



**CITY OF SALINAS
COUNCIL STAFF REPORT**

DATE: APRIL 13, 2021

DEPARTMENT: PUBLIC WORKS, TRAFFIC AND TRANSPORTATION DIVISION

FROM: DAVID JACOBS, PUBLIC WORKS DIRECTOR

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TITLE: INTERSECTION CONTROL EVALUATION AT AIRPORT BOULEVARD AND SKYWAY BOULEVARD

RECOMMENDED MOTION:

A motion to approve a Resolution approving a roundabout concept with road diets at Airport Boulevard and Skyway Boulevard.

RECOMMENDATION:

Staff recommends that the City Council approve a Resolution approving a roundabout concept with road diets at Airport Boulevard and Skyway Boulevard.

EXECUTIVE SUMMARY:

Planned development projects are anticipated to create more traffic at the intersection of Airport Boulevard and Skyway Boulevard, resulting in the need for additional controls at the intersection. An intersection control evaluation (ICE) report was prepared to evaluate the benefits and costs associated with different intersection designs, including a traffic signal, modified all-way stop, and a roundabout. The results of the ICE analysis show that the roundabout provides benefits over the traffic signal and modified all-way stop, despite having a higher initial capital cost. It is requested that the Council receive the report and approve the roundabout concept at Airport Boulevard and Skyway Boulevard.

BACKGROUND:

At its July 3, 2018 meeting, City Council approved a Resolution (No. 21440) affirming the findings and Certifying the City's Salinas Travel Center Final Environmental Impact Report (EIR), adopting a Statement of Overriding Considerations, and adopting the Mitigation Monitoring and Reporting Program. The findings in the EIR identified impacts to the intersection of Airport Boulevard and Skyway Boulevard and as part of the mitigation monitoring program, requiring all developers of individual projects within the specific plan area to pay a fair share of the cost of a traffic signal at Skyway Boulevard/Airport Boulevard. Furthermore, at its May 12, 2020 meeting,

City Council approved a Resolution (No. 21845) certifying the Mitigated Negative Declaration(MND) and Mitigation Monitoring and Reporting Program for a Ground Lease on the 13.25-acre parcel of land located at 1341 Mercer Way. The findings in the MND identified impacts to the intersection of Airport Boulevard and Skyway Boulevard and as part of the mitigation monitoring program, requires the Salinas Travel Center project applicant to pay a fair share of the cost of a traffic signal or roundabout at the Skyway Boulevard & Airport Boulevard intersection. During the public review of the MND the Monterey Bay Air Resources District submitted a letter, dated December 2, 2019 requesting an intersection control evaluation (ICE) at the intersection of Skyway Boulevard and Airport Boulevard to determine the cost-effectiveness of signalization compared to a roundabout. The City modified the MND to reflect this change and planned to prepare an ICE analysis at the Skyway Boulevard & Airport Boulevard intersection.

The intersection of Airport Boulevard and Skyway Boulevard was evaluated using an Intersection Control Evaluation (Attachment 1) analysis in order to compare the cost-effectiveness of signalization versus a roundabout. The ICE analysis process compares five performance metrics evaluated over a 20-year projection at the study intersection to calculate the Benefit Cost (B/C) Ratio which measures the expected return on investment for each proposed intersection control. The performance measures used to calculate the benefits of the proposed improvement compared to the existing condition, or no project alternative are:

- Safety Benefit (of the proposed intersection control type)
- Delay Reduction Benefit (of the proposed intersection control type)
- Emission Reduction Benefit (of the proposed intersection control type)
- Operations and Maintenance Cost (added costs of the proposed intersection control type)
- Initial Capital Cost (added costs of the proposed intersection control type)

The study found that when the two proposed alternatives, a traffic signal and a roundabout option, are compared to one another the roundabout is preferable. The study concludes the roundabout provides benefits over the traffic signal, despite having a higher initial capital cost. The roundabout option requires less costs in annual operations and maintenance and has safety, delay and emission benefits compared to the traffic signal option.

The two proposed alternatives, a traffic signal and a roundabout option, are also compared to the existing all-way stop condition. The ICE analysis shows the benefits and costs associated with each improvement as B/C Ratios relative to the existing condition. B/C Ratios less than 1.0 when compared to the existing all-way stop control imply the project costs exceed the benefits of the improvement within the service life of the analysis. The ICE analysis finds both the signal and the roundabout option have a B/C Ratio less than 1.0. This indicates that the traffic signal and roundabout alternatives will not provide a better return on investment when compared solely to the existing all-way stop control at Airport Boulevard and Skyway Boulevard. This is largely a result of the high initial capital cost to reconfigure the intersection compared to the small cost of rehabilitating the existing pavement to remain as an all-way stop control. However, the need to install additional intersection control either a signal or a roundabout is required as identified in the Salinas Travel Center EIR and 1341 Mercer Way MND.

Road Diet on Airport Boulevard and Skyway Boulevard

Both of the proposed alternatives, the traffic signal and roundabout option, improve traffic operations and reduce delay. The roundabout option will have slightly better operations when compared to the signal option, and additionally the traffic signal option will require extra turn pockets with sufficient storage. The roundabout option only requires one approach lane in each direction, which would require less travel lanes on both Airport Boulevard and Skyway Boulevard. The reduction of travel lanes is often times referred to as a road diet, and the roundabout option supports a road diet while providing sufficient capacity to accommodate future growth. The road diet may provide additional benefits by improving safety and providing opportunities for urban greening and improved bicycle facilities. The City is currently considering updating the Active Transportation Plan to include protected shared used path on both Airport Boulevard and Bardin Boulevard connecting to the planned improvements as part of the Bardin Road Safe Routes to School Project (Attachment 2).

TRAFFIC AND TRANSPORTATION COMMISSION:

The intersection control evaluation at Airport Boulevard and Skyway Boulevard was brought to the Traffic and Transportation Commission on March 11, 2021. The Commission voted unanimously (6-0) to recommend that City Council approve a Resolution approving a roundabout concept with road diets at Airport Boulevard and Skyway Boulevard.

AIRPORT COMMISSION:

The intersection control evaluation at Airport Boulevard and Skyway Boulevard was brought to the Airport Commission on March 25, 2021. The item was brought the Airport Commission as an informational report and no recommendation was requested.

CEQA CONSIDERATION:

Installation of a traffic signal or roundabout at the Skyway Boulevard & Airport Boulevard intersection is a mitigation measure as identified in the Salinas Travel Center EIR and 1341 Mercer Way MND. Furthermore, the installation of a roundabout can be screened out from having CEQA impacts in accordance with the Office of Planning resources guidelines.

STRATEGIC PLAN INITIATIVE:

This action supports the Council's initiative of Public Safety.

DEPARTMENTAL COORDINATION:

The Community Development is responsible for managing the development projects' CEQA documents and approval process. The Economic Development Director is managing components of the 1341 Mercer Way MND. Public Works staff review the CEQA documents, site plans, and any offsite improvements. Preparation of the ICE report was managed by Public Works staff.

FISCAL AND SUSTAINABILITY IMPACT:

The ICE analysis is a high level planning study and the design concepts are not refined to provide precise cost estimates. For this analysis a range of estimated capital costs was assumed to calculate B/C ratios. The roundabout option is estimated to cost between \$1.25 to \$3.00 million. The Salinas Travel Center Development Project would fully fund the traffic signal option as a mitigation measure for the project. The Airport Lease Project is responsible for making a fair

contribution, 31.7% of the cost for the roundabout option. The City would be responsible for bridging the funding shortfall for a roundabout. This shortfall is estimated to be between \$50 thousand to \$1.25 million. The roundabout option would be highly competitive for several grant programs, for which development contributions could be leveraged in order to fully fund the project. If the City is unable to secure grant funds to fully fund the roundabout option, there are several eligible funding sources including but not limited to Regional Surface Transportation Program (RSTP), SB 1, Measure X, and gas tax.

Alternatively, if the traffic signal option is selected for the intersection control at Skyway Boulevard & Airport Boulevard, there would be no direct upfront cost to the City since the improvement would be financed by developer contributions. A component of the airport Lease Project is the relocation of the City's Maintenance Yard and indirect costs may occur in the sublease agreement. The City would also assume responsibility for the operations and maintenance of the traffic signal, approximately \$8,000 annually.

ATTACHMENTS:

Attachment 1: Resolution

Attachment 2: Airport Boulevard and Skyway Boulevard Intersection Control Evaluation

Attachment 3: Airport Active Transportation Network Improvements Map