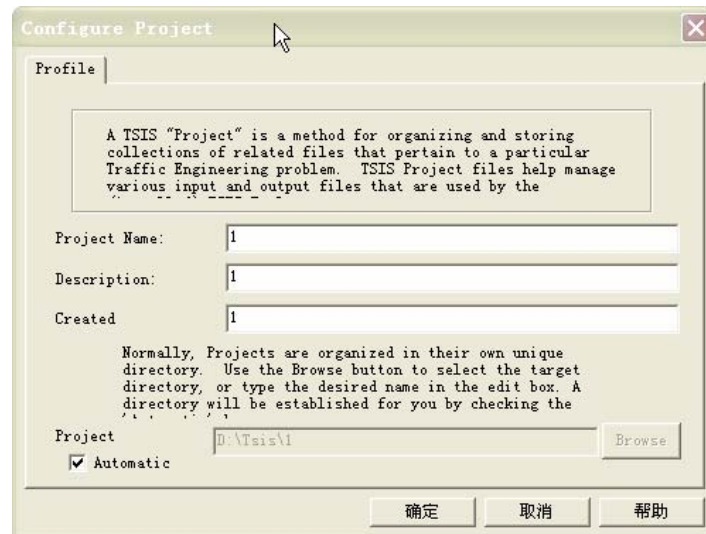
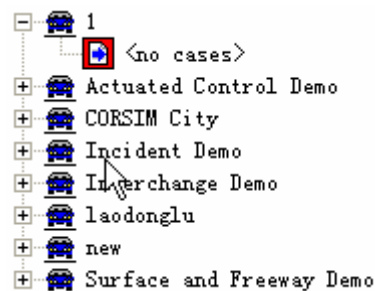


创建新文档

点击           中的小汽车符号，弹出以下对话框：



填写对话框，注意：填写时只能用数字或英文字母，不能使用中文，因为系统可能不识别。填写完后点击确定；



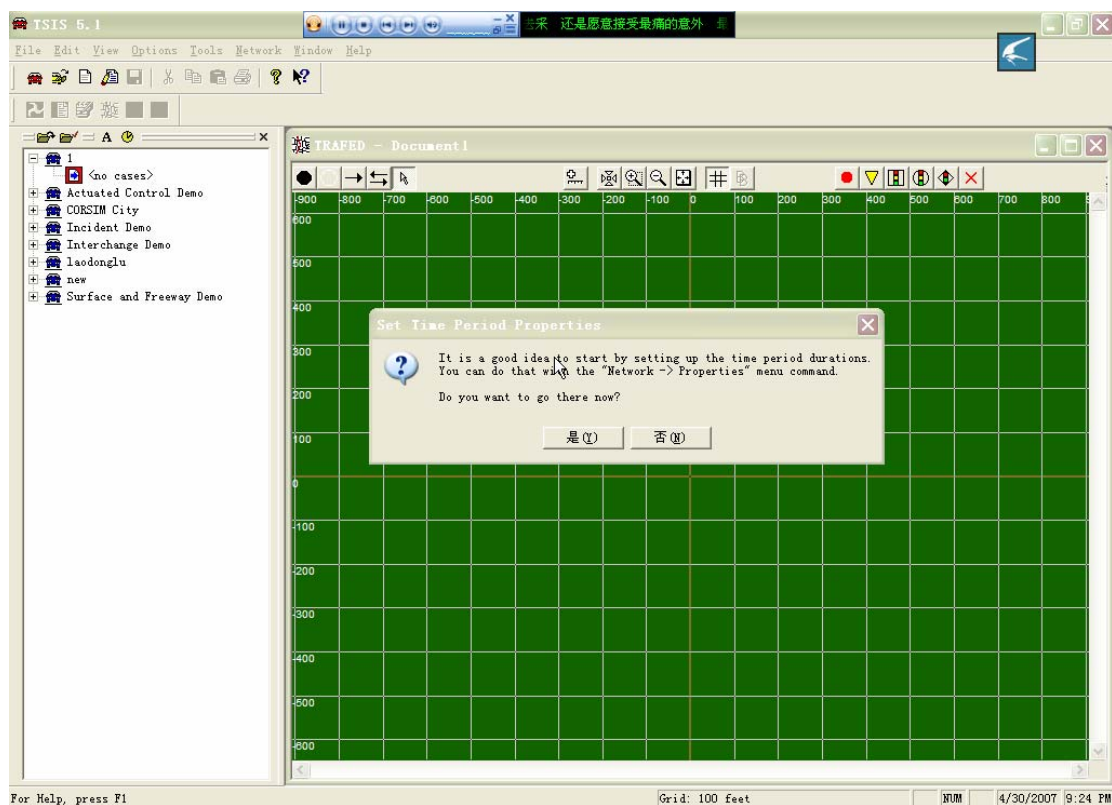
可以看到左框出现如图图标，选中“no cases”，点击工具栏中的纸张图标，



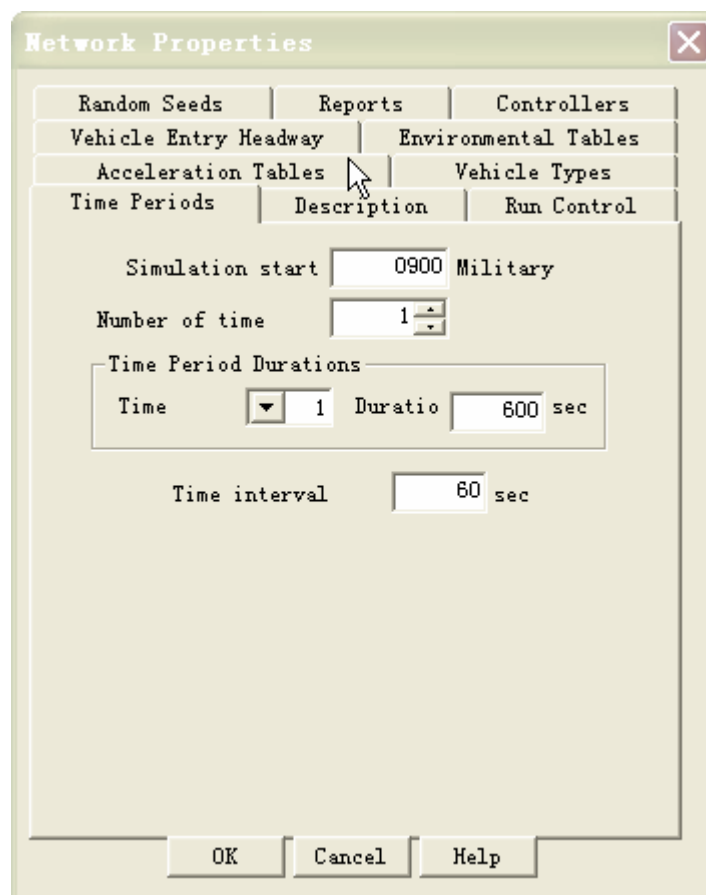
弹出以下对话框，选中“TRAFED”后点击“ok”；



便出现下图界面：



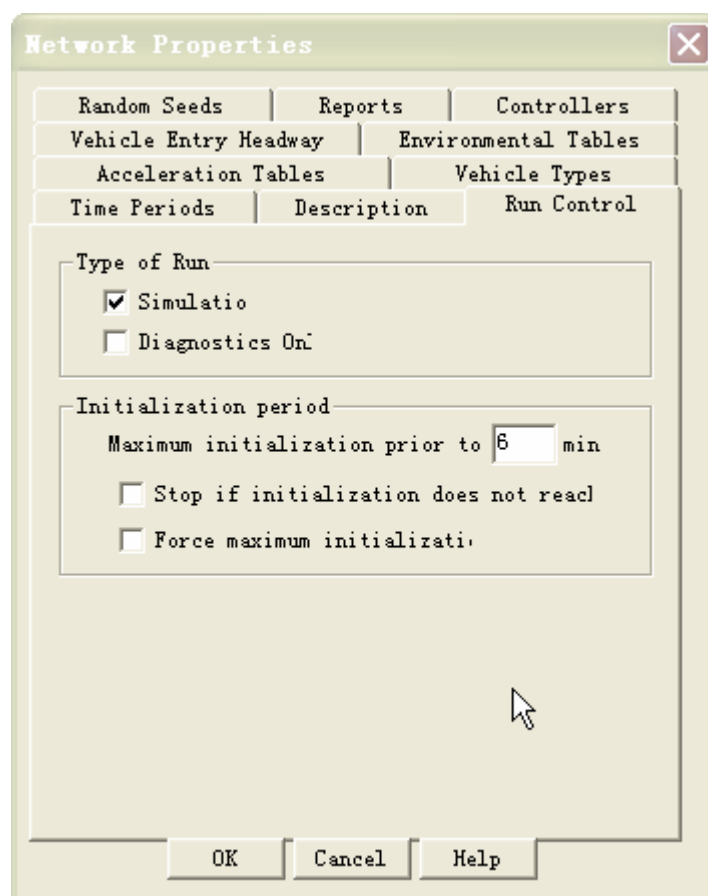
点击“是”；便出现以下对话框：



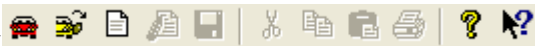
上图中“Simulation Start”为此文档的仿真起始时间，可以填写设定，“Duratio”

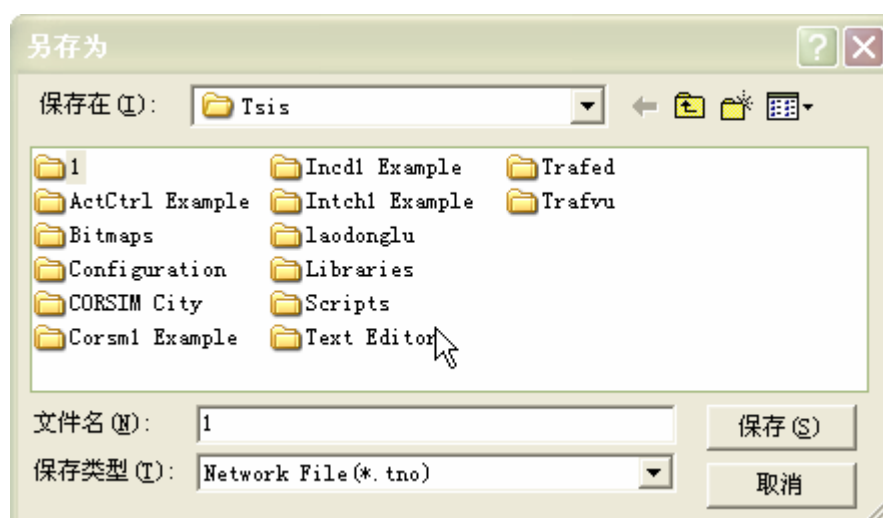
为仿真持续时间，填写范围为“10—9999”，“Time interval”为系统运行时间段，可以设定。

上述设定完后，点击“Run Control”弹出以下对话框：

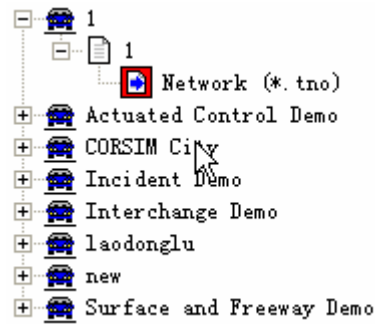


重新设置“Maximum initialization prior to”时间，该时间根据方针路网的大小来确定的，一般为路网中运行时间最长路线的时间。通常取较大值为宜。设置完后点击“ok”；

在点击  中的“保存”图标，弹出以下对话框：



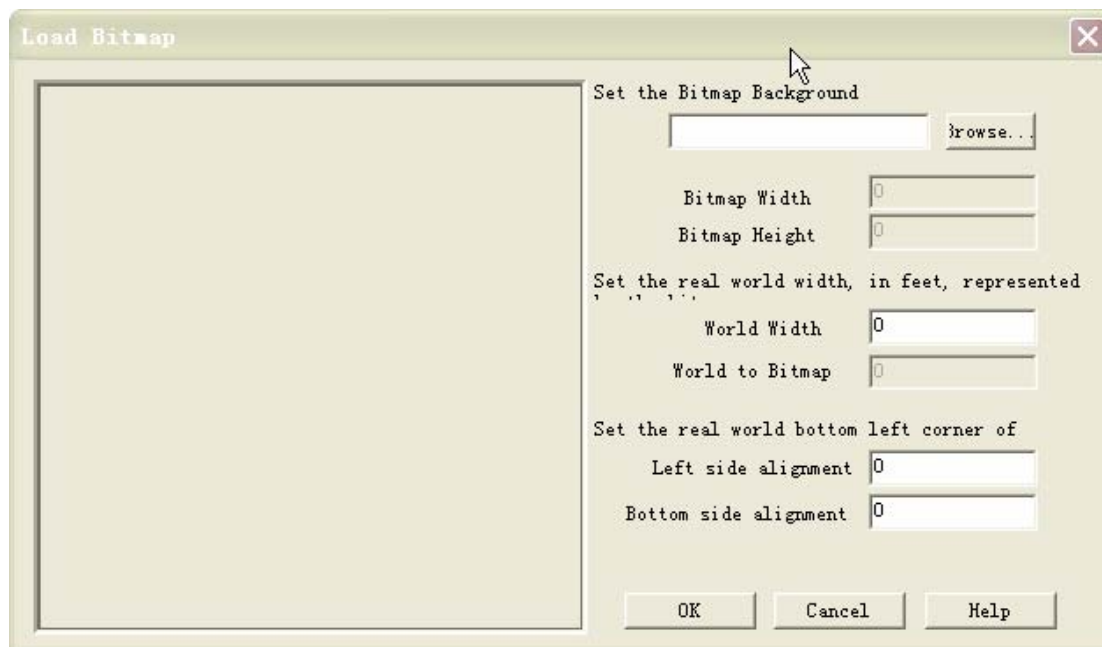
点击“1”文件夹，并取“1”文件名，点击保存：则得左框：



可以看出建立了名为“1”的“Network”，这样就建立了一个新文档。

插入底图

点击菜单栏“Network”——选择“Load Bitmap”——弹出以下对话框——点击“Browse”插入底图（注意底图格式必须为 .bmp 格式）



插入后“World Width”会显示初始图形宽度，进行比例换算后重新输入，最后两个对话框为纵横坐标，输入后点击“ok”即可。

城市道路部分

节点对话框简介

双击任一交叉口节点的以下对话框：

Intersection Properties

Node103Location:15053X13536Y

Select an approach (upstream node ID) to101

Lane Alignment

Conditional Turn Movements

Stop Line

Pedestrians

Control

Turn Movements

Turn Multipliers

Departures (downstream node

LeftThru:RightLeft

104102

Traffic opposing left-turners comesRight

Time-varying data

Time1

	Start time	Left	Thru	Right	Diagonal
▶	0		50	50	
*					

☒ Right turn on red all

OK

Cancel

Help

如上图所示，对话框最上端显示节点编号和该节点现在的纵横坐标，可以进行修改。初始对话框为“Turn Movements”，此对话框为输入每一进口道各转向和流量，点击“Lane Alignment”弹出以下对话框：

Intersection Properties

Node103Location:15053X13536Y

Select an approach (upstream node ID) to101

Stop Line

Pedestrians

Control

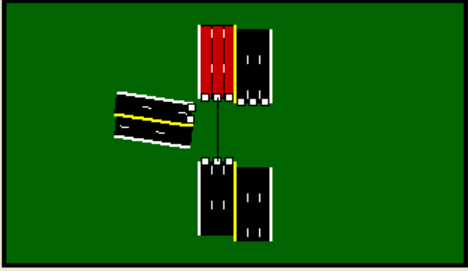
Turn Movements

Turn Multipliers

Lane Alignment

Conditional Turn Movements

Click and drag to set an alignment.
Click and drag over an existing alignment to remove



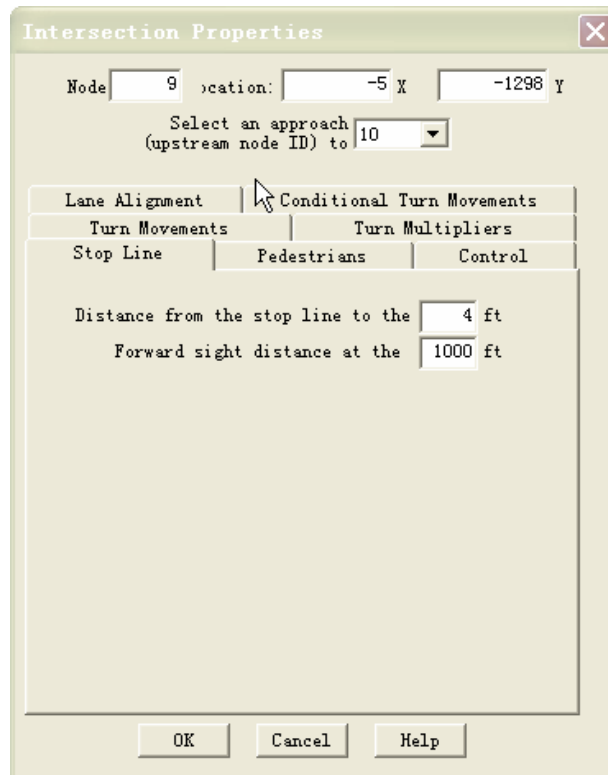
OK

Cancel

Help

该对话框可强行设置该节点交叉口每一进口道各车道转向,红色进口道为当前可设置的进口道,可用鼠标拖拽小方块进行设置。该功能使用较少,主要是在交通较为复杂路口使用。

点击“Stop Line”弹出以下对话框:

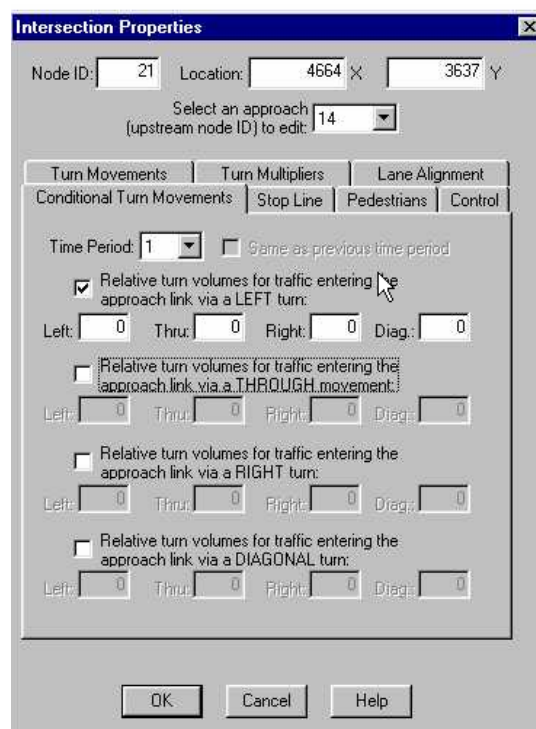


The dialog box is titled "Intersection Properties". It contains the following fields and tabs:

- Node: 9
- Location: -5 X, -1298 Y
- Select an approach (upstream node ID) to: 10
- Tabs: Lane Alignment, Conditional Turn Movements, Turn Movements, Turn Multipliers, Stop Line (selected), Pedestrians, Control.
- Distance from the stop line to the: 4 ft
- Forward sight distance at the: 1000 ft
- Buttons: OK, Cancel, Help.

此对话框在设置了信号控制的情况下可以调节每一进口道停车线至交叉口的距离,如上表中的 4ft, 该长度范围为 4-30ft。

点击“Conditional Turn Movements”弹出以下对话框:

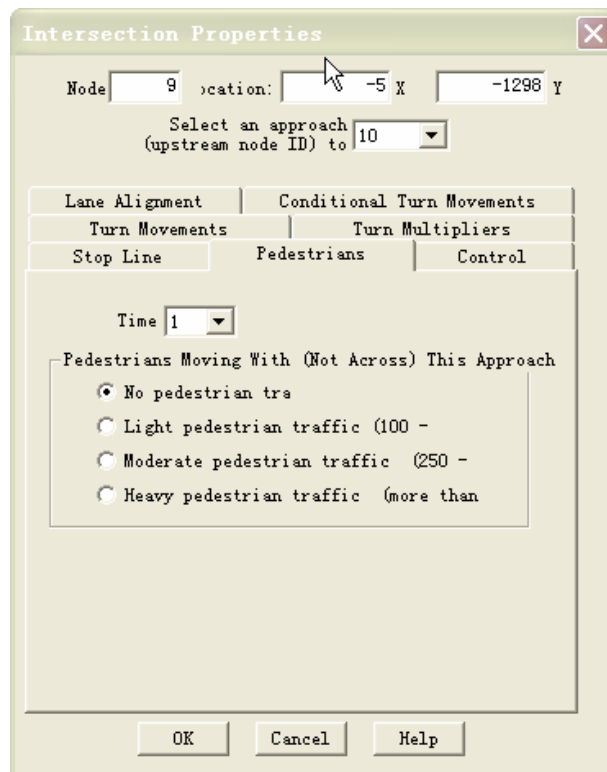


The dialog box is titled "Intersection Properties". It contains the following fields and tabs:

- Node ID: 21
- Location: 4664 X, 3637 Y
- Select an approach (upstream node ID) to edit: 14
- Tabs: Turn Movements, Turn Multipliers, Lane Alignment, Conditional Turn Movements (selected), Stop Line, Pedestrians, Control.
- Time Period: 1
- ☐ Same as previous time period
- ☒ Relative turn volumes for traffic entering the approach link via a LEFT turn:
 - Left: 0
 - Thru: 0
 - Right: 0
 - Diag: 0
- ☐ Relative turn volumes for traffic entering the approach link via a THROUGH movement:
 - Left: 0
 - Thru: 0
 - Right: 0
 - Diag: 0
- ☐ Relative turn volumes for traffic entering the approach link via a RIGHT turn:
 - Left: 0
 - Thru: 0
 - Right: 0
 - Diag: 0
- ☐ Relative turn volumes for traffic entering the approach link via a DIAGONAL turn:
 - Left: 0
 - Thru: 0
 - Right: 0
 - Diag: 0
- Buttons: OK, Cancel, Help.

该对话框针对环形交叉口而设置的，具体用法待续。

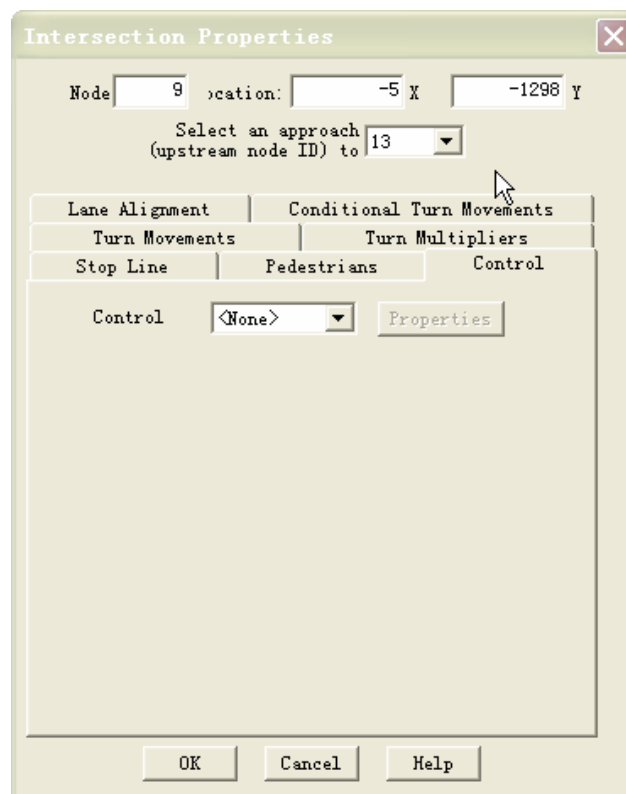
点击“**Pedestrians**”弹出以下对话框：



The dialog box is titled "Intersection Properties". It contains fields for "Node" (9), "Location" (-5 X, -1298 Y), and a dropdown for "Select an approach (upstream node ID) to" (10). Below these are tabs for "Lane Alignment", "Conditional Turn Movements", "Turn Movements", "Turn Multipliers", "Stop Line", "Pedestrians", and "Control". The "Pedestrians" tab is selected, showing a "Time" dropdown (1) and a section titled "Pedestrians Moving With (Not Across) This Approach". This section has four radio button options: "No pedestrian tra" (selected), "Light pedestrian traffic (100 -", "Moderate pedestrian traffic (250 -", and "Heavy pedestrian traffic (more than". At the bottom are "OK", "Cancel", and "Help" buttons.

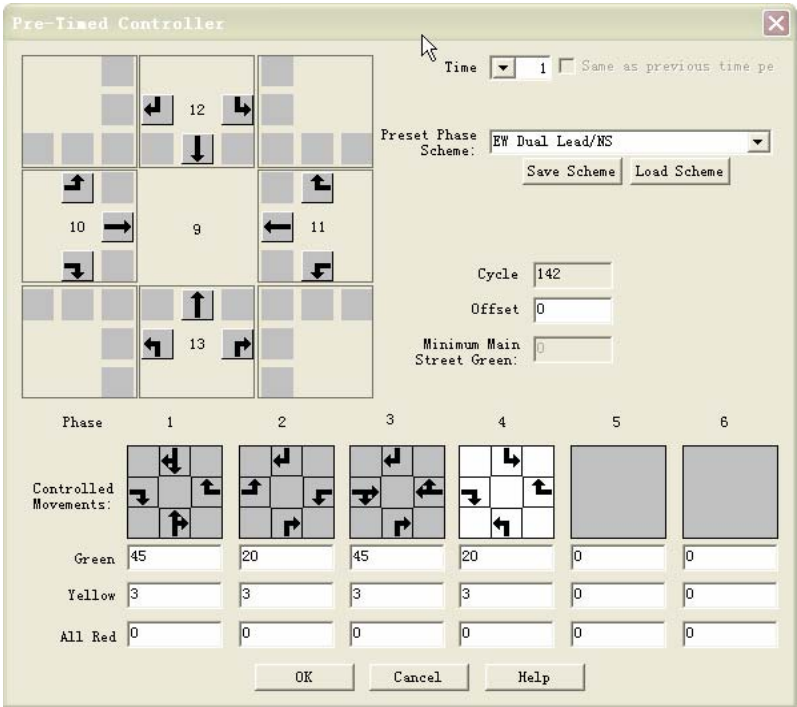
该对话框为设置每一进口道，行人过街数量的。从对话框中可以看出共分为四个等级，无行人（每小时小于 100 人次），较少行人（每小时在 100-250 人次），较多行人（每小时在 250-400 人次），很多行人（大于 400 人次）。

点击“**Control**”弹出以下对话框：



The dialog box is titled "Intersection Properties". It contains fields for "Node" (9), "Location" (-5 X, -1298 Y), and a dropdown for "Select an approach (upstream node ID) to" (13). Below these are tabs for "Lane Alignment", "Conditional Turn Movements", "Turn Movements", "Turn Multipliers", "Stop Line", "Pedestrians", and "Control". The "Control" tab is selected, showing a "Control" dropdown (None) and a "Properties" button. At the bottom are "OK", "Cancel", and "Help" buttons.

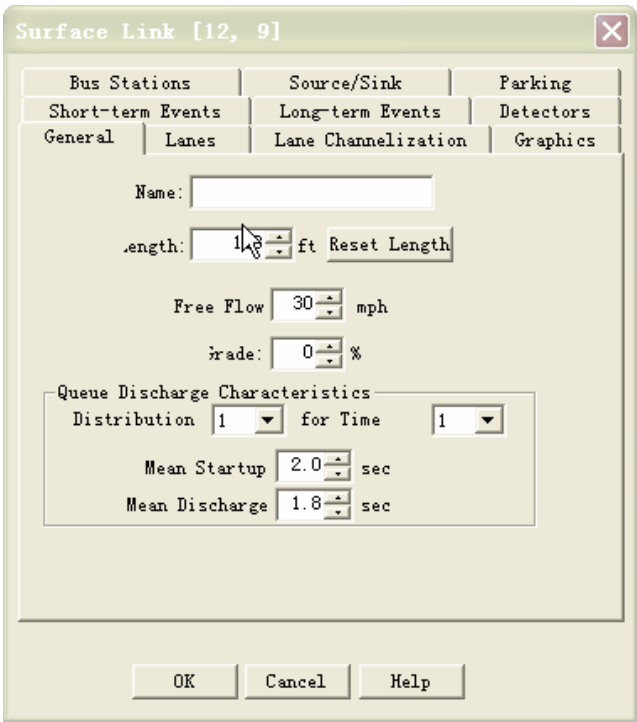
该对话框为设置该交叉口信号控制的。点击下拉菜单“Control”，有 None、Pretimed、Actuated 等三个选项，一般情况下选择 “Pretimed”，选择后点击 “Properties”，得以下对话框：



则可根据上述对话框内容填写信号控制类型。注意在设置绿波带时可运用 “offset” 进行初始时间的设置。

路段对话框简介

双击任一路段，得以下对话框：



初始显示为“General”对话框，该对话框可输入该路段路名，可显示长度（该长度可以改变，此功能在设置环形路时使用）当要还原时，可点“Reset Length”即可还原为初始长度；往下为输入该路段的自由流车速，同时可设置停车线第一辆车的启动时间（0.5-9.9sec 之间），以及排队时的车头时距（大于 1.4sec）。

点击“Lanes”弹出以下对话框：

The screenshot shows the 'Surface Link [12, 9]' dialog box with the 'Lanes' tab selected. The dialog has a title bar with a close button. Below the title bar is a tabbed interface with the following tabs: 'Bus Stations', 'Source/Sink', 'Parking', 'Short-term Events', 'Long-term Events', 'Detectors', 'General', 'Lanes' (selected), 'Lane Channelization', and 'Graphics'. The 'Lanes' tab contains the following controls:

- '# of Full' with a spinner set to 4.
- 'Left Turn Pocket' section with '# of' (0) and 'length' (0 ft) spinners.
- 'Right Turn Pocket' section with '# of' (0) and 'length' (0 ft) spinners.
- 'Lane Alignment with Through Link' section with 'Lane 1 of this link aligns 1 downstream'.
- 'Lane Widths' section with 'Lane' (dropdown), 'width' (12 ft), and a checked 'All lanes same w' checkbox.

At the bottom are 'OK', 'Cancel', and 'Help' buttons.

该对话框可设置该路段进口道车道数，以及专左、专右车道数和长度，往下可设置每一条车道的宽度。

点击“Lane Channelization”弹出以下对话框：

The screenshot shows the 'Surface Link [12, 9]' dialog box with the 'Lane Channelization' tab selected. The dialog has a title bar with a close button. Below the title bar is a tabbed interface with the following tabs: 'Bus Stations', 'Source/Sink', 'Parking', 'Short-term Events', 'Long-term Events', 'Detectors', 'General', 'Lanes', 'Lane Channelization' (selected), and 'Graphics'. The 'Lane Channelization' tab contains the following controls:

- 'Time' (1) and a checkbox 'Same as previous time pe'.
- 'Lane Channelization' section with a list of 7 lanes, each with a dropdown menu for its function: Lane 1 (Right turn only), Lane 2 (Through only), Lane 3 (Through only), Lane 4 (Left turn only), Lane 5 (empty), Lane 6 (empty), and Lane 7 (empty).

At the bottom are 'OK', 'Cancel', and 'Help' buttons.

在确定了每一进口道车道数后，点击此对话框对每一车道转向进行设置。

Channelization
Unchannelized
Left turn only
Buses only
Closed
Right turn only
Carpool only
Carpools and buses only
Right turns + right diagonal; right turns + through; also right turns + right diagonal + through if no other lane allows the through movement
Left turns + left diagonal; left turns + through; also left turns + left diagonal + through if no other lane allows the through movement
All movements permitted by the geometry and adjacent lane channelization
Diagonal traffic only
Through traffic only

选择方式如上图所示，有无、专左、公交专用、封闭、专右、合用汽车专用、合用汽车与公交专用、直右、直左、自由、对角、直行等。

点击“**Graphics**”弹出以下对话框：

该对话框用于设置曲线道路的，可选择“**Direction of**”中的曲线方向，顺时针或逆时针。同时可也设置道路的分层，这在立交中设用较多。

Surface Link [12, 9]

Bus Stations	Source/Sink	Parking
Short-term Events	Long-term Events	Detectors
General	Lanes	Lane Channelization
		Graphics

Direction of

Straight

Minimum drawn radius of curvature

How tightly may TRAFVU curve the link in order to smoothly join at the nodes?
Smaller numbers allow tighter turns, for

8

feet radius of

Links passing under this link

OK

Cancel

Help

点击“Short-trem Events”弹出以下对话框：

Surface Link [12, 9]

Bus Stations

Source/Sink

Parking

General

Lanes

Lane Channelization

Graphics

Short-term Events

Long-term Events

Detectors

Short-term events are generated stochastically to represent brief blockages of the rightmost lane due to illegal parking, standing, etc. The product of the frequency and the

☒ Generate short-term events on tl

Mean frequency of 9 events/h

Mean duration of an 60 sec

OK

Cancel

Help

该对话框用于记录该路段平均每小时发生交通事故（阻塞、施工等）次数以及平均事故时间间隔的（1-60 秒），当大于 60 秒时被视为 Long-trem Events。

点击“Long-trem Events”弹出以下对话框：

该对话框用于记录长时间事故的，分别填写起始时间、时间间隔、事故发生在第几车道。例如下图所示：

Surface Link [12, 9]

Bus Stations

Source/Sink

Parking

General

Lanes

Lane Channelization

Graphics

Short-term Events

Long-term Events

Detectors

Long-term events

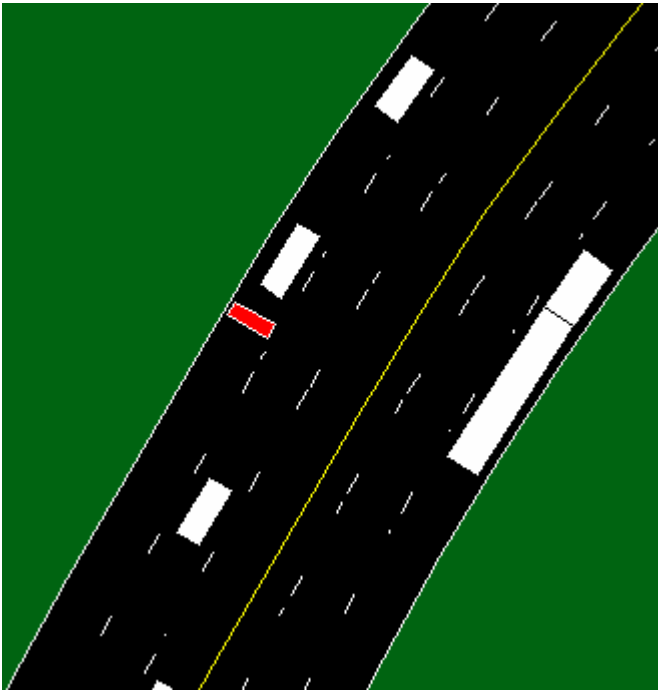
	Start time	Duration	Lane blocked
	1	62	2
*			

OK

Cancel

Help

设置后出现如下图所示效果，图中第一匝道为事故匝道，有一红色方块标示。



点击 “Bus Station” 弹出以下对话框：

Surface Link [12, 9]

Short-term Events

Long-term Events

Detectors

General

Lanes

Lane Channelization

Graphics

Bus Stations

Source/Sink

Parking

Time 1

Bus Stations									
	Station #	Blocks traffic?	Loc.	Cap.	Station type	Mean dwell	Bypass %	Same as prior TF	
	1	☐	60	2	1	15	0	☐	
		☐						☐	

OK

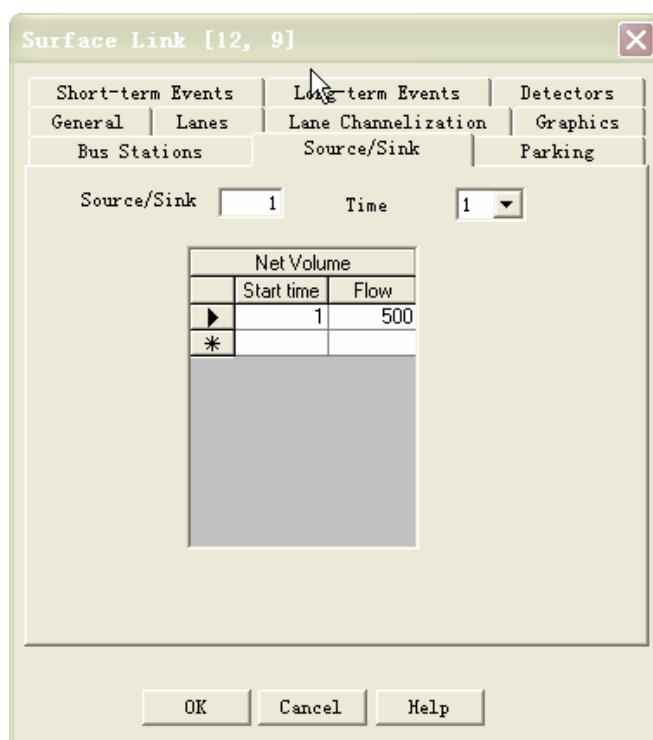
Cancel

Help

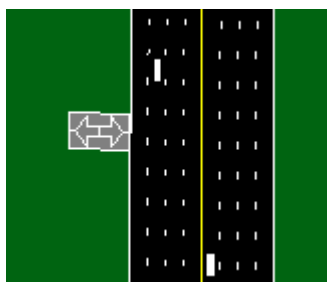
该对话框用于公交站点设置的，第一栏为站点编号（1-99 不得大于 99），第三栏位该站点与此路段停车线的距离，第四栏为该站台一次能同时停几辆公交车，第六栏为停车时间，第七栏为该站点公交车不停车的概率必须小于 90%。

点击 “Source/Sink” 弹出以下对话框：

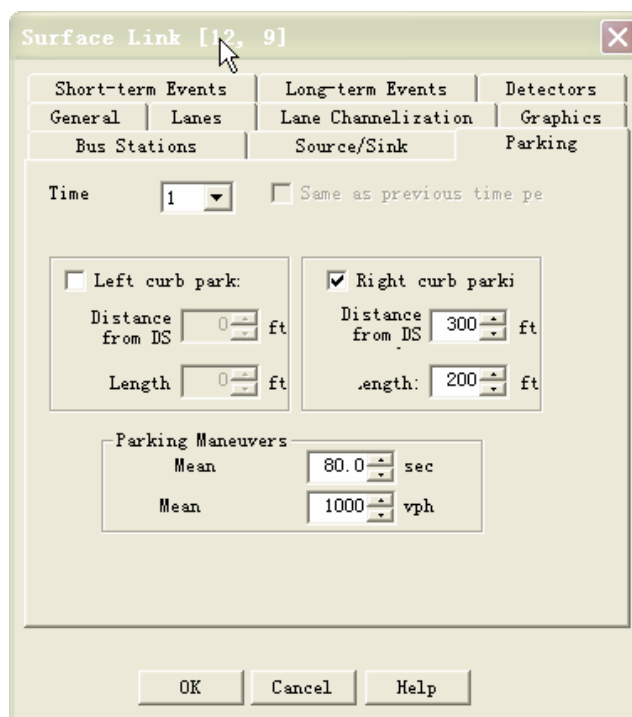
该对话框运用于当两交叉口之间有流量较大的小进出口时，为弥补下游交叉口流量而设置的。分别填写编号，起始时间，进出流量，出流量+，进流量为-。进出点自动设置与该路段中间。



设置后如下图所示：

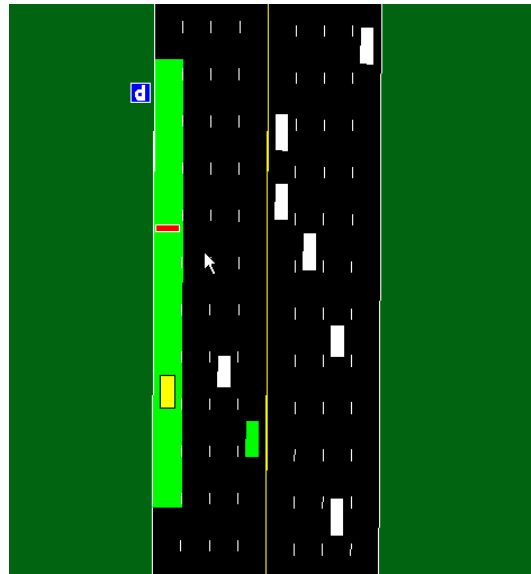


点击“Parking”弹出以下对话框：



该对话框用于设置路边停车带的。可设置右停车带和左停车带，“Distance from DS node”填入停车带距停车线距离，“Length”填入停车带长度。最后填入平均停车时间和平均每小时停车数（大于14）。

设置后如下图所示：



线路分层

双击要分层的线路——弹出“Surface Link[x,x]”对话框——点击“Graphics”栏——调节“Link passing under this link”即可。

设置道路曲线

双击要设曲线的线路——弹出“Surface Link[x,x]”对话框——点击“Graphics”栏——选择“Driection of”中选项——点击“General”栏——在“Length”栏中填曲线长度即可。

道路车道设置

双击要设置的线路——弹出“Surface Link[x,x]”对话框——点击“Lane”——弹出以下对话框——填写“# of Full”为出了专用车道外的车道数——如果要设置左转或右转专用车道

Surface Link [49, 47]

Bus Stations

Source/Sink

Parking

Short-term Events

Long-term Events

Detectors

General

Lanes

Lane Channelization

Graphics

of Full2

Left Turn Pocket

of0

length:0 ft

Right Turn Pocket

of0

length:0 ft

Lane Alignment with Through Link

Lane1 of this link aligns 1 downstream.

Lane Widths

Lane: /width:12 ft ☒ All lanes same w

OK

Cancel

Help

则填写“Left Trun Pocket”和“Right Trun Pocket”，“# of”为专用车道数，“Length”为专用车道纵向长度。同时可设置车道宽度。

再点击“Lane Channelization”——弹出以下对话框——选择各车道的转向或专用情况。

Surface Link [49, 47]

Bus Stations

Source/Sink

Parking

Short-term Events

Long-term Events

Detectors

General

Lanes

Lane Channelization

Graphics

Time1 ☐ Same as previous time pe

Lane

Channelizati

1Unrestricted

2Unrestricted

3

4

5

6

7

OK

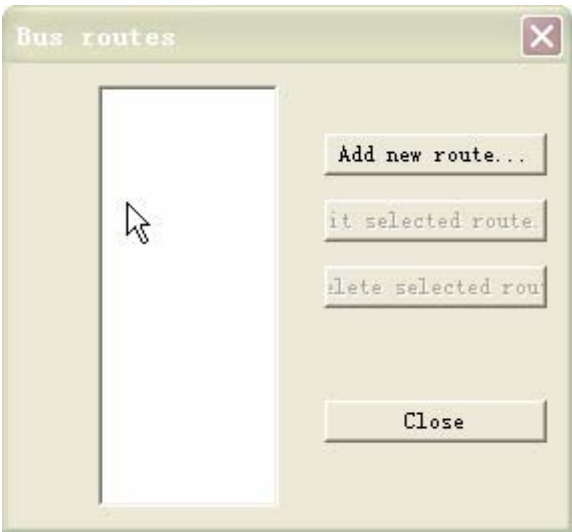
Cancel

Help

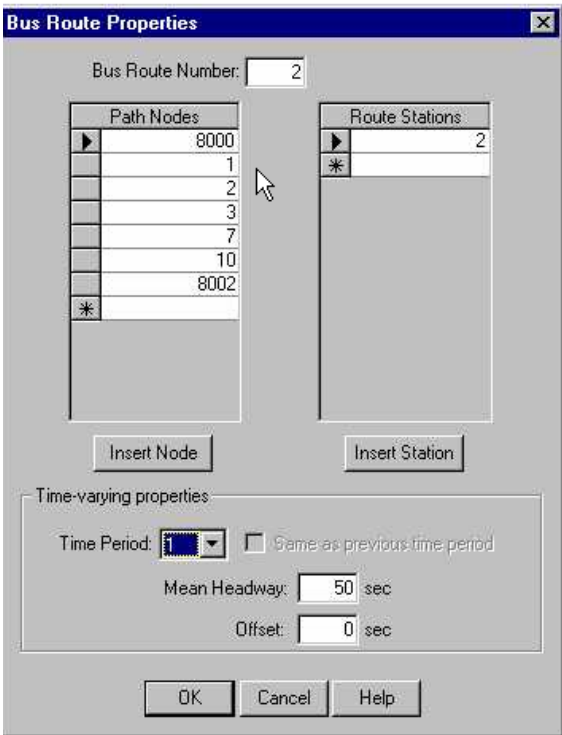
注意：“1”代表最靠外的车道，以下依次类推进行设置。

公交线路设置

在空白车单击右键，点击“Edit Bus Routes”或点击菜单栏中的“Network”选“Edit Bus Routes”则弹出以下对话框：



点击“Add new route”，则弹出如下对话框：



该对话框是在设置完路网各道路路段上公交站点后设置的，如上图所示，左框填写 2 路车从起点站至终点站所经过的节点，右框为 2 路车沿途要停的站点，往下为发车间隔 50 秒，起始时间为 0。

城市道路运行时常见的提示错误

*******FATAL ERROR - 2083 - Illogical channelization code for lane 2 of link (7,1). Check Record Type 11.**

意思是：节点 7 到节点 1 的第二车道有问题，可能是该车道为专左或专右车道，但在设置时车道行驶为“Unrestricted”。

解决方法为：双击节点 1——弹出“Intersection Properties”对话框——查找从节点 7 到节点 1 这条车道的行驶方向——双击该道路——弹出“Surface Link[7,1]”对话框——点击“Lane Channelization”栏——调节车道专用方向即可。

*******FATAL ERROR - 2303 - Link (74,75) was specified as an underpass more than once on the Record Type 196 for link (75,72).**

意思是：道路 74-75 与道路 75-72 的分层有问题。

解决方法为：双击道路 74-75——弹出“Surface Link[x,x]”对话框——点击“Graphics”栏——检查“Link passing under this link”即可。

******* WARNING - 402 - It may not be possible to display link (158,157) as a curved link because the input link length, 138, is less than or equal to the link length computed from the node coordinates, which is 138.**

意思是：道路 158-157 设置曲线长度时出了问题。

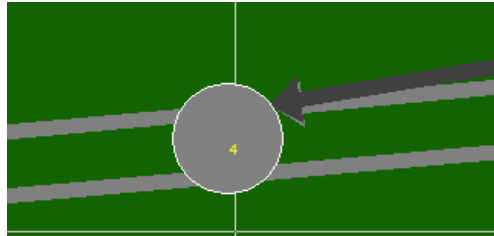
解决方法为：双击道路 158-157——弹出“Surface Link[158,157]”对话框——点击“Graphics”栏——检查“Driection of”即可。

高速公路部分

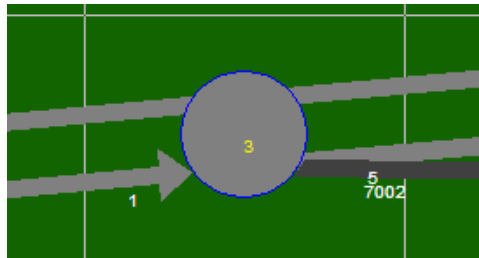
节点对话框简介

高速公路设置与城市道路设置有很大不同，特别是在高速公路匝道处的设置尤为突出。

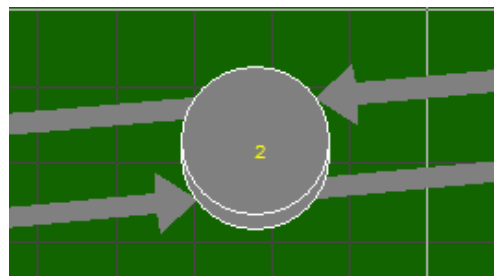
高速公路节点为白色，如下图所示：



节点 1



节点 2



节点 3

高速公路节点共有 3 种不同形式，分别如上图所示，节点 1 为驶进匝道类型、节点 2 为驶出匝道类型、节点 3 为沿途类型。

双击节点 1 弹出以下对话框：

Freeway Node Properties

ID: 4 Location: 3297 X 2833 Y

Connections

Ramp Meter

Incoming Link: [6, 4]

Through Link: [4, 2]

Ramp Link: [24, 4]

Ramp position:

Right of mainl

Left of mainl

OK

Cancel

Help

该对话框显示了主线、匝道线以及驶进匝道的位 置，如上图显示位于主线右边。
双击节点 2 弹出以下对话框：

Freeway Node Properties

ID: 3 Location: 2550 X 2763 Y

Turn Movements

Connections

Time 1

Off-ramp reaction 2500 feet upstream from

HOVs reaction point 2500 feet upstream from

Relative Turn Volumes			
	Start time	Thru traffic	Exiting traffic
▶	0	85	15
*			

Exit percentage multipliers for specific vehicle ty

Vehicle Type

100

2:

100

3:

100

4:

100

5:

100

6:

100

7:

100

8:

100

9:

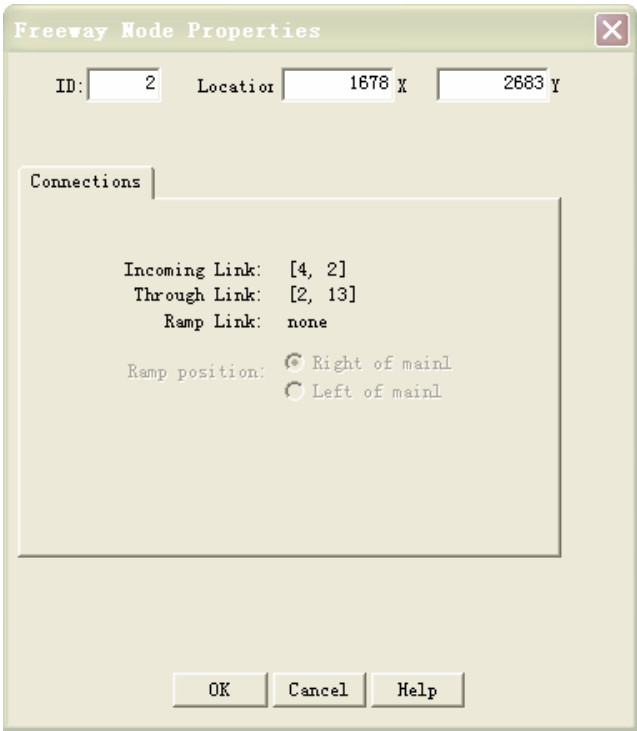
100

OK

Cancel

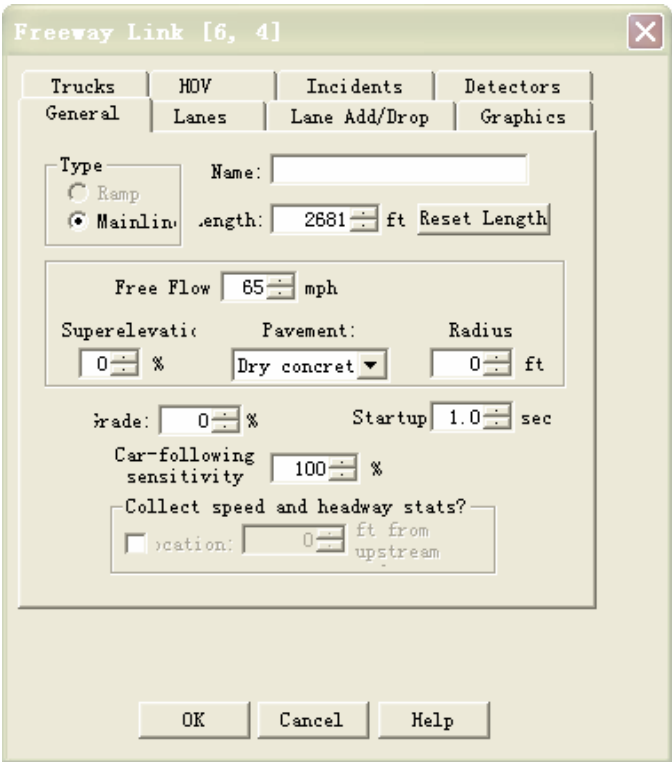
Help

该对话框“Turn Movement”用于填入主线流量和匝道流量，“Connections”与上图一样。
双击节点 3 弹出以下对话框：



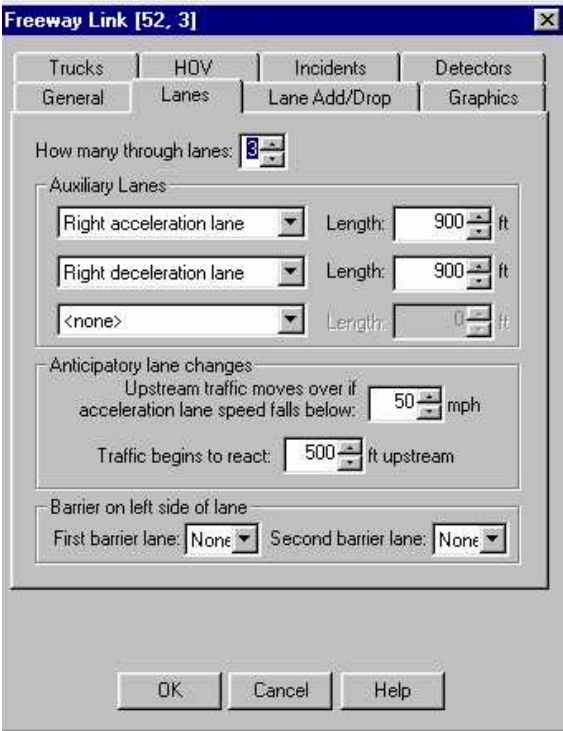
路段对话框简介

双击任意路段得以下对话框：



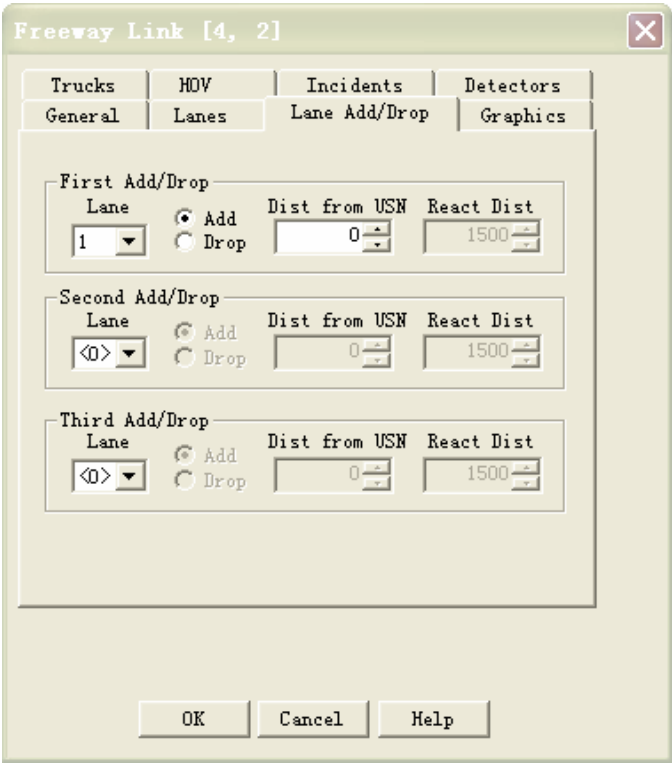
该对话框“General”中的“Type”显示了当前路段为匝道还是主线，往右为路段长度，往下为自由流车速，“Superelevation”为超高值，“Pavement”为路面类型（分别有湿性混凝土型、干性混凝土型、湿性沥青型、干性沥青型四种），“Radius”为曲率，“Startup”为启动延误时间（小于 6 秒）。

单击“Lane”对话框如下：

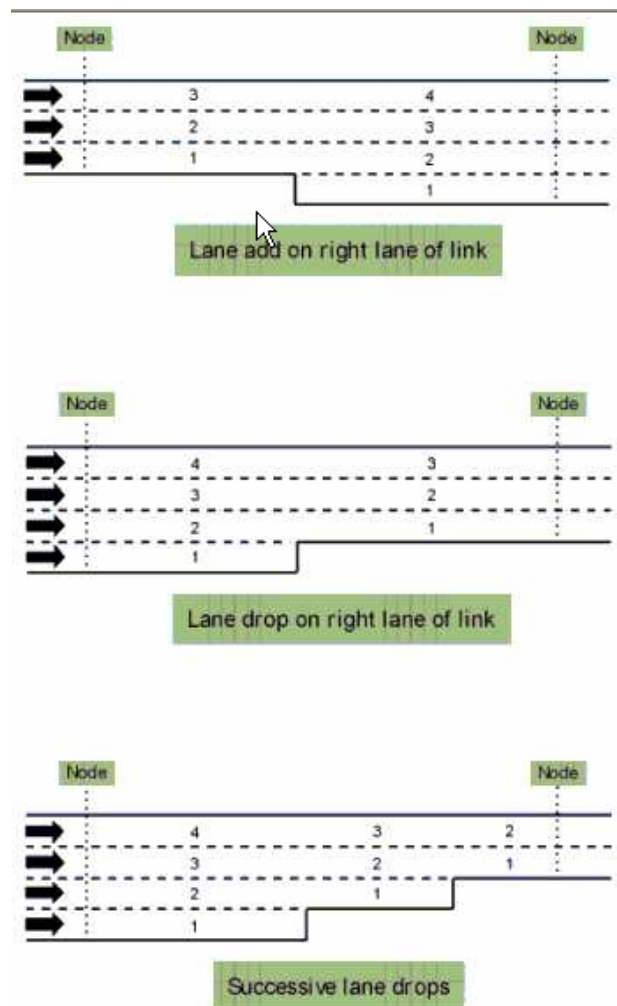


该对话框最上为输入该路段直行车道数，“Auxiliary”为辅助车道设置（有右加速车道、右减速车道、右全能车道、左加速车道、左减速车道、左全能车道），同时设置车道长度。当设置了辅助匝道后“Anticipatory lane changes”对话框将启动，它用于设置辅助匝道最小车速，最后为设置障碍车道（如施工车道）。

单击“Lane Add/Drop”对话框如下：



该对话框用于在两节点之间进行增加/减少车道的设置，如下图所示：



单击“Tracks”弹出以下对话框：

Freeway Link [4, 2]

General	Lanes	Lane Add/Drop	Graphics
Trucks	MOV	Incidents	Detectors

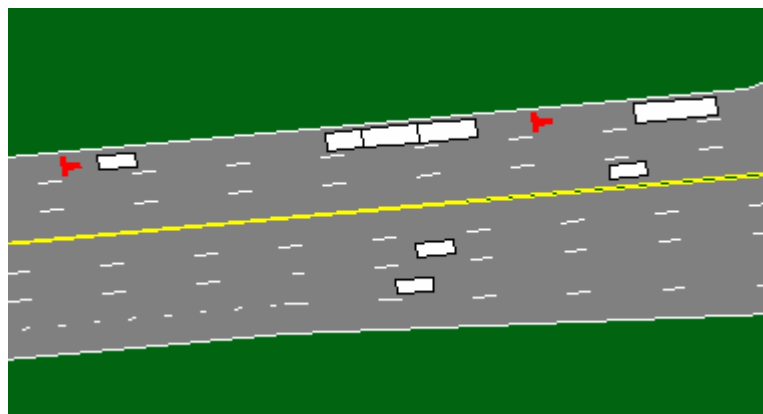
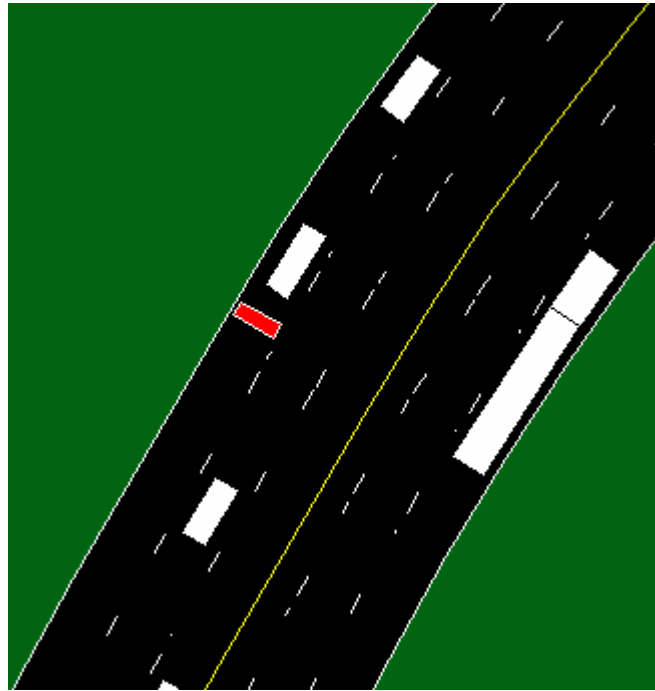
Trucks

☐ Not biased or restricted to a
☒ Biased to a set of
☐ Restricted to a set of

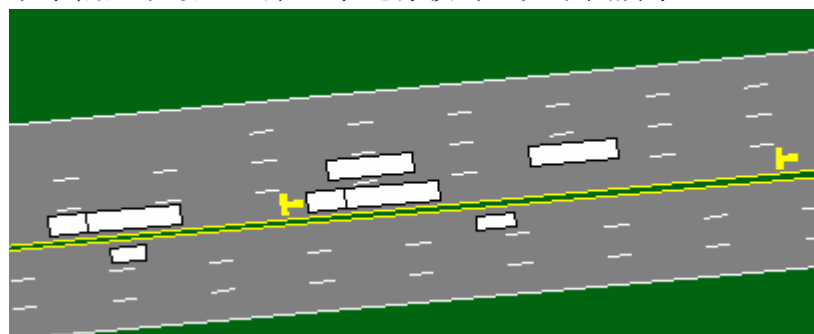
Trucks are

☒ Rightmost through
☐ Leftmost

OK Cancel Help



从上图可以看出，大货车被限制在标有红色 T 形标志的最右第一直行车道内。
如当选择大卡车偏重于最左边第一车道行驶时，如下图所示：



从上图可以看出，大货车偏重于在标有黄色 T 形标志的最左边第一直行车道内。

点击“HOV”弹出以下对话框：

Freeway Link [4, 2]

General Lanes Lane Add/Drop Graphics
Trucks HOV Incidents Detectors

Number of HOV 1

Location
☐ Left sid
☒ Right sid

Type of HOV lane
☐ Non-exclusive, concurr
☒ Exclusive

HOV lane 100 ft from upstream

Extends to end of link

HOV lane 800 ft from upstream

Drivers begin to 5280 ft before start of

Time-varying characteristics

Time 1 ☐ Same as previous time period percentage

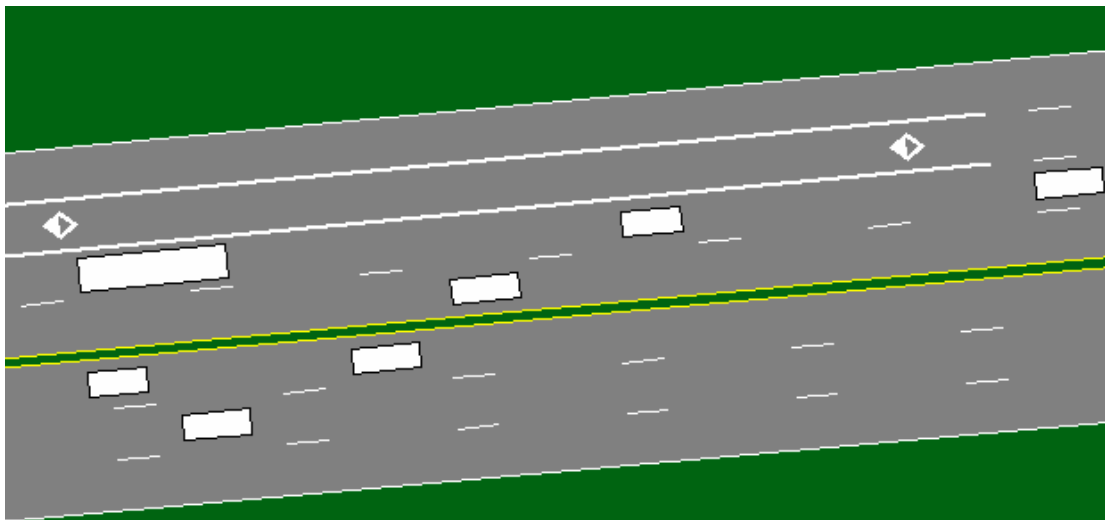
Allowed ☒ from FRESIM Setup

Carpools only Pct usage by 100 %

OK Cancel Help

该对话框用于设置 HOV（High Occupancy Vehicle）车道的，这种车道的设置在中国不多见，但在国外常见，它用于鼓励合乘和减少车流量的，规定至少有两入同车时才能进入该车道，否则禁行。

如上图中就设置了数量 1 靠最右，且为有隔离带（Exclusive）的 HOV 车道，该车道从上游 100ft 处起至 800ft 处止。同时该车道只允许“Carpools”行驶。设置后如下图所示：



图中出现的标有半实半虚菱形的车道及为 HOV 车道。

点击“Incidents”弹出以下对话框：

Freeway Link [4, 2]

General	Lanes	Lane Add/Drop	Graphics
Trucks	HOV	Incidents	Detectors

Incident: 1 [New] [Delete]

Time of: 0 sec ration: 50 sec

Dist. from: 500 ft length: 300 ft

Lanes Affected by the Incident

Lane: 2

☐ Normal speed

☐ Traffic capacity reduced by rubberneck

☒ Blockage at point of incident

Rubberneck: 0 %

Location of incident: 1500 ft

[OK] [Cancel] [Help]

该对话框用于设置发生交通事故的路段，如上图就设置了一次事故。该事故起始时间为 0，即已开始模拟时就开始，持续时间为 50 秒，事故路段为距上游 500ft 开始，长为 300ft 的一段，该事故导致路段完全封死（共有三种结果：无影响正常速度行驶、通行能力下降、完全禁止通行）。

高速公路运行时常见的提示错误

***** WARNING - Either a minimum acceleration lane speed or an anticipatory distance was entered on Record Type 20 for link (5, 7). This link does not have an acceleration lane so these values will be ignored. Check Record Types 19 and 20 for this link.

意思是：高速路段 link [5,7]至少要设置一段加速路段