

Appendix B3 Pedestrian, Bicycle, and Transit Uses



Technical Memorandum

50 West Liberty St, Suite 750
Reno, Nevada 89501
United States
T +1.775.329.7300
F +1.775.329.9162
www.jacobs.com

Subject: Bicycle, Pedestrian, and Transit Uses **Project Name:** Arlington Avenue Bridges Project, Feasibility Study and Conceptual Alternatives Analysis

Date: May 4, 2021

Attention: Judy Trotelli, RTC Washoe County

From: Wynn Hessler, Jacobs Engineering Group Inc. (Jacobs)

Copies to: Jim Clarke, Jacobs
Kaci Stansbury, Jacobs

1. Introduction

This technical memorandum documents the bicycle, pedestrian, and transit considerations associated with the Arlington Avenue Bridges Project, Washoe County. The bridges and Wingfield Park are located within the Riverwalk District and along the Truckee River Greenway Corridor. Greenway corridors are intended to protect the natural features of the area and allow pedestrians, bicyclists, and other recreational users to access a variety of public spaces. The development and evaluation of different bridge type concepts will include a review of possible enhancements to bicycle and pedestrian access and transit service.

2. Project Background

The Regional Transportation Commission (RTC) of Washoe County is conducting a feasibility and alternatives analysis to determine options for the rehabilitation or replacement of the two Arlington Avenue Bridges (Project) located across the Truckee River in downtown Reno, Nevada. The Project is located between Island Avenue and West First Street, and includes the area of Wingfield Park, which is located on an island in the Truckee River.

The Arlington Avenue bridges have served the community of Reno and provided access to Wingfield Park for nearly a century. The park, the Truckee River, and the surrounding area have evolved over that time, and the Arlington Avenue Bridges have been widened, repaired, and modified in ways that met the needs of the community at the time. However, the bridges are showing signs of wear resulting from the variety of modifications made, their age, and their repeated exposure to flood events.

In 2009, the City of Reno completed the TRAction Visioning Project which served as a component of the Truckee River Flood Management Project's (TRFMP) master plan to improve safety along the Truckee River Corridor. The TRAction Project was partially a result of the 1997 and 2005 flood events and focused on looking for the best solutions for improved flood protection in downtown Reno. The two Arlington Avenue Bridges were analyzed as part of the TRAction Project.

The TRAction Visioning Report suggested that the Arlington Avenue Bridges be replaced so that they can better meet flood conveyance needs, but the Report cautioned that the reconstruction of the



structures would be complicated by the need to ensure pedestrian access. Two bridge options were considered as part of the TRAction Report -- replacement with two new structures using a slightly higher deck elevation to keep flood waters in the channel, and replacement with a single structure spanning over the river and Wingfield Park allowing pedestrians to pass under the bridge. Constraints and impacts associated with these two alternatives were not developed in great detail in the report. This Project aims to pick up where the TRAction Report ended by evaluating options to make sure that public safety is continued, to meet the needs of the community, and to provide additional flood conveyance for the Truckee River.

3. Existing Conditions

3.1 Bicycle and Pedestrian

Within the Arlington Avenue Bridges Project area, Arlington Avenue is classified as an arterial, and pedestrian and bicycle activity are prevalent. Wide sidewalks, crosswalks, and bike lanes are located along Arlington Avenue and along the adjacent street network. In addition to the two Arlington Avenue Bridges, the island of Wingfield Park can be accessed by way of three pedestrian bridges that cross the Truckee River. A map of the project area is shown on Figure 1. In addition to at-street crosswalks, an existing pedestrian pathway passes under the north bridge of Arlington Avenue on the north edge of Wingfield Park.

Figure 1: Project Area

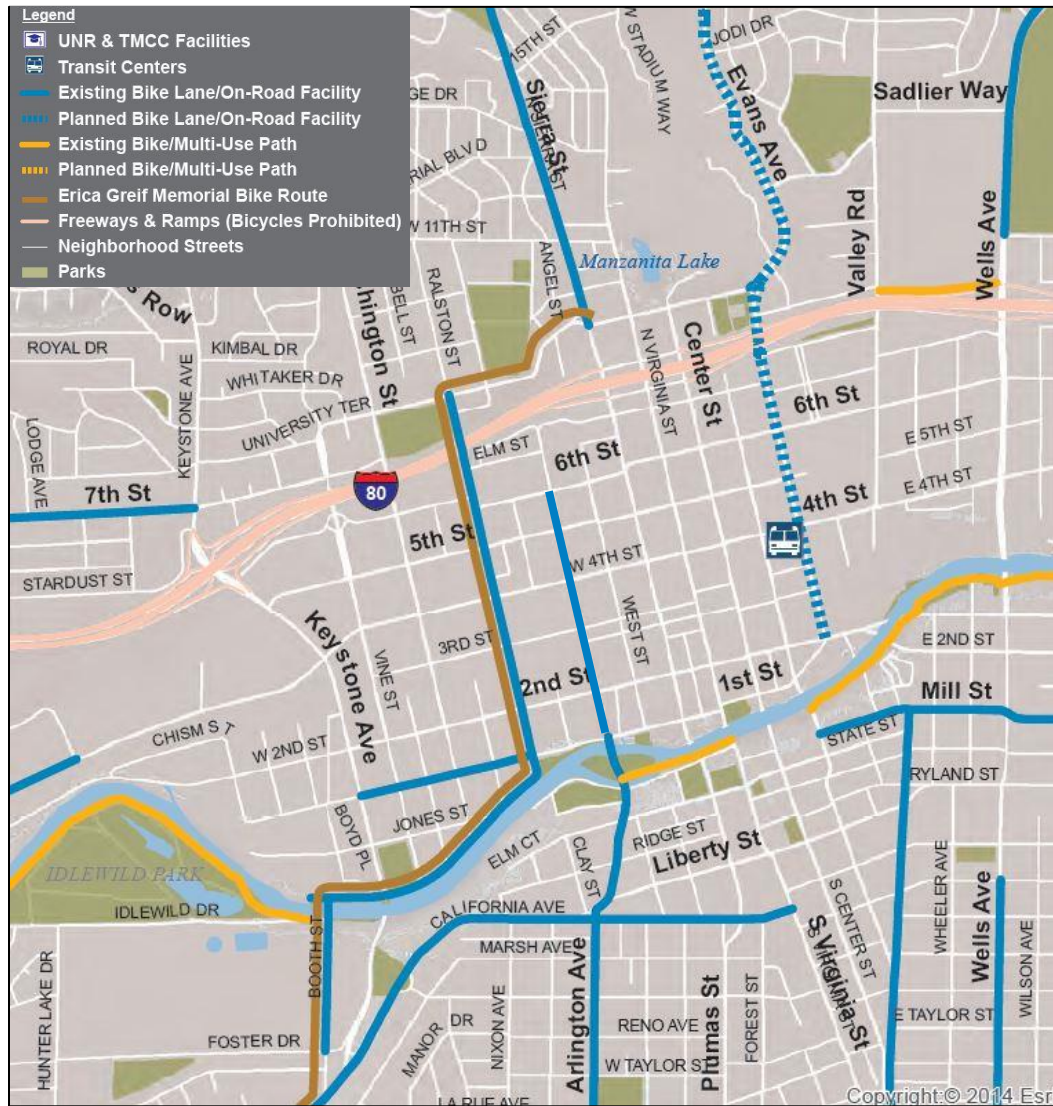


Wingfield Park provides access to the Truckee River offering a variety of recreational activities such as walking, biking, water play, and picnicking. It hosts numerous events and is within the vicinity of the Reno River Festival and Artown-in-July activities, drawing high pedestrian traffic to the area. The Glenn Little Amphitheater is located on the eastern portion of the park and holds several concerts each year. The Truckee River Whitewater Park encircling and accessed by Wingfield Park is free to the public and provides class II and III rapids for kayaking, canoeing, inner tubing, and whitewater rafting. Because there is no parking within the park, access to facilities and events is typically provided by way of pedestrian, bicycle, or public transit.

Although some recent improvements have been made, much of the existing infrastructure within the Arlington Avenue Bridges Project area, including pedestrian curb ramps and bridge railings, does not comply with the Americans with Disabilities Act (ADA) or the Proposed Right-of-Way Accessibility Guidelines (PROWAG). In 2019, the Nevada Department of Transportation (NDOT) completed pedestrian safety and ADA improvements at several locations along Second Street and Arlington Avenue in downtown Reno. Portions of the sidewalk and ADA ramps were replaced along the south and west legs of the Arlington Avenue and Island Avenue intersection. The crosswalk along the north leg was moved to the south leg to improve sight distance, a crosswalk was added to the east leg, and the constantly-flashing pedestrian crossing light was replaced with flashing pedestrian-activated warning signals.

In the early 2000s, the RTC reduced the number of lanes on Arlington Avenue south of First Street from four to two, allowing for the installation of bike lanes. Recently, the same was done between First Street and Sixth Street. Figure 2 shows the existing bicycle facilities in and around the Project area.

Figure 2: Existing Bicycle Facilities



A portion of the Tahoe-Pyramid Bike Trail runs along the north bank of the Truckee River and aims to provide continuous bicycle connectivity along the Truckee River between Lake Tahoe and Pyramid Lake. In this area of downtown Reno, the path shares the existing sidewalk and crosses Arlington Avenue using the crosswalk at the West First Street intersection.



3.2 Transit

RTC transit route 6 (Figure 3) runs along Arlington Avenue between Plumb Lane and 4th Street. Two transit stops are located in Wingfield Park between the two bridges, one northbound and one southbound. According to the *NDOT 2nd Street and Arlington Avenue Safety Management Plan* (NDOT 2016), at the North Arlington Avenue and Island Avenue stop (ID 1436, southbound) includes a bench, and a shelter and trash bin are proposed future improvements. A bench and trash bin are provided at the Arlington Avenue at Wingfield Park stop (ID 1490, northbound), and a shelter is a proposed future improvement. The ridership for both stops is shown in Tables 1 and 2.

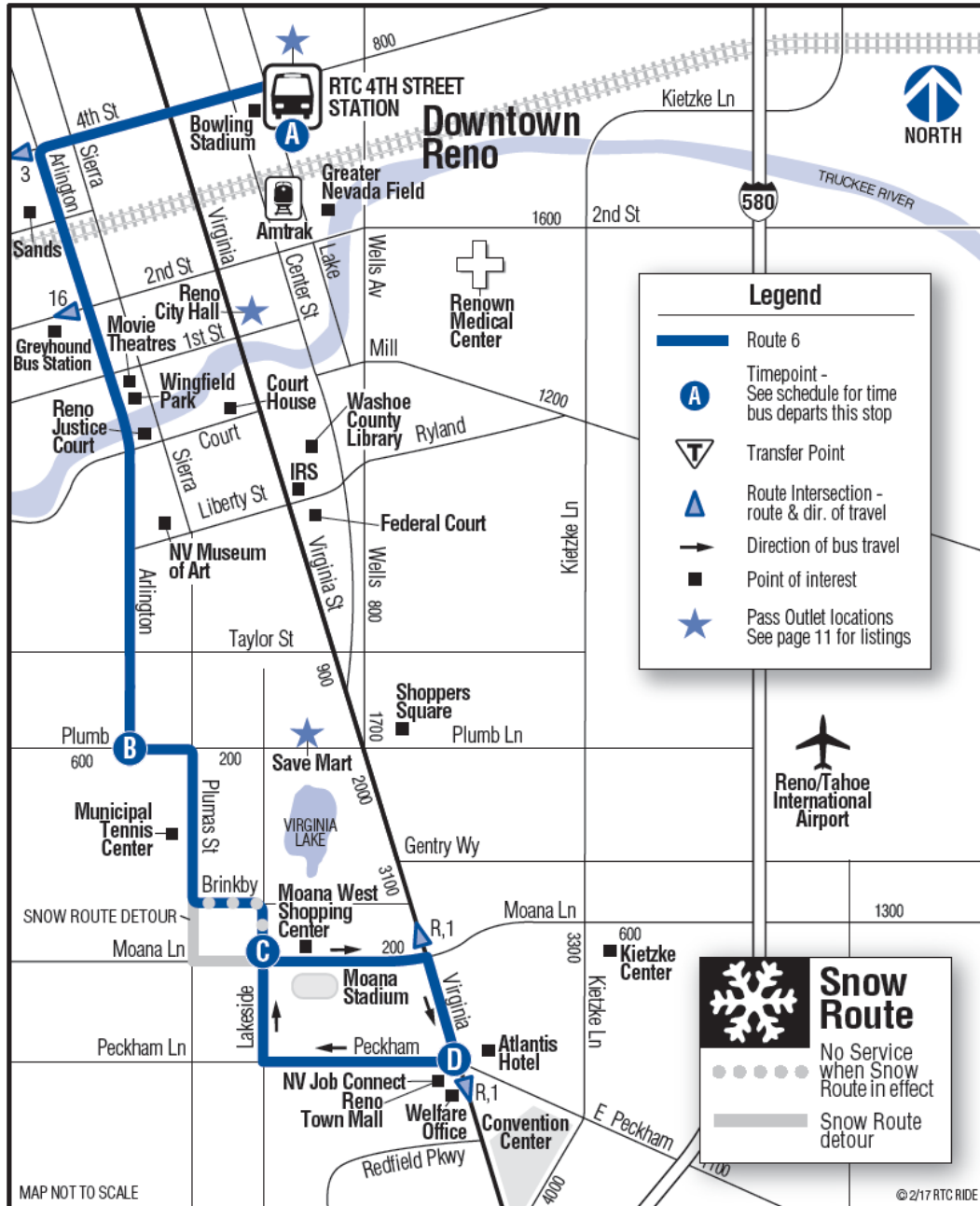
Table 1: Ridership for Southbound North Arlington Avenue and Island Avenue (ID 1436)								
Event	Average On		Average Off		Max On		Max Off	
	2019	2020	2019	2020	2019	2020	2019	2020
Weekday	9	4	5.6	4	46	36	48	49
Saturday	8.1	3.1	5.2	3.7	37	18	23	22
Sunday	6.5	2.5	5.2	1.9	33	24	27	11
Artown 2019 Weekday	14.5		10.1		63		64	
Artown 2019 Saturday	6.5		8.8		13		19	
Artown 2019 Sunday	11.8		18.8		32		59	

Source: Regional Transportation Commission of Washoe County Transit Operations

Table 2: Ridership for Northbound North Arlington Ave at Wingfield Park (ID 1490)								
Event	Average On		Average Off		Max On		Max Off	
	2019	2020	2019	2020	2019	2020	2019	2020
Weekday	3.6	4	7.7	3	34	44	53	31
Saturday	2.4	4	7.8	3.2	14	24	25	22
Sunday	2.7	2.3	7.7	2	15	17	33	15
Artown 2019 Weekday	5.7		10.4		39		50	
Artown 2019 Saturday	7.8		11.8		21		24	
Artown 2019 Sunday	8.6		12.6		33		38	

Source: Regional Transportation Commission of Washoe County Transit Operations

Figure 3: RTC Transit Route 6



4. Regional Planning

In general, there are no plans to alter existing bicycle, pedestrian, or transit routes within the Arlington Avenue Bridges Project area. The RTC’s *Bicycle and Pedestrian Master Plan* (RTC 2017) identifies several improvements in the vicinity of the project, including extending the existing bike lanes north along Arlington Avenue from their current termination at West First Street to the existing pedestrian bridge over Interstate 80. Bike lanes have since been installed between West First Street and Sixth Street.



Technical Memorandum

Bicycle, Pedestrian, and Transit Uses

ReImagine Reno, The City of Reno Master Plan (City of Reno 2017) identifies the Wingfield Park area as a part of the Downtown Riverwalk District and a major destination. It recommends improvements to bicycle and pedestrian connections as well as the expansion of transit service in Reno's downtown area. It expresses an intent to "continue to improve views of and pedestrian, bicycle, and boating/paddling access to and along the Truckee River as it travels through Downtown," and "enhance bicycle and pedestrian connections and infrastructure throughout Downtown with an emphasis on improving connections to UNR, the Truckee River trail, and adjacent neighborhoods" (The City of Reno 2017).

5. Summary

The purpose of the feasibility and alternatives analysis for the Arlington Avenue Bridges project is to develop and analyze options for the rehabilitation or replacement of the two Arlington Avenue Bridges. The development and evaluation of different bridge type concepts will include a review of possible enhancements to bicycle and pedestrian access and transit service, including, but not limited to, addition of shade trees, decorative lighting, decorative railing, decorative paving, artistic features, and widening of pedestrian spaces. While there are no specific plans to alter existing accesses in the Arlington Avenue Bridges Project area, a criterion for the evaluation of alternatives emphasizes maintaining or improving the experience and connectivity for pedestrians, bicyclists, and transit traffic along and across the Truckee River. Maintaining or improving pedestrian and bicycle accommodations aligns with local and regional planning goals to enhance community character, maintain or improve access to Wingfield Park, provide greater multimodal regional connections, and support the overall framework for downtown Reno.

The Regional Transportation Commission (RTC) of Washoe County, Nevada. 2017. "Bicycle and Pedestrian Master Plan." Accessed October 20, 2020. https://rtcwashoe.wpengine.com/wp-content/uploads/2019/02/2017_BPMP-2.pdf.

The City of Reno. 2017. "ReImagine Reno, The City of Reno Master Plan." Accessed October 20, 2020. <https://www.reimaginereno.us/>.

The Nevada Department of Transportation (NDOT). 2016. "Second Street & Arlington Avenue Safety Management Plan." Accessed December 18, 2020. <https://www.nevadadot.com/home/showpublisheddocument?id=7199>.