

BENEFITS OF IMPROVEMENTS

Several benefits would be derived from the improvements included here. The main categories of benefits include: Traffic Operations and Congestion Mitigation, Non-Motorized and Transit Travel Improvements, Safety Improvements, Catalyst for Redevelopment, and Regional Water Quality and Drainage.

TRAFFIC OPERATIONS AND CONGESTION MITIGATION

The single largest benefit that will be recognized by a majority of daily corridor users will be the benefit to traffic flow. For most of the corridor, the recommended Short-Term operations modeling indicates that a peak-hour level of service better than LOS “D,” with only the intersections of Lamar, Koenig, 51st, Manor, and MLK reporting a LOS “D” in either the AM or PM Peak. Without the proposed modifications, 51st is expected to reach an LOS “E” in the PM Peak, and the delay at Lamar, Manor, and MLK will increase in comparison to current conditions. A table summarizing the level of service for the base condition and the short/long-term improvements can be found on the following pages. A summary of the concept of level of service can be found on the following page. Additionally, a detailed analysis of the traffic operations analysis can be found in the Appendix.

Over the long term, the 2030 scenario sees significant growth in traffic at the intersections. The intersection designs recommended here were able to accommodate 20% growth in traffic in this modeling, but unlike the existing mitigated conditions described above, many intersections would continue to experience a Level of Service “D” during one of the peak periods, and the intersections of 45th, I-35, MLK, and Springdale would each experience Level of Service “E” conditions during one of the peak periods. However, the corridor would experience delays that are significantly worse than this *without* the proposed improvements.

NON-MOTORIZED AND TRANSIT TRAVEL IMPROVEMENTS

Project concepts proposed here would close several existing sidewalk gaps within the corridor. The proposed improvements would also significantly increase the perceived attractiveness of bicycle travel within the corridor, by providing physically separated facilities that would be accessible to riders of all comfort levels. Additionally, the provision of a two-way shared-use path along Zone 1 of the corridor would substantially complete the regional Red Line Trail. Around the city, state and nation, pedestrian and bicycle infrastructure has been shown to extend the catchment area of transit service and thereby increase the transit modal split, which will reduce the need to widen the Airport Boulevard roadway beyond the desired 4-lane proposed configuration.



EXISTING CONDITIONS TRAFFIC OPERATIONS ANALYSIS RESULTS

INTERSECTION	2011		2011		2011		2011	
	AM Peak Hour Existing Condition		PM Peak Hour Existing Condition		AM Peak Hour Short Term Improvements		PM Peak Hour Short Term Improvements	
	DELAY (SEC/VEH)	LOS	DELAY (SEC/VEH)	LOS	DELAY (SEC/VEH)	LOS	DELAY (SEC/VEH)	LOS
SIGNALIZED INTERSECTIONS								
	29.6	C	31.3	C	-	-	-	-
Airport Blvd @ Guadalupe St	11.6	B	19.8	B	-	-	-	-
Airport Blvd @ Highland Mall	6.0	A	8.1	A	-	-	-	-
Airport Blvd @ Denson Dr	10.0	B	11.8	B	-	-	-	-
Airport Blvd @ Koenig Ln Westbound	43.8	D	53.3	D	-	-	-	-
Airport Blvd @ Koenig Ln Eastbound	23.3	C	46.2	D	-	-	-	-
Airport Blvd @ 53rd 1/2 St (Bruning Ave)	16.2	B	15.8	B	18.4	B	17.3	B
Airport Blvd @ 51st St	62.2	E	97.0	F	38.9	D	38.0	D
Airport Blvd @ 46th St	-	-	-	-	-	-	-	-
Airport Blvd @ 45th St	28.2	C	35.6	D	-	-	-	-
Airport Blvd @ I-35 SB	22.9	C	22.5	C	-	-	-	-
Airport Blvd @ I-35 NB	24.5	C	16.3	B	-	-	-	-
Airport Blvd @ Wilshire Blvd/ Aldrich St	21.9	C	28.1	C	14.6	B	18.6	B
Airport Blvd @ 38 1/2 St	19.8	B	16.7	B	-	-	-	-
Airport Blvd @ Manor Rd	22.3	C	38.8	D	18.6	B	32.3	C
Airport Blvd @ MLK Blvd	46.7	D	44.7	D	42.5	D	36.5	D
Airport Blvd @ 12th St	16.7	B	19.7	B	15.7	B	19.2	B
Airport Blvd @ Oak Springs Dr	26.3	C	23.2	C	-	-	-	-
Airport Blvd @ Goodwin Ave	5.6	A	3.8	A	-	-	-	-
Airport Blvd @ Springdale Rd	31.9	C	40.4	D	30.2	C	37.1	D
Airport Blvd @ Bolm St	17.1	B	21.8	C	-	-	-	-
Airport Blvd @ Shady Ln	6.5	A	3.9	A	-	-	-	-
Airport Blvd @ Levander Loop	10.4	B	6.9	A	-	-	-	-



FUTURE CONDITIONS TRAFFIC OPERATIONS ANALYSIS RESULTS

INTERSECTION	2030		2030		2030		2030		2030		2030	
	AM Peak Hour Without Improvements		PM Peak Hour Without Improvements		AM Peak Hour With Short Term Improvements		PM Peak Hour With Short Term Improvements		AM Peak Hour With Long Term Improvements		PM Peak Hour With Long Term Improvements	
	DELAY (SEC/VEH)	LOS	DELAY (SEC/VEH)	LOS	DELAY (SEC/VEH)	LOS	DELAY (SEC/VEH)	LOS	DELAY (SEC/VEH)	LOS	DELAY (SEC/VEH)	LOS
SIGNALIZED INTERSECTIONS												
	25.5	C	36.7	D	-	-	-	-	-	-	-	-
Airport Blvd @ Guadalupe St	11.4	B	22.7	C	-	-	-	-	-	-	-	-
Airport Blvd @ Highland Mall	6.4	A	8.7	A	-	-	-	-	-	-	-	-
Airport Blvd @ Denson Dr	14.2	B	16.6	B	-	-	-	-	15.7	B	17.8	B
Airport Blvd @ Koenig Ln Westbound	62.3	E	75.2	E	-	-	-	-	-	-	-	-
Airport Blvd @ Koenig Ln Eastbound	26.9	C	61.1	E	-	-	-	-	-	-	-	-
Airport Blvd @ 53rd 1/2 St (Bruning Ave)	18.0	B	18.3	B	20.7	C	21.5	C			-	-
Airport Blvd @ 51st St	106.2	F	154.2	F	51.8	D	50.0	D	41.9	D	42.2	D
Airport Blvd @ 46th St	-	-	-	-	-	-	-	-	7.4	A	16.0	B
Airport Blvd @ 45th St	38.9	D	53.0	D	-	-	-	-	14.7	B	22.5	C
Airport Blvd @ I-35 SB	38.1	D	26.7	C	-	-	-	-	-	-	-	-
Airport Blvd @ I-35 NB	32.7	C	18.9	B	-	-	-	-	-	-	-	-
Airport Blvd @ Wilshire Blvd/ Aldrich St	26.4	C	32.7	C	17.0	B	20.1	C	26.5	C	22.3	C
Airport Blvd @ 38 1/2 St	20.4	C	17.6	B	-	-	-	-				
Airport Blvd @ Manor Rd	27.0	C	60.3	E	21.9	C	50.1	D	21.3	C	37.3	D
Airport Blvd @ MLK Blvd	78.0	E	65.6	E	73.8	E	54.1	D	49.6	D	42.3	D
Airport Blvd @ 12th St	18.9	B	23.7	C	19.1	B	21.4	C				
Airport Blvd @ Oak Springs Dr	33.8	C	33.3	C	-	-	-	-	30.3	C	25.4	C
Airport Blvd @ Goodwin Ave	6.6	A	5.1	A	-	-	-	-	-	-	-	-
Airport Blvd @ Springdale Rd	37.0	D	56.2	E	35.1	D	50.9	D	31.4	C	40.9	D
Airport Blvd @ Bolm St	23.0	C	24.5	C	-	-	-	-	-	-	-	-
Airport Blvd @ Shady Ln	6.9	A	4.2	A	-	-	-	-	-	-	-	-
Airport Blvd @ Levander Loop	12.1	B	7.8	A	-	-	-	-	-	-	-	-



Table 1: 2011 Intersection Analyses

INTERSECTION	2011		2011		2011		2011	
	AM Peak Hour Existing Condition		PM Peak Hour Existing Condition		AM Peak Hour Short Term Improvements		PM Peak Hour Short Term Improvements	
	DELAY (SEC/VEH)	LOS	DELAY (SEC/VEH)	LOS	DELAY (SEC/VEH)	LOS	DELAY (SEC/VEH)	LOS
SIGNALIZED INTERSECTIONS								
	29.6	C	31.3	C	-	-	-	-
Airport Blvd @ Guadalupe St	11.6	B	19.8	B	-	-	-	-
Airport Blvd @ Highland Mall	6.0	A	8.1	A	-	-	-	-
Airport Blvd @ Denson Dr	10.0	B	11.8	B	-	-	-	-
Airport Blvd @ Koenig Ln Westbound	43.8	D	53.3	D	-	-	-	-
Airport Blvd @ Koenig Ln Eastbound	23.3	C	46.2	D	-	-	-	-
Airport Blvd @ 53rd 1/2 St (Bruning Ave)	16.2	B	15.8	B	18.4	B	17.3	B
Airport Blvd @ 51st St	62.2	E	97.0	F	38.9	D	38.0	D
Airport Blvd @ 46th St	-	-	-	-	-	-	-	-
Airport Blvd @ 45th St	28.2	C	35.6	D	-	-	-	-
Airport Blvd @ I-35 SB	22.9	C	22.5	C	-	-	-	-
Airport Blvd @ I-35 NB	24.5	C	16.3	B	-	-	-	-
Airport Blvd @ Wilshire Blvd/ Aldrich St	21.9	C	28.1	C	14.6	B	18.6	B
Airport Blvd @ 38 1/2 St	19.8	B	16.7	B	-	-	-	-
Airport Blvd @ Manor Rd	22.3	C	38.8	D	18.6	B	32.3	C
Airport Blvd @ MLK Blvd	46.7	D	44.7	D	42.5	D	36.5	D
Airport Blvd @ 12th St	16.7	B	19.7	B	15.7	B	19.2	B
Airport Blvd @ Oak Springs Dr	26.3	C	23.2	C	-	-	-	-
Airport Blvd @ Goodwin Ave	5.6	A	3.8	A	-	-	-	-
Airport Blvd @ Springdale Rd	31.9	C	40.4	D	30.2	C	37.1	D
Airport Blvd @ Bolm St	17.1	B	21.8	C	-	-	-	-
Airport Blvd @ Shady Ln	6.5	A	3.9	A	-	-	-	-
Airport Blvd @ Levander Loop	10.4	B	6.9	A	-	-	-	-

Table 2: 2030 Intersection Analyses

INTERSECTION	2030		2030		2030		2030		2030		2030	
	AM Peak Hour Without Improvements		PM Peak Hour Without Improvements		AM Peak Hour With Short Term Improvements		PM Peak Hour With Short Term Improvements		AM Peak Hour With Long Term Improvements		PM Peak Hour With Long Term Improvements	
	DELAY (SEC/VB)	LOS	DELAY (SEC/VB)	LOS	DELAY (SEC/VB)	LOS	DELAY (SEC/VB)	LOS	DELAY (SEC/VB)	LOS	DELAY (SEC/VB)	LOS
SIGNALIZED INTERSECTIONS												
	25.5	C	36.7	D	-	-	-	-	-	-	-	-
Airport Blvd @ Guadalupe St	11.4	B	22.7	C	-	-	-	-	-	-	-	-
Airport Blvd @ Highland Mall	6.4	A	8.7	A	-	-	-	-	-	-	-	-
Airport Blvd @ Denson Dr	14.2	B	16.6	B	-	-	-	-	15.7	B	17.8	B
Airport Blvd @ Koenig Ln Westbound	62.3	E	75.2	E	-	-	-	-	-	-	-	-
Airport Blvd @ Koenig Ln Eastbound	26.9	C	61.1	E	-	-	-	-	-	-	-	-
Airport Blvd @ 53rd 1/2 St (Bruning Ave)	18.0	B	18.3	B	20.7	C	21.5	C			-	-
Airport Blvd @ 51st St	106.2	F	154.2	F	51.8	D	50.0	D	41.9	D	42.2	D
Airport Blvd @ 46th St	-	-	-	-	-	-	-	-	7.4	A	16.0	B
Airport Blvd @ 45th St	38.9	D	53.0	D	-	-	-	-	14.7	B	22.5	C
Airport Blvd @ I-35 SB	38.1	D	26.7	C	-	-	-	-	-	-	-	-
Airport Blvd @ I-35 NB	32.7	C	18.9	B	-	-	-	-	-	-	-	-
Airport Blvd @ Wilshire Blvd/ Aldrich St	26.4	C	32.7	C	17.0	B	20.1	C	26.5	C	22.3	C
Airport Blvd @ 38 1/2 St	20.4	C	17.6	B	-	-	-	-				
Airport Blvd @ Manor Rd	27.0	C	60.3	E	21.9	C	50.1	D	21.3	C	37.3	D
Airport Blvd @ MLK Blvd	78.0	E	65.6	E	73.8	E	54.1	D	49.6	D	42.3	D
Airport Blvd @ 12th St	18.9	B	23.7	C	19.1	B	21.4	C				
Airport Blvd @ Oak Springs Dr	33.8	C	33.3	C	-	-	-	-	30.3	C	25.4	C
Airport Blvd @ Goodwin Ave	6.6	A	5.1	A	-	-	-	-	-	-	-	-
Airport Blvd @ Springdale Rd	37.0	D	56.2	E	35.1	D	50.9	D	31.4	C	40.9	D
Airport Blvd @ Bolm St	23.0	C	24.5	C	-	-	-	-	-	-	-	-
Airport Blvd @ Shady Ln	6.9	A	4.2	A	-	-	-	-	-	-	-	-
Airport Blvd @ Levander Loop	12.1	B	7.8	A	-	-	-	-	-	-	-	-