

# Tempo Go Live: Modernizing Collaboration and Data Sharing

State of Minnesota — Minnesota IT Services

**CATEGORY:**

Digital Government: Government to Business

**CONTACT:**

Cambray Crozier  
Director of Communications  
cambray.crozier@state.mn.us  
(O) 651-201-1063  
(C) 651-367-4616

**INITIATION DATE:**

April 2015

**END DATE:**

April 2016

## Executive Summary

---

Minnesota IT Services (MNIT) partners with the state's executive branch agencies in the pursuit of their missions to serve and protect all Minnesotans.

Tempo Go Live was the culminating effort of a project that transitioned the Minnesota Pollution Control Agency (MPCA) from their legacy data systems to a new system, Tempo, an off-the-shelf product. The project partnered MNIT staff with MPCA staff to help them achieve their mission to protect and improve the environment and enhance human health; and to help support their vision of clean water, air and land to support healthy communities and ecosystems, and a strong economy in Minnesota. Modernizing the system that monitors, tracks and supports those efforts was a primary priority of the new system.

The Tempo system brought together previously isolated MPCA functions of permitting, enforcement, remediation, prevention, inspections, emergency management, watershed project management, and contract and fiscal management.

A key benefit to the Tempo system is collaboration and information sharing within the agency to leverage and build on the work of colleagues, and to improve data quality and reporting. It also allows more Minnesota businesses to submit applications and compliance reports to the agency digitally, decreasing the number of staff touching them, and reducing reliance on paper. With a "touch" taking anywhere from 15 minutes to hours of staff time, the online options are quicker and garner more efficient transactions for staff and customers. Customers receive immediate copies of what was submitted for verification and, in some cases, nearly immediate approval to proceed with the requested activity. Additionally, a significant benefit is the ability to digitally receive and record permitting application fees, fees for service, annual remittances, and penalties levied for permit non-compliance that total around \$25M annually. The system also provides an audit trail.

The Tempo Go Live project took time, training, and planning. New hardware was purchased and set up, satellite systems were incorporated with the new system, and staff were trained and prepared for the switch. While Tempo is an "off-the-shelf" product, MNIT staff collaborated closely with MPCA staff to customize, configure, migrate, test, train and deploy the new system.

This move to a modern, web-based information and data management system centralized the major functions of the MPCA, promoted agency efficiencies, improved the citizen experience, and is helping the MPCA further its mission to protect and preserve Minnesota's environment.

## Exemplar

---

Tempo is a critical system for the MPCA. The implementation was completed in partnership with MNIT. Both agencies are responsible for ensuring the ongoing success of Tempo and the technology that supports it.

Tempo is a customizable, off-the-shelf, Oracle-based web application made by the vendor CGI. It is a regulatory management software system that includes the following business functions: permitting, compliance, enforcement, remediation, prevention, assistance, planning and invoicing. The MPCA and MNIT worked with CGI to expand the basic regulatory functions used in supporting technical assistance, watershed management and tracking, and benefit tracking of the agency's efforts to reduce pollution.

With Tempo Go Live, the MPCA's daily permitting, compliance and enforcement, remediation, watershed and prevention activities now occur in one integrated web-based system. Some 750 agency staff use this new system to more effectively manage their daily work. A significant part of Tempo Go Live was the creation of nine new online services and the redevelopment of four existing services that allow outside users to submit information. About 6,900 currently registered online-service users have completed more than 34,000 transactions since the first services went live in October 2015. Businesses, government, and partners increasingly expect to be able to do business digitally. With Tempo Go Live, we've taken steps to deliver on that expectation. When customers play a larger role in completing transactions, we get better data and save time. Tempo makes it easier for us to share this data with all Minnesotans.

## Concept

---

Tempo Go Live was critical to MPCA business operations. It enabled the MPCA to centralize and eliminate manual, staff-intensive invoicing. A key win was an upgraded invoicing system that improved online payments and eliminated the manual process of managing paper checks. Now the MPCA's annual fees and permit application fee processes — during which the agency takes in nearly \$25 million — are streamlined, and use modern, digital technologies. To be successful, the Tempo Go Live project team collaborated with the Tempo vendor CGI, the Department of Human Services (DHS) for printer set up, MPCA fiscal and program staff, and MNIT developers to troubleshoot and fix various invoicing issues to meet the MPCA's April 2016 deadline.

To prepare for Tempo Go Live activities, MNIT and MPCA staff along with the vendor, CGI, developed and executed the plan, and moved a newly integrated Tempo system to production. Working in collaboration, the plan considered the technical requirements, but also took into account many of the business needs (when to shut down the old services, what needed to be communicated, etc.). The team determined that it was best to do a dry run first so everyone would understand the level of effort and the time involved in the switch over. The technical staff created a copy of the test environment in June 2015 and worked through the steps to go live.

This effort informed the actual roll out of Release 1, which started with a code freeze in September 2015 and Go Live in October 2015. Checks and balances were identified to make sure server accessibility was turned off during the roll out; the database was backed up, populated, and validated; the integrated systems (including fiscal reporting, document archiving, GIS spatial data processing, and online services) also migrated to the new environment correctly; and servers were turned back on for general access. All systems passed validation testing post rollout before the business went to work. The implementation team used a step-by-step checklist to ensure tasks were completed in the correct order. MNIT and MPCA project teams were updated using an email chain as each step was completed.

Tempo Go Live was successful in large part because MNIT project members were integrated into and represented all facets of the Tempo rollout. There was close partnership between MNIT, the vendor CGI, and the MPCA Change Management team for technical considerations and communication. The Change Management team created a command center manned by MNIT staff and MPCA super-users to field questions and issues. The result was a “quiet” rollout with few-to-no major issues, and the command center ended after one day rather than the planned one week. Additionally, the success of Release 1 built such confidence in the rollout that a command center was planned and executed for only one-half day for the April 2016 Release 2 effort.

Communication plans for the Tempo Go Live project were developed for internal users, as well as external users of new and redeveloped online services. The communications plan included regular updates to staff via email and intranet, brown bag meetings to share updates, updates to leadership to share with teams, large group meetings, trainings, newsletter and website updates, and even poster boards and smaller signs to let people know how to get help when the system was first brought online. The communication plan for staff users included a series of short articles placed in the MPCA’s daily internal all-staff email to educate everyone on the proposed rollout schedule, who to call in the event of problems, and what to expect after the rollout was completed. The development of the robust network of Tempo experts — both by program areas, as well as office location — gave Tempo users multiple options for contacting experts with questions or difficulties. External users of new or redeveloped online services were alerted to potential changes by placement of short articles in various e-newsletters in the months prior to rollout of the new services. Notices were also placed on appropriate webpages across the MPCA’s website to let users know about upcoming changes, and where to call or email questions and comments.

The new system includes these online features: environmental permits; compliance and enforcement for onsite inspections; training and certifications, and tracking of monetary penalties for non-compliance or violations of environmental laws; tracking for remediation/clean-up of pollution from soil, water, and air; environmental reviews of proposed projects; investigation of proposed projects’ environmental impacts to air, water, land, and human health; pollution prevention efforts; and watershed protection tracking.



## Significance

---

The State of Minnesota's Tempo implementation is the first to make use of the breadth of capabilities the system has available and to fully integrate key functions across the entire agency.

The scope of the Tempo initiative impacted all of the MPCA's strategic focus areas: Clean water, air and land to support healthy communities and ecosystems, and a strong economy in Minnesota. As a result of this project, systems and processes that were previously in silos came together. For example, permitting now has a consistent process flow and centralized reporting. Once a permit is in the system, the compliance and enforcement work is performed based on the information there. Online services also tie into the central system and when regulated parties provide their reporting, that information is connected to their permit and is leveraged for federal regulatory reporting as needed. The result is seen as efficiencies in the environmental work, which benefit the citizens of Minnesota and regulated parties, as well as MPCA staff.

Tempo Go Live was a combined effort of MNIT and MPCA staff. MNIT staff helped move to production a significant piece of software that is critical to the MPCA's daily work. The team delivered two successful production releases. The first effort in October 2015 served as a pilot for how to prepare and execute large-scale technology implementations. The second release in April 2016 was confirmation that the process works, and is now used for all our joint projects – both the technical parts and the communication. This team transformed the way the MPCA looks at product releases and how to work with IT resources.

The MNIT staff partnering with MPCA represented all areas, from network infrastructure to developers, and database architects to project management staff. They successfully built a production environment, which integrated the new systems within the existing environment, database and online services. Project members created a comprehensive implementation and deployment plan, which was carefully followed, to deliver the two releases and the follow up maintenance builds without a hitch. The business was only down a short time to make the switch from legacy to new, and subsequent builds now take hours instead of days to complete. The team worked closely to test, log, retest and validate over 1,800 bug tickets. This model set up a process that includes a task list, email reporting chains, and communication plans for production go live efforts.

One of the MPCA's strategic goals is to deliver data and services in a timely, transparent and reliable fashion. Doing so relies on developing and maintaining high-quality, accessible data systems. The well-coordinated rollout of the Tempo data management system goes a long way toward meeting this goal. Not only does the Tempo system allow the agency to make new online services available to its stakeholders, it also allows the agency to make this data available to others through a number of web-based applications.

This initiative supports security and cost effectiveness by enabling older, isolated systems to be retired and replaced by a modern, comprehensive system that complies with State of Minnesota security standards. By decommissioning the older systems, technology support can focus on the modern system, and there is cost savings from no longer needing to support those systems. Adding more online services

meets the needs of Minnesotans and the MPCA by leveraging technology to make processes more efficient and cost effective.

Successful implementation of the system also supports a statewide call for innovation and improved efficiency. Collapsing nearly a dozen legacy database systems into a single, more modernized one was a clear demonstration of agency's willingness to use improved technology to improve efficiency.

## Impact

---

The Tempo initiative impacted all of the MPCA's work – from permitting, enforcement and assistance to contracting and fiscal management. Rather than working in multiple systems and using email as a means to make assignments, the agency now has one system that collects its data and uses a workflow model to prioritize and share work, thereby eliminating paper.

Before Tempo Go Live, there were only a few services available online. With Tempo Go Live, the number of online services has doubled, with more planned going forward. This digital transformation will continue to improve the efficiency and effectiveness of interactions between the public, regulated parties and the MPCA. For example, moving inspections to a paperless, digital technology means that the information is available in real-time so that both the regulated parties and the agency have the tools to know immediately when actions need to be taken.

Since Tempo Go Live Release 1 in October 2015, the agency has created over 7,000 feedlot and tank transactions, 6,400 applications, 3,300 inspections, 3,900 incidents, 2,500 licenses, 500 enforcement actions, and 700 projects in the new system. The nine new and four redeveloped online services bring over 6,900 registered customers, and nearly 30,000 transactions to the Tempo database, saving significant data entry each month. Remediation, environmental review, prevention and assistance, and watershed management finally have better, standardized methods to store data and conduct work. Because the agency's various programs share the one system, it is much easier to get a comprehensive picture of what is taking place at a given location within the state. The new view will be used to build better reporting tools for the State of Minnesota, and to push information out to the public. Transparency at the project level will be improved.

The MPCA believes it now has the foundation in place to move to a truly digital system for receiving data and requests from regulated parties and partners, and seeking input from citizens. Our agency partners have an exciting future ahead thanks to this project that modernizes our systems that protect and improve the environment, and enhance human health for all Minnesotans.