Chapter Eleven: Contents

(MS-7 – 10 December 2002 – LA-UR 01-5716 – Portland Study Reports)

1. CONFIGURATION FILES 1

1.1 MS-7 1
1.2 MS-20 12
1.3 SIGNAL GENERATION 13

Chapter Eleven—MS-7

NOTE: Long code lines that do not fit completely on one line of this document are shown in italics and continued on to the next line.

1. Configuration Files

1.1 MS-7

```
TRANSIMS_ROOT                          /home/transims/CaseStudy3/scenarios/allstr

PLAN_FILE                              $TRANSIMS_ROOT/plans/RS8R/RS8
VEHICLE_FILE                           $TRANSIMS_ROOT/vehicle/vehicles.pop
VEHICLE_PROTOTYPE_FILE                 $TRANSIMS_ROOT/data/allstr.prototypes.short

ROUTER_HOUSEHOLD_FILE                  $TRANSIMS_ROOT/router/hh
ROUTER_COMPLETED_HOUSEHOLD_FILE        $TRANSIMS_ROOT/router/hh.done
ROUTER_PROBLEM_FILE                    $TRANSIMS_ROOT/router/problems
#ACTIVITY_FILE                           $TRANSIMS_ROOT/activity/activities
#ACTIVITY_FILE                           $TRANSIMS_ROOT/activity/AS3.25
ACTIVITY_FILE                          $TRANSIMS_ROOT/activity/AS7
MODE_MAP_FILE                          $TRANSIMS_ROOT/data/allstr.modes

NET_DIRECTORY                  $TRANSIMS_ROOT/network/
NET_NODE_TABLE                 Node.tbl
NET_LINK_TABLE                 Link.tbl
NET_POCKET_LANE_TABLE          Pocket_Lane.tbl
NET_PARKING_TABLE              Parking.tbl
NET_LANE_CONNECTIVITY_TABLE    Lane_Connectivity.tbl
NET_UNSIGNALIZED_NODE_TABLE    Unsignalized_Node.tbl
NET_SIGNALIZED_NODE_TABLE      Signalized_Node.tbl
NET_PHASING_PLAN_TABLE         Phasing_Plan.20010718.tbl
NET_TIMING_PLAN_TABLE          Timing_Plan.tbl
NET_SPEED_TABLE                Speed.tbl
NET_LANE_USE_TABLE             Lane_Use.tbl
NET_TRANSIT_STOP_TABLE         Transit_Stop.tbl
NET_SIGNAL_COORDINATOR_TABLE   Signal_Coordinator.tbl
NET_DETECTOR_TABLE             Detector.tbl
NET_TURN_PROHIBITION_TABLE     Turn_Prohibition.tbl
NET_BARRIER_TABLE              Barrier.tbl
NET_ACTIVITY_LOCATION_TABLE    Activity_Location.tbl
NET_PROCESS_LINK_TABLE         Process_Link.tbl
```

```
ROUTER_INTERNAL_PLAN_SIZE      2000
ROUTER_MESSAGE_LEVEL           4
ROUTER_OVERDO                  0.0
ROUTER_NUMBER_THREADS          2
ROUTER_GET_ON_TRANSIT_DELAY    120
ROUTER_GET_OFF_TRANSIT_DELAY   10
ROUTER_DELAY_NOISE             0.15
ROUTER_SEED                    1234
# Three hours, in seconds
ROUTER_MAX_LEG_LENGTH          10800

TRANSIT_ROUTE_FILE           $TRANSIMS_ROOT/network/Transit_Route.tbl
TRANSIT_SCHEDULE_FILE        $TRANSIMS_ROOT/network/Transit_Schedule.tbl

OUT_DIRECTORY                $TRANSIMS_ROOT/MS8R
OUT_NODES_DEFAULT            $TRANSIMS_ROOT/data/allstr.nodes
OUT_LINKS_DEFAULT            $TRANSIMS_ROOT/data/allstr.links
OUT_BEGIN_TIME_DEFAULT       21600   # 0600
OUT_END_TIME_DEFAULT         32400   # 0900

OUT_SNAPSHOT_NAME_1          snapshot.am
OUT_SNAPSHOT_TYPE_1          VEHICLE; INTERSECTION
OUT_SNAPSHOT_BEGIN_TIME_1    0       # Midnight
OUT_SNAPSHOT_END_TIME_1      43200   # NOON
OUT_SNAPSHOT_TIME_STEP_1     900

OUT_SNAPSHOT_NAME_2          snapshot.pm
#OUT_SNAPSHOT_TYPE_2           VEHICLE
OUT_SNAPSHOT_BEGIN_TIME_2    43200   # NOON
OUT_SNAPSHOT_END_TIME_2      75600   # 9 PM
OUT_SNAPSHOT_TIME_STEP_2     900

OUT_SNAPSHOT_NAME_3          busmall.snapshot
OUT_SNAPSHOT_TYPE_3          VEHICLE
OUT_SNAPSHOT_BEGIN_TIME_3    25200  # 7 AM
OUT_SNAPSHOT_END_TIME_3      32400  # 9 AM
OUT_SNAPSHOT_TIME_STEP_3     1
OUT_SNAPSHOT_LINKS_3         $TRANSIMS_ROOT/data/busmall_links.txt

OUT_SNAPSHOT_NAME_4          snapshot.signals
# OUT_SNAPSHOT_TYPE_4          SIGNAL
OUT_SNAPSHOT_TIME_STEP_4     1
OUT_SNAPSHOT_BEGIN_TIME_4    21600   # 6 AM
OUT_SNAPSHOT_END_TIME_4      23400    # 6:30 AM
# OUT_SNAPSHOT_FILTER_4        NODE < 32500
OUT_SNAPSHOT_LINKS_4         $TRANSIMS_ROOT/data/signal.links
OUT_SNAPSHOT_NODES_4         $TRANSIMS_ROOT/data/signal.nodes

OUT_SNAPSHOT_NAME_5          snapshot.12to4pm
OUT_SNAPSHOT_TYPE_5          VEHICLE
```

```
OUT_SNAPSHOT_BEGIN_TIME_5    43200   # noon
OUT_SNAPSHOT_END_TIME_5      57600   # 4 PM
OUT_SNAPSHOT_TIME_STEP_5     900

OUT_SNAPSHOT_NAME_6          snapshot.4to8pm
OUT_SNAPSHOT_TYPE_6          VEHICLE
OUT_SNAPSHOT_BEGIN_TIME_6    57600   # 4 PM
OUT_SNAPSHOT_END_TIME_6      72000   # 8 PM
OUT_SNAPSHOT_TIME_STEP_6     900

OUT_SNAPSHOT_NAME_7          snapshot.8to9pm
OUT_SNAPSHOT_TYPE_7          VEHICLE
OUT_SNAPSHOT_BEGIN_TIME_7    72000   # 8 PM
OUT_SNAPSHOT_END_TIME_7      75600   # 9 PM
OUT_SNAPSHOT_TIME_STEP_7     900

OUT_SUMMARY_VELOCITY_BINS_DEFAULT       5
OUT_SUMMARY_VELOCITY_MAX_DEFAULT        37.5
OUT_SUMMARY_ENERGY_BINS_DEFAULT         7
OUT_SUMMARY_ENERGY_MAX_DEFAULT          105
OUT_SUMMARY_TIME_STEP_DEFAULT           3600
OUT_SUMMARY_SAMPLE_TIME_DEFAULT         1
OUT_SUMMARY_BOX_LENGTH_DEFAULT          30

OUT_SUMMARY_NAME_1                     summary.no
# OUT_SUMMARY_TYPE_1                     ENERGY
OUT_SUMMARY_ENERGY_SOAK_1              NEGLIGIBLE
OUT_SUMMARY_ENERGY_BINS_1              0
OUT_SUMMARY_ENERGY_MAX_1               0

OUT_SUMMARY_NAME_2                     summary.short
# OUT_SUMMARY_TYPE_2                     ENERGY
OUT_SUMMARY_ENERGY_SOAK_2              SHORT

OUT_SUMMARY_NAME_3                     summary.medium
# OUT_SUMMARY_TYPE_3                     ENERGY
OUT_SUMMARY_ENERGY_SOAK_3              MEDIUM

OUT_SUMMARY_NAME_4                     summary.long
# OUT_SUMMARY_TYPE_4                     ENERGY
OUT_SUMMARY_ENERGY_SOAK_4              LONG

OUT_SUMMARY_NAME_5                     summary.auto
# OUT_SUMMARY_TYPE_5                     VELOCITY
OUT_SUMMARY_VEHICLE_TYPE_5             AUTO

OUT_SUMMARY_NAME_6                     summary.bus
# OUT_SUMMARY_TYPE_6                     VELOCITY
OUT_SUMMARY_VEHICLE_TYPE_6             BUS

OUT_SUMMARY_NAME_7                     summary.truck
```

```
# OUT_SUMMARY_TYPE_7                    VELOCITY
OUT_SUMMARY_VEHICLE_TYPE_7            TRUCK

OUT_SUMMARY_NAME_8              summary.dens
OUT_SUMMARY_TYPE_8              TIME; DENSITY
OUT_SUMMARY_BEGIN_TIME_8        0
OUT_SUMMARY_END_TIME_8          86400
OUT_SUMMARY_TIME_STEP_8         900
OUT_SUMMARY_SAMPLE_TIME_8       60
OUT_SUMMARY_BOX_LENGTH_8        97.5
OUT_SUMMARY_FILTER_8            COUNT>0

OUT_SUMMARY_NAME_9              cutline.auto
OUT_SUMMARY_TYPE_9              TIME
OUT_SUMMARY_BEGIN_TIME_9        0
OUT_SUMMARY_END_TIME_9          86400
OUT_SUMMARY_TIME_STEP_9         900
OUT_SUMMARY_SAMPLE_TIME_9       15
OUT_SUMMARY_BOX_LENGTH_9        97.5
OUT_SUMMARY_LINKS_9             $TRANSIMS_ROOT/data/cutlines-2001-03-22.txt
OUT_SUMMARY_VEHICLE_TYPE_9      AUTO
OUT_SUMMARY_FILTER_9            COUNT>0
OUT_SUMMARY_SUPPRESS_9          LANE;SUM;VSUM;SUMSQUARES;VSUMSQUARES;TURN;VCOUNT

OUT_SUMMARY_NAME_10             cutline.truck
OUT_SUMMARY_TYPE_10             TIME
OUT_SUMMARY_BEGIN_TIME_10       0
OUT_SUMMARY_END_TIME_10         86400
OUT_SUMMARY_TIME_STEP_10        900
OUT_SUMMARY_SAMPLE_TIME_10      15
OUT_SUMMARY_BOX_LENGTH_10       97.5
OUT_SUMMARY_LINKS_10            $TRANSIMS_ROOT/data/cutlines-2001-03-22.txt
OUT_SUMMARY_VEHICLE_TYPE_10     TRUCK
OUT_SUMMARY_FILTER_10           COUNT>0
OUT_SUMMARY_SUPPRESS_10         LANE;SUM;VSUM;SUMSQUARES;VSUMSQUARES;TURN;VCOUNT

OUT_EVENT_NAME_1         event
# OUT_EVENT_TYPE           TRAVELER
OUT_EVENT_FILTER_1       VEHTYPE==1;STATUS @ [16900|19716|25860]
OUT_EVENT_SUPPRESS_
TRAVELER;TRIP;LEG;ROUTE;STOPS;YIELDS;SIGNALS;TURN;STOPPED;ACCELS;TIMESUM;DISTANCESUM;USER;ANOMALY;LINK;NODE;VSUBTYPE

OUT_EVENT_NAME_2             endsim
OUT_EVENT_TYPE_2             TRAVELER
OUT_EVENT_SUPPRESS_2         ACCELS;LEG;ROUTE;SIGNALS;STOPS;TRIP;TURN;VEHTYPE;VSUBTYPE;YIELDS
OUT_EVENT_FILTER_2           STATUS&33554432
OUT_EVENT_BEGIN_TIME_2       86398
OUT_EVENT_END_TIME_2         86402

OUT_EVENT_NAME_3             endtrip
OUT_EVENT_TYPE_3             TRAVELER
```

```
OUT_EVENT_SUPPRESS_3          ACCELS;LEG;ROUTE;SIGNALS;STOPS;STOPPED;TURN;USER;VEHICLE;VEHTYPE;VSUBTYPE;YIELDS
OUT_EVENT_FILTER_3            STATUS&8; STATUS!&4
OUT_EVENT_BEGIN_TIME_3        0
OUT_EVENT_END_TIME_3          86402

OUT_EVENT_NAME_4              anomaly.offplan
OUT_EVENT_TYPE_4              TRAVELER
OUT_EVENT_SUPPRESS_4          ACCELS;ROUTE;SIGNALS;STOPS;TURN;USER;VEHTYPE;VSUBTYPE;YIELDS
OUT_EVENT_FILTER_4            STATUS&8388608; ANOMALY==1
OUT_EVENT_BEGIN_TIME_4        0
OUT_EVENT_END_TIME_4          86402

OUT_EVENT_NAME_5              anomaly.other
OUT_EVENT_TYPE_5              TRAVELER
OUT_EVENT_SUPPRESS_5          ACCELS;LEG;ROUTE;SIGNALS;STOPS;TRIP;TURN;USER;VEHTYPE;VSUBTYPE;YIELDS
OUT_EVENT_FILTER_5            ANOMALY>2; ANOMALY<8
OUT_EVENT_BEGIN_TIME_5        0
OUT_EVENT_END_TIME_5          86402

OUT_EVENT_NAME_6              allstr.times
# OUT_EVENT_TYPE_6            TRAVELER
OUT_EVENT_SUPPRESS_6          DISTANCESUM;LEG;LOCATION;NODE;ROUTE;SIGNALS;STOPS;TRIP;VEHICLE;VEHTYPE;VSUBTYPE;YIELDS
OUT_EVENT_FILTER_6            STATUS&8;STATUS!&4 # end of leg
OUT_EVENT_BEGIN_TIME_6        0
OUT_EVENT_END_TIME_6          86402

OUT_EVENT_NAME_7              cutline.transit
OUT_EVENT_TYPE_7              TRAVELER
OUT_EVENT_SUPPRESS_7
ACCELS;ANOMALY;DISTANCESUM;LEG;LOCATION;SIGNALS;STATUS;STOPS;STOPPED;TIMESUM;TRIP;TURN;USER;VSUBTYPE;YIELDS
OUT_EVENT_FILTER_7            STATUS&2;STATUS&1;ROUTE>0    # On link and change in on link => entering link
OUT_EVENT_BEGIN_TIME_7        0
OUT_EVENT_END_TIME_7          86402
OUT_EVENT_LINKS_7             $TRANSIMS_ROOT/data/cutlines-2001-03-22.txt

OUT_EVENT_NAME_8              allstr.debug
# OUT_EVENT_TYPE_8              TRAVELER
OUT_EVENT_SUPPRESS_8          ACCELS;LEG;ROUTE;SIGNALS;STOPS;TURN;VEHTYPE;VSUBTYPE;YIELDS
OUT_EVENT_FILTER_8            TRIP>1
OUT_EVENT_BEGIN_TIME_8        0
OUT_EVENT_END_TIME_8          86402

# Synpop Keys
SYNPOP_BASE_DIRECTORY          $TRANSIMS_ROOT/../..

SYNPOP_STF_INFO_DIRECTORY      $TRANSIMS_ROOT/../../data/synpop/Parep2/stf
SYNPOP_STF_DATA_DIRECTORY      $TRANSIMS_ROOT/../../data/synpop/stf

SYNPOP_MABLE_FILE              $TRANSIMS_ROOT/../../data/synpop/mable/geocorr.csv

SYNPOP_PUMS_DIRECTORY          $TRANSIMS_ROOT/../../data/synpop/pums
```

```
SYNPOP_MARGINALS_FILE          $TRANSIMS_ROOT/../../data/synpop/marginals.txt

SYNPOP_HOUSEHOLD_DEMOGRAPHICS  PUMSHH;R18UNDR;RWRKR89;RHHINC;TENURE;VALUE
SYNPOP_PERSON_DEMOGRAPHICS     AGE;RELAT1;SEX;WORK89;YEARSCH;INDUSTRY;OCCUP;RPINCOME;HOURS;MOBILLIM;MEANS;RIDERS;DEPART;TRAVTIME

SYNPOP_TEMP_DIRECTORY          tmp
SYNPOP_KEEP_TEMP_FILES         0
SYNPOP_RANDOM_SEED             1234567


POP_BASELINE_FILE            $TRANSIMS_ROOT/population/pop_base
POP_LOCATED_FILE             $TRANSIMS_ROOT/population/pop_located
POP_STARTING_VEHICLE_ID      5000
POP_STARTING_HH_ID           1
POP_STARTING_PERSON_ID       1
POP_RANDOM_SEED              3456789

ACT_HOME_HEADER                    Home
ACT_WORK_HEADER                    Work
ACT_ACCESS_HEADER                  Tran_Dist
ACT_BLOCKGROUP_HEADER              BLOCKGROUP
ACT_TRACT_HEADER                   TRACT
ACT_FEEDBACK_FILE                  $TRANSIMS_ROOT/activity/activity.feedback
#ACT_MULTI_FAMILY_HEADER             MFR
ACT_PARTIAL_OUTPUT                 $TRANSIMS_ROOT/activity/activities.partial
ACT_POPULATION_FILE                $TRANSIMS_ROOT/population/pop_converted
ACT_PROBLEM_FILE                   $TRANSIMS_ROOT/activity/act.problems
ACT_RANDOM_SEED                    985456379
ACT_SHARED_RIDE_TIME_RANGE_MIN     1
ACT_SHARED_RIDE_TIME_RANGE_MEDIUM  1
ACT_SHARED_RIDE_TIME_RANGE_MAX     1
ACT_SHARED_RIDE_DISTANCE_RANGE     10
ACT_TRAVEL_TIME_INTERVALS_FILE     $TRANSIMS_ROOT/data/time_intervals
ACT_TRAVEL_TIMES_FILE              $TRANSIMS_ROOT/activity/travel_times
#ACT_TRAVEL_TIME_FILE_MODES          3;4
ACT_MINIMUM_ADULT_AGE              16

ACT_DECISION_TREE_FILE        $TRANSIMS_ROOT/data/decision_tree
ACT_MODE_WEIGHT_FILE          $TRANSIMS_ROOT/data/mode_weight
ACT_ZONE_INFO_FILE            $TRANSIMS_ROOT/data/zonedata
ACT_SURVEY_ACTIVITY_FILE      $TRANSIMS_ROOT/data/survey_activities
ACT_SURVEY_HOUSEHOLD_FILE     $TRANSIMS_ROOT/data/survey_households
ACT_SURVEY_WEIGHTS_FILE       $TRANSIMS_ROOT/data/survey_weights_25

ACT_INITIAL_HOME_TIME_RANGE      0.75
ACT_OUT_OF_HOME_TIME_RANGE       0.5
ACT_HOME_DURING_DAY_TIME_RANGE   0.75
ACT_WORK_TIME_RANGE              0.25
ACT_END_OF_DAY_TIME_RANGE        0.75
ACT_MAX_END_TIME                 36.0
```

```
ACT_DEFAULT_CAR_SPEED            15.0
ACT_DEFAULT_TRANSIT_SPEED        10.0
ACT_BICYCLE_MODE                 7
ACT_WALKING_MODE                 1
ACT_MAGIC_MOVE_MODE              8
ACT_DEFAULT_TRANSIT_MODE         3
ACT_LOCATION_CHOICE_EXPONENT     0.5
ACT_DEFAULT_INTRAZONE_DISTANCE   1500

ACT_AUTOMOBILE_MODE_1     2
ACT_AUTOMOBILE_MODE_2     5
ACT_AUTOMOBILE_MODE_3     6
ACT_ADJUST_TIMES          0

ACT_PERSON_DEMOG_RELATION_HEADER    RELATE
ACT_PERSON_DEMOG_WORKER_HEADER      WORK
ACT_PERSON_DEMOG_GENDER_HEADER      GENDER
ACT_PERSON_DEMOG_AGE_HEADER         AGE
ACT_REQUIRED_HH_DEMOG_1             HHSIZE
ACT_REQUIRED_HH_DEMOG_2             INCOME
ACT_REQUIRED_HH_DEMOG_3             ALT5
ACT_REQUIRED_HH_DEMOG_4             A5TO15
ACT_REQUIRED_HH_DEMOG_5             A26TO45
ACT_REQUIRED_HH_DEMOG_6             HHAGE
ACT_REQUIRED_HH_DEMOG_7             WORKERS
ACT_REQUIRED_HH_DEMOG_8             HDENSTY
ACT_HHDENSITY_HEADER                HH_Acre

ACT_HOME_ACTIVITY_TYPE     0
ACT_WORK_ACTIVITY_TYPE     1
ACT_SCHOOL_ACTIVITY_TYPE   7

# School specifications:  age ranges, zone and
# location attractor values.
# Elementary and mid school
ACT_SCHOOL_LOWER_BOUND_1                 5
ACT_SCHOOL_UPPER_BOUND_1                 15

# High school
ACT_SCHOOL_LOWER_BOUND_2                 16
ACT_SCHOOL_UPPER_BOUND_2                 18

# Elementary and high school
ACT_SCHOOL_LOWER_BOUND_3                 5
ACT_SCHOOL_UPPER_BOUND_3                 18

# Elementary and mid school
ACT_SCHOOL_ZONE_ATTRACTOR_VALUE_1        1

# High school
ACT_SCHOOL_ZONE_ATTRACTOR_VALUE_2        2
```

```
# Both elementary/mid and high school
ACT_SCHOOL_ZONE_ATTRACTOR_VALUE_3        3

# Elementary and mid school
ACT_SCHOOL_LOCATION_ATTRACTOR_VALUE_1    1

# High school
ACT_SCHOOL_LOCATION_ATTRACTOR_VALUE_2    2

# Both elementary/mid and high school
ACT_SCHOOL_LOCATION_ATTRACTOR_VALUE_3    3

# Anchor Activity types
# Home
ACT_ANCHOR_ACTIVITY_TYPE_1    0
# Work
ACT_ANCHOR_ACTIVITY_TYPE_2    1
# School
ACT_ANCHOR_ACTIVITY_TYPE_3    7
# College
ACT_ANCHOR_ACTIVITY_TYPE_4    8

ACT_ACTIVITY_TYPE_1        0
ACT_ZONE_HEADER_1          Home
ACT_LOCATION_HEADER_1      Home
ACT_PRIORITY_1             2
ACT_TIME_PRIORITY_1        3

ACT_ACTIVITY_TYPE_2        1
ACT_ZONE_HEADER_2          Work
ACT_LOCATION_HEADER_2      Work
ACT_PRIORITY_2             2
ACT_TIME_PRIORITY_2        3

ACT_ACTIVITY_TYPE_3        2
ACT_ZONE_HEADER_3          Shop
ACT_LOCATION_HEADER_3      Shop
ACT_PRIORITY_3             7
ACT_TIME_PRIORITY_3        0

ACT_ACTIVITY_TYPE_4        3
ACT_ZONE_HEADER_4          Visit
ACT_LOCATION_HEADER_4      Visit
ACT_PRIORITY_4             4
ACT_TIME_PRIORITY_4        3

ACT_ACTIVITY_TYPE_5        4
ACT_ZONE_HEADER_5          Social
ACT_LOCATION_HEADER_5      Social
ACT_PRIORITY_5             4
```

```
ACT_TIME_PRIORITY_5        5

ACT_ACTIVITY_TYPE_6        5
ACT_ZONE_HEADER_6          Other
ACT_LOCATION_HEADER_6      Other
ACT_PRIORITY_6             8
ACT_TIME_PRIORITY_6        0

ACT_ACTIVITY_TYPE_7        6
ACT_ZONE_HEADER_7          Serve
ACT_LOCATION_HEADER_7      Serve
ACT_PRIORITY_7             4
ACT_TIME_PRIORITY_7        1

ACT_ACTIVITY_TYPE_8        7
ACT_ZONE_HEADER_8          School
ACT_LOCATION_HEADER_8      School
ACT_PRIORITY_8             3
ACT_TIME_PRIORITY_8        3

ACT_ACTIVITY_TYPE_9        8
ACT_ZONE_HEADER_9          College
ACT_LOCATION_HEADER_9      College
ACT_PRIORITY_9             3
ACT_TIME_PRIORITY_9        3

# TripTable Activity Generator
ACT_TAZ_HEADER             TAZ

# trucks
ACT_TRIPTABLE_STARTING_HH_ID         2000000
ACT_TRIPTABLE_STARTING_PERSON_ID     5000000
ACT_TRIPTABLE_STARTING_VEHICLE_ID    5000000
ACT_TRIPTABLE_FILE                   $TRANSIMS_ROOT/data/allstr.truck_triptable
ACT_TRIPTIME_FILE                    $TRANSIMS_ROOT/data/allstr.truck_timetable
ACT_TRIP_TABLE_OUTPUT                $TRANSIMS_ROOT/trucks/activities.trucks
TRIP_TABLE_VEHICLE_FILE              $TRANSIMS_ROOT/trucks/vehicles.trucks
POP_TRIPTABLE_FILE                   $TRANSIMS_ROOT/trucks/population.trucks
VEH_VEHICLE_TYPE                     2

# Itinerants
#VEH_VEHICLE_TYPE                      1

CA_SIM_STEPS                   86400
CA_SIM_START_HOUR              0
CA_SIM_START_MINUTE            0
CA_SIM_START_SECOND            0
CA_LOOK_AHEAD_CELLS            35
# CA_LOOK_AHEAD_CELLS            0
CA_NO_TRANSIT                  0
CA_TRANSIT_INITIAL_WAIT        4
```

```
CA_EXIT_TRANSIT_DELAY           1
CA_ENTER_TRANSIT_DELAY          2
CA_SLAVE_MESSAGE_LEVEL          1
CA_MASTER_MESSAGE_LEVEL         1
CA_USE_NETWORK_CACHE            1
CA_PARALLEL_LOG                 1
CA_SHORT_SOAK_TIME              600    # 10 minutes
CA_MEDIUM_SOAK_TIME             1800    # 30 minutes
CA_LONG_SOAK_TIME               9000    # 2.5 hours
CA_OFF_PLAN_EXIT_TIME           10
CA_MAX_WAITING_SECONDS          86401
CA_SEQUENCE_LENGTH              1
CA_BROADCAST_ACC_CPN_MAP        1
CA_BROADCAST_TRAVELERS          0
CA_LATE_BOUNDARY_RECEPTION      1
CA_USE_PARTITIONED_ROUTE_FILES  1
CA_HELP_LOST_TRAVELERS          1

PAR_RTM_INPUT_FILE              $TRANSIMS_ROOT/data/run_time_monitor.prev
PAR_RTM_PENALTY_FACTOR          100.0
RTM_FEEDBACK_FILE               run_time_monitor
RTM_SAMPLE_INTERVAL             600

#PAR_SLAVES                       31
PAR_SLAVES                      47
PAR_MIN_CELLS_TO_SPLIT          10
PAR_SAVE_PARTITION              1
PAR_USE_METIS_PARTITION         1
PAR_USE_OB_PARTITION            0
#PAR_PARTITION_FILE               $TRANSIMS_ROOT/data/partition.31
PAR_PARTITION_FILE              $TRANSIMS_ROOT/data/partition.61

LOG_CONTROL                     1
LOG_DISTRIBUTION                0
LOG_IO                          0
LOG_IO_DETAIL                   0
LOG_LOAD_NETWORK                0
LOG_PARTITIONING                0
LOG_ROUTING                     1
LOG_ROUTING_DETAIL              0      # use to get performance information into logfile
LOG_TIMESTEP                    1
LOG_TIMESTEP_DETAIL             0
LOG_TIMING                      1
LOG_TRANSIT                     0
LOG_VEHICLES                    0
LOG_LOG_CONFIG                  0
LOG_RUNTIMEMONITOR              0
LOG_BOUNDARIES                  0
LOG_BOUNDARIES_DETAIL           0
LOG_ROUTING_PROBLEM             0
LOG_PARALLEL                    0
```

```
LOG_PAROUT                      0
LOG_MIGRATION                   0
LOG_MIGRATION_DETAIL            0
LOG_MUTEX                       0
LOG_MUTEX_DETAIL                0
LOG_SELECTOR                    0
LOG_SELECTOR_DETAIL             0
LOG_SYNPOP                      1
LOG_ACT                         1
LOG_ACTL                        1
LOG_POPL                        1


VEH_GENERATE_FOR_DRIVERS        1
VEH_DRIVER_MINIMUM_AGE          1
VEH_AGE_DEMOGRAPHIC             AGE
VEH_RANDOM_SEED                 985456379

# Selector Keys
SEL_MESSAGE_LEVEL               0
SEL_ITDB_FILE                   $TRANSIMS_ROOT/itdb
SEL_POPULATION_FILE             $TRANSIMS_ROOT/population/pop_converted

# Needed for PlanStat
SEL_USE_START_MODE_PREF              1
SEL_USE_START_OTHER_PARTICIPANTS     1
SEL_USE_END_MODE_PREF                1
SEL_USE_END_OTHER_PARTICIPANTS       1
SEL_USE_MODE_STRING                  1

# Needed for ZoneTravelTimeGenerator
SEL_USE_DEP_TIME                     1
SEL_USE_START_ACC                    1
SEL_USE_END_ACC                      1
SEL_USE_DURATION                     1
SEL_USE_START_REGION                 1
SEL_USE_END_REGION                   1
SEL_USE_END_MODE_PREF                1
SEL_USE_MODE_STRING                  1
SEL_UAZ_FILE_1                       $TRANSIMS_ROOT/network/8_districts.polygons
SEL_UAZ_FILE_2                       $TRANSIMS_ROOT/network/20_districts.polygons
```

1.2 MS-20

Changes in the MS-7 configuration file above for the MS-20 run are as follows:

```
TRANSIMS_ROOT                /home/transims/CaseStudy3/scenarios/allstr
CONFIG_DEFAULT_FILE          $TRANSIMS_ROOT/allstr.cfg

PLAN_FILE                    $TRANSIMS_ROOT/plans/RS20/RS20
OUT_DIRECTORY                $TRANSIMS_ROOT/MS20

PAR_SLAVES                   47
PAR_PARTITION_FILE           $TRANSIMS_ROOT/data/partition.61

VEHICLE_FILE                 $TRANSIMS_ROOT/vehicle/vehicles.all
ACTIVITY_FILE                $TRANSIMS_ROOT/activity/AS7

NET_NODE_TABLE                 Node.20010806.tbl
NET_LINK_TABLE                 Link.20010921.tbl
NET_PARKING_TABLE                  Parking_MICROSIM.20010810.tbl
NET_SIGNALIZED_NODE_TABLE      Signalized_Node.20010921.tbl
NET_SIGNAL_COORDINATOR_TABLE   Signal_Coordinator.20010806.tbl
NET_UNSIGNALIZED_NODE_TABLE    Unsignalized_Node.20010921.tbl
NET_POCKET_LANE_TABLE          Pocket_Lane.20010921.tbl
NET_PHASING_PLAN_TABLE         Phasing_Plan.20010921.tbl
NET_LANE_CONNECTIVITY_TABLE    Lane_Connectivity.20010921.tbl
NET_DETECTOR_TABLE             Detector.20010921.tbl
NET_ACTIVITY_LOCATION_TABLE    Activity_Location.20010806.tbl
NET_TIMING_PLAN_TABLE          Timing_Plan.20010913.tbl

CA_INTERSECTION_CAPACITY       1

# include data for determining whether link is jammed
OUT_SUMMARY_NAME_11              summary.noflow.dens
OUT_SUMMARY_TYPE_11              TIME; DENSITY
OUT_SUMMARY_BEGIN_TIME_11        0
OUT_SUMMARY_END_TIME_11          86400
OUT_SUMMARY_TIME_STEP_11         900
OUT_SUMMARY_SAMPLE_TIME_11       60
OUT_SUMMARY_BOX_LENGTH_11        97.5
OUT_SUMMARY_FILTER_11            COUNT==0; VCOUNT>0

OUT_EVENT_NAME_1               event
OUT_EVENT_TYPE_1               TRAVELER
OUT_EVENT_FILTER_1             VEHTYPE==1;STATUS @ [16900|19716|25860]
OUT_EVENT_SUPPRESS_1
TRAVELER;TRIP;LEG;ROUTE;STOPS;YIELDS;SIGNALS;TURN;STOPPED;ACCELS;TIMESUM;DISTANCESUM;USER;ANOMALY;LINK;NODE;VSUBTYPE
OUT_EVENT_BEGIN_TIME_1         0
OUT_EVENT_END_TIME_1           86400
```

1.3 Signal Generation

```
NET_DIRECTORY                          /home/transims/allstr/network
NET_NODE_TABLE                         Node.tbl
NET_LINK_TABLE                         Link.tbl
NET_SPEED_TABLE                        Speed.tbl
NET_POCKET_LANE_TABLE                  Pocket_Lane.tbl
NET_LANE_USE_TABLE                     Lane_Use.tbl
NET_PARKING_TABLE                      Parking.tbl
NET_BARRIER_TABLE                      Barrier.tbl
NET_TRANSIT_STOP_TABLE                 Transit_Stop.tbl
NET_LANE_CONNECTIVITY_TABLE            Lane_Connectivity.tbl
NET_TURN_PROHIBITION_TABLE             Turn_Prohibition.tbl
NET_UNSIGNALIZED_NODE_TABLE            Empty_Unsignalized_Node.tbl
NET_SIGNALIZED_NODE_TABLE              Empty_Signalized_Node.tbl
NET_PHASING_PLAN_TABLE                 Empty_Phasing_Plan.tbl
NET_TIMING_PLAN_TABLE                  Empty_Timing_Plan.tbl
NET_DETECTOR_TABLE                     Empty_Detector.tbl
NET_SIGNAL_COORDINATOR_TABLE           Empty_Signal_Coordinator.tbl
NET_ACTIVITY_LOCATION_TABLE            Activity_Location.tbl
NET_PROCESS_LINK_TABLE                 Process_Link.tbl
NET_NEW_UNSIGNALIZED_NODE_TABLE        Unsignalized_Node.tbl
NET_NEW_SIGNALIZED_NODE_TABLE          Signalized_Node.tbl
NET_NEW_PHASING_PLAN_TABLE             Phasing_Plan.tbl
NET_NEW_TIMING_PLAN_TABLE              Timing_Plan.tbl
NET_NEW_DETECTOR_TABLE                 Detector.tbl
NET_NEW_SIGNAL_COORDINATOR_TABLE       Signal_Coordinator.tbl
NET_CONTROL_GENERATOR_ALGORITHM        F
NET_TIMING_GREENMIN_A                  25
NET_TIMING_GREENEXT_A                  12
NET_TIMING_YELLOW                      3
NET_TIMING_REDCLEAR                    1
NET_TIMING_CYCLE_LENGTH                60
NET_TIMING_GREENEXT_FRACTION           0.6
```