Urban Sustainability Directors Network (USDN) Innovation Fund
2017 Annual Report

Context and Document Purpose. The Urban Sustainability Directors Network (USDN) is a peer-to-peer network of local government professionals from cities across the United States and Canada dedicated to creating a healthier environment, economic prosperity, and increased social equity. This network enables sustainability directors and staff to share best practices and accelerate the application of good ideas across North America. This document details the 2017 progress and impacts of the USDN Innovation Fund (IF), one member of USDN's Family of Funds (Appendix A). It proceeds as follows:

USDN Innovation Fund Overview. Since 2009, The Innovation Fund has granted over $4.3 million, supporting and impacting how cities operate in 137 different current and past member communities. In 2017, the USDN IF was supported by the Barr Foundation, Bloomberg Philanthropies, the JPB Foundation, the Kresge Foundation, the McKnight Foundation, the Summit Foundation, and the Surdna Foundation. The Fund's mission is to assist USDN members and their partners in collaborating to identify and develop high-impact solutions[1] that advance urban sustainability. The goal is to identify potential impacts new innovations can have on communities, and to develop and refine these innovations for broader adoption.

2017 Steering Committee Members. USDN members who serve on the IF Steering Committee (SC) devote many hours over the course of a year to provide fund guidance and to insure the IF is investing in innovations that impact how cities operate. Each year, IF SC members develop and update fund strategy to align with USDN goals, provide input on RFP design, and select award recipients. They also accept completing grant products, and assess the outputs, impacts, and successes of past awards.

Zach Baumer; Austin, TX	Mark Brostrom; Edmonton, AB, Canada
Cori Burbach; Dubuque, IA	Maribeth Delorenzo; Washington, D.C. (co-chair)
Wayne Feiden; Northampton, MA	Erin Gill; Knoxville, TN
Jennifer Green; Burlington, VT	Glen Hadwen; Ft. Lauderdale, FL (co-chair)
Daniel Hamilton; Oakland, CA	Eileen Horn; Lawrence and Douglas County, KS
Brenda Nations; Iowa City, IA	Matt Naud; Ann Arbor, MI
Shannon Parry; Santa Monica, CA	Doug Smith; Vancouver, B.C. *observing

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[1] The USDN IF defines "high impact solutions" as innovations that allow urban sustainability directors to change established governance and operational structures by finding new and better ways for local governments to improve community social, environmental, and economic wellbeing.

2017 Goals and Accomplishments. In support of the vision and mission, the USDN IF has 4 primary goals,[2] shown in Figure 1. They are considered equal in priority and are intended to govern IF work.
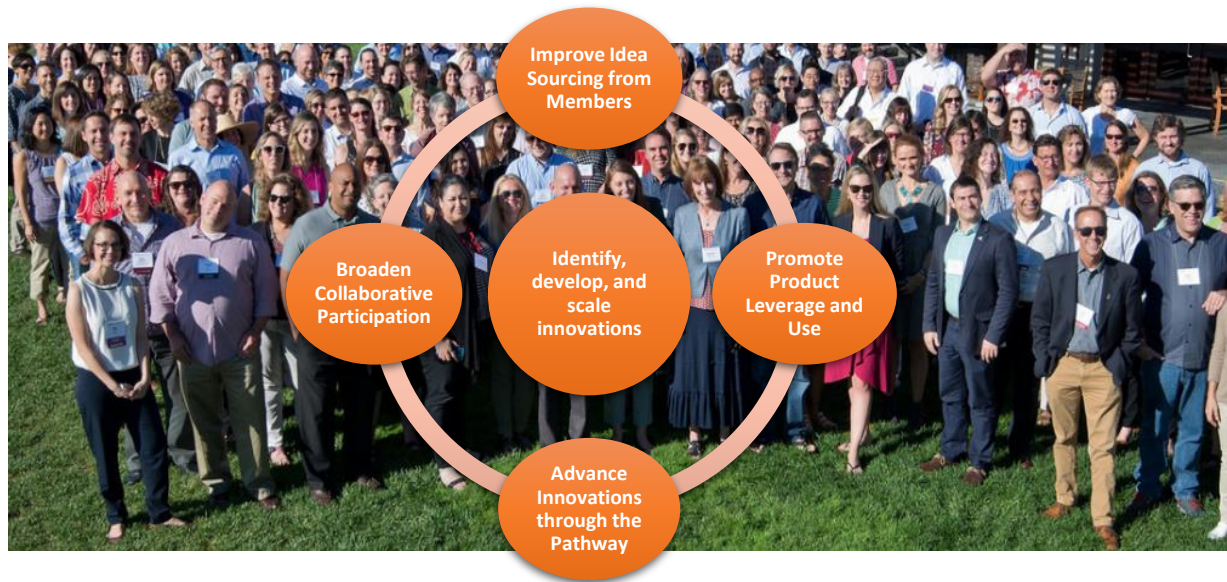

Figure 1. USDN Innovation Fund 2017 Goals

Targeted actions to advance these 4 goals are below in italics, followed by accomplishments:

1. Improve Idea Sourcing from Members - Offer technical assistance (TA) through 2 mechanisms:

- *Provide written and verbal feedback on letters of interest and proposals to help develop the innovation's context, hypothesis, and specific theory of change.*
  - o USDN Family of Funds RFPs were promoted and explained on 6 USDN member calls.
  - o Extensive technical assistance was offered in 2017 by the Fund Manager to support improved proposal submissions. Of the 6 awarded grants, 5 took advantage of this service, receiving on-call draft reviews, and follow-up written/verbal feedback.
  - o All proposers were provided with compiled written Steering Committee feedback to their Letters of Interest (LOIs) and proposals. The LOIs, proposals, and awards are here.
- *Provide Mini-grants to support partnership and proposal development.*
  - o 2 mini-grants were awarded, and they resulted in the 2 highest scoring proposals.

2. Broaden Collaborative Participation - Improve Ideas Sourcing from Members. Target outreach to specific USDN member groups (i.e., user groups, members who haven't yet led or participated in a grant):

- *For proposal development.*
  - o An outreach plan was created and implemented to promote strategic projects/new leads.
  - o IF talking points were created and updated throughout 2017 for use on USDN calls.
  - o The RFP incorporated language promoting collaboration with member groups.
  - o Members were connected with appropriate groups and partners via calls and emails.

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[2] These goals continue into 2018, are tracked against IF metrics, and embedded into the annual work plan, per Tables 1 and 2 in Appendix B.

- o The proposal matchmaker was updated year-round online to promote collaboration.
- o All 6 2017 grants awarded featured participants that are new to the IF.
- o Four USDN Peer Learning Groups shared a topic with 2017 IF grants: Electric Vehicle Strategy Peer Learning Group, Climate Change Preparedness Peer Learning Group, USDN / P4P Equity Lens Learning Group, and Sustainable Behavior User Group.
- o Two awards featured Partner Network collaboration: Great Lakes Climate Adaptation Network, and the Heartland Network.
- *For product uptake.*
  - o Four new awards supported phase 2 work, which was based on phase 1 interest/uptake.

3. Advance Innovations through the pathway - Design RFPs to consider the multiplier effect:

- *Show the innovation in the context of previous work and stage of advancement.*
  - o The public product posting page was re-designed to show products in an innovation stage.
  - o Three awards focused on concept development, and 4 focused on prototyping/refining.
- *Encourage USDN member collaborations that break sector and departmental silos*
  - o All 6 new awards featured either cross-departmental and/or cross-sector partnerships. Local (utilities and communities of color), state (universities), regional (USDN partner networks), federal (National Parks, NOAA), non-profit (various), and private sector (various) levels were all represented, as were other city departments (planning, engineering, and community development, for instance).

4. Product Leverage and Use - Improve communications around RFP opportunities and product releases:

- *Continue to evaluate the IF portfolio and survey members for product use data*
  - o Impacts metrics data was updated at each with grant close.
  - o Debrief calls were hosted for each grant at close to capture lessons learned.
- *Promote the IF products page as a resource that also supports proposal development*
  - o Innovation News published bi-monthly with links to recently posted innovation products.
  - o Members were directed to products by innovation stage to use as a reference in refining the proposals / products during TA.

2017 Awards. In 2017, the USDN IF invested $662,700 to support 64 core and associate USDN communities. Of the 8 funded projects:

- $75,000 supported 1 Midwestern award (Table 1). Funded by the McKnight Foundation, this project focuses on preparing for the proliferation of Electric Vehicles in the Midwest.

Table 1. USDN IF 2017 Midwestern Award.

2017 USDN Innovation Fund Awards – General RFP Grants			
#	Grant Name	$	Lead	Grant Purpose
1	Pathways to EV: Preparing for the Proliferation of Electric Vehicles in the Midwest	$75,000	Columbia, MO	This project seeks to better characterize the current pathways by which communities and counties can influence investment in electric vehicle infrastructure and survey current practices in leading communities.

- $577,700 supported 6 general awards (Table 2). These projects will advance the equitable development and refinement of innovations in biodiversity, climate planning/training, equity programming, and marketing.

Table 2. USDN IF 2017 General Awards.

2017 USDN Innovation Fund Awards – General RFP Grants				
#	**Grant Name**	**$**	**Lead**	**Grant Purpose**
1	Ensuring Equity in Energy Transformation and Innovation	$127,000	Burlington, VT	This project will build knowledge, tools, and partnerships to increase access to clean energy for low- and moderate-income households.
2	From Engagement to Ownership: Municipal Community-Centered Committees for Racial Justice and Environmental Sustainability	$80,000	Seattle, WA	This project seeks to build inter-city and community relationships, and to develop new educational products to understand, improve, and support the creation of effective community-centered committees through a process of research, convening, strategizing, sharing resources, and supporting replication.
3	USDN Socioeconomic Mapping Tool for Climate Risk Planning	$90,000	Ann Arbor, MI	A 2017 USDN IF grant created a pilot mapping tool to visualize neighborhood-level socioeconomic data about high-risk populations. This project refines the mapping tool by combining socioeconomic data sets with climate risks data (e.g., severe weather, heat stress, flooding).
4	Inspiring Local Action through Sustainable Marketing: A Phase 2 Scaling Project	$100,000	Washington, DC	This project scales the Marketing for Action (MFA) phase one project to implementation in ten cities. Phase 2 of will develop a pathway to implementation by providing extensive support cities undertaking marketing campaigns and documenting their journeys.
5	Climate Adaptation Training Tool 3.0	$96,000	Tempe, AZ Boston, MA	A 2016 USDN IF grant created a previous climate adaptation training tool developed by USDN cities. This phase 2 will make additions to the current "Game of Floods" tool by adding an extreme heat component.
6	Tools to Scale Urban Biodiversity Inventory Development and Utilization	$84,700	San Francisco, CA	A 2016 USDN IF grant developed a Biodiversity tool for cities. This resource will be further enhanced to support cities interested in implementing the Urban Biodiversity Inventory Framework (UBIF). It focuses on stakeholder outreach, software functionality, community engagement, and developing municipal resources.

- $10,000 supported 2 Technical Assistance (TA) mini-grants (Table 3). TA Mini-grants are awarded to on-board partners during the proposal development stage, and to foster strong project design. Both proposals were ultimately funded by the IF Steering Committee.

Table 3. USDN IF 2017 Technical Assistance Awards.

2017 USDN Innovation Fund Awards - Technical Assistance Mini- Grants				
#	**Grant Name**	**$**	**Lead**	**Grant Purpose**
1	Equity and Energy	$5,000	Burlington, VT	Proposal development
2	Engagement to Ownership	$5,000	Seattle, WA	Proposal development

2017 Grants Completed. In 2017, 9 Innovation Fund projects came to fruition (Table 4). When projects close, they provide USDN members with new tools, scans, and good practices. As grant projects are completed, they are posted here.

Table 4. USDN IF Projects that completed in 2017.

Innovation Category	Grants Completed in 2017
Climate Change Preparedness	• Climate Training Toolkit • A Guide to Equitable, Community-Driven Climate Preparedness Planning • Utah Climate Action Network*
Transportation	• Shared-Use Mobility Toolkit *
Waste	• Beyond the Ban - Preventing Plastic Packaging Pollution at the City Level *
Economic Development	• Sustainable Economic Development Breakthrough Convening *
Energy	• Southeast Equity and Energy Efficiency Toolkit • Methane Leaks in Gas Distribution Lines * (Posts externally in February 2017, here)
Natural Eco-Systems	• Urban Biodiversity Inventory Framework

*Denotes Impacts Grants

Five of the grants* were from an experimental Impacts RFP, which was designed with a strong focus on creating quantifiable impacts.[3] It tested better ways to gather information on how urban sustainability innovations impact how members do their jobs and collaborate with: (1) each other; (2) across departments; and / or (3) with external partners. The Impacts grant round was well-received, and demonstrated strong collaboration and leverage. Each lead city had plans to carry the work beyond grant close, and these grants produced clear outputs and initial impacts. For instance:

- **Utah Climate Action Network Capacity Expansion:** Salt Lake City's project output was starting a Climate Action Network, hiring a full-time Program Manager, and ultimately transitioning the newly formed organization to Utah Clean Energy as network facilitator. Notable network impacts to date include influencing federal policies (providing input to the 4th U.S. National Climate Assessment draft) and providing network start-up guidance (to Dane County, WI, for instance).

- **Shared Mobility Toolkit Expansion & Interactive Training for Cities:** Los Angeles's project output was expanding the Shared Mobility Toolkit and offering user training. Impacts to date include training over 300 registered sustainability and transportation professionals to use the tool. The Shared Use Mobility Center has partnered with ITS America to continue updating the tool.

- **Beyond the Ban: Plastic Packaging:** Providence's project outputs included model policies and best practices to reduce the negative impacts of plastic packaging on local economies - while promoting sustainable economic development. This project created on-the-ground impact in partner cities by supporting plastic packaging reduction policies, including Boston's Zero Waste Plan, San Francisco's ordinance reducing single-use disposable cups in restaurants, and Sommerville's plastic bag ban.

- **Sustainable Economic Development Breakthrough Convening:** Park Forest's project output was a workshop to advance the emerging and evolving field of Sustainable Economic Development

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[3] For the purpose of this RFP, "impacts" were defined as: an influencing effect on community members or local governance / infrastructure that promotes social, environmental, and economic wellbeing.

(SED). The project team surveyed participants 6 months after the workshop: 53% of attendees said that they had implemented SED projects since the September 2016 convening. Cited examples include green business challenges, new green building/infrastructure, and increased affordable housing projects.

- **Methane Leaks in Natural Gas Distribution Lines - Outlining the Hidden Costs and Creating an Action Strategy for Local and State Policy:** San Francisco's project output was a Natural Gas Action Strategy Report that examined levels of methane leakage in natural gas systems and identified both remediation mechanisms and better methods for accounting for the emissions impacts. Adding to the growing body of thermal decarbonization work, this project is creating impact by highlighting and supporting the case for decarbonization at the state and local level.

Grants from the General RPF rounds that closed had these summarized outputs and impacts:

- **Climate Training Toolkit:** This project created the "Game of Floods" training tool. The Training Toolkit has been implemented in multiple USDN cities, including Baltimore, Phoenix, Dubuque, Fort Lauderdale, Providence, and Seattle. It was used by USDN members at the USDN Annual Meeting and the National Adaptation Forum. The workshop has been run with storm and surface water engineers at conferences, with leaders in local counties throughout the Mid-Atlantic, and with college students. To date, training has been provided 30 times. Phase 2 will expand the tool.

- **A Guide to Equitable Climate Planning:** This grant created a benchmarking document for strategies in climate planning. The project facilitated Georgetown Climate Center's work on the equity portal for the Adaptation Clearinghouse. It created a strong working relationship between USDN and Movement Strategy Center. The Government Alliance on Race and Equity (GARE) shared the toolkit with GARE's membership.

- **Southeast Equity and Energy Efficiency Toolkit.** Leveraging $35,000 from the Southeast Energy Alliance (SEEA) this grant began to embed equity into city and non-profit energy efficiency work and helped expand a number of equity-focuses partnerships in the region. Since, SEEA has allocated $650,000 for grants for organizations focused on increasing equity in energy efficiency.

- **Urban Biodiversity Inventory Framework:** This work leveraged a 1:1 match from the Summit Foundation, and resulted in the creation of a biodiversity framework now hosted by the Biophilic Cities Project at the University of Virginia. Use of it by participating cities led to a second (refining) phase, now awarded to partner with the Biophilic Cities project to design a develop urban biodiversity resources and assemble a streamlined, turnkey package for cities to implement.

2017 Outreach Efforts and Impacts. In 2017, the USDN IF Steering Committee Members focused on reaching out to 69 USDN members who had either never applied to the IF (veteran or new members), applied to the IF and not received an award, or were new members to USDN from cities that have previously received IF awards. Each committee member called, emailed, or met with a segment of these members during the 2017 RFP cycle. **Out of the 69 USDN members contacted, 29 (42%) members participated in a 2017 RFP proposal. Seven (10%) participated in an unfunded proposal, and 22 (32%) are now participants in a 2017 awarded project. Each Steering Committee member had at least 1 of their outreach circle members participate in the 2017 grant round.**

The reason why this outreach is important is because USDN consistently finds in their surveys that the most engaged members are likely to have participated in multiple projects funded by the USDN Family of Funds. Over 67% of respondents to the USDN 2017 USDN Member Satisfaction Survey have received funding from the USDN Peer Learning Exchange (PLE) and the USDN IF. Many of these have received more than one grant. Nearly 20% more members have received a grant from the USDN IF and PLE grant programs in 2017, compared to 2016 (Figures 2 and 3).
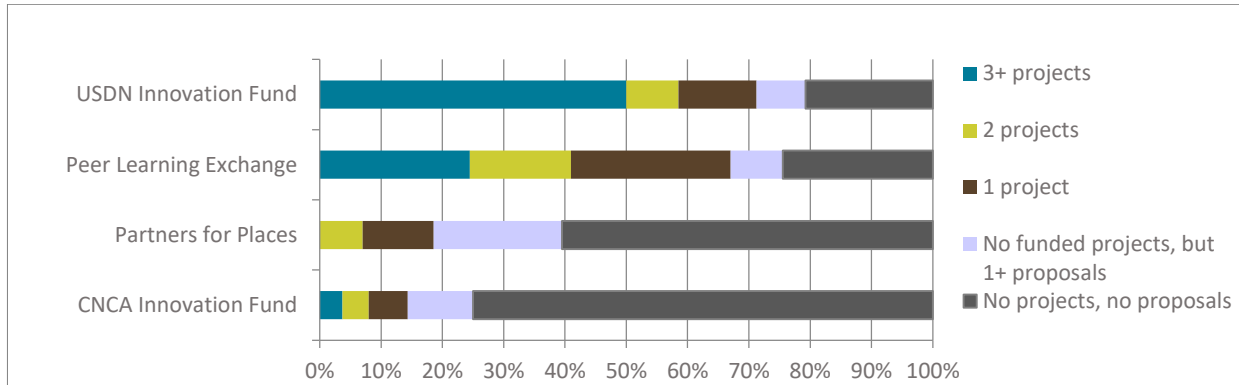

Figure 2. Participation in USDN Grant Program Funded Projects.
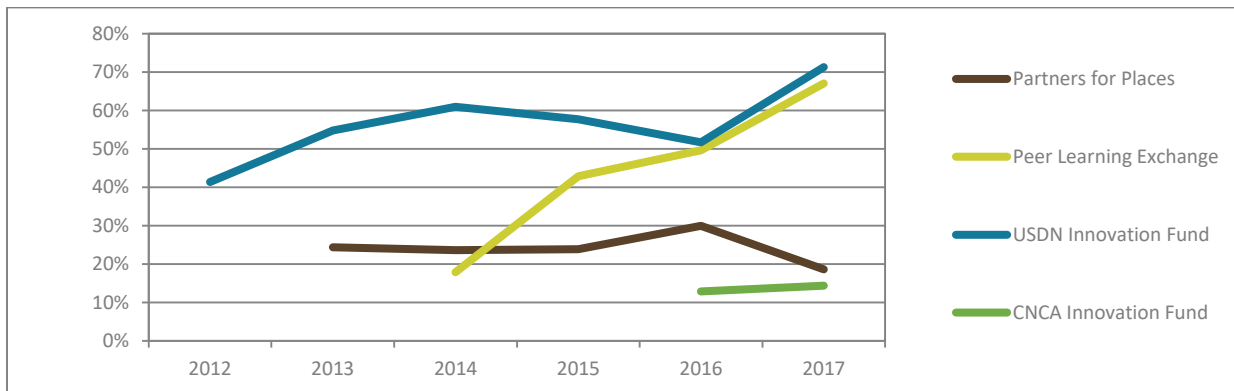

Figure 3. Percent of Members with 1 or More Funded Grant Project from 2015 – 2017.

The survey also indicated that 79% of USDN members highly value the Innovation Fund (Figure 4).
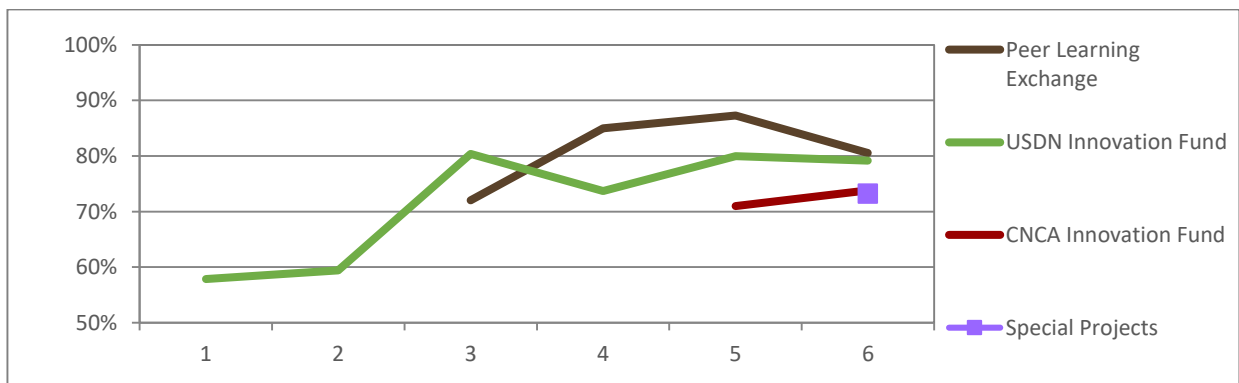

Figure 4. Percent Respondents Rate Activity as High Value from 2012 – 2017.

APPENIDX A – USDN FAMILY OF FUNDS

Network Evolution and Growth. When USDN first began, it was a resource members could use to access their peers in a young and rapidly evolving field. Members saved time, as they shared with each other how to make environmental, economic, and socially sustainable changes within their local governmental structures. To both support peer-to peer relationships and to advance urban sustainably as a field of practice, the USDN IF was born. It served as USDN's primary funding mechanism for collaborative work on sustainable urban innovations.

The USDN Family of Funds. Since 2009, USDN has matured and grown into a much larger network that offers a wider variety of member support services. As this growth occurred, the IF became part of USDN's Family of Funds. [4] Each member of the USDN Family of Funds plays a role in advancing urban sustainability innovations. Innovations proceed through a set of stages divided roughly into two categories (shown in Figure 1):

- **Identifying / Developing** (green and blue dots). Identifying an innovation, researching and conceptualizing it for prototyping, testing, and refining. The USDN IF and Carbon Neutral Cities Alliance Innovation Fund (CNCA IF) specialize here.
- **Scaling** (orange dots). Spreading a proven innovation to other communities through standardization and adoption. Partners for Places (P4P) and the USDN Peer Learning Exchange (PLE) specialize here.
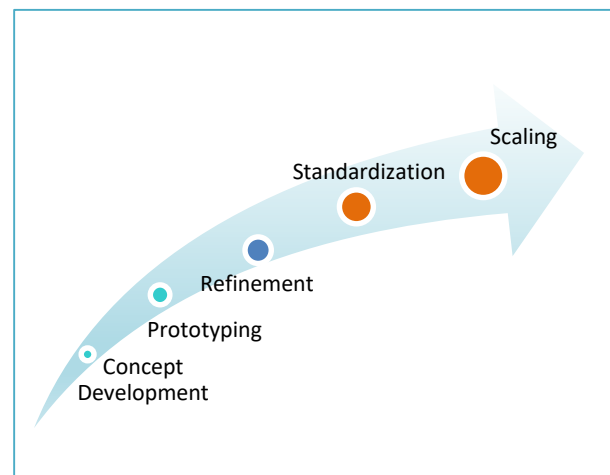

Figure 1. Pathway from Innovation Concept to Scaling

Defining Impact. In 2018, USDN continues implementing a member-adopted long term strategic plan, which marks a notable shift from measuring success based on member participation to measuring success by impacts in member communities. USDN formed the following 2 committees in 2017 to help guide the metrics conversation:

- The High Impact Practices (HIP) Committee: Formed to develop a process through which USDN can help to accelerate the adoption and implementation of high impact practices (HIPs) among a diverse range of member communities and support the piloting of this approach.
- The Common Metrics Committee: Formed to develop a process by which USDN members will report on common sustainability metrics, to (1) improve peer learning through USDN; and (2) enhance their ability to prioritize, measure, and communicate impact at the local and network-wide level.

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[4] The USDN Carbon Neutral Cities Alliance, USDN Peer Learning Exchange, and Partners for Places (administered by the Funders Network for Smart and Livable Communities)

APPENDIX B - USDN INNOVATION FUND 2018 METRICS AND WORK PLAN

Continuing to Refine Impact Measurement. Supported by dedicated members and committed funders, the IF has become established and respected as a lean and adaptable mechanism that reflects and supports USDN member priorities. The question moving forward is no longer can members collaborate to affect change in their communities, but what have these collaborations accomplished so far, and how do we want to use or change them in the future? The development of the USDN IF impacts metrics has been a fluid process that will continue to adapt alongside overarching USDN metrics development.

To maintain alignment with the evolving USDN context, the USDN IF 2018 strategic plan includes measuring grant success with a greater focus on quantifying impacts in member communities. The IF continues to test a system of measurement to evaluate the impacts of the IF's work and grant portfolio. Fund performance metrics are designed to be **specific, measurable, achievable, realistic, and timely**. They are to: (1) ensure the IF is meeting its goals; (2) provide direction to the IF in improving outcomes; and (3) demonstrate to USDN Members and Funders that the IF is advancing its mission and vision (Table 1).

Table 1. USDN Innovation Fund Performance Metrics for 2018

Performance Goal	Metric Target Statement	2016 Baseline % [5] of Portfolio	2017 Actual % of Portfolio	2018 Target % of Portfolio
1. Innovation Idea Development	A. % of IF grants that support brand new concept development	-	45%	50%
	B. % of USDN User Groups that have an associated USDN grant	50%	67%	69%
2. Innovation Advancement	A. % of IF grants that support prototyping and refinement of an innovation	-	55%	50%
	B. % of IF grants that exhibit cross sector and departmental field and champion building partnerships	60%	81%	83%
3. Collaborative Member Participation	A. % of USDN member communities that have led or participated in a collaborative grant	69%	69%	71%
	B. % of new USDN member communities that have led or participated in a collaborative grant[6]	-	-	10%
4. Product Use and Leverage	A. % of IF grants that result in product use [7]	30%	48%	50%
	B. % of IF grants that leverage products though proposal development, during product development, or through follow-on work[8]	54%	55%	57%

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[5] Based on September 2016 IF grant portfolio data sets.
[6] Percent based on 26 new USDN members added in 2017. Target participation is 10% or 3 new members to participate in a grant in 2018.
[7] Product use is defined by the number of grantees that report policy adoption or operational changes in their communities.
[8] Follow-on work can be supported by the IF or by other funding sources, and can occur during or post grant term.

Table 2. USDN Innovation Fund 2018 Work Plan

2018 Innovation Fund Work Plan		
INNOVATION FUND GOAL	**STRATEGIES**	**ACTION ITEMS**
Improve Idea Sourcing from Members Around New Innovations	Offer technical assistance through written and verbal feedback on letters of interest and proposals to help develop the innovation's context, hypothesis, and specific theory of change	Update the Fund Outreach Plan to promote strategic projects and new leads for RFPs.
		Schedule and host Spring RFP Info Calls.
		Provide proposal support for Spring Midwestern RFP.
		Provide proposal support for Fall General RFP.
		Host informational calls / pitch session calls for the fall RFP.
	Offer technical assistance through mini-grants to support partnership and proposal development	Provide proposal support for mini-grantees for fall RFP grant proposal development (focus: partnership development).
		Use the IF products page on the USDN website to inform proposal development, and add a lessons learned / best practice section in the RFPs.
		Connect members, partners, and funders with similar interests.
Promote Product Leverage and Use to Refine Innovations	Improve communications around IF impacts, RFP opportunities, and product releases	Fund Manager provides Steering Committee / USDN Staff with Talking Points for Fall RFP.
		Keep the grants navigation tool up to date with all pertinent RFP information/documents.
		Host open pitch session during the USDN Annual Meeting with support from Fund Manager.
		Keep current partner list up to date on the USDN website.
	Continue to evaluate the IF portfolio for impacts	Fund Manager maintains and updates impacts metrics data with grant close out data.
		Fund Manager hosts debrief call for each grant at close out to capture lessons learned from grant process.
		Portfolio is evaluated for qualitative impacts and used for talking points with funders during outreach, etc.
Advance Innovations Through the First Portion of the Pathway	Design RFPs and scoring criteria to consider the multiplier effect and innovation advancement: 1. Show the innovation in the context of any previous work or advancement; and 2. Encourage USDN member collaborations that break sector and departmental silos.	Make sure any special projects / RFPs identify project focus on / advancement in the first portion of the innovation pathway and sector/silo breaking.
		Redesign RFPs to identify project focus on / advancement in the first portion of the innovation pathway and sector/silo breaking.
		Track measurable metrics achieved by projects. Done during grant close outs.
Broaden Collaborative Participation Around New Innovation Development	Target outreach to new members and specific USDN member groups (i.e., Peer Learning Groups, members who haven't yet led or participated in a grant, regional networks, etc.) for: 1. Proposal development of new innovations; 2. Product uptake to refine innovations.	Design RFPs to incorporate language promoting collaboration with member groups.
		Work to connect members with appropriate member groups during proposal development assistance.
		Identify coordination between USDN external partners though phased grant work.
		Face to face outreach to members who haven't led or participated in a grant during the annual meeting.
		Keep proposal matchmaker updated year-round to promote collaboration.
		Fund Manager maintains and updates impacts metrics data with member collaboration efforts identified in grant close out process.