



CITY OF FERNLEY

CITY COUNCIL AGENDA REPORT

Meeting Date: June 16, 2021

REPORT TO: Mayor and City Council
REPORT THRU: Daphne Hooper, City Manager
REPORT FROM: Jessica Dover, Senior Project Manager
REVIEWED BY: Brandi Jensen, City Attorney
REVIEWED BY: Denise Lewis, City Treasurer

FINANCIAL IMPACT:

Yes: No:

CURRENTLY BUDGETED:

Yes: No:

FUND/ACCOUNT:

100-475-320

ACTION REQUESTED: Consent Ordinance Resolution Motion Receive/File

AGENDA ITEM: Staff Report (For Possible Action): Possible Action to Award a Contract for Engineering Services for the Northern Nevada Regional Travel Demand Model (TDM), to WSP USA, Inc., in an amount not to exceed \$58,630.

Agenda Item Brief:

The City recently approved entering into an Interlocal Agreement with the Regional Transportation Commission of Washoe County, NV (RTC Washoe), to establish roles and responsibilities for development, maintenance, operation and analysis of the RTC Travel Demand Model (TDM) as it relates to the City of Fernley (City). Staff is proposing the City contract separately with RTC's Model Consultant, WSP, to build the Model. The Model will be used to identify and evaluate transportation capacity needs for the City.

Recommended Motion:

"I move to Award a Contract for Engineering Services for the Northern Nevada Regional Travel Demand Model (TDM), to WSP USA, Inc., in an amount not to exceed \$58,630."

Business Impact (per NRS Chapter 237):

- A Business Impact Statement is Attached.
- A Business Impact Statement is not required because this is not a rule (term excludes vehicles by which legislative powers are exercised under NRS Chapters 271, 278, 278A, or 278B).

See attached report for background, analysis, alternatives.

ALTERNATIVES:

1. City Council may award the proposed Contract for Engineering Services to WSP USA, Inc.
2. City Council may reject the proposed Contract and provide additional direction to the City Manager

PROJECT SUMMARY:

On May 19, 2021 the City approved entering into an Interlocal Cooperative Agreement (ICA) with the Regional Transportation Commission of Washoe County, NV (RTC Washoe); establishing roles and responsibilities for development, maintenance, operation and analysis of the RTC Travel Demand Model (TDM) as it relates to the City of Fernley (City).

Under the Agreement, RTC will provide assistance to incorporate the City of Fernley Traffic Analysis Zone (TAZ) geography, roadway network, and existing and forecasted land use, employment, traffic and travel characteristic data into the Model. Once required data and inputs are derived, the Model will be built by WSP; RTC's current Model Consultant. Project discussions previously conducted between RTC, WSP and City Staff determined that it would be more efficient for the City to Contract separate with WSP, (as opposed to RTC amending their current Modeling Contract with the Consultant).

The Model will be used to identify and evaluate transportation capacity needs for the City as it relates to the City of Fernley Transportation Master Plan (TMP).

In general, the Contract establishes the following Scope of Services:

- Task 1: Input Data Coordination
 - o RTC will update 2015 input data to include data and establish Traffic Analysis Zones (TAZ) boundaries for the City
 - o WSP will provide guidance to RTC/City regarding best practices for TAZ development and perform QA/QC checks on the base year highway network and TAZ structure as developed by RTC/COF
 - o WSP will test the Model using files for the 2015 base year; errors will be identified by WSP
- Task 2: Population Synthesizer Data Preparation and JAVA Code Testing
 - o Consultant will prepare control datasets for the population synthesizer based on the socioeconomic data provided by City (as established by RTC/City in Task 1)
- Task 3: External & Truck Model Input Data Development and Testing
 - o RTC/City to provide StreetLight data to WSP to provide count data at all external stations
 - o RTC/City to provide forecasted volumes at new external stations
 - o WSP will process StreetLight data to develop inputs for the external model
 - o WSP will rerun the national truck model and subarea analysis to develop external to external truck trip tables for the 2015 base year and for future year scenarios at five-year increments until year 2050
- Task 4: Testing of GISDK/JAVA/FORTRAN Model Components and Code Update
 - o WSP will test Model components for the expanded Model geography
- Task 5: Check I-80 Volumes & Tech Memo & Model Transmittal
 - o Consultant will spend up to (24) hours in an effort to match 2015 I-80 base year assigned daily volumes to within 20% of the 2015 I-80 count
 - o Consultant to develop a technical memorandum providing a summary of RTC Model expansion Work including changes incorporated into the Model and resulting volume changes along I-80
 - o WSP will transmit the working version of the Model to RTC and provide up to (8) hours of support to ensure RTC is able to install and run the updated Model

WSP was selected by the City to perform the Work per NRS 332.115(1)(a) and 332.115(1)(b).

BACKGROUND:

The City of Fernley's Transportation Master Plan (TMP), adopted by Fernley City Council July 01, 2020 through Resolution #20-014, was prepared to reflect the City's growth, changing trends in transportation and the surrounding area, and the corresponding existing and future transportation needs in Fernley. The plan considers various aspects of the City's transportation network including roadways, parking, transit, bicycle, and pedestrian facilities.

TMP Section 6.7, Table 14 - *Other Strategies*, recommends that the City continue to "... evaluate incorporating City of Fernley data into the RTC Washoe Travel Demand Model (TDM) and/or pursue a northern Nevada Regional TDM" (Page 63).

A TDM assists in forecasting future traffic conditions of a specific region through the following steps, (further detailed per Section 2.10 of the TMP): Trip Generation, Trip Distribution, Mode Choice and Trip Assignment. The City does not currently have a four-step TDM. Model development requires significant investment and coordination with regional partners.

Currently in Northern Nevada, the Regional Transportation Commission of Washoe County (RTC Washoe), utilizes an internal TDM for the Washoe County area. The Carson Area Metropolitan Planning Organization (CAMPO) utilizes a separate model for Carson City, and surrounding areas. Separately, these models allow each agency to customize modeling for individual agency needs, however, shared boundary information between the models is inconsistent and the models are not compatible.

The City approached RTC Washoe in September 2019 to assess the feasibility of incorporating the City of Fernley into the RTC TDM with the intent of utilizing the future model for both local data and to forecast traffic volumes and travel patterns between the City and Washoe County, (including traffic impacts associated with the Tahoe Reno Industrial Center (TRI Center)).

Further discussion during FY 20/21 between City Staff, RTC Washoe and the Nevada Department of Transportation (NDOT) refined the City's options in establishing a TDM. CAMPO has expressed they are not interested at this time in pursuing development of (1) cohesive Travel Demand Model for the Northern Nevada Region. Therefore, the City may proceed by either incorporating City of Fernley data into RTC's Model; or establishing an individual stand-alone Model. Potential benefits of a combined TDM include: increased assurance that model information is consistent throughout the region, local LPAs will more easily be able to coordinate with the Statewide Model, cost sharing of model development and maintenance and economies of scale.

The estimated Project costs shown below for the 5-Year Capital Improvement Plan, are delineated as follows:

FY 21/22 - \$104,000

FY 22/23 - \$24,000

FY 23/24 - \$24,000

FY 24/25 - \$79,000

FY 25/26 - \$24,000

The FY 20/21 Budget included a TDM Project in the amount of \$50,000 to continue Agency coordination efforts and to start implementing City data into the RTC Model. To date, none of the approved funding has been expended during Staff's coordination efforts. If approved, work under the Agreement and WSP Contract would tentatively commence in June 2021.

LEGAL IMPLICATIONS:

FINANCIAL IMPLICATIONS:

Project appropriations are included in the approved FY 2022 Budget as part of the Capital Improvement Plan:

- \$104,000 (100-475-320), Northern Nevada Regional Travel Demand Model (TDM); Model Creation and Calibration with RTC Washoe (Page 167, 219, A-34)

FY 21/22 Northern Nevada Regional (TDM) Project, Approved Agreements and Contracts:

1.) **RTC Washoe** and City of Fernley Interlocal Cooperative Agreement

Model Development Tasks:	
Input Data: (Task A)	\$28,000
Commercial Vehicle & Externals: (Task B)	\$6,000
Project Management and Coordination: (Task C)	\$6,000
<u>Total OPTIONAL Services: (N/A)</u>	<u>\$0</u>
Total (Including OPTIONAL Services):	\$40,000

FY 21/22 Northern Nevada Regional (TDM) Project, Proposed Agreements and Contracts:

1.) City of Fernley Standard Contract for Engineering Services, **WSP**

Input Data Coordination: (Task 1)	\$6,825
Population Synthesizer Data Preparation and JAVA Code Testing: (Task 2)	\$14,188
External and Truck Model Input Data Development and Testing: (Task 3)	\$12,488
Testing of Model Components and Code Update: (Task 4)	\$14,867
Check I-80 Volumes, Tech Memo and Model Transmittal: (Task 5)	\$10,262
<u>Total OPTIONAL Engineering Services: (N/A)</u>	<u>\$0</u>
Total (Including OPTIONAL Services):	\$58,630

FY 21/22 Northern Nevada Regional (TDM) Project, Proposed Total:

RTC Washoe and City of Fernley ICA:	\$40,000
<u>WSP Standard Contract for Engineering Services</u>	<u>\$58,630</u>
Total (Including OPTIONAL Services):	\$98,630

ATTACHMENTS:

- 1.) City of Fernley Standard Contract for Engineering Services, WSP USA, Inc.