

# Maintaining and Managing Infrastructure Assets is Vital to Community Prosperity

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## WHITE PAPER

Sponsored by: Pitney Bowes Business Insights

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## IDC GOVERNMENT INSIGHTS OPINION

Owning assets is both a benefit and a responsibility, particularly when they are community assets managed on behalf of taxpayers by national and local governments. Fundamentally, it is about managing the future of the place where people live and work. Effective management and responsible ownership of assets helps to make communities proud and prosperous.

- **The need for governments at all levels to manage assets of every type will become increasingly important.** Compliance with stringent safety standards and provision of superior services to citizens requires quick and efficient response to any number of urgent situations.
- **Infrastructure assets are costly to buy or develop and to maintain.** As the pressure increases to improve efficiency, reduce the number of systems in place, and place the citizen at the heart of government, infrastructure assets will become a focal point. Visible to the community, important from a quality of life perspective, they must be managed effectively if councils are to fulfil their responsibilities properly.
- **The community infrastructure asset management market has a number of players.** Pitney Bowes Business Insights Confirm has developed an excellent reputation for its ability to support a council to make better informed and location-aware decisions, identify anomalies, pinpoint opportunities and monitor trends, and to create, deliver and manage effective communications. A review of community infrastructure management system modules installed in the UK indicates that Pitney Bowes Business Insights Confirm has about 45% of overall market share.

## **IN THIS WHITE PAPER**

This IDC Government Insights White Paper describes the importance of managing community infrastructure assets. The paper discusses the benefits of taking a strategic approach to choosing an integrated system to support the many stakeholders involved in the multiple components of the infrastructure asset management process. IDC Government Insights concludes that Pitney Bowes Business Insights Confirm software should expect continued growth in market share.

## **SITUATION OVERVIEW**

Councils aspire to serve their communities by caring for their assets, improving their appearance and delivering services to their people in a financially, socially and environmentally responsible manner. Many of these services are delivered through community infrastructure assets owned and managed by the council.

The term *community infrastructure assets* loosely describes a collection of fixed assets forming essential systems that enhance safety and visual amenity and that support a community's way of life. Infrastructure assets provide essential community services of transport, flood protection, recreation services and accommodation for cultural, recreational and business activities.

Infrastructure assets have an inherent cost of ownership and a council's infrastructure portfolio represents a significant investment and includes all of the following:

- Regional and local roads, pavements and footpaths
- Bus stops, shelters, bridges and other permanent structures
- Street lights, traffic signals, parking meters
- Trees, parks and other open spaces
- Drains and waste management

Members of the community generally consider the maintenance of roads and footpaths and other infrastructure assets as a high priority community service that requires critical attention. It is a quality of life issue.

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## **Effective Management Increases the Useful Life of Infrastructure Assets**

Owning assets is both a benefit and a responsibility, particularly when they are community assets managed on behalf of taxpayers by national and local governments. Fundamentally, these assets represent the place where people live and work, and sustainable, safe, friendly and lively communities are important for our future. Effective management and responsible ownership of assets helps to make communities and their citizens proud and prosperous.

A council must manage its infrastructure assets in the most cost effective manner to meet the needs of present and future community members. Responsible management of assets, and services provided by those assets, and compliance with regulatory requirements is required to maximise their useful life. In order to ensure that the approach to infrastructure management contributes to sustaining the useful life of the assets, it must support the following activities:

- Life-cycle management
- Cost-effective asset management
- Performance monitoring according to predefined service levels
- Determining infrastructure investment requirements
- Risk management and resolution
- Continuous improvement

It is important for all staff to have a coherent and consistent view of information about all of these infrastructure assets and an effective interface to ensure timely communication among staff, contractors and citizens. Real-time reporting and feedback on the condition of individual assets allows appropriate repair and maintenance and minimises the risk of further decay. Accurate reporting limits unnecessary maintenance, work assigned to inappropriate individuals or companies, and the incidence of errors in completion of repairs.

### ***Asset Management Strategy***

It is now widely recognised that asset management is a business issue strategy not a technical responsibility. To implement a successful infrastructure asset management program there is the need for:

- Good information
- Comprehensive asset management planning

- Community involvement in establishing service standards
- Financial assessment rigor
- Performance measurement.

Infrastructure assets have a limited life and require regular maintenance. The ownership of infrastructure assets commits councils to fund ongoing operations and maintenance costs and, at the end of the life of the asset, a decision must be made about continued need for the service as well as the need for its renewal. Factors affecting demand include population change, changes in demographics, seasonal factors, vehicle ownership, consumer preferences and expectations, economic factors, agricultural practices, environmental awareness, and so on.

Asset management is an ongoing process, as strategic objectives develop and change. Demand for new services will be managed through a combination of managing existing assets, upgrading existing assets, and providing new assets to meet demand and management. Demand management practices include non-asset solutions, insuring against risks and managing failures.

## **FUTURE OUTLOOK**

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### **Rationalise, Streamline and Improve Asset Maintenance and Management**

Effective and efficient management of the maintenance and condition of infrastructure assets will be increasingly important to delivering modern and efficient services. Local, regional and central governments will need to know what it is, where it is, what we do with it, who will do it, when it will be done and how much will it cost.

This will require a comprehensive solution that supports inspection, condition monitoring and job raising providing flexible reporting and integration for asset portfolio managers, planners, service organisations, citizens and other stakeholders.

### ***Pitney Bowes Business Insights Confirm Will Address These Needs***

One of the UK's market-leading solutions for infrastructure asset maintenance and management, Confirm delivers a suite of specialised capabilities for asset maintenance, planning and service delivery. This is a powerful tool for any organisation with location-based infrastructure assets, including local authorities, utilities, construction companies and maintenance contractors that carry out the work. Confirm helps local agencies meet the challenges posed by

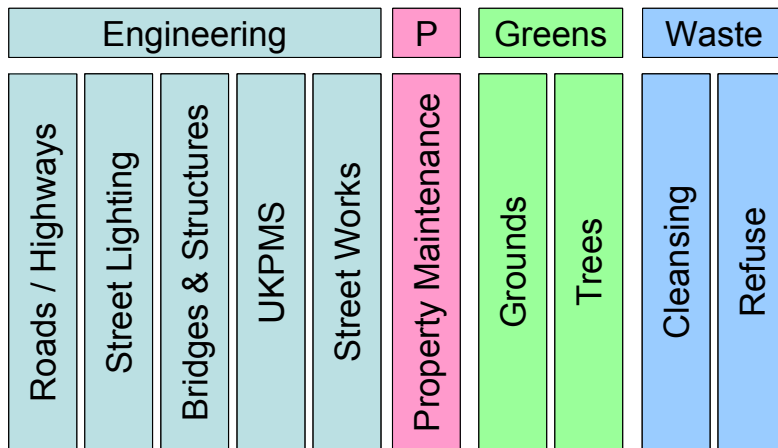
Transformational Government and e-Government initiatives, the efficiency agenda, comparability, benchmarking and performance testing.

Confirm delivers breadth and depth in its coverage of work areas, including street, grounds, property and engineering assets. The product's flexible, modular construction supports the need for a system that can adapt to frequent change. Confirm also offers scalable, expandable functionality to support growth that allows a council to begin with a single work area and easily add others as needed. This scalability makes it equally suitable for small service departments or nationwide authorities, and facilitates collaboration between all stakeholders in the infrastructure ownership, operation and management process.

Because the wide range of capabilities is incorporated into a single integrated suite, Confirm can manage a full range of asset types with varying requirements, including highways, streetlights, bridges and structures, arboriculture and parks and open spaces. It allows decision makers to manage budgets, allocate resources and plan future infrastructure investments (see Figure 1).

**FIGURE 1**

Street Scene Infrastructure Asset Maintenance



Source: Pitney Bowes Business Insights/Government Insights, 2009

The modules included in the Confirm Infrastructure Asset Management solution are:

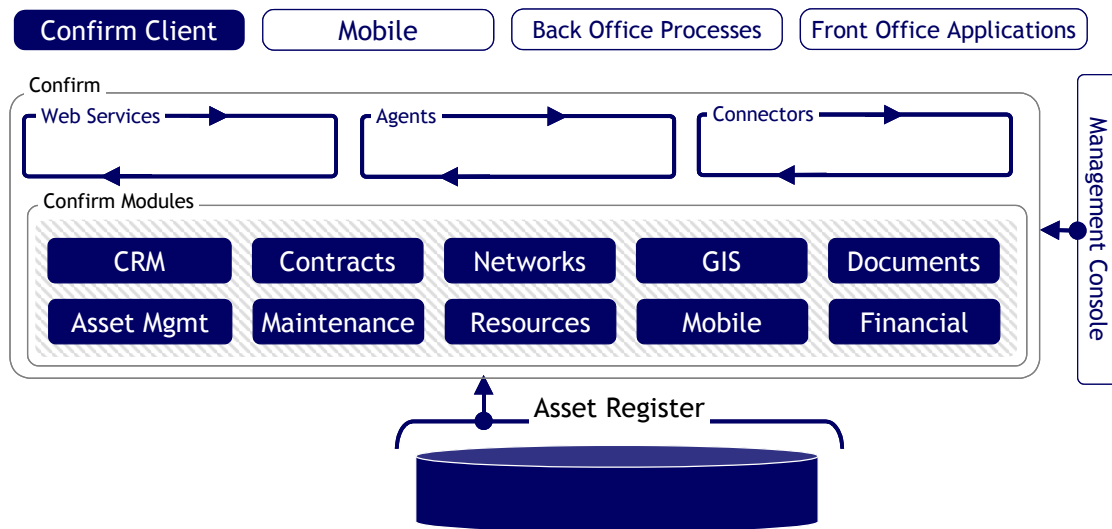
- Confirm Bridges and Structures
- Confirm Street Lighting

- Confirm Street Works
- Confirm Pavement Management System
- Confirm Highways
- Confirm Arboriculture
- Confirm Cleansing and Refuse
- Confirm Grounds Maintenance
- Confirm Property

Confirm provides a fully integrated system with a single, user friendly system to link data with services and applications across the council supporting the need to deliver against key objectives. The result is a single source of comprehensive information that can easily be accessed by a range of users both internally and externally — a single version of the truth (see Figure 2).

**FIGURE 2**

Confirm Asset Management



Source: Pitney Bowes Business Insights/Government Insights, 2009

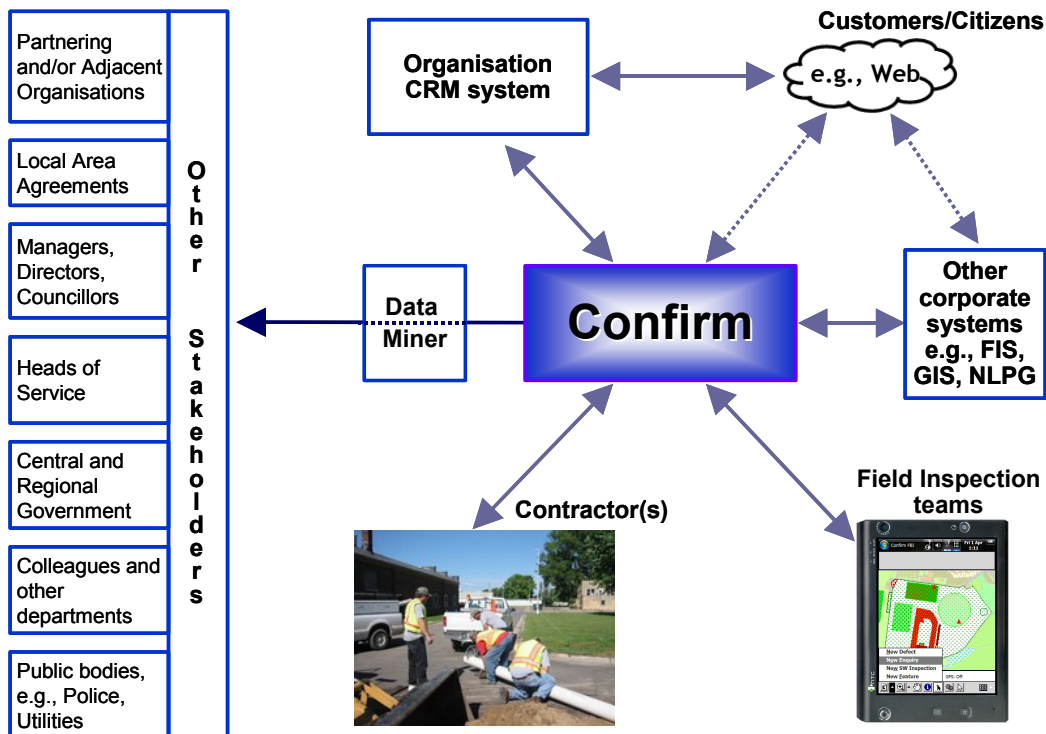
### Supporting the Connections that Matter

The ability to streamline processes, keeping all stakeholders informed, from the citizen through to the maintenance teams carrying out work around the community, is essential. With large, geographically dispersed, diverse groups of stakeholders it is important for councils to implement systems that are robust and resilient.

Oftentimes, it is a citizen who reports a problem or issue with an infrastructure asset — a street light is out, traffic lights are not working, potholes have appeared in the road, and so on. But it can be difficult for the citizen to speak to the most appropriate person if access is only available during normal business hours. Because they are easy to use, with mapping interfaces, Web-based systems that incorporate visualisation technologies allow citizens to actively participate in managing the assets. Proven mobile capabilities help to keep everyone updated with work progress and the ability to manage the workflow from start to finish, supporting the connections that matter (see Figure 3).

**FIGURE 3**

The Connections That Matter



Source: Pitney Bowes Business Insights/Government Insights, 2009

## **CONCLUSIONS**

Undoubtedly, the need for governments at all levels to manage assets of every type will become increasingly important. Compliance with stringent safety standards and provision of superior services to citizens requires quick, efficient response to any number of urgent situations. As the pressure increases to improve efficiency, reduce the number of systems in place, and place the citizen at the heart of government, infrastructure assets will become a focal point. Visible to the community, important from a quality of life perspective, they must be managed effectively if councils are to fulfil their responsibilities properly.

- Pitney Bowes Business Insights Confirm has established itself as a major player with a significant number of implementations in Australia and 110 councils happily using the product in the UK, many of them with multiple modules installed. Confirm has developed an excellent reputation for its ability to support a council to make better informed and location-aware decisions, identify anomalies, pinpoint opportunities and monitor trends, and to create, deliver and manage effective communications. A review of community infrastructure management system modules installed in the UK indicates that Pitney Bowes Business Insights Confirm has about 45% of overall market share.

## **CLIENT COMMENTS**

### ***Keith Cadman — Liverpool City Council***

I estimate that since the implementation of Confirm, the City Council has:

- Reduced the contract administration/exchequer function by approximately 15–20 staff, equating to £600,000 saving.
- Improved the various inspection/monitoring regimes for all service contracts by approximately 10 staff, equating to £400,000 saving.
- Improved inspection processes and retention of evidence has reduced claims against the council from a peak of 1,000 per month to current levels of 80 with an associated liability saving of approximately £1,000,000 per annum.
- Approximately 50% of the reductions in back-office processing and improved inspection processes have been recycled into improved customer contact utilising the enquiry functionality but still demonstrating an improvement in performance while producing a real end-to-end business improvement in value for money.

**Alan Aistrup — Divisional Highways Manager, Lincolnshire County Council**

A truly effective, single system for all our highways-related works was paramount to our needs and imperative to our broader efficiency drive. Pitney Bowes Business Insights clearly demonstrated Confirm to be the best fit to manage all the assets across our highways network, joining together disparate systems to streamline processes and, critically, to deliver a single view to speed up procedures across the board.

**The Chartered Institution of Wastes Management**

Confirm offers the most sophisticated and comprehensive suite of specialist asset and infrastructure management capabilities available. The Confirm Asset Management System also provides a range of added-value capabilities that allow you to mobilise your workforce and undertake analysis, visualisation and planning of operational and investment strategies.

*Environmental Cleansing Handbook 2008*

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