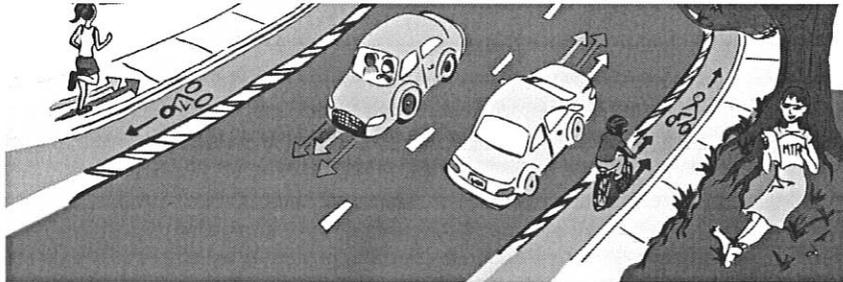




**Administrative Modification**  
**to**  
**Futures 2040 Metropolitan Transportation Plan**

September 2017



Mid-Region Metropolitan Planning Organization  
Mid-Region Council of Governments  
809 Copper Avenue NW  
Albuquerque, NM 87102  
[www.mrcog-nm.gov](http://www.mrcog-nm.gov)



## Futures 2040 Metropolitan Transportation Plan's 2040 Revised Forecast:

### Interim use of a modified Socioeconomic and Travel Demand Forecast

September, 2017

#### Summary

*MRMPO is implementing an administrative modification to the 2040 Metropolitan Transportation Plan to approve the use of the 2040 Revised Forecast for socioeconomic and travel demand projections throughout the Albuquerque Metropolitan Planning Area for the purpose of transportation project planning. The Revised Forecast integrates a reduction in future growth assumptions per updated population projections from the University of New Mexico's Geospatial Population Studies Group, which is the primary source for MTP Forecast.*

#### Introduction

The Metropolitan Transportation Plan (MTP) is developed by the Mid-Region Metropolitan Planning Organization (MRMPO) in collaboration with local agencies and jurisdictions for the purposes of improving mobility, supporting economic growth, promoting active places, and fostering environmental resiliency. The Futures 2040 MTP programs more than 6 billion dollars over the next 25 years to a variety of multi-modal projects that preserve, rehabilitate, and expand transportation infrastructure in key locations. The Futures 2040 MTP was approved by the Metropolitan Transportation Board in April of 2015 and will stand as the official plan to guide regionally-significant transportation projects, planning and decision-making in the Albuquerque Metropolitan Planning Area (AMPA) until the next MTP is approved in 2020.

Federal regulations require that MTPs are updated every 4-5 years to incorporate new assumptions that reflect current transportation conditions, land use patterns, and demographic trends. This schedule has served the region well given that New Mexico and the AMPA have historically been fairly consistent in terms of the direction and pace of growth. However, precipitated by the Great Recession, the AMPA has experienced unprecedented volatility over the past 10 years leading to significant economic decline and stagnant population levels. While neighboring states have since recovered to pre-recessionary employment levels, New Mexico continues to experience high unemployment, low job growth, low birth rates, and most recently, negative net migration. These factors are anticipated to have a deep and lasting impact on future growth.

Population assumptions that underlie the MTP are based on projections developed at the University of New Mexico's Geospatial Population Studies (GPS). Following the approval of the Futures 2040 MTP, GPS revised their population projections downward to reflect reduced growth expectations. Table 1 compares the most recent GPS population projection (released in 2016) with the population projection that the Futures 2040 was based on (released in 2012) for the 4 county area of Bernalillo, Sandoval, Torrance, and Valencia.

**Table 1: GPS Population Projections, MRCOG's Four County Area**

	<i>GPS Projection (2012 release)</i>	<i>GPS Projection (2016 release)</i>	<i>Numeric Difference</i>	<i>Percentage Difference</i>
2015	974,772	910,781	-63,991	-7%
2020	1,062,489	957,975	-104,514	-10%
2025	1,146,267	999,264	-147,003	-13%
2030	1,225,662	1,041,885	-183,777	-15%
2035	1,298,281	1,077,648	-220,633	-17%
2040	1,362,609	1,108,733	-253,876	-19%

The population projections released by GPS in 2016 anticipate 253,876 fewer people in the MRCOG counties by 2040 than was initially projected in 2012. This difference is likely to have an impact on our infrastructure demands as well as the timing of necessary transportation improvements. As such, MRMPO is implementing an administrative modification to allow the regional population, employment, and travel demand forecasts to reflect this change. The purpose of this administrative modification to the 2040 MTP is to allow transportation professionals a more current set of forecasts for use in project development, design, and financial estimates during this interim timeframe until the next MTP is approved in 2020.

This administrative modification also includes the omission of the privately-funded Mesa del Sol interchange from the travel demand network and the MTP project listing. The pace of growth at the 12,000 acre planned community of Mesa del Sol has been far below expectations, and current ownership and financial challenges make future growth uncertain. Because construction of the currently programmed Mesa del Sol interchange will be determined by actual need, and because that need is not expected to occur prior to 2040, MRMPO will remove it from the 2040 transportation modeling network. All other growth inputs, zoning and land uses, and transportation conditions, will be exactly the same as those used in the development of the 2040 MTP.

### 2040 Revised Forecast

MRMPO has developed a 2040 Revised Forecast that is based on the updated population projections. The 2040 Revised Forecast consists of an updated socioeconomic forecast and travel demand forecast that incorporates a lower growth assumption. The socioeconomic forecast was created using an interim forecast year produced by MRMPO's land use model that came closest to the most recent 2040 population projection by GPS.

Chart 1 compares the approved 2040 MTP population forecast with the 2040 MTP Revised Forecast population for the 4 county area.

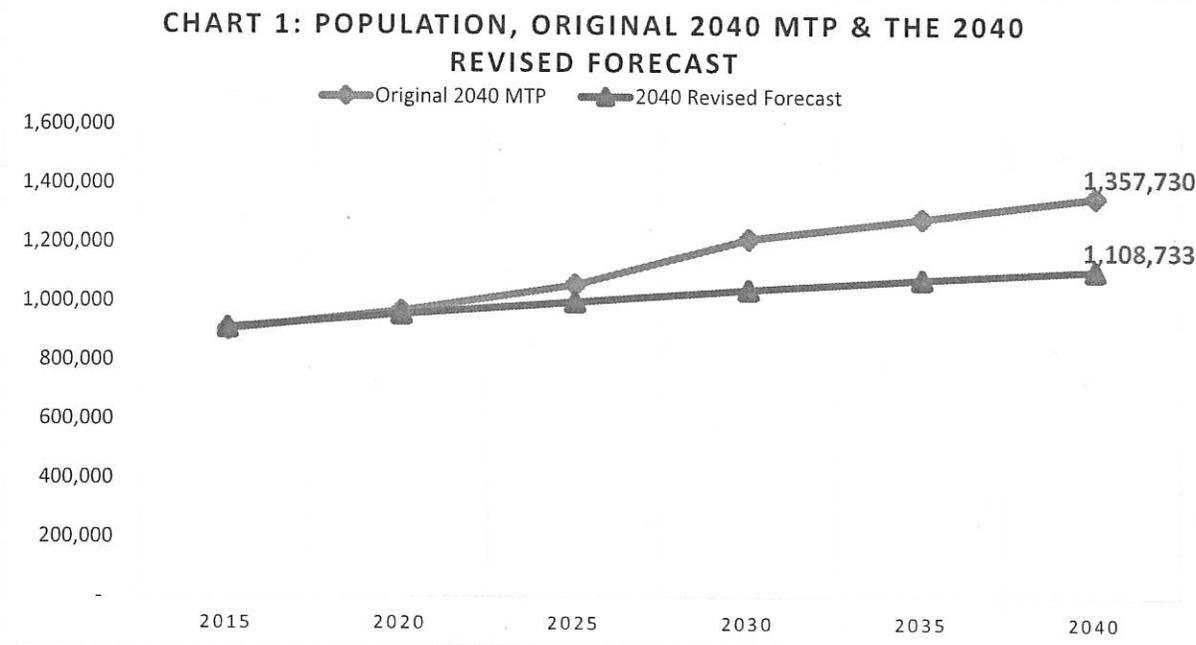
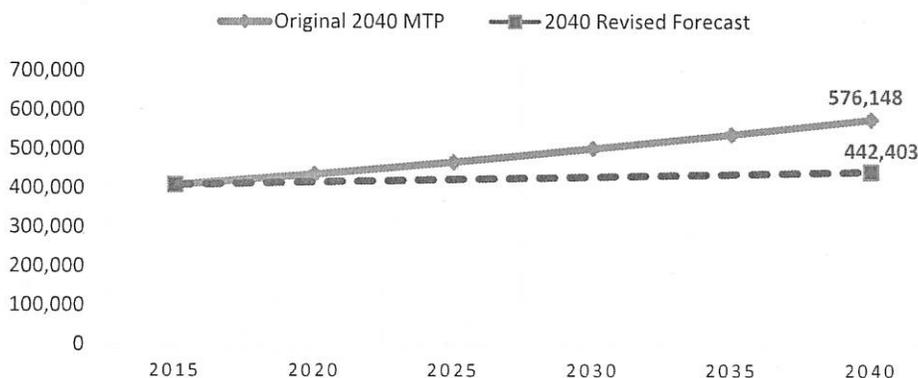


Chart 2 compares the 2040 MTP employment forecast with the 2040 Revised Forecast employment to demonstrate the reduced employment expectations.

**CHART 2: EMPLOYMENT, ORIGINAL 2040 MTP & THE 2040 REVISED FORECAST**



The new socioeconomic forecast was input to the travel demand model to generate the revised travel demand forecast. The future network used by the travel demand model was the currently approved 2040 MTP transportation network without the Mesa del Sol interchange. Table 2 illustrates the comparison between the regional travel demand statistics from the 2040 MTP and the 2040 Revised Forecast.

**Table 2: Travel Demand Model Summary Statistics, AMPA**

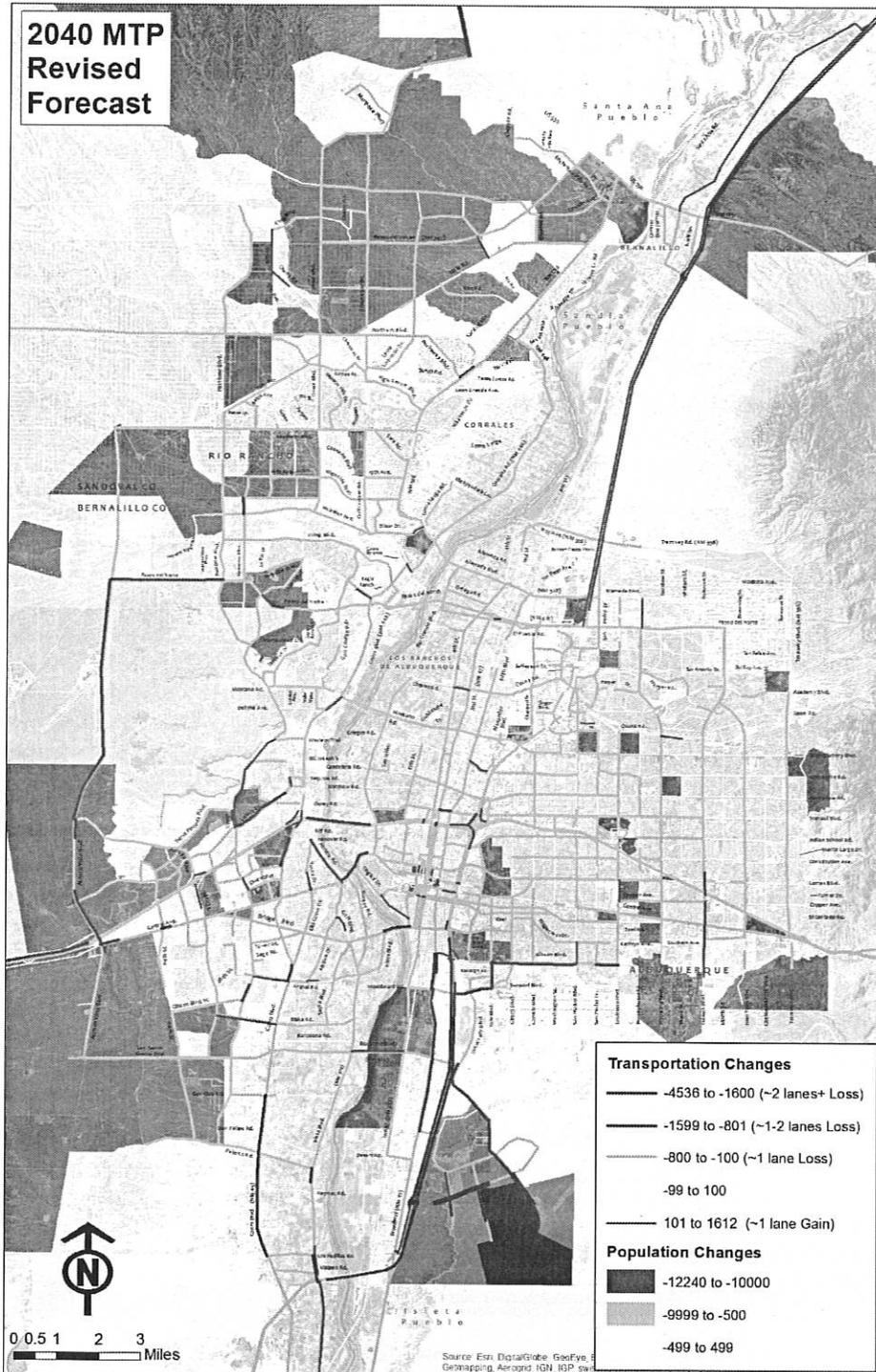
	Original 2040 MTP	2040 Revised Forecast	2040 Differences (#)	2040 Differences (%)
Daily Vehicle Hours Traveled	950,803	679,700	-271,103	-28.5%
Daily Vehicle Miles Traveled	28,671,051	24,927,665	-3,743,386	-13.1%
Average Speed	30.2	36.7	6.5	21.5%
PM Peak Hour Hours of Delay	61,079	25,588	-35,491	-58.1%
PM Peak Hour Hours of Travel	120,472	75,566	-44,906	-37.3%
PM Peak Hr. Miles of Travel	2,758,888	2,368,433	-390,455	-14.2%
Avg. PM Peak Hour Speed	22.9	31.3	8.4	36.7%

The travel demand model results demonstrates a sizable impact between the 2040 MTP and the Revised Forecast which is consistent with the reduction in population and jobs expectations. Region-wide, congestion will be considerably less by 2040 under the Revised Forecast than the original 2040 MTP forecast. These differences are most pronounced during the pm peak hour, when congestion is typically at its worst.

**Small Area Impacts**

While regional impacts of using the 2040 Revised Forecast show a substantial improvement over the original 2040 MTP, the differences at a small area level are not uniform. Map 1 shows the differences in traffic volume on the network and the differences in population levels by data analysis subzone (DASZ) between both forecasts.

Map 1: Difference in Network Volumes and DASZ Population Growth in Albuquerque Area, 2040 Revised Forecast v. Original 2040 MTP





## Conclusions

MRMPO proposes use of the 2040 Revised Forecast for transportation planning purposes until the next MTP update for the following reasons:

- The 2040 Revised Forecast was built using the same land use and travel demand modeling environment as the original 2040 MTP forecast, which maintains consistency and comparability among the technical tools used to construct the forecasts.
- Aside from the revised population and employment forecasts and the removal of the Mesa del Sol interchange, all other data assumptions of the 2040 Revised Forecast are consistent with the original 2040 MTP forecast, which preserves consistency in the underlying information that supports the forecasts.
- The development of a 2040 Revised Forecast allows transportation professionals in the region the latitude to adapt to new and impactful changes regarding growth expectations, while upholding the integrity of the MTP planning process.

Local officials, planners, and engineers rely on MRMPO's long range population, employment and travel demand forecasts that underlie the Metropolitan Transportation Plan when determining future needs and prioritizing investments as they relate to land use, transportation, and infrastructure. Given the newly available and considerably lower population projections available from GPS, local agencies would benefit from an MTP-consistent alternative so that they can account for this difference in their planning processes. **MRMPO supports the approval of an administrative modification to the 2040 MTP that allows for the use of the 2040 Revised Forecast in place of the original 2040 MTP Forecast.**

## Administrative Modification to Appendix A - 2040 MTP Project Listing

2040 MTP Project Listing by Project Type, then Project Title - PRIVATE-DEVELOPER FUNDED PROJECTS									
MPO #	Project Title	From	To	Project Description	Project Type	Lead Agency	MTP Project Cost	Time Frame	
	Time Frame: "Funded" = programmed with federal, state or local funding between 2012-2021; "Near Term" = project completion anticipated 2015-2025; "Late Term" = project completion anticipated 2025-2040								
454.0	L-25 & Mesa del Sol Interchange Project DELETED from 2040 MTP time frame under Admin. Mod. #1 2017 Sept	L-25 New Exit	Mesa del Sol Interchange	Construct New Interchange. (Previous obligations FY 2006-\$371,756 STP-D & \$464,696 Borders&Corr.) Dame ID NM043 with \$5,039,440 remaining per June 22, 2012 HPP reconciliation.	Capacity Proj	MMDOT D-3 (Private Funding with some public funds possible)	26,000,000	Late Term Beyond 2040	
				Total Est. Cost of All Private Developer Funded Projects			1,207,799,922		
				Removal of Project ID 454.0 Mesa del Sol Interchange			(26,000,000)		
				Revised Total Est. Cost of All Private Developer Funded Projects			1,181,799,922		
				Projected Private Revenue for Projects (amount assumed pledged equals cost of projects)			1,181,799,922		
				Difference (Private Revenue Projected - Total Projects' Cost)			0		

There is no change to the fiscal constraint of the MTP since this project was privately funded in this listing.