

Request for Proposal (RFP)

BRT Bus Station Location and Traffic Flow Enhancement Study

Project ID: CEEEn-2016CPST-009

1. Introduction

- Project Title: BRT Bus Station Location and Traffic Flow Enhancement Study
- Project ID: CEEEn-2016CPST-009
- Sponsor: AECOM
 - AECOM is a global network of experts working with clients, communities, and colleagues to develop and implement innovative solutions to the world's most complex challenges.
 - In the Salt Lake City office AECOM has a group that focuses on transportation projects. They have performed several projects for UTA and UDOT.
- Project: AECOM is helping UTA, in conjunction with other organizations such as UDOT and the Cities of Orem and Provo, design Bus Rapid Transit (BRT) that will provide improved public transportation between Orem and Provo. There will be several stations created along the route (see Figure 1). The capstone project is to design the station on 900 North between 700 and 900 East in Provo, UT and improve traffic flow through this area.

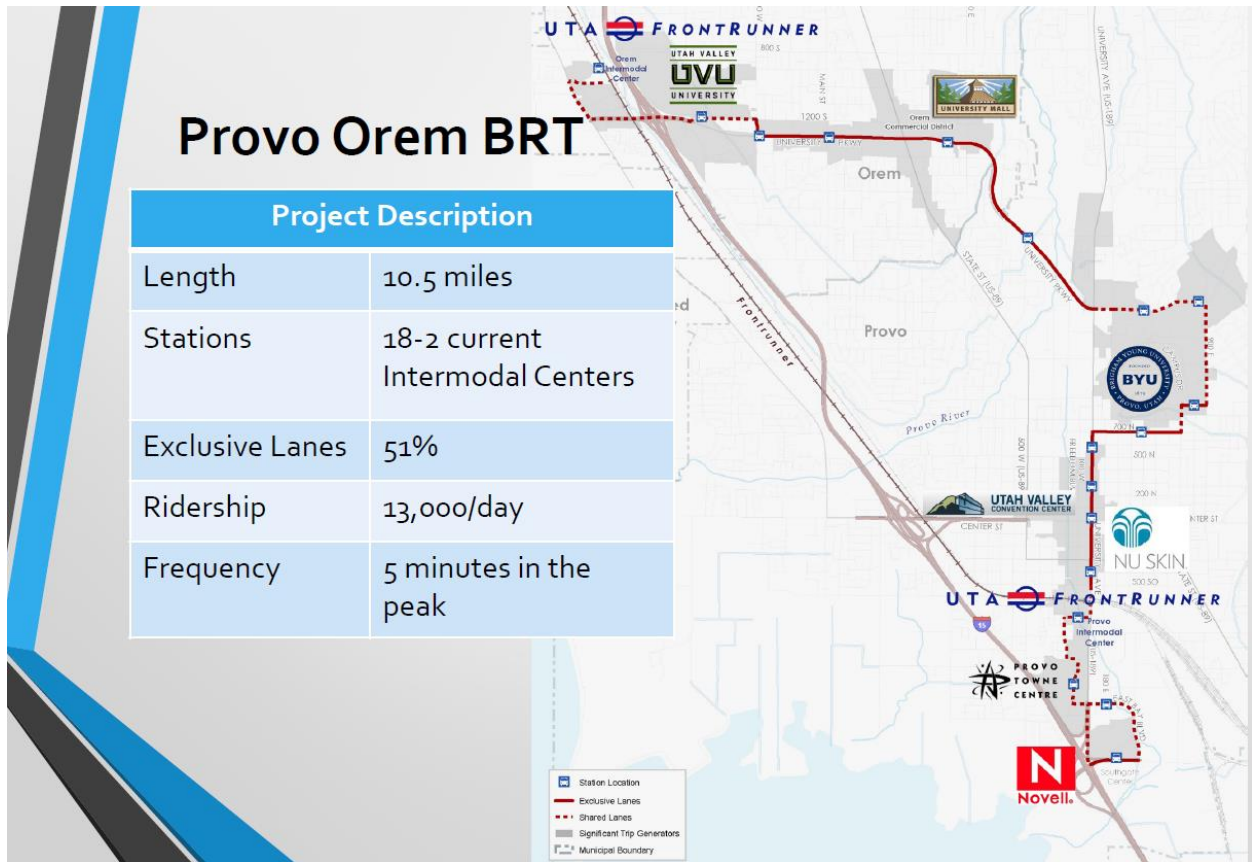


Figure 1: A map of the proposed Provo-Orem Transportation Improvement Project

2. Project Description and Scope of Services

Locate two BRT side stations on 900 North between 700 East and East Campus drive in Provo, UT. Accommodate local bus stops outside of the BRT stations. There are dedicated bus lanes on the outside of 900 North beginning at the stations and extending to 900 East. Accommodate a direct flow of traffic from 700 East to 900 North with Campus Drive “T-ing” into this reconfiguration. Minimize impacts to existing parking lots with no impacts to any other private property.

- Description of requirements
 - General & specific requirements to complete the project
 - Technical: Size the stations to be 12 feet wide by 60 feet long with a 13 inch platform height. Meet the Americans with Disabilities Act (ADA) requirements for all sidewalks and accesses to the stations.
 - Non-technical: Minimize impacts to the adjacent parking lots and utilities. No impacts are allowed to the Stonebridge Apartment property located at 758 East and 900 North.

- Tasks & expectations
 - Provide up to 3 concepts to meet the project requirements
 - Present the concepts in a review meeting where a preferred solution will be identified
 - Prepare final layout for the preferred alternative
 - Key project milestones
 - Concept Review Meeting: end of January 2017
 - Final Layout Review Meeting: end of March 2017
 - Expected meetings & presentations
 - Kick-off meeting: October 6, 2016
 - Progress Review Meetings: as needed

- The following will be provided by the owner:
 - Survey and Mapping
 - Traffic data
 - Design requirements and standards

- Hold one on-site visit with the owner prior to developing any concepts to discuss the project specifics

- Provide a final layout of the recommended alternative that can be reviewed by BYU and Provo City.

3. Outcome and Performance Standards

- Instruct student team to include the following statement in this section of the proposal
 - Our student team will provide the work for this Capstone project “as is”. Our results cannot be construed as work provided by licensed professionals and cannot be used as “stamped deliverables” without first being reviewed, approved and stamped by a qualified license professional engineer.

- Note to graduate mentor/project manager:
 - Student teams represent the BYU Civil & Environmental Engineering Department. As such, all Capstone students are expected to interact among their peers and customers/sponsors in a professional manner and with courtesy and respect at all times. Support for future Capstone projects can be affected by our actions
 - Team work is crucial for the success of current Capstone project as well as all future projects in the field as a professional. It is vital that each team,

starting from the top (i.e. you as a graduate mentor/project manager), to foster team work, mutual respect, patience, and innovative ideas

- Monthly status reports are highly visible as they will be bundled and sent to all sponsors, Capstone committee members, faculty and potential employers who are interested in receiving Capstone status reports. Team diligence, dynamics and challenge resolutions can be a noticeable positive addition to future employers – more so than resume alone. Taking ownership of the project ensures success.
- Do not worry about disappointing customer/sponsor as long as team members put forth their best effort. It is alright to be nervous and it is also rewarding to figure out how to tackle challenges. Important thing is to take full advantage of this opportunity to gain valuable “real world” experience. Customers understand where you are at as they have all gone through nervous experiences themselves.

4. Deliverables

- Deliverable specifications
 - Types: Set of architectural plans or drawings, a report, a presentation, etc.
 - Length requirements, frequency and formats
 - Length requirements: One paragraph, one page, etc.
 - Frequency: Weekly, monthly, quarterly, once etc.
 - Formats: PowerPoint, Word, Excel, Apps etc.
- Minimum required deliverables
 - Short monthly status reports documenting challenges, solutions & progress
 - Answers to 4 questions
 - What challenges have your team encountered in your Capstone project?
 - What actions did your team decided to do to overcome these challenges?
 - Any progress in overcoming these challenges?
 - Summarize the current status of your Capstone Project
 - Did challenges negatively impact the progress of your project?
 - A final report with design alternatives for the project that include economic and environmental considerations
 - If planned ahead and done properly, proposal and monthly status reports can provide a significant portion of the information for the final report
 - i.e. Incorporate status reports in final report as project progresses to reduce work load on final report

- A poster reflecting a summary of your project to be presented to student, faculty and other interested individuals in the final undergraduate seminar
- A presentation summarizing your project to be presented to your sponsor
- Any other additional reports as proposed and agreed upon between team & sponsor
 - In most cases, there should not be any additional reports
- Before the end of winter semester both a presentation to sponsors and poster session for students, faculty and other interested people will be organized.
- All deliverables are tentatively due Monday April 10th.

5. Contractual Terms and Conditions

- Contract type: Non-monetary compensation with all project work on a “best effort” basis
- Term: Team members are to spend 8 hours/week/student with at least 3 hours/week working together. Class time or time spent on class assignments counts toward these hours
- Each project team consists of
 - A project manager/mentor: A graduate student who does not perform technical work on the project. He/she guides, facilitates and directs the team toward successful completion of the project by achieving customer objectives, adhering to schedule/time/cost, and promoting team unity.
 - A project team lead: An undergraduate student team member who serves as the team’s spokesperson and liaison among the team, its project manager, sponsor, faculty advisor and Capstone Committee advisors
 - Two project team members/task leads who may be assigned to take lead on certain aspects of the project in addition to the project team lead. All team members, including project team lead, are to assist one another on each member’s specific task assignments
 - One can take lead on analysis or data gathering, another on design/drawings, data interpretations etc.
- Customer/sponsor may require team members to sign a [non-disclosure agreement](#) that simply states the work you do belongs to the project sponsor

6. Payments, Incentives and Penalties

- Project work to be graded by graduate student mentors/project managers with potential additional inputs from sponsors, Capstone Committee members and faculty advisors
- Grading criteria
 - Team work and unity
 - Project proposal
 - Project Management Plan (PMP)
 - Monthly status report
 - Final report, poster, and presentation
 - Customer satisfaction in satisfying project objectives and required deliverables

7. Submittal Requirements for the Proposal

- Proposal deadline: Monday, October 31, 2016 at 4:00 pm MDT
 - Three copies of proposals in accordance with guidelines & formats specified in the proposal template (to be available by Monday 10/17/2016)
- Minimum requirements for the proposal (each section must start on a new page. Details and formats will be provided in the standardize proposal template)
 - Cover page
 - Letter of submittal / introduction
 - Executive summary (one page or less)
 - Work plan
 - Proposed approach, including innovative ideas, to complete the project
 - Weekly project work schedule for individual team members
 - Weekly team work/meeting schedule
 - Section identifying necessary tools, data, equipment, etc. with brief explanations
 - Project schedule including important milestones
 - Engineering budget: Estimated hours for each phase/element of the proposed work plan
 - Outcome and Performance Standards
 - List of outside consultants (faculty, Capstone Committee member etc.) necessary for this project
 - Statement of qualifications
 - Background, experience, education and organizational structure of the team
 - Team member assignments

- Team member collaboration plan: (How will team work together)
- Appendices
 - Appendix A: 1-page resume for each team member
 - Appendix B, C, etc. as necessary
- Review committee reserves the right to reject any proposal or presentation that is not submitted in a timely fashion or in accordance with instructions and requirements in this RFP

8. Contacts

- Graduate student mentor/project manager:
 - Ryan Egbert
 - (801)518-8895
 - ryanegbert12@gmail.com
- Client:
 - Andy Powell
 - (801)904-4071
 - andy.powell@aecom.com

9. Proposal Evaluation Criteria

- Proposal will be evaluated by graduate student mentor/project manager in accordance with the following rubric, with inputs from project sponsor, Capstone Committee member and potentially faculty advisor.

| | |
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| Timeliness - 1 pt off per full hour late, up to 5. | 5 |
| Grammar/Spelling - 1 pt off per blatant error, up to 5. | 5 |
| Cover Page - Title, Data, Sponsor, Team Name, Team Members, Department of Civil & Environmental Engineering, Ira A. Fulton College of Engineering and Technology, Brigham Young University - 1 pt per piece of information included. | 6 |
| Cover Letter - brief letter of introduction that 1) states your intent to propose and 2) how you may be contacted. | 6 |
| Executive Summary 3/4 to 1 page that summarizes the contents of your proposal | 12 |
| Team Abilities Summary as a team of 1) relevant courses and experience, 2) abilities to complete the work on time and in a professional manner, 3) including use of specific engineering tools/software. Include résumés. | 12 |
| Key Personnel - 1) Identify which individuals will focus on which pieces of your potential tasks, and 2) some kind of organizational chart or visual describing how you will work together as a team. | 12 |
| Project Understanding - 1) Did they address specific items mentioned in the RFP? 2) Do they repeat basic background in somewhat new terms to <i>demonstrate their understanding</i> of the project? 3) Do they mention key deliverables they may need to provide? 4) Did they articulate a <i>specific</i> approach for developing design alternatives and deliverables? 6 pts max per piece. | 24 |
| Formatting - Does it look professional? Consistent? | 6 |
| Concise vs. Wordy , Meaningful vs. Fluffy, repetitive wording. 6 pts means concise, and accurate, and specific. 1 pt means often confusing, wordy, or vague. | 6 |
| Clear and professional flow of writing and style. 6 pts means that you would feel comfortable handing this in if it were your own; it is easy to read and understand; feels professional; 1 pt means it feels like it was cut-pasted, rushed, and done with little thought; hard to read; feels like a high school essay. | 6 |
| Total | 100 |