

North Dakota's Main Street Dashboard

Empowering transparent, data-driven government

Category: Data Management & Analytics

Great State of North Dakota

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Project Initiation: Released in Beta in February 2018 - Ongoing

Executive Summary

An article by McKinsey & Co, "[Delivering for citizens: how to triple the success rate of government transformations](#)" states: 'Governments around the world know that to deliver for citizens, they must transform the services they provide. Aging populations are putting huge pressure on health and social services; educational systems need to equip young people with the skills for a technology-driven world; and the changing shape of cities is creating new demands on infrastructure. Many government services do not meet citizens' growing expectations. These trends are contributing to public discontent.'

Team ND recognizes the need to transform government for all of these reasons and is embracing innovation and reinvention to help fulfill our potential as a state. **Leveraging technology to support data-driven decision making at all levels of government is key to that.** The cloud-based [Main Street Initiative Community Dashboard](#) consolidates information from 19 publicly available, but not always easy to find, cross-state data sources, supporting

Leveraging technology to support data-driven decision making at all levels of government is key to transparent, citizen-centric government.

decision-makers at all levels and providing new insights to help serve citizens more effectively and efficiently.

The dashboard provides unprecedented insight for community leaders by integrating disparate data into meaningful and comparable information. The tool helps paint a more visual picture of everything from education and childcare statistics, to employment and financial data that are the underpinnings of a community's economy.

By enabling community members and decisionmakers at all levels of state and local government to have access to a robust, visualized set of cross-cutting data, we will be able to make more informed decisions to plan for our future.

Project Narrative

Main Street Initiative Overview

The Main Street Initiative (MSI) is one of Governor Doug Burgum’s [five state strategic initiatives](#) and is designed to help the state and its communities fulfill their potential and attract the capital and talent to compete in a 21st century economy. The MSI focuses on community driven (grassroots) growth, and is founded on three pillars: healthy, vibrant communities; 21st century workforce; smart, efficient infrastructure.

MSI guiding principles include:

- Ensuring communities have access to good data and diversity of community members engaged in planning and decision making
- Empowering local control; provide transparency of government
- Building sustainable programs and tools streamlined for citizen and community experience
- Continuing engagement with communities based on their unique requirements

Experience North Dakota
Published by Kim Schmidt [?] · April 7 at 3:02pm · 🌐

Have you had a chance to check out the new community dashboards? It includes community profile information, state, county and city financial information as well as education highlights. Take a look at your Main Street! #MainStreetND

North Dakota Taxes Levied

North Dakota - Taxes Levied on Classes of Property

Year	Land Heating	Pipelines	Railroads
2008	\$17.19M	\$12.24M	\$7.47M
2009	\$17.29M	\$10.34M	\$7.64M
2010	\$24.22M	\$12.40M	\$7.80M
2011	\$29.04M	\$12.40M	\$8.00M
2012	\$31.29M	\$12.88M	\$8.00M
2013	\$36.09M	\$13.53M	\$8.00M
2014	\$41.27M	\$13.91M	\$8.00M
2015	\$45.43M	\$13.91M	\$8.00M
2016	\$47.17M	\$13.42M	\$8.00M

Community Dashboard | Main Street ND
The North Dakota Department of Commerce, announced the release of the cloud-based Main Street Community Dashboard. The dashboard will provide community...
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1,763 people reached [Boost Post](#)

... The Governor, Lt. Governor, Cabinet leaders and agency partners are promoting the MSI through statewide town halls (50 as of May 2019), an annual Main Street Summit, keynote addresses, and leveraging social media channels to highlight MSI and the Dashboard capabilities.

These outreaches provide the opportunity to gather feedback on challenges and opportunities unique to each community. They are also a forum to share best practices in urban planning and 'smart growth' strategies that focus on infill rather than edge development, helping communities understand the benefit of adding mixed use housing, retail and other amenities in areas with existing infrastructure.

Using data to make more informed decisions is part of smart governance and an important aspect to building healthy, vibrant and fiscally sound communities.

Concept, Significance, Impact

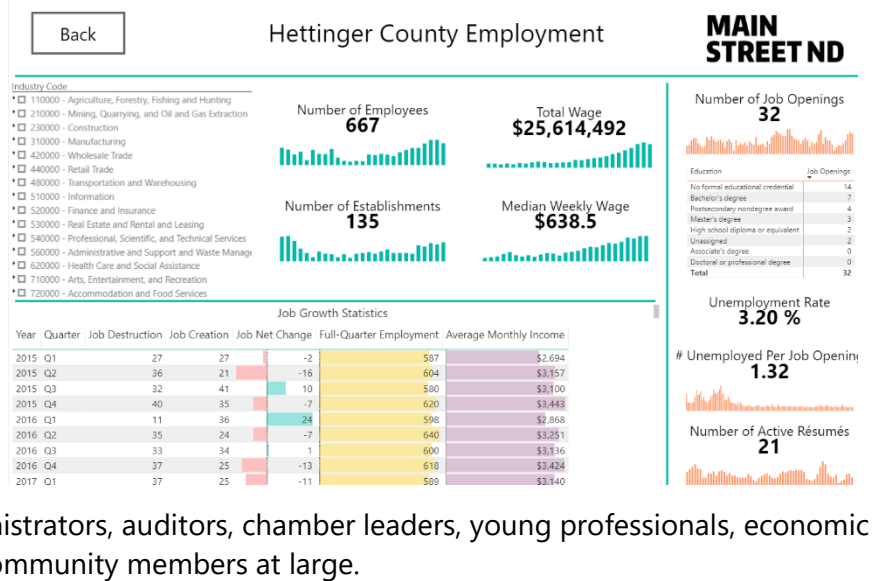
The cloud-based [dashboard](#) was created to support busy community leaders – who often work on a voluntary basis. A portion of the data sources are real-time APIs or URLs, and the Dashboard team is working through ways to automate those that are static. Sources include:

1. US Census
2. AE2S Nexus
3. Childcare Aware of North Dakota
4. Dun & Bradstreet
5. Job Service North Dakota
6. ND Department of Commerce
7. ND Department of Public Instruction
8. ND Department of Transportation
9. ND Office of Tax Commissioner
10. North Dakota Council on the Arts
11. North Dakota Department of Agriculture
12. North Dakota Department of Career and Technical Education
13. North Dakota Department of Health
14. North Dakota Tourism
15. Office of the Attorney General
16. Office of the State Treasurer
17. Utility Companies
18. Vital Records
19. Walk Score

Security updates allowed interested community leaders to upload their local data, and the Dashboard team is working on training for these leaders. The next phase is having reports available for download to PDF and providing community leaders the ability to download data to a spreadsheet for further planning. The data enables deeper analysis that may also drive ways in which the state can prioritize projects to support community growth based on today's environment.

For example, the economic developer in Hettinger, Jasmin, uses the dashboard weekly as she develops grant applications, saying, "The Main Street Dashboard provides a really wonderful data set that makes it very easy for someone in my role to access the local data that's required for grant applications."

Experts from the state's Information Technology and Commerce departments are driving the effort collaboratively with a statewide, cross-agency team. The dashboard will continue to be enhanced based on user feedback and is available to anyone but targeted to elected, paid and volunteer community leaders including city administrators, auditors, chamber leaders, young professionals, economic developers, students and community members at large.

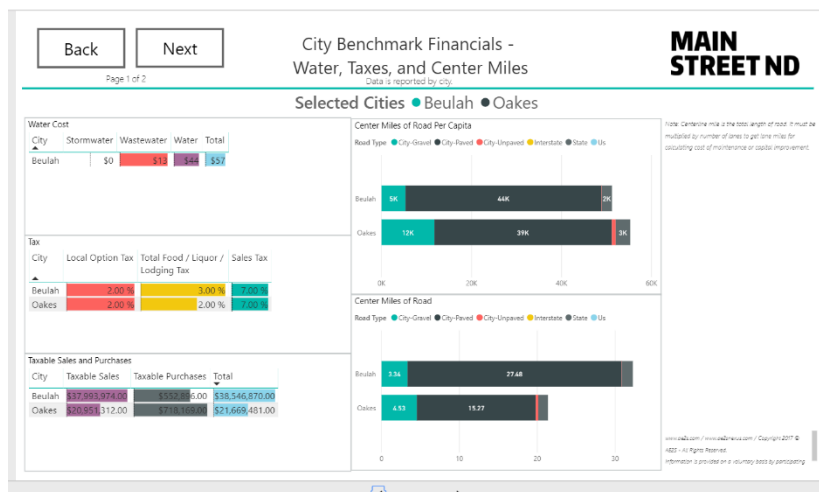


Making an Impact with Data-driven Governance

The Dashboard is one of a number of growing examples across state government of data visualization being used for more robust, transparent and consumable reports for citizens and policymakers.

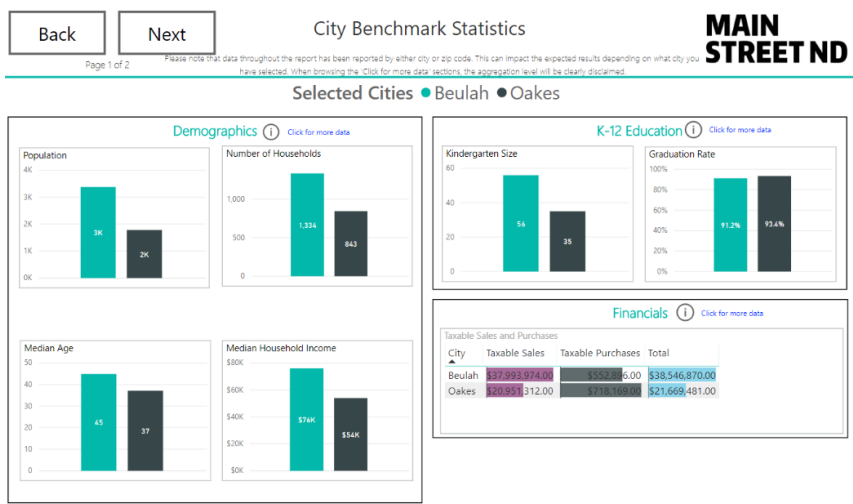
With 70,000 square miles and nearly 750,000 residents, making informed decisions about growth, economic development and infrastructure investments can be the difference between a community thriving vs. dying. As a rural state where 85% of the communities have fewer than 1,000 residents, having access to useable data to make informed decisions is key to financial solvency.

Empowering residents, elected officials, community leaders and young people to engage on these important decisions will ultimately benefit the entire community.



The visual data presentation helps focus conversations around specific data points, providing decision makers greater insight into metrics to help inform community planning efforts.

By comparing towns of similar sizes and demographics, communities can benchmark their efforts and have a more detailed picture of a range of factors.

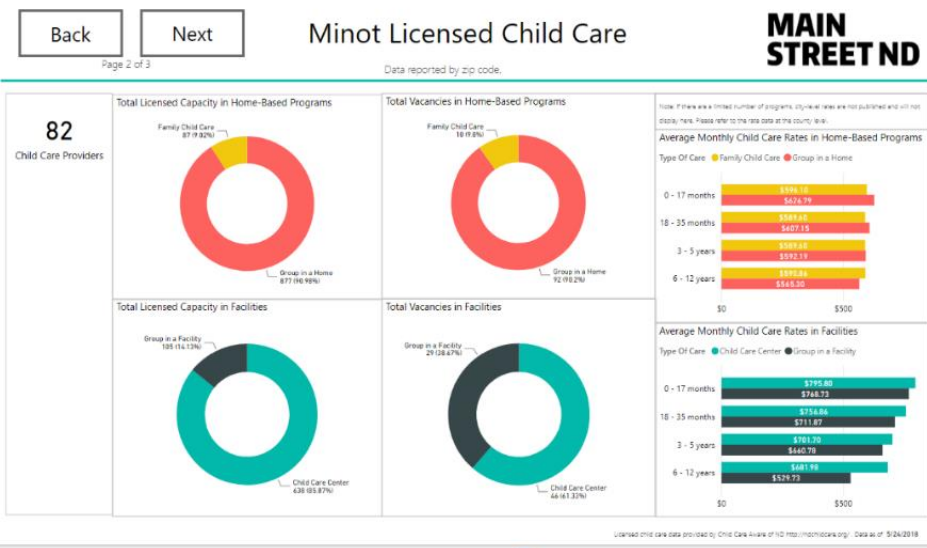


For instance, livability metrics include amenities like parks and recreation, farmer's markets, historic sites, walkability, retail, entertainment and health services. Key economic and financial data includes unemployment, job openings by sector, graduation rates and education trends, poverty, crime, taxes and utilities, and Renaissance Zone

information.

Livability information is valuable because of the importance of these factors in creating healthy, vibrant communities. For instance, an insight from the Bakken Oil Boom was the lack of childcare facilities, particularly in Watford City.

In order for oil field workers to want to move – and stay – in North Dakota, and bring their families, spouses also needed job opportunities and childcare facilities. The Dashboard includes the number of childcare providers, capacity and costs by age group. When combined with the breadth of other data, this provides a more comprehensive picture of amenities that add to communities' livability and attractiveness to prospective employers and employees.



Coordination and collaboration with the ND Association of Counties, League of Cities and other city officials is yielding positive and actionable feedback. As the breadth of data available increases we anticipate the dashboard dynamically evolving to serve the

needs of our community leaders.

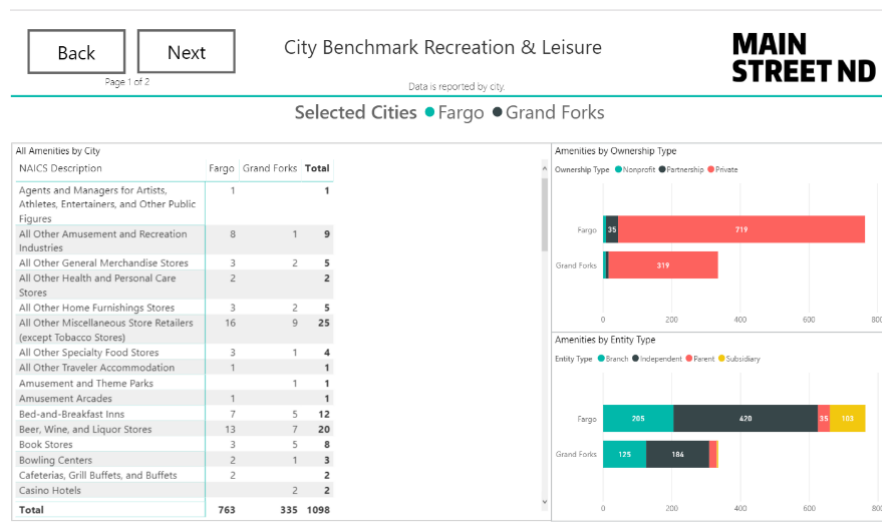
Gaining Recognition

The Dashboard team is embracing every piece of new functionality being released by Microsoft Power BI to increase the impact and benefit of the data, and leveraging Microsoft Azure Platform as a Service (PaaS) data, machine learning and artificial intelligence components. The team [won a hackfest sponsored by Microsoft](#) in 2018 where seven state and local government teams from four states self-identified challenges and worked to develop technology solutions. The Dashboard was also a [2018 Center for Digital Government Experience Award recipient](#) and a [2018 Governor’s Award team recipient](#).

CIO Shawn Riley said of the Dashboard team: “This recognition underscores the positive impact that Team ND has when we work as one and harness technology to deploy solutions that benefit our communities and our citizens. We look forward to working with all of our business partners in state government to support citizen-centric approaches to help reinvent government and deliver effective, efficient services.”

Conclusion

The Dashboard offers visual insights into community planning factors that are the cornerstone of the Main Street Initiative. For example, the strategy of infilling existing spaces with diverse and appealing retail, commercial, hospitality and housing opportunities reduces the tax burden. It benefits tourism and local business and fosters the kinds of creative spaces, arts and culture that attract people to a community.



Development strategies that promote walkable, healthier communities lessen the burden of health care costs on society and taxpayers. It is a sound and necessary strategy for communities of all sizes as North Dakota competes for talent in a global economy.

By providing easily accessible, online dashboards encompassing a range of data, with analytical capabilities of Power BI, North Dakota can better position itself for the future and help communities pursue healthy, vibrant and fiscally sound growth strategies.