

# General Parameters

## K-Factors

The following K factors were adjusted as calibration adjustment factors to reduce non-work trips:

**Between Salt Lake and Utah counties** - SL\_UT\_KFAC\_Wrk = 1.00 - SL\_UT\_KFAC\_Oth = 1.00 - SL\_UT\_KFAC\_Trk = 1.00 - SL\_UT\_KFAC\_Ext = 1.00

**Between Salt Lake and Davis counties** - SL\_DA\_KFAC\_Wrk = 1.00 - SL\_DA\_KFAC\_Oth = 1.00 - SL\_DA\_KFAC\_Trk = 1.00 - SL\_DA\_KFAC\_Ext = 1.00

**Between Box Elder and Weber counties** - WE\_BE\_KFAC\_Wrk = 1.00 - WE\_BE\_KFAC\_Oth = 1.00 - WE\_BE\_KFAC\_Trk = 1.00 - WE\_BE\_KFAC\_Ext = 1.00

## Zone Parameters

- Updated following TAZ & highway node references:
  - UsedZones = 3629
  - BoxElderRange = '1-153'
  - WeberRange = '154-581'
  - DavisRange = '582-905'
  - SLRange = '906-2216'
  - UtahRange = '2217-3546'
  - Dummyzones = '3547-3600'
  - Externalzones = '3601-3629'
  - NorthBC = '3604,3605,3606'
  - HwyNodes = '10000-99999'
- Updated colleges/universities node references:
  - Colleges = '437, 521, 693, 959, 979, 1007, 1029, 1051, 1085, 1231, 1263, 1491, 1525, 1580, 1776, 1886, 2031, 2606, 2809, 2848, 2882, 2939, 3336'
  - LDSBC = 1029
  - WESTMIN = 1263

- UOFU\_Main = 1051
  - UOFU\_Med = 1007
  - WSU\_OGDEN = 437
  - WSU\_DAVIS = 693
  - WSU\_WEST = 521
  - SLCC\_TL = 1580
  - SLCC\_SC = 1231
  - SLCC\_JD = 1776
  - SLCC\_Mead = 1491
  - SLCC\_ML = 1886
  - SLCC\_LB = 1085
  - SLCC\_HL = 1525
  - SLCC\_Airp = 979
  - SLCC\_West = 959
  - SLCC\_HM = 2031
  - BYU = 2939
  - UVU\_MAIN = 2848
  - UVU\_GENEVA = 2882
  - UVU\_THANKP = 2606
  - UVU\_VINE = 2809
  - UVU\_PAYSON = 3336
  - Lagoon = 781
  - Airport = 965
  - TempleSquare = 1035
  - SLC\_Library = 1147
- Removed following variables:
    - RegionRange
    - WFRCRange
    - MAGRange

## County Identification

- Removed this entire section containing the following variables:
  - CountyRange
  - CountyName1
  - CountyName2
  - CountyName3
  - CountyName4
  - CountyName5
  - CO\_Name1

- CO\_Name2
- CO\_Name3
- CO\_Name4
- CO\_Name5

## **AQ conformity reports are broken down by each county and 3 cities**

- Removed this entire section containing the following variables:
  - RE\_ID
  - WE\_ID
  - DA\_ID
  - SL\_ID
  - UT\_ID
  - BE\_ID
  - OC\_ID
  - SC\_ID
  - PC\_ID

## **Special Trip Table Script Parameters**

- Updated income break points to 2019 ACS data
  - Income\_Lo = 45000
  - Income\_Md = 75000
  - Income\_Hi = 125000

## **Household Disaggregation Information**

- Updated regional median income:
  - Reg\_Median\_Inc = 74946
  - from 2019 5-year ACS, in 2019 dollars
  - represents average for just WF region

## Distribution, Mode Choice & Assignment Parameters

### Auto Occupancy

- Renamed the following variables (scripts were also updated) and updated values:

Table 1: Renamed Auto-Occupancy Variables

Previous Name	New Name	New Value
VEH_OCCUPANCY_HBW	VehOcc_HBW	1.1
VEH_OCCUPANCY_HBSHP	VehOcc_HBSHp	1.63
VEH_OCCUPANCY_HBOTH	VehOcc_HBOth	1.68
VEH_OCCUPANCY_HBSCH	VehOcc_HBSch	1.76
VEH_OCCUPANCY_HBC	VehOcc_HBC	1.12
VEH_OCCUPANCY_NHBW	VehOcc_NHBW	1.21
VEH_OCCUPANCY_NHBNW	VehOcc_NHBNW	1.76
	VehOcc_Rec	1.68
VEH_OCCUPANCY_HBO	VehOcc_HBO	1.67
VEH_OCCUPANCY_NHB	VehOcc_NHB	1.54
	VehOcc_ExtWrk	1.16
	VehOcc_ExtHBO	1.82
	VehOcc_ExtNHB	1.73
	VehOcc_ExtRec	1.73
VEH_OCC_3P_HBW	VehOcc_3p_HBW	3.53
	VehOcc_3p_HBSHp	3.49
	VehOcc_3p_HBOth	3.73
	VehOcc_3p_HBSch	3.88
VEH_OCC_3P_HBC	VehOcc_3p_HBC	3.24
	VehOcc_3p_NHBW	3.71
	VehOcc_3p_NHBNW	3.71
	VehOcc_3p_Rec	3.73
VEH_OCC_3P_HBO	VehOcc_3p_HBO	3.68
VEH_OCC_3P_NHB	VehOcc_3p_NHB	3.71

- Auto occupancy parameters were updated based on 2012 Household Travel Survey (re-processed)
- Values represent average persons per vehicle for just the Wasatch Front model space
- External trips (Ext) are average for IX + XI, all other parameters are averages for II trips

### Value of Time

- Updated value of time (VOT):

- VOT\_Auto\_Wrk = 22
  - VOT\_Auto\_Per = 17
  - VOT\_Auto\_Ext = 20
  - VOT\_LT = 37
  - VOT\_MD = 50
  - VOT\_HV = 63
  - VOT\_Toll = 63
  - VOT\_HOT\_DA = 63
- Added following variables:
    - VOT\_Auto\_Wrk\_Lo = 9
    - VOT\_Auto\_Wrk\_Hi = 24
    - VOT\_Auto\_Per\_Lo = 7
    - VOT\_Auto\_Per\_Hi = 19

### **Auto Operating Costs**

- Updated auto operating cost (AOC) based on 2019 fuel cost & economy and vehicle maintenance
  - AOC\_Auto = 21.7
  - AOC\_LT = 27.3
  - AOC\_MD = 55.5
  - AOC\_HV = 74.3

### **Toll and HOT Costs**

- Updated toll (FT=40) cost (cent/mile) parameter to reflect a toll of approximately \$5.00 for a 10.25 mi trip (average work distance) or \$3.00 for a 6.5 mi trip (average trip distance of all trips) in 2019 dollars
  - Cost\_Toll\_Pk = 48
  - Cost\_Toll\_Ok = 48
- Updated HOT (FT=38) cost (cent/mile) parameter to reflect a toll of approximately \$3.50 for a 10.25 mi trip (average work distance) or \$2.20 for a 6.5 mi trip (average trip distance of all trips) in 2019 dollars
  - Cost\_HOT\_Pk = 34
  - Cost\_HOT\_Ok = 17

### **Prefix for Transit Skims**

- Replaced all transit skim prefix global variable tokens with values in scripts
- Removed transit skim prefix variables from 0GeneralParameters.block file

## Other

- Updated comments and cleaned up formatting
- Change RAIL2COR\_MULTIPLIER from 0.40 to 0.33