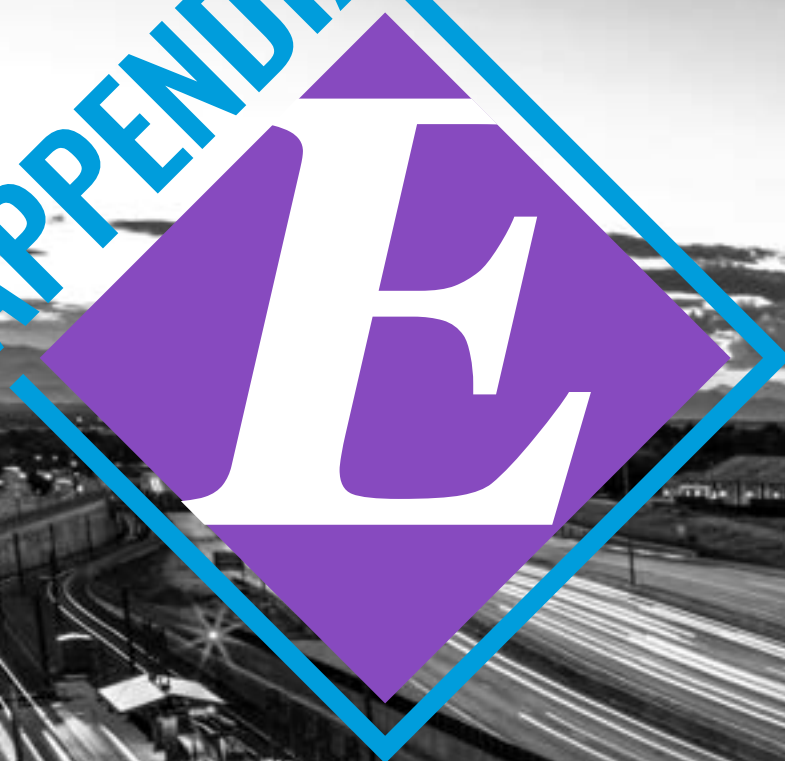


APPENDIX



2050 transportation system mobility performance measures

2050 transportation system mobility performance measures

Appendix E shows changes in regionwide travel measures between 2020 and 2050 using forecasts from DRCOG's Focus transportation model. The Focus model uses the growth in population and employment from DRCOG's small area forecasts (Appendix F), along with other input variables, to forecast transportation trends and performance. The region's population and employment growth, the distribution of that growth, and the provision of transportation facilities and services will affect future travel patterns.

Changes in regionwide travel measures between 2020 and 2050

Modeled system measures - weekday for DRCOG region	2020 Baseline	2050 Forecast	Change
Population	3,376,724	4,428,066	31.1%
Households	1,358,195	1,870,843	37.7%
Employment	2,160,367	2,964,681	37.2%
Person trips			
Within region (internal-internal) single-occupant vehicle drivers	5,452,803	7,339,728	34.6%
Internal-external single-occupant vehicle drivers	267,551	460,780	72.2%
External-external single-occupant vehicle drivers	12,759	21,486	68.4%
Commercial vehicle trips	1,659,119	2,298,175	38.5%
Total single-occupant vehicle driver trips	7,392,232	10,120,169	36.9%
Shared ride driver	2,205,376	2,786,834	26.4%
Shared ride passenger	3,349,011	4,652,120	38.9%
School bus trips	135,323	149,343	10.4%
Total transit trips	264,048	417,646	58.2%
Drive trips to and from transit	69,892	103,113	47.5%
Pedestrian/bicycle trips to and from transit	458,204	732,179	59.8%
Bicycling trips	207,418	264,281	27.4%
Pedestrian trips	1,242,170	1,723,848	38.8%
Total person trips	15,323,674	20,949,533	36.7%

Modeled system measures - weekday for DRCOG region	2020 Baseline	2050 Forecast	Change
Vehicle and congestion performance measures			
Vehicle miles traveled	85,107,276	119,753,537	40.7%
Total vehicle trips	9,597,608	12,907,003	34.5%
Vehicle miles traveled per capita	25	27	7.3%
Vehicle hours traveled	2,302,766	3,433,114	49.1%
Vehicle hours of delay	329,604	676,938	105.4%
Person miles traveled - vehicle	115,745,895	162,864,811	40.7%
Person hours traveled - vehicle	3,131,762	4,669,035	49.1%
Person hours of delay - vehicle	448,261	920,636	105.4%
Average vehicle speed - peak hours (miles per hour)	32	29	-9.4%
Average person delay per trip (minutes)	2	3	51.4%
Vehicle miles traveled / person miles traveled	1	1	-0.3%
Severely congested lane miles (roadways with 3 or more hours of severe congestion) (volume to capacity ratio ≥ 0.95)	816	1,991	144.0%
Percent of vehicle miles traveled in severe congestion	10.2%	18.5%	81.4%

Modeled system measures - weekday for DRCOG region	2020 Baseline	2050 Forecast	Change
Fixed route transit performance measures			
Rail transit boardings	130,053	195,249	50.1%
Bus transit boardings	263,779	441,730	67.5%
Total transit boardings	393,832	636,979	61.7%
Total transit trips	264,048	417,646	58.2%
Person miles traveled on transit	2,156,194	3,511,190	62.8%
Transit share of daily work trips	4.22%	4.88%	15.6%
Transit share of total daily trips	2.01%	2.41%	19.9%
Percent of households making a transit trip	8.42%	9.35%	11.0%
Accessibility performance measures			
Share of total population with good transit-job accessibility (100,000-plus jobs within a 45-minute transit trip)	55%	60%	
Share of population in low-income or minority areas with good transit-job accessibility (Environmental Justice Transportation Analysis Zone)	74%	78%	

Source: DRCOG travel models: base year = 2020; model year = 2050