

MUNICIPAL INNOVATION COUNCIL

IMPACT REPORT

2020 - 2025



MIC
municipal
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council



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WHO WE ARE

The Municipal Innovation Council (MIC) was established in 2020 when eight municipalities in Bruce County came together to find savings and efficiencies, and deliver services better to their residents - all with the goal of building smarter, stronger, more resilient communities.

The MIC sought to understand how issues impact people and was a catalyst for developing solutions to shared problems. The MIC invested in the ability to sense and respond to challenges quickly so that member communities could thrive in the 21st century.

OUR COMMITMENT

MIC's commitment to its members included **LEARNING** from experts, as well as leveraging municipal expertise and our own strengths, **COLLABORATING** with our peers and colleagues, listening to industry, working with experts, and understanding that change is critical, and **TRANSFORMING** the way our municipalities do business, and embracing the opportunity to transform and grow.



MESSAGE FROM THE MIC CHAIR

Over the past five years, the Municipal Innovation Council (MIC) has achieved remarkable progress in fostering innovation and collaboration among its member municipalities. Through the support of County and municipal Council's and by adopting an innovative mindset through strategic partnerships, the MIC has become a leader in developing creative and responsive solutions to the challenges facing municipalities today.

The workplace has evolved significantly, bringing new opportunities for municipal governments. To help member municipalities navigate these changes, the MIC has invested in tools and comprehensive training programs, realizing significant efficiencies and economies of scale. These efforts have not only enhanced workplace capabilities but have also fostered a lasting culture of innovation within our communities.

As the MIC wraps up its tenure, it is important to acknowledge those who contributed their time and energy. Thank you to the MIC board members: Christine MacDonald, CAO Bruce County; Peggy Van Mierlo-West, CAO North Bruce Peninsula; Emily Dance, CAO Arran Elderslie; Leanne Martin, CAO South Bruce; Jodi MacArthur, CAO Huron Kinloss; Jillene Bellchamber-Glazier, CAO Kincardine; and former member Sonya Watson, CAO Brockton.

A special thank you to our current Director, Tony Houad, for his support over the past two years.

I am proud to have worked with such a dedicated group over my tenure as Chair and these achievements are a testament to the collective leadership within the MIC. I am confident that their unwavering commitment to fostering a culture of innovation and collaboration will benefit municipalities for years to come.

Kara Van Myall
Chair, Municipal Innovation Council
CAO, Town of Saugeen Shores



MESSAGE FROM THE MIC DIRECTOR

I am pleased to share this report on the Municipal Innovation Council's (MIC) accomplishments. Over the past five years, as we strived to push the boundaries of creative thinking, we also innovated in ways that were engaging and responsive. I truly believe that innovation is not just a sector of the economy but rather innovation is the economy. Leadership and collaboration continued to be the cornerstones driving our mission and our communities forward. Embracing an innovation mindset has been at the forefront at the MIC. We have continued building strategic partnerships with likeminded organizations.

I would like to show my gratitude to the MIC board members for their leadership and commitment. Since the inception of the MIC, they have guided the organization to fulfil its goals and position itself in the innovation sector. The work at the MIC has been a team effort and I would like to thank the previous leadership team of Dave Shorey and Becky Smith for their commitment and dedication in pursuing the goals of the MIC. Also, my sincere gratitude to all the municipal staff that have assisted in making much of this possible.

MIC member municipalities will continue to benefit from the accomplishments of the MIC. As the workplace is evolving, so are the challenges employees face. To help municipalities stay ahead, the Municipal Innovation Council has invested in providing tools and comprehensive training programs to over 200 employees. The MIC legacy will continue through the dedication and hard work of municipal staff invested in pursuing innovation in the workplace.

Tony Houad
Director, Municipal Innovation Council



PARTNERSHIPS

The MIC has worked in close collaboration with its service delivery partners. Our partners provided expert technical and industrial expertise that supported a range of MIC program activities. At the core of a strategic partnership lies the understanding that collaboration can lead to enhanced innovation, improved efficiency, and better utilization of financial and human resources.

Over the years, the MIC has built partnerships with:

- Food Cycle Science
- Communitech Fast Track Cities
- Nuclear Innovation Institute
- University of Waterloo
- University of Windsor
- Georgian College
- Saugeen Conservation
- Grey Sauble Conservation
- Environment Office - Saugeen Ojibway Nation
- GHD Digital

PROVEN SUCCESS

The MIC was tremendously successful at securing external funding for almost every project it undertook.

The MIC obtained over \$600,000 in additional funding through programs like the Municipal Modernization Program, the National Disaster Mitigation Program, Mitacs Accelerate, and more.

Contributions from 8 member municipalities included \$17,000 to \$50,000 per year in external funding, leveraged \$615,000 total, and delivered value of \$1.25 million. For every MIC dollar invested, we were able to double that through external funding sources. This brought the total value delivered by the MIC to over \$1.25 million.



OUR ACCOMPLISHMENTS

SOLID WASTE MANAGEMENT SERVICE REVIEW

The Municipal Innovation Council (MIC) completed a comprehensive review of solid waste management services across all member municipalities at no cost to its members. This initiative provided municipalities with critical data, operational insights, and strategic recommendations to enhance waste management services, drive efficiencies, and implement best practices.

This study assessed garbage and recycling services and resulted in 24 actionable recommendations to guide future decision-making. The review also fostered collaboration among municipal partners, ensuring a more coordinated approach to addressing evolving waste management challenges.

By conducting this study collectively, municipalities avoided an estimated \$80,000 to \$150,000 in individual costs, reinforcing the value of shared services and regional cooperation in delivering cost-effective and sustainable waste solutions.



DIGITAL TOPOGRAPHICAL MAPPING

The Municipal Innovation Council (MIC) launched a groundbreaking digital mapping project using AI and machine learning to enhance Geographic Information Systems (GIS) data for municipalities and conservation authorities. This innovation streamlined operations and delivered significant cost savings.

By implementing this project, MIC saved municipalities approximately 14,000 hours of in-house GIS work. Each member municipality, investing around \$11,000, saved nearly \$70,000, with collective savings exceeding \$500,000. This demonstrated the power of technology in improving efficiency and financial sustainability.

Key benefits of the project included:

- Enhanced Regulation Mapping: Improved accuracy for environmental risk management.
- Streamlined Planning & Permitting: Faster, more efficient municipal processes.
- Support for Watershed Report Cards: Better data for conservation efforts.

Notable features included Ecopia Technology's land use polygons for detailed tree cover analysis, 3D building renderings with height data, and more accurate bridge mapping using polygon layers.

More than just a technological achievement, this project was a vital tool for municipalities and conservation authorities, enhancing GIS accuracy, reducing costs, and improving local planning and conservation efforts. MIC's commitment to innovation helped transform municipal services for more efficient and sustainable communities.



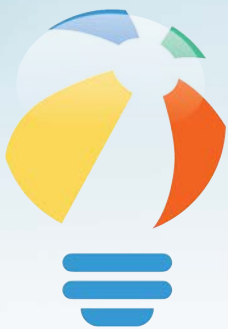
SMART BEACH - INNOVATIVE TECHNOLOGY

The Smart Beach project, the first of its kind in North America combined innovative technology with public education and awareness to provide a unique service to residents, visitors, and newcomers to our beaches. The Smart Beach project was a prime example of the Municipal Innovation Council at work on an innovative solution that could be adapted to and applied across our member municipalities and the Great Lakes. This project also helped keep our first responders safer if they were called out to the scene, by ensuring they have access to real-time information on water conditions.

The Smart Beach program has focused on research and development that guided the implementation of a dynamic warning system at Station Beach in the Municipality of Kincardine. Through physical and social surveys, implementation of Machine Learning models, and creation of a locally calibrated wave and current model, project milestones reached this year provided significant insight on beach-user behaviour and timing and location of surf-related hazards. Historical and real-time data could be freely accessed by the public through the Seagull - Great Lakes Observing System.

A roadmap for Machine Learning models was developed to predict surf hazards, including providing beach-user counts. This also included the ability to predict the surf conditions at Station Beach from a network of offshore wave buoys and regional Met stations. Predictors such as offshore wind conditions were used to forecast surf-related hazards (e.g., significant wave heights and current velocities at depth) recorded offshore. The goal was to extend these hazard predictions to sections of the coast that do not have access to a local buoy on-site.

We continued our journey to expand the Smart Beach project to the Town of Saugeen Shores. The MIC was successful in securing Mitacs grant funding of approximately \$360,000 for Phase 1 of this project.



Smart Beach



CO-OP STUDENT RESEARCH PROJECTS

As part of its commitment to innovation and continuous improvement, the Municipal Innovation Council (MIC) undertook several research projects to enhance municipal operations and identify opportunities for collaboration. These projects focused on IT infrastructure, workforce development, municipal services, downtown revitalization, and procurement strategies, providing valuable insights to all member municipalities. By engaging students in meaningful municipal research, the MIC also helped build capacity, foster new talent, and support the next generation of municipal professionals.

IT Infrastructure & Digital Transformation

A review of IT infrastructure across municipalities assessed current systems, spending, and critical needs. The project also included the development of a prototype asset management system to support future system upgrades and digital transformation efforts. This work provided valuable baseline data and key insights that laid the foundation for a broader Information Technology Review and the development of a five-year digital transformation roadmap (described below). The findings from this research helped identify key opportunities for collaboration, optimization, and long-term improvements in municipal IT services.

Organizational Development & Workforce Capacity

An analysis of organizational development and workforce capacity identified existing training programs, core competencies required for municipal roles, and opportunities for shared training initiatives. The findings support efforts to enhance workforce development and position municipalities as employers of choice.

Municipal Service Delivery & Customer Experience

A comprehensive municipal service scan documented all services provided by MIC members, categorized service structures, and applied user journey mapping methodologies to analyze workflows and identify opportunities for improved efficiency and customer service.

Downtown Revitalization Strategies

Research into downtown revitalization strategies examined best practices across Ontario, stakeholder insights, and case studies to inform strategies for economic renewal in Bruce County's interior region. The project provided recommendations on policies and initiatives that support vibrant and sustainable downtowns.

Municipal Procurement

A study on municipal procurement practices explored category spending, co-op purchasing, and leveraging multiple Vendors of Record (VOR). The research outlined strategies to enhance procurement efficiency, reduce costs, and improve purchasing processes for municipal governments. These projects provided actionable recommendations that strengthen municipal operations, improve service delivery, and enhance collaboration across member municipalities. By leveraging research partnerships, the MIC delivered practical insights and innovative strategies at no cost, reinforcing its role in advancing municipal excellence through shared solutions.



INFORMATION TECHNOLOGY REVIEW

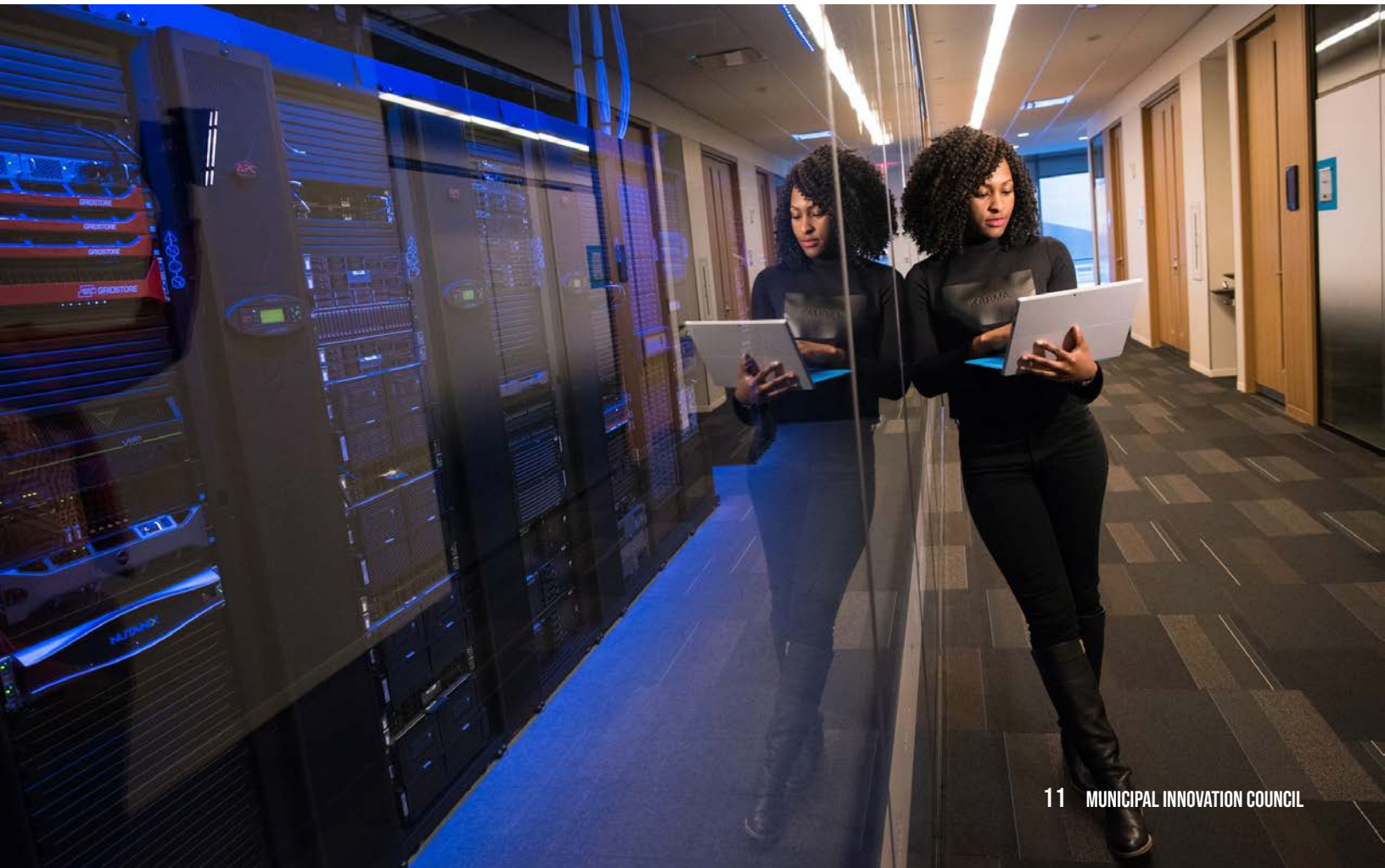
The Municipal Innovation Council completed a capacity review of Information Technology (IT) services across its member municipalities. This analysis revealed significant opportunities to improve efficiency, optimize resources, and strengthen security across the board.

Building on the findings of the IT review, MIC launched an ambitious 5-year roadmap designed to modernize and streamline municipal IT services. The plan emphasized achieving economies of scale by consolidating operations and fostering resource sharing among municipalities. It also prioritized cybersecurity to safeguard municipal systems and data against emerging digital threats.

One of the most impressive outcomes of this initiative was the identification of substantial financial benefits. By implementing the roadmap's strategies, member municipalities were projected to collectively save an estimated \$585,000. This achievement highlighted the power of strategic collaboration and innovative planning in delivering tangible results for communities. Additionally, this work resulted in a contracted service model between Kincardine and Bruce County.

This roadmap was more than just a cost-saving measure, it set the foundation for stronger, more resilient IT systems that could meet the challenges of the future. MIC's commitment to enhancing municipal operations and delivering value underscored its role as a leader in regional innovation and collaboration.

MIC's 5-year digital transformation roadmap was a bold step toward creating more efficient, secure, and cost-effective IT services for its member municipalities. This initiative drove positive change and ensured communities benefitted from enhanced services and strengthened infrastructure.



ATTAINABLE HOUSING

Housing affordability and accessibility are critical issues facing communities today. Recognizing the importance of addressing these challenges, the Municipal Innovation Council (MIC) took a proactive step by partnering with the University of Waterloo's School of Planning. Together, they embarked on a groundbreaking project to support the Saugeen Shores Attainable Housing Task Force.

Collaboration leveraged the expertise of leading planning professionals and academics to deliver a comprehensive report that shaped housing strategies for Saugeen Shores. A final report with recommendations valued at over \$100,000, a significant contribution, was completed at no direct cost to the MIC. By joining forces, the MIC and the University of Waterloo were able to provide invaluable insights into the challenges and opportunities surrounding attainable housing. This collaboration highlighted the power of partnerships in addressing complex community issues effectively and efficiently.

The final report developed through this initiative offered actionable recommendations to help Saugeen Shores tackle housing affordability. It served as a roadmap for creating more inclusive, accessible, and sustainable housing solutions for residents.

From exploring innovative housing models to identifying policy improvements, the report's findings were instrumental in guiding the municipality toward a future where everyone can find a place to call home. The partnership underscored the importance of academic expertise in shaping practical, community-driven solutions.

The success of this project exemplified MIC's commitment to fostering innovation and collaboration for the betterment of Bruce County communities. By engaging with top-tier academic institutions like the University of Waterloo, MIC ensured that its initiatives were grounded in research, expertise, and forward-thinking strategies.

As municipalities across the region continue to grapple with housing challenges, this partnership served as a shining example of what can be achieved through collective efforts. It was a testament to MIC's dedication to finding practical, impactful solutions that address the needs of its member communities. The work done through this partnership not only benefited Saugeen Shores but also set a precedent for future collaborations. As housing challenges evolve, local municipalities remain committed to leveraging partnerships, expertise, and innovation to create a brighter, more inclusive future for all.



FOOD CYCLER PROGRAM

In 2023, the MIC partnered with Food Cycle Science, a Canadian clean-technology company, to launch a FoodCycler™ Pilot Program designed to measure the viability of on-site food waste processing technology as a method of waste diversion. A County-wide program was launched that included 880 participating households, 420 of which were subsidized by the MIC to make this technology accessible to more Bruce County residents at an affordable price. The 420 FoodCyclers™ subsidized by the MIC diverted 116.3 metric tonnes of food waste from local landfills per year - the equivalent reduction in greenhouse gas emissions from taking 29.3 gasoline-powered vehicles off the road every year.

The food cycler program:

- reduced food waste in landfills
- took more trucks off the road
- reduced infrastructure and collection costs
- contributed to a 95% reduction in CO2e compared to sending food to landfills

Residents reported generating 0.42 fewer standard garbage bags per week, a reduction of 21.8 garbage bags per household per year being trucked to local landfills.



BUILDING BENCH STRENGTH

The workplace is evolving, and so are the challenges employees face. To help municipalities stay ahead, the Municipal Innovation Council (MIC) invested in comprehensive training programs for over 200 employees. These programs addressed emerging workplace issues such as Equity, Diversity, and Inclusion (EDI), mental health, local Indigenous culture and history, customer service excellence, and project management skills.

To deliver these impactful programs, MIC leveraged over \$12,000 in external funding. This financial support underscored MIC's ability to maximize resources while minimizing costs for member municipalities. It was a testament to MIC's commitment to creating value and driving meaningful change.

MIC recognized that a well-trained workforce is the backbone of productive and resilient municipalities. By equipping employees with the tools and knowledge to tackle modern challenges, MIC fostered more inclusive, empathetic, and efficient workplaces. These training opportunities also helped municipalities align with best practices and enhanced their service delivery to residents.

As workplaces continue to evolve, MIC was dedicated to supporting employee development. By prioritizing training and education, the Council ensured that its member municipalities were well-positioned to meet the demands of the future while fostering growth, productivity, and innovation in every workplace.



SIMPLY BRILLIANT IDEA PROGRAM

Technology is constantly evolving, changing, and growing. This provides new opportunities for local governments to automate manual processes and leverage data to drive decision-making. Continuous improvement and innovation is a key priority as technology continues to transform. A bottom-up approach toward innovation with hands-on engagement from leadership can help to drive collaboration through a municipality, reduce silos, and increase organization-wide initiatives.

The Municipal Innovation Council introduced the Simply Brilliant Idea program to hear from municipal staff on improvement ideas they have for municipal operations. This program encouraged employees to bring forward innovative ideas on new and existing practices within their municipality. The MIC and its member municipalities were committed to improving the effectiveness, efficiency, and responsiveness of municipal services. The ideas brought forward were evaluated and selected to advance through the MIC to its member municipalities. The Simply Brilliant program supported the MIC's commitment to growing the knowledge, experience, and insight of our municipal employees.

The criteria to evaluate submissions included one or more of the following results:

- Improve productivity in a municipal operation,
- Improve service to the public,
- Eliminate waste,
- Eliminate unnecessary paperwork,
- Reduce hazards, improve employee safety and/or public health & safety,
- Preserve and improve use of equipment,
- Improve control and handling of supplies; and/or
- Any other result that would provide a benefit to the municipality.



FLEET ELECTRIFICATION

Electric vehicles (EVs) are transforming transportation, offering a cleaner, greener alternative to traditional cars. However, their growing popularity brings a critical challenge: the need for robust charging infrastructure. Recognizing this, the Government of Canada set an ambitious goal to ensure that by 2035, 100 percent of new cars sold will be zero-emission vehicles. But achieving this vision requires more than just EV adoption - it demands a comprehensive network of accessible and efficient charging stations.

The Municipal Innovation Council (MIC) advanced the discussion on municipalities' unique role in the transition to EV adoption, particularly through the electrification of local municipal fleets. In response, plans were underway to develop a Sustainable Transportation Roadmap aimed at evaluating the feasibility, benefits, and challenges of transitioning municipal fleets to electric vehicles. This roadmap was to be more than a plan; it was a commitment to reducing greenhouse gas emissions, promoting sustainability, and fostering innovation in local transportation systems.

Municipal fleets - comprising vehicles used for public works, emergency services, and administrative tasks - are a significant contributor to local emissions. Transitioning these fleets to electric vehicles offers multiple benefits:

- **Environmental Impact:** Significantly reduces greenhouse gas emissions and contributes to climate action goals.
- **Operational Savings:** Electric vehicles have lower fuel and maintenance costs, leading to long-term financial benefits for municipalities.
- **Leadership by Example:** Demonstrates a municipality's commitment to sustainability, inspiring residents and businesses to follow suit.

Transitioning to electric fleets is not without its hurdles. Municipalities must address:

- **Infrastructure Needs:** Building a widespread charging network to support fleet operations.
- **Upfront Costs:** Initial investments in vehicles and charging infrastructure can be substantial.
- **Technology Integration:** Ensuring seamless integration with existing systems and training staff to adapt to new technologies.

The electrification of municipal fleets is a bold yet necessary step toward creating sustainable and resilient communities. By advancing the discussion on making this transition a priority, the MIC helped municipalities lead the charge in addressing climate change while improving operational efficiency and service delivery.



FINAL WORDS

Over the past five years, the Municipal Innovation Council (MIC) has achieved significant progress on a variety of initiatives. Each of the MIC projects has strengthened municipal capacity and helped address community needs.

Gratitude is shared with the Nuclear Innovation Institute (NII) for initially hosting the MIC. The NII's support was instrumental in the initiative's success.

A special thank you also goes to the staff who coordinated the work of MIC over the years. Their leadership and dedication have helped foster a culture of innovation among member municipalities. Appreciation is also extended to all the partners who made these initiatives possible.

While the MIC as a formal initiative is winding down, the positive impacts of its projects will continue. The MIC has empowered each member municipality to develop innovative initiatives that will benefit local communities in the years ahead.





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