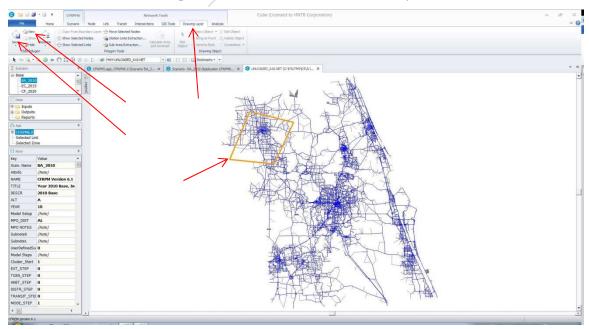




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Figure 1-6: User Defined Subarea Step 2







Section 1 and 1 an

Figure 1-8: User Defined Subarea Step 4

The final step is the select the "check box" for "Use My Defined Windowed Subarea" on the GUI.

# 3. Application & Script Modifications

In order to accommodate the use of the SubArea application in the model, modifications were made to the DISTRIBUTION and MODE CHOICE applications.

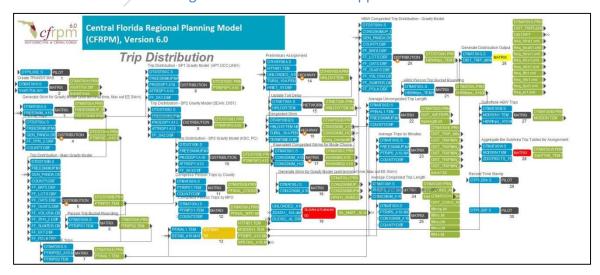


Figure 1-9: DISTRIBUTION Application

The RED boxes show the modified steps.



The SubArea application was inserted as step 19 in DISTRIBUTION. This application is where the networks are configured based on the user's selection for SubArea windowing. See Figure 1-10 below. All scripts are contained in Appendix A.

Central Florida Regional Planning Model (CFRPM), Version 6.0 SUBAREA (Process taken from SERPM 6.5.4) Extract original/NonSANet w centroid NET If User Defined Subarea (Performs steps 7-10) Else MPO-Specific Hwy Only or Full regional model Run SDPIL00AS PILOT PILOT Extract Detail Centroid Selected Attributes Develop TIME Skim to creat TAZ Dist File Finalize TAZ-DISTRICT Equivalency File Write Regional TAZ and MPO Zonal File Generate SubArea District Definitions Extract Detail Portion of Newtowrk and its attributes NETWORK Create Subarea Network Create 1st Pass Temporary SubArea Network ATEM\_HNET

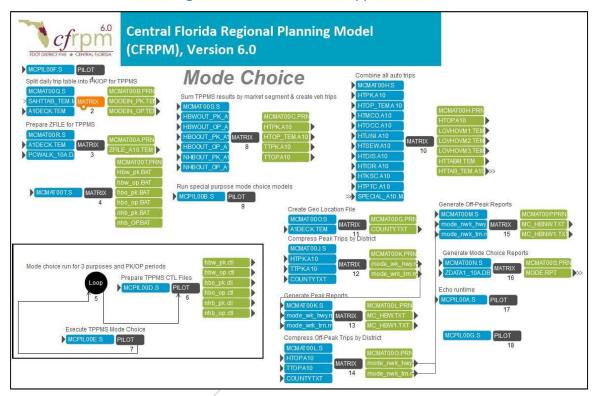
Figure 1-10: SubArea Application

Step 28 of the DISTRIBUTION application was also added to create the SubArea trip tables for assignment. See Figure 1-9.

The final modification in is the Mode Choice Application. Step 2 was modified to sue the output trip table from the SubArea application named "SAHTTAB\_TEM.MAT". See Figure 1-11 for the Mode Choice application. The modified Script is located in Appendix A.



Figure 1-11: Mode Choice Application



# A. SubArea Application Scripts

```
1 ; Do not change filenames or add or remove FILEI/FILEO statements using an
    editor. Use Cube/Application Manager.
    ;SDNET00A.S
    RUN PGM=NETWORK PRNFILE="{CATALOG_DIR}\Cube\SDNET00A.S" MSG='Extract
 3
    original/NonSANet w centroid NET'
 4
    FILEI LINKI[2] = "{SCENARIO_DIR}\Output\UNLOADED_{ATL}{YEAR}.NET"
    FILEO NETO = "{SCENARIO_DIR}\Output\Temp\OrgNetCentroidTime.NET"
    FILEO LINKO = "{SCENARIO_DIR}\Output\Temp\OrgNetCentroidTime.TEM",
 6
 7
       include=a,b,TimeOrg
 8
 9
    PROCESS PHASE=LINKMERGE
10
     if ((a >5406)& (b >5406)) delete
11
      TimeOrg=Time
12
    ENDPROCESS
13
    ENDRUN
14
```

```
1 ; Do not change filenames or add or remove FILEI/FILEO statements using an
    editor. Use Cube/Application Manager.
    ;SDMAT00A.S
    RUN PGM=MATRIX PRNFILE="{CATALOG_DIR}\Cube\SDMAT00A.PRN" MSG='Develop TIME Skim
 3
    to creat TAZ Dist File'
 4
    FILEI MATI[1] = "{SCENARIO_DIR}\Output\Temp\CONGSKIMUP.MAT"
 5
    FILEO MATO[1] = "{SCENARIO_DIR}\Output\Temp\CONGSKIMUP_TEM.MAT",
 6
    mo=1,NAME=TIME
 7
 8
    PAR ZONEMSG=100
 9
    MW[1] = mi.1.1*1
                       ; TIME With Terminal Time (in Minutes) - Step Not really
    needed as TT is already in Minutes. Done for consistency with SERPM
10
    MW[1][I]=1000000 ; QUICKER (WW)
11
12
    ENDRUN
13
```

```
; Do not change filenames or add or remove FILEI/FILEO statements using an
     editor. Use Cube/Application Manager.
     ;SDMAT00B.S
 3
    RUN PGM=MATRIX PRNFILE="{CATALOG_DIR}\Cube\SDMAT00B.PRN" MSG='Write Regional
     TAZ and MPO Zonal File'
     FILEI ZDATI[1] = "{SCENARIO_DIR}\Input\ZDATA1_{YEAR}{ALT}.dbf"
 4
     FILEO RECO[1] = "{SCENARIO_DIR}\Output\ZDMPOs.DBF",
     form=10.0, FIELDS=N,MPO
 6
 7
     PAR ZONES={ZONES}
 8
     PAR ZONEMSG=100
 9
10
     ;Get Zonal TAZ Info as Node Record...
11
12
     N=ZI.1.TAZ_REG
13
     MPO=ZI.1.MPO
14
15
     _ztemp=_ztemp+1
16
17
     ;Set Data for Indian River and Polk Internal and Dummy Zones
18
19
     if(z > = 4601 \& z < = \{ZONESI\})
20
       N=z
21
22
         MPO=0
23
     endif
24
2.5
26
     ;Set Data for MetroPlan Orladndo Internal and Dummy Zones
27
    if(z>=1 \& z<=1400)
28
     N=z
29
30
         MPO=1
31
     endif
32
33
34
     ;Set Data for Volusia Internal and Dummy Zones
35
36
    if(z>=1801 & z<=2900)
37
      N=z
38
39
         MPO=2
40
41
     endif
42
43
     ; Set Data for Flagler Internal and Dummy Zones
44
45
     if(z>=4401 & z<=4600)
46
      N=z
47
         MPO=2
48
49
     ENDIF
50
51
     ;Set Data for Space Coast Internal and Dummy Zones
52
     if(z >= 2901 \& z <= 3700)
53
54
       N=z
55
56
         MPO=3
57
58
     endif
59
     ; Set Data for Ocala Marion Internal and Dummy Zones
```

```
61
 62
      if(z>=3701 \& z<=4200)
 63
      N=z
 64
 65
          MPO=4
 66
 67
      endif
 68
 69
      ;Set Data for Lake Internal and Dummy Zones
 70
 71
      if(z>=1401 & z<=1800)
 72
        N=z
 73
 74
          MPO=5
 75
 76
      endif
 77
 78
 79
      ;Set Data for Sumter Internal and Dummy Zones
 80
 81
      if(z > = 4201 \& z < = 4400)
 82
        N=z
 83
          MPO=5
 84
 85
 86
      ENDIF
 87
 88
      WRITE RECO=1
 89
      ;External Zones
 90
 91
      if(z={ZONESI})
        loop jj={ZONESI}+1,{ZONES}
 92
 93
          N=jj
 94
 95
          if (N>=5351 & N<=5357)
                                          ;Indian River Polk Externals
 96
          MPO = 0
 97
          ENDIF
 98
 99
           if (N>=5361 & N<=5377)
                                           ;Polk Externals
100
            MPO=0
101
           ENDIF
102
          if (N>=5358 & N<=5360)
103
                                           ;MetroPlan Orlando Externals
104
            MPO=1
105
          endif
106
          if (N>=5401 & N<=5406)
107
                                           ; River to Sea Externals
108
            MPO=2
109
          endif
110
111
          if (N>=5384 & N<=5400)
                                           ;Ocala Marion Externals
112
             MPO=4
113
          endif
114
115
          if (N>=5378 & N<=5383)
                                           ;Lake Sumter Externals
116
            MPO=5
117
          endif
118
119
120
          WRITE RECO=1
121
122
        endloop
```

123 ENDIF

124 ENDRUN

125

```
; Do not change filenames or add or remove FILEI/FILEO statements using an
    editor. Use Cube/Application Manager.
    ;SDMAT00C.S
 3
    RUN PGM=MATRIX PRNFILE="{CATALOG_DIR}\Cube\SDMAT00C.PRN" MSG='Generate SubArea
    District Definitions'
 4
 5
    FILEI ZDATI[1] = "{SCENARIO_DIR}\Output\ZDMPOs.DBF",
 6
 7
    FILEI LOOKUPI[1] = "{SCENARIO_DIR}\Input\DLEVEL_{MPO_DIST}.DBF"
     FILEI LOOKUPI[2] = "{SCENARIO_DIR}\Input\SADists_MP.DBF"
 8
 9
    FILEO RECO[1] = "{SCENARIO_DIR}\Output\Temp\ZDISTRICTS_TEM_{MPO_DIST}.DBF",
10
         Fields= TAZ,DTAZ,NEAR,SADIST,MPO
11
    FILEI MATI[1] = "{SCENARIO_DIR}\Output\Temp\CONGSKIMUP_TEM.MAT"
12
13
    LOOKUP LOOKUPI=2, ; One record per District
14
            NAME=DCENTROID,
              LOOKUP[1]=CENTERTAZ, RESULT=SADIST,
15
              LOOKUP[2]=CENTERTAZ, RESULT=CENTERTAZ,
16
17
              LOOKUP[3]=CENTERTAZ, RESULT=MPOCODE,
18
              LOOKUP[4]=CENTERTAZ, RESULT=SADST TW,
19
            FAIL=0,0,0
20
    LOOKUP LOOKUPI=1, ; One record per MPO
2.1
22
           NAME=LEVEL,
              LOOKUP[1]=MPO, RESULT=DLEVEL, ; 1=District Level, 0=TAZ Level
23
24
            FAIL=0.0.0
2.5
26
    Parameters ZONES={ZONES}
27
     PAR ZONEMSG=100
28
29
30
    near=1000
31
    TAZ=i
32
    MPO=zi.1.MPO
33
    mylevel=LEVEL(1,MPO)
34
    IF(i>{ZONESI}) MPO=99
35
      jloop
36
       place=DCENTROID(2,j)
37
       thisdist=DCENTROID(1,j)
38
       if(place<>0)
39
          if(i=place)
40
            near=0
41
             DTAZ = j
42
             SADIST=thisdist
43
          else
             ctime=mi.1.time[j]
44
45
             if(ctime < near)</pre>
46
                near=ctime
                DTAZ=j
47
                SADIST=thisdist
48
49
             endif
50
           endif
51
       endif
52
       endjloop
53
     if(mylevel=0) DTAZ=i ; At the TAZ level
     if(near<1000 & MPO>=0) WRITE RECO=1 ;added = in MPO>0 for Polk and Indian
54
     River zones 4601-5350
55
56
     ENDRUN
57
```

```
; Do not change filenames or add or remove FILEI/FILEO statements using an
     editor. Use Cube/Application Manager.
     ;SDNET00B.S
    RUN PGM=NETWORK PRNFILE="{CATALOG_DIR}\Cube\SDNET00B.PRN" MSG='Create 1st Pass
 3
     Temporary SubArea Network'
 4
     FILEI LINKI[2] = "{SCENARIO_DIR}\Output\UNLOADED_{ALT}{YEAR}.NET"
     FILEI LOOKUPI[1] = "{SCENARIO_DIR}\Output\Temp\ZDISTRICTS_TEM_{MPO_DIST}.DBF"
 6
     FILEO NETO = "{SCENARIO_DIR}\Output\SATEM_HNET_{YEAR}.NET"
 7
 8
     array gone=99000
 9
10
   PROCESS PHASE=NODEMERGE
11
     LOOKUP LOOKUPI=1,
12
            NAME=SADIST,
13
              LOOKUP[1]=TAZ, RESULT=DTAZ,
14
            FAIL[3]=0
15
       if(N<={ZONES}) _NN=_NN+1</pre>
16
       if(N<={ZONES}) SA_Centroid=1</pre>
17
       IF((N<>SADIST(1,N)) & (N<={ZONESI}))</pre>
18
19
      ; (NODETYPE=3,4)) ; for SERPM Only
20
         qone[N]=1
21
         _{dd=_dd+1}
22
       delete
23
       endif
    ENDPROCESS
24
2.5
26 PROCESS PHASE=LINKMERGE
       _AD=gone[a]
27
28
       _BD=gone[b]
29
       if(_AD>0 | _BD>0)
30
         print list= A(5.0), B(5.0), ' deleted'
31
        delete
       endif
32
33
    ENDPROCESS
34
35
    PROCESS PHASE=SUMMARY
36
      _LL=_NN-_dd
       print list=' ****** Deleted ',_dd(4.0),' nodes out of a total of ',_NN(4.0),
37
     ' leaving ',_LL(4.0),' active centroids'
38
     ENDPROCESS
39
40
41
42
43
     ENDRUN
44
```

```
; Do not change filenames or add or remove FILEI/FILEO statements using an
editor. Use Cube/Application Manager.

;SDPILOOA.S

if ({UserDefinedSubarea}=1); User defined Subarea

4

5
```

27

```
; Do not change filenames or add or remove FILEI/FILEO statements using an
    editor. Use Cube/Application Manager.
    ;SDNET00C.S
   RUN PGM=NETWORK PRNFILE="{CATALOG_DIR}\Cube\SDNET00C.PRN" MSG='Extract Detail
3
   Centroid Selected Attributes'
4
  FILEO PRINTO[1] = "{SCENARIO_DIR}\Output\NODEDETAIL.CSV"
   FILEO NODEO = "{SCENARIO_DIR}\Output\Temp\DETAILTAZCEN.DBF",
6
     INCLUDE=TAZ,DTAZ,NEAR,SADIST,MPO,DETAIL
7
   FILEI LINKI[1] = "{SCENARIO_DIR}\Output\UNLOADED_{ALT}{YEAR}.NET"
8
9
   PROCESS PHASE=NODEMERGE
10 ; -----
11 ; NEXT STEP IS TO CAPTURE THE DETAIL ATTRIBUTE ON THE NODES TO
12 ; SAVE THE USER NEEDING TO COMPUTE IT FOR LINKS TOO
13
    PRINT CSV=T, LIST=N(6.0), DETAIL(2.0), PRINTO=1
    ; -----
14
   IF (DETAIL=1 & N \leq {ZONES})
15
16
       TAZ=NI.1.N
17
       DTAZ=NI.1.N
      NEAR=0
18
19
      SADIST=5000+TAZ
20
      MPO=NI.1.MPO
21
    ELSE
22
      DELETE
    ENDIF
23
   ENDPROCESS
24
2.5
26 ENDRUN
```

```
; Do not change filenames or add or remove FILEI/FILEO statements using an
    editor. Use Cube/Application Manager.
    ;SDMAT00D.S
    RUN PGM=MATRIX PRNFILE="{CATALOG_DIR}\Cube\SDMAT00D.PRN" MSG='Finalize
 3
    TAZ-DISTRICT Equivalency File'
 4
 5
    FILEI ZDATI[2] = "{SCENARIO_DIR}\Output\Temp\ZDISTRICTS_TEM_{MPO_DIST}.DBF",
 6
      Z=TAZ
 7
    FILEI ZDATI[1] = "{SCENARIO_DIR}\Output\Temp\DETAILTAZCEN.DBF",
 8
      z=taz
 9
    FILEO RECO[1] = "{SCENARIO_DIR}\Output\ZDISTRICTS_{MPO_DIST}.DBF",
10
       FIELDS=TAZ,DTAZ,NEAR,SADIST,MPO,DETAIL
11
12
    PAR ZONES={ZONES}
    PAR ZONEMSG=100
13
14
15
    ;xxxxxx
16
    TAZ=ZI.2.TAZ
17
    DETAIL=ZI.1.DETAIL
18
   IF (DETAIL=1)
19
20
     DTAZ=ZI.1.DTAZ
21
     NEAR=ZI.1.NEAR
      SADIST=ZI.1.SADIST
22
23
      COUNTY=ZI.1.MPO
      DETAIL=ZI.1.DETAIL
24
    Else
25
26
     DTAZ=ZI.2.DTAZ
27
     NEAR=ZI.2.NEAR
      SADIST=ZI.2.SADIST
28
29
      COUNTY=ZI.2.MPO
30
      DETAIL=0
31
    ENDIF
32
33
    WRITE RECO=1
34
    ENDRUN
35
```

2.5

```
1 ; Do not change filenames or add or remove FILEI/FILEO statements using an
    editor. Use Cube/Application Manager.
    ;SDNET00D.S
    RUN PGM=NETWORK PRNFILE="{CATALOG_DIR}\Cube\SDNET00D.PRN" MSG='Extract Detail
 3
    Portion of Newtowrk and its attributes'
 4
    FILEI LOOKUPI[1] = "{SCENARIO_DIR}\Output\NODEDETAIL.CSV"
    FILEO NETO = "{SCENARIO_DIR}\Output\Temp\DetailNonCentroid.NET"
    FILEI LINKI[1] = "{SCENARIO_DIR}\Output\UNLOADED_{ALT}{YEAR}.NET"
 6
 7
    PROCESS PHASE=NODEMERGE
 8
      IF (DETAIL=1 & N <={ZONES})SA_Centroid=1</pre>
 9
    ENDPROCESS
10
11
    PROCESS PHASE=LINKMERGE
12
     LOOKUP NAME=NODEDETAIL, LOOKUP[1]=1, RESULT=2,
             FAIL[1]=0, FAIL[2]=0, FAIL[3]=0,
13
14
             LOOKUPI=1
     _ADETAIL=NODEDETAIL(1,A.N)
15
      _BDETAIL=NODEDETAIL(1,B.N)
16
17
      ; IF EITHER THE ANODE OR BNODE IS A KEEPER THEN KEEP
18
      _KEEP=MAX(_ADETAIL,_BDETAIL)
19
      IF ( KEEP=0) DELETE
20
21
     ; IF (DETAILNET=0) delete
22
    ENDPROCESS
23
24
    ENDRUN
```

```
1 ; Do not change filenames or add or remove FILEI/FILEO statements using an
    editor. Use Cube/Application Manager.
    ;SDNET00E.S
 2
 3
    RUN PGM=NETWORK PRNFILE="{CATALOG_DIR}\Cube\SDNET00E.PRN" MSG='Create Subarea
    Network'
 4
    FILEI LINKI[3] = "{SCENARIO_DIR}\Output\Temp\DetailNonCentroid.NET"
 5
    FILEI LINKI[1] = "{SCENARIO_DIR}\Output\SATEM_HNET_{YEAR}.NET"
 6
 7
    FILEO NETO = "{SCENARIO_DIR}\Output\SA_HNET_{YEAR}.NET"
 8
 9
    merge MAX=SA_Centroid
10
11
     PROCESS PHASE=LINKMERGE
12
13
     ENDPROCESS
14
15
     ENDRUN
16
```

```
; Do not change filenames or add or remove FILEI/FILEO statements using an
editor. Use Cube/Application Manager.
; SDPILOOB.S
```

4 else

```
; Do not change filenames or add or remove FILEI/FILEO statements using an
    editor. Use Cube/Application Manager.
2
    ;SDPIL00C.S
3
4
    ;*if exist {SCENARIO_DIR}\Output\TEMP\ZDISTRICTS_TEM_XX.DBF copy
    {SCENARIO_DIR}\Output\TEMP\ZDISTRICTS_TEM_XX.DBF
    {SCENARIO_DIR}\Output\ZDISTRICTS_XX.DBF
    ;*if exist {SCENARIO_DIR}\Output\SATEM_HNET_{Year}.NET copy
    {SCENARIO_DIR}\Output\SATEM_HNET_{Year}.NET
    {SCENARIO_DIR}\Output\SA_HNET_{Year}.NET
    ;*if exist {SCENARIO_DIR}\Output\SATEM_HNET_{Year}.NET copy
    {SCENARIO_DIR}\Output\SATEM_HNET_{Year}.NET
    {SCENARIO_DIR}\Output\S6HNET_{Year}.NET
7
8
9
10
```

```
1 ; Do not change filenames or add or remove FILEI/FILEO statements using an
    editor. Use Cube/Application Manager.
    ;DTMATOOW.S
    RUN PGM=MATRIX PRNFILE="{CATALOG_DIR}\Cube\DTMAT00W.PRN" MSG='Aggregate the
 3
     SubArea Trip Tables for Assignment'
 4
    FILEI ZDATI[1] = "{SCENARIO_DIR}\Output\Temp\ZDISTRICTS_TEM_{MPO_DIST}.DBF"
    FILEI MATI[2] = "{SCENARIO_DIR}\Output\MODEIN.TEM"
 6
    ;DISTRIBUTEINTRASTEP PROCESSID='CFRPMdist',
    PROCESSLIST=2-%NUMBER_OF_PROCESSORS%,MinGroupSize=20,SavePrn=F
 7
    ;DISTRIBUTEINTRASTEP ProcessID='CFRPMdist',ProcessList=1-4
 8
    FILEO MATO[1] = "{SCENARIO_DIR}\Output\Temp\SAHTTAB_TEM.MAT",
 9
    MO=1-4, NAME=M1, M2, M3, M4 DEC=2*S
10
11
    PAR ZONEMSG=100
12
13
14
    FILLMW MW[1]=MI.2.1,2,3,4
15
16
    RENUMBER ZONEO=ZI.1.DTAZ MISSINGZI=W MISSINGZO=W ZONES={ZONES}
17
18
19
    ENDRUN
20
```

```
; Do not change filenames or add or remove FILEI/FILEO statements using an
     editor. Use Cube/Application Manager.
     ;MCMAT000.S
    RUN PGM=MATRIX PRNFILE="{CATALOG_DIR}\CUBE\MCMAT00B.PRN" MSG='Split daily trip
 3
     table into PK/OP for TPPMS'
 4
     FILEI MATI[2] = "{SCENARIO_DIR}\Output\Temp\SAHTTAB_TEM.MAT"
 5
 6
     DistributeINTRASTEP ProcessID="CFRPMdist", ProcessList=1-%NUMBER_OF_PROCESSORS%
 7
     ;DistributeINTRASTEP ProcessID="CFRPMdist", ProcessList=1-4
 8
 9
    FILEI LOOKUPI[1] = "{SCENARIO_DIR}\output\A1DECK.TEM"
10
    FILEO MATO[2] = "{SCENARIO_DIR}\OUTPUT\MODEIN_OP.TEM",
    MO=4-10, name=HBW0, HBW1, HBW2, HBO0, HBO1, HBO2, NHB, Format=tranplan
11
12
     FILEO MATO[1] = "{SCENARIO_DIR}\OUTPUT\MODEIN_PK.TEM",
13
    MO=4-10, name=HBW0, HBW1, HBW2, HBO0, HBO1, HBO2, NHB, format=tranplan
14
     zonemsg=100
15
16
     LOOKUP NAME=A1DECK, LOOKUP[1]=1, RESULT=5, ; HBWO
17
                         LOOKUP[2]=1,RESULT=6, ;HBW1
18
                         LOOKUP[3]=1,RESULT=7, ;HBW2
19
                         LOOKUP[4]=1,RESULT=8,;NWKO
20
                         LOOKUP[5]=1, RESULT=9, ; NWK1
21
                         LOOKUP[6]=1,RESULT=10,;NWK2
22
                         FAIL=0,0,0,
23
                         LOOKUPI=1
24
25
    FILLMW MW[1]=MI.2.1,2,3
26
     MW[4]=MW[1]*A1DECK(1,I)*0.5*0.01
27
28
     MW[5] = MW[1] *A1DECK(2,I) *0.5*0.01
29
     MW[6] = MW[1] * (100 - A1DECK(1, I) - A1DECK(2, I)) * 0.5 * 0.01
30
     MW[7] = MW[2] * A1DECK(4,I) * 0.5 * 0.01
     MW[8]=MW[2]*A1DECK(5,I)*0.5*0.01
31
32
     MW[9]=MW[2]*(100-A1DECK(4,I)-A1DECK(5,I))*0.5*0.01
33
     MW[10] = MW[3] * 0.5
34
35
     ENDRUN
36
```