



**REGIONAL TRANSPORTATION COMMISSION**

*Metropolitan Planning · Public Transportation & Operations · Engineering & Construction*

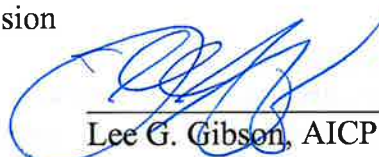
Metropolitan Planning Organization of Washoe County, Nevada

May 20, 2019

**AGENDA ITEM 3.2**

**TO:** Regional Transportation Commission

**FROM:** Brian Stewart, P.E.  
Engineering Director



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Lee G. Gibson, AICP  
Executive Director

**SUBJECT: RTC Engineering Activity Report**

**RECOMMENDATION**

Acknowledge receipt of the monthly Engineering Activity Report.

**CAPACITY/CONGESTION RELIEF PROJECTS**

ITS Pilot Project, Design of Phase 2 ITS Connectivity

This pilot project will connect traffic signal systems of the City of Reno, the City of Sparks, Washoe County, and NDOT through fiber optic communication lines. This project also includes design of Phase 2A and 2B, which will expand communication to outlying signal systems and install ITS devices to monitor and remotely adjust traffic signals to respond to special events, changing traffic conditions, provide information to drivers and traffic incidents. Construction of the Pilot Project is complete. The ITS Phase 2A Project began on June 7, 2018 and is now complete. Phase 2B is currently under design and NDOT permit review with advertisement scheduled for summer 2019.

North Valleys Improvements

Package 3 is currently in final design stages. Package 3 will include installation of a new traffic signal at the Lemmon Drive/North Virginia Street intersection. The advertisement was issued on April 11, 2019 with construction taking place in summer 2019.

Package 3B is currently at 90% design. Package 3B includes adding capacity to the right turn lane at North Virginia Street/Business 395. This Project also includes improvements to two bus stop pads located within the Project area, and associated access and drainage improvements. Construction of this package is tentatively scheduled for late summer of 2019.

Regional Road Impact Fees (RRIF) funds and Fuel Tax funds have been allocated as part of the 2019 Program of Projects for this project. RRIF funds have been allocated as part of the 2020 Program of Projects for this project.

### Pyramid and McCarran Intersection Improvement

The project is complete. RTC staff and consultants continue to work through final warranty items with the contractor and the City of Sparks. NDOT has provided relief of maintenance to Granite and taken over maintenance responsibilities. RTC is working with NDOT and the City of Sparks to resolve irrigation system issues. Landscape establishment has been extended to July 31, 2019.

### Traffic Engineering (TE) Spot 7 Project

The TE Spot 7 project construction is ongoing with the scheduled completion anticipated in March 2019. However, the remaining paving and striping operations will not resume until suitable temperatures are reached.

The TE Spot 7 project included a new traffic signal at the intersection of Prater Way and Lillard Drive and continues improvements to regional intersections focusing on enhancements to traffic signal operations: including replacement of malfunctioning video detection cameras with in-ground loop detectors and battery backup systems to keep traffic signals operating during power outages. The traffic signal at Prater Way and Lillard Drive is complete.

The scope of the TE Spot 7 project also includes:

#### Remove Pedestrian Scramble

Victorian at 11<sup>th</sup> & 14<sup>th</sup>

#### Battery backup systems

Sparks Blvd. at Springland/O'Callahan

#### New signal cabinet, detection loops and battery backup system

Prater at Howard (new cabinet and remove split phase)

Prater at Pullman

Prater at Vista

Vista at Whitewood

Virginia at 9th

South Meadows at I-580 southbound off ramp (add cabinet to west intersection)

Mill at Wells (add loops north and south legs)

#### Replace old video detection system

Pyramid at Golden View

Mt Rose at Wedge

South Meadows at Double R

Longley at Maestro

Longley at Patriot

Virginia at Grove

#### Install Flashing Yellow Arrow (FYA)

Mill at I580 SB on- ramp westbound to southbound left turn

Mill at I580 NB on- ramp westbound to northbound left turn

### Traffic Signal Coordination 5 Project

Following a three year cycle schedule, the project includes review and timing optimization of approximately one-third (1/3) of the signals in the region per year. For 2018, 92 intersections were re-timed. For 2019, nine corridors, roughly 230 intersections will have new timing implemented. Timing plans are developed in coordination with RTC/UNR. In the process, re-evaluation of the clearance intervals and pedestrian crossing times are calculated at each intersection to make sure it is up to current standards.

#### Process for signal retiming

1. Collect traffic & signal data
2. Input timings into model and evaluate existing signal timing & develop new timing.
3. Implement timing in the field
4. Fine-tune timing
5. Conduct before-after studies

#### Completed Corridors (196 signals as of May 2019)

1. Wells Avenue – (Ryland Street to E. 9<sup>th</sup> Street)
2. Vista Boulevard – (Eastbound I-80 Off/On Ramps to S. Los Altos Parkway)
3. Sparks Boulevard – (Eastbound I-80 Off/On Ramps to Los Altos Parkway)
4. N. McCarran Boulevard/Clear Acre Lane – (Sutro Street to Sullivan/N. McCarran Boulevard to Scottsdale)
5. Pyramid Highway (Disc Dr. to Lazy 5)
6. Kietzke Ln/Mill Street – (Peckham Lane to Glendale Avenue/Kietzke Lane to Terminal Way)
7. W. McCarran Boulevard/Mae Anne – (Plumb Lane to W. 7<sup>th</sup> Street/W. McCarran to Sierra Highlands)
8. S. McCarran/Kietzke Lane/Virginia Street
  - a. On McCarran Blvd - Greensboro Drive to Mill Street
  - b. On Virginia St. – Kietzke Ln to S. McCarran Blvd
  - c. On Kietzke Ln. – S. Virginia St. to Sierra Rose Dr.
  - d. On Longley Ln – Peckham Ln to S. McCarran Blvd.
9. Pyramid Way
  - a. I-80 to Sparks Blvd including two intersections of McCarran Boulevard at Rock Boulevard & 4<sup>th</sup> Street
10. Downtown Reno (45 signals)
11. Keystone Ave (6 Signals) – W. 7<sup>th</sup> St. to W. 1<sup>st</sup> St.
12. Damonte Ranch (7 signals) – Zolezzi Ln to Double R Blvd, and Double R Blvd at Double Diamond
13. Rock Blvd (9 signals) – Greg St to Prater Way
14. Sun Valley Blvd (6 Signals) – Dandini to 7<sup>th</sup> Ave

#### Progress as of Mid-April 2019

- Prater Way – Evans Ave to 15<sup>th</sup> St – TSP implementation completed for Prater Way.
- Sun Valley Blvd (6 Signals) – New timing completed.

- South Meadows Pkwy (5 signals) – Virginia St to Double R – New Timing under development.
- Sutro St (9 Signals) – Data collection initiated
- S. Virginia St (19 Signals) – Data Collection initiated

#### Traffic Engineering (TE) Spot 8 – Package 1 Project

Currently under design with 90% plans. Advertisement for construction is scheduled for June 2019.

The scope of this project includes:

##### Flashing Yellow Arrow – East/West

Keystone Avenue at 7<sup>th</sup> Street  
East Lincoln Way at Marina Gateway Drive  
Mill Street at Kirman Avenue

##### Flashing Yellow Arrow – North/South

McCarran Boulevard at Neil Road

##### Battery Back-Up Systems

Mae Anne Avenue at Coit Plaza  
Oddie Boulevard at I-80 Ramps (both sides)  
Wells Avenue at I-80 Ramps (both sides)  
Wells Avenue at 6<sup>th</sup> Street

##### Traffic Signal

Evans Avenue at Enterprise Road

#### Traffic Engineering (TE) Spot 8 – Package 2 Project

The project includes a new traffic signal at the intersection of Red Rock Road and Silver Lake Road and capacity improvements at the North McCarran Boulevard and U.S. 395 Interchange. The project is out for advertisement. The bid opening is scheduled for May 29, 2019.

### **CORRIDOR IMPROVEMENT PROJECTS**

#### 4<sup>th</sup> Street/Prater Way Bus Rapid Transit (BRT) Project (Evans Avenue to Pyramid Way)

Construction is complete. Traffic Signal Prioritization (TSP) for the buses is now working and under evaluation.

#### Virginia Street RAPID Extension

A detailed monthly progress report will be given on this project for May. Additional information can be viewed at: <http://virginiastreetproject.com/>

#### Truckee River Shared Use Path Project

The proposed pathway will start at John Champion Memorial Park and continue along the south side of the Truckee River. The existing pathway in this segment of the river currently crosses to the north side of the river at the park as it continues eastward. The proposed pathway will be about 2,400 lineal feet in length, continuing below Interstate 580 (I-580) to meet up with the existing pathway located near the Walmart east of I-580. This project was included in the fiscal year (FY)

2017 Program of Projects. The design portion of this project is funded through federal funds and includes oversight by NDOT through a Local Public Agency (LPA) agreement.

Thirty percent design plans have been reviewed and work continues on the environmental documentation that is required for the project.

#### Pyramid Highway and US 395 Connection

Signature of the ROD by FHWA was received on December 7, 2018. In accordance with the EIS and the RTC's RTP, design and construction of the project is phased over approximately 20 years. The current estimated cost of the overall project is \$800 million and will relieve congestion on the Pyramid Highway, McCarran Boulevard and other regional roads and provide connectivity between the North Valleys, Sun Valley and Spanish Springs.

#### Oddie Boulevard/Wells Avenue Improvement Project (Preliminary Design Phase)

Thirty percent (30%) design plan comments from the cities of Reno and Sparks have been received. Meetings with city staff have been held to discuss the proposed "raised cycle track" maintenance challenges. City of Reno staff will present bike box, raised cycle track, lightning, fencing, and landscape alternatives at the May 22, 2019, Reno City Council Meeting.

#### Sun Valley Boulevard Corridor Improvement Project (Preliminary Design Phase)

Preliminary design work is underway with a 30% design scheduled at the end of June 2019 and 60% design by the end of January 2020. A Public Meeting was held on April 24, 2019 at the Sun Valley Neighborhood Center. Discovery of inadequate drainage systems to handle existing storm water flow is presenting project challenges. Addressing existing drainage systems fall outside the scope of project. Maintenance of the proposed new facilities may also present challenges to Washoe County, NDOT, and Sun Valley General Improvement District (GID).

### **BICYCLE AND PEDESTRIAN IMPROVMENTS (2018)**

#### Keystone Avenue at California Avenue

The final design builds upon Alternative F as identified in the Keystone Avenue Corridor Study. Anticipated improvements include the re-alignment of the Keystone and California intersection, lane reconfigurations, pavement section reconstruction, sidewalk, curb and gutter, new PROWAG compliant pedestrian sidewalks and ramps and other incidentals necessary for the final design of this facility. The design is complete and the project is out for Bid. Construction is now expected to begin in June and occur primarily during Reno High School's (RHS) summer break.

#### Mill Street (I-580 to McCarran Boulevard)

The scope of this project is to design and construct various complete street improvements along Mill Street from I-580 to McCarran Boulevard, as identified in the RTC Complete Streets Masterplan completed in July 2016 and the Mill/Terminal corridor study completed in March 2013. Although this roadway segment has had some existing complete street treatments, more improvements are needed to conform to the RTC masterplan. The emphasis of this project is to assess and identify improvements for pedestrians, bicyclists, and transit riders as well as motorists. Deficiencies in pedestrian access related to Charter Schools and AACT High School in the area as well as a number of ADA deficient bus stops will be addressed. Preliminary design continues with 50% plan review completed and 90% plans under development. ROW impacts are minor, but

numerous. Identifying and addressing those issues will be a major focus over the coming months. Construction is not anticipated to begin until early 2020.

## **PAVEMENT PRESERVATION PROJECTS**

### **2018 Preventive Maintenance (Various Locations)**

The 2018 Preventive Maintenance Program was suspended last fall and construction will resume in late May.

### **2019 Preventive Maintenance (Various Locations)**

Bids were received in March and the project has been awarded to the low bidder, Sierra Nevada Construction, Inc. Construction is anticipated to begin in May.

### **Clean Water Way**

The limits of this project are from East McCarran Boulevard to second gated entrance to the Truckee Meadows Water Reclamation Facility (TMWRF). The Professional Services Agreement was awarded to Eastern Sierra Engineering, P.C. on April 12, 2018. The project includes reconstruction of the existing roadway, correction of any localized drainage deficiencies, and other features necessary for the rehabilitation of Clean Water Way. The project recently advertised for bids and was awarded to Sierra Nevada Construction Inc. (SNC). Work will begin as soon as the environmental conditions are favorable enough to install the improvements.

### **Reno Consolidated 19-01- Sutro Street, 1<sup>st</sup> Street, Lake Street, and State Street Project**

The project includes rehabilitation/reconstruction of the following street segments: Sutro Street from Commercial Row to 4<sup>th</sup> Street and from McCarran Boulevard to 1,400' north, 1<sup>st</sup> Street from Center to Lake, Lake Street Truckee River Bridge, and State Street from Virginia to Sinclair Street. The project will advertise for bids in late June/early July with construction beginning in August of this year.

### **Reno Consolidated 19-02 – North Hills Boulevard and Hunter Lake Drive Project**

The Professional Services Agreement was awarded to Wood Rodgers, Inc. on October 1, 2018. The project includes rehabilitation/reconstruction of the following street segments: North Hills Boulevard from Golden Valley Road to Lemmon Drive (including Buck Drive intersection) and the intersection of Hunter Lake Drive at Foster Drive. Ninety percent (90%) plans were submitted to City of Reno on April 18, 2019. We are working with the City to address comments and move forward with 100% plans.

### **Reno Consolidated 19-03 – Sierra Highlands Drive, Colbert Drive, Hammill Lane, Ralston Street, and Ohm Place Project**

The Professional Services Agreement for design and engineering during construction was awarded to Eastern Sierra Engineering (ESE). The project includes rehabilitation/reconstruction of the following street segments: Sierra Highlands Drive from the NDOT right-of-way on McCarran Boulevard to Idlebury Way; Colbert Drive from Longley Lane to 300 feet northwest of Longley Lane; Hammill Lane from Kietzke Lane to the eastern terminus; Ralston Street from University Terrace to Eleventh Street; and Ohm Place from Mill Street to 500 feet south. ESE is in the 90%

design stages of the project. The project is scheduled to advertise at the end of May 2019 with construction scheduled to start the middle of July 2019.

**Sparks Consolidated 19-01 – 15<sup>th</sup> Street, Franklin Way, Hulda Court, and El Rancho Sidewalk Project**

The Professional Services Agreement was awarded to CFA, Inc. on October 1, 2018. This project is scheduled to advertise in mid-May 2019. The project includes rehabilitation/reconstruction of the following street segments: 15<sup>th</sup> Street from C Street to Prater Way, Franklin Way from the Rail Road crossing to East Greg Street, Hulda Court, and sidewalk improvements on El Rancho Drive from G Street to Oddie Boulevard. It is anticipated that construction will begin in July.

**REPORT ON NEGOTIATED SETTLEMENT AGREEMENTS FOR THE ACQUISITION OF PROPERTY**

<b>Project</b>	<b>Property Owner</b>	<b>Purchase Amount</b>	<b>Amount Over Appraisal</b>
Virginia Street BRT Extension	Montrose Properties Nevada, LLC	\$6,308.00	\$0
Virginia Street BRT Extension	Montrose Properties Nevada, LLC	\$5,020.00	\$0
Virginia Street BRT Extension	Donner Inn LP	\$7,241.00	\$0
Virginia Street BRT Extension	TMMR 1-DE SPE, LLC	\$17,675.00	\$0
Virginia Street BRT Extension	TMMR 1-DE SPE, LLC	\$11,990.00	\$0
Virginia Street BRT Extension	TMMR 1-DE SPE, LLC	\$20,245.00	\$0
Virginia Street BRT Extension	TMMR 1-DE SPE, LLC	\$11,430.00	\$0
Virginia Street BRT Extension	660TS, LLC	\$1,890.00	\$0
California & Keystone Avenues Interchange Enhancements	7-ELEVEN, INC.	\$20,720.00	\$2,800.00

**CONTRACTS UNDER \$50,000**

None

**ENGINEERING ON-CALL WORK ASSIGNMENTS**

Attachment A summarizes the work assignments on the engineering pre-qualified on-call lists. Engineering Department consultant assignments are reported after Board approval of the professional services agreement with each firm.

**ADVISORY COMMITTEE(S) RECOMMENDATION**

There are no advisory committee recommendations pertaining to this agenda item.

Attachment

## On Call Consultant Summary

<b>Engineering, Construction Management &amp; Quality Assurance</b>			
<b>BOARD APPROVAL DATE</b>	<b>FIRM</b>	<b>PROJECT NAME</b>	<b>AMOUNT</b>
No work has been assigned this period			

<b>Independent Cost Estimating (ICE)</b>			
<b>BOARD APPROVAL DATE</b>	<b>FIRM</b>	<b>PROJECT NAME</b>	<b>AMOUNT</b>
No work has been assigned this period			

<b>Traffic Engineering</b>			
<b>BOARD APPROVAL DATE</b>	<b>FIRM</b>	<b>PROJECT NAME</b>	<b>AMOUNT</b>
No work has been assigned this period			



**Engineering Services - Categories**  
**List is valid through June 30, 2019**

<b>Engineering, Construction Management &amp; Quality Assurance</b>	<b>Independent Cost Estimating (ICE)</b>
Atkins North America, Inc. CA Group, Inc. CFA, Inc. CH2M Hill, Inc. Eastern Sierra Engineering HDR Engineering, Inc. Jacobs Engineering Group, Inc. Louis Berger Group, Inc. Lumos & Associates, Inc. Nichols Consulting Engineers Parsons Transportation Poggemeyer Design Group, Inc. Stantec Consulting Services Inc. Wood Rodgers, Inc.	CA Group CH2M Hill HDR Engineering, Inc. Stanley Consultants Inc.

**Traffic Engineering Services - Categories**  
**List valid through September 28, 2018**

<b>Traffic Engineering</b>	<b>I.T.S.</b>	<b>Traffic Surveys &amp; Data</b>
Aecom	Aecom	CA Group
CA Group	Atkins	HDR Engineering, Inc.
Cardno	HDR Engineering, Inc.	Jacobs
CH2M Hill	Iteris	LSC Transportation Consultants, Inc.
HDR Engineering, Inc.	Jacobs	Parsons Brinkerhoff
Iteris	Kimley-Horn & Associates	Solaegui
Jacobs	Parsons Brinkerhoff	STE Sierra Transportation Engineers, Inc.
Kimley-Horn & Associates	Stantec	TRA Traffic Research and Analysis, Inc.
Parsons Brinkerhoff	Traffic Works	Traffic Works
SHG Slater Hanafin Group		
Solaegui Engineers, LTD		
Stantec		
Traffic Works		