

Connected, Rural, Equitable, and Autonomous Transportation for Everyone (CREATE)

FY 2023 USDOT Advanced Transportation Technology and Innovation Program



VOLUME 2

Submitted by:



In partnership with:



SECTION 01: STANDARD FORMS

The following Standard Forms are attached to the Application in Grants.gov:

- Standard Form 424 (Application for Federal Assistance)
- Standard Form 424A (Budget Information for Non-Construction Programs)
- Standard Form LLL (Disclosure of Lobbying Activities)
- Standard Form 424B (Assurances for Non-Construction Programs)

SECTION 02: SUMMARY BUDGET NARRATIVE

NCDOT is requesting \$8,227,088 in ATTAIN Program funding for this innovative program that deploys AVs in microtransit services in Wilson, North Carolina. The ATTAIN funding request equals 79.7% of the Project’s total cost, which is \$10,327,588.

NCDOT, May Mobility, and Via, the Project partners, are providing a non-Federal match of **\$2,100,500**. NCDOT is committing **\$2,000,000** from funds specifically reserved for IIJA grant matches. May Mobility will provide an in-kind contribution totaling **\$90,500**, and Via will provide an in-kind contribution of **\$10,000**.

Table 1 provides summary level cost information for each task, associated subtasks, as well as the Federal and non-Federal matches. Table 2 provides a breakdown of Project costs by year.

In all tables, the grand total is the sum of subcomponents rounded to the nearest whole dollar; therefore, the sum of each task may not equal the grand total.

Table 1. CREATE Summary Budget

Project Task	Total	Share of Total Project
Task 1: Grant Administration	\$480,000	4.6%
Task 2: Public Engagement	\$1,126,787	10.9%
Task 3: Deployment	\$7,079,329	68.5%
Task 4: Data Analysis	\$538,916	5.2%
Task 5: Final Report	\$69,798	0.7%
Contingency	\$1,032,759	10.0%
Total	\$10,327,588	100.0%
Total Federal Share	\$8,227,088	79.7%
Total Non-Federal Share	\$2,100,500	20.3%

The grand total is the sum of subcomponents rounded to the nearest whole dollar; therefore, the sum of each task may not equal the grand total. The percentages have been rounded to the nearest tenth; therefore, the sum may not equal the total.

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Table 2. CREATE Funding per Year

Project Task	Year 1 Costs	Year 2 Costs	Year 3 Costs	Year 4 Costs	Total
Task 1: Grant Administration	\$120,000	\$120,000	\$120,000	\$120,000	\$480,000
Task 2: Public Engagement	\$359,047	\$319,206	\$296,514	\$152,021	\$1,126,787
Task 3: Deployment	\$2,630,684	\$2,180,788	\$2,192,857	\$75,000	\$7,079,329
Task 4: Data Analysis	\$123,129	\$125,439	\$152,669	\$137,679	\$538,916
Task 5: Final Report	-	-	-	\$69,798	\$69,798
Contingency	\$359,207	\$305,048	\$306,893	\$61,611	\$1,032,759
Total	\$3,592,066	\$3,050,480	\$3,068,934	\$616,108	\$10,327,588
Total Federal Share	\$2,861,486	\$2,430,051	\$2,444,752	\$490,800	\$8,227,088
Total Non-Federal Share	\$730,581	\$620,429	\$624,182	\$125,309	\$2,100,500

The grand total is the sum of subcomponents rounded to the nearest whole dollar; therefore, the sum of each task or year may not equal the grand total.

Table 3 displays the division of funding amongst Project partners. NCDOT will support 9.5% of the overall Project budget for planning and reporting requirements (less than 5%) and local coordination tasks, which are further described below. NCDOT IMD will engage a project consultant from its group of pre-approved on-call consultants to provide additional support for public engagement and preparation of the final report. The budget for May Mobility includes contractual services, which encompass travel, equipment, supplies, public engagement, and mobility services. Via's budget includes contractual services that encompass travel, equipment, supplies, app development, marketing, and public engagement. NC A&T State University (NC A&T)'s allotted amount of the Project budget will cover direct labor in the form of conducting research and analysis of the data provided by May Mobility and Via, as well as the compilation of reports for NCDOT. Contingency will be allotted as needs arise throughout the Project.

Table 3. Partner Cost Breakdown

Project Partner	Total Partner Costs	Share of Total Project
NCDOT	\$980,000	9.5%
Project Consultant	\$1,145,000	11.1%
Via	\$1,378,689	13.3%
May Mobility	\$5,291,140	51.2%
NC A&T	\$500,000	4.8%
Contingency	\$1,032,759	10.0%
Total	\$10,327,588	100.0%

The grand total is the sum of subcomponents rounded to the nearest whole dollar; therefore, the sum of partner costs may not equal the grand total. The percentages have been rounded to the nearest tenth; therefore, the sum may not equal the total.

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By primary cost category, concise yet detailed line item estimates of Project costs are provided below:

A. Direct Labor

- a. NCDOT will manage the Project through direct labor and consultant support.
 - i. The estimated total cost for planning and reporting requirements is \$120,000 per year for a total of \$480,000 over the four-year project: 1.5 positions x 4 years x \$80,000 = \$480,000 or 4.6% of the total project budget. Note this amount is less than the maximum allowable amount of 5% per the NOFO.
 - ii. In addition, NCDOT will support the proposed Ambassador Program (see **Public Engagement Plan**) through its subrecipient, the City of Wilson, for an estimated cost of \$100,000 for City of Wilson staff time and \$400,000 for ambassador time.
- b. NC A&T will provide direct labor in the form of one (1) PhD student, one (1) postdoctoral employee, four (4) undergraduate trainees, one (1) staff member, along with two (2) faculty advisors overseeing the Project for a total of \$275,264 (not including the tuition costs).
 - i. 2 faculty advisors x 4 years = \$33,465
 - 1. Advising this project will total 1% of one advisor's annual salary (\$1,114 in Year 1) and each year that amount is adjusted for inflation at 3%.
 - 2. Advising this project will total 50% of one advisor's monthly salary (\$6,885 in Year 1) and each year that amount is adjusted for inflation at 3%.
 - ii. 1 staff member x 2 years = \$36,540
 - 1. CREATE will account for 40% of the staff member's salary (\$18,000 for Year 1) with a 3% increase annually for inflation.
 - iii. 1 Postdoctoral employee x 4 years = \$50,204
 - 1. CREATE will account for 20% of the postdoctoral employee's salary (\$12,000 in Year 1) with a 3% increase annually for inflation.
 - iv. 1 PhD student x 4 years = \$85,346
 - 1. The stipend will be \$1,700 per year and a 3% increase each year for inflation is accounted for.
 - v. 4 undergraduate trainees x 2 years = \$23,040
 - vi. The Fringe benefits for individuals working on this project are calculated at a rate of 36% of the salaries and wages of senior personnel, the staff member, and the postdoctoral employee while a rate of 7.65% is used for the undergraduate trainees and PhD student, totaling \$46,670 for the four years.
 - vii. Tuition support is requested for the PhD student at the rate of \$10,489 per year and a 3% increase each year for inflation for a total of \$43,881.

B. Travel

- a. NC A&T's travel costs will be \$30,000 for the four years.
 - i. These funds will cover ground transportation, lodging, mileage, and meals.
- b. Travel costs are included in Via and May Contractual Services.

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C. Equipment

- a. Equipment is included in Via and May Contractual Services.

D. Supplies

- a. NC A&T will require supplies and materials including software licenses, documentation, communication, and equipment maintenance totaling \$5,301 over four years.
- b. Supplies are included in Via and May Contractual Services.

E. Contractual Services

- a. The consultant will provide direct labor as a liaison between NCDOT and the project partners while also serving as the task lead for the data analysis, supporting public engagement, and assisting in developing the final report.
 - i. The consultant will provide engagement support totaling \$845,000.
 - 1. Support for the elected official AV safety seminar = \$75,000
 - 2. Support for the economic development outreach = \$200,000
 - 3. Support for engagement with riders with disabilities = \$130,000
 - 4. Support for engagement with the large employers = \$300,000
 - 5. Support for general community engagement = \$140,000
 - ii. The consultant will lead the data analysis task for a total of \$250,00.
 - iii. The consultant will support the development of the final report for a total of \$50,000.
- b. Via will provide contractual pre- and post-launch services in Wilson.
 - i. Via will install software as a service (SaaS) at a cost of \$35,000.
 - ii. The SaaS software licensing fee for the 5 AVs is estimated to be \$442,989 for the Project duration.
 - iii. Via transportation as a service (TaaS) operational costs in Wilson total \$900,700. This includes \$25,000 in upfront costs and \$875,700 in operational costs.
- c. May Mobility will provide contractual services in the form of public engagement and mobility services in Wilson.
 - i. Public engagement totals \$90,500. Additional details are available in Table 4.
 - ii. Launch fees total \$201,626. This includes \$157,359 in AV setup costs for IT needs, mapping, travel, vehicle shipping, and training. The launch fees also include \$44,267 in facility site setup costs.
 - iii. Ongoing AV Support totals \$280,634.
 - iv. Facilities expenses include rent, utilities, and other costs for a total of \$392,911.
 - v. May Mobility will employ 1 site manager, 2 site supervisors, and 1 technician for a total of \$962,956 in fixed site staff expenses over the Project duration.
 - vi. AV operating expenses include autonomy equipment depreciation, autonomous equipment maintenance and upkeep, and insurance for an estimated total of \$1,039,297.
 - vii. 15-20 AVOs will be hired for an estimated \$1,886,270.

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viii. Vehicle fuel costs are variable but are estimated to be \$59,693 for the Project duration.

F. Other

- a. Contingency for the project, to cover unforeseen pricing escalations and other risks, totals \$1,032,759.
- b. NC A&T Indirect Costs were assumed to be 45% of the modified total direct cost to the project (i.e., the direct cost of labor, benefits, travel, and materials minus the cost of tuition) and total \$139,754 over four years.

Table 4 highlights the tasks that May Mobility will provide through their in-kind contribution. Over CREATE’s duration, May Mobility will hold two (2) emergency management (EMT) and first responder trainings on how to interact with AVs and will walk EMTs through how riders utilize the vehicles. This has shown to be effective when encouraging adoption of AVs into service and proves helpful for individuals with disabilities, senior centers, veteran centers, and pedestrian/cyclist groups. In addition to the EMT trainings, May Mobility will conduct 12 Community Engagement sessions. These sessions will take place after consulting with local leaders to determine what the community’s needs are, where the preferred stop points are, the desired outcomes, and possible considerations to be made when finalizing route planning. The in-kind contribution also includes print and digital advertising to spotlight the CREATE project. May’s in-kind contribution will fund event materials, as well as a vehicle shipment for a demonstration of the service during community engagement efforts. Throughout the community engagement, May Mobility will contribute one (1) knowledge-sharing session with government officials to communicate Project findings.

Table 4. Detailed Breakdown of May Mobility’s In-Kind Contribution

May Mobility In-Kind Contribution	Amount
Two (2) EMT Training and Coordination (1 pre-launch + 1 at program half point)	\$8,000
Twelve (12) Community Engagement events	\$60,000
Advertising (Digital, Print, etc.)	\$10,000
One (1) Knowledge Sharing Session with Government Officials	\$2,000
Materials Development	\$5,500
Vehicle Shipment for Pre-Launch Community Socialization	\$5,000
Total	\$90,500

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Table 5 captures the summary of Via’s in-kind labor contribution (pre- and post-service launch). The contribution will support Via’s central business and technology teams as needed. Support will be provided in several ways, including systems testing, driver, dispatcher, and manager training, as well as developing a launch plan and rider acquisition strategy.

Table 5. Detailed Breakdown of Via's In-Kind Contribution

Via In-Kind Contribution	Amount
Pre-Launch Systems Testing	\$1,500
Training for Drivers, Dispatchers, or Managers	\$7,000
Building a Launch Plan and Rider Acquisition Strategy	\$1,500
Total	\$10,000

Table 6 on the following page displays details of the Project costs by year, task, and partner.

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Table 6. CREATE Detailed Cost and Schedule

Project Task	Year 1 Costs	Year 2 Costs	Year 3 Costs	Year 4 Costs	Total
Task 1: Grant Administration	\$120,000	\$120,000	\$120,000	\$120,000	\$480,000
Task 2: Public Engagement	\$359,047	\$319,206	\$296,514	\$152,021	\$1,126,787
May Mobility Public Engagement	\$31,375	\$22,375	\$18,375	\$18,375	\$90,500
NC A&T (Rider Survey)	\$11,005	\$85,164	\$86,473	\$8,646	\$191,287
Project Consultant	\$316,667	\$211,667	\$191,667	\$125,000	\$845,000
Elected Official AV Safety Seminar	\$75,000				\$75,000
Economic Development Outreach	\$66,667	\$66,667	\$66,667		\$200,000
Engagement With Riders with Disabilities	\$40,000	\$30,000	\$30,000	\$30,000	\$130,000
Engagement With Large Employers	\$75,000	\$75,000	\$75,000	\$75,000	\$300,000
General Community Engagement	\$60,000	\$40,000	\$20,000	\$20,000	\$140,000
Task 3: Deployment in Wilson	\$2,630,684	\$2,180,788	\$2,192,857	\$75,000	\$7,079,329
Local Coordination	\$275,000	\$75,000	\$75,000	\$75,000	\$500,000
City of Wilson Staff Time	\$25,000	\$25,000	\$25,000	\$25,000	\$100,000
Ambassadors	\$250,000	\$50,000	\$50,000	\$50,000	\$400,000
Via - AV SaaS	\$179,400	\$147,632	\$150,957		\$477,989
Installation Fee	\$35,000				\$35,000
Software Licensing Fee	\$144,400	\$147,632	\$150,957		\$442,989
Via - TaaS	\$308,320	\$291,818	\$300,562		\$900,700
Fixed Upfront Costs	\$25,000				\$25,000
Ongoing Operational Costs	\$283,320	\$291,818	\$300,562		\$875,700
May Mobility	\$1,867,964	\$1,666,338	\$1,666,338		\$5,200,640
AV Setup (IT, mapping, travel, shipping, training)	\$157,359				\$157,359
Facility Site Setup	\$44,267				\$44,267
AV Support (May Tech & Support)	\$93,545	\$93,545	\$93,545		\$280,635
Facilities Expense (Rent, Utilities, Other Misc)	\$130,970	\$130,970	\$130,970		\$392,910
Site Staff (1 Manager, 2 Supervisors, 1 Technician)	\$320,985	\$320,985	\$320,985		\$962,955

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Project Task	Year 1 Costs	Year 2 Costs	Year 3 Costs	Year 4 Costs	Total
AV Vehicle Expense (Depreciation, Insurance, Maintenance)	\$346,432	\$346,432	\$346,432		\$1,039,296
AVO Expense (Drivers)	\$754,508	\$754,508	\$754,508		\$2,263,524
Vehicle Fuel	\$19,898	\$19,898	\$19,898		\$59,694
Task 4: Data Analysis	\$123,129	\$125,439	\$152,669	\$137,679	\$538,916
Project Consultant	\$50,000	\$50,000	\$75,000	\$75,000	\$250,000
NC A&T	\$73,129	\$75,439	\$77,669	\$62,679	\$288,916
Task 5: Final Report				\$69,798	\$69,798
Project Consultant				\$50,000	\$50,000
NC A&T				\$19,798	\$19,798
Project Contingency	\$359,207	\$305,048	\$306,893	\$61,611	\$1,032,759
Total	\$3,592,066	\$3,050,480	\$3,068,934	\$616,108	\$10,327,588
Total Federal Share	\$2,861,486	\$2,430,051	\$2,444,752	\$490,800	\$8,227,088
Total Non-Federal Share	\$730,581	\$620,429	\$624,182	\$125,309	\$2,100,500

The grand total is the sum of subcomponents rounded to the nearest whole dollar; therefore, the sum of each task or year may not equal the grand total.

SECTION 03: COST SHARE INFORMATION

Project partners, NCDOT, May Mobility, and Via, are providing a non-Federal match of \$2,100,500 (20% of the project cost). NCDOT committed \$2,000,000 from the Public Transportation Matching Grants (IIJA) Fund (Code 7831). May Mobility will also provide an in-kind contribution totaling \$90,500, and Via will provide an in-kind contribution of \$10,000. Letters of commitment from partners indicate their financial or in-kind contributions. For more information, please refer to the following attachments:

- *NCDOT Letter of Commitment*
- *May Mobility Letter of Commitment*
- *Via Letter of Commitment*



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

02/02/2024

J.R. "JOEY" HOPKINS
SECRETARY

Secretary Buttigieg
US Department of Transportation
1200 New Jersey Ave, SE
Washington, DC 20590

Dear Secretary Buttigieg,

Please accept this letter of support for the Connected, Rural, Equitable, and Autonomous Transportation for Everyone (CREATE or "the Project") grant application to the United States Department of Transportation's Advanced Transportation Technology and Innovation (ATTAIN) Program. CREATE advances the North Carolina Department of Transportation (NCDOT)'s vision and strategy – led by the Integrated Mobility Division (IMD) – to partner with transit agencies and leaders, private industry, and the research community to deliver affordable, convenient, safe, and expanded transit services to transportation disadvantaged communities in rural areas using advanced technology. CREATE will pilot the future of advanced transportation technologies in an on-demand transit service (also known as "microtransit") by leveraging software and automated vehicles (AVs) to provide easier, more reliable, efficient, and equitable access for riders to reach key destinations in Wilson, North Carolina.

The Project will build on the City of Wilson's popular RIDE microtransit service and the recently awarded Mobility for Everyone, Everywhere in NC (MEE NC) initiative to address service gaps and unmet needs while also gathering data to understand rider preferences and behaviors related to AVs and on-demand transit services. NCDOT IMD will partner with May Mobility, Via, the Community Transportation Association of America (CTAA), and North Carolina Agricultural and Technical (NC A&T) State University to accomplish the following:

Expand the existing microtransit service area to include major employment centers and other community hubs. The Project will deploy conventional vehicles to support the expanded coverage to facilities that are on high-speed roadways where AVs cannot currently operate.

Pilot a prescheduling option for riders to secure rides to work shifts, medical appointments, care centers, and for other preplanned trips.
Integrate five hybrid electric AVs into the fleet. Riders will be able to select between a conventional vehicle and an AV to complete their trip. Qualitative and quantitative data

will be collected and analyzed to better understand rider preferences, behaviors, and perceptions surrounding AVs, particularly as part of an on-demand transit service. Leverage an Autonomous Driving Kit (ADK) and Multi-Policy Decision-Making (MPDM) system in each automated vehicle for safe navigation in diverse road and traffic environments. The AVs will feature onboard safety operators that will educate riders on the technology, provide customer service, and assist riders using mobility devices. The findings from CREATE will provide a replicable model and guidance for communities in North Carolina to leverage advanced technologies in serving new employment centers, riders with disabilities, and prescheduled trips. The Project will also contribute to the greater body of research and inform innovative deployments across the country.

By addressing challenges faced by rural areas and increasing transportation options for all travelers, CREATE supports multiple FHWA focus areas, including advanced public transportation systems, the ROUTES Initiative, and Complete Trip Program. The modernization and automation of public transportation in North Carolina is vital to creating vibrant and inclusive communities by connecting people to places, addressing mobility needs, and increasing high-quality transportation choices for all people. The Project is reflected in our mission statement:
Connecting people, products and places safely and efficiently with customer focus, accountability and environmental sensitivity to enhance the economy and vitality of North Carolina.

To that end, the NCDOT will fund the CREATE project in the amount of \$2 million (2024\$) towards a successful ATTAIN grant from the FHWA.

Thank you for your consideration of the CREATE project for the 2023 ATTAIN Discretionary Grant Program. If NCDOT can be of any further assistance, please do not hesitate to contact me at 919-612-6133 or via e-mail at mnewsome2@ncdot.gov

Sincerely,

DocuSigned by:

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Mark Newsome
Chief Financial Officer
North Carolina Department of Transportation



May Mobility

ATTAIN Grant Letter of Commitment

January 29, 2024

Honorable Pete Buttigieg
Secretary
U.S. Department of Transportation
1200 New Jersey Ave. SE
Washington, DC 20590

Dear Secretary Buttigieg:

On behalf of May Mobility, I am writing in support of the Connected, Rural, Equitable, and Autonomous Transportation for Everyone (CREATE) grant application to the United States Department of Transportation's Advanced Transportation Technology and Innovation (ATTAIN) Program, submitted by the North Carolina Department of Transportation (NCDOT).

Should NCDOT be awarded the funding through the ATTAIN program, May Mobility commits up to \$90,500 of in-kind costs in the form of labor/services (Emergency Management Services AV Training and Coordination, Community Engagement Events, Peer and Industry Knowledge-sharing Events, Webinars and case study, Materials Development, and Vehicle shipment for AV socialization) in matching funds to support the CREATE program.

Thank you for your consideration of this application.

Sincerely,

Daisy Wall, Senior Director of Government Business

May Mobility



The Honorable Pete Buttigieg
Secretary
United States Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590

November 18, 2022


Dear Secretary Buttigieg,

On behalf of Via Transportation, Inc. (Via), I am writing in support of the **Connected, Rural, Equitable, and Autonomous Transportation for Everyone (CREATE)** grant application to the United States Department of Transportation's Advanced Transportation Technology and Innovation (ATTAIN) Program, submitted by the North Carolina Department of Transportation (NCDOT).

Should NCDOT be awarded the funding through the ATTAIN program, Via commits \$10,000 of in-kind labor costs (pre- and post-launch) towards the local match.

Thank you so much for your consideration of this application. Should you have any questions, please do not hesitate to contact me at zack@ridewithvia.com.

Sincerely,

DocuSigned by:

59BB4A4E225C423...

Zack Wasserman
Chief Strategy Officer
Via Transportation, Inc.

SECTION 04: GRANT FUNDS, SOURCES, AND USES OF PROJECT FUNDS

Table 7. CREATE Use of Funding Sources

Project Task	ATTAIN Program		Non-Federal						Other Federal		Total	
			NCDOT		May Mobility (In-Kind)		Via (In-Kind)					
	\$	%	\$	%	\$	%	\$	%	\$	%	\$	%
Task 1: Grant Administration	\$387,045	3.7%	\$92,955	0.9%							\$480,000	4.6%
Task 2: Public Engagement	\$818,078	7.9%	\$218,209	2.1%	\$90,500	1%					\$1,126,787	10.9%
May Mobility Public Engagement					\$90,500	1%					\$90,500	0.9%
NC A&T (Rider Survey)	\$154,243	1.5%	\$37,044	0.4%							\$191,287	1.9%
Project Consultant	\$681,361	6.6%	\$163,639	1.6%							\$845,000	8.2%
Elected Official AV Safety Seminar	\$60,476	0.6%	\$14,524	0.1%							\$75,000	0.7%
Economic Development Outreach	\$161,269	1.6%	\$38,731	0.4%							\$200,000	1.9%
Engagement With Riders with Disabilities	\$104,825	1.0%	\$25,175	0.2%							\$130,000	1.3%
Engagement With Large Employers	\$241,903	2.3%	\$58,097	0.6%							\$300,000	2.9%
General Community Engagement	\$112,888	1.1%	\$27,112	0.3%							\$140,000	1.4%
Task 3: Deployment in Wilson	\$5,698,374	55.2%	\$1,370,955	13.3%			\$10,000	0.1%			\$7,079,329	68.5%
Local Coordination	\$403,172	3.9%	\$96,828	0.9%							\$500,000	4.8%
City of Wilson Staff Time	\$80,634	0.8%	\$19,366	0.2%							\$100,000	1.0%
Ambassadors	\$322,538	3.1%	\$77,462	0.8%							\$400,000	3.9%
Via - AV SaaS	\$385,424	3.7%	\$92,565	0.9%							\$477,989	4.6%
Installation Fee	\$28,222	0.3%	\$6,778	0.1%							\$35,000	0.3%
Software Licensing Fee	\$357,201	3.5%	\$85,788	0.8%							\$442,989	4.3%

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Project Task	ATTAIN Program		Non-Federal						Other Federal		Total	
			NCDOT		May Mobility (In-Kind)		Via (In-Kind)					
	\$	%	\$	%	\$	%	\$	%	\$	%	\$	%
Via - TaaS	\$716,274	6.9%	\$174,426	1.7%			\$10,000	0.1%			\$900,700	8.7%
Fixed Upfront Costs	\$10,159	0.1%	\$4,841	0.0%			\$10,000	0.1%			\$25,000	0.2%
Ongoing Operational Costs	\$706,115	6.8%	\$169,585	1.6%							\$875,700	8.5%
May Mobility	\$4,193,505	40.6%	\$1,007,135	9.8%							\$5,200,640	50.4%
AV Setup (IT, mapping, travel, shipping, training)	\$126,885	1.2%	\$30,474	0.3%							\$157,359	1.5%
Facility Site Setup	\$35,694	0.3%	\$8,573	0.1%							\$44,267	0.4%
AV Support (May Tech & Support)	\$226,288	2.2%	\$54,347	0.5%							\$280,635	2.7%
Facilities Expense (Rent, Utilities, Other Misc)	\$316,821	3.1%	\$76,089	0.7%							\$392,910	3.8%
Site Staff (1 Manager, 2 Supervisors, 1 Technician)	\$776,473	7.5%	\$186,482	1.8%							\$962,955	9.3%
AV Vehicle Expense (Depreciation, Insurance, Maintenance)	\$838,030	8.1%	\$201,266	1.9%							\$1,039,296	10.1%
AVO Expense (Drivers)	\$1,825,179	17.7%	\$438,345	4.2%							\$2,263,524	21.9%
Vehicle Fuel	\$48,134	0.5%	\$11,560	0.1%							\$59,694	0.6%
Task 4: Data Analysis	\$434,551	4.2%	\$104,364	1.0%							\$538,916	5.2%
Project Consultant	\$201,586	2.0%	\$48,414	0.5%							\$250,000	2.4%
NC A&T	\$232,965	2.3%	\$55,950	0.5%							\$288,916	2.8%
Task 5: Final Report	\$56,281	0.5%	\$13,517	0.1%							\$69,798	0.7%
Project Consultant	\$40,317	0.4%	\$9,683	0.1%							\$50,000	0.5%
NC A&T	\$15,964	0.2%	\$3,834	0.0%							\$19,798	0.2%
Project Contingency	\$832,759	8.1%	\$200,000	1.9%							\$1,032,759	10.0%
Total	\$8,227,088	79.7%	\$2,000,000	19.4%	\$90,500	0.9%	\$10,000	0.1%			\$10,327,588	100.0%

The grand total is the sum of subcomponents rounded to the nearest whole dollar; therefore, the sum of each task or year may not equal the grand total.

SECTION 05: ORGANIZATIONAL INFORMATION

1. Exceptions to Anticipated Awards and Conditions

NCDOT IMD does not take exception to the anticipated award terms and conditions as contained in Section F, Federal Award Administration Information. NCDOT anticipates using the following intellectual property during the Project:

- **May Mobility:** CREATE will use intellectual property related to the operation and performance of the five (5) SAE Level 4 microtransit vehicles. May maintains ownership rights to the patents identified per the attached Patent list provided (see attachment), in addition to all copyrights, service marks, trade secrets, trade names, logos, know-how and all other intellectual property associated with its vehicles, technology and service. May's position on data rights is that it will own all data related to the services, vehicles, and riders before and after the award period of performance. May would consider negotiating terms to license certain data sets to help evaluate and improve the services. May Mobility has worked with the UDOT on multiple grant awards and have provided relevant data that the USDOT and NCDOT may need for further evaluation of the success of the program during contracting. For example, May Mobility can share data from Fleet APIs and Rider dashboards. May is open and willing to discuss other data inputs that may be needed if awarded.
- **Via Transportation, Inc:** CREATE will use intellectual property related to the rider software platform and operation of conventional microtransit vehicles in Wilson. Via maintains a global portfolio of patents to protect our proprietary technology and intellectual property assets. Via's patent portfolio includes granted patents for various unique technologies, including "virtual bus stop" technology for efficient, on-demand dynamic routing for shared ride vehicles both in the United States (US9816824B1) and in Europe (EP3355028B1). Via's patent protection, combined with their experience and expertise in the TransitTech space, means that no competitor can provide the same or comparable on-demand shared transportation and dynamic routing services. Any other entity that claims to operate substantially similar technology is likely infringing on Via's intellectual property and is therefore at risk of patent infringement claims. Via vigorously protects its intellectual property and seeks to prevent unfair competition by patent infringers, including by bringing actions against patent infringers where appropriate.

Data and KPIs related to AV and microtransit operations and rider behavior and preferences will be downloaded for analysis and evaluation by NCDOT IMD and NC A&T throughout the Project and will be made available for USDOT use.

2. NCDOT's SAM UEI

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3. A-133 Single Audit

The State of North Carolina Office of the State Auditor completed a Single Audit on the State of North Carolina for the Year Ended June 30, 2022, issued on December 5, 2022. There were no Conflicts of Interest.

4. Conflicts of Interest Statement

NCDOT IMD is not aware of any actual or potential personal or organizational conflicts of interest.

5. Accounting System Audit

An outside CPA firm on behalf of the state of North Carolina has audited the accounting system for NCDOT using the *Enhancing Accountability in Government through Leadership and Education* (EAGLE) audit. The date of the audit was July 28, 2023. The audit consists of an annual assessment of internal controls over financial reporting, compliance, and IT general controls processes. There were five findings. Management responded to three of the findings, and two of the findings warranted no response. POC: Wayne Davenport - wdavenport@ncdot.gov.

6. Terminated Contracts

NCDOT terminated contract 54-JR-STEF2019 with EasyMile for convenience effective October 1, 2022. The contract was terminated due to technical issues with the EZ10 Gen3 vehicle leased from EasyMile and extensive project delays. No other contract or agreement was terminated for the convenience of NCDOT IMD within the past 3 years, and no contract or agreement was terminated for default within the past 5 years.

7. Reporting Requirements Statement

NCDOT IMD has reviewed title 2 CFR §170 (CFR: 2 CFR Part 170 — Reporting Subaward and Executive Compensation Information) dated September 14, 2010, and Appendix A thereto, and acknowledges understanding of the requirement, has the necessary processes and systems in place, and is prepared to fully comply with the reporting described in the term if it receives funding resulting from this notice.

8. Disclosure of Federal Law Violations

NCDOT IMD has no violations of Federal criminal law involving fraud, bribery, or gratuity violations to disclose.

schox_client_portal_cases 012024

P#	Type	Client Facing Status	Filing Date (from Docketing sync)	APP # (from Docketing sync)	PUB # (from Docketing sync)	PAT # (from Docketing sync)	Case Number
P06	US4	Issued	7/26/2022	17/873,637	US-2022-0355809-A1	11,679,776	
P10	US	Issued	5/27/2022	17/826,655	US-2022-0388536-A1	11,565,717	
P10	US2	Published	10/16/2022	17/966,877	US-2023-0032713-A1		
P13	US	Issued	2/14/2023	18/109,689	US-2023-0256991-A1	11,814,072	
P05	US3	Issued	5/17/2022	17/746,422	US-2022-0274627-A1	11,565,716	
P01	US4	Issued	2/22/2021	17/181,302	US-2021-0200215-A1	11,269,332	
P01	US6	Published	1/31/2022	17/588,809	US-2022-0155785-A1		
P01	US5	Issued	2/22/2021	17/181,155	US-2021-0200214-A1	11,269,331	
P06	US	Issued	12/14/2021	17/550,461	US-2022-0185299-A1	11,396,302	
P12	US	Pending	12/1/2022	18/072,939			
P05	US2	Issued	5/6/2022	17/738,462	US-2022-0258764-A1	11,667,306	
P04	US2	Issued	9/3/2020	17/011,037	US-2020-0400781-A1	11,525,887	
P03	US	Abandoned	8/14/2019	16/540,836	US-2020-0057441-A1		
P05	US	Issued	7/1/2021	17/365,538	US-2022-0001892-A1	11,352,023	
P07	US	Issued	12/17/2021	17/554,619	US-2022-0194436-A1	11,472,444	
P04	US3	Issued	3/5/2021	17/193,621	US-2021-0208244-A1	11,513,189	
P08	PCT	Published	4/4/2022	PCT/US22/23300	WO 2022/212944		
P01	JP	Issued	7/17/2019	2021-539333	2021-533036	7199545	
P13	PRV	Advanced	2/14/2022	63/309,945			
P07	US2	Published	9/9/2022	17/941,225	US-2023-0001958-A1		
P12	PRV	Advanced	12/1/2021	63/285,024			
P11	PRV	Advanced	12/2/2021	63/285,238			
P01	EP	Published	7/17/2019	19837626.1	EP3824404		
P11	US	Pending	12/1/2022	18/073,209			
P08	US	Issued	4/4/2022	17/712,757	US-2022-0315051-A1	11,472,436	
P08	US2	Issued	9/9/2022	17/941,251	US-2023-0001952-A1	11,745,764	
P06	US3	Issued	7/26/2022	17/873,584	US-2022-0355808-A1	11,673,566	
P14	PRV	Pending	12/13/2022	63/432,137			
P07	US3	Published	9/21/2022	17/949,921	US-2023-0027212-A1		
P06	US2	Issued	6/22/2022	17/846,963	US-2022-0324469-A1	11,673,564	
P08	US3	Issued	9/29/2022	17/956,327	US-2023-0033977-A1	11,845,468	
P04	US4	Published	11/8/2022	17/982,858	US-2023-0059510-A1		
L04	US	Pending	12/5/2022	18/074,944			
P05	PCT	Advanced	7/1/2021	PCT/US21/40125	WO 2022/006418		
P10	PCT	Published	5/27/2022	PCT/US22/31296	WO 2022/256249		
L01	JP	Issued	1/26/2018	2019540329		7262776	
P02	US	Issued	7/8/2019	16/505,372	US-2020-0035098-A1	10,614,709	
P01	US3	Issued	1/15/2020	16/743,289	US-2020-0150661-A1	10,962,975	
P04	PRV	Advanced	2/15/2019	62/806,564			
L03	PRV	Advanced	3/17/2017	62/472,734			
P01	PRV	Advanced	7/20/2018	62/701,014			
P03	PRV	Advanced	8/14/2018	62/718,642			
L03	US	Issued	3/16/2018	15/923,577	US-2018-0268281-A1	11,087,200	
P09	cPRV	Abandoned	4/8/2021	63/172,288			
L03	JP	Issued	3/16/2018	2019-550667		7069456	
P07	PCT	Advanced	12/17/2021	PCT/US21/64076	WO 2022/133242		
P05	PRV	Advanced	7/1/2020	63/046,842			
P06	PRV	Advanced	12/14/2020	63/125,304			
P08	PRV	Advanced	4/2/2021	63/170,206			
P01	PCT	Advanced	7/17/2019	PCT/US19/42235	WO 2020/018688		
L04	PRV	Advanced	12/6/2021	63/264,977			
P04	US	Issued	2/17/2020	16/792,780	US-2020-0264275-A1	10,969,470	
P06	PCT	Advanced	12/14/2021	PCT/US21/63315	WO 2022/132774		
L03	PCT	Advanced	3/16/2018	PCT/US18/22956	WO 2018/170444		
L03	US2	Issued	7/9/2021	17/371,221	US-2021-0342667-A1	11,681,896	
L03	JP2	Issued	3/16/2018	2022-063511.		7262858	

L02	PCT	Abandoned	3/15/2018	PCT/US18/22575	WO 2018/170224		
L02	US	Issued	3/14/2018	15/920,730	US-2018-0267162-A1	10,948,584	
L01	PRV	Advanced	1/26/2017	62/450,616			
P02	US3	Issued	9/8/2020	17/014,578	US-2020-0402398-A1	11,847,913	
P02	US2	Issued	1/30/2020	16/776,993	US-2020-0168085-A1	10,803,745	
L02	PRV	Advanced	3/15/2017	62/471,559			
L01	PCT	Advanced	1/26/2018	PCT/US18/15480	WO 2018/140748		
P01	US2	Issued	12/6/2019	16/705,503	US-2020-0110411-A1	10,962,974	
L01	US	Issued	1/26/2018	15/881,026	US-2018-0210087-A1	10,838,065	
P01	US	Issued	7/17/2019	16/514,624	US-2020-0026286-A1	10,564,641	
P10	PRV	Advanced	6/2/2021	63/195,774			
P02	PRV	Advanced	7/24/2018	62/702,715			
P07	PRV	Advanced	12/17/2020	63/126,938			
P10	US3	Published	12/22/2022	18/086,832	US-2023-0127379-A1		
P05	US4	Allowed	12/21/2022	18/086,430	US-2023-0129316-A1		
P14	US	Pending	12/13/2023	18/538,312			
P14	PRV2	Pending	2/1/2023	63/442,636			
P05	EP	Published	7/1/2021	21833278.1	4165476		
P06	US5	Published	4/28/2023	18/140,904	US-2023-0303095-A1		
L03	US3	Pending	5/12/2023	18/196,897			
P05	JP	Published	7/1/2021	2022-580347	2023-533225		
P11	PCT	Published	12/1/2022	PCT/US22/51537	WO 2023/102116		
L04	PCT	Pending	12/6/2022	PCT /US22/51958			
P12	PCT	Published	12/1/2022	PCT/US22/51491	WO 2023/102098		
P13	PCT	Published	2/14/2023	PCT/US23/13035	WO 2023/154568		
P06	EP	Published	12/14/2021	21907633.8	4260009		
P07	EP	Published	12/17/2021	21907911.8	4264181		
P07	JP	Pending	12/17/2021	2023-535662			
P06	JP	Published	12/14/2021	2023-535660	2023-553980		
P08	US4	Pending	11/6/2023	18/387,367			
P13	US2	Pending	10/11/2023	18/378,911			
P02	US4	Pending	11/8/2023	18/388,107			
P08	EP	Published	4/4/2022	22782364.8	22782364.8		
P08	JP	Pending	4/4/2022	2023-559701			
P15	PRV	Pending	12/14/2023	63/610,249			
P10	JP	Pending	5/27/2022	2023-573573			
P14	PCT	Pending	12/13/2023	PCT/US23/83793			

