SCOPE OF SERVICES

Project Description

The purpose of the project is to evaluate one alternative for Main Street (SH-75) between River Street and Saddle Road for the City of Ketchum, Idaho (City).

This Scope of Services (SOS) includes the, data collection, travel demand forecasting, analysis, and alternatives evaluation for Main Street. HDR Engineering, Inc. (HDR) is the prime consultant with L2 Data Collection (L2) as subconsultant.

The scope narrative is organized by the following tasks:

- Task 100 Project Management
- Task 200 Project Goals and Objectives
- Task 300 Data Collection
- Task 400 Existing Conditions
- Task 500 Future Conditions
- Task 600 Alternative Concepts Analysis and Evaluation
- Task 700 Final Concept Refinement and Report

Key Understandings

1. The City is the agreement administrator and the project is funded by the City. State and Federal funds will not be used.
2. This scope of services assumes an six (6) month project duration for estimating purposes, with report delivery no later than March 31, 2022, based on an NTP of August 13, 2021.
3. In providing opinions of probable construction cost for the project, HDR has no control over cost or price of labor and materials, unknown or latent conditions of existing equipment or structures that might affect operation or maintenance costs, competitive bidding procedures and market conditions, time or quality of performance by operating personnel or third parties, and other economic and operational factors that might materially affect the ultimate cost or schedule. HDR, therefore, will not warranty project costs will not vary from HDR's opinions, analyses, projections, or estimates.
4. All deliverables will be electronic PDF files. Where hard copies are required it will be noted in the tasks below.

100 PROJECT MANAGEMENT

110 Project Initiation and Project Management Plan

HDR will set up the project files and accounting system, as well as prepare a Project Management Plan for use by the project team, including the City. The plan will include key project information such as communication protocols, contact information for key team members, project schedule, project delivery process, quality control procedures and will be updated as needed during the project development process.

Deliverables

- Project Management Plan (information only, no review)

120 Kick-off Meeting

A kick-off meeting will be held to outline the project objectives, roles and responsibilities, critical success factors, and to review the schedule. This meeting will include City staff, ITD staff, and three (3) HDR staff (PM + two [2] key task leads). HDR will prepare the agenda, schedule, and facilitate the kick-off meeting with City staff to discuss the project objectives, approach, schedule, available information, etc.

Assumptions

- The kickoff meeting will be held in person in the City of Ketchum. Two (2) team members will travel from out of state to attend the meeting.
- Meeting attendance includes three (3) HDR staff (PM + two [2] key task leads).
- The kickoff meeting is anticipated to last three (3) hours, including preparing meeting minutes, and five (5) hours of travel time.

Deliverables

- Kickoff meeting agenda and minutes

130 Project Team Meetings

Project team meetings will be conducted throughout the duration of the project. Team meetings will be held via conference call to review project status and address questions with the City. Timing and scheduling of these meetings will be determined at the project kick-off meeting. The team meetings will be held via conference call throughout the project.

All meetings will include an agenda and discussion of action items. Meeting minutes will be prepared and distributed.

Assumptions

- Three (3) team coordination meetings will be scheduled as needed.
- Meeting attendance includes three (3) HDR staff (PM + two [2] key task leads).
- Project Team meetings are anticipated to last one and a half (1 ½) hours, including preparing meeting minutes.

Deliverables

- Project Team meetings agendas and minutes

140 Status Calls

Status calls between the HDR PM and the City PM will be scheduled as needed throughout the duration of the project to coordinate project status and needs. The HDR PM will coordinate the necessary updates and action items for the calls.

Assumptions

- Ten (10) status calls at ½ hour each.

Deliverables

- Action Item List - via email, if necessary

150 Project Administration, Progress Reports and Invoicing

HDR will staff and manage a project team to provide project deliverables and manage the budget and schedule. The HDR PM will coordinate with L2 as needed to complete data collection. Monthly progress reports and invoices will meet the City's requirements. HDR will submit invoices to the City.

Deliverables

- Monthly Invoice and Progress Report - including labor and expense backup (assume six [6] invoices)

200 PROJECT GOALS AND OBJECTIVES

210 Develop the Project Goals and Objectives

In coordination with the kickoff meeting, HDR will discuss the established the project goals and objectives that the City and ITD will develop. This will include a high-level review and discussion of land use plans and opportunities of economic and real estate development and placemaking with potential improvements, including redevelopment along Warm Springs Road near the 10th Street and Lewis Street intersections.

HDR will summarize goals and objectives in the meeting minutes for City review following the meeting. Once comments are received from the City and the appropriate input incorporated, the goals and objectives will be documented in the Final Report.

Assumptions

- Three (3) HDR staff, City staff, and ITD staff will meet in the kickoff meeting in task 120.
- Travel expenses for this will be under the kickoff meeting under Task 120.

Deliverables

- Meeting minutes under Task 120

300 DATA COLLECTION

HDR will contact the appropriate agencies (e.g. City of Ketchum, Blaine County, Mountain Rides, Wood River Bicycle Coalition, and ITD District 4) to assist in updating and collecting the following data:

- Most recent five calendar years of crash data (e.g., type, severity, injuries) including location information
- Locations in the project area identified as exceeding statewide or local performance measure for crash frequency or severity
- Signalized intersections and signal timings
- Posted speeds
- Number of lanes/cross-sections for project roadways
- Pavement conditions (assuming data are readily available and completed)
- Existing bike lanes, sidewalks, publicly maintained off-street pedestrian/bike facilities
- Pedestrian and bicycle counts on project and surrounding corridors
- Transit routes
- Proposed and adopted plans for future land use and development
- Significant land use changes and/or developments since the last Comprehensive Plan
- Peak hour and AADT counts at key intersections and segments by L2 as summarized in their proposal (attached)

HDR will document the existing conditions, including roadway and intersection configurations, pedestrian facilities, bicycle facilities, surrounding land use, and will collect the existing travel time data along Main Street using the floating car methodology as part of the kickoff.

Base map data (AutoCAD or GIS format) for use in analyzing and presenting transportation information will be obtained from the City of Ketchum, including land use and current zoning. HDR will provide information to the City to update the base maps with current development and infrastructure as needed. The ITD travel demand model TAZ information will be reviewed as well to help estimate future population, households, and employment.

HDR will review completed data and recommend updates and request additional information from the City.

Deliverables

- Existing Data Summary included in the Draft and Final project reports

L2 Data Collection

June 2, 2021

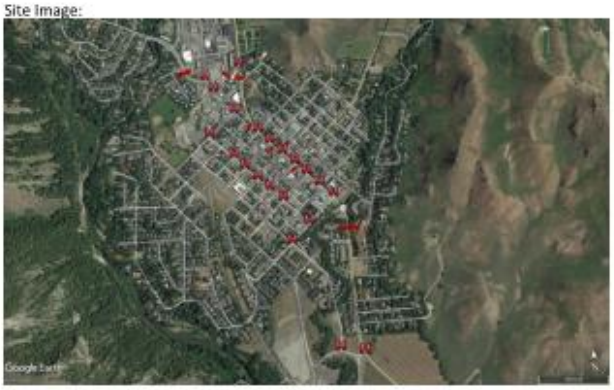
TRAFFIC DATA COLLECTION SERVICES FOR
HDR
Scope of Services and Cost Proposal

L2 Data Collection (L2DC) is pleased to submit this proposal to provide traffic data collection services in Ketchum, ID.

1. **Data Collection: Intersection Turning Movement**
   Type: Vehicle Volume & Direction
   Time: 7:00-9:00AM and 4:00-6:00PM
   Classification: Yes
   Pedestrian & Bikes: Yes
   Day: Weekday – Tuesday, Wednesday, or Thursday
   Locations:
   Main Street & River Street
   Main Street and 1st Street
   Main Street and 2nd Street
   Main Street and Sun Valley Road
   Main Street and 4th Street (Sun Valley Trail)
   Main Street and 5th Street
   Main Street and 6th Street
   SH-75 and 10th Street
   Warm Springs Road and 10th Street
   Warm Springs Road and Lewis Street
   SH-75 and Serenade Lane
   2nd Street and Serenade Lane
   2nd Street and River Street
   1st Avenue and River Street
   1st Avenue and 2nd Street
   1st Avenue and Sun Valley Road
   1st Avenue and 4th Street (Sun Valley Trail)
   1st Avenue and 5th Street
   1st Avenue and 6th Street
   1st Avenue and 8th Street
   Warm Springs and 8th Street

L2 Data Collection

Site Image:



2. **Data Collection: Machine Tube Count**
   Type: Vehicle Volume & Direction
   Duration: 24-hours
   Classification: Yes *
   Day: Weekday – Tuesday, Wednesday, or Thursday Locations:
   Main Street east of River Street
   Main Street between Sun Valley Road and 2nd Street
   Main Street east of 5th Street
   SH-75 east of 10th Street
   Warm Springs west of Lewis Street
   Warm Springs east of 7th Street
   10th Street between Warm Springs Road and SH-75

   * It may not be possible to collect accurate speed and classification data in the congested areas on Main Street.

3. **Deliverables**
   The Traffic Data Report will be delivered no later than 10 days after the on-site data collection is completed.

4. **Contract and Payment Terms**
   Payment terms for the services listed above are net 90 days. Client will notify L2DC, prior to authorizing work, if terms are pay-when-paid.

5. **Cost Proposal**
   The total lump-sum cost for the services listed above is $12,650.00, including travel time, mileage, lodging, data collection and data processing.

400 EXISTING CONDITIONS

410 Land Use Review

HDR will review the streetscape and public realm elements in the areas surrounding the project corridors and areas to identify the components that contribute to a cohesive pedestrian and business zone and those that can help foster local businesses and residents or catalyze economic and real estate development.

420 Capacity and Operational Analysis

HDR will analyze the study area roadways and intersections under existing conditions collected in Task 300. Level of service (LOS) will be reported based on Highway Capacity Manual (HCM) metrics using Synchro, SimTraffic, Sidra, and Highway Capacity Software (HCS) traffic operations analysis tools. Existing travel times along Main Street as well as delay will be compared to results from Synchro or SimTraffic simulation runs.

430 Crash Mapping and Analysis

HDR will analyze the gathered crash history within the study area for the most current five (5) years to identify locations with potential for safety improvement. HDR will evaluate crash rate, frequency, and equivalent property damage to develop a relative ranking intersections and segments within the project area. HDR will complete a crash analysis following Highway Safety Manual (HSM) procedures for each intersection and roadway segment to determine the existing crash rates. Crash rates will be evaluated and summarized to determine high accident locations. Specific focus of the analysis will include fatal and serious injury crashes. HDR will develop a figure showing crash locations and types and will discuss safety concerns with the City and ITD to identify locations that are safety concerns for motor vehicles, bicyclists, and pedestrians.

A summary of identified corrective actions and countermeasures in line with proposed alternatives will be prepared.

Assumptions

- Capacity and safety analysis will include intersections with counts conducted in Task 300.
- The City will obtain all crash data.
- Emergency Responders and the Ketchum Traffic Authority will be invited to a team meeting conference call under Task 130 to discuss safety issues. Crash materials and analysis will be shared with them prior to the meeting.

440 Before/After Pedestrian Evaluation

HDR will analyze the operations at the signals updated with the pedestrian scramble before and after they are implemented to evaluate performance and compare operations.

Assumptions

- This analysis will be for existing conditions. Future Conditions will use the pedestrian scramble.
- The existing conditions Synchro model will be updated with the pedestrian scramble and results developed. No new model or additional analysis will be completed.

450 Document Existing Conditions

HDR will prepare an Existing Conditions Technical Memorandum to document information collected throughout the Existing Conditions Analysis task and identify the baseline for where

project transportation facilities are in terms of operations, connectivity, and safety. It is expected that the technical memorandum will be included in the final project documents as the Existing Conditions section.

Deliverables

- Existing Conditions Technical Memorandum

500 FUTURE CONDITIONS

510 Travel Demand Forecasts

HDR will develop traffic volume forecasts for project roadways and intersection for the analysis year of 2042 using the volumes collected by L2, the growth rates and factors HDR completed for the City of Ketchum Master Transportation Plan update, and the SH-75, Elkhorn Rd to River St, Ketchum with ITD. HDR will propose growth rates to be used for this project and coordinate them with the City and ITD for approval before moving forward with the forecast conditions analyses.

Assumptions

- HDR will confirm traffic forecasting, distributions and turning movement volumes with the City and ITD before proceeding with analyses in subsequent tasks.

Deliverables

- Estimated travel demand forecasts (included in Future Conditions Technical Memorandum)

520 Define Performance Standards and Evaluation Criteria

HDR will work with the City to determine performance standards and level of service (LOS) thresholds for all modes of travel for use in the needs analysis. The ITD District 4 Traffic Engineer will be included in the discussion and determination of these standards. HDR will prepare a summary of the recommended performance standards, and LOS thresholds will be prepared.

530 Capacity and Operational Analysis

HDR will conduct no-build capacity analyses for the project intersections, roadways and multi-use facilities identified for the 2042 analysis year. This analysis will identify deficiencies and needs for project facilities and will support the alternative improvements development and analyses in Task 600.

Deliverables

- No-build capacity and operational analyses results (included in Future Conditions Technical Memorandum)

540 No-Build Crash Frequency and Severity Analysis

HDR will estimate future crash conditions on Main Street using the HSM Predictive Method or Crash Modification Factors, as appropriate. If the Predictive Method is used and calibration factors are available, they will be integrated into the analysis. This analysis will support the alternative improvements development and analyses in Task 600.

Deliverables

- No-build safety analysis results (included in Future Conditions Technical Memorandum)

550 Document Future Needs Assessment

HDR will prepare a Future Needs Assessment Technical Memorandum to document the work completed for the needs assessment tasks. It is expected that the technical memorandum will be included in the final plan document as the Future Needs Assessment chapter.

Deliverables

- Future Conditions Assessment Technical Memorandum

600 ALTERNATIVE CONCEPTS ANALYSIS AND EVALUATION

610 Alternative Concept Development

HDR will coordinate with City and ITD staff to develop a feasible alternative to improve Main Street operations for all modes as well as connectivity as a three-lane configuration with modifications to side streets. HDR will develop a conceptual plan view layout with a brief written descriptions depicting and addressing major and minor roadways, land use, private property, and development opportunity impacts, right-of-way impacts, placemaking and public realm improvement, bicycle and pedestrian accommodations and crossings, and major utility, and/or drainage relocations. Operational analysis models as described below will be prepared to estimate how the segments and key intersections of Main Street will operate and compare the results to the baseline no-build alternatives from Task 500.

Assumptions

- HDR will confirm traffic forecasting, distributions and turning movement volumes with the City and ITD before proceeding with analyses in subsequent tasks.
- If the lane reconfiguration is determined to not be feasible, additional alternatives may be added to this scope by the City for development, review and analysis as additional services.

620 Capacity and Operational Analysis

HDR will conduct an operational analysis for the lane reconfiguration alternative under 2042 analysis year conditions. Intersection, multimodal, and roadway segment operational LOS will be estimated for roadways and intersections with assumed intersection control identified through discussions with the City and ITD. Travel times along Main Street as well as delay will be determined from the Synchro or SimTraffic simulation runs of each alternative.

630 Relative Crash Frequency and Severity

HDR will forecast crash conditions under the proposed Main Street lane reconfiguration alternative. The analysis will be conducted using the HSM predictive method or Crash Modification Factors (CMFs) as appropriate. The analysis will be conducted under 2041 analysis year conditions.

640 Alternative Concept Cost Estimates

HDR will prepare a conceptual cost estimate to implement the proposed Main Street lane reconfiguration alternative. A potential one-way couplet alignment and conceptual cost will also be developed for comparison.

650 Benefits Determination and Evaluation

HDR will prepare a list of benefits and impacts the proposed Main Street lane reconfiguration alternative for discussion with the Project Team, along with the conceptual one-way couplet option. Benefits and impacts will be evaluated through the discussion and the alternative will be compared to the No-Build scenario. A summary of the identified benefits and impacts and Project Team discussion will be included in the Final Report.

Assumptions

- The traffic operational and safety project area will include Main Street from River Street to Saddle Road.
- Detailed operational modeling with Synchro and SimTraffic, conceptual cost estimating, benefit determination and evaluation, and safety analyses will be limited to the proposed Main Street lane reconfiguration alternative.
- Detailed safety analysis will be limited to the proposed Main Street lane reconfiguration alternative.
- The alternative concept will not require additional right-of-way along Main Street.

700 FINAL REPORT

710 Draft Report

The results of the analyses and screening completed under Task 600 will be compiled into a report format that documents the alternatives analyses and provides a recommendation on the lane reconfiguration alternative for Main Street. The report will also include potential funding sources for The City and ITD to consider and key components of the alternative that may score well on grant applications. The report will also include conceptual layouts and preliminary cost estimates.

HDR will distribute the Draft Report electronically to City staff to share with City Council and agency partners, including the ITD District 4 Traffic Engineer, and other stakeholders. The Draft Report will also be available via the City's website for the public and other stakeholders to review and provide comment via the website for a defined review period. HDR and City staff will discuss the public and stakeholder comments and resolutions on the Draft Report via conference call.

Assumptions

- Draft Report will be up to twenty (20) pages, with figures. Appendices will be additional pages.
- City will post the Draft Report on the City's website
- One (1) review of the Draft Report will be conducted by the City Council and staff
- City will compile all City Council, staff, ITD, stakeholder, and public comments and provide to HDR
- HDR and City staff will discuss comments and resolutions at team meeting identified under Task 130.

Deliverables

- Draft Report
- Comment and response matrix from public and stakeholder review of Draft Report

720 Final Report

HDR will finalize the Report by incorporating comments received. HDR will provide a Final Report to City staff, City Council, agency partners, and the general public in electronic format.

Assumptions

- Final Report will be up to twenty (20) pages, with figures. Appendices will be additional pages.

Deliverables

- Final Report

730 Adoption

HDR will assist the City, as needed, with the report adoption process. Anticipated tasks include presenting the plan to the City Council. This is intended to be an on-call task that will be utilized by the City on an as-needed/as-requested basis.

Assumptions

- Effort associated with this task is limited to a total of ten (10) hours by HDR as well as travel expenses to attend one (1) City Council meeting.
- Revisions to the Final Report will not be required.

Deliverables

- Assist the City with Plan adoption, as-needed/as-requested