



# MEMORANDUM

RECEIVED

SEP 26 2012

DISTRICT BUSINESS SERVICES

**TO:** Bob Bielek, P.E.  
Attention: Jesus "Eddie" Valtier, P.E.

**DATE:** September 21, 2012

**FROM:** William E. Knowles, P.E.

**FILE:** TPP (T)  
(512) 486-5100

**SUBJECT:** Traffic Data  
CSJ: 2552-04-027  
Border Highway West (BHW) Project:  
From Loop 375 in Downtown El Paso  
To US 85/W Paisano Dr just South of I-10  
El Paso County

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Attached are tabulations showing traffic analysis for highway design for the 2015 to 2035 twenty year, and for the 2015 to 2045 thirty year design periods, for the specified limits of the route. Also included are data for use in air and noise analysis.

Please refer to your original e-mailed memorandum dated August 6, 2012.

If you have any questions or need additional information, please contact George Petrek at (512) 486-5140.

## Attachments

cc: ✓ Marty Boyd, ELP  
Design Division

A handwritten signature in black ink, appearing to read "William E. Knowles".

## El Paso District

September 7, 2012

El Paso District															Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 20 Year Period (2015 to 2035)					SLAB	
Description of Location	Average Daily Traffic		Dir Dist %	Base Year			ATHWLD	Percent Tandem Axles in ATHWLD	Flexible Pavement	S	Rigid Pavement	SLAB									
	2015	2035		K Factor	Percent Trucks																
					ADT	DHV															
<u>Border Highway West (BHW) Project</u> Loop 375, East of Downtown (East of Coles St) El Paso County	41,400	57,000	53 - 47	8.4	9.1	6.0	14,500	50	12,637,000	3	16,588,000	8"									
NOT INTENDED FOR CONSTRUCTION BIDDING OR PERMIT PURPOSES William Erick Knowles, P.E. Serial Number 84704																					
Description of Location	Average Daily Traffic		Dir Dist %	Base Year			ATHWLD	Percent Tandem Axles in ATHWLD	Flexible Pavement	S	Rigid Pavement	SLAB									
	2015	2045		K Factor	Percent Trucks																
					ADT	DHV															
<u>Border Highway West (BHW) Project</u> Loop 375, East of Downtown (East of Coles St) El Paso County	41,400	64,600	53 - 47	8.4	9.1	6.0	14,600	50	20,420,000	3	26,805,000	8"									

# TRAFFIC ANALYSIS FOR HIGHWAY DESIGN

September 7, 2012

El Paso District														Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 20 Year Period (2015 to 2035)					
Description of Location		Average Daily Traffic		Dir Dist %	K Factor	Base Year		ATHWLD	Percent Tandem Axles in ATHWLD	Flexible Pavement	S	Rigid Pavement	SLAB						
		2015	2035			ADT	Percent Trucks												
														DHV					
<u>Border Highway West (BHW) Project</u> Loop 375, South of Downtown (Between Campbell St & Coles St) El Paso County		11,600	22,700	53 - 47	8.4	7.7	5.1	12,800	70	3,733,000	3	4,897,000	8"						
<b>NOT INTENDED FOR CONSTRUCTION BIDDING OR PERMIT PURPOSES William Erick Knowles, P.E. Serial Number 84704</b>																			
<b>Data for Use in Air &amp; Noise Analysis</b>																			
Vehicle Class		Base Year																	
		% of ADT	% of DHV																
Light Duty		92.3		94.9															
Medium Duty		3.2		2.1															
Heavy Duty		4.5		3.0															
<b>Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 30 Year Period (2015 to 2045)</b>																			
Description of Location		Average Daily Traffic		Dir Dist %	K Factor	Base Year		ATHWLD	Percent Tandem Axles in ATHWLD	Flexible Pavement	S	Rigid Pavement	SLAB						
		2015	2045			ADT	Percent Trucks												
														DHV					
<u>Border Highway West (BHW) Project</u> Loop 375, South of Downtown (Between Campbell St & Coles St) El Paso County		11,600	27,700	53 - 47	8.4	7.7	5.1	13,000	70	6,416,000	3	8,416,000	8"						

## El Paso District

September 7, 2012

El Paso District										Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 20 Year Period (2015 to 2035)			
Description of Location	Average Daily Traffic			Dir Dist %	K Factor	Base Year		ATHWLD	Percent Tandem Axles in ATHWLD	Flexible Pavement	S N	Rigid Pavement	SLAB
	2015		2035			ADT	Percent Trucks						
	2015	2045	DHV										
<u>Border Highway West (BHW) Project</u> Managed Lanes (BHW): (South of Spur 1966) El Paso County	7,100	16,900		53 - 47	8.4	7.3	4.8	12,300	70	2,478,000	3	3,249,000	8"
NOT INTENDED FOR CONSTRUCTION BIDDING OR PERMIT PURPOSES William Erick Knowles, P.E. Serial Number 84704													
Data for Use in Air & Noise Analysis													
Vehicle Class	% of ADT		% of DHV										
	92.7		95.2										
	3.1		2.0										
Heavy Duty	4.2		2.8										
Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 30 Year Period (2015 to 2045)													
Description of Location	Average Daily Traffic			Dir Dist %	K Factor	Base Year		ATHWLD	Percent Tandem Axles in ATHWLD	Flexible Pavement	S N	Rigid Pavement	SLAB
	2015		2045			ADT	Percent Trucks						
	2015	2045	DHV										
<u>Border Highway West (BHW) Project</u> Managed Lanes (BHW): (South of Spur 1966) El Paso County	7,100	20,600		53 - 47	8.4	7.3	4.8	12,500	70	4,290,000	3	5,625,000	8"

## El Paso District

<b>EI Paso District</b>										Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 20 Year Period (2015 to 2035)							
Description of Location	Average Daily Traffic				Dir Dist %	Base Year			ATHWLD	Percent Tandem Axles in ATHWLD	Flexible Pavement		S	N	Rigid Pavement	SLAB	
	2015		2035			K Factor	ADT	Percent Trucks			DHV						
<u>Border Highway West (BHW) Project</u>  Managed Lanes (BHW): (South of Exec Center Blvd)  EI Paso County	10,100	23,900	53 - 47	8.4	7.6	5.0	12,700	70	3,653,000	3	4,791,000	8"					
<b>NOT INTENDED FOR CONSTRUCTION BIDDING OR PERMIT PURPOSES William Erick Knowles, P.E. Serial Number 84704</b>																	
<b>Data for Use in Air &amp; Noise Analysis</b>										Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 30 Year Period (2015 to 2045)							
Vehicle Class	Base Year				% of DHV	Dir Dist %	Base Year			ATHWLD	Percent Tandem Axles in ATHWLD	Flexible Pavement		S	N	Rigid Pavement	SLAB
	% of ADT		% of DHV				K Factor	ADT	Percent Trucks			DHV					
Light Duty	92.4	95.0															
Medium Duty	3.2	2.1															
Heavy Duty	4.4	2.9															
<b>EI Paso District</b>										Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 30 Year Period (2015 to 2045)							
Description of Location	Average Daily Traffic				Dir Dist %	Base Year			ATHWLD	Percent Tandem Axles in ATHWLD	Flexible Pavement		S	N	Rigid Pavement	SLAB	
	2015		2045			K Factor	ADT	Percent Trucks			DHV						
<u>Border Highway West (BHW) Project</u>  Managed Lanes (BHW): (South of Exec Center Blvd)  EI Paso County	10,100	29,100	53 - 47	8.4	7.6	5.0	12,900	70	6,318,000	3	8,286,000	8"					

**September 7, 2012**

El Paso District										September 7, 2012									
										Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 20 Year Period (2015 to 2035)									
										Percent Tandem Axles in ATHWLD									
										Base Year									
										Percent Trucks									
										ADT DHV									
										K Factor									
										Dir Dist %									
										Average Daily Traffic									
										2015 2035									
<u>Border Highway West (BHW) Project</u> Managed Lanes (BHW): (North of Exec Center Blvd) El Paso County										23,300 33,200 53 - 47 8.4 8.8 5.8 60 7,019,000 3 9,212,000 8"									
NOT INTENDED FOR CONSTRUCTION BIDDING OR PERMIT PURPOSES William Erick Knowles, P.E. Serial Number 84704																			
<u>Border Highway West (BHW) Project</u> Managed Lanes (BHW): (North of Exec Center Blvd) El Paso County										23,300 38,000 53 - 47 8.4 8.8 5.8 60 11,423,000 3 14,992,000 8"									

## El Paso District

September 7, 2012

El Paso District													Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 20 Year Period (2015 to 2035)				
Description of Location	Average Daily Traffic		Dir Dist %	K Factor	Base Year			ATHWLD	Percent Tandem Axles in ATHWLD	Flexible Pavement	S	Rigid Pavement	SLAB				
	2015	2035			ADT	Percent Trucks	DHV										
<u>Border Highway West (BHW) Project</u> Managed Lanes (BHW): (South of Doniphan Dr)  El Paso County	13,100	17,200	53 - 47	8.4	7.9	5.2	12,600	70	3,383,000	3	4,438,000	8"					
NOT INTENDED FOR CONSTRUCTION BIDDING OR PERMIT PURPOSES William Erick Knowles, P.E. Serial Number 84704																	
Data for Use in Air & Noise Analysis																	
Vehicle Class	Base Year		% of DHV														
	% of ADT	% of DHV															
	92.1	94.8															
	3.3	2.2															
Light Duty			4.6	3.0													
Medium Duty																	
Heavy Duty																	
Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 30 Year Period (2015 to 2045)																	
Description of Location	Average Daily Traffic		Dir Dist %	K Factor	Base Year			ATHWLD	Percent Tandem Axles in ATHWLD	Flexible Pavement	S	Rigid Pavement	SLAB				
	2015	2045			ADT	Percent Trucks	DHV										
<u>Border Highway West (BHW) Project</u> Managed Lanes (BHW): (South of Doniphan Dr)  El Paso County	13,100	19,200	53 - 47	8.4	7.9	5.2	12,700	70	5,409,000	3	7,095,000	8"					