

TRAFFIC IMPACT ANALYSIS
FOR

Legacy Place Glendale – Phase 2
Glendale, Arizona

Approved by Becca Fastje
8/25/25

Prepared for:

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Legacy Place Glendale – Phase 2 Glendale, Arizona

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1.0 EXECUTIVE SUMMARY

Colliers Engineering and Design retained United Civil Group to prepare a traffic impact analysis (TIA) for the proposed Legacy Place Glendale Phase 2 development (APN# 143-25-011E) in Glendale, Arizona. Legacy Place Glendale Phase 2 encompasses approximately 34.8 acres and is located south of Northern Avenue and north of Frier Drive between 75th Avenue and 73rd Avenue in Glendale, Arizona. Planned as a residential community, Legacy Place Glendale – Phase 2 will include 151 single-family dwelling units constructed by 2028.

The Legacy Place Glendale Phase 2 is a portion of the overall Legacy Place Glendale that is approximately 120 acres in size and approximately 432 single family dwelling units. The initial phase of development, referred to as Phase I, consists of approximately 276 single family homes that will be occupied by 2028. For this study Phase I is included in the background conditions because this TIA focuses on roadway improvements required as part of Phase 2.

Once developed, the site is proposed with two accesses. Access A aligns with Augusta Avenue on 75th Avenue and Access B is an entry into the site from 73rd Avenue.

Access A – located on 75th Avenue will align with Augusta Avenue on the west side of 75th Avenue. Access A is proposed as a full movement roadway. Access A is located approximately 640 feet south of Northern Avenue and 700 feet north of Frier Drive, measured from center of roadway to center of roadway.

Access B (Lane Avenue) – is proposed on 73rd Avenue as a full movement roadway that provides ingress and egress to the community. Access B is located approximately 440 feet south of Northern Avenue and 895 feet north of Frier Drive, measured from the center of roadway to center of roadway. Access B aligns with the proposed driveway on the east side of 73rd Avenue.

In addition to Legacy Place Glendale Phases 1 and 2, Legacy Place and Peoria Industrial are planned north of Northern Avenue in Peoria, Arizona, within the vicinity of this proposed development. Legacy Place is planned as 482 single family detached units, 83 multifamily units and approximately 81,675 square feet of commercial development to be constructed in three phases. Because Peoria Industrial is in the preliminary planning stages, this TIA includes 1,800,000 square feet of industrial development with full buildout assumed by 2028. The trips generated by Legacy Place Glendale Phase 1, Legacy Place and Peoria Industrial are included in the background of this Legacy Place Glendale – Phase 2 TIA.

A. Guiding Criteria

The Legacy Place Glendale TIA has been performed in general accordance with the requirements established by the City of Glendale as well as locally accepted standards and industry practice to determine the traffic impacts of Legacy Place Glendale-Phase 2 development on the surrounding street network. Requirements for the Legacy Place Glendale-Phase 2 TIA were set forth by the City of Glendale's Guide for the Submittal of Traffic Statements and Traffic Impact Analysis dated March 27, 2023, coupled with the City's 2015 *Engineering Design and Construction Standards*. Based on the City Guidelines; Legacy Place Glendale – Phase 2 will be analyzed as a Category I Development with peak hour trips estimated generate more than 100 but less than 500 vehicles during either the morning or evening peak hour. The study horizon years for Legacy Place Glendale – Phase 2 plus 5 years after opening. The study area includes any traffic signals within 1 mile of either side of the development.

Within both of these general parameters, the following guidelines were followed:

Horizon years:

Existing year - 2025

Opening of development – 2028

5 years after opening - 2033

Study area intersections:

75th Avenue/Northern Avenue

75th Avenue/Olive Avenue/Grand Avenue

67th Avenue/Northern Avenue/Grand Avenue

71st Avenue/Northern Avenue

73rd Avenue/Frier Avenue

73rd Avenue/Northern Avenue

75th Avenue/Frier Avenue

75th Avenue/Glendale Avenue

75th Avenue/Golden Lane

75th Avenue/Orangewood Avenue

83rd Avenue/Northern Avenue

B. Study Objectives

This study is intended to investigate the existing and future traffic conditions and identify any potential roadway improvements necessary to serve the proposed development. Major study objectives of this traffic report are as follows:

- Analyze the existing study area intersections and site accessibility for the development.
- Determine the site traffic volumes generated by the proposed development and their impacts on the surrounding study area and roadway network.
- Where applicable, recommend safety, intersection and/or roadway improvements, sufficient to meet the needs of the development and adjacent roadway network due to the additional site generated traffic volumes.

C. Conclusions and Recommendations

The proposed site is planned as 151 single family dwelling units located on the southeast corner of 75th Avenue and Northern Avenue in Glendale, Arizona. It is assumed that the site will be constructed and occupied by 2028. The year 2033 was also analyzed, five years after the site is constructed and occupied. The site is currently agricultural land.

According to the Trip Generation Manual, 11th Edition, on a typical weekday, after full buildout of the residential development, Legacy Place Glendale – Phase 2 is forecasted to generate 1,474 daily trips, with 108 trips occurring in the morning peak hour and 146 trips occurring in the evening peak hour.

Once developed, the site is proposed with two accesses. Access A aligns with Augusta Avenue on 75th Avenue and Access B (Lane Avenue) is an entry into the site from 73rd Avenue, that will align with a proposed driveway on the east side of 73rd Avenue. Both accesses will be constructed as residential local roads and are proposed with full turning movements at the access intersections.

Using the existing traffic volumes and roadway geometrics, all the study intersections currently operate at overall intersection acceptable levels of service, LOS D or better, during the morning and evening peak hours.

Through the study horizon, year 2033, with total traffic volumes, the study intersections operate at overall intersection acceptable levels of service, LOS D or better, except for the intersections of 71st Avenue/Northern Avenue and 75th Avenue/Grand Avenue/Olive Avenue operate at an unacceptable LOS E in the evening peak hours. This is consistent with the findings in the background conditions in the study area.

For 71st Avenue/Northern Avenue, through and left-turning movements on stop-controlled minor roads and driveways that intersect with major streets typically experience greater delay for short periods of time in the peak hours due to the wait for acceptable gaps on the major street, while the free-flowing major streets experience minimal delay.

Proper intersection sight distance and sight triangles shall be provided and maintained at the site accesses and intersections of the proposed development to give drivers exiting the accesses a clear view of oncoming traffic. The landscape and hardscape within the sight triangles must not obstruct the driver's view of the adjacent travel lanes. To ensure adequate sight distances and sight distance triangles, AASHTO's *A Policy on Geometric Design of Highways and Streets* Section 9.5 should be followed as appropriate when designing the accesses and landscaping.

Based on the findings of this TIA, the following recommendations apply:

- Preserve adequate right of way along the northern boundary of the site to accommodate the Northern Avenue roadway cross section with 65 feet of right of way measured centerline to right of way line.
- Preserve adequate right of way and construct ½ street improvements along the western boundary of the site to accommodate the 75th Avenue roadway cross section with 55 feet of right of way, measured centerline to right of way line.
- Construct the dedicated northbound right turn lane on 75th Avenue at Northern Avenue. Ten feet of additional right of way on 75th Avenue at Northern Avenue will be required.
- Preserve adequate right of way and construct ½ street improvements along the eastern boundary of the site to accommodate the 73rd Avenue roadway cross section with 30 feet of right of way, measured centerline to right of way line.
- Preserve adequate right of way and construct ½ street improvements along the southern boundary of the site to accommodate the Frier Drive roadway cross section with 30 feet of right of way, measured centerline to right of way line.
- Construct a dedicated right turn lane on Frier Drive at 75th Avenue for westbound traffic.
- Construct a right turn lane on Northern Avenue at 73rd Avenue for eastbound traffic.
- Construct a right turn lane on 75th Avenue at Augusta Avenue (Access A) for northbound traffic.
- Install a median on 73rd Avenue from Northern Avenue south approximately 300 feet.