

**STAFF'S REVIEW COMMENTS FOR THE
4403 BROADWAY REDEVELOPMENT TRAFFIC IMPACT STUDY**

STUDY AREA

Comment 1. Include a discussion on the Shinning Mountain Waldorf School and how traffic associated with the school impacts the study area.

Response: Discussion and interaction of school traffic added.

TRIP DISTRIBUTION AND ASSIGNMENT

Comment 2. Staff does not concur with the 75% distribution to the south and 20% distribution to the east given that the existing and 2011 peak hour traffic counts show an even number of vehicles traveling to the south and to the east. Is this assumption based on a similar project observed? Adjust accordingly.

Response: Based on total traffic headed south on Broadway, not just from Violet, there is 80% traveling south on Broadway. With respect to employee areas and potential destinations on 28th Street and east Boulder, the trip distribution was adjusted to be 55% southbound on Broadway and 40% eastbound on Violet.

EXISTING INTERSECTION CAPACITY ANALYSIS

Comment 3. Include a discussion that the westbound left operates at a LOS "D" in the AM peak along with the reason why.

Response: Discussion was added on westbound left-turn operations in the existing condition.

AUXILIARY LANE PROVISIONS

Comment 4. The study needs to discuss how much storage is required by the Broadway southbound left-turn lane at the signalized intersection when discussing the northbound left-turn volumes on Broadway turning into access #1. Is there a projected overlap between the left-turn movements?

Response: Discussion was added on the expected queue lengths for each movement compared to the available shared storage length. It was concluded that there will be no overlap in the short-term or long-term scenarios within the TWLTL on Broadway between Violet Avenue and Access #1.

SHORT-TERM AND LONG-TERM TRAFFIC PROJECTS

Comment 5. All the LOS analysis must use the existing signal timing and the report must state so.

Response: The original TIS had the previous signal timing that was updated in early 2015. This updated TIS utilized the latest signal timing. This impacted the LOS and progression discussion. See TIS for further discussion and conclusions.

Comment 6. Under all the future scenarios a discussion is needed on the location of access #2 and if the access should be shifted to the west due to traffic and queuing on Violet. Include a discussion on how future queuing on Broadway will impact access #1.

Response: Discussion was added regarding the anticipated queue length and location of the Violet Avenue access. It was concluded that the access can remain in the proposed location.

Comment 7. The background traffic for the 2016 and 2035 scenarios must include peak hour trips to be generated by the Violet Crossing and 820 Lee Hill developments.

Response: The trips for Violet Crossing and 820 Lee Hill developments were added to the future background scenarios for 2016 and 2035.

Comment 8. It is staff's opinion the 0.5% growth rate is too low for Broadway given the re-development potential north of the study area. How does the 0.5% growth rate compare when looking at the growth in the peak hour volumes at this intersection from 2011 to 2014? Is Violet assumed to grow at 0.5%?

Response: Per subsequent discussions and an email dated August 10, 2015, staff approved the use of 0.5% annual growth rate for this project. The growth rate was applied to all roadways within the study area.

Comment 9. Pursuant to section 2.02 (S)(4)(b) of the Design and Construction Standards provide another iteration of the LOS analysis to demonstrate the anticipated results of making the recommended improvements. How does the change in the signal timing impact the Broadway progression, discuss in terms of delay.

Response: Discussion was added on the recommended slight change in signal timing and impact on Broadway progression. A snapshot of the bandwidth on Broadway in this part of the corridor is included as well.

Comment 10. The short-term and long-term traffic projects must include scenarios in the AM and PM period where the existing curb cut on Broadway is restricted to a right-in/right-out only. The left turn volume will need to be assigned to the intersection as well as the left-turn volumes from the Violet Xing Project. A discussion of the findings must be included in the report.

Response: For short-term and long-term future background+project, an additional scenario was evaluated assuming that the access on Broadway will be right-in, right-out for both 4403 Broadway and Violet Crossing. Left-turns into and out of both developments were reassigned as necessary. Figures, tables, and discussion associated with this scenario was included.

Comment 11. The conclusion needs to be revised to provide a clear and concise description of the study findings. How much more delay (in seconds) will occur on Broadway and the intersection due to the project, why is it acceptable. Staff does not agree with the findings that modifying the traffic signal timing will not impact the progression band on Broadway. What's the impact of this development on the Broadway progression and why is it acceptable or should the land use be reduced or additional TDM measures required. What's the projected daily traffic to be added on Broadway and Violet north, south, east, and west of the site.

Response: The conclusion was revised.

FUTURE PEDESTRIAN, BIKE AND TRANSIT ACCESS

Comment 12. This section should be revised to discuss the public improvements to be constructed by the development and its' consistency with the surrounding area. Please note, staff made a review comment that east – west pedestrian circulation was not being provided within the site.

Response: Added further information to this section. Pedestrians would be safer utilizing the sidewalk on Violet Avenue and not conflicting with vehicles entering/exiting the garages behind the townhomes along the alley; therefore, pedestrian activity is not encouraged east-west within the site in this area.

TDM

Comment 13. Discuss that a TDM Plan is being completed for the project and include the TDM as an attachment to the study.

Response: Section added for TDM and the plan will be added to Appendix.

Attachments:

Broadway Progression Band
Pen-and-ink changes on Page 2