TRAFFIC IMPACT ANALYSIS FOR

CHURCH OPERATED NURSERY/PRE-K CHILD DAY CARE CENTER IN FIRST UNITARIAN CHURCH OF DALLAS

IN CITY UNIVERSITY PARK, TEXAS

DeShazo Project No. 19098

Prepared for:

Rev. Dr. Daniel Kanter First Unitarian Church of Dallas 4015 Normandy Avenue Dallas, Texas 75205

Prepared by:

DeShazo Group, Inc.

Texas Registered Engineering Firm F-3199

400 South Houston Street, Suite 330 Dallas, Texas 75202 214.748.6740

October 8, 2019



Texas Registered Engineering Firm F-3199



10E08/2019

Traffic Impact Analysis for

Church Operated Nursery/Pre-K Child Day Care Center in First Unitarian Church of Dallas in City of University Park, Texas

~ DeShazo Project No. 19098~

Table of Contents

EXECUTIVE SUMMARY	1
INTRODUCTION	2
PURPOSE	2
TRAFFIC IMPACT ANALYSIS — METHODOLOGY	2
ANALYSIS SCENARIOS	3
EXISTING AND PROPOSED LAND USE	6
SITE LOCATION AND STUDY AREA	6
EXISTING SITE AND DEVELOPMENT	6
EXISTING AND PROPOSED TRANSPORTATION SYSTEM	7
THOROUGHFARE SYSTEM	7
EXISTING TRAFFIC VOLUMES	7
PROJECTED BACKGROUND TRAFFIC VOLUMES	7
SITE-TRAFFIC CHARACTERISTICS	8
TRIP GENERATION	8
TRIP DISTRIBUTION AND ASSIGNMENT	8
SITE-GENERATED TRAFFIC VOLUMES	8
ROADWAY INTERSECTION ANALYSIS	9
INTERSECTION CAPACITY ANALYSIS — METHODOLGY	9
2019 EXISTING - INTERSECTION ANALYSIS	10
2022 BACKGROUND AND BACKGROUND-PLUS-SITE - INTERSECTION ANALYSIS	11
ROADWAY LINK ANALYSIS — METHODOLGY	12
ROADWAY LINK ANALYSIS — RESULTS	13
SITE ACCESS REVIEW	14
DECELERATION LANE ANALYSIS	14
SUMMARY OF FINDINGS AND RECOMMENDATIONS	15

LIST OF TABLES:

- Table 1. Development Program Summary
- Table 2. Development Scenarios Analyzed
- Table 3. Historical Daily Traffic Volume Growth Trend
- Table 4. Projected Trip Generation
- Table 5. Existing Intersection Analysis
- Table 6. 2022 Intersection Analysis
- Table 7. Roadway Link Capacity Analysis Results Summary

LIST OF EXHIBITS:

- Exhibit 1. Site Location Map
- Exhibit 2. Preliminary Site Plan
- Exhibit 3. Existing Roadway Geometry and Traffic Control
- Exhibit 4. Pickup and drop off zones

LIST OF APPENDICES:

- Appendix A. Traffic Volume Exhibits
- Appendix B. Existing Traffic Count Data
- Appendix C. Site-Generated Traffic Supplement
- Appendix D. Detailed Intersection Capacity Analysis Results

EXECUTIVE SUMMARY

The services of **DeShazo Group, Inc.** (DeShazo) were retained by **First Unitarian Church of Dallas** to conduct a traffic impact analysis (TIA) for the proposed Church Operated Nursery/Pre-K Child Day Care Center in the First Unitarian Church of Dallas, Texas. The subject property is to be located in the First Unitarian Church of Dallas in the city of University Park, Texas.

The proposed Church Operated Nursery/Pre-K Child Day Care Center is planned to be fully operational by 2022. **Table 1** shows the development program summary for the site development.

Table 1. Development Program Summary

Use	Quantity	Buildout Year
Church Operated Nursery/Pre-K Child	120 Students	2022
Day Care Center		

The analysis of the traffic generated by the proposed development indicated no significant impact on the local roadway system. Below is a summary of findings from this TIA.

FINDING: All the study intersections currently operate at *LOS C* or better at existing conditions for both AM and PM peak hours.

FINDING: All the study intersections are expected to operate at *LOS D* or better at background-plus-site conditions for both peak hours.

FINDING: Based upon the roadway link analysis, the proposed development has no significant impact on Preston Road.

FINDING: Based upon the projected volumes derived in this study, installation of an auxiliary deceleration lane is not required at any of the study intersections.

GENERAL RECOMMENDATIONS:

There is enough queuing space for a double queue on the site adjacent to Preston Road as shown in **Exhibit 4**. The available space is about 240 feet. The space should easily accommodate about 10 vehicles. It is recommended that the parents dropping off/picking up kids use the space available along Preston Road if necessary. DeShazo also recommends that the parents use the parking spaces available behind the building via St. Andrews Drive. There are a sufficient number of parking spaces available on St. Andrews Street, Normandy Avenue and on the site for both staff and parents. The staff need to make sure the on-site queueing along Preston Road does not spill back onto Preston Road. This would lead to unnecessary disturbance to traffic on Preston Road.

END OF SUMMARY