

2050 MTP -- Alternative Analysis
Measures of Effectiveness for the DCHC MPO

DCHC MPO	Year =	2016	2050	2050 Plans & Trends	2050 Shared Leadership	2050 All Together
Alternative (Scenario) =		Baseline	E+C			
1 Performance Measures						
1.1 Total VMT (daily)						
1.1.1	All Facility+C Connectors	14,516,717	22,620,357	22,873,253	22,849,537	22,442,832
1.1.1a	All Facility+C Connectors (per capita)	33	34	34	34	34
1.1.2	All Facility (no C Connectors)	13,612,286	21,264,845	21,523,885	21,523,182	21,116,079
1.1.2a	All Facility (no C Connectors) (per capita)	31	32	32	32	32
1.2 Total VHT (daily)						
1.2.1	All Facility+C Connectors	365,641	725,075	639,884	632,091	639,392
1.2.1a	All Facility+C Connectors (per capita)	0.82	1.09	0.96	0.95	0.96
1.2.2	All Facility (no C Connectors)	335,601	225,823	591,974	584,936	591,849
1.2.2a	All Facility (no C Connectors) (per capita)	0.75	0.34	0.89	0.88	0.89
1.3 Average Speed by Facility (miles/hour)						
1.3.1	- Freeway	59	48	53	54	53
1.3.2	- Arterial	35	30	32	33	32
1.3.3	- All Facility	46	39	43	44	43
1.4 Peak Average Speed by Facility (miles/hour)						
1.4.1	- Freeway	57	45	51	52	51
1.4.2	- Arterial	34	28	31	31	30
1.4.3	- All Facility	45	36	41	42	41
1.5 Daily Average Travel Length - All Person Trips						
1.5.1	- Travel Time	13	16	15	15	15
1.5.2	- Travel Distance	6	6	6	6	6
1.6 Daily Average Travel Length - Work Trips						
1.6.1	- Travel Time	20	25	22	22	21
1.6.2	- Travel Distance - Work Trips	10	10	11	11	11
1.7 Peak Average Travel Length - All Person Trips						
1.7.1	- Peak Travel Time	14	18	17	17	17
1.7.2	- Peak Travel Distance	6	6	7	7	7
1.8 Daily Average Travel Length - All CV Trips						
1.8.1	- Travel Time	10	11	11	11	11

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1.8.2	- Travel Distance	7	7	7	7	7
1.9 Daily Average Travel Length - Truck Trips						
1.9.1	- Travel Time	11	13	12	12	12
1.9.2	- Travel Distance	8	8	8	8	8
1.10.	Hours of Delay (daily)	37,909	195,359	119,246	114,850	121,093
1.10a	Minutes of Delay (daily) (per capita)	5	18	11	10	11
1.10.1	Truck Hours of Delay (daily)	1,939	10,911	6,289	5,912	6,383
1.11 Percent of VMT experiencing congestion - All Day						
1.11.1	- Freeway	6%	52%	27%	27%	30%
1.11.2	- Arterial	5%	18%	10%	8%	9%
1.11.3	- All Facility	5%	33%	19%	18%	19%
1.12 Percent of VMT experiencing congestion - Peak						
1.12.1	- Freeway	10%	61%	35%	32%	38%
1.12.2	- Arterial	7%	26%	16%	13%	14%
1.12.3	- All Facility	8%	39%	24%	22%	25%
1.12.4	- Designated truck routes	6%	26%	15%	13%	18%
1.12.5	- Facilities w/bus routes	8%	49%	24%	22%	24%
2 Mode Share Measures						
2.1 All Trips - Daily						
2.1.1	- Drive alone (single occupant vehicle -SOV)	939,928	1,474,117	1,470,368	1,460,258	1,462,009
2.1.2	- Carpool (Share ride)	765,458	1,209,578	1,211,660	1,204,278	1,203,639
2.1.3	- Bus	51,620	82,246	92,563	96,262	98,389
2.1.4	- Rail	-	-	949	1,496	1,943
2.1.5	- Non-Motorized (Bike and Walk)	311,628	554,258	547,875	550,460	547,882
2.2 Work Trips - Daily						
2.2.1	- Drive alone (single occupant vehicle -SOV)	202,133	329,284	327,829	323,353	321,826
2.2.2	- Carpool (Share ride)	29,143	43,077	41,707	39,726	39,427
2.2.3	- Bus	14,413	18,669	24,791	25,042	26,153
2.2.4	- Rail	-	-	366	601	749
2.2.5	- Non-Motorized (Bike and Walk)	12,433	24,046	20,970	21,692	22,003

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Alternative (Scenario) =						
2.3 All Trips - Peak Hours						
2.3.1	- Drive alone (single occupant vehicle -SOV)	500,574	787,905	786,812	780,981	781,484
2.3.2	- Carpool (Share ride)	439,581	705,322	707,366	701,168	699,837
2.3.3	- Bus	27,172	43,724	50,225	51,783	52,795
2.3.4	- Rail	-	-	789	1,186	1,529
2.3.5	- Non-Motorized (Bike and Walk)	140,260	251,413	245,021	246,811	246,479
3 Demographics and Trip Measures						
3.1	Population	446,275	666,483	667,537	666,715	666,818
3.2	Employment	289,221	518,726	519,483	519,845	519,891
3.3	Total Daily Person Trips	2,068,634	3,320,199	3,323,415	3,312,754	3,313,862
3.3.1	Work Person Trips	258,122	415,076	415,663	410,414	410,158
3.4	Total Daily CV Trips	133,002	202,059	202,741	202,307	202,493
3.4.1	Daily Truck Trips	54,882	82,260	82,596	82,376	82,477
3.5	Total Highway Lane Miles	2,597	2,675	2,922	2,942	2,916
4 Other Measures						
4.1	Lane Miles	2,597	2,675	2,922	2,942	2,916
5 Transit Measures						
5.1	Transit Ridership by Prod. Ends					
5.1.1	- GoTriangle (Including Rail)	17,035	30,363	49,395	50,999	63,315
5.1.2	- GoRaleigh	23,853	62,385	105,725	102,074	91,277
5.1.3	- CHT	29,797	59,794	59,117	63,385	65,037
5.1.4	- GoDurham	23,286	26,842	27,330	33,108	32,874
5.1.5	- NCSU	11,873	18,999	14,927	15,775	18,593
5.1.6	- DUKE	8,018	12,727	12,844	12,077	11,594
5.1.7	- OCPT	576	109	680	728	773
5.1.8	- GoCary	2,597	3,688	3,685	4,631	4,445
5.1.9	Total	117,036	214,908	273,704	282,779	287,908
5.4 Transit Supply - Service Miles						
5.4.1	- GoTriangle (Including Rail)	13,392	13,128	30,972	29,534	37,878
5.4.2	- GoRaleigh	10,970	17,686	30,549	30,936	31,033

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5.4.3	- CHT	10,418	9,876	14,448	20,283	22,152
5.4.4	- GoDurham	9,852	9,389	19,904	24,109	24,539
5.4.5	- NCSU	4,563	4,563	3,569	3,566	3,566
5.4.6	- DUKE	2,652	2,776	2,776	3,121	3,121
5.4.7	- OCPT	974	662	1,227	1,227	1,227
5.4.8	- GoCary	1,623	1,931	3,722	3,707	3,730
5.4.9	Total	54,448	60,015	107,170	116,486	127,248
All Trips - Mode Share						
	- Drive alone (single occupant vehicle -SOV)	45%	44%	44%	44%	44%
	- Carpool (Share ride)	37%	36%	36%	36%	36%
	- Bus	2%	2%	3%	3%	3%
	- Rail	0%	0%	0%	0%	0%
	- Non-Motorized (Bike and Walk)	15%	17%	16%	17%	17%
	Total	1.00	1.00	1.00	1.00	1.00
Work Trips - Mode Share						
	- Drive alone (single occupant vehicle -SOV)	78%	79%	79%	79%	78%
	- Carpool (Share ride)	11%	10%	10%	10%	10%
	- Bus	6%	4%	6%	6%	6%
	- Rail	0%	0%	0%	0%	0%
	- Non-Motorized (Bike and Walk)	5%	6%	5%	5%	5%
	Total	1.00	1.00	1.00	1.00	1.00

Note: Values are rounded. Thus, some math operations will appear incorrect, e.g., 90 - 89 = 0

N/A = measure is not applicable, e.g., there is no rail transit in the Plans and Trends scenario.