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NMDOT

Anderson Heights TIS Scope & Outline

July 20, 2020

The following documents the proposed scope for the Anderson Heights Traffic Impact Study

1. Intersections, data collection & trip generation
    a. The following shows proposed off-site study intersections and the latest known traffic count available:

Major Street	Minor Street	Traffic Count Data
Dennis Chavez	118th	Provided by BERNCO
Dennis Chavez	98th	Provided by BERNCO
Dennis Chavez	Unser	April 2018
Dennis Chavez	Condershire	April 2018
Dennis Chavez	Coors	April 2018
98th	Colobel	May 2016
98th	Amole Mesa	April 2013
Amole Mesa	Messina	No Data

    b. Data Collection for intersections without useable data:
        i. For intersections without recent traffic counts the following procedure will be used:
            1. Collect new traffic counts at the intersection in question and an intersection for which recent data exists.
            2. Compare new traffic count to previously collected traffic count at the intersection with previously collected data to determine a "volume change factor".
            3. Apply volume change factor to traffic count without previous count data to "adjust" data to pre-COVID levels.
            4. Validate and verify by comparison to MRCOG peak hour link volumes.
        ii. For counts that older than 2018, growth rates determined from MRCOG projections will be applied to forecast data to current year.

    c. Trip Generation, Pass By, & Internal Capture
        i. Trip Generation Manual (10th Edition) Land Use
            1. Single Family Detached Housing (ITE 210) – 506 Units
            2. Trip Generation in 4 phases
                a. Phase 1 – 306 units in 2023
                b. Phase 2 – 117 units in 2025
                c. Phase 3 (full build) – 83 units in 2027
        ii. No pass-by trips
        iii. No Internal Capture
    d. Known Developments or Pending Improvements in Area:

i. Ceja Vista – MGA project on the south side of Dennis Chavez
    1. Additional lanes on Dennis Chavez 98th to Unser and additional auxiliary lanes for side streets.
    2. Improvements are understood to be constructed by others by phase 1 of Anderson Heights.
ii. Bernalillo County Internal project at NM 500 and 118th: FYA and school improvements.
    1. Improvements are understood to be constructed by others by phase 1 of Anderson Heights.
iii. Bernalillo County Condershire NM 500 project to re-align south Condershire with Mead Rd.
    1. Includes auxiliary lanes to South Condershire from Dennis Chavez Blvd.
    2. Pending BERNCO funding. Will not be considered in background networks for Anderson Heights.

e. Build-out Year and Growth Rate
    i. MRCOG Projections.
        1. 2016 Model compared to 2040 Model to determine yearly growth rate.
            a. Compound growth applied to traffic volumes.

f. Analysis scenarios
    i. Existing (current year 2020) conditions
    ii. Background 2023 (no build)
    iii. Buildout 2023 with 306 units
        1. Mitigated buildout 2023 (with recommended improvements if any)
    iv. Background 2025
    v. Buildout 2025 with additional 117 units including 2023 Build volumes
        1. Mitigated buildout 2025 (with recommended improvements if any)
    vi. Background 2027
    vii. Full Build 2027 with additional 83 units including 2023 and 2025 Build volumes
        1. Mitigated buildout 2025 (with recommended improvements if any)
    viii. Horizon Year 2037
        a. Note: All scenarios to use existing signal timings except for "mitigated" scenarios.
        b. Note: mitigated scenarios will be analyzed only when improvements are recommended.

g. Required Analysis & Methodology
    i. LOS Capacity analysis based on HCM 6th Edition (HCM)
        1. Using urban street module for both 98th St and Dennis Chavez
    ii. 95th Percentile Queue demands (HCM)
    iii. Auxiliary Lane Analysis for site driveways/access roads
    iv. Sight Distance Analysis at Proposed Driveways

v. Warrant Study
    1. 98th Amole Mesa
vi. Safety Summary
    1. HSM Predictive Crash Method
    2. Summary of 5-year crash data

Lee Engineering has reviewed NMDOT's traffic study requirements from memo dated November 2019. It is noted that count data was collected prior to the requirements set forth in the traffic study requirements memo and therefore the following data collection items may not available:

- Demand volumes
- Right turn on red
- Busses stopping in travel lane
- Lane utilization estimate
- Pedestrians & bicycles
- Saturation flow rates
- Proportion of vehicles arriving on green