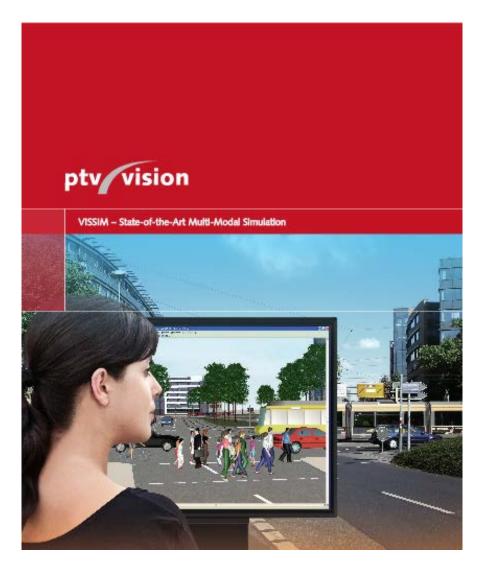
Getting Started: VISSIM



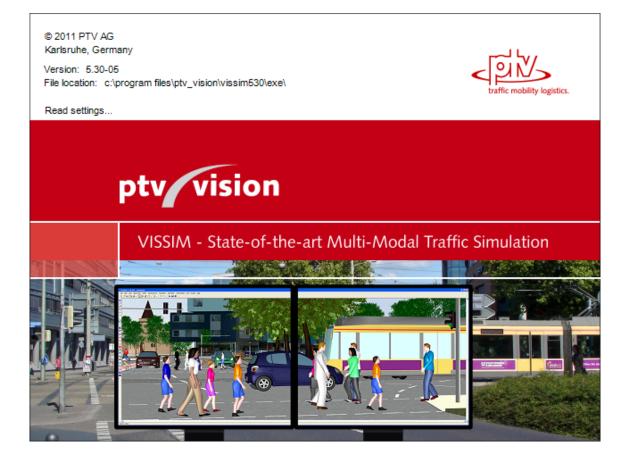
Version 1.1

February 5, 2015

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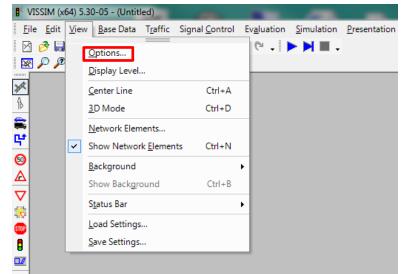
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Section 1: General Settings



Switch to English units:

1. Go to View, then Options

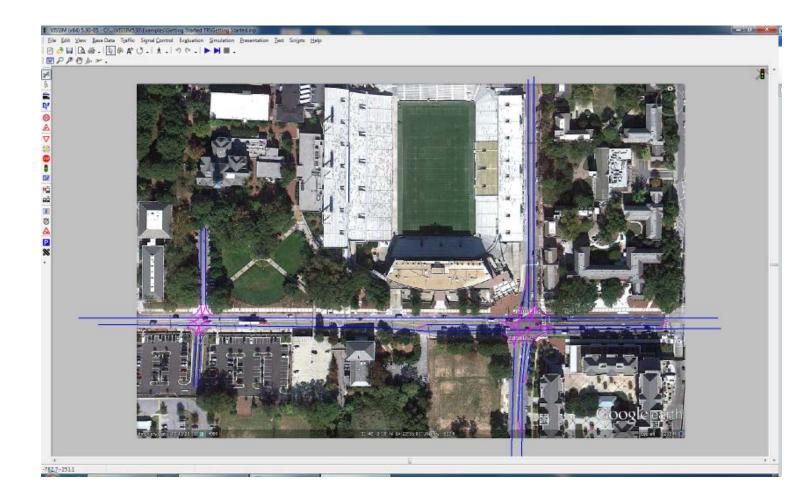


2. Select the Language & Units tab

3	Display Options						
	Network	Vehicles	Pedestrians	Colors	3D	Language & Units	
	Language	:	English	English			•
	Units:			Distance:	ft		•
					mi		-
				Speed:	mph		•
			Acc	eleration:	m/s²		-
					m/s²		
					ft/s²		
Ľ						OK Can	cel "#

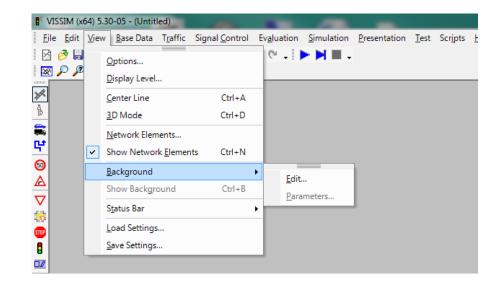
3. Change **Distance**, **Speed** and **Acceleration** to English units.

Section 2: Build a Network



Lesson 1: Add a background image

1. Go to View > Background > Edit



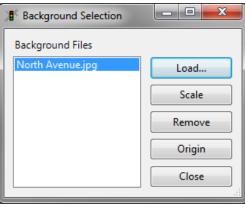
Click **load** and navigate to image file and select **Open**.
 The image used in this example can be found <u>here</u>

Background Selection	
Background Files	
	Load
	Scale
	Remove
	Origin
	Close

* supported background formats

Supported bitmap formats	Supported vector formats
BMP	DWG ¹⁾
JPG	DXF ¹⁾
PNG	EMF
TGA	WMF
TIF (uncompressed & packbits)	SHP (shape files)

3. The image name displays in the background files list and loads in the bottom right hand corner of the screen



*click the show entire network button to locate image



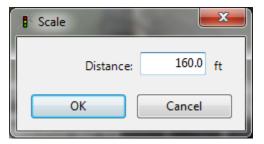
4. Select **Scale** to scale the image.

Background Selection					
Background Files					
North Avenue.jpg	Load				
	Scale				
	Remove				
	Origin				
	Close				
	.::				

5. A scale will replace the mouse icon. Click and drag the scale over a know distance (ex across one 12ft lane, a roof top width, parking space, etc...)



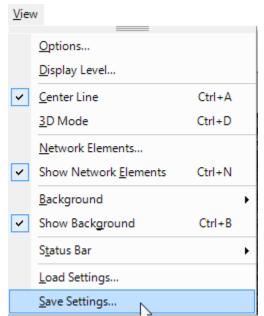
6. Then enter the known distance in the scale window. Click OK



7. The image is now scaled. Click the show entire network button.



8. Go to View > Save Settings



9. Name and save your layout settings

* You must load settings each time you open a new session.

Lesson 2: Draw/Edit links (links are one way):

1. Click the **link** button



- Click and Hold the right mouse button and drag in the direction of travel to create a link.
 * draw the link in the center of the direction of travel. If one lane- the middle or the lane, if two lanes-the center line, if three lanes-the middle of the center lane, etc....
- 3. Enter the following in the **Link Data** Window
 - a. Name: Street Name
 - b. No. of Lanes : # of lanes in one direction (thru lanes)
 - c. Behavior Type: Urban or Freeway
 - d. Lane Width: leave at 12ft (or reduce to 11ft to view line striping on background image)

1	Link Data		-	_	_	
L	No.:	1	Name:	North Avenue (B	EB)	
	No. of Lanes:	2		Behavior type:	1: Urbar	n (motorized) 🔹
	Link Length:	1432.894 ft		Display type:	1: Road	surface gray 🔻
	Lanes Display Lane width: Various Lane Lane Clos No Lane Ch	ure				Change Direction Generate opposite direction No. of Lanes: 2 Use as pedestrian area
						OK Cancel

***SHORTCUT** Select "Generate in opposite direction" to create a mirrored link in the opposite direction (i.e. For a two way street) The link may need to be shifted to the exact offset.

4. Repeat to recreate the entire network to be modeled.



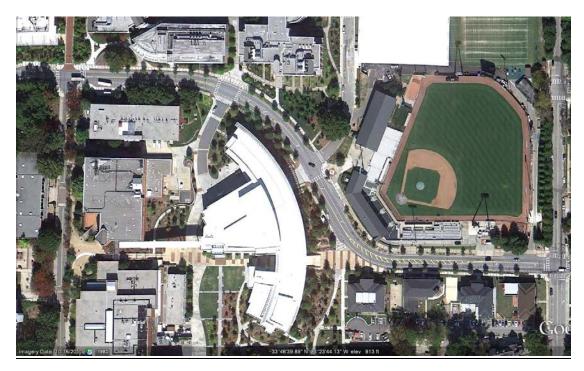
*CTRL + A will change the link view from centerline (above) to lane (below)



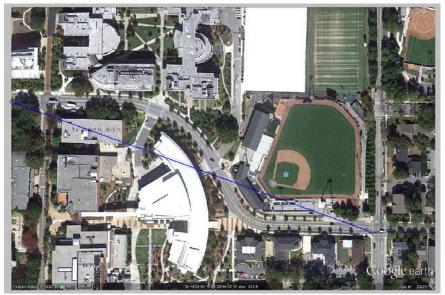
To move a link:

- 1. Left click a point on the link and drag to desired location.
- 2. Move as many points as necessary to create the desired alignment
 - a. To create a point left click to select a link, then right click to add a point
 - b. To delete a point left click a point and drag it over the nearest point

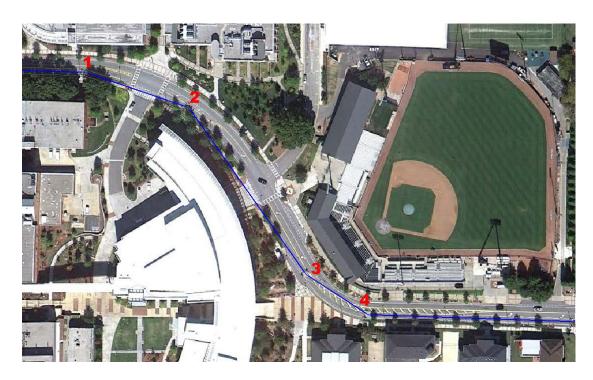
Create a curve:



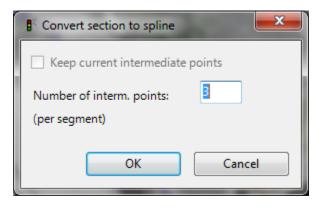
- 1. Draw a line that closely follows the alignment
 - a. Draw a straight line for begin to end.



b. Right click to add four additional points (one before and after each curve)



2. Left click and hold on a point to the right of Point 1 (be careful not to select the point itself), drag along the link and release just before Point 2. This box will appear.



3. Enter the number of points desired (the higher the number of points the smoother the curve)

4. The curve is created



5. Select individual points to smooth out the curve if need. Or repeat the process from step 1.

Lesson 3: Draw connectors

(connectors are used for turn movements)

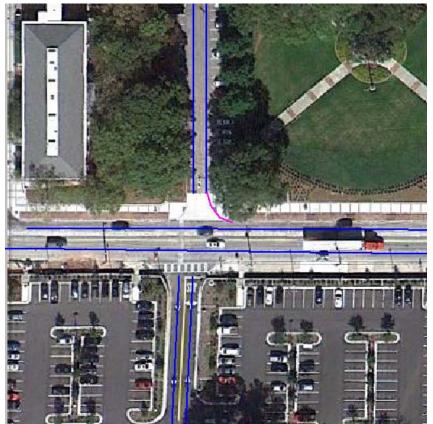
1. Click the **link** button



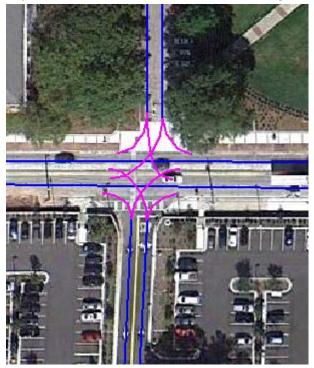
- 2. Right click on the westbound link ahead of the intersection and drag to the North leg for a right turn. This dialogue box will open.
 - *a.* Select the **from** and **to link** lane (lane 1 is the outside lane) Typically right turns come from lane 1 and left turns from lane 2
 - b. Make sure Spline is checked and enter the number of points (2-4 for right turns, 4-6 left turns)
 - c. Click **OK**

Connector	
No.: 10000 Name:	
Behavior Type:	1: Urban (motorized) 🔹
Display Type:	1: Road surface gray 🔹
from link:	to link:
No.: 2 At: 320.909 ft	No.: 4 At: 15.992 ft
Lane 1 Lane 2	Lane 1
Spline: Lane Change Display Dyn. A Lane Closure	# Points: 4 ssignment Other No Lane Change
Route	
Emergency Stop: Lane change: Desired Direction	16.4 ft back 656.2 ft back 🔲 per lane
	t 💿 Left
	OK Cancel

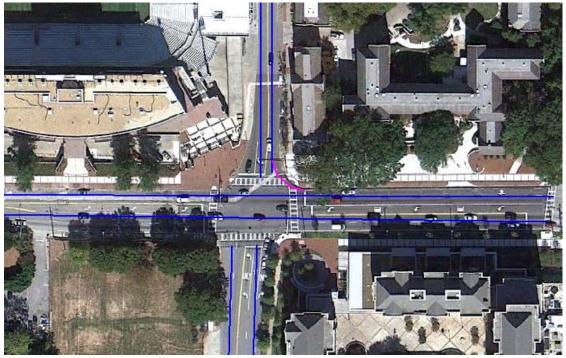
3. The connector will show up in pink.



4. Repeat for all the turn movements (left and right turn in and left and right turns out)

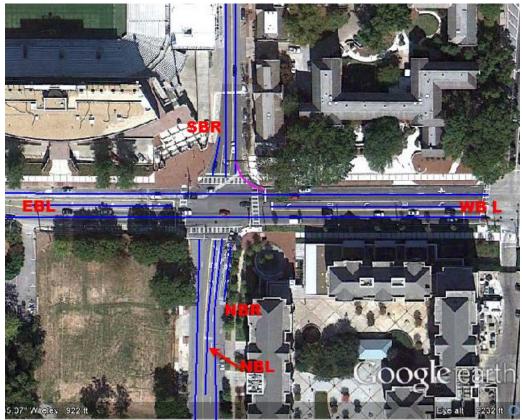


Add turn lanes

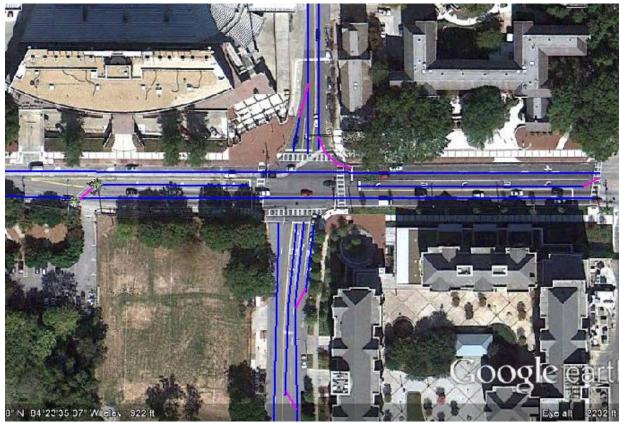


Turn lanes are needed for the WB left turn, SB right turn, EB Left turn and NB left and right turns.

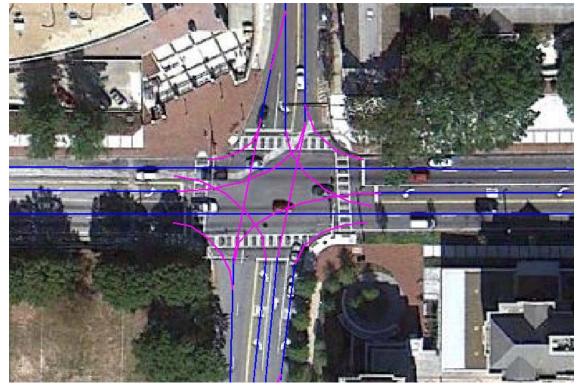
1. Create a separate link for the turn lanes.



2. Connect the turn lanes with connectors



3. Now you can add your connectors for your turn movements for the intersection



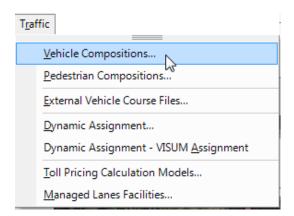
Page intentionally left blank

Section 3: Add Vehicles



Lesson 1: Enter Vehicle Composition (% Heavy Vehicles and desired speed)

1. Go to Traffic>Vehicle compositions



2. Select the Edit button

📲 Vehi	Vehicle Compositions		
No.	Name		
1	Default		New
			Edit
			Delete
			Close
		_	

3. Select 100, Car then Edit

Vehicle Com	position		
No.:	1	Name: Default	
Vehicle Type	Rel. Flow	Des. Speed	
100, Car 200, HGV	0.980 0.020	50: 50 km/h (29.8, 36.0) 50: 50 km/h (29.8, 36.0)	New Edit Delete
Cat. converter Cooling water			*
		ОК	Cancel

4. Change the **Rel. flow** (relative flow) to 0.960. Change the **desired speed** (mph range in parenthesis) Click **OK**

Vehicle Type	×
Vehicle type: Rel. flow:	
Des. speed:	50: 50 km/h (29.8, 36.0) 🔻
	OK Cancel

5. Repeat for HGV. Change Rel. flow to 0.040. Check desired speed.

Vehicle Com	position	1.2			
No.:	1	Name:	Default		
Vehicle Type	Rel. Flow	Des. Spe	ed		
100, Car 200, HGV	0.980 0.020	50: 50 km/h (2 50: 50 km/h (2			New Edit
					Delete
Cat. converter t	temp. dist.:			•	
Cooling water t	temp. dist.:			-	
				ОК	Cancel
	Vehicle	Туре		X]

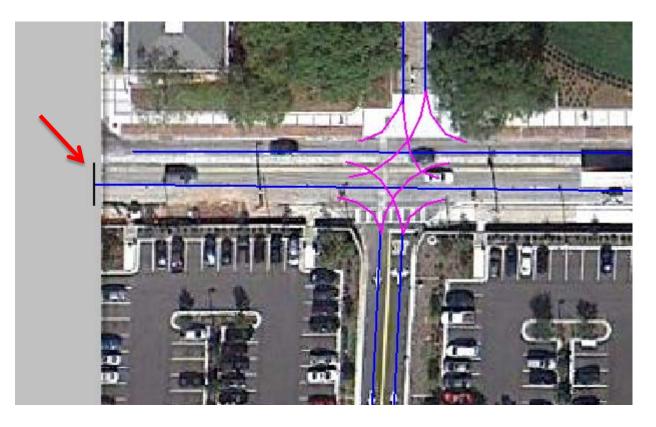
Vehicle Type	
Vehicle type:	200, HGV 👻
Rel. flow:	0.020
Des. speed:	50: 50 km/h (29.8, 36.0) 🔻
	OK Cancel

Lesson 2: Enter Entry Volumes

1. Select the Vehicle Inputs icon



2. Left click to select a link near the entry point and the right click to place the entry point (*a black line will appear*)



3. Vehicle Inputs window

- a. Enter the Traffic Volume (in the blue box)
- b. Select the Vehicle Composition (in the yellow box)
- c. Enter the 99999 as the end of the time period (in the green box)

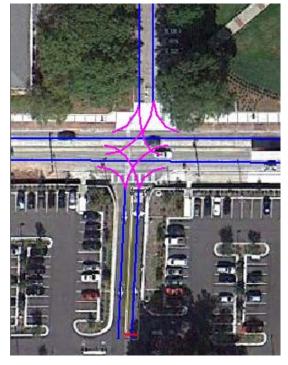
	Vehicle I	npu	ts					100 100				×
	Link Number	7	Link Name	Y	Input Name	Show Label	0 - 99999	_		Time 0		직
•	1	•	North Avenue (EB)	Ŧ		V	1200 1:Default	nime intervais	no Inton	99999		
			Ľ		1			a s	2			
Vo	lumes are	shc	wn in veh/h. Yellow c	ell:	s indicat	te exac	t (non-stoc	hastic) volumes.		ОК	Cancel	
		_									cancer	

4. Repeat for every entry link (1 each for each end of the road)

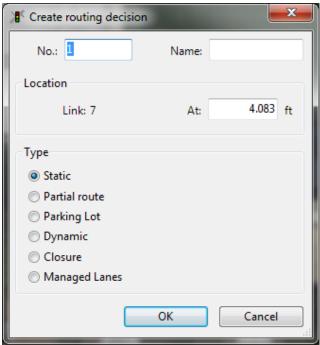
1	Vehicle I	npu	its		-			. w			_ 0	x
	Link Number	7	Link Name	V	Input Name		0 - 99999			Tim 0	e	
ŀ	1	•	North Avenue (EB)	•		v	1200 1:Default		Time Intervals	99999		
	2	•	North Avenue (EB)	•		V	1200 1:Default		/als			
	3	•	Centennial Olympic Park Dr. NB	•		V	400 1:Default					
	9	•	Techwood Dr. SB	•		V	400 1:Default					
	6	•	Cherry St SB	•		v	30 1:Default					
	7	•	Driveway NB	•		V	20 1:Default					
Vol	umes are	sho	own in veh/h. Yellow cells indicate e	exad	ct (non-	stocha	stic) volum	nes.		ОК	Cance	I

Lesson 3: Enter Route Decisions (turn movements)

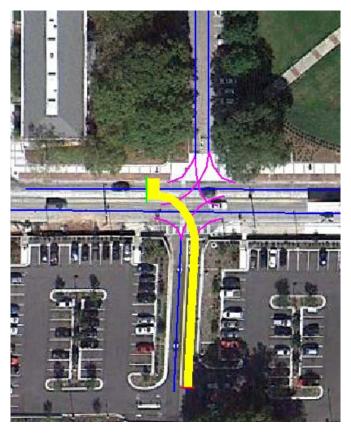
- 1. Select the **Routes** Button
- 2. Left click on the desired link. Right click to place the beginning of the route. (appears as red line)



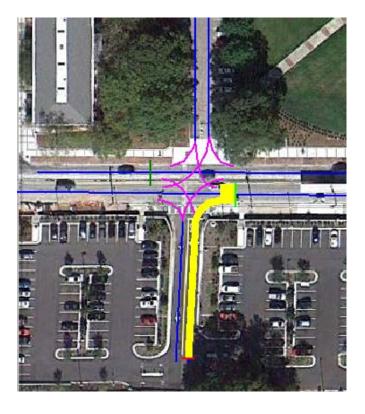
3. Click ok



4. Start with the left turn movement. Left click (at the point you want to drive to make the decision) to select the upstream link for the left turn movement and right click on the link. A yellow highlighted route is shown



5. Repeat for the right turn movement (as well as any other movements)



- 6. Right click off of the link to bring up the Routes menu.
- 7. Select the **Decision No**. you wish to edit in the left window. Each decision start point (the red line) is assigned a **Decision No**. (*notice the associate route path highlight on the screen*)

)	Route	es				- 16							-				_ D X
S	tatic	Partial	Par	cing Dy	namic	Closure	Mana	ged	Lanes								
ſ	Dec	ision y	7	Decision			At	ſ	 Decision]
L	1	No.		Name	Lir	nk -	[ft]		No.:		1 Name:						
P	1						4.08136		At:	4.0813	⁵ ft	Link:	7:Drivewa	ay NB			
	2				6:Cher	ry St SB	15.3379			Ve	hicle Class(es):	All Ve	ehicle Type	es			•
									Decision No.	Route No. ▼	Dest. Link	V	At [ft]	0 - 99999			Time 0
								Þ	1	1	2:North Avenu	e (EB)	1350	1		ne In	99999
									1	2	1:North Avenu	e (EB)	217.503	1		Time Intervals	
																sis	
			m				Þ	E	show only	routes ove	er link				-		
1				Static Ro	outing D	ecisions:	2								ОК		Cancel
					Statio	: Routes:	4								UK		

8. Notice in the middle window that each **Decision No.** has a multiple Route Numbers. Each Route No. represents a turn movement. Enter the turn volume for each movement (Route No.) in the last column **(0-99999)**. You can also enter turn percentages instead of turn volumes.

) Ko	utes	-	14								-	100				
Statio	Partial	Parking	Dynamic	Closure	Manag	ged	Lanes									
C	Decision	V Decisi		art 🗸	At	٢Ē	_]
	No.	• Nam		nk	[ft]		No.:		1 Name:							
1				eway NB	4.08136		At:	4.0813	6 ft	Link:	7:Drivew	ay NB				
2			6:Che	rry St SB	15.3379			Ve	hicle Class(es):	All V	ehicle Typ	es				•
														_		
							Decision No.	Route No.	Dest. Link	Y	At [ft]	0 - 99999		C	_	Time
							1	1	2:North Avenu	o (EB)	1350				0	
						Ľ	1	2	1:North Avenu					TITLE TITLETVIIS	99999	
										. ,				Vals	5	
•					۴.		show only	routes ove	er link					•		
		Static	Routing [Decisions:	2	-]
Static Routes: 4												(ЭК		Cancel	

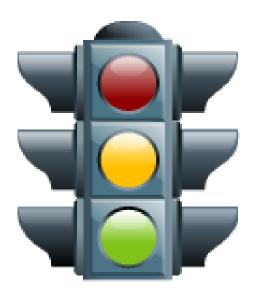
(Notice the route will highlight in the background as you select a Route No.)

9. Repeat this for every approach at each intersection.

Page intentionally left blank

Section 4: Add Controls





Lesson 1: Add Stop Control

Place stop sign



- 2. Left click the link you wish to add a stop control to select
- 3. Right click on the link (at the stop bar location) to place the stop sign.

Edit Stop Sign	1000	
No.: 2	Name:	
Location RTC	OR Time Distribution	
Link: Lane: At:	7 1 130.268 ft	
✓ Label		
	ОК	Cancel

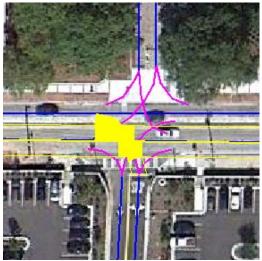
4. Click OK

Set conflict areas:

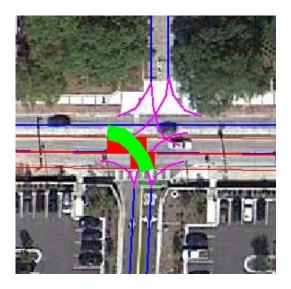
1. Select Conflict Area Button 🔤



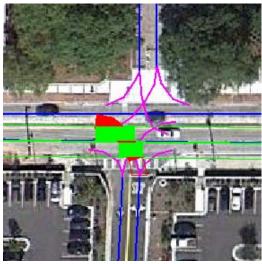
- 2. Click on a conflict area. Let say the left turn from the parking lot onto North Ave.
- 3. The conflicting movements are now hightlighted in all yellow. Right click on the area to rotate through the priority options. The movement highlighted in green has the ROW while the movement in red has to yield/giveway to the green movement.



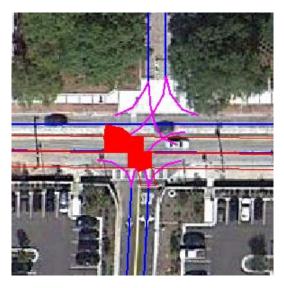
a. All movements yield



c. Thru movement yields to left turner



b. Left turners yield to thru movment



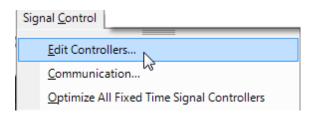
d. All movements yield

- 4. Select (b.) to reflect the stop control on the minor road.
- 5. Repeat for all conflicting movements (NBR & EBT, WBL & EBT, SBL & WBT, SBR & WBT, EBL & WBT)

Lesson 2: Add Signal Control

Edit Controllers

1. Click Signal Control on the Menu Bar and Select Edit Controllers from the drop down menu



2. Right click in the box on the right and select **New** to create a new element

8	< Sig	gnal Cor	ntrol								J
	۷o.	Name	Cycle	# Signa	ls Type	No.:		Name:			
						Cycle Time: 🔘	s	Туре:	External	*	
						() v	ariable	Offset:	S		
	Click	the rick	+	e button l	are and						
			' to crea	te a new							
			(SC)				1				
					New	Ctrl+N	1				
					Dupli	ate Ctrl+D					
					Delete	e Del					
				_							
								(ОК	Cancel	

1	🖁 Sig	nal Cor	ntrol					-		— — X
	No.	Nam	Cycl	# Sign	Туре	No.:	1	Name:	Techwood	
	1			0	Fixed ti	Cycle Time:	🔿 🚺 s	Туре:	Fixed time	•
							() variable	Offset:	Fixed time	
i						Fixed time	Sig <u>T</u> imTbl Con	fig <u>L</u> DP Co	Ring Barrier Controller SIEMENS VA TRENDS	
							Program file:	VISSIG_Cont	VAP	
						1	Dialog DLL file:	VISSIG_GUI.	VAS VS-PLUS	
								Edit Signal	Control	
							Data file 1:			
							Data file 2:			
							WTT files:	VISSIG.wtt		
							Program no.:	1	Start Opti	mization
								(ОК	Cancel

3. Give the Controller a **Name** and change the **Type** to Ring Barrier Control

4. Go to the **Ring Barrier Controller** tab and click button (next **to Data file 2**). Name the Signal Group

∦K Sig	inal Cor	ntrol							
No.	Nam	Cycl	# Sign	Туре	No.: 1		Name:	Tec	hwood
1			0	Fixed ti	Cycle Time: 🕥 🛛 0	s	Type:	Rin	g Barrier Controller 🔹 🔻
					② variable		Offset:	0	5
					Ring Barrier Controller	Sig	<u>T</u> imTbl Cont	fig	LDP Config
					Program file	e: [rbc_controll	er.d	
					Dialog DLL file	2	rbc.dll		
						(Edit Signal	Grou	aps
					Data file 1	L: [
					Data file 2	2:			
					WTT file	s:	rbc.wtt		
							ſ		
							l		OK Cancel

5. Select Edit Signal Groups

📲 Sig	nal Control								
No.	Name	C #	s	Туре	No.:	1	Name:	No	rth at Techwood
1	North at	8	ł	Ring Barri	Cycle Time: 🔘	0 s	Type:	Rin	g Barrier Controller 🔹 👻
					variab	le	Offset:	0	s
					Ring Barrier Controller	S	ig <u>T</u> imTbl Con	fig	LDP Config
					Program	file:	rbc_control	ler.d	II
					Dialog DLL	file:	rbc.dll		
							Edit Signal	Gro	ups
					Data fi	le 1:	north.rbc		
					Data fi	le 2:	north.rbc		
					WTT	files:	rbc.wtt		
							[OK Cancel

6. Complete Ring Barrier Controller Window

Ring Barrier Controller 01.70.03 (north.rbc)											-	-				X
File View Help					N	otes								Frequen	icy 1		
	Basic																
SG Number	 SG Number 	1	2	3	4	5	6	7	8								
Min Green	SG Name																
Vehicle Extensic	Min Green	10	20	10	20	10	20	10	20								Ш
✓ Max 1 ✓ Yellow	Veh Extension	5	5	5	5	5	5	5	5								
Red Clearance	Max 1	30	30	30	30	30	30	30	30								1
Ped SG Number	Yellow	3	3	3	3	3	3	3	3								1
✓ Walk ✓ Ped Clear (FDW)	Red Clearance	2	2	2	2	2	2	2	2								1
Start Up	Ped SG Number																
Min Recall	Walk																1
Max Recall	Ped Clear (FDW)																
Soft Recall	Start Up																1
V NSE Max Recal	Min Recall			V	V	V	V	V									
🗸 Dual Entry 👻																	
Pattern 1 E	Max Recall									 							
Pattern 1 CycleLength 0 ^	Ped Recall																ľ
Global Values	Soft Recall																
	NSE Max Recall																1
01 35sec	Ø2 35sec					Ø3 35s	ec				Ø4 3	35sec					
05 35sec	Ø6 35sec					Ø7 35s	ec				ØS	35sec					
														[Lock	c Diagra	m
Errors (0) Warnings (0) Messages (1)																
mors (u) wamings (u) messages (1	,									 				ОК		Cancel	_
														UK		Jancel	-

- a. **SG** Number= the signal group number is used to create signal heads. (i.e. you will need a SG number for every signal phase)
 - Minimum of 4 maximum of 8 (for a standard 4 legged intersection)
- b. Min Green= the minimum green time that the signal group will serve before changing to yellow. In the absence of any extension, the signal group will serve this minimum green time before it is eligible to terminate. This value is also used during offset seeking as a minimum value that the controller can display for the signal group. If this value is set artificially too high, the controller will take longer to get back into coordination and could possibly prevent the controller from getting back into coordination (if you set the min green equal to max green).
- c. Veh Extension = The allowed time between successful vehicle extensions before a signal group will gap out. If the signal group Time To Reduce parameter is non-zero, this allowed gap between vehicles will be reduced according to volume/density timing defined for the signal group. Volume/density timing parameters are described in Base Timing, Advanced.
- d. Max 1= the maximum time that the signal group will be allowed to extend before it will max-out. A max-out will make a signal group eligible to terminate, even though it may not have gapped-out. Normally, the maximum green timer will not begin counting until an opposing call to the signal group is present. An exception to this rule is when the signal group is a flagged as a <u>Max Recall</u> signal group, in which case the maximum green timer will

begin counting as soon as the signal group changes to green. Max 1 is the default maximum green time for each signal group.

e. **Yellow** = The time a signal group will time a yellow interval before advancing to red. This time cannot be abbreviated by any operation.

y =
$$\frac{1.0 + \frac{1.47 * V}{(20 + 64.4g)}}{(20 + 64.4g)}$$
 where V is the approach speed (mph)

f. **Red clearance** = The time a signal group will time red before a conflicting signal group will be allowed to begin timing

 $R = \frac{W + 20}{1.47 * V}$ where W = width of the stop line to far side no-conflict point (ft) and V = speed of vehicle, mph

g. **Min Recall**=Signal groups flagged for this option will receive an automatic vehicle call when they are not green.

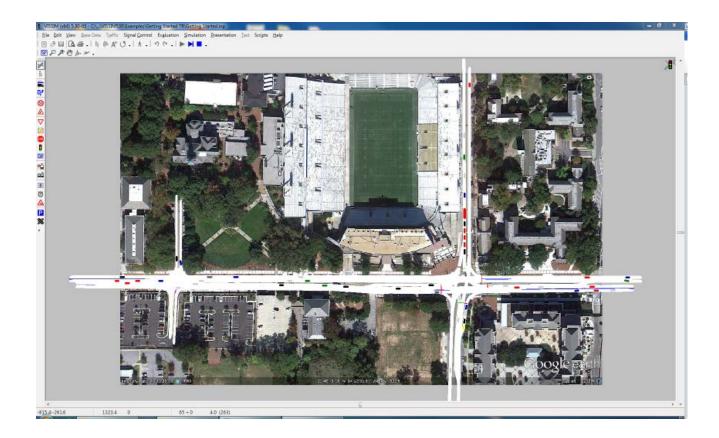
Place Signal Heads

- 1. Select the **Signal Heads** Button
- 2. Left click to select the link you wish to add a signal head
- 3. Right click on the link (at the stop line) to place the signal head.

	🥤 Signal Head			-	٢.		x
	No.:	1]	Name:			
l	Link:	13			Vehic	le Classes	
	Lane:	1			All V	ehicle Types Car	
	At:	207.001	ft		20	HGV	
	SC:	1	•		30 40	Bus Tram	
	Signal group:	1	-		50 60	Pedestrian Bike	
1	Type:	Left Arrow		•			
	🔲 Or Sig. Gr.:		-				
l	🔽 Label						
	New 3D Signal		(ОК		Cancel	

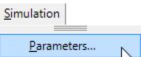
- a. SC (Signal Controller) = match to the controller number you set previously
- b. **Signal Group** = match to the signal group (or phase) from the Ring Barrier Control Window
- c. **Type** = left arrow, right arrow, circular (ball)
- 4. Repeat for all lanes

Section 4: Run Simulation



Lesson 1: Set Simulation Parameters

1. Select Simulation from the menu bar and go to Parameters



2. Set parameters

Simulation Parameters	
Comment:	2035am No Build
Traffic regulations:	Right-side Traffic
	Ceft-side Traffic
Period:	4500 Simulation seconds
Start Time:	00:00:00 [hh:mm:ss]
Start Date:	[YYYYMMDD]
Simulation resolution:	10 Time step(s) / Sim. sec.
Random Seed:	42
Simulation speed:	10.0 Sim. sec. / s
	maximum
Break at:	0 Simulation seconds
Number of cores:	1 Core 🔹
	OK Cancel

- a. **Comment** = The comment line is stored in the input file and included in both printouts of the network and in output files.
 - Enter a description.
- b. **Period** = The period of time to be simulated. Including initialization period.
 - Use a minimum of 4500s (15 minutes to fill up the system then 1 hr of simulation)
- c. **Simulation resolution** = The number of times the vehicle's position will be calculated within one simulated second (range 1 to 10). The higher the value the smoother the simulation
 - Use a value between 5-10

- d. Random Seed = Simulation runs with identical input files and random seeds generate identical results. For meaningful results it is recommended to determine the arithmetic mean based on the results of multiple simulation runs with different random seed settings.
 - Use a different number to produce 3-5 runs per alternative
- e. **Simulation Speed** = The number of simulation seconds to a real time second.
 - maximum

Run the Simulation:



2. The simulation will run

Warnings

If there are any warnings in the simulation the following window will appear

X VISS	IM
?	During the simulation/test run time warnings were written to the file Getting Started.err!
	OK Show

Select Show to view the warnings

Page intentionally left blank

Section 5:

Output Data

Getting Started - Notepad	
File Edit Format View Help	
Table of Delay	^
File: C:\ProgramData\PTV_Vision\VISSIM530\Examples\Getting Started TR\Getting Started. Comment: 2035am No Build Date: Wednesday, February 06, 2013 1:58:49 PM VISSIM: 5.30-05 [28482]	inp
No. 1: Travel time section(s) 21	
Time; Delay; Stopd; Stops; #Veh; Pers.; #Pers; VehC; All;;;;; No.:; 1; 1; 1; 1; 1; 1; 1; 900; 33.6; 23.8; 0.86; 213; 33.6; 213; 1800; 40.2; 28.2; 1.00; 255; 40.2; 255; 2700; 47.3; 34.1; 1.09; 251; 47.3; 251; 3600; 38.1; 26.7; 0.96; 242; 38.1; 242; 4500; 55.2; 39.8; 1.20; 243; 55.2; 243; Total; 43.1; 30.7; 1.03; 1204; 43.1; 1204;	
4	× ⊪

Lesson 1: Collect Travel Time and Delay Output Data

- 1. Decide where to analyze the travel time
- 2. Select Travel Time Sections Icon
- 3. Left click on the starting link of the travel time section to select
- 4. Right click at the exact start point to place start line
- 5. Right click at the exact end point to place travel time end line
- 6. Complete the Travel Time Measurement window

Edit Travel Time Measure	ement			23
No.: 21	Name	e: North Ave EB		
From Section		To Section		
Link: 1		Link:	1	
At: 105.785	ft	At:	1588.376	ft
Vehicle Classes		Distance:	1482.6	ft
All Vehicle Types 10 Car 20 HGV 30 Bus 40 Tram 50 Pedestrian 60 Bike Smooth. Factor:	0.25	 Visible (Screen Label Write (to File) 		
		ОК	Canc	el

- a. Add a name for this roadway section
- b. Select only the **Write** (to file) box
- 7. Click OK

Lesson 2: Configure Travel Time Measurement

- 1. Select **Evaluation**> **File** from the main menu
- 2. In the vehicles tab check the box for **Travel Times**
- 3. Click the **configuration** button
 - a. Active travel times Select the travel time sections (set in previous lesson)
 - b. **Time** select the time frame and interval to collect the data
 - c. **Output** select compiled data
- 4. Click OK

Evaluations (File)	X
Vehicles Signal Control Pe	destrians
Observer	
Export:	Configuration
Vehicle record:	Configuration Filter
Nodes:	Configuration Filter
Data collection:	Configuration
Network performance:	Configuration Filter
PT waiting time	
Travel times:	Configuration
Lane change:	Filter
Queue length:	Configuration
Link evaluation:	Configuration
Delay:	Configuration
Vehicle inputs	
Analyzer database:	Configuration
Special evaluations	
Paths (Dyn. Assign.):	Configuration Filter
Convergence:	Configuration
Managed lanes:	Configuration
	OK Cancel

₩ TT-Measurement Configuration					
Active travel times:	Time				
21	from:	0	s		
	until:	99999	s		
	Interval:	900	s		
	Aggregation by passing the	time of			
	start section				
	Odestination set	ection			
	Output				
	🔽 Compiled dat	ta			
	🔲 Raw data				
	Databas	e			
	Table name	8			
	Getting St_	TRAVELTIN	IES		
[(ОК	Cano	:el		

Lesson 2: Configure Delay Measurement

- 1. Select **Evaluation**> **File** from the main menu
- 2. In the vehicles tab check the box for **Delay**
- 3. Click the **configuration** button
- 4. Complete the Delay Measurements window
 - a. **No. active travel times** Select the travel time sections
 - b. **Time** select the time frame and interval to collect the data
 - c. **Output** select compiled data
- 5. Click OK

* Delay is the average total delay per vehicle in seconds and is measured as the difference in the real travel time and the theoretical travel time

Evaluations (File)	X
Vehicles Signal Control Pe	destrians
Observer	
Export:	Configuration
Vehicle record:	Configuration Filter
Nodes:	Configuration Filter
Data collection:	Configuration
Network performance:	Configuration Filter
PT waiting time	
Travel times:	Configuration
Lane change:	Filter
Queue length:	Configuration
Link evaluation:	Configuration
Delay:	Configuration
Vehicle inputs	
Analyzer database:	Configuration
Special evaluations	
Paths (Dyn. Assign.):	Configuration Filter
Convergence:	Configuration
Managed lanes:	Configuration
	OK Cancel

B Delay Measurements - Configuration			x
No. [active] (Travel Times)		Time	
		from: 0	s
1 [x] (21)	New	until: 99999	s
	Edit	Interval: 900	s
	Delete	Output	
		Compiled data	
		🔲 Raw data	
		Database	
		Table name:	
		Getting St_DELAYTIMES	
		OK Cance	: I

Lesson 4: View Travel Time and Delay Output Files

1. Go to the project folder. Notice two files. One with a .RSZ extension and one with a .VLZ extension

1000	a. 19	124	S	Contraction in the
3 - 🕒	► Computer ► Local Disk (C:) ► Pro	gramData 🕨 PTV_Vision 🕨 V	ISSIM530 🕨 Examples	Getting Started TR
Organize 🔻	Include in library	 Slide show Burn 	New folder	
🔶 Favoi	Name	Date	Туре	Size Tags
🧮 Des	BCLog	2/6/2013 3:35 PM	Text Document	1 KB
📕 Dov 🔤	🔏 curve.	12/12/2012 3:44 PM	VISSIM input file	58 KB
🖳 Rec	🗿 curve	12/12/2012 3:44 PM	Configuration sett	8 KB
鷆 Tiff	🔄 curve	12/12/2012 3:17 PM	JPEG image	354 KB
	Getting Started.err	1/4/2013 11:46 AM	ERR File	1 KB
🥽 Libra	Getting Started.in0	12/12/2012 3:50 PM	IN0 File	81 KB
Do:	getting started	12/12/2012 3:11 PM	Configuration sett	8 KB
📔 Pic	K Getting Started	12/12/2012 3:10 PM	VISSIM input file	81 KB
🛃 Vid	Getting Started	2/6/2013 1:58 PM	RSZ File	1 KB
	Getting Started	2/6/2013 1:58 PM	VLZ File	1 KB
🖳 Com	Getting Started_exception.err	12/12/2012 3:50 PM	ERR File	1 KB
🚢 Loc	North Avenue 2	12/12/2012 8:23 AM	JPEG image	367 KB
]]ь b	North Avenue.bgr	12/12/2012 11:08 AM	BGR File	1 KB
鷆 в	📔 North Avenue	12/12/2012 11:05 AM	JPEG image	382 KB
ili d	north.rbc	1/7/2013 2:53 PM	RBC File	42 KB
🕕 G	north.rbc.bak	1/7/2013 2:53 PM	BAK File	42 KB
鷆 G	rbc.frq	1/7/2013 2:53 PM	FRQ File	1 KB
鷆 Ir	🗊 rbc	1/7/2013 2:53 PM	Configuration sett	23 KB
🌗 Ir	rbc_controller.dll.err	1/8/2013 7:37 AM	ERR File	1 KB
JL N	RBCLog	1/18/2013 3:20 PM	Text Document	9 KB
🛺 N	RBCLog.txt_99	1/7/2013 2:53 PM	TXT_99 File	1 KB
🍌 o	iii vissim	12/12/2012 3:11 PM	Configuration sett	8 KB

2. Open the .RSZ file to view the Travel Time Output

C Getting Started - Notepad	□ ×
File Edit Format View Help	
Table of Travel Times	*
File: C:\ProgramData\PTV_Vision\VISSIM530\Examples\Getting Started TR\Getting Started.in Comment: 2035am No Build Date: Wednesday, February 06, 2013 1:58:49 PM VISSIM: 5.30-05 [28482]	np
No. 21: from link 1 at 105.8 ft to link 1 at 1588.4 ft, Distance 1482.6 ft	
Time; Trav;#Veh; VehC; All;; No.:; 21; 21;	
900; 64.8; 213; 1800; 71.4; 255; 2700; 78.4; 251;	
3600; 69.0; 242; 4500; 86.3; 243;	
	-
<	

- a. Travel time= average time it takes to travel (in seconds) along the travel section
- b. # vehicles = number of vehicles that pass the *data provided for each 900s interval

3. Open the .VLZ file to view the Delay

Getting Started - Notepad	x
File Edit Format View Help	
Table of Delay	^
File: C:\ProgramData\PTV_Vision\VISSIM530\Examples\Getting Started TR\Getting Started.inp Comment: 2035am No Build Date: Wednesday, February 06, 2013 1:58:49 PM VISSIM: 5.30-05 [28482]	
No. 1: Travel time section(s) 21	
Time; Delay; Stopd; Stops; #Veh; Pers.; #Pers; VehC; All;;;;;;	
No.: 1; 1; 1; 1; 1; 1; 1; 900; 33.6; 23.8; 0.86; 213; 33.6; 213; 1800; 40.2; 28.2; 1.00; 255; 40.2; 255; 2700; 47.3; 34.1; 1.09; 251; 47.3; 251; 3600; 38.1; 26.7; 0.96; 242; 38.1; 242; 4500; 55.2; 39.8; 1.20; 243; 55.2; 243; Total; 43.1; 30.7; 1.03; 1204; 43.1; 1204;	
< >	•

- a. Delay: Average total delay per vehicle (in seconds). The total delay is computed for every vehicle completing the travel time section by subtracting the theoretical (ideal) travel time from the real travel time. The theoretical travel time is the time that would be reached if there were no other vehicles and no signal controls or other stops in the network (reduced speed areas are taken into account).
- b. Stopd: Average standstill time per vehicle (in seconds), not including passenger stop times at PT stops or in parking lots.
- c. Stops: Average number of stops per vehicle, not including stops at PT stops or in parking lots.
- d. #Veh: Vehicle throughput
- e. Pers: Average total delay per person (in seconds), not including passenger stop times at PT stops.
- f. #Pers: Person throughput

*data provided for each 900s interval