

Energy Waste Reduction Low Income Workgroup

May 4, 2023



Agenda

Welcome	Brad Banks Energy Waste Reduction Section, MPSC
Michigan Energy Workforce Development Consortium	Christopher P. HooSang, DTE Energy, Co-Chair MEWDC Sharon E. Miller, Director, Consumers Energy, Co-Chair MEWDC Marcia Black-Watson Michigan Energy Workforce Development Consortium
Great Lakes Energy Manufactured Home Replacement Research	Shannon Stendel Slipstream Rachel Krogman,, Slipstream
Lead Abatement Interest Survey	Ty Liggons, MDHHS
EWR Plan Discussion: Non-Energy Impacts Health and Safety Survey	Laura Goldberg Natural Resources Defense Council
Next Steps & Closing	Brad Banks Energy Waste Reduction Section, MPSC

Michigan Energy Workforce Development Consortium

Christopher P. HooSang, DTE Energy, Co-Chair MEWDC

Sharon E. Miller, Director, Consumers Energy, Co-Chair MEWDC

Marcia Black-Watson, Michigan Energy Workforce Development Consortium

Great Lakes Energy Manufactured Home Replacement Research

Shannon Stendel and Rachel Krogman | Slipstream

May 4, 2023



Shannon Stendel
Senior Researcher



Rachel Krogman
Program Manager

Climate + Clean Energy Solutions for everyone.

The knowledge, people, and
resources to solve our biggest
energy challenges.



Slipstream and Manufactured Homes

- 2008/2009 – Wisconsin (Focus on Energy) MH duct sealing pilot
- 2014 – Data Collection/Study for National Weatherization Assistance Program (WAP) MH Impact Evaluation
- 2015 – Michigan (Cloverland, Marquette & SEMCO Gas) and WI (FOE) MH Direct install w/duct sealing pilots
- 2016 – Minnesota Department of Commerce Conservation Applied Research and Development (CARD) Grant MH Characterization study
- 2016 to 2021 –Michigan Electric Cooperative Association (MECA) collaborative utilities (Great Lakes, Midwest Energy, HomeWorks, PIEG) MH Direct install with duct and air sealing
- 2019 to 2020 – Illinois (ComEd) MH Direct install with duct and air sealing program
- 2020 to Present – U.S. DOE ABC Reimagining HVAC for New MH
- 2020 – ORNL MH Improvement Working Group Participants
- 2020 – Minnesota Clean Energy Resource Team (CERTS) MH Resident Education & Train-the-Trainer Training & Videos
- 2022 – MN CERTs SEED Grant MH ROC Research
- 2022 – Michigan (Great Lakes Energy) Manufactured Home Replacement Research Report
- 2023 – Minnesota (Xcel Energy) MH Workforce Development Study
- 2023 – Ramsey County MN CDBG Critical MH Repair Program

Manufactured Homes

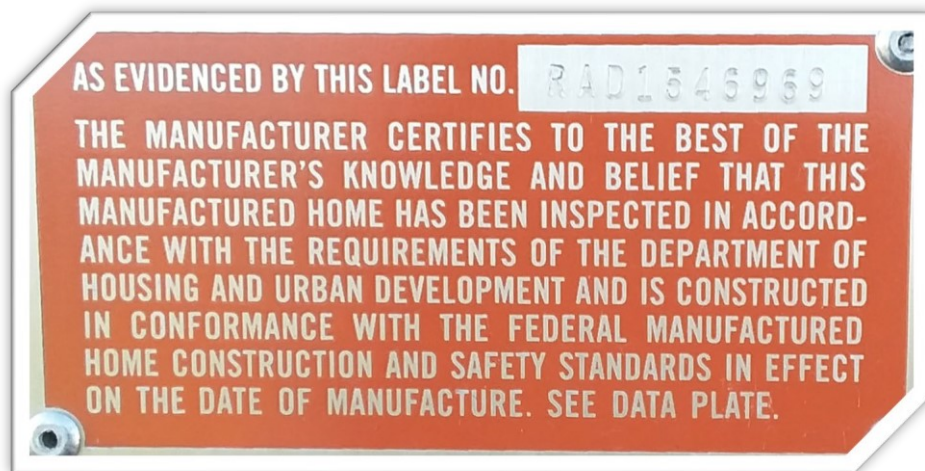
U.S. Department of Housing and Urban Development (HUD code)

1976 - Federal regulation begins

1994 - Major code update

1997 - EPA ENERGY STAR expanded to include MH

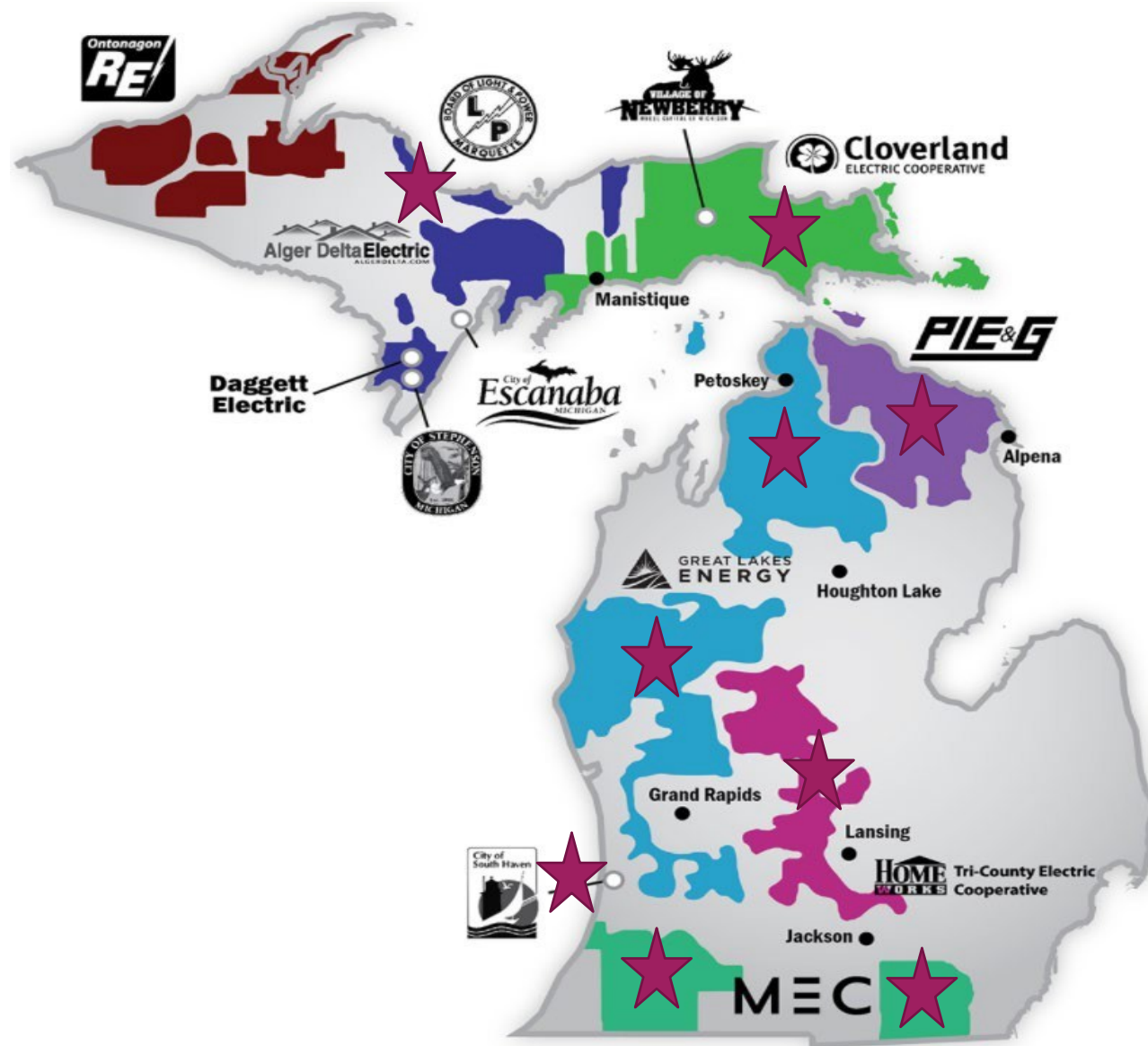
2022 - Proposed improvements for multi-section (double wide) homes



Manufactured Homes in Michigan

- 193,212 manufactured homes in Michigan
- 4.8% of total housing in Michigan
- Higher percentage than most other Midwestern states

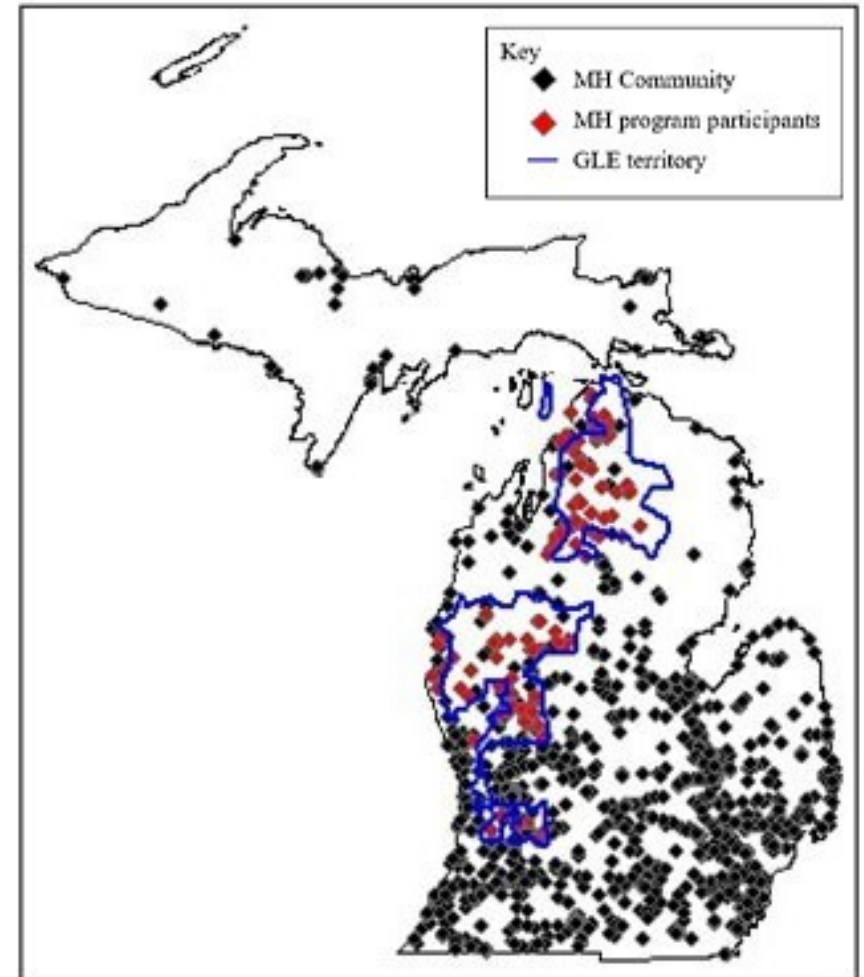




GLE Manufactured Homes Program 2016-2021

Served 403 homes across 21 counties

- Direct install with duct sealing program
- Light bulbs, faucet aerators, etc. plus duct sealing and belly repair
- Health and safety – carbon monoxide detectors, fire extinguishers
- High customer satisfaction



Manufactured Home Residents

- Low-income individuals and families
- Elderly and retired – often on a fixed income
- Veterans
- Residents who are disabled or unable to work
- **Asset Limited, Income Constrained, Employed**

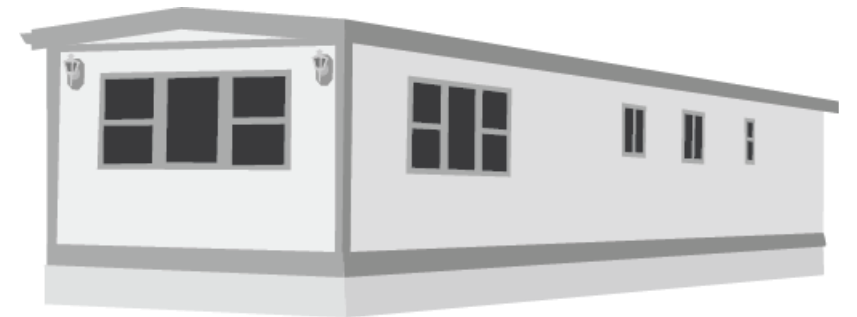
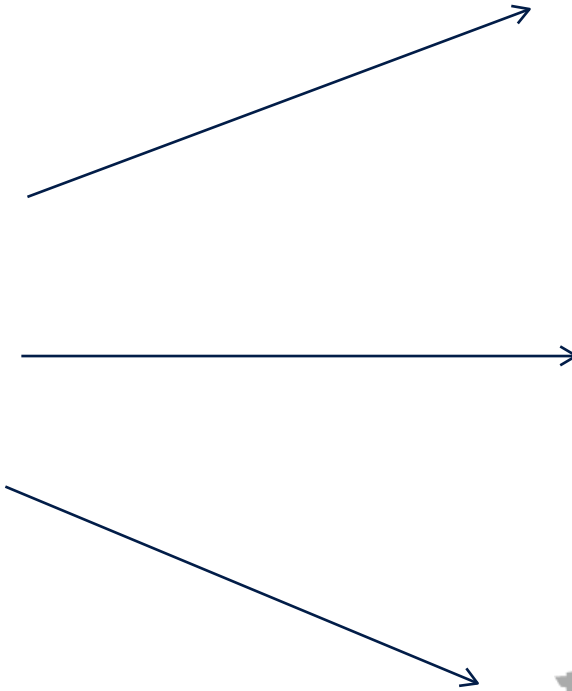
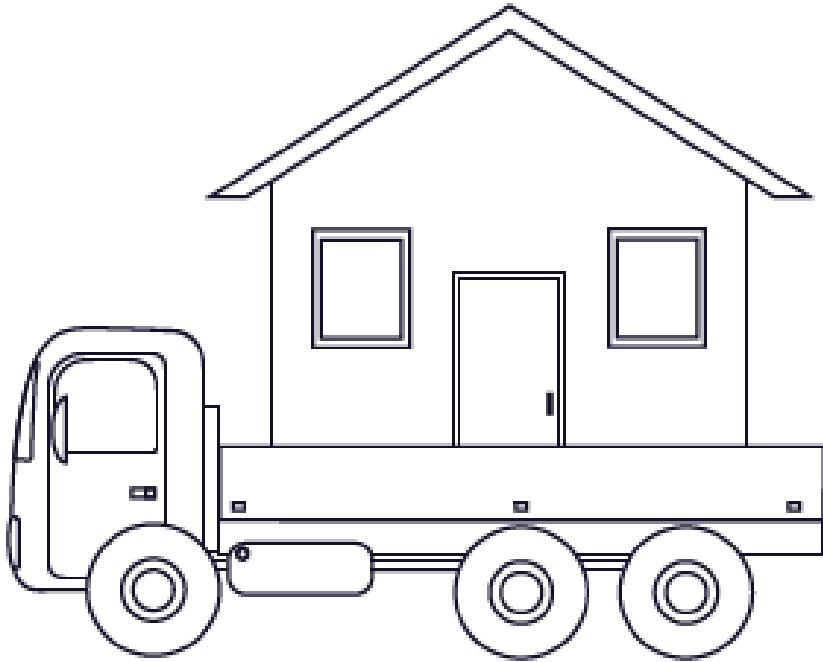
**OF 4 MILLION HOUSEHOLDS IN MICHIGAN
1.5 MILLION - 39% - STRUGGLED TO AFFORD
THE BASICS LIKE HOUSING, CHILD CARE, FOOD,
TRANSPORTATION, AND HEALTH CARE.**



GLE MH Served



MH Replacement



MH Replacement Program Comparison

	Energy Trust of Oregon*	City of Mankato*	Maine*	Montana	Washington
Target Home for Replacement	Pre-1995	1970s	Pre-1976	Unclear	Unclear
Replacement home type	New	Used	New ENERGY STAR	New and used	New ENERGY STAR
Funding	State, utility	State	State	State and federal	Federal
Financing	Loan, utility incentives	Loan and grant	Loan and grant	Loan	Loan

*denotes the pilots or programs that are currently on-going

City of Mankato, MN Pilot Program

- Park manager support to replace 1970 homes in parks with slightly used homes
- Buy unoccupied unit in park, rehab, move family living in older home in the park to the refurbished home
- Replaced 7-8 homes
- Cost: \$37,500 per home, including \$15,000 for home setup, parks paid for removal and demolition (\$10,000)
- City of Mankato Community Development Block Grant funds
- Current Minnesota Housing Rehabilitation Loan Program

Energy Trust of Oregon

Pilot 2017-2020

- Pre-Pilot spent two years creating partnerships with housing, energy and community development orgs
- 50 homes served
- Replace homes built before 1995
- Understand energy impact, quality of life improvements, project costs, and participation barriers

Energy Trust of Oregon

Program 2021-now

- “Early Retirement”
- Eight homes replaced – 30 homes in pipeline
- Home replacements take one to three years
- Program navigator – resident support, funding coordination, home project planning
- Nonprofit financial literacy support

Energy Trust of Oregon

Funding Source	Amount per home
Oregon Housing Community Services (0% interest, no payment, forgivable loan after 10 years)	\$30,000-\$80,000
Craft3 low interest loan (fixed, low-interest loan)	Up to \$50,000
ETO Utility Incentives	\$10,000-\$16,000

Project costs (demolition, site prep, new home, transport, setup)

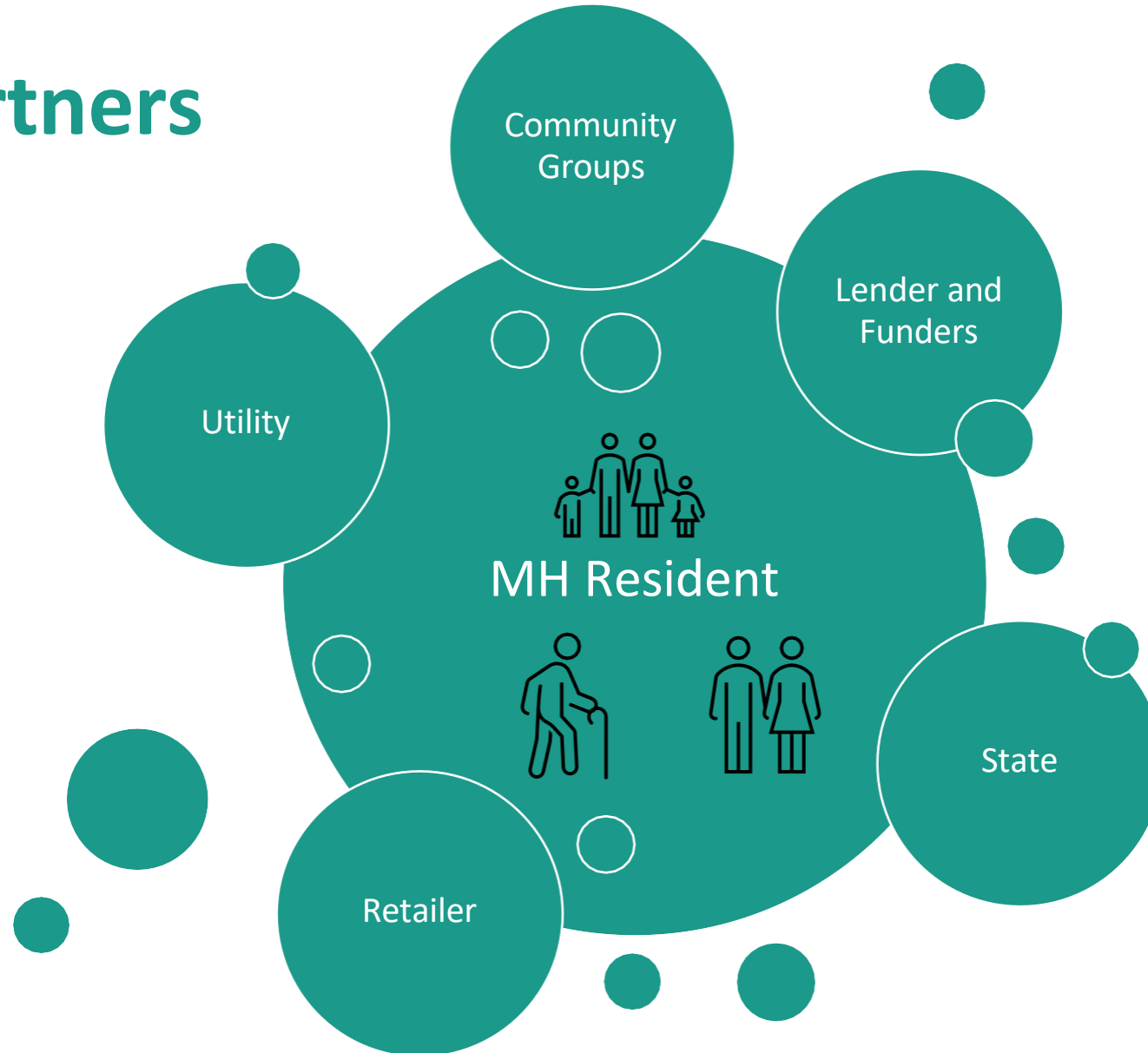
SW: \$87,112

DW: \$123,973

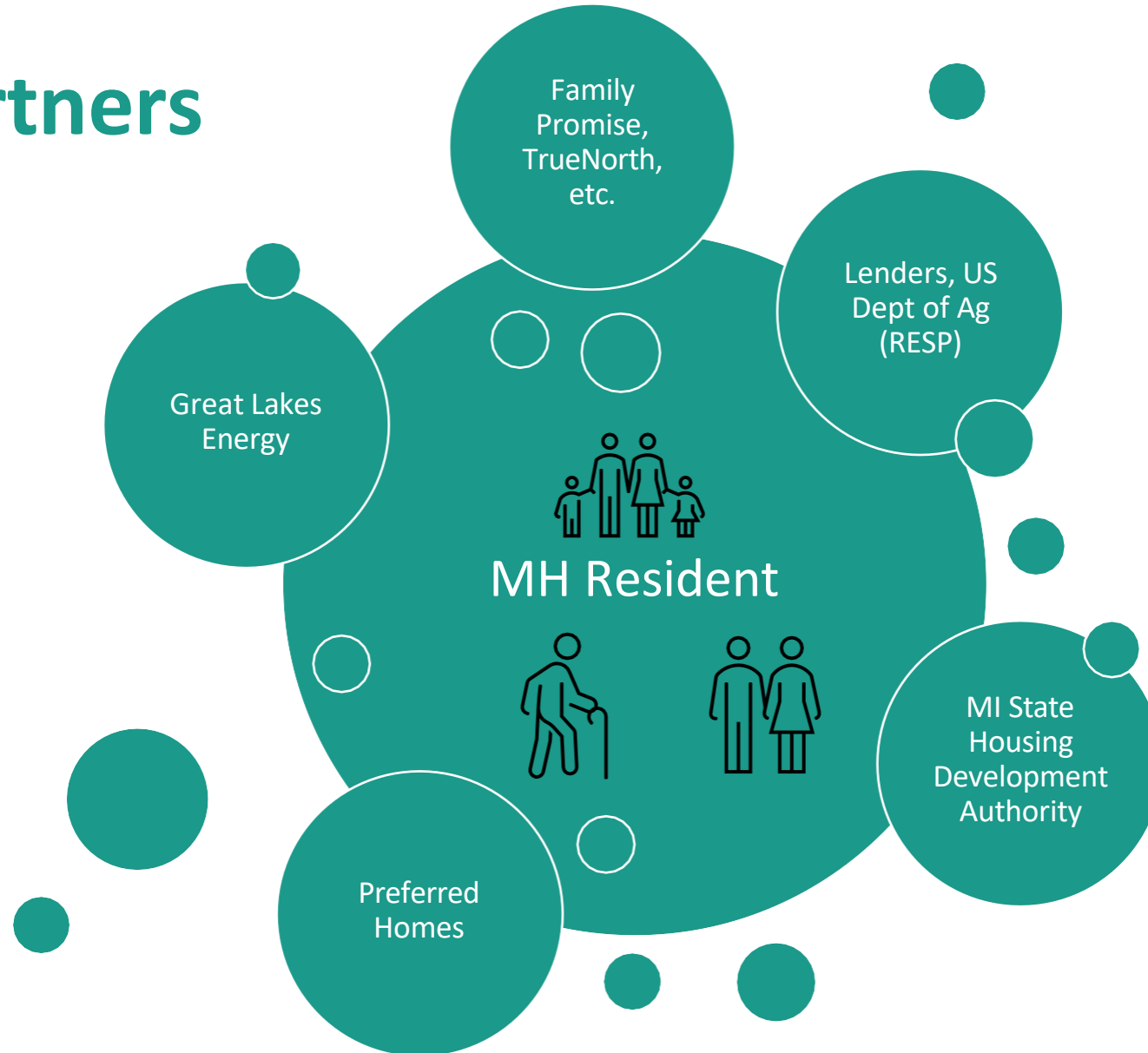


Partners

Partners



Partners



U.S. Dept of Agriculture

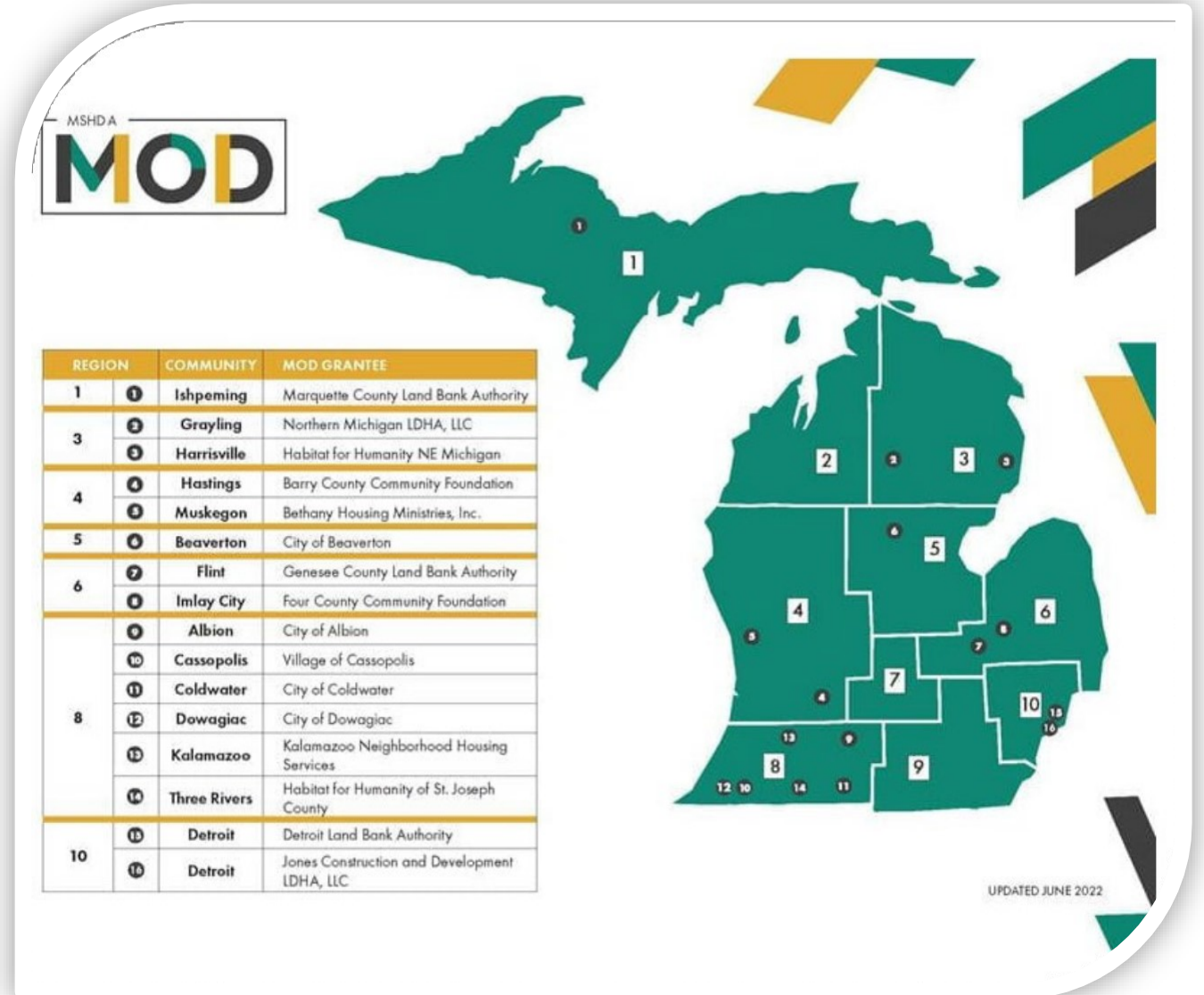
Rural Energy Savings Program (RESP)

- Loans to providers of energy efficiency serves in rural areas
- Affordable loans to help consumers implement cost-effective, energy efficiency measures
- Borrowers apply for loan up to 20 years at 0% interest rate with up to 4% of the loan total to be used for startup costs

Michigan State Housing Development Authority

MSHDA Mod

- Financing for modular homes
- Designed to fit into neighborhoods (basements, garages, etc.)
- Support workforce housing need in a community



Manufactured Home Retailers

- Support buyers in purchasing a home
- Arrange home installation, transportation and delivery, set-up and HVAC installation
- Sell a couple all-electric homes each year and has worked with HVAC contractors who install heat pumps
- Introduced us to Family Promise

Community Groups

TrueNorth Community Services

- Able to serve MH through rehab and healthy homes programs
- Cost of repairs can't exceed value of the home
- Willing to refer people to a replacement program

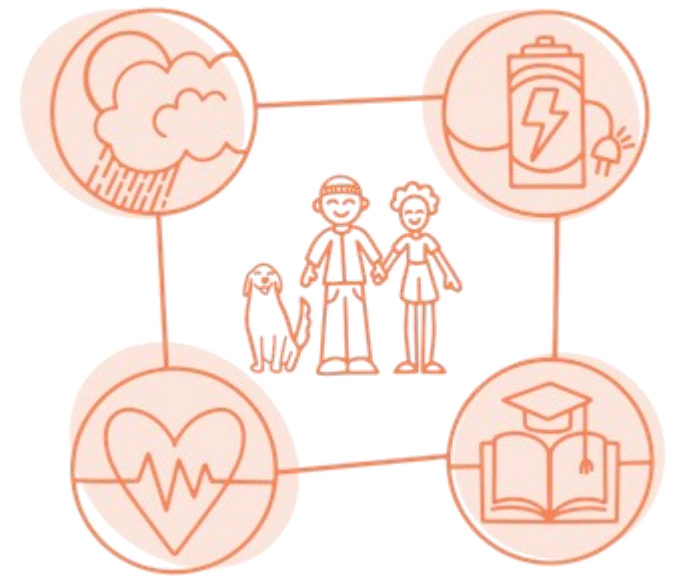
Family Promise of Grand Rapids

- Purchase and restore 200 homes in 35 parks
 - 2022: 28 homes
 - 2023: 40 home goal
- Support families with children (for 1 year) to become homeowners
- Cost: \$28,000 to purchase and rehab
- Timeline: 4-6 weeks to remodel and 9 months for family to transition



Long-term Opportunity

- Demand for MH Replacement
- Build coalition of partners
- Develop funding sources
- Define program eligibility requirements



Short-term Opportunities

- Support TrueNorth's efforts
- Outreach to Family Promise of Grand Rapids
- Additional energy efficiency/retrofit programs





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Appendix

Michigan State Housing Development Authority

MI Home Loan

- First-time homebuyers across state
- Repeat homebuyers in targeted areas
- Minimum credit score of 660

Michigan Housing Opportunities Promoting Energy Efficiency Program (MI-HOPE)

Federal ARP funding to support home rehabilitation targeting older homes

Maine State Housing Authority

2008-2010 Pilot

- Replace homes built prior to 1976
- Nine participants 30-year first mortgage
- 26 participants Maine HOME deferred mortgage
- Own land

2018-current Program

- MaineHousing grant \$35,000 and MaineHousing mortgage loan
- 10-year occupancy requirement
- No longer required to own land



U.S. Dept of Housing and Urban Development

Home Investment Partnerships Program (HOME)

- Grants to states and local governments to fund building, buying and rehab affordable housing
- Montana and Washington program use these funds



Lead Abatement Interest Survey

Ty Liggons,
MDHHS



EWR Plan: Non-Energy Impacts, Health and Safety Survey

Laura Goldberg, Natural Resources Defense Council

Brad Banks, Michigan Public Service Commission

Close & Adjourn

Thank You!