

**FLOYD HILL REVENUE GAP STUDY
INTRA-AGENCY AGREEMENT**

THIS FLOYD HILL REVENUE STUDY INTRA-AGENCY AGREEMENT (the “Agreement”) is made this ___ day of _____, 2020 by and between the COLORADO DEPARTMENT OF TRANSPORTATION (“CDOT” or the “Department”), an executive agency of the State of Colorado (“State”), and the COLORADO HIGH PERFORMANCE TRANSPORTATION ENTERPRISE, a government-owned business and a division of CDOT (“HPTE”). CDOT and HPTE are hereinafter referred to individually as a “Party” and collectively as the “Parties.”

RECITALS

A. CDOT is an agency of the State authorized pursuant to C.R.S. § 43-1-105, to plan, develop, construct, coordinate, and promote an integrated transportation system in cooperation with federal, regional, local, and other state agencies.

B. Pursuant to C.R.S. § 43-1-110 the executive director of CDOT is authorized to execute certain agreements on behalf of CDOT.

C. HPTE was created pursuant to C.R.S. § 43-4-806(2) and operates as a government-owned business within CDOT.

D. The business purpose of HPTE, as provided for in C.R.S. § 43-4-806(2)(c), is to pursue public-private partnerships and other innovative and efficient means of completing surface transportation infrastructure projects, which HPTE may agree to complete for CDOT under agreements entered into with the Department in accordance with C.R.S. § 43-4-806(6)(f).

E. Pursuant to C.R.S. § 43-4-806(6)(g) HPTE is empowered to prepare, or cause to be prepared, detailed plans, specifications, or estimates for any surface transportation infrastructure project within the state.

F. HPTE is further empowered, pursuant to C.R.S. § 43-4-806(6)(h) to make and enter into all other contracts and agreements, including intergovernmental agreements under C.R.S. § 29-1-103 that are necessary or incidental to the exercise of its powers and performance of its duties.

G. CDOT acknowledges that HPTE possesses expertise and legal powers unavailable to CDOT, which enable it to accelerate the development and delivery of critical surface transportation infrastructure projects.

H. CDOT has identified Floyd Hill as a high priority project (the “Floyd Hill Project”) to address the operational and infrastructure issues that hamper travel time reliability, safety, and mobility on the I-70 Mountain Corridor.

I. As part of CDOT's development plan and in conjunction with the Environmental Assessment currently underway on Floyd Hill, CDOT desires for HPTE to partner with a consultant to provide the following: (1) a traffic and revenue study; (2) financial advisory services for financing options; and (3) public meeting facilitation along the geographical boundaries of the Floyd Hill Project (collectively, the "Floyd Hill Revenue Gap Study").

J. Previously, HPTE has selected and commissioned contractors to complete traffic and revenue studies for several of CDOT's corridors, including, but not limited to, the Interstate 70 Mountain Corridor Project, the Interstate I-25 "Gap" Project, the C-470 Express Lanes Project, and State Highway 119.

K. Recognizing the usefulness of HPTE's expertise and legal powers unavailable to CDOT, as well as HPTE's experience in procuring and administering traffic and revenue studies as well as financial services, CDOT desires to provide funding to HPTE for the development of the Floyd Hill Revenue Gap Study.

L. The Parties further desire to enter into this Agreement to define their respective roles and responsibilities with respect to the Floyd Hill Revenue Gap Study, specifically related to funding the Study and to allocate the costs related thereto.

M. HPTE has prepared a scope of work describing the services it intends to provide during the Revenue Gap Study (the "Study Services"), which is attached hereto and incorporated herein as **Exhibit A** (the "Scope of Work").

N. In order to further the efficient completion of surface transportation infrastructure projects necessary to CDOT's development of an integrated transportation system, CDOT desires that HPTE utilize its expertise to provide the Revenue Gap Study, in exchange for which CDOT agrees to compensate HPTE in the amounts set forth in the Scope of Work.

O. Both CDOT and HPTE are authorized under law to execute this Agreement.

NOW, THEREFORE, IN CONSIDERATION OF THE FOREGOING RECITALS, THE PARTIES TO THIS AGREEMENT HEREBY AGREE AS FOLLOWS:

1. Scope of Work and Responsibilities.

a. HPTE shall provide the Study Services set forth in Exhibit A.

b. The Parties may agree to modify the specific tasks set forth in the Scope of Work to be undertaken by HPTE during the term of this Agreement, provided that such modifications do not result in an increase or decrease in the overall maximum dollar CDOT contribution of the Study Services to be provided under this Agreement. Any modifications to the Scope of Work resulting in an increase or decrease in the overall maximum dollar amount of the Study Services shall not be undertaken unless agreed to in writing by the Parties in an amendment to this Agreement.

2. Payment Amount and Procedures.

a. The Parties agree that CDOT shall contribute payment of no more than One Million Three Hundred Dollars (\$1,300,000.00) to HPTE for the provision of the Study Services in fiscal year 2020 under this Agreement (the “Maximum Payment Amount”).

b. The Study Services to be provided, and the Maximum Payment Amount thereof, may be amended from time to time. The Study Services provided by HPTE shall be compensated as part of the Maximum Payment Amount provided for herein.

c. HPTE shall initiate payment requests by invoice to CDOT, in a form and manner approved by the Parties. CDOT shall pay each invoice within 45 days following CDOT’s receipt of that invoice.

3. Availability of Funds. Payment pursuant to this agreement is subject to and contingent upon the continuing availability of funds appropriated for the purposes hereof. If any of said funds become unavailable, as determined by CDOT, either Party may immediately terminate or seek to amend this Agreement.

4. Record Keeping Requirements. HPTE shall maintain a complete file of all books, records, papers, accounting records, and other documents pertaining to its execution of the Scope of Work under this Agreement, and shall make such materials available to CDOT upon request for a period of three years.

5. Right to Audit. HPTE shall permit CDOT, the State Auditor and/or their designee(s) to inspect all records of HPTE and audit all activities that are or have been undertaken pursuant to this Agreement.

6. Consideration; Exchange Transaction. The Parties acknowledge that the mutual promise and covenants contained herein, and other good and valuable consideration, are sufficient and adequate to support this Agreement. The Parties further acknowledge that, for accounting purposes, this Agreement represents an exchange transaction for CDOT’s purchase of specific services provided by HPTE at the market value of such services.

7. Dispute Resolution. Any dispute concerning the performance of this Agreement shall be referred to the CDOT Chief Engineer and the HPTE Director. Failing resolution by such officers, the dispute shall be submitted in writing by both parties to the State Controller, whose decision on the dispute shall be final.

8. Default; Termination. Any failure of either Party to perform in accordance with the terms of this Agreement shall constitute a breach of the Agreement. CDOT reserves the right to terminate this Agreement upon thirty (30) days written notice to HPTE of its nonperformance of the Study Services; provided, however that HPTE shall not be in default under this Agreement if it has promptly commenced a cure of such nonperformance and is diligently pursuing the same. Any finding of nonperformance and failure to cure under this Section shall be referred for dispute resolution as provided for in Section 7 prior to any termination becoming effective. In the event

of termination, HPTE shall be required to reimburse CDOT for the value of the Study Services not yet completed as of the date of termination.

9. Delegation. Except as identified or otherwise implied in the Scope of Work, the duties and obligations of HPTE with respect to the provision of the Study Services under this Agreement shall not be assigned, delegated or subcontracted without the prior consent of CDOT. All subcontractors will be subject to the requirements of this Agreement.

10. Modification. This Agreement is subject to such modifications as may be required by changes in federal or state law, or their implementing regulations. Any such required modification shall automatically be incorporated into and be part of this Agreement on the effective date of such change as if fully set forth herein.

11. Severability. To the extent that this Agreement may be executed and performance of the obligations of the Parties may be accomplished within the intent of the Agreement, the terms of this Agreement are severable, and should any term or provision hereof be declared invalid or become inoperative for any reason, such invalidity or failure shall not affect the validity of any other term or provision hereof.

12. Waiver. The waiver of any breach of a term, provision, or requirement of this Agreement shall not be construed or deemed as a waiver of any subsequent breach of such term, provision, or requirement, or of any other term, provision or requirement, or the same term, provision or requirement upon subsequent breach.

13. No Third Party Beneficiaries. This agreement shall inure to the benefit of and be binding only upon the Parties hereto and their respective successors and assigns. No third party beneficiary rights or benefits of any kind are expressly or impliedly provided herein. It is expressly understood and agreed that the enforcement of the terms and conditions of this Agreement and all rights of action relating to such enforcement, shall be strictly reserved to CDOT and HPTE. Nothing contained in this Agreement shall give or allow any claim or right of action whatsoever by any other third person. It is the express intention of CDOT and HPTE that any such person or entity, other than CDOT or HPTE, receiving services or benefits under this Agreement, shall be deemed an incidental beneficiary only.

14. Entire Understanding. This Agreement is intended as the complete integration of all understandings between the Parties. No prior or contemporaneous addition, deletion, or other amendment hereto shall have any force or affect whatsoever. Except as otherwise provided in this Agreement, no subsequent renewal, addition, deletion, or other amendment hereto shall have any force or effect unless embodied in a writing executed and approved by the Parties.

15. Governmental Immunity. No term or condition of this Agreement shall be construed or interpreted as a waiver, express or implied, of any of the immunities, rights, benefits, protections, or other provisions, of the Colorado Governmental Immunity Act, C.R.S. § 24-10-101 *et seq.*, or the Federal Tort Claims Act, 28 U.S.C. §§ 1346(b) and 2671 *et seq.*, as applicable now or hereafter amended.

16. Adherence to Laws. At all times during the performance of this Agreement, HPTE shall strictly adhere to all applicable federal and state laws, rules, and regulations that have been or may hereafter be established, including, but not limited to state and federal laws respecting discrimination and unfair employment practices.

17. Legal Authority. The Parties each warrant that they possess the legal authority to enter into this Agreement and that each has taken all actions required by its procedures, by-laws, and/or applicable law to exercise that authority, and to lawfully authorize its undersigned signatory to execute this Agreement and to bind CDOT or HPTE, as applicable, to its terms. The persons executing this Agreement on behalf of CDOT and HPTE each warrant that they have full authorization to execute this Agreement.

18. Notices. All communications relating to the day-to-day activities for the work shall be exchanged between representatives of CDOT and HPTE. All communication, notices, and correspondence shall be addressed to the individuals identified below. Either Party may, from time to time, designate in writing new or substitute representatives.

If to CDOT:

Region 1
Regional Transportation Director
Colorado Department of Transportation
2829 W. Howard Place, 2nd floor
Denver, CO 80204

If to HPTE:

Nicholas Farber, Director
HPTE
Colorado Department of Transportation
2829 W. Howard Place, 5th floor
Denver, CO 80204
Email: nicholas.farber@state.co.us

19. Controller's Approval. This agreement shall not be deemed valid until it has been approved by the State Controller or such assistant as he or she may designate.

[Signature page follows.]

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the day and year first above written.

STATE OF COLORADO
Jared S. Polis, Governor

COLORADO HIGH PERFORMANCE
TRANSPORTATION ENTERPRISE

By: _____
SHOSHANA LEW
EXECUTIVE DIRECTOR
DEPARTMENT OF TRANSPORTATION

By: _____
NICHOLAS J. FARBER
HPTE DIRECTOR

APPROVED:

Philip J. Weiser
ATTORNEY GENERAL

By: _____
ASSISTANT ATTORNEY GENERAL

ALL CONTRACTS REQUIRE APPROVAL BY THE STATE CONTROLLER

§ 24-30-202, C.R.S. requires the State Controller to approve all State Contracts. This Agreement is not valid until signed and dated below by the State Controller or delegate of the State of Colorado.

<p>STATE CONTROLLER Robert Jaros, CPA, MBA, JD</p> <p>By: _____</p> <p>Date: _____</p>

EXHIBIT A
Scope of Work for Floyd Hill Revenue Gap Study
(Attached)

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EXHIBIT A, STATEMENT OF WORK AND BUDGET

STATEMENT OF WORK

The High-Performance Transportation Enterprise ("HPTE") will utilize the services of the Contractor to perform public/stakeholder outreach, traffic and revenue (T&R) analysis, and financial analysis for the Floyd Hill Funding Gap Study (the Project). The Project comprises the segment of I-70 between milepost 248 (just east of the Beaver Brook/Floyd Hill interchange) and Exit 241 (Idaho Springs/Colorado Blvd., west of the Veterans Memorial Tunnel).

SCOPE OF SERVICES

Contractor will provide public/stakeholder outreach services including, but not limited to:

- **Kick-Off Meeting with HPTE and Internal Project Team**

This task includes:

- Understanding HPTE's objectives and goals.
- Determining success factors, milestones, and parameters of the decision-making process.
- Confirming Floyd Hill Project Leadership Team (PLT) membership and PLT/Collaborative Effort (CE) interview questions.
- Obtaining initial feedback and input on conceptual funding options.
- Obtaining initial feedback and input on criteria for evaluating options.

- **PLT and CE Interviews**

This task includes:

- Reviewing conceptual options.
- Understanding various interests, positions, and priorities of PLT/CE members.
- Soliciting initial ideas/reactions on evaluation process for funding options.
- Understanding the role of the general public and their input.
- Clarifying the decision-making process.
- Gaining insights on the role and integration of full CE.

- **PLT Meeting #1**

This task includes:

- Reviewing interview themes.
- Developing and adopting PLT charter.
- Reviewing the full range of funding options and grants.
- Reviewing and confirming funding gap evaluation criteria.
- Confirming the decision-making process/timeframe and public outreach strategy/schedule.

- **Full CE Update #1**

This task includes:

- Ensuring broader understanding of the process, timeline, milestones, and next steps.

- **PLT Meeting #2**

This task includes:

- Presenting sketch-level T&R results for each option.
- Reaching a consensus on options to be evaluated by Level 2 T&R analysis, based on evaluation criteria and stakeholder input.

- Using familiar processes to narrow funding options.
- Identifying/determining acceptable revenue generation and financial investment objectives for refinement.
- Ensuring PLT understands the potential effects of each option.
- **PLT Meeting #3**

This task includes:

- Presenting preliminary financial models to measure the viability of each funding option identified by the PLT, based on diverse project delivery methods.
- Identifying preferred funding option using evaluation criteria.
- Ascertaining the information needs and preferred alternatives to be presented to the CE and stakeholders.
- **Full CE Update #2**

This task includes:

- Presenting the preferred funding option.
- Soliciting input from the CE on the preferred funding option.
- Determining whether a public meeting/public engagement process is needed.
- **PLT Meeting #4**

This task includes:

- Revising the preferred funding alternative based on CE input
- Documenting the process and final decision
- Developing and delivering a process evaluation survey to stakeholders

Contractor will provide traffic and revenue (T&R) analysis services including, but not limited to:

- **Review Existing Documents and Reports**
- **Review and Incorporate Inputs and Feedback from Public/Stakeholder Outreach Process.**
- **Adopt CDOT's StateFocus and DRCOG's FOCUS 2.2 Activity-Based Models**
- **Review CDOT's and DRCOG's Demographic Forecasts**

Contractor will review demographic forecasts for population/employment within the project's area of influence and the external station demand forecasts for activities at resorts on the western side of the corridor.

- **Review and Modify Coded Roadway Network**

Contractor will modify the coded roadway network to ensure the base network is correct and the proposed alignments are included in each analysis scenario.

- **Develop a Data Collection Plan**

Contractor will develop a data collection plan to supplement the traffic data currently available along the corridor.

- **Develop a Calibrated Base Year Model**

This task includes:

- Developing a subarea model from the DRCOG TDM that includes the project corridor and the

- competing facilities (i.e., US 40, US 6)
- Calibrating the subarea model to the collected traffic counts—including tolled shoulder lane volumes—and the acquired OD data
 - Developing a microscopic model of the project corridor using the TDM’s calibrated demand as input.
 - Calibrating the effect of slope in the microscopic model to replicate observed corridor speeds.
 - Developing the volume-delay function from the microscopic model results for feedback into the macroscopic TDM, then repeating the calibration process.
 - Repeating the above process until the TDM results and microscopic model results are in accord.
 - Performing the calibration process for a typical weekday and a typical weekend due to the inherent differences in the nature of their demands.
- Developing a toll-diversion model based on stated preference/revealed preference (SP/RP) surveys. Since the users of the corridor have a history of using the MEXL, Contractor will use the available data to estimate the value-of-time saving (VOT) for corridor users. Contractor also recommends performing an SP survey—via sub consultant RSG— to gain insight on the willingness of travelers to pay for using a tolled alternative if travel time reliability is significantly improved.

- **Scenario Analysis**

This task will be performed in two parts. Part 1 comprises a set of sketch-level T&R analyses to evaluate the viability of a wide range of alternatives. Contractor has developed tools to assist with performing a simplified T&R analysis in an efficient manner. Part 2 comprises a set of detailed Level 2 T&R analyses for a limited number of selected alternatives based on the comparative outcome of the sketch-level analysis and the consensus reached through stakeholder and public outreach (per Public/Stakeholder Outreach services to be provided).

The detailed scenario analysis will include feedback between each scenario’s microscopic operational model and the macroscopic TDM to ensure that the effects of operational/geometrical improvements along the corridor and the major interchanges are reasonably seen at the macroscopic level, which includes the toll-diversion module.

The microscopic models will account for the shift of traffic between competing routes and I-70 based on travel time changes resulting from implementing operational/geometric improvements along the corridor.

- **Develop Measures of Effectiveness.**

Contractor will evaluate network performance in the model subarea and provide overall network performance measures such as vehicle miles traveled, vehicle hours traveled, average travel times, increased reliability and vehicle throughput.

Contractor will provide financial analysis services including, but not limited to:

- **High-Level Analysis**

Contractor will conduct a high-level analysis to determine financial feasibility and shortlist potential delivery methods.

Sample inputs may include the following:

- Basic project assumptions
- Assumed toll rates (including MEXL performance, caps, exceptions for local residents, etc.)
- High-level financing assumptions (including federal grant and loan programs)
- HPTE Board tolling policies
- Corridor O&M costs, including shared HPTE/CDOT costs

Sample outputs may include:

- Annualized cash flows
 - Total development costs
 - Gross and net revenues
 - Project sources and uses
- **Detailed Comparative Analysis**

Contractor will conduct a detailed comparative analysis to evaluate delivery alternatives.

Sample inputs may include:

- Detailed project assumptions as the EA develops, including cost information at a unit level, targeted federal loan and grant programs, and spend curve
- Detailed financing costs and commercial structuring assumptions, operating costs, and maintenance costs
- Risk transfer valuation and delivery model premiums

Sample outputs may include:

- Peak/off-peak toll rates
- Gross cash flows
- Comparative NPV figures
- Sources and uses

- **Granular Financial Analysis**

Contractor will conduct a granular financial analysis for utilization during transaction procurement and negotiation.

Sample inputs may include:

- Detailed project assumptions, including program cost information at a unit level and a spend curve, detailed financing costs, commercial structuring assumptions, operating costs for both CDOT and HPTE, debt interest rates, and repayment provisions (as applicable)
- Specific deal terms associated with developer bids

Sample outputs may include:

- Full cash flow waterfall associated with project delivery for utilization negotiation
- Comparative NPV and project cash flows for specific procurement respondents

BUDGET:

Contractor shall send Invoices to State on a monthly basis. Those Invoices shall be based upon the tasks, rates, and hours detailed in the following chart:

Key Personnel	Tasks										Total Hours	Loaded Hourly Rate	Cost
	1. Public/Stakeholder Outreach	2. Traffic and Revenue Analysis											
	2.1. Review Existing Documents and Reports	2.2. Review and Incorporate Inputs and Feedback from Public/Stakeholder Outreach Process	2.3. Adopt CDOT's State Focus and DRCOG's FOCUS 2.2 Activity Based Models	2.4. Review CDOT's and DRCOG's Demographic Forecasts	2.5. Review and Modify Coded Roadway Network	2.6. Develop a Data Collection Plan	2.7. Develop a Calibrated Base Year Model	2.8. Scenario Analysis	2.9. Develop Measure of Effectiveness	3. Financial Analysis			
C&M Associates, Inc. (C&M)													
Engagement Director	8	16	4	16					40	20	104	\$301	\$31,339
Project Manager	40	40	80	40	20	80	120	160	80	80	660	\$279	\$183,966
Principal Engineer	40	40	96	40	20	80	120	160	40	40	636	\$226	\$143,738
Senior Engineer/Planner	40	40	120	40	52	80	120	160	80	80	732	\$136	\$99,260
Engineer/Planner	64	64	180	64	80	80	120	240	80	80	972	\$105	\$102,515
Document Controller	8							40	24		72	\$90	\$6,509
Hours Per Task	200	200	480	200	172	320	480	800	324		3,176		
Cost Per Task	\$35,497	\$37,185	\$80,457	\$37,185	\$25,583	\$59,665	\$89,497	\$143,436	\$58,821				\$567,326
KPMG													
Partner/Principal/Managing Director											116	\$575	\$66,700
Director											184	\$495	\$91,080
Manager											228	\$425	\$96,900
Senior Associate / Associate											312	\$345	\$107,640
Hours Per Task											840		
Cost Per Task													\$362,320
													\$362,320
CDR													
Principal/Executive Director	300										300	\$205	\$61,500
Project Manager	348										348	\$165	\$57,420
Project Associate	196										196	\$125	\$24,500
Hours Per Task	844										1684		
Cost Per Task	\$143,420												\$143,420
Economic & Planning System, Inc. (EPS)													
Principal In Charge				100							100	\$240	\$24,000
Vice President				136							136	\$185	\$25,160
Analyst				260							260	\$100	\$26,000
Hours Per Task				496							496		
Cost Per Task				\$75,160									\$75,160
Resource Systems Group, Inc. (RSG)													
President			8								8	\$393	\$3,144
Director			80								80	\$203	\$16,240
Consultant			80								80	\$127	\$10,160
Senior Analyst			164								164	\$106	\$17,384
Analyst			368								368	\$79	\$29,072
Hours Per Task			700								700		
Cost Per Task			\$76,000										\$76,000
Direct Costs													
Traffic Counts		\$19,900											
Survey Implementation			\$24,000										
Socioeconomic data acquisition				\$2,000									
Copy, Print and Postage	\$2,800												
Travel	\$12,062												
Coordination with APEX									\$15,000				
Subtotal Direct Cost	\$14,862	\$19,900	\$24,000	\$2,000					\$15,000				\$75,762
Grand Total (Hours Per Task)	844	200	200	1,180	696	172	320	480	800	324	840		4,372.00
Grand Total (Cost Per Task)	\$143,420	\$50,359	\$57,085	\$180,457	\$114,345	\$25,583	\$59,665	\$89,497	\$143,436	\$73,821	\$362,320		\$1,299,988

The breakdown of direct costs regarding traffic counts is provided below:

Traffic Data Collection Items	Unit	Unit Cost	Quantity	Cost
All Traffic Data Services, Inc.				
24-Hour Video Classification Counts - Main Lanes	per camera/day	\$ 300.00	36	\$ 10,800.00
2-Hour Turning Movement Count, Major Intersection, with Classification, Weekday	each	\$ 350.00	26	\$ 9,100.00
TOTAL COST:				\$19,900.00

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