

NORTH CAROLINA
WAKE COUNTY

CONTRACT FOR PROFESSIONAL SERVICES

THIS CONTRACT (the “Contract”) is entered into on _____, 20____, by and between _____, hereinafter referred to as the “Contractor;” and the Capital Area Metropolitan Planning Organization, a N.C. metropolitan transportation planning organization, authorized and existing under Article 16 of Chapter 136 of the N.C. General Statutes (“CAMPO”); (Collectively, the “Parties”).

RECITALS:

WHEREAS, in furtherance of its official responsibilities, obligations, and objectives, CAMPO desires to engage a private contractor to perform certain services for CAMPO as further described in this Contract; and

WHEREAS, CAMPO has completed the necessary steps for solicitation and selection of an individual or firm to perform such services, all in accord with CAMPO policies and applicable legal requirements; and

WHEREAS, CAMPO has agreed to engage and contract with the Contractor, and the Contractor has agreed to contract with CAMPO, for performance of the services described herein, and in accordance with the further terms and conditions of this Contract; and

WHEREAS, CAMPO and the Contractor recognize and acknowledge that the Town of Cary (the “Town”) serves as the Lead Planning Agency (“LPA”) for CAMPO and, in this capacity, performs financial and other services in support of CAMPO’s official functions, all in accordance with that Agreement between CAMPO and the Town of Cary (December 16, 2022), as amended, which Agreement is incorporated herein by reference.

NOW THEREFORE, in consideration of the sums to be paid to the Contractor as provided herein, and other good and valuable consideration, the Contractor and CAMPO contract and agree as follows:

1. Scope of Services

The Contractor shall perform for CAMPO the following described services (hereinafter at times referred to as the “work”, “project work”, or “project services”:

Perform necessary data collection and analysis and preparation of a written report on recommended updates to the bicycle and pedestrian element of the Metropolitan Transportation Plan (MTP), as more specifically described in Exhibit 1, attached, entitled “Update to the Bicycle/Pedestrian Element of the Metropolitan Transportation Plan (MTP)”.

2. Time of Performance

In performing the services described in this Contract, it is mutually agreed that **time is of the essence**. The Contractor shall begin work without delay following execution of this Contract by both parties, and upon CAMPO's giving to the Contractor Notice to Proceed with the work. The work shall be completed by June 20, 2025

The term of this Agreement shall commence upon execution by all parties and shall continue through the Contractor's satisfactory completion of all work, services, and tasks described in the Contract.

3. Compensation; Time of Payment

(Billing by Time, Charges, and Expenses) For services to be performed hereunder, CAMPO shall pay the Contractor for the actual work satisfactorily performed, in accordance with the Statement of Fees and Charges set forth in Exhibit 2, attached. Total compensation may in no event exceed the sum of \$249,960.35, except pursuant to a duly authorized, written amendment to this Contract, properly executed by the Parties.

The Contractor shall submit to CAMPO quarterly invoices as work is completed, describing in reasonable detail the completed work. Invoices will be reviewed and approved by the CAMPO Executive Director or his designee, prior to payment.

Payment terms shall be: Net 30 days from the date of CAMPO's receipt of the Contractor's invoice. Invoices may be submitted through the USPS mail, by personal delivery, or via email. Emailing of invoices is encouraged, to: *Gaby.Lawlor@campo-nc.us*. All invoices **must include** the following **Purchase Order Number**_____. Invoices submitted without the correct purchase order number will result in delayed payment.

4. Quality of Services and Standard of Care.

All work performed under this Contract (including all phases of project work to which the Contract applies) shall be performed in a high quality and professional manner, to the reasonable satisfaction of CAMPO, and shall conform to all prevailing industry and professional standards. The standard of care for services performed or furnished by Contractor under this Contract will be the care, thoroughness, and skill ordinarily provided by members of Contractor's profession, practicing under generally similar conditions, at the same general time, and in the same general locality.

As deemed appropriate in the performance or furnishing of professional and related services hereunder, the Contractor may engage subcontractor(s), including without limitation consultant(s) or sub-consultant(s). The Contractor is not authorized to engage any such individuals or businesses which shall have been found by CAMPO to be not acceptable in the

performance of work for CAMPO. It shall be the responsibility of the Contractor to confer with CAMPO in this regard prior to engaging for any such subcontractor services

5. Notices

All notices, requests for payment, or other communications arising hereunder shall be sent to the following:

CAMPO:
Inc.
Attn:
Capital Area MPO

Cary, NC 27601
Telephone: 919-996-4400

Contractor: Alta Planning + Design,

Attn: Contract Administrator
711 SE Grand Ave
Portland, OR 97214

Telephone: 503-230-9862
Email: contracts@altago.com

All notices regarding a dispute arising under this Agreement shall also be provided to:

Capital Area MPO
Attn: Executive Director

6. Actions in Conformance with Lead Planning Agency Agreement.

The Parties agree to take all reasonable steps and otherwise act in conformance with applicable provisions of the Lead Planning Agency Agreement between CAMPO and the Town of Cary as referenced in the Recitals. In recognition of the Town's role as LPA, the Contractor shall cooperate with the Town of Cary in bookkeeping, invoicing, and other financial matters arising in the administration of this Contract.

7. Insurance

As indicated by the notation of applicability set forth herein, the Contractor agrees to continuously maintain, on a primary basis, at its sole expense and at all times during the term of this Contract, the applicable coverages and limits, set forth below. The requirements contained herein, as well as CAMPO's review or acceptance of insurance maintained by Contractor is not intended to and shall not in any manner limit or qualify the liabilities or obligations of the Contractor under this Contract.

Commercial General Liability – Combined single limit of no less than \$1,000,000 each occurrence and \$2,000,000 aggregate. Coverage shall not contain any endorsement(s) excluding

nor limiting Product/Completed Operations, Contractual Liability or Cross Liability.

Applicable: Yes ___ No ___.

Automobile Liability – Limits of no less than \$1,000,000 Combined Single Limit. Coverage shall include liability for Owned, Non-Owned and Hired automobiles. In the event Contractor does not own automobiles, Contractor agrees to maintain coverage for Hired and Non-Owned Auto Liability, which may be satisfied by way of endorsement to the Commercial General Liability policy or separate Auto Liability policy. Automobile coverage is only necessary if vehicles are used in the provision of services under this Contract.

Applicable: Yes ___ No ___

Worker's Compensation & Employers Liability – The Contractor agrees to maintain Worker's Compensation Insurance in accordance with North Carolina General Statute Chapter 97 (relating to statutory limits and number of employees liability) of not less than \$1,000,000 each accident.

Applicable: Yes ___ No ___.

Professional Liability (Errors and Omissions Coverage) – The Contractor agrees to maintain insurance with limits of not less than \$1,000,000 each claim. This coverage is necessary for professional services such as engineering, architecture, or when otherwise required by CAMPO.

Applicable: Yes ___ No ___.

Umbrella or Excess Liability – Contractor may satisfy the minimum liability limits required above under an Umbrella or Excess Liability policy. There is no minimum Per Occurrence limit of liability under the Umbrella or Excess Liability, however, the Annual Aggregate limits shall not be less than the highest 'Each Occurrence' limit for required policies. The Contractor agrees to endorse CAMPO and the Town of Cary as additional insured parties on the Umbrella or Excess Liability policy unless the Certificate of Insurance states the Umbrella or Excess Liability provides coverage on a "Follow-Form" basis.

Additional Insured – Contractor agrees to endorse CAMPO and the Town of Cary as additional insureds on the Commercial General Liability, Auto Liability policies. The endorsement shall read: "Capital Area Metropolitan Planning Organization and the Town of Cary? are named additional insured as their interest may appear.", or equivalent phrasing.

Certificate of Insurance – The Contractor agrees to provide both CAMPO and the Town of Cary a Certificate of Insurance evidencing that all coverages, limits, and endorsements required herein are continuously maintained in full force and effect. If the Contractor receives a non-renewal or cancellation notice from an insurance carrier affording coverage required herein, or receives notice that coverage no longer complies with the insurance requirements herein, Contractor agrees to notify CAMPO and the Town of Cary? within five (5) business days with a copy of the non-renewal or cancellation notice, or provide to CAMPO a reasonably sufficient statement identifying the coverage(s) which is/are no longer in compliance. The Certificate Holders' addresses should read as follows:

All insurance coverages referenced above shall be provided by an insurance company authorized to do business in the State of North Carolina.

8. Indemnity

A. PROFESSIONAL SERVICES CONTRACTOR'S INDEMNIFICATION
(EXCLUSIVE OF DESIGN SERVICES) TO CAMPO

a. To the fullest extent allowed by law, the Contractor shall defend, indemnify and hold harmless CAMPO, its officers, officials, employees, agents, or indemnities (collectively called "Indemnified Parties") from and against those Losses, liabilities, damages, and costs caused by, arising out of, resulting from, or in connection with the execution of the work provided for in this Agreement, when the Fault of the Contractor or its Derivative Parties is a proximate cause of the Loss, liability, damage, or expense indemnified.

b. Costs and expenses shall include reasonable attorneys' fees, litigation or arbitration expenses, and court costs actually incurred by the Indemnified Parties to defend against third-party claims alleged in any court, tribunal, or alternative dispute resolution procedure required of any of the Indemnified Parties by law or by contract, but only if the Fault of the Contractor or its Derivative Parties is a proximate cause of the attorney's fees, litigation or arbitration expenses, or court costs to be indemnified.

c. The Contractor's duty to indemnify, defend, and hold harmless described hereinabove shall survive the termination or expiration of this Contract.

B. PROFESSIONAL SERVICES CONTRACTOR'S INDEMNIFICATION
(EXCLUSIVE OF DESIGN SERVICES) TO THE TOWN OF CARY

a. To the fullest extent allowed by law, the Contractor shall defend, indemnify and hold harmless the Town of Cary, its officers, officials, employees, agents, or indemnities (collectively called "Indemnified Parties") from and against those Losses, liabilities, damages, and costs caused by, arising out of, resulting from, or in connection with the execution of the work provided for in this Agreement, when the Fault of the Contractor or its Derivative Parties is a proximate cause of the Loss, liability, damage, or expense indemnified.

b. Costs and expenses shall include reasonable attorneys' fees, litigation or arbitration expenses, and court costs actually incurred by the Indemnified Parties to defend against third-party claims alleged in any court, tribunal, or alternative dispute resolution procedure required of any of the Indemnified Parties by law or by contract, but only if the Fault of the Contractor or its Derivative Parties is a proximate cause of the attorney's fees, litigation or arbitration expenses, or court costs to be indemnified.

c. The Contractor's duty to indemnify, defend, and hold harmless described hereinabove shall survive the termination or expiration of this Contract.

C. Definitions:

1. For the purposes of this Section, the term “Fault” shall mean ; negligent, reckless, or intentional act or omission constituting a tort under applicable statutes or common law; or violation of applicable statutes or regulations.
2. For the purposes of this Section, the term “Loss” or “Losses” shall include, but not be limited to, fines, penalties, and/or judgments issued or levied by any local, state, or federal governmental entity.
3. For the purposes of this Section, the term “Derivative Parties” shall mean any of the Contractor’s subcontractors, agents, employees, or other persons or entities for which the Contractor may be liable or responsible because of any statutory, tort, or contractual duty.

9. Intellectual Property

Subject expressly to the provisions of paragraph 17 of this Agreement, any information, data, instruments, documents, studies, reports or deliverables given to, exposed to, or prepared or assembled by the Contractor under this Contract shall be kept as confidential proprietary information of CAMPO and not divulged or made available to any individual or organization without the prior written approval of CAMPO. Such information, data, instruments, documents, studies, reports or deliverables will be the sole property of CAMPO and not the Contractor.

All intellectual property, including, but not limited to, patentable inventions, patentable plans, copyrightable works, mask works, trademarks, service marks and trade secrets invented, developed, created or discovered in performance of this Contract shall be the property of the CAMPO.

Copyright in and to any copyrightable work, including, but not limited to, copy, art, negatives, photographs, designs, text, software, or documentation created as part of the Contractor’s performance of this project shall vest in the CAMPO. Works of authorship and contributions to works of authorship created by the Contractor’s performance of this project are hereby agreed to be ‘works made for hire’ within the meaning of 17 U.S.C. 201.

10. Force Majeure

Except as otherwise provided in any environmental laws, rules, regulations, or ordinances applicable to the parties and the services performed under this Contract, neither party shall be deemed to be in default of its obligations hereunder if and so long as it is prevented from performing such obligations by an act of war, hostile foreign actions, nuclear explosion, earthquake, hurricane, tornado, or other catastrophic natural event or act of God. Either party to the Contract must take reasonable measures and implement reasonable protections when a weather event otherwise defined as a force majeure event is forecast to be eligible to be excused from the performance otherwise required under this Contract by this provision.

11. Advertising

The Contractor shall not use the existence of this Contract, or the name of the Town of Cary or CAMPO, as part of any advertising without the prior written approval of CAMPO and the Town of Cary, respectively.

12. Cancellation.

CAMPO may terminate this Contract at any time by providing thirty (30) days written notice to the Contractor. In addition, if Contractor shall fail to fulfill in a timely and proper manner the obligations under this Contract for any reason, including the voluntary or involuntary declaration of bankruptcy, CAMPO shall have the right to terminate this Contract by giving written notice to the Contractor, and in such event, termination will be effective upon receipt. Upon receipt of such notice, the Contractor shall cease performance immediately.

In the event of early termination, Contractor shall be entitled to receive just and equitable compensation for satisfactory work completed and associated costs incurred prior to the Contractor's receipt of notice of termination. Notwithstanding the foregoing, in no event will the total amount due to Contractor under this section exceed the total amount due Contractor under the Contract. The Contractor shall not be relieved of liability to CAMPO for damages sustained by CAMPO by virtue of any breach of this Contract, and CAMPO may withhold any payment due to the Contractor for the purpose of setoff until such time as CAMPO can determine the exact amount of damages due CAMPO resulting from the breach.

Payment of compensation specified in this Contract, its continuation, or any renewal thereof, is dependent upon and subject to the allocation or appropriation of funds to CAMPO for the purpose set forth in this Contract.

13. Laws/Safety Standards

The Contractor shall comply with all laws, ordinances, codes, rules, regulations, safety standards and licensing requirements that are applicable to the conduct of its business, including those of Federal, State, and local agencies having jurisdiction and/or authority regarding the Contractor's work under the Contract.

Contractor must comply with *North Carolina Occupational Safety and Health Standards for General Industry, 29CFR 1910*. In addition, Contractor shall comply with all applicable occupational health and safety and environmental rules and regulations.

As applicable to the scope of work under this Contract, the Contractor shall effectively fulfill and manage their safety and health responsibilities including:

A. Accident Prevention

Prevent injuries and illnesses to their employees and others on or near their job site. Contractor managers and supervisors shall ensure personnel safety by strict adherence to established safety rules and procedures.

B. Environmental Protection

Protect the environment on, near, and around their work site by compliance with all applicable environmental regulations.

C. Employee Education and Training

Provide education and training to all subcontractors, consultants, and employees before they are exposed to potential workplace or other hazards, as required by specific OSHA Standards.

14. Applicability of North Carolina Public Records Law

Notwithstanding any other provisions of this Contract, this Contract and all materials submitted to CAMPO by the Contractor are subject to the public records laws of the State of North Carolina. It is the responsibility of the Contractor to properly designate materials at the time of initial disclosure to CAMPO that may be protected from disclosure as "Confidential" and/or "Trade Secrets" under North Carolina law as such and in the form required by law prior to the submission of such materials to CAMPO. The Contractor understands and agrees that CAMPO may take any and all actions necessary to comply with federal, state, and local laws and/or judicial orders and such actions will not constitute a breach of the terms of this Contract. To the extent that any other provisions of this Contract conflict with this paragraph, the provisions of this section shall control.

15. Audit

At their election, CAMPO and/or the Town of Cary may conduct, or provide for, an audit or audits of the Contractor's financial, performance and compliance records maintained in connection with the operations and services performed under this Contract. CAMPO and/or the Town may conduct such audits or inspections throughout the term of this Contract, and for a period of three years after final payment to the Contractor, or for a longer period if such is required by law.

In the event of such an audit, the Contractor agrees that CAMPO or the Town, or its/their designated representative(s), shall have the right to review and to copy any work, materials, payrolls, records, data, supporting documentation, or any other sources of information and matters that may in CAMPO or the Town's judgment have any bearing on or pertain to any matters, rights, duties or obligations arising under the Contract. The Contractor agrees that CAMPO and/or the Town, or its/their designated representative, shall have access to Contractor's personnel records pertaining to the performance of this contract, including but not limited to financial, performance, operations and compliance records. The Contractor agrees to maintain such records for a minimum of three years after final payment, unless a longer period of records retention is required by law. The Contractor agrees to allow CAMPO and the Town, or its/their designee to access to such records during normal business hours and to allow interviews of any employees who might reasonably have information related to such records. CAMPO and the Town's authorized representative or designee shall have reasonable access to the Contractor's facilities, shall be allowed to interview all current or former employees to discuss matters

pertinent to the performance of this Contract, and shall be provided an adequate and appropriate workspace to conduct audits as provided for herein.

The Contractor agrees to include similar provisions regarding the rights of CAMPO and the Town to conduct auditing activities in any contract with employees, consultants or subcontractors of the Contractor for performance of work under this Contract.

CAMPO and the Town agree to provide the Contractor with an opportunity to discuss and respond to any findings before any final audit report is issued.

CAMPO's and the Town's rights under provisions of this Contract regarding audits shall survive the termination of this contract.

16. E – Verify

Contractor shall comply with E-Verify, the federal E-Verify program operated by the United States Department of Homeland Security and other federal agencies, or any successor or equivalent program used to verify the work authorization of newly hired employees pursuant to federal law and as in accordance with N.C.G.S. §64-25 et seq. In addition, to the best of Contractor's knowledge, any subcontractor employed by Contractor as a part of this contract shall be in compliance with the requirements of E-Verify and N.C.G.S. §64-25 et seq.

17. Iran Divestment Act Certification.

Contractor certifies that, as of the date listed below, it is not on the Final Divestment List as created by the State Treasurer pursuant to N.C.G.S. § 147-86.55, *et seq.* In compliance with the requirements of the Iran Divestment Act and N.C.G.S. § 147-86.59, Contractor shall not utilize in the performance of the contract any subcontractor that is identified on the Final Divestment List.

18. Non-discrimination

To the extent permitted by law, the parties hereto for themselves, their agents, officials, employees, and servants agree, with respect to the subject matter of this contract, not to discriminate in any manner based on race, color, creed, national origin, sex, age, disability, handicap, marital status, pregnancy, or sexual orientation. The parties further agree, to the extent permitted by law, to comply with all State and Federal statutes and regulations prohibiting discrimination, including but not limited to Title VI of the Civil Rights Act of 1964 (42 U.C.C. 2000 et seq.); the Fair Housing Act, Title VII of the Civil Rights Act of 1968 (42 U.S.C. 3601 et seq.); Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794); the Age Discrimination Act of 1975, as amended (42 U.S.C.6101 et seq.); and Title II of the Americans with Disabilities Act of 1990.

19. Minority or Women Owned Businesses

Consistent with, and in furtherance of the above-stated agreements not to discriminate on the basis of race, color, creed, national origin, sex, age, marital status, pregnancy, or sexual orientation, the Contractor will pursue an affirmative policy of fostering, promoting and conducting business with and engagement of women and minority owned business enterprises ("WMBE"). Further, the Contractor shall adhere to any State and Federal MWBE requirements associated with any governmental funding involved in this Contract.

20. Federal Contracting Requirements.

The Contractor shall, with respect to the subject matter of this Contract and all services provided or performed hereunder be bound, and abide by, the requirements of applicable federal laws set forth in Exhibit 3, attached. Further, with respect to the subject matter of this contract and services to be provided or performed hereunder, the Contractor shall take all reasonable steps to insure that all of its employees, officers, agents, (sub)contractors, and (sub)consultants abide by such federal requirements, and shall, without limitation, provide reasonable notice of such requirements to its employees, officers, and agents, and shall reference and include such federal requirements in all its contracts with (sub)contractors and (sub)consultants.

22. Assignment

This Contract may not be assigned without the express written consent of CAMPO.

23. Applicable Law

All matters relating to this Contract shall be governed by the laws of the State of North Carolina, without regard to its choice of law provisions, and venue for any action relating to this Contract shall be Wake County Civil Superior Court or the United States District Court for the Eastern District of North Carolina, Eastern Division.

24. Miscellaneous.

The Contractor shall be responsible for the proper custody and care of any property furnished or purchased by CAMPO or the Town of Cary for use in connection with the performance of this Contract and, without limitation as to further claims, will reimburse CAMPO or the Town of Cary for, as applicable, repair costs or the replacement value of such property.

The Contractor shall be considered an Independent Contractor, and as such shall be wholly responsible for the work to be performed, including the supervision of its employees, consultants, or subcontractors. Nothing herein is intended or will be construed to establish any agency, partnership, or joint venture relationship between the Parties. The Contractor represents that it has, or will secure at its own expense, all resources and personnel required to satisfactorily

perform the required services under this Contract. Any employees, sub-contractors, and/or consultants performing work hereunder shall not be employees of, or have any individual contractual relationship with, CAMPO.

This Contract may be amended only by written agreement of the parties executed by their authorized representatives.

This Contract, and any documents incorporated below, represent the entire Contract between the parties and suspend all prior oral or written statements, agreements, or contracts between the Parties.

Specifically incorporated into this Contract are the following attachments, or if not physically attached, are incorporated fully herein by reference:

- Exhibit 1: Scope of Services
- Exhibit 2: Statement of Fees and Charges
- Exhibit 3: CAMPO Requirements under Federal Laws
- CAMPO-Town of Cary Lead Planning Agency Agreement 2023 - not attached-incorporated by reference.

In the case of any conflict between this Contract and any of the above incorporated attachments, the terms of this Contract shall govern.

IN WITNESS WHEREOF, the Contractor has executed the Contract by the signature of its duly authorized officer(s), and CAMPO has executed the Contract, with proper authority, by the signature of its Executive Director, with the official seal affixed, the day and year first above written.

THE CONTRACTOR:

By:

Matt Hayes, Vice President

ATTEST (If corporate):

By: _____

(Affix Seal)

THE CAPITAL AREA METROPOLITAN PLANNING ORGANIZATION “CAMPO”

By: _____
Chris Lukasina, Executive Director

(Affix Seal)



To: Capital Area Metropolitan Planning Organization (CAMPO)

From: Alta Planning + Design

Date: April 26, 2023

Re: Update to the Bicycle and Pedestrian Element of the Metropolitan Transportation Plan: Draft Scope of Work

Task 1: Project Management

Throughout the project, Alta's Project Manager will coordinate with CAMPO's Project Manager, including email and a monthly scheduled conference call meeting. In addition to ongoing communication, the Alta Project Manager will provide monthly status reports, submitted with invoicing. Should any urgent or time-sensitive issues arise, Alta's Project Manager will not wait until the monthly scheduled meeting to notify the CAMPO Project Manager.

Deliverables

- Monthly status calls
- Monthly status reports

Task 2: Background Research on Current CAMPO State of Practice

Alta will conduct a targeted review of CAMPO's current state of practices of bicycle and pedestrian planning as related to the Metropolitan Transportation Plan (MTP), as well as in GIS data management and governance practices.

We anticipate that our review will focus on but not be limited to the following documents or topics, and will be accomplished primarily through document review and supplemented with interviews of appropriate CAMPO subject matter experts, where necessary:

- The existing bicycle and pedestrian element of the MTP, including a review of the current tier system used in the Element (including criteria, function, purpose, and high level review of overall network). We will also consider how the current bicycle and pedestrian element compares to other elements on the transportation plan in terms of length, level of detail, funding and other relevant topic areas.
- A review of CAMPO's geospatial data infrastructure including the CAMPO open data portal, relevant web maps, bicycle and pedestrian infrastructure data and database schema, relevant metadata and mapping standards, collaboration with member jurisdictions with a focus on data maintenance and update protocols and funding as well as other relevant data governance strategies or plans. Along with current areas of coordination with geospatial data with other departments within CAMPO and with NCDOT.

A summary memo will be created summarizing the findings, and then assess them using the framework of a SWOT analysis which is used to assess Strengths, Weaknesses, Opportunities, and Threats.

Key takeaways from this review will be utilized in discussions with CAMPO, the steering committee, and individual meetings with member jurisdiction representatives to gain a deeper understanding of (1) where the Element and geospatial infrastructure could be improved as well as (2) most helpful components of the existing Element.

Deliverable

- Draft and final background research memo



Task 3: Goal & Strategy Definition, Steering Committee Meetings

Using a charrette format for the kickoff steering committee meeting (comprised of CAMPO staff and TCC members), Alta will work to build a consensus in developing goals, strategies, and ideas that will help the update result in a useful tool for long-range planning and local project implementation. As part of the kickoff charrette, the project team could use the consensus workshop method to focus discussion. The steering committee will meet at key points in the planning process. Alta will meet with the steering committee three times during the planning process, during the following phases:

- Kickoff/Existing Conditions Phase (kickoff charrette – focusing on Tasks 2, 3, and 4)
- Recommendations Development Phase (focusing on Tasks 4, 5, 6, and 7)
- Recommendations Review Phase (focusing on Draft deliverables for Tasks 5, 6, and 7)

The kickoff charrette will focus on the following topics:

- Ideas to better define CAMPO's role in the development and documentation of the regional bicycle/pedestrian transportation network
- Developing an understanding of the methods used by member jurisdictions to describe, develop, and document bicycle and pedestrian networks
- Discussion of the current methods of collaboration between CAMPO and member jurisdictions and development of ideas to foster holistic collaboration amongst member jurisdictions

Building on the charrette and other discussions with CAMPO staff and member jurisdictions, Alta will develop a short memorandum summarizing draft project goals and strategies. The memo will include a collaborative process diagram that will be used to facilitate a shared understanding of the interactions between the development and documentation of the regional bicycle and pedestrian transportation network and its interactions with the local plans. Alta's Creative Services team will make this into a final infographic that lives with the updated network document.

Deliverables

- Steering committee kickoff meeting and two subsequent meetings, associated meeting materials and notes
- Draft and final memo describing project goals, strategies, and collaborative process diagram

Task 4: Peer Evaluation & Data Structure Review

Using list of peer MPOs agreed upon by the project team, we will conduct a peer evaluation of bicycle and pedestrian plan elements, mapping and other products, public engagement, and associated geospatial data infrastructure. The review will be conducted primarily through document and data review and supplemented with interviews with relevant staff when necessary. The review will focus on the plan and geospatial data elements identified in Task 2 (Background Research). From Alta's initial research, peers to potentially evaluate include:

- **Metropolitan Planning Council's (Twin Cities) Transportation Policy Plan** - especially the goals and guiding principles beginning on page 7.12
- **Minnesota IT Services Geospatial Information Office -Bikeways Data Standard for Minnesota** provides a single, commonly accepted set of attribute specifications (field name, type, and length) for transferring and aggregating bikeways data in Minnesota for a wide variety of purposes. It is intended to be used when data are being transferred between organizations.
- **Bozeman Transportation Master Plan** - Integrates bicycle and pedestrian recommendations with each element throughout the MTP



- **Tucson Mobility Master Plan (aka Move Tucson)** - good example of looking at projects comprehensively across all modes, including elements such as a roadway capacity analysis using output from the regional travel demand model to guide project recommendations, and includes a number of graphically rich documents/presentations/web presence.
- **Portland Metro (Metro)** – has collected and produced high quality and current regional spatial bicycle and pedestrian data for over 20 years. The Data Resource Center (DRC) is one of the oldest and most effective MPO based data aggregation programs in the US.
- **Delaware Valley Regional Planning Commission** – Has a robust bicycle and pedestrian planning program that includes comprehensive data development and management program.
- **Additional MPOs with robust bicycle and pedestrian planning efforts:**
 - **Regional Transportation Commission of Southern Nevada** – Regional Walkability Plan
 - **Walk Bike Thrive! Atlanta Regional Bicycle and Pedestrian Plan**
 - **Walk + Bike BCD (Berkeley-Charleston-Dorchester Council of Governments)**
 - **Southern California Association of Governments** –Connect SoCal Active Transportation Technical Report
 - **Oregon Metro's Regional Transportation Plan**
 - **Metropolitan Transportation Council (MTC) - San Francisco, CA**
 - **Wasatch Front Regional Council** – Salt Lake City, UT
- Also helpful to review will be ITE's current work toward multimodal level of service analysis for site planning.

The findings from each peer MPO will be documented in narrative and summary tables to facilitate comparison with the Task 2 deliverables.

Deliverable

- Draft and final memo documenting peer research

Task 5: Database & Schema Development

Based on work completed in Tasks 2 through 4, as well as through collaboration with CAMPO staff, member jurisdictions, and NCDOT IMD staff, we will develop a data structure which includes a database with meaningful attributes such as existing conditions, length, project types and sub-types (as established through this study), on/off-road characteristics, etc (In development of the data schema, Alta will prioritize compatibility and functionality with CAMPOs existing MTP database). This will establish a common language as it pertains to project types and definitions that can be utilized across the region's multiple plans to create consistency. Formalizing this product has the benefit of streamlining future data updates and also creating a foundational dataset that can potentially be used for multiple purposes. We have found that development of that shared data schema is a both a collaborative and iterative exercise. As a starting point, we propose using data products developed for the previous planning efforts, informed by recommendations from the FHWA Guidebook for Measuring Multimodal Connectivity, NCHRP, the NCDOT Pedestrian and Bicycle Infrastructure Network (PBIN) and other peer agencies.

Starting from that base, we envision using the following process to inform schema development:

- **Interviews** with staff at the beginning of this phase as well as during work conducted as part of Tasks 2, 3, and 4 to identify key attributes that should be considered across the CAMPO region. The list of attributes to be included will be assessed based on their ability to inform basic bicycle and pedestrian planning efforts, ease of collection and ability to help the plan goals identified in Task 1. For example, if one of the stated plan goals is to identify percentage of curb ramps that are ADA compliant, the appropriate data should be reflected in the unified data schema. Additionally, we will gather information on what level of detail is too burdensome for jurisdictions or the MPO to provide. Finding a level of detail that meets current planning needs that can be updated over time within the available resource budget is critical to ongoing success. For example, this could include specific attributes that should be added or removed, such as data aggregated to the wrong scale, or inappropriately classified. If Alta



identifies inconsistencies or gaps in data collected, this will also be documented and modifications will be recommended.

- Following these interviews, we will review work completed to date as well as up to three (3) additional data schemes and then, **Alta will develop a unified bicycle and pedestrian data schema** inclusive of attribute names, values and data types that can be used to standardize data representation. In development of the data schema, Alta will prioritize compatibility and functionality with CAMPOs existing MTP database. The data collection schema may generalize more detailed infrastructure data collected by member jurisdictions, which would allow member jurisdictions the flexibility to collect more detailed data for use locally, if they choose. CAMPO staff, member jurisdictions, and NCDOT IMD staff will weigh in on the attributes and values that should be included in a revised dataset.
- **Alta will test the revised data schema** to a sample of data provided by member jurisdictions to test ease of use, the data translation process, and identify fatal flaws such as missing but necessary infrastructure types or descriptors that would limit CAMPO's abilities to use data for tracking plan implementation (e.g., bike lane width, or year constructed). A review of network geometry will also be included with a goal of maximizing data reliability and ease of data editing. Based on this test, Alta will provide a set of recommended modifications to CAMPO staff for review and approval, resulting in a draft final unified data schema.
- The draft final data and associated schema will be **provided to CAMPO and appropriate partners for a final review and evaluation**. The intent of this review will be to identify any fatal flaws in the data schema or the associated data rather than significantly alter the draft final data schema.

Deliverables

- Draft and final Unified Domain Schema: Regional Bicycle and Pedestrian Facility Data Dictionary (updated mapping schema for the updated Bicycle/Pedestrian Element)
- GIS data used to test the Draft and Final Unified Data Schema

Task 6: Data Maintenance Protocol & Tools

Once a unified data scheme has been adopted, the dataset must be developed. In Task 5, Alta will build the regional database in parallel with tools that CAMPO can use to maintain the data over time. To do this, we will establish a data maintenance protocol for maintaining the Bicycle/Pedestrian data as local or regional plans are updated. A Bicycle and Pedestrian Data Dashboard will also be created that can be used to track implementation over time. This will include GIS integration with the state's PBIN, ETL tools for local/MPO data coordination, and process for defining structures for MTP and non-MTP (sidewalks) features.

Data Maintenance and Visualization Tools

A Bicycle and Pedestrian Data Dashboard will be created as part of the bicycle and pedestrian element update. This is a key communication tool to explain and support the bicycle and pedestrian element, and provide a powerful and transparent way to track progress and accountability. The dashboard could be configured to show a variety of metrics—for example, miles of existing bikeway or sidewalks, high-priority projects, or number of people with proximity to an existing trail. It can also be configured to show a map of existing and proposed facilities.



This dashboard and the data behind the bicycle and pedestrian element will require reprocessing, treatment, and further maintenance protocols to update key metrics. Alta will hold a maintenance tool brainstorming meeting with relevant stakeholders on the development of an automated data maintenance tool. This meeting will be grounded in the data development and anticipated schemas developed to date. After this meeting, Alta will develop a presentation that will outline the potential design and key functions of a data maintenance toolkit that will include an instruction guide on important procedures to maintain key datasets, and a Python-based ArcGIS Pro toolbox that will assist with key data maintenance tasks. We anticipate this toolbox will leverage the ArcGIS API to transform a well-structured database of bicycle and pedestrian data into the analytical pieces featured in the dashboard and enable CAMPO to update it as new bicycle and pedestrian data is appended to the database. However, we are open to this data maintenance tool conducting different tasks such as creating data validation reports (checking key attributes are filled, not blank), conducting relevant ETL or conflation procedures, or similar tasks. These updates may be performed on a regular cycle, or ad hoc as jurisdictions provide updated data to CAMPO. The ArcGIS API enables users to not only conduct detailed analysis in a GIS context, but also communicate and update feature services in ArcGIS online. We envision a single toolkit that can point at key analysis and network components. While the tools might update the bicycle and pedestrian network, data dashboard, validate data inputs, and associated analysis such as project scoring, it would not update data used to score projects (e.g., safety or demand analysis).

After the toolbox is constructed, Alta will provide a training session (that can be recorded) to CAMPO that covers key findings from the analysis, the analysis methodology, and how to manage data set up and operation of the data maintenance tool. We have provided similar trainings for clients such as the Washington State Department of Transportation and the Republic of Singapore.

Deliverable

- Draft and final project database with applicable functionality for maintenance of the updated Bike/Ped Element in current and future Metropolitan Transportation Plans

Task 7: Finalize MTP Bicycle & Pedestrian Process and Element

We will review CAMPO's current MTP database and identify improvements for the Bicycle/Pedestrian element, that includes vetting of current recommendations, a table structure, forms, and reports necessary for the MPO to maintain the updated Element. Building on the findings from Tasks 1 through 6, an adjusted quantitative project vetting and prioritization process will add meaning to existing projects, tiers, and current prioritization efforts utilized by local jurisdictions and CAMPO.

- Alta will work with CAMPO to determine the appropriate analyses to conduct that would assist in prioritizing regional and/or local projects that may include level of traffic stress, equity, demand, and crash analyses. These analyses may be useful for identifying needed projects and conducting prioritization. Further detail on a menu of options for these analyses can be found on the following pages.
- Scenario-focused prioritization analysis could be used to further synthesize local and regional dynamics in creating a more meaningful regional network.
 - Prioritization is where we bring our values to data to understand which projects will provide the greatest bang for their buck. Alta's Civic Analytics team has developed tools to streamline metric creation, score development, and overlay processes to efficiently deliver prioritization analysis in either GIS or Excel. Based on the types of data available, Alta can use qualitative scoring or percentile-based scores for comparing different metrics of success for projects.

Alta will establish different weighting schemes for different prioritization scenarios and provide draft results for review by relevant stakeholders. Based on stakeholder review and a sensitivity analysis of results based on different weights, Alta will develop final maps for a preferred prioritization approach.



This task will also include development and documentation of a visually appealing mapping product for the Bicycle/Pedestrian Element. In consultation with Alta's Creative Services team and relevant CAMPO staff, we will develop a set of graphic styles and standards drawing on existing branding guidelines for inspiration. As part of this update, we can develop an ArcGIS Pro template and associated style files as well as associated documentation so that the styles can be reproduced in Adobe Illustrator or other graphics programs, if desired.

Lastly, this task will also include a high level analysis of which elements to include as part of the MTP versus high level recommendations to be carried out outside of the MTP (ie: SRTS, Transit interaction with bike/ped, special studies).

Deliverable

- Documentation of an updated purpose and understanding of the Bicycle/Pedestrian Element as it pertains to the MTP, local planning efforts, and other MPO processes and programs; develop a more visually appealing and meaningful mapping product for the Bicycle/Pedestrian Element, including a more robust quantitative prioritization process.

Task 7 Addendum: Analyses and Data Collection Menu

\$15,000 of the Task 7 budget could potentially be utilized towards additional analysis. Options for additional analysis are detailed below and their respective costs are included in the budget spreadsheet on page 10.

Expanding upon the analyses mentioned in Task 7, this section provides further detail for level of traffic stress, equity, demand, and crash analyses that could be utilized in this planning process and prioritization. Alta will work with CAMPO in refining the final scope of work to complement CAMPO's current tools for analysis and preferences for this planning process. Below is standard Alta scope language and descriptions of the analyses.

Any analysis completed as part of Task 7 is dependent upon both the project budget and data availability, which we look forward to refining with CAMPO. Any analysis work will be preceded by a memorandum documenting data analysis methods and any data limitations prior to initiation of any work.

Existing Bicycle and Pedestrian Infrastructure Data Updates

To produce an up-to-date GIS data set of existing sidewalks, bike lanes, bike boulevards, and shared use paths, several sources could be utilized to accomplish this task. Below are several options to consider:

- Strava Metro
- Ecopia
- Manuel digitization

Level of Traffic Stress

Alta can complete a level of traffic stress (LTS) analysis for the bicycle and pedestrian network, ranking streets from low stress (LTS 1, suitable for children) to high stress (LTS 4, suitable only to "strong and fearless" bicyclists/pedestrians). This network will be based on the preliminary LTS analysis derived from OpenStreetMap data, and is intended to identify large facilities with high-speed traffic that could pose a soft barrier to bicycle or pedestrian activity. These preliminary networks could be refined based on locally available data, and based on consultation with relevant staff and stakeholders. Our analysis can illustrate how stress barriers (e.g., challenging crossings) can create areas of disconnectivity and islands along what otherwise appear to be low-stress roadways. We can identify the low-stress "catchment areas" as defined by the network for bicycling, and identify major facilities that can act as barriers to pedestrian travel from this analysis.



Equity Analysis

Alta can conduct an equity analysis using a data-driven approach that identifies concentrations of historically disadvantaged or vulnerable populations using public health and demographic indicators. Special attention would be paid to demographic groups who are likely to face mobility restrictions, including populations that are low income, lack vehicle access, face high pollution burdens and health disparities, and are ethnic minorities. This information can help guide prioritization of facilities so that multimodal improvements are benefiting vulnerable community members who could use more travel options and improve access to life-enhancing services and community centers. Alta leverages internal tools such as Alta Site Explorer to enable this analysis to easily be customized based on local priorities and contextual needs. This analysis will map areas of high need as defined by concentration of population indicators. The results can be used to support network recommendations refinement and/or be incorporated into the prioritization criteria for the project.

Demand Analysis

Understanding where potential demand for active transportation exists is key to informing where infrastructure might be needed to enable a wider range of transportation choices. Alta can conduct a demand analysis leveraging a data-driven process which estimates the latent demand for recreation or active transportation depending on a variety of location-based features. The unit of analysis will be a disaggregated hexagonal evaluation grid across the study area or similar. This analysis will account for built environment, distance from key destination classes (parks, grocery, entertainment, transit, parks, schools), travel model outputs, and demographic characteristics of areas that inform latent demand for active travel. The demand analysis inputs can be tailored based on CAMPO's preferences and readily available data. The resulting composite demand map summarizes the geographic distribution of latent demand throughout the study area for bicyclists and pedestrians. The results of the analysis could be used to help inform and prioritize recommendations.

Crash Analysis and High-Injury Network Development

The project team can gather available bicycle, pedestrian, and motor-vehicle collision data. If provided, Alta can also review supplemental data from the Sheriff's Department, Hospital Records, and Traffic Operations Center specifically for severe crashes that could affect prioritization that haven't been processed through key collision databases. These collision sources will be qualitatively reviewed to understand if any major discrepancies that could impact a collision analysis are present. These collision data sets will be used to identify key collision trends, and to map severity-weighted densities for all bicycle and pedestrian collisions along study area corridors. Where possible, the density calculations will employ network distances rather than Euclidean distances to mitigate bleeding effects that commonly impact density estimation procedures on roadway networks.

High-Injury Networks (HINs) identify streets with the largest concentration of collisions where victims are killed or severely injured (KSI). These networks often illustrate that a small amount of improvable network can address the majority of KSI collisions. Alta can develop a HIN for the study area based on the risk implied from the intersection of the collision history with the street network. These networks are often developed by a staged process of developing a risk index based on the collision types and severities and their intensity. This index can be created either using rolling window analysis, kernel density estimation (using network distances), or spatial joins to a network with a thoughtful network segmentation. Then, Alta would accumulate collisions to the network in the order of that index to identify a network with a significant proportion of collisions relative to the improvable length being targeted. Based on the appropriate threshold developed in coordination with stakeholder feedback, Alta would create maps of a finalized HIN. Based on the HIN, Alta can take any analysis or available context and provide tabulations that explain the composition of streets, built form, and communities identified to be proximal to the HIN.



Network Gap Analysis

Alta can conduct an assessment of infrastructure gaps and needs. This assessment will quantify factors that impact walking and bicycling activity, locate network gaps as potential projects, and identify areas with specific characteristics, for example areas that have both need for active transportation and a high demand. This analysis would consider roadways and trails within CAMPO.

Alta would use existing multimodal infrastructure data to develop an understanding of how well destinations and areas of demand are connected for people who want to walk and bike for both transportation and recreation. It would also consider how the CAMPO networks connect regionally.

Alta can use this analysis to identify:

- Gaps in existing bicycle networks, intersection crossing needs, and other conflict points
- Gaps in pedestrian networks, such as sidewalk gaps, crossing needs in areas of pedestrian activities, or at crossings of streets and other public rights-of-way
- New trail opportunities along waterways, other infrastructure rights-of-way, or adjacent to public street rights-of-ways

Bicycle and Pedestrian Connectivity Analysis

Alta can develop metrics identifying each street's level of connectivity relative to the rest of the network and relative to an ideal condition. These metrics are inspired by Karel Marten's Potential Mobility Index as described in Transportation Justice and his papers on the topic (Martens, 2015). Two metrics that will be developed for each street will be:

- **Pedestrian Connectivity Index:** This index compares the area of a walkshed at a given location along a walkable network, and compares to the area of a crow-flies buffer assuming an average walking speed of 3 MPH.
- **Bicycle Connectivity Index:** This index compares the area of bicycle sheds that use all facilities normally and those that are LTS-adjusted to that of the area of a crow-flies buffer assuming an average biking speed of 10 MPH (or 15 MPH if evaluating e-bikes).



Draft Schedule

Tasks	2023								2024					
	M	J	J	A	S	O	N	D	J	F	M	A	M	J
1. Project Management														
1.1 Monthly status updates + Invoicing														
2 Background Research on Current CAMPO State of Practice														
2.1 MTP Bicycle and Pedestrian Element review														
2.2 Geospatial data structure review														
2.3 CAMPO subject matter interviews														
2.4 Draft and final background research memo														
3 Goal & Strategy Definition, Steering Committee Meetings														
3.1 Steering Committee Meetings (3-4)														
3.2 Draft and final memo describing project goals, strategies, and a collaborative process diagram														
4 Peer Evaluation & Data Structure Review														
4.1 Peer and Data Structure Review														
4.2 Peer interviews														
4.3 Draft and final memo documenting peer research														
5 Database & Schema Development														
5.1 Draft unified domain schema														
5.2 Test revised data schema														
5.3 Final unified domain schema														
6 Data Maintenance Protocol & Tools														
6.1 Data maintenance protocol														
6.2 Data dashboard														
6.3 Data creation and maintenance training														
7 Finalize MTP Bicycle & Pedestrian Process and Element														
7.1 Documentation of an updated purpose and understanding of the Bicycle and Pedestrian Element and recommended structure														
7.2 Updated mapping product														