

# Project Document

## Background Research and Context Analysis

### Project Objectives

---

The Greenbelt East Trail project, spearheaded by the iConsultancy in collaboration with Jeff Lemieux, focuses on enhancing walkability and promoting alternative mobility options in the Greenbelt East area, particularly for NASA employees. The essence of this project lies in its commitment to addressing several critical challenges:

- *Improving Accessibility and Sustainability:* By analyzing current walking conditions and developing user personas, the project aims to make commuting more accessible and environmentally sustainable for NASA employees and the local community. This directly contributes to reducing carbon emissions and traffic congestion, aligning with broader goals of environmental stewardship and public health.
- *Enhancing Community Engagement:* Through community engagement efforts, the project seeks to gather insights and feedback from potential users and stakeholders, ensuring that the development of the trail is inclusive and meets the actual needs of the community it serves.
- *Educational Value:* The involvement of the University of Maryland student team offers educational benefits, providing practical experience in data analysis, user research, and community engagement. This not only benefits the students but also adds value to the project through fresh perspectives and innovative approaches.

### Project Stakeholders & Goals

---

- *Beneficiaries:*

*NASA Employees:* As the primary target group, they will benefit from improved walking conditions, making their commute more accessible and pleasant.

*Local Community:* Residents in the Greenbelt East area will gain from enhanced walkability and the potential for a more connected community.

*Environment:* Reduced reliance on cars for short distances will lower carbon emissions, benefiting the broader environment.

*Eleanor Roosevelt HS, DuVal HS, and St. George's Episcopal:* These schools could leverage the trail for educational purposes, promoting physical education, environmental

science, and community service opportunities for students. They could also benefit from increased accessibility for students and staff commuting to and from the school.

- *Adversely Impacted:*

*Local Businesses:* If not properly engaged, local businesses might see the changes as disruptive or fear a reduction in parking or accessibility for customers.

*Non-Participants:* Residents or employees who, for various reasons, cannot or choose not to use the trail might feel neglected or overlooked by the focus on walking and alternative mobility options.

- *Potential Overlooked Stakeholders:*

*Disabled Community:* Ensuring that the trail and related infrastructure are fully accessible to people with disabilities is crucial. This group might be unintentionally excluded if their specific needs are not considered in the planning and development phases.

*Remote Workers and Flexible Employees:* As work patterns evolve, considering the needs of those who might use the trail outside of traditional commuting hours could broaden its appeal and utility.

## Possible Constraints

---

### *Constraints of the project:*

- *Time:* Our time is just a few months in order to fully collect our required data, organize it, and present it to our client. Collecting data such as the transportation data may take more time than expected depending on how long our requests through the appropriate government bodies take. In addition, we must make time in order to meet with our client, complete parts such as field data collection, and create our presentation.
- *Biases:* we may oversee biases in our data based on the demographics of the Greenbelt area. As mentioned above, there are people that could be adversely affected by the trail proposal. Our presentation needs to persuade these affected people that the trail can be a project that benefits them as well.
- *Interviews:* One piece of the project scope is to conduct user interviews to gather data. In order to further remove the possible bias, interviews should be conducted at neutral areas near the proposal, and not in areas that are the target market for the trail.

## Required Resources

---

To complete the project of data analysis and user persona research for the Greenbelt East Trail, our team will require a variety of technical and substantive resources. Here is a breakdown of the resources needed and where we might find them:

*Transportation data:* Transportation data encompasses a variety of information crucial for understanding mobility patterns and infrastructure needs. This data includes pedestrian traffic volumes, existing transportation infrastructure such as roads and sidewalks, public transit routes, and designated bike lanes. Transportation departments, city planning offices, and transit agencies are primary sources for this data. They collect and maintain comprehensive datasets through traffic counts, transit schedules, and infrastructure inventories. This data is crucial for assessing the current state of transportation networks, identifying areas of congestion or safety concerns, and informing future transportation planning and infrastructure investments.

*Demographic data:* Demographic data provides insights into the characteristics of the population residing in the area surrounding the Greenbelt East Trail. This includes information such as age distribution, income levels, employment status, educational attainment, and household composition. Census data, compiled by government agencies such as the U.S. Census Bureau, is a fundamental source for demographic information. Additionally, local government agencies, public health departments, and community organizations may conduct surveys and collect data specific to the project area. Analyzing demographic data helps identify target user groups, understand their needs and preferences, and tailor project interventions to meet diverse community needs.

*Geographic Information System (GIS) data:* Geographic Information System (GIS) data offers spatial information about the physical environment surrounding the Greenbelt East Trail. This includes land use patterns, zoning regulations, environmental features, and topographical characteristics. GIS data is typically managed by local governments, planning departments, and regional agencies responsible for land use planning and environmental management. Common GIS datasets include parcel data, land cover maps, transportation networks, and environmental overlays. GIS analysis enables planners and decision-makers to visualize spatial relationships, assess potential impacts, and prioritize interventions based on geographic considerations. Integrating GIS data with other datasets enhances spatial understanding and supports informed decision-making throughout the project lifecycle.

## Transition Plan

---

After the final product is completed, the transition of the product would happen through a presentation that goes over the details of the final product. As of now, myself along with the team's communicator will be in charge of transitioning our final product to our client. After all research is complete, we will use our findings to create and conduct a thorough presentation on all information that tells the story of how the project will transition. More specifically, all the files would be kept in our team google drive folder, where we keep track of all progress and reports. The client will have access to all files that we have worked on, in a google drive folder. As the project progresses the client will also be able to monitor our progress and come forward with any questions or concerns they may have.

This should be a smooth transition as we will keep our client up to date as we close out the project. In the case of any questions after the final product is completed they will still be able to reach out to us, using the contact information they already have for us. In the future, another team would definitely be able to use our findings to further their final product due to the fact that this is a developing project, especially since this trail is a part of the east coast greenway which is still developing.

## MOST Analysis

---

As a team we were able to do a MOST analysis because it closely aligned to the objectives that were set out by the project and it would give us a great overview on necessary information needed for completing the project.

Mission	<ul style="list-style-type: none"><li>- Their mission is to educate Marylanders about the need for a trail connecting Greenbelt Road, or more known as Route 193.</li></ul>
Objectives	<ul style="list-style-type: none"><li>- Educate Marylanders of need for trail connections</li><li>- Create a safer commute for those in the Greenbelt area</li><li>- Building community one and around trails in Greenbelt.</li></ul>
Strategy	<ul style="list-style-type: none"><li>- Understanding requirements for people that use the trail</li><li>- Find financial support for the Greenbelt East Trail project</li><li>- Prioritize particular sections according to the needs and requirements based on the residents in the Greenbelt area</li></ul>
Tactics	<ul style="list-style-type: none"><li>- Reaching out to people that use the trail itself</li><li>- Applying to grants to help fund the project<ul style="list-style-type: none"><li>- Examples include:<ul style="list-style-type: none"><li>- National Park Service Grant</li><li>- Anacostia Trails Heritage Area (ATHA) Grant</li></ul></li></ul></li></ul>

	<ul style="list-style-type: none"><li>- “Rocket Grant” &gt; Applied to design renderings</li><li>- Sending letters to MDOT SHA to help share emphasis on the project itself</li></ul>
--	---

# Requirements Interview and Document

## Greenbelt East Trail - User Persona Analysis

Members: Kendrick Montecino, Kevin Agbedi, Rabindra Raj Suwal, Thuy D Tran, Ethan Van Amburg

### Abstract

The Greenbelt East Trail - Data Analysis and User Persona Research project aims to enhance walkability in the Greenbelt East area, with a focus on improving accessibility for NASA employees. Spanning from January to May 2024, the project encompasses a multifaceted approach to understanding current walking conditions, identifying barriers to pedestrian mobility, and crafting user personas to inform the development of the proposed trail.

Key components include an initial project briefing to align project goals, followed by a comprehensive assessment of current walking conditions and identification of barriers hindering potential trail users, particularly NASA employees. Through user persona research involving interviews, surveys, and focus groups, the project seeks to uncover user needs, preferences, and motivations, enabling the creation of detailed personas reflecting diverse user segments.

Community engagement efforts, time permitting, involve collaboration with stakeholders and leveraging resources for gathering feedback from potential trail users. The project culminates in a final presentation and report, including recommendations for improving walkability and promoting alternative mobility options in the Greenbelt East area.

Throughout the project, collaboration with the Greenbelt East Trail organization, led by primary point of contact Jeff Lemieux, ensures access to relevant resources and feedback to guide the project's progression. By synthesizing data analysis, user research, and community engagement, the project aims to inform the development of a user-centered trail solution tailored to the needs of the Greenbelt East community, with a specific focus on NASA employees.

## Executive Summary

### Overview:

This document summarizes key insights and action items derived from interviews conducted with stakeholders involved in the development of the Greenbelt East Trail project, with a particular focus on enhancing the connection between local communities and ensuring the smooth integration of the trail into existing transportation and environmental frameworks.

### Interview Insights:

- **Data and Resources:** Kendrick highlighted the importance of incorporating additional, possibly non-public data that could enhance the project's planning phase. He pointed out the utility of a GIS web app developed by our team, which includes various layers such as municipal boundaries, MDOT roads, and Metropolitan Washington Council of Governments (MWCOC) Transportation Planning Board (TPB) Equity Emphasis Areas. These tools are critical for understanding the geographic and socio-political landscape of the project area.
- **Project Deliverables:** A query was raised regarding the number and detail of user personas required for the project, emphasizing their role in the planning and design process. User personas are envisioned as a tool for tailoring the trail design to meet diverse community needs, particularly in ensuring equitable access and benefits from the new infrastructure.
- **Communication and Updates:** Kendrick expressed the need for regular updates on the project's progress, proposing weekly meetings as a forum for these updates.
- **Maintenance and Management:** Kevin questioned the plans for the ongoing maintenance and management of the trail, highlighting a potential gap as local governments are reluctant to maintain infrastructure on state highways. The role of community groups, such as Friends of Greenbelt, in maintenance efforts was noted as a vital component of the project's sustainability.
- **Budgetary Constraints and Challenges:** While specific budgetary constraints were not detailed, the discussion acknowledged the importance of understanding and navigating these limitations throughout the project's lifecycle.

### Key Action Items:

- **Data Integration:** Leverage the GIS web app and other tools to incorporate comprehensive data layers into project planning, with a focus on equity and connectivity.
- **User Personas:** Develop detailed user personas to guide the design and implementation of the trail, ensuring it meets the needs of a diverse community base.
- **Stakeholder Engagement:** Establish a schedule for bi-weekly updates and meetings with stakeholders, including community groups and government entities, to ensure transparent communication and collaborative decision-making.
- **Maintenance Planning:** Address the challenge of trail maintenance by fostering partnerships with community organizations and clarifying roles and responsibilities among local and state agencies.

- **Community Involvement:** Organize meetings with key stakeholders, including NASA staff, local school representatives, and residents, to gather insights and bolster support for the project.
- **Advocacy and Legal Considerations:** Engage with NASA's legal team and other relevant entities to address any concerns and ensure the project aligns with legal and regulatory requirements, particularly for sections of the trail impacting high-traffic areas and natural traffic flows.

## **Project Details**

### **1. Constraints**

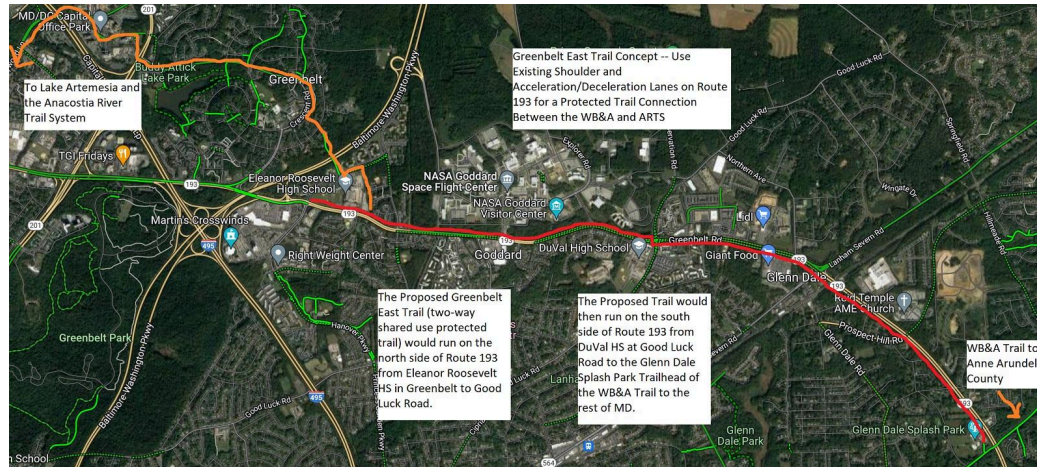
- 1.1. The time constraint on this project is the end of the semester on May 9th, 2024. We are aiming to present the final project to stakeholders in early May to ensure that all the information will be communicated properly by then and make any final tweaks to the project in the end.
- 1.2. There is a money constraint as well. We plan to complete all work through free and publicly available software and programs, and reach out to different communities through different listserv services that our client can provide us with. In the case that we do need funds for anything (e.g. fliers, surveys, etc.) our client let us know to contact him if there is any case that comes up in that case.

### **2. Facts and Assumptions**

- 2.1. Friends of the Greenbelt East Trail, Inc. is a registered non-profit charitable (501c3) organization. Friends of GET, has started working on this project for about 18 months (as of 2024-02-27 ) with constant project updates provided on their [webpage](#) that hosts a lot of the information about the project itself and many details on what is currently being worked on.
- 2.2. The research that will be done on this project will benefit the project to show significant research done to be able to push the project forward for approval.
- 2.3. Friends of GET is also working with another group of students for a Data Analysis that they recorded for the trail, which can be a potential to use this information to help find people of interest from the trails.

### **3. Current Situation**

- 3.1. We are currently waiting for the client to send us a list of contacts that work at NASA located near Greenbelt East Trail. Our team will then take this information and try to move forward with the User Persona analysis of the different contacts. With our different persona analysis, we will be able to compare and contrast the research and create viable final personas for our client.
- 3.2. Through this we will also be able to get a consensus on the other personas that we are missing out on that would be important to cover for this project. We plan to outreach to other people of interest that use the trail frequently through means of surveys and hope to further develop through that.



3.3.

## 4. Scope of the project

- 4.1. This project is intended to be used by the Greenbelt East Trail to gain attention from local and state government officials in order to build a safer walking/cycling trail along the Greenbelt Road.
- 4.2. The client is looking to expand the outreach through this project by collecting insights from NASA employees, Eleanor Roosevelt High School employees and nearby residents.

## 5. Functional Requirements

- 5.1. The client provided us some statistics and wants us to use the data in determining the needs and resources needed to build the proposed trail
- 5.2. The client wants us to organize a meeting with NASA employees and collect information on their use of the Greenbelt Trails.
- 5.3. The User Persona Analysis that we develop will need to reflect the importance and benefits of the proposed trail so that the analysis can be used for campaigns and marketing purposes.

## 6. Non-functional Requirements

- 6.1. General: The client requested that we create a visualization based on our user persona research and data in order to politically persuade the local Greenbelt government to construct the trail.
- 6.2. Client mentioned setting up ways to raise awareness to the project in key areas near the proposed trail, using methods such as bake sales, protests, etc.

## 7. Security Requirements

### 7.1. Digital Security:

- Data Protection: Implement strong encryption for all digital communications and stored data, especially sensitive information such as the details of NASA employees and community feedback.



- **Access Control:** Strictly manage access to project data with role-based access controls (RBAC), ensuring that only authorized personnel can view or manipulate sensitive information.
- **Privacy Compliance:** Adhere to relevant privacy laws and regulations, such as GDPR or CCPA, in handling personal data collected during user interviews, surveys, and community engagement efforts.
- **Secure Communication Channels:** Use secure, encrypted channels for all project communications, especially when sharing sensitive information like transportation and demographic data.
- **Regular Security Audits:** Conduct regular security audits of all digital systems used in the project to identify and rectify potential vulnerabilities.

## **7.2. *Physical Security:***

- **Trail Safety Measures:** Design the trail with safety in mind, including adequate lighting, emergency call stations, and clear signage to enhance user security.
- **Maintenance and Surveillance:** Develop a plan for regular maintenance and surveillance of the trail to prevent and quickly address safety hazards or vandalism.
- **Stakeholder Engagement in Safety:** Involve community groups, such as Friends of Greenbelt, in safety and surveillance efforts to foster a sense of ownership and responsibility for the trail's security.
- **Accessibility:** Ensure the trail design is accessible to all, including the disabled community, and meets ADA standards to prevent accidents or exclusion.
- **Emergency Response Plan:** Establish a clear emergency response plan for incidents on the trail, including coordination with local law enforcement and emergency services.

## **7.3. *Data Security during Research:***

- **Anonymization of Data:** Anonymize personal data collected during user research and community engagement to protect participant privacy.
- **Secure Data Storage:** Use secure, encrypted storage solutions for storing research data, ensuring that access is limited to authorized project members.
- **Ethical Use of Data:** Commit to the ethical use of all data collected, ensuring it is only used for project purposes and not shared without consent.

## **7.4. *Project Documentation and Communication:***

- **Document Security:** Ensure all project documentation is stored securely, with access restricted to stakeholders and team members as appropriate.
- **Secure Transition of Project Deliverables:** When transitioning project deliverables to the client or other stakeholders, use secure transfer methods to protect the integrity and confidentiality of the information.

### **7.5. Implementation and Compliance:**

- Security Training for Team Members: Provide security awareness and protocol training for all project team members to ensure they understand their role in maintaining project security.
- Compliance with Local Regulations: Ensure all security measures comply with local laws and regulations regarding public spaces and data protection.

## **8. Open Issues**

- 8.1. The client mentioned in the recent interview that the project was receiving major pushbacks, particularly from those who are unaffected by the project proposal. The team needs to find ways to promote the project as something everyone has a use for, so that the overall user data will have a more positive trend.
- 8.2. We need to figure out how we will present the data we collect in a way that the client sees fit.

## **9. New Problems**

- 9.1. (Interaction with current systems) As we know for the project, it is a constantly evolving project in terms of updates for the trail approvals itself. It is important to stay up to date with evolving requirements for the project with the client and any new problems that may arise during the development.

## **10. User Documentation and Training**

- 10.1. To bring the Greenbelt East Trail project closer to stakeholders, we've developed user documentation and training tailored to enhance community engagement and walkability. This initiative offers an in-depth look into the project, emphasizing the importance of digital privacy, safety, and accessibility on the trail. Through practical training sessions, participants will dive into the project's tools, learn safety and inclusivity practices, and explore ways to advocate for and maintain the trail.
- 10.2. Central to this effort is our commitment to continuous support and feedback, ensuring that as the project evolves, so does our community's involvement and understanding. This approach aims to not only inform but also inspire all participants, fostering a sense of shared ownership and pride in the Greenbelt East Trail, reflecting our collective goals for sustainability and community cohesion.

# Client Interview Notes

- Through the preliminary research that has already been completed by our team, is there any other additional data that isn't publicly available that would be beneficial to us?
  - Sharing information of NASA employees
    - Next week
  - <https://dbehr.maps.arcgis.com/apps/webappviewer/index.html?id=dbb55eaf19b74ef98deb3851d6d89b0e>
    - You can click on the layer list on the upper right to add or remove layers. I was able to add a municipal boundary layer (from PG Atlas). It shows all municipalities in the county, not just College Park, but should help. I also added the MDOT Know Your Roads layer based on your feedback last night.
    - I also included a layer for the Metropolitan Washington Council of Governments (MWCOG) Transportation Planning Board (TPB) Equity Emphasis Areas. An Equity Emphasis Area is a designation that MWCOG/TPB uses to incorporate equity in long-range transportation planning. MWCOG and the TPB use the Equity Emphasis Areas in the selection criteria for grants they administer. It might be helpful to keep them in mind, if BPAC helps the city with future MWCOG grant applications.
- Looking through the statement of work for the project itself, is there a particular quantity of user personas needed as a deliverable? What level of detail do you expect in the user personas? How do you envision utilizing the user personas in the planning and design process for the trail?
  - Track record at the bottom of the page
  - Feasibility study with MDOT
  - Advocacy
- How frequently would you like to receive updates or progress reports regarding the project?
  - Set up a weekly meeting with him so that we can give him updates.
- What plans are in place for the ongoing maintenance and management of the Greenbelt East Trail once it is completed?
  - Local governments should be taking care of the maintenance in the future.
  - But they disagree to do maintenance on state highways.
  - Basically no one
- Are there opportunities for community involvement in the maintenance efforts?
  - Friends of Greenbelt
- Are there any budgetary constraints or limitations that we should be aware of during the project's execution?

- ANSWERED
- What potential challenges do you see for the future in terms of getting necessary approvals or permits for trail construction and development?
- ANSWERED

2/27/2024

- Dan barron
  - Point of contact for NASA Employees
- Use the same email thread for all communication
- Trail from Elenanor high school to ....trail (total 5miles)
- Plan is to connect with all other trails (Regional connection)
- Create safe riding lanes and safe/efficient bus stops
  - Floating bus stops
  - Without intruding the natural flow of traffic
- Take away high speed merging ramps
- Want to get sector 2 built first (NASA Frontage)
- NASA's legal team not very serious about the project
- Have a list of nasa staff that are willing to contribute to the project by next call.
- User persona analysis for advocacy/political campaigns.
- Would help if we are able to organize a meeting with NASA staff, Roosevelt high school staff, and surrounding residents for more insight.

3/11/2024

- Putting together a list of NASA employees
- Newsletter:
  - <https://conta.cc/49NeFGm>
- Group of 4 or 5 employees for a focus group
- Possible event: Bike to Work Day (May 17th)
- Bike during semester, go to NASA and meet people
- Access the list of employees through email (5 or 6 people who volunteered)
- Probably do a when to meet with the employees (focus group)
- .NASA employee:
  - Browley Ramone(facilities guy)
- Stakeholders meeting 03/22 at noon -> Go over the Feasibility study (carried out by MDOT)
  - Email: [info@greenbeltnasatrail.org](mailto:info@greenbeltnasatrail.org) to be invited

3/25/2024

- Emailed document with list of contacts of NASA employees
  - Contact them for interviews/possible focus groups.
  - Send introductory emails for staff not confirmed on the list.
- Mention about the feasibility study and MDOT being onboard in the interview.

- Trying to figure out if the old NASA entrance is gonna be permanently closed or restricted.
- Interested in getting the feedback from NASA employees on the right turn on-ramp being closed off on the new NASA entrance.
  - So **add this on the interview questions**
- Wanting to see if right turns can be removed to avoid having to put retaining walls.
  - Ask if removing right turns would be beneficial or not.
- Lisa, Christine that are on the list are important people.
- Email the Union guy and survey the people in his union/group.
  - Cc jeff and info@greenbeltnasatrail.org
  - Try to reach out for a robust group of samples, who not only bike but drive also.

## Tasks and Schedule

### Abstract

The Greenbelt East Trail-Data Analysis and User Persona Research project focuses on improving walkability and bike safety for the Greenbelt East Area, with an emphasis on improving accessibility to the NASA Goddard Space Flight Center. From January-May 2024, the project will look into the many sides of the public concerning current walkability conditions and mobility barriers, and through this with create user personas to back the development of the Greenbelt East Trail. The project is in collaboration with the Greenbelt East Trail organization, led by Jeff Lemieux. Frequent communication with the organization and Lemieux gives the project the resources and feedback it needs to progress.

The goal of the project is to inform the development of a user-centered trail solution tailored to the needs of the Greenbelt East community, with a specific focus on employees of the Goddard Center. The project aims to collect local demographic information, as well as transportation data such as mobility patterns. The use of a Geographical Information System (GIS) for data collection is also in play. Meetings with NASA employees, local residents, and local schools will be facilitated to conduct interviews and surveys as well as community outreach programs, all to create the user personas that reflect the views on the Trail proposal. Finally, a final presentation and report of the project's findings will be presented to the Trail organization with recommendations to the stakeholders of the project.

## Scope

Milestone	Task	Description
Project Initiation	Conduct project briefing	Meet with key stakeholders to discuss project goals, objectives, and deliverables.
Data Collection	Gather transportation data	Collect data from transportation departments, city planning offices, and transit agencies to understand mobility patterns and infrastructure needs.
	Collect demographic data	Obtain demographic information from census records, government agencies, and community organizations to understand the population characteristics of the area.
	Analyze GIS data	Utilize Geographic Information System (GIS) data to analyze spatial relationships, land use patterns, and environmental features surrounding the proposed trail route.
Stakeholder Engagement	Organize stakeholder meetings	Arrange meetings and workshops with key stakeholders to gather feedback and promote project awareness.
User Persona	Connect with NASA employees	Find/ get a list of NASA employees from Jeff, that we can reach out to for interviews.
	Conduct user surveys	Create surveys to be sent out to NASA employees to be sent out through email newsletters.
	Conduct user interviews	Create a questionnaire for candidates willing to do an interview and set up time/appointments to conduct the interview.
Research	Develop user personas	Create detailed user personas based on background research and user feedback, ensuring representation of diverse user segments and demographics.
Community Engagement	Facilitate community outreach	Utilize online platforms, social media channels, and outreach events to solicit

		input and foster community support for the project.
Documentation	Prepare project reports	Document project progress and findings through reports, visualizations, and presentations to communicate outcomes and recommendations to stakeholders.

**Work Breakdown Structure (WBS) and Schedule**

Milestone	Task	Description	Assigned To	Start date	Due Date
Project Initiation	Conduct project briefing	Discuss project goals, objectives, and deliverables with stakeholders.	Ethan	02/01/2024	02/15/2024
Data Collection	Gather transportation and demographic data	Collect and analyze data to understand mobility patterns and community needs.  Asking questions along the trail for more data.	Kendrick, everyone in group can participate	02/16/2024	03/12/2024
	Analyze GIS data	Use GIS data for spatial analysis of the project area.	Rabindra	02/16/2024	03/12/2024
Stakeholder Engagement	Organize stakeholder meetings	Facilitate meetings with NASA employees, local schools, and community members.	Kevin	(Bi-weekly meeting 02/27/2024 03/11/2024 03/25/2024 04/08/2024 04/22/2024 05/05/2024	

User Persona	Conduct user research	Surveys, interviews, and creation of user personas reflecting diverse community segments.	Thuy	03/12/2024	04/09/2024
Community Engagement	Facilitate community outreach	Engage the community through online platforms and events.	Rabindra	03/26/2024	04/04/2024
Documentation	Prepare project reports	Document findings, reports, and recommendations for stakeholders.	Kendrick	02/27/2024	05/10/2024
Final Presentation	Develop and present final findings	Present the final project findings and recommendations to stakeholders.	Ethan	05/06/2024	

## List of Expected Deliverables

The plan for what will be delivered and a plan for handing off to the client is provided.

The project deliverables are outlined as follows:

- Project requirements document
- Needs assessment
- Current conditions assessment report
- User personas derived from background research and user interviews
- Summary report on community engagement
- Final presentation for the client and stakeholders
- Comprehensive final report, incorporating any supplementary recommendations

Our current strategy involves sharing completed deliverables with the client as they are finished. This approach ensures that the client remains informed of project progress and allows for any questions or issues to be addressed promptly. On May 6, 2024, we will hold our final meeting with the client, during which we will present all findings and information accumulated throughout the semester. This presentation will include a question and answer component to address any inquiries and potentially modify the final report based on the discussion. As for the reports, we aim to provide these to the client by the end of May 10, 2024. This timeline allows for thorough review, ensuring that all details are accurate and polished before delivery.



## Questions for the initial focus group/ interviews:

- Areas for basic info
  - Name
  - Age
  - Occupation
  - How often they commute as a pedestrian
    - Are there any particular times of day when you prefer to walk or cycle, and if so, what factors influence your choice of timing?
    - Out of the weekdays, how many days do you usually commute to work by walking or using pedestrian transportation?
  - May need to inquire more information to create a bio for the persona
- What would you rate the Greenbelt East Trail for when you commute from 1 (being the worst) to 10 (being the best)?
  - Satisfaction
  - Content
  - Engagement with the design
- What are some of the pain points of the trail that you have noticed? <- Frustrations
- Any particular needs that you would like to emphasize for the trail? <- Wants & Need
- What amenities do you consider essential for a safe and enjoyable walking/cycling experience?
  - What suggestions or recommendations do you have for improving walkability in the area?
- How do you see the proposed Greenbelt East Trail benefiting you and others in the community?
- Have you ever encountered any safety concerns while commuting on the trail?
- How would you rate the accessibility of the trail for individuals with disabilities or mobility impairments?
- Do you think that there are enough rest areas or facilities along the trail to accommodate commuters' needs?
- Have you ever participated in advocacy or community efforts aimed at improving pedestrian infrastructure

## Prospective Interview Questions

### *Preamble*

The purpose of this research project is to better understand the users of the Greenbelt East Trail and collect necessary data to help win grants and push progress for the project. Please note that your responses in this interview will be kept confidential. We will be sure to not identify you if we want to use particular quotes from this interview.

Also we want you to know that you can stop anytime, and it is important to mention that we are undergraduate students conducting this study, so there is a lot that we are still learning about the area and these different research methods.

Do you mind if we record the meeting for future reference.

### Nasa Employees

**Can you introduce yourself and tell us how familiar are you with the Greenbelt East Trail project for further development of the trail?**

- Sub question: Could you tell me about your connection to the Greenbelt East Trail. *Do you primarily use it for commuting, exercise, or a way to get around, ...?*

### *Commuting Details*

- Talk me through a daily commute to work, this can be either via the trail itself or car.
- Through the survey we saw that there were many challenges that the trail posed to commuters, what were some of the most significant challenges you see. - *Try to get a more personalized note/example*
  - Can you share any memorable experiences or stories related to using the Greenbelt East Trail that highlighted the need for improvement or renovation?
  - Or describe an experience where you were commuting along the Greenbelt East Trail and ran into difficulty.
  - *Follow-up: **Would the Greenbelt East Trail Project help solve these problems? Any specifics as to how it would help?***
  - *Is this particular problem unique to you or could it be applicable to other users of the trail?*
  - *(If people mentioned not using the trail on the survey) So you mentioned ..... In our survey. Can you tell us more about that?*

### *Project effectiveness details*

- How would you rate the accessibility of the trail for individuals with disabilities or mobility impairments?
- Have you ever participated in advocacy or community efforts aimed at improving pedestrian infrastructure?
  - *Follow up: Have you seen the same efforts put in for this project compared to what you have seen for others?*
- What would having this project completed mean to you?
  - *Follow up: What would the project mean to the area/community (e.g. stores, businesses, organizations, etc.)?*
- Are there any Drawbacks that you can envision from having this project completed?
- If you were talking to a potential funder, how would you say to them about why this project needs to be done?

### *Conclusion*

- Are there any last thoughts that you would like to include for our user persona research, or any other details that would be important to mention.

## **Interviewees's Consolidation**

### **Chris Gnam**

- Works at NASA, lives in Silver Spring, familiar with the Greenbelt East Trail proposal.
- Bikes to work weekly, uses MARC trains, and prefers safer neighborhood routes over major roads.
- Experiences near misses, especially with high school buses; concerned about safety at crossings and along MD 193.
- Advocates for protected bike lanes and better bike infrastructure.
- Attends Washington Bicycle Association meetings, participates in NASA's bike groups, and attends town hall meetings discussing trail improvements.
- Believes Greenbelt East Trail would enhance safety by separating traffic and providing clear route directions.
- Envisions potential traffic issues from the trail but argues for its necessity in improving pedestrian safety and regional connectivity.

### **Marc Neveu**

- Uses the trail for commuting to NASA Goddard; drives when necessary.
- Describes hazardous conditions for pedestrians and bikers along the trail.
- Participates in advocacy groups at Goddard, focusing on entryway improvements and accessibility.
- Emphasizes lack of accessibility for those with disabilities.
- Supports the trail for reducing car dependence, congestion, and pollution, and enhancing local recruitment.
- Highlights the need for the trail to support all non-car commuters, not just bikers.

### **Ryan McClelland**

- Commutes from Goddard/Old Greenbelt, formerly biked, now use electric cars.
- Describes the trail as dangerous and unmarked, with issues from cars and debris.
- Recorded dangerous commutes for city council advocacy; follows trail updates via an email newsletter.

- Believes the trail would promote a healthier, more cost-effective community.
- Stresses the urgent need for safety improvements to prevent fatalities.

### **Terry Kucera**

- Uses the trail for biking to work from Roosevelt High School, primarily using the more reliable northern shoulder.
- Describes difficulties with poorly lit paths and dangerous crossings on Greenbelt Rd.
- Has participated in campaigns for bike lanes.
- Advocates for the trail to improve safety and environmental impact, although acknowledges challenges with state highway regulations.

## References

- Inc, S. (n.d.). *Greenbelt East Trail Proposal and ARTS/WB&A Connector - Bike Shop* | Proteus Bicycles | College Park, MD. [www.proteusbicycles.com](http://www.proteusbicycles.com).  
<https://www.proteusbicycles.com/articles/greenbelt-east-trail-proposal-and-arts-wba-connector-pg257.htm>
- ChrisGnam. (2023, April 30). *Proposal for “Greenbelt East Trail”, connecting the WB&A Trail with the Anacostia River Trail System*.  
[https://www.reddit.com/r/bikedc/comments/133f08b/proposal\\_for\\_greenbelt\\_east\\_trail\\_connecting\\_the/](https://www.reddit.com/r/bikedc/comments/133f08b/proposal_for_greenbelt_east_trail_connecting_the/)
- Harris, S. (2022, September 9). *A Bike Trail from Eleanor Roosevelt HS to NASA?* Greenbelt Online. <https://www.greenbeltonline.org/a-bike-trail-from-eleanor-roosevelt-hs-to-nasa/>
- Greenbelt East Trail Project Cost Estimator v2.xlsx*. (n.d.). Google Docs.  
[https://docs.google.com/spreadsheets/d/1gOgPMWSr2to\\_\\_ZStkVqvJJ4n\\_Kq0MQgZ/edit#gid=498047505](https://docs.google.com/spreadsheets/d/1gOgPMWSr2to__ZStkVqvJJ4n_Kq0MQgZ/edit#gid=498047505)
- Nielsen Norman Group: *UX Training, Consulting, & Research*. (2019). Nielsen Norman Group.  
<https://www.nngroup.com/>
- Geographic Information Systems (GIS)*. Prince George’s County. (n.d.).  
<https://www.princegeorgescountymd.gov/departments-offices/information-technology/about-our-office/geographic-information-systems-gis>