Office of Innovation

Our Innovation and Improvement Model

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OVERVIEW

Under the authority of the Secretary, the Office of Innovation will select, manage, and report progress on efforts strategically aligned with the Department's mission. To accomplish this the office is structured with two divisions:

1. Innovation **Generator** (Office of Ideation) – Engage with the Department, private, and public partners to identify opportunities to solve the Department's challenges.
2. Innovation **Engine** (Office of Innovation and Improvement) – facilitate innovation and improvement with meaningful metrics for the Department.

WHAT WE DO

The Office of Innovation's

Vision – ***The Department of Housing and Urban Development routinely innovates and improves its operations, services and working conditions.***

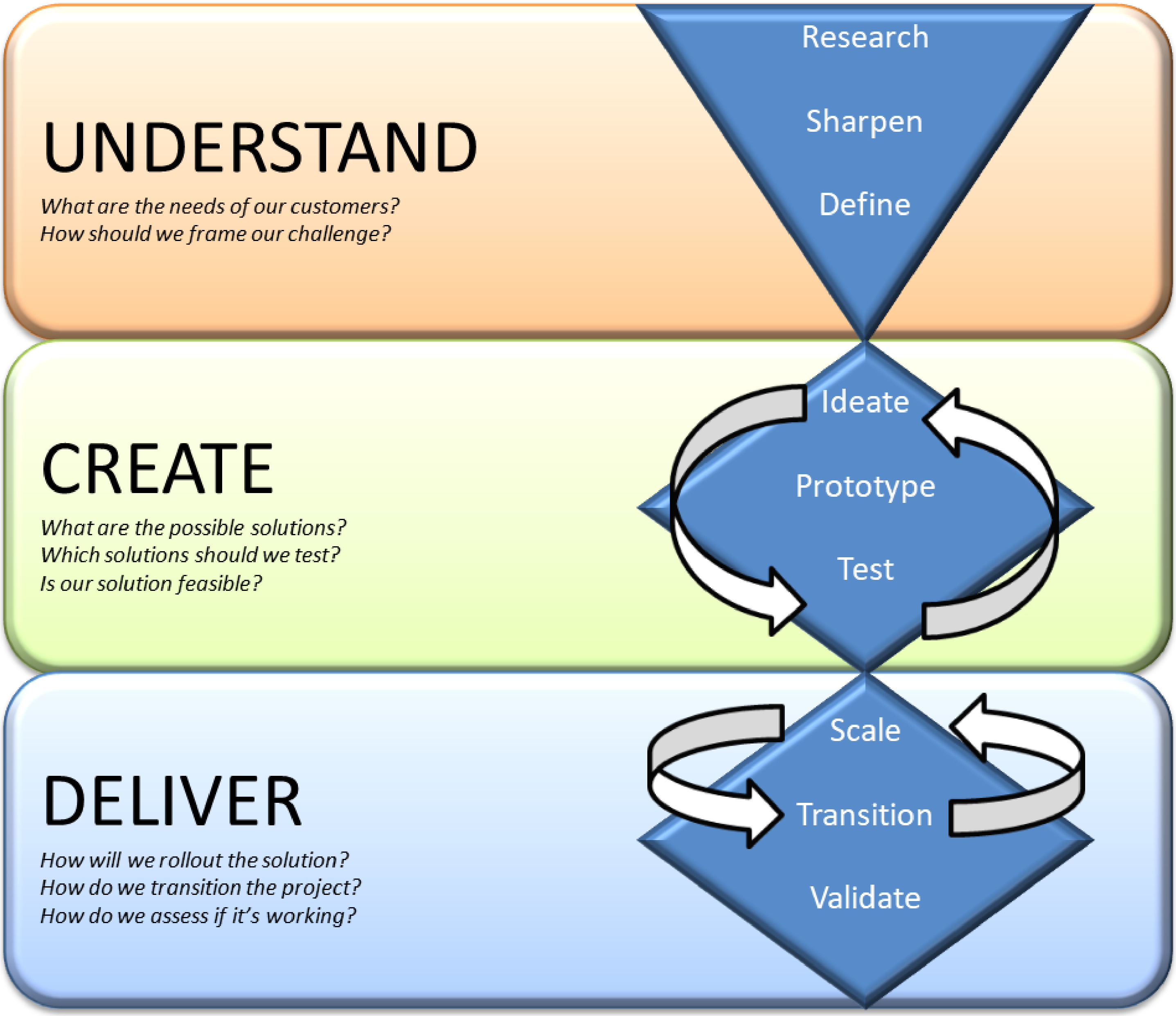
Mission – ***To facilitate impactful innovation and improvement for the Department***.

OUR APPROACH

To tackle the right challenges and incorporate innovative solutions or improve processes for the Department the Office of Innovation intakes projects after careful consideration by the leadership steering committee. The Office then leads a project selection workshop to prioritize and select potential efforts which then enter the intake process for the Innovation and Improvement Process.

INNOVATION AND IMPROVEMENT PROCESS

The Office of Innovation (OI) at HUD utilizes a process that is built upon, and developed from, conventionally accepted business innovation and improvement processes including Design Thinking, Lean Six Sigma, The Balanced Scorecard, and budgeting and acquisition best practices. The process consists of three phases, each with three stages. The three phases are Understand, Create, and Deliver. The phases are sequential and non-iterative. At the end of each phase is a phase review briefing to the Office of Innovation management marking the transition from one phase to the next. Throughout the process there are also tollgate briefings to leadership to inform decision makers on the project's progress and obtain decisions for the way ahead. The final tollgate briefing concludes the project and ensures the Office of Innovation has completed the task and the supported program is able to sustain the improvement.


UNDERSTAND
What are the needs of our customers?
How should we frame our challenge?
Research
Sharpen
Define
CREATE
What are the possible solutions?
Which solutions should we test?
Is our solution feasible?
Ideate
Prototype
Test
DELIVER
How will we rollout the solution?
How do we transition the project?
How do we assess if it's working?
Scale
Transition
Validate

PHASE 1 – UNDERSTAND

The goal during the **Understand Phase** of the process is to develop a clear and measurable problem statement. This phase has three stages: Research, Sharpen, and Define. These stages are not iterative; however, they may have significant overlap with each other. The purpose of the Understand phase is to bring into focus the issue which needs to be addressed, whether from a process improvement standpoint in addressing an established product or service, or from a truly innovative standpoint; meaning the development of a new program, process, or novel technology rather than revamping or redesigning an existing way of working. Fully understanding an issue includes coming to grips with current performance to create a baseline to compare future performance against as an indicator of success or failure when testing solutions. The outputs required at the end of the Understand Phase include a project charter, a SIPOC Diagram, a project communications plan, a process map, baseline measures, and a phase review briefing to the OI management.

RESEARCH – The first of the three stages in the Understand Phase of our innovation and improvement process. After formally taking on a project, this stage involves the cognizant members of the team familiarizing themselves with the issue and its background. Conversations with the process owner are appropriate as well as a review of any existing literature dealing with the issue. This is also when the historical development of the issue is explored. This stage may overlap with the next stage: Sharpen.

SHARPEN – This is the second stage in the Understand Phase of our innovation and improvement process. This stage involves deliberate focus on the specific issue at hand, bringing the issue out of the background context. This is when the Office of Innovation facilitator and the project sponsor discuss the scope of the project and potential project team members. The roles and responsibilities of executive sponsors, the project sponsor, the facilitator, and the project team members are discussed and documented during this stage. The facilitator conducts a stakeholder analysis at this time while Voice-of-the-Business (VOB) and Voice-of-the-customer (VOC) tools are used to delve more deeply into the issue. The facilitator and team may have more extensive conversations with internal stakeholders and interviews with external stakeholders. During this stage, a formal kick-off event could be held to introduce the project to the broader organization or stakeholders. This stage may overlap with the next stage: Define.

DEFINE – This is the third, and final, stage in the Understand Phase of our innovation and improvement process. This stage involves the production of a formal charter for the project. One aspect of the charter is the formulation of a specific problem or opportunity statement (from this point forward the term problem statement will be used for ease of communication). If not already addressed in a previous stage, a measurement system and associated metrics must be discussed during this phase to formulate the problem statement precisely. Other aspects of a charter include a written business case statement, identifying project team members and documenting project scope and some roles and responsibilities. Although the charter is a formal project document and is intended to be a project artifact for the purposes of memorializing the project, it is intended to be flexible. Updates in later stages are shared with the process owner and executive sponsor to ensure the project remains focused on leadership objectives. Since the define stage is the final stage in the Understand Phase, there is very little, if any, overlap with the next stage in the process: Ideation.

PHASE 2 – CREATE

The Create Phase of the innovation and improvement process follows the transition from Understand. It includes three stages; Ideate, Prototype, and Test. The Create Phase may be iterative and, although a single iteration may be enough, it is expected a team will cycle through several iterations of the stages to develop the most appropriate solution. While this phase is hypothesis driven it remains necessary to understand the overarching goal to ensure the new process is aligned. To generate ideas, the facilitator will guide the team through root cause analysis, determining the root cause to the problem

IDEATE – This is the first stage in the Create Phase of the OI innovation and improvement process. This is a highly interactive stage intended to solicit potential solutions from project team members, internal stakeholders, and depending on the project, external stakeholders or customers as well. During this stage the team explores connections and themes in the data. The team articulates insights discovered during root cause analysis and brainstorms solutions that could lead to improvement or innovation. Feasibility Assessments are developed towards the latter part of this stage to assist in narrowing the solution pool and should include discussion, among other things, risk/reward, resource constraints, and implementation timelines.

PROTOTYPE –This stage in the Create Phase of the OI innovation and improvement process involves designing a preliminary version of the solution. The prototype is the device with which the team can test the assumptions made during ideation. This includes developing the scale-up plan. It also lets the team understand technical challenges and resolve conflicts about design. The prototype simulates the solution and the relevant part of the system where it resides. Early-stage prototypes are often low-fidelity (sketch, storyboard, role play, etc.). Through the iterative process, successive prototypes may advance from a paper prototype to a higher-fidelity prototype or live prototype.

TEST – This is the final stage in the Create Phase of the OI innovation and improvement process. This stage involves testing a prototype to validate learning by gathering feedback from stakeholders and verifying the solution and the scale-up plan. Useful feedback will support or challenge the assumptions and hypotheses made during ideation. After testing, the ideate-prototype-test cycle may be repeated to incorporate the feedback into the solution's design. The purpose of iterating is to refine the solution towards a design that can be scaled.

PHASE 3 – DELIVER

The Deliver Phase of the innovation and improvement process follows Create. This phase includes three stages; Scale, Validate, and Transition. The Deliver Phase progresses sequentially. Any decision to move back in the process will require the project to reenter in Phase 2. After solutions have been validated and selected in the Create Phase they are scaled-up, validated that the scale-up is successful, and then transitioned to the process owner.

SCALE –scale-up" means adapting an innovation for widespread and supported application. There are three steps in the framework for going to full scale:

1. Set-up, which prepares the ground for introduction and testing of the solution taken to full scale.
2. Test of Scale-up, which spreads the solution to a variety of settings that are likely to represent contexts that will be encountered at full scale.
3. Go to Full Scale, which unfolds rapidly to enable a larger number of sites to adopt and/or replicate the intervention.

While this sequence reflects a logical progression from conception to full scale, in reality, the steps may not be linear; rather, they may be more organic and iterative, with streams of work initiated at different times and progressing at different rates.

TRANSITION – The transition signifies the completion of active participation by the Office of Innovation. It is critical because after the implementation of this plan, the responsibility of the project is transferred to the process owner. Since there are likely to be issues emerging there must be crystal clear accountability. This transition plan marks the shift from active assistance.

VALIDATE – To validate the scale-up has been successful the Office of Innovation will monitor the project metrics, review all documentation, and hold after-action-review sessions to discuss lessons learned and to finalize the archival of project documentation.

STEERING COMMITTEE

The mission of the steering committee is to provide the oversight, guidance, and leadership support needed to achieve impactful and measurable improvement across the agency. The steering committee is sponsored by the agency's senior management team and prioritizes, directs, and monitors the implementation of agency-wide innovation and improvement.

MEMBERSHIP

The steering committee voting members are:

Deputy Secretary – Chair
Director, Office of Innovation – Vice-Chair
Director, Enterprise Risk Management
Office of Administration
Office of the Chief Financial Officer
Office of the Chief Human Capital Officer
Office of the Chief Information Officer
Office of the General Counsel
4 – General Deputy Assistant Secretary*
2 – Program Office Subject Matter Experts*

** GDAS and SME participants will serve a minimum of two years and be replaced on a staggered timeframe for continuity and to develop experience and expertise with the steering committee functions.*

RESPONSIBILITY

The steering committee is responsible for:

1. Working with the Office of Innovation to ensure efforts are aligned with agency goals and consistent with the desired agency culture.
2. Advocating program office use of the Office of Innovation to solve complex problems with unknown solutions.
3. Creating and maintaining the project selection and review process.
4. Providing guidance and oversight by:
    a. Conducting annual project selection and prioritization sessions.
    b. Conducting project reviews and assessments at each meeting.
    c. Resolving staff, management, and resource conflicts.
    d. Identifying and promoting best practices throughout the agency.
    e. Promoting innovation and improvement through employee recognition.
5. The steering committee helps create a culture of innovation and improvement. In this culture leadership guides and supports employees as they use innovation and improvement principles and tools in their day-to-day work.

PROJECT SELECTION

The Office of Innovation reviews proposed projects, works with the project sponsor to clarify the objective, and makes a recommendation to the steering committee. The recommendation is based on assessing the impact and effort of the project, using the Steering Committee Impact/Effort Assessment Excel spreadsheet, balanced with the capacity of the Office of Innovation to complete the work on schedule.

Once the steering committee accepts the project it prioritizes it against other current or proposed projects. Project prioritization rankings are:

- **Tier 1 – Essential** activities with the agency's highest level of commitment which may require current activity or resource adjustments.
- **Tier 2 – Important** activities which must be considered against other ongoing activities if funds or resources are insufficient.
- **Tier 3 – Beneficial** activities which will be pursued if they do not infringe upon higher level priorities.

Tier 1 projects will be assured the appropriate resources for project completion. The project sponsor and members of the Office of Innovation will report progress, milestones, resource constraints, and results of Tier 1 projects every 6 weeks.

Tier 2 and tier 3 projects will be reported in the same manner each quarter.

AGENDA

The steering committee meeting agenda will include:

- Projects
    - Project Pipeline Review
    - Needs (capacity of OI Team)
    - Project Repository (in progress, approved, completed)
- Active Project Review
    - Projects behind schedule
    - Project updates
    - Amendments / changes
- Proposed Projects
    - Newly identified opportunities
    - Review / vote
        - Approve / Approve Conditionally / Hold / Cancel
- Other Needs

- Program Performance
    - Financial and Operational Benefits (Program to date and Fiscal Year)

INNOVATION COUNCIL

An Innovation Council of high-level members from the private sector and academia will provide advice and recommendations to the Secretary regarding departmental innovation. The Office of Innovation shall plan and organize the meetings and manage the agenda on behalf of the Secretary.

PROJECT INTAKE

As a method to capture the intake of work, ensure timely response to clients, and capture data to improve our own processes, the Office of Innovation follows two project intake processes. The first process is a calendar driven deliberate process to align project work with the federal budget process.

Step 1. Deliberate collection: From April to June the Office of Innovation collects feedback to identify the most impactful opportunities. Feedback is collected from:

1. senior leaders
2. program office management
3. employees
4. the Innovation Council
5. private and public partners
6. external stakeholders
7. academia

OR

Step 1: Supervisors and managers interested in requesting assistance should contact us by sending an email to Innovate@HUD.gov. The email need not contain any more than a request for service with a general idea of what the effort is. It is preferred that the client can articulate the basic elements of a Charter:

1. Project Title
2. Problem Statement
3. Scope
4. Project Team

A charter template can be downloaded from the Office of Innovation website (insert link here). The team will use the charter to assess the effort and proceed through the selection process. (can we make this a fillable document in Share Point that populates assessment tools?)

Step 2. Initial meeting with client. Within 5 business days from receipt of the initial email request for service, a member of the Office of Innovation will contact the requestor to set up a preliminary meeting. This is an opportunity for the client to clarify the requirement and the Office to discuss the team's approach to improvement. The Office representative will guide the conversation with the client by gathering the following information:

1. What problem are you trying to solve? (Capture who the customer is and if they are dissatisfied, what the specific problem is, if the process is currently being documented or measured in any way)
2. What would success look like? (Note if they already have a proposed solution, what benefits or improvements would be)
3. What would be the business/strategic impact? (is the project aligned with organizational goals, does it have senior leader support)
4. Who will be the executive sponsor?
5. Who are the members of the project team? (does the identified sponsor control most of the process?
6. Does the project team have time to devote to the project?)
7. How long should this take? (how long would the owner/sponsor like this project to take? Are there any time constraints or pressures?)
8. What are the key potential barriers to solving this problem? (capture any cultural, political, or resource issues that will reduce likelihood of success)

Step 2. Within 5 business days from the meeting with the client the Office representative will meet with management to review the information gathered and to set up a meeting with the team. The representative will set up a meeting with the Office of Innovation team to present and discuss recommendations.

Step 3. During this team meeting each team member will assess the project by conducting:

1. viability assessments to advise selection
2. steering committee impact/effort assessment

The representative will combine the assessments and the recommendation at the close of the meeting and provide to the manager to guide a decision with the steering committee.

Step 3. The project sponsor and Office of Innovation management will present the project to the steering committee for consideration, selection, and prioritization

Step 4. The Office of Innovation management assigns a project lead facilitator and co-facilitator.

Step 5. The Office of Innovation management notifies the client of selection.

Step 6. Facilitator and client launch project.

APPENDIX A – REVISIONS

Revisions will be represented by .01 ,.02, etc until a final which will be version 1.0. Then revised with 1.01, 1.02, etc. until the next final of 2.0.

Revision Number	Revision Date	Revision Notes
0.1	7 Nov 2018	- Draft Innovation and Improvement Process - Draft Phase 1 (with 3 stages) from Larry
0.2	8 Nov 2018	- Added logo to cover
0.3	26 Nov 2018	- Changed revision protocol - Added Overview - Added What We Do - Added Steering Committee - Added Innovation Council
0.4	4 Dec 2018	- Added Phase 2 input from Peter - Changed document title
0.5	8 Feb 2019	- Added project intake - Added Phase 3
0.6	6 Mar 2019	- Changed title - Added definitions - Moved the Innovation and Improvement Process to the beginning of the Model (Bottom Line Up Front) - Moved “Transition” before “Validate” to ensure the Office follows through with monitoring success
0.7	7 March 2019	- Added the process model graphic - Corrected grammar throughout
1.0	14 March 2019	- Clarified Office names and functions in the overview

APPENDIX B – DEFINITIONS AND TERMS

Client – A person or organization that seeks the products and services of the Office of Innovation.

Customer (Consumer) - A person or organization that receives a product, service or information but is not part of the organization supplying it.

Executive Sponsor – An executive who ensures resources are available for training and projects, is involved in periodic project reviews, and supports and addresses Quality Improvement organizational issues.

a) Generates alignment by communicating the vision and setting expectations for the program to the organization
b) Ensures the resources and participation needed for success
c) Supports the process owner by removing obstacles to their success
d) Takes active stages to overcome resistance from other leaders

Facilitator - A specifically trained person who functions as a CI Process Teacher and coach; as well as the moderator for a group, team or organization.

a) Guides the engagement with questions and frameworks to help the project team solve the problem
b) Provide coaching and analysis to support leaders and teams in making important choices about the project
c) Reports to the QI manager, Executive Sponsor, Process Owner, and Project Champions

Phase – The largest category of our process which identifies the progress of an effort.

Phase Review – A review and briefing at the end of each phase as a project moves through phases. These reviews ensure required deliverables are approved and appropriate innovation and improvement methodologies have been used or considered.

Process Improvement Team (Project team) - A structured group often made up of cross functional members who work together to improve a process or processes.

a) Staff members who work in the process at each level of the organization
b) Participate in the evaluation of the current and future states
c) Assist with developing and implementing solutions

Process Owner - The person who coordinates the various functions and work activities at all levels of a process, has the authority or ability to make changes in the process as required and manages the entire process cycle to ensure performance effectiveness.

a) Primary responsibility for the successful fulfillment of the overall process
b) Organizes the logistics of engagement events and implementation activities
c) Holds the project champion accountable for achieving project objectives
d) Responsible for implementation decision-making.

Process Partner (Internal Customer) - Entities, agencies or departments that work together to provide a product or service to a customer. They can be organizations that are upstream or downstream from the process in question. Process partners are in the process collaborating with others to deliver the end-product or service to the customer. They provide information, do the work and produce documents or materials that eventually reach the customers.

Project Champion (Project Lead) - The person delegated by the process owner with implementing a project; who takes on the burden of ensuring everyone involved is on board and behind the ultimate success of the project. They are responsible for:

a) Collaborate with the process owner and facilitator to clarify the project's strategic objectives.
b) Working with the project team to ensure the vision for the project is successfully translated into the requirements and solution design.
c) Identify, eliminate, or report to the process owner any obstacles that may threaten a project's viability within the organization itself.
d) Relaying timely updates to all managers and client contacts impacted team members.
e) Appropriately allocating and organizing internal resources to ensure the successful completion implementation or adoption of a project.

Stage – The smallest category of our process. Each stage is a logical division of a phase and helps further identify the progress of an effort within a phase.

Steering Committee – A Deputy Secretary chaired team of leaders and subject matter experts charged with innovation and improvement oversight.

Steering Committee Impact Effort Assessment – An assessment of potential projects conducted by the Office of Innovation prior to review, consideration, and prioritization by the Steering Committee. The assessment, an Excel spreadsheet, considers the impact of a project based on estimated cost savings, cost avoidance, cycle time reduction, quality improvement, and customer service improvement and the required effort based on estimated time to implement, implementation cost, project risk, data availability, and resource availability.

Tollgate – A briefing to obtain leadership approval to move forward to the next phase or stage. The tollgate briefing ensures the team is aligned with leadership's intent.