

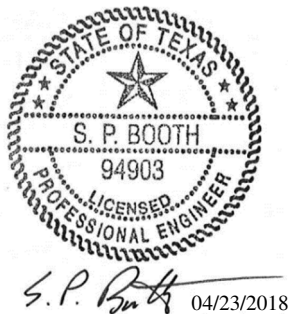
# TRAFFIC MANAGEMENT PLAN

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## Texans Can Academies - Skillman Campus Dallas, Texas

April 2018

Prepared for  
Texans Can Academies



AVO 33762



1201 North Bowser Road  
Richardson, Texas 75081

*Firm Registration No. 312*



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## I. INTRODUCTION

Halff Associates, Inc. (Halff) was retained by Texans Can Academies (Client) to prepare a Traffic Management Plan (TMP) for the proposed Skillman Street Campus located in Dallas, Texas. Figure 1 below is a map detailing the site location. An enlarged aerial of the site has been included in the Appendix on Exhibit 1.



\* Trafficware Synchro 10 screenshot reprinted with permission from Microsoft Bing Maps

**Figure 1 – Site Location Map**

The proposed school will be located in existing buildings that are part of an existing office/light industrial type area, located south of the intersection of Forest Lane and Skillman Street. In the figure above, buildings A, C, and D (approximately 49,000 square feet in total) will be renovated to house classrooms and support areas for the school, Building B is currently occupied and will not be part of the school. The proposed school will have up to 350 students enrolled (split over morning and afternoon classes) with 35 staff members (many of which work both morning and afternoon classes).

### 1.1 Current and Future Roadway Conditions

The Skillman Campus is bordered by Skillman Street on the north edge of the site, Wendell Road along the southern edge, and access driveways on both the east and east sides of the site. Skillman Street is a major six-lane divided thoroughfare. Wendell Road is a 40-foot wide roadway with no lane striping, therefore, it functions as a two-lane roadway. The driveways on either side of the buildings are standard width drive aisles that are approximately 24 feet wide, and are striped as fire lanes. There are no known proposed/planned improvements to existing roadways surrounding the site.

## II. TRAFFIC MANAGEMENT PLAN

The purpose of the Traffic Management Plan (TMP) is to have established procedures for traffic flow and circulation around the charter school related to student drop-off and pick-up operations. Use of a TMP helps improve traffic/student safety and helps maximize the efficiency of drop-off and pick-up operations. The analysis summarized in this report identifies critical elements of the TMP such as available queuing space that is both on and off site, circulation patterns for the charter school facilities, and the projected trip generation (and estimated queuing) during the morning and afternoon peaks.

### 2.1 Operational Characteristics

Based on information from the client, the school is projected to have:

- maximum of 350 students, split over a morning and afternoon session
- 35 staff members

The high school is open from 7:00 AM until 7:00 PM. Classes are split between a morning session (7:45 AM to 12:00 PM) and an afternoon session (12:30 PM to 4:45 PM). The actual start and end times for the class sessions could be slightly different from those listed above and are structured around the DART bus schedule. This is due to a large number of students that utilize transit.

For schools, the peak times of traffic flow are concentrated around the start and end of classes and are shorter than an hour (typically 30 minutes). As was stated above, there are two sessions of school for students, an AM session and a PM session. Most students are enrolled in either the AM or PM session, but a few are enrolled in both sessions.

Based on the estimated class times and observations conducted at the existing Grand East Campus, the morning peak hour is between 7:00 AM and 8:00 AM. The midday peak hour is from 11:30 AM to 12:30 PM and has the highest student related turnover for the day. This is due to both students leaving and arriving at the facility in the one-hour period. The afternoon peak is from 4:30 PM to 5:30 PM and is the least busy time of the day.

#### 2.1.1 Campus Trip Generation

Trip generation for the school was based on observations conducted at an existing campus in the south Dallas area (the Grant East Campus). Given that the Grant East Campus had an enrollment of 275 students at the time trip generation data was collected, it was necessary to use a straight-line adjustment to project trips for a campus with 350 students. The estimated trip generation based on that projection is summarized in Table 1 below.

**Table 1 – Projected Trip Generation Summary for Vehicle Trips**

Land Use	Independent Variable	Units	AM-Peak Hour			Midday-Peak Hour			PM-Peak Hour		
			In	Out	Total	In	Out	Total	In	Out	Total
High School	Students	350	99	42	141	45	67	112	9	24	33
<b>Total Trips</b>			<b>99</b>	<b>42</b>	<b>141</b>	<b>45</b>	<b>67</b>	<b>112</b>	<b>9</b>	<b>24</b>	<b>33</b>

The above table shows that the most vehicular traffic occurs in the morning peak hour with a total of 141 trips. Much of this is due to the arrival of both students and staff for morning classes. From the observations at the Grant East Campus, it was also observed the arrival of vehicles in the AM peak was spread out more evenly over the peak hour. This is due to staff arriving at the site before students.

The midday peak hour, which was determined to be the critical time period for traffic activity, has fewer overall trips when compared the AM peak, but has both drop off and pick up occurring on site. It is also concentrated into a peak 30 minute period between 11:45 AM and 12:15 PM.

There is minimal vehicular activity on the campus in the afternoon. This is due to the split in morning and afternoon classes with more students attending class in the morning session.

### 2.1.2 Trip Generation Comparison

Given that the proposed campus is located at a site with an existing use, it is necessary to compare the trip generation of the proposed school with that of the existing use. This comparison is shown in the Table 2 below.

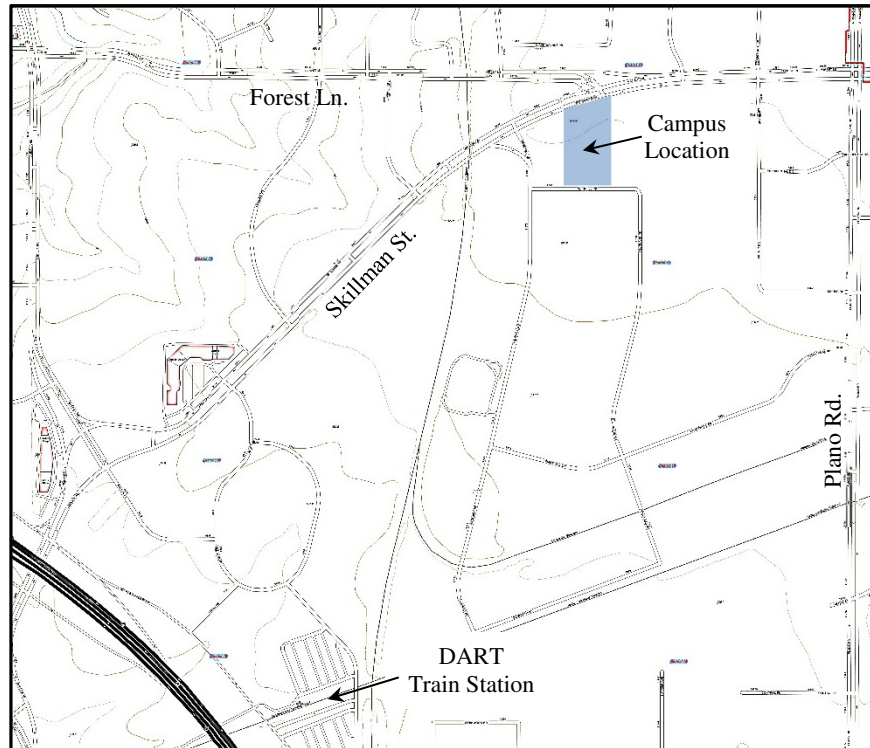
**Table 2 – Comparison of Trip Generation for Site**

Land Use	Independent Variable	Units	AM-Peak Hour			PM-Peak Hour			24 Hour		
			In	Out	Total	In	Out	Total	In	Out	Total
Office (ITE Code 710)	SQFT (1000)	49	95	13	108	23	110	133	382	382	764
High School	Students	350	99	42	141	9	24	33	163	163	326
<b>Difference in Trips</b>			<b>+4</b>	<b>+29</b>	<b>+33</b>	<b>-14</b>	<b>-86</b>	<b>-100</b>	<b>-219</b>	<b>-219</b>	<b>-438</b>

Under the current use, which was assumed to be general office, 49,000 square feet of gross floor space is projected to generate 108 trips in the AM peak, 133 in the PM peak, and 764 trips over a 24-hour period. Comparing that to the projected trip generation of the school, the school will generate 33 additional trips in the AM peak, 100 fewer trips in the PM peak, and over 400 less trips in a 24-hour period. Also attached is a copy of the City of Dallas Traffic Impact Worksheet, which shows that proposed school will generate less trip than the existing use.

## 2.2 Projected School Operations and Vehicular Circulation

As with other Texans Can Academies campuses, the majority of the students attending this location will utilize transit services to reach the campus. There are DART bus stops located on Skillman Street adjacent to the campus (the locations are shown on the TMP exhibit). In addition, there is a DART train station/transit hub less than one mile away (southwest of the campus). This transit hub is serviced by the bus routes that have stops on the Skillman Street route adjacent to the campus. Therefore, students that ride the train could walk to campus, or choose to ride the bus. An overview map is shown below in Figure 2.



**Figure 2 – Area Overview Map**

Students will enter and exit the campus through the cafeteria which is located in Building D. (Refer to the attached TMP exhibit). It is anticipated that the main entrance to the cafeteria will be on the north side of the building. Therefore, all students that use transit, will access the campus from Skillman Street, where the transit stops are located. These students will also exit the campus in the same manner.

Students that are dropped off or picked up by parents will do so in the parking/drive isle area that is north of the cafeteria (building D), which runs between buildings A and B and buildings C and D. For parents/students coming from the north or east, access to the site will be by making a left-turn on to Pagemill Road, which is signalized. For those coming from the south and west, they will access the site via a right-turn on to Pagemill Road. Parents/students will then turn left on to Wendell Road (from Pagemill Road) and then access the campus from the entrance located on Wendell Road south of buildings C and D.

Students who drive their own vehicle, park in the designated lot located adjacent to buildings A, C, and D of the campus. These students will access the campus through the cafeteria in the same manner as that described for the pickup and drop-off operations above.

### **2.3 On-Street Pick-Up/Drop-Off**

At the Grant East Campus, the school is located in a residential neighborhood and some pickup and drop-off activity occurs on the adjacent streets. For this site, on-street pickup/drop-off will be strongly discouraged by staff and is not anticipated to occur. Therefore, all pickup/drop-off activity will occur on site.

### **2.4 On-Site Queues and Projected Queue Lengths**

Based on the location of the proposed entry point to the campus, there is approximately 500 feet (approximately 20 vehicles) of space for the queuing of vehicles (see attached TMP in Exhibit 1) for parents picking up and dropping off students. Based on observations from the Grant East Campus, vehicle queues in the AM peak hour were minimal during the morning drop-off and are anticipated to be similar for the Skillman Campus.

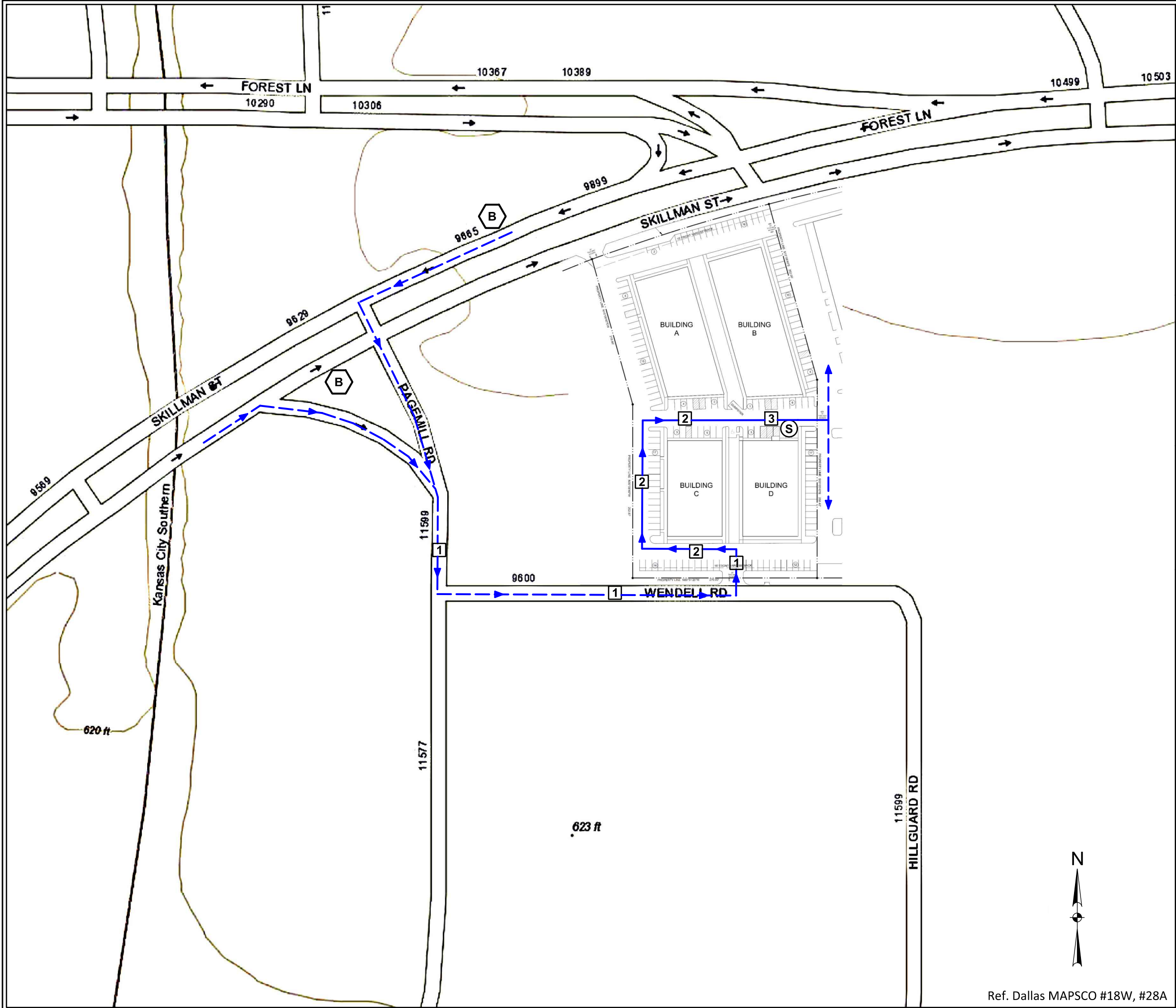
During the midday peak, the vehicle queue of parents waiting to pick students up at the Grant East Campus did not exceed four (4) vehicles at any given time. This short queue is likely due to the presence of on-street pickup at that site. Given that the Skillman Campus will not have on-street pickup, it is anticipated that the pickup queue will be double that of the Grant East Campus. Thus, the maximum queue anticipated at the Skillman Campus would be eight (8) vehicles during the midday peak hour. This projected queue can be easily contained on site, with no disruption to surrounding businesses.

### **III. SUMMARY**

Based upon the proposed site layout for the Skillman Campus, the projected student enrollment, and observations from existing Texans Can Academies campuses; it is not anticipated that the proposed school campus will have a significant impact on the traffic operations of the adjacent roadways. The proposed school will generate significantly less overall trips during a 24-hour period (438 less trips less than office use), less trips in the PM peak hour (100 less than office use), but have a marginal increase in the AM peak hour (33 trips more than office use).

Overall access to the site is good and there is sufficient on-site storage for the projected queues related to the operations of the school.

# **APPENDIX**



LEGEND

- Student Pick-up/Drop-off Circulation Path
- Student Pick-up/Drop-off On-site Queue Area
- DART Bus Stop
- Pick-up/Drop-off Area Staff Assitant
- Pick-up Lane Travel Path
- Pick-up Queue Path
- Pick-up/Drop-off Area

Campus Information

Enrollment: 350 Students\*  
Academic: Grades 9-12  
Hours: 8:00AM to 5:00PM  
\*Students are split over two sessions

Queuing Information

Projected Queue: 200 ft (8 veh.)  
On-site Storage: 500 ft (20 veh.)  
Net Surplus: 300 ft (12 veh.)

Note:  
This Traffic Management Plan was developed to prevent the queuing of drop-off/pick-up related vehicles within the City right-of-way. The school administration should adhere to the TMP and any deficiency due to spill over of queuing into undesignated areas of the City right-of-way, including roadway travel lanes, should be corrected by the school immediately.

TEXANS CAN ACADEMIES

SKILLMAN CAMPUS

TRAFFIC MANAGEMENT PLAN

HALFF

1201 N. BOWSER ROAD  
RICHARDSON, TX 75081-4275  
TEL (214) 346-6200  
FAX (214) 739-0095

Revision No.	Date	Description

Project No.: 33762

Issued: 4/23/2018

Drawn By: HA

Checked By: HA

Scale: N.T.S.

Sheet Title

SKILLMAN CAMPUS

9704 Skillman St.

Dallas, Texas

TMP EXHIBIT

Sheet Number

# TEXANS CAN ACADEMIES - SKILLMAN CAMPUS

## TRAFFIC IMPACT WORKSHEET

This worksheet will help you determine if a Traffic Impact Study (T.I.S.) needs to be submitted with your zoning change request. **Please read the following paragraphs before filling out this worksheet.**

First, read all of the uses listed in column A and check the box to the right of each use that characterizes the proposed development.

Next, fill in the number of units or gross square footage of each use in column 'C' :

- \* If the development has a Number of Units, then multiply that number by the Trip Rate (column 'B' times column 'C') and indicate the total in column 'D'.
- \* If the development has a Gross Square Footage, then divide the gross square footage in column 'C' by 1,000, then multiply the result by the Trip Rate in column 'B' and indicated the total in column 'D'.

Finally, total all the trips generated per day to the space at the bottom of column 'D'.

If the total exceeds 1,000 trips per day, then either a Traffic Impact Study (T.I.S.) or a Waiver of the T.I.S. is required with the zoning request. Traffic Impact Study waivers will be considered on a per case basis by the Director of the Sustainable Development and Construction. The Department of Sustainable Development and Construction is located in the Oak Cliff Municipal Center at 320 E. Jefferson Blvd., Room 200 and can be reached by telephone at 214-948-4205. If a proposed project cannot be defined within the uses provided on this worksheet, check ITE and contact the Department of Sustainable Development and Construction for assistance. Finally, fill out the applicant and development information below the chart.

A	B	C	D
Use	Trip Rates <sup>1</sup>	Number of Units / SQ. FT.	Trip Generated
Lodging <input type="checkbox"/>	9.11 per room		
Residential			
Single Family <input type="checkbox"/>	9.57 per dwelling unit		
Other <input type="checkbox"/>	6.59 per dwelling unit		
Industrial <input type="checkbox"/>	6.96 per 1,000 gsf		
Office			
Financial Institution w/o drive-in <input type="checkbox"/>	156.48 per 1,000 gsf		
Financial Institution with drive-in <input type="checkbox"/>	246.49 per 1,000 gsf		
Other: 10,000 gsf or less <input type="checkbox"/>	26.59 per 1,000 gsf		
10,001-50,000 gsf <b>EXISTING</b> <input checked="" type="checkbox"/>	22.64 per 1,000 gsf	49	1,109
50,000-100,000 gsf <input type="checkbox"/>	15.58 per 1,000 gsf		
100,001-150,000 gsf <input type="checkbox"/>	13.27 per 1,000 gsf		
150,001-200,000 gsf <input type="checkbox"/>	12.08 per 1,000 gsf		
Retail/ Personal Service			
General Merchandise > 3,500 sq.ft. <input type="checkbox"/>	177.59 per 1,000 gsf		
General Merchandise < 3,500 sq.ft. <input type="checkbox"/>	863.10 per 1,000 gsf		
Restaurant w/o drive-in <input type="checkbox"/>	158.37 per 1,000 gsf		
Restaurant with drive-in <input type="checkbox"/>	722.03 per 1,000 gsf		
Other: 10,000 gsf or less <input type="checkbox"/>	278.24 per 1,000 gsf		
10,001-50,000 gsf <input type="checkbox"/>	215.39 per 1,000 gsf		
50,000-100,000 gsf <input type="checkbox"/>	118.36 per 1,000 gsf		
100,001-150,000 gsf <input type="checkbox"/>	91.46 per 1,000 gsf		
150,001-200,000 gsf <input type="checkbox"/>	78.65 per 1,000 gsf		
Church <input type="checkbox"/>	36.63 per 1,000 gsf		
School (1.29 Elem., 1.62 JH, 1.71 H.S.) <b>PROP</b> <input checked="" type="checkbox"/>	Per Student @ 22 Student/Class	25 Student/ JH & HS	598
Day care <input type="checkbox"/>	79.26 per 1,000 gsf		
Wholesale/ Distribution/ Storage			
Mini-warehouse <input type="checkbox"/>	2.50 per 1,000 gsf		
Warehouse <input type="checkbox"/>	4.96 per 1,000 gsf		
<b>Total trips generated</b>			<b>- 511</b>

1. All rates are based on ITE Trip Generation Report, 7<sup>th</sup> edition, November 2003

2. These rates may change based on new data / publications, directional distribution and specific developments.

Applicant	TEXANS CAN ACADEMIES	Phone Number	
Location	9704 SKILLMAN ST	Size (in Acres)	