



#### ABOUT DEIGHTON

Deighton Associates Limited (Deighton) has established itself as one of the world leaders in providing asset management systems and asset management expertise at the strategic, tactical, and operational levels for agencies around the world. Recognized as the premier software product for infrastructure asset management, dTIMS® is used to manage large infrastructure networks in Africa, Asia, Australia, Canada, Europe, New Zealand, and the United States. These infrastructure networks include hundreds of thousands of miles of pavements, thousands of bridges, and millions of wastewater, storm water, and fresh water distribution pipe assets.

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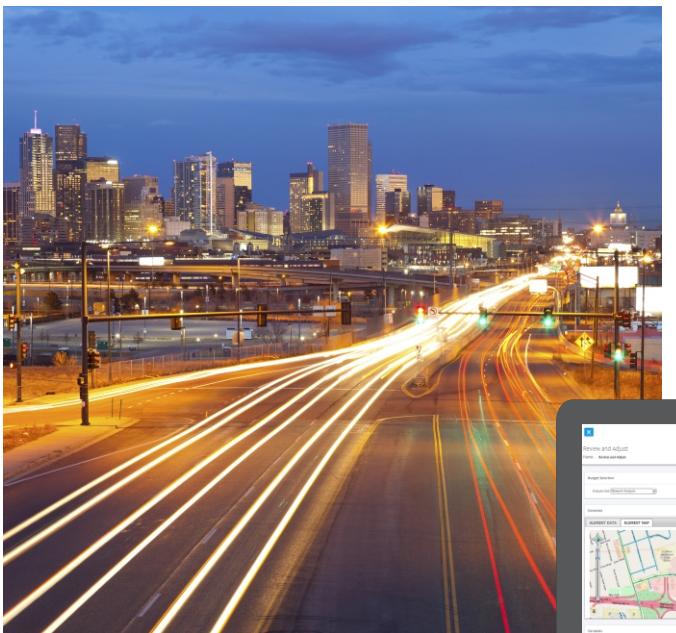
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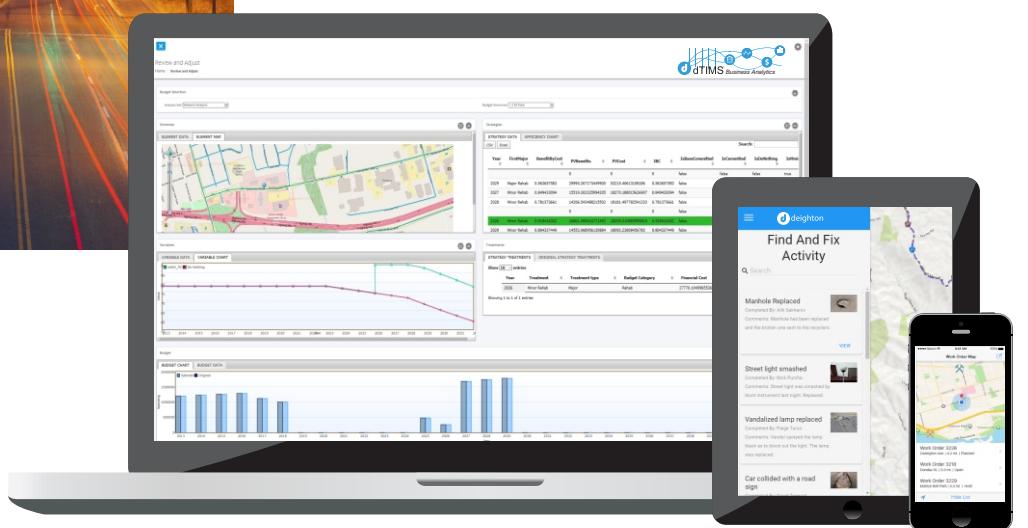
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## INFRASTRUCTURE ASSET MANAGEMENT SOLUTIONS *for a Sustainable Future*

# dTIMS for Infrastructure Asset Management



Today's government agencies are changing the way they do business. Asset management is no longer a siloed approach separated by strategic and operational departments and different asset groups. Strategic recommendations are necessary for planning work schedules. Agencies need a holistic solution that integrates all their assets with strategic recommendations and day-to-day work seamlessly.



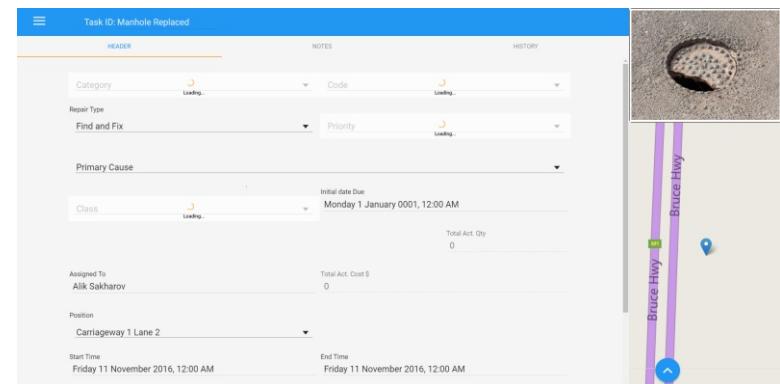
You can use dTIMS anywhere. dTIMS solutions are designed with the way you work in mind. So if you are on a desktop, the web, or a mobile device, we have the solution for you.

## What is dTIMS?

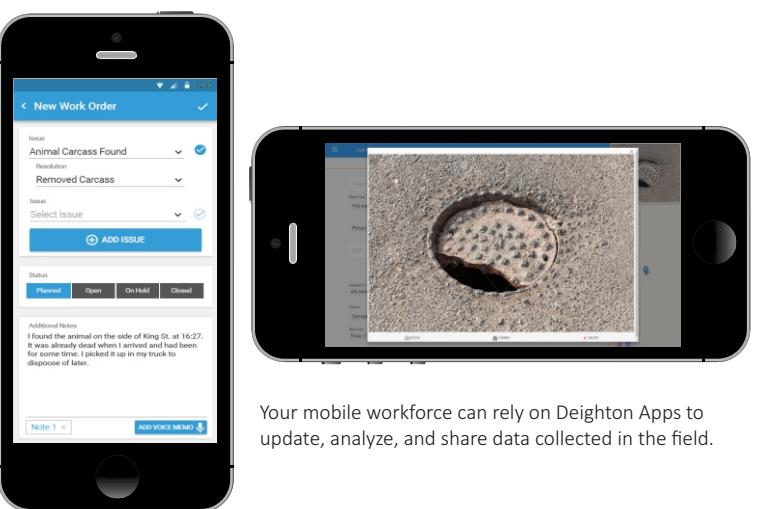
dTIMS (Deighton Total Infrastructure Management System) is a holistic infrastructure asset management system that enables an agency to locate, maintain, rehabilitate, and manage critical infrastructure assets throughout their lifecycle.

dTIMS is comprised of a strategic component, referred to as dTIMS Business Analytics (dTIMS BA) and an operational component, known as dTIMS Operations Management (dTIMS OM). Together, dTIMS BA and dTIMS OM represent the future of smarter asset management. Business Intelligence and Business Mobility leverage your investment in dTIMS.

dTIMS integrates seamlessly with your other existing systems including GIS, CRM, ERP, and Finance. Your applications can talk to each other without complex integrations or customizations.



dTIMS allows you to generate standard, custom, ad-hoc, and map-based reports across your agency to help communicate decisions.



Your mobile workforce can rely on Deighton Apps to update, analyze, and share data collected in the field.

## Customized Data Collection

All of the forms your field staff are required to work with in dTIMS OM can be customized to the way your agency does business. Let's face it, not every agency collects the same data. Since dTIMS OM shares the same asset registry as dTIMS BA, your agency can easily customize data collection forms in the database configuration mode.

Once data has been entered into dTIMS OM, work will be tracked against what was actually done and then fed back into dTIMS BA.

## Field Mobility

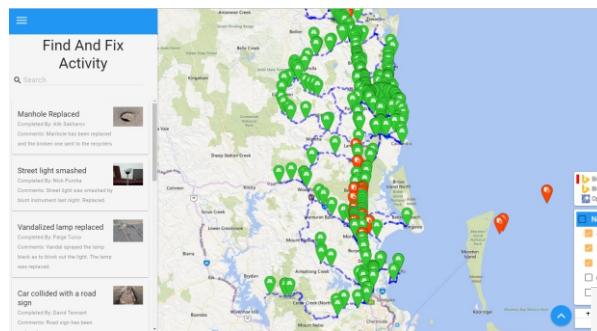
dTIMS mobile apps are designed for field staff. The days of manual worksheets in the field are gone. A tablet or phone is portable and more consistent, and photos or voice recordings are now essential tools for data collection. Staff can capture, analyze, and share work data with their smartphones or tablets.

dTIMS Apps function online and offline. All of our mobile devices will allow you to log, track, and adjust work activities regardless of connectivity.

Your agency gets better decision-making and productivity in the field, and a quick return on investment.



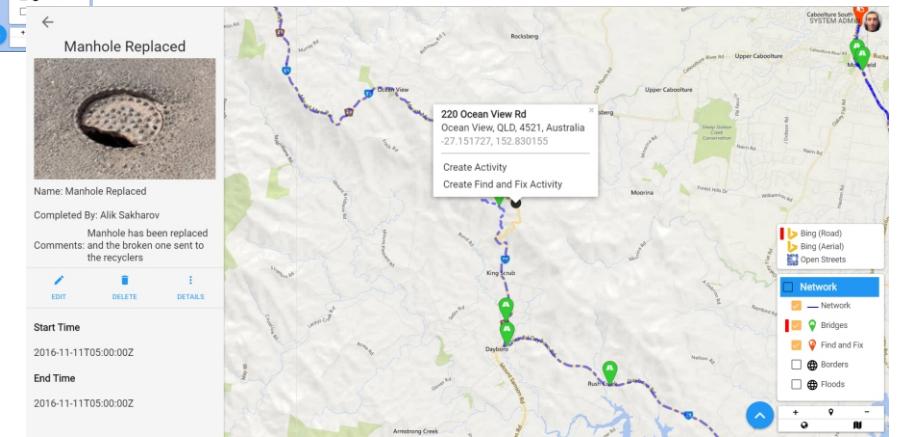
# dTIMS Operations Management



## Manage Your Day-to-Day Operations

Asset management is no longer reserved for LCCA, generating recommendations, and hoping operations completes the work required. Agencies want to use strategic recommendations when developing work schedules. They are also automating the way they perform work orders and trying to find ways to improve efficiencies when working in the field.

dTIMS OM is a fully functional operations management system used to track the operation, maintenance, and disposal of assets. Core features include the ability to schedule jobs (work orders), secure resources (labour, equipment, and materials), record costs, and track relevant information such as the cause of an issue, downtime involved, and recommendations for future action.



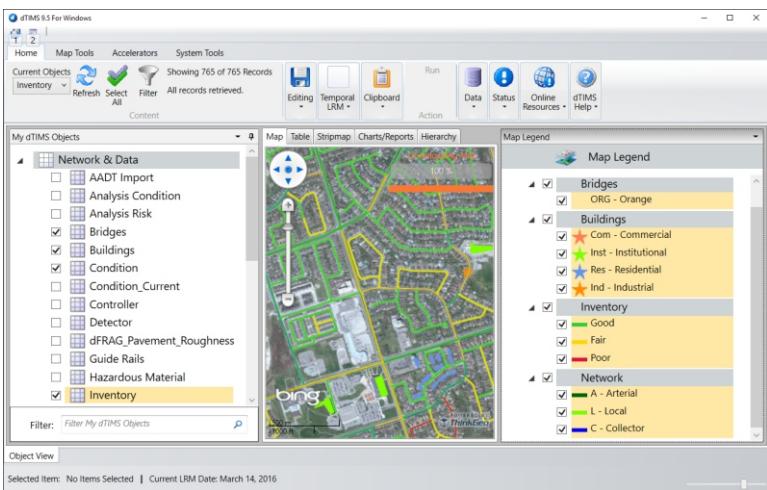
You can drill down into a specific activity using the map.

## dTIMS OM at a Glance

Using dTIMS OM is as easy as opening a browser. All the data and asset information on the asset is at your fingertips. Use the map to drill down into an activity to get more detailed information. Track pertinent information for all resources. See how time and money are being spent on individual assets. It works in real time on any device and covers the full spectrum of operations management.

See when projects are completed or in progress and then bring them into a dTIMS BA recommended program for review and to produce a work plan.

With one unified system, you will be able to learn the system quickly and collaborate more effectively across the agency. And because everyone will have access to the same centralized information, you can make better decisions, faster.

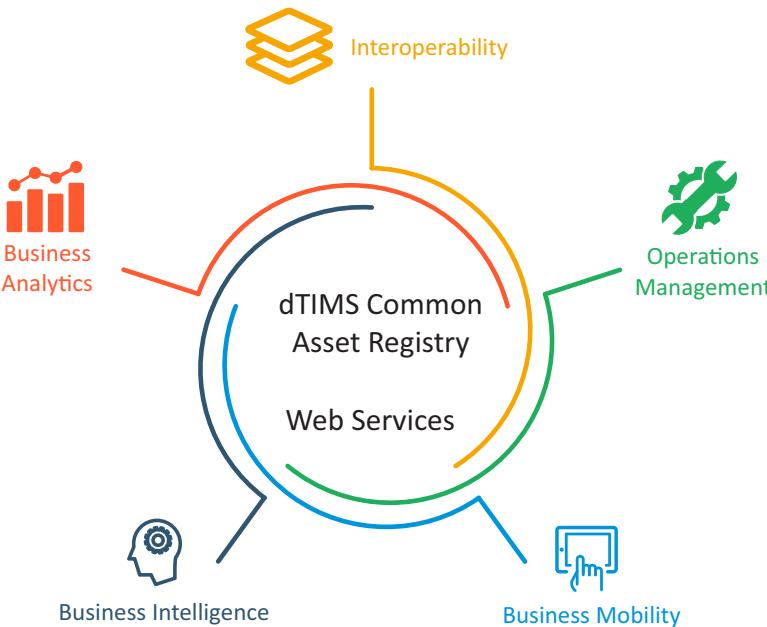


## dTIMS - The Complete Platform

Leading transportation agencies manage their assets from a network and corridor perspective, allowing for resource allocation trade-offs between assets. Incorporating all of your assets into dTIMS is the first step towards using asset management to help optimally manage assets across traditional infrastructure silos.

dTIMS allows you to incorporate all of your agency's infrastructure assets into one complete platform, including: roads, bridges, culverts, tunnels, curbs and gutters, sidewalks, signals, signs, guiderails, subsurface utilities, facilities, and more.

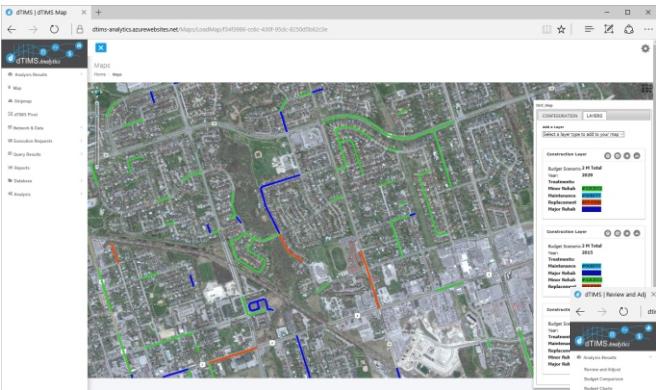
## dTIMS Supports the Way You Do Business



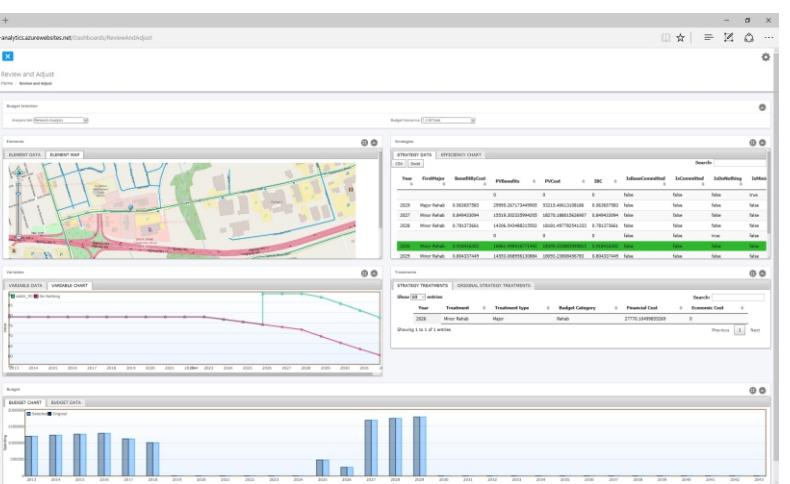
It is estimated that the average executive loses six weeks per year searching for missing information (almost one hour per day, per person)<sup>1</sup>. dTIMS supports the way you do business by providing information, not data, at your fingertips. Instead of searching for answers, dTIMS provides information in visual pivot tables and customized dashboards. This visual interface allows you to focus on making decisions, not searching for information.

The seamless integration of dTIMS BA and dTIMS OM is made possible through a common asset registry and web services. A shared asset registry means that all transactions, regardless of the application, are stored against the same assets.

# dTIMS Business Analytics



dTIMS Business Analytics features an HTML 5 responsive web user interface. So whether you work on a desktop, laptop, tablet, or smartphone, the screen will automatically adjust so the experience will be the same.



## Measure Condition

All of your assets are stored in a relational database with temporal and hierarchical functionality. Models describe the current condition and predict the future condition of your assets.

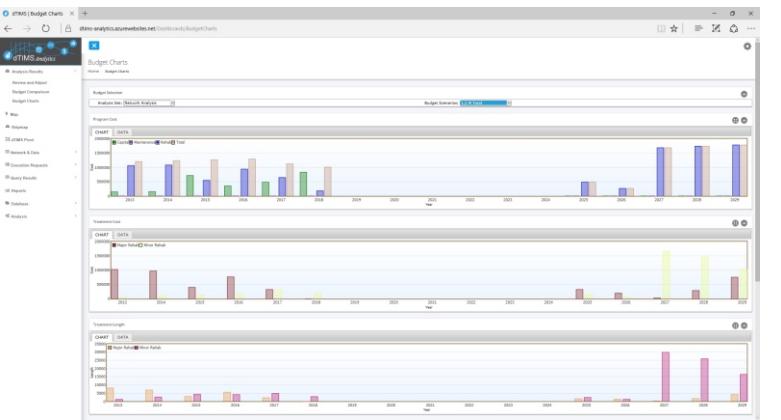
The dTIMS platform allows agencies to structure a database that will support virtually any attribute, which describes the composition or condition of the assets that you are managing. The list of attributes is not limited to a set of predetermined tables that are required to support a vendor imposed analysis. Instead, the database structure is designed to accept and integrate inventory and condition data that you currently maintain, with the flexibility to modify the structure in the future.

When you run an analysis, dTIMS BA produces a set of alternative treatment strategies for each element included in the analysis. These strategies describe the effects of applying various treatments (or applying no treatments) during the asset's life-cycle.

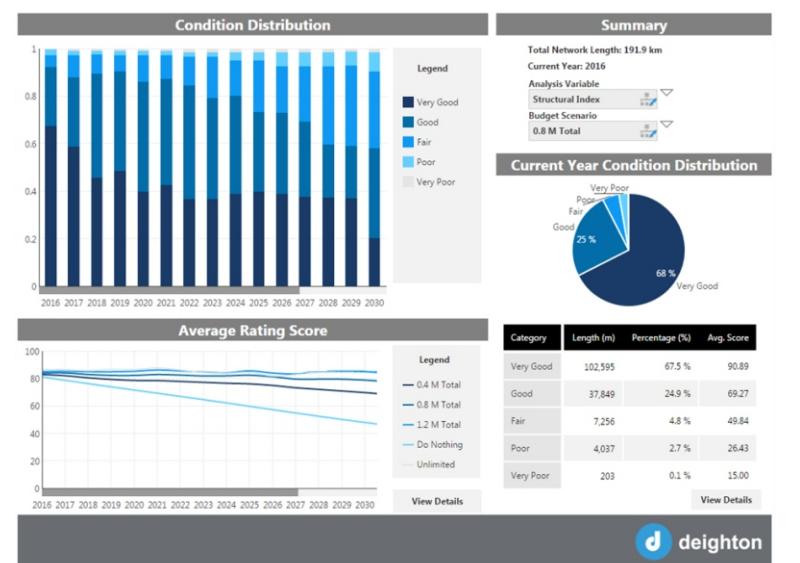
## Optimize Decision Making

dTIMS Life Cycle Cost Analysis (LCCA) is a flexible and sophisticated analysis and optimization tool that will meet the planning needs of your agency now and into the future.

Your agency will have full control over any of the dTIMS parameters used to generate the LCCA, including: analysis segmentation, performance measures, performance prediction models, pavement families, treatments, treatment decision trees, treatment impact, treatment costs, budget categories, budgets, and all economic parameters such as discount and inflation rates. Having this much flexibility ensures that dTIMS generates maintenance, preservation, and rehabilitation recommendations according to your business practices, and ensures that you are not forced into a predefined analysis methodology.



Once you run an analysis on your network, you can generate standard, custom, ad-hoc, and map-based reports across your agency to help communicate decisions.



dTIMS BA and dTIMS OM provides: business intelligence through heat maps, pivot tables, and a custom dashboard (shown above).

## Visualize Your Data

dTIMS BA shows you detailed reports, comparative reports, map-based reports and more. View the impact of current work plans, or simulate the potential impact of budget increases or cutbacks.

Report types include: Detailed (Strategies, Treatments, Analysis Variables), Summary (Program Costs, Condition Distribution, Travel Distribution, Treatment Costs, Treatment Lengths), Comparative (Average Condition, Length in Backlog, Return on Investment, Remaining Work), Works Program, and Construction Program.

## For All of Your BI Needs

Tired of constantly searching for information? dTIMS allows you to easily interpret large volumes of data. Identify opportunities or shortfalls so you can implement an effective strategy based on insights gained through dTIMS. Use heatmaps, pivot tables, and custom dashboards for a clearer understanding of the information. Provide historical, current, and predictive views of agency operations in a fraction of the time.

dTIMS Data Mart Views enables you to push dTIMS BA or dTIMS OM information to an external agency dashboard and a wider audience.

