DDOT Pilot Framework

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1. Executive Summary

The District Department of Transportation (DDOT) is committed to advancing its mission of enhancing transportation efficiency, safety, and sustainability. The agency has a long history of supporting innovative pilot projects in service to this mission. Pilot projects are a means to explore innovative ideas, strategies, and technologies on a limited scale before full-scale implementation. Pilots allow DDOT to collect real-world data, assess feasibility, and identify challenges; ultimately informing decision-making for proposed initiatives. However the volume of inbound requests makes it difficult to manage and prioritize the projects that best align with the District's goals.

DDOT designed this pilot program framework to create a more efficient way to evaluate, prioritize and commit to pilot projects. The framework details key components and phases, with the overarching goal of strengthening DDOT's ability to drive innovation while effectively managing resources and minimizing risks for the benefit of the city and its residents.

In addition, while the core piece of this framework is a process flow for vetting and approving inbound pilot requests, the framework provides additional guidance on planning and implementation after pilots are approved and developing a Challenge-based program to develop a more outcomes driven approach to pilots.

This document is intended to provide an overview of the pilot framework and provide recommendations to guide implementation. The development of this framework and recommendations was informed by a market scan and survey of municipalities across the country as well as two in person workshops with DDOT staff. More detailed information from the discovery phase of the project can be found in **Appendix H**. The Appendices provide more detailed information and templates that can be leveraged by DDOT to aid in the implementation of this report.

2. Pilot Selection Framework

2.1. What is a Pilot?

Pilot projects experiment with new ideas, strategies, or technologies on a small scale before full implementation. These initiatives collect real-world data, assess feasibility, identify challenges, to inform decisions on proposed initiatives. These projects can offer benefits for the agency facilitating the pilot and the community at large. Pilot projects give engaged community members and staff the opportunity to be part of the product development process to ensure inclusive and equitable outcomes. They can also contribute to industry growth, development and job creation but creating an environment where companies want to have a strong presence and staff. While the results of some pilots do not reflect the initial vision for the project the lessons learned may lead to 'happy accidents' where originally unintended benefits or applications are uncovered due to the purposely more flexible and creative environment of pilots. Similarly many pilots fail, which also produces good learnings that might otherwise be hidden or suppressed in a conventional deployment

While pilot projects can take many forms, it is important to define what should and should not fit within the bounds of a pilot.

Pilot projects are typically limited in scope, geography, and duration, and test a new technology, policy, process, or integrated solution. Pilots are an effective way to explore innovations and refine strategies while limiting risk and financial commitment. Some pilot projects may utilize commercially available technology or solutions, but to be a true "pilot" the project should be designed to test a novel application unique to DC. Pilots should not be a back door sales channel. On the other end of the spectrum, technologies that are very early stage or prototypes are in most cases not practical for pilot projects. These projects should first be tested in a controlled environment before being tested in a public facing pilot. DDOT could consider creating a controlled testbed for these early stage innovations that are still trying to prove their technical feasibility but that should be considered complementary to but not a component of this pilot framework.

2.2. Overview of Pilot Framework

To effectively vet and manage pilot projects DDOT must ensure that any pilot projects are aligned in the best interest of the city and are an effective use of DDOT time and resources. This includes establishing criteria and a review process to check for alignment with moveDC goals, experience of the proposed pilot team, and alignment of with the equity and sustainability goals of the city. The following pilot process will manage and vet incoming requests for pilots and assist in decisions of dedicating resources to support pilots. The design of the process reduces barriers for small business and historically underrepresented communities by limiting the amount of information required at the concept phase. Additionally, this reduces the amount of time required from DDOT staff by being able to make quick decisions on whether a concept warrants further development.

The framework has two core process flows, one for internal projects and another for external projects. While internal and external pilot submission have their own paths, the general steps in each process are similar and seek to achieve the same outcomes.

The following provides a brief overview of the key components of the framework and an overview of the process flow. **Appendix A and B** provide detailed submission and review templates for the internal and external process respectively.

Internal Pilots - Pilots generated and/or sponsored DDOT or other DC Government staff should generally follow the internal pilot path. These should be projects that require little to no support from vendors or private companies. NOTE: pilots initiated by a private company approaching or pitching to a city staffer should be directed to the external pilot process.

External Pilots - Pilots proposed by stakeholders external to the DC government should follow the external pilot path. External stakeholders include private companies, community organizations, or industry groups. There is an expectation that DDOT will need to provide some support to these projects which could be monetary, staff time, or access to the public right-of-way (ROW).

Pilot Process

Phase I - Concept Submission - Phase I of the pilot process is intended to focus on vetting the concept of the proposed pilot and its alignment to the goals of DDOT. This is intended to limit the time and effort required both by DDOT and the submitter.

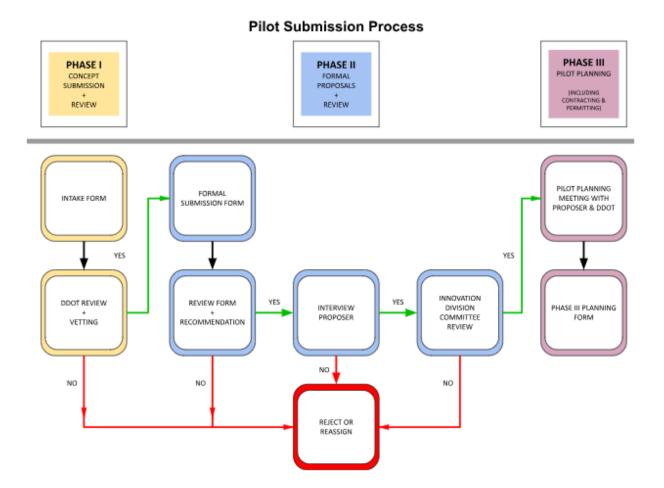
- Intake Form Form to be completed by the submitter of the pilot.
- Review DDOT review by Innovation Committee and subject matter experts (SMEs) to decide if the concept is interesting and aligned enough with DDOT goals to move forward, and if so, identify what questions would need to be addressed in the next round.

Phase II - Formal Proposal - Phase II is focused on understanding the details of the potential pilot and understanding the feasibility, practicality and benefits of the pilot before making a decision if DDOT should approve.

- Formal Submission Form A more detailed submission than the initial intake form to capture the key elements of the design and deployment of the project.
- Submission Review Review by DDOT team to understand both the objectives, resources needed and the ability of the proposed team to deliver on the pilot.
- Interview For proposals with promising submissions, DDOT will contact and interview the proposer to better understand their qualifications and review details of the proposed pilot.
- Innovation Committee Decision After the interview, the review team will present the proposal to the full innovation committee for discussion and decide if the pilot project is approved.

Phase III - Pilot Planning - After the project is approved, DDOT will move into the planning and design phase of the piloting process. This is where DDOT will work with the submitters to refine a project plan, establish reporting requirements, and ensure that mitigation and close out strategies are in place.

Figure 1. Pilot Submission Process



2.3. Review Process

Generally the review process will be led by the DDOT Innovation Committee. In addition to managing the overall pilot process, the Innovation Committee should serve as the primary reviewers for each round of pilot evaluations. While the Innovation Committee brings together expertise from across DDOT, there may be occasions when it is necessary to bring in additional support (e.g., specific subject matter expertise, legal, etc.) to ensure that the right questions are being asked and that the pilots are being scoped in a way that aligns with DDOT's goals.

It is recommended that each stage of the review process include two members of the Innovation Committee for the primary review, scoring, and interviewing. Projects that receive favorable scores and interviews can be brought to the full Innovation Committee for a formal decision¹. This process will ensure multiple perspectives on each application while minimizing the time required of DDOT staff to review early-stage pilots.

2.4. Training Materials

"Training instructions" can be found at the beginning of each section of both the intake forms and the review guides. These provide step-by-step instructions for the pilot process. Appendices B and C there are additional training materials intended as quick overviews to orient external and internal stakeholders to the overall tool/process.

3. Pilot Planning Process

Having a standardized planning, implementation, and closeout process helps to reduce the resource investment necessary for each pilot, ensures that outcomes are being captured in a manner that helps to inform DDOT decisions, and limits risks to DDOT and the public by ensuring there is a strategy to end the pilot. While the focus of this memo is on the process for reviewing and vetting potential pilots it is also important to consider the process for planning, implementing and closing out pilot projects. Below is an overview of key components and considerations to include when developing a pilot planning, monitoring and close out process.

3.1. Pre-Pilot Planning

Pre-pilot planning begins after DDOT approves a pilot in concept and continues up to the point of pilot launch. Many steps of this process may occur concurrent with permitting or other requirements. The pre-pilot planning should include, but is not limited to the

¹ Scoring Criteria is given in the review Matrix in both the Internal and External process documents.

following steps. The consultant team advises that DDOT take these guiding principles for pilot planning and further individualize them to DDOT's unique pilot experience and process.

Pilot Background Information - Most background information should be submitted through the proposal process, but DDOT may need to work with partners to ensure all basic information is secured. Background information includes the project name and description, project champion and team members from the pilot team. Background information should highlight the goals and desired outcomes of the project, and provide proposed dates of service. Information must specify the geography where the pilot will be tested, and the target population it aims to benefit.

Permitting - There should have already been preliminary discussions between DDOT and the pilot team around any permits that will be needed for the pilot. The permit process should be initiated in the pre-planning stage, to ensure a timely pilot launch. Permitting includes any requirements from DDOT, as well as permits or licensing requirements from other District or Federal agencies.

Engagement and Outreach - DDOT will work in collaboration with the pilot team to build upon the initial submission to determine what partners need to be engaged in each stage of the pilot process. This may include divisions within DDOT, other DC government stakeholders, community organizations, and the general public. Once specific stakeholders are identified, an engagement strategy will be built out including level of engagement, key messaging, timelines and communication responsibilities.

Pilot Launch - DDOT in coordination with the pilot team will develop a launch strategy appropriate for the pilot. Depending on the project this could include a launch event, attendance from Senior Officials in the DC government, the general public and local or national press.

Pilot Management - The pilot team works with DDOT to develop a detailed project plan for the pilot. This should include project managers, cadence for regular project check ins and procedure for resolving any issues that might arise over the course of the pilot. **Evaluation Criteria and Reporting** - Based on the desired outcomes of the pilot, DDOT and the pilot team should collectively develop and agree on a set of metrics (data points) and key performance indicators that measure the outcomes of the program. This should include both input metrics that are measuring the steps in the pilot process and output and outcome metrics that measure the impact of the pilot on the city and help to inform DDOT strategy. This should also include a discussion over whether additional research partners are needed to provide third-party validation of the pilot results.

In conjunction with the development of evaluation criteria, there should be a preestablished timeline and process for reporting interim and final results. This will the formalized reporting structure, definition of information and data to be shared with the DC government, and articulation of the results that will be available to the public.

Milestones and Decision Points - The pilot team in collaboration with DDOT will determine critical project milestones where it would be appropriate to consider if the pilot should continue or be suspended/terminated. Depending on the project these could be based on time, key deliverables/implementation steps or a combination of time and implementation. At each step there should be a strategy for how the project will be decommissioned if needed.

3.2. Implementation and Monitoring

The Implementation and monitoring phase builds upon the pre-planning activities. This project phase requires regular communication between DDOT and the pilot team to monitor progress. DDOT will closely monitor key performance indicators (KPIs) and work with the pilot team to make any needed adjustments. Additionally, Timely reporting to stakeholders, including quantitative data and qualitative insights, maintains transparency within the DC Government and the public. While it is important to follow the project plan to measure the outcomes of the pilot, the key milestones and decision points provide opportunities to evaluate progress and identify adjustments are needed.

3.3. Pilot Closeout

Close out is a crucial phase of any pilot project. Formal and conscious close out will facilitate knowledge retention and bolster against 'endless' pilot projects. A comprehensive assessment of the pilot's objectives and outcomes is crucial to gauge its success in meeting the KPIs identified in the planning stage. Gathering data and feedback from stakeholders, including community members and project participants, will provide valuable insights. DDOT should compile detailed reports outlining the project's scope, implementation process, challenges faced, and lessons learned. These documents serve as a knowledge base for future endeavors and provide transparency to decision-makers. Additionally, based on the communication plan developed in the pre-planning process it is vital to inform stakeholders about the project's results, and any planned next steps. Transparency in sharing outcomes fosters trust and encourages the community to remain engaged.

4. Challenge Framework

4.1. Overview of Approach and Why it is Valuable

Given limited staff capacity, DDOT does not have the ability to implement a challenge program at this time; however, the following information is to serve as a framework for when DDOT would like to design and implement a challenge program in the future. The intent of creating a challenge program is to invite innovative solutions to key issues that the City is facing without prescribing what solution the City is looking for. This approach allows DDOT to play a proactive role in shaping where the agency is dedicating innovation resources, rather than being reactive to private sector-initiated projects. The problem/outcome-driven approach solicits solutions from private sector companies/ or groups of companies. This will not preclude DDOT from entering into direct agreements for pilots if/when those opportunities arise.

4.2. Challenge Program Framework

When establishing a challenge program, it is recommended to develop a phased approach with multiple rounds of "Challenges." For instance, each round will have 3-5 problem statements, and companies will be encouraged to submit proposals that offer a solution to one or more of these problems. Examples of topic areas for challenge statements could include materials and strategies to lower carbon emissions from DDOT infrastructure projects, strategies and technology to improve pedestrian safety or solutions to improve last mile deliveries. The topic areas should focus on specific areas of interest for DDOT but be broad enough to solicit a range of solutions. DDOT can create a schedule of when these challenges will be posted and have them on a rolling basis, which will help to control the flow of projects, ensuring that DDOT is making consistent efforts to support innovation and helping to smooth fluctuations from ad hoc proposals. A more detailed process framework for a challenge program can be found in **APPENDIX F**.

4.3. Recommendations for Establishing a Challenge Program

Establishing a challenge program will take additional time and resources up front to ensure that there is appropriate organizational infrastructure in place to manage internal and external stakeholders, set a vision and desired outcomes, and secure dedicated funding. Ultimately, once the program is established, it will enable DDOT to take a more proactive and outcomes-oriented approach to innovation, and reduce the amount of staff time needed to respond to ad hoc requests for pilots. When creating a challenge program, there are a few key process and structural elements to consider to ensure successful implementation.

- Develop process for sourcing and refining problem statements It can be incredibly valuable to source potential problem statements from across all administrations and staff levels within DDOT. However, there will need to be a centralized process and team for aggregating, prioritizing and refining these statements so they have the right balance of specificity to ensure that submissions address the problem, while still being broad enough to encourage innovative solutions.
- 2) **Create a dedicated pool of funding** With the challenge based approach, there needs to be flexibility to fund a range of projects based on the number of good solutions that are

submitted. DDOT will need to secure a dedicated pool of potential funding that can be used to support submissions.

- 3) Ensure submission process complies with procurement requirements While a single challenge may result in multiple pilots, it is likely that some projects will require more than \$10,000, thus requiring formal procurement requirements. From the initial design of the submission process, the team should integrate contracting officers to ensure the process meets the requirements for a formal solicitation while allowing for maximum flexibility.
- 4) Create timeline/roadmap for projects A clear timeline of current and future challenge solicitations can help to set a consistent schedule for agency staff to expect for reviewing, overseeing and closing out pilots. Additionally, having a clear roadmap of when new challenges will be issued allows DDOT to proactively manage vendor requests by directing them to where their solution would fit within the upcoming list of challenges.

5. Recommended Legislative and Permitting Strategy

6. Next Steps

As DDOT finalizes the new pilot framework the agency will need to take several steps to operationalize and implement the new process. These include:

Digitize process - The forms provided in this process have been created to provide the structure and fields to collect information and data for DDOT to make informed decisions. As DDOT looks to implement the process the agency will need to digitize the process to make it more accessible to the public and easy to manage for DDOT staff.

Explore needed statutory changes - The ability to implement pilots may be enhanced by the addition of statutory changes to DC Code. Example language has been drafted in **Appendix G**. This is only intended to serve as an example of potential changes to statute. If DDOT is interested in making these changes the language should be vetted by DDOT legal counsel.

Develop promotional materials and outreach campaign - A major component of controlling the flow of incoming pilot projects will be educating potential pilot participants on the new process and guiding them to use the process rather than reaching out to DDOT staff directly. Additionally, DDOT staff need to be educated so if they are approached, they know how to appropriately route inquiries to the new process.

APPENDICES

Appendix A - Unsolicited External Pilots Intake and Review Forms

DDOT Pilot Policy Framework Unsolicited External Pilot Proposals: Phase I Intake Form

- 1. Name, Title, Email: ______
- 2. Brief description of yourself and your associated company or organization (e.g., *I am a resident of DC; I work for Company X, a startup seeking to....*). Please provide links to company websites.
- 3. How would you rate the current 'readiness' of the proposed technology or solution?
 - Idea The technology or solution is still in the conceptual stage and has not been tested in any environment
 - **Prototype** The technology or solution has been demonstrated in a controlled environment
 - **Validated** The technology/solution is proven to work in real world environments but is being scaled and tested in new use cases and/or geographies
 - **Commercialized** The technology or solutions have already been deployed across numerous use cases, environments and geographies
- 4. Provide a brief explanation of the technology or solution that you are proposing for the pilot.
- 5. Select which of the <u>moveDC goal(s)</u> this project will seek to advance (select all that apply)
 - **Safety** DDOT will design and manage a transportation network that offers safe and secure travel choices for all users, in accordance with Mayor Bowser's Vision Zero initiatives.
 - **Equity** DDOT will advance transportation equity by evaluating its policies, planning, community engagement, and project delivery to ensure public investments in transportation justly benefit all residents, visitors, and commuters.
 - **Mobility** DDOT will increase system reliability, improve accessibility and manage congestion through coordination, communications, and mobility options, providing safe and affordable travel choices for all users and trips.
 - **Project Delivery** DDOT will complete projects on-time and on budget while engaging and communicating with the community
 - Management and Operations (state of Good Repair) DDOT will ensure the state of good repair for existing assets by investing in maintenance and operations to address the greatest mobility needs.

- **Sustainability** DDOT will manage and promote a transportation network that supports economic vitality and opportunity, reduces emissions, and strengthens resilience in the face of climate change, especially in historically under-resourced neighborhoods that may experience greater impacts.
- **Enjoyable Spaces** Public spaces and transportation systems managed by DDOT will be accessible, safe, and welcoming to residents, visitors, and commuters.
- Provide a brief description of the problem the pilot is seeking to address. Include how this project is specific to D.C. (This could include 1) specific geographies, challenges, etc of DC and/or 2) how this project would make DC a thought leader/innovator in a particular space.)
- 7. Provide a brief description of the proposed pilot. This should include what the pilot is seeking to test (e.g., a new technology, new process, new service, new material), as well as a general timeline, geography, and target population (if applicable). Explain the benefits or outcomes this pilot is anticipated to bring to your company. (500 word limit).
- 8. To the best of your knowledge what support will be needed from DDOT?
 - Monetary contributions
 - Physical asset access
 - Right-of-way access
 - Data asset access
 - Inter-/Intra-agency coordination and communication
 - Public outreach
 - Staff support
 - Technology
 - Other (specify):______

Brief description of the support needed and justification for DDOT to provide those resources:

9. What resources will your organization be providing (e.g., funding, data sharing, etc.)?

10. Have you or anyone from your company/organization spoken with anyone within DC Government, the Mayor's Office, or City Council? If so, please list and describe the outcome of that conversation.

DDOT Pilot Policy Framework

Unsolicited External Pilot Proposals: Phase I Proposal Review and Vetting

DDOT Pilot Policy Framework External Pilot Proposals: Phase I Proposal Review and Vetting

Instructions: Two members of the Innovation Committee will be responsible for reviewing External Pilot Proposals.

Additionally, as appropriate, staff should include a subject matter expert (SME) to provide technical expertise on the review and response. Each reviewer should score the proposal independently before meeting to compare responses.

Scoring: The reviewer should use their judgment and expertise to rate the response on a scale of 0 (lowest) - 5 (highest).

The scoring framework is intended to guide a user in evaluating pilot projects.

Where possible, scoring is intended to quantitatively measure (and provide supporting qualitative evidence for) decisions. As general guidance, as the scoring is on a scale of 1-5, projects that score the highest on Intake should be most strongly considered. However, as a baseline, <u>projects that average</u> <u>score below 14 should either be redesigned or not moved forward in the process</u>, as they are not in overall alignment with the values, vision, and goals of DDOT.

Guidance on assigning a score value (1-5):

- 1. Project as designed completely lacks alignment with the criterion, and negatively impacts the criterion.
- 2. Project as designed somewhat aligns with the criterion. There may be one or several points of alignment between project/program design and criterion, but if the project/program was judged solely on this criterion, it should not move forward.
- 3. Project as designed adequately aligns with the criterion. There is some alignment, but project/program could be tweaked or redesigned to better fit with this criterion.
- 4. Project as designed primarily meets the requirements of, but does not perfectly align with, the criterion.
- 5. Project as designed perfectly aligns with criterion. This is an ideal match between the project/program as designed and the criterion presented.

* REMINDER - this is the first phase of the process, where only cursory information has been requested. At this stage, reviewers should be considering only if there is enough potential to warrant further discussions. Reviewers are NOT approving the pilot in Phase I.			
Reviewer #1 - Name, Title			
Reviewer #2 - Name, Title			
SME/DDOT Administration (as applicable)			
	Gating C	uestions	
Review Criteria	Reviewer #1	Reviewer #2	SME
Is the solution commercially available? (Yes/No) - If yes should move to sales pitch process			
Has the vendor had questionable interactions with DDOT or other city departments, or been previously turned down to conduct a pilot?			
Is technology readiness at a minimum of a prototype phase?			
	Respons	e Scoring	
Review Criteria	Reviewer #1 Score	Reviewer #2 Score	SME Score

Is the problem statement something DDOT is seeking, or should be seeking, to solve?		
Will the outcomes of the project provide meaningful insight that informs future DDOT decisions?		
Is the technology proven to be technically viable?		
Is the level of support/resources needed from DDOT manageable at this time, or in the near future? Similarly, are the resources provided by the company adequate for the pilot and in light of what DDOT can contribute?		
TOTAL SCORE		
AVERAGE SCORE		
Additional Request for information from proposer before decision		
Recommendation: • Advance to Phase	e II	

- Applicant encouraged to resubmit as part of a current or upcoming Challenge (when program is created)
- Reject/Deny proposal at this time

	•	
Brief reasoning for recommendation:		
Additional comments for proposer to address in next phase:		

Next Steps:

- 1. If the proposal is advancing to Phase II, the reviewer will reach out to the proposer with the appropriate form.
- 2. If the proposal is denied/rejected at this time, send notification to the proposer with standard DDOT email template.
- 3. At your discretion, you may also reach out to a proposer and request additional information. (As a reminder, the first review is to vet if this is a potentially interesting project and to identify questions that need to be more fully answered in the final review. You are NOT approving the project, so feel free to advance if it is an interesting concept but you still have questions).

DDOT Pilot Policy Framework Unsolicited External Pilot Proposals: Phase II - Formal Submission Form

- 1. Name, Title, Email: ______
- 2. Describe in detail the problem the proposed pilot is seeking to solve.

- 3. Select which of the <u>moveDC goal(s)</u> this project will seek to advance (select all that apply).
 - **Safety** DDOT will design and manage a transportation network that offers safe and secure travel choices for all users, in accordance with Mayor Bowser's Vision Zero initiatives.
 - **Equity** DDOT will advance transportation equity by evaluating its policies, planning, community engagement, and project delivery to ensure public investments in transportation justly benefit all residents, visitors, and commuters.
 - **Mobility** DDOT will increase system reliability, improve accessibility and manage congestion through coordination, communications, and mobility options, providing safe and affordable travel choices for all users and trips.
 - **Project Delivery** DDOT will complete projects on-time and on budget while engaging and communicating with the community
 - Management and Operations (state of Good Repair) DDOT will ensure the state of good repair for existing assets by investing in maintenance and operations to address the greatest mobility needs.
 - **Sustainability** DDOT will manage and promote a transportation network that supports economic vitality and opportunity, reduces emissions, and strengthens resilience in the face of climate change, especially in historically under-resourced neighborhoods that may experience greater impacts.
 - **Enjoyable Spaces** Public spaces and transportation systems managed by DDOT will be accessible, safe, and welcoming to residents, visitors, and commuters.

Describe how your project will help to advance these goals.

4. Detailed pilot description (500 words) (include timeline, what is being tested, what access to public space will be required):

- 5. Provide an estimated projected timeline, including key milestones. This should include planning, implementation, pilot operations, evaluation, and close out. (For the purposes of this submission use a generic schedule i.e., Month 1, Month 2, etc):
- 6. Describe any locations in the city that you are currently considering for deployment. If specific locations have not been considered, describe the attributes of what would make a successful location to host the pilot.
- 7. Describe the intended outcomes of the pilot. This should include how and what you measure in order to determine success. Include how equity will be incorporated into project outcomes.
- 8. Describe the resources you would need DDOT to contribute to this pilot (e.g., staff time, funding, labor, etc.).
- 9. Describe the resources your company or organization will provide.
- 10. Estimated Budget and Potential Funding Sources:
 NOTE: if DDOT or other city funds in excess of \$10,000 are needed for the pilot, competitive bidding requirements will be applied which can be time consuming (several months or more)
- 11. Anticipated challenges and proposed mitigation strategies:

- 12. Describe go/no go decisions points associated with project milestones. At each decision point, describe how the project would ramp down if the decision were to be made to end the pilot early.
- 13. What partners are needed to deploy the project (Community Organizations, non-profits, research, private sector companies)? Have they already been secured? (be as specific as possible especially regarding any technology requirements or community partnerships):
- 14. Describe any known regulatory or permitting requirements for the pilot.
- 15. Describe the project closeout process, assuming that the project was successful. If successful how would you envision scaling the project?
- 16. Are there any examples of similar pilots being implemented elsewhere by your company?
- 17. Describe the data collection, sharing and governance strategies that will be part of the pilot.
- 18. Most pilots require some level of public engagement. What level of contribution to engagement would the company be willing to make. (Examples include participating in a kick off event or touch and feel event where public can interact with the technology; or attending a public meeting to answer questions; or contributing time and/or materials to communication materials about the pilot; other, etc.):

DDOT Pilot Policy Framework

Unsolicited External Pilot Proposals: Phase II Proposal Review and Vetting

DDOT Pilot Policy Framework

Unsolicited External Pilot Proposals: Phase II Proposal Review and Vetting

Instructions: Two members of the Innovation committee will be responsible for reviewing Unsolicited External Pilot Proposals.

Additionally, as appropriate staff should include a subject matter expert (SME) to provide technical expertise on the review and response. Each reviewer should score the proposal independently before meeting to compare responses.

Scoring: The reviewer should use their judgment and expertise to rate the response on a scale of 0 (lowest) - 5 (highest).

The scoring framework is intended to guide a user in evaluating pilot projects.

Where possible, scoring is intended to quantitatively measure (and provide supporting qualitative evidence for) decisions. As general guidance, as the scoring is on a scale of 1-5, projects that score the highest on Intake should be most strongly considered. However, as a baseline, <u>projects that average a score below 24 should either be redesigned or not moved forward in the process</u>, as they are not in overall alignment with the values, vision, and goals of DDOT.

Guidance on assigning a score value (1-5):

- 1. Project as designed completely lacks alignment with the criterion, and negatively impacts the criterion.
- 2. Project as designed somewhat aligns with the criterion. There may be one or several points of alignment between project/program design and criterion, but if the project/program was judged solely on this criterion, it should not move forward.
- 3. Project as designed adequately aligns with the criterion. There is some alignment, but project/program could be tweaked or redesigned to better fit with this criterion.
- 4. Project as designed primarily meets the requirements of, but does not perfectly align with, the criterion.
- 5. Project as designed perfectly aligns with criterion. This is an ideal match between the Project/program as designed and the criterion presented.

Reviewer #1 - Name,		
Title		
The		

Reviewer # 2 - Name, Title			
SME/DDOT Administration			
	Response	Scoring	
Review Criteria	Reviewer #1 Score	Reviewer #2 Score	SME Score
Does the proposal advance the goals in moveDC?			
Potential impact from pilot findings			
Does this pilot seem feasible based on the details provided in the intake form? Consider: • Timeline • Target locations • Budget (this is only for the feasibility of the budget, not DDOT's ability to support the budget)			
Can DDOT support the budget request?			
Does the pilot provide opportunities to coordinate with other divisions/departments (i.e., solve complementary			

needs/challenges, leverage mutual resources or data sets, share learnings, etc.)		
Have the needed partners been identified?		
Does the company/proposer offer adequate support for community engagement efforts?		
Have evaluation criteria and reporting methods been proposed that align with both the company and DDOT's needs?		
TOTAL SCORE		
AVERAGE SCORE		
Outstanding questions to be addressed in interview		
Recommendation: Advance to Intervi Reject/Deny prop		
Brief reasoning for recommendation:		
Additional comments for proposer to address in next phase:		

Next Steps:

- After the initial review, the DDOT Innovation team with additional SME for the specific proposal should schedule an interview with the submitter to answer additional questions.
- After an interview, the review team should meet with the full Innovation Committee to make the determination and submit to DDOT leadership for approval.
- If a determination is made to not pursue the proposal, send notification to proposer with standard DDOT email template.
- After approval, the proposal will move on to the planning stage. The reviewer(s) shall contact the proposer to schedule a 90-minute meeting, at which DDOT staff (the identified project manager and champion, at minimum) and the proposer will work to fill out the <u>Phase III</u> <u>Planning Form</u>.

Appendix B – Internal Pilots Intake and Review Forms

DDOT Pilot Policy Framework Internal Pilot Proposals: Phase I Intake Form

- 1. Name, Title, Email: _____
- 2. Select which of the moveDC goal(s) this project will seek to advance (select all that apply)
 - Safety DDOT will design and manage a transportation network that offers safe and secure travel choices for all users, in accordance with Mayor Bowser's Vision Zero initiatives.
 - **Equity** DDOT will advance transportation equity by evaluating its policies, planning, community engagement, and project delivery to ensure public investments in transportation justly benefit all residents, visitors, and commuters.
 - **Mobility** DDOT will increase system reliability, improve accessibility and manage congestion through coordination, communications, and mobility options, providing safe and affordable travel choices for all users and trips.
 - **Project Delivery** DDOT will complete projects on-time and on budget while engaging and communicating with the community
 - Management and Operations (state of Good Repair) DDOT will ensure the state of good repair for existing assets by investing in maintenance and operations to address the greatest mobility needs.
 - **Sustainability** DDOT will manage and promote a transportation network that supports economic vitality and opportunity, reduces emissions, and strengthens resilience in the face of climate change, especially in historically under-resourced neighborhoods that may experience greater impacts.
 - **Enjoyable Spaces** Public spaces and transportation systems managed by DDOT will be accessible, safe, and welcoming to residents, visitors, and commuters.
- Provide a brief description of the problem the pilot is seeking to address. Include how this project is specific to D.C. (This could include 1) specific geographies, challenges, etc of DC and/or 2) how this project would make DC a thought leader/innovator in a particular space.)
- 4. Provide a brief description of the proposed pilot (and any associated technologies) (500 word limit). This should include what the pilot is seeking to test (e.g., a new technology, new process, new service, new material), as well as a general timeline, geography, and target population (if applicable). Explain the benefit to DC government and/or the local community of implementing

the pilot.

- 5. What support will DDOT need to provide?
 - Monetary contributions
 - Physical asset access
 - Right-of-way access
 - Data asset access
 - Inter-/Intra-agency coordination and communication
 - Public outreach
 - Staff support
 - Technology
 - Other (specify):______

Note whether any of these resources are already secured:

- 6. Is support from external partners or vendors needed to conduct the project?
- 7. Is there a DDOT senior leader who is a sponsor for this project? If so, please list.

DDOT Pilot Policy Framework Internal Pilot Proposals: Phase I Proposal Review and Vetting

DDOT Pilot Policy Framework Internal Pilot Proposals: Phase I Proposal Review and Vetting

Instructions: Two members of the Innovation Committee will be responsible for reviewing Internal Pilot Proposals.

Additionally, as appropriate, staff should include a subject matter expert (SME) to provide technical expertise on the review and response. Each reviewer should score the proposal independently before meeting to compare responses.

Scoring: The reviewer should use their judgment and expertise to rate the response on a scale of 1 (lowest) - 5 (highest).

The scoring framework is intended to guide a user in evaluating pilot projects.

Where possible, scoring is intended to quantitatively measure (and provide supporting qualitative evidence for) decisions. As general guidance, as the scoring is on a scale of 1-5, projects that score the highest on Intake should be most strongly considered. However, as a baseline, <u>projects that average a score below 14 should either be redesigned or not moved forward in the process</u>, as they are not in overall alignment with the values, vision, and goals of DDOT.

Guidance on assigning a score value (1-5):

- 1. Project as designed completely lacks alignment with the criterion, and negatively impacts the criterion.
- 2. Project as designed somewhat aligns with the criterion. There may be one or several points of alignment between project/program design and criterion, but if the project/program was judged solely on this criterion, it should not move forward.
- 3. Project as designed adequately aligns with the criterion. There is some alignment, but project/program could be tweaked or redesigned to better fit with this criterion.
- 4. Project as designed primarily meets the requirements of, but does not perfectly align with, the criterion.
- 5. Project as designed perfectly aligns with criterion. This is an ideal match between the project/program as designed and the criterion presented.

***REMINDER** - this is the first phase of the process, where only cursory information has been requested. At this stage, reviewers should be considering only if there is enough potential to warrant further discussions. Reviewers are NOT approving the pilot in Phase I.

Reviewer #1 - Name, Title	
Reviewer #2 - Name, Title	
SME/DDOT Administration (as applicable)	

Response Scoring			
Review Criteria	Reviewer #1 Score	Reviewer #2 Score	SME Score
Is the problem statement something DDOT is seeking, or should be seeking, to solve?			
Will the outcomes of the project provide meaningful insight that informs future DDOT decisions?			
Will the pilot help advance the goals in moveDC?			
If a new technology is needed for the pilot, is the technology proven to be technically viable?			
Is the level of support/resources needed from DDOT manageable at this time, or in the near future?			
TOTAL SCORE			
AVERAGE SCORE			

Additional Request for information from proposer before decision can be made	
Recommendation:	
Advance to Phase II	
• Project to be submitted as an external project (project is reliant on an external vendor and	
does not fit within the guidelines of an internal pilot).	
• Applicant encouraged to resubmit as part of a current or upcoming Challenge (when program	

is created)

• Reject/Deny proposal at this time

Brief reasoning for recommendation:	
Additional comments for proposer to address in next phase:	

Next Steps:

- 1. If the proposal is advancing to Phase II, the reviewer will reach out to the proposer with the appropriate form.
- 2. If the proposal is denied/rejected at this time, send notification to the proposer with standard DDOT email template.
- 3. At your discretion, you may also reach out to a proposer and request additional information. (As a reminder, the first review is to vet if this is a potentially interesting project and to identify questions that need to be more fully answered in the final review. You are NOT approving the project, so feel free to advance if it is an interesting concept but you still have questions).

DDOT Pilot Policy Framework Internal Pilot Proposals: Phase II - Formal Submission Form

- 1. Name, Title, Email: ______
- 2. Describe in detail the problem the proposed pilot is seeking to solve (i.e. what is the community or departmental need?).

- 3. Select which of the <u>moveDC goal(s)</u> this project will seek to advance (select all that apply).
 - **Safety** DDOT will design and manage a transportation network that offers safe and secure travel choices for all users, in accordance with Mayor Bowser's Vision Zero initiatives.
 - **Equity** DDOT will advance transportation equity by evaluating its policies, planning, community engagement, and project delivery to ensure public investments in transportation justly benefit all residents, visitors, and commuters.
 - **Mobility** DDOT will increase system reliability, improve accessibility and manage congestion through coordination, communications, and mobility options, providing safe and affordable travel choices for all users and trips.
 - **Project Delivery** DDOT will complete projects on-time and on budget while engaging and communicating with the community
 - Management and Operations (state of Good Repair) DDOT will ensure the state of good repair for existing assets by investing in maintenance and operations to address the greatest mobility needs.
 - **Sustainability** DDOT will manage and promote a transportation network that supports economic vitality and opportunity, reduces emissions, and strengthens resilience in the face of climate change, especially in historically under-resourced neighborhoods that may experience greater impacts.
 - Enjoyable Spaces Public spaces and transportation systems managed by DDOT will be accessible, safe, and welcoming to residents, visitors, and commuters.

Describe how your project will help to advance these goals.

4. Detailed pilot description (500 words) (include timeline, what is being tested, what access to public space will be required)::

- Provide an estimated projected timeline, including key milestones. This should include planning, implementation, pilot operations, evaluation, and close out. (For the purposes of this submission use a generic schedule - i.e. Month 1, Month 2, etc):
- 6. Describe any locations in the city that you are currently considering for deployment. If specific locations have not been considered, describe the attributes of what would make a successful location to host the pilot.
- 7. Describe the intended outcomes of the pilot. This should include how and what you measure in order to determine success. Include how equity will be incorporated into project outcomes.
- 8. Describe the resources you expect DDOT to contribute to this pilot (e.g., staff time, funding, labor, etc.).
- Estimated Budget and Potential Funding Sources:
 NOTE: if DDOT or other city funds in excess of \$10,000 are needed for the pilot, competitive bidding requirements will be applied which can be time consuming (several months or more).

- 10. Anticipated challenges and proposed mitigation strategies:
- 11. Describe go/no go decisions points associated with project milestones. At each decision point, describe how the project would ramp down if the decision were to be made to end the pilot early.
- 12. What partners are needed to deploy the project (Community Organizations, non-profits, research, private sector companies)? Have they already been secured? (be as specific as possible especially regarding any technology requirements or community partnerships):
- 13. Is it anticipated that any permits will be needed for the project?
- 14. Describe the project closeout process assuming that the project was successful. If successful how would you envision scaling the project?
- 15. Are there any examples of similar pilots being implemented elsewhere?
- 16. Most pilots require some level of public engagement. What level of contribution to engagement would the company be willing to make. (Examples include participating in a kick off event or touch and feel event where public can interact with the technology; or attending a public meeting to answer questions; or contributing time and/or materials to communication materials about the pilot; other, etc.):

DDOT Pilot Policy Framework Internal Pilot Proposals: Phase II Proposal Review and Vetting

DDOT Pilot Policy Framework Internal Pilot Proposals: Phase II Proposal Review and Vetting

Instructions: Two members of the Innovation committee will be responsible for reviewing Internal Pilot Proposals.

Additionally, as appropriate staff should include a subject matter expert (SME) to provide technical expertise on the review and response. Each reviewer should score the proposal independently before meeting to compare responses

Scoring: The reviewer should use their judgment and expertise to rate the response on a scale of 0 (lowest) - 5 (highest).

The scoring framework is intended to guide a user in evaluating pilot projects.

Where possible, scoring is intended to quantitatively measure (and provide supporting qualitative evidence for) decisions. As general guidance, as the scoring is on a scale of 1-5, projects that score the highest on Intake should be most strongly considered. However, as a baseline, <u>projects that average a score below 24 should either be redesigned or not moved forward in the process</u>, as they are not in overall alignment with the values, vision, and goals of DDOT.

Guidance on assigning a score value (1-5):

- 1. Project as designed completely lacks alignment with the criterion, and negatively impacts the criterion.
- 2. Project as designed somewhat aligns with the criterion. There may be one or several points of alignment between project/program design and criterion, but if the project/program was judged solely on this criterion, it should not move forward.
- 3. Project as designed adequately aligns with the criterion. There is some alignment, but project/program could be tweaked or redesigned to better fit with this criterion.
- 4. Project as designed primarily meets the requirements of, but does not perfectly align with, the criterion.
- 5. Project as designed perfectly aligns with criterion. This is an ideal match between the project/program as designed and the criterion presented.

Reviewer #1 - Name,	me,	
Title		

Reviewer #2 - Name, Title					
SME/DDOT Administration					
Response Scoring					
Review Criteria	Reviewer #1 Score	Reviewer #2 Score	SME Score		
Does the proposal advance the goals in moveDC?					
Potential impact from pilot findings					
Does this pilot seem feasible based on the details provided in the intake form? Consider: • Timeline • Target locations • Budget (this is only for the feasibility of the budget, not DDOT's ability to support the budget)					
Can DDOT support the budget request?					
Does the pilot provide opportunities to coordinate with other divisions/departments (i.e., solve complementary					

needs/challenges, leverage mutual resources or data sets, share learnings, etc.)					
Have the needed partners been identified?					
Have outreach and engagement plans been thoughtfully considered and set forth by the proposer?					
Have evaluation criteria and reporting methods been proposed?					
TOTAL SCORE					
AVERAGE SCORE					
Outstanding questions to be addressed in interview					
 Recommendation: Advance to Interview Reject/Deny proposal at this time 					
Brief reasoning for recommendation:					
Additional comments for proposer to address in next phase:					

Next Steps:

- 1. After the initial review, the DDOT Innovation team with additional SME for the specific proposal should schedule an interview with the submitter to answer additional questions.
- 2. After an interview, the review team should meet with the full innovation team to make the determination and submit to DDOT leadership for approval.
- 3. If a determination is made to not pursue the proposal, send notification to proposer with standard DDOT email template.
- After approval, the proposal will move on to the planning stage. The reviewer(s) shall contact the proposer to schedule a 90-minute meeting, at which DDOT staff (the identified project manager and champion, at minimum) and the proposer will work to fill out the <u>Phase III</u> <u>Planning Form</u>.

Appendix C - Market Scan Entities Used for In-Depth Research

1. New York City Taxi and Limousine Commission (TLC) - Pilot Programs - Subchapter C

This example was selected to highlight the methodology used for submission of pilot proposals.

2. City of San Francisco - Office of Emerging Technology (OET) - Chapter 22G

This example was chosen as a good model for the approval parameters of pilot programs in DC; specifically, establishing a clear "front door" within DC government for transportation-related pilot proposals which can help create consistency in how pilots are vetted, selected, deployed, overseen, and evaluated.

3. Connecticut Public Utilities Regulatory Authority - <u>Innovative Energy Solutions (IES) Program</u> <u>Design Document</u>

This framework is a comprehensive pilot program which could be used as an inspiration for DDOT's pilot policy.

4. City of Pittsburgh - Trial Period for New Regulations - § 503.02

This example offered a sense of statutory language that could create streamlined, time-limited piloting in DC.

5. City of Boston - Office of New Urban Mechanics

This example was chosen due to its intentional big-picture approach for "prototyping" when evaluating whether to proceed with or pass over a potential pilot. Additionally, the required process of transparent communication with the public during and after the conclusion of the pilot is an example of garnering trust with stakeholders.

6. City of Philadelphia - "Pitch and Pilot" Program

This program is an example of using funding awards as a potential incentive to entice private innovators to present pilots that advance the City's priorities and principles.

 Department of Homeland Security (DHS) - Science & Technology Directorate's (S&T) Long Range Broad Agency Announcement (<u>LRBAA</u>)

Though this example is focused on research, their <u>portal</u> could be a template for solicitation of pilot projects due to its detailed articulation of each need DHS has identified. Additionally, their process highlights the intent and execution of a flexible and efficient solicitation process which encourages innovation with strong guardrails and prioritization.

8. Brooklyn Public Library (BPL) - BKLYN Incubator - Program Funding Proposal Guidelines

The BKLYN Incubator is an "out-of-the-box" example of a pilot process created from ideas generated by internal staff. This example highlights an internal, unsolicited pilot process that has been used successfully.

9. City of Dublin (OH) - <u>Procurement Threshold for Competitive Bidding</u>

This example was offered because it provides flexibility to enter into contracts with pilot vendors for amounts under \$75,000.

10. City of San Antonio - Smart City Roadmap

This example was included to demonstrate a tiered system of dollar amounts and the associated action that must be taken.

11. City of San Francisco - <u>Healthy Air and Clean Transportation Program</u>

The administration of this program is an example of contracts for pilot programs not having to conform to the standard contracting/ procurement requirements.

Appendix D – Internal Submission Training Guide

Pilot Program Training Guide Internal Submission

d.

Overview

When proposing a pilot idea to the District Department of Transportation (DDOT), there is a formalized methodology that should be followed to ensure a consistent and efficient process required for submission, review, and decision-making. The process outlined in this Training Guide should be expected for any pilot proposal relating to programs and initiatives underneath the umbrella of DDOT.

To achieve the strongest consideration, proposed pilots should be aligned with one or more of the moveDC goals below. To read more about moveDC, please click <u>here</u>.

- **Safety** a transportation network designed and managed offering safe and secure travel choices for all users, in accordance with the Districts' Vision Zero initiatives.
- **Equity** equitable transportation will be advanced by the evaluation of policies, planning, community engagement, and project delivery, ensuring public investments in transportation justly benefit all residents, visitors, and commuters.
- **Mobility** system reliability, improved accessibility, and congestion management will be improved through coordination, communications, and mobility options, providing safe and affordable travel choices for all users and trips.
- **Project Delivery** completion of projects on-time and on-budget while engaging and communicating with the community.
- Management and Operations (State of Good Repair) the state of good repair will be ensured for existing assets by investing in maintenance and operations to address the greatest mobility needs.
- **Sustainability** a transportation network will be managed and promoted to support economic vitality and opportunity, reduce emissions, and strengthen resilience in the face of climate change, especially in historically underserved neighborhoods that may experience greater impacts.
- **Enjoyable Spaces** public spaces and transportation systems managed by DDOT will be accessible, safe, and welcoming to residents, visitors and commuters.

Phase I: Concept Submission and Review

All internally generated proposals for pilots will go through the following intake process:

- Completion of the Internal Proposal Intake form.
- After the proper intake form has been completed, members of the Innovation Committee and, if technical expertise is needed, a Subject Matter Expert (SME) will review.
- Each reviewer will score the proposal independently, then meet to compare responses and collectively average the scores.
- The review team will reach out to proposer if the pilot will advance to Phase II, is denied/rejected, or requires further information.

Phase II: Formal Proposals and Review

If accepted to advance to Phase II, the proposer will be sent a formal submission form, which will ask for more detailed information to supplement the concept submission. This phase is where the proposal will either be approved, recommended for reassignment, or rejected. The following process will be adhered to in Phase II:

- Completion of the Internal Proposal Formal Submission form.
- After the Formal Submission form has been submitted, the DDOT Innovation Committee (with SME, if applicable) will review the proposal.
- After the Formal Submission form review, the Innovation Committee will either submit to DDOT leadership for approval or determine not to pursue the proposal.
- If proposal is approved to move forward by the Innovation Committee and the DDOT leadership, then the proposal will move to Phase III, the planning stage.

Phase III: Pilot Planning

This stage is where the planning of the pilot will be carried out with the proposer and the DDOT staff championing this pilot. DDOT will contact the proposer to schedule a 90 minute meeting at which DDOT staff (the identified project manager and champion, at minimum) and the proposer will work to fill out the Phase III Planning Form.

Phase IV: Procurement/Permits

Once the pilot has been completely planned, all necessary procurement and permitting will commence.

Phase V: Implementation

Upon launching the pilot, the process of tracking and monitoring will begin. It should be anticipated that a mid-pilot evaluation will take place to assess the pilot's performance and determine if any adjustments are necessary.

Phase VI: Pilot Evaluation and Determination of Whether to Scale

Near the conclusion of the pilot term, DDOT will be determining whether to scale the program or cease operation.

Appendix E – Unsolicited External Submission Training Guide

Pilot Program Training Guide Unsolicited External Submission



Overview

When proposing a pilot idea to the District Department of Transportation (DDOT), there is a formalized methodology that should be followed to ensure a consistent and efficient process required for submission, review, and decision-making. The process outlined in this Training Guide should be expected for any pilot proposal relating to programs and initiatives underneath the umbrella of DDOT.

To achieve the strongest consideration, proposed pilots should be aligned with one or more of the moveDC goals below. To read more about moveDC, please click <u>here</u>.

- **Safety** a transportation network designed and managed offering safe and secure travel choices for all users, in accordance with the Districts' Vision Zero initiatives.
- **Equity** equitable transportation will be advanced by the evaluation of policies, planning, community engagement, and project delivery, ensuring public investments in transportation justly benefit all residents, visitors, and commuters.
- **Mobility** system reliability, improved accessibility, and congestion management will be improved through coordination, communications, and mobility options, providing safe and affordable travel choices for all users and trips.
- **Project Delivery** completion of projects on-time and on-budget while engaging and communicating with the community.
- Management and Operations (State of Good Repair) the state of good repair will be ensured for existing assets by investing in maintenance and operations to address the greatest mobility needs.
- **Sustainability** a transportation network will be managed and promoted to support economic vitality and opportunity, reduce emissions, and strengthen resilience in the face of climate change, especially in historically underserved neighborhoods that may experience greater impacts.
- **Enjoyable Spaces** public spaces and transportation systems managed by DDOT will be accessible, safe, and welcoming to residents, visitors and commuters.

Phase I: Concept Submission and Review

All externally generated proposals for pilots will go through the following intake process:

- Completion of the Unsolicited External Proposal Intake form.
- After the proper intake form has been completed, members of the Innovation Committee and, if technical expertise is needed, a Subject Matter Expert (SME) will review.
- Each reviewer will score the proposal independently, then meet to compare responses and collectively average the scores.
- The review team will reach out to proposer if the pilot will advance to Phase II, is denied/rejected, or requires further information.

Phase II: Formal Proposals and Review

If accepted to advance to Phase II, the proposer will be sent a formal submission form which will ask for more detailed information to supplement the Concept Submission. This phase is where the proposal will either be approved, recommended for reassignment, or rejected. The following process will be adhered to in Phase II:

- Completion of the Unsolicited External Proposal Formal Submission form.
- After the Formal Submission form has been submitted, the DDOT Innovation Committee (with SME, if applicable) will review the proposal. If there proposal is of sufficient interest DDOT will schedule an interview with the submitter.
- After the interview, the Innovation Committee will either submit to DDOT leadership for approval or determine not to pursue the proposal. If determined not to pursue as a pilot, the Innovation Committee could:
 - Contact the proposer to resubmit as part of a current or upcoming Challenge (if created in the future), or
 - Reject/deny the proposal
- If the proposal is approved to move forward by the Innovation Committee and the DDOT leadership, then the proposal will move to Phase III, the planning stage.

Phase III: Pilot Planning

This stage is where the planning of the pilot will be carried out with the proposer and the DDOT staff. DDOT will contact the proposer to schedule a 90 minute meeting at which DDOT staff (the identified project manager and champion, at minimum) and the proposer will work to fill out the Phase III Planning Form.

Phase IV: Contracting/Procurement/Permits

Once the pilot has been completely planned, a contract will be drafted and signed by both parties and all necessary procurement and permitting will commence.

Phase V: Implementation

Upon launching the pilot, the process of tracking and monitoring will begin per contract terms. It should be anticipated that a mid-pilot evaluation will take place to assess the pilot's performance and determine if any adjustments are necessary.

Phase VI: Pilot Evaluation and Determination of Whether to Scale

Near the conclusion of the pilot term, DDOT will be determining whether to scale the program or cease operation. Data collected will need to be transferred to DDOT per contract terms.

Appendix F - Challenge Strategy Process Framework

Process

- Draft Problem Statement DDOT innovation will develop draft problem statements and desired outcomes. For example, problem statements could be focused on Pedestrian Safety, Curbspace Management, or electrification.
- Draft intended outcomes DDOT team will develop a draft statement of the intended outcomes that it hopes to achieve through the challenge, this could include gathering data to inform future policy, testing the scalability of technology or measuring the real world outcomes of a new technology.
- 3. **Determine potential funding -** Prior to issuing a challenge DDOT should commit to how much potential funding it is willing to dedicate to the challenge. This funding can be contingent on the projects being submitted (does not need to be spent if good ideas are not submitted). There should also be a range of funding per project that is allocated
- 4. Working Group Meet with subject matter experts within DDOT to refine the problem statement and shape project requirements, refine data requests, etc. At this stage, the working group will identify potential regulatory/permitting hurdles and discuss potential workarounds or <u>'no go' areas</u>
- 5. **Community Engagement** The draft from the working group will be shared with community stakeholders for feedback before anything is issued. This may include groups such as: DC Sustainable Transportation (DCST), ANC, Washington Area Bicyclist Association (WABA), etc
- 6. **Final Scoping of the call for projects** DDOT staff will incorporate feedback and develop a formal call for projects. the call for projects should include;
 - a. Problem Statement
 - b. Intended Outcomes/Things to be tested
 - c. Resources that DDOT can provide (potentially based on #3 above)
 - d. Proposed timeline for pilot:
- 7. Issuing Challenges Problem statements will be publicly announced and promoted
- 8. Company Responses
 - a. Which Problem Statements they are addressing:
 - b. Proposed solution:
 - c. Financial Support/Business model: Are they proposing to receive funding from the DDOT? Are they donating services? Revenue share, etc
 - d. Partners: What other companies/organizations are involved in this solution, Are there gaps still needed for full delivery (the Mobility Innovation District (MID) may be able to help facilitate)
 - e. Data sharing and privacy: What data will be provided to the MID, research partners, DC Govt, etc

- 9. **Project review and negotiation**: DDOT will review project submissions. DDOT may engage with companies to discuss and negotiate details/scope of the project or to propose partnerships with other companies/project ideas
- Project selection DDOT will select projects that promote the goals and values of DDOT and offer viable solutions to the proposed problem statements. There is no limit on the number of pilots that DDOT selects for a given area. (ex. Deliveries - Could include - delivery bikes; dynamic priced loading zones and B2B mobility hub)
- 11. **Memorandum of Understanding (MOU) Scoping -** Each project will enter into an MOU with the provider. The DDOT MOU will include:
 - a. Area of operations
 - b. Data sharing
 - c. Period of operations
 - d. Hypothesis Statement/Goals How will this pilot present test ways to address the problem statement
 - e. Regulatory waiver/approvals
 - f. Reporting requirements
 - g. Exit strategy
- 12. Project operations
- 13. Reporting and close out

Appendix G – Example Language for Statutory Changes

Title 50. Motor and Non-Motor Vehicles and Traffic

[NEW SUBTITLE]: Subtitle IX. Pilot Projects

A. Definitions

"Pilot" means a pilot program is a small-scale, limited duration project by an organization to test the feasibility and effectiveness of a new idea, product, service or technology designed to gather data before rolling it out on a larger scale.

"Department" means the District of Columbia Department of Transportation

"Director" means the District of Columbia Department of Transportation Director

- B. The Department shall encourage and support efficiency and innovation through pilot and demonstration projects that align with District and Departmental goals and have the potential to improve city services or overall quality of life of District residents and visitors.
- C. The Department is authorized to plan, support, procure, and implement pilot and demonstration projects subject to the following conditions:
 - a. The pilot or demonstration project costs are reasonable and in no event exceed \$100,000 annually
 - b. The pilot or demonstration project is two years or less, with an option to extend for one year at the conclusion of the pilot or demonstration project with written approval from the Director
 - c. The pilot or demonstration project has the potential to improve city services or overall quality of life of District residents and visitors
- D. The Department shall adopt rules and regulations necessary to allow for the implementation of pilot or demonstration projects within the Department's jurisdiction as set forth in § 50–921.04.
- E. The Department shall create a unique class of permits to allow for efficient permitting of pilot and demonstration projects, where necessary.
- F. The Department may procure pilot or demonstration projects at an amount not to exceed \$100,000 annually, provided that the Department spends no more than \$500,000 annually on

pilot or demonstration projects. Contracts for these procurements shall be exempt from the competition requirements established by Chapter 3A.

§ 2–354.13. Competition exemptions is amended to read as follows:

Contracts for the following procurements shall be exempt from the competition requirements established by this chapter:

(1) Artistic services or works of art;

(2) Commodities or contractual services if federal or District law prescribes with whom the District must contract;

(3) Legal services or negotiation services in connection with proceedings before administrative agencies or state or federal courts, including experts, attorneys, and mediators;

(4) Copyrighted or patented materials, including technical pamphlets, published books, maps, and testing or instructional materials; provided, that the materials are purchased directly from the owner of the copyright or patent;

(5) Memberships in trade or professional organizations;

(6) Entertainers;

(7) Job-related seminars and training for District employees;

(8) Maintenance and support of existing software and technology to the extent that the creator of the intellectual property is still protected and is the only source of the maintenance and support of the existing software and technology;

(9) Public transit farecards, passes, and tokens;

(10) Personal property or services provided by another public entity, agency, or authority;

(11) Postage;

(12) Purchases of advertising in all media, including electronic, print, radio, and television; provided, that they are purchased directly from the media outlet;

- (13) Trade and career fairs for District employees;
- (14) Special event venues and related services as dictated by the establishment;
- (15) Subscriptions for periodicals and newspapers;
- (16) Ticket purchases for special events, tourist attractions, and amusement parks; and

(17) Professional development training which supports principal, teacher, and student achievement, health, and safety; and

(18) Transportation or right-of-way pilot projects as defined in Title 50, Subtitle IX.

Appendix H – Detailed Information from the Discovery Phase

Research and Engagement for Development of Framework

The development of the pilot framework was informed by a discovery process that included a market scan and in-person workshops with DDOT staff. This included two phases : (1) a review of the existing structure and processes used by DDOT for their piloting (DDOT Policy Scan), coupled with in-depth research on programs and policies of other entities (Market Scan) followed by (2) a presentation of the key findings to assist DDOT stakeholders in deliberating which elements could be integrated into their processes and how these ideas could be adapted to best suit DDOT's needs (Workshop #1).

The planning process sought the following priority objectives:

Understand DDOT's Needs: Gaining a comprehensive understanding of DDOT's requirements for creating a pilot policy that aligns with DDOT's values and goals, moveDC, and the DC Government operating practices while also benefiting the citizens of the District by enhancing the effectiveness and equity components of the pilot programs.

Create an Efficient Pilot Submission Process: Developing a pilot submission process that is efficient and user-friendly for DDOT staff while remaining inclusive and inviting to both internal (e.g. DDOT staff, DC government, etc) and external (e.g. private businesses, DC associations and residents, industry groups, etc) proposers.

Standardize Operating Processes: Formalize a standard planning, implementation, and closeout process to reduce the resource investment required by DDOT staff for each pilot. This ensures that outcomes are adequately recorded to inform DDOT decision-making and minimizes risk to both DDOT and the public by establishing a strategy for concluding each pilot.

Research Summary

The research portion of the pilot policy creation included a DDOT policy scan and a market scan, which contains a survey of other entities that facilitate pilot programs. Both scans worked in tandem to inform conversations in the first workshop regarding what pieces of a pilot policy DDOT stakeholders felt should shape the proposed process.

DDOT Policy Scan

The DDOT policy scan aimed to comprehend how DDOT has conducted pilots in the past, with the objective of identifying both successful and challenging processes. This scan encompassed the following documents provided by DDOT to analyze:

- Innovation Governance Graphics a draft overview of DDOT's proposed innovation categories and governance structure which had been proposed to leadership. The consultant team used these categories and governance structures as a reference to build out an updated vetting, selection, and implementation process for pilots.
- **Draft SOP for Piloting Process** a comprehensive draft of each phase of the piloting process. The consultant team built from and refined this draft to enhance and formalize the piloting process.
- **DDOT Emerging Technology Pilots Application** previously used intake form for companies seeking to pilot or test emerging transportation-related technologies in DC. This intake form was used as a reference to further build and refine the vetting process for pilot proposals, both external and internal.
- **DDOT Interview Questions for Past Pilot Programs** interview questions and responses from past interviews with private sector companies seeking to pilot or test in DC. This information helped inform the consultant team on the successes, challenges, and gaps in information from past pilot projects from the perspective of private sector partners/vendors.

Market Scan

The market scan included 24 examples from cities, counties, states, and entities known for innovation in piloting. This research aimed to guide the development of an effective pilot project implementation policy for DDOT. By studying others' approaches, the goal was to uncover innovative ideas and practices that have been implemented elsewhere that offer lessons learned for DC. Some of the researched programs are well established, while others are relatively new. 11 examples were identified for deeper analysis² as being particularly relevant or unique examples for DC. This included an emphasis on jurisdictions that had specific code provisions or other formal policies and procedures for vetting, selecting, and procuring pilot projects.

The market scan also included an assessment of pilot programs meant to help policymakers understand lessons learned and best practices from other innovation offices and/or pilot programs that could assist with better pilot implementation. Additionally, the consultant team reviewed DC statutory code and regulatory code to identify the current laws applicable to piloting new services/technologies in order to determine what updates or amendments might be needed to improve and streamline DDOT's piloting process.

Lastly, a stakeholder best practices survey was conducted, which provided insight into both successful and challenging components of pilot programs, as well as recommendations and lessons learned from previous pilots. The stakeholders contacted to complete the survey were leaders in the public, private, and academic realms who have either designed, implemented, and/or managed pilot programs.

² Please see Appendix C for list of 11 selected entities reviewed for in-depth analysis

Key analysis and takeaways from the market scan include:

- Not one entity was identified with a comprehensive, formal policy, and/or regulations that create consistency in how pilot opportunities are vetted, administered, and evaluated that provides flexibility and lowers regulatory barriers to allow fast and nimble implementation. This re-emphasized the need for a comprehensive pilot policy within DDOT and indicated that this policy will serve as a guide for other cities and entities struggling with the same pilot implementation obstacles DDOT is currently facing.
- In light of the previous takeaway, there are cities and other entities that do pieces of pilot selection, procurement, implementation, or evaluation very well. These examples were highlighted in the market scan and were considered for integration into the DDOT Pilot Implementation Policy.
- Clear procurement authority that does not require competitive bidding and gives a reasonable dollar range for piloting is critical to timely, meaningful piloting in cities.
- A general pilot permit and consistent terms and conditions for pilot agreements with third party entities is essential to timely, uniform piloting. This consistency also provides an expectation to prospective companies seeking to pilot in DC.

Workshop Summary

A key component of the pilot framework was the generation of key factors and potential barriers that should be considered in the drafting of a pilot process. DDOT participated in two onsite workshops, on June 7, 2023 and July 19, 2023.

Workshop #1

The purpose of the first workshop was to:

- Confirm the values ("North Stars") that should guide DDOT's pilot policy framework.
- Share and leverage lessons learned and best practices from other agencies/cities to fuel discussion about what components should be considered for DDOT's pilot process.
- Identify current successes, key opportunities, and challenges stakeholders see in designing/implementing a pilot policy framework.
- Confirm the priority types of pilot use cases the department anticipates encountering.
- Understand if there are any additional gaps in knowledge around pilot policies which stakeholders would like to better understand from other cities.

Key takeaways from Workshop #1 are summarized below:

- **Outcomes** Attendees provided the following desired outcomes for a pilot process/framework:
 - Aim to operate and maintain advanced technology.
 - Initiate fair and sustainable pilot projects.

- Devise optimal solutions to meet the needs of DC residents and visitors.
- o Establish a pipeline between research and implementation.
- Implement appropriate guardrails.
- Improve institutional knowledge retention.
- Maintain adherence to DC code.
- Establish an efficient model to expedite DDOT's processes while minimizing entry points for pilot vendors/proposers.
- Pilot Criteria The consultant team provided stakeholders with a key set of pilot criteria that require parameters to create a formal policy framework. Within each pilot criterion, stakeholders were asked to comment on DC's current approach, approaches from other jurisdictions that DDOT should consider adopting, and any challenges that might hinder adopting a new approach to the parameter at issue. The following provides the key takeaways from the feedback on each of the pilot criteria presented:
 - **Time/Duration:** Multiple options were discussed regarding the duration of a pilot, highlighting the need to avoid a one-size-fits-all approach during the initial setup. While this nuanced analysis may pose challenges to the decision-making process, the end result of each pilot should be able to be evaluated better. Additionally, it was stressed that there should be a clear off-ramp with clarity around not only who decides to end a pilot early but also how that decision is made in a transparent and defensible way.
 - **Cost and Procurement:** The \$10,000 limit which allows DDOT to pilot without legislative authority is considered low compared to other jurisdictions, but determining the appropriate non-competitive procurement amount above the current limit and getting it approved could be a challenge.
 - **Scale/Geography:** Geography should be considered based on greatest need or where results can be most impactful, while also being mindful of not having concurrent or successive projects in the same community.
 - **Community Engagement:** When embarking on a pilot, there should be upfront crossagency collaboration and engagement to ensure all stakeholders are working together towards the same goals and outcomes. Additionally, all community engagement should be focused on the desired outcome of the meeting(s) in order to achieve optimal buy-in from those affected by the pilot. There also needs to be consensus on whether DDOT's pilots should focus solely on transportation or adopt a broader DC government approach.
 - **Evaluation/Metrics:** Goals for evaluation should be established prior to pilot approval with a clear performance plan in place. The review of the pilot should be formally cataloged for future review and all data collected by the pilot should have a centralized location in place.

Workshop #2

The purpose of the second workshop was to:

- Become familiar with the draft framework and decision tree for intake and selection of pilots drafted by the consultant team.
- Test the draft framework and provide feedback on its utility, as well as suggestions for improvement.
- Offer a preview of next steps for finalizing the policy framework post-workshop.

This workshop included a brief recap of the findings from the first workshop, the market scan, and the external survey of pilot program facilitators. Next, the group was introduced to the draft framework and provided with an overview of the proposed process. After attendees had a chance to individually review the draft policy process, participants took part in an exercise to test the policy framework with hypothetical pilots.

As a result of the feedback collected from testing the framework, the following is a high-level summary of the key takeaways identified for incorporation into the final draft of the Pilot Policy Framework (please note that this is not an exhaustive list of feedback received and incorporated into the framework):

- moveDC should prominently guide the review and evaluation process in the Pilot Policy Framework in each step of the pilot process.
- Scoring criteria should be used to evaluate proposed pilots, creating a standardized methodology for the approval, rejection, or reassignment of proposals.
- Clarification is needed regarding who should be involved with the review process.
- Training instructions for reviewers was recommended to standardize the process over time and accommodate eventual staff changes.
- Proposals can be rejected for various reasons. The proposals perceived to have potential benefits in the future should either be reassigned to a project other than a pilot or earmarked as a pilot for reconsideration at a later date.
- Equity assessments should be an early part of the proposal evaluation process. Equity should be defined as it is articulated in moveDC, where public investments in transportation justly benefit all residents, visitors, and commuters. For piloting, the geographical and community engagement considerations noted in Workshop #1 should be included.
- Providing transparency of proposal rejections to the public could help inform, challenge, and/or improve future submissions.