



# Development Services Department

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## MEMORANDUM

**Date:** March 11, 2022  
**To:** Reno City Planning Commission  
**Thru:** Angela Fuss, AICP, Assistant Development Services Director *AF*  
**From:** Nathan Gilbert, AICP, Senior Planner  
**Subject:** Item 5.3 - LDC22-00038 (Jacobs Glow Plaza and Festival Area)

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The staff report incorrectly listed the project's representative as the applicant. For clarification, the applicant for this request is "Reno Real Estate Development, LLC."

Additionally, the applicant's representative submitted a revised "Parking and Traffic Analysis" following staff report publication (attached). Revisions note that an increase from 2,000 to 3,700 attendees would increase the number of inbound/outbound vehicle trips within the project area from 400 to 746.



March 8, 2022

Nathan Gilbert  
Associate Planner  
Development Services  
City of Reno  
One East First Street  
Reno, NV 89505

## **PARKING AND TRAFFIC ANALYSIS FOR GLOW PLAZA FESTIVAL GROUNDS**

Dear Mr. Gilbert,

This letter presents a Parking & Traffic Analysis for the Glow Plaza Festival Grounds project in downtown Reno, NV. This study includes 1) a review of the planned land use and multi-modal transportation considerations, 2) a review of the planned parking supply, and 3) a discussion of potential impacts on the local transportation network.

### **PROJECT OVERVIEW**

The Glow Plaza project is located within Reno's Neon Line, in the southeast quadrant of the West 4<sup>th</sup> Street / Washington Street intersection, as shown in attached **Figure 1**. The venue is intended to be a flexible open-air entertainment space which is anticipated to host a variety of events during the spring and summer months (primarily between May and October). Large events will generally be held on weekends and Friday evenings outside the typical weekday peak commute hours.

### ***Multi-Modal Considerations***

The site is easily accessed from the downtown grid roadway system with existing sidewalks and a growing network of bicycle facilities within the project area. The project site is served by multiple existing Regional Transportation Commission of Washoe County (RTC) RIDE fixed route bus stops, within one block, which provides access to five separate bus routes as shown in **Figure 2**. Existing RTC transit stops with access to the 3CC & 3CL bus routes are located on the west side of the West 4<sup>th</sup> Street / Washington Street intersection for both the eastbound and westbound travel directions. The Glow Plaza festival grounds will be located one block west of the existing Sands Hotel and Casino. It is anticipated that many of the attendees will walk from the Sands Hotel and Casino or from the other numerous hotels and high-density residential buildings in the immediate area. The project site is well connected to hotels and housing with sidewalks on nearly all streets in the project area and existing bicycle facilities on Ralston Street and Arlington Avenue, as shown in **Figure 3**. The Washoe RTC is planning to construct multi-modal improvements along W. 4<sup>th</sup> Street in front of the project site based on the most recent Regional Transportation Plan (2050 RTP) and the 4<sup>th</sup> Street / Prater Way Corridor Study. Future improvements are

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anticipated to include sidewalk enhancements, bike lanes, and intersection improvements that will greatly enhance multi-modal access near the event venue.

## **PARKING SUPPLY**

The Glow Plaza site is surrounded by several parking lots which will provide parking supply to accommodate parking demand for special events. Attendees of the Glow Plaza events can utilize parking spaces at four event parking lots (Lots A-D), Sands Hotel & Casino, Gold Dust West, and nearby on-street parking as shown on **Figure 3**. When needed, the project may utilize the overflow lot just south of the festival grounds to provide additional parking or as an event support area. All analyzed parking lots are located within two blocks (roughly 1,000 feet) of the festival grounds. Pedestrian access from each lot to the Glow Plaza festival ground is easily navigable and includes high quality crossing infrastructure including Rectangular Rapid Flashing Beacons (RRFBs) and traffic signals.

### ***Dedicated Festival Grounds Parking Supply***

Two nearby parking areas will be dedicated to event parking and are located within approximately 1,000 feet of the Glow Plaza festival grounds. Parking supply and pedestrian access from each dedicated parking lot is further described below.

#### Lot A

Lot A is a newly completed parking lot located directly to the east of the venue. This lot will provide 200 dedicated parking spaces for the Glow Plaza. Attendees will walk to the Glow Plaza entrance on 4<sup>th</sup> Street.

#### Lot B

Lot B is a recently completed paved parking lot providing 130 dedicated parking spaces. Glow Plaza event attendees parking at this location can walk west on 4<sup>th</sup> Street using the traffic signals and marked crosswalks at Arlington Avenue and Ralston Street or may walk west on 3<sup>rd</sup> Street using the RRFB at Arlington Avenue and the marked crosswalk at Ralston Street, as shown in **Exhibit 2**. It is important to note that the Arlington Street / 4<sup>th</sup> Street traffic signal automatically includes a pedestrian walk sign for eastbound / westbound pedestrians without the need to push the pedestrian button.



**Exhibit 2. Existing RRFB at 3rd St & Arlington Avenue intersection**



### ***Shared Parking Utilization***

Parking utilization was analyzed for the following parking areas on a Friday evening (7 PM – 8 PM) during the typical peak parking demand for the project:

- ▶ Shared surface lots (Lot C and D)
- ▶ Sands Hotel & Casino
- ▶ Gold Dust West
- ▶ On-street parking areas

#### Lot C

Currently, Lot C is utilized as an overflow lot for employees and guests of the Sands Hotel and Casino. This lot is intended to be used for Glow Plaza attendees if parking supplies at the dedicated lots were exhausted. This analysis found that a total of 28% of the parking spaces in Lot C are utilized by the current parking demands. The remaining 72% of spaces (157 total spaces) could be utilized by the Glow Plaza attendees. Furthermore, Lot C may accommodate additional spaces in the southwest corner, which currently does not have marked parking spaces. Attendees using this lot may cross the railroad trench via Ralston Street to the west or with the existing mid-block pedestrian bridge, shown in **Exhibit 3**. Additionally, the project is proposing to provide a TNC loading/drop-off area within Lot C.



**Exhibit 3. Pedestrian bridge over railroad trench at Lot C**

### Lot D

The shared surface Lot D contains approximately 52 parking spaces and is under control of the Sands Hotel and Casino. During the parking survey, this lot was completely unutilized during the evening hours. Attendees can utilize the existing sidewalk network on Ralston Street and cross at the marked crosswalk at 3<sup>rd</sup> Street to navigate towards the Glow Plaza.

### Sands Hotel and Casino

Additionally, attendees can also park at the Sands Hotel and Casino. The Sands Hotel and Casino has approximately 500 total spaces combined at the various surface lots and parking garage. Note that most of the parking supply will be used/reserved for current hotel guests. Some of these guests will also be Glow Plaza attendees and walk to the festival grounds. A modest estimate of 10% or 50 spaces of the total parking supply could be utilized by Glow Plaza attendees. Attendees can easily walk across Ralston Street using the marked crosswalks at either 3<sup>rd</sup> Street or 4<sup>th</sup> Street.

### Gold Dust West

Gold Dust West offers an additional supply of parking, if/when necessary. Since Gold Dust West is currently owned by the same entity as the Sands, attendees of the Glow Plaza could utilize available parking supply at the Gold Dust West without the need to develop a shared parking agreement between separate entities. The parking survey identified that a total of 199 spaces (60% of spaces) are utilized by current parking demand. The remaining 136 parking spaces (40% of spaces) could be utilized by Glow Plaza attendees if nearby supply is exhausted. There is only one roadway crossing (W. 4<sup>th</sup> Street) between this parking lot and the Glow Plaza festival grounds. This crossing has an existing RRFB with a pedestrian refuge island which diverts thru traffic on Washington Avenue, as shown in **Exhibit 1**.



**Exhibit 1. 4th Street & Washington Ave crossing location with RRFB & pedestrian refuge island**



On-Street Parking

On-street parking spaces on adjacent streets including Washington Street, Ralston Street, and 3<sup>rd</sup> Street, provide a supplemental supply of available parking spaces for the Glow Plaza project. As shown in **Table 1**, the parking utilization along each street immediately surrounding the project site was identified during a typical Friday evening (7 PM – 8 PM).

**Table 1. On-Street Parking Supply**

Parking Location (Extent)	Occupied Spaces	Parking Supply	Available Spaces
Ralston Street (3rd St - 4th St) <sup>1</sup>	17	29	12
Washington Street (3rd St - 4th St)	1	19	18
3rd Street (Washington St to Ralston St)	11	41	30
<b>Total:</b>	29	89	<b>60</b>

*Note: <sup>1</sup>Parking Supply estimates 23 ft per parallel parking space (RMC Fig. 18.12-21 – Off-Street Parking Standard)*

As **Table 1** shows, the supply of available on-street parking spaces in the immediate project area currently provides additional capacity of approximately 60 spaces. **Exhibit 4** shows a view of additional on-street parking areas on Ralston Street looking north from the Lot C exit.



**Exhibit 4. Ralston Street (looking north from Lot C exit)**

As shown, the parking utilization on Ralston Street south of 3<sup>rd</sup> Street is low. Additional on-street spaces on streets one to two blocks away from the festival grounds could add a significant number of parking spaces to the overall supply. To be conservative, only on-street parking spaces in the immediate project area were included. Stated another way, there is additional on-street parking supply in the project vicinity that was not included in the analysis.

**Total Parking Capacity**

**Table 2** provides a summary of the aforementioned parking areas as well as the total parking supply within the immediate area.



**Table 1. Available Parking Supply within 2 Blocks**

Parking Area/Lot	Dedicated Event Parking	Approximate Distance from Project (ft.)	Available Parking Supply
A	Yes	0	200
B	Yes	1,050	130
C	Yes	550	157
D	Yes	1,050	52
Sands Hotel	Yes	550	50
Gold Dust	No/Private	125	136
On-Street	No/Public	Varies	60
<b>Total Parking Supply:</b>			<b>785</b>

As shown in the table, the venue can conservatively utilize a total parking supply of 785 spaces not including the overflow lot to the south, other on-street parking, or other parking lots/garages in the area.

## PARKING DEMAND

The Federal Highway Administration (FHWA) publication *Managing Travel for Planned Special Events (2003)* presents mode share percentages for special events and indicates that transit, walking, and other trip types can account for 15% to 50% of the total person trips. Based on the downtown environment, proximity to numerous hotels & casinos, multi-modal accessibility of the site, planned multi-modal accommodations, and FHWA guidance, an estimated 40% of event attendees are assumed to arrive via modes other than a personal vehicle. Therefore this analysis assumes that 60% of event attendees will arrive via personal vehicles.

The ITE Parking Generation (5<sup>th</sup> Edition) manual was reviewed for applicable parking demand rates. No applicable rates were available for this unique project type. The FHWA *Managing Travel for Planned Special Events (2003)* recommends vehicle occupancy factors of 2.2 to 2.8 persons per vehicle, depending on local factors, and reports data points with up to 3.1 persons per vehicle at special events. Review of other data identified through internet research indicates that parking demand for special events can commonly range from 2.5 persons to 3.5 persons per parking space (0.4 to 0.285 vehicles per stadium seat/ticket).

Having reviewed all this information, it is our conclusion that 3.0 seats per parking space is in the middle of the data range and a reasonable estimate for this unique project. This yields a parking rate of 0.33 parking spaces per person for the 60% of attendees arriving via personal vehicle. **Table 3** shows the calculations for the maximum attendees that could be accommodated based on the total parking supply without use of overflow lots.



**Table 3. Estimated Glow Plaza Parking Demand**

Special Event Vehicle Parking Supply (Spaces)	Special Event Parking Rate (Person / Space)	Total Attendees Arriving in Personal Vehicles	Special Event Parking Ratio (100% Attendees / 60% Personal Vehicles)	Maximum Glow Plaza Attendees w/o Overflow Lots
785	3	2,355	1.667	3,925

As shown in the table, a parking supply of 785 total spaces could support a special event of nearly 3,925 attendees with a 100% parking occupancy. In reality, a 100% parking occupancy is not realistic as attendees would have to drive around to search for the last few remaining spaces. The parking supply at 95% capacity (or a total 746 spaces) could supply parking for a special event of up to 3,700 attendees. An event over 3,700 attendees will likely have to utilize other on-street parking and parking lots/garages in Downtown Reno.

**Overflow Lots**

The Sands Hotel and Casino also owns the large unimproved lot just south of 3<sup>rd</sup> Street as shown on **Figure 3**. This lot is anticipated to be available as overflow parking or as an event support area during large events.

**POTENTIAL TRANSPORTATION IMPACTS**

The Glow Plaza will generate nearly no AM peak hour trips and with most events occurring on weekends and Friday evenings after the typical commute period, the number of PM peak hour trips generated by this project will be minimal. Based on FHWA guidance, the presence of existing multimodal facilities, and urban context of the project site, 40% of all attendees are estimated to arrive via alternative modes. With the remaining portion of attendees arriving at a rate of three per vehicle, an event with 3,700 attendees is estimated to generate a total of 746 inbound and 746 outbound new vehicle trips to and from the immediate project area. Inbound and outbound vehicle trips will be separated by two hours or more and will be dispersed throughout the study area to numerous parking locations. All parking lots are easily accessed by the downtown street network which has significant available travel capacity.

It is important to note that transportation innovations such as ridesharing (Uber/Lyft) and micro-mobility (bike-share & scooter-share) are likely to have significant impacts on how people travel downtown and arrive to the Glow Plaza in the years to come. As these modes continue to grow in popularity, the percentage of attendees arriving to the Glow Plaza by personal vehicle may decline. In order to accommodate and encourage the use of ridesharing, the Glow Plaza project should incorporate a loading zone specifically for ridesharing and taxi services to accommodate pick-ups/drop-offs during all events. As shown in **Figure 3**, the project is proposing to provide a TNC/Rideshare loading zone at Lot C during events.

The multi-modal project planned by the RTC on W. 4<sup>th</sup> Street will also impact mode choice for attendees. The project includes the addition of bus / bike lanes which will improve transit operations on W. 4<sup>th</sup> Street in-front of the project site and create a needed east-west bicycle connection through downtown. The





project is also envisioned to include enhancements to intersections and sidewalks between Keystone Avenue and Evans Avenue. These enhancements to the transit, bicycle, and pedestrian environments will make all three modes more attractive and may result in a larger percentage of Glow Plaza attendees walking, biking, or taking transit instead of driving and thus further reduce demand for parking. It is recommended that the project provide bicycle racks (40 bikes) in Lot A to accommodate bicycles, electric scooters, and other micro-mobility devices.

Special event traffic is a frequent and expected occurrence in the downtown Reno casino core area, especially during summer Friday and weekend evenings, when the project will be primarily operating. The proposed level of special event traffic dispersed to multiple locations, outside of peak commute periods, would create only minor increases in overall traffic volumes in the project area. No significant traffic flow or circulation impacts during the typical commute hours are anticipated with attendance up to 3,700.

## CONCLUSIONS AND RECOMMENDATIONS

Below is a list of key findings and recommendations from this analysis:

- ▶ The immediate project area is anticipated to contain a total parking supply of approximately 785 spaces without use of overflow lots, other on-street parking, and other downtown parking lots/garages. A parking supply of 785 spaces can support an event of up to 3,700 attendees.
- ▶ At 3,700 attendees, the Glow Plaza will generate approximately 746 inbound and 746 outbound new vehicle trips within the immediate project area and generally occur outside of the typical commute periods. Inbound and outbound vehicle trips will be separated by two hours or more and will be dispersed throughout the study area to numerous parking locations.
- ▶ Events exceeding 3,700 in attendance can utilize other on-street parking spaces and parking lots/garages within Downtown Reno.
- ▶ Special event vehicle traffic of a similar magnitude is a typical condition during weekday evenings and weekend days in the downtown Reno environment.
- ▶ The large unimproved overflow lot just south of the festival grounds could also be used for event overflow parking or support area.
- ▶ All parking lots have easily navigable pedestrian routes to the Glow Plaza festival grounds.
- ▶ It is recommended that the project provide bicycle racks for 40 bikes within Lot A to accommodate bicycles, electric scooters, and other micro-mobility devices.
- ▶ The project plans on providing a Taxi/TNC/Shuttle loading zone at Lot C which will encourage attendees to arrive using ridehailing / ridesharing.
- ▶ The project will utilize the four existing bus stops on W. 4<sup>th</sup> Street adjacent to the venue. Events will generally occur outside commute hours and are not anticipated to create any notable travel delays due to bus loading/unloading.



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Please do not hesitate to contact with any questions or comments at (775) 322-4300.

Sincerely,  
Headway Transportation, LLC



Loren E. Chilson, PE  
Principal

- Attachments: Figure 1 – Preliminary Site Plan  
Figure 2 – Existing Transit Routes  
Figure 3 – Parking Locations & Multimodal Amenities



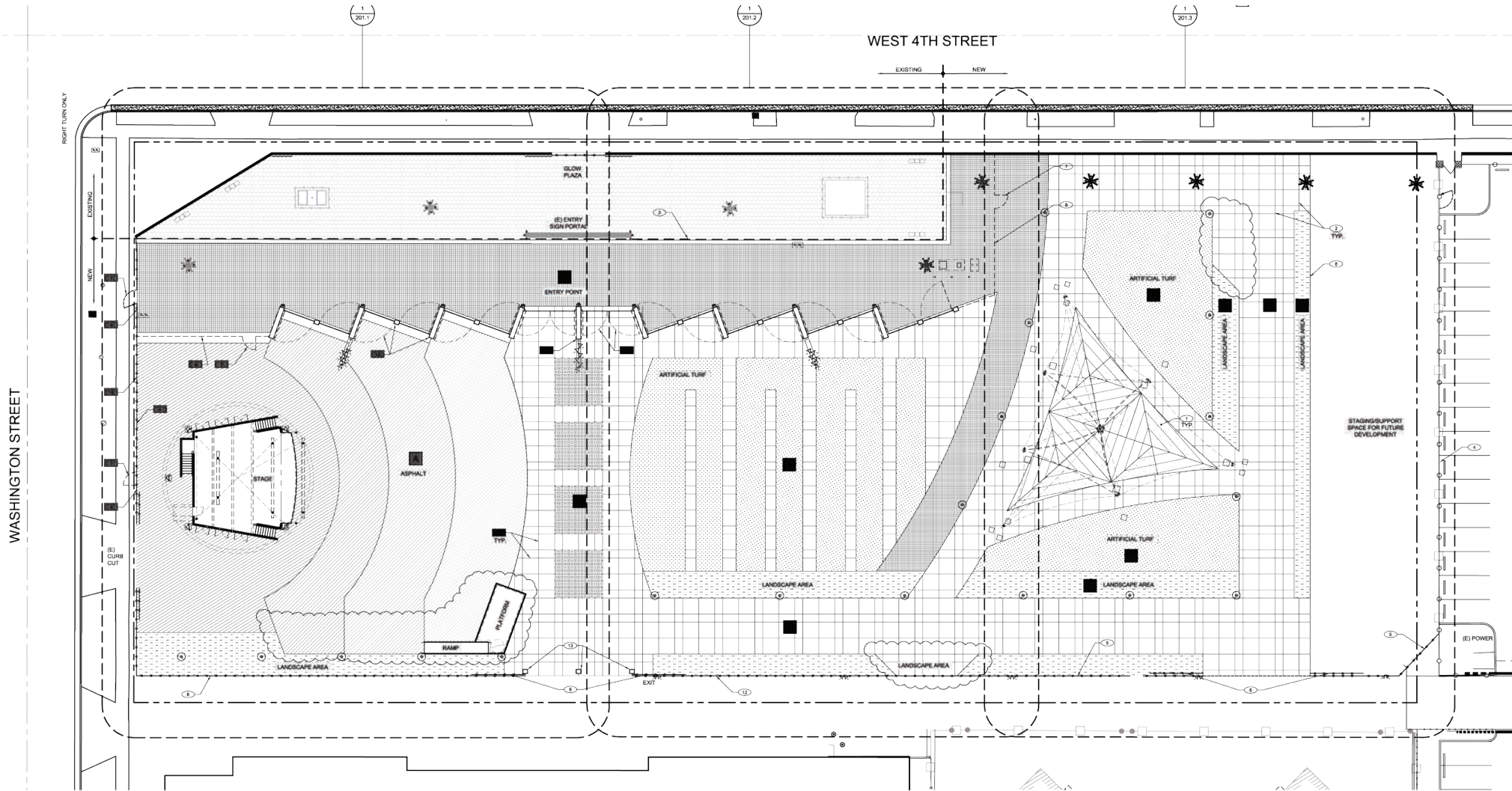
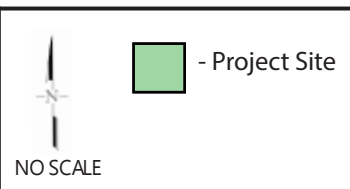
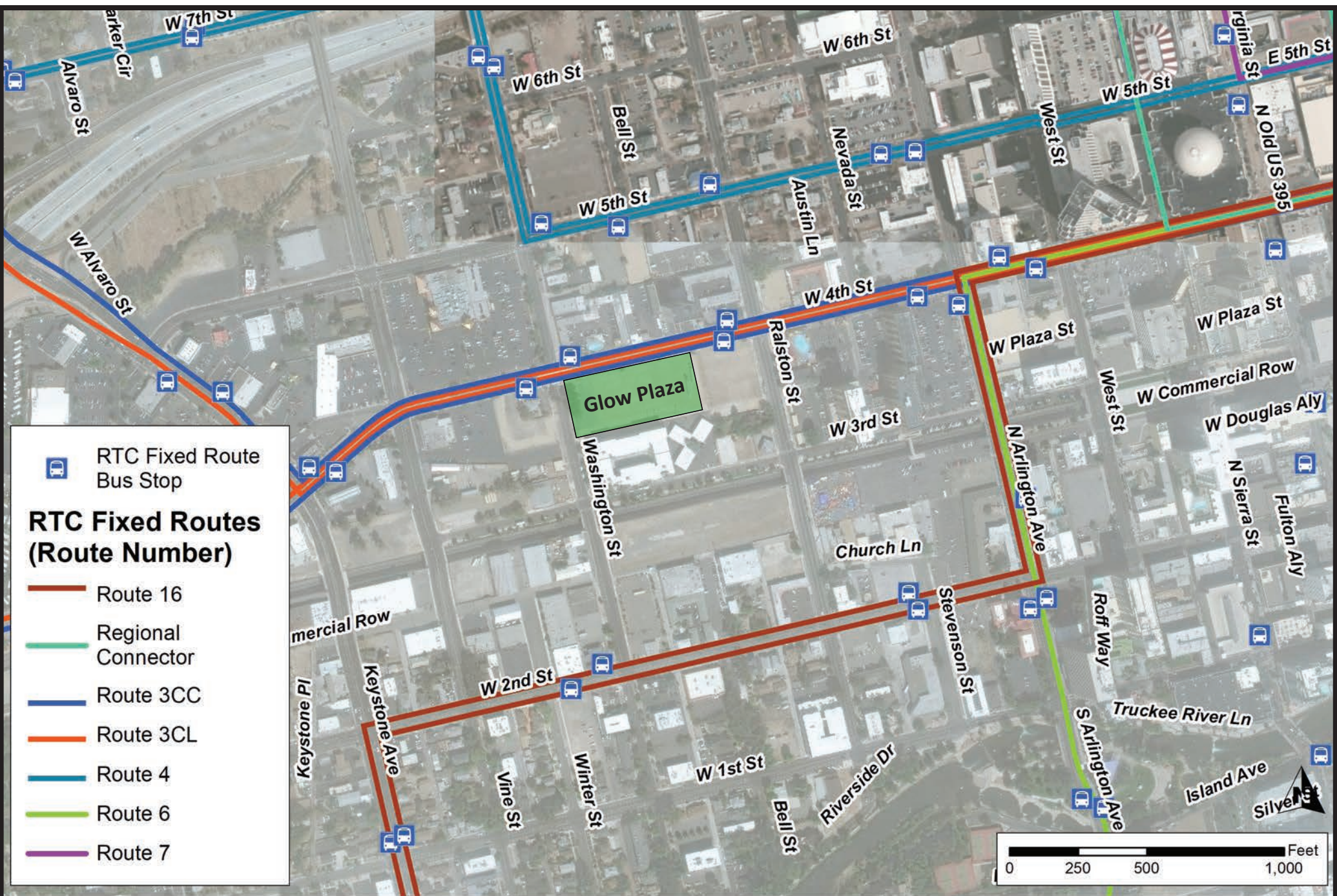
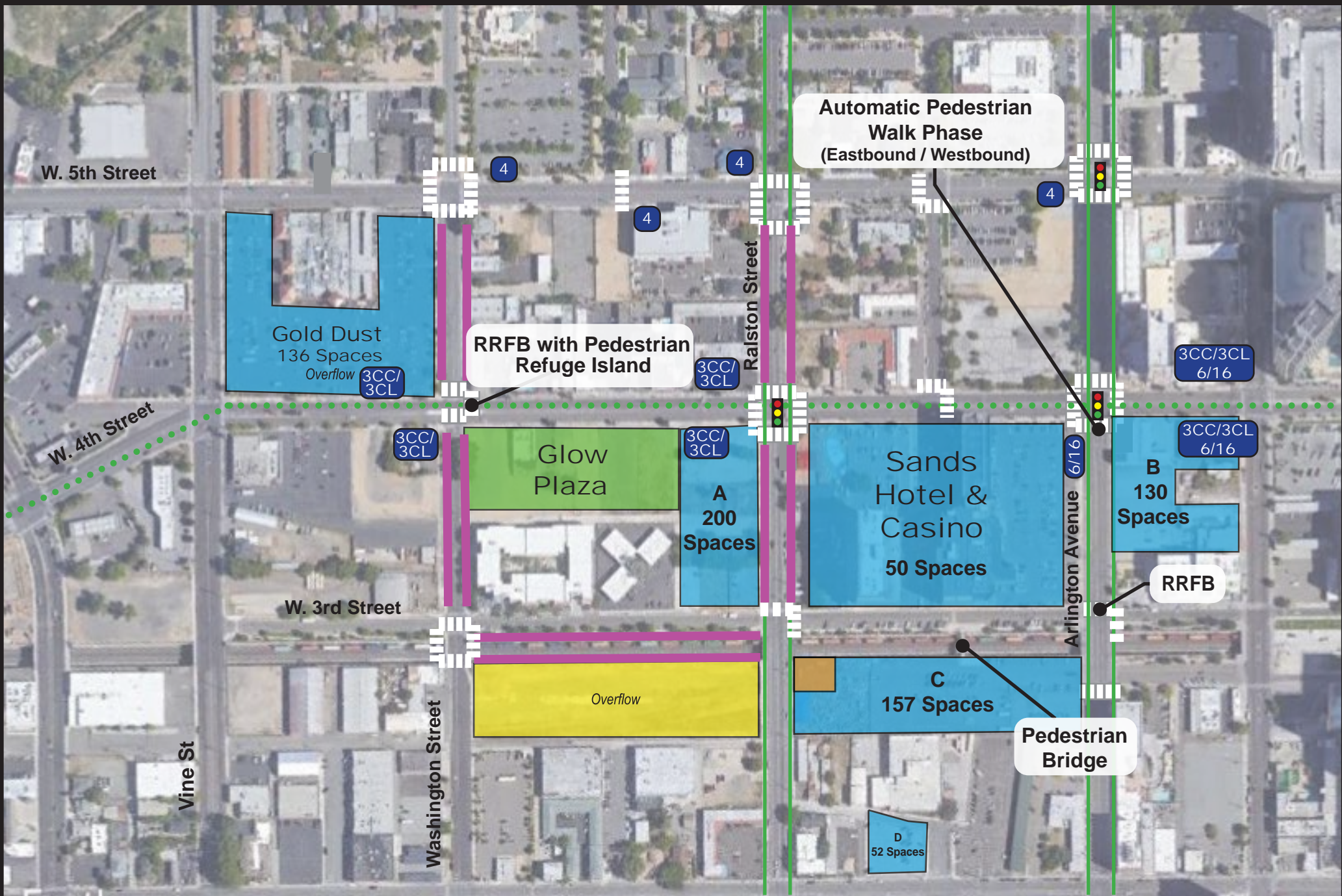


Figure 1



**Figure 2**  
 Glow Plaza  
 Traffic & Parking Analysis  
 Existing Transit Routes



 NO SCALE	<ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: #90EE90; border: 1px solid black; margin-right: 5px;"></span> - Project Site</li> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: #ADD8E6; border: 1px solid black; margin-right: 5px;"></span> - Paved/Marked Parking Lots</li> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: #FFFF00; border: 1px solid black; margin-right: 5px;"></span> - Overflow Parking Lot</li> </ul>	<ul style="list-style-type: none"> <li> - Existing Crosswalk</li> <li> - Existing Bike Lane</li> <li><span style="display: inline-block; width: 15px; height: 15px; border: 1px solid black; border-radius: 50%; text-align: center; line-height: 15px; font-weight: bold; margin-right: 5px;">4</span> - Existing Bus Stop &amp; Route Number</li> </ul>	<ul style="list-style-type: none"> <li> - Planned 4th Street Project (Enhanced Sidewalks and bus / bike lanes, intersection improvements)</li> <li> - On Street Parking (60 Spaces Available)</li> <li> - TNC Loading/Drop-Off</li> </ul>	<p><b>Figure 3</b></p> <p>Glow Plaza Traffic &amp; Parking Analysis Parking Locations &amp; Multimodal Amenities</p>
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