## SCOPE OF TRAFFIC IMPACT STUDY (TIS)

**TO:** Keith Christian, P.E., RSP<sub>1</sub> Kimley-Horn 1100 West Idaho Street, Suite 210 Boise, ID, 83702

MEETING DATE: February 27, 2025

ATTENDEES: Curtis Cherne, Margaret Haynes, Brady Hutchins, Keith Christian, Lauren Nuffer

PROJECT: Sequoia Public School, Zone Atlas #G11

**REQUESTED CITY ACTION:** Zone Change X Site Development Plan

\_\_\_\_ Subdivision \_\_\_\_ Building Permit \_\_\_\_ Site Plan Amendment

\_\_\_\_ Curb Cut Permit \_\_\_\_ Conditional Use \_\_\_\_ Annexation

**ASSOCIATED APPLICATION:** Proposed development will be a K-12 public school located at 5310 Sequoia Rd NW. It is proposed that the school will be developed in two phases with renovations/changes to the existing site layout and an overall expected enrollment of 1240 students and approximately 114,000 sf of floor area.

#### SCOPE OF REPORT:

The Traffic Impact Study should follow the standard report format, which is outlined in the DPM. The following supplemental information is provided for the preparation of this specific study.

- Neighborhood Impact Assessment (NIA) standards will be followed
- Curtis can send examples of NIAs
- 1. Trip Generation Use Trip Generation Manual, 11th Edition.

Local data may be used for certain land use types as determined by staff. Consultant to provide.

- AM and PM peak period trip data will be collected at the existing Albuquerque School of Excellence located on Lomas Blvd NE west of Tramway Blvd NE
- From this peak period data, AM and PM peak hour rates will be developed
- The existing school has an enrollment of 1143 students

# 2. Appropriate study area:

Signalized Intersections;

- a. Sequoia/Coors
- b. St Joseph/Coors

Unsignalized Intersections;

- a. Sequioa/Atrisco
- b. Sequoia/Vista Grand
- c. Redlands/Coors
- d. Tucson/Coors
- e. Alamogordo/Redland

- f. Alamogordo/Tucson
- g. Alamogordo/St Joseph

Driveway Intersections: all site drives.

3. Intersection turning movement counts

Study Time – 7-9 a.m. peak hour, 4-6 p.m. peak hour Consultant to provide for all intersections listed above. Include pedestrian and cyclists.

- Based on the MRCOG traffic count data, Coors has a 7:00 AM peak hour and a 4:45 PM peak hour
- Study intersection turning movement counts (TMCs) will be collected 6:00-9:00 AM and 3:00-6:00 PM
- Trip data from the existing Albuquerque School of Excellence will also be collected during the same time periods
- Counts will be collected on a typical Tuesday, Wednesday, or Thursday and not on school holidays/breaks
- School will be closed campus, so a midday analysis is not required
- 4. Type of intersection progression and factors to be used.

Type III arrival type (see "Highway Capacity Manual, current edition" or equivalent as approved by staff). Unless otherwise justified, peak hour factors and % heavy commercial should be taken directly from the MRCOG turning movement data provided or as calculated from current count data by consultant.

- In addition to the TMCs, one 24-hour vehicle classification bi-directional tube count will be collected along Coors Blvd to determine the heavy vehicle percentage on Coors Blvd
- It is assumed the heavy vehicle percentage on Sequoia Rd is low; the typical 2% heavy vehicles will be used for movements on and off Sequoia Rd and the other study area side streets
- 5. Boundaries of area to be used for trip distribution.

City Wide - residential, office or industrial; x mile radius - commercial; Interstate or to be determined by consultant - motel/hotel APS district boundary mapping for each school and bus routes

- Brady Hutchins will provide exhibits that show the areas that students are distributed
- 6. Basis for trip distribution.

For smaller projects: Based on existing traffic patterns, trip attractions in the study area and locations where most trips may originate.

For larger projects: In addition to the information for smaller projects the distribution is to be determined using the most recently-approved socioeconomic forecasts from MRCOG and will be based upon appropriate radii or distribution areas around the site.

• Brady Hutchins will provide exhibits that show the areas that students are distributed

- 7. Traffic Assignment. Logical routing on the major street system.
- Two scenarios considered in analysis:
  - 1. Keep queue away from Coors Vehicles make a WBL into the westernmost access drive, wrap around the school parking area, and exit at the easternmost access drive and continue to the east
  - 2. Keep queue out of neighborhood Vehicles make an EBR into the westernmost access drive, wrap around the school parking area, and exit at the easternmost access drive and continue to the west
- 8. Proposed developments which have been approved but not constructed that are to be Included in the analyses. Projects in the area include:
  - a. Oxbow/Pavilion Coors/St Joseph, traffic and improvements
    - City to provide TIA
    - DOT to provide improvements plans
- 9. Method of intersection capacity analysis planning or operational (see "Highway Capacity Manual 7<sup>th</sup> edition" or equivalent (e.g. HCS, Synchro, etc.] as approved by staff). Must use latest version of design software and/or current edition of design manual.
  - LOS analysis will be completed using HCS
- 10. Traffic conditions for analysis:
  - a. Existing analysis year (2025);
  - b. Phase implementation year(s) without proposed development -
  - c. Phase implementation year(s) with proposed development -
  - d. Project completion year without proposed development 2027
  - e. Project completion year with proposed development 2027
  - f. Other Horizon with and without development 2037

### 11. Background traffic growth.

Method: use 10-year historical growth based on standard data from the MRCOG Traffic Flow Maps. Minimum growth rate to be used is 1/2%.

- 12. Planned (programmed) traffic improvements.
  - List planned CIP improvements in study area and projected project implementation year:
  - a. Oxbow/Palisades (see #8 above) Improvements will be considered based on the year they are expected to be implemented per the current plan provided by NMDOT
- 13. Crash Analysis and 85<sup>th</sup> percentile speed.

a. Provide crash analysis for 5 years of crash data for selected intersections and links. Discuss type of crash data (e.g. Spreadsheet or redacted reports, just peds) to be included

- Will be requested from NMDOT
- Crash analysis will need to be robust; focus on details of vulnerable road user (VRU) crashes and will need details of fatal VRU crashes
- Use FHWA CMFs to mitigate any issues from the crash analysis

b. Provide 85<sup>th</sup> percentile vehicle speeds if the site's frontage is in a Above 2X Mean on the MRCOG or City's HFIN website.

c. Provide 85<sup>th</sup> percentile vehicle speeds for roadways as requested by the Traffic Engineer.

14. STOP controlled, including site driveways, and signalized intersections that should be analyzed as a roundabout. In general, most intersections will be analyzed except for 6-lane divided arterials and where ROW is an issue.

- Roundabout analysis or the recommendation for traffic circles will be included where it makes sense from a volume perspective
- Kimley-Horn will provide locations where roundabouts analysis should be considered and receive city and DOT input when the time comes during the analysis

15. If agencies in addition to the City are involved, a response to their and City comments, including follow-up emails and meetings, are required to be submitted with the next submittal.

- NMDOT and City of Albuquerque will be reviewing agencies
- 16. Other None
- 17. Items to be included in the study:
  - a. 11"x17" minimum size Site Plan with including dimension from driveways to intersections/other driveways.
  - b. Intersection analysis.
  - c. Signal progression An analysis is required if the driveway analysis indicates a traffic signal is possibly warranted. Analysis Method:
    - Signal progression will be looked at for the study signals on Coors Blvd
  - d. Arterial LOS analysis; None
  - e. Site design features such as turning lanes, median cuts, queuing requirements and site circulation, including driveway signalization and visibility.
  - f. Transportation system impacts.
  - g. Other mitigating measures.
  - h. Crash analysis-at a minimum to include the project frontage, but may extend to area of influence- to be discussed. Discuss countermeasures as necessary.
  - i. 85<sup>th</sup> percentile speed, as required. Discuss countermeasures as necessary.
    - No specific analysis required, but mitigations will be considered in the report
  - j. Weaving analyses <u>yes X</u> no; Location(s):
  - k. Recommended street, intersection and signal improvements.
  - I. Transportation Infrastructure proposed to be built with this project: list and exhibit.
  - m. Pedestrian Facility and Safety section: This section will provide a narrative on existing and proposed pedestrian facilities, elaborate on pedestrian involved crashes and propose mitigation as necessary.
  - n. Bicycle facility and safety section: This section will provide a narrative on existing and proposed bicycle facilities, elaborate on cyclist involved crashes and propose mitigation as necessary and include whether cycling facilities are required/required to be upgraded per the MRCOG Long Range Bicycle System Map.

### SUBMITTAL REQUIREMENTS:

- 1. Number of copies of report required
  - a. 1 digital copy
- 2. Submittal Fee \$1300 for up to 3 reviews plus technology fee
  - a. Submit the TIS along with a DTIS to Planning Development Review Services email <u>PLNDRS@cabq.gov.</u>

The Traffic Impact Study for this development proposal, project name, shall be performed in accordance with the above criteria. If there are any questions regarding the above items, please contact me at 505-924-3986.

Curtis A Cherne

2-28-25

Date

Curtis Cherne, P.E. Senior Engineer City of Albuquerque, Planning Dept. Transportation Development Section

C: TIS Meeting Attendees

Revised May 2024