



City of Grass Valley City Council Agenda Action Sheet

Title: Downtown Grass Valley Roundabout Project - Approve Engineering Concept

CEQA: N/A - CEQA review will be completed as part of the project work

Recommendation: That Council approve a selected project alternative for the Downtown Grass Valley Roundabout Project

Prepared by: Bjorn P. Jones, PE, City Engineer

Council Meeting Date: 11/5/2025

Date Prepared: 10/30/2025

Agenda: Administrative

Background Information: On February 25, 2025, Council awarded a Professional Services Agreement to GHD, Inc. for Civil Engineering Design, Project Management and Environmental Services for the Downtown Grass Valley Roundabout Project. Since this time, GHD and Staff have been working diligently to further a design concept and initiate environmental review.

Currently the project is navigating the Project Approval and Environmental Document (PA&ED) phase, as it is known in the Caltrans project development framework. The intent of the PA&ED phase is to obtain input to inform the selection of a project alternative, identify land use needs, further define costs and develop the necessary environmental documents in accordance with policy acts.

Previously in 2020, the City of Grass Valley collaborated with the Nevada County Transportation Commission (NCTC) and consultant GHD to complete an Intersection Analysis for the complex South Auburn St, Colfax Ave, Neal St, Tinloy St, Hansen Way and State Route 20 interchange, affectionately known as “The Triangle”. As part of that process, a number of design alternatives were evaluated to best manage traffic flows and incorporate pedestrian and bicycle facilities through this difficult corridor. The result of that study was the preferred alternative of the an oblong or “Peanut” shape roundabout to incorporate the majority of the legs into a single large intersection.

One unique design feature of that alternative, in addition to its shape, was the proposed signalized treatment of the S Auburn St and Neal St intersection legs situated just adjacent to the roundabout but not wholly encompassed into the roundabout operations. The City has always had some reservations if combining a signal so close to a roundabout was the best treatment for traffic and pedestrian control.

In 2022, the City again partnered with NCTC to apply for an Active Transportation Program (ATP) grant to fund the delivery of the complete roundabout project, utilizing the preferred design from the Intersection Analysis as the basis for the grant

application. The application was eventually successful and in 2023 the City was notified of awarded funding in the amount of \$5.439 million ATP funds with a leveraging contribution approved by NCTC of \$1.376 million in Congestion Mitigation and Air Quality (CMAQ) grant funds, for a fully funded total estimated project cost of \$6.815 million.

Although substantial project scope changes would likely be frowned upon by the California Transportation Commission (CTC) that manages the grant funding, some deviations may be warranted as the final design process is completed, as long as project objectives and deliverables stated in the grant application are met. As such, as part of the PA&ED work, the City requested that GHD again evaluate design alternatives to confirm the optimal intersection control, specifically the treatment of the S Auburn and Neal St legs.

In order to exhaust all options GHD evaluated the following configurations:

1. An oblong roundabout with a signalized S Auburn and Neal St intersection
2. An oblong roundabout with a stop-controlled S Auburn and Neal St intersection
3. An oblong roundabout with a separate mini roundabout at the S Auburn and Neal St intersection
4. One “Mega” roundabout to encompass all intersecting streets
5. An oblong roundabout with right-in, right-out only movements on S Auburn St; forcing all southbound traffic to turn right onto Neal, or to use an alternate routing

Option #1 has already been evaluated through previous analysis and found to function satisfactorily; this is the grant funded option, although cost escalations by 2028-2029 may see it difficult to stay within the original construction budget estimates.

Switching the traffic signal to a stop-controlled treatment at S Auburn and Neal, as in Option #2, was evaluated by GHD and found to meet design standards and function acceptably, although an initial simulation showed some longer queuing on S Auburn St southbound during peak periods. Staff has some proposals for optimizing and simplifying this layout if we were to move forward with this concept into final design. Some cost savings would be seen by eliminating the traffic signal and would hopefully offset any construction cost escalations.

Option #3 of a mini roundabout was found to have significant right of way impacts and the major cost and schedule increases were deemed excessively prohibitive to not pursue further.

A single, large roundabout configuration in Option #4 was initially a favorite of City Staff, but once further evaluated by GHD was found to have major right of way acquisition needs and failed a key roundabout design standard for line of sight. This option is no longer deemed feasible.

Option #5 has been preliminarily laid out overtop the original oblong roundabout plan, utilizing a “right-in, right-out” connection to S Auburn St as shown in the attached exhibit. The advantage of this configuration is the simplicity of connecting the S Auburn and Neal legs more directly to the roundabout, avoiding a separate signalized or stop-controlled intersection, and GHD designers believe this layout could easily be made

functional. However further evaluation has not yet been completed due to the alterations to traffic flows and potential impacts to businesses and truck traffic created by instituting the right turn only control coming southbound on S Auburn St. Although this traffic pattern change would be significant and certainly necessitate an outreach campaign, if the City were willing to accept these implications, Staff does feel this option presents one of the cleanest and most navigable roundabouts for managing the remainder of the legs.

At this point the City needs to provide clear direction to GHD regarding which alternative to proceed with in the Project Approval phase and ultimately into final design. The project delivery schedule approved by CTC is quite aggressive and has already been extended once, therefore further delays could jeopardize overall grant funding.

Staff's recommendation would be to proceed with either Option #2 of an oblong roundabout with stop-controlled S Auburn and Neal St legs or Option #5 with the right-in, right-out treatment onto S Auburn St. Option #2 fits within the approved schedule and budget and has passed all functionality criteria. Proceeding with this configuration would not rule out future improvements of either converting S Auburn/Neal intersection to a traffic signal or even a mini roundabout at a later date, if traffic levels warranted. Option #5 produces the aforementioned, flow changes and creates unknown schedule impacts. Budget-wise this alternative could likely see significant cost savings due to its simplicity and smaller footprint.

This is a complex intersection and there is no obvious perfect solution. Either alternative has its tradeoffs, but both options are sure to be a vast improvement over the facilities in place today, and the City is fortunate to have the funding secured to enact these improvements. We need to make a decision and proceed with a final concept in order to get back on schedule and achieve project delivery milestones, as committed to in the grant documentation. Staff requests that Council provide direction to Staff and approve a selected roundabout concept to move forward with to final design.

Council Goals/Objectives: The Downtown Grass Valley Roundabout Project executes portions of work tasks towards achieving/maintaining Strategic Plan Goal - Transportation

Fiscal Impact: Of the two recommended options, both fit within current budget estimates and available grant funding. Option #2 likely sees some nominal costs savings from the original proposal by switching to stop-control in place of a traffic signal. Option #5 savings could be significant by removing the traffic signal, shrinking the overall footprint and eliminating a portion of work in the on-ramp area of Caltrans right of way.

Funds Available: Yes

Account #: 300-406-63455

Reviewed by: City Manager

Attachments: Roundabout Exhibits #1-5