



MICHIGAN MUNICIPAL LEAGUE  
**CONVENTION2024**

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# AI in Action: Case Studies from Michigan Communities



# Overview

- Brief Introduction to AI
- Overview of AI in Local Government
- Holland Using AI to Manage Recycling
- Portage Police Resource Routing
- Productivity Tools and Municipal Case Studies
- Real time AI demos
- Questions

# Introduction to AI

AI and its relevance to local government.

- AI goals for local government
  - Improve service delivery
  - Optimize resources
  - Enhance decision-making.

Overview of AI in Local Government

- AI and its core components (machine learning, data analytics, etc.).
- Benefits: Efficiency, cost savings, improved services, and data-driven decisions.
- Challenges: Data privacy, implementation costs, and need for staff training.

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# Holland Recycling

Keith Van Beek, City Manager, City of Holland







**RECYCLE**  
*RECICLE*

**THANK YOU FOR RECYCLING THESE:**  
*GRACIAS POR RECICLAR ESTOS MATERIALES:*

**Paper**  
*Papel*



**Mixed Paper and Paperboard**  
*Cajas de cereales, periódicos, revistas*

**Cardboard**  
*Cartón*



**Cardboard**  
(flattened)  
*Cartón*  
*(aplana los envases de cartón o cartón)*

**Metal**  
*Latas*



**Cans**  
(empty and clean)  
*Latas de aluminio y acero*  
*(vacío y seco)*

**Plastic**  
*Plástico*



**Plastic Bottles, Jars and Jugs**  
(empty and clean)  
*Cocina, lavadero, baño: botellas y recipientes*  
*(vacío y seco)*

**Glass**  
*Vidrio*



**Glass Bottles and Jars**  
(empty and clean)  
*Botellas y frascos*  
*(vacío y seco)*

**NO!**



**Do Not Bag Recyclables**  
(no garbage)  
*No coloque artículos que se puedan reciclar en una bolsa*  
*(no recicle basura)*



**No Styrofoam™ or polystyrene of any kind**  
*No recicle Styrofoam o espuma de poliestireno de ningún tipo*



**No Plastic Bags or Plastic Wrap**  
(return to retail)  
*No recicle bolsas de plástico o envoltura de plástico*  
*(devolver a la tienda)*



**No Clothing or Linens**  
*No reciclar ropa*



**No Scrap Metal or Wood**  
*No recicle chatarra ni madera*

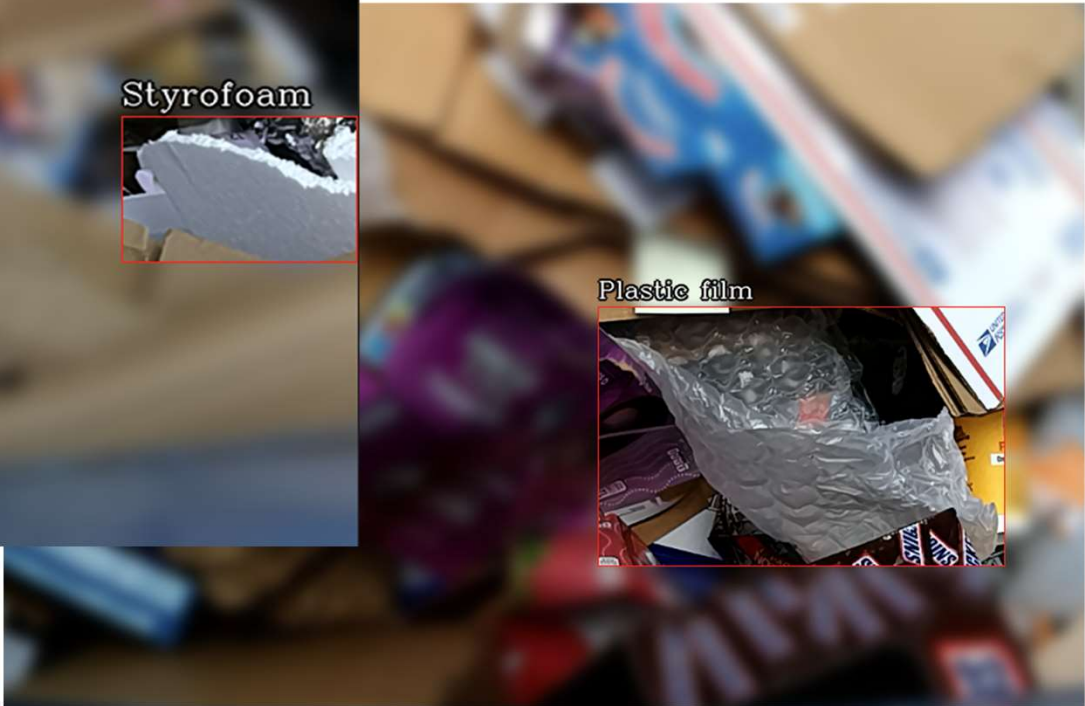
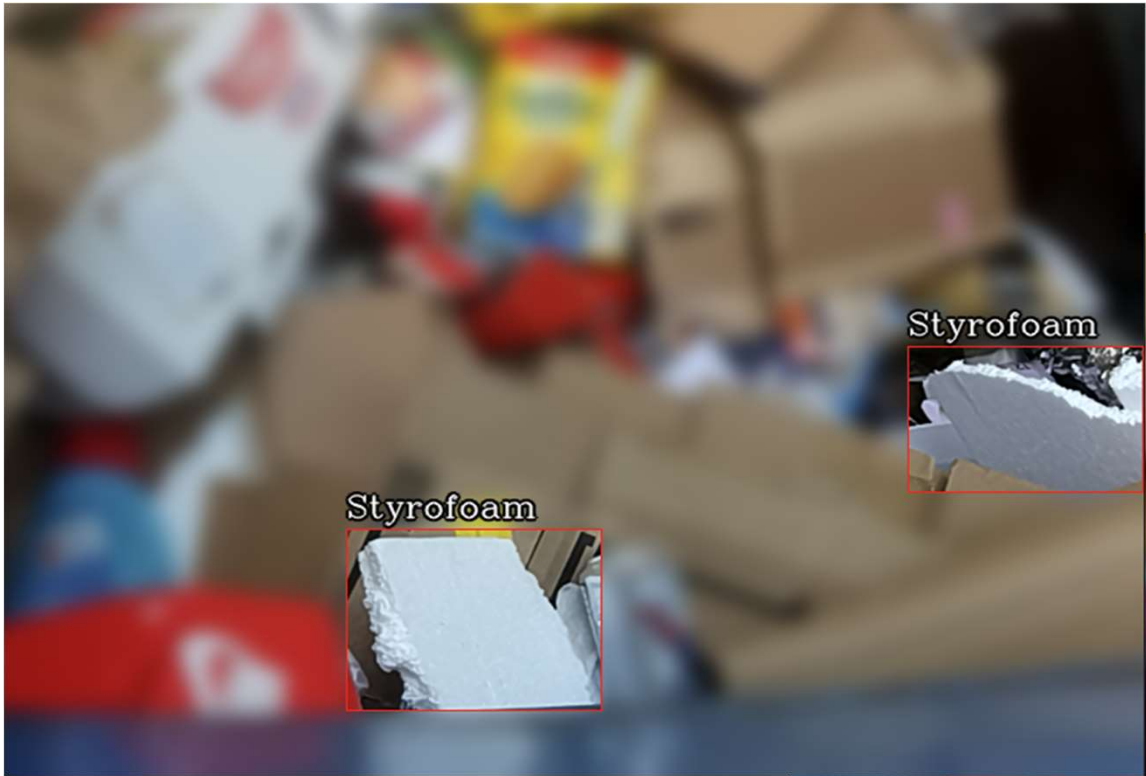


**616-355-1500 ext 4**  
[www.recycleholland.com](http://www.recycleholland.com)



Funded in part by  
**The Recycling Partnership**  
Solving for Circularity







# Educational Materials

When we emptied your recycling into the truck—our team noticed these “NO” items in your cart.

*Cuando vaciamos su reciclaje en el camión, nuestro equipo notó algunos materiales que “NO” deberían estar en su contenedor.*

## OOPS!

KEEP THESE ITEMS OUT OF CURBSIDE RECYCLING:  
NO COLOQUE ESTOS MATERIALES EN SU CARRITO DE RECICLAJE:

 <p><b>No Not Bag Recyclables</b> (no garbage)</p> <p><i>No coloque artículos que se puedan reciclar en una bolsa (no recicle basura)</i></p>	 <p><b>No Styrofoam™ or polystyrene of any kind</b> <i>No recicle Styrofoam o espuma de poliestireno de ningún tipo</i></p>	 <p><b>No Plastic Bags or Plastic Wrap</b> (return to retail)</p> <p><i>No recicle bolsas de plástico o envoltura de plástico (devolver a la tienda)</i></p>
 <p><b>No Scrap Metal or Wood</b> <i>No recicle chatarra ni madera</i></p>	 <p><b>No Clothing or Linens</b> <i>No reciclar ropa</i></p>	 <p><b>No Yard Waste</b> <i>No reciclar residuos de jardinería</i></p>

- Other Michigan communities have also participated in this program:
  - City of East Lansing
  - Kalamazoo
  - Bay City
  - Grand Rapids



City of Portage

Pat McGinnis, City Manager

# RESOURCE ROUTER

Previously Pred Poll

Owned by Sound Thinking

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# RESOURCE ROUTER

- Patrol Management Software
- Generates Automatic Directed Patrol Zones
- Based primarily on Part 1 Crimes (gunfire, homicide, aggravated assault, robbery, motor vehicle theft)
- Does not used data from crimes that are susceptible to enforcement bias (Part 2 crimes such as retail fraud, domestic disturbance, controlled substances, MIP, noise complaints)
- 500m x 500m boxes set up to elevate presence and deter criminal activity
- Boxes based off real time crime data and other variables such as seasonality, time of month/week/day, holidays, upcoming events, weather, and locations of liquor establishments



# RESOURCE ROUTER

- Patrol Zones use the Koper Curve:

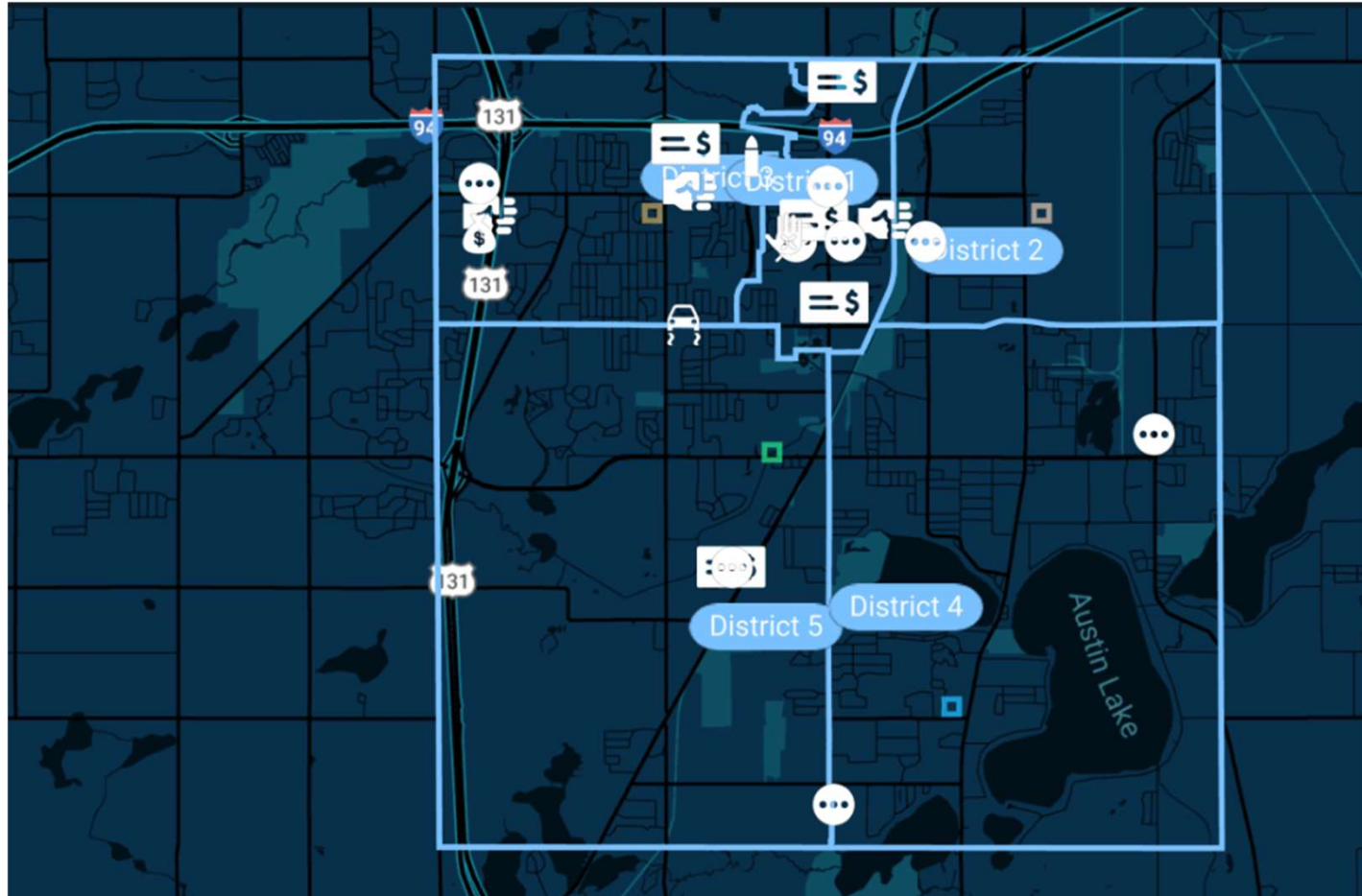
Visible in the zone for 15 minute time periods with at least 90 minutes in-between sessions

Officers do traffic enforcement, mobile patrol, foot patrol, community engagement

- Supervisors can set up ad hoc zones, it's not all AI driven
- Implicit bias is covered and discussed in all major purchases, and this system is designed to avoid typical enforcement bias traps



# RESOURCE ROUTER



# RESOURCE ROUTER

The screenshot displays the InSight Resource Router interface. At the top left is the InSight logo. A search bar is located at the top center. On the top right, the text "ResourceRoute Mayhew" is displayed next to a "Save" button. The main area is a map showing a route. A resource icon labeled "022" is positioned on the map. A white box highlights a time value of "01:06:17" on the map. The left sidebar contains a summary for ID 71873022, dated 09/04/2024, with a time range of 07:00:00 - 19:00:00 and 2 visits conducted. Below this are buttons for "SUMMARY", "RELATIVE CRIME RISKS", "VISITS", "AVAILABLE ACTIVITIES", "RISK FORECAST", "RISK TERRAIN FACTORS", "ACTIVATION STATUS", and "STREET VIEW". The bottom left corner shows "Patrol State: Restricted" and "Visits Completed: 1 of 3".

01:06:17

022

09/04/2024  
07:00:00 - 19:00:00  
2 visits conducted

SUMMARY RELATIVE CRIME RISKS VISITS  
AVAILABLE ACTIVITIES RISK FORECAST  
RISK TERRAIN FACTORS ACTIVATION STATUS  
STREET VIEW

SUMMARY

Patrol State: **Restricted**  
Until 09/04/2024 @ 11:00

Visits Completed: **1 of 3**

Total Patrol Time  
**15:37**





# RESOURCE ROUTER – HUMAN INTEL

The screenshot displays the InSight Resource Router interface. The top navigation bar includes the InSight logo, a search bar, and the user name 'CERT Mayhew' with a 'Save' button. The left sidebar contains a 'FILTERS' panel with a 'LIST' tab selected. Below the filters, there are summary statistics: 'PATROL AREA VISITS' (6), 'PATROL AREAS VISITED' (3), and 'MINUTES IN PATROLS' (76). A table lists patrol activities with columns for ID, Risk Forecast, and Patrol date. The main map area shows a street grid with three districts labeled: District 1, District 2, and District 3. A blue route is overlaid on the map, and several green and grey markers are visible.

ID	Risk Forecast	Patrol
018	CERT	09/04/
017	CERT	09/04/
016	CERT	09/04/
019	All Crime Directed Patrols	09/04/



# RESOURCE ROUTER

The screenshot displays the Resource Router interface. On the left, a 'FILTERS' panel is active, showing a summary of 31 devices, 1,177 miles of distance, and 42,107 locations. Below this is a table with 5 columns: Device, Date From, Date To, Duration, and Distance. The table lists five routes with their respective details. On the right, a 'VIEW' panel shows a map of the area around Austin Lake, with various colored routes overlaid on the map. The routes are color-coded and labeled with device IDs like SWA2, BHUN, LMOR, and ASPI. The map also shows major roads like F-31 and 131, and district boundaries for District 3 and District 4.

Device	Date From	Date To	Duration	Distance
SWA2	09/04/2024 07:14:14	09/04/2024 09:49:42	02:35:28	17.04 miles
BHUN	09/04/2024 07:10:37	09/04/2024 09:49:43	02:39:06	13.77 miles
LMOR	09/04/2024 07:08:36	09/04/2024 09:49:48	02:41:12	11.71 miles
ASPI	09/04/2024 07:04:58	09/04/2024 09:49:39	02:44:41	8.43 miles



# RESOURCE ROUTER



# RESOURCE ROUTER

## ResourceRouter Three-Year Term

	Year 1	Year 2	Year 3	Total
ResourceRouter One-Time Fees (Service Initiation, and Onboarding)	\$15,000	N/A	N/A	\$15,000
One-Time Fee Waiver for Geolitica Customers	(\$15,000)	N/A	N/A	(\$15,000)
ResourceRouter Annual Subscription Fees (EAP Pricing)	\$29,500	\$29,500	\$29,500	\$88,500
Annual Subscription Fee Waiver for Geolitica Customers	(\$16,700)	(\$8,350)	N/A	(\$25,050)
Discounted ResourceRouter Annual Subscription Fees	\$12,800	\$21,150	\$29,500	\$63,450
<b>Annual Totals</b>	<b>\$12,800</b>	<b>\$21,150</b>	<b>\$29,500</b>	<b>\$63,450</b>



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# AI in Action: Case Studies from Michigan Communities

Dene Westbrook, IT/Operations Director, Michigan Municipal League



# Already using AI? Probably.

## Services you may be familiar with:

- Amazon Alexa
- Apple Siri
- Grammar/Writing Assistants – Grammarly
- Language Learning - Duolingo
- Self-driving cars – Tesla, Ford, GM
- Software Productivity suites – Microsoft 365 (Copilot), Google (Gemini)
- Cybersecurity – CrowdStrike
- Social Media – Facebook, Instagram, X

**This list will only keep growing!**



# Applications of AI in Local Government

## AI is the next step for Smart Cities

- Predictive – Blends machine learning and statistical analysis
- Generative – Uses massive amounts of raw data to create content
  
- Traffic Management
- Waste Management
- Energy Grid Management
- Emergency Services Response
- Street Lighting
- Water Quality Monitoring
  
- Building Energy Management
- Planning & Development Statistical Analysis
- Parking Management
- Citizen Engagement
- Tourism Management
- Policing

# Taking the Bad with the Good

## **AI Can:**

- Save time and effort by automating tasks.
- Enhance the experience your citizens have with you.

## **AI Risks:**

- Explainability
- Potentially biased
- Data Privacy & Security

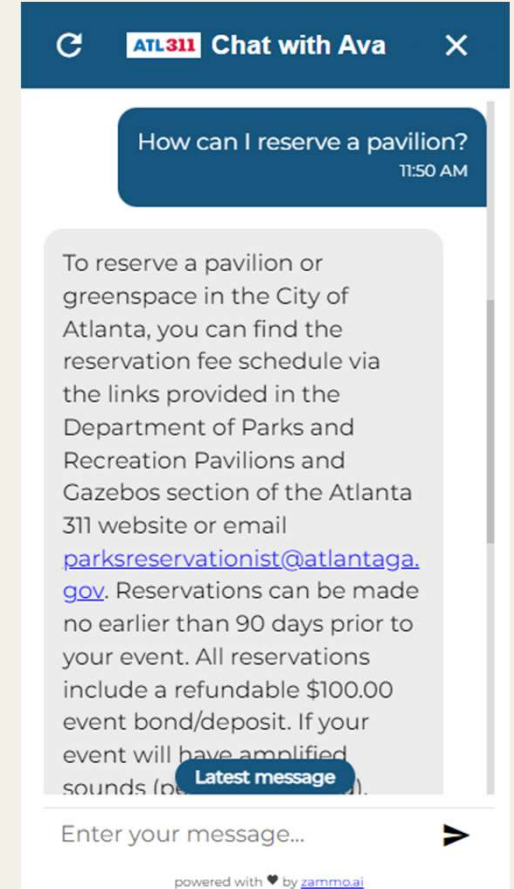
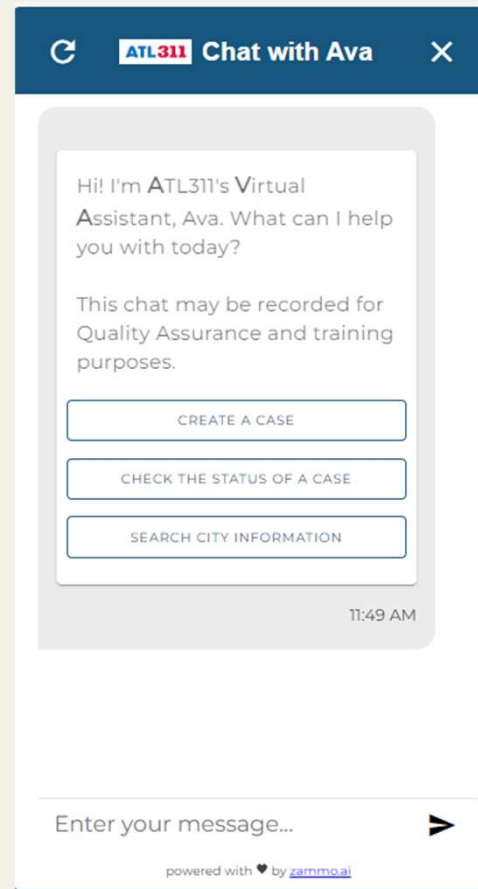
# Today's Focus – 4 Examples

- Citizen Engagement using Chatbots
- Communication Generation
- Language Translation
- Productivity

# Example #1 – Chatbot

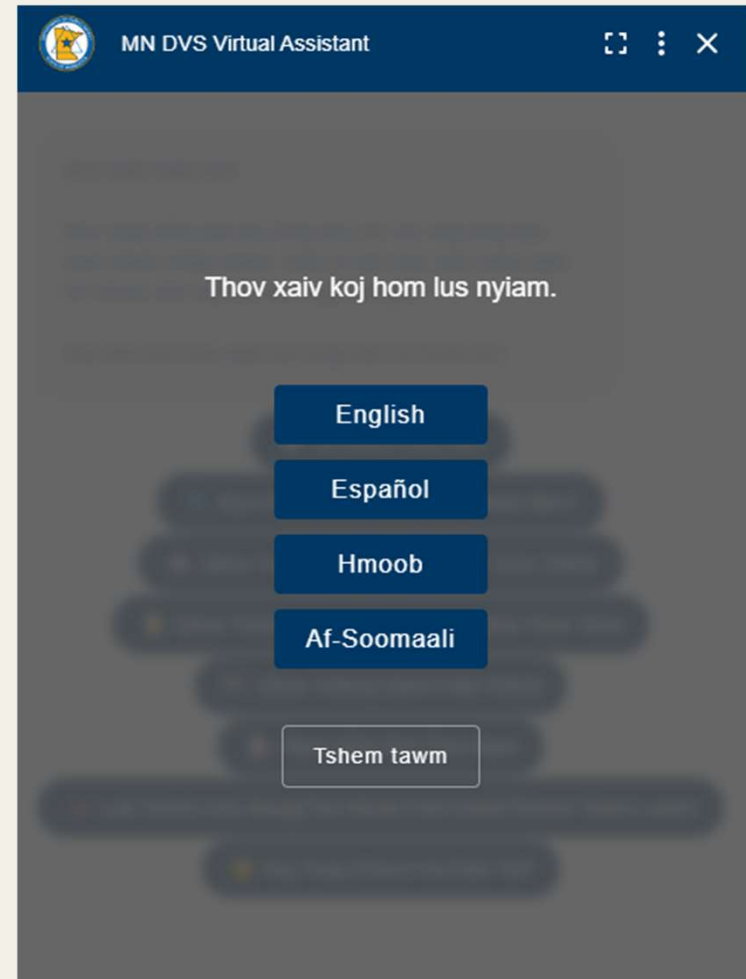
Atlanta, GA, added an AI Chatbot to the city's 311 web page and voice call center.

- Allows for citizens to answer questions on their own.
- Provides immediate answers.
- Has the ability to escalate to a live person for assistance.



## Example #2 – Language Translation

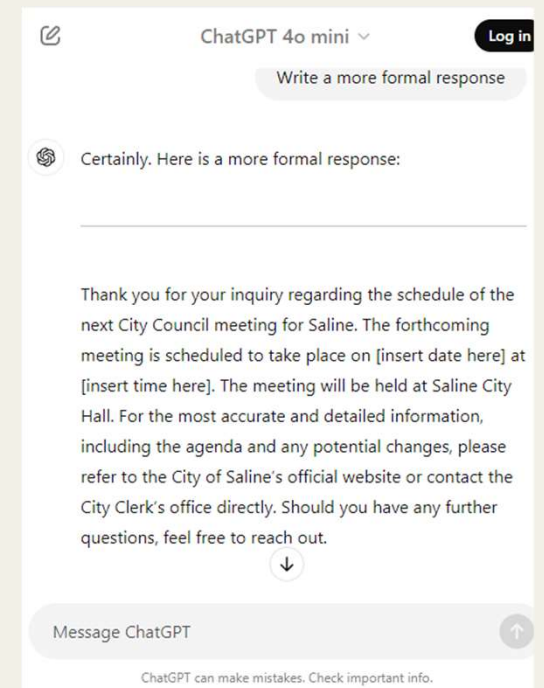
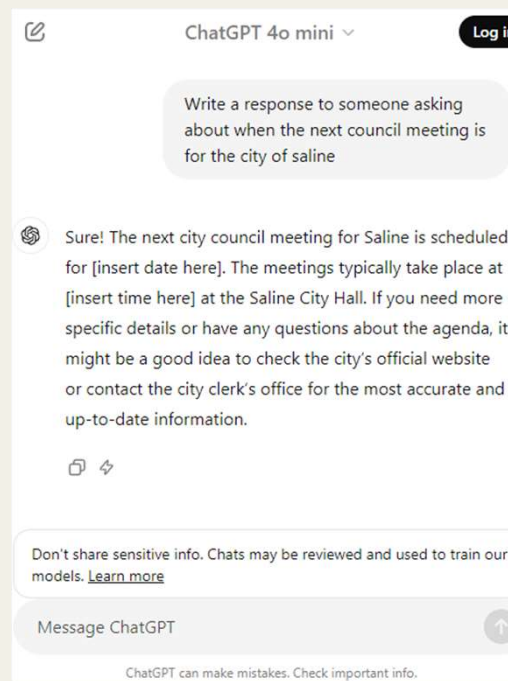
- Dearborn, MI – Google Gemini provides language translation for web pages and documents.
- State of Minnesota – The DMV is utilizing a virtual assistant (chatbot) to provide services (and language options).



# Example #3 – Communications

Wentzville, MO is using generative AI to create communications.

- Automating only specific communications
- Maintaining human oversight and review
- Adherence to Wentzville AI Policy





## Example #4 – Productivity Pilot

The League is utilizing Microsoft 365 Copilot and ChatGPT to boost productivity.

- MS Teams note taking and video recording by meeting topic
- Rapid PowerPoint generation (not this one)
- Grant report writing
- File searching
- Meeting creation
- Communication writing



Microsoft Teams

# Review Pulling Nimble Reports for Emails

2024-05-17 20:03 UTC

Recorded by  
Dene Westbrook

Organized by  
Ariel Ryan

Microsoft Stream

## Content

No files were shared.

Notes

AI notes

Mentions

Transcript

Generated by AI. Be sure to check for accuracy.

Copy all

## Meeting notes

- > **Reports in Nimble:** Dene showed how to use the reports folder, the filters, and the export options for mailing and communication lists.
- > **Affiliate membership lists:** Dene explained how to change the start date for dues year and how to handle renewal period for MME and other affiliates.
- > **Email newsletter lists:** Dene demonstrated how to access and filter the email subscription lists and how to remove the opt outs.
- > **League member lists by role:** Dene presented two options for filtering by role: using the pre-made reports with complex filters or exporting the all roles list and filtering in Excel.
- **HubSpot integration:** Dene said that the HubSpot project will restart in the next two weeks and will take about a month to complete.
- > **Branding and access:** Josh asked about changing the brand colors and assets in HubSpot. Dene said he will contact him when he starts working on it. Ariel suggested to reorganize the access and roles for HubSpot.
- **Mohamed's wedding shower:** Dene announced that July 22nd will be Mohamed's wedding shower and asked everyone to save the date.

Are these notes useful?  

## Follow-up tasks

- **Email subscription page:** Find and remove or redirect the old page on the league website that is not synced to nimble (Ariel)
- **HubSpot:** Start working on setting up HubSpot with the new branding and data from nimble (Dene)

Speakers

Topics

Chapters

DW Dene Westbrook

Ariel Ryan

Josh Hartley

TP Taylor Pine

## Other AI Possibilities

- AI Policy/Guidelines
  - Government AI Coalition Website/Templates – San Jose website
- Legislation Summaries
- mml.org Chatbot

# Realtime AI Demos

## **Hallucinations or misleading information**

My query to ChapGPT:

Give me 15 examples of cities in Michigan using Artificial Intelligence for local operations

## ChatGPT

Here are 15 examples of cities in Michigan using Artificial Intelligence (AI) for local operations:

1. Detroit: AI-driven predictive analytics to optimize public safety deployment and reduce crime.
2. Grand Rapids: AI systems in smart traffic management to reduce congestion and improve traffic flow.
3. Ann Arbor: AI-enhanced public transportation schedules for more efficient route planning.
4. Lansing: AI-based chatbots on municipal websites to assist residents with inquiries and services.
5. Flint: Predictive AI to monitor water quality and prevent future crises.
6. Sterling Heights: AI-driven maintenance scheduling for public infrastructure, like roads and bridges.
7. Kalamazoo: AI-supported environmental monitoring systems to track air quality and pollution levels.
8. Troy: AI-powered financial management tools to improve budget forecasting and resource allocation.

1. Farmington Hills: AI in emergency response systems to optimize dispatching and response times.
2. Southfield: AI-enhanced urban planning tools to analyze development impacts and optimize land use.
3. Rochester Hills: AI for predictive policing to identify areas at higher risk of criminal activity.
4. Dearborn: AI-based energy management systems in public buildings to reduce energy consumption.
5. Livonia: AI-supported public health monitoring for tracking the spread of infectious diseases.
6. Warren: AI-driven asset management systems to track and maintain public assets like parks and buildings.
7. Saginaw: AI-powered tools for analyzing public feedback and sentiment to improve city services.

These examples demonstrate a variety of ways Michigan cities are leveraging AI to enhance efficiency, safety, and service delivery.



**You said:**

Can you provide a link or source for each example?

**ChatGPT said:**

Providing specific sources for each of these examples is challenging because they are largely hypothetical or generalized representations of how cities in Michigan could be using AI based on common trends in local government technology. While many cities across the U.S., including some in Michigan, are exploring or implementing AI in various aspects of their operations, detailed public records or reports on AI usage in specific Michigan cities might not be readily available.

To provide concrete examples, I would need to conduct specific research on each city to identify any current AI initiatives. This can be done using tools like the browser tool to search for real-time information. Would you like me to do that for a few specific cities, or should I provide more general information on AI use in local governments?

Questions?