



MOVING FORWARD 2020

INNOVATION WORKSHOP

EXECUTIVE SUMMARY





Building an Energy Ecosystem[™]



Summary

The Project and Collaborative Workshop

Building on the success of Moving Forward 1.0 - 3.0 and Moving Forward Rural Development, the Indiana Housing and Community Development Authority (IHCDA) and Energy Systems Network (ESN) have expanded their partnership to include Indiana Family and Social Services Administration (FSSA).

Referred to as Moving Forward 2020, this year's development teams will work to provide integrated affordable housing that increases the quality of life for individuals with intellectual and developmental disabilities (IDD). This housing will adhere to the Moving Forward programmatic goals of ending generational poverty through energy and transportation solutions and additionally use innovative technology to create a space that allows more independence, works to reduce barriers to participation, and increases the quality of life for individuals with IDD.



Moving Forward will enhance the Quality of Life for Hoosiers through innovative and integrated housing and transportation solutions to increase affordability, improve environmental quality, and create greater community within the site, region, state, and beyond.

Innovation Workshop and Results

Participants in the workshop spent two highly active days working in a collaborative Innovation Workshop to establish stretch goals, identify breakthrough opportunities, address challenges, and to develop process and product solutions. On <u>Day One</u>, the participants were placed into five strategic breakout subgroups:

- Built Environment & Energy Efficiency
- Transportation
- Smart Living & Cognitive Technology
- Policy & Finance
- Quality of Life

On <u>Day Two</u>, participants were split into two "Visioneering" teams to create high-level plans that would address and achieve the stretch goals for each site. This Executive Summary provides an overview of the key workshop results so the IHCDA and developer teams can review the summary results of the Moving Forward 2020 Innovation Workshop. A full report of all Innovation Workshop results will also be available.



Summary - Day One

Overview of Main Activities from Day One

The first day of the Moving Forward 2020 Innovation Workshop was centered around four main activities:

- 1. Inspiration and Breaking Boundaries
- 2. Establishing Minimum and Stretch Goals
- 3. Selecting Top Three Goals for Each Group
- 4. Identifying Opportunities to Achieve Stretch Goals and Possible Challenges

Inspiration and Breaking Boundaries

Developer teams, subject matter experts (SMEs), and parents of individuals with IDD were invited to the Indiana IOT lab and its smart home demonstration area.

The day kicked off with a panel whose participants worked closely with the Indiana IDD population as parents and caregivers.

The workshop participants then brainstormed "Headlines of 2030" to consider the possibilities for successful outcomes of Moving Forward 2020.





Goal Setting

After the warmup activities of the morning, the next two breakout group sessions defined minimum and stretch goals for each development.

Opportunities for Achieving Stretch Goals

The final breakout session of Day One focused on defining the opportunities available to get from minimum goals to stretch goals.

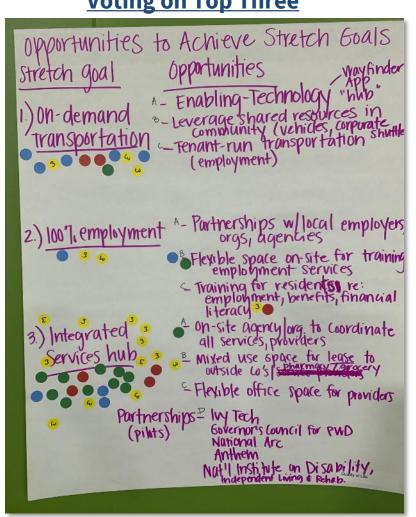
Voting on Top Three Opportunities

At the end of Day One, all workshop participants voted on which three goals and opportunities that should be prioritized for further definition and refinement.

Voting on Top Three

Goal Setting







Setting Minimum & Stretch Goals

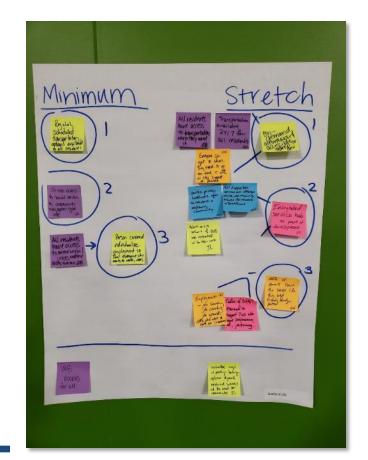
The intent of the Moving Forward 2020 workshop was to create affordable housing using the principles of Moving Forward with the addition of supporting peoples with IDD.

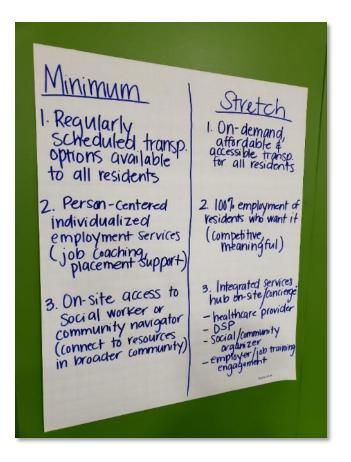
These principles focus on integrating affordable housing with energy efficiency and wraparound services to address quality of life, education, employment, and more. To achieve this, workshop participants established two levels of goals for each project area.



Minimum Goals: These goals set the baseline requirements for the final projects. While they are "minimum" goals, they are intended to far exceed current standards for energy efficiency, environmental quality, materials, water, transportation, systems, poverty alleviation, etc.

Stretch Goals: Participants also set stretch or "out of the box" goals which became the actual targets that all participant proposals aimed to define and accomplish.







Summary of Minimum Goals By Breakout

Built Environment & Energy Efficiency	Transportation
Addressing all aspects of indoor environmental quality on some level	Ensure building design and site plan provide needed infrastructure to access mobility
Net-zero operations	Housing and transportation costs built into lease payments
24 hours of backup power , a resilient community hub	Multiple mode options throughout the site
Smart Living & Cognitive Technology	Policy and Finance
Make sure all technology is accessible to everyone.	Pursue mixed-income, mixed-use, multi-phase developments
All units have: WIFI, voice-enabled sensor tech, accessible dashboard with intuitive interface, full safety/security/emergency alerts, privacy and security info, automation capability (HVAC, lighting, water, telecom, washing, cooking, access/security).	Partner with cities to secure funding for on-demand transportation/shuttle services
Make sure there are people and procedures in place for training and maintenance.	Ensure residents are able to access the full range of benefits to which they are entitled

Quality of Life

Regularly scheduled transportation options available

Person-centered individualized employment services

On-site access to social worker or community navigator – a connection to resources in the broader community

Looking Beyond Certification Programs - The goals set at the workshop are not meant to conform to existing standards and certification programs; however, certification programs can provide useful insights and potential baseline targets in different areas.



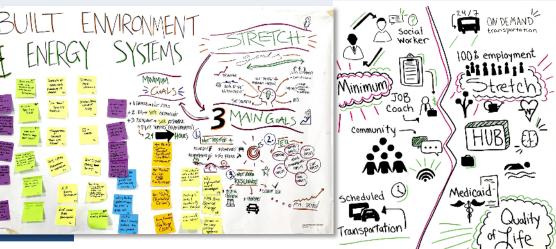
Summary of Stretch Goals By Breakout Group

Built Environment & Energy Efficiency	Transportation
Complete Resiliency	Residents can do where they want to, when they want to, how they want to
Net-positive carbon	Offering technology on a single integrated platform for trip planning, payment, and coordination (MaaS platform)
All aspects of indoor environmental quality addressed to the highest degree possible	North End: Develop resident-based ride share/ car share programs to serve other residents (and others)
	Bicentennial: World's best mobility hub
Smart Living & Cognitive Technology	Policy and Finance
Universal capability for all, with person-centered flexibility to support/optimize quality of life via caregiving support (human/machine), transport, finance, employment, health/medicine, social/recreation, lifestyle, education.	Achieve zero debt by identifying gap funding of at least \$2m in soft funding
Transparent human-machine interface through: onboarding/training, continuous support and feedback + optimization, enable connectivity with community/caregivers/etc., full privacy and security of personal info (without compromising functions).	Create Medicaid funded transportation savings account that allows for wide range of mobility options
Tech has ubiquitous 5G+ "WIFI", AI-learning and adaption, building/residence access control, is self-diagnosing, suggests not dictates resident life, and follows	Establish federally-approved pilot element of developments BUILT ENVIRONMENT Social Contents
residents into the community.	Worker 100% employment 100% employment 100% employment
Quality of Life	Minimum) Job Stretch Minimum) And Minimum And Minimum

On-demand transportation

100% employment

Integrated Services Hub







Opportunities Voting Results

Each participant was given 4 voting stickers — 3 one-point stickers and 1 three-point sticker to use for an idea they thought was outstanding. Each breakout group had several opportunities for achieving their goals, this chart represents the two highest earning opportunities from each breakout group.

Built Environment & Energy Efficiency		Transportation	
Net Positive Energy	25 Points	All Access Pass: Identify mobility/transportation needs of all residents	15 Points
Solar Walls and/or Trees	23 Points	North End Resident Ride Share: Research other communities for best practices and lessons learned	11 Points
Smart Living & Cognitive Technology		Policy and Finance	
Infrastructure - Operating System, reliable connectivity, scalable replaceable and updatable, consider subscription-based system	21 Points	Partner with FSSA/OMPPto establish transportation savings account pilot with opportunity for employer contribution	33 Points
Technology – End-user dashboards, multiple user profiles, active	12 Points	Identify one new mission-based, non-traditional funding source	24 Points
Quality of Life		The Integrated Services Hub Opportunities to Achieve Stretch Goals Stretch goal Opportunities Opportunities Opportunities Opportunities Opportunities Opportunities	

89 Points

26 Points

received the most points of any

idea in the history of the

workshop.

Integrated Services Hub

On Demand Transportation



Summary - Day Two

Strategies for Overcoming Challenges

Day Two was kickstarted with plenary presentations and discussions on how to address the challenges that were thought of during Day One.

Visioneering Team Session

The majority of Day Two was spent developing high-level plans for each developer team:

- Bicentennial Team Indianapolis, In.
- Old Town Companies Carmel, In.

The developer team members were randomly assigned to either the Indianapolis or Carmel site, with the remaining SMEs were equally distributed between them. The groups were challenged to create a high-level development plan that would achieve the established stretch goals and could be replicated in the developer's actual plans.

After a half day of "Visioneering," each developer presented their high-level plans to Lt. Governor Suzanne Crouch, several local officials, and members of the IDD community and their families. The following pages contain a summary overview of the proposals set forth by each team.



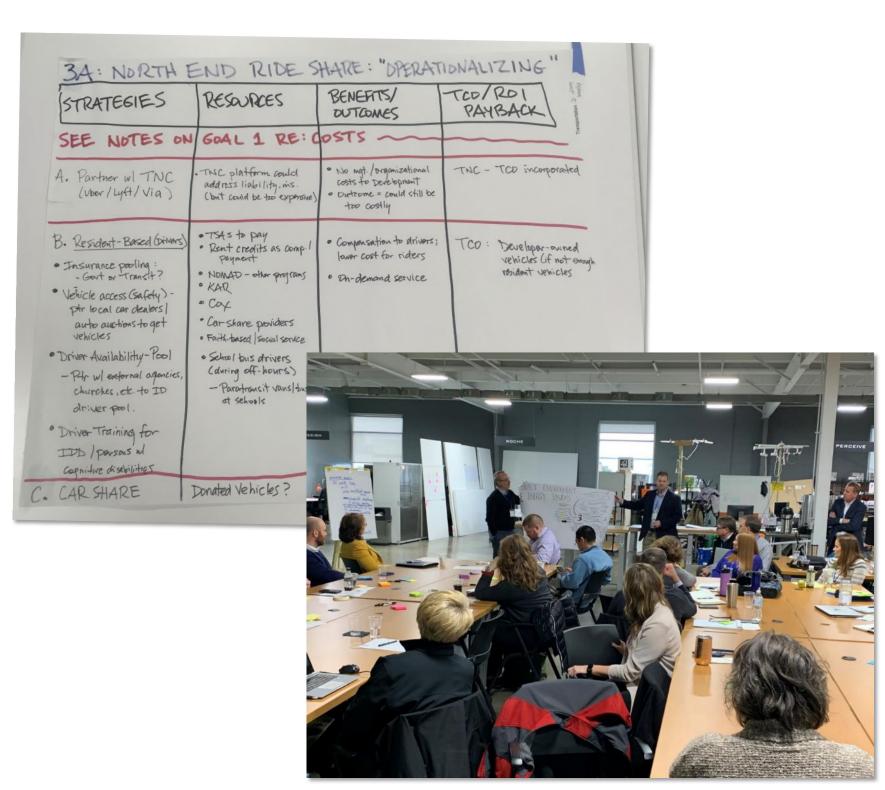
Lt. Governor Suzanne Crouch



Strategies for Achieving Stretch Goals

The breakout groups were challenged to take the processes they established at the end of Day One and define, in full detail, the means of achieving the stretch goals. This included, but was not limited, to:

- "Who / How" what partners, technology, policy, etc. are needed to achieve the stretch goal?
- "TCO" Defining total cost of ownership (TCO) includes all capital expenses as well as ongoing operating expenses, over the life of the system
- "ROI" What is the return-on-investment (ROI) on the stretch goal? What funding streams can be identified to make this stretch goal a reality?





Bicentennial Team

Location: Indianapolis, IN The site:

- Approximately 1 acre to the east of downtown Indianapolis
- Less than a mile from Monument Circle and Fountain square
- Amenities:
 - Parking
 - Employment training center
 - Community room
 - Patio
 - Pet walk
- About 36 units, with ~1/3 dedicated to IDD housing
- Located within the planned community land trust



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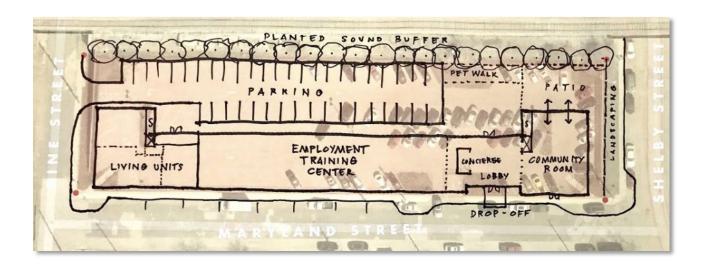
EAST WASHINGTON 2020 - SITE CONTEXT

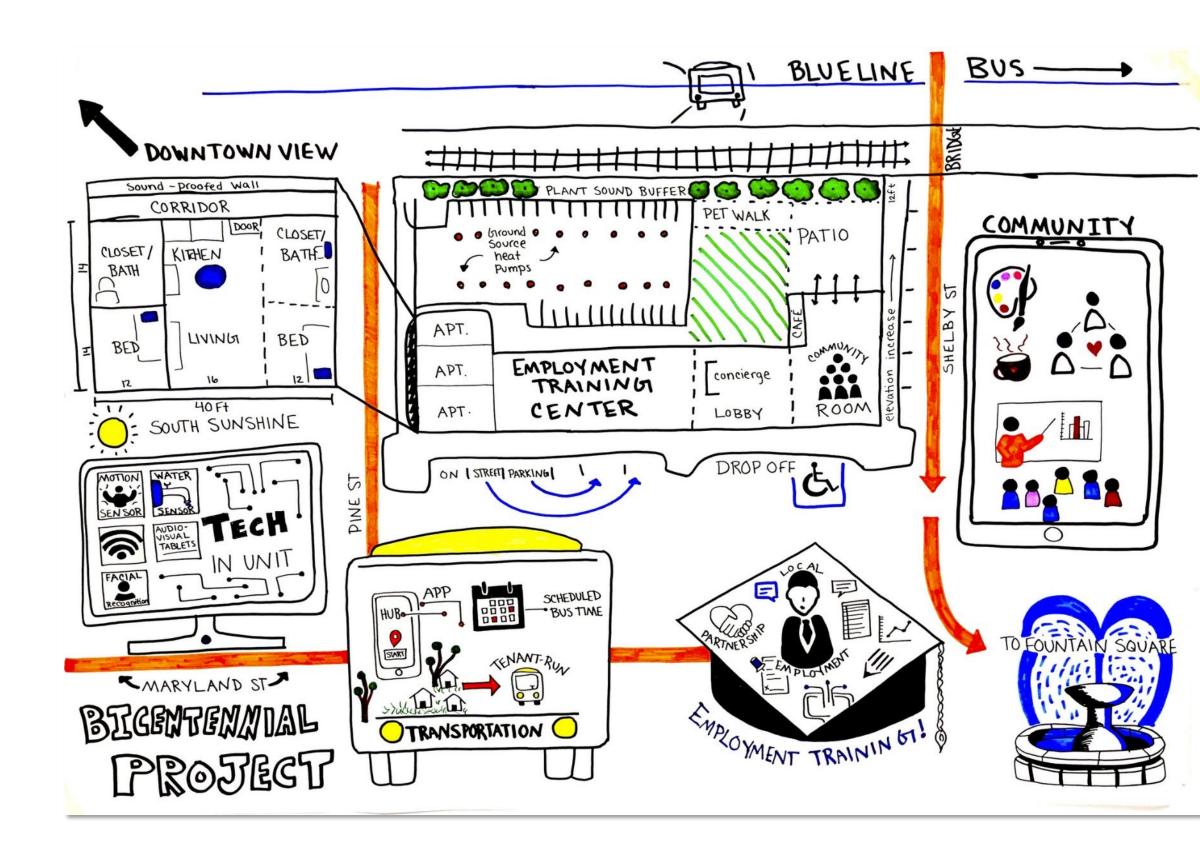


Bicentennial Team

Goals and Objectives:

- A flexible Employment Training Center and community room both with access to green space
- Accessible dashboard in the units
- Indoor Environmental Quality
 - Acoustics
 - Light







Plans to Achieve Goals

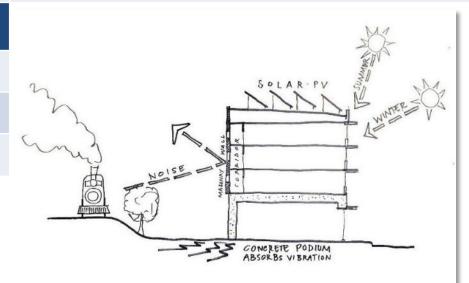
Built Environment & Energy Efficiency	Transportation
 Indoor Environmental Quality – Acoustics Noise barrier Triple pane windows 	Transportation scheduling –both public and resident run – available on the building's app
 Indoor Environmental Quality – Light Design the building so that the hallway can have natural light 	Resident run transit or car share
Roof mounted solar power	Micro transit assistance to the Blue Line
Smart Living & Cognitive Technology	Policy and Finance
 Smart Living & Cognitive Technology In unit technology including: Water sensors to monitoring flooding and alert supportive services Motion sensor lighting Audio/visual tables 	 Policy and Finance 10% of the development costs from non-traditional sources including Business partners to make labor, materials, or additional funding contributions LEI Enhancing Opportunity

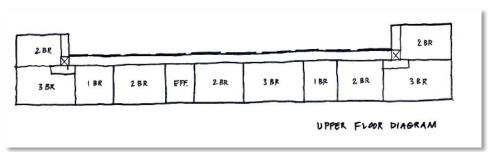
Quality of Life

On-demand transportation

Green space and pet walk

Career training on site





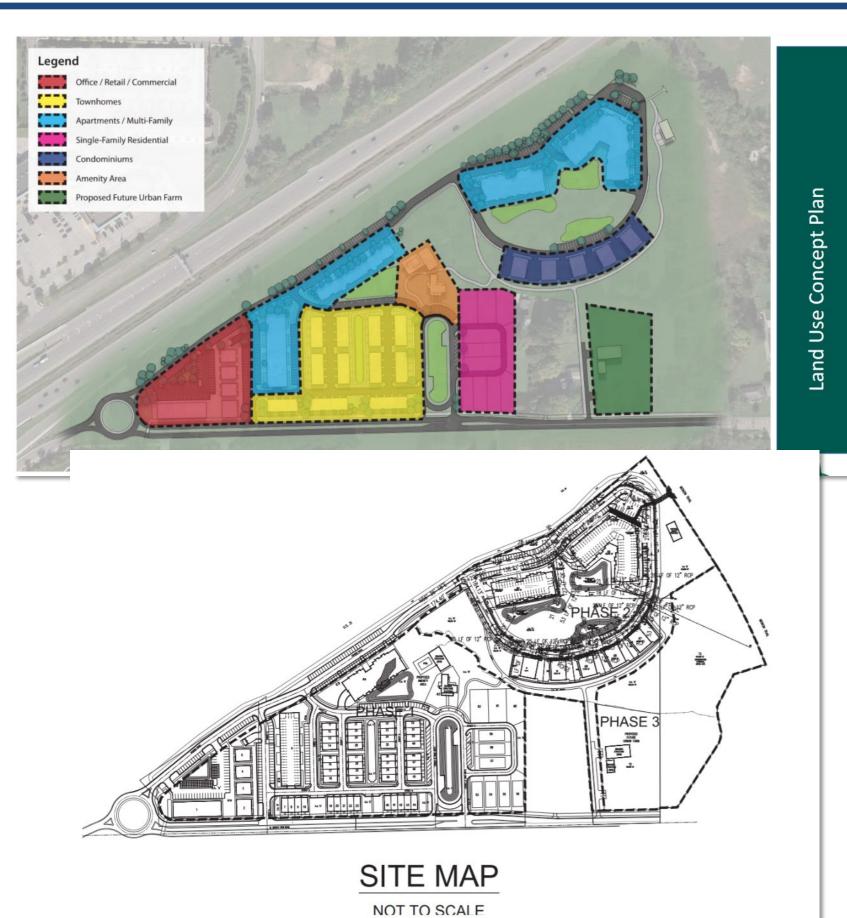


Old Town Companies

Location: Carmel, IN

The site:

- Part of North End, a 28-acre master-planned community which includes office space, townhomes, condominiums, single family homes, and multifamily apartments
- The Moving Forward development will be 144 to 280 units, with up to 48 (at least 20) dedicated IDD units
- 1/4 mile of Monon trail access
- Less than 2 miles away from the arts and entertainment district in Carmel and possible employment opportunities

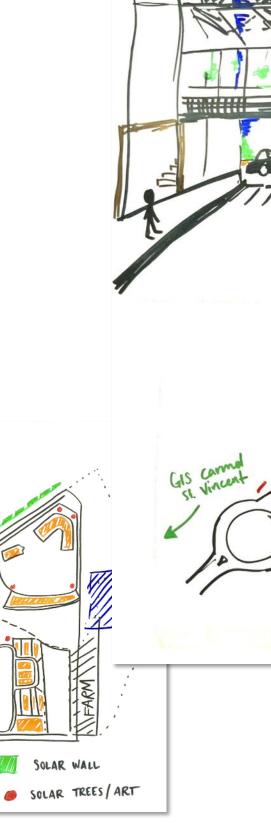




Old Town Companies

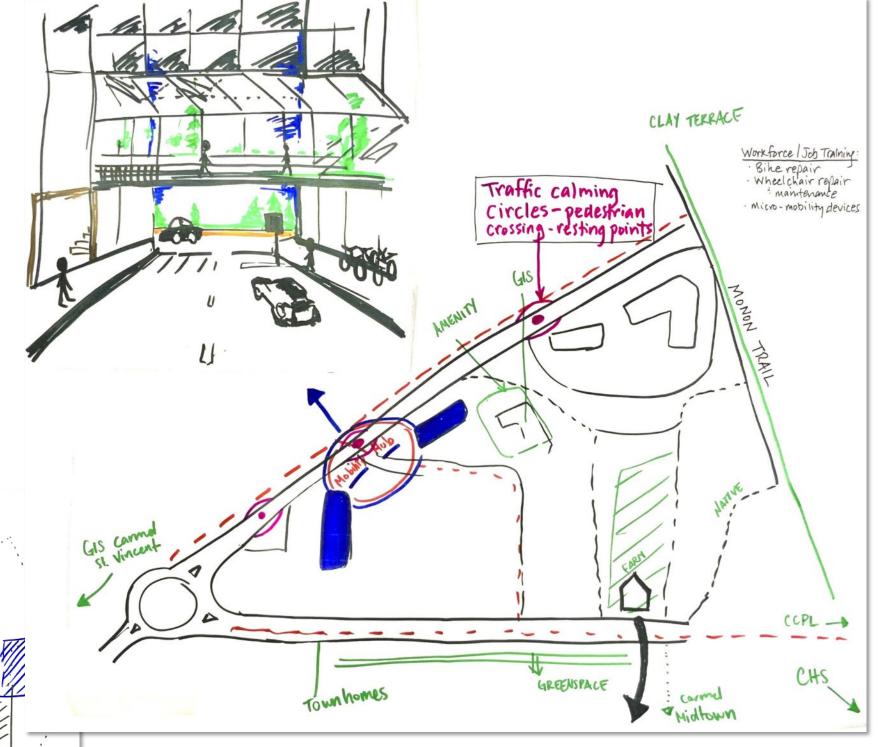
Goals and Objectives:

- Elevated sense of "neighborhood-ness"
- On-site solar
- \$2 million in mission-driven gap funding
- Passive and active technology integrated into units
- On-demand shuttle
- Indoor walkways to provide access to the community hub
- Integrated on-site employment
- Restaurant, farm, café, etc.



ROOFTOP SOLAR

GROUND MOUNT SOLAR





Old Town Companies

Built Environment & Energy Efficiency	Transportation
Completely indoor access to community hub	Partner with service provider for an on-demand shuttle
Increase resiliency with 24-hour backup for common area	Community golf cart, car, and bike ride-share programs
Ground and roof mounted solar; a solar sound wall	Walking paths and sidewalks located throughout the development
Smart Living & Cognitive Technology	Policy and Finance

18 different technologies integrated together into the unit. 15 passive systems of which only 3 active systems require the residents to interact with the technology

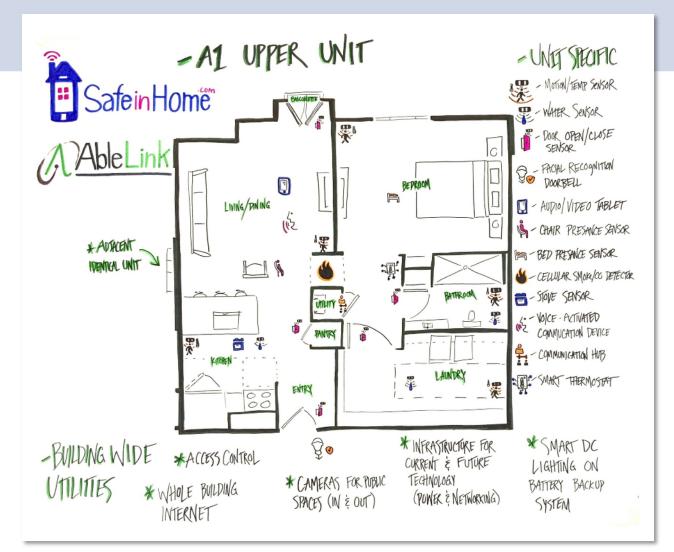
Quality of Life

Reduce noise pollution with sound barrier

Work with on-site companies to provide employment opportunities for residents

Community garden

Achieve zero debt by identifying mission-driven gap funding of at least \$2M





Moving Forward 2020 Next Steps

The Moving Forward 2020 Workshop created a collaborative environment that challenged every participant to question previously perceived limitations on how to create affordable and accessible housing for vulnerable populations and purposefully address poverty alleviation.

The stretch goals pushed the developer teams to think beyond the boundaries of a selected site and identify aspects of sites that would make the goals more achievable.

As detailed designs begin in the coming months, developer teams and community partners are expected to integrate the ideas and solutions cultivated in the Moving Forward 2020 workshop.

This represents an executive summary, and a full report will be released at a later date. Thank you to all who participated – Lieutenant Governor Suzanne Crouch, the developer teams, our SMEs, IHCDA, FSSA, and others. We appreciate your participation and input at our workshop.







ENERGY SYSTEMS NETWORK

