# PLANIMIIG COMMISSION <br>  



Meeting Date:
General Plan Element:
General Plan Goal:

August 24, 2022
Land Use
Create a sense of community through land uses

## ACTION

## One Scottsdale PU III Quick Trip

1-UP-2022

## Request to consider the following:

1. A recommendation to City Council regarding a request by owner for approval of a Conditional Use Permit for a new gas station on a +/- 2-acre site with Planned Regional Center, Planned Community District (PRC PCD) zoning, located at 19552 N. 73rd Street.

## Purpose of Request

The applicant's request is for a Conditional Use Permit to construct a 16-pump gasoline station and 5,312 square foot convenience store on a 2.03-acre site.

## Key Items for Consideration

- Conditional Use Permit Criteria
- Gasoline Station and Convenience Store Design Guidelines
- No community input received as of the date of this report


## OWNER

## QuikTrip - Daniel Chambers

(480) 446-6321

## APPLICANT CONTACT

Berry Riddell, LLC
John Berry
(602) 463-4081

$\qquad$

## LOCATION

19552 N 73rd St

## BACKGROUND

## General Plan

The General Plan Land Use Element designates the property as Mixed-Use Neighborhoods-Regional Use Overlay. This category focuses on human-scale development and is located in areas with strong access to multiple modes of transportation and major regional services. These areas accommodate higher-density housing combined with complementary office or retails uses.

## Greater Airpark Character Area Plan

The Greater Airpark Character Area Plan (GACAP) designates the property as Airpark Mixed-Use Residential (AMU-R) This category accommodates various land uses including a combination of personal and business services, employment, office, institutional, hotel and higher density residential. This proposal is consistent with the Character and Design Element of the General Plan, and the GACAP.

## Zoning

This site is zoned Planned Community (P-C), with Planned Regional Center (PRC) comparable zoning. The site is part of the One Scottsdale master plan which allows fueling stations subject to conditional use permit approval.

## Context

The property is located on the east side of N. Scottsdale Road between E. Thompson Peak Parkway on the north, E. Legacy Boulevard on the south, and N. $73^{\text {rd }}$ Street on the east. Surrounding uses include existing commercial, multi-family residential and vacant land owned by the City of Phoenix. Please refer to context graphics attached.

## Adjacent Uses and Zoning

- North: Undeveloped land within One Scottsdale Planning Unit III, zoned Planned Regional Center and Planned Community District (PRC PCD)
- South: Undeveloped land within One Scottsdale Planning Unit III, zoned Planned Regional Center and Planned Community District (PRC PCD)
- East: Undeveloped land within One Scottsdale Planning Unit III, zoned Planned Regional Center and Planned Community District (PRC PCD)
- West: Vacant land, owned by the City of Phoenix


## Other Related Policies, References:

Scottsdale General Plan 2023
Greater Airpark Character Area Plan
Zoning Ordinance
Gas Station and Convenience Store Design Guidelines
One Scottsdale Master Development Plan: 20-ZN-2002 et al.

## APPLICANT'S PROPOSAL

## Development Information

The development proposal includes a new one-story gas station and convenience store with 16 service bays that are architecturally attached with a canopy to the main structure.

- Existing Use: Vacant, undeveloped site
- Proposed Use: Gasoline station with convenience store and 16 service bays
- Buildings/Description: One-story gas station and convenience store with 16 service bays
- Parcel Size: $\quad 3.29$ gross acres
2.03 net acres
- Building Height Allowed: 45 feet (exclusive of rooftop appurtenances)
- Building Height Proposed: 20 feet
- Parking Required: 27 spaces
- Parking Provided: 59 spaces
- Open Space Required: 13,274 square feet
- Open Space Provided: 36,819 square feet


## IMPACT ANALYSIS

## Airport Vicinity

The project falls within the AC-1 Airport Influence Zone, which allows municipal uses. Development located within the twenty-thousand-foot radius of the Scottsdale Airport, that penetrates the 100:1 slope from the nearest point of the runway shall submit to the FAA the appropriate forms for FAA review.

## Conditional Use Permit

Conditional Use Permits, which may be revocable, conditional, or valid for a specified time period, may be granted only when expressly permitted after the Planning Commission has made a recommendation and City Council has found as follows:
A. That the granting of such Conditional Use Permit will not be materially detrimental to the public health, safety or welfare. In reaching this conclusion, the Planning Commission and the City Council's consideration shall include, but not be limited to, the following factors:

1. Damage or nuisance arising from noise, smoke, odor, dust, vibration or illumination.

- No excessive or significant noise, smoke, odor, dust or vibration is anticipated to be generated from the proposed use.

2. Impact on surrounding areas resulting from an unusual volume or character of traffic.

- Parking for the proposed site requires 27 spaces, 59 space are provided.
- The site fronts a major arterial and major collector which are both designed to handle the volume of traffic associated with gas station. The proposed gas station use will not result in an unusual increase in traffic volume or character as outlined in the approved traffic study.
B. The characteristics of the proposed conditional use are reasonably compatible with the types of uses permitted in the surrounding areas.
- The One Scottsdale Master Development supports a range of commercial, office, retail, and multi-family development. As such, the proposed gas station is reasonably compatible with the existing and future land uses.
C. The additional conditions specified in Section 1.403 , as applicable, have been satisfied. The proposal meets the provisions for Gas Stations as identified in Zoning Ordinance Section 1.403.1., including:

1. The application shall include detailed landscape plans showing plant, type, size and spacing. All landscape plans shall include an automated watering system. Planting areas shall cover a minimum of five (5) percent of the lot area and may be required to cover as much as twenty (20) percent of the site, depending upon site size. All trees planted shall have a minimum caliper of two (2) inches and all shrubs shall be at least five-gallon size. Lack of care and maintenance of the landscaped areas is cause for revoking the Conditional Use Permit.

- The conceptual landscape plan complies with the minimum landscape requirements and the Scenic Corridor along N. Scottsdale Road will be maintained and enhanced with desert landscape.

2. All structures approved under this Conditional Use Permit shall be of a unique design appropriate for the area in which they are to be constructed. All canopies shall be connected to the roof of the main structure unless otherwise approved. Renderings of any buildings shall accompany each application and construction shall be in reasonable conformity thereto.

- The proposed gas station and associate convenient store is consistent with the One Scottsdale Master Environment Design Concept Plan and Gas Station Convenience Store Design Guidelines. The 16-bay gas pump canopy is architecturally integrated to the main building.
- The Gas Station and Convenient Store Design Guidelines recommends the canopy height should not exceed $13^{\prime}-9{ }^{\prime \prime}$ measured from finished grade to the lowest point on the canopy fascia and the overall height of canopies should not exceed $17^{\prime}-0^{\prime \prime}$. To accommodate a broad range of cars, trucks and trailers the applicant is applicant is proposing $14^{\prime}-6^{\prime \prime}$ as the bottom clearance of the canopy with a maximum overall height of $18^{\prime}-0^{\prime \prime}$.

3. All sources of artificial light shall be concealed and attached to the main structure, unless otherwise approved. All lighting shall be designed to minimize glare.

- Exterior lighting will be consistent with the Gas Station and Convenience Store Design Guidelines. All lighting for the main building and fueling station will be concealed and flush mounted to minimize glare and trespass.

4. The minimum area of a parcel, exclusive of street dedication, shall be twenty-two thousand five hundred $(22,500)$ square feet.

- The site is approximately +/- 2-acres and exceeds the 22,500 square feet minimum requirement.

5. A solid masonry wall or planting screen is required between all gas station sites and a residential district shown on Table 4.100.A., or the residential portion of a Planned Community P-C or any portion of a Planned Residential Development PRD with an underlying zoning district comparable to the residential districts shown on Table 4.100.A. The wall height shall be as determined in each case based on the site and surrounding property contextual relationships

- The site and surrounding area are zoned PRC PCD to accommodate commercial, retail, office and multi-family development. A combination of landscape and screen walls are provided along both street frontages to adequate screen the gas station and fueling pumps.


## Water/Sewer

The applicant provided Basis of Design reports for water and sewer, which have been accepted by the Water Resources Division. The City of Scottsdale is an Arizona Department of Water Resources designated provider with a 100 years Assured Water Supply and will supply water in accordance with City codes, ordinances, and the City's Drought Management Plan. All infrastructure upgrades necessary to serve this project will be completed by the applicant.

## Traffic

The proposed gas station and convenient store is located on the northeast corner of Scottsdale Road and Legacy Boulevard. The proposed development is anticipated to generate 1.032 weekday trips with 96 occurring during the AM peak hour and 102 trips during the PM peak hour. To accommodate the vehicular traffic, site improvements include new driveways along both street frontages. Specifically, the developer will construct a right-in and right-out access point along E. Legacy Boulevard and a right-in and right-out access point along N. Scottsdale Road.

## Fire/Police

The nearest fire station is within 2.6 miles of the site and located at 20363 N. Pima Road. The subject site is served by Police District 4, Beat 18. As with any project that contributes to growth, the fire department and police department continually anticipate and evaluate resource needs for the city's budget process.

## Open Space

Overall, the gas station site requires 13,274 square feet of open space and 36,819 square feet is provided per the site plan. Open space is located along the E. Legacy Boulevard frontage and perimeter of the site.

## Community Involvement

With the submittal of the application, staff notified all property owners within 750 feet of the site. In addition, the applicant held a virtual Open House meeting on Wednesday, January 26, 2022. According to the public outreach report, there were 28 total views of the online website during that time and the development team did not receive any e-mails or phone calls. As of the publishing of this report, staff has not received any community input regarding the application.

## STAFF RECOMMENDATION

## Recommended Approach:

Staff recommends that the Planning Commission find that the Conditional Use Permit criteria have been met and determine that the proposed Gas Station is consistent and conforms with the adopted General Plan and Greater Airpark Character Area Plan and make a recommendation to City Council for approval per the attached stipulations.

## RESPONSIBLE DEPARTMENTS

## Planning and Development Services

Current Planning Services
Transportation Engineering
Stormwater Management
Water Resources
Fire \& Life Safety Services

## STAFF CONTACT

Meredith Tessier
Senior Planner
480-312-4211
E-mail: mtessier@ScottsdaleAZ.gov

## APPROVED BY



Meredith Tessier, Senior Planner, Report Author


Tim Curtis, AICP, Current Planning Director
Planning Commission Liaison
Phone: 480-312-4210 Email: tcurtis@scottsdaleaz.gov


Erin Perreault, AICP, Executive Director
8/17/2022

Planning, Economic Development, and Tourism
Phone: 480-312-7093 Email: eperreault@scottsdaleaz.gov

## ATTACHMENTS

1. Context Aerial
2. Resolution No. 12572

Exhibit 1: Aerial Close Up
Exhibit 2: Stipulations
Exhibit A to Exhibit 2: Site Plan
Exhibit 3: Additional Conditions
3. Applicant's Narrative
4. Existing Zoning Map
5. Landscape Plan
6. Building Elevations
7. Perspectives
8. Traffic Impact \& Mitigation Analysis
9. Community Involvement
10. City Notification Map


A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SCOTTSDALE, MARICOPA COUNTY, ARIZONA, ADOPTING A CONDITIONAL USE FOR A NEW GAS STATION ON A +/- 2-ACRES SITE WITH PLANNED REGIONAL CENTER, PLANNED COMMUNITY DISTRICT (PRC PCD) ZONING, LOCATED AT 19552 N. 73RD STREET.

WHEREAS, the Planning Commission held a public hearing on August 24, 2022;
NOW, THEREFORE, LET IT BE RESOLVED, by the City Council of the City of Scottsdale, Maricopa County, Arizona, as follows:

Section 1. That the City Council finds:
a) that the granting of this conditional use permit per stipulations set forth on Exhibit 2 will not be materially detrimental to the public health, safety or welfare based on, but not limited to, the following factors: damage or nuisance arising from noise, smoke, odor, dust, vibration or illumination and impact on surrounding areas resulting from an unusual volume or character of traffic;
b) that the characteristics of the proposed conditional use are reasonably compatible with the types of uses permitted in the surrounding areas; and

Section 2. That a description of the conditional use permit is set forth in Case No. 1-UP-2022. The property that is subject to the conditional use permit is shown on Exhibit 1 and the conditional use permit approval is conditioned upon compliance with all of the stipulations that are set forth in Exhibits 2 and 3. All exhibits are incorporated herein by reference.

PASSED AND ADOPTED by the Council of the City of Scottsdale this $\qquad$ day of $\qquad$ ,2022.

ATTEST:

By:
Ben Lane, City Clerk
APPROVED AS TO FORM:
OFFICE OF THE CITY ATTORNEY

By:
Sherry R. Scott, City Attorney
By: Joe Padilla, Deputy City Attorney

CITY OF SCOTTSDALE, an Arizona Municipal Corporation

By:
David D. Ortega, Mayor


Exhibit 1
Page 1 of 1

# Stipulations for the Conditional Use Permit For a Gas Station One Scottsdale PU III Quick Trip Case Number: 1-UP-2022 

These stipulations are in order to protect the public health, safety, welfare, and the City of Scottsdale.

## SITE DESIGN

1. CONFORMANCE TO CONCEPTUAL SITE PLAN. Development shall conform with the conceptual site plan submitted by Kimley-Horn and with the city staff date of July 8, 2022, attached as Exhibit A to Exhibit 2. Any proposed significant change to the conceptual site plan as determined by the Zoning Administrator, shall be subject to additional action and public hearings before the Planning Commission and City Council
2. SIDEWALK CONNECTION. Before any certificate of occupancy is issued for the site, the owner shall construct or cause to have constructed a six (6) foot, minimum, sidewalk from the main entry of the development to N Scottsdale Road and E Legacy Boulevard.
3. SCREEN WALL. At time of Development Review Board, the applicant shall extend the wall along N . Scottsdale Road to screen vehicles at the fuel station. Additionally, the applicant shall provide a wall along E. Legacy Boulevard. Final wall location to be determined by final plan staff reviewers to confirm that the wall will not conflict with easements.

## FUEL STATION CANOPY ELEVATIONS:

4. CANOPY ELEVATIONS: At time of Development Review Board, the applicant shall demonstrate conformance with the Gas Station and Convenient Store Design Guidelines and shall request Development Review Board approval for canopy height, as measured from the finished grade to the lowest point on the canopy fascia shall not exceed $14^{\prime}-6^{\prime \prime}$ and the overall height of the canopies shall not exceed $18^{\prime}-0^{\prime \prime}$.

## EXTERIOR LIGHTING:

5. FUEL STATION AND CANOPY LIGHTING. At time of Development Review Board, the applicant shall demonstrate conformance with the City of Scottsdale Exterior Lighting Ordinance and the Gas Station and Convenient Store Design Guidelines.

## AIRPORT

6. FAA DETERMINATION. With the final plans submittal, the developer shall submit a copy of the FAA Determination letter on the FAA FORM 7460-1 for any proposed structures and/or appurtenances that penetrate the 100:1 slope. The elevation of the highest point of those structures, including the appurtenances, must be detailed in the FAA form 7460-1 submittal.
7. AIRCRAFT NOISE AND OVERFLIGHT DISCLOSURE. With the final plans submittal, the developer shall provide noise disclosure notice to occupants, potential homeowners, employees and/or students in a form acceptable to the Scottsdale Aviation Director

## INFRASTRUCTURE AND DEDICATIONS

8. CIRCULATION IMPROVEMENTS. Before any certificate of occupancy is issued for the site, the owner shall make the required dedications and provide the following improvements in conformance with the Design Standards and Policies Manual and all other applicable city codes and policies.
9. EASEMENTS.
a. EASEMENTS DEDICATED BY PLAT. The owner shall dedicate to the city on the final plat, all easements necessary to serve the site, in conformance with the Scottsdale Revised Code and the Design Standards and Policies Manual.
b. EASEMENTS CONVEYED BY SEPARATE INSTRUMENT. Before any building permit is issued for the site, each easement conveyed to the city separate from a final plat shall be conveyed by an instrument or map of dedication subject to city staff approval, and accompanied by a title policy in favor of the city, in conformance with the Design Standards and Policies Manual.
10. SCENIC CORRIDOR SETBACK LOCATION AND DEDICATION. The Scenic Corridor setback width along N. Scottsdale Road shall be a minimum of 60 feet wide and an average of 100 feet, measured from back of curb. Unless otherwise approved by the Development Review Board, the Scenic Corridor setback shall be left in a natural condition. The final plat shall show all Scenic Corridor setback easements dedicated to the city.


Resolution No. 12572
Exhibit A to Exhibit 2
Page 1 of 1

## EXHIBIT 3

Excerpt from the Zoning Ordinance of the City of Scottsdale, Section 5.102.I
I. Gas station.

1. The application shall include detailed landscape plans showing plant, type, size and spacing. All landscape plans shall include an automated watering system. Planting areas shall cover a minimum of five (5) percent of the lot area and may be required to cover as much as twenty (20) percent of the site, depending upon site size. All trees planted shall have a minimum caliper of two (2) inches and all shrubs shall be at least five-gallon size. Lack of care and maintenance of the landscaped areas is cause for revoking the Conditional Use Permit.
2. All structures approved under this Conditional Use Permit shall be of a unique design appropriate for the area in which they are to be constructed. All canopies shall be connected to the roof of the main structure unless otherwise approved. Renderings of any buildings shall accompany each application and construction shall be in reasonable conformity thereto.
3. All sources of artificial light shall be concealed and attached to the main structure, unless otherwise approved. All lighting shall be designed to minimize glare.
4. The minimum area of a parcel, exclusive of street dedication, shall be twenty-two thousand five hundred $(22,500)$ square feet.
5. A solid masonry wall or planting screen is required between all gas station sites and a residential district shown on Table 4.100.A., or the residential portion of a Planned Community P-C or any portion of a Planned Residential Development PRD with an underlying zoning district comparable to the residential districts shown on Table 4.100.A. The wall height shall be as determined in each case based on the site and surrounding property contextual relationships.

Resolution No. 12572
Exhibit 3
Page 1 of 1

## QuikTrip <br> Project Narrative - Conditional Use Permit Scottsdale Road \& Legacy Boulevard



Prepared for:
QuikTrip Corporation
Daniel Chambers

Prepared by:
Berry Riddell, LLC
John V. Berry, Esq Michele Hammond, Principal Planner

## Project Overview

QuikTrip Corporation is proposing to build a new fueling station on the vacant $2+/$ - acre parcel located at the northeast corner of Scottsdale Road and Legacy Boulevard (the "Property") and this application is a request a Conditional Use Permit ("CUP") for the proposed fueling station. The site is part of the One Scottsdale master plan (Planning Unit III north of Legacy Blvd) with Planned Regional Center - Planned Community District ("PRC PCD") zoning, which allows for fueling stations with an approved CUP. Access will be provided via Scottsdale Road and Legacy Boulevard with vehicular circulation around the centrally placed QuikTrip building. The QuikTrip convenience store building faces Scottsdale Road with the fueling pump canopy located on the northend of the site. The scenic corridor easement along Scottsdale Road will be maintained as dedicated. The proposed fueling station is cognizant of the City's Gas Station and Convenience Store Design Guidelines as outlined below. In a first for a Scottsdale fueling center, the site design includes a shaded bicycle station along the east end of the Property and the first ever electric vehicle charging station available to the public, which is located at the southwest corner of the site.

## Conceptual Site Plan



Context Aerial


## Conditional Use Permit Criteria

Sec. 1.401. Issuance.
Conditional use permits, which may be revocable, conditional or valid for a specified time period, may be granted only when expressly permitted by this ordinance and, except in the case of conditional use permits for adult uses under Section 1.403(A), only after the Planning Commission has made a recommendation and the City Council has found as follows:
A. That the granting of such conditional use permit will not be materially detrimental to the public health, safety or welfare. In reaching this conclusion, the Planning Commission and the City Council's consideration shall include, but not be limited to, the following factors:

1. Damage or nuisance arising from noise, smoke, odor, dust, vibration or illumination.

Response: No damage or nuisance will arise from noise, smoke, odor, dust, vibration or illumination in the operation of the proposed use.
2. Impact on surrounding areas resulting from an unusual volume or character of traffic.

Response: Scottsdale Road, a major arterial and Legacy Boulevard, a major collector, are both designed to handle the volume of traffic associated with the proposed fueling station use. The proposed use will not result in an unusual increase of traffic volume or character as detailed in the traffic study submitted with this CUP application.
B. The characteristics of the proposed conditional use are reasonably compatible with the types of uses permitted in the surrounding areas.

Response: The site is located on Scottsdale Road and is approximately one-half mile north of the Loop 101/Scottsdale Road freeway interchange and is suitably situated for a fueling station. The surrounding PRC uses within the One Scottsdale master plan will include a range of commercial, office, retail, and multifamily development consistent with the zoning entitlements approved in 2002. Avion on Legacy and One North Scottsdale Apartments exist to the east of the site (approximately 400 -ft away). Subsequent to the zoning approvals, a Master Environmental Design Concept Plan was approved by DRB (1-MP-2006) that includes landscape, hardscape, architectural styles and other design features for One Scottsdale. The proposed QuikTrip development will comply with these plans.

[^0]Sec. 1.403 Additional Conditions for Specific Conditional Uses.
I. Gas station.

1. The application shall include detailed landscape plans showing plant, type, size and spacing. All landscape plans shall include an automated watering system. Planting areas shall cover a minimum of five (5) percent of the lot area and may be required to cover as much as twenty (20) percent of the site, depending upon site size. All trees planted shall have a minimum caliper of two (2) inches and all shrubs shall be at least five-gallon size. Lack of care and maintenance of the landscaped areas is cause for revoking the Conditional Use Permit.

Response: A landscape plan has been included as part of the submittal and not only meets the above noted criteria but exceeds the landscape spacing calculations. Additionally, the landscaping will be maintained at the same high level of other QuikTrip locations.
2. All structures approved under this Conditional Use Permit shall be of a unique design appropriate for the area in which they are to be constructed. All canopies shall be connected to the roof of the main structure unless otherwise approved. Renderings of any buildings shall accompany each application and construction shall be in reasonable conformity thereto.

Response: The proposed building and fueling station canopy are designed with consideration of the surrounding area and master plan design criteria intended to evoke a unique architectural character appropriate for this One Scottsdale site.
3. All sources of artificial light shall be concealed and attached to the main structure, unless otherwise approved. All lighting shall be designed to minimize glare.

Response: Lighting for the fueling station shall be concealed and attached to the main structure and will be flush mounted with the canopy consistent with the Gas Station and Convenience Store Design Guidelines with minimal glare and light trespass.
4. The minimum area of a parcel, exclusive of street dedication, shall be twenty-two thousand five hundred $(22,500)$ square feet.

Response: The site is approximately $2+/-$ acres and exceeds the 22,500 s.f. minimum requirement.
5. A solid masonry wall or planting screen is required between all gas station sites and a residential district shown on Table 4.100.A., or the residential portion of a Planned Community P-C or any portion of a Planned Residential Development PRD with an underlying zoning district comparable to the residential districts shown on Table 4.100.A. The wall height shall be as determined in each case based on the site and surrounding property contextual relationships.

Response: The site and surrounding area is zoned PRC PCD. Landscaping is proposed along the perimeter of the site to provide screening.

## Gas Station \& Convenience Store Design Guidelines

## * Site Design:

1. All development proposals should show evidence of coordination with the site plan, arrangement of buildings and planning elements of neighboring properties.

- Respond to local development patterns and the streetscape through the use of consistent building setbacks, orientation and relationship of structures to the street and linkages to pedestrian facilities.
- Seek shared-access with adjoining commercial uses where feasible to minimize curb cuts and enhance pedestrian and vehicular circulation.
- Minimize cross traffic conflicts within parking areas.

Response: Vehicular access on the north is provided via a shared driveway connecting to Scottsdale Road and direct vehicular access to Legacy Boulevard is proposed at the southeast corner of the site via a shared driveway. Vehicular circulation around the centrally placed QuikTrip building facing Scottsdale Road allows for ease of movement onsite and ample turning radii for trucks. The fueling pump canopy is located on the north-end of the site and is oriented for direct pedestrian access to the building. Sidewalk connections are provided around the building to encourage connectivity from all four sides. The scenic corridor easement along Scottsdale Road will be maintained as dedicated. In a first for a Scottsdale fueling center, a shaded bicycle station will be provided along the eastern edge of the site to include air, water, and minor repair amenities for cyclists. Further, the site design includes the first ever electric vehicle charging station available to the public, which is located at the southwest corner of the site.
2. Mitigate the negative impacts from site activities on adjoining uses:

- Service areas, storage areas and refuse enclosures should be oriented away from public view and screened from adjacent sites
- Orient drive-through windows, menu boards and associated stacking lanes away from residential areas and screen from public view.
- Orient auto repair bay openings and car-wash openings away from public view.

Response: Refuse and service areas are oriented away from public view. No drive-thru, repair bays or car washes are proposed with this CUP request.
3. ATMs should be located within the primary retail building when possible. Freestanding and/or exterior wall mounted ATMs are discouraged. Automatic payment points at the pump island will be reviewed with respect to the guidelines for Pump Islands.

Response: Any ATM will be internal to the building.

## * Architecture:

The following guidelines are applicable to the proposed QuikTrip.

## 1. Building design should take into consideration the unique qualities and character of the surrounding area (refer to the City's Character Area Plans for additional information).

Response: As mentioned above, the architectural design was enhanced to provide an appropriate character and design for this location within the One Scottsdale master plan. After several iterations, the design has been approved, as required by DMB. The use of materials and textures was selected to complement the surrounding development. The building was designed with a variety of horizontal and vertical building planes to create visual interest and pedestrian scale elements while minimizing the building massing. The roof line has a series of heights and is finished with a painted metal cornice treatment.
2. Building elements that speak to the desert environment and climate, such as, architectural shade devices, a strong relationship to the ground plane, deeply recessed windows and the use of materials and textures that are associated with the region are encouraged to define the project identity with the Arizona Sonoran Desert.

Response: The proposed architecture provides an appropriate, contemporary character and design with a variety of materials selected to complement the surrounding development. Additionally, the building was designed with four-sided architecture and a variety of horizontal and vertical building planes to create visual interest, character, and pedestrian scale elements.

## 3. Buildings that derive their image solely from applied treatments that express corporate identity are discouraged.

Response: The proposed QuikTrip utilizes a variety of materials, textures and design features that establish individuality and building character consistent with the surrounding architecture and developments within One Scottsdale. Applied treatments are not the main theme, rather the use of quality building materials and pedestrian scale elements. The use of QuikTrip's traditional "red" is kept to a minimum and only used for signage. This will be a unique QuikTrip designed solely for this One Scottsdale location.
4. The design of stand-alone gas stations and convenience stores should conform to the dominant existing or planned character of the surrounding neighborhood. This can be accomplished through the use of similar forms, materials and colors.

Response: See 1, 2 and 3 above.
5. The design of a facility that occupies a pad or portion of a building within a larger commercial center should be designed to reflect the design elements of that center.

Response: Not applicable.
6. Drive through elements should be architecturally integrated into the building rather than appearing to be applied or "stuck on" to the building.

Response: Not applicable.
7. All sides of a building should express consistent architectural detail and character. All site walls, screen walls and pump island canopies and other outdoor covered areas should be architecturally integrated with the building by using similar material, color and detailing.

Response: The building architectural detail and character is consistent with the fueling pump canopy design. The canopy columns are faced with materials that match the building on all four sides and the canopy fascia is a brush aluminum consistent with the building design.
8. To encourage visually interesting roofs, provide variations in the roof line and incorporate treatments such extended eaves and parapet walls with cornice treatments.

Response: The building was designed with a variety of horizontal and vertical building planes to create visual interest and pedestrian scale elements while minimizing the building massing. The roof line has a series of heights and is finished with a painted metal cornice treatment.
9. Building should respond to solar heat gain, reflectivity and glare through building orientation and the use of architectural shading devices such as pronounced eaves, covered walkways.

Response: The building entrances are shaded with the large canopy overhangs and the windows are shaded with awning. Walkways and vegetation around the building are designed with consideration to the customers.
10. Buildings should reduce their perceived height and bulk by dividing the building mass into smaller-scaled components. Possible treatments to avoid excessive bulk and height include:

- Low-scale planters and site walls. Landscape islands are integrated near the building.
- Wainscot treatment. A variety of materials and accent banding is provided.
- Reveals and or projections of building massing. Projections and variation in building elements are provided.
- Clearly pronounced eaves or cornices. Cornice detailing is incorporated with the building design.
- Subtle changes in material color and texture. A variety of material colors and textures are provided.
- Variation in roof forms. A series of roof heights and building forms are provided.
- Covered pedestrian frontages and recessed entries. Shaded recessed entries are provided.


## 11. Storefronts should be broken into smaller individual windows or groupings of windows.

Response: The windows are broken into sections with mullions to avoid sterile expanses of glass. The building design incorporates window canopies and awnings to address passive solar cooling opportunities.

## 12. Building accents should be expressed through differing materials and/or architectural detailing and not through applied finishes such as paint.

Response: A variety of building materials are proposed and include bushed aluminum awnings and accent canopies.

## 13. Building colors should emphasize earth tones. The use of highly reflective or glossy materials should be limited and will not be appropriate in all contexts.

Response: The building materials and colors selected embody an earth tone palette compatible with the balance of the One Scottsdale master plan.

## 14. Canopy:

- Integration of canopy to building and site walls is desirable. Multiple canopies or canopies that express differing architectural masses are encouraged.

Response: QuikTrip has elected to provide a canopy which is separated from the convenience retail store building due the range of heights and limited maneuverability of the vehicles anticipated to utilize this facility. The separation of these two structures helps create different architectural massing on site.

- Canopy height, as measured from the finished grade to the lowest point on the canopy fascia, should not exceed 13'- 9". The clearance height of canopies should be clearly indicated on the structure or through use of a headache bar. The overall height of canopies should not exceed 17’.

Response: Due to its proximity of the Loop 101 and location along Scottsdale Road, this fueling station is expected to serve a range of vehicles that would exceed the 13'-9" height restriction. The canopy design accommodates a broad range of cars, trucks, and trailers. Additionally, the Arizona Department of Transportation (ADOT) specifies that $14^{\prime}-6$ " is a generally accepted height to accommodate all vehicles. QuikTrip is proposing $14^{\prime}-6^{\prime \prime}$ as the bottom clearance of the canopy with a maximum height of $18^{\prime}-0^{\prime \prime}$.

- Canopy ceiling should be textured or have a flat finish, glossy or highly reflective materials are not recommended.

Response: The canopy ceiling will be designed with a finish to prevent light glare and reflectivity.

## - Lighted bands or tubes or applied bands of corporate color are discouraged.

Response: Light bands and applied corporate color bands have been minimized. This proposed QuikTrip has been uniquely designed specific to this One Scottsdale location.
15. All display items for sale should occur within the main building or within designated areas that are screened from public streets.

Response: Display items will be contained within the main building and/or designated areas that are screened from public streets.
16. Gas tank vents shall be an integral part of the building design in terms of form, color and texture.

Response: The gas tank vents will be integrated with the building design.

## - Pump Islands:

1. The design of pump islands should be architecturally integrated with other structures onsite using similar colors, materials and architectural detailing.

Response: The pump islands will be architecturally integrated with the canopy and building design with respect to color, materials and detailing.
2. The color of the various components of the pump island, including dispensers, bollards and all appurtenances, are encouraged to be muted.

Response: The pump island, including dispensers, bollards and other appurtenances will be finished with muted tones.
3. All elements of the pump island or canopy that are not operational should be architecturally integrated by use of color, material, and architectural detailing.

Response: All elements of the pump island and canopy will be architectural integrated with the overall building design with respect to color, materials, and detailing.
4. The use of translucent materials and internally lighted cabinets are discouraged as finishes or as applied treatments at the pump island or on the canopy.

Response: The use of translucent materials and internally lighted cabinets will be discouraged. Final design will be identified with the Development Review Board submittal.
5. Either a pump island curb or bollard is recommended for the protections of dispensing units.

Response: Pump island curbs and/or bollards will be installed to protect the dispensing units.
Additionally, landscaping and lighting will be designed in conformance with the Gas Stations and Convenience Store Design Guidelines and shall be subject to review and approval by the Development Review Board under a separate and subsequent application. Signage and corporate
identification will be tastefully integrated with the architectural character of the building and will conform to the City's sign code.

## Greater Airpark Character Area Plan

The proposed fueling station complies with the Greater Airpark Character Area Plan, which designates the site as Airpark Mixed-Use Residential ("AMU-R").

## Greater Airpark Character Area Plan-Land Use Map



Airpark Mixed Use-Residential areas are appropriate for the greatest variety of land uses in the Greater Airpark. Appropriate uses may include a combination of personal and business services, employment, office, institutional, cultural amenities, retail, hotel, and higher density residential. Developments in AMU-R areas should be pedestrian-oriented, have access to multiple modes of transportation, and should be located outside of the Airport's 55 DNL contour. Residential and other sensitive uses should be a lesser component of development and include adequate sound attenuation. Design of residential uses in the area south of the Central Arizona Project Aqueduct should support businesses and tourism uses, such as time-shares, multi-family rental units, and corporate housing.

## * Character \& Design

Goal CD 2 Create vibrant Signature Corridors in the Greater Airpark to provide a distinct identity and design theme in the area.

## Policy CD 2.1

Establish a unified streetscape for identified Signature Corridor with unique imagery for each corridor.

## Policy CD 2.1.4 Scottsdale Road Signature Corridor

The Scottsdale Road Signature Corridor, from Frank Lloyd Wright Boulevard to the northern Greater Airpark boundary, is a designated scenic corridor with distinct design guidelines, which reflect the transitional nature from urban to the native desert, while responding to sophisticated urban development and resort characteristics found in adjacent developments.

## Policy 2.1.5 Legacy Signature Corridor

The Legacy Signature Corridor should consist of urban characteristics that celebrate transitions from the urban environment to the native desert and residential area.

## Policy CD 2.6

Where Signature Corridors intersect, and particularly at designated Landmark Intersections, incorporate distinct, landmark architecture, which incorporates elements of the intersecting design themes.

Response: The site is located on Scottsdale Road, a Signature Corridor, and is approximately onehalf mile north of the Loop 101/Scottsdale Road freeway interchange. The QuikTrip development will maintain the existing scenic corridor dedication along Scottsdale Road consistent with the Master Environmental Design Concept Plan approved by DRB (1-MP-2006) that includes streetscape design features for One Scottsdale.

## * Community Mobility

Goal CM 6 Enhance pedestrian and bicyclist access and activity for Greater airpark residents, visitors, and employees.

## Policy CM 6.2

Support an attractive, safe, and engaging pedestrian and bicyclist environment for all users.

## Policy CM 6.5

Design corridors that accommodate and attract pedestrians and bicyclists, particularly in Airpark Mixed Use Future Land Use Areas and along Signature Corridors.

Response: As noted above, both Scottsdale Road and Legacy Boulevard are designated as Signature Corridors in the GACAP. The surrounding area provides a mixture of residential, commercial, retail and office land uses. This proposal for a new fueling station on the subject $2+/-$ acre site will integrate well with the mix of uses provided along these Corridors and provide desirable support retail/gasoline services to the surrounding community. Bike lanes along Legacy Boulevard and trail connectivity will be maintained/improved with the development. The fueling station site design provides for a shaded bicycle station which will include air, water, and minor repair amenities for cyclists. The site design also includes an electric vehicle charging station available to the public, which is located at the southwest corner of the site. Direct sidewalk connections will be provided into the site from the street frontages as well as the existing and future the development to the east. Sidewalk connections are provided around the building to encourage connectivity from all four sides.



ATTACHMENT 5






$\underset{\text { PersF }}{\text { APPRYED }}$


Transportation Impact \& Mitigation Analysis


## Prepared for:

C.J QuikTrip | QuikTrip Corporation |
| :--- |
| 1116 East Broadway Road |
| Tempe, AZ 85282 |

Project Number: 21.5286.01 July 6, 2022


Prepared by:

## TABLE OF CONTENTS:

1. Introduction and Executive Summary .....  .1
1.1. Purpose of Report and Study Objectives .....  .1
1.2. Executive Summary .....  1
2. Proposed Development ..... 4
3. Area Conditions ..... 8
3.1. Study Roadway Segments .....  8
3.2. Study Intersections ..... 9
3.3. Surrounding Area Land Use ..... 9
3.4. Site Accessibility ..... 9
3.5. Collision Rates ..... 10
3.6. Collision History ..... 10
4. Existing Conditions. ..... 12
4.1. Existing Land Use ..... 12
4.2. Existing Traffic Counts ..... 12
4.3. Existing Capacity Analysis ..... 14
5. Projected Traffic ..... 17
5.1. Trip Generation. ..... 17
5.2. Trip Distribution and Assignment ..... 18
6. Future Conditions (Year 2023) ..... 22
6.1. Year 2023 Background Traffic Volumes ..... 22
6.2. Year 2023 Build Traffic Volumes ..... 22
6.3. Year 2023 No Build Capacity Analysis ..... 22
6.4. Year 2023 Build Capacity Analysis ..... 23
7. Turn Lane Analysis ..... 29
7.1. Right Turn Lanes ..... 29
7.2. Queue Analysis ..... 30
8. Access and Circulation Analysis ..... 31
9. Recommendations \& Conclusions. ..... 33

QuikTrip

## FIGURES:

Figure 1 - Vicinity Map ..... 5
Figure 2 - Site Plan ..... 6
Figure 3 - Study Area ..... 7
Figure 4 - Existing Traffic Volumes ..... 13
Figure 5 - Existing Capacity Analysis ..... 16
Figure 6 - Trip Distribution ..... 19
Figure 7 - Site Traffic Volumes ..... 20
Figure 8 - Pass-by Traffic Volumes ..... 21
Figure 9 - Year 2023 No Build Traffic Volumes ..... 25
Figure 10 - Year 2023 Build Traffic Volumes ..... 26
Figure 11 - Year 2023 No Build Capacity Analysis ..... 27
Figure 12 - Year 2023 Build Capacity Analysis ..... 28
TABLES:
Table 1 - Collision Rates - Study Roadway Segments ..... 10
Table 2 - Level of Service Criteria ..... 14
Table 3 - Existing Level of Service and Delay - Unsignalized ..... 15
Table 4 - Existing Level of Service and Delay - Signalized ..... 15
Table 5 - Trip Generation - Proposed Development ..... 17
Table 6 - Year 2023 Level of Service and Delay - Unsignalized ..... 24
Table 7 - Year 2023 Level of Service and Delay - Signalized ..... 24
Table 8 - Queue Analysis ..... 30
APPENDICES:
Appendix A - Proposed Site Plan ..... A
Appendix B - Collision History ..... B
Appendix C - Parcel Information .....
Appendix D - Traffic Count Data ..... D
Appendix E - Signal Timing ..... E
Appendix F - Existing Capacity Analysis .....
Appendix G - Trip Generation ..... G
Appendix H - MAG Socioeconomic Projections ..... H
Appendix I - Year 2023 No Build Capacity Analysis .....
Appendix J - Year 2023 Build Capacity Analysis ..... J
ii

## 1. INTRODUCTION AND EXECUTIVE SUMMARY

### 1.1. PURPOSE OF REPORT AND STUDY OBJECTIVES

Lōkahi, LLC (Lōkahi) was retained by QuikTrip Corporation to complete a Transportation Impact \& Mitigation Analysis for the proposed QuikTrip development located on the northeast corner of Scottsdale Road and Legacy Boulevard. The objective of this Transportation Impact \& Mitigation Analysis is to analyze the traffic related impacts of the proposed development to the adjacent roadway network. See Figure 1 for the vicinity map.

### 1.2. EXECUTIVE SUMMARY

The QuikTrip development will be located on the northeast corner of Scottsdale Road and Legacy Boulevard in Scottsdale, Arizona. The proposed QuikTrip will include a 5,312 square foot convenience store and 16 vehicle fueling positions.

This Transportation Impact and Mitigation Analysis includes:

- Level of service analysis of existing conditions for the weekday AM and PM peak hours
- Trip Generation for the existing and proposed development
- Level of service analysis for the opening year (2023) weekday AM and PM peak hours
- 2023 No Build
- 2023 Build

The following are the two (2) existing intersections included in this study:

- Scottsdale Road and Legacy Boulevard (2)
- Legacy Boulevard and $73^{\text {rd }}$ Street (4)


## Existing Capacity Analysis

The AM and PM peak hour existing conditions capacity analysis were completed for the existing study intersections. The results of the capacity analysis reveal the following location with an existing level of service (LOS) E or F:

Scottsdale Road and Legacy Boulevard (2) - Signalized

- WB left AM peak hour operates at LOS E
- WB right PM peak hour operates at LOS E

QuikTrip
QuikTrip Corporation

## Trip Generation

The proposed development is anticipated to generate a total of 4,114 weekday trips with 433 occurring during the AM peak hour and 364 trips during the PM peak hour. Based on the data for ITE Land Use 935 provided in the Trip Generation Handbook, a percentage of the development's AM and PM total trips, may be attributed to traffic passing the site on the way from an origin to an ultimate destination. Thus, the proposed development is anticipated to add 1,032 new weekday trips, with 96 new trips occurring during the AM peak hour and 102 new trips occurring during the PM peak hour.

| Land Use | ITE Code | Qty | Unit | Weekday | AM Peak Hour |  |  | PM Peak Hour |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Total | Total | In | Out | Total | In | Out |
| Convenience Store/Gas Station | 945 | 16 | Fueling Positions | 4,114 | 433 | 217 | 216 | 364 | 182 | 182 |
|  |  |  | Pass-By | 3,082 | 337 | 169 | 168 | 262 | 131 | 131 |
|  |  |  | Total | 1,032 | 96 | 48 | 48 | 102 | 51 | 51 |

## Future Conditions - Year 2023

The QuikTrip is anticipated to be constructed and ready to open in the year 2023. Therefore, year 2023 analyses were completed with and without the build out of the proposed development. An annual growth rate of $2.0 \%$ was applied to the existing traffic volumes.

A capacity analysis was completed for both the AM and PM peak hours for year 2023, with and without the build out of the proposed development. All movements operate at a LOS D or better or are maintained at the year 2023 no build level of service, with the exception of

Scottsdale Road and Legacy Boulevard (2) - Signalized

- WB left PM a peak hour operates at LOS E

The results of the year 2023 no build capacity analysis indicate the westbound left turn at Scottsdale Road and Legacy Boulevard (2) operates at a LOS D with a delay of 54.8 seconds in the PM peak hour. Under the build conditions, the westbound left operates at a LOS E with a delay of 56.2 seconds in the PM peak hour. This represents an increase of 1.4 seconds (2.5\%).

Also, it should be noted that the overall intersection operates at a LOS A.

## Recommendations

The recommendations with the build out of the proposed QuikTrip include:

- Scottsdale Road and Driveway A (1)

Buildout of a right-in and right-out access point, 450 feet north of Legacy Boulevard. This will be a shared access driveway. A northbound right turn lane will be constructed at this driveway by others.

- Legacy Boulevard and Driveway B (3)

Buildout of a right-in and right-out access point, 350 feet east of Scottsdale Road. This will be a shared access driveway. A westbound right-turn lane will be constructed at this driveway location.

The location, movements (right-in/right-out), and traffic control (stop-controlled) at Driveway $B$ is consistent and was included in the Traffic Impact and Mitigation Analysis (TI\&MA) for the One Scottsdale development, dated May 2016. This 2016 TI\&MA was accepted by the City of Scottsdale Transportation Department

## 2. PROPOSED DEVELOPMENT

The study area is located in the City of Scottsdale, Arizona, approximately one-half mile north of State Route Loop 101 (SR 101). The proposed development is located on the northeast corner of Scottsdale Road and Legacy Boulevard.

The proposed QuikTrip will include a 5,312 square foot convenience store and 16 vehicle fueling positions.

See Figure 2 and Appendix A for the proposed site plan.
There are two (2) access points to the proposed site:

Scottsdale Road and Driveway A (1) is located approximately 450 feet north of Legacy Boulevard and will allow for right-in and right-out movements only. This will be a shared-access driveway.

Legacy Boulevard and Driveway B (3) is located approximately 350 feet east of Scottsdale Road and will allow for right-in and right-out movements only. This will be a shared-access driveway.

Additionally, there will be an agreement with the property to the east to allow access to $73^{\text {rd }}$ Street.

See Figure 3 for study area.


FIGURE1 VICINITY MAP


FIGURE $2 \mid$ SITE PLAN


## Legend

## 3. AREA CONDITIONS

The study area is located in the City of Scottsdale, Arizona. Sections 3.1 and 3.2 provide detailed descriptions of the study roadway segments and intersections.

### 3.1. STUDY ROADWAY SEGMENTS

Scottsdale Road runs north-south that generally provides two (2) travel lanes for each direction of travel with a center two-way left turn lane, just north of Henkel Way. Scottsdale Road generally provides three (3) travel lanes for each direction of travel with a raised landscaped median, south of Henkel Way. There is a posted speed limit of 45 miles per hour (mph). The City of Scottsdale classifies Scottsdale Road as a major arterial, according to City of Scottsdale Transportation Master Plan, dated July 2016. The City of Scottsdale's 2018 Average Daily Segment Traffic (ADT) Volumes map reports an ADT of 49,700 vehicles per day (vpd) along Scottsdale Road, between SR 101 and Thompson Peak Parkway.

Legacy Boulevard is generally an east-west roadway, that currently operates between Scottsdale Road and Hayden Road, within the study area. Two (2) travel lanes are provided for each direction of travel with a raised landscaped median. There is a posted speed limit of 30 mph . Legacy Boulevard is classified as a minor arterial, per the City of Scottsdale Transportation Master Plan, dated July 2016.
$73^{\text {rd }}$ Street, within the vicinity of the study area, is a north-south roadway, located approximately 550 feet east of Scottsdale Road. $73{ }^{\text {rd }}$ Street currently operates between Legacy Boulevard to Thompson Peak Parkway. There is an unposted speed limit of 25 mph .

Thompson Peak Parkway, within the vicinity of the study area, is generally an east-west roadway, providing two (2) travel lanes for each direction of travel with a raised landscaped median. There is a posted speed limit of 45 mph . Thompson Peak Parkway is classified as a minor arterial, per the City of Scottsdale Transportation Master Plan, dated July 2016.

QuikTrip QuikTrip Corporation

### 3.2. STUDY INTERSECTIONS

Scottsdale Road and Legacy Boulevard (2) currently operates as a signalized T-intersection. The northbound approach provides two (2) through lanes and one (1) dedicated right turn lane. The southbound approach provides one (1) dedicated left turn lane and two (2) through lanes. The westbound approach provides two (2) dedicated left turn lanes and one (1) dedicated right turn lane.
$73^{\text {rd }}$ Street and Legacy Boulevard (4) currently operates as a stop-controlled t-intersection, with the stop control on the southbound approach. The southbound approach provides one (1) dedicated left turn and one (1) dedicated right turn lane. The eastbound approach provides one (1) dedicated left turn lane, two (2) through lanes, and one (1) dedicated right turn lane. The westbound approach provides one (1) dedicated left turn lane, one (1) through lane, and one (1) shared through-right turn lane. The south leg of the intersection is currently developed to approximately 50 ' to the south, where it currently terminates and is gated.

### 3.3. SURROUNDING AREA LAND USE

The proposed QuikTrip is located in Scottsdale, Arizona. The proposed development is bordered by Scottsdale Road to the west, with vacant and undeveloped land located on the west side of Scottsdale Road. Multi-family residential developments generally surround the area to the east.

### 3.4. SITE ACCESSIBILITY

## Roadway System

The study area is located in the City of Scottsdale, Arizona approximately one-half mile north of State Route 101 (SR 101). This route provides regionals access to the Phoenix metropolitan area. Within the vicinity of the proposed site there is a well-developed roadway network.

## Pedestrian Facilities

Between Henkel Way and Thompson Peak Parkway, Scottsdale Road does not currently provide sidewalk facilities.

Legacy Boulevard generally does not currently provide sidewalk facilities, with the exception of an approximate 1,100 -foot segment on the north side of the roadway, east of $73^{\text {rd }}$ Street.
$73^{\text {rd }}$ Street provides sidewalks on the east side of the roadway, between Legacy Boulevard and Thompson Peak Parkway.

Thompson Peak Parkway generally provides continuous sidewalks on both sides of the roadway, within the study area, with the exception of an approximate 500 -foot segment between Scottsdale Road and73 ${ }^{\text {rd }}$ Street.

## Bicycle Facilities

Marked on-street bike lanes are provided in each direction of travel along Legacy Boulevard and Thompson Peak Parkway, within the study area.

Scottsdale Road and $73^{\text {rd }}$ Street do not provide on-street bicycle lanes, within the study area.

## Transit Facilities

Within the immediate study area, Valley Metro Route 72 operates along Scottsdale Road. There are two (2) bus stops for Route 72 in the area. There is one (1) bus stop provided on the northwest corner of Thompson Peak Parkway and Scottsdale Healthcare Drive. An additional bus stop is located along Scottsdale Healthcare Drive, just east of $73^{\text {rd }}$ Street.

### 3.5. COLLISION RATES

The City of Scottsdale's 2020 Traffic Volume and Collision Rate Data report provides collision rate and traffic volume information on major roadway segments and at major intersections within the City. Segment collisions are collisions that occur on a major street more than 100 feet from the major intersections that define the segment, including at minor intersections within the segment. Intersection collisions are collisions that occur at or within 100 feet of a major intersection. The collision rates and city-wide rankings for the study roadway segments are shown in Table 1. The collision rate for the study intersections were not provided in the City of Scottsdale's 2020 Traffic Volume and Collision Rate Data.

Table 1 - Collision Rates - Study Roadway Segments

| Segment | From | To | Collision Rate | Rank |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Scottsdale Road | 101 Freeway (SR 101) | Thompson Peak Parkway | 1.41 | 111 |  |  |  |
| 2020 City of Scottsdale Average Segment Collision Rate |  |  |  |  |  | 1.36 |  |

### 3.6. COLLISION HISTORY

The most recent 3-year collision history, from January 2018 to December 2020, was obtained from the City of Scottsdale. See Appendix B for collision data. The data included the following intersections and segments:

- Scottsdale Road and Legacy Boulevard (2)
- Scottsdale Road, Henkel Way to Legacy Boulevard
- Scottsdale Road, Legacy Boulevard to Thompson Peak Parkway
- Legacy Boulevard, Scottsdale Road to approximately $1 / 4$ mile to the east


## Scottsdale Road and Legacy Boulevard (2)

During the three-year period, there were a total of 11 collisions at the intersection of Scottsdale Road and Legacy Boulevard (2). There was a total of 8 rear end, 2 sideswipe same direction, and 1 angle collision(s). Of the 11 collisions, 6 were speed too fast for conditions, 2 followed too closely, 2 unsafe lane changes, and 1 failed to yield the right of way.

## Scottsdale Road, Henkel Way to Legacy Boulevard

During the three-year period, there were a total of 6 collisions along the segment of Scottsdale Road, between Henkel Way and Legacy Boulevard. Of the 6 collisions, there were 4 rear end, 1 sideswipe same direction, and 1 angle collision(s). Of which, 3 were speed too fast for conditions, 1 followed too closely, 1 unsafe lane changes, and 1 unknown.

## Scottsdale Road, Legacy Boulevard to Thompson Peak Parkway

During the three-year period, there were a total of 18 collisions along the segment of Scottsdale Road, between Legacy Boulevard and Thompson Peak Parkway. Of the 18 collisions, there were 14 rear end, 2 sideswipe same direction, 1 angle, and 1 single vehicle collision(s). Of which, 9 were speed too fast for conditions, 5 followed too closely, 2 unsafe lane changes, 1 no improper action, and 1 unknown.

## Legacy Boulevard, Scottsdale Road to approximately $1 / 4$ mile east

During the three-year period, there were a total of 3 collisions along the segment of Legacy Boulevard, between Scottsdale Road and approximately one-quarter mile east of Scottsdale Road. Of the 3 collisions, there was 1 sideswipe same direction, 1 angle, and 1 single vehicle collision(s). Of which, there was 1 unsafe lane change, 1 no improper action, and 1 unknown.

## 4. EXISTING CONDITIONS

### 4.1. EXISTING LAND USE

According to the Maricopa County Assessor's website, the proposed site occupies a portion of the existing parcel 215-05-304. See Appendix C for detailed parcel information.

### 4.2. EXISTING TRAFFIC COUNTS

A local data collection firm, All Traffic Data, was utilized to collect traffic counts. On Wednesday, December 8, 2021, turning movement counts were obtained from 7:00 to 9:00 am and from 4:00 to 6:00 pm at the following locations:

- Scottsdale Road and Legacy Boulevard (2)
- Legacy Boulevard and $73^{\text {rd }}$ Street (4)

Additionally, on Wednesday, December 8, 2021, bi-directional tube counts for 24-hours in 15-minute intervals were collected along the following roadway segments:

- Scottsdale Road, north of Legacy Boulevard
- Legacy Boulevard, east of Scottsdale Road

The turning movement counts were then analyzed for the highest 1-hour within each time period. The following peak hours were analyzed throughout this study.

$$
\begin{array}{ll}
\text { AM Peak Hour } & 7: 45 \mathrm{am}-8: 45 \mathrm{am} \\
\text { PM Peak Hour } & 4: 00 \mathrm{pm}-5: 00 \mathrm{pm}
\end{array}
$$

The City of Scottsdale seasonal adjustment factors were used to adjust the traffic counts. The traffic volumes were adjusted based on the month the counts were taken. See Appendix D for detailed count data. See Figure 4 for the existing adjusted AM and PM peak hour weekday traffic volumes.


| Legend |
| :--- |
| AM(PM) Peak Hour Traffic Volumes |

Intersection

## FIGURE 4 EXISTING TRAFFIC VOLUMES

### 4.3. EXISTING CAPACITY ANALYSIS

The existing conditions capacity analysis was completed for the existing study intersections. The capacity and level of service for the study area intersections were evaluated using the methodology presented in the $6^{\text {th }}$ Edition of the Highway Capacity Manual (HCM). Traffic analysis software, Synchro Version 11, was used to perform the analyses using the signal timing provided by the City of Scottdale. The existing peak hour factor (PHF) was used. However, if the existing PHF was greater than 0.92, the PHF was defaulted to 0.92. See Appendix E for the existing signal timing.

Table 2 is from the $6^{\text {th }}$ Edition of the Highway Capacity Manual Exhibit 20-2, which lists the Level of Service (LOS) thresholds for signalized and unsignalized intersections.

Table 2 - Level of Service Criteria

| Level of Service (LOS) | Control Delay per Vehicle (s/veh) |  |
| :---: | :---: | :---: |
|  | Signalized Intersection | Unsignalized Intersection |
| A | $\leq 10$ | $0-10$ |
| B | $>10-20$ | $>10-15$ |
| C | $>20-35$ | $>15-25$ |
| D | $>35-55$ | $>25-35$ |
| E | $>55-80$ | $>35-50$ |
| F | $>80$ | $>50$ |

The results of the capacity analysis reveal the following locations with an existing level of service (LOS) E or F:

## Scottsdale Road and Legacy Boulevard (2) - Signalized

- WB left AM a peak hour operates at LOS E
- WB right PM peak hour operates at LOS E

The existing AM and PM peak hour level of service and delay for unsignalized intersections are shown in Table 3 and signalized intersections are shown in Table 4.

See Figure 5 for the existing AM and PM peak hour capacity analysis. The detailed capacity analysis sheets can be found in Appendix F.

14

Table 3 - Existing Level of Service and Delay - Unsignalized

| Intersection | Existing Conditions |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | AM PEAK |  | PM PEAK |  |
| Unsignalized Intersections | LOS | DELAY | LOS | DELAY |
| Legacy Boulevard and 73rd Street (4) | A | 7.4 | A | 7.5 |
| Eastbound Left | A | 7.6 | A | 7.6 |
| Westbound Left | A | 9.2 | A | 9.7 |
| Southbound Left | A | 8.6 | A | 8.6 |
| Southbound Right |  |  |  |  |

Table 4 - Existing Level of Service and Delay - Signalized

| Intersection | Existing Conditions |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | AM PEAK | PM PEAK |  |  |
|  |  |  |  |  |
| Scottsdale Road and Legacy Boulevard (2) | DELAY | LOS | DELAY |  |
| Overall Intersection | A | 7.0 | A | 7.2 |
| Westbound Left | E | 55.2 | D | 54.9 |
| Westbound Right | D | 54.4 | E | 55.3 |
| Northbound Through | A | 7.8 | A | 8.0 |
| Northbound Right | A | 3.0 | A | 3.1 |
| Southbound Left | A | 7.1 | A | 7.4 |
| Southbound Through | A | 4.6 | A | 5.0 |

15


FIGURE 5 EXISTING CAPACITY ANALYSIS

## 5. PROJECTED TRAFFIC

### 5.1. TRIP GENERATION

The trip generation for the proposed development was calculated utilizing the Institute of Transportation Engineers (ITE) publication entitled Trip Generation, $11^{\text {th }}$ Edition. The ITE rates are based on studies that measured the trip generation characteristics for various types of land uses. The rates are expressed in terms of trips per unit of land use type. This publication is considered to be the standard for the transportation engineering profession.

## Pass-by Trips

Pass-by trips are intermediate stops on the way from an origin to a primary trip destination without a route diversion. Pass-by trips are attracted from the existing traffic passing the site on an adjacent street or roadway that offers direct access to the generator. These trips are not considered to add new traffic to the adjacent street network and may be reduced from the total external trips generated by the proposed development. Pass-by rates were applied to the Weekday, AM Peak Hour and PM Peak Hour trips generated by the respective land uses. These rates are based on data provided in the Trip Generation Handbook, $3^{\text {rd }}$ Edition.

The trip generation for proposed development was calculated utilizing ITE Land Use 945 Convenience Store/Gas Station. Trip generation calculations are shown in Table 5 below. Detailed trip generation calculations are provided in Appendix G.

Table 5 - Trip Generation - Proposed Development

| Land Use | ITE Code | Qty | Unit | Weekday | AM Peak Hour |  |  | PM Peak Hour |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Total | Total | In | Out | Total | In | Out |
| Convenience Store/Gas Station | 945 | 16 | Fueling Positions | 4,114 | 433 | 217 | 216 | 364 | 182 | 182 |
|  |  |  | Pass-By | 3,082 | 337 | 169 | 168 | 262 | 131 | 131 |
|  |  |  | Total | 1,032 | 96 | 48 | 48 | 102 | 51 | 51 |

The proposed development is anticipated to generate 1,032 weekday trips with 96 occurring during the AM peak hour and 102 trips during the PM peak hour.

### 5.2. TRIP DISTRIBUTION AND ASSIGNMENT

The trip distribution procedure determines the general pattern of travel for vehicles entering and leaving the proposed development. The trip distribution for QuikTrip development is based on the distribution of the existing traffic. This project is being developed in a primarily developed area, so it can be assumed that the existing trip distribution will remain. The trip distribution is shown in
Figure 6.
The trip assignment was generally based on proximity of the driveways, permitted turn movements, as well as ease and probability of use. The site generated traffic volumes are shown in Figure 7. Additionally, the pass-by traffic volumes are shown in Figure 8.

For the purposes of this report all of the site generated traffic was directed to Scottsdale Road and Driveway A (1) and Legacy Boulevard and Driveway B (3). There are discussions for a cross access agreement with the property to the east of the proposed QuikTrip development to allow access to $73^{\text {rd }}$ Street.

18


## Legend

AM(PM) Inbound Trip Distribution Percentages
AM(PM) Outbound Trip Distribution Percentages


FIGURE7 7 SITE TRAFFIC VOLUMES


FIGURE 8 | PASS-BY TRAFFIC VOLUMES

## 6. FUTURE CONDITIONS (YEAR 2023)

The proposed QuikTrip is anticipated to be constructed and ready to open in the year 2023. This section analyzes the effects the proposed development will have on the surrounding roadway network during the opening year of 2023.

### 6.1. YEAR 2023 BACKGROUND TRAFFIC VOLUMES

According to the 2019 Maricopa Associations of Governments (MAG) socioeconomic projections in the City of Scottsdale within the study area (RAZ 230), it is estimated that in the year 2018 the population was approximately 32,232 . MAG estimates that the 2030 population of the surrounding area to be 38,882 . This results in an approximate annual growth rate of $1.38 \%$.

As a conservative approach, a $2.0 \%$ annual growth rate was utilized. See Appendix H for the MAG socioeconomic projections. See Figure 9 for the year 2023 background traffic volumes.

### 6.2. YEAR 2023 BUILD TRAFFIC VOLUMES

When the site traffic (Figure 7) and pass-by traffic (Figure 8) are added to the year 2023 background traffic (Figure 9), the result is the 2023 build traffic volumes. This represents the traffic volumes with the build out of the proposed development. The year 2023 build traffic volumes are shown in Figure 10.

### 6.3. YEAR 2023 NO BUILD CAPACITY ANALYSIS

The capacity and level of service for the study area intersections were evaluated for the 2023 no build scenario. The PHF was assumed to be 0.92.

The year 2023 no build AM and PM peak hour level of service and delay for unsignalized intersections are shown in Table 6 and signalized intersections are shown in Table 7. The detailed capacity analysis sheets can be found in Appendix I.

The results of the year 2023 no build capacity analysis are shown in Figure 11. The results of the capacity analysis reveal the following locations with a level of service (LOS) E or F:

Scottsdale Road and Legacy Boulevard (2) - Signalized

- WB left AM a peak hour operates at LOS E
- WB right PM peak hour operates at LOS E


### 6.4. YEAR 2023 BUILD CAPACITY ANALYSIS

The capacity and level of service for the study area intersections were evaluated for the year 2023 build traffic volumes. See Figure 10. The PHF was assumed to be 0.92.

The year 2023 build AM and PM peak hour level of service and delay for unsignalized intersections are shown in Table 6 and signalized intersections are shown in Table 7. The detailed capacity analysis sheets can be found in Appendix J.

The results of the year 2023 build capacity analysis are shown in Figure 12. All movements operate at a LOS D or better or are maintained at the year 2023 no build level of service, with the exception of:

## Scottsdale Road and Legacy Boulevard (2) - Signalized

- WB left PM a peak hour operates at LOS E

The results of the year 2023 no build capacity analysis indicate the westbound left turn at Scottsdale Road and Legacy Boulevard (2) operates at a LOS D with a delay of 54.8 seconds in the PM peak hour. Under the build conditions, the westbound left operates at a LOS E with a delay of 56.2 seconds in the PM peak hour. This represents an increase of 1.4 seconds (2.5\%).

Also, it should be noted that the overall intersection operates at a LOS A.

23

Table 6 - Year 2023 Level of Service and Delay - Unsignalized

| Intersection | 2023 No Build Conditions |  |  |  | 2023 Build Conditions |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | AM PEAK |  | PM PEAK |  | AM PEAK |  | PM PEAK |  |
| Unsignalized Intersections | LOS | DELAY | LOS | DELAY | LOS | DELAY | LOS | DELAY |
| Scottsdale Road and Driveway A (1) |  |  |  |  |  |  |  |  |
| Westbound Right | - | - | - | - | C | 20.5 | C | 20.4 |
| Legacy Boulevard and Driveway B (3) |  |  |  |  |  |  |  |  |
| Southbound Right | - | - | - | - | A | 9.0 | A | 8.9 |
| Legacy Boulevard and 73rd Street (4) |  |  |  |  |  |  |  |  |
| Eastbound Left | A | 7.4 | A | 7.5 | A | 7.9 | A | 7.9 |
| Westbound Left | A | 7.6 | A | 7.6 | A | 7.6 | A | 7.6 |
| Southbound Left | A | 9.3 | A | 9.7 | B | 10.6 | B | 10.9 |
| Southbound Right | A | 8.6 | A | 8.6 | A | 8.6 | A | 8.6 |

Table 7 - Year 2023 Level of Service and Delay - Signalized

| Intersection | 2023 No Build Conditions |  |  |  | 2023 Build Conditions |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | AM PEAK |  | PM PEAK |  | AM PEAK |  | PM PEAK |  |
| Signalized Intersections | LOS | DELAY | LOS | DELAY | LOS | DELAY | LOS | DELAY |
| Scottsdale Road and Legacy Boulevard (2) |  |  |  |  |  |  |  |  |
| Overall Intersection | A | 7.1 | A | 7.5 | A | 9.4 | A | 9.7 |
| Westbound Left | E | 55.2 | D | 54.8 | E | 56.9 | E | 56.2 |
| Westbound Right | D | 54.4 | E | 55.3 | D | 54.1 | D | 54.9 |
| Northbound Through | A | 7.9 | A | 8.4 | B | 10.4 | B | 11.0 |
| Northbound Right | A | 3.1 | A | 3.1 | A | 4.0 | A | 4.1 |
| Southbound Left | A | 7.1 | A | 8.0 | B | 12.7 | B | 14.1 |
| Southbound Through | A | 4.6 | A | 5.3 | A | 4.6 | A | 5.4 |

24


Legend
AM(PM) Peak Hour Traffic Volumes

* Intersection

FIGURE 9 | YEAR 2023 NO BUILD TRAFFIC VOLUMES


Legend
AM(PM) Peak Hour Traffic Volumes
Intersection

FIGURE 10 | YEAR 2023 BUILD TRAFFIC VOLUMES


FIGURE11| YEAR 2023 NO BUILD CAPACITY ANALYSIS


## 7. TURN LANE ANALYSIS

### 7.1. RIGHT TURN LANES

Turn lanes or deceleration lanes, allow vehicles exiting a roadway to slow to a reduced speed to execute a turn without impeding the main flow of traffic.

The City of Scottsdale 2018 Design Standards \& Policies Manual Section 5.3.206 deceleration lane criteria is analyzed below for the study intersections where traffic volumes were available.

## Right Turn Lane

Deceleration lanes are required at all new driveways on major arterials and at new commercial/retail driveways on minor arterials. To determine the need for a deceleration lane on streets classified as a minor arterial or collector, use the following criteria:

- At least 5,000 vehicle per day are expected to be using the street.
- The roadway's $85^{\text {th }}$ percentile speed limit is at least 35 mph .
- At least 30 vehicles will make right-turns into the driveway during a 1-hour period.

Using the above criteria, a right turn lane would be required at the following study intersection:

- Scottsdale Road and Driveway A (1) - northbound right turn lane. The proposed northbound right turn lane will be constructed by others.

Although the study intersection of Legacy Boulevard and Driveway B (3) does not meet the above criteria, because the posted speed limit along Legacy Boulevard is only 30 mph , at the request of the City of Scottsdale, a westbound right turn lane will be provided. Due to existing geometric constraints, the proposed right turn lane will provide 75 feet of storage with a 56 -foot taper.

### 7.2. QUEUE ANALYSIS

The $95^{\text {th }}$ percentile queue reported by Synchro was used to calculate the required storage length for each turn lane. See Table 8 for the turn bay storage for each required turn lane for year 2023 with the built out of the proposed QuikTrip.

Table 8 - Queue Analysis

| Intersection | Movement | Existing Storage | Existing/Proposed Storage Length | 95th Percentile |  | Storage Length |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | AM Peak Hour | PM Peak Hour |  |
| Scottsdale Road and Driveway A (1) | WB Right | - | $100^{\prime}$ | 48' | $40^{\prime}$ | Sufficient |
|  | NB RIght | - | $10{ }^{\prime}$ | * | * | Sufficient |
| Scottsdale Road and Legacy Boulevard (2) | WB Left | Dual Turn Lanes | 450' | $84^{\prime}$ | $72^{\prime}$ | Sufficient |
|  | WB Right | Turn Lane | 130' | $21^{\prime}$ | 29' | Sufficient |
|  | NB Right | Turn Lane | $380{ }^{\prime}$ | $17^{\prime}$ | $15^{\prime}$ | Sufficient |
|  | SB Left | Turn Lane | 280' | 42' | $36^{\prime}$ | Sufficient |
| Legacy Boulevard and Driveway B (3) | WB Right | - | $75^{\prime}$ | * | * | Sufficient |
|  | SB Right | - | $50^{\prime}$ | $8^{\prime}$ | $5^{\prime}$ | Sufficient |
| Legacy Boulevard and 73rd Street (4) | EB Left | Turn Lane | $110^{\prime}$ | $5^{\prime}$ | $7.5^{\prime}$ | Sufficient |
|  | WB Left | Turn Lane | 200' | $0^{\prime}$ | $0^{\prime}$ | Sufficient |
|  | SB Left | Turn Lane | $150{ }^{\prime}$ | $2.5{ }^{\prime}$ | $2.5{ }^{\prime}$ | Sufficient |
|  | SB Left | Turn Lane | 150' | $5{ }^{\prime}$ | $2.5{ }^{\prime}$ | Sufficient |

*Free-flowing right turning movements area not anticipated to queue.

30

QuikTrip QuikTrip Corporation

## 8. ACCESS AND CIRCULATION ANALYSIS

Location and access ingress and egress at gas stations are critical.
The proposed QuikTrip located on the northeast corner of Scottsdale Road and Legacy Boulevard (2) proposed right-in and right-out accesses on both roadway frontages, one along Scottsdale Road (Driveway A), and one along Legacy Boulevard (Driveway B). Both of these accesses will be limited to right-in/right-out movements due to its proximity to the intersection of Scottdale Road and Legacy Boulevard (2) along with the presence of raised medians.

A right-turn deceleration lane meets the City of Scottsdale criteria and is recommended for installation along Scottsdale Road at Driveway A. Although, Driveway B's posted speed limit and daily through volumes do not meet the right turn lane criteria, at the request of the City of Scottsdale a westbound right turn lane will be recommended for installation.

The following specifically addresses the operation and location of the Legacy Boulevard and Driveway B (3):

- It is located approximately 350 feet east of Scottsdale Road and will be limited to right-in and right-out movements only. A raised median is constructed on Legacy Boulevard which further enforces the restricted and allowed movements into and out of this access.
- The City of Scottsdale encourages shared driveways, to limit the number of accesses and conflicts. Driveway B will be a shared access with future developments to the east and north.
- The location, movements (right-in/right-out), and traffic control (stop-controlled) at Driveway B is consistent with and was included in the Traffic Impact and Mitigation Analysis (TI\&MA) for the One Scottsdale development, dated May 2016. This 2016 TI\&MA was accepted by the City of Scottsdale Transportation Department.
- Driveway B will be located just east of the exclusive left turn storage lanes for the signalized intersection of Scottsdale Road and Legacy Boulevard (2).
- An analysis was conducted to determine the $95^{\text {th }}$ percentile queues for the exclusive right and left turn lanes for the signalized intersection of Scottsdale Road and Legacy Boulevard (2).
- The $95^{\text {th }}$ percentile queue for the westbound dual left turn lanes is 89 feet and 77 feet for the AM and PM peak hours, respectively.
- The $95^{\text {th }}$ percentile queue for the westbound right turn lane is 22 feet and 31 feet for the AM and PM peak hours, respectively.
- Located approximately 350 feet east of the intersection of Scottsdale Road and Legacy Boulevard (2), Driveway B will not be blocked by queuing from the signalized intersection.
- Driveway B operates at acceptable levels of service during the AM and PM peak hours in year 2023 with the build out of the QuikTrip.
- For the purposes of circulating passenger vehicles and refueling vehicles (semitrucks) around the proposed site, the driveway along Legacy Boulevard allows for egress and access to southbound Scottsdale Road and access to SR 101L.
- The design of this site is similar to other locations throughout the City of Scottsdale and other cities in the Phoenix Metro area. The following are a few examples:
- Scottsdale Road and Bell Road/Frank Lloyd Wright - a right-in/right-out driveway is located approximately 350 feet west of the intersection of Scottsdale Road and Bell Road/Frank Lloyd Wright Boulevard.
- Scottsdale and Butherus Drive - a right-in/right-out driveway is located approximately 300 feet east of the intersection of Scottsdale Road and Butherus Drive.
- Frank Lloyd Wright and SR 101L - a right-in/right-out driveway is located approximately 300 feet west of the intersection of Frank Lloyd Wright Boulevard and SR 101L.


## 9. RECOMMENDATIONS \& CONCLUSIONS

The proposed QuikTrip will be located on the northeast corner of Scottsdale Road and Legacy Boulevard in the City of Scottsdale, Arizona, and will include a 5,312 square foot convenience store and 16 vehicle fueling positions.

The proposed development is anticipated to generate 1,032 weekday trips with 96 occurring during the AM peak hour and 102 trips during the PM peak hour.

## Recommendations

The recommendations with the build out of the QuikTrip include:

- Scottsdale Road and Driveway A (1)

Buildout of a right-in and right-out access point, 450 feet north of Legacy Boulevard. This will be a shared access driveway. A northbound right turn lane will be constructed at this driveway by others.

- Legacy Boulevard and Driveway B (3)

Buildout of a right-in and right-out access point, 350 feet east of Scottsdale Road. This will be a shared access driveway. A westbound right-turn lane will be constructed at this driveway location.

The location, movements (right-in/right-out), and traffic control (stop-controlled) at Driveway $B$ is consistent and was included in the Traffic Impact and Mitigation Analysis (TI\&MA) for the One Scottsdale development, dated May 2016. This 2016 TI\&MA was accepted by the City of Scottsdale Transportation Department

33

## Appendix A - Proposed Site Plan

A



MATCH LINE: SEE SHEET SP1


Kimley")Horn N

## 

OH


## Appendix B - Collision History

B

CITY OF SCOTTSDALE
'17-'18 COLLISION SUMMARY

| REPORT\# | DATE YYMMDD | time HHMM | NORTH / SOUTH ST. | TYPE | EASt WESt st. | TYPE | $\begin{aligned} & \text { DIR } \\ & \text { FROM } \end{aligned}$ | $\begin{aligned} & \text { DIST } \\ & \text { FROM } \end{aligned}$ | INJ. | sev. \#2 |  | HYs. Cond. \#2 | vIOL \#1 | $\underset{\# 2}{\text { LATION }}$ |  | $\begin{gathered} \text { TION } \\ \# \# \end{gathered}$ | $\begin{aligned} & \text { TRA } \\ & { }_{1}^{2} \end{aligned}$ | $\underset{\# 2}{\text { AV. DIR. }}$ | manner of COLLISION | COMMENTS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1806540 | 180323 | 0857 | Scottsdale | RD | henkel | wy | ${ }^{\text {at }}$ |  | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 4 | NB | SB | 2 |  |
| 1807400 | 180402 | 2052 | Scottsdale | RD | HENKEL | wy | N | 50 | 1 | 1 | 0 | 0 | 12 | 1 | 1 | 1 | NB | NB | 2 |  |
| 1805042 | 180305 | 1558 | SCottsdale | RD | henkel | wy | s | 217 | 1 | 1 | 0 | 0 | 2 | 1 | 1 | 3 | NB | NB | 4 |  |
| 1805533 | 180311 | 1231 | Scottsdale | RD | Legacy | BL | AT |  | 1 | 1 | 0 | 0 | 2 | 1 | 1 | 3 | SB | sb | 4 |  |
| 1800677 | 180110 | 1040 | Scottsdale | RD | legacy | BL | AT |  | 1 | 1 | 0 | 0 | 2 | 12 | 2 | 2 | SB | SB | 4 |  |
| 1814033 | 180625 | 1214 | Scottsdale | RD | legacy | BL | N | 100 | 1 | 1 | 0 | 0 | 4 | 1 | 2 | 3 | SB | SB | 4 |  |
| 1811631 | 180525 | 1534 | Scottsdale | RD | legacy | BL | N | 120 | 1 | 1 | 0 | 0 | 2 | 1 | 1 | 2 | NB | NB | 4 |  |
| 1820211 | 180913 | 0607 | Scottsdale | RD | legacy | BL | N | 200 | 1 | 1 | 0 | 0 | 12 | 1 | 8 | 1 | NB | NB | 6 |  |
| 1820678 | 180920 | 1057 | scottsdale | RD | Legacy | BL | N | 236 | 3 | 2 | 0 | 0 | 2 | 1 | 1 | 3 | SB | sb | 4 |  |
| 1801688 | 180123 | 1106 | scottsdale | RD | Legacy | BL | N | 300 | 1 | 1 | 0 | 0 | 2 | 1 | 1 | 2 | SB | sb | 4 |  |
| 1813656 | 180620 | 1422 | scottsdale | RD | Legacy | BL | s | 363 | 1 | 2 | 0 | 0 | 2 | 1 | 1 | 3 | SB | Sb | 4 | multi veh 5 |
| 1812138 | 180531 | 1816 | Scottsdale | RD | LEGACY | BL | E | 500 | 1 | 99 | 0 | 99 | 1 | 12 | 1 | 8 | NB | NB | 6 | HIT AND RUN |
| 1819086 | 180829 | 1734 | Scottsdale | RD | legacy | BL | N | 800 | 1 | 1 | 0 | 0 | 4 | 1 | 1 | 2 | SB | SB | 4 | multi veh 3 |
| 1803892 | 180218 | 1603 | Scottsdale | RD | legacy | BL | E | 1350 | 3 |  | 99 |  | 13 |  | 9 |  | EB |  | 1 | HITA ND RUN |
| 1811629 | 180525 | 1511 | SCOTTSDALE | RD | THOMPSON PEAK | PY | ${ }^{\text {AT }}$ |  | 2 |  | 97 |  | 7 |  | 4 |  | SB |  | 1 |  |
| 1808491 | 180416 | 0904 | Scottsdale | RD | THOMPSON PEAK | PY | ${ }_{\text {at }}$ |  | 3 | 3 | 0 | 0 | 20 | 1 | 4 | 1 | EB | wB | 3 |  |
| 1810005 | 180505 | 1536 | SCOTTSDALE | RD | THOMPSON PEAK | PY | AT |  | 1 | 1 | 0 | 0 | 2 | 1 | 1 | 3 | NB | NB | 4 |  |
| 1813306 | 180615 | 1911 | SCOTTSDALE | RD | THOMPSON PEAK | PY | ${ }^{\text {AT }}$ |  | 1 | 1 | 0 | 0 | 99 | 99 | 4 | 4 | wB | wB | 6 |  |
| 1820019 | 180910 | 1311 | scottsdale | RD | THOMPSON PEAK | PY | ${ }_{\text {at }}$ |  | 1 | 1 | 99 | 0 | 99 | 99 | 4 | 1 | SB | NB | 2 |  |
| 1806513 | 180322 | 2204 | SCOTTSDALE | RD | THOMPSON PEAK | PY | N | 80 | 1 | 1 | 4 | 0 | 97 | 1 | 10 | 3 | SB | SB | 4 | DUI |
| 1814276 | 180628 | 1225 | SCOTTSDALE | RD | THOMPSON PEAK | PY | s | 100 | 1 | 2 | 2 | 0 | 4 | 1 | 2 | 3 | NB | NB | 4 |  |
| 1804007 | 180220 | 1300 | scottsdale | RD | THOMPSON PEAK | PY | N | 138 | 1 | 1 | 0 | 0 | 97 | 1 | 1 | 1 | NB | NB | 4 |  |
| 1810202 | 180508 | 0805 | SCOTTSDALE | RD | THOMPSON PEAK | PY | s | 200 | 1 | 1 | 0 | 0 | 2 | 1 | 2 | 3 | NB | NB | 4 |  |


| REPORT \# | DATE YYMMDD | TIME HHMM | NORTH / SOUTH ST. | TYPE | EAST WEST ST. | TYPE | DIR <br> FROM | DIST FROM | INJ. | $\begin{aligned} & \text { SEV. } \\ & \text { \#. } \end{aligned}$ | $\begin{aligned} & \text { PHY: } \\ & \text { \#1 } \end{aligned}$ | YS. COND. \#2 |  | $\begin{aligned} & \text { LATION } \\ & \# 2 \end{aligned}$ | ACT | $\begin{gathered} \text { rION } \\ \text { \#2 } \end{gathered}$ | $\begin{aligned} & \text { TRA } \\ & \# 1 \text { \# } \end{aligned}$ | V. DIR. \#2 | MANNER OF COLLISION | COMMENTS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1825625 | 181127 | 1751 | SCOTTSDALE | RD | THOMPSON PEAK | PY | S | 800 | 1 | 1 | 0 | 0 | 2 | 1 | 1 | 3 | NB | NB | 4 | MULTI VEH 3 |

## KEY

NJURY SEVERITY:
1=NO INJURY, 2=POSSIBLE INJURY, 3=NON-INCAPACITATING INJURY, 4=INCAPACITATING INJURY, 5=FATAL INJURY, 99=NOT REPORTED / UNKNOWN
PHYSICAL CONDITION:
$0=$ NO APPARENT INFLUENCE, 1=ILLNESS, 2=PHYSICAL IMPAIRMENT, 3=FELL ASLEEP / FATIGUED 4=ALCOHOL, 5=DRUGS, 6=MEDICATIONS, A=NO TEST GIVEN, B=TEST GIVEN, C=TEST REFUSED,
D=TESTING UNKNOWN, $97=$ OTHER, $99=$ UNKNOWN
VIOLATION:



$18=W A L K E D$ ON WRONG SIDE OF ROAD, $19=E L E C T R O N I C$ COMMUNICATIONS DEVICE, $20=$ FAILED TO YIELD RIGHT OF WAY (added August 2014), $97=0$ THER, 99 UNKNOWN

## ACTION:



 VEHICLE, $24=$ WORKING ON ROAD, $97=$ OTHER, $99=U K N O W N$

## MANNER OF COLLISION:

1=SINGLE VEHICLE, 2=ANGLE (front to side, other than left turn), $3=$ LEFT TURN, 4=REAR END (front to rear), 5=HEAD-ON (front to front, other than left turn), $6=$ SIDESWIPE (same direction), 7=SIDESWIPE (opposite direction), 8=REAR-TO-SIDE, $9=$ REAR TO REAR, $97=0$ THER, $99=$ UNKNOWN

CITY OF SCOTTSDALE
'19-'20 COLLISION SUMMARY

| REPORT \# | DATE YYMMDD | TIME HHMM | NORTH / SOUTH ST. | TYPE | EAST WESt St. | TYPE | DIR FROM | $\begin{aligned} & \text { DIST } \\ & \text { FROM } \end{aligned}$ |  | $\begin{gathered} \text { SEV. } \\ \text { \#2. } \end{gathered}$ |  | $\begin{aligned} & \text { rs. COND. } \\ & \text { \#2 } \end{aligned}$ |  | $\begin{aligned} & \text { ATION } \\ & \# 2 \end{aligned}$ |  | $\begin{gathered} \text { IION } \\ \text { \#2 } \end{gathered}$ | $\begin{aligned} & \text { TRA } \\ & \text { \#1 } \end{aligned}$ | AV. DIR. \#2 | MANNER OF COLLISION | COMments |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2009104 | 200526 | 1420 | SCOtTSDALE | RD | HENKEL | wY | AT |  |  |  | 0 | 0 | 4 | 1 | 1 | 3 | SB | SB | 4 |  |
| 2001966 | 200127 | 1055 | SCOTTSDALE | RD | HENKEL | wY | AT |  |  |  | 0 |  | 13 | 0 | 1 |  | SB |  | 1 |  |
| 1922545 | 191028 | 1604 | SCOTTSDALE | RD | HENKEL | wY | N | 100 |  |  | 0 | 0 | 0 | 1 | 1 | 3 | SB | SB | 4 |  |
| 1906065 | 190319 | 1054 | SCOTTSDALE | RD | HENKEL | wy | S | 200 |  |  | 0 | 0 | 4 | 1 | 1 | 3 | SB | SB | 4 |  |
| 2018460 | 201028 | 1841 | SCOTTSDALE | RD | HENKEL | wY | N | 450 |  |  | 99 | 0 | 2 | 1 | 1 | 1 | SB | SB | 6 |  |
| 2011650 | 200709 | 1049 | SCOTTSDALE | RD | LEGACY | BL | AT |  |  |  | 0 | 0 | 12 | 1 | 8 | 1 | NB | NB | 6 |  |
| 1909566 | 190503 | 1610 | SCOTTSDALE | RD | LEGACY | BL | AT |  |  |  | 0 | 0 | 2 | 1 | 1 | 3 | NB | NB | 4 |  |
| 1909526 | 190503 | 0807 | SCOTTSDALE | RD | LEGACY | BL | AT |  |  |  | 0 | 0 | 2 | 1 | 1 | 1 | SB | SB | 4 |  |
| 1913924 | 190630 | 1747 | SCOTTSDALE | RD | LEGACY | BL | AT |  |  |  | 99 | 0 | 12 | 1 | 1 | 1 | NB | NB | 6 |  |
| 1903164 | 190209 | 1326 | SCOTTSDALE | RD | LEGACY | BL | AT |  |  |  | 0 | 0 | 2 | 1 | 1 | 2 | NB | NB | 4 |  |
| 2004694 | 200303 | 1112 | SCOTTSDALE | RD | LEGACY | BL | AT |  |  |  | 0 | 0 | 4 | 1 | 1 | 2 | NB | NB | 4 |  |
| 1900437 | 190107 | 1607 | SCOTTSDALE | RD | LEGACY | BL | AT |  | 1 | 1 | 0 | 0 | 4 | 1 | 1 | 2 | SB | SB | 4 | MULTI VEH 3 |
| 2017878 | 201020 | 1115 | SCOTTSDALE | RD | LEGACY | BL | AT |  |  |  | 0 | 0 | 20 | 1 | 5 | 1 | WB | NB | 2 |  |
| 1906383 | 190323 | 1633 | SCOTTSDALE | RD | LEGACY | BL | AT |  |  |  | 0 | 0 | 2 | 1 | 1 | 3 | SB | SB | 4 |  |
| 1913298 | 190622 | 0857 | SCOTTSDALE | RD | LEGACY | BL | N | 162 |  |  | 0 | 0 | 2 | 1 | 1 | 3 | SB | SB | 4 |  |
| 2000785 | 200111 | 1823 | SCOTTSDALE | RD | LEGACY | BL | N | 200 |  |  | 99 | 0 | 99 | 1 | 8 | 1 | NB | NB | 2 |  |
| 1916036 | 190731 | 1512 | SCOTTSDALE | RD | LEGACY | BL | N | 200 |  |  | 0 |  | 1 | 0 | 1 |  | NB |  | 1 |  |
| 1900231 | 190104 | 1645 | SCOTTSDALE | RD | LEGACY | BL | N | 300 | 1 | 1 | 0 | 0 | 4 | 1 | 1 | 3 | NB | NB | 4 |  |
| 1925424 | 191207 | 1730 | SCOTTSDALE | RD | LEGACY | BL | N | 300 |  |  | 0 | 0 | 4 | 1 | 1 | 3 | SB | SB | 4 |  |
| 1913586 | 190626 | 1007 | SCOTTSDALE | RD | Legacy | BL | S | 300 |  |  | 0 | 0 | 4 | 1 | 1 | 3 | NB | NB | 4 |  |
| 1913558 | 190625 | 1805 | SCOTTSDALE | RD | LEGACY | BL | E | 500 |  |  | 0 | 99 | 1 | 99 | 14 | 99 | 99 | 99 | 2 |  |
| 1906915 | 190330 | 1533 | SCOTTSDALE | RD | LEGACY | BL | N | 500 |  |  | 0 | 0 | 2 | 1 | 1 | 1 | SB | SB | 4 |  |
| 2019971 | 201121 | 1415 | SCOTTSDALE | RD | LEGACY | BL | S | 685 |  |  | 0 | 0 | 2 | 1 | 1 | 3 | NB | NB | 4 |  |
| 1906381 | 190325 | 1643 | SCOTTSDALE | RD | LEGACY | BL | N | 800 |  |  | 0 | 0 | 2 | 1 | 1 | 3 | SB | SB | 4 |  |


| REPORT \# | DATE <br> YYMMDD | TIME HHMM | NORTH / SOUTH ST. | TYPE | EAST WEST St. | TYPE | DIR <br> FROM | DIST FROM | $\begin{aligned} & \text { INJ. SEV. } \\ & \text { \#1 \#2 } \end{aligned}$ | $\begin{aligned} & \text { PHY } \\ & \text { \#1 } \end{aligned}$ | $\begin{aligned} & \text { S. COND. } \\ & \text { \#2 } \end{aligned}$ | $\begin{aligned} & \text { VIOL } \\ & \text { \#1 } \end{aligned}$ | $\begin{aligned} & \text { LATION } \\ & \# 2 \end{aligned}$ | $\begin{aligned} & \text { AC } \\ & \# 1 \end{aligned}$ | TION | $\begin{aligned} & \text { TRA } \\ & \# 1 \neq \end{aligned}$ | $\begin{aligned} & \text { V. DIR. } \\ & \# 2 \end{aligned}$ | MANNER OF COLLISION | COMmENTS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1911162 | 190524 | 1959 | SCOTTSDALE | RD | LEGACY | BL | E | 2198 |  | 4 |  | 3 | 0 | 1 |  | wB |  | 1 |  |
| 2015822 | 200918 | 2148 | SCOTTSDALE | RD | LEGACY | BL | E | 15000 |  | 1 |  | 3 | 0 | 9 |  | wB |  | 1 |  |
| 1914034 | 190702 | 1337 | SCOTTSDALE | RD | THOMPSON PEAK | PY | AT |  |  | 0 | 0 | 99 | 99 | 1 | 4 | WB | SB | 2 |  |
| 1916970 | 190813 | 1527 | SCOTTSDALE | RD | THOMPSON PEAK | PY | AT |  |  | 0 | 0 | 4 | 1 | 4 | 4 | wB | wB | 4 |  |
| 1902521 | 190202 | 0307 | SCOTTSDALE | RD | THOMPSON PEAK | PY | AT |  |  | 99 |  | 2 | 0 | 5 |  | NB |  | 1 |  |
| 2005554 | 200314 | 2118 | SCOTTSDALE | RD | THOMPSON PEAK | PY | AT |  |  | 0 |  | 1 | 0 | 1 |  | NB |  | 1 |  |
| 1901707 | 190123 | 1846 | SCOTTSDALE | RD | THOMPSON PEAK | PY | AT |  |  | 0 | 0 | 2 | 1 | 1 | 1 | NB | NB | 4 |  |
| 1905047 | 190306 | 1120 | SCOTTSDALE | RD | THOMPSON PEAK | PY | AT |  |  | 0 | 0 | 12 | 1 | 8 | 1 | SB | SB | 6 |  |
| 2007237 | 200422 | 0638 | SCOTTSDALE | RD | THOMPSON PEAK | PY | AT |  |  | 0 | 0 | 2 | 1 | 1 | 6 | NB | NB | 4 |  |
| 1906535 | 190325 | 1842 | SCOTTSDALE | RD | THOMPSON PEAK | PY | AT |  |  | 0 | 0 | 99 | 99 | 4 | 1 | SB | NB | 2 |  |
| 1919909 | 190922 | 1941 | SCOTTSDALE | RD | THOMPSON PEAK | PY | AT |  |  | 0 | 0 | 1 | 1 | 1 | 1 | NB | NB | 6 |  |
| 1925737 | 191212 | 0650 | SCOTTSDALE | RD | THOMPSON PEAK | PY | AT |  |  | 0 | 0 | 2 | 1 | 1 | 3 | NB | NB | 4 |  |
| 1926206 | 191218 | 1028 | SCOTTSDALE | RD | THOMPSON PEAK | PY | AT |  |  | 99 | 0 | 97 | 97 | 10 | 14 | SB | NB | 4 |  |
| 1924149 | 191119 | 0757 | SCOTTSDALE | RD | THOMPSON PEAK | PY | AT |  |  | 0 | 0 | 2 | 1 | 1 | 1 | NB | NB | 4 |  |
| 2008976 | 200524 | 1812 | SCOTTSDALE | RD | THOMPSON PEAK | PY | AT |  |  | 99 | 0 | 4 | 1 | 1 | 1 | WB | wB | 4 |  |
| 2008305 | 200513 | 0941 | SCOTTSDALE | RD | THOMPSON PEAK | PY | AT |  |  | 0 | 0 | 2 | 1 | 1 | 3 | WB | wB | 4 |  |
| 2009370 | 200530 | 1457 | SCOTTSDALE | RD | THOMPSON PEAK | PY | N | 30 |  | 0 | 0 | 97 | 1 | 1 | 1 | SB | SB | 4 |  |
| 2015212 | 200908 | 1520 | SCOTTSDALE | RD | THOMPSON PEAK | PY | N | 50 |  | 0 | 0 | 4 | 1 | 2 | 3 | SB | SB | 4 |  |
| 1917777 | 190824 | 1603 | SCOTTSDALE | RD | THOMPSON PEAK | PY | N | 200 |  | 0 | 0 | 13 | 1 | 1 | 1 | SB | SB | 2 |  |
| 1901243 | 190117 | 1823 | SCOTTSDALE | RD | THOMPSON PEAK | PY | S | 200 |  | 0 | 0 | 12 | 1 | 8 | 1 | NB | NB | 6 |  |
| 1912622 | 190613 | 1455 | SCOTTSDALE | RD | THOMPSON PEAK | PY | S | 590 |  | 0 | 0 | 2 | 1 | 1 | 3 | NB | NB | 4 |  |
| 2007005 | 200416 | 1714 | SCOTTSDALE | RD | THOMPSON PEAK | PY | N | 600 |  | 0 | 0 | 13 | 1 | 8 | 1 | NB | NB | 6 |  |



KEY
NJURY SEVERITY:
1=NO INJURY, 2=POSSIBLE INJURY, 3=NON-INCAPACITATING INJURY, 4=INCAPACITATING INJURY, 5=FATAL INJURY, 99=NOT REPORTED / UNKNOWN
PHYSICAL CONDITION:
$0=$ NO APPARENT INFLUENCE, 1=ILLNESS, 2=PHYSICAL IMPAIRMENT, 3=FELL ASLEEP / FATIGUED 4=ALCOHOL, 5=DRUGS, 6=MEDICATIONS, A=NO TEST GIVEN, B=TEST GIVEN, C=TEST REFUSED D=TESTING UNKNOWN, 97=OTHER, 99=UNKNOWN

## VIOLATION:



 18=WALKED ON WRONG SIDE OF ROAD, 19=ELECTRONIC COMMUNICATIONS DEVICE, $20=$ FAILED TO YIELD RIGHT OF WAY (added August 2014), $97=0$ OTHER, 99 UNKNOWN
ACTION:


 VEHICLE, $24=$ WORKING ON ROAD, $97=0 T H E R, 99=U K N O W N$
MANNER OF COLLISION:
1=SINGLE VEHICLE, 2=ANGLE (front to side, other than left turn), 3=LEFT TURN, 4=REAR END (front to rear), 5=HEAD-ON (front to front, other than left turn), 6=SIDESWIPE (same direction), 7=SIDESWIPE (opposite direction), 8=REAR-TO-SIDE, 9=REAR TO REAR, 97=OTHER, 99=UNKNOWN

# Appendix C - Parcel Information 

This is a Land parcel located at 19552 N 73RD ST SCOTTSDALE 85255. The current owner is RKCCLL INVESTMENTS LLC/ETAL. It is located in the ONE SCOTTSDALE LOT 3 subdivision, and MCR 159925. Its current year full cash value is $\$ 7,873,023$.


PROPERTY INFORMATION

## 田

19552 N 73RD ST SCOTTSDALE 85255

| MCR \# | 159925 |
| :--- | :--- |
| Description | ONE SCOTTSDALE LOT 3 MCR 1599-25 |
| Lat/Long | $\underline{33.665445 \mid-111.924089}$ |
| Lot Size | $256,720 \mathrm{sq} \mathrm{ft}$ |
| Zoning | N/A |
| Lot \# | 3 |
| High School District | PARADISE VALLEY UNIFIED \#69 |
| Elementary School | PARADISE VALLEY UNIFIED SCHOOL DISTRICT |
| District |  |
| Local Jurisdiction | SCOTTSDALE |
| S/T/R ? | $264 N 4 E$ |
| Market | $/$ |
| Area/Neighborhood |  |
| Subdivision (8 Parcels) | ONE SCOTTSDALE LOT 3 |

OWNER INFORMATION

| Deed Number | $\underline{210703036}$ |
| :--- | :--- |
| Last Deed Date | $06 / 28 / 2021$ |
| Sale Date | $\mathrm{n} / \mathrm{a}$ |
| Sale Price | $\mathrm{n} / \mathrm{a}$ |

## VALUATION INFORMATION

(1) We provide valuation information for the past 5 years. For mobile display, we only show 1 year of valuation information. Should you need more data, please look at our data sales.

The Valuation Information displayed below may not reflect the taxable value used on the tax bill due to any special valuation relief program. CLICK HERE TO PAY YOUR TAXES OR VIEW YOUR TAX BILL[']

| Tax Year | 2022 | 2021 |
| :---: | :---: | :---: |
| Full Cash | \$7,873,023 | \$7,608,146 |
| Value (3) |  |  |
| (3) |  | \$4,450,211 |
| Legal Class | 2.R | 2.R |
| Description | AG / VACANT | AG / VACANT |
|  | LAND / NON- | LAND / NON- |
|  | PROFIT R/P | PROFIT R/P |
| Assessment | 15.0\% | 15.0\% |
| Ratio |  |  |
| Assessed LPV | \$649,524 | \$667,532 |
| Property Use | 0021 | 0021 |
| Code |  |  |
| PU Description | Vacant | Vacant |
|  | Commercial | Commercial |
|  | Land | Land |
| Tax Area Code | 691400 | 691400 |
| Valuation | Notice | Resolution |
| Source |  |  |

## MAP FERRET MAPS

Mapferret maps, also known as Mapld maps, pdf maps, or output maps are now available here without having to search.

## - Parcel Maps (2)

## - Subdivision Maps (2)

## MCR Maps (2)

## - Book/Map Maps (12)

Appendix D - Traffic Count Data
(303) 216-2439 www.alltrafficdata.net

Location: 1 SCOTTSDALE RD \& LEGACY BLVD AM
Date: Wednesday, December 8, 2021
Peak Hour: 07:45 AM - 08:45 AM
Peak 15-Minutes: 07:45 AM - 08:00 AM

Peak Hour - Bicycles


Peak Hour - Pedestrians


Note: Total study counts contained in parentheses.
Traffic Counts - Motorized Vehicles

(303) 216-2439 www.alltrafficdata.net

Location: 2 73RD ST \& LEGACY BLVD AM
Date: Wednesday, December 8, 2021
Peak Hour: 07:15 AM - 08:15 AM
Peak 15-Minutes: 07:30 AM - 07:45 AM


Note: Total study counts contained in parentheses.
Traffic Counts - Motorized Vehicles

| Interval Start Time | LEGACY BLVD <br> Eastbound |  |  |  | LEGACY BLVD <br> Westbound |  |  |  | 73RD ST <br> Northbound |  |  |  | 73RD ST <br> Southbound |  |  |  |  | Total | Rolling Hour | Pedestrian Crossings |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | U-Turn | Left | Thru | Right | U-Turn |  | Thru R |  | U-Turn | Left | Thru | Right |  | urn | Left | Thru | Right |  |  | West | East | South |  |
| 7:00 AM | 0 | 7 | 5 | 0 | 0 | 0 | 3 | 2 | 0 | 0 | 0 | 0 |  | 0 | 4 | 0 | 11 | 32 | 146 | 0 | 0 | 0 | 0 |
| 7:15 AM | 0 | 2 | 6 | 0 | 3 | 0 | 10 | 2 | 0 | 0 | 0 | 0 |  | 0 | 3 | 0 | 14 | 40 | 155 | 0 | 0 | 0 | 0 |
| 7:30 AM | 0 | 5 | 6 | 0 | 2 | 0 | 7 | 0 | 0 | 0 | 0 | 0 |  | 0 | 6 | 0 | 15 | 41 | 155 | 0 | 0 | 0 | 0 |
| 7:45 AM | 0 | 5 | 5 | 0 | 0 | 0 | 7 | 1 | 0 | 0 | 0 | 0 |  | 0 | 8 | 0 | 7 | 33 | 153 | 0 | 0 | 0 | 0 |
| 8:00 AM | 1 | 4 | 7 | 0 | 2 | 0 | 5 | 2 | 0 | 0 | 0 | 0 |  | 0 | 5 | 0 | 15 | 41 | 148 | 0 | 0 | 0 | 1 |
| 8:15 AM | 0 | 4 | 6 | 0 | 0 | 0 | 6 | 3 | 0 | 0 | 0 | 0 |  | 0 | 6 | 0 | 15 | 40 |  | 0 | 0 | 0 | 0 |
| 8:30 AM | 1 | 3 | 6 | 2 | 2 | 0 | 5 | 3 | 0 | 0 | 0 | 1 |  | 0 | 5 | 0 | 11 | 39 |  | 0 | 1 | 0 | 0 |
| 8:45 AM | 1 | 8 | 3 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 |  | 0 | 1 | 0 | 11 | 28 |  | 0 | 0 | 0 | 0 |
| Count Total | 3 | 38 | 44 | 2 | 9 | 0 | 47 | 13 | 0 | 0 | 0 | 1 | , | 0 | 38 | 0 | 99 | 294 |  | 0 | 1 | 0 | 1 |
| Peak Hour | 1 | 16 | 24 | 0 | 7 | 0 | 29 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 22 | 0 | 51 | 155 |  | 0 | 0 | 0 | 1 |

(303) 216-2439
www.alltrafficdata.net
Location: 1 SCOTTSDALE RD \& LEGACY BLVD PM
Date: Wednesday, December 8, 2021
Peak Hour: 04:00 PM - 05:00 PM
Peak 15-Minutes: 04:15 PM - 04:30 PM


Note: Total study counts contained in parentheses.
Traffic Counts - Motorized Vehicles

| Interval | LEGACY BLVD Eastbound |  |  |  | LEGACY BLVD <br> Westbound |  |  |  | SCOTTSDALE RD <br> Northbound |  |  |  | SCOTTSDALE RD <br> Southbound |  |  |  | Total | Rolling Hour | Pedestrian Crossings |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | U-Turn | Left | Thru | Right | U-Turn | Left | Thru R |  | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right |  |  | West | East | South |  |
| 4:00 PM | 0 | 0 | 0 | 0 | 0 | 11 | 0 | 5 | 0 | 0 | 486 | 12 | 0 | 3 | 506 | 0 | 1,023 | 3,935 | 0 | 0 | 0 | 0 |
| 4:15 PM | 0 | 0 | 0 | 0 | 0 | 11 | 0 | 8 | 0 | 0 | 491 | 17 | 0 | 1 | 513 | 0 | 1,041 | 3,909 | 0 | 0 | 0 | 0 |
| 4:30 PM | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 4 | 0 | 0 | 424 | 12 | 0 | 2 | 483 | 0 | 931 | 3,869 | 0 | 0 | 0 | 0 |
| 4:45 PM | 0 | 0 | 0 | 0 | 0 | 15 | 0 | 4 | 0 | 0 | 449 | 17 | 0 | 1 | 454 | 0 | 940 | 3,879 | 0 | 0 | 0 | 0 |
| 5:00 PM | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 2 | 0 | 0 | 478 | 18 | 0 | 2 | 487 | 0 | 997 | 3,812 | 0 | 0 | 0 | 0 |
| 5:15 PM | 0 | 0 | 0 | 0 | 0 | 15 | 0 | 7 | 0 | 0 | 460 | 16 | 0 | 1 | 502 | 0 | 1,001 |  | 0 | 0 | 0 | 0 |
| 5:30 PM | 0 | 0 | 0 | 0 | 2 | 15 | 0 | 3 | 0 | 0 | 499 | 21 | 0 | 1 | 400 | 0 | 941 |  | 0 | 0 | 0 | 0 |
| 5:45 PM | 0 | 0 | 0 | 0 | 2 | 22 | 0 | 2 | 0 | 0 | 414 | 14 | 0 | 1 | 418 | 0 | 873 |  | 0 | 0 | 0 | 0 |
| Count Total | 0 | 0 | 0 | 0 | 4 | 105 | 0 | 35 | 0 | 0 | 3,701 | 127 | 0 | 12 | 3,763 | 0 | 7,747 |  | 0 | 0 | 0 | 0 |
| Peak Hour | 0 | 0 | 0 | 0 | 0 | 43 | 0 | 21 | 0 | 0 | 1,850 | 58 | 0 |  | 7 1,956 |  | - 3,935 |  | 0 | 0 | 0 | 0 |

(303) 216-2439 www.alltrafficdata.net

Location: 2 73RD ST \& LEGACY BLVD PM
Date: Wednesday, December 8, 2021
Peak Hour: 05:00 PM - 06:00 PM
Peak 15-Minutes: 05:30 PM - 05:45 PM


Note: Total study counts contained in parentheses.
Traffic Counts - Motorized Vehicles

| Interval Start Time | LEGACY BLVD <br> Eastbound |  |  |  | LEGACY BLVD <br> Westbound |  |  |  | 73RD ST <br> Northbound |  |  |  | 73RD ST <br> Southbound |  |  |  | Total | Rolling Hour | Pedestrian Crossings |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | U-Turn | Left | Thru | Right | U-Turn | eft | Thru R |  | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right |  |  | West | East | South |  |
| 4:00 PM | 2 | 7 | 6 | 0 | 0 | 0 | 9 | 7 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 7 | 41 | 158 | 0 | 1 | 0 | 0 |
| 4:15 PM | 3 | 11 | 3 | 0 | 0 | 0 | 6 | 6 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 6 | 37 | 165 | 0 | 0 | 0 | 0 |
| 4:30 PM | 1 | 7 | 6 | 0 | 2 | 0 | 7 | 5 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 3 | 34 | 171 | 0 | 0 | 0 | 0 |
| 4:45 PM | 1 | 11 | 7 | 0 | 0 | 0 | 8 | 9 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 9 | 46 | 193 | 0 | 0 | 0 | 0 |
| 5:00 PM | 0 | 13 | 7 | 0 | 0 | 0 | 5 | 7 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 11 | 48 | 199 | 0 | 0 | 0 | 0 |
| 5:15 PM | 3 | 14 | 2 | 0 | 1 | 0 | 9 | 5 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 5 | 43 |  | 0 | 1 | 0 | 0 |
| 5:30 PM | 2 | 14 | 9 | 0 | 1 | 0 | 9 | 7 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 11 | 56 |  | 0 | 0 | 0 | 0 |
| 5:45 PM | 0 | 14 | 5 | 0 | 0 | 0 | 9 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 52 |  | 0 | 2 | 1 | 0 |
| Count Total | 12 | 91 | 45 | 0 | 4 | 0 | 62 | 57 | 0 | 0 | 0 | 0 | 0 | 21 | 0 | 65 | 357 |  | 0 | 4 | 1 | 0 |
| Peak Hour | 5 | 55 | 23 | 0 | 2 | 0 | 32 | 30 | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 40 | 199 |  | 0 | 3 | 1 | 0 |


| Start | 08-Dec-21 |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Time | Wed | EB | WB |  |  |  |  |  |  | Total |
| 12:00 AM |  | 4 | 5 |  |  |  |  |  |  | 9 |
| 01:00 |  | 1 | 1 |  |  |  |  |  |  | 2 |
| 02:00 |  | 2 | 3 |  |  |  |  |  |  | 5 |
| 03:00 |  | 0 | 2 |  |  |  |  |  |  | 2 |
| 04:00 |  | 2 | 7 |  |  |  |  |  |  | 9 |
| 05:00 |  | 6 | 20 |  |  |  |  |  |  | 26 |
| 06:00 |  | 28 | 59 |  |  |  |  |  |  | 87 |
| 07:00 |  | 40 | 72 |  |  |  |  |  |  | 112 |
| 08:00 |  | 44 | 70 |  |  |  |  |  |  | 114 |
| 09:00 |  | 39 | 77 |  |  |  |  |  |  | 116 |
| 10:00 |  | 62 | 74 |  |  |  |  |  |  | 136 |
| 11:00 |  | 47 | 74 |  |  |  |  |  |  | 121 |
| 12:00 PM |  | 65 | 77 |  |  |  |  |  |  | 142 |
| 01:00 |  | 70 | 65 |  |  |  |  |  |  | 135 |
| 02:00 |  | 58 | 55 |  |  |  |  |  |  | 113 |
| 03:00 |  | 55 | 61 |  |  |  |  |  |  | 116 |
| 04:00 |  | 65 | 64 |  |  |  |  |  |  | 129 |
| 05:00 |  | 78 | 80 |  |  |  |  |  |  | 158 |
| 06:00 |  | 64 | 61 |  |  |  |  |  |  | 125 |
| 07:00 |  | 55 | 36 |  |  |  |  |  |  | 91 |
| 08:00 |  | 45 | 19 |  |  |  |  |  |  | 64 |
| 09:00 |  | 39 | 13 |  |  |  |  |  |  | 52 |
| 10:00 |  | 23 | 15 |  |  |  |  |  |  | 38 |
| 11:00 |  | 17 | 8 |  |  |  |  |  |  | 25 |
| Total |  | 909 | 1018 |  |  |  |  |  |  | 1927 |
| Percent |  | 47.2\% | 52.8\% |  |  |  |  |  |  |  |
| AM Peak | - | 10:00 | 09:00 | - | - | - | - | - | - | 10:00 |
| Vol. | - | 62 | 77 | - | - | - | - | - | - | 136 |
| PM Peak | - | 17:00 | 17:00 | - | - | - | - | - | - | 17:00 |
| Vol. | - | 78 | 80 | - | - | - | - | - | - | 158 |
| Grand Total |  | 909 | 1018 |  |  |  |  |  |  | 1927 |
| Percent |  | 47.2\% | 52.8\% |  |  |  |  |  |  |  |
| ADT |  | ADT 1,927 |  | AADT 1,927 |  |  |  |  |  |  |



## Appendix E - Signal Timing

E

| SCOTTSDALE RD \& LEGACY BLVD |  | System \# 291 |  |
| :---: | :---: | :---: | :---: |
| BASIC TIMING PLAN | Section \# | I.P. Address <br> MM1-5-1 | Date Designed |
|  |  | 172.27 .12 .91 | $1 / 20 / 2021$ |



| SCOTTSDALE RD \& LEGACY BLVD |  |  |  |  |  |  |  |  | System \# |  | 291 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| COORDINATOR |  |  |  |  |  | Section \# |  |  | Date Updated |  |  |
|  |  |  |  |  |  | 0 |  |  | 1/20/2021 |  |  |
|  | PHASE | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |  |  |
|  | FDW |  | - |  | - |  | 26 |  |  |  |  |
|  | YELLOW |  | 4.7 |  | 3.6 | 4 | 4.7 |  |  |  |  |
|  | ALL RED |  | 1.6 |  | 3 | 2 | 1.6 |  |  |  |  |
|  | WALK |  | - |  | - |  | 26 |  |  |  |  |
| PLAN 1 <br> AM PLAN OPERATIVE <br> TIMES <br> 6:00 | R1 | 1 | $\uparrow \uparrow \uparrow$ | 2 | $\downarrow$ | 3 | $\uparrow \uparrow \uparrow$ | 4 | $\leftarrow$ | $\begin{gathered} \hline \text { COORD } \\ \text { PATTERN } \\ \hline \end{gathered}$ | Offset |
|  | R2 | 5 | $\checkmark$ | 6 | $\uparrow$ | 7 | $\uparrow \uparrow \uparrow$ | 8 | $\uparrow \uparrow \uparrow$ | Balanced | 115 |
|  |  | RING 1 |  |  |  | RING 2 |  |  |  |  |  |
|  | PHASE | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |  |  |
|  | SPLIT |  | 100 |  | 20 | 14 | 86 |  |  | Target Cycle Length |  |
|  | COORD |  | X |  |  |  | X |  |  | 120 |  |
|  | RECALLS |  | V |  |  |  | V |  |  | Actual Cycle Length |  |
|  | GREEN |  | 93.7 |  | 13.4 | 8.0 | 79.7 |  |  | 120 |  |
| PLAN 2 <br> MIDDAY PLAN OPERATIVE TIMES 9:00 | R1 | 1 | $\uparrow \uparrow \uparrow$ | 2 | $\downarrow$ | 3 | $\uparrow \uparrow \uparrow$ | 4 | $\leftarrow$ | $\begin{gathered} \hline \text { COORD } \\ \text { PATTERN } \\ \hline \end{gathered}$ | OfFSET |
|  | R2 | 5 | $\rightarrow$ | 6 | $\uparrow$ | 7 | $\uparrow \uparrow \uparrow$ | 8 | $\uparrow \uparrow \uparrow$ | Balanced | 86 |
|  |  | RING 1 |  |  |  | RING 2 |  |  |  |  |  |
|  | PHASE | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |  |  |
|  | SPLIT |  | 88 |  | 20 | 12 | 76 |  |  | Target Cycle Length |  |
|  | COORD |  | X |  |  |  | X |  |  | 108 |  |
|  | RECALLS |  | V |  |  |  | V |  |  | Actual Cycle Length |  |
|  | GREEN |  | 81.7 |  | 13.4 | 6.0 | 69.7 |  |  | 108 |  |
| PLAN 3 <br> PM PLAN OPERATIVE <br> TIMES <br> 15:00 | R1 | 1 | $\uparrow \uparrow \uparrow$ | 2 | $\downarrow$ | 3 | $\uparrow \uparrow \uparrow$ | 4 | $\leftarrow$ | $\begin{aligned} & \hline \text { COORD } \\ & \text { PATTERN } \end{aligned}$ | OfFSET |
|  | R2 | 5 | $\square$ | 6 | $\uparrow$ | 7 | $\uparrow \uparrow \uparrow$ | 8 | $\uparrow \uparrow \uparrow$ | Balanced | 75 |
|  |  | RING 1 |  |  |  | RING 2 |  |  |  |  |  |
|  | PHASE | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |  |  |
|  | SPLIT |  | 106 |  | 14 | 11 | 95 |  |  | Target Cycle Length |  |
|  | COORD |  | X |  |  |  | X |  |  | 120 |  |
|  | RECALLS |  | V |  |  |  | V |  |  | Actual Cycle Length |  |
|  | GREEN |  | 99.7 |  | 7.4 | 5.0 | 88.7 |  |  | 120 |  |
| PLAN 4 MIDNIGHT <br> PLAN OPERATIVE <br> TIMES <br> 22:00 | R1 | 1 | $\uparrow \uparrow \uparrow$ | 2 | $\downarrow$ | 3 | † ¢ $\uparrow$ | 4 | $\leftarrow$ | $\begin{gathered} \hline \text { COORD } \\ \text { PATTERN } \\ \hline \end{gathered}$ | OfFSET |
|  | R2 | 5 | ¢ | 6 | $\uparrow$ | 7 | $\uparrow \uparrow \uparrow$ | 8 | $\uparrow \uparrow \uparrow$ | Balanced | 10 |
|  |  | RING 1 |  |  |  | RING 2 |  |  |  | Target Cycle Length |  |
|  | PHASE | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |  |  |
|  | SPLIT |  | 71 |  | 19 | 12 | 59 |  |  |  |  |
|  | COORD |  | X |  |  |  | X |  |  | 90 |  |
|  | RECALLS |  | V |  |  |  | V |  |  | Actual Cycle Length |  |
|  | GREEN |  | 64.7 |  | 12.4 | 6.0 | 52.7 |  |  | 90 |  |

QuikTrip<br>QuikTrip Corporation

## Appendix F - Existing Capacity Analysis

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lane Configurations | ${ }^{7} 1$ | 「 | 44 | 「 | ${ }^{1}$ | 44 |
| Traffic Volume (veh/h) | 57 | 9 | 1739 | 37 | 6 | 1758 |
| Future Volume (veh/h) | 57 | 9 | 1739 | 37 | 6 | 1758 |
| Initial $Q(Q b)$, veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 |  | 1.00 | 1.00 |  |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No |  | No |  |  | No |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 63 | 10 | 1932 | 41 | 7 | 1953 |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Percent Heavy Veh, \% | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 184 | 84 | 2774 | 1237 | 190 | 2983 |
| Arrive On Green | 0.05 | 0.05 | 0.78 | 0.78 | 0.01 | 0.84 |
| Sat Flow, veh/h | 3456 | 1585 | 3647 | 1585 | 1781 | 3647 |
| Grp Volume(v), veh/h | 63 | 10 | 1932 | 41 | 7 | 1953 |
| Grp Sat Flow(s),veh/h/ln | 1728 | 1585 | 1777 | 1585 | 1781 | 1777 |
| Q Serve(g_s), s | 2.1 | 0.7 | 31.4 | 0.7 | 0.1 | 23.5 |
| Cycle Q Clear(g_c), s | 2.1 | 0.7 | 31.4 | 0.7 | 0.1 | 23.5 |
| Prop In Lane | 1.00 | 1.00 |  | 1.00 | 1.00 |  |
| Lane Grp Cap(c), veh/h | 184 | 84 | 2774 | 1237 | 190 | 2983 |
| V/C Ratio(X) | 0.34 | 0.12 | 0.70 | 0.03 | 0.04 | 0.65 |
| Avail Cap(c_a), veh/h | 386 | 177 | 2774 | 1237 | 294 | 2983 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(l) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 54.8 | 54.1 | 6.3 | 3.0 | 7.1 | 3.4 |
| Incr Delay (d2), s/veh | 0.4 | 0.2 | 1.5 | 0.0 | 0.0 | 1.1 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| \%ile BackOfQ(50\%),veh/ln | 0.9 | 0.7 | 8.5 | 0.2 | 0.0 | 4.3 |
| Unsig. Movement Delay, s/veh |  |  |  |  |  |  |
| LnGrp Delay(d),s/veh | 55.2 | 54.4 | 7.8 | 3.0 | 7.1 | 4.6 |
| LnGrp LOS | E | D | A | A | A | A |
| Approach Vol, veh/h | 73 |  | 1973 |  |  | 1960 |
| Approach Delay, s/veh | 55.1 |  | 7.7 |  |  | 4.6 |
| Approach LOS | E |  | A |  |  | A |


| Timer - Assigned Phs | 2 | 4 | 5 | 6 |
| :--- | ---: | ---: | ---: | ---: |
| Phs Duration (G+Y+Rc), s | 107.0 | 13.0 | 7.0 | 100.0 |
| Change Period (Y+Rc), s | ${ }^{*} 6.3$ | 6.6 | 6.0 | ${ }^{*} 6.3$ |
| Max Green Setting (Gmax), s | ${ }^{*} 94$ | 13.4 | 8.0 | ${ }^{*} 80$ |
| Max Q Clear Time (g_c+11), s | 25.5 | 4.1 | 2.1 | 33.4 |
| Green Ext Time (p_c), s | 6.7 | 0.1 | 0.0 | 6.5 |


| Intersection Summary |  |
| :--- | ---: |
| HCM 6th Ctrl Delay | 7.0 |
| HCM 6th LOS | A |

## Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

| Intersection |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Int Delay，s／veh | 5.3 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Movement | EBU | EBL | EBT | EBR | WBU | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  | \％ | 个个 | 「 |  | \＄ | 个 ${ }_{\text {a }}$ |  |  |  |  | ${ }^{4}$ |  | 「 |
| Traffic Vol，veh／h | 2 | 16 | 24 | 0 | 4 | ， | 23 | 9 | 0 | 0 | 0 | 24 | 0 | 47 |
| Future Vol，veh／h | 2 | 16 | 24 | 0 | 4 | 0 | 23 | 9 | 0 | 0 | 0 | 24 | 0 | 47 |
| Conflicting Peds，\＃hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control F | Free | Free | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | － | － | － | None | － | － | － | None | － |  | None | － | － | None |
| Storage Length | － | 105 | － | 160 | － | 200 | － | － | － | － | － | 0 | － | 150 |
| Veh in Median Storage，\＃ | \＃ | － | 0 | － | － | － | 0 | － | 108229 | 2224 | － | － | 0 | － |
| Grade，\％ | － | － | 0 | － | － | － | 0 | － | － | 0 | － | － | 0 | － |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles，\％ | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 2 | 17 | 26 | 0 | 4 | 0 | 25 | 10 | 0 | 0 | 0 | 26 | 0 | 51 |



| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lane Configurations | \％${ }^{*}$ | F | 个个 | F | ${ }_{7}$ | 个4 |
| Traffic Volume（veh／h） | 42 | 21 | 1802 | 57 | 7 | 1906 |
| Future Volume（veh／h） | 42 | 21 | 1802 | 57 | 7 | 1906 |
| Initial $Q(Q b)$ ，veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped－Bike Adj（A＿pbT） | 1.00 | 1.00 |  | 1.00 | 1.00 |  |
| Parking Bus，Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No |  | No |  |  | No |
| Adj Sat Flow，veh／h／ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate，veh／h | 46 | 23 | 1959 | 62 | 8 | 2072 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh，\％ | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap，veh／h | 181 | 83 | 2773 | 1237 | 185 | 2985 |
| Arrive On Green | 0.05 | 0.05 | 0.78 | 0.78 | 0.01 | 0.84 |
| Sat Flow，veh／h | 3456 | 1585 | 3647 | 1585 | 1781 | 3647 |
| Grp Volume（v），veh／h | 46 | 23 | 1959 | 62 | 8 | 2072 |
| Grp Sat Flow（s），veh／h／ln | 1728 | 1585 | 1777 | 1585 | 1781 | 1777 |
| Q Serve（g＿s），s | 1.5 | 1.7 | 32.4 | 1.1 | 0.1 | 26.8 |
| Cycle Q Clear（g＿c），s | 1.5 | 1.7 | 32.4 | 1.1 | 0.1 | 26.8 |
| Prop In Lane | 1.00 | 1.00 |  | 1.00 | 1.00 |  |
| Lane Grp Cap（c），veh／h | 181 | 83 | 2773 | 1237 | 185 | 2985 |
| V／C Ratio（X） | 0.25 | 0.28 | 0.71 | 0.05 | 0.04 | 0.69 |
| Avail Cap（c＿a），veh／h | 213 | 98 | 2773 | 1237 | 242 | 2985 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter（l） | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay（d），s／veh | 54.6 | 54.7 | 6.5 | 3.0 | 7.4 | 3.7 |
| Incr Delay（d2），s／veh | 0.3 | 0.7 | 1.5 | 0.1 | 0.0 | 1.4 |
| Initial Q Delay（d3），s／veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| \％ile BackOfQ（50\％），veh／ln | 0.7 | 1.5 | 8.8 | 0.3 | 0.1 | 5.0 |
| Unsig．Movement Delay，s／veh |  |  |  |  |  |  |
| LnGrp Delay（d），s／veh | 54.9 | 55.3 | 8.0 | 3.1 | 7.4 | 5.0 |
| LnGrp LOS | D | E | A | A | A | A |
| Approach Vol，veh／h | 69 |  | 2021 |  |  | 2080 |
| Approach Delay，s／veh | 55.0 |  | 7.9 |  |  | 5.0 |
| Approach LOS | E |  | A |  |  | A |


| Timer - Assigned Phs | 2 | 4 | 5 | 6 |
| :--- | ---: | ---: | ---: | ---: |
| Phs Duration $(G+Y+R c)$, s | 107.1 | 12.9 | 7.2 | 99.9 |
| Change Period $(Y+R c), s$ | $* 6.3$ | 6.6 | 6.0 | $* 6.3$ |
| Max Green Setting（Gmax），s | $* 1 E 2$ | 7.4 | 5.0 | $* 89$ |
| Max Q Clear Time（g＿c＋1），s | 28.8 | 3.7 | 2.1 | 34.4 |
| Green Ext Time（p＿c），s | 7.6 | 0.0 | 0.0 | 6.8 |

## Intersection Summary

HCM 6th Ctrl Delay 7.2

HCM 6th LOS A

## Notes

User approved pedestrian interval to be less than phase max green．
＊HCM 6th computational engine requires equal clearance times for the phases crossing the barrier．

| Intersection |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Int Delay，s／veh | 4.1 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Movement | EBU | EBL | EBT | EBR | WBU | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  | ＊ | 个4 | 「 |  | \＃ | 性 |  |  |  |  | ${ }^{*}$ |  | F＇ |
| Traffic Vol，veh／h | 7 | 36 | 22 | 0 | 2 | 0 | 30 | 27 | 0 | 0 | 0 | 9 | 0 | 25 |
| Future Vol，veh／h | 7 | 36 | 22 | 0 | 2 | 0 | 30 | 27 | 0 | 0 | 0 | 9 | 0 | 25 |
| Conflicting Peds，\＃／hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control F | Free | Free | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | － | － | － | None | － | － | － | None | － | － | None | － | － | None |
| Storage Length | － | 105 | － | 160 | － | 200 | － | － | － | － | － | 0 | － | 150 |
| Veh in Median Storage，\＃ | \＃ | － | 0 | － | － | － | 0 | － | 108229 | 92224 | － | － | 0 | － |
| Grade，\％ | － | － | 0 | － | － | － | 0 | － | － | 0 | － | － | 0 | － |
| Peak Hour Factor | 86 | 86 | 86 | 86 | 86 | 86 | 86 | 86 | 86 | 86 | 86 | 86 | 86 | 86 |
| Heavy Vehicles，\％ | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 8 | 42 | 26 | 0 | 2 | 0 | 35 | 31 | 0 | 0 | 0 | 10 | 0 | 29 |



Appendix G - Trip Generation

Trip Generation Calculations

| 945 Convenience StorelCas station | (cFA4.5.5.) |  |  |  |  |  |  |  |  | PM Peak Hour |  |  | Weekday |  |  | AM Peak Hour |  |  | PM Peak Hour |  |  | Average |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | ${ }^{\text {ITE }}$ | Qty | Unit | Weekday |  |  | AM Peak Hour |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | Rate | \% 1 n | \% Out | Rate | \% 1 n | \% Out | Rate | \% 1 ln | \% Out | Total | In | Out | Total | In | Out | Total | In | Out |  |
| Convenience Store/Gas Station | 945 | 16 | Fueling Positions | 257.13 | 50\% | 50\% | 27.04 | 50\% | 50\% | 22.76 | 50\% | 50\% | 4,14 | 2,057 | 2,057 | 433 | 217 | 216 | 364 | 182 | 182 |  |
| Convenience Store/Gas Station | 945 | 16 | Fueling Positions | 193.00 | 50\% | 50\% | 7.78 | 50\% | 50\% | 9.78 | 50\% | 50\% | 3,088 | 1,544 | 1,544 | 124 | 62 | 62 | 156 | 78 | 78 | Minimum |
| Convenience Store/Gas Station | 945 | 16 | Fueling Positions | 324.17 | 50\% | 50\% | 44.38 | 50\% | 50\% | 37.50 | 50\% | 50\% | 5,187 | 2,594 | 2,593 | 710 | 355 | 355 | 600 | 300 | 300 | Maximum |
| Land Use | ${ }^{\text {ITE }}$ | Qty | Unit | Weekday |  |  | AM Peak Hour |  |  | PM Peak Hour |  |  | Weekday |  |  | AM Peak Hour |  |  | PM Peak Hour |  |  |  |
|  | Code |  |  | Equation | \% 1 ln | \% Out | Equation | \% 1 n | \% Out | Equation | \% 1 ln | \% Out | Total | In | Out | Total | 咗 | Out | Total | in | Out | Equation |
| Convenience Store/Gas Station | 945 | 16 | Fueling Positions | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |  |
| Convenience Store/Gas Station | Standard Deviation |  |  | 57.53 |  |  | 9.88 |  |  | 8.49 |  |  |  |  |  |  |  |  |  |  |  |  |
|  | $\begin{gathered} \text { Number of Studies } \\ \hline \text { Average Size } \\ \hline \end{gathered}$ |  |  | 5 |  |  | 18 |  |  | 23 |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | 14 |  |  | 13 |  |  | 14 |  |  |  |  |  |  |  |  |  |  |  |  |
|  | $\mathrm{R}^{2}$ |  |  | N/A |  |  | N/A |  |  | N/A |  |  |  |  |  |  |  |  |  |  |  |  |

## Pass-By Calculations



# Appendix H - MAG Socioeconomic Projections 

## Socioeconomic Projections

## Population and Employment

by Municipal Planning Area, Jurisdiction, and Regional Analysis Zone June 2019

## Maricopa Association of Governments

Table 1: Total Population by Municipal Planning Area
July 1, 2018 and Projections July 1, 2020 to July 1, 2055

| Municipal Planning Area | Total Population |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2018 | 2020 | 2030 | 2040 | 2050 | 2055 |
| Apache Junction | 59,000 | 60,800 | 70,000 | 92,000 | 117,100 | 132,600 |
| Avondale | 84,200 | 86,700 | 101,800 | 111,900 | 119,000 | 122,100 |
| Buckeye | 89,000 | 97,700 | 186,600 | 305,400 | 409,900 | 459,300 |
| Carefree | 3,700 | 3,800 | 4,100 | 4,200 | 4,200 | 4,300 |
| Cave Creek | 5,900 | 6,000 | 6,500 | 7,000 | 7,200 | 7,300 |
| Chandler | 270,300 | 279,500 | 309,100 | 321,100 | 329,000 | 332,400 |
| El Mirage | 34,300 | 35,100 | 36,500 | 36,900 | 37,200 | 37,200 |
| Florence | 79,400 | 85,500 | 120,300 | 160,500 | 209,900 | 231,400 |
| Fort McDowell Yavapai Native Nation | 1,000 | 1,100 | 1,100 | 1,100 | 1,100 | 1,100 |
| Fountain Hills | 24,000 | 24,700 | 26,200 | 26,600 | 26,900 | 27,000 |
| Gila Bend | 2,500 | 2,700 | 3,700 | 3,700 | 3,900 | 4,200 |
| Gila River Indian Native Nation | 12,000 | 12,200 | 12,300 | 12,300 | 12,300 | 12,300 |
| Gilbert | 256,500 | 265,900 | 293,500 | 308,800 | 318,100 | 321,400 |
| Glendale | 272,200 | 279,100 | 306,400 | 323,400 | 333,200 | 338,800 |
| Goodyear | 87,300 | 92,100 | 140,300 | 192,200 | 228,600 | 247,900 |
| Guadalupe | 6,300 | 6,400 | 6,700 | 6,800 | 6,800 | 6,800 |
| Litchfield Park | 13,300 | 14,000 | 15,400 | 15,700 | 16,100 | 16,400 |
| Maricopa | 59,800 | 67,000 | 90,800 | 106,400 | 121,600 | 128,900 |
| Mesa | 533,400 | 552,800 | 607,500 | 649,400 | 680,000 | 690,300 |
| Paradise Valley | 14,000 | 14,100 | 14,700 | 15,100 | 15,200 | 15,300 |
| Peoria | 188,500 | 196,600 | 232,400 | 273,700 | 312,600 | 329,900 |
| Phoenix | 1,653,500 | 1,697,700 | 1,881,900 | 2,019,300 | 2,117,400 | 2,155,300 |
| Queen Creek | 58,700 | 65,000 | 90,900 | 109,000 | 120,900 | 128,500 |
| Salt River Pima-Maricopa Native Nation | 6,800 | 6,100 | 5,700 | 5,800 | 5,800 | 5,800 |
| Scottsdale | 245,500 | 253,800 | 281,900 | 299,400 | 311,400 | 316,700 |
| Surprise | 144,000 | 150,300 | 216,700 | 307,500 | 383,300 | 417,200 |
| Tempe | 185,300 | 190,000 | 217,100 | 247,000 | 272,400 | 282,200 |
| Tolleson | 7,000 | 7,100 | 8,600 | 10,300 | 11,400 | 11,800 |
| Unicorporated Pinal County | 66,800 | 68,600 | 79,100 | 93,700 | 110,800 | 122,700 |
| Unincorporated Maricopa County | 97,900 | 101,200 | 110,500 | 116,800 | 137,000 | 152,600 |
| Wickenburg | 8,200 | 8,500 | 9,400 | 9,500 | 9,800 | 10,000 |
| Youngtown | 6,600 | 6,800 | 7,300 | 7,700 | 7,800 | 7,800 |

[^1]
## Maricopa Association of Governments

Table 2: Total Employment by Municipal Planning Area July 1, 2018 and Projections July 1, 2020 to July 1, 2055

| Municipal Planning Area | Total Employment |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2018 | 2020 | 2030 | 2040 | 2050 | 2055 |
| Apache Junction | 7,800 | 8,800 | 13,100 | 17,800 | 26,400 | 30,500 |
| Avondale | 22,400 | 23,200 | 30,400 | 36,200 | 42,800 | 45,400 |
| Buckeye | 21,600 | 26,900 | 42,900 | 64,500 | 98,000 | 128,900 |
| Carefree | 1,600 | 1,600 | 2,100 | 2,400 | 2,500 | 2,600 |
| Cave Creek | 2,200 | 2,400 | 2,700 | 2,900 | 3,000 | 3,200 |
| Chandler | 145,500 | 154,700 | 182,300 | 202,100 | 215,200 | 222,000 |
| El Mirage | 5,000 | 5,100 | 6,500 | 7,200 | 8,000 | 8,900 |
| Florence | 11,000 | 12,100 | 17,000 | 26,400 | 40,900 | 51,100 |
| Fort McDowell Yavapai Native Nation | 2,200 | 2,400 | 2,400 | 2,500 | 2,600 | 2,600 |
| Fountain Hills | 7,100 | 7,700 | 9,100 | 9,800 | 10,200 | 10,300 |
| Gila Bend | 900 | 900 | 1,200 | 1,300 | 1,500 | 1,700 |
| Gila River Indian Native Nation | 10,500 | 10,700 | 11,500 | 13,100 | 14,800 | 15,500 |
| Gilbert | 92,800 | 98,600 | 120,200 | 135,900 | 146,600 | 152,200 |
| Glendale | 103,800 | 111,400 | 134,000 | 153,100 | 168,900 | 175,900 |
| Goodyear | 35,900 | 37,200 | 50,600 | 69,000 | 92,600 | 102,500 |
| Guadalupe | 1,300 | 1,300 | 1,500 | 1,600 | 1,600 | 1,600 |
| Litchfield Park | 3,800 | 4,400 | 5,200 | 5,900 | 6,400 | 6,700 |
| Maricopa | 6,200 | 7,100 | 11,400 | 18,200 | 28,200 | 33,500 |
| Mesa | 197,200 | 205,900 | 249,000 | 296,000 | 333,700 | 351,000 |
| Paradise Valley | 6,300 | 6,300 | 6,800 | 7,100 | 7,500 | 7,700 |
| Peoria | 58,200 | 62,400 | 73,100 | 84,800 | 91,900 | 96,300 |
| Phoenix | 897,700 | 937,600 | 1,084,000 | 1,189,200 | 1,264,900 | 1,298,900 |
| Queen Creek | 15,500 | 16,400 | 19,900 | 24,000 | 28,900 | 31,100 |
| Salt River Pima-Maricopa Native Nation | 21,200 | 22,900 | 28,200 | 33,900 | 35,900 | 36,400 |
| Scottsdale | 197,200 | 207,400 | 235,500 | 252,000 | 261,700 | 267,000 |
| Surprise | 33,600 | 36,400 | 59,500 | 86,400 | 113,400 | 130,500 |
| Tempe | 190,000 | 200,500 | 231,200 | 257,700 | 280,000 | 290,900 |
| Tolleson | 17,700 | 18,300 | 21,200 | 23,900 | 26,000 | 26,700 |
| Unicorporated Pinal County | 3,500 | 3,900 | 6,000 | 8,900 | 13,500 | 17,800 |
| Unincorporated Maricopa County | 28,600 | 31,500 | 35,500 | 41,100 | 51,200 | 58,400 |
| Wickenburg | 4,400 | 4,600 | 5,200 | 5,600 | 6,000 | 6,200 |
| Youngtown | 1,500 | 1,800 | 2,200 | 2,700 | 2,800 | 3,100 |

[^2]

## Maricopa Association of Governments

Table 4: Population by Regional Analysis Zone (RAZ) by MPA
July 1, 2018 and Projections July 1, 2020 to July 1, 2055

| RAZ | County | Total Population |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2018 | 2020 | 2030 | 2040 | 2050 | 2055 |
|  | Total | 1,653,469 | 1,697,722 | 1,881,876 | 2,019,269 | 2,117,427 | 2,155,333 |
| Queen Creek MPA |  |  |  |  |  |  |  |
| 339 | Maricopa County | 49,781 | 53,579 | 72,670 | 82,172 | 87,155 | 89,586 |
| 422 | Pinal County | 13 | 13 | 300 | 437 | 564 | 638 |
| 423 | Pinal County | 1,286 | 1,410 | 3,714 | 6,136 | 7,457 | 8,686 |
| 424 | Pinal County | 7,642 | 10,003 | 14,200 | 20,287 | 25,759 | 29,586 |
|  | Total | 58,722 | 65,005 | 90,884 | 109,032 | 120,935 | 128,496 |
| Salt River Pima-Maricopa Native Nation MPA |  |  |  |  |  |  |  |
| 264 | Maricopa County | 6,798 | 6,073 | 5,708 | 5,820 | 5,820 | 5,820 |
|  | Total | 6,798 | 6,073 | 5,708 | 5,820 | 5,820 | 5,820 |
| Scottsdale MPA |  |  |  |  |  |  |  |
| 209 | Maricopa County | 12,188 | 12,605 | 13,961 | 14,512 | 14,984 | 15,255 |
| 210 | Maricopa County | 6,013 | 6,591 | 10,463 | 12,339 | 13,491 | 13,961 |
| 229 | Maricopa County | 20,542 | 21,269 | 25,221 | 27,864 | 29,698 | 30,229 |
| 230 | Maricopa County | 32,232 | 33,028 | 38,882 | 43,580 | 46,789 | 48,510 |
| 247 | Maricopa County | 13,549 | 13,858 | 15,420 | 16,342 | 16,871 | 17,019 |
| 248 | Maricopa County | 36,178 | 37,227 | 38,468 | 38,807 | 39,048 | 39,143 |
| 249 | Maricopa County | 20,903 | 21,410 | 22,543 | 22,768 | 22,839 | 22,848 |
| 263 | Maricopa County | 34,908 | 35,814 | 37,002 | 37,252 | 37,584 | 37,773 |
| 272 | Maricopa County | 68,987 | 71,970 | 79,910 | 85,942 | 90,054 | 91,927 |
|  | Total | 245,500 | 253,772 | 281,870 | 299,406 | 311,358 | 316,665 |
| Surprise MPA |  |  |  |  |  |  |  |
| 211 | Maricopa County | 863 | 884 | 4,471 | 23,112 | 36,704 | 40,737 |
| 212 | Maricopa County | 10,265 | 11,365 | 37,615 | 69,296 | 85,862 | 93,806 |
| 232 | Maricopa County | 29,296 | 30,200 | 34,506 | 37,144 | 37,927 | 38,313 |
| 233 | Maricopa County | 87,834 | 91,276 | 111,822 | 119,384 | 123,777 | 126,523 |
| 234 | Maricopa County | 8,969 | 9,467 | 10,460 | 10,878 | 11,335 | 11,488 |
| 371 | Maricopa County | 342 | 344 | 434 | 734 | 2,584 | 4,316 |
| 504 | Maricopa County | 6,460 | 6,718 | 17,425 | 46,912 | 85,127 | 102,004 |
|  | Total | 144,029 | 150,254 | 216,733 | 307,460 | 383,316 | 417,187 |
| Tempe MPA |  |  |  |  |  |  |  |
| 288 | Maricopa County | 73,442 | 76,444 | 100,651 | 129,202 | 150,094 | 157,410 |
| 297 | Maricopa County | 53,146 | 54,092 | 56,336 | 57,432 | 61,780 | 64,273 |
| 308 | Maricopa County | 58,756 | 59,473 | 60,120 | 60,348 | 60,476 | 60,559 |
|  | Total | 185,344 | 190,009 | 217,107 | 246,982 | 272,350 | 282,242 |

Notes: Numbers rounded to the nearest 100. These projections include both the Maricopa County and Pinal County portions for Apache Junction, Queen Creek, and the Gila River Indian Community. Peoria and Wickenbura include only the Maricopa County portion.

Source: Maricopa Association of Governments (MAG) Socioeconomic Projections of Population and Employment by Municipal Planning Area (MPA) and Regional Analysis Zone (RAZ), May 2019

For explanation of variables and complete notation on this series, please refer to the Notes and Caveats in Appendix A.

## Maricopa Association of Governments

Table 5: Employment by Regional Analysis Zone (RAZ) by MPA
July 1, 2018 and Projections July 1, 2020 to July 1, 2055

| RAZ | County | Total Employment |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2018 | 2020 | 2030 | 2040 | 2050 | 2055 |
|  | Total | 897,713 | 937,622 | 1,083,980 | 1,189,209 | 1,264,941 | 1,298,903 |
| Queen Creek MPA |  |  |  |  |  |  |  |
| 339 | Maricopa County | 13,933 | 14,696 | 16,482 | 18,825 | 20,733 | 21,151 |
| 422 | Pinal County | 9 | 8 | 18 | 22 | 31 | 39 |
| 423 | Pinal County | 89 | 109 | 351 | 620 | 1,068 | 1,639 |
| 424 | Pinal County | 1,435 | 1,576 | 3,073 | 4,571 | 7,020 | 8,309 |
|  | Total | 15,466 | 16,389 | 19,924 | 24,038 | 28,852 | 31,138 |
| Salt River Pima-Maricopa Native Nation MPA |  |  |  |  |  |  |  |
| 264 | Maricopa County | 21,160 | 22,869 | 28,215 | 33,871 | 35,903 | 36,442 |
|  | Total | 21,160 | 22,869 | 28,215 | 33,871 | 35,903 | 36,442 |
| Scottsdale MPA |  |  |  |  |  |  |  |
| 209 | Maricopa County | 4,488 | 4,659 | 4,851 | 5,174 | 5,161 | 5,344 |
| 210 | Maricopa County | 2,386 | 3,018 | 2,759 | 3,091 | 3,139 | 3,191 |
| 229 | Maricopa County | 9,604 | 10,005 | 11,231 | 11,962 | 12,193 | 12,896 |
| 230 | Maricopa County | 23,272 | 24,919 | 32,112 | 36,968 | 40,834 | 42,136 |
| 247 | Maricopa County | 44,254 | 47,089 | 52,652 | 54,822 | 55,679 | 56,105 |
| 248 | Maricopa County | 29,603 | 30,901 | 33,285 | 34,001 | 34,234 | 34,548 |
| 249 | Maricopa County | 7,409 | 7,692 | 8,179 | 8,684 | 8,906 | 9,045 |
| 263 | Maricopa County | 26,351 | 26,961 | 28,903 | 30,245 | 30,919 | 31,381 |
| 272 | Maricopa County | 49,833 | 52,185 | 61,540 | 67,039 | 70,676 | 72,330 |
|  | Total | 197,200 | 207,429 | 235,512 | 251,986 | 261,741 | 266,976 |
| Surprise MPA |  |  |  |  |  |  |  |
| 211 | Maricopa County | 60 | 53 | 1,560 | 3,172 | 4,766 | 7,017 |
| 212 | Maricopa County | 2,008 | 2,338 | 5,821 | 9,965 | 13,362 | 15,709 |
| 232 | Maricopa County | 8,349 | 9,228 | 11,297 | 12,187 | 12,875 | 13,116 |
| 233 | Maricopa County | 19,943 | 21,079 | 32,661 | 44,032 | 52,007 | 57,402 |
| 234 | Maricopa County | 2,588 | 2,711 | 3,354 | 3,922 | 4,239 | 4,386 |
| 371 | Maricopa County | 18 | 20 | 327 | 423 | 2,381 | 2,937 |
| 504 | Maricopa County | 677 | 1,020 | 4,460 | 12,695 | 23,763 | 29,886 |
|  | Total | 33,643 | 36,449 | 59,480 | 86,396 | 113,393 | 130,453 |
| Tempe MPA |  |  |  |  |  |  |  |
| 288 | Maricopa County | 88,927 | 94,229 | 111,010 | 128,894 | 144,714 | 152,703 |
| 297 | Maricopa County | 44,730 | 47,069 | 53,149 | 57,125 | 60,725 | 62,552 |
| 308 | Maricopa County | 56,380 | 59,208 | 67,052 | 71,701 | 74,542 | 75,596 |
|  | Total | 190,037 | 200,506 | 231,211 | 257,720 | 279,981 | 290,851 |

Notes: Numbers rounded to the nearest 100. These projections include both the Maricopa County and Pinal County portions for Apache Junction, Queen Creek, and the Gila River Indian Community. Peoria and Wickenburg include only the Maricopa County portion.

Source: Maricopa Association of Governments (MAG) Socioeconomic Projections of Population and Employment by Municipal Planning Area (MPA) and Regional Analysis Zone (RAZ), May 2019

For explanation of variables and complete notation on this series, please refer to the Notes and Caveats in Appendix A.

# Appendix I - Year 2023 No Build Capacity Analysis 

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lane Configurations | $\cdots$ | 「 | 44 | 「 | ${ }^{*}$ | 44 |
| Traffic Volume (veh/h) | 59 | 10 | 1774 | 38 | 7 | 1794 |
| Future Volume (veh/h) | 59 | 10 | 1774 | 38 | 7 | 1794 |
| Initial $Q(Q b)$, veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 |  | 1.00 | 1.00 |  |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No |  | No |  |  | No |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 64 | 11 | 1928 | 41 | 8 | 1950 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, \% | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 185 | 85 | 2769 | 1235 | 192 | 2981 |
| Arrive On Green | 0.05 | 0.05 | 0.78 | 0.78 | 0.01 | 0.84 |
| Sat Flow, veh/h | 3456 | 1585 | 3647 | 1585 | 1781 | 3647 |
| Grp Volume(v), veh/h | 64 | 11 | 1928 | 41 | 8 | 1950 |
| Grp Sat Flow(s),veh/h/ln | 1728 | 1585 | 1777 | 1585 | 1781 | 1777 |
| Q Serve(g_s), s | 2.1 | 0.8 | 31.4 | 0.7 | 0.1 | 23.5 |
| Cycle Q Clear(g_c), s | 2.1 | 0.8 | 31.4 | 0.7 | 0.1 | 23.5 |
| Prop In Lane | 1.00 | 1.00 |  | 1.00 | 1.00 |  |
| Lane Grp Cap(c), veh/h | 185 | 85 | 2769 | 1235 | 192 | 2981 |
| V/C Ratio(X) | 0.35 | 0.13 | 0.70 | 0.03 | 0.04 | 0.65 |
| Avail Cap(c_a), veh/h | 518 | 238 | 2769 | 1235 | 264 | 2981 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(l) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 54.8 | 54.1 | 6.4 | 3.0 | 7.1 | 3.4 |
| Incr Delay (d2), s/veh | 0.4 | 0.3 | 1.5 | 0.1 | 0.0 | 1.1 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| \%ile BackOfQ(50\%),veh/ln | 0.9 | 0.7 | 8.5 | 0.2 | 0.0 | 4.4 |
| Unsig. Movement Delay, s/veh |  |  |  |  |  |  |
| LnGrp Delay(d),s/veh | 55.2 | 54.4 | 7.9 | 3.1 | 7.1 | 4.6 |
| LnGrp LOS | E | D | A | A | A | A |
| Approach Vol, veh/h | 75 |  | 1969 |  |  | 1958 |
| Approach Delay, s/veh | 55.1 |  | 7.8 |  |  | 4.6 |
| Approach LOS | E |  | A |  |  | A |


| Timer - Assigned Phs | 2 | 4 | 5 | 6 |
| :--- | ---: | ---: | ---: | ---: |
| Phs Duration (G+Y+Rc), s | 107.0 | 13.0 | 7.2 | 99.8 |
| Change Period (Y+Rc), s | ${ }^{*} 6.3$ | 6.6 | 6.0 | ${ }^{*} 6.3$ |
| Max Green Setting (Gmax), s | ${ }^{*} 89$ | 18.0 | 6.0 | ${ }^{*} 77$ |
| Max Q Clear Time (g_c+11), s | 25.5 | 4.1 | 2.1 | 33.4 |
| Green Ext Time (p_c), s | 6.7 | 0.1 | 0.0 | 6.5 |


| Intersection Summary |  |
| :--- | ---: |
| HCM 6th Ctrl Delay | 7.1 |
| HCM 6th LOS | A |

## Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

| Intersection |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Int Delay，s／veh | 5.3 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Movement | EBU | EBL | EBT | EBR | WBU | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  | ＊ | 个4 | 「 |  | ＊ | 个 ${ }^{2}$ |  |  |  |  | \％ |  | 「 |
| Traffic Vol，veh／h | 3 | 17 | 25 | 0 | 5 | 0 | 24 | 10 | 0 | 0 | 0 | 25 | 0 | 48 |
| Future Vol，veh／h | 3 | 17 | 25 | 0 | 5 | 0 | 24 | 10 | 0 | 0 | 0 | 25 | 0 | 48 |
| Conflicting Peds，\＃／hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control F | Free | Free | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | － | － | － | None | － | － | － | None | － | － | None | － | － | None |
| Storage Length | － | 105 | － | 160 | － | 200 | － | － | － | － | － | 0 | － | 150 |
| Veh in Median Storage，\＃ | \＃ | － | 0 | － | － | － | 0 | － | 108229 | 2224 | － | － | 0 | － |
| Grade，\％ | － | － | 0 | － | － | － | 0 | － | － | 0 | － | － | 0 | － |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles，\％ | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 3 | 18 | 27 | 0 | 5 | 0 | 26 | 11 | 0 | 0 | 0 | 27 | 0 | 52 |



| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lane Configurations | \％${ }^{*}$ | 「 | 个个 | F | \％ | 个4 |
| Traffic Volume（veh／h） | 43 | 22 | 1839 | 59 |  | 1945 |
| Future Volume（veh／h） | 43 | 22 | 1839 | 59 | 8 | 1945 |
| Initial $Q(Q b)$ ，veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped－Bike Adj（A＿pbT） | 1.00 | 1.00 |  | 1.00 | 1.00 |  |
| Parking Bus，Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No |  | No |  |  | No |
| Adj Sat Flow，veh／h／ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate，veh／h | 47 | 24 | 1999 | 64 | 9 | 2114 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh，\％ | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap，veh／h | 183 | 84 | 2768 | 1234 | 179 | 2984 |
| Arrive On Green | 0.05 | 0.05 | 0.78 | 0.78 | 0.01 | 0.84 |
| Sat Flow，veh／h | 3456 | 1585 | 3647 | 1585 | 1781 | 3647 |
| Grp Volume（v），veh／h | 47 | 24 | 1999 | 64 | 9 | 2114 |
| Grp Sat Flow（s），veh／h／ln | 1728 | 1585 | 1777 | 1585 | 1781 | 1777 |
| Q Serve（g＿s），s | 1.6 | 1.7 | 34.1 | 1.1 | 0.1 | 28.3 |
| Cycle Q Clear（g＿c），s | 1.6 | 1.7 | 34.1 | 1.1 | 0.1 | 28.3 |
| Prop In Lane | 1.00 | 1.00 |  | 1.00 | 1.00 |  |
| Lane Grp Cap（c），veh／h | 183 | 84 | 2768 | 1234 | 179 | 2984 |
| V／C Ratio（X） | 0.26 | 0.29 | 0.72 | 0.05 | 0.05 | 0.71 |
| Avail Cap（c＿a），veh／h | 213 | 98 | 2768 | 1234 | 234 | 2984 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter（l） | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay（d），s／veh | 54.6 | 54.7 | 6.7 | 3.1 | 8.0 | 3.8 |
| Incr Delay（d2），s／veh | 0.3 | 0.7 | 1.7 | 0.1 | 0.0 | 1.5 |
| Initial Q Delay（d3），s／veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| \％ile BackOfQ（50\％），veh／ln | 0.7 | 1.6 | 9.4 | 0.3 | 0.1 | 5.3 |
| Unsig．Movement Delay，s／veh |  |  |  |  |  |  |
| LnGrp Delay（d），s／veh | 54.8 | 55.3 | 8.4 | 3.1 | 8.0 | 5.3 |
| LnGrp LOS | D | E | A | A | A | A |
| Approach Vol，veh／h | 71 |  | 2063 |  |  | 2123 |
| Approach Delay，s／veh | 55.0 |  | 8.2 |  |  | 5.3 |
| Approach LOS | E |  | A |  |  | A |


| Timer－Assigned Phs | 2 | 4 | 5 | 6 |
| :--- | ---: | ---: | ---: | ---: |
| Phs Duration（G＋Y＋Rc），s | 107.1 | 12.9 | 7.3 | 99.8 |
| Change Period（Y＋Rc），s | $* 6.3$ | 6.6 | 6.0 | $* 6.3$ |
| Max Green Setting（Gmax），s | $* 1 E 2$ | 7.4 | 5.0 | $* 89$ |
| Max Q Clear Time（g＿c +11 ），s | 30.3 | 3.7 | 2.1 | 36.1 |
| Green Ext Time（p＿c），s | 7.9 | 0.0 | 0.0 | 7.0 |


| Intersection Summary |  |
| :--- | ---: |
| HCM 6th Ctrl Delay | 7.5 |
| HCM 6th LOS | A |

## Notes

User approved pedestrian interval to be less than phase max green．
＊HCM 6th computational engine requires equal clearance times for the phases crossing the barrier．

| Intersection |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Int Delay，s／veh | 4.1 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Movement | EBU | EBL | EBT | EBR | WBU | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  | $\stackrel{y}{4}$ | 个4 | 「 |  | ＊ | 蚛 |  |  |  |  | ${ }^{7}$ |  | F |
| Traffic Vol，veh／h | 8 | 37 | 23 | 0 | 3 | 0 | 31 | 28 | 0 | 0 | 0 | 10 | 0 | 26 |
| Future Vol，veh／h | 8 | 37 | 23 | 0 | 3 | 0 | 31 | 28 | 0 | 0 | 0 | 10 | 0 | 26 |
| Conflicting Peds，\＃／hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control F | Free | Free | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | － | － | － | None | － | － | － | None | － | － | None | － | － | None |
| Storage Length | － | 105 | － | 160 | － | 200 | － | － | － | － | － | 0 | － | 150 |
| Veh in Median Storage，\＃ | \＃ | － | 0 | － | － | － | 0 |  | 108229 | 2224 | － | － | 0 | － |
| Grade，\％ | － | － | 0 | － | － | － | 0 | － | － | 0 | － | － | 0 | － |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles，\％ | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 9 | 40 | 25 | 0 | 3 | 0 | 34 | 30 | 0 | 0 | 0 | 11 | 0 | 28 |


| Major／Minor $\quad$ a | Major1 | Major2 |  |  |  |  |  |  |  | Minor2 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Conflicting Flow All | 64 | 64 | 0 | 0 | 25 | 25 | 0 | 0 |  | 166 | － | 32 |
| Stage 1 | － | － | － | － | － | － | － | －－ |  | 55 | － | － |
| Stage 2 | － | － | － | － | － | － | － | －－ |  | 111 | － | － |
| Critical Hdwy | 6.44 | 4.14 | － | － | 6.44 | 4.14 | － | －－ |  | 6.84 | － | 6.94 |
| Critical Hdwy Stg 1 | － | － | － | － | － | － | － | －－ |  | 5.84 | － | － |
| Critical Hdwy Stg 2 | － | － | － | － | － | － | － | －－ |  | 5.84 | － | － |
| Follow－up Hdwy | 2.52 | 2.22 | － | － | 2.52 | 2.22 | － | －－ |  | 3.52 | － | 3.32 |
| Pot Cap－1 Maneuver | 1303 | 1536 | － | － | 1378 | 1588 | － | －－ |  | 808 | 0 | 1035 |
| Stage 1 | － | － | － | － | － | － | － | －－ |  | 961 | 0 | － |
| Stage 2 | － | － | － | － | － | － | － | －－ |  | 901 | 0 | － |
| Platoon blocked，\％ |  |  | － | － |  |  | － | －－ |  |  |  |  |
| Mov Cap－1 Maneuver | 1481 | 1481 | － | － | 1378 | 1378 | － | －－ |  | 780 | 0 | 1035 |
| Mov Cap－2 Maneuver | － | － | － | － | － | － | － | －－ |  | 780 | 0 | － |
| Stage 1 | － | － | － | － | － | － | － | －－ |  | 929 | 0 | － |
| Stage 2 | － | － | － | － | － | － | － | －－ |  | 899 | 0 | － |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Approach | EB |  |  |  | WB |  |  |  |  | SB |  |  |
| HCM Control Delay，s | 5 |  |  |  | 0.4 |  |  |  |  | 8.9 |  |  |
| HCM LOS |  |  |  |  |  |  |  |  |  | A |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Minor Lane／Major Mvmt |  | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 | SBLn2 |  |  |  |
| Capacity（veh／h） |  | 1481 | － | － | 1378 | － | － | － 780 | 1035 |  |  |  |
| HCM Lane V／C Ratio |  | 0.033 | － | － | 0.002 | － | － | － 0.014 | 0.027 |  |  |  |
| HCM Control Delay（s） |  | 7.5 | － | － | 7.6 | － | － | 9.7 | 8.6 |  |  |  |
| HCM Lane LOS |  | A | － | － | A | － | － | －A | A |  |  |  |
| HCM 95th \％tile Q（veh） |  | 0.1 | － | － | 0 | － | － | 0 | 0.1 |  |  |  |

## Appendix J - Year 2023 Build Capacity Analysis

| Intersection |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Int Delay, s/veh | 0.8 |  |  |  |  |  |



[^3]

## Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

|  | $\checkmark$ | 4 | $\uparrow$ | > |  | $\downarrow$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lane Group | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Group Flow (vph) | 136 | 15 | 1952 | 41 | 77 | 1904 |
| v/c Ratio | 0.51 | 0.11 | 0.75 | 0.04 | 0.45 | 0.66 |
| Control Delay | 59.6 | 24.3 | 13.3 | 3.7 | 14.9 | 6.0 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 59.6 | 24.3 | 13.3 | 3.7 | 14.9 | 6.0 |
| Queue Length 50th (ft) | 53 | 0 | 436 | 4 | 9 | 242 |
| Queue Length 95th (ft) | 84 | m21 | 652 | 17 | 42 | 343 |
| Internal Link Dist (ft) | 271 |  | 660 |  |  | 332 |
| Turn Bay Length (ft) | 230 | 125 |  | 145 | 195 |  |
| Base Capacity (vph) | 612 | 294 | 2590 | 1164 | 179 | 2884 |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.22 | 0.05 | 0.75 | 0.04 | 0.43 | 0.66 |
| Intersection Summary |  |  |  |  |  |  |


| Intersection |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |



| Intersection |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Int Delay, s/veh | 6.2 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Movement | EBU | EBL | EBT | EBR | WBU | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  | \% | 个4 | F' |  | \% | 性 |  |  |  |  | ${ }^{7}$ |  | F' |
| Traffic Vol, veh/h | 67 | 17 | 25 | 0 | 5 |  | 26 | 10 | 0 | 0 | 0 | 25 | 0 | 50 |
| Future Vol, veh/h | 67 | 17 | 25 | 0 | 5 | 0 | 26 | 10 | 0 | 0 | 0 | 25 | 0 | 50 |
| Conflicting Peds, \#/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control F | Free | Free | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | - | None | - | - | - | None | - | - | None | - | - | None |
| Storage Length | - | 105 | - | 160 | - | 200 | - | - | - | - | - | 0 | - | 150 |
| Veh in Median Storage, \# | \# | - | 0 | - | - | - | 0 | - | 10824 | 56064 | - | - | 0 | - |
| Grade, \% | - | - | 0 | - | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, \% | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 73 | 18 | 27 | 0 | 5 | 0 | 28 | 11 | 0 | 0 | 0 | 27 | 0 | 54 |



| Intersection |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |


| Major/Minor | Minor1 |  |  |  |  |  | Major1 |  | Major2 |  |
| :--- | ---: | ---: | ---: | ---: | :--- | :---: | :---: | :---: | :---: | :---: |
| Conflicting Flow All | - | 961 | 0 | 0 | - |  |  |  |  |  |


| Approach | WB | NB | SB |
| :--- | :---: | :---: | :---: |
| HCM Control Delay, s | 20.4 | 0 | 0 |

HCMLOS C

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBT |
| :--- | ---: | ---: | ---: |
| Capacity (veh/h) | - | -363 | - |
| HCM Lane V/C Ratio | - | -0.359 | - |
| HCM Control Delay (s) | - | -20.4 | - |
| HCM Lane LOS | - | - | $C$ |
| HCM 95th \%tile Q(veh) | - | - | 1.6 |

## Notes

$\sim$ : Volume exceeds capacity $\$$ : Delay exceeds $300 s \quad+$ : Computation Not Defined $\quad$ : All major volume in platoon

|  | $\checkmark$ | 4 | 4 | $p$ |  | $\downarrow$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lane Group | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Group Flow (vph) | 110 | 28 | 2024 | 64 | 68 | 2078 |
| v/c Ratio | 0.46 | 0.21 | 0.76 | 0.05 | 0.44 | 0.71 |
| Control Delay | 59.8 | 22.1 | 12.2 | 2.1 | 15.4 | 6.4 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 59.8 | 22.1 | 12.2 | 2.1 | 15.4 | 6.4 |
| Queue Length 50th (ft) | 43 | 1 | 456 | 3 | 7 | 278 |
| Queue Length 95th (ft) | 72 | m29 | 584 | 15 | 36 | 377 |
| Internal Link Dist (ft) | 210 |  | 660 |  |  | 382 |
| Turn Bay Length (tt) | 230 | 125 |  | 145 | 195 |  |
| Base Capacity (vph) | 242 | 137 | 2684 | 1212 | 154 | 2944 |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.45 | 0.20 | 0.75 | 0.05 | 0.44 | 0.71 |
| Intersection Summary |  |  |  |  |  |  |



## Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



| Intersection |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Int Delay, s/veh | 5.2 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Movement | EBU | EBL | EBT | EBR | WBU | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  | \% | 个4 | F' |  | \% | 性 |  |  |  |  | ${ }_{1}$ |  | F' |
| Traffic Vol, veh/h | 63 | 37 | 23 | 0 | 3 |  | 34 | 28 | 0 | 0 | 0 | 10 | 0 | 29 |
| Future Vol, veh/h | 63 | 37 | 23 | 0 | 3 | 0 | 34 | 28 | 0 | 0 | 0 | 10 | 0 | 29 |
| Conflicting Peds, \#/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control F | Free | Free | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | - | None | - | - | - | None | - | - | None | - | - | None |
| Storage Length | - | 105 | - | 160 | - | 200 | - | - | - | - | - | 0 | - | 150 |
| Veh in Median Storage, \# | \# | - | 0 | - | - | - | 0 | - | 10824 | 56064 | - | - | 0 | - |
| Grade, \% | - | - | 0 | - | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, \% | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 68 | 40 | 25 | 0 | 3 | 0 | 37 | 30 | 0 | 0 | 0 | 11 | 0 | 32 |



# CITIZEN REVIEW \& NEIGHBORHOOD INVOLVEMENT REPORT QuikTrip- Scottsdale and Legacy 

February 1, 2022

## Overview

This Citizen Review Report is being performed in association with a request for a Conditional Use Permit to allow for a fueling station on an approximately $2.0+/-$ acre site located at the northeast corner of Scottsdale Road and Legacy Boulevard. The site is currently zoned Planned Regional Center - Planned Community District and the zoning on the site is not changing as part of this request. This Citizen Review Report will be updated throughout the process.

The entire project team is sensitive to the importance of neighborhood involvement and creating a positive relationship with property owners, residents, business owners, homeowners associations, and other interested parties. Communication with these parties will be ongoing throughout the process. Work on compiling a list of impacted and interested stakeholders and neighborhood outreach began prior to the application filing and will also continue throughout the process.

## Community Involvement

Surrounding property owners, HOAs and other interested parties were noticed via first class mail regarding the project and were provided contact information for those who wanted more information. Additionally, the notice included information regarding a Virtual Open House for the project that was held on Wednesday, January 26, 2022. The distribution of this notification EXCEEDED the City's 750' radius mailing requirements as specified in the Citizen Review Checklist.

A detailed description and visuals for the project were posted online as well as an opportunity for neighbors to provide comments/questions by phone or by email to the development team. The website and its accessibility date/time were posted on the Early Notification Sign on the property and the website was available from $1 / 25$ through 1/28. There were 28 total views of the online website during that time. The development team did not receive any emails or phone calls with questions or comments regarding the project. However, the development
team will continue to be accessible by phone and email to ensure that surrounding property owners and neighbors have ongoing opportunities to comment and ask questions.

A vital part of the outreach process is to allow people to express their concerns and understand issues and attempt to address them in a professional and timely matter. Again, the entire team realizes the importance of the neighborhood involvement process and is committed to communication and outreach for the project.

## Attachments:

Notification Letter
Notification List
Affidavit of Posting

January 14, 2022
Dear Neighbor:
We are pleased to tell you about an upcoming request (1165-PA-2021) for a Conditional Use Permit on the $2+/$ - acre parcel located at the northeast corner of Scottsdale Road and Legacy Boulevard. This site is part of the One Scottsdale Master Plan and the Use Permit would result in a new gas station on this corner. The site is zoned Planned Regional Center - Planned Community District and the zoning on the site is not changing as part of this request.

In accordance with public safety procedures during COVID-19, we will be hosting an open house virtually, allowing for questions and comments, just as they would be if there were an in person open house. Information will be posted on the web link www.technicalsolutionsaz.com/open-house.html and will be accessible on Wednesday, January 26, 2022. The project team will then be available on January 26, 2022
from 4:30 PM to 6 PM to respond to questions or comments at (602) 957-3434 or email info@technicalsolutionsaz.com.

If you are unable to access the Virtual Open House online, please contact the neighborhood outreach team at 602-957-3434 or info@technicalsolutionsaz.com and we will be happy to provide you information about the proposal. The City of Scottsdale Project Coordinator for the project is Meredith Tessier, who can be reached at 480-312-4211 or MTessier@ScottsdaleAZ.gov.

Thank you.
Sincerely,


Susan Bitter Smith
President

## Affidavit of Posting

## Required: Signed, Notarized originals.

Recommended: E-mail copy to your project coordinator.

Project Under Consideration Sign (White)

Case Number:
Project Name:
Location:
Site Posting Date:
NEC Scottsdale Rd \& Legacy Blvd
1165-PA-2021

Applicant Name:

## Technical Solutions

Sign Company Name:
Phone Number:


I confirm thazthe site has peen posted as indicated by the Project Manager for the case as listed above.

$\frac{01 / 14 / 22}{\text { Date }}$

Return completed original notarized affidavit AND pictures to the Current Planning Office no later than 14 days after your application submittal.

Acknowledged before me this the $\qquad$ day of $\sqrt{\text { amaru }} 2023$ MARYBETH CONRAD
Notary Public - Arizona
Maricopa County
Commission \# 591461
My Comm. Expires Oct 25, 2024
M


## City of Scottsdale -- Current Planning Division

7447 E Indian School Road, Suite 105, Scottsdale, AZ 85251 * Phone: 480-312-7000 * Fax: 480-312-7088

City Notifications - One Scottsdale PU III Quick Trip



[^0]:    C. The additional conditions specified in Section 1.403, as applicable, have been satisfied.

[^1]:    Notes: Numbers rounded to the nearest 100. These projections include both the Maricopa County and Pinal County portions for Apache Junction, Queen Creek, and the Gila River Indian Community. Peoria and Wickenbura include only the Maricopa County portion.

    Source: Maricopa Association of Governments (MAG) Socioeconomic Projections of Population and Employment by Municipal Planning Area (MPA) and Regional Analysis Zone (RAZ), June 2019

    For explanation of variables and complete notation on this series, please refer to the Notes and Caveats in Appendix A.

[^2]:    Notes: Numbers rounded to the nearest 100. These projections include both the Maricopa County and Pinal County portions for Apache Junction, Queen Creek, and the Gila River Indian Community. Peoria and Wickenbura include only the Maricopa County portion.

    Source: Maricopa Association of Governments (MAG) Socioeconomic Projections of Population and Employment by Municipal Planning Area (MPA) and Regional Analysis Zone (RAZ), June 2019

    For explanation of variables and complete notation on this series, please refer to the Notes and Caveats in Appendix A.

[^3]:    QuickTrip - Year 2023 AM Build
    Synchro 11 Report
    Lokahi, LLC HCM 6th TWSC

