Citycare - Helping Meet & Exceed: Ontario's **Minimum Road Maintenance Standards**

In today's rapidly changing municipal landscape, maintaining compliance with Ontario's Minimum Maintenance Standards (MMS) has become increasingly challenging.

Staffing shortages, high turnover, and limited training resources often stretch field teams to their limits, while overburdened managers struggle to coordinate patrols & inspections across hundreds of laneway miles and thousands of critical assets.

In this climate, it's no longer sensible—or even feasible—to rely on outdated, purely manual processes. Municipalities need an automated, self-documenting system that not only optimizes road and infrastructure safety, but also preserves a robust audit trail for legal defense in MMS-related lawsuits.

Citycare stands alone in delivering this next-generation solution. Leveraging our **revolutionary smartphone app** and the **CoPilot companion cradle**, our technology uniquely enables both **active** and **passive** road patrols and asset inspections—seamlessly blending the efficiency of drive-by validations with the thoroughness of scheduled, in-person checks.

By automatically linking each road infrastructure asset to its relevant road class, Citycare takes the guesswork out of compliance intervals and inspection scheduling. No other product on the market today provides this level of real-time intelligence, ensuring that municipalities maintain precise, continuous asset oversight—even amid staff turnover, training constraints, and limited managerial bandwidth.

The result is a streamlined, cost-effective, and legally robust approach to municipal asset management that meets the demands of modern governance head-on. This document contains 4 Citycare features which allow municipalities in Ontario to meet & exceed Ontario's provincial Minimum Maintenance Standards regulation.

- Road & Sidewalk Patrol
- Asset Inspections & Maintenance
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Road & Sidewalk Patrol

1. Introduction

Citycare's **Patrol Compliance** feature is designed to help municipal leaders and operational staff achieve continuous compliance with Ontario's Minimum Maintenance Standards (MMS) without the burden of separate, dedicated patrols.

At the heart of this capability is a dynamic "heat map" of all roads in the municipality, highlighting which segments are coming due for inspection and when.

2. How Patrolling Works

By simply driving through the city with the Citycare app active, all employees which are deemed qualified will automatically log official MMS compliant patrol passages.

Color Coding for Due/Overdue Patrols

- **Not highlighted** – More than 5 days remain until the next required patrol
- **Blue** – Road segment requires patrol in 3-5 days
- **Orange** – Road segment requires patrol in 1-3 days
- **Red** – Road segment requires patrol in less than 1 day (critical)

These color codes appear on the driver's in-app map at all times when performing trips within the Citycare app, granted they are not performing any service routes.

2.1 Automatic Inspection Logging

- Any time a qualified driver in a qualified vehicle travels on a road segment, the system recognizes their passage as an official patrol.

- This process is "hands-off"—drivers don't need to start or stop a route or log separate patrol details. If all criteria are met (driver credentials, vehicle type, and no incompatible task selected), the patrol is automatically recorded.

2.2 Inspection Types

Citycare manages and displays various **road infrastructure items**, ensuring compliance with Ontario's Minimum Maintenance Standards (MMS) in both inspection types:

- **Passive** (simply driving by)
- **Active** (performing a deliberate inspection & completing digital form)

2.3 Ongoing Compliance

- Because every trip becomes an opportunity for inspection, municipalities can drastically reduce or eliminate the need for staff dedicated solely to patrol duties.

- Managers can see which streets are nearing their next inspection deadline (orange or red). They can either alert available staff to re-route or deliberately schedule a short detour to cover those critical segments.

2.4 Real-Time Heat Map

- On-screen road colors continuously update, showing which streets are close to overdue.

- Drivers can easily see if a nearby segment or asset is about to go overdue, making it simple to spontaneously adjust their route and ensure compliance.

3. Reporting Observations on Patrols

Experience a ground-breaking shift in how road issues are reported with **one-tap observation** capture.

With just a single tap on the Citycare app, municipal staff instantly record vital details—voice memos, real-time video clips, and location data—without diverting attention from the road.

This streamlined process not only ensures accurate, immediate logging of concerns like potholes or road debris, but also boosts safety by minimizing driver distractions.

It's a seamless way to keep communities well-maintained and compliant with regulations, all through the power of effortless, on-the-go reporting.

One-Tap Capture

- The driver simply taps "Observation," then speaks their note.

- The system automatically converts audio to text, logs the observation type, date, time, and exact location.

Video Clip

- The Citycare app automatically attaches up to 30 seconds of front-facing camera footage (prior to the tap) for context, creating a visual record of the situation.

Task Creation & Triage

- An observation generates a task within Citycare for the operations coordinator.

- All supporting evidence (audio clip, transcript, video snippet) is centrally stored for review and follow-up.

Categorized by MMS Requirements

- Each observation is assigned a category (e.g., potholes, snow accumulation, shoulder drop-off, sidewalk discontinuities, etc.) aligned with MMS criteria.

Observation Types

By automatically assigning each observation to one of these categories (and capturing relevant data such as location, time, and video evidence), Citycare's Observation feature expedites reporting and resolution—ultimately improving road safety and service quality for residents.

- **Accurate Issue Tracking**: Each category aligns with MMS definitions, ensuring every reported issue directly maps to regulatory requirements.

- **Streamlined Triage & Response**: Observations can be quickly sorted and prioritized by staff based on issue type.

- **Enhanced Liability Protection**: Consistent categorization of maintenance issues helps demonstrate compliance with MMS guidelines.

Below is a clear breakdown of the **Observation Types** aligned with Ontario's Minimum Maintenance Standards (MMS). You can use this list in your business proposal to demonstrate how Citycare categorizes and manages different types of observations.

3.1. Road Surfaces

3.1.1 Weather (Oct 1 to Apr 30)

- Snow Accumulation
- Ice Formation

3.1.2 Non-Weather

- Surface Discontinuities (e.g., uneven pavement, major cracks)
- Pothole
- Shoulder Drop-off (shoulder edge higher or lower than main road)
- Cracks in Road
- Debris (fallen branches, materials, or obstructions on the roadway)
- Bridge Deck Spalls (deterioration in the surface of bridge decks)
- Laneway Markings (faded, missing, or unclear lane markings)

3.2. Road Infrastructure

- Luminaires (streetlight issues, burned-out bulbs)
- Signs (missing, damaged, or faded signage)
- Traffic Control Signals (malfunctioning or obscured traffic lights)

3.2.1 Road Infrastructure Types

Citycare supports the tracking and maintenance of a range of infrastructure assets that fall under Ontario's MMS. These include (but are not limited to):

3.2.1.1 Luminaires (Streetlights)

- Individual streetlight poles, bulbs, and fixtures.
- Can store details like wattage, bulb type, installation date, maintenance history, and GIS coordinates.

3.2.1.2 Signs

- Regulatory signs (Stop, Yield, Speed Limit), warning signs (curve ahead, slippery when wet), and informational signs (directional, parking).
- Metadata includes sign type, reflectivity rating, installation date, and current condition.

3.2.1.3 Traffic Control Signals

- Traffic lights (vehicle and pedestrian signals), advanced green turn signals, crosswalk signals, etc.
- Each signal can be managed as a separate asset, with details like timing plans, controller cabinet info, and maintenance logs.

3.2.1.4 Guardrails & Barriers

- Metal or concrete barriers along roadways or bridges.
- Helps municipalities monitor protective measures on roads.

3.2.1.5 Bridge & Overpass Structures

- Bridge decks, expansion joints, and guardrails integrated into overpasses.
- Useful for tracking deck conditions (e.g., spalling, cracks).

3.2.1.6 Lane Markings

- While often considered part of road surfaces, some municipalities choose to treat them as separate infrastructure elements for tracking repaint or reflective-tape upgrades.

3.3. Sidewalks

3.3.1 Weather (Oct 1 to Apr 30)

- Snow Accumulation
- Ice Formation

3.3.2 Non-Weather

- Surface Discontinuities (cracks, heaving, or unevenness)

3.4. Bicycle Lanes

3.4.1 Weather (Oct 1 to Apr 30)

- Snow Accumulation
- Ice Formation

3.4.2 Non-Weather

- Surface Discontinuities (potholes, cracks, or obstructions within bicycle lanes)

4. Benefits

The **Patrol Compliance** feature for Citycare represents a major step forward in how municipalities meet Ontario MMS patrol requirements.

Turning every vehicle trip performed by qualified on-duty personnel while on-route to regularly assigned work locations into valid patrols significantly reduces the managerial burden of scheduling dedicated patrol teams.

Coupled with the effortless “Observation” reporting tool, it empowers municipal staff to proactively identify and address issues—ensuring a safer, more efficient service for residents while maintaining robust compliance with provincial standards.

This solution will help transform your municipality’s approach to road inspections—making compliance continuous, cost-effective, and easy to manage.

Reduced Operational Costs

- Eliminates the need for full-time, dedicated patrols.
- Maximizes staff utilization—any qualified employee's daily travel can fulfill patrol requirements.

Enhanced Compliance & Liability Protection

- Automatic, frequent road coverage means the municipality is well-positioned to meet or exceed MMS standards, reducing liability risks.
- Full digital records of patrol passage and inspection activities simplify audit trails.

Real-Time Visibility & Simplified Planning

- Heat map functionality gives managers an at-a-glance understanding of upcoming deadlines for patrols.
- Red segments highlight urgent needs; managers can prioritize tasks immediately to maintain compliance.

Faster Issue Reporting & Response

- The "Observation" feature streamlines reporting of road hazards, sidewalk concerns, and other infrastructure issues.
- Immediate creation of tasks with accompanying evidence allows quicker triage and response, improving public safety.

Improved Employee Engagement & Safety

- Minimal disruption to employees' routine—they simply drive while the app passively logs patrols.
- Hands-free observation capture ensures safety and compliance with distracted driving regulations.

(Note: The final scope depends on each municipality's asset management strategy. Citycare is flexible in defining any infrastructure item for tracking and compliance.)

Asset Inspections & Maintenance

Citycare's **Asset Inspection Manager** expands on Citycare's revolutionary approach, seamlessly blending **active** (in-person) and **passive** (drive-by) inspection methods, while automatically tracking compliance intervals for every roadway infrastructure asset.

1. Introduction

Citycare's **Asset Inspection Manager** allows road managers to centralize all of their road infrastructure assets (e.g., signs, luminaires, traffic signals) in one digital platform. If this information is already available in other GIS tools, Citycare allows for easy integration with a variety of these systems and also has very simple to use import tools.

Once entered in Citycare, each asset is automatically assigned to its appropriate **road class** based on its proximity to the road it is on.

Citycare automatically assigns the inspection interval for each asset in a way that meets or exceeds Ontario's Minimum Maintenance Standards (MMS).

Going forward, Citycare automatically generates inspection tasks ahead of deadlines, helping busy municipal teams stay on top of required checks and document every step for liability protection.

Here are some of the most valuable capabilities which which only Citycare's can provide when it comes to ensuring Roadway infrastructure and assets are inspected and maintained at minimal MMS standards and beyond, at the lowest possible operating costs :

1.1 Reduced Redundancy

- By merging "drive-by" inspections with staff's daily activities, municipalities lower costs and avoid sending out separate crews solely for routine checks.

1.2 Enhanced Visibility

- Managers get at-a-glance maps showing which assets are approaching inspection deadlines or flagged for issues, enabling proactive resource allocation.

1.3 Improved Public Safety

- Prompt detection and reporting of defective signs, signals, or lighting ensure safer roads.
- Swift identification of hazards helps fulfill the municipality's legal duty and public service responsibilities.

1.4 Future Planning & Budgeting

- Historical inspection data, combined with maintenance and repair records, inform long-term capital planning (e.g., budgeting for replacements or major overhauls).

By extending Citycare's capabilities to **road infrastructure assets**—and capturing both **passive** (drive-by) and **active** (scheduled) inspections—the platform ensures continuous compliance with MMS standards.

Municipalities gain a powerful, unified system to track each streetlight, sign, or traffic control signal's condition, seamlessly capturing inspections and observations in real time. This proactive, data-driven approach leads to **improved safety, reduced liability, and better operational efficiency** for your municipality.

2. How Assets & Inspections Works

2.1 Unified Asset Registry

- Municipalities can upload or create an inventory of each asset (type, location, installation date, etc.).

- Citycare maps these assets onto the road network, linking them to the adjacent **road class** (1–5).

2.2 Inspection Intervals by Road Class & Asset Type

- Citycare factors in **road class** and **asset type** (e.g., a traffic signal vs. a streetlight) to determine the inspection frequency.

- For example, assets on higher-class roads may require more frequent checks or different forms than those on lower-class roads.

2.3 Integration with Other Modules

- **Timekeeper**: Only on-duty staff receive notifications for active inspections.

- **Road Patrol Compliance**: Drivers performing a road trip can also passively inspect nearby assets.

2.3. Scheduling & Task Generation

2.3.1 Timed Alerts & Notifications

- Once Citycare calculates the due date for the next inspection, it automatically **assigns a task** to the relevant user or team.
- Managers can configure lead times (e.g., 7 days before an inspection is due) to ensure staff aren't caught off-guard.

2.3.2 Round-Robin or Role-Based Assignment

- If multiple users are qualified to inspect an asset type, tasks can be distributed evenly (round-robin) or based on specializations (role-based).

2.3.3 Escalation & Reminders

- If an inspection task nears its due date without action, Citycare sends escalating notifications or reassigns it to a fallback user to avoid non-compliance.

2.4. Inspection Types: Active

2.4.1 Scheduled

- When a more thorough inspection is required (e.g., monthly sign reflectivity checks, annual traffic signal timing calibration), Citycare can generate a **task** or **checklist** for each asset.

- A qualified Citycare user, physically present at the asset, completes a detailed **inspection form** specific to that asset type (e.g., reflectivity test for signage, operational test for traffic signals).

2.4.2 Unscheduled

- Active inspections may also be required due to a trigger caused by an “Observation” reported during a passive route patrol event (e.g., a driver flags a damaged sign).

2.4.3 Real-Time Updates & Condition Reporting

- During active inspections, users can record asset conditions, attach images, and submit any urgent maintenance requests on the spot.

- For example, if a sign is found faded, a failed inspection form can then automatically trigger the creation of a task which can then be triaged and dispatched by operations managers at a future time in Citycare.

2.4.4 Centralized Logging & Audit Trail

- All findings, timestamps, user IDs, and notes are saved in the asset history, supporting MMS audit requirements and internal oversight.

2.5 Passive Inspections

2.5.1 Automatic Logging

- Passive inspections are automatically logged when a qualified driver passes the asset while performing a route in Citycare.

- As a qualified Citycare user drives along a route, the system detects when they pass within a set proximity of an infrastructure item.

- This proximity-based “drive-by” can be used to **automatically log** an inspection event, capturing date, time, and the driver’s ID.
- This approach eliminates the need for dedicated crews to revisit assets that can be reliably monitored through normal daily travel.
- Reduces staffing pressures while maintaining near-constant oversight.

2.5.2 Compliance Benefit

- Each drive-by event refreshes the asset’s “last inspected” date, ensuring real-time compliance tracking for managers.
- Helps ensure municipalities meet MMS requirements for routine checks without needing dedicated inspection-only routes.

- Any anomalies or observed issues can be flagged (e.g., “Observation” feature in the app) for follow-up tasks.

2.5.3 Minimal User Effort

- If no issues are reported (no “Observation” raised), the asset is deemed inspected and its **inspection interval timer resets**.
- The driver doesn’t have to stop or manually mark each asset. Citycare handles the tracking, so long as the driver meets criteria (qualified driver, correct vehicle, no conflicting route type, etc.).

2.6 How Assets appear on a Driver’s Map

2.6.1 Layered Map View

- Citycare displays each infrastructure asset as an icon or label on the in-app map.

- Users can toggle on/off specific layers (e.g., “Streetlights” or “Signs”) for clarity.

2.6.2 Real-Time Status Indicators

- Each asset can be color-coded or flagged based on inspection status or upcoming maintenance deadlines.

- Example: A streetlight due for inspection in under a week might appear with a yellow highlight.

3. Conclusion on Assets & Inspections

3.1 Real-Time Insights for Managers

- Managers can see **which assets** are coming due for inspection in the next few days (or are already overdue).
- A color-coded map highlights hot spots—red for overdue, yellow for coming due soon, etc.

Comprehensive Reporting

- Generate on-demand or scheduled reports to show **inspection history**, pending tasks, and completion timelines.
- Ideal for internal audits, council presentations, or legal inquiries.

Mobile & Web Accessibility

- Whether in the office or out in the field, managers can access the Citycare dashboard on desktop or mobile devices, always having up-to-date asset status at their fingertips.

5.2 Operational & Strategic Advantages

Staff Efficiency

- Offloads repetitive inspection tasks to passive drive-by events, freeing specialized inspectors for higher-value or urgent duties.

Reduced Training & Turnover Impact

- Clear, automated workflows require minimal training.
- Detailed forms and prompts guide even newer employees to correctly log inspections.

Holistic Road Network Care

- Citycare aligns **road surfaces** and **road infrastructure** management in a single system.
- Ensures consistent oversight of **all** municipal assets, from signage to pavement markings.

Cost-Effective

- Fewer dedicated patrols or separate data entry processes save significant labor and administrative costs over time.

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5.3 Ensuring MMS Compliance

Interval Management

- Each asset class (signs, luminaires, traffic signals, etc.) can be assigned **minimum inspection intervals** in Citycare, reflecting MMS guidelines or local policies.
- Citycare automatically notifies managers and relevant staff when an item is nearing or past due for inspection.

Digital Audit Trail

- Passive and active inspection logs create a comprehensive digital trail that can be exported or referenced during compliance reviews.
- If a claim arises (e.g., a malfunctioning traffic light was cited in an accident), the municipality can demonstrate up-to-date inspections.
- Each inspection—passive or active—captures a **time-stamped** record of who performed the check and the asset's condition.
- In the event of a lawsuit, the municipality has clear documentation demonstrating adherence to **MMS** guidelines.

Integrated Reporting

- Observations collected passively or actively can be categorized under MMS-compliant types (e.g., signage damage, lighting outage) to streamline triage and repair processes.

Adaptable to Regulatory Changes

- If Ontario updates MMS intervals or adds new asset categories, Citycare can be quickly configured to match.

Proactive Maintenance

- Early detection of asset issues (e.g., damaged signs, flickering streetlights) prevents safety hazards from escalating and reduces incident-related liability.

5.4 In Summary

Asset Inspection Manager is a powerful, automated solution that revolutionizes how municipalities track and maintain vital road infrastructure.

By binding assets to their respective road classes and streamlining both **active** (form-based) and **passive** (drive-by) inspections, Citycare ensures **continuous compliance** with MMS while reducing operational burdens.

Managers benefit from real-time visibility, automated task scheduling, and a robust audit trail—delivering safer roads, legal peace of mind, and a more efficient use of municipal resources.

Weather Observation Newsfeed

Under Ontario's MMS, weather verification is a **core requirement** for municipalities to **proactively identify and respond** to winter conditions (snow and ice) on roads, sidewalks, and other infrastructure.

We're here to make sure you effortlessly comply with the MMS weather-related requirements almost as a background task, seamlessly ensuring rock solid record-keeping for municipal staff.

1. Introduction

Citycare's **Weather Observation** feature makes it easy for municipal teams to maintain **timely, verifiable** weather checks all year long.

Managers can rest assured that no observation window is missed as they can customize who receives notifications to report the weather observation at any time, and assign fallbacks which can escalate all the way back to them 24/7.

This approach ensures robust compliance with Ontario's MMS while optimizing daily operational workflows.

Incorporating **Weather Observations** into your Citycare usage empowers your municipality to meet MMS weather-monitoring standards effortlessly, reducing the risk of non-compliance, all while delivering a straightforward user experience for staff.

Its proactive approach makes sure your city stays ahead of weather-related maintenance demands—keeping roads and sidewalks safe, while continuously documenting every step taken to protect residents and municipal interests.

By keeping **systematic records** of these checks and using them to inform timely road maintenance actions, municipalities uphold their responsibilities, **reduce liability risks,** and maintain safer travel conditions for the public.

2. How Weather Observations work

The **Weather Observation Newsfeed**, emphasizing its **newsfeed-style interface** that promotes both regulatory compliance and collaborative decision-making among municipal teams.

This approach transforms mandatory weather verification into a **collaborative, real-time conversation**, ensuring municipalities stay aligned with MMS requirements while efficiently coordinating across all of their relevant employees around ever-changing weather conditions.

2.1 Social-Style Interface for Collaboration

- **Familiar Feeds**: The Weather Observation feature functions like a Facebook-style feed, allowing users to **post updates** and observations in a simple, familiar format.

- **Real-Time Dialogue**: Team members can read and comment on each post, **share insights**, or attach relevant data (e.g., radar screenshots, weather service links) in one central location.

- **Continuous Thread**: The feed displays all weather-related posts chronologically, giving everyone a quick way to **catch up on recent conditions** or review past discussion threads.

2.2. Compliance with MMS Weather Requirements

- **Timely Prompts**: Citycare automatically prompts users to **submit weather verifications** as frequently as required under Ontario's MMS (e.g., every 8 hours during winter).

- **Proof of Verification**: Each post includes **time-stamped entries** and, if desired, attachments (screenshots, voice notes) that fulfill MMS documentation guidelines.

- **Audit-Ready Records**: Having all weather checks consolidated in a single, traceable feed makes it far easier to demonstrate compliance in the event of an inquiry or legal review.

2.3 Centralized Weather Communication

- **Consolidated Decision-Making**: Rather than scattering weather updates across emails, phone calls, and chat apps, staff now **collaborate directly** in Citycare's newsfeed.

- **Visibility for All**: Operations managers, field staff, and other relevant stakeholders can **see the same information** at the same time, helping eliminate miscommunication.

- **Multi-Department Access**: Public works, road maintenance, parks, and other teams can be given access, fostering a **cross-department dialogue** around weather impacts and responses.

2.4. Historical Context & Learning

- **Post Archive**: All weather-related posts remain archived in the feed, allowing users to **review past events** (e.g., significant storms, freeze-thaw cycles) to plan future actions.

- **Best Practices**: Managers can identify trends and **extract lessons** from previous weather scenarios, improving long-term operational efficiency (e.g., how much salt was needed, timing of plowing).

- **Ongoing Improvement**: Over time, this collective knowledge base helps refine **weather response strategies**, leading to better resource allocation and safety outcomes.

2.5. Seamless Integration with Citycare Modules

- **Timekeeper & Assignments**: Only on-duty staff (as tracked by Timekeeper) are prompted to post observations, reducing irrelevant notifications.

- **Asset Management & Road Patrol**: Weather conditions can correlate with increased checks on infrastructure or roads, making it easy for managers to **coordinate tasks** directly from the feed.

- **Mobile-Friendly**: Like other Citycare features, the Weather Observation feed is accessible on any smartphone or tablet, ensuring **real-time updates** wherever staff are located.

3. Benefits of the Weather Observation Newsfeed

3.1 Flexible Scheduling & Assignments

3.1.1 Manager-Defined Schedules

- Managers can **select specific users** (e.g., road supervisors or qualified employees) to perform weather observations at designated days/times.

- Assignments can be tailored to staff shifts, road networks, or any operational constraints.

3.1.2 Fallback Assignments

- If the primary assigned user misses a scheduled check, the system automatically **prompts a fallback user** (pre-assigned by the manager) to submit the observation.

- This ensures that every required observation is completed, even if someone is unexpectedly unavailable.

3.2 Automated Notifications & MMS-Compliant Intervals

3.2.1 Push Notifications

- The Citycare app sends **automatic push notifications** to the assigned user at the scheduled interval, reminding them to enter a weather observation.

- If the user does not acknowledge or complete the entry, the system will notify the designated fallback user.

3.2.2 Seasonal Frequency

- **Every 8 hours (or more frequently, if needed) from October 1 to April 30**
  Aligns with stricter winter monitoring requirements.

- **Once per day from May 1 to September 30**
  Provides sufficient regular checks in non-winter months while reducing administrative burden when weather risks are lower.

3.3 Streamlined Observation Entry

3.3.1 Evidence Capture

- Users can **attach screenshots** of weather forecasts from their preferred app.

- They can optionally **record a short audio note** or add a text comment to highlight local conditions or forecasts.

3.3.2 Automatic Logging

- Each observation is automatically time-stamped and geo-tagged, making it easy to retrieve for audits or internal reviews.

- Managers can view a consolidated weather observation log in real time to stay updated on conditions and compliance.

3.4 Compliance & Operational Benefits

3.4.1 Continuous MMS Compliance

- Regular, documented weather checks ensure municipalities meet or exceed Minimum Maintenance Standards for weather monitoring.

- Clear records reduce liability risks and demonstrate proactive municipal management.

3.4.2 Reduced Managerial Oversight

- Automated scheduling and fallback assignments minimize the need for hands-on coordination.

- Push notifications keep everyone on track without constant reminders.

3.4.3 Better Resource Allocation

- Consistent, verified weather data informs decisions around snowplowing, salting, or other proactive maintenance.
- Historical records allow for data-driven planning and improved service delivery.

4. Weather Observation Newsfeed Conclusion

Citycare's **Weather Observation Newsfeed** transforms mandatory weather checks into a **collaborative, real-time conversation**, ensuring municipalities stay aligned with MMS requirements while efficiently coordinating operations around ever-changing weather conditions.

Time & Attendance

Below is a concise yet thorough description of **Timekeeper**, Citycare's Time & Attendance management capabilities that streamlines and enhances real-time workforce visibility.

1. Introduction

- **Centralized Time & Attendance**: Timekeeper allows Citycare users to **start** their workshift, **record breaks**, and **end** their workshift—all within the Citycare app.

- **Real-Time Workforce Visibility**: Operations managers can view, at a glance, who is currently on duty, on break (until when), and how much time is left in each user's shift.

2. How Time & Attendance works

This section provides a step-by-step guide to using the Timekeeper feature in Citycare. With a few taps, employees can accurately log their work shifts and breaks, while managers gain real-time visibility over staffing status and availability.

2.1 Shift Start

- **One-Tap Clock-In**: Employees tap "Start Shift" to begin their workday.
- **Automatic Logging**: The system immediately records the date, time, and user ID.
- **Workforce Dashboard Update**: Each clock-in triggers an update in Citycare, displaying who's on duty.
- **Error Prevention**: This simple process helps avoid missed punch-ins or manual errors.

2.2 Breaks

- **Break Management**: Users tap "Start Break" and "End Break" to track breaks without paper logs.
- **Timing & Status**: The system records the break start time and sets status to "On Break."
- **Optional Break Duration**: Users may enter a planned break length; Citycare automatically ends the break at that time.
- **Manual Return**: If no duration was set, tapping "End Break" reactivates the user's availability in the system.

2.3 Shift End

- **One-Tap Shift Closure**: Tapping "End Shift" finalizes that day's time log.
- **Immediate Status Update**: Users become "Off Duty," removing them from active task assignment.

- **Accurate Time Capture**: This ensures complete time and attendance accuracy for payroll and compliance.
- **Overtime Safeguard**: Ending the shift on time prevents accidental overtime or missed punch-outs.

3. Time & Attendance Advantages & Benefits

3.1 Live Dashboard

- **Who's On Duty**: Managers see each employee's real-time status—on shift, on break, or off duty.

- **Shift Countdown**: A live display shows how many hours/minutes remain in each person's shift.

- **Location Insights**: If location sharing is enabled, managers can view where each active user is.

- **Instant Resource Allocation**: With a quick glance, managers identify who can take on new tasks or may need relief soon.

3.2 Notifications & Alerts

- **Missed Clock-Out Alerts**: The system reminds users if they forget to end their shift or surpass break duration.

- **Overtime Thresholds**: Managers receive configurable alerts when an employee is approaching or exceeding scheduled hours.
- **Automatic Escalation**: If a user remains on break too long, Citycare can notify a supervisor to check in.

- **Proactive Management**: These alerts help prevent staffing gaps, reduce unauthorized overtime, and improve overall efficiency.

3.3 Accurate Payroll & Compliance

- Eliminates paper timesheets or separate tracking systems, reducing the risk of human error.

- Provides an **audit-ready** record of all hours worked for each employee, supporting labor law compliance.

3.4 Real-Time Resource Allocation

- Managers can **instantly identify** who is active and available for urgent tasks, improving response times to on-demand requests (e.g., snow clearing, emergency repairs).

- The system streamlines on-the-fly scheduling by focusing on those who are already clocked in and not on break.

3.5 Seamless Integration with Citycare Features

- **Weather Observations**: The system knows exactly who is on duty and can send targeted push notifications for weather checks on a **round-robin** basis among qualified users.

- **Patrol Compliance**: Only those who are currently clocked in and driving a qualified vehicle can log official patrol passages.

3.6 Enhanced Workforce Visibility

- Supervisors see all on-duty personnel in real time within Citycare—no separate dashboard or communication tool is needed.

- Less reliance on manual radio or phone calls to confirm availability, freeing up time for higher-priority tasks.

4. Time & Attendance Wrap-up

Timekeeper turns Citycare into a comprehensive workforce management solution by **combining real-time visibility** of who's on duty with **accurate, automated timekeeping**.

It reduces administrative overhead, improves operational agility, and seamlessly integrates with other Citycare features—like patrol logs and weather observations—ensuring the right tasks go to the right people at the right time.

Road & Sidewalk Winter Service Routes

1. Introduction

Citycare's Route Planner automates and optimizes winter service tasks—such as plowing, salting, snow blowing, and snow transportation—across roads and sidewalks.

By tailoring routes to a zone, road class, and service type, Citycare offers a powerful, user-friendly system that reduces operational overhead while ensuring compliance with Ontario's Minimum Maintenance Standards (MMS).

This capability transforms a historically cumbersome task into a streamlined, data-driven process. Then with CoPilot, vehicle operators simply select a route, and they're automatically guided along the most optimal route for them to complete with turn-by-turn navigation to execute each plan, while managers track completion in real time.

This holistic, adaptive approach ensures communities are safer and services are delivered on schedule, empowering municipalities to confidently meet and exceed the stringent standards set by Ontario's MMS—even during the toughest winter weather.

2. Creating Routes

Citycare's Route Planner is designed to make the planning and management of winter snow and ice control operations easier than ever, in 8 simple steps.

2.1 Select Route Type

Citycare begins by allowing users to define the **type of operation** they want to perform. This ensures the system tailors all subsequent settings and route options to the unique demands of winter maintenance or other service categories.

- **Multiple Operation Categories**: Options include *Winter*, *Environmental*, *Sanitation*, and *Patrol*.
- **Focused on Winter Tasks**: When "Winter" is selected, Citycare activates specialized settings for snow and ice control.
- **Clear Differentiation**: Each category has its own parameters and workflow, preventing confusion across different municipal tasks.

2.2 Select Surface Type

Once “Winter” is chosen, users specify whether they’re **servicing roads or sidewalks**. This distinction helps tailor the route plan based on the equipment and methods best suited to each surface.

- **Road or Sidewalk**: Choose “Road” for vehicle pathways or “Sidewalk” for pedestrian areas.
- **Automatic Segmentation**: Citycare identifies and includes only the relevant sections for the selected surface.
- **Equipment Adaptation**: Different vehicles and tools (e.g., wide plow trucks vs. sidewalk plows) can be factored into the route.
- **Streamlined Planning**: Ensures no irrelevant areas are added, saving time and resources during route creation.

2.3 Select Service Type

Next, operators define the **primary service** they intend to deliver—plowing, salting & abrasives, snow blowing, or snow transportation. Citycare uses this information to optimize the route for each specific task.

- **Plowing**: Ideal for clearing snow from roads or sidewalks; Citycare considers the equipment size and capacity for optimal routing.
- **Salting & Abrasives**: Focuses on de-icing treatments; route lengths may adjust for necessary refill stops.
- **Snow Blowing**: These are the routes to be completed at the end of plowing operations, when the snow banks are ready to be blown into transport vehicles.
- **Snow Transportation**: Routes are planned to be filled by snowblowers and transport snow to designated dump sites, prioritizing locations with safety or visibility concerns.

2.4 Select Area

Operators define the **geographic zone** they want to service, letting them pinpoint neighborhoods or districts precisely.

- **Interactive Map Interface**: Users draw or click on the map to highlight the target zone.

- **Flexible Zoning**: Zones can represent standard neighborhoods or unique, event-based areas.

- **Clear Delineation**: Visually distinct boundaries help operators and managers confirm the exact service coverage area.

2.5 Select Road Type

Citycare then filters roads by **class** within the chosen zone, ensuring the route is tailored to meet the **minimum maintenance standards** for each classification.

- **Class-Based Filtering**: From Class 1 (highest priority) to Class 5 (lower priority).

- **Compliance with MMS**: Road classes directly correlate with mandated inspection and maintenance intervals.

- **Operational Efficiency**: The system naturally groups similar-class roads to streamline service routes.

2.6 Make Adjustments

Operators can **fine-tune** the route by adding or removing specific road segments as needed—ensuring the final plan accurately matches ground-level requirements.

- **Map-Based Edits**: Trace or select individual segments to be included or excluded.

- **Multi-Zone Editing**: Managers can layer additional zones or sub-zones to refine coverage.

- **Real-Time Changes**: Citycare updates the route on-screen instantly after edits.

- **Reduction of Redundancies**: Minimizes overlap or missed sections by precisely targeting relevant roadways.

2.7 Plow Position

Once the route is defined, operators specify **plow blade settings** for each segment, enabling more nuanced control over how snow is moved or cleared.

- **Segment-by-Segment Control**: Users can set plow blades up or down, or main vs. auxiliary plows.

- **Optimized Snow Removal**: Different roads may require different plow configurations (e.g., main roads vs. side streets).

- **Reduced Wear & Tear**: Prevent unnecessary blade contact with surfaces that do not require plowing.

- **Accurate Instructions**: The system provides clear, turn-by-turn guidance that includes plow positioning instructions.

2.8 Set Salt & Abrasive Rates

For routes involving **de-icing**, users define how much material to apply per kilometer, ensuring both safety and cost-efficiency.

- **Precise Calibration**: Enter desired rates in kg/km for exact spread control.

- **Material Management**: Helps forecast how much salt or abrasive will be used, preventing stock depletion.

- **Environmental Considerations**: Limits over-application, reducing runoff and ecological impact.

- **Consistency & Quality**: Ensures uniform service quality across the entire route.

2.9 Set Sequence

Citycare guides operators through the **best order** to complete their route, factoring in vehicle capacity, urgency, and MMS priorities.

- **Route Optimization**: Each leg is ordered to minimize backtracking and idle travel time.

- **Vehicle Capacity**: Refill points or dump site visits are strategically placed within the route.

- **Turn-by-Turn Navigation**: Drivers receive clear audio and visual instructions in the Citycare app.

- **Live Adjustments**: If conditions or capacity change, managers can reorder tasks and instantly update the app.

2.10 Save the Route

Finally, once all settings are confirmed, operators **save** the route, making it immediately available to any CoPilot-equipped vehicle in Citycare.

- **Instant Accessibility**: Routes appear in the Citycare app for driver selection with no additional configuration.

- **Shared Visibility**: Managers and team members can see saved routes, ensuring alignment across the operation.

- **Real-Time Completion Tracking**: As drivers follow the route, Citycare logs completed segments automatically.

- **Continuous Improvement**: Historical route performance can be analyzed later to refine strategies and optimize future plans.

By following these steps, municipalities can leverage **Citycare's Route Planner** to create highly efficient, compliant, and adaptable winter service routes—delivering safer roads and sidewalks while meeting and exceeding MMS obligations.

3. Navigating Routes

Citycare's **Turn-by-Turn Route Navigation** allows operators to seamlessly select, follow, and finalize assigned routes, while providing real-time updates and comprehensive completion logs.

Here's how it works;

3.1 Operator Gets in Vehicle

When the operator begins their shift, they enter the vehicle equipped with Citycare's CoPilot device or a compatible smartphone/tablet. This foundational step initiates all subsequent route navigation features.

- **Vehicle & Equipment Check**: The operator confirms that the CoPilot device (or smartphone) is functioning correctly.
- **User Login**: The operator logs into the Citycare app, ensuring all actions are attributed to the correct user.
- **Readiness Confirmation**: Any pre-operational checks (fuel, vehicle condition) are completed.
- **Seamless Integration**: The system is now primed for route selection and real-time tracking.

3.2 Operator Scans the CoPilot or Manually Starts Trip

Next, the operator either **scans** the CoPilot device—automatically linking them to the vehicle—or manually starts a trip within the Citycare app.

- **Instant Vehicle Assignment**: Scanning the CoPilot pairs the operator with the specific vehicle, avoiding confusion about who's driving.
- **Manual Option**: If CoPilot scanning isn't available, the operator can begin the trip by selecting the vehicle in the app.

- **In-App Verification**: Citycare confirms the operator's identity and the vehicle's readiness.
- **Trip Creation**: Once confirmed, the system creates a "Trip" record, capturing date, time, and user details.

3.3 Route Selection

After starting the trip, the operator chooses which **saved route** they intend to complete from a list of available options.

- **Filtered List**: The app displays only routes relevant to the chosen operation type (e.g., Winter Maintenance).
- **Route Details**: Each route includes a name, area coverage, and service type, helping operators pick the correct one.
- **Confirmation Prompt**: Citycare asks for a final confirmation before loading the route.
- **Seamless Transition**: The system instantly prepares the navigation instructions for the selected route.

3.4 Clear Map View

Once the route is selected, Citycare provides an **overview** map that highlights planned paths, key waypoints, and resources.

- **Visual Clarity**: The map outlines every road segment or sidewalk included in the route.
- **Resource Icons**: Salt yards, dump sites, or break locations are marked for quick reference.
- **Zoom & Pan**: Operators can zoom in for more detail or pan out to see the entire coverage area.
- **Immediate Context**: This overview ensures drivers understand the complete scope of the task before moving to the start point.

3.5 Guided to Route Start

Citycare then directs the operator to travel from their **current location** to the route's starting point, ensuring a smooth transition into the official service zone.

- **Initial Navigation**: Turn-by-turn instructions guide the operator to the first road segment in the selected route.
- **Traffic & Conditions**: Citycare can adjust paths if roads are blocked or conditions change unexpectedly.
- **ETA Display**: Operators see how long it will take to reach the route start.
- **Automatic Updates**: If the operator deviates, the system recalculates the path to realign with the planned route.

3.6 Turn-by-Turn Guidance

Upon arriving at the start point, **step-by-step directions** help the operator follow the optimized path.

- **Real-Time GPS**: The app updates constantly to reflect current position, guiding each turn accurately.
- **Role-Specific Interface**: For instance, road vs. sidewalk plowing tasks appear differently on the screen to avoid confusion.
- **Adaptive Instructions**: The system automatically accommodates changes, rerouting as needed if obstacles arise.
- **Clear Notifications**: Visual and audio cues ensure the operator stays on track without distraction.

3.7 Completion Tracking

While moving through the route, **each segment is automatically logged** once serviced, providing a real-time snapshot of progress.

- **Automatic Checkpoints**: When a segment is completed, Citycare marks it “done” and updates the driver’s next turn.
- **Live Manager View**: Managers can see progress on a dashboard, minimizing the need for radio or phone updates.
- **Data Recording**: Time stamps, distances covered, and service actions (e.g., salting rates) are stored for compliance.
- **On-the-Fly Notes**: Operators can quickly add an “Observation” if they encounter road hazards or special conditions.

3.8 End Route

Upon finishing or deciding to stop the route, the operator officially **ends** the navigation sequence, triggering final prompts and record updates.

- **Missed Segments Check**: Citycare asks if any route segments remain uncompleted, allowing the operator to finish or note exceptions (e.g., blocked roads).
- **Optional Notes**: Operators can add remarks about incidents, challenges, or anomalies encountered.
- **Flagging Exceptions**: This step helps identify any required follow-up, such as a separate pass or maintenance request.
- **Route Closure**: The system closes out the event, logging the entire route’s details for future reference or audit.

By following these steps operators can deliver consistent, efficient service on every route.

Real-time updates, automated tracking, and clear end-of-route documentation together ensure both **operational excellence** and **robust compliance** with Ontario’s MMS.

4. Real-Time Status & Reporting

Tracking progress during winter operations is critical to maximizing efficiency and ensuring compliance with Ontario's Minimum Maintenance Standards (MMS). Citycare facilitates **Real-Time Status & Reporting** to offer managers a clear, centralized view of ongoing routes, automatically logs key activities, and generates valuable insights for post-event analysis.

4.1 Progress Updates

A dedicated dashboard provides **live tracking** of every route, enabling dispatchers and managers to quickly identify any gaps or bottlenecks in coverage.

- **Visual Completion Map**: Color-coded segments (e.g., green for complete, orange for in-progress) allow instant recognition of which areas need attention.
- **Instant Redeployment**: Managers can reassign resources on the fly if certain zones are cleared faster than expected.
- **Coverage Visibility**: Any newly reported trouble spots or high-priority areas can be addressed promptly by redirecting available crews.
- **Real-Time Decision Making**: Rapid updates enable informed, data-driven choices throughout the storm response.

4.2 Automatic Activity Logs

Citycare creates **time-stamped, location-tagged** logs for each pass and service action, establishing an indisputable record of compliance and progress.

- **Proof of Service**: Every cleared segment is documented, showing exact times and locations of plowing or salting.
- **Observation Integration**: Staff can flag issues (e.g., ice accumulation, vehicle breakdowns) directly, linking them to the appropriate service log.
- **Digital Paper Trail**: Eliminates the need for manual logs or spreadsheets, reducing administrative overhead.
- **Accurate Incident Tracking**: In the event of disputes, logs clearly illustrate when and where services were performed.

4.3 Post-Event Analysis

After the operation concludes, Citycare's reporting tools compile **detailed metrics** to inform continuous improvement and strategic planning.

- **Performance Reports**: Managers see how long each zone took, the frequency of refill stops, and if multiple passes were needed.
- **Data-Driven Insights**: The system highlights trends (e.g., certain streets consistently requiring extra attention), guiding future resource allocation.
- **Route Optimization**: Historical data helps refine route planning for upcoming events or seasons, improving response time.
- **Operational Transparency**: Clear statistics foster accountability, aiding communication with city officials and residents.

4.4 MMS Compliance & Auditing

All service activities are **centrally documented**, giving municipalities a robust defense and ensuring they meet or exceed regulatory standards.

- **Comprehensive Audit Trail**: Timestamped data and logs demonstrate thorough adherence to MMS guidelines.
- **Reduced Legal Exposure**: Detailed records help cities address liability claims, showing proactive and timely action.
- **Easy Reporting**: Automated exports allow quick sharing of evidence with external auditors or legal teams.
- **Long-Term Trust**: Demonstrating consistent compliance builds public confidence in municipal snow and ice control efforts.

5. Route management & Navigation Summary

Citycare's integrated approach to winter road and sidewalk maintenance stands unmatched for municipalities striving to meet—and exceed—Ontario's Minimum Maintenance Standards.

From the instant a manager plans a route to the moment a driver completes it, Citycare seamlessly manages every step: robust route optimization, real-time turn-by-turn guidance, automatic compliance logging, and post-event analysis.

The system's intuitive design reduces administrative burdens, cuts training time, and streamlines a process that has traditionally been chaotic at best.

By unifying personnel tracking (Timekeeper), asset monitoring (Patrol Compliance and Asset Inspection Manager), and responsive weather data (Weather Observations) within a single platform, Citycare ensures that municipalities not only remain MMS compliant, but also deliver safer, more efficient service to their communities—even under the harshest conditions.

Simply put, there is no other technology on the market today that so comprehensively and effectively tackles winter maintenance operations, giving managers the confidence and proven audit trail they need to safeguard both citizens and the municipality.

Thank you for taking the time to read this material. Please do not hesitate to contact us for any further information.

Sincerely,

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