



To: CCRPC, Attn: Bryan Davis

Date: October 26, 2023

Project #: 85492.23

From: Drew Gingras, PE

Re: South Burlington Active Transportation Plan  
Scope of Work and Labor Budget

VHB continues to help municipalities and their communities create more equitable and sustainable transportation systems in the State of Vermont, and Northeast. We recognize what is needed to effectively engage with these communities and develop a plan for enhanced mobility, improved safety, equity in the transportation landscape, and a more active and healthier community. As we develop the Active Transportation Plan for the City of South Burlington, VHB will:

- Provide recommendations and prioritizations to help the City deliver on its sustainable transportation and climate change resiliency goals, including a 2.5% annual reduction in overall vehicle miles travelled within the community.
- Develop an Active Transportation Plan that prioritizes a multimodal / active transportation (AT) network that allows for South Burlington's residents and visitors alike to safely travel to where they want to go, by a means of their choice, with a prioritized set of project recommendations;
- Seek to – within the plan – focus on projects that eliminate sidewalk, bike facility, and shared-use path system gaps, helping to connect City-wide origins and destinations—especially schools, parks, and transit—and surrounding communities; and
- Prioritize equitable public representation through a robust and far-reaching public engagement effort.

The following approach is based upon our understanding of the City of South Burlington needs and our experience with successfully completing other Walk Bike / Active Transportation plans.

## Scope of Work

### Task 1—Project Management and Public Involvement

#### *Task 1.1 Project Kickoff and Project Management*

To initiate the project and planning process, VHB will meet with the CCRPC and City of South Burlington staff and review the proposed project approach, overall schedule, and the initiation of the public involvement tasks. The project schedule will be discussed in detail, establishing a shared understanding of the order of critical tasks and project elements.

VHB will conduct monthly meetings with the CCRPC and City of South Burlington Project Managers in order to keep the project moving forward according to the schedule and budget.

#### *Task 1.2 Public Engagement*

VHB understands how critical community outreach and input are to the development of a successful, publicly supported, fiscally responsible, and implementable plan. To facilitate community engagement, VHB will develop a Public Involvement Plan (PIP) for the project based on discussions with the CCRPC and City at the kickoff meeting. This plan will outline the approaches being considered for general outreach as well as targeted outreach to underserved

and overburdened populations including, but not limited to, individuals with disabilities, low-income households, and newer Americans. VHB recognizes that South Burlington has a unique and diverse geographic layout, inclusive of widespread rural landscapes / land-uses, as well as several arterial corridors and urban centers. VHB will work with the City staff and RPC to develop an in-depth and well-articulated approach to public outreach to achieve far-reaching and equitable engagement with all of South Burlington's communities and populations.

Because outreach has been conducted for recent efforts such as the Exit 14 East-West Crossing Pedestrian Bicycle Bridge, the City's Climate Action Plan, and the 2024 City Plan, VHB will work to summarize the information already collected from stakeholders on each of the recent efforts.

VHB will work with the City and the CCRPC to reach stakeholders through an advisory group, public meetings (potentially in open house format), stakeholder interviews, online surveys and mapping tools.

#### Task 1.2a Meetings with Advisory Group (AG)

VHB will participate in three (3) working meetings with a project advisory group which is expected to be developed by the CCRPC and City Project Managers and potentially include representatives from the Department of Public Works (DPW), Planning & Zoning, School District, Recreation & Parks Department, Law Enforcement, Operations & Maintenance Department, Bicycle & Pedestrian Committee, Local Motion, Refugee / New American Community, Disability Advocacy Group, and VTrans. The AG is expected to provide both high level comments and detailed technical input as the plan evolves over time.

#### Task 1.2b Public Meetings

VHB will prepare for and conduct three (3) public meetings to gather input from the community. These meetings, and time associated with them are described where they fall in the scope of work below. All meetings will be held at easily accessible locations such as the City library or other City/community facilities to encourage a mix of planned and unplanned engagement with a wide-cross section of residents. It is anticipated that these meetings will typically follow either an open house or breakout group format to engage more participants and gather more input.

VHB will work with the CCRPC and City to coordinate translation of materials and interpretation services at the meetings. While up to two members of VHB will attend each meeting, we will look to CCRPC and City staff, as well as members of the AG to promote the meeting (and the online survey and mapping tool below), potentially co-lead breakout groups, and to provide a sense of community connection at the three meetings.

#### (Optional) Task 1.2c Stakeholder Interviews

VHB will work with CCRPC and City staff for four (4) stakeholder interviews to gather feedback regarding existing conditions issues, perceptions of walking and bicycling in South Burlington, and desired needs for improved safety and network connectivity. We will work with the CCRPC and City staff to finalize a diverse list of stakeholders ranging from advocate volunteers, parent representatives, refugee advocates, students, commuters, and recreational /commuting walkers and bicyclists throughout South Burlington.

#### (Optional) Task 1.2d Participatory / Active Events & Field Trips, Tabling at City-Sponsored Events

VHB will prepare materials for and attend three (3) participatory / active events and/or "field trips". It is VHB's understanding that the City would like to see a PIP that goes well beyond the traditional public meeting structure, and includes active/participatory events, i.e., walking and biking tours, "field trips" to future project locations, etc. VHB will

work with the City and RPC to identify the best sites and opportunities for such events and develop materials to support these events. Additionally, the project team will coordinate with VDH about the possibility of planning and leading walk audits in partnership with City schools and/or other similar groups. In line with the City's desire to table at a variety of community events, VHB will develop materials to support these outreach efforts.

#### (Optional) Task 1.2e Online Survey and Mapping Tool

VHB will develop an online survey to engage additional community members and stakeholders. Questions will help the team understand current walking, rolling, and bicycling trends in South Burlington, desired multimodal network conditions, acceptability of project trade-offs, and preferences for investments in infrastructure and/or programs. The survey will be complemented by an interactive, online mapping tool to collect feedback on existing conditions, perceptions, and needs from members of the public. Early in the process, VHB will consider whether it is preferable to create separate mapping opportunities for pedestrians and bicyclists or to combine in a comprehensive fashion.

To reach people without technology access, a paper survey could also be available. The input map will be shared at the first public meeting and will accept comments until the completion of the draft bicycle and pedestrian network recommendations and design treatments. Its purpose will be to create a convenient way for members of the public to provide information on points of interest (by dropping pins with comments on a map) and/or preferences for places community members want to bicycle and walk to, as well as what limits them if they try. This information will inform the connectivity analysis and network recommendations.

#### **Task 1 Deliverables**

- *Public Involvement Plan*
- *Public Engagement Deliverables:*
  - *Summary meeting notes for meetings attended by VHB (advisory group meetings, stakeholder interviews, participatory events, etc.)*
  - *Support materials for use at the kick-off, advisory group meetings, stakeholder interviews, public meetings, participatory events, etc. (e.g., slide deck, interactive materials, map boards, handouts, fliers/door hangers, lawn signs, etc.)*
  - *Online survey and mapping tool*

### **Task 2 - Inventory of Existing Walking and Biking Networks, and Data Collection**

#### **Task 2.1 Document Review and Development of Base Maps**

To create a foundation for bicycle and pedestrian related conditions and needs in South Burlington, VHB will tap into our intimate familiarity with several transportation planning and design efforts in South Burlington. VHB will review and summarize a selection of planning documents, studies, ongoing design projects, and key policies. This will include the Climate Action Plan, City Plan 2024 (Draft), South Burlington Bicycle and Pedestrian Feasibility Study (Phases I & II), I-89 2050 Study, and several other documents and projects.

Using GIS data, plans, and maps from State, CCRPC and City sources, along with field work and online map programs, VHB will inventory and map the current network of shared-use paths, sidewalks, on-street bicycle facilities, and any other relevant active transportation facilities in South Burlington. Our data collection will include gathering of available

existing bicycle/pedestrian count information, motor vehicles traffic volumes, crash data, and transit routes and stops. Based on our knowledge of South Burlington and through the City staff and Stakeholder input, we will also map out destinations that are relevant for recreational bicycling, walking, and rolling. This will likely include shared-use paths, walking trails, schools, playgrounds, parks, commercial centers, and religious institutions.

### ***Task 2.2 Existing Conditions***

VHB will assess transportation conditions in South Burlington and develop a series of analysis maps and documentation to summarize our understanding of walking and biking conditions. Maps are expected to include:

- Existing bicycle facility and multimodal networks (paved and unpaved paths, and on-street bike facilities)
- Existing pedestrian networks (sidewalks, crosswalks, shared-use paths, walking trails)
- Existing transit routes and stops
- Current locations of pedestrian and bicycle crash locations, and perceived hazardous intersections and road corridors
- Destinations including schools, playgrounds, parks, neighborhood retail/service destinations, employment centers, parks, conservation areas, civic and religious centers, and transit access points
- Pedestrian and bicycle destinations and amenities, including—per available data—benches, bus shelters, water fountains, restrooms, bicycle repair stations or bicycle shops, bicycle racks, and public charging stations

VHB will also identify the City's planned projects that include active transportation components including the Williston Road Streetscape project, Garden Street, City Center Park Path and Boardwalk, and Dorset and Spear Street Shared Use Paths, as well as work being undertaken by the private sector including public facilities being constructed as part of O'Brien Eastview and Hillside, Edgewood, Spear Meadows, UVMCC, and others. VHB has been involved in a number of ongoing City plans and projects including the Exit 14 East-West Crossing Pedestrian and Bicycle Bridge.

Additionally, a summary of South Burlington's pedestrian and bicycle safety and promotion programs and initiatives will accompany this analysis. This may include initiatives such as the South Burlington Bicycle & Pedestrian Committee's "Share the Road" Initiative, and/or the statewide Safe Routes to School program.

### ***Task 2.3 Public Meeting #1***

VHB will lead public meeting #1 (of the three indicated above) to include a discussion of bicycling and pedestrian needs and high-level priorities for the City. We will emphasize engagement and the collection of input and data from members of the community.

### ***Task 2.4 Needs Identification (with Gap Analysis)***

VHB will aggregate community input received from the public meeting, online survey/map, by phone/email, and from outreach activities as part of Task 1.2d, to develop a deeper understanding of pedestrian and bicycle desire lines, gaps, needs, and perceptions and experiences of unsafe areas throughout the transportation network.

Based on the existing conditions assessment described earlier along with input from City staff, public meetings, and stakeholder interviews, we will conduct a gap analysis of the City's multimodal network. We will illustrate gaps within the on-street bicycle network, shared-use path system, and sidewalk network that hamper ADA access, walking and bicycling between neighborhoods and destinations. Each of the individual gaps will be mapped. The map can also

indicate whether the designated gap is within or adjacent to lower-incomes areas and/or areas with non-English speaking households. Both the technical and equity-related characteristics will be used later in the process to prioritize the subsequent recommendations.

## **Task 2 Deliverables**

- *Technical Memorandum #1 (Existing Conditions and Network Analysis) and accompanying materials developed for the first set of public meetings. The memorandum is likely to include:*
  - *Base maps in a GIS format compatible with South Burlington's database that includes:*
    - *Existing bicycle, pedestrian, and multimodal networks*
    - *Existing transit facilities and routes*
    - *Citywide Bicycle/Pedestrian crash data*
    - *Pedestrian and bicycle destinations (existing and future), amenities, and activity centers*
    - *AADT Data*
  - *Needs Identification with Gap Analysis*
  - *A summary of planned and ongoing transportation projects in South Burlington*
  - *A summary of South Burlington's pedestrian and bicycle safety and promotion programs and initiatives*

## **Task 3—Data Analysis**

### **Task 3.1 Develop Project Goals and Evaluation Criteria**

VHB will aggregate comments from City staff, the AG, and the general public to formulate project goals for the Active Transportation Plan. Using the objectives and strategies from the Climate Action Plan, City Plan 2024 (Draft), and South Burlington Pedestrian and Bicycle Feasibility Study (2017 and 2020) as a starting point, the goals may include: safety, network connectivity, sustainable design elements, accessibility, cost, funding availability, and future maintenance issues.

The project goals will evolve into evaluation criteria from which the bicycle and pedestrian network recommendations will be measured against and prioritized with a weighted ranking system. Supplementing each goal will be a performance measure that will allow the City to measure success over a given time period (generally from two to five years). Performance Measures may include but are not limited to:

- Network Connectivity Benefits
  - Reduction in network gaps
  - Proximity to schools, key community centers, parks, etc.
  - Links users to transit with a focus on first mile / last mile needs
  - Improves access to activity nodes for community gathering
  - Benefits underserved and overburdened populations

- Metrics
  - Reduction in crashes and conflicts involving bicyclists and pedestrians
  - Level of traffic stress based on speed, conditions, and/or volume considerations
  - Number of enhanced mid-block crossing treatments (RRFBs, median islands, and/or bump outs)
  - Changes to bicycle and pedestrian mode share in the City
  - Miles of new bike lanes and/or separated bike lane treatment
  - Miles of new sidewalks and shared use paths
  - Projected usage
- Feasibility Considerations
  - Cost
  - Complexity / simplicity of implementation
  - Environmental constraints
  - Maintenance impacts
  - Redundancy of facility

Throughout the data analysis plan development stages, VHB will also review available and future funding opportunities with the City to fully understand possible constraints and potential opportunities as they relate to implementation of future roadway and other infrastructure projects.

### **Task 3.2 Public Meeting #2**

Public meeting #2 will be held roughly mid-way through the planning process and serve as a venue for publicly presenting key findings relating to tasks #1 and #2. This includes the existing conditions and needs identification, project goals and evaluation criteria, and findings from document and program reviews. Feedback will be solicited specifically on the prioritization and weighted criteria.

With all public meetings, VHB anticipates in person formats. Public meeting #2 can be structured in either an open house format or using break-out groups so VHB— potentially with assistance from CCRPC and City staff—can facilitate small-group discussion.

### **Task 3 Deliverables**

- *Technical Memorandum #2 that is likely to include:*
  - *Project goals*
  - *Evaluation criteria for prioritization*
  - *Performance measures*
- *Public Engagement Deliverables:*

- *Summary meeting notes and support materials for public meeting #2 (slide deck, interactive materials, map boards)*

## Task 4—Draft Plan Development

### *Task 4.1 Recommended Bicycle and Pedestrian Network*

Based on comments received at the public meetings and from various stakeholders, VHB will work with the City to develop a complete Draft Active Transportation Plan, to be produced in graphical format using GIS based maps. The draft recommendations will be included in a table format with attributes included (i.e. project length, context, traffic volume, proximity to schools, nearby destinations, etc.). We will also highlight the potential challenges to implementation for each recommendation (i.e., need to restrict on-street parking, limited ROW, or wide intersections with heavy turning movements).

VHB will draft on- and off-street project recommendations to improve connectivity and safety for bicyclists and pedestrians. The recommendations will describe existing and planned bicycle and pedestrian facilities, as well as network gaps and missing connections. Descriptions of the multimodal desire lines, corridors, and destinations will be included. A table of recommendations will be made to illustrate the primary characteristics of each proposed corridor, including the location, length, width and number of travel lanes, and land use character. The recommended network will consider connections to neighboring communities (i.e., Burlington, Shelburne, Williston, Winooski) based on their existing and/or planned active transportation facilities, as well as the recommended network in the Regional Active Transportation Plan, to create an integrated regional active transportation network.

### *(Optional) Task 4.2 Recommended Design Treatments*

With VHB's authorship of numerous FHWA bicycle and pedestrian design guides as well as our deep familiarity with the AASHTO Guides for the Development of Bicycle and Pedestrian Facilities, MUTCD, and other nationally accepted design guidance (such as MassDOT's design guides), the network improvements described above will include recommended roadway design treatments. On-street bicycle facility treatments will be informed by traffic volume, speed, and area context, primarily, while pedestrian treatments will consider prevailing land use and the current character of the streetscape as well. All design treatments will be oriented for a range of bicyclists and pedestrians of all ages and abilities—including safety zones for schools—and feature:

- Greenways and shared-use paths
- Contextually Appropriate Roadway crossing treatments (crosswalks and accompanying traffic calming)
- On-street bicycle facilities on arterial/collector roads that provide visual or physical separation
- On-street, shared facilities on low volume and/or low-speed roadways

The table of recommendations will also highlight primary candidates for quick-build improvements that can be done at low cost. Also called demonstration projects, these low-cost interventions help to build support for long-term improvements and provide the opportunity for the City to make adjustments to the design, or remove it, if it fails to provide the safety enhancements that were anticipated.

### **Task 4.3 Project Prioritization**

We will use an evaluation matrix to score, rank and prioritize the Task 4.1 and 4.2 recommendations using the project goals as evaluation criteria, i.e., scoring the ability of a proposed recommendation to close an identified network gap. The prioritization matrix will include a list of facilities for residential and commercial areas, supported by the evaluation criteria. As specified earlier, the prioritization criteria will include a comprehensive range of metrics and will also incorporate "ease of implementation" factors such as cost, design, permitting, and ROW to rank both short-term and long-term projects. A technical memorandum will describe the prioritization criteria, scoring process and methodology, and illustrate how it was developed, such as by incorporating public input.

### **(Optional) Task 4.4 Implementation Strategy / Action Plan**

VHB will develop an Implementation Strategy / Action Plan incorporating outcomes from Tasks 4.1-4.3 geared specifically toward implementation. It will include:

- Approximate project implementation timelines (short- / medium- / long-\*term)
- Lead agency (Planning and Zoning, DPW, City Manager, etc.)
- Conceptual cost to implement, expressed as a scale, i.e., \$-\$-\$-\$-\$-\$-\$-\$-\$-\$
- Special funding opportunities or considerations
- Equity considerations

### **Task 4.5 Public Meeting #3**

Public meeting #3 will be held upon the completion of the technical analysis and recommendations effort described in the tasks and sub-tasks above. VHB will present our key findings, network recommendations, and preliminary evaluation to outline the priorities. Input gathered from the public will help to inform revisions to the recommendations as we complete the Bicycle and Pedestrian Plan report.

### **Task 4 Deliverables**

- *Technical Memorandum #3 that provides:*
  - *Recommended bicycle and pedestrian network improvements*
  - *Recommended design treatments*
  - *Project Prioritization*
  - *Planning level cost estimates*
  - *Implementation Strategy / Action Plan*
- *Public Engagement Deliverables:*
  - *Summary meeting notes and support materials for use at Public Meeting #3 (slide decks, interactive materials, map boards)*



## Task 5—Final Plan

### *Task 5.1 Development of Final Plan Document*

After reviewing community/stakeholder feedback from Public Meeting #3, VHB will develop the final plan document. Along with incorporating the feedback, the draft and final plan document will also highlight:

- Summary of project goals, needs, and evaluation criteria
- Recommended bicycle and pedestrian network
- Project prioritization
- Recommended design treatments
- Implementation Strategy / Action Plan
- Summary of the public engagement effort

The document will be completed in preparation for presentation to the City Council as the end of the 12-month project.

### *Task 5.2 Final Presentation to City Council*

VHB will present the finalized Plan to the South Burlington City Council for approval. The plan will be provided in both electronic and hard copies, and all maps will be GIS-based. Like all deliverables developed earlier, the electronic files provided will become the property of the CCRPC and the City of South Burlington.

### *Task 5 Deliverables*

- *Draft and final versions of the South Burlington Active Transportation Plan in both 1) Navigable / Searchable PDF and 2) Editable / Navigable / Searchable files, including maps, graphics, appendices.*
- *GIS files containing all geospatial data produced for the project.*

## Project Schedule

Assuming a Notice to Proceed is issued by Mid-September 2023, VHB anticipates the project advancing according to the schedule outlined below:

- Kickoff Meeting: October 2023
- Existing Data Collection: October 2023 – January 2024
- Focus Group Meetings: December 2023 – February 2024
- Public Meeting#1: Late January 2024
- Data Analysis: February – April 2024
- Public Meeting #2: Late April 2024
- Develop Recommendations: May – July 2024
- Public Meeting #3: Late July 2024
- Develop Plan: December 2023 – August 2024
- Submit Draft Plan for Review: August 2024
- Presentation to City Council: September 2024
- Submission Final Plan: October 2024