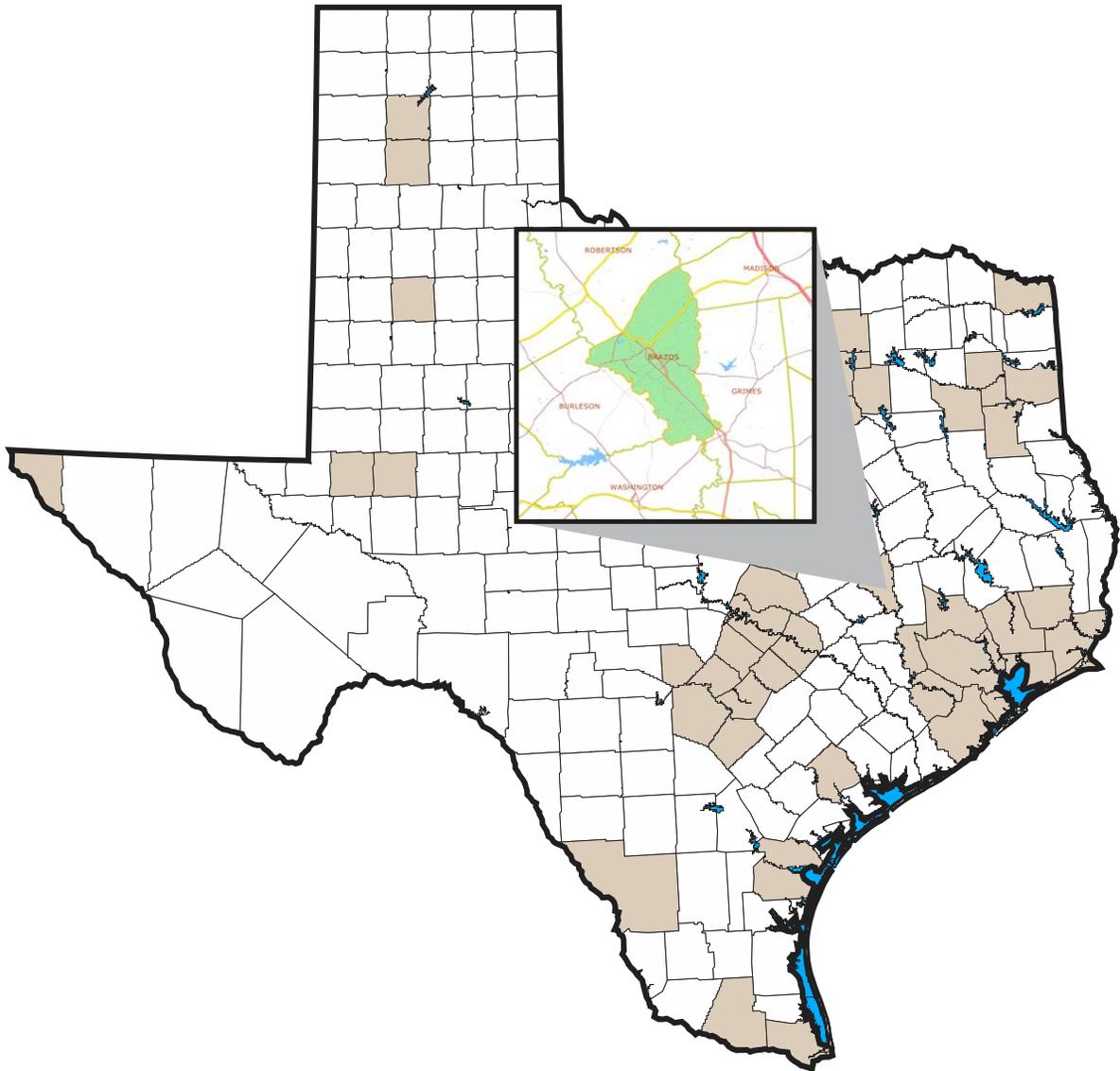


2012/2013 Bryan-College Station MPO Work Place and Special Generator Travel Summary Technical Summary



Prepared by the
Texas A&M Transportation Institute
June 2015

**2012/2013 Bryan-College Station
Work Place and Special Generator
Travel Survey**

TECHNICAL SUMMARY

Texas Department of Transportation Travel Survey Program

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DISCLAIMER

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INTRODUCTION

In 2012/2013, the Transportation Planning and Programming (TPP) Division of the Texas Department of Transportation (TxDOT) funded the Bryan-College Station work place and special generator travel surveys. The purpose of the survey was to collect data on the travel characteristics of employees and non-employees at basic, retail, service, and education establishments. These data will enable TxDOT, in cooperation with the Bryan-College Station Metropolitan Planning Organization (BCSMPO), to develop and/or update trip attraction models to forecast travel demand within the study area.

The study area covers all of Brazos County which is located in east central Texas and approximate distances of 180 miles south of Dallas-Fort Worth, 166 miles northeast of San Antonio, 104 miles east of Austin, and 95 miles northwest of Houston. Based on 2010 Census, Brazos County has a total population of 194,851 and a total land area of 585.45 square miles. The cities of Bryan and College Station are the urban centers, which has a combined population of 170,281 and a total land area of 93.85 square miles.

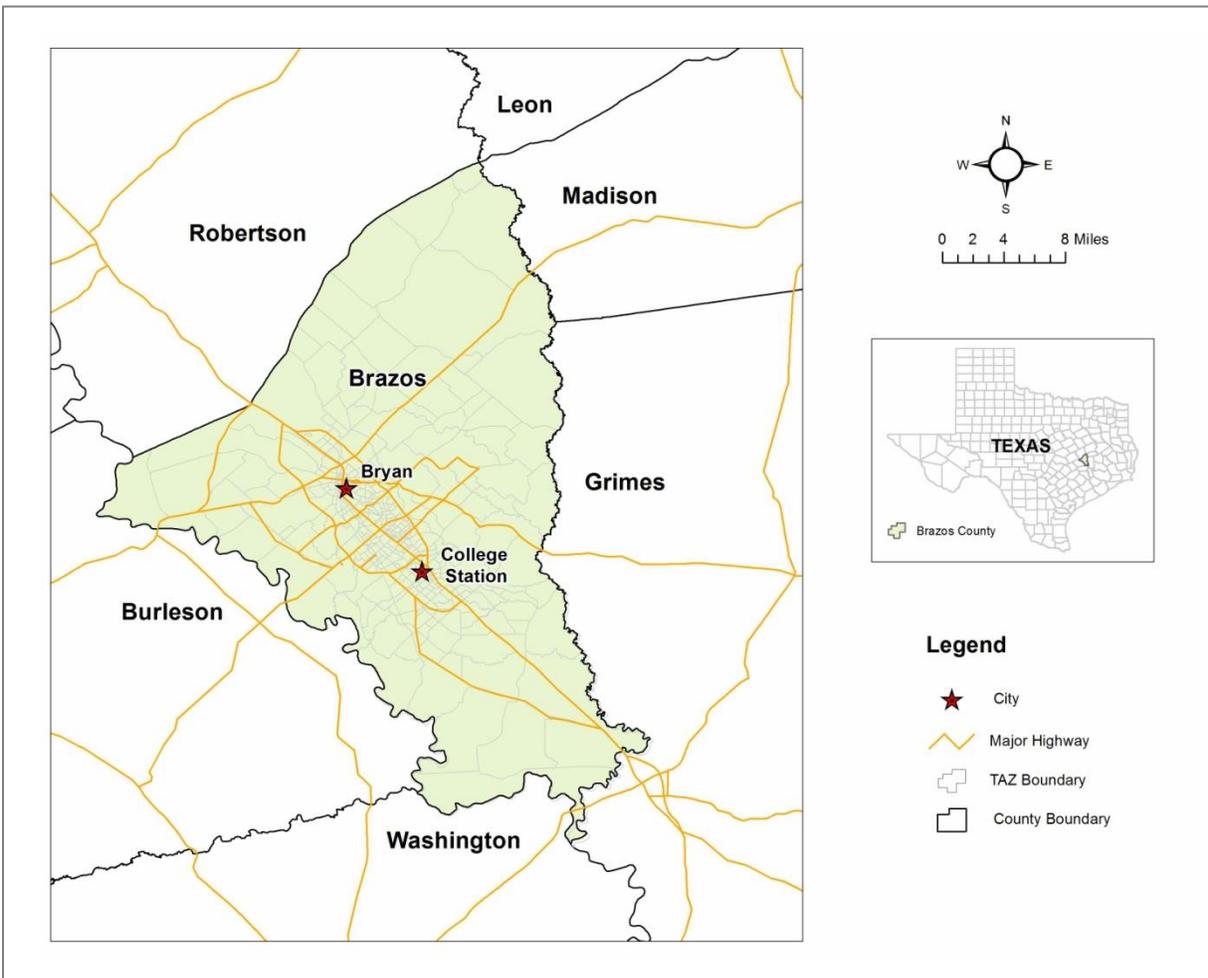


Figure 1. Bryan-College Station MPO Study Area.

SURVEY METHODOLOGY

The Bryan-College Station (BCS) work place surveys were conducted during the period of November 2012 through March 2013. TxDOT contracted with GRAM Traffic Counting, Inc. (GRAM) to conduct the surveys. The Texas A&M Transportation Institute (TTI) provided technical assistance to both TxDOT and GRAM in the effort.

The BCS work place survey consisted of the following four data collection efforts.

- Establishment Survey. This survey determined whether the work place was free standing (e.g., points of vehicle access and parking were clearly established and were designed to serve that work place only), or non-free standing (e.g., vehicle access points and parking were designed to serve more than one establishment). Data on total employment, number of employees at work during the travel survey day, amount of parking, number of daily deliveries, hours of operation, and other general information were collected in this survey.
- Intercept Interview Survey. This survey involved an intercept interview of persons as they entered and/or exited the establishments. All survey participants were randomly selected, and included both employees and non-employees.
- Person or Vehicle Count. This task involved counting all vehicles entering and exiting surveyed establishments during their normal operating hours using Accumulative Count Recorders (ACRs) in addition to video cameras. For those sites not suitable for vehicle counts, person counts were conducted using video cameras and manual counts. The counts were performed at each entrance and exit beginning a minimum of one hour prior to the location's normal operating hours and ending no later than one hour after normal operating hours.
- Commercial Vehicle (CV) Count. This task involved counting the number of CVs accessing the establishment (i.e., making deliveries or pick-ups or other purposes) using ACRs, video cameras, or manual counts.

The surveyed establishments were classified as either full survey sites or partial survey sites, and distinguished according to their free standing or non-free standing status. Full survey sites included all the previously mentioned data collection activities, while partial survey sites only collected general information (e.g., establishment survey) and did not include intercept interview surveys. Counts were conducted at all surveyed sites.

SAMPLING PLAN AND RECRUITMENT

The sampling plan was developed based on the establishment data available from the Texas Workforce Commission (TWC), and the North American Industry Classification System (NAICS) code groupings shown in Table 1.

Table 1. NAICS Groupings by Employment Type.

Employment Type	NAICS Code	Industry Group
Basic	11	Agriculture, Forestry, Fishing and Hunting
	21	Mining
	22	Utilities
	23	Construction
	31-33	Manufacturing
	42	Wholesale Trade
	48-49	Transportation and Warehousing (except 491)
	5111	Newspaper Publishers/Book Publishers/Directory Publishers
	5112	Software Publishers
	512	Motion Picture and Sound Recording (except 51213)
	5151	Radio and TV Broadcasting
	5152	TW Cable
	5173	Telecommunications Resellers
5174	Satellite Network	
5175	Cable and Other Program Distribution	
Retail	44-45	Retail trade
	51213	Motion Picture Theaters
	71	Arts, Entertainment, and Recreation
	722	Accommodation (except Hotels) and Food Services
	491	Post Offices
Service	516 - 5172	Internet Publishing and Telecommunications
	5179	Other Telecommunications
	518 - 519	Internet Service Providers and News Syndicates
	52	Finance & Insurance
	53	Real Estate, Rental, and Leasing
	54	Professional, Scientific, and Technical Services
	55-56	Company Management and Administrative Support
	6114-6116	Business, Technical, Trade, and Other Schools
	6117	Educational Support Services
	62	Health Care and Social Assistance (including Hospitals)
	721	Accommodation (Hotels)
	81	Other Service, Repair, and Maintenance
92	Public Administration (including Justice, Public Order and Safety, i.e., Police, Fire, and Courts)	
9999	Unknown	
Education	6111	Elementary and Secondary Schools
	6112-6113	Jr. Colleges, Colleges, Universities & Professional Schools

Source: TxDOT, 2004.

The BCS work place sampling plan sought to obtain 150 full surveys and 150 partial surveys. Table 2 shows the sampling targets by employment category and survey type.

Table 2. Sampling Targets by Employment Category and Survey Type .

Employment Category	Full Survey	Partial Survey	All Surveys
Basic	25	25	50
Retail	50	50	100
Service	60	60	120
Education	15	15	30
Total	150	150	300

The BCS survey sample was drawn from a listing of establishments generated from the TWC database that consisted of 869 basic, 932 retail, 2,160 service, and 82 education establishments. Each TWC listing included the name, address, and NAICS code of the establishment, and were placed in random order for sampling. The recruitment process involved contacting the businesses from each employment type in the randomized order that they appeared on the list. Businesses were verified and tracked based on the following categories:

- Willing to Participate. The establishment is located within the study area and indicated willingness to participate as a full or partial survey.
- Refused with Data. The establishment refused to participate in the survey but provided general data.
- Refused without Data. The establishment refused to participate in the survey and did not provide general data.

Table 3 shows a summary of the BCS work place survey recruitment participation by employment category. A total of 692 establishments were successfully contacted, out of which 304, including special generators, agreed to participate in the travel surveys.

Table 3. BCS Work Place Survey Recruitment Participation.

Employment Category	Recruitment Category			Total
	Willing to Participate	Refused	Refused with Data	
Basic	50	6	75	131
Retail	100	5	86	191
Service	120	18	194	332
Education	30	-	4	4
Special Generators	4	-	-	4
Total	304	29	359	692

SURVEY RESULTS

The BCS work place survey completed 152 full surveys and 148 partial surveys. Table 4 provides a breakdown of these surveys by employment category and establishment type. The slight difference in the sampling distribution was as a result of two partial survey retail establishments being fully surveyed.

Table 4. Distribution of Surveys by Employment Category and Establishment Type.

Employment Category	Full Survey			Partial Survey			All Surveys		
	FS ¹	NFS ¹	Total	FS ¹	NFS ¹	Total	FS ¹	NFS ¹	Total
Basic	19	6	25	15	10	25	34	16	50
Retail	18	34	52	13	35	48	31	69	100
Service	25	35	60	13	47	60	38	82	120
Education	15	-	15	15	-	15	30	-	30
Total	77	75	152	56	92	148	133	167	300

¹ FS - Free Standing, NFS – Non-Free Standing.

The full surveys consisted of 77 free standing and 75 non-free standing establishments that reported a total employment of 2,817. A total of 1,111 employees and 2,587 non-employees (referred to in this report as visitors) participated in the intercept surveys. The surveyed employees represented approximately 47 percent of the total 2,358 employees reported to be at work during the travel survey day.

The partial survey sites consisted of 56 free standing and 92 non-free standing establishments that reported a total employment of 5,606, of which 4,340 employees were reported to be at work during the travel survey day. No intercept surveys were conducted at these sites, but general information about the establishments was collected.

The BCS MPO boundary consisted of seven area types — Central Business District (CBD), Urban, Suburban, Rural, TAMU West Campus, TAMU Main Campus, and University Intense. Area type, which is generally determined by land use activity within a Traffic Analysis Zone (TAZ), is measured based on a combination of population and employment density in the zone.

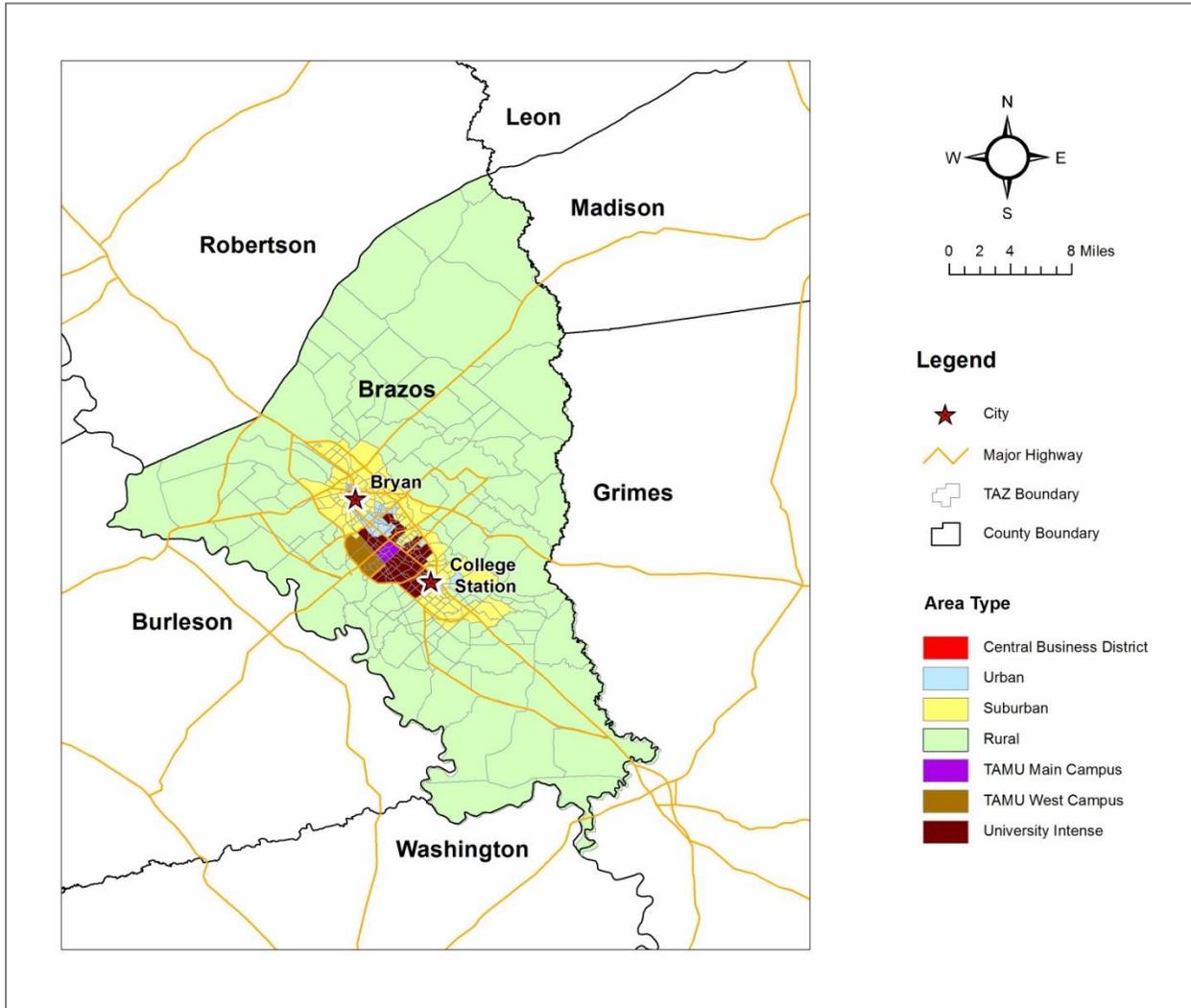


Figure 2 shows the BCS MPO boundary area types.

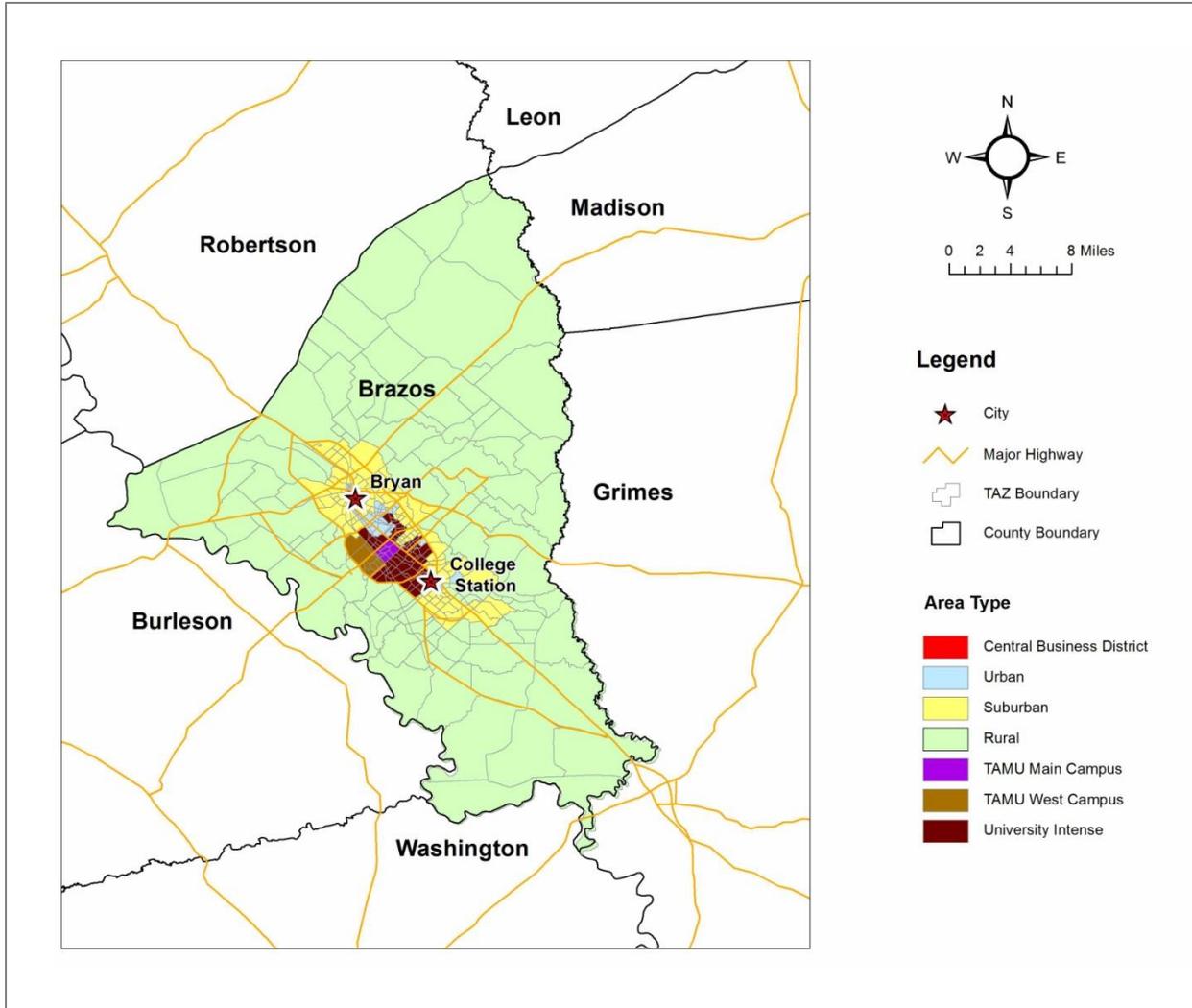


Figure 2. Bryan-College Station MPO Boundary Area Types.

Figure 3 shows the general locations of the surveyed establishments in the study area, color-coded by employment type and corresponding area type. Table 5 and

Table 6. BCS Work Place Full Survey Data Summary (continued).

Area Type	Item	Basic	Retail	Service	Education	Total
TAMU Main Campus	Number of sites	-	-	-	-	-
	Employee surveys	-	-	-	-	-
	Visitor surveys	-	-	-	-	-
	CV surveys	-	-	-	-	-
	Person count	-	-	-	-	-
	Non-CV count	-	-	-	-	-
	CV count	-	-	-	-	-
	Total employment	-	-	-	-	-
	Employees at work	-	-	-	-	-
TAMU West Campus	Number of sites	-	-	-	-	-
	Employee surveys	-	-	-	-	-
	Visitor surveys	-	-	-	-	-
	CV surveys	-	-	-	-	-
	Person count	-	-	-	-	-
	Non-CV count	-	-	-	-	-
	CV count	-	-	-	-	-
	Total employment	-	-	-	-	-
	Employees at work	-	-	-	-	-
University Intense	Number of sites	1	16	18	5	40
	Employee surveys	8	97	95	105	305
	Visitor surveys	-	532	192	33	766
	CV surveys	-	15	12	1	28
	Person count	52	4,992	1,155	-	6,199
	Non-CV count	-	3,658	396	4,917	8,971
	CV count	-	111	20	104	235
	Total employment	10	282	190	319	801
	Employees at work	8	207	156	312	683
Total	Number of sites	25	52	60	15	152
	Employee surveys	194	275	317	325	1,111
	Visitor surveys	70	1,884	508	125	2,596
	CV surveys	11	57	26	11	105
	Person count	256	20,495	2,522	-	23,273
	Non-CV count	1,134	7,960	1,761	16,049	26,904
	CV count	332	245	88	376	1,041
	Total employment	467	786	629	935	2,817
	Employees at work	408	547	498	905	2,358

Table 6. BCS Work Place Partial Survey Data Summary.

Area Type	Item	Basic	Retail	Service	Education	Total
CBD	Number of sites	-	1	1	1	3
	Person count	-	262	595	-	857
	Non-CV count	-	-	-	421	421
	CV count	-	-	-	30	30
	Total employment	-	4	175	35	214
	Employees at work	-	4	100	35	139
Urban	Number of sites	2	11	19	4	36
	Person count	120	3,268	2,451	-	5,839
	Non-CV count	-	1,400	640	6,636	8,676
	CV count	-	38	22	176	236
	Total employment	30	93	251	463	837
	Employees at work	15	77	204	362	658
Suburban	Number of sites	10	17	17	4	48
	Person count	366	29,205	2,902	-	32,473
	Non-CV count	634	6,828	1,034	4,195	12,691
	CV count	90	167	314	96	667
	Total employment	196	797	439	283	1,715
	Employees at work	177	507	365	274	1,323
Rural	Number of sites	10	5	4	2	21
	Person count	264	778	1,771	-	2,813
	Non-CV count	2,705	612	-	2,088	5,405
	CV count	374	48	-	54	476
	Total employment	1,590	49	75	131	1,845
	Employees at work	1,096	41	43	128	1,308
TAMU Main Campus	Number of sites	-	-	-	-	-
	Person count	-	-	-	-	-
	Non-CV count	-	-	-	-	-
	CV count	-	-	-	-	-
	Total employment	-	-	-	-	-
	Employees at work	-	-	-	-	-
TAMU West Campus	Number of sites	-	-	-	-	-
	Person count	-	-	-	-	-
	Non-CV count	-	-	-	-	-
	CV count	-	-	-	-	-
	Total employment	-	-	-	-	-
	Employees at work	-	-	-	-	-
University Intense	Number of sites	3	14	19	4	40
	Person count	433	8,341	2,461	-	11,235
	Non-CV count	24	1,737	112	7,112	8,985
	CV count	2	16	12	373	403
	Total employment	26	197	242	530	995
	Employees at work	12	215	162	222	611
Total	Number of sites	25	48	60	15	148
	Person count	1,183	41,854	10,180	-	53,217
	Non-CV count	3,363	10,577	1,786	20,452	36,178
	CV count	466	269	348	729	1,812
	Total employment	1,842	1,140	1,182	1,442	5,606
	Employees at work	1,300	844	874	1,021	4,039

provide information on the number of sites, employee and visitor surveys, and employment data by area type for each category of employment, respectively.

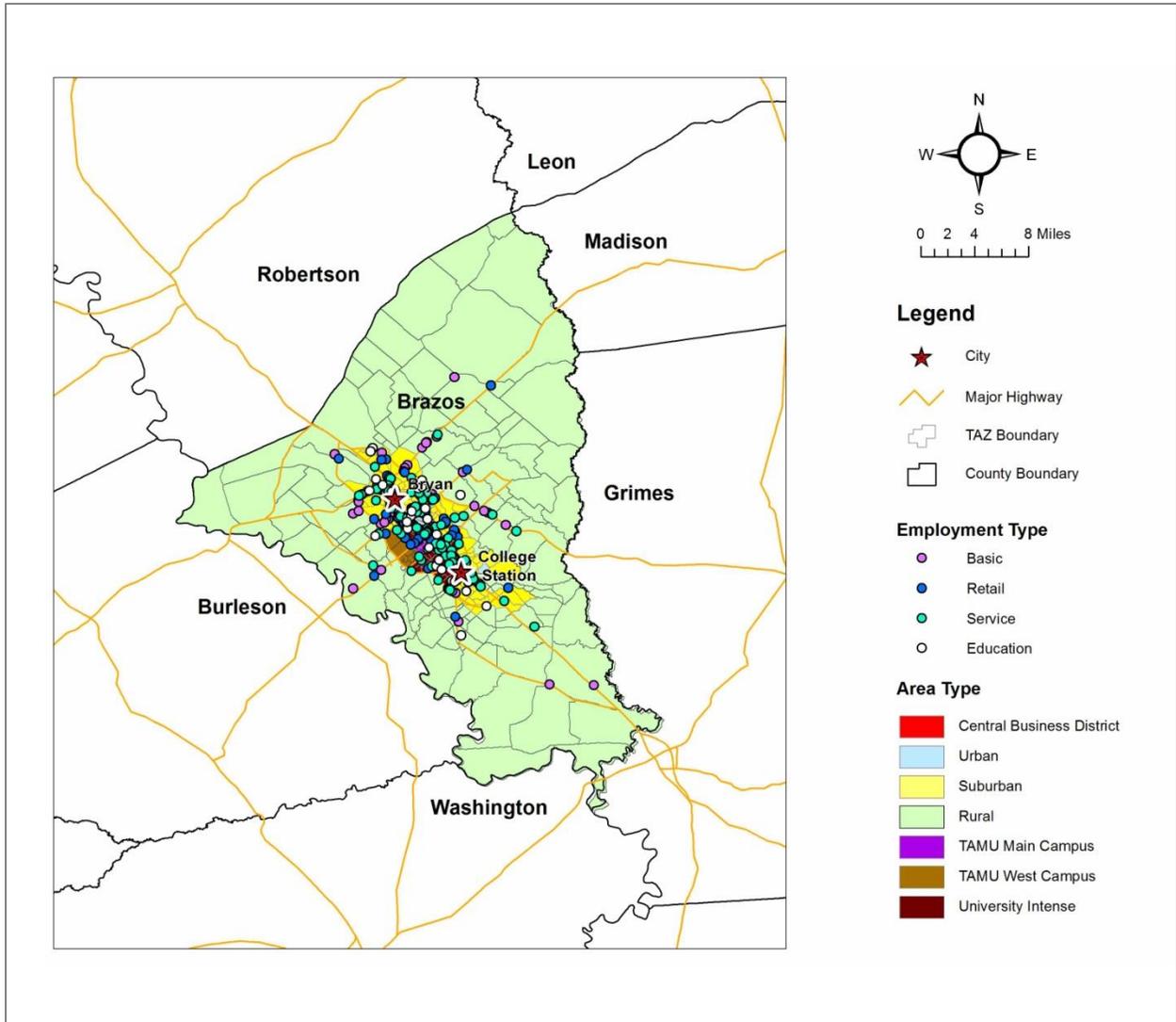


Figure 3. Bryan-College Station Work Place Survey Locations.

Table 5. BCS Work Place Full Survey Data Summary.

Area Type	Item	Basic	Retail	Service	Education	Total
CBD	Number of sites	-	1	2	-	3
	Employee surveys	-	3	6	-	9
	Visitor surveys	-	9	16	-	25
	CV surveys	-	2	1	-	3
	Person count	-	40	103	-	143
	Non-CV count	-	-	-	-	-
	CV count	-	-	-	-	-
	Total employment	-	5	6	-	11
	Employees at work	-	3	5	-	8
Urban	Number of sites	4	15	17	2	38
	Employee surveys	10	81	66	43	200
	Visitor surveys	10	584	107	12	713
	CV surveys	-	23	2	3	28
	Person count	-	9,537	643	-	10,180
	Non-CV count	65	1,651	323	2,006	4,045
	CV count	6	50	18	48	122
	Total employment	18	233	151	62	464
	Employees at work	14	159	107	60	340
Suburban	Number of sites	6	13	15	7	41
	Employee surveys	57	65	92	166	380
	Visitor surveys	23	523	161	58	765
	CV surveys	6	16	6	6	34
	Person count	88	3,793	443	-	4,324
	Non-CV count	394	2,541	870	8,040	11,845
	CV count	270	76	36	202	584
	Total employment	201	229	164	506	1,100
	Employees at work	185	145	130	485	945
Rural	Number of sites	14	7	8	1	30
	Employee surveys	119	29	58	11	217
	Visitor surveys	37	236	32	22	327
	CV surveys	5	1	5	1	12
	Person count	116	2,133	178	-	2,427
	Non-CV count	675	110	172	1,086	2,043
	CV count	56	8	14	22	100
	Total employment	238	37	118	48	441
	Employees at work	201	33	100	48	382

Table 6. BCS Work Place Full Survey Data Summary (continued).

Area Type	Item	Basic	Retail	Service	Education	Total
TAMU Main Campus	Number of sites	-	-	-	-	-
	Employee surveys	-	-	-	-	-
	Visitor surveys	-	-	-	-	-
	CV surveys	-	-	-	-	-
	Person count	-	-	-	-	-
	Non-CV count	-	-	-	-	-
	CV count	-	-	-	-	-
	Total employment	-	-	-	-	-
	Employees at work	-	-	-	-	-
TAMU West Campus	Number of sites	-	-	-	-	-
	Employee surveys	-	-	-	-	-
	Visitor surveys	-	-	-	-	-
	CV surveys	-	-	-	-	-
	Person count	-	-	-	-	-
	Non-CV count	-	-	-	-	-
	CV count	-	-	-	-	-
	Total employment	-	-	-	-	-
	Employees at work	-	-	-	-	-
University Intense	Number of sites	1	16	18	5	40
	Employee surveys	8	97	95	105	305
	Visitor surveys	-	532	192	33	766
	CV surveys	-	15	12	1	28
	Person count	52	4,992	1,155	-	6,199
	Non-CV count	-	3,658	396	4,917	8,971
	CV count	-	111	20	104	235
	Total employment	10	282	190	319	801
	Employees at work	8	207	156	312	683
Total	Number of sites	25	52	60	15	152
	Employee surveys	194	275	317	325	1,111
	Visitor surveys	70	1,884	508	125	2,596
	CV surveys	11	57	26	11	105
	Person count	256	20,495	2,522	-	23,273
	Non-CV count	1,134	7,960	1,761	16,049	26,904
	CV count	332	245	88	376	1,041
	Total employment	467	786	629	935	2,817
	Employees at work	408	547	498	905	2,358

Table 6. BCS Work Place Partial Survey Data Summary.

Area Type	Item	Basic	Retail	Service	Education	Total
CBD	Number of sites	-	1	1	1	3
	Person count	-	262	595	-	857
	Non-CV count	-	-	-	421	421
	CV count	-	-	-	30	30
	Total employment	-	4	175	35	214
	Employees at work	-	4	100	35	139
Urban	Number of sites	2	11	19	4	36
	Person count	120	3,268	2,451	-	5,839
	Non-CV count	-	1,400	640	6,636	8,676
	CV count	-	38	22	176	236
	Total employment	30	93	251	463	837
	Employees at work	15	77	204	362	658
Suburban	Number of sites	10	17	17	4	48
	Person count	366	29,205	2,902	-	32,473
	Non-CV count	634	6,828	1,034	4,195	12,691
	CV count	90	167	314	96	667
	Total employment	196	797	439	283	1,715
	Employees at work	177	507	365	274	1,323
Rural	Number of sites	10	5	4	2	21
	Person count	264	778	1,771	-	2,813
	Non-CV count	2,705	612	-	2,088	5,405
	CV count	374	48	-	54	476
	Total employment	1,590	49	75	131	1,845
	Employees at work	1,096	41	43	128	1,308
TAMU Main Campus	Number of sites	-	-	-	-	-
	Person count	-	-	-	-	-
	Non-CV count	-	-	-	-	-
	CV count	-	-	-	-	-
	Total employment	-	-	-	-	-
	Employees at work	-	-	-	-	-
TAMU West Campus	Number of sites	-	-	-	-	-
	Person count	-	-	-	-	-
	Non-CV count	-	-	-	-	-
	CV count	-	-	-	-	-
	Total employment	-	-	-	-	-
	Employees at work	-	-	-	-	-
University Intense	Number of sites	3	14	19	4	40
	Person count	433	8,341	2,461	-	11,235
	Non-CV count	24	1,737	112	7,112	8,985
	CV count	2	16	12	373	403
	Total employment	26	197	242	530	995
	Employees at work	12	215	162	222	611
Total	Number of sites	25	48	60	15	148
	Person count	1,183	41,854	10,180	-	53,217
	Non-CV count	3,363	10,577	1,786	20,452	36,178
	CV count	466	269	348	729	1,812
	Total employment	1,842	1,140	1,182	1,442	5,606
	Employees at work	1,300	844	874	1,021	4,039

Trip Characteristics

This section presents the trip characteristics of persons entering or exiting the surveyed work places. Information on residency, trip purpose, mode of travel and occupancy, trip origins, and trip destinations were analyzed to measure the amount of trip attractions to the sites.

Residence

A total of 3,698 respondents (1,111 employees and 2,587 visitors) were surveyed at the establishments. Approximately 49 percent of the surveyed employees and 43 percent of the surveyed visitors were residents of Bryan, while close to 42 percent of the surveyed employees and 46 percent of the surveyed visitors lived in College Station. Figure 4 displays the geocoded residency locations of the surveyed employees and visitors within and outside the BCS study area.

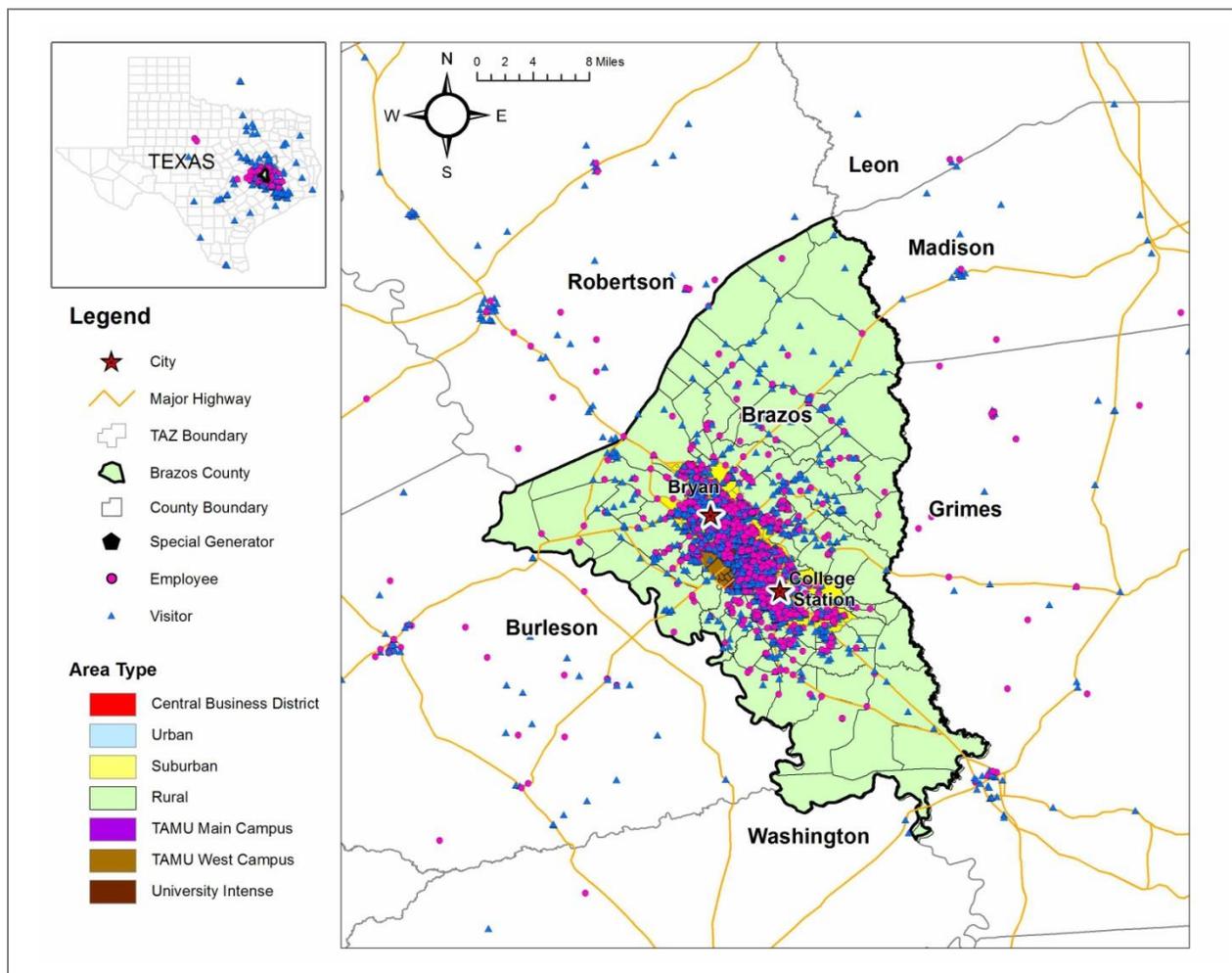


Figure 4. Residence Locations of Bryan-College Station Work Place Survey Participants.

Trip Purpose

Table 7 summarizes the trip purposes of surveyed resident and non-residents at the establishments.

Table 7. Survey Trip Purposes.

Trip Purpose	Resident		Non-Resident		Total		Grand Total
	Employee	Visitor	Employee	Visitor	Employee	Visitor	
Return Home	8	5	-	1	8	6	14
Work Related	977	53	96	11	1,073	64	1,137
School Related	-	38	-	2	-	40	40
Social/Recreational/Visit	1	46	-	9	1	55	56
Shop	8	1,194	-	157	8	1,351	1,359
Eat Out	13	429	-	47	13	476	489
Personal Business	5	429	-	49	5	478	483
Pick-Up/Drop-Off Passenger	3	108	-	3	3	111	114
Change Travel Mode	-	-	-	-	-	-	-
Delivery – Pick-Up/Drop-Off	-	5	-	-	-	5	5
No response	-	1	-	-	-	1	1
Total	1,015	2,308	96	279	1,111	2,587	3,698

In the analysis, the surveyed trip purposes were classified according to the following trip categories and were distinguished between those made by residents and non-residents of the BCS study area.

- 1) Home-based work (HBW) – when the purpose was work-related, the origin or destination was the home, and the origin or destination was located within the study area.
- 2) Home-based non-work (HBNW) – when the purpose was not work-related, the origin or destination was the home, and the origin or destination was located within the study area.
- 3) Non home-based destination (NHB-D) – when the origin was not the home, the destination was the establishment being surveyed, and the origin was located within the study area.
- 4) Non home-based origin (NHB-O) – when the reported destination when leaving the establishment being surveyed was not the home, and the destination was located within the study area.
- 5) External trip origin (EXT-O) – when the origin was outside the study area.
- 6) External trip destination (EXT-D) – when the destination was outside the study area when leaving the establishment.
- 7) Non-resident (NON-RES) – when the person making the trip to and from the establishment lived outside the study area and the origin or destination of the trip was inside the study area.

In the same manner as the resident trips, non-resident trips were also classified based on the previously mentioned trip purpose categories (1 through 6). Table 8 shows the breakdown of these trips. However, in the analysis and expansion of survey non-resident trip data, such trips are presented as one trip purpose category (NON-RES). In addition, 83 trips which were reported as “not the first store visited” at non-free standing establishments were not counted as trip attractions.

Table 8. Survey Resident and Non-Resident Trips by Purpose.

Trip Purpose	Resident			Non-Resident			All Trips		
	Employee	Visitor	Total	Employee	Visitor	Total	Employee	Visitor	Total
HBW	1,468	54	1,522	-	-	-	1,468	54	1,522
HBNW	42	2,835	2,877	-	-	-	42	2,835	2,877
NHB-D	178	765	943	10	113	123	188	878	1,066
NHB -O	335	829	1,164	23	150	173	358	979	1,337
EXT-O	4	20	24	86	166	252	90	186	276
EXT-D	3	30	33	73	129	202	76	159	235
Total	2,030	4,533	6,563	192	558	750	2,222	5,091	7,313

Table 9. Survey Trips by Purpose and Area Type.

Area Type	Trip Purpose							Total
	HBW	HBNW	NHB-D	NHB-O	EXT-O	EXT-D	NON-RES	
CBD	4	36	7	10	-	-	10	67
Urban	287	818	232	268	7	8	174	1,794
Suburban	528	824	279	329	6	9	294	2,269
Rural	318	347	141	161	7	10	96	1,080
TAMU Main Campus	-	-	-	-	-	-	-	0
TAMU West Campus	-	-	-	-	-	-	-	0
University Intense	385	852	284	396	4	6	176	2103
Total	1,522	2,877	943	1,164	24	33	750	7,313

Table 9 shows the distribution of survey trip purposes by area type, while Table 10 provides the breakdown by area type and employment category.

Table 9. Survey Trips by Purpose and Area Type.

Area Type	Trip Purpose							Total
	HBW	HBNW	NHB-D	NHB-O	EXT-O	EXT-D	NON-RES	
CBD	4	36	7	10	-	-	10	67
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Suburban	528	824	279	329	6	9	294	2,269
Rural	318	347	141	161	7	10	96	1,080
TAMU Main Campus	-	-	-	-	-	-	-	0
TAMU West Campus	-	-	-	-	-	-	-	0
University Intense	385	852	284	396	4	6	176	2103
Total	1,522	2,877	943	1,164	24	33	750	7,313

Table 10. Survey Trips by Purpose, Area Type and Employment Category.

Area Type	Employment Category	Trip Purpose							Total
		HBW	HBNW	NHB-D	NHB-O	EXT-O	EXT-D	NON-RES	
CBD	Basic	-	-	-	-	-	-	-	-
	Retail	1	11	1	2	-	-	8	23
	Service	3	25	6	8	-	-	2	44
	Education	-	-	-	-	-	-	-	-
Urban	Basic	15	7	8	9	1	-	-	40
	Retail	118	688	177	181	3	4	128	1,299
	Service	93	103	41	66	3	3	36	345
	Education	61	20	6	12	-	1	10	110
Suburban	Basic	84	18	9	18	1	2	28	160
	Retail	82	528	183	167	5	4	188	1,157
	Service	148	204	49	61	-	2	40	504
	Education	214	74	38	83	-	1	38	448
Rural	Basic	170	29	37	43	1	-	32	312
	Retail	40	252	84	79	5	10	52	522
	Service	94	35	13	27	1	-	10	180
	Education	14	31	7	12	-	-	2	66
TAMU Main Campus	Basic	-	-	-	-	-	-	-	-
	Retail	-	-	-	-	-	-	-	-
	Service	-	-	-	-	-	-	-	-
	Education	-	-	-	-	-	-	-	-
TAMU West Campus	Basic	-	-	-	-	-	-	-	-
	Retail	-	-	-	-	-	-	-	-
	Service	-	-	-	-	-	-	-	-
	Education	-	-	-	-	-	-	-	-
University Intense	Basic	13	-	1	-	-	-	2	16
	Retail	125	599	201	217	2	4	100	1,248
	Service	121	210	54	119	1	2	56	563
	Education	126	43	28	60	1	-	18	276
Total Trips		1,522	2,877	943	1,164	24	33	750	7,313

Mode of Travel and Vehicle Occupancy

Table 9 shows the mode of travel used by the survey participants to the work place. Approximately 89 percent of the trips to the work places were made by drivers of cars, trucks, or vans, and close to 10 percent were passengers of a vehicle. Trips by “other” modes were classified as company trucks. The average occupancy was estimated at 1.4 persons per vehicle.

Table 9. Survey Modes of Travel to the Work Place.

Mode	Resident		Non-Resident		All Surveys		
	Employee	Visitor	Employee	Visitor	Total	Percent of Total	Average Vehicle Occupancy
Driver (car/truck/van)	969	2,177	94	267	3,507	96.27	1.34
Passenger (car/truck/van)	20	43	2	7	72	2.40	2.08
Walk	12	69	-	3	84	0.80	0.00
Bicycle	5	7	-	-	12	-	0.00
Transit Bus	5	5	-	-	10	-	0.00
School Bus	2	2	-	-	4	-	0.00
Taxi/Limo	-	-	-	-	-	-	-
Commercial Cargo Transport Vehicle	-	2	-	-	2	-	-
Commercial Service Vehicle	-	-	-	2	2	0.53	0.00
Motorcycle	2	3	-	-	5	-	0.80
Total	1,015	2,308	96	279	3,698	100.00	1.31

Trip Length

Each trip in the survey, based on its reported origin location and destination location, was geocoded either to a TAZ system for the BCS study area, or to the statewide TAZ system when the location was outside the study area (but within the state of Texas). It was found that the zones reported in the survey were based on an older TAZ version. Hence, zones had to be re-tagged to the current TAZ version during actual data processing analysis.

After the trips were geocoded, the travel distance and travel time for each trip to the surveyed work place were estimated using the transportation network available for the BCS study area that provides the zone-to-zone trip lengths and travel times based on network speeds. The BCS network matrix only provides distances and travel time between zones (inter-zonal) and not within zones (intra-zonal).

The analyses of trip length and travel time to and from the surveyed work place pertain only to inter-zonal trips by person and auto-driver mode of travel. Person trips included all travel modes, including walking and bicycle trips. Auto-driver trips pertain to trips made by drivers of cars, trucks, and or vans, including commercial cargo and service vehicles.

Table 10 and Table 11 show the survey inter-zonal trip lengths and travel times to and from the work place within the BCS study area by trip purpose, respectively. HBW trips had an average travel distance of approximately 5.4 miles per person trip and 5.5 miles per auto-driver trip, with average travel time close to 9 minutes per trip. For HBNW trips, the average trip length was approximately 3.8 miles per trip, and the average travel time was approximately 6.3 minutes per trip. The estimates for NHB trips reflected the average of NHB-D and NHB-O trips, which showed an average trip length of 3.4 miles per person trip and 3.6 miles per auto-driver trip, while the average travel time was close to 6 minutes per trip. The NON-RES trips had an average trip length of approximately 3 miles per person trip and 3.2 miles per auto-driver trip, while the average travel time was 5 minutes per person trip and 5.3 minutes per auto-driver trip.

Table 10. Survey Inter-Zonal Trip Lengths to and from the Work Place.

Trip Purpose	Total Person Trips	Total Person Miles	Average Person Miles	Total Auto-Driver Trips	Total Auto-Driver Miles	Average Auto-Driver Miles
HBW	1,751	9,397	5.37	1,422	7,836	5.51
HBNW	3,923	15,043	3.83	2,666	10,287	3.86
NHB	1,357	4,596	3.39	964	3,422	3.55
NON-RES	416	1,233	2.96	281	886	3.15
Total	7,447	30,268	4.06	5,333	22,431	4.21

Table 11. Survey Inter-Zonal Trip Travel Times to and from the Work Place.

Trip Purpose	Total Person Trips	Total Person Minutes	Average Person Minutes	Total Auto-Driver Trips	Total Auto-Driver Minutes	Average Auto-Driver Minutes
HBW	1,751	14,970	8.55	1,422	12,453	8.76
HBNW	3,923	24,812	6.32	2,666	16,896	6.34
NHB	1,357	7,754	5.71	964	5,729	5.94
NON-RES	416	2,098	5.04	281	1,495	5.32
Total	7,447	49,634	6.66	5,333	36,573	6.86

Table 12 and Table 13 provide the survey trip length frequency distributions (TLFDs) and travel times by trip purpose for all survey person and auto-driver trips.

Table 12. Survey Person and Auto-Driver Trip TLFDs.

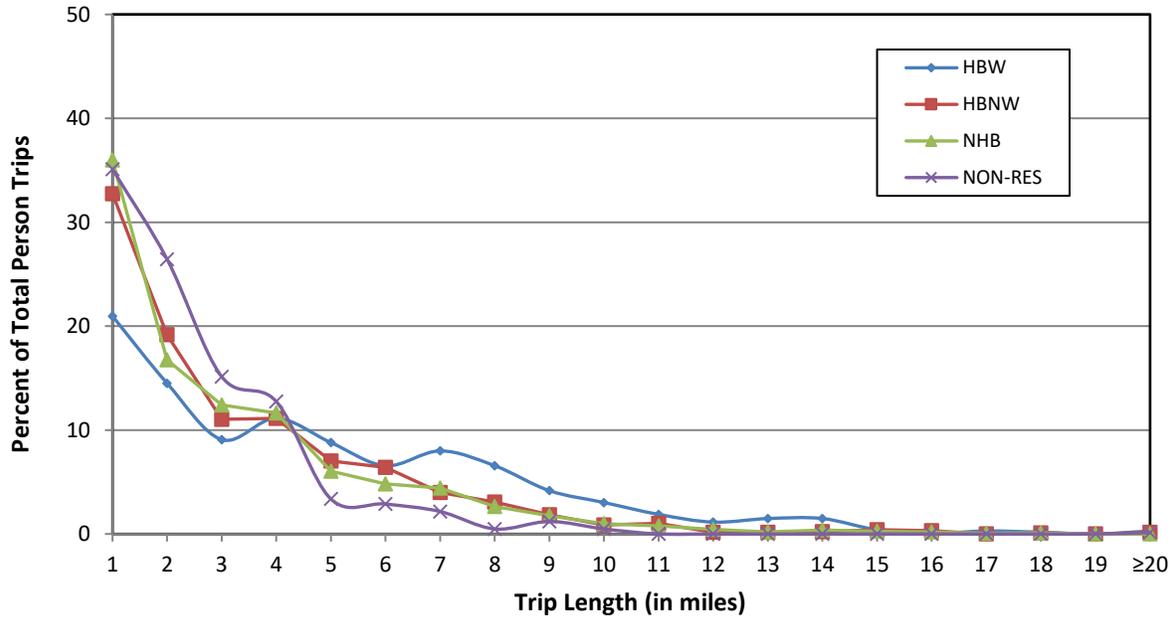
Miles	Person Trips				Auto-Driver Trips			
	HBW	HBNW	NHB	NON-RES	HBW	HBNW	NHB	NON-RES
1	367	1,285	488.5	146	271	866	322.5	84
2	254	753	227.5	110	202	520	168.0	72
3	159	433	168.5	63	139	310	119.0	49
4	195	437	158	53	154	287	116.5	42
5	154	276	82	14	136	184	61.5	11
6	115	252	65.5	12	100	165	47.0	8
7	140	157	60	9	120	100	44.5	7
8	115	121	36	2	86	80	27.5	2
9	73	73	24	5	63	51	17.0	4
10	53	34	13.5	2	45	27	10.0	2
11	33	40	10.5	-	29	28	8.0	-
12	20	7	6	-	16	4	5.0	-
13	26	7	2.5	-	20	5	2.5	-
14	26	9	5	-	20	9	5.0	-
15	7	16	3.5	-	7	13	3.0	-
16	1	13	2.5	-	1	9	3.5	-
17	5	-	1	-	5	-	1.0	-
18	3	4	1.5	-	3	4	1.5	-
19	-	-	-	-	-	-	-	-
20	3	2	0.5	-	3	2	0.5	-
21	2	-	-	-	2	-	-	-
26	-	4	-	-	-	2	-	-
27	-	-	0.5	-	-	-	0.5	-
Total	1,751	3,923	1,357	416	1,422	2,666	964	84

Table 13. Survey Person and Auto-Driver Trip Travel Times.

Minutes	Person Trips				Auto-Driver Trips			
	HBW	HBNW	NHB	NON-RES	HBW	HBNW	NHB	NON-RES
1	137	575	252.0	76	100	381	132.5	49
2	141	450	142.5	50	95	314	98.5	21
3	132	502	167.5	58	109	328	109.5	36
4	144	395	116.5	46	126	281	87.5	32
5	137	268	118.0	60	107	198	89.0	44
6	123	334	111.0	28	102	237	77.5	28
7	106	255	101.0	35	89	165	70.0	24
8	117	254	81.5	27	98	167	62.0	19
9	111	215	47.5	8	93	138	36.5	6
10	98	149	49.0	11	81	90	33.5	8
11	92	132	36.5	6	81	96	30.5	4
12	111	103	43.0	7	85	67	31.0	6
13	61	87	25.5	1	55	59	18.0	1
14	64	63	16.0	1	53	45	13.5	1
15	30	35	14.0	2	20	23	8.0	2
16	37	21	6.0	-	34	14	5.0	-
17	34	5	5.0	-	26	5	5.0	-
18	19	21	6.5	-	17	13	5.0	-
19	21	12	3.5	-	15	7	2.5	-
20	9	9	5.5	-	9	9	5.5	-
21	5	16	2.5	-	5	11	2.0	-
22	6	5	0.5	-	6	5	0.5	-
23	2	1	0.5	-	2	1	1.5	-
24	7	5	1.5	-	7	3	1.5	-
25	1	3	1.0	-	1	3	1.0	-
26	2	2	1.5	-	2	2	1.5	-
27	2	-	1.0	-	2	-	1.0	-
28	-	-	-	-	-	-	-	-
29	-	2	-	-	-	2	-	-
30	2	-	-	-	2	-	-	-
34	-	4	-	-	-	2	-	-
37	-	-	0.5	-	-	-	0.5	-
Total	1,751	3,923	1,352	416	1,422	2,666	930	281

Figure 5 (a and b) shows the trip lengths in percentage values of total person and auto-driver trips by trip purpose, respectively.

(a) Person Trips



(b) Auto-Driver Trips

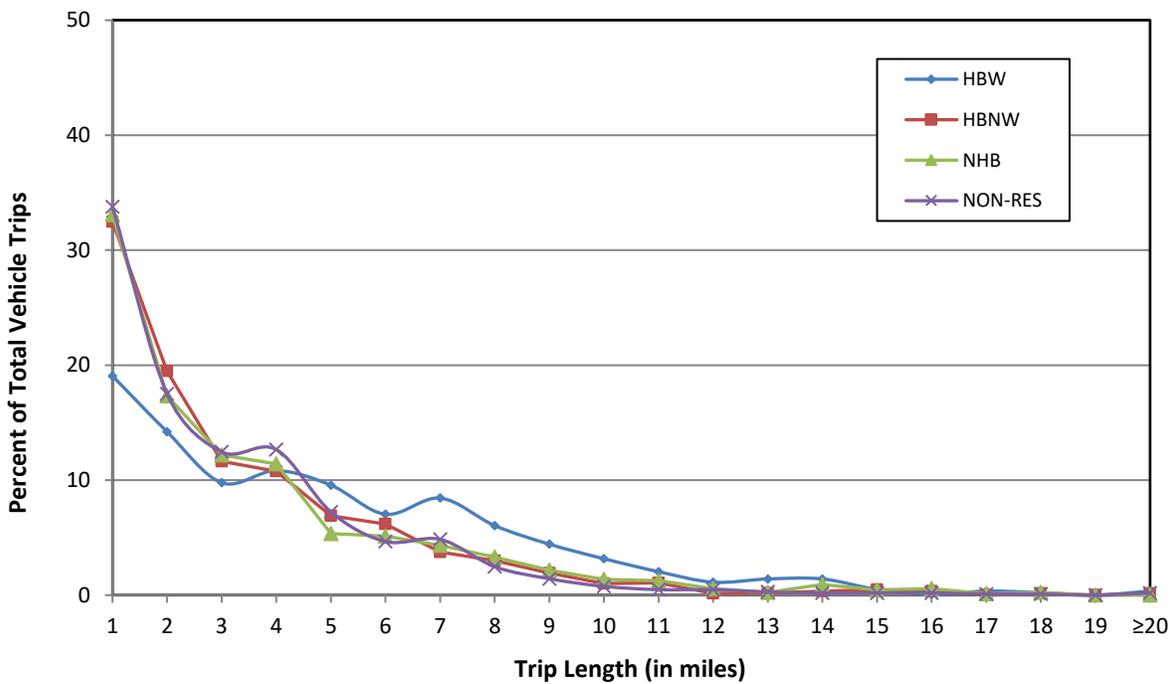
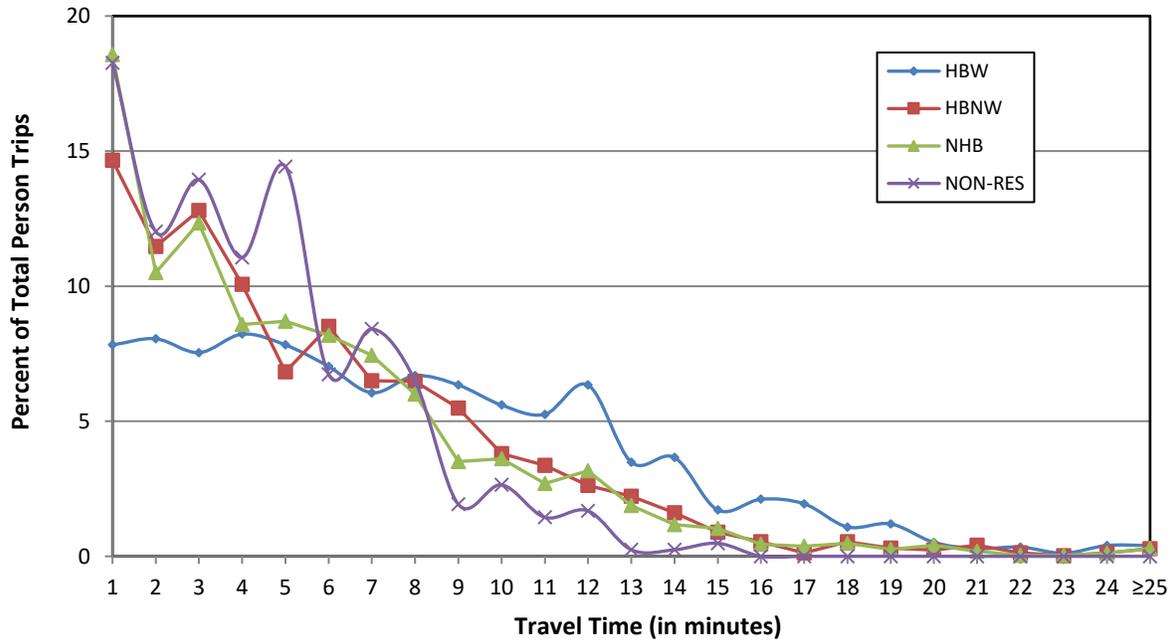


Figure 5. TLFDs of Person and Auto-Driver Trips to and from the Work Place.

Figure 6 (a and b) shows the travel times in percentage values of total person and auto-driver trips by trip purpose, respectively.

(a) Person Trips



(b) Auto-Driver Trips

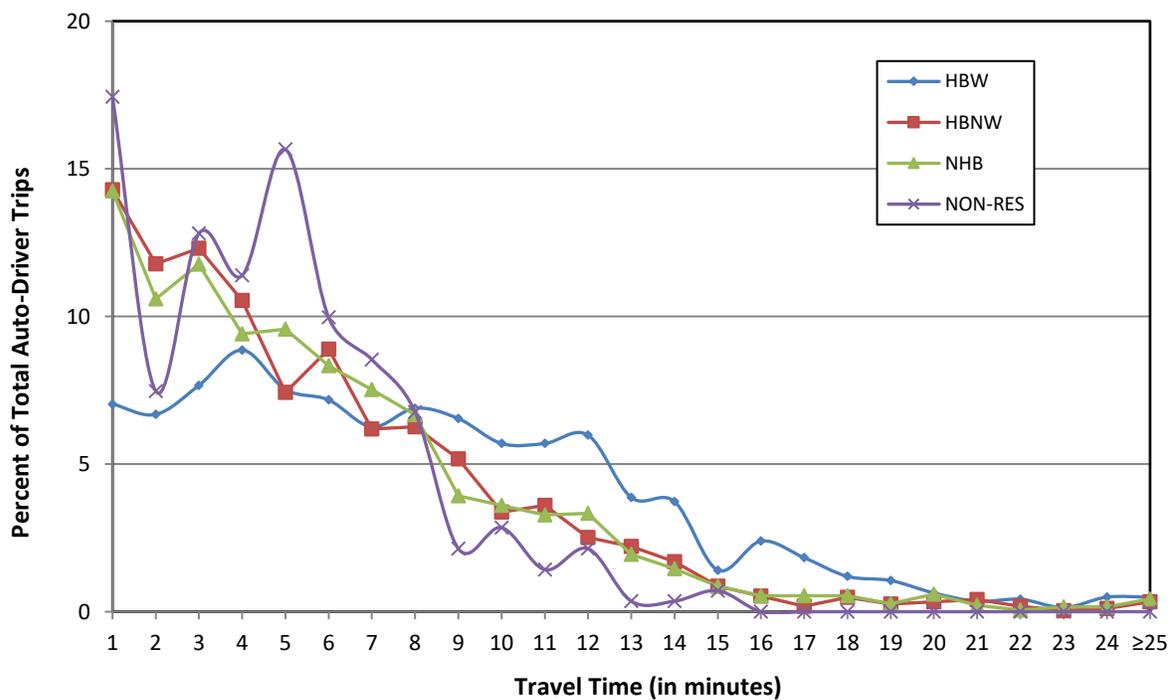


Figure 6. Travel Times of Person and Auto-Driver Trips to and from the Work Place.

COMMERCIAL VEHICLE COUNTS

The CV counts involved counting the number of cargo and service vehicles that entered and exited the surveyed establishments during the work place travel survey day. The counts were conducted using ACRs, video cameras, or manual counts. The counts were conducted at least one hour prior during (and no later than one hour) after the location's normal operating hours. If the establishment's operating hours are 24 hours, the counts were conducted for the 24 hour period beginning at 6:00 a.m. and ending at 6:00 a.m. on the following day of the survey. A total of 2,853 CVs were counted at the surveyed establishments. Based on the total CV counts, approximately 39 percent were at education, 28 percent were at basic, 18 percent were at retail, and 15 percent were at service establishments.

Figure 7 shows the distribution of CV counts by employment type while Table 14 shows the distribution by area type and employment category for the BCS study area.

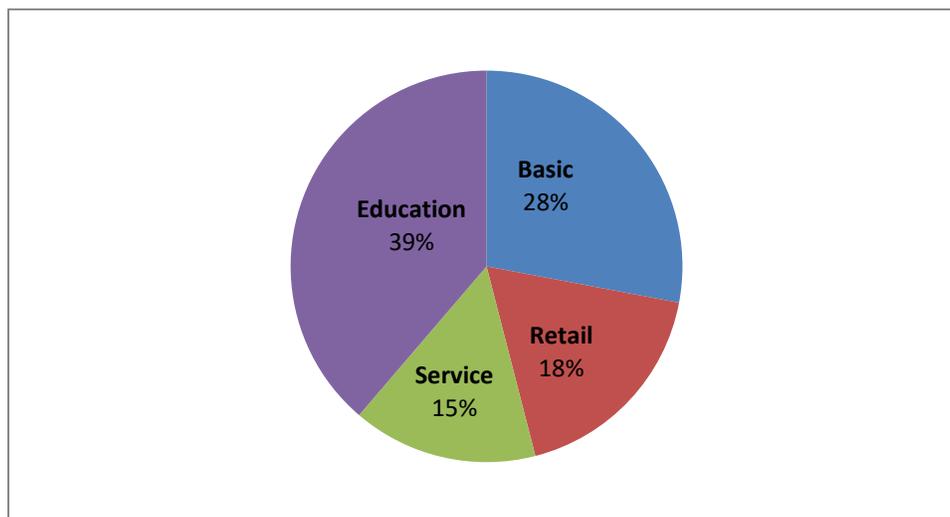


Figure 7. CV Counts by Employment Category.

Table 14. CV Counts by Area Type and Employment Category.

Area Type \ Employment Category	Basic	Retail	Service	Education	Total
CBD	-	-	-	30	30
Urban	6	88	40	224	358
Suburban	360	243	350	298	1,251
Rural	430	56	14	76	576
TAMU Main Campus	-	-	-	-	-
TAMU West Campus	-	-	-	-	-
University Intense	2	127	32	477	638
Total	798	514	436	1,105	2,853

COMMERCIAL VEHICLE SURVEYS

CV intercept interviews were conducted as part of BCS work place survey. A total of 152 drivers of CVs making deliveries or pick-ups (including 47 at special generators sites) agreed to participate in the CV survey. The CVs were distinguished based on nine classification types listed in

Table 15, and were categorized either as cargo transport or service vehicle types. The CV analysis included the trip purpose, the type of place where the trips occurred, and the type and average weight of cargo being transported at pick-up and drop-off locations.

Table 15 shows the vehicle classification and type of the surveyed CVs for each category of employment. Approximately 89 percent of the total were cargo transport vehicles and 11 percent were service vehicles. Approximately 41 percent were classified as single-unit 2-axle (6-wheels), 28 percent were cargo or mini vans, and 13 percent were pick-up trucks. More than 8 percent were semi tractor and trailer combinations, 5 percent were single-unit 3-axle, and 3 percent were passenger cars.

Table 15. Surveyed CV Classification and Commercial Types.

Employment Category	Basic	Retail	Service	Education	Special Gen.	Total	Percent of Total
Vehicle Classification							
Passenger Car	-	1	2	-	2	5	3.29
Pick-Up Truck	2	9	3	1	5	20	13.16
Van (cargo or mini)	2	10	12	4	15	43	28.29
Sport Utility Vehicle	-	1	-	-	-	1	0.66
Single Unit 2-axle (6-wheels)	4	23	7	4	24	62	40.79
Single Unit 3-axle (10-wheels)	-	5	2	1	-	8	5.26
Single Unit 4-axle (14-wheels)	-	-	-	-	-	-	-
Semi (all tractor-trailer combination)	3	8		1	1	13	8.55
Other	-	-	-	-	-	-	-
Total	11	57	26	11	47	152	100.00
Percent of Total	7.24	37.5	17.11	7.24	30.92	100.00	
Employment Category	Basic	Retail	Service	Education	Special Gen.	Total	Percent of Total
Commercial Type							
Cargo Transport Vehicle Type	9	50	24	11	41	135	88.82
Service Vehicle Type	2	7	2	-	6	17	11.18

Table 16 and Table 17 show the trip purposes and types of place at the origin and destination of all surveyed CVs, respectively.

Table 16. Survey CV Travel Purposes at Trip Origins and Destinations.

Trip Purpose	Cargo Vehicle		Service Vehicle		Percent of Total	
	Origin	Destination	Origin	Destination	Origin	Destination
Depart/Return to Base Location	29	29	12	11	26.97	26.32
Vehicle Maintenance (fuel, oil, etc.)	4	-	-	-	2.63	0.00
Driver Needs (lunch, etc.)	1	-	-	-	0.66	0.00
Delivery of Cargo	82	96	-	-	53.95	63.16
Pick up Cargo	10	2	1	1	7.24	1.97
Delivery and Pick-Up	9	7	-	-	5.92	4.61
Installation/Maintenance/Repair Service	-	1	3	4	1.97	3.29
Sales/Professional Service	-	-	1	1	0.66	0.66
Total	135	135	17	17	100.00	100.00

Table 17. Survey CV Types of Place at Trip Origins and Destinations.

Type of Place	Cargo Vehicle		Service Vehicle		Percent of Total	
	Origin	Destination	Origin	Destination	Origin	Destination
Office Building	20	13	4	2	15.79	9.87
Retail/Shopping	60	57	2	4	40.79	40.13
Industrial/Manufacturing	11	14	9	8	13.16	14.47
Medical/Hospital	1	8	-	-	0.66	5.26
Educational (12th grade or less)	6	6	-	1	3.95	4.61
Educational (College, Trade, etc.)	9	15	-	-	5.92	9.87
Residential	7	11	1	-	5.26	7.24
Intermodal Facility	1	-	-	-	0.66	0.00
Warehouse	9	6	1	1	6.58	4.61
Distribution Center	11	5	-	-	7.24	3.29
Construction Site	-	-	-	1	-	0.66
Total	135	135	17	17	100.00*	100.00*

*Percentage total may not be exact due to rounding.

Table 20 and Table 21 show the types of commodities being transported at the work place by the surveyed CVs.

Table 20. Survey Cargo Deliveries.

Cargo Type	Cargo Vehicle		Service Vehicle	
	Number of Deliveries	Average Weight (in lbs.)	Number of Deliveries	Average Weight (in lbs.)
Farm Products	7	58	-	-
Forest Products	2	60,000	-	-
Metals and Minerals	1	1,000	1	250
Food, Health, and Beauty Products	47	2,498	-	-
Textiles	5	165	-	-
Wood Products	2	27	-	-
Printed Matter	3	679	-	-
Chemical Products	2	180	-	-
Refined Petroleum or Coal Products	1	612	1	5
Rubber, Plastic, and Styrofoam Products	6	1,533	1	30
Clay, Concrete, Glass, or Stone	6	455	1	300
Manufactured Goods/Equip.	9	3,428	1	7
Miscellaneous Shipments	36	66	-	-
Hazardous Materials	1	300	2	17
Transportation	2	2,788	-	-
No Cargo Delivery/Pick-Up	5	-	10	-
Total	135	2,259	17	89

Table 18. Survey Cargo Pick-Up.

Cargo Type	Cargo Vehicle		Service Vehicle	
	Number of Pick Up	Average Weight(in lbs.)	Number of Pick Up	Average Weight (in lbs.)
Food, Health, and Beauty Products	2	9	-	-
Textiles	3	188	-	-
Printed Matter	3	1,018	-	-
Chemical Products	2	1,500	-	-
Clay, Concrete, Glass, or Stone	-	-	1	50
Manufactured Goods/Equipment	1	500	-	-
Wastes	-	-	1	115
Miscellaneous Shipments	10	86	-	-
No Cargo Delivery/Pick-Up	114	-	15	-
Total	135	381	17	83

SPECIAL GENERATOR SURVEYS

Special generators are those establishments that are considered unique trip attractors. These may include major shopping centers, hospitals, colleges/universities, recreational facilities, military bases, airports, and other land use developments that have unique trip generation characteristics and therefore require modeling outside the typical travel demand modeling framework.

Four special generators were surveyed in the BCS study area — Texas A&M University (TAMU), Blinn College, Post Oak Mall, and St. Joseph Regional Health Center.

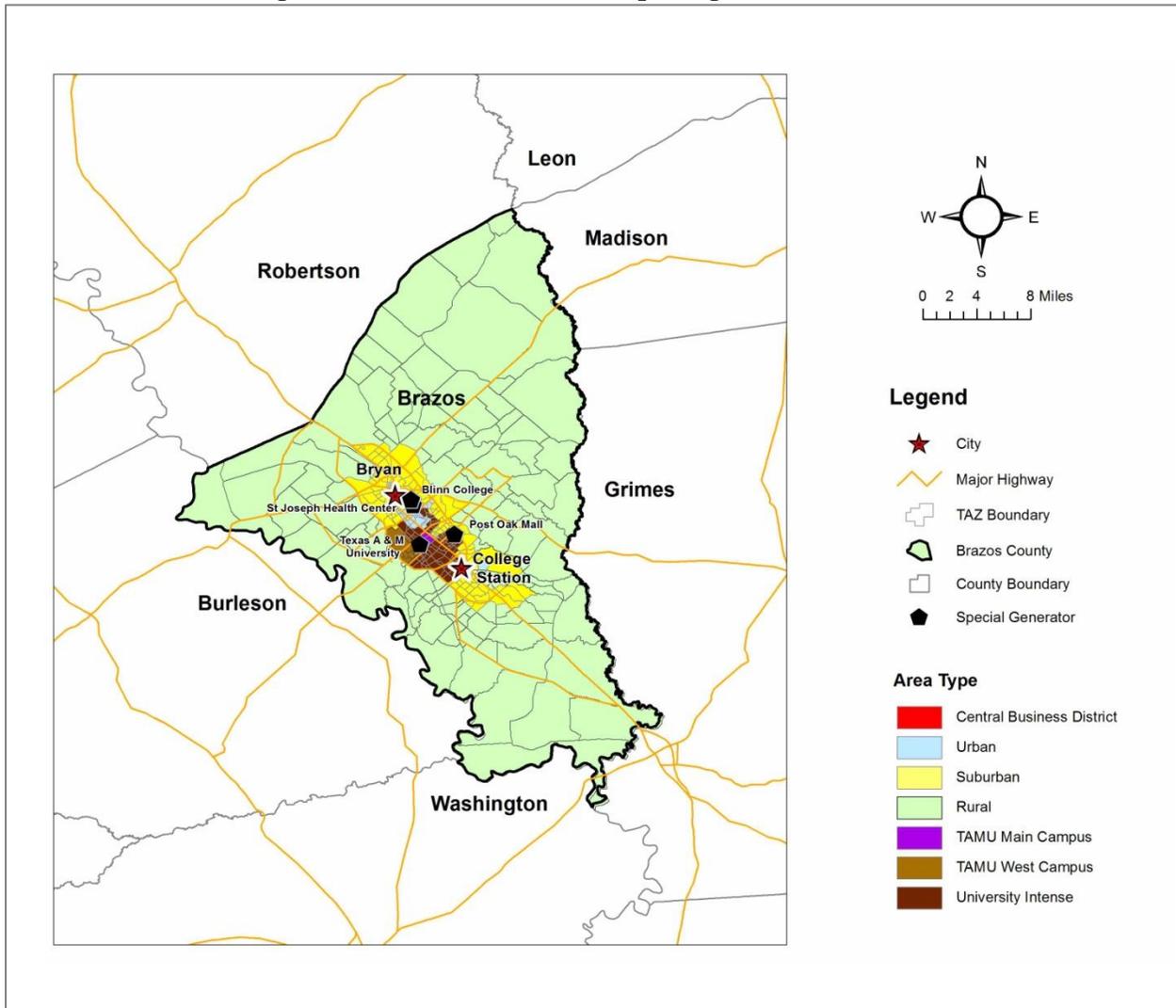


Figure 8 shows their locations and corresponding area types.

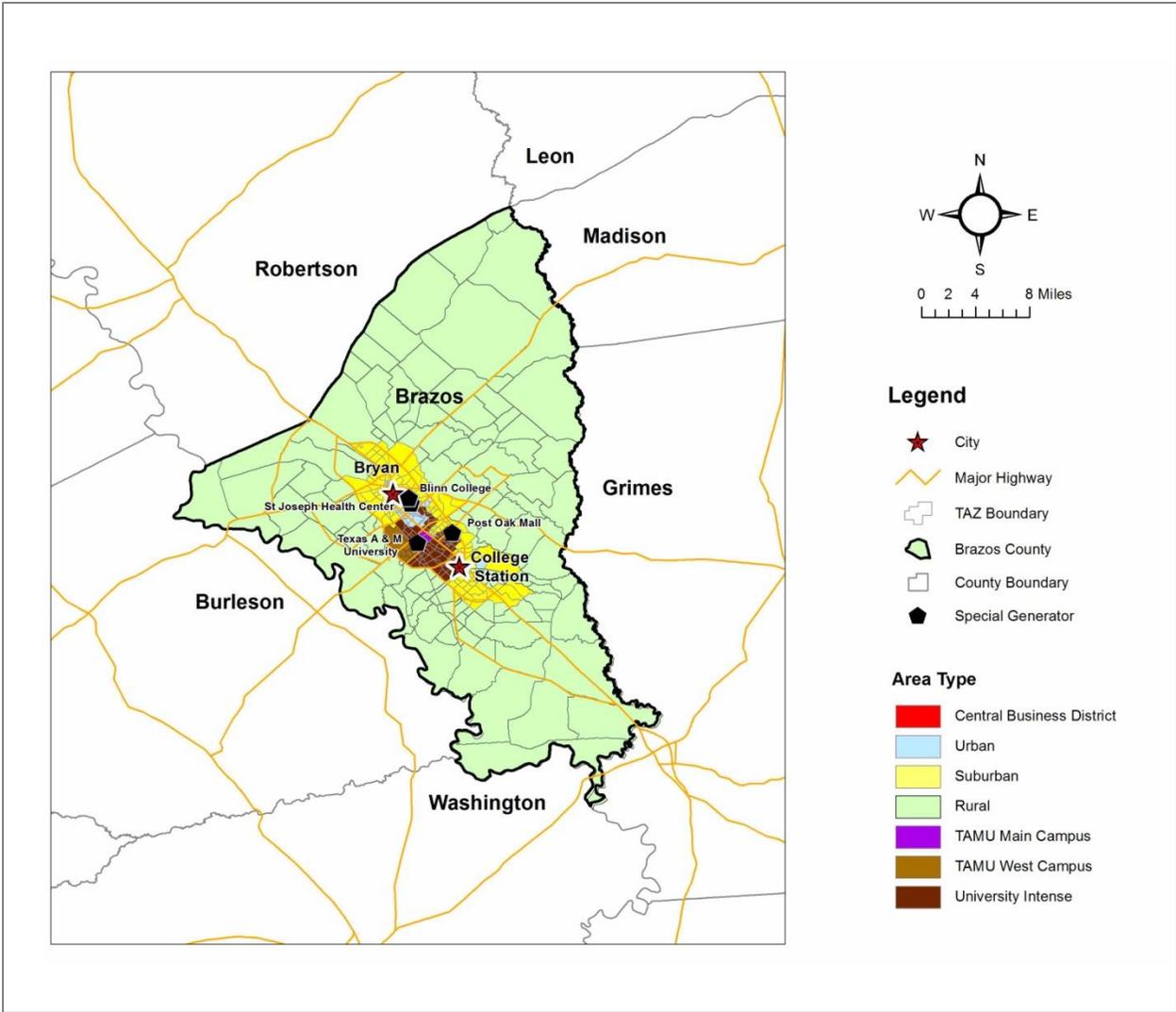


Figure 8. Bryan-College Station Special Generators.

The methodology used to survey special generators was the same as that used for full work place surveys (see page 2 of this report). It included a general survey, an intercept survey, non-CV counts and/or person counts, and CV counts. Table 19 provides a summary of the general data collected from the special generator surveys.

Table 19. Bryan-College Station Special Generators Data Summary.

Data Elements	TAMU	Blinn College	Post Oak Mall	St. Joseph Health Center
Total Employment	9,033	950	1,200	2,600
Employees at Work	8,130 ¹	855	720	1,350
CV Counts	4,772	43	130	128
School Bus Counts	526	134	-	-
Non-CV Counts	137,458	24,643	11,938	6,353
Person Counts ²	216,441 ³	27,354	16,474	8,831
Employee Surveys	393	125	125	334
Visitor Surveys	34	13	577	235
Student Surveys	1,007	499	-	-
CV Surveys	26	2	9	10

¹ This data was not available from the establishment survey. Therefore, this estimate was based on the assumption that 90% of the total number of TAMU employees were at work during the travel survey, as in the case of Blinn College.

² Estimates were derived by multiplying the non-CV counts by the average auto-driver vehicle occupancy from the special generator survey.

³ Included 29,498 persons counted at the site.

The trip characteristics observed from each special generator are described by mode of travel, trip purpose, and trip length. The analyses of trip length and travel time to and from the surveyed special generator pertain only to inter-zonal trips by person and auto-driver mode of travel. Person trips included all travel modes, including walking and bicycle trips. Auto-driver trips pertain to trips made by drivers of cars, trucks, and or vans, including commercial cargo transport and service vehicles.

CV intercept surveys were also conducted at each special generator, and the results from these surveys are summarized in a separate section. The CV vehicles were distinguished based on nine classification types and categorized as cargo transport or service vehicle types. The CV analysis included the trip purpose, the type of place where the trips occurred, and the type and average weight of cargo being transported at pick-up and drop off locations.

The results presented throughout this section were based on survey trip data. These results significantly change after weighting is applied to the trip data during the survey expansion.

Texas A&M University (TAMU)

Texas A&M University had a reported total employment of 9,033. The total number of employees at work was not reported. Hence, an estimate of 90 percent of the total employment was used based on Blinn College's percentage. A total of 393 employees, 1,007 students, and 34 non-employees participated in the survey. Vehicle counts were conducted from 6:00 a.m. to 8:00 p.m., with a total count of 137,458 non-CVs, 4,772 CVs, and 526 School Buses. A total of 29,498 persons were counted at established locations.

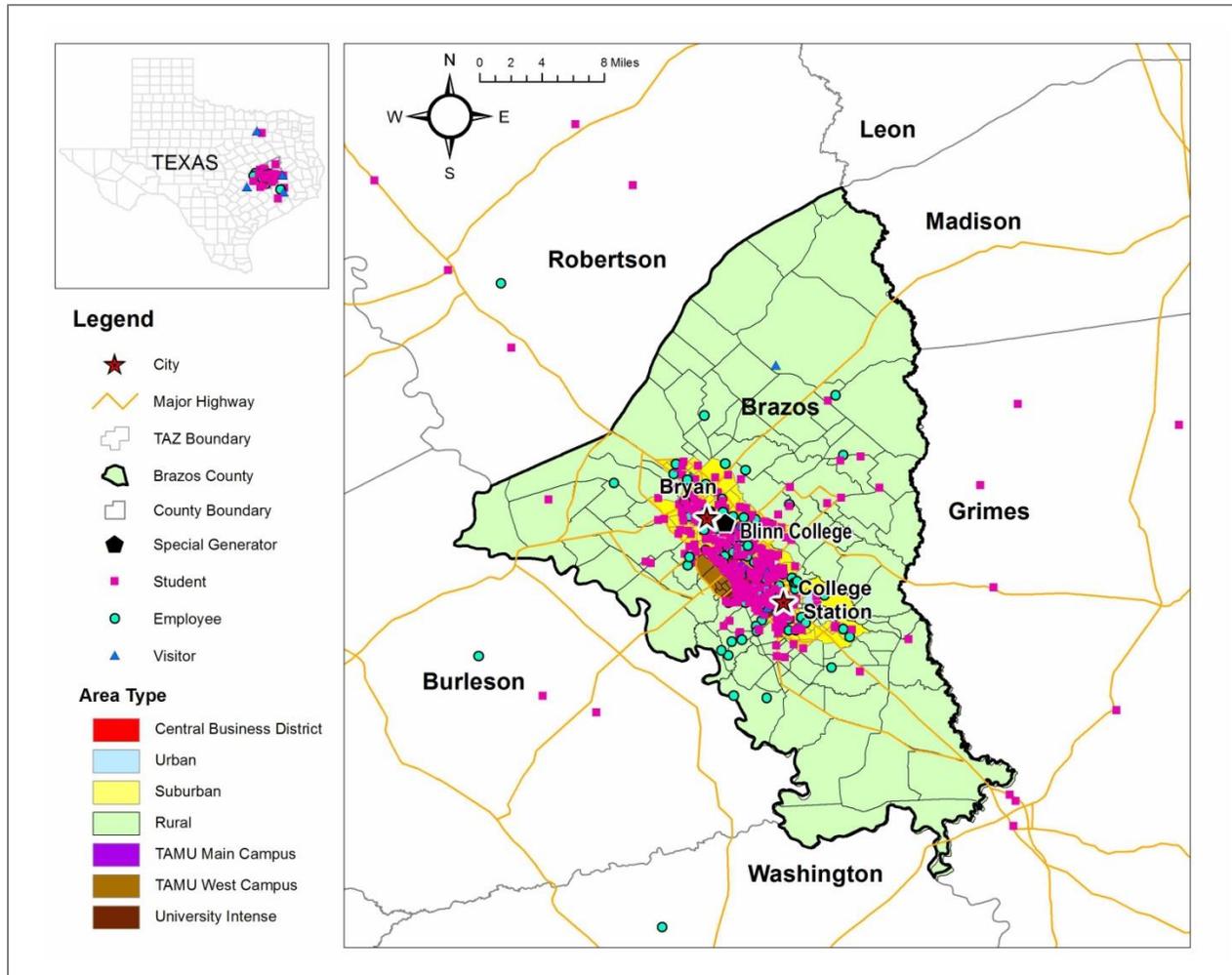


Figure 9 shows the residence locations of TAMU survey participants. Approximately 22 percent were residents of Bryan and 75 percent lived in College Station. The remaining 3 percent resided outside the study area. Table 23 shows the residence locations of survey participants by area type. Table 24 shows the residence locations outside the study area.

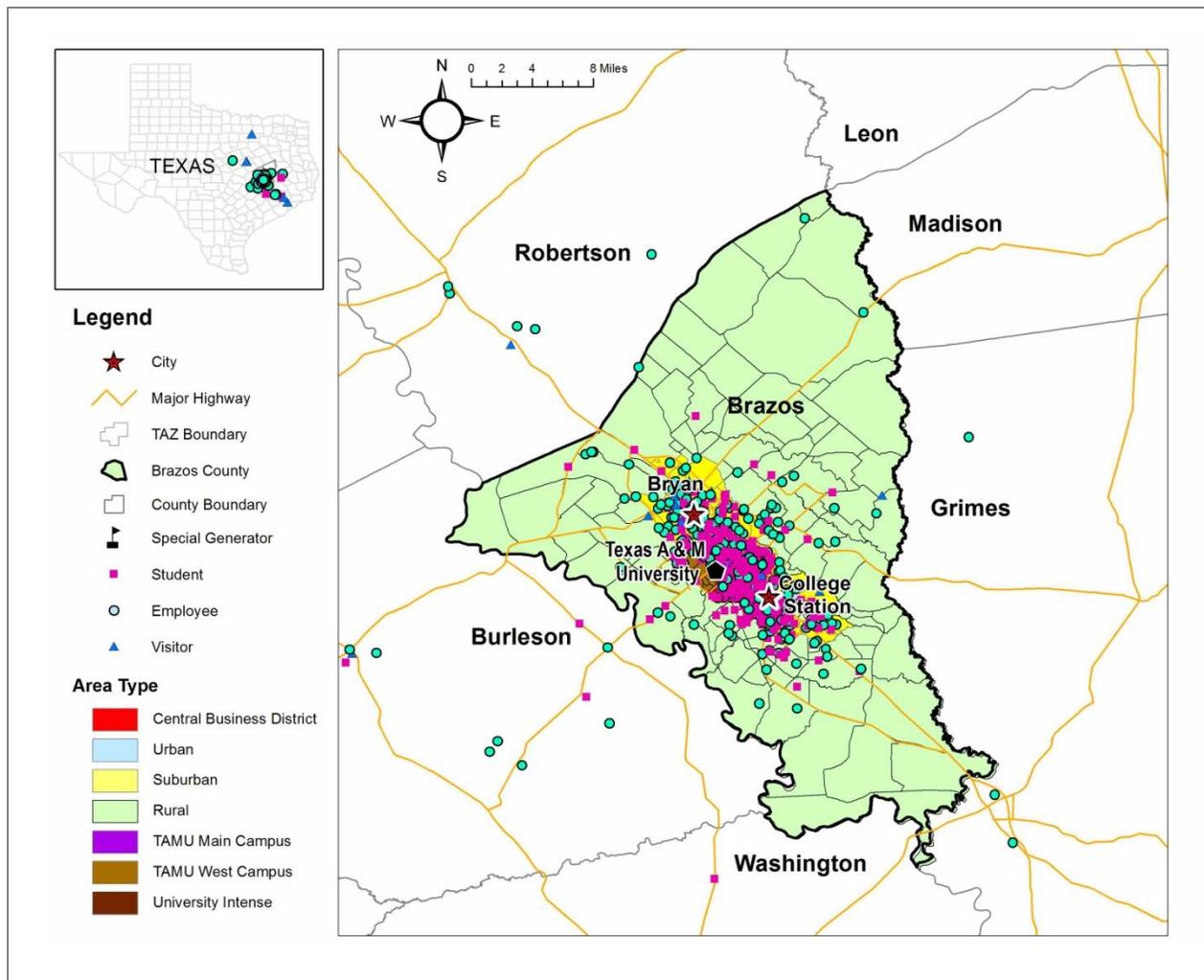


Figure 9. Residence Locations of Survey Participants at TAMU.

Table 20. Residence Locations of TAMU Survey Participants by Area Type.

Area Type	Student	Employee	Visitor	Total	Percent of Total
CBD	1	-	-	1	0.07
Urban	50	33	2	85	5.93
Suburban	185	135	12	332	23.15
Rural	84	65	3	152	10.6
TAMU Main	29	2	-	31	2.16
TAMU West	9	4	-	13	0.91
University Intense	641	129	10	780	54.39
Total	999	368	27	1,394	97.21
OUT OF AREA	8	25	7	40	2.79
Grand Total	1,007	393	34	1,434	100.00

Table 21. Residence Locations of TAMU Non-Resident Survey Participants.

Location	Student	Employee	Visitor	Total	Percent of Total
Bellville	1	-	-	1	2.50
Brenham	1	1	-	2	5.00
Caldwell	3	5	1	9	22.50
Carrollton	-	-	1	1	2.50
Cypress	-	1	-	1	2.50
Dime Box	-	1	-	1	2.50
Hearne	-	3	1	4	10.00
Houston	1	1	1	3	7.50
Huntsville	1	-	-	1	2.50
Iola	-	1	-	1	2.50
Jonesboro	-	1	-	1	2.50
League City	-	-	1	1	2.50
Lincoln	-	1	-	1	2.50
Madisonville	-	1	-	1	2.50
Navasota	-	2	-	2	5.00
Somerville	1	3	-	4	10.00
Trinity	-	1	-	1	2.50
Waco	-	-	2	2	5.00
Robertson	-	3	-	3	7.50
Total	8	25	7	40	100.00

Table shows the mode of travel used by survey participants traveling to and from TAMU. Approximately 72 percent were drivers of cars, trucks, or vans and close to 17 percent used the university shuttle bus. The average occupancy rates by auto-driver mode of travel was 1.1 persons per student and employee trip, and 2.1 persons per visitor trip.

Table 25. Survey Modes of Travel to and from TAMU.

Mode	To TAMU	From TAMU	Total Trips	Percent of Total
Driver (car/truck/van)	1,029	1,033	2,062	71.90
Passenger (car/truck/van)	47	53	100	3.49
Walk	47	48	95	3.31
Bicycle	51	53	104	3.63
Transit Bus	1	3	4	0.14
Motorcycle	9	9	18	0.63
Other (Shuttle Bus)	250	235	485*	16.91
Total	1,434	1,434	2,868	100.00

*included 12 trips identified as school bus trips.

Table shows the number and percentage of surveyed trips to and from TAMU by purpose.

Table 26. Survey Trips by Purposes to and from TAMU.

Trip Purpose	To Work Place	From Work Place	Total Trips	Percent of Total
HBW	326	303	629	21.93
HBNW	990	934	1,924	67.09
NHB-D	78	-	78	2.72
NHB-O	-	156	156	5.44
EXT-O	-	-	-	-
EXT -D	-	1	1	0.03
NON RES	40	40	80	2.79
Total	1,434	1,434	2,868	100.00

Table shows the distribution of student, employee, and visitor trip purposes by area type. Out of the total 2,868 TAMU survey trips, 70 percent were made by students, more than 27 percent were employee trips, and close to 3 percent visitor trips. Approximately 55 percent of the total trips originated and ended at University Intense area.

Table 27. Distribution TAMU Survey Trip Purposes.

Student Trip Purpose Area Type	HBW	HBNW	NHB-D	NHB-O	EXT-O	EXT-D	NONRES	Total	Percent of Total
	CBD	2	-	-	-	-	-	-	2
Urban	4	86	4	7	-	-	-	101	5.01
Suburban	5	341	6	12	-	-	-	364	18.07
Rural	8	154	3	5	-	-	-	170	8.44
TAMU Main Campus	2	53	3	10	-	-	-	68	3.38
TAMU West Campus	-	18	4	2	-	-	-	24	1.19
University Intense	54	1,149	18	47	-	-	3	1,271	63.11
OUT OF AREA	-	-	-	-	-	1	13	14	0.70
Total	75	1,801	38	83	-	1	16	2,014	70.22
Employee Trip Purpose Area Type	HBW	HBNW	NHB-D	NHB-O	EXT-O	EXT-D	NONRES	Total	Percent of Total
	CBD	-	-	1	2	-	-	-	3
Urban	54	-	9	17	-	-	4	84	10.69
Suburban	212	17	9	18	-	-	1	257	32.70
Rural	90	8	2	4	-	-	2	106	13.49
TAMU Main Campus	3	-	1	4	-	-	-	8	1.02
TAMU West Campus	3	4	-	1	-	-	-	8	1.02
University Intense	183	53	18	21	-	-	5	280	35.62
OUT OF AREA	2	-	-	-	-	-	38	40	5.09
Total	545	82	40	67	-	-	12	746	27.41
Visitor Trip Purpose Area Type	HBW	HBNW	NHB-D	NHB-O	EXT-O	EXT-D	NONRES	Total	Percent of Total
	CBD	-	-	-	-	-	-	-	-
Urban	-	4	-	-	-	-	-	4	5.88
Suburban	4	17	-	2	-	-	-	23	33.82
Rural	1	3	-	1	-	-	-	5	7.35
TAMU Main Campus	-	-	-	-	-	-	-	-	-
TAMU West Campus	-	-	-	-	-	-	-	-	-
University Intense	2	17	-	-	-	-	2	24	35.29
OUT OF AREA	-	-	-	-	-	-	12	12	17.65
Total	7	41	-	6	-	-	14	68	2.37
TOTAL TRIPS	629	1,924	78	156	-	1	80	2,868	100.00

Table and **Error! Reference source not found.** show the inter-zonal trip lengths and travel times by trip purpose for person and vehicle trips, respectively. The estimates for NHB trips reflected the average of NHB-D and NHB-O trips. The average trip length was close to 4 miles per trip. The average travel time was close to 7 minutes per trip.

Table 28. Survey Inter-Zonal Trip Lengths to and from TAMU by Trip Purpose.

Student Trip Purpose	Total Person Trips	Total Person Miles	Average Person Miles	Total Auto-Driver Trips	Total Auto-Driver Miles	Average Auto-Driver Miles
HBW	672	3,135.43	4.67	526	2,469.12	4.69
HBNW	1704	5,602.81	3.29	1254	4,307.53	3.44
NHB	130	444.51	3.42	102.5	344.95	3.37
NON-RES	17	47.49	2.79	14	38.70	2.76
Total	2,523	9,230.24	3.66	1,896.5	7,160.30	3.78

Table 29. Survey Inter-Zonal Travel Times to and from TAMU by Trip Purpose.

Trip Purpose	Total Person Trips	Total Person Minutes	Average Person Minutes	Total Auto-Driver Trips	Total Auto-Driver Minutes	Average Auto-Driver Minutes
HBW	672	5,488.56	8.17	526	4,323.12	8.22
HBNW	1704	10,421.67	6.12	1254	7,942.87	6.33
NHB	130	806.42	6.2	102.5	638.19	6.23
NON-RES	17	88.13	5.18	14	72.41	5.17
Total	2,523	16,804.78	6.66	1,896.5	12,976.59	6.84

Table and **Error! Reference source not found.** show the inter-zonal trip lengths and travel times by student, employee, and visitor trip purposes, respectively.

Table 22. Survey Inter-Zonal Trip Length to and from TAMU by Student, Employee and Visitor Trip Purposes.

Student Trip Purpose	Total Person Trips	Total Person Miles	Average Person Miles	Total Auto-Driver Trips	Total Auto-Driver Miles	Average Auto-Driver Miles
HBW	73	230.83	3.16	50	173.57	3.47
HBNW	1581	5,099.74	3.23	1185	4,037.02	3.41
NHB	60	162.76	2.71	48	142.41	2.97
NON-RES	3	6.67	2.22	2	3.11	1.56
Total	1,717	5,500.00	3.20	1,285	4,356.11	3.39
Employee Trip Purpose	Total Person Trips	Total Person Miles	Average Person Miles	Total Auto-Driver Trips	Total Auto-Driver Miles	Average Auto-Driver Miles
HBW	581	2,736.03	4.71	473	2,266.99	4.79
HBNW	53	183.03	3.45	40	158.23	3.96
NHB	60	219.56	3.66	51.5	190.02	3.69
NON-RES	10	30.36	3.04	10	30.36	3.04
Total	704	3,168.98	4.50	575	2,645.60	4.61
Visitor Trip Purpose	Total Person Trips	Total Person Miles	Average Person Miles	Total Auto-Driver Trips	Total Auto-Driver Miles	Average Auto-Driver Miles
HBW	18	168.57	9.37	3	28.56	9.52
HBNW	70	320.04	4.57	29	112.28	3.87
NHB	10	62.20	6.22	3	12.52	4.17
NON-RES	4	10.46	2.62	2	5.23	2.62
Total	102	561.27	5.50	37	158.59	4.29

Table 23. Survey Inter-Zonal Travel Time to and from TAMU by Student, Employee and Visitor Trip Purposes.

Student Trip Purpose	Total Person Trips	Total Person Minutes	Average Person Minutes	Total Auto-Driver Trips	Total Auto-Driver Minutes	Average Auto-Driver Minutes
HBW	73	435.30	5.96	50	320.41	6.41
HBNW	1581	9,497.58	6.01	1185	7,459.18	6.29
NHB	60	306.76	5.11	48	266.40	5.55
NON-RES	3	13.50	4.5	2	6.56	3.28
Total	1,717	10,253.14	5.97	1,285	8,052.55	6.27
Employee Trip Purpose	Total Person Trips	Total Person Minutes	Average Person Minutes	Total Auto-Driver Trips	Total Auto-Driver Minutes	Average Auto-Driver Minutes
HBW	581	4,796.97	8.26	473	3,955.19	8.36
HBNW	53	331.64	6.26	40	280.21	7.01
NHB	60	405.24	6.75	51.5	350.08	6.80
NON-RES	10	57.07	5.71	10	57.07	5.71
Total	704	5,590.92	7.94	575	4,642.55	8.08
Visitor Trip Purpose	Total Person Trips	Total Person Minutes	Average Person Minutes	Total Auto-Driver Trips	Total Auto-Driver Minutes	Average Auto-Driver Minutes
HBW	18	256.29	14.24	3	47.52	15.84
HBNW	70	592.45	8.46	29	203.48	7.02
NHB	10	94.42	9.44	3	21.72	7.24
NON-RES	4	17.56	4.39	2	8.78	4.39
Total	102	960.72	9.42	37	281.50	7.61

Blinn College

Blinn College had a reported total employment of 950 and 855 of its employees were estimated to be at work during the travel survey day. A total of 125 employees, 499 students, and 13 non-employees participated in the survey. Vehicle counts were conducted from 6:00 a.m. to 8:00 p.m., with a total count of 24,643 non-CVs, 43 CVs, and 134 School Buses.

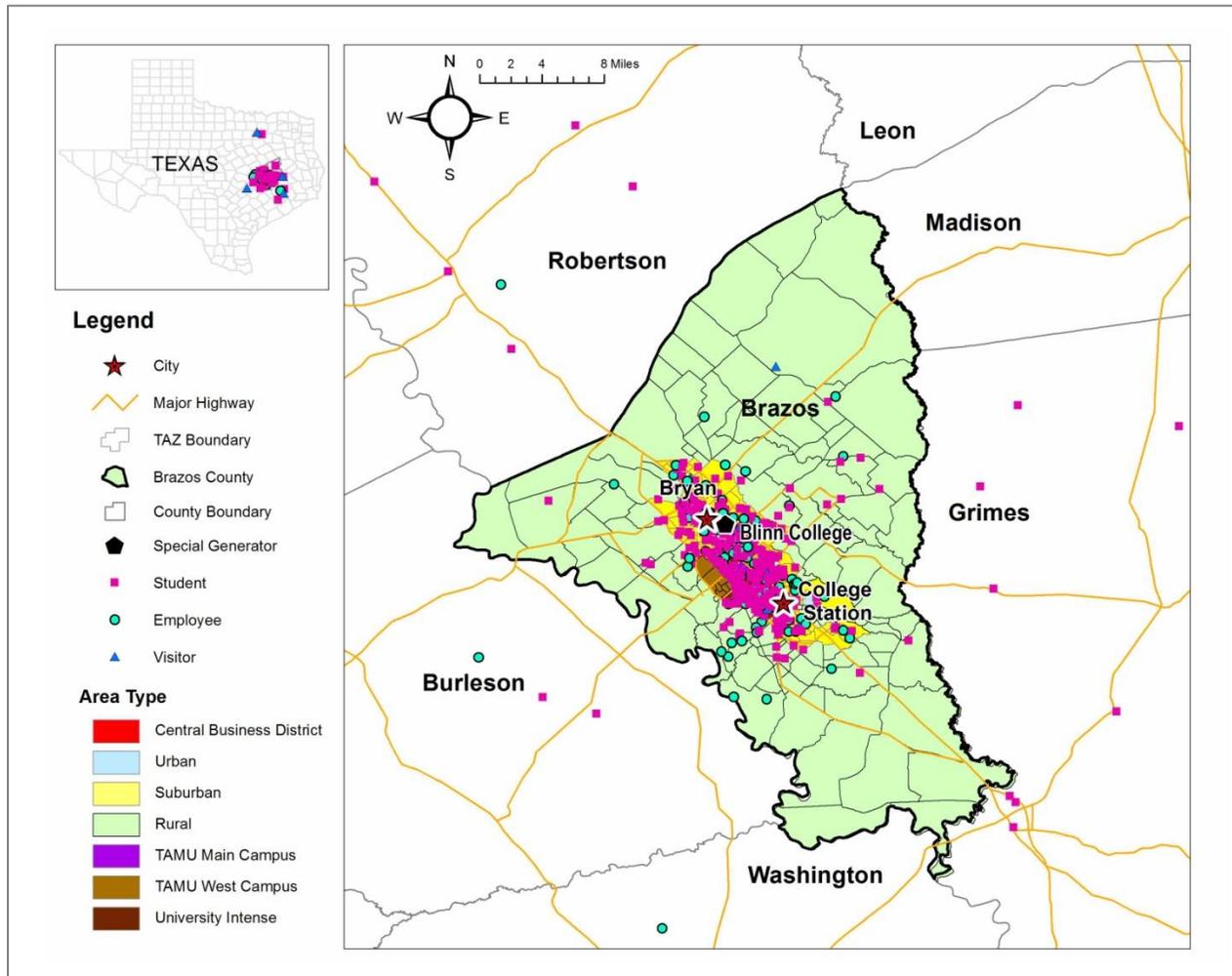


Figure 9 shows the residence locations of Blinn College survey participants. Approximately 33 percent were residents of Bryan and 61 percent lived in College Station. The remaining 6 percent resided outside the study area. Table 32 shows the residence locations of survey participants by area type. Table 33 shows the residence locations outside the study area.

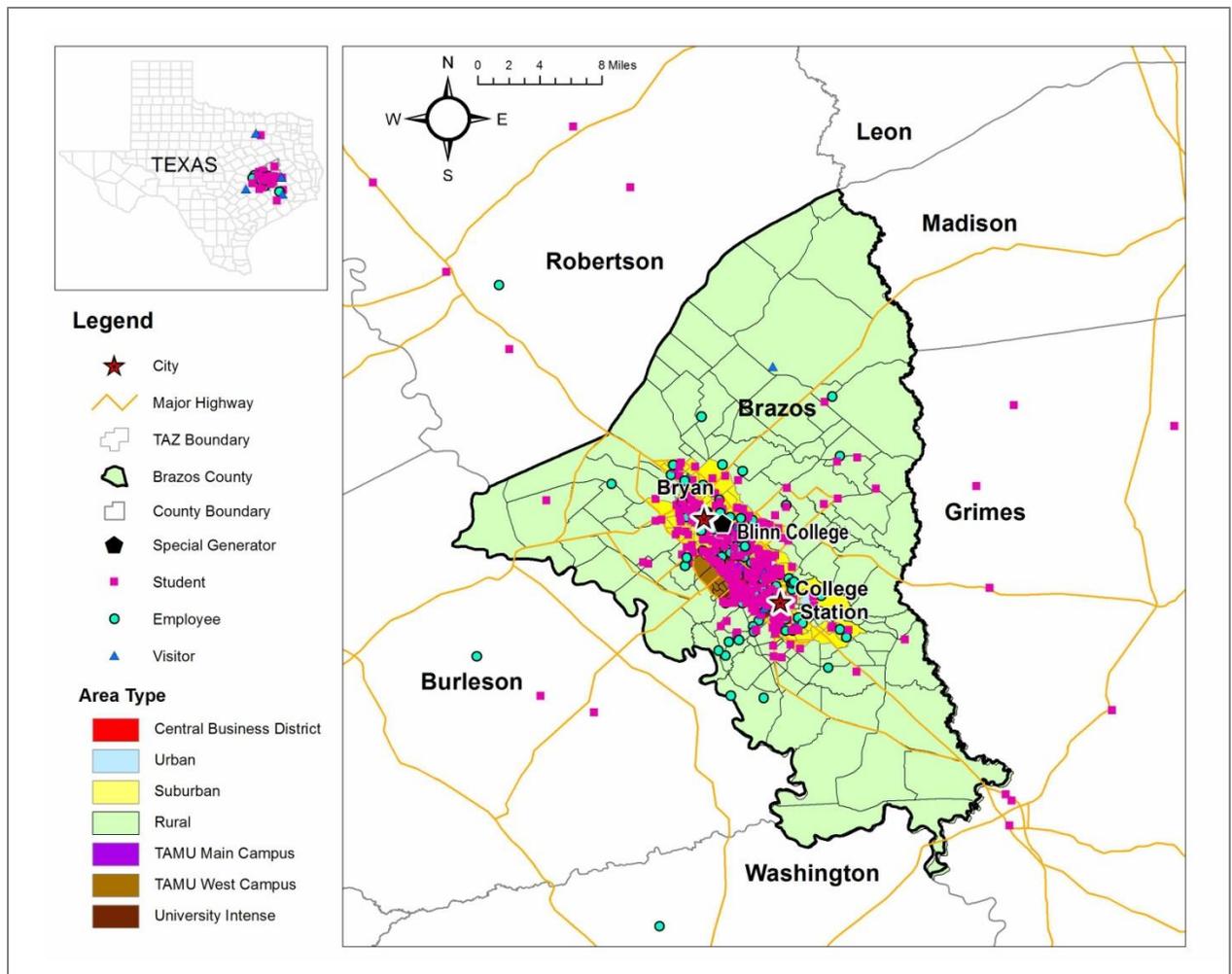


Figure 9. Residence Locations of Survey Participants at Blinn College.

Table 32. Residence Locations of Blinn College Survey Participants by Area Type.

Area Type	Student	Employee	Visitor	Total	Percent of Total
CBD	-	-	-	-	-
Urban	20	14	-	34	5.34
Suburban	139	52	4	195	30.61
Rural	41	20	2	63	9.89
TAMU Main	17	-	-	17	2.67
TAMU West	6	-	-	6	0.94
University Intense	249	33	3	285	44.74
Total	472	119	9	600	94.19
OUT OF AREA	27	6	4	37	5.81
Grand Total	499	125	13	637	100.00

Table 33. Residence Locations of Blinn College Non-Resident Survey Participants.

Location	Student	Employee	Visitor	Total	Percent of Total
Anderson	2	-	-	2	5.41
Bastrop	-	-	1	1	2.70
Bedias	1	-	-	1	2.70
Brenham	2	1	-	3	8.11
Caldwell	1	1	-	2	5.41
Calvert	1	-	-	1	2.70
Cameron	-	1	-	1	2.70
Carmine	1	-	-	1	2.70
Centerville	1	-	-	1	2.70
Cypress	-	1	-	1	2.70
Dallas	-	-	1	1	2.70
Franklin	2	-	-	2	5.41
Gause	1	-	-	1	2.70
Hearne	2	1	-	3	8.11
Houston	-	-	1	1	2.70
Huntsville	3	-	1	4	10.81
Iola	2	-	-	2	5.41
Lexington	1	-	-	1	2.70
Navasota	3	-	-	3	8.11
Rockdale	-	1	-	1	2.70
Rosenberg	1	-	-	1	2.70
Somerville	1	-	-	1	2.70
Spring	1	-	-	1	2.70
Sunnyvale	1	-	-	1	2.70
Total	27	5	4	37	100.00¹

¹Percentage total may not be exact due to rounding.

Table shows the mode of travel used by survey participants traveling to and from Blinn College. Approximately 88 percent were drivers of cars, trucks, or vans, 5 percent used the transit bus and 2 percent used the college shuttle bus. The average occupancy rates by auto-driver mode of travel was 1.1 persons per student/employee trip, and 1.0 persons per visitor trip.

Table 34. Survey Modes of Travel to and from Blinn College.

Mode	To Work Place	From Work Place	Total Trips	Percent of Total
Driver (car/truck/van)	559	558	1,117	87.68
Passenger (car/truck/van)	13	11	24	1.88
Walk	13	13	26	2.04
Bicycle	2	2	4	0.31
Transit Bus	15	47	62	4.87
School Bus	6	6	12	0.94
Other (Shuttle Bus)	29	-	29	2.28
Total	637	637	1,274	100

Table shows the number and percentage of surveyed trips to and from Blinn College by purpose.

Table 35. Survey Trips by Purposes to and from Blinn College.

Trip Purpose	To Work Place	From Work Place	Total Trips	Percent of Total
HBW	100	89	189	14.84
HBNW	420	383	803	63.03
NHB-D	79	-	79	6.2
NHB-O	-	122	122	9.58
EXT-O	1	-	1	0.08
EXT -D	-	6	6	0.47
NON RES	37	37	74	5.81
Total	637	637	1,274	100.00

Out of the total 1,274 survey trips, 78 percent were made by students, more than 20 percent were employee trips, and 2 percent were visitor trips. Approximately 43 percent of the total trips originated and were destined at University Intense area. Table shows the distribution of student, employee, and visitor trip purposes by area type.

Table 36. Distribution of Blinn College Survey Trip Purposes.

Student Trip Purpose Area Type	HBW	HBNW	NHB-D	NHB-O	EXT-O	EXT-D	NONRES	Total	Percent of Total
	CBD	-	-	1	1	-	-	-	2
Urban	-	34	16	16	-	-	5	71	7.11
Suburban	2	227	15	18	-	-	2	264	26.45
Rural	-	61	3	7	-	-	-	71	7.11
TAMU Main Campus	-	33	5	15	-	-	-	53	5.31
TAMU West Campus	1	7	2	4	-	-	-	14	1.40
University Intense	4	423	16	27	-	-	3	473	47.39
OUT OF AREA	-	-	-	-	1	5	44	50	5.01
Total	7	785	58	88	1	5	54	998	78.34
Employee Trip Purpose Area Type	HBW	HBNW	NHB-D	NHB-O	EXT-O	EXT-D	NONRES	Total	Percent of Total
	CBD	0	0	1	-	-	-	1	0.40
Urban	19	0	4	10	-	-	-	33	13.20
Suburban	81	1	8	9	-	-	3	102	40.80
Rural	30	2	1	2	-	-	-	35	14.00
TAMU Main Campus	-	-	-	1	-	-	-	1	0.40
TAMU West Campus	-	-	-	-	-	-	-	-	-
University Intense	50	3	5	10	-	-	1	69	27.60
OUT OF AREA	-	-	-	-	-	1	8	9	3.60
Total	180	6	19	32	-	1	12	250	19.62
Visitor Trip Purpose Area Type	HBW	HBNW	NHB-D	NHB-O	EXT-O	EXT-D	NONRES	Total	Percent of Total
	CBD	-	-	-	-	-	-	-	-
Urban	-	-	1	2	-	-	-	3	11.54
Suburban	-	6	-	-	-	-	-	6	23.08
Rural	-	2	-	-	-	-	-	2	7.69
TAMU Main Campus	-	-	-	-	-	-	-	-	-
TAMU West Campus	-	-	-	-	-	-	-	-	-
University Intense	2	4	1	-	-	-	2	9	34.62
OUT OF AREA	-	-	-	-	-	-	6	6	23.08
Total	2	12	2	2	-	-	6	6	2.04
TOTAL TRIPS	189	803	79	122	1	6	74	1,274	100.00

Table and **Error! Reference source not found.** show the inter-zonal trip lengths and travel times by trip purpose for person and vehicle trips, respectively. The estimates for NHB trips reflected the average of NHB-D and NHB-O trips. The average trip length was close to 5 miles per trip. The average travel time was close to 9 minutes per trip.

Table 37. Survey Inter-Zonal Trip Lengths to and from Blinn College by Trip Purpose.

Trip Purpose	Total Person Trips	Total Person Miles	Average Person Miles	Total Auto-Driver Trips	Total Auto-Driver Miles	Average Auto-Driver Miles
HBW	206	1017.52	4.94	179	887.83	4.96
HBNW	872	4423.89	5.07	686	3534.81	5.15
NHB	112.5	451.80	4.02	84	339.94	4.05
NON-RES	28	76.08	2.72	14	38.9	2.78
Total	1,218.5	5969.29	4.90	963	4,801.48	4.99

Table 38. Survey Inter-Zonal Travel Times to and from Blinn College by Trip Purpose.

Trip Purpose	Total Person Trips	Total Person Miles	Average Person Miles	Total Auto-Driver Trips	Total Auto-Driver Miles	Average Auto-Driver Miles
HBW	206	1,766.24	8.57	179	1,538.44	8.59
HBNW	872	8,012.56	9.19	686	6,404.64	9.34
NHB	112.5	821.06	7.30	84	617.24	7.35
NON-RES	28	144.10	5.15	14	73.69	5.26
Total	1,218.5	10,743.96	8.82	963	8,634.01	8.97

Table and **Error! Reference source not found.** show the inter-zonal trip lengths and travel times by student, employee, and visitor trip purposes, respectively.

Table 39. Survey Inter-Zonal Trip Lengths to and from Blinn College by Student, Employee and Visitor Trip Purposes.

Student Trip Purpose	Total Person Trips	Total Person Miles	Average Person Miles	Total Auto-Driver Trips	Total Auto-Driver Miles	Average Auto-Driver Miles
HBW	7	23.92	3.42	7.0	23.92	3.42
HBNW	854	4296.89	5.03	673.0	3,440.22	5.11
NHB	77.5	310.9	4.01	57.5	231.61	4.03
NON-RES	19	50.03	2.63	8.0	21.09	2.64
Total	958	4,682	4.89	745.5	3,716.84	4.99
Employee Trip Purpose	Total Person Trips	Total Person Miles	Average Person Miles	Total Auto-Driver Trips	Total Auto-Driver Miles	Average Auto-Driver Miles
HBW	197	980.9	4.98	170	851.21	5.01
HBNW	7	58.4	8.34	4	42.56	10.64
NHB	33.5	136.17	4.06	25	103.60	4.14
NON-RES	7	19.59	2.8	4	11.35	2.84
Total	245	1,195	4.89	203	1,008.72	4.97
Visitor Trip Purpose	Total Person Trips	Total Person Miles	Average Person Miles	Total Auto-Driver Trips	Total Auto-Driver Miles	Average Auto-Driver Miles
HBW	2	12.7	6.35	2	12.70	6.35
HBNW	11	68.6	6.24	9	52.03	5.78
NHB	1.5	4.74	3.16	1.5	4.74	3.16
NON-RES	2	6.46	3.23	2	6.46	3.23
Total	17	93	5.61	14.5	76	5.24

Table 24. Survey Inter-Zonal Travel Times to and from Blinn College by Student, Employee and Visitor Trip Purposes.

Student Trip Purpose	Total Person Trips	Total Person Minutes	Average Person Minutes	Total Auto-Driver Trips	Total Auto-Driver Minutes	Average Auto-Driver Minutes
HBW	7	45.99	6.57	7.0	45.99	6.57
HBNW	854	7799.5	9.13	673.0	6,248.65	9.28
NHB	77.5	571.07	7.37	57.5	423.98	7.37
NON-RES	19	94.63	4.98	8.0	39.72	4.97
Total	958	8,511	8.89	745.5	6,758.34	9.07
Employee Trip Purpose	Total Person Trips	Total Person Minutes	Average Person Minutes	Total Auto-Driver Trips	Total Auto-Driver Minutes	Average Auto-Driver Minutes
HBW	197	1696.51	8.61	170	1,468.71	8.64
HBNW	7	95.15	13.59	4	65.97	16.49
NHB	33.5	240.77	7.19	25	184.04	7.36
NON-RES	7	37.22	5.32	4	21.72	5.43
Total	245	2,070	8.46	203	1,740.44	8.57
Visitor Trip Purpose	Total Person Trips	Total Person Minutes	Average Person Minutes	Total Auto-Driver Trips	Total Auto-Driver Minutes	Average Auto-Driver Minutes
HBW	2	23.74	11.87	2	23.74	11.87
HBNW	11	117.91	10.72	9	90.02	10.00
NHB	1.5	9.23	6.15	1.5	9.23	6.15
NON-RES	2	12.25	6.13	2	12.25	6.13
Total	17	163	9.89	14.5	135	9.33

Post Oak Mall

Post Oak Mall had a reported total employment of 1,200 and 720 of its employees were estimated to be at work during the travel survey day. A total of 125 employees and 577 non-employees participated in the survey. The surveyed employees represented 17 percent of the total employees at work. Vehicle counts were conducted from 9:00 a.m. to 10:00 p.m., with a total count of 11,938 non-CVs and 130 CVs.

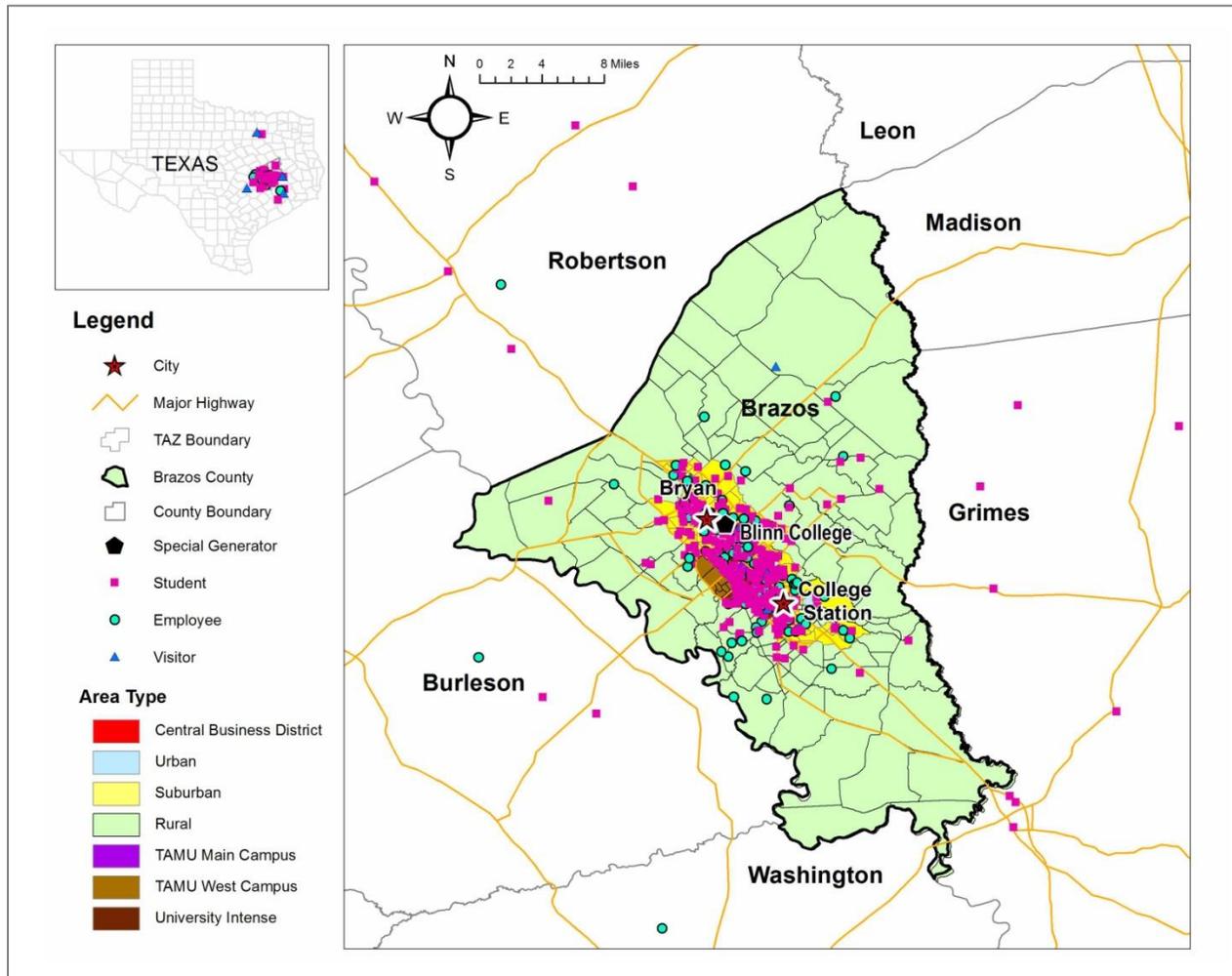


Figure 9 shows the residence locations of Post Oak Mall survey participants. Approximately 29 percent were residents of Bryan and 50 percent lived in College Station. The remaining 6 percent resided outside the study area. Table 41 shows the residence locations of survey participants by area type. Table 42 shows the residence locations outside the study area.

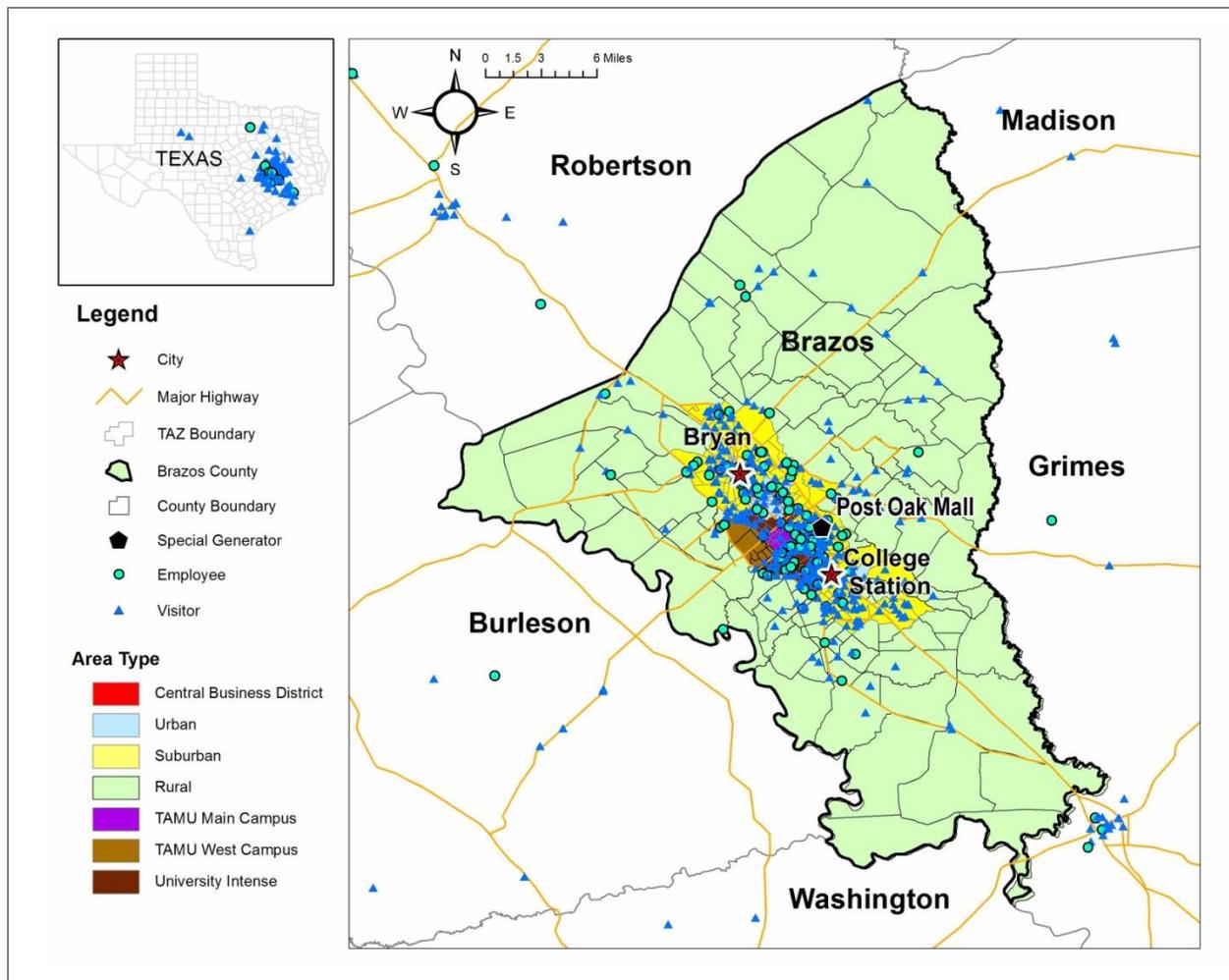


Figure 10. Residence Locations of Survey Participants at Post Oak Mall.

Table 41. Residence Locations of Post Oak Mall Survey Participants by Area Type.

Area Type	Employee	Visitor	Total	Percent of Total
CBD	-	1	1	0.18
Urban	9	29	38	6.83
Suburban	36	171	207	37.23
Rural	18	81	99	17.81
TAMU Main	2	7	9	1.62
TAMU West	-	1	1	0.18
University Intense	47	154	201	36.15
Total	112	444	556	79.20
OUT OF AREA	13	133	146	20.80
Grand Total	125	577	702	100.00

Table 42. Residence Locations of Post Oak Mall Non-Resident Survey Participants.

Location	Employee	Visitor	Total	Percent of Total
Bremond	-	5	5	3.42
Brenham	1	11	12	8.22
Burton	-	3	3	2.05
Caldwell	2	8	10	6.85
Calvert	1	4	5	3.42
Franklin	-	7	7	4.79
Hearne	1	12	13	8.9
Houston	1	5	6	4.11
Huntsville	-	3	3	2.05
Iola	1	2	3	2.05
Madisonville	0	6	6	4.11
Navasota	4	18	22	15.07
Mabank	-	1	1	0.68
Normangee	-	5	5	3.42
Somerville	-	6	6	4.11
Total	4	96	107	73.25
Other	2	37	39	26.75

Table shows the mode of travel used by survey participants traveling to and from Post Oak Mall. Approximately 88 percent were drivers of cars, trucks, or vans, 5 percent used the transit bus and 2 percent used the college shuttle bus. The average occupancy rates by auto-driver mode of travel was 1.1 persons per student/employee trip, and 1.0 persons per visitor trip.

Table 43. Survey Modes of Travel to Post Oak Mall.

Mode	Employee	Visitor	Total Trips	Percent of Total
Driver (car/truck/van)	117	558	675	96.15
Passenger (car/truck/van)	7	14	21	2.99
Walk	1	-	1	0.14
Transit Bus	-	4	4	0.57
Motorcycle	-	1	1	0.14
Total	125	577	702	100.00

Table shows the number and percentage of surveyed trips to and from Post Oak Mall by purpose.

Table 44. Survey Trips by Purposes to and from Post Oak Mall.

Trip Purpose	To Work Place	From Work Place	Total Trips	Percent of Total
HBW	87	73	160	11.40
HBNW	314	316	630	44.87
NHB-D	153	-	153	10.90
NHB-O	-	166	166	11.82
EXT-O	1	-	1	0.07
EXT -D	-	-	-	0.00
NON RES	147	147	294	20.94
Total	702	702	1,404	100.00

Table shows the distribution of employee, and visitor trip purposes by area type. Out of the total 1,404 survey trips, 18 percent were employee trips, and the remaining 82 percent were visitor trips. The survey was not designed to identify student trips. Approximately 34 percent of the total trips originated and were destined at University Intense area.

Table 45. Distribution of Post Oak Mall Survey Trip Purpose.

Employee Trip Purpose Area Type	HBW	HBNW	NHB-D	NHB-O	EXT-O	EXT-D	NONRES	Total	Percent of Total
	CBD	-	-	-	-	-	-	-	-
Urban	6	6	1	6	-	-	2	21	8.40
Suburban	54	6	3	11	-	-	-	74	29.60
Rural	25	2	-	2	-	-	-	29	11.60
TAMU Main Campus	2	2	1	2	-	-	-	7	2.80
TAMU West Campus	-	-	-	1	-	-	-	1	0.40
University Intense	71	10	7	6	-	-	2	96	38.40
OUT OF AREA	-	-	-	-	-	-	22	22	8.80
Total	158	26	12	28	-	-	26	250	17.81

Visitor Trip Purpose Area Type	HBW	HBNW	NHB-D	NHB-O	EXT-O	EXT-D	NONRES	Total	Percent of Total
	CBD	-	2	-	2	-	-	1	5
Urban	-	38	26	18	-	-	18	100	8.67
Suburban	-	225	41	53	-	-	47	366	31.72
Rural	2	89	5	6	-	-	5	107	9.27
TAMU Main Campus	-	9	17	9	-	-	7	42	3.64
TAMU West Campus	-	-	3	1	-	-	1	5	0.43
University Intense	-	241	49	49	-	-	45	384	33.28
OUT OF AREA	-	-	-	-	1	-	144	145	12.56
Total	2	604	141	138	1	-	268	1,154	82.19
TOTAL TRIPS	160	630	153	166	1	-	294	1,404	100.00

Table and **Error! Reference source not found.** show the inter-zonal trip lengths and travel times by trip purpose for person and vehicle trips, respectively. The estimates for NHB trips reflected the average of NHB-D and NHB-O trips. The average trip length was around 4 miles per trip. The average travel time was close to 7 minutes per trip.

Table 46. Survey Inter-Zonal Trip Lengths to and from Post Oak Mall by Trip Purpose.

Trip Purpose	Total Person Trips	Total Person Miles	Average Person Miles	Total Auto-Driver Trips	Total Auto-Driver Miles	Average Auto-Driver Miles
HBW	193	845	4.38	148	664	4.48
HBNW	1,028	4,685	4.56	597	2,645	4.43
NHB	234	797	3.41	157	542	3.46
NON-RES	204	628	3.08	126	398	3.16
Total	1,659	6,954	4.19	1,028	4,248	4.13

Table 47. Survey Inter-Zonal Travel Times to and from Post Oak Mall by Trip Purpose.

Trip Purpose	Total Person Trips	Total Person Minutes	Average Person Minutes	Total Auto-Driver Trips	Total Auto-Driver Minutes	Average Auto-Driver Minutes
HBW	193	1,345	6.97	148	1,049	7.08
HBNW	1,028	7,484	7.28	597	4,247	7.11
NHB	234	1,339	5.72	157	904	5.77
NON-RES	204	1,062	5.21	126	670	5.32
Total	1,659	11,231	6.77	1,028	6,869	6.69

Table and **Error! Reference source not found.** show the inter-zonal trip lengths and travel times by employee and visitor trip purposes, respectively.

Table 48. Survey Inter-Zonal Trip Length to and from Post Oak Mall by Employee and Visitor Trip Purposes.

Employee Trip Purpose	Total Person Trips	Total Person Miles	Average Person Miles	Total Auto-Driver Trips	Total Auto-Driver Miles	Average Auto-Driver Miles
HBW	191	815	4.27	146	634	4.34
HBNW	37	121	3.27	24	75	3.13
NHB	24	88	3.65	20	75	3.77
NON-RES	4	13	3.35	4	13	3.35
Total	256	1,037	4.05	194	798	4.11
Visitor Trip Purpose	Total Person Trips	Total Person Miles	Average Person Miles	Total Auto-Driver Trips	Total Auto-Driver Miles	Average Auto-Driver Miles
HBW	2	30	14.79	2	30	14.79
HBNW	991	4,564	4.61	573	2,570	4.48
NHB	210	710	3.38	137	466	3.42
NON-RES	200	615	3.07	122	385	3.15
Total	1,403	5,917	4.22	834	3,450	4.14

Table 25. Survey Inter-Zonal Travel Time to and from Post Oak Mall by Employee and Visitor Trip Purposes.

Employee Trip Purpose	Total Person Trips	Total Person Minutes	Average Person Minutes	Total Auto-Driver Trips	Total Auto-Driver Minutes	Average Auto-Driver Minutes
HBW	191	1,309	6.85	146	1,013	6.94
HBNW	37	214	5.78	24	131	5.46
NHB	24	145	6.04	20	124	6.18
NON-RES	4	22	5.62	4	22	5.62
Total	256	1,691	6.60	194	1,290	6.65
Visitor Trip Purpose	Total Person Trips	Total Person Minutes	Average Person Minutes	Total Auto-Driver Trips	Total Auto-Driver Minutes	Average Auto-Driver Minutes
HBW	2	36	17.88	2	36	17.88
HBNW	991	7,270	7.34	573	4,116	7.18
NHB	210	1,194	5.69	137	780	5.71
NON-RES	200	1,040	5.20	122	647	5.31
Total	1,403	9,540	6.80	834	5,579	6.69

St. Joseph Health Center

St. Joseph Health Center had a reported total employment of 2,600 and 1,350 of its employees were estimated to be at work during the travel survey day. A total of 334 employees and 235 non-employees participated in the survey. The surveyed employees represented 25 percent of the total employees at work. Vehicle counts were conducted from 6:00 a.m. to 10:00 p.m., with a total count of 6,353 non-CVs and 128 CVs.

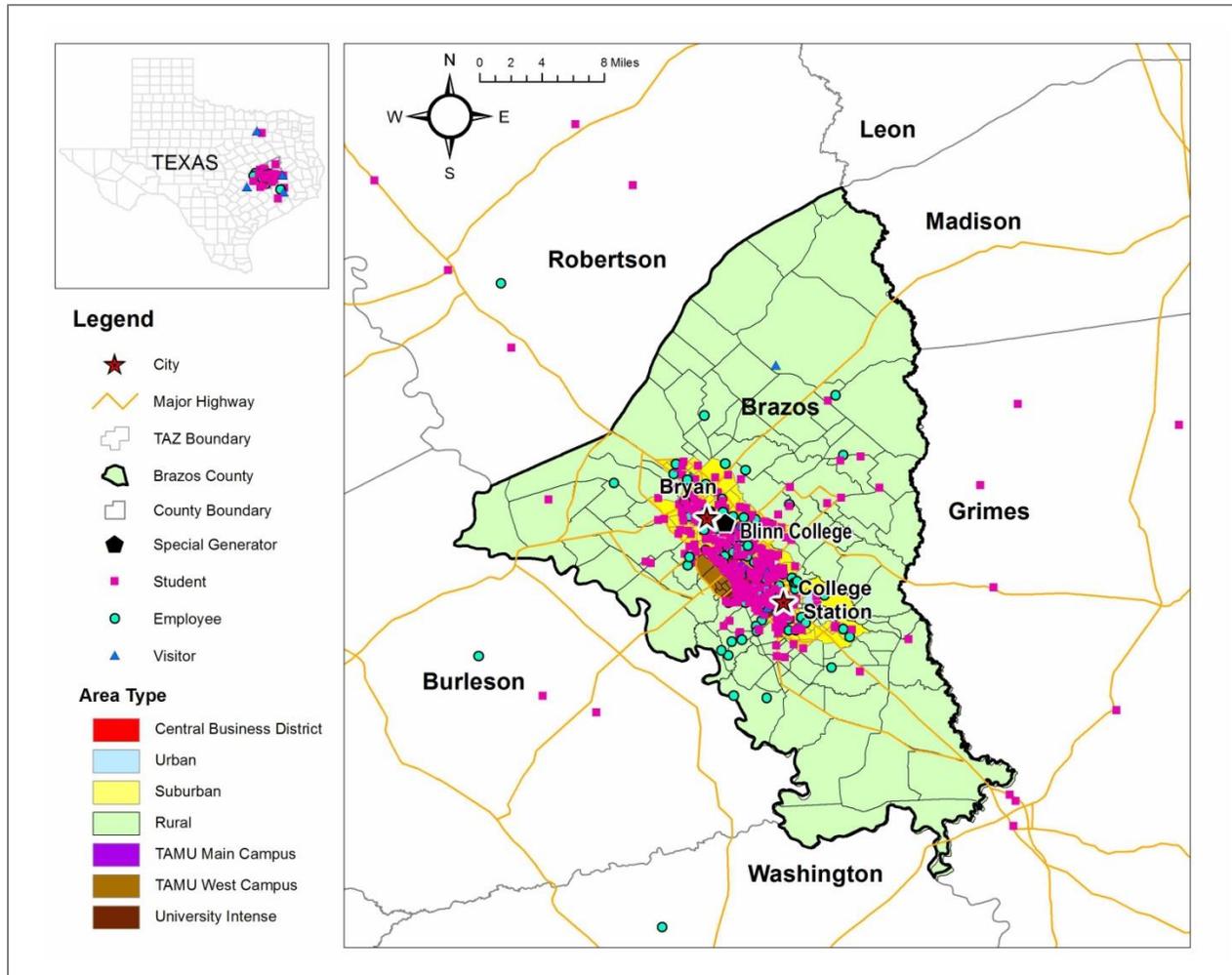


Figure 9 shows the residence locations of St. Joseph Health Center survey participants. Approximately 47 percent were residents of Bryan and 25 percent lived in College Station. The remaining 28 percent resided outside the study area. Table 50 shows the residence locations of survey participants by area type. Table 46 shows the residence locations outside the study area.

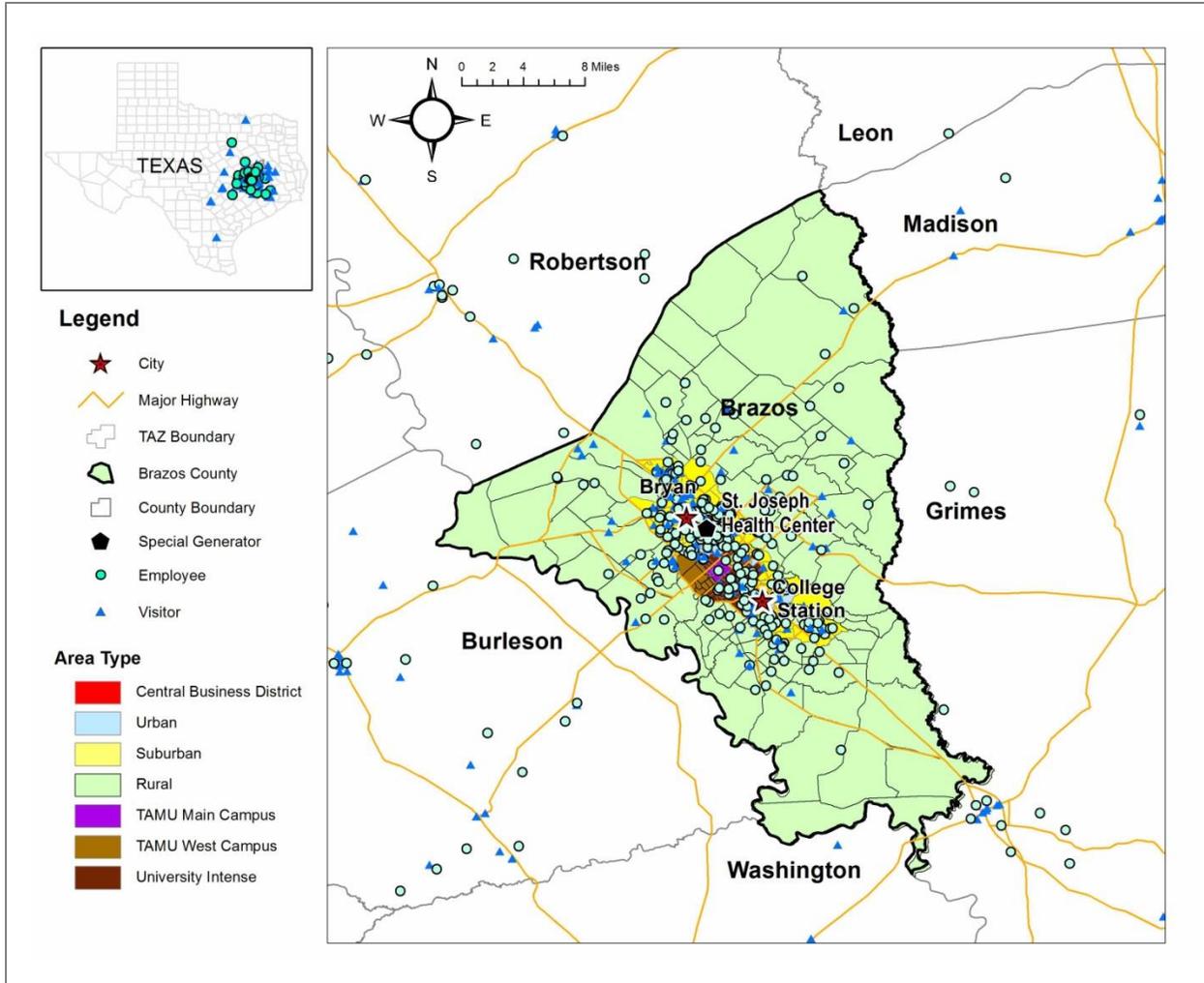


Figure 11. Residence Locations of Survey Participants at St. Joseph Health Center.

Table 50. Residence Location of from St. Joseph Health Center Survey Participants by Area Type.

Area Type	Employee	Visitor	Total	Percent of Total
CBD	-	-	-	9.18
Urban	22	16	38	50.72
Suburban	136	74	210	24.40
Rural	68	33	101	0.24
TAMU Main	1	-	1	0.00
TAMU West	-	-	-	15.46
University Intense	45	19	64	72.76
Total	272	142	414	27.24
OUT OF AREA	62	93	155	9.18
Grand Total	334	235	569	100.00

Table 51. Residence Location of from St. Joseph Health Center Non-Resident Survey Participants.

Location	Employee	Visitor	Total	Percent of Total
Brenham	3	9	12	7.74
Caldwell	8	17	25	16.13
Hearne	7	6	13	8.39
Houston	1	3	4	2.58
Madisonville	-	6	6	3.87
Navasota	9	7	16	10.32
Total	28	48	76	49.03
Other	34	45	79	50.97

Table shows the mode of travel used by survey participants traveling to and from St. Joseph Health Center. Approximately 97 percent were drivers of cars, trucks, or vans and 2 percent were passengers. The average occupancy rates by auto-driver mode of travel was 1.1 persons per student/employee trip, and 1.0 persons per visitor trip.

Table 52. Survey Modes of Travel to and from St. Joseph Health Center.

Mode	Employee	Visitor	Total Trips	Percent of Total
Driver (car/truck/van)	325	226	551	96.84
Passenger (car/truck/van)	7	4	11	1.93
Walk	2	2	4	0.70
Bicycle	-	1	1	0.18
Transit Bus	-	1	1	0.18
Taxi/Limo	-	1	1	0.18
Total	334	235	569	100.00

Table shows the number and percentage of surveyed trips to and from St. Joseph Health Center by purpose.

Table 53. Survey Trips by Purposes to and from from St. Joseph Health Center.

Trip Purpose	To Work Place	From Work Place	Total Trips	Percent of Total
HBW	432	14	446	39.19
HBNW	33	223	256	22.5
NHB-D	20	18	38	3.34
NHB-O	55	25	80	7.03
EXT-O	1	1	2	0.18
EXT -D	3	1	4	0.35
NON RES	124	188	312	27.42
Total	668	470	1,138	100.00

Table shows the distribution of student, employee, and visitor trip purposes by area type. Out of the total 1,274 survey trips, approximately 59 percent were employee trips, and 41 percent were visitor trips. Approximately 12 percent of the total trips originated and were destined at University Intense area.

Table 54. Distribution of St. Joseph Health Center Survey Trip Purposes.

Employee Trip Purpose Area Type	HBW	HBNW	NHB-D	NHB-O	EXT-O	EXT-D	NONRES	Total	Percent of Total
	CBD	-	-	-	-	-	-	-	-
Urban	6	6	1	6	-	-	2	21	8.40
Suburban	54	6	3	11	-	-	-	74	29.60
Rural	25	2	-	2	-	-	-	29	11.60
TAMU Main Campus	2	2	1	2	-	-	-	7	2.80
TAMU West Campus	-	-	-	1	-	-	-	1	0.40
University Intense	71	10	7	6	-	-	2	96	38.40
OUT OF AREA	-	-	-	-	-	-	22	22	8.80
Total	158	26	12	28	-	-	26	250	17.81

Visitor Trip Purpose Area Type	HBW	HBNW	NHB-D	NHB-O	EXT-O	EXT-D	NONRES	Total	Percent of Total
	CBD	-	2	-	2	-	-	1	5
Urban	-	38	26	18	-	-	18	100	8.67
Suburban	-	225	41	53	-	-	47	366	31.72
Rural	2	89	5	6	-	-	5	107	9.27
TAMU Main Campus	-	9	17	9	-	-	7	42	3.64
TAMU West Campus	-	0	3	1	-	-	1	5	0.43
University Intense	-	241	49	49	-	-	45	384	33.28
OUT OF AREA	-	-	-	-	1	-	144	145	12.56
Total	2	604	141	138	1	-	268	1,154	82.19
TOTAL TRIPS	160	630	153	166	1	-	294	1,404	100.00

Table and **Error! Reference source not found.** show the inter-zonal trip lengths and travel times by trip purpose for person and vehicle trips, respectively. The estimates for NHB trips reflected the average of NHB-D and NHB-O trips. The average trip length was close to 5 miles per trip. The average travel time was approximately 7.9 minutes per person trip and 8.3 minutes per auto-driver trip.

Table 55. Survey Inter-Zonal Trip Lengths to and from St. Joseph Health Center by Trip Purpose.

Trip Purpose	Total Person Trips	Total Person Miles	Average Person Miles	Total Auto-Driver Trips	Total Auto-Driver Miles	Average Auto-Driver Miles
HBW	491	2,561.21	5.22	432	2,300.11	5.32
HBNW	432	1,915.77	4.43	242	1,105.03	4.57
NHB	80.5	256.17	3.18	55.5	177.92	3.21
NON-RES	33	91.78	2.78	21	65.60	3.12
Total	1,036.5	4,824.93	4.66	750.5	3,648.66	4.86

Table 56. Survey Inter-Zonal Travel Times to and from St. Joseph Health Center by Trip Purpose.

Trip Purpose	Total Person Trips	Total Person Minutes	Average Person Minutes	Total Auto-Driver Trips	Total Auto-Driver Minutes	Average Auto-Driver Minutes
HBW	491	4,283.53	8.72	432	3,843.31	8.90
HBNW	432	3,323.24	7.69	242	1,910.59	7.90
NHB	80.5	456.31	5.67	55.5	317.75	5.73
NON-RES	33	165.22	5.01	21	117.76	5.61
Total	1,036.5	8,228.30	7.94	750.5	6,189.41	8.25

Table and **Error! Reference source not found.** show the inter-zonal trip lengths and travel times by employee and visitor trip purposes, respectively.

Table 57. Survey Inter-Zonal Trip Lengths to and from St. Joseph Health Center by Employee and Visitor Trip Purposes.

Employee Trip Purpose	Total Person Trips	Total Person Miles	Average Person Miles	Total Auto-Driver Trips	Total Auto-Driver Miles	Average Auto-Driver Miles
HBW	474	2,472.58	5.22	420	2,237.01	5.33
HBNW	60	194.52	3.24	30	106.09	3.54
NHB	47.5	176.73	3.72	36.5	127.94	3.51
NON-RES	11	37.23	3.38	9	31.83	3.54
Total	592.5	2,881.06	4.86	495.5	2,502.87	5.05
Visitor Trip Purpose	Total Person Trips	Total Person Miles	Average Person Miles	Total Auto-Driver Trips	Total Auto-Driver Miles	Average Auto-Driver Miles
HBW	17	88.63	5.21	12	63.10	5.26
HBNW	372	1,721.25	4.63	212	998.94	4.71
NHB	33	79.44	2.41	19	49.98	2.63
NON-RES	22	54.55	2.48	12	33.77	2.81
Total	444	1,943.87	4.38	255	1,145.79	4.49

Table 58. Survey Inter-Zonal Travel Times to and from St. Joseph Health Center by Employee and Visitor Trip Purposes.

Employee Trip Purpose	Total Person Trips	Total Person Minutes	Average Person Minutes	Total Auto-Driver Trips	Total Auto-Driver Minutes	Average Auto-Driver Minutes
HBW	474	4,134.17	8.72	420	3,735.73	8.89
HBNW	60	348.54	5.81	30	190.01	6.33
NHB	47.5	309.46	6.51	36.5	226.39	6.20
NON-RES	11	65.86	5.99	9	56.29	6.25
Total	592.5	4,858.03	8.20	495.5	4,208.42	8.49
Visitor Trip Purpose	Total Person Trips	Total Person Minutes	Average Person Minutes	Total Auto-Driver Trips	Total Auto-Driver Minutes	Average Auto-Driver Minutes
HBW	17	149.36	8.79	12	107.58	8.97
HBNW	372	2,974.70	8	212	1,720.58	8.12
NHB	33	146.86	4.45	19	91.36	4.81
NON-RES	22	99.36	4.52	12	61.47	5.12
Total	444	3,370.28	7.59	255	1,980.99	7.77

DATA EXPANSION

The expansion of work place and special generator survey data involved a series of procedures. This section provides a general description of the expansion process.

The full survey trip data were aggregated by site and then linked with the employment and count data collected from the establishment survey. The person and vehicle counts at each site were used to expand the survey trip data. The total trips were counted separately for employees and visitors at free-standing and non-freestanding establishments, and distinguished between residents and non-residents of the BCS study area. The total trips were classified by purpose, both from the origin to the work place and from the work place to the next destination, and summed as person trips (all travel modes, including walking and bicycle trips) and auto-driver trips (all trips by drivers and passengers of cars, trucks, and vans, including commercial cargo transport and service vehicles) for each trip purpose category.

The survey employee trips were expanded first to estimate the total employee person trips and employee auto-driver trips by purpose. The process involved dividing the survey employee trips for each category purpose by the number of employee surveys and then multiplying this number by the total number of employees reported to be at work during the survey day. The expanded employee person/auto-driver trips were subtracted from the total person/vehicle count at the site to yield the total visitor person/auto-driver trips to the site.

The survey visitor person/auto-driver trips were used to establish the proportion of visitor trips for each trip purpose category. These percentages were applied to the total estimated visitor trips to yield the visitor person/auto-driver trips by purpose. The average visitor vehicle occupancy rates were based on the auto-driver mode of travel and were calculated for each trip purpose. These occupancy rates were used to convert the expanded visitor person trips to auto-driver trips, or visitor auto-driver trips to person trips, depending on whether a vehicle count or a person count was conducted at the site.

After the data were expanded for each site, the results were aggregated by employment category and area type. The results from the full survey sites were then used to estimate the number of employee and visitor trips by purpose and employment category at the partial survey sites. The person and vehicle counts at each partial survey site were used to expand the trip estimates. Table provides the work place survey data summary by area and employment types.

Table 59. BCS Work Place Survey Data Summary by Area Type and Employment Category.

Area Type	Item	Basic	Retail	Service	Education	Total
CBD	Number of sites	-	2	3	1	6
	Total employment	-	9	181	35	225
	Employees at work	-	7	105	35	147
	Total person count	-	302	698	620	1,620
	Total vehicle count	-	211	567	421	1,199
	Total CV count	-	-	-	76	76
Urban	Number of sites	6	26	36	6	74
	Total employment	48	326	402	525	1,301
	Employees at work	29	236	311	422	998
	Total person count	187	16,599	4,327	11,330	32,443
	Total vehicle count	159	14,577	3,462	8,642	26,840
	Total CV count	6	88	40	76	210
Suburban	Number of sites	16	30	32	11	89
	Total employment	397	1,026	603	789	2,815
	Employees at work	362	652	495	759	2,268
	Total person count	1,538	45,203	5,486	14,640	66,867
	Total vehicle count	1,430	34,726	4,701	12,350	53,207
	Total CV count	360	243	350	76	1,029
Rural	Number of sites	24	12	12	3	51
	Total employment	1,828	86	193	179	2,286
	Employees at work	1,297	74	143	176	1,690
	Total person count	3,809	3,754	2,140	4,416	14,119
	Total vehicle count	3,750	3,458	1,576	3,222	12,006
	Total CV count	430	56	14	76	576
TAMU Main Campus	Number of sites	-	-	-	-	-
	Total employment	-	-	-	-	-
	Employees at work	-	-	-	-	-
	Total person count	-	-	-	-	-
	Total vehicle count	-	-	-	-	-
	Total CV count	-	-	-	-	-
TAMU West Campus	Number of sites	-	-	-	-	-
	Total employment	-	-	-	-	-
	Employees at work	-	-	-	-	-
	Total person count	-	-	-	-	-
	Total vehicle count	-	-	-	-	-
	Total CV count	-	-	-	-	-
University Intense	Number of sites	4	30	37	9	80
	Total employment	36	479	432	849	1,796
	Employees at work	27	377	363	828	1,595
	Total person count	511	19,874	4,168	15,591	40,144
	Total vehicle count	457	15,391	3,589	12,029	31,466
	Total CV count	2	127	32	228	389
Total	Number of sites	50	100	120	30	300
	Total employment	2,309	1,926	1,811	2,377	8,423
	Employees at work	1,715	1,346	1,417	2,220	6,698
	Total person count	6,045	85,732	16,819	46,597	155,193
	Total vehicle count	5,796	68,363	13,895	36,664	124,718
	Total CV count	798	514	436	532	2,280

The expanded person and auto-driver trips by purpose, shown in Table and Table for each employment and area type category, were divided by the total employment (in Table) to develop the attraction rates (in Table and Table). The total expanded trips do not include the external trips and “not first store” trips to the surveyed work places.

Table 60. BCS Work Place Survey Person Trips by Purpose, Area Type, and Employment Category.

BASIC Trip Purpose		HBW	HBNW	NHB-D	NHB-O	NONRES	Total Person Trips
Area Type							
CBD		-	-	-	-	-	-
Urban		52	44	38	52	-	186
Suburban		525	317	89	160	393	1,484
Rural		1,734	487	563	650	361	3,795
TAMU Main Campus		-	-	-	-	-	-
TAMU West Campus		-	-	-	-	-	-
University Intense		71	177	70	82	97	497
Total		2,382	1,025	760	944	851	5,962
RETAIL Trip Purpose		HBW	HBNW	NHB-D	NHB-O	NONRES	Total Person Trips
Area Type							
CBD		2	176	16	18	74	286
Urban		511	9,675	2,236	2,169	1,493	16,084
Suburban		871	22,000	7,237	6,507	7,440	44,055
Rural		100	1,954	610	569	357	3,590
TAMU Main Campus		-	-	-	-	-	-
TAMU West Campus		-	-	-	-	-	-
University Intense		482	10,513	3,385	3,607	1,606	19,593
Total		1,966	44,318	13,484	12,870	10,970	83,608
SERVICE Trip Purpose		HBW	HBNW	NHB-D	NHB-O	NONRES	Total Person Trips
Area Type							
CBD		52	390	95	125	36	698
Urban		487	1,740	598	899	487	4,211
Suburban		903	2,798	626	676	425	5,428
Rural		234	1,015	214	464	182	2,109
TAMU Main Campus		-	-	-	-	-	-
TAMU West Campus		-	-	-	-	-	-
University Intense		545	1,883	464	796	391	4,079
Total		2,221	7,826	1,997	2,960	1,521	16,525
EDUCATION Trip Purpose		HBW	HBNW	NHB-D	NHB-O	NONRES	Total Person Trips
Area Type							
CBD		61	355	68	91	44	619
Urban		1,514	8,513	560	639	96	11,322
Suburban		942	8,118	1,599	2,190	1,784	14,633
Rural		302	2,680	583	663	189	4,417
TAMU Main Campus		-	-	-	-	-	-
TAMU West Campus		-	-	-	-	-	-
University Intense		1,647	8,232	2,031	3,518	161	15,589
Total		4,466	27,898	4,841	7,101	2,274	46,580

Table 61. BCS Work Place Survey Auto-Driver Trips by Purpose, Area Type, and Employment Type.

BASIC Trip Purpose		HBW	HBNW	NHB-D	NHB-O	NONRES	Total Auto-Driver Trips
Area Type							
CBD		-	-	-	-	-	-
Urban		48	35	31	45	-	159
Suburban		518	277	82	151	357	1,385
Rural		1,720	470	552	641	354	3,737
TAMU Main Campus		-	-	-	-	-	-
TAMU West Campus		-	-	-	-	-	-
University Intense		68	156	61	73	87	445
Total		2,354	938	726	910	798	5,726
RETAIL Trip Purpose		HBW	HBNW	NHB-D	NHB-O	NONRES	Total Auto-Driver Trips
Area Type							
CBD		2	121	11	13	54	201
Urban		463	8,486	1,972	1,874	1,335	14,130
Suburban		848	16,699	5,574	5,037	5,682	33,840
Rural		98	1,801	567	508	332	3,306
TAMU Main Campus		-	-	-	-	-	-
TAMU West Campus		-	-	-	-	-	-
University Intense		459	8,108	2,631	2,689	1,284	15,171
Total		1,870	35,215	10,755	10,121	8,687	66,648
SERVICE Trip Purpose		HBW	HBNW	NHB-D	NHB-O	NONRES	Total Auto-Driver Trips
Area Type							
CBD		52	299	79	101	36	567
Urban		470	1,331	471	719	382	3,373
Suburban		854	2,311	526	592	368	4,651
Rural		215	717	155	333	132	1,552
TAMU Main Campus		-	-	-	-	-	-
TAMU West Campus		-	-	-	-	-	-
University Intense		515	1,576	406	677	342	3,516
Total		2,106	6,234	1,637	2,422	1,260	13,659
EDUCATION Trip Purpose		HBW	HBNW	NHB-D	NHB-O	NONRES	Total Auto-Driver Trips
Area Type							
CBD		56	227	45	62	31	421
Urban		1,270	6,315	438	517	96	8,636
Suburban		926	6,691	1,315	1,887	1,524	12,343
Rural		270	1,900	421	497	135	3,223
TAMU Main Campus		-	-	-	-	-	-
TAMU West Campus		-	-	-	-	-	-
University Intense		1,415	6,237	1,512	2,702	161	12,027
Total		3,937	21,370	3,731	5,665	1,947	36,650

Table and Table show the survey person and auto-driver trip attraction rates by purpose for each employment category and area type, respectively. The NHB trips represented the average of NHB origin and destination trips. The NON-RES trips were divided by two to develop a rate for non-resident trip attractions. The external trips were removed from the analysis because these trips were estimated using the external survey and input to the travel demand model directly.

Table 62. BCS Work Place Survey Person Trip Attraction Rates.

Trip Purpose	Area Type	Person Trips Per Employee			
		Basic	Retail	Service	Education
HBW	CBD	0.000	0.222	0.287	1.729
	Urban	1.090	1.567	1.211	2.884
	Suburban	1.323	0.849	1.498	1.194
	Rural	0.948	1.163	1.212	1.689
	TAMU Main Campus	0.000	0.000	0.000	0.000
	TAMU West Campus	0.000	0.000	0.000	0.000
	University Intense	1.981	1.006	1.261	1.940
HBNW	CBD	0.000	19.558	2.156	10.130
	Urban	0.911	29.678	4.328	16.216
	Suburban	0.799	21.443	4.640	10.289
	Rural	0.266	22.719	5.261	14.971
	TAMU Main Campus	0.000	0.000	0.000	0.000
	TAMU West Campus	0.000	0.000	0.000	0.000
	University Intense	4.908	21.947	4.358	9.696
NHB	CBD	0.000	1.891	0.607	2.278
	Urban	0.937	6.756	1.863	1.143
	Suburban	0.314	6.698	1.079	2.401
	Rural	0.332	6.855	1.755	3.479
	TAMU Main Campus	0.000	0.000	0.000	0.000
	TAMU West Campus	0.000	0.000	0.000	0.000
	University Intense	2.113	7.300	1.460	3.268
NON-RES	CBD	0.000	4.114	0.100	0.630
	Urban	0.000	2.290	0.606	0.092
	Suburban	0.496	3.626	0.353	1.131
	Rural	0.099	2.078	0.473	0.528
	TAMU Main Campus	0.000	0.000	0.000	0.000
	TAMU West Campus	0.000	0.000	0.000	0.000
	University Intense	1.356	1.677	0.453	0.095

Note: Attraction rates represent observed rates.

Table 63. BCS Work Place Survey Auto-Driver Trip Attraction Rates.

Trip Purpose	Area Type	Auto-Driver Trips Per Employee			
		Basic	Retail	Service	Education
HBW	CBD	0.000	0.222	0.287	1.590
	Urban	0.994	1.421	1.169	2.419
	Suburban	1.304	0.827	1.416	1.174
	Rural	0.941	1.140	1.114	1.511
	TAMU Main Campus	0.000	0.000	0.000	0.000
	TAMU West Campus	0.000	0.000	0.000	0.000
	University Intense	1.886	0.959	1.192	1.667
HBNW	CBD	0.000	13.398	1.649	6.481
	Urban	0.722	26.031	3.311	12.029
	Suburban	0.697	16.276	3.832	8.480
	Rural	0.257	20.941	3.718	10.612
	TAMU Main Campus	0.000	0.000	0.000	0.000
	TAMU West Campus	0.000	0.000	0.000	0.000
	University Intense	4.336	16.929	3.649	7.346
NHB	CBD	0.000	1.331	0.499	1.522
	Urban	0.788	5.898	1.481	0.910
	Suburban	0.294	5.171	0.928	2.029
	Rural	0.327	6.251	1.266	2.562
	TAMU Main Campus	0.000	0.000	0.000	0.000
	TAMU West Campus	0.000	0.000	0.000	0.000
	University Intense	1.875	5.555	1.254	2.482
NON-RES	CBD	0.000	2.994	0.100	0.443
	Urban	0.000	2.047	0.476	0.092
	Suburban	0.450	2.769	0.305	0.966
	Rural	0.097	1.933	0.343	0.377
	TAMU Main Campus	0.000	0.000	0.000	0.000
	TAMU West Campus	0.000	0.000	0.000	0.000
	University Intense	1.208	1.340	0.397	0.095

Note: Attraction rates represent observed rates.

The CV counts taken at each site were aggregated by area type and employment type, and then divided by the total employment, and then divided by two to develop a trip attraction rate for CV travel. Table shows the survey CV trip attraction rates by area type.

Table 64. BCS Work Place Survey CV Trip Attraction Rates.

Area Type	CV Trips Per Employee			
	Basic	Retail	Service	Education
CBD	0.000	0.000	0.000	0.429
Urban	0.063	0.135	0.050	0.214
Suburban	0.454	0.119	0.290	0.189
Rural	0.118	0.326	0.037	0.213
TAMU Main Campus	0.000	0.200	0.000	0.120
TAMU West Campus	0.000	0.000	0.000	0.000
University Intense	0.036	0.136	0.039	0.301

Note: Attraction rates represent observed rates.

Table shows the expanded survey trip attractions and attraction rates by purpose for each BCS study area special generator. The expansion procedures used were similar to the full work place survey sites. The attraction rates were developed by dividing the expanded trips by purpose by the total employment at the special generator. The external trips were removed from the analysis. The NHB trips represented the average of the NHB origin and destination trips. The NON-RES trips were divided by two to develop a rate for non-resident trip attractions. The CV count at the special generator was divided by two to develop a rate for CV trip attractions.

Table 65. Special Generator Survey Person and Auto-Driver Trip Attractions and Rates.

Trip Purpose	Texas A&M University			
	Total Person Trips	Person Trips Per Employee	Total Auto-Driver Trips	Auto-Driver Trips Per Employee
HBW	20,200	2.236	14,751	1.633
HBNW	113,165	12.528	81,830	9.059
NHB	72,851	0.799	4,835	0.536
NON-RES	1,959	0.217	1,387	0.154
CV	2,386	0.264	2,386	0.264
Total	210,561	16.044	105,189	11.646
Trip Purpose	Blinn College			
	Total Person Trips	Person Trips Per Employee	Total Auto-Driver Trips	Auto-Driver Trips Per Employee
HBW	1,457	1.534	1,379	1.452
HBNW	20,000	21.053	17,935	18.879
NHB	2,053	2.161	1,856	1.954
NON-RES	817	0.860	738	0.777
CV	22	0.023	22	0.023
Total	24,349	25.631	21,930	23.085
Trip Purpose	Post Oak Mall			
	Total Person Trips	Person Trips Per Employee	Total Auto-Driver Trips	Auto-Driver Trips Per Employee
HBW	936	0.780	860	0.717
HBNW	8,019	6.683	5,595	4.663
NHB	1,933	1.611	1,415	1.179
NON-RES	1,821	1.518	1,322	1.102
CV	65	0.054	65	0.054
Total	12,774	10.646	9,257	7.715
Trip Purpose	St. Joseph Health Center			
	Total Person Trips	Person Trips Per Employee	Total Auto-Driver Trips	Auto-Driver Trips Per Employee
HBW	1,929	0.742	1,797	0.691
HBNW	3,042	1.170	1,869	0.719
NHB	432	0.166	323	0.124
NON-RES	1,477	0.568	1,005	0.387
CV	64	0.025	64	0.025
Total	6,944	2.671	5,058	1.946

Model Rate Development

The work place survey data must be converted into recommended attraction rates to be used as inputs to the travel demand model. Attraction rates, defined as the estimated number of attractions per employee, were developed for each trip purpose, area type, and employment type. The NHB origin and destination trips were combined and divided by two to develop an attraction rate for NHB trips. The NON-RES trips were divided by two to develop an attraction rate for non-resident travel.

Table 26 and Table 27 show the total person and auto-driver vehicle trip attraction rates by purpose and employment type for all area types, as calculated from the survey trip data, respectively.

Table 26. BCS Work Place and Special Generator Survey Total Person Trip Attraction Rates.

Employment Category	HBW	HBNW	NHB	NON-RES
Basic	1.032	0.444	0.369	0.185
Retail	1.021	23.010	6.842	2.848
Service	1.226	4.321	1.369	0.420
Education (K to12)	1.879	11.736	2.512	0.478
Education (University) ¹	2.170	13.339	7.503	0.278

¹Consisted of TAMU and Blinn College

Table 27. BCS Work Place and Special Generator Survey Total Auto-Driver Trip Attraction Rates.

Employment Category	HBW	HBNW	NHB	NON-RES
Basic	1.019	0.406	0.355	0.173
Retail	0.972	18.284	5.420	2.255
Service	1.163	3.442	1.122	0.348
Education (K to12)	1.657	8.990	1.976	0.410
Education (University) ¹	1.634	9.993	3.409	0.238

¹Consisted of TAMU and Blinn College

The next step in model rate development involved applying the survey attraction rates to the overall employment estimates for the study area. **Error! Not a valid bookmark self-reference.** provides the employment estimates, including special generators, for the BCS study area that were used to estimate the total trip attractions and to develop the attraction rates by employment type and area type. The trip attraction

rates for the surveyed special generators were developed separately using the reported total employment at the facilities.

It is important to note that at the time of analysis, the MPO employment data that was available (and initially used) was based on a 2006 base year. It was later realized that the developed trip rates, particularly for Education 1 (K-12), was flawed given that the Education employment estimates were found to be predominantly TAMU (Education 2 - university). The estimates for Education K-12 employment were included under the Service category. A considerable portion of TAMU employment was also included under the Service special generators category.

It is not certain when the updated MPO employment data for the BCS study area would be completed and made available. In this regard, it was deemed worthwhile to use the TWC 2011 employment data as a proxy in developing the model trip rates. After all, the TWC data was the basis in the work place survey sampling. In preparing the TWC data, it was crucial to remove establishments with reported address outside the BCS study area. Since the TWC Education included TAMU and Blinn employment, these were removed to show only Education K-12 facilities. However, since these did not include the geocoded locations, geocoding was performed based on their reported addresses. Also, the TWC Education included only Bryan ISD employment, and did not provide for the College Station schools (CSISD). Hence, it was necessary to use the estimates reported from CSISD website. The area types of these establishments were assigned using 2006 TAZ geography.

Table 68 provides the total employment estimates for the BCS study area by area type for each category of employment.

Table 68. Total Employment in the BCS Study Area by Employment Type and Area Type.

Area Type	Total Employment (including Special Generators)				Total
	Basic	Retail	Service	Education (K-12)	
CBD	-	133	641	-	774
Urban	897	4,895	7,885	644	14,321
Suburban	4,561	5,100	5,285	2,253	17,199
Rural	6,648	1,418	2,243	241	10,550
TAMU Main Campus	-	236	125	-	361
TAMU West Campus	50	170	471	-	691
University Intense	937	7,230	6,437	1,046	15,650
Total	13,093	19,182	23,087	4,185*	59,547

Source: TWC Employment Estimates, 2011.

*Employment estimates were only available for Bryan ISD. The estimates for College Station schools were drawn from the CSISD website.

Table shows the estimated CV trip attractions and rates for each category of employment.

Table and Table show the estimated total person and auto-driver trip attractions for the BCS study area by employment type and trip purpose, respectively.

Table shows the estimated CV trip attractions and rates for each category of employment.

Table 69. Total Person Trip Attractions by Employment Type and Trip Purpose.

Employment Category	HBW	HBNW	NHB	NON-RES	Total
Basic	13,512	5,813	4,831	2,422	26,578
Retail	19,585	441,378	134,293	54,630	649,886
Service	28,305	99,759	25,465	9,697	163,226
Education (K to12)	7,864	49,115	8,525	2,000	67,504
Education (University)	21,657	133,165	74,902	2,777	232,502
Total	90,923	729,230	248,016	71,526	1,139,696

Table 70. Total Auto-Driver Trip Attractions by Employment Type and Trip Purpose.

Employment Category	HBW	HBNW	NHB	NON-RES	Total
Basic	13,342	5,316	4,648	2,265	25,571
Retail	18,645	350,724	107,112	43,255	519,736
Service	26,850	79,465	20,894	8,034	135,243
Education (K to12)	6,935	37,623	6,566	1,716	52,840
Education (University)	16,129	99,765	39,550	2,377	157,821
Total	81,901	572,893	178,770	57,647	891,211

Table 71. BCS Work Place and Special Generator Survey CV Trip Estimates by Employment Category.

Employment Category	CV Attraction Rate	CV Trip Attractions
Basic	0.173	2,265
Retail	0.133	2,551
Service	0.120	2,770

Education (K to12)	0.232	971
Education (University)	0.241	2,406

The total trip attractions estimated from the work place survey were then compared with the estimated total trip productions from the BCS household and CV surveys. Table provides a summary of the trip estimates from the travel surveys conducted in the BCS study area.

Table 72. Travel Estimates from the BCS Travel Surveys.

Trip Purpose	Work Place Survey		Household Survey		CV Survey
	Person Trips	Auto-Driver Trips	Person Trips	Auto-Driver Trips	Vehicle Trips
HBW All	90,923	81,901	103,904	96,673	-
HBW University	21,657	16,130	21,657	16,316	-
HBW Non-University	69,266	65,771	82,247	80,357	-
HBNW All	729,230	572,893	646,285	421,740	-
HBNW Retail	441,378	350,724	278,398	197,400	-
HBNW School (K to 12)	49,115	37,623	118,418	40,456	-
HBNW University	133,165	99,765	133,165	99,765	-
HBNW Other	105,572	84,781	116,304	84,119	-
NHB All	248,016	178,771	212,497	126,461	-
NHB University	74,902	39,550	74,904	34,035	-
NHB Non-University	173,114	139,220	137,593	92,426	-
All Purposes (Internal Trips)	1,068,170	880,861	962,686	644,874	-
NON-RES Attractions All	71,526	57,647	-	-	-
NON-RES University	2,777	2,377	-	-	-
NON-RES Non-University	68,749	55,270	-	-	-
CV Attractions	-	10,964	-	-	58,142
CV University	-	2,406	-	-	8,182
CV Non-University	-	8,558	-	-	49,960
			-	-	-

Note: The estimates for the Special Generators only show University trip attractions that were developed from the TAMU and Blinn surveys, and were adjusted to match with HH/Student trip production estimates. The trip attraction estimates for the other two special generators trips (Post Oak Mall and St. Joseph Health Center) were not included in the table.

The attraction rates by trip purpose from the work place survey required some adjustments to balance the aggregate estimates of trip attractions with the aggregate estimates of trip productions from the household survey and CV surveys. The balancing factors for HBW and HBNW person/auto-driver trips were calculated by dividing the number of person/auto-driver trips from the household survey with the number of person/auto-driver trips from the work place survey for HBW and HBNW trips, respectively.

The NHB destination and origin trips from the work place survey were summed and averaged to reflect trip attractions and matched with the NHB trips from the household survey.

The NON-RES trips from the work place survey were calculated, summed, and divided by the total employment. The resulting rates were applied to the employment data to develop an estimate of the total internal trips made by persons that did not live in the study area. The total non-resident trips from the BCS work place and special generators survey, when converted to trip productions and attractions, yield an estimate of 71,526 person trips and 57,647 auto-driver trips. These estimates are recommended for use in the travel demand model for non-resident travel.

The travel estimates by purpose were categorized as university and non-university. The university trips pertained to expanded trips from the special generators TAMU and Blinn surveys, and included trip estimates from the student survey for on-campus students (and therefore excluded from the special generator survey). Upon review of the estimates from the surveys (household, student, and special generators), it was observed that the HBNW and NHB university trips were not reasonable due to misinterpretation about survey questions and under-reporting issues. It was deemed appropriate to adjust the university trip estimates to bring the productions and attractions into balance.

The estimates for non-university pertained to trips from the work place (Basic, Retail, Service, and Education (K to 12)). The special generator surveys (Post Oak Mall and St. Joseph Health Center) were analyzed separately and trip rates were developed based on their reported total employment. The travel estimates and rates from these special generators were not included in balancing trip productions.

Error! Reference source not found. and **Error! Reference source not found.** show the balanced total trip production/attraction rates by employment category and trip purpose. **Error! Reference source not found.** and **Error! Reference source not found.** show the balanced total trip productions/attractions by employment category and trip purpose.

Table 73. Balanced Total Person Production/Attraction Rates by Employment Category.

Employment Type	HBW	HBNW	NHB	NON-RES
Basic	1.214	0.489	0.293	0.185
Retail	1.212	14.514	5.564	2.848
Service	1.463	4.760	0.877	0.348
Education (K to12)	2.231	28.296	1.619	0.478
Education (University)	2.169	13.339	7.503	0.278

Table 74. Balanced Total Auto-Driver Production/Attraction Rates by Employment Category.

Employment Category	HBW	HBNW	NHB	NON-RES
Basic	1.200	0.354	0.236	0.173
Retail	1.188	10.291	3.707	2.255
Service	1.446	3.443	0.601	0.348
Education (K to12)	2.024	9.667	1.042	0.410
Education (University)	1.634	9.993	3.409	0.238

Table 75. Balanced Total Person Productions/Attractions by Employment Category.

Employment Category	HBW	HBNW	NHB	NON-RES
Basic	15,892	6,400	3,836	2,422
Retail	23,249	278,398	106,733	54,630
Service	33,769	109,904	20,248	9,697
Education (K to12)	9,337	118,418	6,776	2,000
Education (University)	21,657	133,165	74,904	2,777
Total	103,904	646,285	212,497	71,526

Table 76. Balanced Total Auto-Driver Productions/Attractions by Employment Category.

Employment Category	HBW	HBNW	NHB	NON-RES
Basic	15,712	4,629	3,090	2,265
Retail	22,788	197,400	71,102	43,255
Service	33,387	79,490	13,874	8,034
Education (K to12)	8,470	40,456	4,360	1,716
Education (University)	16,316	99,765	34,035	2,377
Total	96,673	421,740	126,461	57,647

Table shows the balanced and adjusted work place survey CV attraction rates by employment category. Trip balancing was performed to match the CV trip attractions from the work place survey with the total CV trip estimates from the 2013/2014 BCS Commercial Vehicle Survey. The Household CV rate was estimated at 0.171 trips per household.

Table 77. BCS Balanced CV Trip Attractions and Trip Attraction Rates.

Employment Category	CV Attraction Rate	CV Trip Attractions
Basic	0.772	10,103
Retail	0.869	16,674
Service	0.944	21,798
Education (K to12)	0.331	1,384
Education (University)	0.820	8,182

Table 78. BCS Balanced Person Trip Production/Attraction Rates.

Trip Purpose	Area Type	Person Trips Per Employee					Per Household	
		Basic	Retail	Service	Education K-12	Education (University)	University	Non-University
HBW	CBD	1.214	0.934	0.856	2.232	2.169		0.080
	Urban	1.186	1.633	1.384	3.857	2.169		0.080
	Suburban	1.271	1.020	1.713	1.596	2.169		0.080
	Rural	1.148	1.220	1.386	2.258	2.169		0.080
	TAMU Main Campus	1.214	1.177	1.447	2.232	2.169		0.080
	TAMU West Campus	1.214	1.177	1.447	2.232	2.169		0.080
	University Intense	1.440	1.068	1.442	2.593	2.169		0.080
HBNW	CBD	0.489	14.948	3.452	28.303	13.339		0.340
	Urban	0.824	18.021	4.608	40.535	13.339		0.340
	Suburban	0.723	13.020	4.940	25.719	13.339		0.340
	Rural	0.241	13.796	5.600	37.422	13.339		0.340
	TAMU Main Campus	0.489	14.486	4.725	28.303	13.339		0.340
	TAMU West Campus	0.489	14.486	4.725	28.303	13.339		0.340
	University Intense	0.769	13.327	4.640	24.236	13.339		0.340
NHB	CBD	0.293	3.438	0.785	1.619	7.503	0.060	0.210
	Urban	0.659	5.459	0.959	1.493	7.503	0.060	0.210
	Suburban	0.221	5.613	0.809	1.500	7.503	0.060	0.210
	Rural	0.233	5.642	0.865	2.410	7.503	0.060	0.210
	TAMU Main Campus	0.293	5.548	0.935	1.619	7.503	0.060	0.210

	TAMU West Campus	0.293	5.548	0.935	1.619	7.503	0.060	0.210
	University Intense	0.714	5.625	0.840	1.772	7.503	0.060	0.210
NON-RES	CBD	0.185	3.788	0.331	0.478	0.278		
	Urban	0.193	2.709	0.476	0.355	0.278		
	Suburban	0.280	4.290	0.330	0.592	0.278		
	Rural	0.115	2.458	0.381	0.277	0.278		
	TAMU Main Campus	0.185	2.854	0.445	0.478	0.278		
	TAMU West Campus	0.185	2.854	0.445	0.478	0.278		
	University Intense	0.209	1.983	0.445	0.355	0.278		

Note: Person trip attraction rates represent balanced, adjusted, and smoothed rates to match the trip production estimates from the 2012 BCS Household Travel Survey. The zero trip rates were replaced by the overall average trip rate by purpose for the particular employment category. The university attraction rates were assumed to be the same across area types for each category of trip purpose. The household rates were based on the total trip attraction to residential land use per household and were assumed to be the same across area types by trip purpose.

Table 79. BCS Balanced Auto-Driver Trip Production/Attraction Rates.

and **Error! Reference source not found.** show the balanced person and auto-driver trip attraction rates recommended to be used as data inputs to the BCS travel demand model. These rates represent adjusted data to match the estimated total productions from the 2012 Household Survey. The attraction rates per household were developed from the 2012 BCS Household Survey, based on the total trip attractions to residential land use by trip purpose and divided by the total number of households. These rates were assumed to be the same across all area types for each category of trip purpose. The university attraction rates were also assumed to be the same across area types, given that the reported TAMU employment was not available by area type. The distribution of trips by area type from the TAMU surveys were based on the trip origins and destination locations, and dividing these estimates by the aggregate TAMU employment resulted in rates that were skewed and may not be reasonable.

It is also important to note that some trip rates were null for some area types as a result of zero observations or zero employment. The zero trip rates were replaced by the overall average attraction rate under that employment category to ensure that the model will still be applicable if employment is allocated in the future. Trip smoothing was performed and further adjustments were made to match with the production estimates by employment category and purpose.

Table 78. BCS Balanced Person Trip Production/Attraction Rates.

Trip Purpose	Area Type	Person Trips Per Employee					Per Household	
		Basic	Retail	Service	Education K-12	Education (University)	University	Non-University
HBW	CBD	1.214	0.934	0.856	2.232	2.169		0.080
	Urban	1.186	1.633	1.384	3.857	2.169		0.080
	Suburban	1.271	1.020	1.713	1.596	2.169		0.080
	Rural	1.148	1.220	1.386	2.258	2.169		0.080
	TAMU Main Campus	1.214	1.177	1.447	2.232	2.169		0.080
	TAMU West Campus	1.214	1.177	1.447	2.232	2.169		0.080
	University Intense	1.440	1.068	1.442	2.593	2.169		0.080
HBNW	CBD	0.489	14.948	3.452	28.303	13.339		0.340
	Urban	0.824	18.021	4.608	40.535	13.339		0.340
	Suburban	0.723	13.020	4.940	25.719	13.339		0.340
	Rural	0.241	13.796	5.600	37.422	13.339		0.340
	TAMU Main Campus	0.489	14.486	4.725	28.303	13.339		0.340
	TAMU West Campus	0.489	14.486	4.725	28.303	13.339		0.340
	University Intense	0.769	13.327	4.640	24.236	13.339		0.340
NHB	CBD	0.293	3.438	0.785	1.619	7.503	0.060	0.210
	Urban	0.659	5.459	0.959	1.493	7.503	0.060	0.210
	Suburban	0.221	5.613	0.809	1.500	7.503	0.060	0.210
	Rural	0.233	5.642	0.865	2.410	7.503	0.060	0.210
	TAMU Main Campus	0.293	5.548	0.935	1.619	7.503	0.060	0.210
	TAMU West Campus	0.293	5.548	0.935	1.619	7.503	0.060	0.210
	University Intense	0.714	5.625	0.840	1.772	7.503	0.060	0.210
NON-RES	CBD	0.185	3.788	0.331	0.478	0.278		
	Urban	0.193	2.709	0.476	0.355	0.278		
	Suburban	0.280	4.290	0.330	0.592	0.278		
	Rural	0.115	2.458	0.381	0.277	0.278		
	TAMU Main Campus	0.185	2.854	0.445	0.478	0.278		
	TAMU West Campus	0.185	2.854	0.445	0.478	0.278		
	University Intense	0.209	1.983	0.445	0.355	0.278		

Note: Person trip attraction rates represent balanced, adjusted, and smoothed rates to match the trip production estimates from the 2012 BCS Household Travel Survey. The zero trip rates were replaced by the overall average trip rate by purpose for the particular employment category. The university attraction rates were assumed to be the same across area types for each category of trip purpose. The household rates were based on the total trip attraction to residential land use per household and were assumed to be the same across area types by trip purpose.

Table 79. BCS Balanced Auto-Driver Trip Production/Attraction Rates.

Trip Purpose	Area Type	Auto-Driver Trips Per Employee					Per Household	
		Basic	Retail	Service	Education K-12	Education (University)	University	Non-University
HBW	CBD	1.200	0.932	0.840	2.025	1.634		0.060
	Urban	1.122	1.621	1.384	3.227	1.634		0.060
	Suburban	1.262	0.958	1.691	1.590	1.634		0.060
	Rural	1.143	1.209	1.330	2.015	1.634		0.060
	TAMU Main Campus	1.200	1.176	1.430	2.025	1.634		0.060
	TAMU West Campus	1.200	1.176	1.430	2.025	1.634		0.060
	University Intense	1.402	1.058	1.423	2.224	1.634		0.060
HBNW	CBD	0.354	10.435	2.325	9.669	9.993		0.200
	Urban	0.533	13.782	3.217	13.123	9.993		0.200
	Suburban	0.515	8.617	3.724	9.251	9.993		0.200
	Rural	0.189	11.086	3.612	11.577	9.993		0.200
	TAMU Main Campus	0.354	10.055	3.416	9.669	9.993		0.200
	TAMU West Campus	0.354	10.055	3.416	9.669	9.993		0.200
	University Intense	0.553	8.963	3.545	8.014	9.993		0.200
NHB	CBD	0.236	2.367	0.490	1.042	3.409	0.030	0.130
	Urban	0.476	3.940	0.713	1.040	3.409	0.030	0.130
	Suburban	0.179	3.539	0.530	1.081	3.409	0.030	0.130
	Rural	0.193	4.297	0.489	1.524	3.409	0.030	0.130
	TAMU Main Campus	0.236	3.619	0.595	1.042	3.409	0.030	0.130
	TAMU West Campus	0.236	3.619	0.595	1.042	3.409	0.030	0.130
	University Intense	0.588	3.580	0.572	1.155	3.409	0.030	0.130
NON-RES	CBD	0.173	2.892	0.254	0.410	0.238		
	Urban	0.191	2.349	0.422	0.238	0.238		
	Suburban	0.274	3.179	0.270	0.500	0.238		
	Rural	0.099	2.218	0.304	0.267	0.238		
	TAMU Main Campus	0.173	2.212	0.345	0.410	0.238		
	TAMU West Campus	0.173	2.212	0.345	0.410	0.238		
	University Intense	0.188	1.538	0.347	0.267	0.238		

Note: Auto-driver attraction rates represent balanced, adjusted, and smoothed rates to match the trip production estimates from the 2012 BCS Household Travel Survey. The zero trip rates were replaced by the average trip rate by purpose for the particular employment category. The university attraction rates were assumed to be the same across area types for each category of trip purpose. The household rates were based on the total trip attraction to residential land use per household and were assumed to be the same across area types by trip purpose.

TRAVEL OPTIONS

The BCS work place and special generator intercept surveys included questions on how often the survey participants travel to the Austin-San Antonio, Dallas-Fort Worth, and Houston areas, and if they would use rail to travel to these areas should passenger rail service were available. Figure 13 provides an overview of the survey responses.



Figure 12. Frequency of Travel and Use of Rail.

SURVEY SUMMARY

TxDOT funded the Bryan/College Station work place and special generator surveys in 2012/2013. The surveys collected data on the travel characteristics of employees and non-employees at industrial, retail, service, and education establishments. These data are used for updating and forecasting travel demand within the Bryan and College Station urban areas.

The work place survey consisted of four data collection efforts, which involved a general establishment survey, an intercept interview survey, a person or vehicle count, and a CV count. The surveyed establishments were classified as either full survey sites or partial survey sites. The full survey sites consisted of 152 establishments, with a total reported employment of 2,817, of which 84 percent were reported to be at work during the travel survey day. A total of 1,111 employees and 2,587 non-employees/visitors participated in the intercept interviews. The partial survey sites consisted of 148 establishments, with total reported employment of 5,606, of which 77 percent were reported to be at work during the survey day. The partial sites did not include intercept interview surveys. The survey findings indicated that approximately 155,192 persons and 124,717 non-CVs were traveling to and from the surveyed establishments during the travel survey period. There were 2,280 CVs counted at the surveyed establishments during their normal operating hours.

The special generator surveys consisted of Texas A&M University, Blinn College, Post Oak Mall, and St. Joseph Health Center. The data collection efforts for the special generator surveys were similar to the work place survey.

The expansion of work place and special generator survey data involved a series of procedures to develop the trip rate estimates for each trip purpose category based on employment and count data. In the final analysis, the aggregate estimates of trip attractions from the 2012/2013 BCS Work Place and Special Generator University Surveys were compared with the aggregate estimates of trip productions from the 2012 BCS Household and Student Travel Surveys. Adjustments and balancing factors were applied to match the total trip attractions with the total trip productions. The recommended trip attraction rates represent balanced and adjusted data.

The total non-resident trip attractions amounted to approximately 71,526 person trips and 57,647 auto-driver trips. The CV trip attraction rates were developed to match the total 58,142 internal trip estimates from the 2013/2014 BCS Commercial Vehicle Survey.

Adjustments made to the observed trip rates are highly sensitive to the amount of employment and distribution of employment. The 2011 TWC employment data was used as basis in developing the trip rates and estimating the total attractions, given that the MPO employment data was outdated and needed updating. The distribution of employment by area type was based on 2006 Area Types and TAZ geography. It is anticipated that the recommended attraction rates presented in this report may require smoothing and further adjustments, during the calibration phase of the travel demand model for the BCS study area once updated employment estimates are made available for use and modeling.

**APPENDIX A:
WORK PLACE TRAVEL SURVEY FORMS**

Bryan-College Station Work Place Recruitment and General Survey

Form A

SAMPLE NUMBER: _____ RECRUITER: _____
 DATE: ____/____/____ COMPANY NAME: _____
 ADDRESS: _____
 CONTACT NAME / POSITION: _____ / _____
 COMPANY PHONE: _____ FAX NUMBER: _____
 EMPLOYMENT TYPE: _____

Hello, my name is _____ from (vendor name). We are working with the Texas Department of Transportation to collect travel data at area businesses. May I speak to the owner or manager, please?

(If you have to call back, get):

The manager or owner's name: _____

And, a good time to call back: _____

(If you are transferred to the owner or manager, repeat):

Hello, my name is _____ from (vendor name). We are working with the Texas Department of Transportation to collect travel data at area businesses. Your business has been randomly selected to participate in this data collection effort because TxDOT needs information about where traffic is being generated. Do you have time for me to explain how the data collection would work? It will take about 3 minutes.

If yes, continue. If NO, when can I call back? _____

If a refusal, ask if they can provide some information to assist in this study, if yes ask preliminary questions, if no thank them.

- For one single day, we would have a person outside of your business, a discrete distance away from your business. After visitors and employees leave your business, we would ask them politely to answer a few questions about where they came from and where they are going to.

Would you be willing to participate in this data collection effort?

If yes, ask:

We'll need to coordinate with someone at your workplace on the survey day. Should we coordinate with you or is there someone else you would like us coordinate with on the day of the survey?

(Name: _____). Then ask the Preliminary Questions.

If no, ask: I just explained the longer version of our data collection effort. Would you be willing to allow us to just place traffic counters at the entrances to your business? In this case no one would ask your visitors or employees any questions, but we could still get data on the amount of traffic your business generates each day.

If the answer is yes,

We'll need to coordinate with someone at your workplace on the survey day. Should we coordinate with you or is there someone else you would like us coordinate with on the day of the survey?

(Name: _____). Tell them that we will call them back in a couple of days to let them know the day we will be there to perform the counts. Thank them and ask the Preliminary Questions.

BCS Work Place Recruitment and General Survey Form A - Continued

If they have agreed to participate in the survey, tell them you need to get some preliminary information from them to assist in planning the data collection effort at their location.

If they did not agree to participate in the survey, tell them they can assist the study by answering a few questions about their business and where it is located.

PRELIMINARY QUESTIONS

First, let me verify your address (**front page**).

1. How many full and part time employees are located at your site? EMPLOYEES _____ #
2. On a typical week day, how many persons visit this location? VISITORS _____ #
3. On a typical week day, how many employees do you have working at this location? _____ #
4. What are your hours of operation? FROM _____ am/pm, TO _____ am/pm
5. Are you in a shopping center or in an office building? _____.
- If yes, are any other companies in the shopping center or office building?
- Yes No (circle one)
6. Does the building you are in have its own parking lot? Yes No (circle one)
- Is this parking shared between your business and other businesses? Yes No (circle one)
- Do people use your parking lot **or driveway** as a cut through to access other businesses?
- Yes No (circle one)
7. How many deliveries are made at this location on an average day? _____ #
8. What are the delivery hours? FROM _____:_____ am/pm, TO _____:_____ am/pm
9. Do you have a special door for deliveries or for employees? Yes No (circle one)
10. How many vehicles are owned and/or leased by your company for business use in this area? _____ #

How many of these are:

- _____ passenger car or sport utility vehicle
- _____ pickup truck
- _____ van used for cargo delivery or pickup
- _____ van used as a service vehicle

If not one of the above categories, how many of these are:

- _____ cargo transport vehicles
- _____ vehicles used for service or other business purposes

Thank you very much. We will call you in a day or two to schedule an exact date for the data collection. If you have any questions about the survey, please don't hesitate to call _____ at ###-####.

BCS Work Place Recruitment and General Survey Form A - Continued

CALL DISPOSITION LOG

Company Name: _____

Keep a record of the calls made to this company below. Indicate if it is an initial call, a call back, a reminder call, a follow-up call, or a form retrieval call. Record notes about what happened during the call.

DATE CALLS

**BRYAN-COLLEGE STATION WORK PLACE
INTERCEPT TRAVEL SURVEY**

Free Standing Work Place

Form B

Survey Area: _____

Site #: _____

Date: ____/____/____

Address: _____

Interviewer: _____

Location: _____

Employment Type: _____

<u>Questions</u>	<u>Person 1</u>	<u>Person 2</u>
Time interview began	_____ am / _____ pm	_____ am / _____ pm
Time interview ended	_____ am / _____ pm	_____ am / _____ pm
1. Do you work in this building or at this location?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
2. In what city or county do you live?		
3a. Is that in Brazos County? (If YES, go to question 4)	a. <input type="checkbox"/> Yes (Go to 4) <input type="checkbox"/> No (Go to 3b)	a. <input type="checkbox"/> Yes (Go to 4) <input type="checkbox"/> No (Go to 3b)
3b. If NO, which roadway did you use to enter the area? (airport is an option)	b. _____	b. _____
4. What is your home address or the names of the nearest two intersecting streets?	_____ _____ (Address or nearest intersection)	_____ _____ (Address or nearest intersection)
5a. Did you travel here directly from your home with no stops? (If YES, go to Question 7)	a. <input type="checkbox"/> Yes (Go to 7) <input type="checkbox"/> No (Go to 5b)	a. <input type="checkbox"/> Yes (Go to 7) <input type="checkbox"/> No (Go to 5b)
5b. If NO, where did you start the trip that brought you to _____?	b. _____ (Address or nearest intersection)	b. _____ (Address or nearest intersection)
6a. Is that location in:	a. <input type="checkbox"/> Brazos County <input type="checkbox"/> Other county (enter name) _____	a. <input type="checkbox"/> BCS County <input type="checkbox"/> Other county (enter name) _____
6b. If outside of Brazos County, what street or highway were you on when you entered the Bryan-College Station area?	b. _____	b. _____
7. What approximate time did you arrive at this location today?	_____ am / _____ pm	_____ am / _____ pm
8. How did you arrive here at the _____ today? (Choose from Arrival Options)	Arrival Option #: _____ Other: _____	Arrival Option #: _____ Other: _____
Arrival Options: 1) Driver (car/truck/van) 5) Transit Bus 9) Commercial Service Vehicle 2) Passenger (car/truck/van) 6) School Bus 10) Motorcycle 3) Walk 7) Taxi/Paid Limousine 96) Other (Specify) 4) Bicycle 8) Commercial Cargo Transport Vehicle 99) Refused		
9a. If car/truck/van, ask: How many people, including you, were in the vehicle?	a) # of People _____	a) # of People _____
9b. If bus, ask: What fare did you pay?	b) Fare \$ _____.	b) Fare \$ _____.

BCS Work Place Intercept Survey, Record 10, Form B - Continued

<u>Questions</u>	<u>Person 1</u>	<u>Person 2</u>
10. What is the reason for coming here today? (Choose from Trip Purpose Options)	Trip Purpose Option #: _____ Other: _____	Trip Purpose Option #: _____ Other: _____
Trip Purpose Options: 1) Return Home 2) Work Related 3) School Related 4) Social/Recreational/Visit 5) Shop 6) Eat Out 7) Personal Business 8) Pick Up/Drop Off Passenger 9) Change Travel Mode 10) Delivery – Pick Up/Drop Off Cargo 11) Other (Specify) 99) Refused		
11. When you leave here are you going straight home with no stops?	<input type="checkbox"/> Yes (Go to 14) <input type="checkbox"/> No (Go to 12)	<input type="checkbox"/> Yes (Go to 14) <input type="checkbox"/> No (Go to 12)
12. What is the address of the place you will be going?	_____ _____ (Address or nearest intersection)	_____ _____ (Address or nearest intersection)
13a. Is that location in: 13b. If outside of Brazos County, what street or highway will you be on when you leave this area?	a. <input type="checkbox"/> Brazos County <input type="checkbox"/> Other county (enter name) _____ b. _____	a. <input type="checkbox"/> Brazos County <input type="checkbox"/> Other county (enter name) _____ b. _____
14. How often do you travel to the Austin-San Antonio area?	<input type="checkbox"/> Never <input type="checkbox"/> 1 - 2 times per year <input type="checkbox"/> 1 - 2 times every 6 months <input type="checkbox"/> 1 - 2 times every 3 months <input type="checkbox"/> 1 or more times every month <input type="checkbox"/> 1 or more times every week	<input type="checkbox"/> Never <input type="checkbox"/> 1 - 2 times per year <input type="checkbox"/> 1 - 2 times every 6 months <input type="checkbox"/> 1 - 2 times every 3 months <input type="checkbox"/> 1 or more times every month <input type="checkbox"/> 1 or more times every week
15. How often do you travel to the Dallas-Ft. Worth area?	<input type="checkbox"/> Never <input type="checkbox"/> 1 - 2 times per year <input type="checkbox"/> 1 - 2 times every 6 months <input type="checkbox"/> 1 - 2 times every 3 months <input type="checkbox"/> 1 or more times every month <input type="checkbox"/> 1 or more times every week	<input type="checkbox"/> Never <input type="checkbox"/> 1 - 2 times per year <input type="checkbox"/> 1 - 2 times every 6 months <input type="checkbox"/> 1 - 2 times every 3 months <input type="checkbox"/> 1 or more times every month <input type="checkbox"/> 1 or more times every week
16. How often do you travel to the Houston area?	<input type="checkbox"/> Never <input type="checkbox"/> 1 - 2 times per year <input type="checkbox"/> 1 - 2 times every 6 months <input type="checkbox"/> 1 - 2 times every 3 months <input type="checkbox"/> 1 or more times every month <input type="checkbox"/> 1 or more times every week	<input type="checkbox"/> Never <input type="checkbox"/> 1 - 2 times per year <input type="checkbox"/> 1 - 2 times every 6 months <input type="checkbox"/> 1 - 2 times every 3 months <input type="checkbox"/> 1 or more times every month <input type="checkbox"/> 1 or more times every week
17. If passenger rail service were available to Dallas-Ft. Worth, Austin-San Antonio or to Houston, would you use rail to travel to these areas?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Possibly	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Possibly
Thank them for their time and participation.		

INTERCEPT TRAVEL SURVEY

Form C

Survey Area: _____

Site #: _____

Date: ____/____/____

Interviewer: _____

Address: _____

Location: _____

Employment Type: _____

<u>Questions</u>	<u>Person 1</u>	<u>Person 2</u>
Time interview began	_____ am / _____ pm	_____ am / _____ pm
Time interview ended	_____ am / _____ pm	_____ am / _____ pm
1. Do you work in this building or at this location?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
2. In what city or county do you live?		
3a. Is that in Brazos County? (If YES, go to question 4)	a. <input type="checkbox"/> Yes (Go to 4) <input type="checkbox"/> No (Go to 3b)	a. <input type="checkbox"/> Yes (Go to 4) <input type="checkbox"/> No (Go to 3b)
3b. If NO, which roadway did you use to enter the area? (airport is an option)	b. _____	b. _____
4. What is your home address or the names of the nearest two intersecting streets?	_____ _____ (Address or nearest intersection)	_____ _____ (Address or nearest intersection)
5a. Did you travel here directly from your home with no stops? (If YES, go to Question 7)	a. <input type="checkbox"/> Yes (Go to 7) <input type="checkbox"/> No (Go to 5b)	a. <input type="checkbox"/> Yes (Go to 7) <input type="checkbox"/> No (Go to 5b)
5b. If NO, where did you start the trip that brought you to _____?	b. _____ (Address or nearest intersection)	b. _____ (Address or nearest intersection)
6a. Is that location in:	a. <input type="checkbox"/> Brazos County <input type="checkbox"/> Other county (enter name) _____	a. <input type="checkbox"/> Brazos County <input type="checkbox"/> Other county (enter name) _____
6b. If outside of Brazos County, what street or highway were you on when you entered the Bryan-College Station area?	b. _____	b. _____
7. What approximate time did you arrive at this location today?	_____ am / _____ pm	_____ am / _____ pm
8. How did you arrive here at the _____ today? (Choose from Arrival Options)	Arrival Option #: _____ Other: _____	Arrival Option #: _____ Other: _____
Arrival Options: 1) Driver (car/truck/van) 5) Transit Bus 9) Commercial Service Vehicle 2) Passenger (car/truck/van) 6) School Bus 10) Motorcycle 3) Walk 7) Taxi/Paid Limousine 96) Other (Specify) 4) Bicycle 8) Commercial Cargo Transport Vehicle 99) Refused		
9a. If car/truck/van, ask: How many people, including you, were in the vehicle?	a) # of People _____	a) # of People _____
9b. If bus, ask: What fare did you pay?	b) Fare \$ _____.	b) Fare \$ _____.

COMMERCIAL VEHICLE DRIVER INTERCEPT SURVEY

Form D

Work Place Site # or Special Generator: _____

Date: ____/____/____

Interviewer: _____

<u>Questions</u>	<u>Vehicle 1</u>	<u>Vehicle 2</u>																																																
1. Time interview began	_____ am / _____ pm	_____ am / _____ pm																																																
2. Time interview ended	_____ am / _____ pm	_____ am / _____ pm																																																
3. Number of People in vehicle																																																		
4. Standard Vehicle Class (Choose from Vehicle Class Options)																																																		
Vehicle Class Options 1) Passenger Car 4) Sport Utility Vehicle (SUV) 7) Single Unit 4-axle (14 wheels) 2) Pickup 5) Single Unit 2-axle (6 wheels) 8) Semi (all tractor-trailer combinations) 3) Van (cargo or mini) 6) Single Unit 3-axle (10 wheels) 9) Other (Specify)																																																		
5. Vehicle Type	<input type="checkbox"/> Cargo Transport <input type="checkbox"/> Service	<input type="checkbox"/> Cargo Transport <input type="checkbox"/> Service																																																
6. What is the cargo being delivered? (Choose from Cargo Options)	Option # _____ (If coded 19, enter name of cargo)	Option # _____ (If coded 19, enter name of cargo)																																																
<table border="0" style="width: 100%;"> <tr> <td style="width: 35%;"><u>Cargo Options</u></td> <td style="width: 65%;"><u>Description</u></td> </tr> <tr> <td>1) Farm Products</td> <td>Livestock, fertilizer, dirt, landscaping, etc.</td> </tr> <tr> <td>2) Forest Products</td> <td>Trees, sod, etc.</td> </tr> <tr> <td>3) Marine Products</td> <td>Fresh fish, seafood, etc.</td> </tr> <tr> <td>4) Metals and Minerals</td> <td>Crude petroleum, natural gas, propane, metals, gypsum, ores, etc.</td> </tr> <tr> <td>5) Food, Health, and Beauty Products</td> <td>Assorted food products, cosmetics, etc.</td> </tr> <tr> <td>6) Tobacco Products</td> <td>Cigarettes, cigars, chewing tobacco</td> </tr> <tr> <td>7) Textiles</td> <td>Clothing, linens, etc.</td> </tr> <tr> <td>8) Wood Products</td> <td>Lumber, paper, cardboard, wood pulp, etc.</td> </tr> <tr> <td>9) Printed Matter</td> <td>Newspapers, magazines, books, etc.</td> </tr> <tr> <td>10) Chemical Products</td> <td>Soaps, paints, household or industrial chemicals, etc.</td> </tr> <tr> <td>11) Refined Petroleum or Coal Products</td> <td>Gasoline, etc.</td> </tr> <tr> <td>12) Rubber, Plastic, and Styrofoam Products</td> <td>Finished products of rubber, plastic, or styrofoam</td> </tr> <tr> <td>13) Clay, Concrete, Glass, or Stone</td> <td>Finished products of clay, concrete, glass, or stone</td> </tr> <tr> <td>14) Manufactured Goods/Equipment</td> <td>Miscellaneous products, such as machinery, appliances, furniture, etc.</td> </tr> <tr> <td>15) Wastes</td> <td>Waste products including scrap and recyclable materials</td> </tr> <tr> <td>16) Miscellaneous Shipments</td> <td>U.S. mail, U.P.S., Federal Express, and other mixed cargo</td> </tr> <tr> <td>17) Hazardous Materials</td> <td>Hazardous chemicals and substances</td> </tr> <tr> <td>18) Transportation</td> <td>Automobiles, Heavy Equipment, etc.</td> </tr> <tr> <td>19) Empty</td> <td>Empty (including empty shipping containers)</td> </tr> <tr> <td>20) No cargo delivered or picked up</td> <td></td> </tr> <tr> <td>96) Other</td> <td>Unclassified Cargo - Cargo not falling within one of the above. Record name of cargo</td> </tr> <tr> <td>98) Unknown</td> <td></td> </tr> <tr> <td>99) Refused</td> <td></td> </tr> </table>			<u>Cargo Options</u>	<u>Description</u>	1) Farm Products	Livestock, fertilizer, dirt, landscaping, etc.	2) Forest Products	Trees, sod, etc.	3) Marine Products	Fresh fish, seafood, etc.	4) Metals and Minerals	Crude petroleum, natural gas, propane, metals, gypsum, ores, etc.	5) Food, Health, and Beauty Products	Assorted food products, cosmetics, etc.	6) Tobacco Products	Cigarettes, cigars, chewing tobacco	7) Textiles	Clothing, linens, etc.	8) Wood Products	Lumber, paper, cardboard, wood pulp, etc.	9) Printed Matter	Newspapers, magazines, books, etc.	10) Chemical Products	Soaps, paints, household or industrial chemicals, etc.	11) Refined Petroleum or Coal Products	Gasoline, etc.	12) Rubber, Plastic, and Styrofoam Products	Finished products of rubber, plastic, or styrofoam	13) Clay, Concrete, Glass, or Stone	Finished products of clay, concrete, glass, or stone	14) Manufactured Goods/Equipment	Miscellaneous products, such as machinery, appliances, furniture, etc.	15) Wastes	Waste products including scrap and recyclable materials	16) Miscellaneous Shipments	U.S. mail, U.P.S., Federal Express, and other mixed cargo	17) Hazardous Materials	Hazardous chemicals and substances	18) Transportation	Automobiles, Heavy Equipment, etc.	19) Empty	Empty (including empty shipping containers)	20) No cargo delivered or picked up		96) Other	Unclassified Cargo - Cargo not falling within one of the above. Record name of cargo	98) Unknown		99) Refused	
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7. What is the weight of the cargo being delivered in pounds?	Weight _____ <input type="checkbox"/> No cargo delivered	Weight _____ <input type="checkbox"/> No cargo delivered																																																
8. What is the cargo being picked up? (Choose from Cargo Options above)	Option # _____ (If coded 19, enter name of cargo)	Option # _____ (If coded 19, enter name of cargo)																																																
9. What is the weight of the cargo being picked up in pounds?	Weight _____ <input type="checkbox"/> No cargo picked up	Weight _____ <input type="checkbox"/> No cargo picked up																																																

BCS Work Place and Special Generator Commercial Vehicle Driver Intercept Survey, Record CV, Form D - Continued

<u>Questions</u>	<u>Vehicle 1</u>	<u>Vehicle 2</u>
10. What is your reason for coming here today? (Choose from Trip Purpose Options below)	_____ (Trip Purpose Option #)	_____ (Trip Purpose Option #)
11a. What is the address of the last place you got into your vehicle? (Address or nearest two intersecting streets) 11b. What type of place was that location? (Choose from Type of Place Options below)	a. _____ _____ b. Type of Place Option # _____	a. _____ _____ b. Type of Place Option # _____
12a. Is that location in: 12b. If outside of Brazos County, what street or highway were you on when you entered the study area?	a. <input type="checkbox"/> Brazos County <input type="checkbox"/> Other county (enter name) _____ b. _____	a. <input type="checkbox"/> Brazos County <input type="checkbox"/> Other county (enter name) _____ b. _____
13. What was your purpose for being at that location? (Choose from Trip Purpose Options below)	_____ (Trip Purpose Option #)	_____ (Trip Purpose Option #)
14. What approximate time did you leave that location?	_____ am / _____ pm	_____ am / _____ pm
15a. What is the address of the place you will be going when you leave? (place/address or nearest intersection/city) 15b. What type of place is that location? (Choose from Type of Place Options below)	a. _____ _____ b. Type of Place Option # _____	a. _____ _____ b. Type of Place Option # _____
16a. Is that location in: 16b. If outside Brazos County, what street or highway will you be on when you leave the study area?	a. <input type="checkbox"/> Brazos County <input type="checkbox"/> Other county (enter name) _____ b. _____	a. <input type="checkbox"/> Brazos County <input type="checkbox"/> Other county (enter name) _____ b. _____
17. What is your purpose for traveling to your next destination? (Choose from Trip Purpose Options below)	_____ (Trip Purpose Option #)	_____ (Trip Purpose Option #)
Thank them for their time and participation.		

- | <u>Trip Purpose Options</u> | | |
|--|---|---------------------|
| 1) Base location/Return to base location | 4) Delivery and Pick Up | 7) To home |
| 2) Delivery | 5) Maintenance | 8) Buy gas/fuel |
| 3) Pickup | 6) Driver Needs (lunch, restroom, etc.) | 96) Other (Specify) |
| | | 99) Refused |

- | <u>Type of Place Options</u> | | |
|---|---------------------------------------|-------------------------|
| 1) Office Building | 6) Educational (College, Trade, etc.) | 11) Warehouse |
| 2) Retail / Shopping | 7) Government Office/Building | 12) Distribution Center |
| 3) Industrial/Manufacturing | 8) Residential | 13) Construction Site |
| 4) Medical / Hospital | 9) Airport | 96) Other (Specify) |
| 5) Educational (12 th grade or less) | 10) Intermodal Facility | 99) Refused |

SPECIAL GENERATOR INTERCEPT SURVEY

Form B

Date: _____/_____/_____

Survey Area: _____

Interviewer: _____

Location on Campus: _____

<u>Questions</u>	<u>Person 1</u>	<u>Person 2</u>
Time interview began	_____ am / _____ pm	_____ am / _____ pm
Time interview ended	_____ am / _____ pm	_____ am / _____ pm
1. Are you a student here?	<input type="checkbox"/> Yes (Go to 2) <input type="checkbox"/> No (Go to 3)	<input type="checkbox"/> Yes (Go to 2) <input type="checkbox"/> No (Go to 3)
2. Do you live on campus?	<input type="checkbox"/> Yes (Terminate Interview) <input type="checkbox"/> No (Go to 3)	<input type="checkbox"/> Yes (Terminate Interview) <input type="checkbox"/> No (Go to 3)
3. Do you work here at the college/university or are you visiting the college/university?	<input type="checkbox"/> Employee <input type="checkbox"/> Visitor	<input type="checkbox"/> Employee <input type="checkbox"/> Visitor
4. In what city or county do you live?	_____	_____
5. Is that in Brazos County?	<input type="checkbox"/> Yes (Go to 7) <input type="checkbox"/> No (Go to 6)	<input type="checkbox"/> Yes (Go to 7) <input type="checkbox"/> No (Go to 6)
If they live outside Brazos County, ask: 6. Which roadway did you use to enter the Bryan-College Station area? (airport is an option)	_____	_____
If they live in Brazos County, ask: 7. What is your home address or nearest two intersecting streets?	_____ _____ (Address or nearest intersection)	_____ _____ (Address or nearest intersection)
8. How did you arrive here at the college today? (Choose from Arrival Options)	Arrival Option # _____ Other _____	Arrival Option # _____ Other _____
Arrival Options: 1) Driver (car/truck/van) 5) Transit Bus 9) Commercial Service Vehicle 2) Passenger (car/truck/van) 6) School Bus 10) Motorcycle 3) Walk 7) Taxi/Paid Limousine 96) Other (Specify) 4) Bicycle 8) Commercial Cargo Transport Vehicle 99) Refused		
9a. If arrival was by car/truck/van, how many people, including you, were in the vehicle when you arrived at the college? 9b. Where did you park?	a. # of People _____ b. 1) On-Campus 2) Off Campus Parking Lot 3) Off Campus in Street Designated Parking Spot 4) Other (specify) _____	a. # of People _____ b. 1) On-Campus 2) Off Campus Parking Lot 3) Off Campus in Street Designated Parking Spot 4) Other (specify) _____
10a. Did you travel directly from your home to the college with no stops? 10b. If NO, where did you start the trip that brought you to the college?	a. <input type="checkbox"/> Yes (Go to 12) <input type="checkbox"/> No (Go to 10b) b. _____ _____ (Address or nearest intersection)	a. <input type="checkbox"/> Yes (Go to 12) <input type="checkbox"/> No (Go to 10b) b. _____ _____ (Address or nearest intersection)
11a. Is that location in Brazos County? 11b. If NO, what street or highway were you on when you entered the Bryan-College Station area?	a. <input type="checkbox"/> Yes <input type="checkbox"/> No (enter name of county) b. _____ _____	a. <input type="checkbox"/> Yes <input type="checkbox"/> No (enter name of county) b. _____ _____

**ST. JOSEPH REGIONAL HEALTH CENTER
SPECIAL GENERATOR INTERCEPT SURVEY**

Form B

Date: ____/____/____

Survey Area: _____

Interviewer: _____ Location on Medical Center Campus: _____

<u>Questions</u>	<u>Person 1</u>	<u>Person 2</u>
Time interview began	_____ am / _____ pm	_____ am / _____ pm
Time interview ended	_____ am / _____ pm	_____ am / _____ pm
1. Do you work in this building or at this location?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
2. In what city or county do you live?		
3a. Is that in Brazos county? (If YES, go to question 4) 3b. If NO, which roadway did you use to enter the Bryan-College Station area? (airport is an option)	a. <input type="checkbox"/> Yes (Go to 4) <input type="checkbox"/> No (Go to 3b) b. _____	a. <input type="checkbox"/> Yes (Go to 4) <input type="checkbox"/> No (Go to 3b) b. _____
4. What is your home address or nearest two intersecting streets?	_____ _____ (Address or nearest intersection)	_____ _____ (Address or nearest intersection)
5a. Did you travel directly from your home to the Medical Center with no stops? 5b. If NO, where did you start the trip that brought you to the Medical Center?	a. <input type="checkbox"/> Yes (Go to 7) <input type="checkbox"/> No (Go to 5b) b. _____ _____ (Address or nearest intersection)	a. <input type="checkbox"/> Yes (Go to 7) <input type="checkbox"/> No (Go to 5b) b. _____ _____ (Address or nearest intersection)
6a. Is that location in Brazos County? 6b. If NO, what street or highway were you on when you entered the Bryan-College Station area?	a. <input type="checkbox"/> Yes <input type="checkbox"/> No (enter name of county) _____ b. _____	a. <input type="checkbox"/> Yes <input type="checkbox"/> No (enter name of county) _____ b. _____
7. What approximate time did you arrive at the Medical Center today?	_____ am / _____ pm	_____ am / _____ pm
8. How did you arrive at the Medical Center today? (Choose from Arrival Options)	Arrival Option # _____ Other _____	Arrival Option # _____ Other _____
Arrival Options: 1) Driver (car/truck/van) 5) Transit Bus 9) Commercial Service Vehicle 2) Passenger (car/truck/van) 6) School Bus 10) Motorcycle 3) Walk 7) Taxi/Paid Limousine 96) Other (Specify) 4) Bicycle 8) Commercial Cargo Transport Vehicle 99) Refused		
9a. If car/truck/van, ask: How many people, including you, were in the vehicle? 9b. If bus, ask: What fare did you pay?	a. # of People _____ b. Fare \$ _____.	a. # of People _____ b. Fare \$ _____.

St. Joseph Regional Health Center Special Generator Survey, Record SH, Form B – Continued

<u>Questions</u>	<u>Person 1</u>	<u>Person 2</u>
10. What is the reason for coming here today? (Choose from Trip Purpose Options)	Trip Purpose Option # _____ Other _____	Trip Purpose Option # _____ Other _____
Trip Purpose Options: 1) Return Home 2) Work Related 3) School 4) Social/Recreational/Visit 5) Shop 6) Eat Out 7) Personal Business 8) Pick Up/Drop Off Passenger 9) Change Travel Mode 10) Delivery – Pick Up/Drop Off Cargo 96) Other (Specify) 99) Refused		
11. When you leave the Medical Center, are you going straight home with no stops?	<input type="checkbox"/> Yes (Go to 14) <input type="checkbox"/> No (Go to 12)	<input type="checkbox"/> Yes (Go to 14) <input type="checkbox"/> No (Go to 12)
12. What is the name and address of the place you will be going?	_____ _____ (Address or nearest intersection)	_____ _____ (Address or nearest intersection)
13a. Is that location in Brazos county? 13b. If NO, what street or highway will you be on when you leave the Bryan-College Station area?	a. <input type="checkbox"/> Yes <input type="checkbox"/> No (enter name of county) _____ b. _____	a. <input type="checkbox"/> Yes <input type="checkbox"/> No (enter name of county) _____ b. _____
14. How often do you travel to the Austin-San Antonio area?	<input type="checkbox"/> Never <input type="checkbox"/> 1 - 2 times per year <input type="checkbox"/> 1 - 2 times every 6 months <input type="checkbox"/> 1 - 2 times every 3 months <input type="checkbox"/> 1 or more times every month <input type="checkbox"/> 1 or more times every week	<input type="checkbox"/> Never <input type="checkbox"/> 1 - 2 times per year <input type="checkbox"/> 1 - 2 times every 6 months <input type="checkbox"/> 1 - 2 times every 3 months <input type="checkbox"/> 1 or more times every month <input type="checkbox"/> 1 or more times every week
15. How often do you travel to the Dallas-Ft. Worth area?	<input type="checkbox"/> Never <input type="checkbox"/> 1 - 2 times per year <input type="checkbox"/> 1 - 2 times every 6 months <input type="checkbox"/> 1 - 2 times every 3 months <input type="checkbox"/> 1 or more times every month <input type="checkbox"/> 1 or more times every week	<input type="checkbox"/> Never <input type="checkbox"/> 1 - 2 times per year <input type="checkbox"/> 1 - 2 times every 6 months <input type="checkbox"/> 1 - 2 times every 3 months <input type="checkbox"/> 1 or more times every month <input type="checkbox"/> 1 or more times every week
16. How often do you travel to the Houston area?	<input type="checkbox"/> Never <input type="checkbox"/> 1 - 2 times per year <input type="checkbox"/> 1 - 2 times every 6 months <input type="checkbox"/> 1 - 2 times every 3 months <input type="checkbox"/> 1 or more times every month <input type="checkbox"/> 1 or more times every week	<input type="checkbox"/> Never <input type="checkbox"/> 1 - 2 times per year <input type="checkbox"/> 1 - 2 times every 6 months <input type="checkbox"/> 1 - 2 times every 3 months <input type="checkbox"/> 1 or more times every month <input type="checkbox"/> 1 or more times every week
17. If passenger rail service were available to Dallas-Ft. Worth, Austin-San Antonio or to Houston, would you use rail to travel to these areas?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Possibly	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Possibly
Thank them for their time and participation.		

**POST OAK MALL
SPECIAL GENERATOR INTERCEPT SURVEY**

Form B

Date: ____/____/____

Survey Area: _____

Interviewer: _____ Location at Mall: _____

<u>Questions</u>	<u>Person 1</u>	<u>Person 2</u>
Time interview began	_____ am / _____ pm	_____ am / _____ pm
Time interview ended	_____ am / _____ pm	_____ am / _____ pm
1. Do you work in this Mall?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
2. In what city or county do you live?		
3a. Is that in Brazos county? (If YES, go to question 4) 3b. If NO, which roadway did you use to enter the Bryan-College Station area? (airport is an option)	a. <input type="checkbox"/> Yes (Go to 4) <input type="checkbox"/> No (Go to 3b) b. _____	a. <input type="checkbox"/> Yes (Go to 4) <input type="checkbox"/> No (Go to 3b) b. _____
4. What is your home address or nearest two intersecting streets?	_____ _____ (Address or nearest intersection)	_____ _____ (Address or nearest intersection)
5a. Did you travel directly from your home to the Mall with no stops? 5b. If NO, where did you start the trip that brought you to the Mall?	a. <input type="checkbox"/> Yes (Go to 7) <input type="checkbox"/> No (Go to 5b) b. _____ (Address or nearest intersection)	a. <input type="checkbox"/> Yes (Go to 7) <input type="checkbox"/> No (Go to 5b) b. _____ (Address or nearest intersection)
6a. Is that location in Brazos County? 6b. If NO, what street or highway were you on when you entered the Bryan-College Station area?	a. <input type="checkbox"/> Yes <input type="checkbox"/> No (enter name of county) _____ b. _____	a. <input type="checkbox"/> Yes <input type="checkbox"/> No (enter name of county) _____ b. _____
7. What approximate time did you arrive at the Mall today?	_____ am / _____ pm	_____ am / _____ pm
8. How did you arrive at the Mall today? (Choose from Arrival Options)	Arrival Option # _____ Other _____	Arrival Option # _____ Other _____
Arrival Options: 1) Driver (car/truck/van) 5) Transit Bus 9) Commercial Service Vehicle 2) Passenger (car/truck/van) 6) School Bus 10) Motorcycle 3) Walk 7) Taxi/Paid Limousine 96) Other (Specify) 4) Bicycle 8) Commercial Cargo Transport Vehicle 99) Refused		
9a. If car/truck/van, ask: How many people, including you, were in the vehicle?	a. # of People _____	a. # of People _____
9b. If bus, ask: What fare did you pay?	b. Fare \$ _____.	b. Fare \$ _____.

**APPENDIX B:
ASCII FILE FORMATS**

Bryan-College Station Work Place Recruitment and General Survey, Form A Format

This file contains the recruitment information, call disposition results, and data collected during recruitment using Form G: Work Place Recruitment Survey. The data are in an ASCII data file format.

FIELD COLUMNS

<u>Item</u>	<u>Begin</u>	<u>End</u>	<u>Type</u>	<u>Format</u>	<u>Description</u>
1. Record Type	1	3	Alphanum. LJ	A3	Code indicating type of record. Here it should be 9.
2. Contact Month	4	5	Numeric RJ	I2	Month work place was contacted.
3. Contact Day	6	7	Numeric RJ	I2	Day of month work place was contacted.
4. Contact Year	8	11	Numeric RJ	I4	Year work place was contacted.
5. Site Number	12	16	Numeric RJ	I5	Unique non - zero number assigned to each work place.
6. NAICS Code	17	22	Numeric RJ	I6	North American Industrial Classification System code of the workplace.
7. Work Place Name	23	52	Alphanum. LJ	A30	Name of work place.
8. Work Place Address	53	112	Alphanum. LJ	A60	Address of work place.
9. Work Place City	113	142	Alphanum. LJ	A30	City where work place is located.
10. Work Place State	143	157	Alphanum. LJ	A15	State where work place is located.
11. Work Place Zip Code	158	162	Numeric RJ	I5	Zip code for work place.
12. Work Place County	163	164	Numeric RJ	I2	Code indicating county in which work place is located: 1 - Brazos County
13. Work Place Longitude	165	174	Numeric RJ	F10.6	Longitude of work place location. Those locations within the study area but unknown should be coded 888.888888. All work places must be within the study area.
14. Work Place Latitude	175	184	Numeric RJ	F10.6	Latitude of work place location. Those locations within the study area but unknown should be coded 888.888888. All work places must be within the study area.
15. Work Place Study Area	185	186	Alphanum. LJ	A2	Code indicating study area in which company/operator is located. Use 'B' to indicate BCS/Brazos County study area. All work places must be within the study area.
16. Work Place Zone	187	191	Numeric RJ	I5	Leave blank - to be completed by TxDOT or TTI. Zone where work place is located. If unknown but in the study area, it should be coded 88888. All work places must be within the study area.
17. Employment Type	192	193	Numeric RJ	I2	Code indicating the type of employment at the workplace. See code descriptions.
18. Other Employment Type	194	253	Alphanum. LJ	A60	If employment type is coded as 96 - Other, this field contains a description of the employment type.
19. Employment Sector	254	256	Numeric RJ	I3	Code indicating the sector of employment at the work place. 1 - Basic, 2 - Retail, 3 - Service, 4 - Education, 96 - Other
20. Other Employment Sector	257	286	Alphanum. LJ	A30	If employment sector is coded as other, this field contains a description of the employment type.
21. Work Place Phone No.	287	298	Alphanum. LJ	I12	Phone number of work place.
22. Number of Attempts	299	301	Numeric RJ	I3	Number of attempts made to contact work place.
23. Call Disposition Code	302	303	Numeric RJ	I2	Code indicating final result of call attempts. See code definitions.
24. Other Call Disposition	304	333	Alphanum. LJ	A30	If call disposition code is "other", this field contains a description of the call disposition.
25. Recruitment	334	335	Numeric RJ	I2	Code indicating results of recruitment attempts. 1 - Full Survey, 2 - Partial Survey, 3 - Refusal w/Data, 4 - Refusal w/No data, 5 - contact never made - no data
26. Total Employment	336	341	Numeric RJ	I6	Total number of full and part time employees at this location.
27. Estimated No. of Visitors	342	346	Numeric RJ	I5	Estimated average number of visitors to the work place on a typical weekday.
28. Estimated No. Employees	347	351	Numeric RJ	I5	Average number of employees at work on a typical weekday.
29. Begin Operations	352	356	Numeric RJ	I5	Normal time (military) operations begin at work place.
30. End Operations	357	361	Numeric RJ	I5	Normal time (military) operations end at work place.

31. Workplace Type	362	363	Numeric RJ	12	Code indicating the type of workplace. 1 - free standing, 2 - non - free standing
32. Location Code	364	365	Numeric RJ	12	Code indicating type of location. 1 - Shopping center or office building, 2 - Other
33. Others at Location	366	367	Numeric RJ	12	Code indicating if other businesses are located at the same location. 1 - Yes, 2 - No
34. Parking	368	369	Numeric RJ	12	Code indicating if work place has its own parking. 1 - Yes, 2 - No
35. Cut Thru Traffic	370	371	Numeric RJ	12	Code indicating if traffic cuts through parking lot to access other businesses. 1 - Yes, 2 - No
36. Estimate of Deliveries	372	374	Numeric RJ	13	Estimated number of deliveries on an average week day.
37. From Delivery Hours	375	378	Numeric RJ	14	Beginning time for deliveries in military time.
38. To Deliver Hours	379	382	Numeric RJ	14	Ending time for deliveries in military time.
39. Special Access	383	384	Numeric RJ	12	Code indicating if special access is provided for deliveries or employees. 1 - Yes, 2 - No
40. Business Vehicles	385	391	Numeric RJ	17	Total Number of vehicles owned or leased by work place for business purposes (all types).
41. Cars/SUVs	392	396	Numeric RJ	15	Number of cars and SUVs owned or leased by work place for business purposes.
42. Pickup Trucks	397	401	Numeric RJ	15	Number of pickup trucks owned or leased by work place for business purposes.
43. Cargo Vans	402	406	Numeric RJ	15	Number of vans owned or leased by work place used for delivery or pick up of cargo.
44. Service Vans	407	411	Numeric RJ	15	Number of vans owned or leased by work place used for commercial service or other purposes.
45. Cargo Vehicles	412	416	Numeric RJ	15	Number of cargo transport vehicles owned or leased by work place for business purposes that do not fall into the other categories.
46. Service Vehicles	417	421	Numeric RJ	15	Number of service vehicles owned or leased by work place for business purposes that do not fall into the other categories.
47. Survey Month	422	423	Numeric RJ	12	Month work place was surveyed.
48. Survey Day	424	425	Numeric RJ	12	Day of month work place was surveyed.
49. Survey Year	426	429	Numeric RJ	14	Year work place was surveyed.
50. Employees at Work	430	434	Numeric RJ	15	Total number of employees at work on the day that the travel survey was conducted.
51. Count of Deliveries	435	437	Numeric RJ	13	Total number of delivery persons making deliveries or pick - ups at workplace on survey day beginning 1 hour before and ending 1 hour after operations. Count is for 24 - hours if workpalce is open 24 hours.
52. Count of Persons	438	443	Numeric RJ	16	Total number of persons counted entering and exiting the workplace beginning 1 hour before and ending 1 hour after operations. Count is for 24 - hours if workplace is open 24 hours.

BCS Work Place Recruitment and General Survey Form A Format - Continued

53. Count of Passenger Vehicles	444	449	Numeric RJ	16	Total number of passenger vehicles counted entering and exiting the workplace
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54. Count of Commercial Vehicles	450	454	Numeric RJ	15	beginning 1 hour before and ending 1 hour after operations. Count is for 24 hours if workplace is open 24 hours. Total number of commercial vehicles (excluding school buses) counted entering and exiting the workplace beginning 1 hour before and ending 1 hour after operations. Count is for 24 hours if workplace is open 24 hours.
55. Count of School Buses	455	459	Numeric RJ	15	Total number of school buses counted entering and exiting the workplace beginning 1 hour before and ending 1 hour after operations. Count is for 24 hours if workplace is open 24 hours.
56. ACR Counts	455	456	Numeric RJ	12	Code indicating if passenger vehicle and commercial vehicle counts were obtained from ACRs. 1 - Yes, 2 - No

17. EMPLOYMENT TYPE

- 1 - Office (Non-Government)
- 2 - Retail
- 3 - Industrial
- 4 - Medical
- 5 - Education - Day Care / K-12th
- 6 - Education - College, trade, other
- 7 - Gov't/City/County/State/Federal Offices
- 8 - Convenience Store/Gas Station
- 9 - Grocery Store
- 10 - Restaurant/Fast Food/Bar & Grill
- 11 - Bank/Financial Institution
- 12 - Manufacturing
- 13 - Wholesale Trade
- 14 - Construction
- 15 - Other

23. FINAL DISPOSITION CODES

- 1 - Contact Made
- 2 - No Answer
- 3 - Phone Disconnected
- 4 - Answering Machine
- 5 - Busy
- 6 - Non - Business
- 7 - Computer/Fax
- 96 - Other

Bryan-College Station Free Standing Workplace Intercept Survey, Form B Format

This file contains the travel data for employees and visitors surveyed at free standing work places using Form B, Intercept Travel Survey. The data are in an ASCII data file format.

FIELD COLUMNS

<u>Item</u>	<u>Begin</u>	<u>End</u>	<u>Type</u>	<u>Format</u>	<u>Description</u>
1. Record Type	1	3	Alphanum. LJ	A3	Code which indicates the type of record. Here it should be 10.
2. Month	4	5	Numeric RJ	I2	Month workplace was surveyed.
3. Day	6	7	Numeric RJ	I2	Day of the month workplace was surveyed.
4. Year	8	11	Numeric RJ	I4	Year work place was surveyed.
5. Site Number	12	16	Numeric RJ	I5	Unique non - zero number assigned to the work place where these interviews were conducted.
6. Form Number	17	22	Numeric RJ	I6	Survey form number which contains raw survey data.
7. Person Number	23	23	Numeric RJ	I1	Number of person being interviewed. This corresponds to the column number on the interview form.
8. Time Began	24	28	Numeric RJ	I5	Time interview began. Military time
9. Time Ended	29	33	Numeric RJ	I5	Time interview ended. Military time
10. Person Interviewed	34	35	Numeric RJ	I2	Code indicating if person being interviewed is an employee or a visitor. 1 - Employee, 2 - Visitor
11. Residence	36	95	Alphanum. LJ	A60	Name of city, county or country where person lives.
12. Residence Code	96	97	Numeric RJ	I2	Code indicating if residence is located in the study area the work place is located. 1 - Yes, 2 - No, 98 - Unknown, 99 - Refused
13. Home Entry Facility	98	157	Alphanum. LJ	A60	If person does not live in the study area the work place is located, this field should contain the name of the street/highway/bridge the person was on when they entered the study area the work place is located. If person stayed over night, this field should be blank. Note that airport is a valid entry.
14. Home Entry Zone	158	162	Numeric RJ	I5	Leave blank - to be completed by TxDOT or TTI. Zone number associated with the street/highway/bridge person was on when they entered the study area the work place is located. If person lives in study area, this field should be blank.
15. Home Address	163	222	Alphanum. LJ	A60	Address where respondent lives. If person gives nearest intersecting streets, both street names are listed here.
16. Home City	223	252	Alphanum. LJ	A30	City (or nearest city/town) where respondent lives.
17. Home State	253	267	Alphanum. LJ	A15	State where respondent lives.
18. Home Zip	268	272	Numeric RJ	I5	Zip code where respondent lives.
19. Home County	273	274	Numeric RJ	I2	Code indicating county where respondent's home is. 1 - Brazos County, 96 - Other (enter name of county in next field), 98 - Unknown, 99 - Refused
20. Home - County Other	275	304	Alphanum. LJ	A30	If county location is coded as other, this field should contain the name of the county where location is.
21. Home Study Area	305	306	Alphanum. LJ	A2	Code indicating study area in which home address is located. Use 'B' to indicate BCS/Brazos County study area. If home address is outside the study area being surveyed but within Texas, this field should be coded 'TX'. If location is outside Texas, 'XX' should be coded in this field.

22. Home Zone	307	311	Numeric RJ	I5	Leave blank - to be completed by TxDOT or TTI. Zone number of home address. If in the study area being surveyed but location unknown, it should be coded 88888. Locations in Mexico should be coded 77777 and addresses outside of the study area being surveyed, but within Texas should be coded using the Statewide Zone System. Unknown locations outside of the study area being surveyed but within the state of Texas should be coded 66666. Addresses outside of Texas and Mexico should be coded using 99999.
23. Home Longitude	312	321	Numeric RJ	F10.6	Longitude of home address. If within the study area being surveyed but unknown, it should be coded 888.8888. If outside the study area being surveyed but within Texas and unknown, it should be coded as 666.666666. Locations in Mexico should be coded 777.777777 and addresses outside of Texas and Mexico should be coded 999.999999.
24. Home Latitude	322	331	Numeric RJ	F10.6	Latitude of home address. If within the study area being surveyed, but unknown it should be coded 888.8888. If outside the study area being surveyed but within Texas and unknown it should be coded as 666.666666. Locations in Mexico should be coded 777.777777 and addresses outside of Texas and Mexico should be coded 999.999999.
25. Origin Code	332	333	Numeric RJ	I2	Code indicating origin of trip. 1 - Home, 2 - Other
26. Origin Address	334	393	Alphanum. LJ	A60	Origin address. If person gives nearest intersecting streets, both street names are listed here.
27. Origin City	394	423	Alphanum. LJ	A30	Origin city.
28. Origin State	424	438	Alphanum. LJ	A15	Origin state.
29. Origin Zip	439	443	Numeric RJ	I5	Origin zip code.
30. Origin County	444	446	Numeric RJ	I3	Code indicating county where trip originated. 1 - Brazos County, 96 - Other (enter name of county in next field), 98 - Unknown, 99 - Refused
31. Other Origin County	447	476	Alphanum. LJ	A30	If county origin/location is coded as "other", this field contains the name of the county or location.
32. Origin Study Area	477	478	Alphanum. LJ	A2	Code indicating study area in which trip origin is located. Use 'B' to indicate BCS/Brazos County study area. If trip origin is outside the study area being surveyed but within Texas, this field should be coded 'TX'. If location is outside Texas, 'XX' should be coded in this field.
33. Origin Zone	479	483	Numeric RJ	I5	Leave blank - to be completed by TxDOT or TTI. Zone where trip originated. Locations in Mexico should be coded 77777. Locations outside of these study areas, but within Texas should be coded to the state zone system. Unknown zone numbers in the study area the work place is located should be coded as 88888. Unknown zone numbers outside of the study area the work place is located but within Texas should be coded as 66666. Locations outside Texas and not in Mexico should be coded as 99999.
34. Origin Longitude	484	493	Numeric RJ	F10.6	Longitude of location trip originated from. If location is in Mexico, this should be coded 777.777777. If location is outside Texas, this should be coded 999.999999. If unknown but in the study area the work place is located, it should be coded 888.888888. If unknown but in Texas, it should be coded as 666.666666.
35. Origin Latitude	494	503	Numeric RJ	F10.6	Latitude of location trip originated from. If location is in Mexico, this should be coded 777.777777. If location is outside Texas, this should be coded 999.999999. If unknown but in the study area the work place is located, it should be coded 888.888888. If unknown but in Texas, it should be coded as 666.666666.
36. Entry Facility	504	563	Alphanum. LJ	A60	If origin is outside the study area the work place is located in, this field should contain the name of the bridge, street, or highway used to enter the study area.

37. Entry Study Area	564	565	Alphanum. LJ	A2	If origin is outside of the study area, this field should contain a code indicating the study area where the bridge, street, or highway used to enter is located. Use 'B' to indicate BCS/Brazos County study area.
38. Entry External Zone	566	570	Numeric RJ	I5	Leave blank - to be completed by TxDOT or TTI. If origin is outside the study area in which the work place is located, this field should contain the external station number associated with the bridge, street, or highway used to enter the study area.
39. Arrival Hour	571	573	Numeric RJ	I3	Hour person arrived at this site. This hour should be in terms of military time.
40. Arrival Minute	574	576	Numeric RJ	I3	Minute person arrived at this site.
41. Mode	577	578	Numeric RJ	I2	Code indicating mode of travel to this location. See definitions below.
42. Other Mode	579	608	Alphanum. LJ	A30	If mode is coded "other", this field should contain a description of the mode given.
43. Number Persons	609	610	Numeric RJ	I2	If car/truck/van, this is the number of persons in the vehicle including the person being interviewed. This field is blank for all other modes.
44. Fare	611	616	Numeric RJ	F6.2	If mode of travel was bus, this is the fare paid.
45. Trip Purpose	617	618	Numeric RJ	I2	Code indicating purpose of trip. See code definitions below.
46. Other Purpose	619	648	Alphanum. LJ	A30	If purpose is coded as "other", this contains description of purpose given.
47. Depart Destination	649	650	Numeric RJ	I2	Code indicating destination when person departs from this site. 1 - Home, 2 - Other
48. Destination Address	651	710	Alphanum. LJ	A60	Destination address or cross streets.
49. Destination City	711	740	Alphanum. LJ	A30	Destination city.
50. Destination State	741	755	Alphanum. LJ	A15	Destination state.
51. Destination Zip	756	760	Numeric RJ	I5	Destination zip code.
52. Destination County	761	763	Numeric RJ	I3	Code indicating county of trip destination. 1 - Brazos County, 96 - Other (enter name of county in next field), 98 - Unknown, 99 - Refused
53. Other Destination County	764	793	Alphanum. LJ	A30	If county destination/location is coded as "other", this field contains the name of the county or location.
54. Destination Study Area	794	795	Alphanum. LJ	A2	Code indicating study area of trip destination. Use 'B' to indicate BCS/Brazos County study area. If trip destination is outside the study area being surveyed but within Texas, this field should be coded 'TX'. If location is outside Texas, 'XX' should be coded in this field.

BCS Free Standing Work Place Intercept Survey, Form B Format – Continued.

55. Destination Zone	796	800	Numeric RJ	I5	Leave blank - to be completed by TxDOT or TTI. Zone where individual is going when they leave this location. Locations in Mexico should be coded 77777. Locations not in a study area county, but within Texas should be coded to the state zone system. Unknown zone numbers in the study area the work place is located should be coded as 88888. Unknown zone numbers not in the study area the work place is located but within Texas should be coded as 66666. Locations outside Texas and not in Mexico should be coded as 99999.
56. Destination Longitude	801	810	Numeric RJ	F10.6	Longitude of destination location. If location is in Mexico, this should be coded 777.777777. If location is outside Texas, this should be coded 999.999999. If unknown but in study area the work place is located in, it should be coded 888.888888. If unknown but in Texas, it should be coded as 666.666666.
57. Destination Latitude	811	820	Numeric RJ	F10.6	Latitude of destination location. If address is in Mexico, this should be coded 777.777777. If address is outside Texas , this should be coded 999.999999. If unknown but in study area the work place is located in, it should be coded 888.888888. If unknown but in Texas, it should be coded as 666.666666.
58. Exit Facility	821	880	Alphanum. LJ	A60	If destination is outside of the study area the work place is located in, this field should contain the name of the bridge, street, or highway used to leave the study area.
59. Exit Study Area	881	882	Alphanum. LJ	A2	If destination is outside of the study area, this field should contain a code indicating the study area where the bridge, street, or highway used to exit is located. Use 'B' to indicate BCS/Brazos County study area.
60. Exit External Zone	883	887	Numeric RJ	I5	Leave blank - to be completed by TxDOT or TTI. If destination is outside the study area the work place is located in, this field should contain the external station number associated with the bridge, street, or highway used to exit the study area.

BCS Free Standing Work Place Intercept Survey, Form B Format – Continued.

61. Travel to Austin - San Antonio	888	889	Numeric RJ	I2	Code indicating frequency of travel to Austin - San Antonio. See options below.
62. Travel to Dallas - Ft. Worth	890	891	Numeric RJ	I2	Code indicating frequency of travel to Dallas - Ft. Worth. See options below.
63. Travel to Houston	892	893	Numeric RJ	I2	Code indicating frequency of travel to Houston. See options below.
64. Passenger Rail to Dallas - Ft. Worth, Austin - San Antonio or Houston	894	895	Numeric RJ	I2	Code indicating whether respondent would use passenger rail service to Dallas - Ft. Worth, Austin - San Antonio or Houston. 1 - Yes, 2 - No, 3 - Possibly

41. MODE OF TRANSPORTATION CODES

- 1 - Driver (car/truck/van)
- 2 - Passenger (car/truck/van)
- 3 - Walk
- 4 - Bicycle
- 5 - Transit Bus
- 6 - School Bus
- 7 - Taxi/Limo
- 8 - Commercial Cargo Transport Vehicle
- 9 - Commercial Service Vehicle
- 10 - Motorcycle
- 96 - Other
- 99 - Refused

45. TRIP PURPOSE CODES

- 1 - Return Home
- 2 - Work Related
- 3 - School Related
- 4 - Social/Recreational/Visit
- 5 - Shop
- 6 - Eat Out
- 7 - Personal Business
- 8 - Pick Up/Drop Off Passenger
- 9 - Change Travel Mode
- 10 - Delivery - Pick Up/Drop Off
- 96 - Other
- 99 - Refused

61,62,63. FREQUENCY OF TRAVEL OPTIONS

- 1 - Never
- 2 - 1 to 2 times per year
- 3 - 1 to 2 times every 6 months
- 4 - 1 to 2 times every 3 months
- 5 - 1 or more times every month
- 6 - 1 or more times every week
- 99 - Refused

Bryan-College Station Non-Free Workplace Intercept Survey, Form C Format

This file contains the travel data for employees and visitors surveyed at non-free standing work places using Form C, Intercept Travel Survey. The data are in an ASCII data file format.

FIELD COLUMNS

<u>Item</u>	<u>Begin</u>	<u>End</u>	<u>Type</u>	<u>Format</u>	<u>Description</u>
1. Record Type	1	3	Alphanum. LJ	A3	Code which indicates the type of record. Here it should be 11.
2. Month	4	5	Numeric RJ	I2	Month workplace was surveyed.
3. Day	6	7	Numeric RJ	I2	Day of the month workplace was surveyed.
4. Year	8	11	Numeric RJ	I4	Year work place was surveyed.
5. Site Number	12	16	Numeric RJ	I5	Unique non - zero number assigned to the work place where these interviews were conducted.
6. Form Number	17	22	Numeric RJ	I6	Survey form number which contains raw survey data.
7. Person Number	23	23	Numeric RJ	I1	Number of person being interviewed. This corresponds to the column number on the interview form.
8. Time Began	24	28	Numeric RJ	I5	Time interview began. Military time
9. Time Ended	29	33	Numeric RJ	I5	Time interview ended. Military time
10. Person Interviewed	34	35	Numeric RJ	I2	Code indicating if person being interviewed is an employee or a visitor. 1 - Employee, 2 - Visitor
11. Residence	36	95	Alphanum. LJ	A60	Name of city, county or country where person lives.
12. Residence Code	96	97	Numeric RJ	I2	Code indicating if residence is located inside the study area the work place is located. 1 - Yes, 2 - No, 98 - Unknown, 99 - Refused
13. Home Entry Facility	98	157	Alphanum. LJ	A60	If person does not live in the study area the work place is located, this field should contain the name of the street/highway/bridge the person was on when they entered the study area the work place is located. If person stayed over night, this field should be blank. Note that airport is a valid entry.
14. Home Entry Zone	158	162	Numeric RJ	I5	Leave blank - to be completed by TxDOT or TTI. Zone number associated with the street/highway/bridge person was on when they entered the study area the work place is located. If person lives in study area, this field should be blank.
15. Home Address	163	222	Alphanum. LJ	A60	Address where respondent lives. If person gives nearest intersecting streets, both street names are listed here.
16. Home City	223	252	Alphanum. LJ	A30	City where respondent lives.
17. Home State	253	267	Alphanum. LJ	A15	State where respondent lives.
18. Home Zip	268	272	Numeric RJ	I5	Zip code where respondent lives.
19. Home County	273	274	Numeric RJ	I2	Code indicating county where respondent's home is. 1 - Brazos County, 96 - Other (enter name of county in next field), 98 - Unknown, 99 - Refused
20. Home - Other County	275	304	Alphanum. LJ	A30	If county location is coded as other, this field should contain the name of the county where location is.
21. Home Study Area	305	306	Alphanum. LJ	A2	Code indicating study area in which home address is located. Use 'B' to indicate BCS/Brazos County study area. If home address is outside the study area being surveyed but within Texas, this field should be coded 'TX'. If location is outside Texas, 'XX' should be coded in this field.
22. Home Zone	307	311	Numeric RJ	I5	Leave blank - to be completed by TxDOT or TTI. Zone number of home address. If in the study area being surveyed but location unknown, it should be coded 88888. Locations in Mexico should be coded 77777 and addresses outside of the study area being surveyed, but within Texas should be coded using the Statewide Zone System. Unknown locations outside of the study area being surveyed but within the state of Texas should be coded 66666. Addresses outside of Texas and Mexico should be coded using 99999.

BCS Non-Free Standing Work Place Intercept Survey, Form C Format – Continued.

23. Home Longitude	312	321	Numeric RJ	F10.6	Longitude of home address. If within the study area being surveyed, but unknown it should be coded 888.888888. If outside the study area being surveyed but within Texas and unknown it should be coded as 666.666666. Locations in Mexico should be coded 777.777777 and addresses outside of Texas and Mexico should be coded 999.999999.
24. Home Latitude	322	331	Numeric RJ	F10.6	Latitude of home address. If within the study area being surveyed, but unknown it should be coded 888.888888. If outside the study area being surveyed but within Texas and unknown it should be coded as 666.666666. Locations in Mexico should be coded 777.777777 and addresses outside of Texas and Mexico should be coded 999.999999.
25. Origin Code	332	333	Numeric RJ	I2	Code indicating origin of trip. 1 - Home, 2 - Other
26. Origin Address	334	393	Alphanum. LJ	A60	Origin address. If person gives nearest intersecting streets, both street names are listed here.
27. Origin City	394	423	Alphanum. LJ	A30	Origin city.
28. Origin State	424	438	Alphanum. LJ	A15	Origin state.
29. Origin Zip	439	443	Numeric RJ	I5	Origin zip code.
30. Origin County	444	446	Numeric RJ	I3	Code indicating county where trip originated. 1 - Brazos County, 96 - Other (enter name of county in next field), 98 - Unknown, 99 - Refused
31. Other Origin County	447	476	Alphanum. LJ	A30	If county origin/location is coded as "other", this field contains the name of the county or location.
32. Origin Study Area	477	478	Alphanum. LJ	A2	Code indicating study area in which trip origin is located. Use 'B' to indicate BCS/Brazos County study area. If trip origin is outside the study area being surveyed but within Texas, this field should be coded 'TX'. If location is outside Texas, 'XX' should be coded in this field.
33. Origin Zone	479	483	Numeric RJ	I5	Leave blank - to be completed by TxDOT or TTI. Zone where trip originated. Locations in Mexico should be coded 77777. Locations outside of these study areas, but within Texas should be coded to the state zone system. Unknown zone numbers in the study area the work place is located should be coded as 88888. Unknown zone numbers outside of the study area the work place is located but within Texas should be coded as 66666. Locations outside Texas and not in Mexico should be coded as 99999.
34. Origin Longitude	484	493	Numeric RJ	F10.6	Longitude of location trip originated from. If location is in Mexico, this should be coded 777.777777. If location is outside Texas, this should be coded 999.999999. If unknown but in the study area the work place is located, it should be coded 888.888888. If unknown but in Texas, it should be coded as 666.666666.
35. Origin Latitude	494	503	Numeric RJ	F10.6	Latitude of location trip originated from. If location is in Mexico, this should be coded 777.777777. If location is outside Texas, this should be coded 999.999999. If unknown but in the study area the work place is located, it should be coded 888.888888. If unknown but in Texas, it should be coded as 666.666666.
36. Entry Facility	504	563	Alphanum. LJ	A60	If origin is outside the study area the work place is located in, this field should contain the name of the bridge, street, or highway used to enter the study area.
37. Entry Study Area	564	565	Alphanum. LJ	A2	If origin is outside of the study area, this field should contain a code indicating the study area where the bridge, street, or highway used to enter is located. Use 'B' to indicate BCS/Brazos County study area.

BCS Non-Free Standing Work Place Intercept Survey, Form C Format – Continued.

38. Entry External Zone	566	570	Numeric RJ	I5	Leave blank - to be completed by TxDOT or TTI. If origin is outside the study area in which the work place is located, this field should contain the external station number associated with the bridge, street, or highway used to enter the study area.
39. Arrival Hour	571	573	Numeric RJ	I3	Hour person arrived at this site. This hour should be in terms of military time.
40. Arrival Minute	574	576	Numeric RJ	I3	Minute person arrived at this site.
41. Mode	577	578	Numeric RJ	I2	Code indicating mode of travel to this location. See definitions below.
42. Other Mode	579	608	Alphanum. LJ	A30	If mode is coded "other", this field should contain a description of the mode given.
43. Number Persons	609	610	Numeric RJ	I2	If car/truck/van, this is the number of persons in the vehicle including the person being interviewed. This field is blank for all other modes.
44. Fare	611	616	Numeric RJ	F6.2	If mode of travel was bus, this is the fare paid.
45. Trip Purpose	617	618	Numeric RJ	I2	Code indicating purpose of trip. See code definitions below.
46. Other Purpose	619	648	Alphanum. LJ	A30	If purpose is coded as "other", this contains description of purpose given.
47. First Store	649	650	Numeric RJ	I2	Code indicating if this store/work place is the first visited in the location since arriving. 1 - Yes, 2 - No, 98 - Unknown, 99 - Refused
48. Number Visited	651	652	Numeric RJ	I2	Number of stores/work places visited in this location including this establishment.
49. More Visits	653	654	Numeric RJ	I2	Number of additional stores/work places in this location person plans on visiting during this trip.
50. Depart Destination	655	656	Numeric RJ	I2	Code indicating destination when person departs from this site. 1 - Home, 2 - Other
51. Destination Address	657	716	Alphanum. LJ	A60	Destination address or cross streets.
52. Destination City	717	746	Alphanum. LJ	A30	Destination city.
53. Destination State	747	761	Alphanum. LJ	A15	Destination state.
54. Destination Zip	762	766	Numeric RJ	I5	Destination zip code.
55. Destination County	767	769	Numeric RJ	I3	Code indicating county of trip destination. 1 - Brazos County, 96 - Other (enter name of county in next field), 98 - Unknown, 99 - Refused
56. Other Destination County	770	799	Alphanum. LJ	A30	If county destination/location is coded as "other", this field contains the name of the county or location.
57. Destination Study Area	800	801	Alphanum. LJ	A2	Code indicating study area of trip destination. Use 'B' to indicate BCS/Brazos County study area. If trip destination is outside the study area being surveyed but within Texas, this field should be coded 'TX'. If location is outside Texas, 'XX' should be coded in this field.
58. Destination Zone	802	806	Numeric RJ	I5	Leave blank - to be completed by TxDOT or TTI. Zone where individual is going when they leave this location. Locations in Mexico should be coded 77777. Locations not in a study area county, but within Texas should be coded to the state zone system. Unknown zone numbers in the study area the work place is located should be coded as 88888. Unknown zone numbers not in the study area the work place is located but within Texas should be coded as 66666. Locations outside Texas and not in Mexico should be coded as 99999.

BCS Non-Free Standing Work Place Intercept Survey, Form C Format – Continued.

59. Destination Longitude	807	816	Numeric RJ	F10.6	Longitude of destination location. If location is in Mexico, this should be coded 777.777777. If location
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60. Destination Latitude	817	826	Numeric RJ	F10.6	is outside Texas, this should be coded 999.999999. If unknown but in study area the work place is located in, it should be coded 888.888888. If unknown but in Texas, it should be coded as 666.666666. Latitude of destination location. If address is in Mexico, this should be coded 777.777777. If address is outside Texas, this should be coded 999.999999. If unknown but in study area the work place is located in, it should be coded 888.888888. If unknown but in Texas, it should be coded as 666.666666.
61. Exit Facility	827	886	Alphanum. LJ	A60	If destination is outside of the study area the work place is located in, this field should contain the name of the bridge, street, or highway used to leave the study area.
62. Exit Study Area	887	888	Alphanum. LJ	A2	If destination is outside of the study area, this field should contain a code indicating the study area where the bridge, street, or highway used to exit is located. Use 'B' to indicate BCS/Brazos County study area. Leave blank - to be completed by TxDOT or TTI. If destination is outside the study area the work place is located in, this field should contain the external station number associated with the bridge, street, or highway used to exit the study area.
63. Exit External Zone	889	893	Numeric RJ	I5	Code indicating frequency of travel to Austin - San Antonio. See options below.
64. Travel to Austin - San Antonio	894	895	Numeric RJ	I2	Code indicating frequency of travel to Dallas - Ft. Worth. See options below.
65. Travel to Dallas - Ft. Worth	896	897	Numeric RJ	I2	Code indicating frequency of travel to Houston. See options below.
66. Travel to Houston	898	899	Numeric RJ	I2	Code indicating whether respondent would use passenger rail service to Dallas - Ft. Worth, Austin - San Antonio or Houston. 1 - Yes, 2 - No, 3 - Possibly
67. Passenger Rail to Dallas - Ft. Worth, Austin - San Antonio or Houston	900	901	Numeric RJ	I2	

41. MODE OF TRANSPORTATION CODES

- 1 - Driver (car/truck/van)
- 2 - Passenger (car/truck/van)
- 3 - Walk
- 4 - Bicycle
- 5 - Transit Bus
- 6 - School Bus
- 7 - Taxi/Limo
- 8 - Commercial Cargo Transport Vehicle
- 9 - Commercial Service Vehicle
- 10 - Motorcycle
- 96 - Other
- 99 - Refused

45. TRIP PURPOSE CODES

- 1 - Return Home
- 2 - Work Related
- 3 - School Related
- 4 - Social/Recreational/Visit
- 5 - Shop
- 6 - Eat Out
- 7 - Personal Business
- 8 - Pick Up/Drop Off Passenger
- 9 - Change Travel Mode
- 10 - Delivery - Pick Up/Drop Off
- 96 - Other
- 99 - Refused

64,65,66. FREQUENCY OF TRAVEL OPTIONS

- 1 - Never
- 2 - 1 to 2 times per year
- 3 - 1 to 2 times every 6 months
- 4 - 1 to 2 times every 3 months
- 5 - 1 or more times every month
- 6 - 1 or more times every week
- 99 - Refused

**Bryan-College Station Work Place and Special Generator
Commercial Vehicle Driver Intercept Survey, Form D Format**

This file contains the travel data for commercial vehicles surveyed at work places and special generators, using Form D, Intercept Travel Survey. The data are in an ASCII data file format.

FIELD COLUMNS

<u>Item</u>	<u>Begin</u>	<u>End</u>	<u>Type</u>	<u>Format</u>	<u>Description</u>
1. Record Type	1	2	Numeric RJ	I2	Code which indicates the type of record, here it should be CV.
2. Month	3	4	Numeric RJ	I2	Month workplace was surveyed.
3. Day	5	6	Numeric RJ	I2	Day of the month workplace was surveyed.
4. Year	7	10	Numeric RJ	I4	Year work place was surveyed.
5. Site Number	11	15	Numeric RJ	I5	Non - zero number assigned to the workplace.
6. Interviewer	16	75	Alphanum. LJ	A60	Name of person conducting survey interview.
7. Form Number	76	82	Numeric RJ	I7	Number of survey form.
8. Truck Number	83	84	Numeric RJ	I2	Truck number surveyed. This should correspond to the column number of the survey form used to collect the data.
9. Time Began	85	89	Numeric RJ	I5	Time interview began. Military time
10. Time Ended	90	94	Numeric RJ	I5	Time interview ended. Military time
11. Occupancy	95	96	Numeric RJ	I2	Number of people in vehicle.
12. Vehicle Classification	97	98	Numeric RJ	I2	Code indicating the classification of the vehicle. See below for code descriptions.
13. Other Classification	99	128	Alphanum. LJ	A30	If vehicle classification is coded as "other", this field should contain the description recorded on the survey form for vehicle.
14. Type of Vehicle	129	130	Numeric RJ	I2	Code indicating type of commercial vehicle. Use 1 for cargo transport vehicle and 2 for service vehicle (i.e. all others besides cargo transport).
15. Delivery Cargo	131	132	Numeric RJ	I2	Cargo being delivered to work place. See code definitions below. If no cargo is being delivered, code 20 should be entered.
16. Unclassified Delivery Cargo	133	192	Alphanum. LJ	A60	If delivery cargo is coded as unclassified (#19) in the previous field, this field should contain the name of the cargo being delivered.
17. Delivery Cargo Weight	193	199	Numeric RJ	I7	Weight in pounds of cargo being delivered.
18. Pick - up Cargo	200	201	Numeric RJ	I2	Cargo being picked up at work place. See code definitions below. If no cargo is being picked up,code 20 should be entered.
19. Unclassified Pick Up Cargo	202	261	Alphanum. LJ	A60	If pick up cargo is coded as unclassified (#19) in the previous field, this field should contain the name of the cargo being picked up.
20. Pick Up Cargo Weight	262	268	Numeric RJ	I7	Weight in pounds of cargo being picked up.
21. Trip Purpose	269	270	Numeric RJ	I2	Purpose of trip. See code descriptions below.
22. Other Trip Purpose	271	300	Alphanum. LJ	A30	If trip purpose is coded as "other", this is a description of that purpose.
23. Origin Type of Place	301	302	Numeric RJ	I2	Code indicating type of place at origin of trip. See type of place codes below.
24. Other Origin Type of Place	303	332	Alphanum. LJ	A30	If Origin Type of Place is coded as 96 - Other, this field contains a description of the type of place.
25. Origin Street Address	333	392	Alphanum. LJ	A60	Street address of last place person got into vehicle before traveling to this workplace.
26. Origin City	393	422	Alphanum. LJ	A30	Origin city.
27. Origin State	423	437	Alphanum. LJ	A15	Origin state.
28. Origin Zip	438	442	Numeric RJ	I5	Origin zip code.
29. County of Origin	443	444	Numeric RJ	I2	Code indicating county where origin of trip is located. See code definitions below.
30. Other Origin County	445	474	Alphanum. LJ	A30	If county of origin is coded as "other", this field contains the name of the county or location.

BCS Work Place and Special Generator Commercial Vehicle Driver Intercept Survey, Form D Format – Continued.

31. Origin Study Area	475	476	Alphanum. LJ	A2	Code indicating study area in which trip origin is located. Use 'B' to indicate BCS/Brazos County study area. If trip origin is outside the study area being surveyed but within Texas, this field should be coded 'TX'. If location is outside Texas, 'XX' should be coded in this field.
32. Origin Zone	477	481	Numeric RJ	I5	Leave blank - to be completed by TxDOT or TTI. Zone where trip originated. Locations in Mexico should be coded 77777. Locations outside of these study areas, but within Texas should be coded to the state zone system. Unknown zone numbers in the study area the work place is located should be coded as 88888. Unknown zone numbers outside of the study area the work place is located but within Texas should be coded as 66666. Locations outside Texas and not in Mexico should be coded as 99999.
33. Origin Longitude	482	491	Numeric RJ	F10.6	Longitude of location trip originated from. If location is in Mexico, this should be coded 777.777777. If location is outside Texas, this should be coded 999.999999. If unknown but in study area, it should be coded 888.888888. If unknown but in Texas, it should be coded as 666.666666.
34. Origin Latitude	492	501	Numeric RJ	F10.6	Latitude of location trip originated from. If location is in Mexico, this should be coded 777.777777. If location is outside Texas, this should be coded 999.999999. If unknown but in study area, it should be coded 888.888888. If unknown but in Texas, it should be coded as 666.666666.
35. Entry Facility	502	561	Alphanum. LJ	A60	If origin is outside of the study area, this field should contain the name of the bridge, street, or highway used to enter the BCS/Brazos County study area based on location being surveyed.
36. Entry Study Area	562	563	Alphanum. LJ	A2	If origin is outside of the study area, this field should contain a code indicating the study area where the bridge, street, or highway used to enter is located. Use 'B' to indicate BCS/Brazos County study area.
37. Entry External Zone	564	568	Numeric RJ	I5	Leave blank - to be completed by TxDOT or TTI. If origin is outside the study area, this field should contain the external station number associated with the bridge, street, or highway used to enter the BCS/Brazos County study area.
38. Origin Purpose	569	570	Numeric RJ	I2	Purpose for being at origin address where this trip originated. See code definitions below.
39. Other Origin Purpose	571	600	Alphanum. LJ	A30	If the origin purpose is coded as "other", this is a description of that purpose.
40. Hour Departed	601	603	Numeric RJ	I3	Hour vehicle departed from origin address. This time should be in military time.
41. Minute Departed	604	606	Numeric RJ	I3	Minute vehicle departed from origin address.
42. Destination Type of Place	607	608	Numeric RJ	I2	Type of place at destination. See type of place codes.
43. Other Destination Type of Place	609	638	Alphanum. LJ	A30	If Destination Type of Place is coded as 96 - Other, this field contains a description of the type of place.
44. Destination Street Address	639	698	Alphanum. LJ	A60	Street address of location vehicle will be going when it leaves this workplace.
45. Destination City	699	728	Alphanum. LJ	A30	Destination city.
46. Destination State	729	743	Alphanum. LJ	A15	Destination state.
47. Destination Zip	744	748	Numeric RJ	I5	Destination zip code.
48. Destination County	749	750	Numeric RJ	I2	Code indicating county of trip destination. See code definitions below.
49. Other Destination County	751	780	Alphanum. LJ	A30	If county of destination is coded as "other", this field contains the name of the county or location.
50. Destination Study Area	781	782	Alphanum. LJ	A2	Code indicating study area of trip destination. Use 'B' to indicate BCS/Brazos County study area. If trip destination is outside the study area being surveyed but within Texas, this field should be coded 'TX'. If location is outside Texas, 'XX' should be coded in this field.

BCS Work Place and Special Generator Commercial Vehicle Driver Intercept Survey, Form D Format – Continued.

51. Destination Zone	783	787	Numeric RJ	I5	Leave blank - to be completed by TxDOT or TTI. Zone where individual is going when they leave this location. Locations in Mexico should be coded 77777. Locations not in a study area county, but within Texas should be coded to the state zone system. Unknown zone numbers in the study area the work place is located should be coded as 88888. Unknown zone numbers not in the study area the work place is located but within Texas should be coded as 66666. Locations outside Texas and not in Mexico should be coded as 99999.
52. Destination Longitude	788	797	Numeric RJ	F10.6	Longitude of destination location. If location is in Mexico, this should be coded 777.777777. If location is outside Texas, this should be coded 999.999999. If unknown but in study area, it should be coded 888.888888. If unknown but in Texas, it should be coded as 666.666666.
53. Destination Latitude	798	807	Numeric RJ	F10.6	Latitude of destination location. If address is in Mexico, this should be coded 777.777777. If address is outside Texas, this should be coded 999.999999. If unknown but in study area, it should be coded 888.888888. If unknown but in Texas, it should be coded as 666.666666.
54. Exit Facility	808	867	Alphanum. LJ	A60	If destination is outside the study area, this field should contain the name of the bridge, street, or highway used to leave the BCS/Brazos County study area based on location being surveyed.
55. Exit Study Area	868	869	Alphanum. LJ	A2	If destination is outside of the study area, this field should contain a code indicating the study area where the bridge, street, or highway used to exit is located. Use 'B' to indicate BCS/Brazos County study area.
56. Exit External Zone	870	874	Numeric RJ	I5	Leave blank - to be completed by TxDOT or TTI. If destination is outside the study area, this field should contain the external station number associated with the bridge, street, or highway used to leave the BCS/Brazos County study area.
57. Destination Purpose	875	876	Numeric RJ	I2	Purpose for traveling to the next destination. See below for code definitions.
58. Other Destination Purpose	877	906	Alphanum. LJ	A30	If the destination purpose is coded as "other", this is a description of that purpose.

12. VEHICLE CLASSIFICATION CODES

- 1 - Passenger Car
- 2 - Pick - up
- 3 - Van (cargo or mini)
- 4 - Sport Utility Vehicle (SUV)
- 5 - Single Unit 2 - axle (6 wheels)
- 6 - Single Unit 3 - axle (10 wheels)
- 7 - Single Unit 4 - axle (14 wheels)
- 8 - Semi (tractor - trailer combination)
- 96 - Other

29., 48. COUNTY CODES

- 1 - Brazos
- 96 - Other
- 98 - Unknown
- 99 - Refused

21. TRIP PURPOSE - CV OPTIONS

- 1 - Base Location/ Return to Base Location
- 2 - Vehicle Maintenance (fuel, oil, etc)
- 3 - Driver Needs (lunch, etc)
- 4 - Delivery of Cargo
- 5 - Pick up Cargo
- 6 - Deliver and Pick up Cargo
- 7 - Government Service
- 8 - Installation/Maintenance/Repair Service
- 9 - Sales/Professional Service
- 96 - Other Cargo or Service Activity (specify)
- 99 - Refused

BCS Work Place and Special Generator Commercial Vehicle Driver Intercept Survey, Form D Format – Continued.

23.42.TYPE OF PLACE CODES

- 1 - Office Building
- 2 - Retail/Shopping
- 3 - Industrial/Manufacturing
- 4 - Medical/Hospital
- 5 - Educational (12th grade or less)

- 6 - Educational (College, Trade, etc.)
- 7 - Government Office/Building
- 8 - Residential
- 9 - Airport
- 10 - Intermodal Facility
- 11 - Warehouse

- 12 - Distribution Center
- 13 - Construction Site
- 96 - Other (specify)
- 99 - Refused

15, 18.VEHICLE CARGO CODES

- 1 - Farm Products
- 2 - Forest Products
- 3 - Marine Products
- 4 - Metals and Minerals
- 5 - Food, Health, and Beauty Products
- 6 - Tobacco Products

- 7 - Textiles
- 8 - Wood Products
- 9 - Printed Matter
- 10 - Chemical Products
- 11 - Refined Petroleum or Coal Products

- 12 - Rubber, Plastic, and Styrofoam Products
- 13 - Clay, Concrete, Glass, or Stone
- 14 - Manufactured Goods/Equip.
- 15 - Wastes
- 16 - Miscellaneous Shipments
- 17 - Hazardous Materials

- 18 - Transportation
- 19 - Empty
- 20 - No cargo delivery/pick up
- 96 - Other - Unclassified Cargo
- 98 - Unknown

BCS University/ College Special Generator Intercept Survey, Form B Format

This file contains the travel data for employees and visitors surveyed at the special generator using Form B, Special Generator College Intercept Travel Survey. The data are in an ASCII data file format.

FIELD COLUMNS

<u>Item</u>	<u>Begin</u>	<u>End</u>	<u>Type</u>	<u>Format</u>	<u>Description</u>
1. Record Type	1	3	Alphanum. LJ	A3	Code which indicates the type of record. Here it should be SU.
2. Month	4	5	Numeric RJ	I2	Month workplace was surveyed.
3. Day	6	7	Numeric RJ	I2	Day of the month workplace was surveyed.
4. Year	8	11	Numeric RJ	I4	Year work place was surveyed.
5. Name of Generator	12	61	Alphanum. LJ	A50	Name of special generator that was surveyed.
6. Campus Location	62	111	Alphanum. LJ	A50	Location on campus where interviews are being conducted.
7. Site Number	112	116	Numeric RJ	I5	Unique non - zero number assigned to the university where these interviews were conducted.
8. Form Number	117	122	Numeric RJ	I6	Survey form number which contains raw survey data.
9. Person Number	123	123	Numeric RJ	I1	Number of person being interviewed. This corresponds to the column number on the interview form.
10. Time Began	124	128	Numeric RJ	I5	Time interview began. Military time
11. Time Ended	129	133	Numeric RJ	I5	Time interview ended. Military time
12. Person Interviewed	134	135	Numeric RJ	I2	Code indicating if person being interviewed is a student, employee or a visitor. 1 - Student, 2 - Employee, 3 - Visitor
13. Campus Resident	136	137	Numeric RJ	I2	Code indicating if person lives on campus. 1 - Yes, 2 - No
14. Residence	138	197	Alphanum. LJ	A60	Name of city, county or country where person lives.
15. Residence Code	198	199	Numeric RJ	I2	Code indicating if residence is located inside the study area the generator is located. 1 - Yes, 2 - No, 98 - Unknown, 99 - Refused
16. Home Entry Facility	200	259	Alphanum. LJ	A60	If person does not live in the study area the college/university is located, this field should contain the name of the street/highway/bridge the person was on when they entered the study area the work place is located. If person stayed over night, this field should be blank. Note that airport is a valid entry.
17. Home Entry Zone	260	264	Numeric RJ	I5	Leave blank - to be completed by TxDOT or TTI. Zone number associated with the street/highway/bridge person was on when they entered the study area the work place is located. If person lives in study area, this field should be blank.
18. Home Address	265	324	Alphanum. LJ	A60	Address where respondent lives. If person gives nearest intersecting streets, both street names are listed here.
19. Home City	325	354	Alphanum. LJ	A30	City where respondent lives.
20. Home State	355	369	Alphanum. LJ	A15	State where respondent lives.
21. Home Zip	370	374	Numeric RJ	I5	Zip code where respondent lives.
22. Home County	375	376	Numeric RJ	I2	Code indicating county where respondent's home is. 1 - Brazos County, 96 - Other (enter name of county in next field), 98 - Unknown, 99 - Refused
23. Home - Other County	377	406	Alphanum. LJ	A30	If county location is coded as other, this field should contain the name of the county where location is.
24. Home Study Area	407	408	Alphanum. LJ	A2	Code indicating study area in which home address is located. Use 'B' to indicate BCS/Brazos County study area. If home address is outside the study area being surveyed but within Texas, this field should be coded 'TX'. If location is outside Texas, 'XX' should be coded in this field.

BCS University/College Special Generator Intercept Survey, Form B Format – Continued.

25. Home Zone	409	413	Numeric RJ	I5	Leave blank - to be completed by TxDOT or TTI. Zone number of home address. If in the study area being surveyed but location unknown, it should be coded 888888. Locations in Mexico should be coded 77777 and addresses outside of the study area being surveyed, but within Texas should be coded using the Statewide Zone System. Unknown locations outside of the study area being surveyed but within the state of Texas should be coded 66666. Addresses outside of Texas and Mexico should be coded using 99999.
26. Home Longitude	414	423	Numeric RJ	F10.6	Longitude of home address. If within the study area being surveyed, but unknown it should be coded 888.888888. If outside the study area being surveyed but within Texas and unknown it should be coded as 666.666666. Locations in Mexico should be coded 777.777777 and addresses outside of Texas and Mexico should be coded 999.999999.
27. Home Latitude	424	433	Numeric RJ	F10.6	Latitude of home address. If within the study area being surveyed, but unknown it should be coded 888.888888. If outside the study area being surveyed but within Texas and unknown it should be coded as 666.666666. Locations in Mexico should be coded 777.777777 and addresses outside of Texas and Mexico should be coded 999.999999.
28. Origin Code	434	435	Numeric RJ	I2	Code indicating origin of trip. 1 - Home, 2 - Other
29. Origin Address	436	495	Alphanum. LJ	A60	Origin address. If person gives nearest intersecting streets, both street names are listed here.
30. Origin City	496	525	Alphanum. LJ	A30	Origin city.
31. Origin State	526	540	Alphanum. LJ	A15	Origin state.
32. Origin Zip	541	545	Numeric RJ	I5	Origin zip code.
33. Origin County	546	548	Numeric RJ	I3	Code indicating county where trip originated. 1 - Brazos County, 96 - Other (enter name of county in next field), 98 - Unknown, 99 - Refused
34. Other Origin County	549	578	Alphanum. LJ	A30	If county origin/location is coded as "other", this field contains the name of the county or location.
35. Origin Study Area	579	580	Alphanum. LJ	A2	Code indicating study area in which trip origin is located. Use 'B' to indicate BCS/Brazos County study area. If trip origin is outside the study area being surveyed but within Texas, this field should be coded 'TX'. If location is outside Texas, 'XX' should be coded in this field.
36. Origin Zone	581	585	Numeric RJ	I5	Leave blank - to be completed by TxDOT or TTI. Zone where trip originated. Locations in Mexico should be coded 77777. Locations outside of these study areas, but within Texas should be coded to the state zone system. Unknown zone numbers in the study area the work place is located should be coded as 88888. Unknown zone numbers outside of the study area the work place is located but within Texas should be coded as 66666. Locations outside Texas and not in Mexico should be coded as 99999.
37. Origin Longitude	586	595	Numeric RJ	F10.6	Longitude of location trip originated from. If location is in Mexico, this should be coded 777.777777. If location is outside Texas, this should be coded 999.999999. If unknown but in the study area the work place is located, it should be coded 888.888888. If unknown but in Texas, it should be coded as 666.666666.
38. Origin Latitude	596	605	Numeric RJ	F10.6	Latitude of location trip originated from. If location is in Mexico, this should be coded 777.777777. If location is outside Texas, this should be coded 999.999999. If unknown but in the study area the work place is located, it should be coded 888.888888. If unknown but in Texas, it should be coded as 666.666666.
39. Entry Facility	606	665	Alphanum. LJ	A60	If origin is outside the study area the work place is located in, this field should contain the name of the bridge, street, or highway used to enter the study area.

BCS University/College Special Generator Intercept Survey, Form B Format – Continued.

40. Entry Study Area	666	667	Alphanum. LJ	A2	If origin is outside of the study area, this field should contain a code indicating the study area where the bridge, street, or highway used to enter is located. Use 'B' to indicate BCS/Brazos County study area.
41. Entry External Zone	668	672	Numeric RJ	I5	Leave blank - to be completed by TxDOT or TTI. If origin is outside the study area in which the work place is located, this field should contain the external station number associated with the bridge, street, or highway used to enter the study area.
42. Arrival Hour	673	675	Numeric RJ	I3	Hour person arrived at this site. This hour should be in terms of military time.
43. Arrival Minute	676	678	Numeric RJ	I3	Minute person arrived at this site.
44. Arrival Mode	679	680	Numeric RJ	I2	Code indicating mode of travel to this location. See definitions below.
45. Other Arrival Mode	681	710	Alphanum. LJ	A30	If mode is coded "other", this field should contain a description of the mode given.
46. Number Persons	711	712	Numeric RJ	I2	If car/truck/van, this is the number of persons in the vehicle including the person being interviewed. This field is blank for all other modes.
47. Fare	713	718	Numeric RJ	F6.2	If mode of travel was bus, this is the fare paid.
48. Park Location	719	720	Numeric RJ	I2	Code indicating where person parked. See code definitions below.
49. Other Parking	721	770	Alphanum. LJ	A50	If park location is coded as other, this field contains description of where person parked.
50. Trip Purpose	771	772	Numeric RJ	I2	Code indicating purpose of trip. See code definitions below.
51. Other Purpose	773	802	Alphanum. LJ	A30	If purpose is coded as "other", this contains description of purpose given.
52. Departure Mode	803	804	Numeric RJ	I2	Code indicating mode of departure from this location. See definitions below.
53. Departure Mode Other	805	834	Alphanum. LJ	A30	If departure mode is coded "other", this field should contain a description of the mode given.
54. Depart Destination	835	836	Numeric RJ	I2	Code indicating destination when person departs from this site. 1 - Home, 2 - Other
55. Destination Address	837	896	Alphanum. LJ	A60	Destination address or cross streets.
56. Destination City	897	926	Alphanum. LJ	A30	Destination city.
57. Destination State	927	941	Alphanum. LJ	A15	Destination state.
58. Destination Zip	942	946	Numeric RJ	I5	Destination zip code.
59. Destination County	947	949	Numeric RJ	I3	Code indicating county of trip destination. 1 - Brazos County, 96 - Other (enter name of county in next field), 98 - Unknown, 99 - Refused
60. Other Destination County	950	979	Alphanum. LJ	A30	If county destination/location is coded as "other", this field contains the name of the county or location.
61. Destination Study Area	980	981	Alphanum. LJ	A2	Code indicating study area of trip destination. Use 'B' to indicate BCS/Brazos County study area. If trip destination is outside the study area being surveyed but within Texas, this field should be coded 'TX'. If location is outside Texas, 'XX' should be coded in this field.
62. Destination Zone	982	986	Numeric RJ	I5	Leave blank - to be completed by TxDOT or TTI. Zone where individual is going when they leave this location. Locations in Mexico should be coded 77777. Locations not in a study area county, but within Texas should be coded to the state zone system. Unknown zone numbers in the study area the work place is located should be coded as 88888. Unknown zone numbers not in the study area the work place is located but within Texas should be coded as 66666. Locations outside Texas and not in Mexico should be coded as 99999.

63. Destination Longitude	987	996	Numeric RJ	F10.6	Longitude of destination location. If location is in Mexico, this should be coded 777.777777. If location is outside Texas, this should be coded 999.999999. If unknown but in study area the work place is located in, it should be coded 888.888888. If unknown but in Texas, it should be coded as 666.666666.
64. Destination Latitude	997	1006	Numeric RJ	F10.6	Latitude of destination location. If address is in Mexico, this should be coded 777.777777. If address is outside Texas, this should be coded 999.999999. If unknown but in study area the work place is located in, it should be coded 888.888888. If unknown but in Texas, it should be coded as 666.666666.
65. Exit Facility	1007	1066	Alphanum. LJ	A60	If destination is outside of the study area the work place is located in, this field should contain the name of the bridge, street, or highway used to leave the study area.
66. Exit Study Area	1067	1068	Alphanum. LJ	A2	If destination is outside of the study area, this field should contain a code indicating the study area where the bridge, street, or highway used to exit is located. Use 'B' to indicate BCS/Brazos County study area.
67. Exit External Zone	1069	1073	Numeric RJ	I5	Leave blank - to be completed by TxDOT or TTI. If destination is outside the study area the work place is located in, this field should contain the external station number associated with the bridge, street, or highway used to exit the study area.
68. Travel to Austin - San Antonio	1074	1075	Numeric RJ	I2	Code indicating frequency of travel to Austin - San Antonio. See options below.
69. Travel to Dallas - Ft. Worth	1076	1077	Numeric RJ	I2	Code indicating frequency of travel to Dallas - Ft. Worth. See options below.
70. Travel to Houston	1078	1079	Numeric RJ	I2	Code indicating frequency of travel to Houston. See options below.
71. Passenger Rail to Dallas - Ft. Worth, Austin - San Antonio or Houston	1080	1081	Numeric RJ	I2	Code indicating whether respondent would use passenger rail service to Dallas - Ft. Worth, Austin - San Antonio or Houston. 1 - Yes, 2 - No, 3 - Possibly

44.52. MODE OF TRANSPORTATION CODES

- 1 - Driver (car/truck/van)
- 2 - Passenger (car/truck/van)
- 3 - Walk
- 4 - Bicycle
- 5 - Transit Bus
- 6 - Light Rail
- 7 - School Bus
- 8 - Taxi / Limo
- 9 - Commercial Cargo Transport Vehicle
- 10 - Commercial Service Vehicle
- 11 - Motorcycle
- 12 - Other
- 99 - No Response

50. TRIP PURPOSE CODES

- 1 - Return Home
- 2 - Work Related
- 3 - School
- 4 - Social / Recreational / Visit
- 5 - Shop
- 6 - Eat Out
- 7 - Personal Business
- 8 - Pick Up / Drop Off Passenger
- 9 - Change Travel Mode
- 10 - Delivery - Pick Up / Drop Off
- 11 - Other
- 99 - No Response

68.69.70. FREQUENCY OF TRAVEL OPTIONS

- 1 - Never
- 2 - 1 to 2 times per year
- 3 - 1 to 2 times every 6 months
- 4 - 1 to 2 times every 3 months
- 5 - 1 or more times every month
- 6 - 1 or more times every week
- 99 - Refused

48. PARK LOCATION CODES

- 1 - On - Campus
- 2 - Off Campus Parking Lot
- 3 - Off Campus in Street Designated Parking Spot
- 96 - Other
- 99 - Refused

BCS Hospital/Medical Center Special Generator Intercept Survey, Form B Format

This file contains the travel data for employees and visitors surveyed at special generators using Form B, Standard Special Generator Intercept Travel Survey. The data are in an ASCII data file format.

FIELD COLUMNS

<u>Item</u>	<u>Begin</u>	<u>End</u>	<u>Type</u>	<u>Format</u>	<u>Description</u>
1. Record Type	1	3	Alphanum. LJ	A3	Code which indicates the type of record. Here it should be SH.
2. Month	4	5	Numeric RJ	I2	Month workplace was surveyed.
3. Day	6	7	Numeric RJ	I2	Day of the month workplace was surveyed.
4. Year	8	11	Numeric RJ	I4	Year work place was surveyed.
5. Name of Generator	12	61	Alphanum. LJ	A50	Name of special generator that was surveyed.
6. Location of Interview	62	111	Alphanum. LJ	A50	Location in special generator where interviews were conducted.
7. Site Number	112	116	Numeric RJ	I5	Unique non - zero number assigned to the establishment where these interviews were conducted.
8. Form Number	117	122	Numeric RJ	I6	Survey form number which contains raw survey data.
9. Person Number	123	123	Numeric RJ	I1	Number of person being interviewed. This corresponds to the column number on the interview form.
10. Time Began	124	128	Numeric RJ	I5	Time interview began. Military time
11. Time Ended	129	133	Numeric RJ	I5	Time interview ended. Military time
12. Person Interviewed	134	135	Numeric RJ	I2	Code indicating if person being interviewed is an employee or a visitor. 1 - Employee, 2 - Visitor
13. Residence	136	195	Alphanum. LJ	A60	Name of city, county or country where person lives.
14. Residence Code	196	197	Numeric RJ	I2	Code indicating if residence is located inside the study area the generator is located. 1 - Yes, 2 - No, 98 - Unknown, 99 - Refused
15. Home Entry Facility	198	257	Alphanum. LJ	A60	If person does not live in the study area in which the generator is located, this field should contain the name of the street/highway/bridge the person was on when they entered the study area the work place is located. If person stayed over night, this field should be blank. Note that airport is a valid entry.
16. Home Entry Zone	258	262	Numeric RJ	I5	Leave blank - to be completed by TxDOT or TTI. Zone number associated with the street/highway/bridge person was on when they entered the study area the work place is located. If person lives in study area, this field should be blank.
17. Home Address	263	322	Alphanum. LJ	A60	Address where respondent lives. If person gives nearest intersecting streets, both street names are listed here.
18. Home City	323	352	Alphanum. LJ	A30	City where respondent lives.
19. Home State	353	367	Alphanum. LJ	A15	State where respondent lives.
20. Home Zip	368	372	Numeric RJ	I5	Zip code where respondent lives.
21. Home County	373	374	Numeric RJ	I2	Code indicating county where respondent's home is. 1 - Brazos County, 96 - Other (enter name of county in next field), 98 - Unknown, 99 - Refused
22. Home - Other County	375	404	Alphanum. LJ	A30	If county location is coded as other, this field should contain the name of the county where location is.
23. Home Study Area	405	406	Alphanum. LJ	A2	Code indicating study area in which home address is located. Use 'B' to indicate BCS/Brazos County study area. If home address is outside the study area being surveyed but within Texas, this field should be coded 'TX'. If location is outside Texas, 'XX' should be coded in this field.

BCS Hospital/Medical Center Special Generator Intercept Survey, Form B Format – Continued.

24. Home Zone	407	411	Numeric RJ	I5	Leave blank - to be completed by TxDOT or TTI. Zone number of home address. If in the study area being surveyed but location unknown, it should be coded 888888. Locations in Mexico should be coded 77777 and addresses outside of the study area being surveyed, but within Texas should be coded using the Statewide Zone System. Unknown locations outside of the study area being surveyed but within the state of Texas should be coded 66666. Addresses outside of Texas and Mexico should be coded using 99999.
25. Home Longitude	412	421	Numeric RJ	F10.6	Longitude of home address. If within the study area being surveyed, but unknown it should be coded 888.888888. If outside the study area being surveyed but within Texas and unknown it should be coded as 666.666666. Locations in Mexico should be coded 777.777777 and addresses outside of Texas and Mexico should be coded 999.999999.
26. Home Latitude	422	431	Numeric RJ	F10.6	Latitude of home address. If within the study area being surveyed, but unknown it should be coded 888.888888. If outside the study area being surveyed but within Texas and unknown it should be coded as 666.666666. Locations in Mexico should be coded 777.777777 and addresses outside of Texas and Mexico should be coded 999.999999.
27. Origin Code	432	433	Numeric RJ	I2	Code indicating origin of trip. 1 - Home, 2 - Other
28. Origin Address	434	493	Alphanum. LJ	A60	Origin address. If person gives nearest intersecting streets, both street names are listed here.
29. Origin City	494	523	Alphanum. LJ	A30	Origin city.
30. Origin State	524	538	Alphanum. LJ	A15	Origin state.
31. Origin Zip	539	543	Numeric RJ	I5	Origin zip code.
32. Origin County	544	546	Numeric RJ	I3	Code indicating county where trip originated. 1 - Brazos County, 96 - Other (enter name of county in next field), 98 - Unknown, 99 - Refused
33. Other Origin County	547	576	Alphanum. LJ	A30	If county origin/location is coded as "other", this field contains the name of the county or location.
34. Origin Study Area	577	578	Alphanum. LJ	A2	Code indicating study area in which trip origin is located. Use 'B' to indicate BCS/Brazos County study area. If trip origin is outside the study area being surveyed but within Texas, this field should be coded 'TX'. If location is outside Texas, 'XX' should be coded in this field.
35. Origin Zone	579	583	Numeric RJ	I5	Leave blank - to be completed by TxDOT or TTI. Zone where trip originated. Locations in Mexico should be coded 77777. Locations outside of these study areas, but within Texas should be coded to the state zone system. Unknown zone numbers in the study area the work place is located should be coded as 88888. Unknown zone numbers outside of the study area the work place is located but within Texas should be coded as 66666. Locations outside Texas and not in Mexico should be coded as 99999.
36. Origin Longitude	584	593	Numeric RJ	F10.6	Longitude of location trip originated from. If location is in Mexico, this should be coded 777.777777. If location is outside Texas, this should be coded 999.999999. If unknown but in the study area the work place is located, it should be coded 888.888888. If unknown but in Texas, it should be coded as 666.666666.
37. Origin Latitude	594	603	Numeric RJ	F10.6	Latitude of location trip originated from. If location is in Mexico, this should be coded 777.777777. If location is outside Texas, this should be coded 999.999999. If unknown but in the study area the work place is located, it should be coded 888.888888. If unknown but in Texas, it should be coded as 666.666666.
38. Entry Facility	604	663	Alphanum. LJ	A60	If origin is outside the study area the work place is located in, this field should contain the name of the bridge, street, or highway used to enter the study area.

BCS Hospital/Medical Center Special Generator Intercept Survey, Form B Format – Continued.

39. Entry Study Area	664	665	Alphanum. LJ	A2	If origin is outside of the study area, this field should contain a code indicating the study area where the bridge, street, or highway used to enter is located. Use 'B' to indicate BCS/Brazos County study area.
40. Entry External Zone	666	670	Numeric RJ	I5	Leave blank - to be completed by TxDOT or TTI. If origin is outside the study area in which the work place is located, this field should contain the external station number associated with the bridge, street, or highway used to enter the study area.
41. Arrival Hour	671	673	Numeric RJ	I3	Hour person arrived at this site. This hour should be in terms of military time.
42. Arrival Minute	674	676	Numeric RJ	I3	Minute person arrived at this site.
43. Arrival Mode	677	678	Numeric RJ	I2	Code indicating mode of travel to this location. See definitions below.
44. Other Arrival Mode	679	708	Alphanum. LJ	A30	If mode is coded "other", this field should contain a description of the mode given.
45. Number Persons	709	710	Numeric RJ	I2	If car/truck/van, this is the number of persons in the vehicle including the person being interviewed. This field is blank for all other modes.
46. Fare	711	716	Numeric RJ	F6.2	If mode of travel was bus, this is the fare paid.
47. Trip Purpose	717	718	Numeric RJ	I2	Code indicating purpose of trip. See code definitions below.
48. Other Purpose	719	748	Alphanum. LJ	A30	If purpose is coded as "other", this contains description of purpose given.
49. Depart Destination	749	750	Numeric RJ	I2	Code indicating destination when person departs from this site. 1 - Home, 2 - Other
50. Destination Address	751	810	Alphanum. LJ	A60	Destination address or cross streets.
51. Destination City	811	840	Alphanum. LJ	A30	Destination city.
52. Destination State	841	855	Alphanum. LJ	A15	Destination state.
53. Destination Zip	856	860	Numeric RJ	I5	Destination zip code.
54. Destination County	861	863	Numeric RJ	I3	Code indicating county of trip destination. 1 - Brazos County, 96 - Other (enter name of county in next field), 98 - Unknown, 99 - Refused
55. Other Destination County	864	893	Alphanum. LJ	A30	If county destination/location is coded as "other", this field contains the name of the county or location.
56. Destination Study Area	894	895	Alphanum. LJ	A2	Code indicating study area of trip destination. Use 'B' to indicate BCS/Brazos County study area. If trip destination is outside the study area being surveyed but within Texas, this field should be coded 'TX'. If location is outside Texas, 'XX' should be coded in this field.
57. Destination Zone	896	900	Numeric RJ	I5	Leave blank - to be completed by TxDOT or TTI. Zone where individual is going when they leave this location. Locations in Mexico should be coded 77777. Locations not in a study area county, but within Texas should be coded to the state zone system. Unknown zone numbers in the study area the work place is located should be coded as 88888. Unknown zone numbers not in the study area the work place is located but within Texas should be coded as 66666. Locations outside Texas and not in Mexico should be coded as 99999.
58. Destination Longitude	901	910	Numeric RJ	F10.6	Longitude of destination location. If location is in Mexico, this should be coded 777.777777. If location is outside Texas, this should be coded 999.999999. If unknown but in study area the work place is located in, it should be coded 888.888888. If unknown but in Texas, it should be coded as 666.666666.

BCS Hospital/Medical Center Special Generator Intercept Survey, Form B Format – Continued.

59. Destination Latitude	911	920	Numeric RJ	F10.6	Latitude of destination location. If address is in Mexico, this should be coded 777.777777. If address is outside Texas, this should be coded 999.999999. If unknown but in study area the work place is located in, it should be coded 888.888888. If unknown but in Texas, it should be coded as 666.666666.
60. Exit Facility	921	980	Alphanum. LJ	A60	If destination is outside of the study area the work place is located in, this field should contain the name of the bridge, street, or highway used to leave the study area.
61. Exit Study Area	981	982	Alphanum. LJ	A2	If destination is outside of the study area, this field should contain a code indicating the study area where the bridge, street, or highway used to exit is located. Use 'B' to indicate BCS/Brazos County study area.
62. Exit External Zone	983	987	Numeric RJ	I5	Leave blank - to be completed by TxDOT or TTI. If destination is outside the study area the work place is located in, this field should contain the external station number associated with the bridge, street, or highway used to exit the study area.
63. Travel to Austin - San Antonio	988	989	Numeric RJ	I2	Code indicating frequency of travel to Austin - San Antonio. See options below.
64. Travel to Dallas - Ft. Worth	990	991	Numeric RJ	I2	Code indicating frequency of travel to Dallas - Ft. Worth. See options below.
65. Travel to Houston	992	993	Numeric RJ	I2	Code indicating frequency of travel to Houston. See options below.
66. Passenger Rail to Dallas - Ft. Worth, Austin - San Antonio or Houston	994	995	Numeric RJ	I2	Code indicating whether respondent would use passenger rail service to Dallas - Ft. Worth, Austin - San Antonio or Houston. 1 - Yes, 2 - No, 3 - Possibly

43. MODE OF TRANSPORTATION CODES

- 1 - Driver (car/truck/van)
- 2 - Passenger (car/truck/van)
- 3 - Walk
- 4 - Bicycle
- 5 - Transit Bus
- 6 - Light Rail
- 7 - School Bus
- 8 - Taxi / Limo
- 9 - Commercial Cargo Transport Vehicle
- 10 - Commercial Service Vehicle
- 11 - Motorcycle
- 12 - Other
- 99 - No Response

47. TRIP PURPOSE CODES

- 1 - Return Home
- 2 - Work Related
- 3 - School
- 4 - Social / Recreational / Visit
- 5 - Shop
- 6 - Eat Out
- 7 - Personal Business
- 8 - Pick Up / Drop Off Passenger
- 9 - Change Travel Mode
- 10 - Delivery - Pick Up / Drop Off
- 11 - Other
- 99 - No Response

63,64,65. FREQUENCY OF TRAVEL OPTIONS

- 1 - Never
- 2 - 1 to 2 times per year
- 3 - 1 to 2 times every 6 months
- 4 - 1 to 2 times every 3 months
- 5 - 1 or more times every month
- 6 - 1 or more times every week
- 99 - Refused

48. PARK LOCATION CODES

- 1 - On - Campus
- 2 - Off Campus Parking Lot
- 3 - Off Campus in Street Designated Parking Spot
- 96 - Other
- 99 - Refused

BCS Mall/Shopping/Mixed Use Special Generator Intercept Survey, Form B Format

This file contains the travel data for employees and visitors surveyed at special generators using Form B, Standard Special Generator Intercept Travel Survey. The data are in an ASCII data file format.

FIELD COLUMNS

<u>Item</u>	<u>Begin</u>	<u>End</u>	<u>Type</u>	<u>Format</u>	<u>Description</u>
1. Record Type	1	3	Alphanum. LJ	A3	Code which indicates the type of record. Here it should be SM.
2. Month	4	5	Numeric RJ	I2	Month workplace was surveyed.
3. Day	6	7	Numeric RJ	I2	Day of the month workplace was surveyed.
4. Year	8	11	Numeric RJ	I4	Year work place was surveyed.
5. Name of Generator	12	61	Alphanum. LJ	A50	Name of special generator that was surveyed.
6. Location of Interview	62	111	Alphanum. LJ	A50	Location in special generator where interviews were conducted.
7. Site Number	112	116	Numeric RJ	I5	Unique non - zero number assigned to the establishment where these interviews were conducted.
8. Form Number	117	122	Numeric RJ	I6	Survey form number which contains raw survey data.
9. Person Number	123	123	Numeric RJ	I1	Number of person being interviewed. This corresponds to the column number on the interview form.
10. Time Began	124	128	Numeric RJ	I5	Time interview began. Military time
11. Time Ended	129	133	Numeric RJ	I5	Time interview ended. Military time
12. Person Interviewed	134	135	Numeric RJ	I2	Code indicating if person being interviewed is an employee or a visitor. 1 - Employee, 2 - Visitor
13. Residence	136	195	Alphanum. LJ	A60	Name of city, county or country where person lives.
14. Residence Code	196	197	Numeric RJ	I2	Code indicating if residence is located inside the study area the generator is located. 1 - Yes, 2 - No, 98 - Unknown, 99 - Refused
15. Home Entry Facility	198	257	Alphanum. LJ	A60	If person does not live in the study area in which the generator is located, this field should contain the name of the street/highway/bridge the person was on when they entered the study area the work place is located. If person stayed over night, this field should be blank. Note that airport is a valid entry.
16. Home Entry Zone	258	262	Numeric RJ	I5	Leave blank - to be completed by TxDOT or TTI. Zone number associated with the street/highway/bridge person was on when they entered the study area the work place is located. If person lives in study area, this field should be blank.
17. Home Address	263	322	Alphanum. LJ	A60	Address where respondent lives. If person gives nearest intersecting streets, both street names are listed here.
18. Home City	323	352	Alphanum. LJ	A30	City where respondent lives.
19. Home State	353	367	Alphanum. LJ	A15	State where respondent lives.
20. Home Zip	368	372	Numeric RJ	I5	Zip code where respondent lives.
21. Home County	373	374	Numeric RJ	I2	Code indicating county where respondent's home is. 1 - Brazos County, 96 - Other (enter name of county in next field), 98 - Unknown, 99 - Refused
22. Home - Other County	375	404	Alphanum. LJ	A30	If county location is coded as other, this field should contain the name of the county where location is.
23. Home Study Area	405	406	Alphanum. LJ	A2	Code indicating study area in which home address is located. Use 'B' to indicate BCS/Brazos County study area. If home address is outside the study area being surveyed but within Texas, this field should be coded 'TX'. If location is outside Texas, 'XX' should be coded in this field.

BCS Mall/Shopping/Mixed Use Special Generator Intercept Survey, Form B Format – Continued.

24. Home Zone	407	411	Numeric RJ	15	Leave blank - to be completed by TxDOT or TTI. Zone number of home address. If in the study area being surveyed but location unknown, it should be coded 88888. Locations in Mexico should be coded 77777 and addresses outside of the study area being surveyed, but within Texas should be coded using the Statewide Zone System. Unknown locations outside of the study area being surveyed but within the state of Texas should be coded 66666. Addresses outside of Texas and Mexico should be coded using 99999.
25. Home Longitude	412	421	Numeric RJ	F10.6	Longitude of home address. If within the study area being surveyed, but unknown it should be coded 888.888888. If outside the study area being surveyed but within Texas and unknown it should be coded as 666.666666. Locations in Mexico should be coded 777.777777 and addresses outside of Texas and Mexico should be coded 999.999999.
26. Home Latitude	422	431	Numeric RJ	F10.6	Latitude of home address. If within the study area being surveyed, but unknown it should be coded 888.888888. If outside the study area being surveyed but within Texas and unknown it should be coded as 666.666666. Locations in Mexico should be coded 777.777777 and addresses outside of Texas and Mexico should be coded 999.999999.
27. Origin Code	432	433	Numeric RJ	I2	Code indicating origin of trip. 1 - Home, 2 - Other
28. Origin Address	434	493	Alphanum. LJ	A60	Origin address. If person gives nearest intersecting streets, both street names are listed here.
29. Origin City	494	523	Alphanum. LJ	A30	Origin city.
30. Origin State	524	538	Alphanum. LJ	A15	Origin state.
31. Origin Zip	539	543	Numeric RJ	I5	Origin zip code.
32. Origin County	544	546	Numeric RJ	I3	Code indicating county where trip originated. 1 - Brazos County, 96 - Other (enter name of county in next field), 98 - Unknown, 99 - Refused
33. Other Origin County	547	576	Alphanum. LJ	A30	If county origin/location is coded as "other", this field contains the name of the county or location.
34. Origin Study Area	577	578	Alphanum. LJ	A2	Code indicating study area in which trip origin is located. Use 'B' to indicate BCS/Brazos County study area. If trip origin is outside the study area being surveyed but within Texas, this field should be coded 'TX'. If location is outside Texas, 'XX' should be coded in this field.
35. Origin Zone	579	583	Numeric RJ	I5	Leave blank - to be completed by TxDOT or TTI. Zone where trip originated. Locations in Mexico should be coded 77777. Locations outside of these study areas, but within Texas should be coded to the state zone system. Unknown zone numbers in the study area the work place is located should be coded as 88888. Unknown zone numbers outside of the study area the work place is located but within Texas should be coded as 66666. Locations outside Texas and not in Mexico should be coded as 99999.
36. Origin Longitude	584	593	Numeric RJ	F10.6	Longitude of location trip originated from. If location is in Mexico, this should be coded 777.777777. If location is outside Texas, this should be coded 999.999999. If unknown but in the study area the work place is located, it should be coded 888.888888. If unknown but in Texas, it should be coded as 666.666666.
37. Origin Latitude	594	603	Numeric RJ	F10.6	Latitude of location trip originated from. If location is in Mexico, this should be coded 777.777777. If location is outside Texas, this should be coded 999.999999. If unknown but in the study area the work place is located, it should be coded 888.888888. If unknown but in Texas, it should be coded as 666.666666.
38. Entry Facility	604	663	Alphanum. LJ	A60	If origin is outside the study area the work place is located in, this field should contain the name of the bridge, street, or highway used to enter the study area.

BCS Mall/Shopping/Mixed Use Special Generator Intercept Survey, Form B Format – Continued.

39. Entry Study Area	664	665	Alphanum. LJ	A2	If origin is outside of the study area, this field should contain a code indicating the study area where the bridge, street, or highway used to enter is located. Use 'B' to indicate BCS/Brazos County study area.
40. Entry External Zone	666	670	Numeric RJ	I5	Leave blank - to be completed by TxDOT or TTI. If origin is outside the study area in which the work place is located, this field should contain the external station number associated with the bridge, street, or highway used to enter the study area.
41. Arrival Hour	671	673	Numeric RJ	I3	Hour person arrived at this site. This hour should be in terms of military time.
42. Arrival Minute	674	676	Numeric RJ	I3	Minute person arrived at this site.
43. Arrival Mode	677	678	Numeric RJ	I2	Code indicating mode of travel to this location. See definitions below.
44. Other Arrival Mode	679	708	Alphanum. LJ	A30	If mode is coded "other", this field should contain a description of the mode given.
45. Number Persons	709	710	Numeric RJ	I2	If car/truck/van, this is the number of persons in the vehicle including the person being interviewed. This field is blank for all other modes.
46. Fare	711	716	Numeric RJ	F6.2	If mode of travel was bus, this is the fare paid.
47. Trip Purpose	717	718	Numeric RJ	I2	Code indicating purpose of trip. See code definitions below.
48. Other Purpose	719	748	Alphanum. LJ	A30	If purpose is coded as "other", this contains description of purpose given.
49. Depart Destination	749	750	Numeric RJ	I2	Code indicating destination when person departs from this site. 1 - Home, 2 - Other
50. Destination Address	751	810	Alphanum. LJ	A60	Destination address or cross streets.
51. Destination City	811	840	Alphanum. LJ	A30	Destination city.
52. Destination State	841	855	Alphanum. LJ	A15	Destination state.
53. Destination Zip	856	860	Numeric RJ	I5	Destination zip code.
54. Destination County	861	863	Numeric RJ	I3	Code indicating county of trip destination. 1 - Brazos County, 96 - Other (enter name of county in next field), 98 - Unknown, 99 - Refused
55. Other Destination County	864	893	Alphanum. LJ	A30	If county destination/location is coded as "other", this field contains the name of the county or location.
56. Destination Study Area	894	895	Alphanum. LJ	A2	Code indicating study area of trip destination. Use 'B' to indicate BCS/Brazos County study area. If trip destination is outside the study area being surveyed but within Texas, this field should be coded 'TX'. If location is outside Texas, 'XX' should be coded in this field.
57. Destination Zone	896	900	Numeric RJ	I5	Leave blank - to be completed by TxDOT or TTI. Zone where individual is going when they leave this location. Locations in Mexico should be coded 77777. Locations not in a study area county, but within Texas should be coded to the state zone system. Unknown zone numbers in the study area the work place is located should be coded as 88888. Unknown zone numbers not in the study area the work place is located but within Texas should be coded as 66666. Locations outside Texas and not in Mexico should be coded as 99999.
58. Destination Longitude	901	910	Numeric RJ	F10.6	Longitude of destination location. If location is in Mexico, this should be coded 777.777777. If location is outside Texas, this should be coded 999.999999. If unknown but in study area the work place is located in, it should be coded 888.888888. If unknown but in Texas, it should be coded as 666.666666.

BCS Mall/Shopping/Mixed Use Special Generator Intercept Survey, Form B Format – Continued.

59. Destination Latitude	911	920	Numeric RJ	F10.6	Latitude of destination location. If address is in Mexico, this should be coded 777.777777. If address is outside Texas, this should be coded 999.999999. If unknown but in study area the work place is located in, it should be coded 888.888888. If unknown but in Texas, it should be coded as 666.666666.
60. Exit Facility	921	980	Alphanum. LJ	A60	If destination is outside of the study area the work place is located in, this field should contain the name of the bridge, street, or highway used to leave the study area.
61. Exit Study Area	981	982	Alphanum. LJ	A2	If destination is outside of the study area, this field should contain a code indicating the study area where the bridge, street, or highway used to exit is located. Use 'B' to indicate BCS/Brazos County study area.
62. Exit External Zone	983	987	Numeric RJ	I5	Leave blank - to be completed by TxDOT or TTI. If destination is outside the study area the work place is located in, this field should contain the external station number associated with the bridge, street, or highway used to exit the study area.
63. Travel to Austin - San Antonio	988	989	Numeric RJ	I2	Code indicating frequency of travel to Austin - San Antonio. See options below.
64. Travel to Dallas - Ft. Worth	990	991	Numeric RJ	I2	Code indicating frequency of travel to Dallas - Ft. Worth. See options below.
65. Travel to Houston	992	993	Numeric RJ	I2	Code indicating frequency of travel to Houston. See options below.
66. Passenger Rail to Dallas - Ft. Worth, Austin - San Antonio or Houston	994	995	Numeric RJ	I2	Code indicating whether respondent would use passenger rail service to Dallas - Ft. Worth, Austin - San Antonio or Houston. 1 - Yes, 2 - No, 3 - Possibly

43. MODE OF TRANSPORTATION CODES

- 1 - Driver (car/truck/van)
- 2 - Passenger (car/truck/van)
- 3 - Walk
- 4 - Bicycle
- 5 - Transit Bus
- 6 - Light Rail
- 7 - School Bus
- 8 - Taxi / Limo
- 9 - Commercial Cargo Transport Vehicle
- 10 - Commercial Service Vehicle
- 11 - Motorcycle
- 12 - Other
- 99 - No Response

47. TRIP PURPOSE CODES

- 1 - Return Home
- 2 - Work Related
- 3 - School
- 4 - Social / Recreational / Visit
- 5 - Shop
- 6 - Eat Out
- 7 - Personal Business
- 8 - Pick Up / Drop Off Passenger
- 9 - Change Travel Mode
- 10 - Delivery - Pick Up / Drop Off
- 11 - Other
- 99 - No Response

63,64,65. FREQUENCY OF TRAVEL OPTIONS

- 1 - Never
- 2 - 1 to 2 times per year
- 3 - 1 to 2 times every 6 months
- 4 - 1 to 2 times every 3 months
- 5 - 1 or more times every month
- 6 - 1 or more times every week
- 99 - Refused

48. PARK LOCATION CODES

- 1 - On - Campus
- 2 - Off Campus Parking Lot
- 3 - Off Campus in Street Designated Parking Spot
- 96 - Other
- 99 - Refused