# APPENDIX A

## TCRPM CUBE Catalog Keys and PROFILE.MAS

# CUBE KEYS

TCRPM uses a variety of CUBE/Voyager catalog "keys" that have been created and defined during the model development process. Many variables that were previously defined in the PROFILE.MAS have been defined as KEYS in TCRPM.

The KEYS are as listed in the Table A-1

**Table A-1**
TCRPM Catalog Keys
2000 Treasure Coast Regional Planning Model

| S. No. | KEYS | Current Value |
|---|---|---|
| 1 | Model Description | Year 2000 TCRPM |
| 2 | Model Year (2 Digit) | 00 |
| 3 | Alternative Letter (1 Character) | T |
| 4 | Input Data Storage Directory | D:\fsutms\d4\input.00t |
| 5 | User-written Program Directory | D:\fsutms\d4\TCRPM\USER.PRG |
| 6 | Home node for Path Skimming | 76 |
| 7 | Number of Internal Zones | 700 |
| 8 | Total numbe of zones including internal and external | 731 |
| 9 | Maximum number of attraction iterations | 10 |
| 10 | Maximum sidewalk area around stations | 0.5 |
| 11 | Terminal time for area type 11 | 5 |
| 12 | Terminal time for area type 12 | 5 |
| 13 | Terminal time for area type 13 | 5 |
| 14 | Terminal time for area type 21 | 3 |
| 15 | Terminal time for area type 31 | 1 |
| 16 | Terminal time for area type 32 | 1 |
| 17 | Terminal time for area type 33 | 1 |
| 18 | Terminal time for area type 34 | 1 |
| 19 | Terminal time for area type 41 | 2 |
| 20 | Terminal time for area type 42 | 2 |
| 21 | Terminal time for area type 43 | 2 |
| 22 | Terminal time for area type 51 | 1 |
| 23 | Terminal time for area type 52 | 1 |
| 24 | Constrained Skim weight for final dist-HBW Trips | 0.6135 |
| 25 | Free Flow Skim weight for final dist-HBW Trips | 0.3865 |
| 26 | Constrained Skim weight for final dist-HBSHP Trips | 0.3856 |
| 27 | Free Flow Skim weight for final dist-HBSHP Trips | 0.6144 |
| 28 | Constrained Skim weight for final dist-HBSR Trips | 0.3955 |
| 29 | Free Flow Skim weight for final dist-HBSR Trips | 0.6045 |
| 30 | Constrained Skim weight for final dist-HBSCH Trips | 0.8163 |
| 31 | Free Flow Skim weight for final dist-HBSCHTrips | 0.1837 |
| 32 | Constrained Skim weight for final dist-HBO Trips | 0.4729 |
| 33 | Free Flow Skim weight for final dist-HBO Trips | 0.5271 |
| 34 | Constrained Skim weight for final dist-NHBW Trips | 0.4987 |
| 35 | Free Flow Skim weight for final dist-NHBW Trips | 0.5013 |

**Table A-1 (Contd.)**
TCRPM Catalog Keys
2000 Treasure Coast Regional Planning Model

| S. No. | KEYS | Current Value |
|---|---|---|
| 36 | Constrained Skim weight for final dist-NHBO Trips | 0.4053 |
| 37 | Free Flow Skim weight for final dist-NHBO Trips | 0.5947 |
| 38 | Constrained Skim weight for final dist-AIRP Trips | 0.5 |
| 39 | Free Flow Skim weight for final dist-AIRP Trips | 0.5 |
| 40 | Constrained Skim weight for final dist-TRUCK Trips | 0.4 |
| 41 | Free Flow Skim weight for final dist-TRUCK Trips | 0.6 |
| 42 | Maximum number of assignment iterations | 20 |
| 43 | Impedance unit per dollar of toll | 0.06 |
| 44 | maximum VOL-over-CAP Ratio for BPR equation | 3 |
| 45 | Default Segment Data | D:\fsutms\d4\tcrpm\input.00t\default_segment.csv |
| 46 | SPDADJ Factors | D:\fsutms\d4\tcrpm\input.00t\SPDADJ.DBF.csv |
| 47 | Highway Network | D:\fsutms\d4\tcrpm\input.00t\UPDATED.NET.csv |
| 48 | ACCELERATE | 2.5 |
| 49 | Autos per HBW person trip | 0.88 |
| 50 | Autos per HBSHP person trip | 0.65 |
| 51 | Autos per HBSR person trip | 0.55 |
| 52 | Autos per HBSCH person trip | 0.44 |
| 53 | Autos per HBO person trip | 0.55 |
| 54 | Autos per NHBW person trip | 0.78 |
| 55 | Autos per NHBO person trip | 0.56 |
| 56 | Autos per AIRP person trip | 0.57 |
| 57 | Autos per TRUCK (4 TIRED) person trip | 1 |
| 58 | Autos per TRUCK (Single Unit) person trip | 1 |
| 59 | Autos per TRUCK (Multi Unit) person trip | 1 |
| 60 | EPSILON | 0.0005 |

Figure A-1 presents screenshots of the TCRPM base scenario keys.

**Figure A-1**
TCRPM Base Scenario Keys
2000 Treasure Coast Regional Planning Model

Scenario - Base (Application TCRPM in Voyager)

## Model Description and Inputs

☐ Highway Only Run

| | |
|---|---|
| Model Description | Year 2000 TCRPM |
| Model Year (2 digits) | 00 |
| Alternative Letter (1 character) | T |
| Input Data Storage Directory | d:\fsutms\d4\tcrpm\input.00t |
| User-written Program Directory | d:\FSUTMS\D4\TCRPM\USER.PRG |
| Home node for path skimming (Same as files, not FDLES) | 76 |

**PROFILE.MAS Entries (not normally changed)**

☐ Abort on SPDCAP Errors

| | |
|---|---|
| Number of internal zones | 700 |
| Total number of zones including internal and external | 731 |

Coordinate units per mile
○ 1609
◉ 5280

| | |
|---|---|
| Maximum number of attraction iterations (gravity model) | 10 |
| Maximum sidewalk area around stations | 0.5 |
| Terminal time for area type 11 | 5 |
| Terminal time for area type 12 | 5 |
| Terminal time for area type 13 | 5 |
| Terminal time for area type 21 | 3 |
| Terminal time for area type 31 | 1 |
| Terminal time for area type 32 | 1 |
| Terminal time for area type 33 | 1 |
| Terminal time for area type 34 | 1 |
| Terminal time for area type 41 | 2 |
| Terminal time for area type 42 | 2 |
| Terminal time for area type 43 | 2 |
| Terminal time for area type 51 | 1 |

OK | Cancel | Next... | Back... | Run

Figure A-1 (Contd.)
TCRPM Base Scenario Keys
2000 Treasure Coast Regional Planning Model

**Scenario - Base (Application TCRPM in Voyager)**

| | |
|---|---|
| Terminal time for area type 52 | 1 |
| Constrained Skim weight for final dist-HBW Trips | 0.6135 |
| Free Flow Skim weight for final dist-HBW Trips | 0.3865 |
| Constrained Skim weight for final dist-HBSHP Trips | 0.3856 |
| Free Flow Skim weight for final dist-HBSHP Trips | 0.6144 |
| Constrained Skim weight for final dist-HBSR Trips | 0.3955 |
| Free Flow Skim weight for final dist-HBSR Trips | 0.6045 |
| Constrained Skim weight for final dist-HBSCH Trips | 0.8163 |
| Free Flow Skim weight for final dist-HBSCH Trips | 0.1837 |
| Constrained Skim weight for final dist-HBO Trips | 0.4729 |
| Free Flow Skim weight for final dist-HBO Trips | 0.5271 |
| Constrained Skim weight for final dist-NHBW Trips | 0.4987 |
| Free Flow Skim weight for final dist-NHBW Trips | 0.5013 |
| Constrained Skim weight for final dist-NHBO Trips | 0.4053 |
| Free Flow Skim weight for final dist-NHBO Trips | 0.5947 |
| Constrained Skim weight for final dist-AIRP Trips | 0.5 |
| Free Flow Skim weight for final dist-AIRP Trips | 0.5 |
| Constrained Skim weight for final dist-Truck Trips | 0.4 |
| Free Flow Skim weight for final dist-Truck Trips | 0.6 |
| Maximum number of assignment iterations (equilibrium) | 20 |
| Impedance units per dollar of toll | 0.06 |
| Maximum VOL-over-CAP Ratio for BPR equation | 3 |
| Default Segment Data | d:\fsutms\d4\tcrpm\input.00t\DEFAULT_SEGMENT.CSV (Browse ...) |
| Segment Data | d:\fsutms\d4\tcrpm\input.00t\xsegment.dbf (Browse ...) |
| SPDADJ Factors | d:\fsutms\d4\tcrpm\input.00t\SPDADJ.DBF (Browse ...) |
| ☑ Round Network Times (100ths) | |
| Highway Network | d:\fsutms\d4\tcrpm\input.00t\updated.net (Browse ...) |
| ACCELRATE | 2.5 |
| Autos per HBW person trip | 0.88 |

OK | Cancel | Next... | Back... | Run

**Figure A-1 (Contd.)**
TCRPM Base Scenario Keys
2000 Treasure Coast Regional Planning Model

Scenario - Base (Application TCRPM in Voyager)

| | |
|---|---|
| Autos per HBShop person trip | 0.65 |
| Autos per HBSocRec person trip | 0.55 |
| Autos per HBSchool person trip | 0.44 |
| Autos per HBOther person trip | 0.55 |
| Autos per NHBW person trip | 0.78 |
| Autos per NHBO person trip | 0.56 |
| Autos per AIRP person trip | 0.57 |
| Autos per TRUCK (4-tired) person trip | 1 |
| Autos per TRUCK (Single Unit) person trip | 1 |
| Autos per TRUCK (Combination) person trip | 1 |
| EPSILON2 | 0.0005 |

OK | Cancel | Next... | Back... | Run

## PROFILE.MAS

```
&HEVALDBF
LINKSWITHCOUNTS.DBF
&PATH1        Location of User Written Program
D:\fsutms\d4\TCRPM\USER.PRG
&FSUTMS       Location of special control files (blank = present directory)
.\FULSCRPT\
&SCENARIO     Use by LSTGEN program for any future year
FUTURE
&MOBILE       Location of Mobile5a files (IMDATA & TECH12)
c:\FSUTMS.v55
&NAME         Study area name
2000 Treasure Coast
&TWODIGIT     The twodigit network flag
YES
&ANALYSIS     Sets HEVAL to run in analysis mode if "YES"
NO
&VALIDATE     Sets HEVAL to run in validate mode if "YES"
YES
&SKIP         Skipping report level control flag
2
&ZONESI       Number of internal zones
700
&ZONESA       Total number of zones including internal and external
731
&EXTK         External zones
701-731
&CBDZONE      Home node for path skimming
198
&SELDEST      Destination node(s) for path skimming
198
&NODES        Highest node number permitted
9999
&UNITS        Coordinate units per mile
5280
&ATITER       Maximum number of attraction iterations (gravity model)
10
&ITER1        Max number of initial equilibrium assignment iterations
10
&ITER2        Max number of final equilibrium assignment iterations
20
&EPSILON2     Specifies closure criterion for equilibrium acceptance
0.005
&BLDINTRARPT  Option to report Intrazonal Impedances
~  PRINT DETAIL
&FREQRPT      Option to generate frequency distribution of transit skim tables
~  FREQUENCY REPORT
&FFREQRPT     Option to generate frequency distribution of transit fares
~  FARE FREQUENCY REPORT
&AVEZONE      Number of adjacent zones considered for intrazonal calculation
2
&CITYCODE     Identifies City
TREASURE COAST
&TITLE        Title use in reporting
```

2000 Treasure Coast
&MAXD Maximum sidewalk area around stations
0.5
&TERM Auto access terminal time (home end)
2.0
&DEF Default auto access time
2.0
&NOPT Usage check on second auto connector
1
&BACK Backtrack flag for auto connector
1
&MXTFERWA Maximum Number of Transfer for Transit Path - Walk Access
3
&MXTFERAA Maximum Number of Transfer for Transit Path - Auto Access
2
&AOC Auto operating costs
9.5
&OC3 Average 3+ auto occupancy
3.20 3.20 3.20
&OCTA Average park/ride auto occupancy
1.2 1.2 1.2
&TASPD Average auto access speed
26.0 26.0
&MINRUN1 Minimum walk-to-local run time
3.0
&MINRUN2 Minimum walk-to-premium run time
3.0
&MINRUN3 Minimum auto-to-local run time
6.0
&MINRUN4 Minimum auto-to-premium run time
6.0
&INFL1 Transit fare inflation
1.0
&INFL2 Auto operating cost inflation
1.0
&INFL3 Parking cost inflation
1.0
&MSMIN Minimum mode split
0.00 0.00 0.00
&HOVUSE HOV usage flag
2
&HOVMIN HOV minimum time
3.0
&RAILAC Station walk access impedance flag
0
&VAL Validation summary flag
0
&KRFAC Kiss/ride additional impedance factor
1.50
&JITNEY Jitney flag (0=none, 1=base, 2=alt)
0
&VERS Model Version (1=standard FSUTMS, 2=Orlando 10 purposes)
1
&DEFMS Default Regional Mode Splits
0.00868 0.00298 0.00236
&DEFUPD Update Zonal Default Mode Splits (1=yes, 2=no)

&EMISFAC Model VMT to HPMS VMT adjustment factor
0.850
&IMFAC IM/ATP credit adjustment factor
.8000
&TOLLFM Use of tolls facility model indication (~ = not used)
TOLL FACILITIES MODEL
&MULTSQ Use of multiple server queues indication (~ = not used)
MULTIPLE SERVER QUEUES
&GMTIME Identifies impedance used in gravity model (TIME2 if Toll Model)
TIME2
&HOV Identifies type of HOV if any - use with transit models
TYPE1
&HOV1 Used in HASSIGN to define HOV facility type
HOV LINKS, LINK GROUP2 = 81-89
&HOV2 Used in HASSIGN to select purposes assigned to network
SELECTED PURPOSES = 1-2
&HOV3 Used in Report Highway Load
ADD PURPOSES = 1-2
&HOVDEL Used in highway skimming for non HOV network
DELETE LINKS, LINK GROUP 2 = 80-89
&TERM11 Terminal time for area type 11
5
&TERM12 Terminal time for area type 12
5
&TERM13 Terminal time for area type 13
5
&TERM21 Terminal time for area type 21
3
&TERM31 Terminal time for area type 31
1
&TERM32 Terminal time for area type 32
1
&TERM33 Terminal time for area type 33
1
&TERM34 Terminal time for area type 34
1
&TERM41 Terminal time for area type 41
2
&TERM42 Terminal time for area type 42
2
&TERM43 Terminal time for area type 43
2
&TERM51 Terminal time for area type 51
1
&TERM52 Terminal time for area type 52
1
&MAXTIM Maximum time used in FF.yya file (friction factors)
80
&AOFAC1 Autos per HBW person trip
0.877
&AOFAC2 Autos per HBShop person trip
0.621
&AOFAC3 Autos per HBSocRec person trip
0.513
&AOFAC4 Autos per HBSchool person trip
0.541

&AOFAC5 Autos per HBOther person trip
0.541
&AOFAC6 Autos per NHBW person trip
0.775
&AOFAC7 Autos per NHBO person trip
0.538
&AOFAC8 Autos per AIRPORT person trip (used in pre-distrib)
0.620
&AOFAC9 Autos per TRUCK (4-tired) person trip
0.909
&AOFAC10 Autos per TRUCK (Single Unit) person trip
0.909
&AOFAC11 Autos per TRUCK (Combination) person trip
0.909
&CAPFAC Factor to convert hourly capacity to daily capacity (C Level)
1.000
&DAMPING Damping factor used in equilibrium
0.5
&CTOLL Impedance units per dollar of toll
0.075
&UNCONNPK Peak Max time(min) allowed for non Tri-Rail transit trip
180
&UNCONNMD Off-peak Max time(min) allowed for non Tri-Rail transit trip
180
&UNCONNTR Max time(min) allowed for Tri-Rail transit trips
200
&PERIOD Number of hours in transit analysis period
1
&GLSELECT Specifies geographic location to be reported in HEVAL
0
&GLTITLE Specifies title for HEVAL runs using geographic location
Summation for Geographic Location ALL
&COLORS Specifies color "order" of pen use
1,2,3,4,5,6,7,8
&INITPEN Specifies color of pen used to annotate title blocks
1
&PAPER Specifies paper size used in plotter (See TranPlan Manual)
NORMALD
&PLOTTER Identification of attached plotter
HP650V
&ROTANG Rotation angle of plots (counter clockwise)
0
&PLOTFAC Scale factor in coordinate units per inch (0 auto fits)
0
&PLOTWIN The "standard" plot window
PLOTXY.STD
&CBDPB PB CBDZONE 717 for Auto Connector backtracking
717
&CBDBO BO CBDZONE 717 (set same as PB) for Auto Connector backtrack
717
&CBDMI MI CBDZONE 717 (set same as PB) for Auto Connector backtrack
717
&MAXZPB Maximum Zone (internal and external) for Palm Beach
1619
&MAXZMI Set as MAXZPB
1619

&MAXZBO Set as MAXZPB
1619
&EE1OCC Percentage of EE trips that are DA
0.7326
&EE2OCC Percentage of EE trips that are 2 occ
0.1718
&EE3OCC Percentage of EE trips that are 3+ occ
0.0956
&IE1OCC Percentage of IE trips that are DA
0.8297
&IE2OCC Percentage of IE trips that are 2 occ
0.1196
&IE3OCC Percentage of IE trips that are 3+ occ
0.0507
&AIR1OCC Percentage of AIRPORT trips that are DA
0.5020
&AIR2OCC Percentage of AIRPORT trips that are 2 occ
0.4194
&AIR3OCC Percentage of AIRPORT trips that are 3+ occ
0.0786
&TRCOM Tri Rail Company for Assessing Zonal Fare
5
&ZFARE1 Tri Rail Fare in Cents for 1 Zones Traveled
167
&ZFARE2 Tri Rail Fare in Cents for 2 Zones Traveled
250
&ZFARE3 Tri Rail Fare in Cents for 3 Zones Traveled
333
&ZFARE4 Tri Rail Fare in Cents for 4 Zones Traveled
375
&ZFARE5 Tri Rail Fare in Cents for 5 Zones Traveled
417
&ZFARE6 Tri Rail Fare in Cents for 6 Zones Traveled
458
&ZFARE7 Tri Rail Fare in Cents for 7 Zones Traveled
500
&WRHBW Constrained Trip Table weight for final dist-HBW Trips
0.6135
&WFHBW Free Flow Trip Table weight for final dist-HBW Trips
0.3865
&WRHBSHP Constrained Trip Table weight for final dist-HBSHP Trips
0.3856
&WFHBSHP Free Flow Trip Table weight for final dist-HBSHP Trips
0.6144
&WRHBSR Constrained Trip Table weight for final dist-HBSR Trips
0.3955
&WFHBSR Free Flow Trip Table weight for final dist-HBSR Trips
0.6045
&WRHBSCH Constrained Trip Table weight for final dist-HBSCH Trips
0.8163
&WFHBSCH Free Flow Trip Table weight for final dist-HBSCH Trips
0.1837
&WRHBO Constrained Trip Table weight for final dist-HBO Trips
0.4729
&WFHBO Free Flow Trip Table weight for final dist-HBO Trips
0.5271

```
&WRNHBW       Constrained Trip Table weight for final dist-NHBW Trips
0.4987
&WFNHBW       Free Flow Trip Table weight for final dist-NHBW Trips
0.5013
&WRNHBO       Constrained Trip Table weight for final dist-NHBO Trips
0.4053
&WFNHBO       Free Flow Trip Table weight for final dist-NHBO Trips
0.5947
&WRARPRT      Constrained Trip Table weight for final dist-AIRPORT Trips
0.50
&WFARPRT      Free Flow Trip Table weight for final dist-AIRPORT Trips
0.50
&WRTRK        Constrained Trip Table weight for final dist-Truck Trips
0.4000
&WFTRK        Free Flow Trip Table weight for final dist-Truck Trips
0.6000
&VFACTORS      Required entry.  YES must start in column one
YES
&DATABASE      Optional entry to enable database capability
NO
&DBCOUT        When activated, writes database files for TASSIGN
~ DBC OUTPUT, INET
&MINUROADFAC   Specifies minimum UROAD factor allowed   (Optional)
0.50
&MAXUROADFAC   Specifies maximum UROAD factor allowed
1.00
&MINCONFAC     Specifies minimum CONFAC factor allowed
0.04
&MAXCONFAC     Specifies maximum CONFAC factor allowed
1.00
&MINBPRCOEFF   Specifies minimum BPR coefficient allowed
0.0
&MAXBPRCOEFF   Specifies maximum BPR coefficient allowed
1.00
&MINBPREXP     Specifies minimum BPR exponent allowed
1.00
&MAXBPREXP     Specifies maximum BPR exponent allowed
10.00
&EMISTABLES    Tables on HTTAB file for intrazonal emissions (default = 1)
1
&VCMAX         Maximum VOL-over-CAP Ratio for BPR equation
3
&ASCII
YES
&VCMAXD        Maximum VOL-over-CAP Ratio for BPR equation in DISTRIB
2.00
&HEVALLOAD     Specifies the maximum LOAD number to report
0
&TWOWAY        Generates second ASCII file (HRLDXY2.ASC) with 2-way vol and cap
YES
&MODELCAP      For maximum capacity use MAXIMUM CAPACITY
MODEL CAPACITY
&PENMD         Transit Run Time Factor for Penalized Modes
1.00
&FAVMD         Transit Run Time Factor for Favored Modes
0.10
```