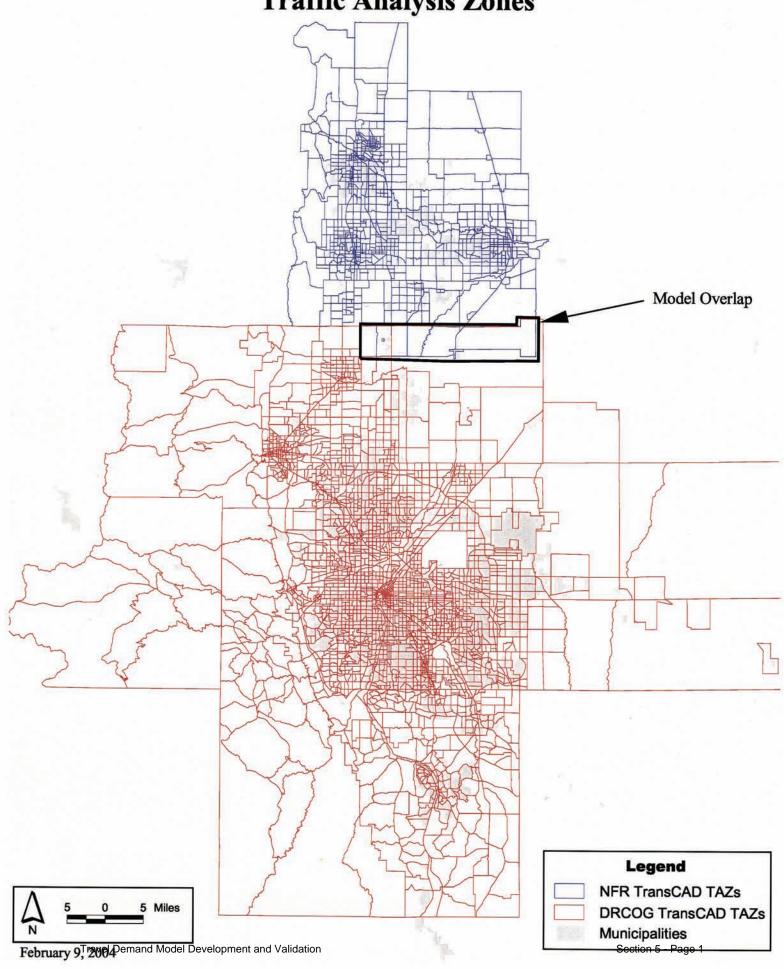
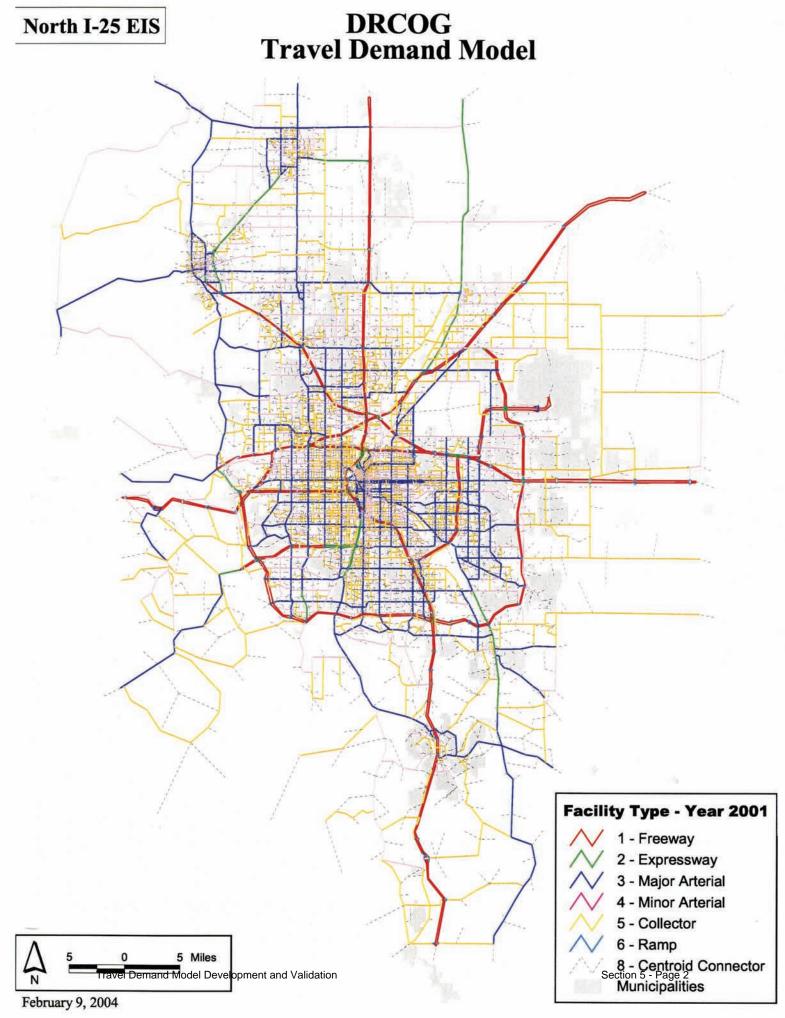
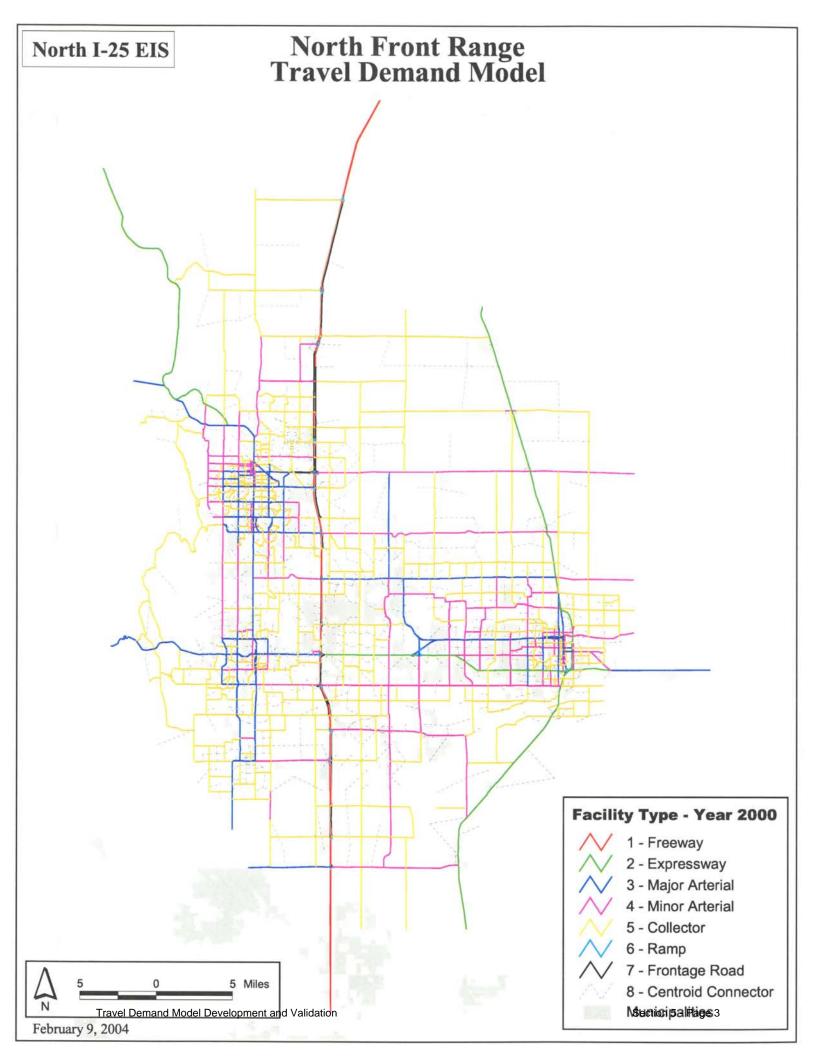
North I-25 EIS

North Front Range & DRCOG Traffic Analysis Zones







Socio-Economic Model		DRCOG			NFRMPO			
MODEL PROCESS	forecasts for each a communities, as we weighted based upofactors include: - accessibility of training environmental corum ental corum economic activity, - home-to-work traving planned rapid traning evaluability of vaca	el tims,		A Community-VIZ-based allocation model. The Base Year (2000) models were calibrated, validated in 2003. Both the employment and household models are bas upon current Comprehensive Master Plans from the communities, but use different evaluation criteria. Allocation of emplyees and households are within the bounds of planned land uses based upon a series of social, economic, and physical factors that have been weighted based upon their suitability and attractiveness to future development. Output is disaggregated into TAZs and passed through a FRATAR process for further disaggregation. Key factors include: - proximity to major roadway corridors, - floodplains, - existing developemnt, - historic sites, - and other constraints				
SOCIO-ECONOMIC	Туре	Attribute Fields	- 終	Туре	Attribute Fields			
ATTRIBUTES	Population Employment	HH Pop and HH by Low-, Med-, & High Income Prod/Dist, Retail, & Service Emp.		Population Employment	HH Income (1-5) HH Size (1, 2, 3, 4, 5+) Basic, Retail, Service Emp			
Travel Model Status		DRCOG TransCAD Travel Model			NFRMPO TransCAD Travel Model			
Calibration Year Base Year Future Year	100	······································			And the state of t			

tructural Flomanta		DECOC	TransCAD Traval Mass	اما			NEDSSE	O T	ND Tecres!	Badal	
tructural Elements		DRCOG	TransCAD Travel Mod	iei	4-1-		NEKME	O TransCA	I lravel	viodei	
PROJECTION	Otata Diama 00					A Lana Nad OO					
Coordinate System	State Plane 83				La	t. Long. Nad 83					
Type/Zone	Colorado Central										
Units	Feet				Mi	les					
TONE OVOTER	# 										
ZONE SYSTEM	** **										
Number of Zones	2628 262	7									
Internal		/				797					
External	36					18					
Total	2664					815					
	02. I 18. I				2 mg						
Zone Area (acres)		_									
Total Area	2,207,227	_				724,678					
Average Area	840	_				909]				
Range	8 to 121,434	_				17 to 22,405	_				
	7 (18) 14 (18) 14 (18)										
# of Centroid Connectors	5171					1020					
entroid Connectors per Internal TAZ Zone	1.95					1.26					
	42 666 684				150.4 151.4 151.4						
Area Type Methodology	Based upon population	n and employme	ent densities.		Ва	sed on the emplo	oyment and ho	ousing density	of each TAZ.		
5	Used a calibrated disc	riminant model	to determine area types.		Ft	.Collins has its o	wn CBD categ	ory due to mo	ore compact n	ature. Takes	nto account
i de la companya de l	Modifications were ma	ide as necessar	y for contiguous areas.			the bike/ped asp	ects of Ft. Col	llins downtow	n.		
· ·					De	finition of downto	own areas bas	ed on downto	wn developm	ent associatioi	ns.
75 X	Ž				Α	zone is considere	ed a specific ar	rea type if <i>eith</i>	<i>er</i> mimimum	employment of	r
						minimum house	hold density is	exceeded. V	Vherever poss	sible, Set 1 wa	s used but
ľ					1 25.7	some manual ch	anges were m	nade for contir	nuity. Set 2 w	as used for ac	lditional
		AreaType	Recommended	Recommended		guidance and re	flects DRCOG	guidelines.			
	Area Type	Number	Population Density	Employment Density						_	
i i	CBD	1	>= 20,000	>= 40,000			AreaType		et 1		Set 2
<u>[</u>		2	< 20,000	< 40,000	1	Area Type	_	Pop/Sq.M			Emp/Sq.M
	Fringe	+	4.6					6,000	1,000	5,200	2,300
	Urban	3	< 10,000	< 8,000	-	Urban	3		1	700	250
	Urban Suburban	3 4	< 5,200	< 2,300		Suburban	2	600	170		_
	Urban	+					1		170 0	0	0
	Urban Suburban Rural	3 4 5	< 5,200	< 2,300		Suburban Rural	2	600			0
Area Type Codes	Urban Suburban Rural Code Definition	3 4 5	< 5,200	< 2,300	Co	Suburban Rural ode Definition	2	600			0
Area Type Codes	Urban Suburban Rural Code Definition 1 CBD	3 4 5	< 5,200	< 2,300	Co	Suburban Rural ode Definition 1 Rural	2 1	600			0
Area Type Codes	Urban Suburban Rural Code Definition 1 CBD 2 Fringe	3 4 5	< 5,200	< 2,300	Co	Suburban Rural Definition Rural Suburba	2 1	600			0
Area Type Codes	Urban Suburban Rural Code Definition 1 CBD 2 Fringe 3 Urban	3 4 5	< 5,200	< 2,300	C	Suburban Rural ode Definition 1 Rural 2 Suburba 3 Urban	2 1	600			0
Area Type Codes	Urban Suburban Rural Code Definition 1 CBD 2 Fringe 3 Urban 4 Suburban	3 4 5	< 5,200	< 2,300	Co	Suburban Rural Definition Rural Rural Suburba Urban Fort Coll	2 1	600			0
Area Type Codes	Urban Suburban Rural Code Definition 1 CBD 2 Fringe 3 Urban	3 4 5	< 5,200	< 2,300	Co	Suburban Rural ode Definition 1 Rural 2 Suburba 3 Urban	2 1	600			0
Area Type Codes	Urban Suburban Rural Code Definition 1 CBD 2 Fringe 3 Urban 4 Suburban	3 4 5	< 5,200	< 2,300	Co	Suburban Rural Definition Rural Rural Suburba Urban Fort Coll	2 1	600			0

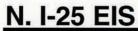
Structural Elements			RCOG T	ransCAD	Travel Mod	el				NFRMP(O TransCA	D Travel M	odel	
ROADWAY/LINK ATTRIBUTES											<u> </u>			
Facility Types	3	Definition Freeway Expressway Major Arterial Minor Arterial						1 2 3 4	Definition Freeway Expressway Major Arterial Minor Arterial					
	6	Collector Ramp Centroid Connec		h. II.				6 7	Collector Ramp Frontage Road Centroid Conn		_			
Capacity (Vehicles per Hour per Lane)		LOS E - Capacit	ies snown		⁻2 or more lar Area Type	ies per direction). ફિ		LOS C			Area Type		
(Vernoles per riour per Eurio)		<u> </u>	-CBD	2-Fringe	3-Urban	4-Suburban	5-Rural		5-0	ther CBD	4-Ft.C CBD	3-Urban	2-Suburban	1-Rural
	X	1	2000	2000	2000	2000	2000		1 n/a		n/a	1500		1500
	8	2	800	1000	1250	1350	1400		2	800			1100	1200
		3	600	850	950	950	1100		3	700		800	800	800
	Type	4	450 400	550 450	600 500	750 550	800 600	Type	4	435		550	550	550
	Ĺ	6	700	900	1100	1100	1100	È	5	435 800	435 800	400 800	400 800	400 800
	Facility		700	300	(,	1100	11007	€	7	550		550	550	550
	Fac	8	n/a	n/a	n/a	n/a	n/a	Facility	8	n/a			n/a	n/a
	\$ #				Nan Tiran							A T		
Free Flow Speeds	한 경 건 건	\$5.0 7	-CBD	2-Fringe	Area Type 3-Urban	4-Suburban	5-Rural		5.0	ther CRD	4-Ft.C CBD	Area Type 3-Urban	2-Suburban	1-Rural
(miles per hour)		1	58	58	64	68	77		1 n/a				n/a	75
	8	2	47	47	53	53	61		2	40			55	60
		3	26	26	36	40	61		3	26	26		46	57
	e e	4	25	25	29	33	45	l e	4	17	17	35	42	48
	Туре	5	20	20	20	23	36 39	Type	5	15			30	35
	acility	7	39 41	39 41	39 31	39 36	48	∦	6	30 32			30 32	30 32
	Fac	8	11	13	16	20	28	Facility	8	16	16	16	21	25
		·		· - [**************************************	<u> - I </u>		·····	, , ,	— — — — — — — — — — — — — — — — — — —	

Structural Elements		DRCOG	TransCAD	Travel Mo	del		NFRMPO TransCAD Travel Model	
ROADWAY/LINK ATTRIBUTES HOV Code	Facility Type AM Peak HOV PM Peak HOV No Peak HOV		nuous- cess 3+ 4 5		rrier- arated 3+ 10 11 12	Not Applicable		
Toll Code	Code Definition 0 No toll 1 Toll 6 Ramp	n					Not Applicable	
TRANSIT ATTRIBUTES Transit Mode Codes	5 Denver L 6 Limited S 7 Express 8 8 Regional	ervice & intra-Boulder Service ice (LRT & CRT Service t Local	services Cnty				Not Applicable	
Transit Network Link Types	0 Roadway 1 Roadway 2 Transit O 99 Walk only overpass 98 Transit &		auto (Rail line auto. (Ped ne centroids) auto (16th St.				Not Applicable	

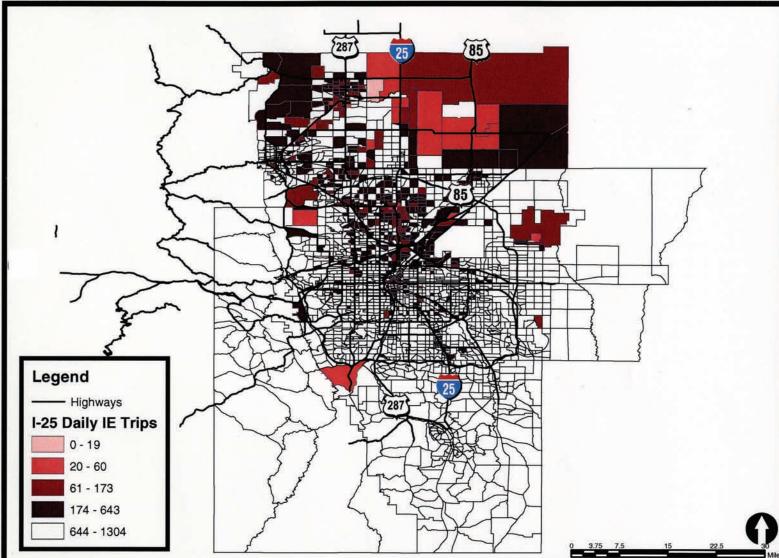
Four Step Summary		DRCOG Tra	ansCAD Travel Model			NFRMPO	TransCAD Trave	el Model	٠
TRIP GENERATION Methodology	Trip Attraction Trip attraction	ons = Cross-classification by ns = Function of # of retail, p ns balanced to trip production erators = DIA, Auraria		Trip Productions = Cross-classification by HH Size & HH Income Trip Attractions = Function of HH, basic, retail and service employment. Trip attractions balanced to trip productions (except HBU, WBO, & OBO trips) Special Generators = CSU, UNC					
	9. 3	Year 2	2001				Year 2000		
# of Trips by Purpose	Type	# of Trips	% of Trips		Туре	# of Trips	% of Trips	Subtotal	s
(2001 & 2000)	HBW HBNW NHB	1,904,515 4,547,202 2,686,379	18.0% 42.9% 25.4%		HBW HBU HBS	305,526 126,722 248,869	16.4% 6.8% 13.4%	HBNW= HBU+HBS+HBO	51.9%
	СОМ	1,153,866	10.9%		HBO	590,134	31.7%	пвотпвотпво	
	I-E	290,030	2.7%		WBO	187,885	10.1%	NHB=	27.5%
	E-E	13,686	0.1%	7 A	ОВО	325,080	17.5%	WBO+OBO	
			-		I-E	77,855	4.2%		**
				6.44 97.9 98.4					
	TOTAL COM = Comn	10,595,678 nercial & truck trips	100.0%		(i)	1,862,071 ne-Based Shop ne-Based University	100%		
TRIP DISTRIBUTION Methodology	K-factors app HBW trips dis	I by trip purpose. lied for Boulder urban area. tributed using peak travel ti ibuted using non-peak trave	mes.		त इ. इ.	del by trip purpose.			
		Year 2001				Year 2000			
Average Trip Length by Purpose	Туре	Average Trip	Length		Туре	Average Trip Lengtl	h (miles)		
(2001 & 2000)		miles	minutes		HBW	6.6			
	HBW	10.3	26.8		HBU	3.5			
	HBNW	5.2	13.1		HBS	4.1			
	NHB	5.8 7.8	15.0		HBO	4.2			
	COM I-E	28.2	17.6 35.2		WBO OBO	4.4 3.2			
		20.2			I-E	19.9			
K	**************************************				-				
					u K				
<u></u>	·.					·····			

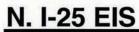
Four Step Summary			DRCOG	TransCAD	Travel Mod	lel				NFRM	PO TransCAD Travel N	lodel		
MODE CHOICE Methodology	4 I	use 3-dime se 2-dimens ons account	nsional logit i ional logit mo for time and	model. odel. cost of travel.	ı, transit fare, p	arking cost, a	nd	Mode split (or mode choice option for Ft. Collins area). 1st Step = non-motorized mode split - bike/peds are separated from motorized. (aggregate, factor based approach using distance-based algorithms) 2nd Step = mode split (NFR area) or optional mode choice (Ft. Collins area only). Mode Split = based on mode shares dervied from the 2001 travel survey Ft. Collins Mode Choice = nested logit model.						
Parking Cost Methodology		arking Sub-	districts. Sub	o-district parki	upply model. ng characterist I land area with				Ft. Collins Mode Choice Model Only: Daily Parking Costs are used for HBW trips.					
Mode Types	Shared Shared	HBW Drive Alone d Ride - 2 Pe d Ride - 3 Pe it - Walk Acc	eople	e Transit - Drive Access			IHB Auto Valk Access				Not Applicable to NFR A	rea		
Mode Chaire 9/ by Trin Tyre	Transi	it - Drive Acc	cess ost-processe	ess est-processed to categorize into DA, SR2, SR3					2000 NI	FRRTM Transi	it Mode Shares:			
Mode Choice % by Trip Type (2001 & 2000)	HBNW NHB	DA 81.9%	SR2 10.0% Auto 98.5% Auto	SR3 3.2%	TW 3.8% TW 1.3% TW	TD 1.2% TD 0.2%	100.0%				within Ft. Collins within Greeley within Loveland			
TIME OF DAY			98.5%		1.5%		100.0%				Loveland to Ft. Collins	0.4%		
Number of Periods Peak Hour	Period AM1 AM2 AM3 PM1 PM2 PM3 OP1 OP2 OP3 OP4	6 7 8 3 5 6	Fime Frame 5:30-7:00 AM 7:00-8:00 AM 3:00-9:00 AM 5:00-5:00 PM 5:00-6:00 PM 6:00-7:00 PM 11:00 PM-6:3 9:00-11:30 AI 11:30 AM-3:0	0 AM M	<u> </u>				Period Morning Midday Evening Off Peak	Time Frame 6:30 AM - 9:00 AM 11:00 AM - 1:00 PM 3:30 PM - 6:30 PM Remaining 16.5 hours				

Four Step Summary		DRCOG	TransCAD	Travel Mod	lel.		NFRMPO TransCAD Travel Model							
ASSIGNMENT Methodology	User equilibrium - 50 it Feedback process for I		it speeds with	input speeds			Peak period: user equilibrium; off-peak: stochastic Feedback process for balancing output speeds with input speeds							
Toll Methodology	Impedance functions b Value of time = \$8/hr d Current toll rate set to \$	uring peak, \$6/l					Not Applicable to NFR Area							
VDF Coefficients	Facility Type		alpha		beta		Facility Type	alpha			beta			
	Freeway and MRA		0.66		7.2		Freeway		0.9		6.0			
	Major/Minor Arterials		0.76		5.9		Expressway		0.6		4.0			
	Rural Multilane Hwy		0.73		2.2		Other		0.5		4.0			
	Other		0.15		4.0									
														
∨мт	2001		Time Period				2000			Time Period				
(2001 & 2000)	Facility Type	AM	PM	OP	Daily	(4) (4)	Facility Type	AM	Midday	PM	OP	Daily		
	Freeway	4,345,186	6,202,744	11,481,867	22,029,797		Freeway	431,978	319,709	660,131	1,109,120	2,520,939		
	Expressway	640,816	869,556	1,614,243	3,124,616		Expressway	224,982	145,079	312,633	484,489	1,167,184		
	Major Arterial	4,000,653	5,329,464	10,318,294	19,648,411		Major Arterial	553,170	377,822	723,498	1,239,337	2,893,827		
	Minor Arterial	1,657,345	2,117,857	4,087,080	7,862,282		Minor Arterial	292,931	175,005	380,991	561,862	1,410,790		
	Collector Street	892,288	1,035,889	1,971,115	3,899,292	2	Collector Street	166,941	80,457	197,582	261,566	706,546		
	Ramp	156,594	217,475	430,479	804,548		Ramp	7,187	5,241	9,421	18,146	39,994		
							Frontage Road	3,658	1,816	3,861	6,059	15,394		
	Centroid Connector	881,458	1,300,072	2,408,800	4,590,330	2014 3015 3015	Centroid Connector	179,407	117,861	223,286	381,663	902,217		
	Total	12,574,342	17,073,056	32,311,878	61,959,276		Total	1,860,254	1,222,990		4,062,242	9,656,891		
VHT 🧖	2001		Time Period				2000			Time Period		-		
(2001 & 2000)	Facility Type	AM	PM	OP	Daily	440 174	Facility Type	AM	Midday	PM	OP	Daily		
	Freeway	91,488	95,464	172,984	359,936		Freeway	6,171	4,390	10,388	15,103	36,053		
	Expressway	17,767	18,865	34,349	70,981		Expressway	4,125	2,639	5,739	8,746	21,249		
	Major Arterial	156,089	169,842	317,044	642,975		Major Arterial	16,347	10,505	21,051	32,954	80,855		
	Minor Arterial	67,908	71,238	134,920	274,066	175 1243	Minor Arterial	8,230	4,549	10,484	14,409	37,671		
	Collector Street	76,902	49,088	85,762	211,752		Collector Street	5,558	2,678	6,520	8,726	23,481		
	Ramp	6,283	7,405	13,545	27,233		Ramp	254	182	335	620	1,391		
F 2 2.7.							Frontage Road	115	57	121	189	482		
	Centroid Connector	45,785	67,063	124,429	237,277		Centroid Connector	9,165	6,131	11,463	19,709	46,468		
	Total	462,220	478,964	883,034	1,824,218		Total	49,965	31,131	66,101	100,456	247,650		
Transit Assignment	Multi-path assignment Peak and Off-peak						1	Not Applicable	e to NFR Are	a				

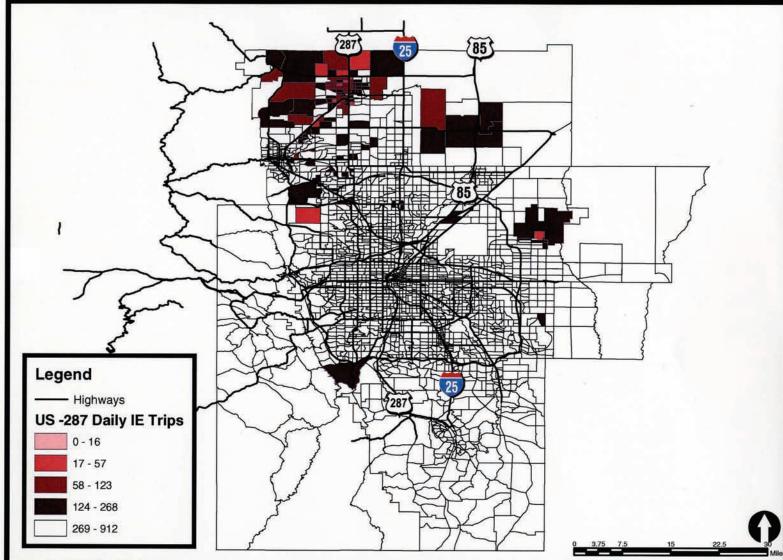


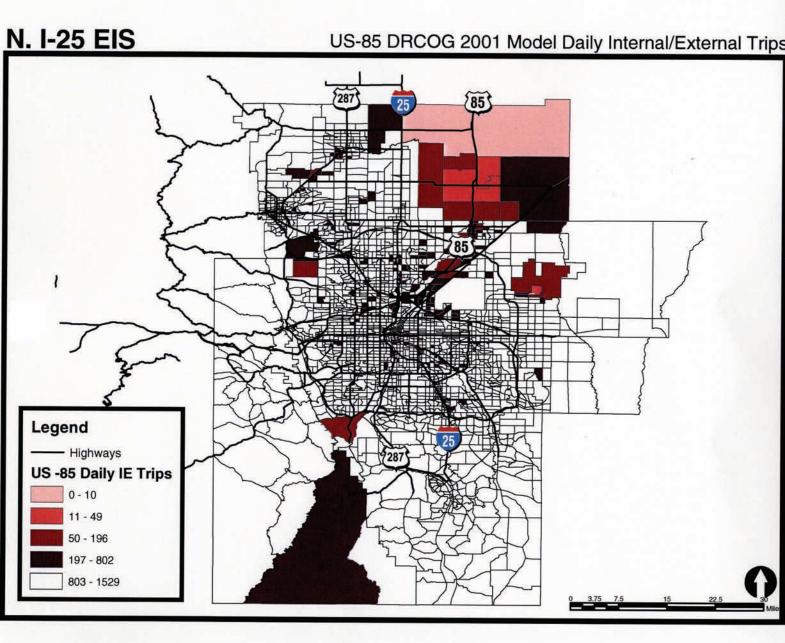
I-25 DRCOG 2001 Model Daily Internal/External Trips

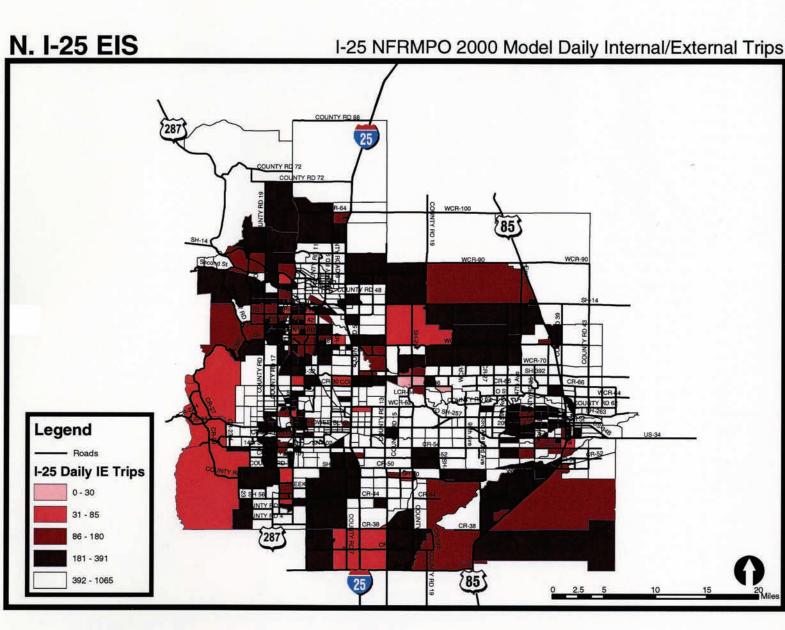




US-287 DRCOG 2001 Model Daily Internal/External Trips









US-287 NFRMPO 2000 Model Daily Internal/External Trips

