Abstract of the Program
Innovation by Design is a Hennepin County creative problem-solving approach based in human-centered design. It starts with the people we’re serving and ends with a service that is specifically tested and designed for them. Innovation by Design is guided by the mindsets of empathy, optimism and experiment. The Hennepin County core values of continuous improvement, customer service, diversity and inclusion, employee engagement and workforce development are embedded into the approach.

The mindset of empathy is practiced by hearing from the end-user and others involved in a service. The optimism mindset is practiced by brainstorming ideas in a co-creation setting. The experiment mindset is practiced by testing our ideas until a desirable and viable solution is identified.

The Innovation by Design program is comprised of learning and lab components. Hennepin County staff are trained to think differently using the approach and to solve problems to transform government systems. Projects from across the county are brought through the lab using the approach. Innovation by Design improves services across the organization for county residents through co-creation of a better future together.

The Problem or Need for the Program
Residents are holding their local governments accountable and want to see the return on investment of taxpayer dollars. At Hennepin County, we want to listen to our residents to understand the needs and issues they’re experiencing before we jump to solutions. Insular approaches will not support the systematic changes necessary to meet the needs of our communities; collaboration across staff, residents and partners to improve government services is an imperative. Through this effort we will create equitable services that meet the needs of our residents.

Description of the Program
The Innovation by Design program kicked off in early 2017. County administration requested the development and implementation of a learning and application approach based in design thinking, to support the county core values and to be available to staff at all levels of the organization. The program was designed through conversations with staff from across the county, local innovation labs, local government agencies, higher education and other organizations doing similar work. The ideas gathered were combined with design thinking, human-centered design and service design concepts, and then woven into existing county practices to support greater adoption. Three mindsets were identified and their related methods were pulled together to create the Innovation by Design framework. These mindsets are empathy, optimism and experiment.

The empathy behaviors and principles identified include:
- People are the center of our work
- I am not my end-user
- Immerse yourself
- A chance to be other
These behaviors are meant to be a starting point for staff; they can add to the list or change the language to align the behaviors to their work or way of thinking.

The optimism mindset behaviors and principles include:
- Embrace fear
- There’s no wrong answer
- We’re all creative
- Failure is okay
- Take baby steps
- Try to get away with something
- Believe is possible

And last, the experiment behaviors and principles are:
- Keep it simple
- Take risks
- Fail faster, succeed sooner
- Test ideas
- Experiment to learn
- Gain validation from user

The mindset of empathy is put into practice by first identifying the needs of our end-users. The end-user is the person at the end of the service or the person receiving the product. The end-user could be a client, patron, resident or customer. Understanding the root cause of the need or issue happens by immersing ourselves in the end-user experience through one-on-one interviews, focus groups, observation or other forms of direct engagement. Other stakeholders are also engaged in this part of the process. When practicing empathy, hearing from the end-user and others involved in the service is vital. Empathy mapping is used to help us understand what our end-user says, does, thinks, feels and to gain deeper insights into their needs.

The optimism mindset is practiced by synthesizing what we learned during the empathy phase. Finding themes in the data or affinity mapping their experiences are ways to more fully understand the end-user experience. Everything learned thus far feeds into brainstorming ideas for how we can develop a new service or improve an existing service to meet the needs of our end-users. When brainstorming we pull a diverse team together to build off of each other’s ideas and discover new and innovative concepts. There are no wrong answers when brainstorming, all ideas are tested or expanded.

The experiment mindset begins by prototyping ideas. Prototypes can include story boards, role play and creating models with other materials to convey a concept or idea. Prototypes are low cost and can be made quickly. This low fidelity and low effort approach is an effective method to convey ideas to end-users and stakeholders to get their reactions. Sometimes prototypes fail at this point and that’s okay; we appreciate failing early in the design process. It’s low-risk - very little money has been invested in the concepts and we haven’t fully developed a service that won’t meet the needs of end users. When we fail early, we’re able to learn from that failure. We iterate our prototypes until we find a desirable and viable solution to move forward to pilot or implementation. The solution is put into a project plan, implemented, measured or evaluated, and adjusted as needed.

The Innovation by Design program is applied through learning and lab. All Hennepin County staff can learn Innovation by Design methods through short, team-based trainings or cohort-
style learning. Topics for the short trainings include: Innovation by Design Basics, Building Empathy Through LEGO® Serious Play and Empathy Mapping. The cohort focuses on mastering the mindsets and methods as outlined above.

Cohort participants are staff from all levels and areas of Hennepin County and meet for seven sessions over the course of three months. They work in cross-departmental teams in an effort to create a learning community to last beyond the cohort; this leads to continued collaboration after graduation. Participants begin the cohort by taking Implicit Association Tests so they can have a deep conversation about how their biases may impact the design process. Through identification of bias and reflection, staff acknowledge how our biases can unintentionally lead to the creation of inequitable services for our residents. This positions staff to more intentionally design equitable services. Innovation by Design cohort graduates develop:

- Understanding of the key methods of the Innovation by Design process.
- Skills necessary to work through a creative problem-solving process.
- The ability to begin projects with an empathetic approach, prototype, gather input, iterate and implement a tested solution.
- A value of diversity and collaboration.

Graduates of the cohort are Innovation by Design Ambassadors. They lead projects in their own departments, assist other graduates with their projects and assist the Innovation by Design program in the learning and lab efforts. This approach helps fully imbed the mindsets and methods across the county and builds capacity for the work throughout the organization.

The Innovation by Design lab is an internal consultancy focused on projects from any county department where the mindsets and methods are applied. The tools utilized can shift based on the need while still following the mindsets of empathy, optimism and experiment, with a strong emphasis on co-creation. The value of bringing together residents, community-based organizations, clients, partners and others to co-create is applied to all lab projects.

The size of projects brought through the lab varies. Smaller efforts include coaching teams on specific aspects of Innovation by Design as they apply it to a project. For example, the Hennepin County Law Library convened a group of law library directors from across the country for an annual meeting. The group wanted to come up with some ideas about how to better reach their patrons in response to changing needs due to the abundance and availability of online resources. The directors were brought through an empathy mapping session, which helped them see that while there are many online resources, patrons’ value the expertise law librarians have. This helped the groups think about how to better serve their patrons. Other lab projects completed in 2017 were larger in scope. Two examples are outlined below.

An Innovation by Design approach was utilized to improve customer service at one of Hennepin County’s Service Centers. This is a place residents visit for services relating to driver’s licenses, motor vehicles and vital records. In this process, customers were interviewed about their experiences. Customers were also shadowed and the queuing system was observed. Data was shared with staff working at the service center and other staff from across the county, and they all came together for a session where they participated in empathy mapping, developing needs statements, brainstorming and prototyping ideas. The group developed prototypes that included:

- Communication with immigrant populations about services available through public access television, partnerships with consulates and other immigrant-facing groups.
- Enhanced experiences in the service center as a gathering place through a library presence, entertainment, coffee and improved queuing through buzzers or text.
• Enhanced online services with an improved service center where a navigator greets clients to ensure they have everything they need with the elimination of counters in the service center.

This team continues to test the concepts and find solutions that will work for their customers.

Another project completed in 2017 includes the Young Adult Housing Model. A need was identified to improve and expand services for young adults aging out of foster care. In this project, Innovation by Design partnered with outside foundations to design the effort. The Innovation by Design team pulled together young adults with extensive foster care histories and over 15 community-based organizations to participate in the process. The approach used to develop the young adult housing model was based entirely in the co-creation aspects of the Innovation by Design methodology.

The model was designed based on the input of young adults. Young adults played a game prioritizing basic needs, made life choices based on different scenarios, and prototyped their ideal living situations. Community-based organizations, who provide housing and supportive services to these young adults, pitched a model based on the collected input from young adults. Prototypes were created and brought back to young adults to gather their feedback. Community-based organizations and Hennepin County staff also shared feedback. Once this was complete the broader community came back together to put together a logic model for the new program through a participatory consensus workshop. A steering committee comprised of young adults, community-based organizations and Hennepin County will oversee the program. This particular project is gearing up for pilot this year and will have a researcher assigned to complete a developmental evaluation of the new model. The anticipated cost to fund this is relatively low compared to funding a brick and mortar approach we know does not meet the needs of this target population.

**Responding to Economic Downturn (Optional)**
Innovation by Design is new, but early indications show the approach will save the county resources overtime by:

• Centering our services around our residents’ needs.
• Engaging residents, staff, foundations, community organizations and other partners in developing and improving services and leveraging shared investments.
• Iterating concepts and testing ideas before investing large sums of money into a concept or idea that fails.

**The Cost of the Program**
In 2017, Hennepin County employed 9,139 staff and had an overall operating budget of 1.9 billion dollars. The budget below outlines the Innovation by Design operational budget in 2017. There was a one-time capital investment of $15,000 not captured below.

<table>
<thead>
<tr>
<th>Personnel Costs (salaries and fringe benefits)</th>
<th>$191,961+7150</th>
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<tbody>
<tr>
<td>1 .70 Innovation by Design Manager - $88,894</td>
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<tr>
<td>1 .75 Innovation by Design Coordinator - $82,436</td>
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</tr>
<tr>
<td>1 .15 FTE Administrative Coordination/Support - $20,631</td>
<td>$199,111</td>
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<tr>
<td>Supplies</td>
<td>$7,150</td>
</tr>
<tr>
<td><strong>Total Operating Expenses</strong></td>
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Costs for Innovation by Design projects are relatively low. For example, the cost to run the new young adult housing model is a new cost to Hennepin County, however, the cost would have been accrued and then some had we chose to continue to fund brick and mortar programs that we knew were failing young adults aging of foster care. If we assume half of the operating costs went toward lab projects and all lab projects were created equal we would have spent $9,051 per completed lab project in 2017. This does not include the six projects in progress at the end of the year. We know that our lab projects have saved money for the county and estimate a minimum return on investment of a half a million dollars.

Our learning efforts have also been successful with relatively low costs. Similar learning opportunities where staff are convened in a learning community and supported after graduation as they implement their learnings don’t exist in the private market. A basic design thinking sprint training averages $1,500 for a three – four day training. If half of our operating costs for learning equals $99,556 and 70% of that is focused on cohort training, we spent $1,010 to train each cohort graduate. Additionally, 30% of the effort focused on training 200 staff through ad hoc trainings averaging about $140 per staff trained.

The Results/Success of the Program
In 2017, 69 staff representing all lines of business were trained in the Innovation by Design cohorts. Participants gave the training an average Net Promoter Score of eight. On the last day of the cohort, participants are surveyed on their ability to utilize the mindsets in their work. Six months after graduating, participants are surveyed again to check for utilization and our first cohort shows they have maintained or improved their ability.

In addition to the cohort, eight small, ad hoc trainings were offered to about 200 staff within their teams. The feedback and follow up from teams was so positive that with current staffing levels, we’re not able to keep up with the demand.

Eleven lab projects were completed in 2017 with six projects in process. Eleven cohort graduates were coached on their own Innovation by Design projects. Each project completed in the lab is measured for success based on the needs of that particular project.

Innovation by Design is currently partnering with the University of Minnesota’s School of Public Policy to develop an evaluation plan to measure the effectiveness of the Innovation by Design program. The goal is to find out if Innovation by Design is having its intended impact. The first evaluation will be completed in 2018.

Worthiness of Award
Innovation by Design is working toward increased trust in government from our residents and the broader public by centering our services on the needs of our residents and engaging them in designing services. Government can no longer spend limited resources to fund solutions, systems and programs that don’t meet the needs of our residents or worse fail after a large investment. The Innovation by Design approach sets the stage for formalized ongoing communication between government, residents and the wider community. We start all projects with empathy. We don’t tell our residents what they need and instead engage them in the process through co-creation. Additionally, the approach of capacity building to use the methods within Hennepin County will lead to internal culture change and a greater positive impact for our residents.