

SCOPE OF WORK HPTE/mobilitynext

mobilitynext is a non-profit, membership based organization, that brings public and private entities together to solve Metro Denver's growing mobility challenges using technology, policy, urban planning, financing, partnerships, and pilots.

HPTE seeks membership in mobilitynext. Membership will allow HPTE to access mobilitynext's services and services approach to provide insights into HPTE's real-world transportation problems and challenges and to receive input from and opportunity for real-world testing and demonstrations by mobilitynext's private entity partners in order to accelerate actionable innovation.

HPTE and mobilitynext agree to the following services:

- **Membership Start Date.** The services and terms of membership set forth in this Agreement will begin [September 30, 2019].
- **Term.** The term of membership ("Membership Term") will begin on the Membership Start Date and will not expire for [four years], unless earlier terminated by HPTE or mobilitynext.
- **Annual Membership Fee.** Beginning on the Membership Start Date, HPTE will pay mobilitynext an annual membership fee of [Twenty-Five Thousand Dollars (\$25,000.00)], payable by the end of the first week of each membership year ("Annual Membership Fee"). All financial obligations of HPTE under this Scope of Work and the Purchase Order are subject to annual budgeting and appropriation by HPTE's governing body, in its sole discretion.
- **Maximum Contract Liability.** Notwithstanding any other provision of this Agreement, in no event shall HPTE be liable for payment for services rendered and expenses incurred by mobilitynext under the terms of this Agreement for any amount in excess of the sum of [One Hundred Thousand Dollars (\$100,000.00)] ("Maximum Contract Liability"), which is the Annual Membership Fee multiplied by the Membership Term. The obligations of HPTE shall extend only to monies encumbered for the purposes of being a member of and receiving services from mobilitynext. mobilitynext acknowledges and understands HPTE does not irrevocably pledge present cash reserves for payments in future fiscal years, and membership in mobilitynext is not intended to create a multiple-fiscal year direct or indirect debt or financial obligation of HPTE.
- **Services of Membership.** The services that mobilitynext will perform are attached as Appendix A to this Scope of Work.
- **Services Approach.** The services approach that mobilitynext will use is attached as Appendix B to this Scope of Work.
- **mobilitynext Committees.** If it so chooses, HPTE may make its most senior executive available may provide staff for mobilitynext committees to support mobilitynext's goals and to provide direction.

- **HPTE Leadership Access.** HPTE will use its best efforts to make its most senior executive available for mobilitynext’s executive-level only quarterly events with mobilitynext’s private entity partners. If the senior-most executive is unavailable, HPTE will use its best efforts to make its next most senior executive available for such quarterly events, which will be no longer than two hours each and which may be broken into parts to better facilitate conversation among HPTE and the private entity partners in attendance.
- **Network Participation.** Subject to its federal, state, and contractual restrictions and obligations, HPTE will make its physical infrastructure available to mobilitynext’s private entity partners for testing, trials, development, and deployment of advanced technologies that may benefit HPTE. HPTE may establish the terms and conditions upon which its physical infrastructure will be made available, with due regard and without limitation to, safety and security restrictions, operational needs, regulatory requirements, and procurement procedures.
- **Procurement.** HPTE and mobilitynext shall abide by all relevant procurement standards and guidelines, including any and all policies regarding organizational conflicts of interest. mobilitynext acknowledges that HPTE’s procurement requirements shall govern HPTE’s approach to collaboration with mobilitynext’s private entity partners, as well as a private entity partner’s ability to bid on potential public projects.
- **Organizational Conflict of Interest.** In accordance with procurement best practices, mobilitynext acknowledges that participation by a private entity partner in developing a scope of work for HPTE or another public agency for a potential public project would create an organizational conflict of interest that would preclude the private entity partner from competing for the work that the private entity partner had helped to delineate. As such, mobilitynext shall use its best efforts to ensure that its private entity partners are not engaged in the practice of developing any scopes of work with HPTE or another public agency for potential public projects.
- **Insurance.** mobilitynext shall maintain general liability and other insurance as reasonably necessary to cover its obligations under this Scope of Work and the Purchase Order.
- **Notices.** All communication, notices, and correspondence shall be addressed to the individuals identified below. Either HPTE or mobilitynext may, from time to time, designate in writing new or substitute representatives:
 - If to mobilitynext:
Attn: Jim Doyle
8100 E. Union Ave., #1111
Denver, CO 80237
 - If to HPTE:
Attn: Director, HPTE
Colorado Department of Transportation
2829 W. Howard Place, 5th Floor
Denver, CO 80204

APPENDIX A
MEMBERSHIP SERVICES

mobilitynext will provide the following services throughout the term of the Agreement:

1. Topic Area Analysis

- a. Topic Areas provide members with a way to categorize and evaluate mobility factors independently. Each Topic Area has a set of issues and challenges that are used to focus member research, strategy development, and pilots. mobilitynext leverages the Transportation Research Board's materials as well as other timely research.
- b. Topic Area review and analysis are incorporated into the mobilitynext Services Approach. mobilitynext facilitates the use of these Topic Areas by members.

2. mobilitynext Services Approach

- a. The Services Approach is the primary methodology for developing a regional mobility strategy and associated pilots.
- b. Members will have the opportunity to participate at multiple levels in the strategy development and pilot definition and execution, based on their own preferences.
- c. Appendix B contains a detailed outline of the approach.

3. Public-Private Collaboration

- a. mobilitynext will recruit relevant public and private members to support the mission of mobilitynext and provide a broad base of stakeholders.
- b. mobilitynext will manage the process of connecting public and private members to execute the mobilitynext Services Approach.
- c. mobilitynext will identify multiple funding sources to support regional pilots. This will include grants applied for and received by mobilitynext as well as those applied for and received by a coalition of members.

4. Learning & Collaboration Events

- a. mobilitynext will provide events for members to learn and collaborate that include:
 - i. The latest regional issues and challenges
 - ii. New models and technologies
 - iii. Mobility case studies from around the world
 - iv. Policy issues and ideas
 - v. Land use planning issues and strategies
 - vi. Innovative financing and funding approaches
 - vii. Individual municipality plans and strategies
 - viii. Member selected topics

5. Opportunity to Directly Support Metro Denver Mobility

- a. As a member, support the Denver Metro Region's actions to develop and execute a pragmatic strategy.

APPENDIX B SERVICES APPROACH

mobilitynext Services Approach (Version 1.0)



Phase I is performed/updated annually. Phase II is an ongoing process that is executed based on the Strategy’s timeline and other factors such as availability, budget, and stakeholder availability.

NOTE: *The mobilitynext Services Approach will be updated periodically based on usage, feedback, and new methods to leverage to develop strategy and pilots.*

Key Terms:

- **Topic Areas:** Areas defined by the Transportation Research Board to categorize/group the most important topics in transportation and mobility. Also, defines issues under each topic for review and analysis.
- **Stakeholders:** A defined group of public and private leaders setup to guide and support mobilitynext output and recommendations.
- **Focus Areas:** Areas within and across the Topic Areas that represent key areas for the team to focus on for strategy and pilots. This is based on the unique issues and challenges within the Denver Metro Region. For example, RTD FasTracks could be a Focus Area.
- **Inputs Analysis:** This is the collection, review and analysis of strategy inputs from multiple areas including top issues/opportunities, ecosystem elements, regional inputs, and other relevant sources to provide a fully informed view to be used in strategy development.
- **Focus Area Ideas:** These are hypothesis-based concepts that are solely used to drive innovative thinking and outline what is in the range of the possible. These are used early on in the process to get stakeholders engaged and open up everyone’s eyes to what might be possible.
- **Assumptions:** These are critical to developing and running a successful pilot. As part of strategy development, new ideas, models and technology are hypothesized to positively impact the established goals. The “hypothesis” that are generated are based on Assumptions, e.g. technology A will do X and impact metric Y by ZZ%.” Assumptions need to be tested to prove that they were correct or incorrect. All key Assumptions should be identified for review and testing to ensure that Pilots are focused and supportive of a deployment decision.
- **Pilot Charter:** The Charter outlines key information to ensure the pilot is focused, well organized, clearly owned and setup to achieve a pilot’s only goal: decide on a follow-on deployment or no deployment. Thus, a pilot can only have three outcomes:
 1. **Yes:** The pilot proved that enough of the assumptions proved correct to move forward with deployment of the technology/model/idea.
 2. **Yes, but:** The pilot proved out most of the assumptions, but may have missed some key area(s) or the results were inconclusive in some key areas. This requires additional testing via an extension of the pilot with new, modified or additional tests.

3. **No:** The pilot proved that enough of the assumptions were incorrect making deployment unwise or impractical. Lessons learned are documented and shared across the region to eliminate the possibility of retesting the same thing in the future, or at least until one of the inputs has significantly changed/improved, e.g. a more matured technology.
- **User Adoption Analysis:** This analysis leverages behavioral economics and others tools to truly understand a user or group of user’s intents to adopt a new technology/model/idea. This avoids the “build it and they will come” problem prevalent and in many infrastructure projects.

1. Phase I: Strategy Development

1.1. Review Topic Areas

- 1.1.1. Assign Topic Area owners
- 1.1.2. Stakeholders review transportation Research Board “Critical Issues in Transportation 2019”

Deliverable: None

1.2. Perform Inputs Analysis

1.2.1. Define Top Regional Focus Areas

- 1.2.1.1. Define top Issues/Opportunities
- 1.2.1.2. Develop Focus Areas to prioritize strategy

Deliverable: Focus Areas Document

1.2.2. Review Strategy Inputs

- 1.2.2.1. Perform Ecosystem analysis (Policy, technology, trends, expert interviews, ...)
- 1.2.2.2. Evaluate Regional inputs (e.g. Prior Strategy, MCB, Metro Vision, Metro Mayor’s Principles, transit plans, individual municipality strategies, ...)
- 1.2.2.3. Evaluate Key Trade-Offs & Choices between inputs
- 1.2.2.4. Define Strategy Scope (Hard Constraints, Key Focus Areas & Tactics for Later)

Deliverable: Input Analysis Summary Document

1.2.3. Develop Focus Area Ideas

- 1.2.3.1. Evaluate Issues and potential solutions in each Topic Area
- 1.2.3.2. Create Ideas for each Focus Area to stimulate innovative thinking
- 1.2.3.3. Launch “quick wins” if majority support of Stakeholders (Go to 2.1)

Deliverable: Focus Area Idea Sheets

1.3. Define Goals & Scorecard

1.3.1. Define a Target Date for the Strategy (e.g. 2030)

- 1.3.1.1. Finalize target date with Stakeholders

Deliverable: None

1.3.2. Define Practical, Non-Conflicting Goals

- 1.3.2.1. Publish summarized Analysis from 1.2
- 1.3.2.2. Define Goals
- 1.3.2.3. Test Goals (against theoretical potential outcomes or against individual municipality Goals)

Deliverable: Goals Document

1.3.3. Define Evaluation Metrics and Scorecard

- 1.3.3.1. Define evaluation Metrics
- 1.3.3.2. Define data owners, update process, frequency, etc.

Deliverable: Scorecard

1.3.4. Approve and Finalize

- 1.3.4.1. Present Goals and Scorecard to Stakeholders
- 1.3.4.2. Finalize and setup

Deliverable: updated Goals Document and updated Scorecard

1.4. Develop Strategy

1.4.1. Summarize all inputs

- 1.4.1.1. Summarize prior inputs & analysis

Deliverable: Strategy Input Summary Document

1.4.2. Finalize Focus Areas

- 1.4.2.1. Present findings and draft Focus Areas to Stakeholders
- 1.4.2.2. Refine and finalize

Deliverable: updated Focus Areas Document

1.4.3. Develop high-level timelines and budgets

- 1.4.3.1. Phase work in high-level timeline
- 1.4.3.2. Gather budget data and integrate

Deliverable: Timeline & Budget Document

1.4.4. Socialize and refine strategy

- 1.4.4.1. Present consolidated Strategy to Stakeholders
- 1.4.4.2. Refine and finalize Strategy

Deliverable: Strategy Document

2. Phase II: Pilot Execution

2.1. Refine & Expand Assumptions

- 2.1.1. Refine Strategy Assumptions
- 2.1.2. Expand Assumptions where needed to support comprehensive pilots

Deliverable: Key Assumptions Document

2.2. Define Pilot(s)

- 2.2.1. Organize assumptions into Pilots to test
- 2.2.2. Define entities (Public/Private/Grant) to fund and execute pilots
- 2.2.3. Develop Pilot Charters (1 per)

Deliverable: Pilot Charter Document(s)

2.3. Pre-Pilot Analysis

- 2.3.1. Define detailed Pilot Scope
- 2.3.2. Evaluate similar pilots, risks, and issues
- 2.3.3. Define Assumptions testing methods and criteria
- 2.3.4. Perform User Adoption analysis
- 2.3.5. Perform pilot and deployment Budget analysis
- 2.3.6. Review with Stakeholders, finalize and approve for launch

Deliverable: Approved Pilots Analysis Summary Document

2.4. Pilot Execution

- 2.4.1. Develop reporting method with delivery owner
- 2.4.2. Develop, publish and periodically review status with Stakeholders

Deliverable: Status Report Document

2.5. Pilot Review & Decision

2.5.1. Review all results & decide on action

- 2.5.1.1. Document results
- 2.5.1.2. Present to Stakeholders
- 2.5.1.3. Decide (Yes, Yes but or No)

Deliverable: Pilot Results Analysis Document and Pilots Decision Document

2.5.2. Take action

- 2.5.2.1. Yes: Work with jurisdictions for deployment
 - 2.5.2.1.1. Identify and Launch Deployment Team

2.5.2.1.2. Brief Deployment Team

2.5.2.1.3. Periodically collect and report status to Stakeholders

Deliverable: None (at mobilitynext level)

2.5.2.2. Yes but: Define smaller pilot to test specific assumptions

2.5.2.2.1. Identify and define specific areas for additional testing

2.5.2.2.2. Update Pilot Charter and Pre-Pilot Analysis

2.5.2.2.3. Launch “second” pilot, repeating steps above

Deliverable: updated Pilot Charter

2.5.2.3. No: Evaluate and document lessons learned

2.5.2.3.1. Document lessons learned & archive

Deliverable: Lessons Learned

Strategy Development Tools:

The following tools are used throughout the Services Approach to support the process and the deliverables:

- Behavioral Economics
- Strategy Alternatives
- Benchmarking
- SWOT Analysis
- Service Design
- Value Chain Analysis

