664TP

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# 1. Introduction

HSL Developers is proposing the development of Dream Town, a multi-use site containing a restaurant and a mixed-use office/retail building. This section contains information on the purpose of the report and the study level of the proposed development.

## 1.1 Purpose

This report presents a Traffic Impact Analysis (TIA) for the proposed Dream Town development. This TIA was completed to fulfill requirements from Provo City and the Utah Department of Transportation (UDOT) for new development, and was done in accordance with UDOT guidelines to apply for an access permit (Utah Department of Transportation 2019). The TIA identifies current traffic patterns—including traffic volume counts—in the study area, and projects traffic volumes to opening day and five years after opening (2024 and 2029, respectively).

## 1.2 Study Level

UDOT Administrative Rule R930-6-8(4) (Utah Department of Transportation 2019) sets forth general requirements for an access permit, including determining the application level. The proposed development will contain an 8,000 ft2 high-turnover restaurant (Institute of Transportation Engineers (ITE) land use code 932) and a 32,000 ft2 office/retail building, half of which (18,000 ft2) will be a general office location (ITE land use code 710), and the remaining half (18,000 ft2) will be a hardware store (ITE land use code 816). From the ITE Trip Generation Manual (Institute of Transportation Engineers 2021), these locations are expected to generate 1264 weekday trips and 166 PM peak trips. These trip rates, along with the land use and respective development sizes, necessitate a level II application.

A Level II application requires the following:

* Analysis area includes intersection of site access drives with state highways and any signalized and un-signalized intersection within access category distance of property line
* Design years are opening day and five years after project completion
* Traffic is identified for weekday AM and PM peak, and special peak hour as necessary
  + **N.B. This analysis only includes PM peak traffic due to the scope of the assignment**
* Data collection includes:
  + Daily and turning movement counts
  + Site and adjacent roadway/intersection geometrics
  + Information on traffic control devices
  + Crash data
* Trip generation following the ITE Trip Generation Manual or other ITE procedures
* Trip distributions and assignment (existing, site, background, and future volumes in analysis area)
* Conflict and capacity analysis
* Traffic signal impacts
* Right-of-way identified, including no- and limited-access control lines
* Includes safe operational design needs and concerns with accompanying mitigation measures

# 2. Proposed Development

This section describes the plans for the development, including site location, land use, zoning information, and the the site plan itself.

## 2.1 Site Description

The proposed Dream Town development is located in southern Provo, in Utah. The site is located on the west side of University Avenue (US-189), between 1200 S and Towne Centre Drive. This location is just east of the Provo Towne Centre mall, which is a large retail and dining center and a large generator of trips. The location is also near (to the north of) the intersection of I-15 and University Avenue. [Figure 2.1](#fig-sitemap) shows a map of the site area. Four intersections are included in the analysis:

* 1200 S / Towne Centre Blvd. (stop-controlled)
* 1200 S / University Ave. (signalized)
* Towne Centre Dr. / Towne Centre Blvd. (signalized)
* Towne Centre Dr. / University Ave. (signalized)

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| Figure 2.1: Map of the site location. |

## 2.2 Land Use and Zoning Information

The proposed Dream Town development has two development pads, with one pad containing a sit-down restaurant and the other pad containing a mixed-use office/retail location. The retail location is intended to be a hardware/paint store. (**tab-landuse?**) shows these land uses along with their ITE land use codes and respective square footage.

**Table** **:** Proposed Land Use and Sizes

| Development Pad | Proposed Land Use | ITE Land Use Code | Area (sqft) |
| --- | --- | --- | --- |
| A | Sit-Down Restaurant | 932 | 8 000 |
| B | General Office Building | 710 | 18 000 |
| B | Hardware/Paint Store | 816 | 18 000 |

The site area is zoned as SC3???, …. *include zone map*

## 2.3 Site Plan

[Figure 2.2](#fig-siteplan) shows a site plan for the proposed development. Note that Pad C is not included in this analysis, as it has already been developed. This site map is still preliminary, and will be updated in a future draft of this report.

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| Figure 2.2: Site plan for proposed Dream Town development. |

# 3. Study Area Conditions

The study area for this analysis includes the streets adjacent to the site as well as their intersections. These streets are 1200 S on the north, University Ave. / US-189 on the east, Towne Centre Blvd. on the west, and Towne Centre Dr. on the south. Note that there is existing development between Dream Town and Towne Centre Dr. All of the intersections in the TIA are signalized with the exception of the Town Centre Blvd. / 1200 S intersection, which is stop-controlled. This is shown in [Figure 3.1](#fig-intersections).

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| Figure 3.1: Map of basic intersection characteristics in TIA area. |

## 3.1 Street Conditions

Detailed information on the streets in the study are is provided below:

#### 3.1.0.1 1200 South

#### 3.1.0.2 University Avenue / US-189

#### 3.1.0.3 Towne Centre Boulevard

#### 3.1.0.4 Towne Centre Drive

## 3.2 Adjacent Land Uses

## 3.3 Site Accessibility

# 4. Analysis of Existing Conditions

## 4.1 Physical Characteristics

## 4.2 Traffic Volumes

## 4.3 Level of Service

## 4.4 Transportation Safety

# 5. Projected Traffic

# 6. Access and Parking Layout

# 7. Traffic and Improvement Analysis

# 8. Conclusions and Recommendations

# References

Institute of Transportation Engineers. 2021. *Trip Generation Manual*. 10th ed. <https://itetripgen.org/>.

Utah Department of Transportation. 2019. “Administrative Rule R930-6 (Access Management).” <https://drive.google.com/file/d/1a0YNDy9Z8bFxuE121lJP5XJNW0rw9Ft3/view?usp=embed_facebook>.