



Oracle's City Platform Solution: Best Practices from Cities around the World



Local governments face unfunded mandates and reduced tax revenues, yet their constituents are demanding improved services. Only Oracle provides a modular, yet unified platform that delivers intelligent, innovative, and integrated services and the tools necessary to determine which services are effective and how to quantitatively justify funding them to their constituents and central government organizations.

Local governments are bearing the brunt of major global changes, such as increased immigration and migration, enrollment in social safety programs, criminal justice system activity and general demand for municipal services as urban areas continue to grow in population. Unfortunately, government resources have not kept pace and services are often delivered over aging infrastructure, with shrinking workforces, and supported by declining or unstable tax bases. Innovative local authorities will leverage IT in an intelligent, integrated fashion: looking to use the least expensive, fastest means of delivering services within their resource constraints. Based on three decades of work with local governments in their efforts to do more with less, Oracle has developed its City Platform Solution.

"Like most cities, Sacramento is facing significant challenges and what 311 has done is allow us to consolidate our call center... It allows us to have a dialogue with the community, find out what their needs are. And then we are able to adjust our services based on their needs... Our goal is for Sacramento to be a model city when it comes to customer service, and the Oracle solution allowing us to use 311 is going to help us achieve that goal."

Kevin Johnson, Mayor, City of Sacramento, California

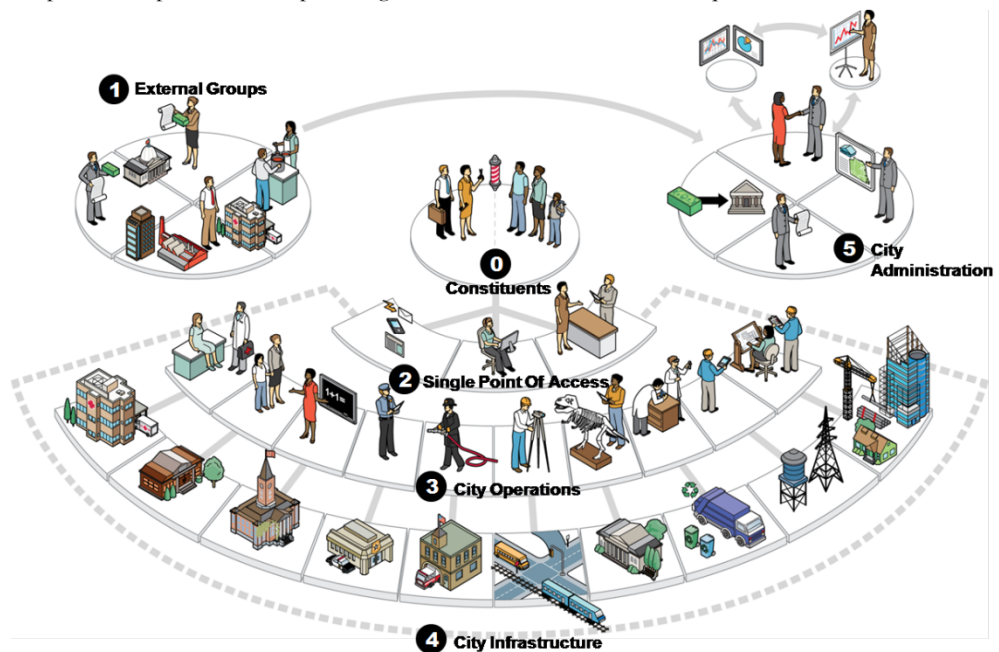
These solutions are based on three key platforms that can be implemented in any order depending on what local authorities have as existing platforms, existing services, budgets, and plans. The platforms are as follows:

- **Smart Innovations Platform:** An integrated yet modular multi-channel (self-service web/chat, email, backed by a local single number contact center) platform for 90%+ resolution of most government service requests
- **Smart Process Platform:** An intelligence and enterprise operations platform for continuous improvement of service delivery and identifies which services to prioritize, extend, consolidate or even discontinue
- **Smart Infrastructure Platform:** Enables integration and interoperability with the city's existing siloed legacy IT infrastructure, allows for more embedded intelligence in city infrastructure and modernizes service delivery capability

This brochure provides tips and best practices used by Local Authorities who've implemented one or more key platform components within Oracle's City Platform Solution.

Characteristics of 21st Century Cities

Oracle's City Platform Solution, with its three modular platforms, provide local authorities the ability to undergo steady, pragmatic and, over time, fundamental transformation in the way they deliver services and extend them through overhauling and streamlining underlying operations. In the figure below, we depict the overarching local government process model that would be implemented over time. The figures on the pedestal (5) represent the mayoral and city council offices and their administrative staff, collectively, the **City Administration**. The City Administration would be most concerned with two sets of stakeholders: **External Groups** (1) and **Local Constituents** (0). The External Groups include local government's stakeholders: public sector (state/provincial and central/federal government); private sector (large national and regional industries and targeted corporations within those industries to recruit); and non-profit and other non-governmental agencies (everything from local charities and churches to international organizations such as the IMF). City Administration is typically concerned with providing their public sector stakeholders with necessary information to receive matching funds, reallocation and reimbursement of tax revenues collected on their behalf, proof of regulatory compliance, responses to competitive grants, and other activities that require clear, concise data and



reporting formats that, in turn, provide transparency and establish exceptional governance. The second set of stakeholders, the local constituents (0), are the voting and primary campaign contributing electorate. They need to be able to initiate contact and interact with city government through a variety of channels—including Web, e-mail, text and instant message, face-to-face at a government office, in the field, and by proxy through a constituent care center. Constituents should be able to move seamlessly between channels over the course of service delivery. All these methods of stakeholder interaction require the same underlying set of **Streamlined City Operations** (3) across what was, in the past, a set of inefficient departmental silos. And, despite periodic reductions or flat resourcing, improvements made in these operations are achievable because the city administration and departmental line managers are able to identify the right program gaps and overlaps, consolidate and create efficiencies, and use data-driven analysis to identify the best investments to make in the **Integrated and Shared City Infrastructure** (4).

"We've changed people's lives. 311 is not just a citizen service hotline; it's the most powerful management tool ever developed for New York City's government. I can't imagine running a city without it!"

Michael Bloomberg, Mayor, City of New York

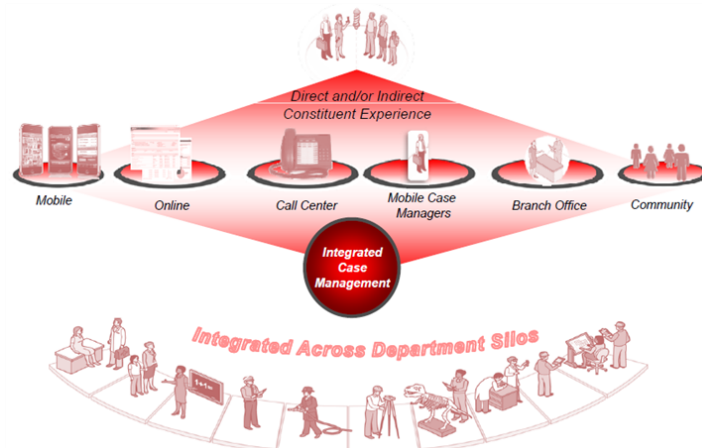
Oracle's City Platform Solution Key Benefits for Citizens and Business

- 24 x 7 access to government services without the "city hall shuffle"
- SNEN services to support mobile users and those on the other side of the digital divide
- Face-to-face focused on up-front personal connection (when needed) and to deal with very complex issues
- Changes the behavior and expectations of constituents
- Closed feedback loop on political policy to desired outcomes through KPIs posted to Constituents
- Constituents don't have to understand government organizations to obtain services

Best Practices in Integrated, Multi-channel, Single Point of Contact for Local Government Citizen and Business Services

Local governments are increasingly strapped for resources, and must find ways to limit access to scarce resources, such as public safety officers, social services case managers, tax assessors, and other municipal workers without degrading actual or perceived service levels. Emergency services must be limited to actual fire alarms, violent or significant property crimes, and other sensitive, life-changing events that truly call for face-to-face interactions. But local authorities need to optimize services – not ration them - so they must also find ways to avoid constituents being bounced between departments, having their issues fall between the cracks – essentially, receiving the "City Hall Shuffle."

Oracle's City Platform Solution is a step-change from the traditional online eGovernment sites or even more recent SNEN (Single Non-Emergency Number)/Contact Center services (for example 311 in the US). In order to innovate service delivery to constituents, we offer the following key recommendations based on best practices from our local government customers:



- Start with a shared services process orchestrated portal and use policy automation and business process management tools to assess your "as is" operational process, including manual workflow operations;
- Build towards a single Point of Contact, by building a single case management and associated universal content management system behind the CRM call center system and the self-service city-wide portal;
- Incorporate Cross-Channel transition capability to enable a constituent to start online in a self-service format, transfer over to a contact center agent and, if needed, include support from departmental knowledge workers, while maintaining a clear view of all issues through the self-service portal;
- Embed institutional knowledge and policy into self-service and contact center agent services through use of enterprise policy automation to provide flexible but clear consistent rules and execution across self-service, agent-assisted and face-to-face knowledge worker services.

"The City of Arnhem has a wealth of information that is not widely accessible. By digitizing our planning archive, we are improving the service we offer to city personnel, citizens, and companies. We are able to do this now because we implemented a stable, flexible basic infrastructure, built on Oracle Fusion Middleware." – Hemmo de Groot, Director, Information Management, City of Arnhem, the Netherlands

Oracle customers such as **New York City, New York, Denver, Colorado, Sacramento, California and Halton, Ontario Canada**) have taken this approach in developing their City-wide portals integrated with their 311 systems (SNEN in North America). Similar Oracle customer implementations have been done in other cities around the world including **Hong Kong 1823, Berlin and Madrid** , for their SNENs. Several of these cities have won multiple awards for their SNEN systems including New York City and Hong Kong. The New York City 311 system stands out because it is the largest Public sector local government constituent call center in the United States, handling over 1 million calls per month.

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Some Oracle customers have replaced siloed contact centers with a single SNEN based on Siebel CRM to support citizens on the other side of the digital divide or to compensate for reductions in city workforces, as was the case with **Riverside**) and **Sacramento** in the State of California. For example, in the case of Sacramento, several call centers were forced to consolidate after a round of layoffs. At the point of consolidation, morale was down; but after consolidation, morale improved, and the time and cost per service request (SR) went down by over a factor of two.

In other cases, for example, the **City of Leeds**, in the United Kingdom, consolidated their call centers into a single call center with an SNEN, but they also consolidated many of their face-to-face services into a set of 14 branch offices with over 1400 case managers across all city services including city housing and job programs, tax collections, and social services programs to handle those on the other side of the digital divide. Both the call center and the face-to-face representatives use a single instance of Siebel as their case management system.

Many of these cities, like New York City and Hong Kong, also realize that integration of their front-end, multi-channel points of entry are necessary, but not sufficient for assured service delivery at the lowest cost. Customers such as **Querétaro**, a municipal area within the State of Querétaro (735,000 residents) in central Mexico and **Bolton Council**, a municipal government in the United Kingdom with 260,000 residents, use process management behind their Siebel CRM systems to ensure SRs that start out as web self-service but require a transition to call center support agents, and then over to department-specific domain experts are transitioned back to web self-service, are concluded with status reports and context upon resolution for subsequent SRs. In the case of Querétaro, this has enabled them to eliminate many manual processes, and reduced their information reprocessing load by 70% for over 80 types of citizen self-service operations across 7 major departments.

Best Practices for Shared Services Platforms that Streamline Operations and Get the Most out of Your Existing and Future Investments

Oracle's City Platform Solution tracks not only the initial citizen or business request, but also all assets and resources utilized in resolving that request. Oracle's City Platform Solution tracks requests all the way through to resolution; as a result, government executives are able to analyze the relative cost of each service request (SR) instance as delivered by and across various agencies, channels, contractors and non-profits. Oracle's City Platform Solution is the only solution capable of tracking the costs of all assets associated with an SR and its resolution and the underlying infrastructure and human resources associated, providing executive insights into the overall effectiveness of various service delivery operations and the investments to support them.

Oracle's City Platform Solution takes a Service Oriented Architecture (SOA) approach regarding the identification of best practices in front- and back-office operations as well as their supporting IT infrastructure and looks for points of reuse inclusive of departmental siloed Enterprise Resource Planning (ERP) applications. The solution then looks to consolidate where possible, leveraging pre-planned integration modules around these new composite applications, integrating them with existing legacy applications and interfaces to vendors, contractors, and peer local, regional, and national government organizations.

In order to implement the city platformies shared services module, we offer the following key recommendations, based on best practices from our local government customers:

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**Oracle's City Platform Solution
Key Benefits for Local
Government Employees**

- Seamless integration of response systems: from self-service to call center to face-to-face and back makes their lives easier
- Request for services can be traced and automatically routed to the right department – they don't like department shuffles anymore than constituents do!
- Allocation of Government resources responding to requests can be optimized reducing the burden on individual employees
- Information is captured & stored in one place, allowing for greater management analysis and decision making *at lower levels*
- Upward spiral: new expectations by citizens change the expectations of employees
- Employees leverage technology in commercial ways improving their marketability

"Oracle's integrated procurement suite has enabled us to achieve exceptional cost and efficiency savings that exceed government targets while enforcing compliance with national and EU procurement directives."

– Donald McGougan, Director of Finance, The City of Edinburgh Council, Scotland

- Start by surveying your IT and supported business operations landscape, develop an Enterprise Architecture (EA) and a project plan that incrementally builds out the EA over time;
- Identify projects your stakeholders see as critical core components of their services that are either completely redundant across multiple organizations, expensive to maintain or present some other clear and visible obstacle to their primary domain-specific mission or extension of that department's services online;
- Look to consolidate and service-enable existing ERP and legacy systems and document management repositories and plan a pragmatic transition to commercial-off-the-shelf ERP systems and digital repositories where possible;
- Use policy and process automation tools to simulate and then implement overhauled policies and processes across disparate organizations and systems;
- Look to build out shared services that enhance service delivery and the value of existing investments such as enterprise-wide, shared Identity and GIS services.

Legacy systems and data, spread across disparate silos, along with paper-based documents often inhibit automation and prevent efficient, transparent and uniform agent-assisted service delivery and all but eliminate delivery of online, transaction-oriented self-service. It is imperative that the EA and each individual project focus on elimination or modernization of underlying IT systems and provision of shared services around core back-end ERP functions including payroll, procurement, bid and contract management, accounts payable and receivable, and other common financial and human resource functions.

Many of our local government customers see this modernization of underlying IT and core applications as a critical component of becoming "Smart Cities". The cities of **Espoo, Finland, Edinburgh, Scotland, Norfolk County, and Bolton Council in the United Kingdom, and St. Petersburg, Florida, Englewood, Colorado and Oakland, California** in the United States, to name just a few, implemented several components of Oracle's E-Business Suite to support overhaul of their siloed legacy systems. In most cases, these cities offer centralized Oracle E-Business Suite, Oracle Peoplesoft Suite, or JD Edwards shared services to all their employees for everything from their travel expenses to their HR tasks. All of these customers have achieved significant quantitative improvements in their operations:

- Edinburgh's implementation of Oracle iProcurement enabled them to immediately ramp to 40% of spend online, cut procurement cycles, and process 2,000 invoices electronically everyday and Oracle Sourcing enabled them to negotiate best-value for US\$180 million worth of goods and services each year thereafter;
- Norfolk County reduced finance overhead by US\$297,000 (£200,000) a year with Oracle Financials and saved US\$39,000 (£26,000) a year in procurement process efficiencies with Oracle Procurement;
- With Oracle iProcurement and Procurement Contracts, St. Petersburg increased the number of requisitions going through their centralized purchasing department, representing a shift of about 25,000 requisitions annually from department subsystems to the central online system which saved the city an estimated US\$4.9 million annually;
- When Englewood implemented Oracle E-Business Suite, their IT staff provided real-time budget analysis and report generation capabilities directly to business-end users and so they were able to focus on critical projects that were tabled or outsourced, saving funds and improving the morale and skills of their own staff;
- And Compañía de Parques Nacionales de Puerto Rico reduced auditing costs from \$300,000 to \$15,000, accelerated online purchase orders by 50% and decreased IT maintenance costs by 60% after

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consolidating their siloed legacy systems and moving to Oracle E-Business Suite as a shared services platform.

Streamlining and consolidating back-end systems, as described above, is only part of the solution. If the actual forms and prior records of critical documents necessary for service delivery are paper-based then process and the supporting policies cannot be automated. Oracle has found that many of its customers tackle this problem by digitizing their critical record archives that must support agent-assist and online self-service including tax codes, prior tax records, county deed recordings, employee history, policy guidelines, and fee schedules to name just a few. This is typically an on-going effort that is a function of which services are being moved on-line and what are the required single-view-of-the-constituent puzzle pieces to support the service set (which documents and format and from which silo they will need to be recovered).

The **City of Arnhem, the Netherlands** (population 100,000) embarked on an aggressive program of archival digitization for over 4 million documents dating back to 1917; the vast majority paper-based, but many, from more recent times, in various proprietary digital formats associated with existing department silos. Arnhem used Oracle Document Capture, Universal Content Manager and Data Integrators to perform the capture and storage. They then used Oracle Application Server and WebCenter Suite as a window into the new archive and Oracle BPEL Process Manager along with Web Services Manager as a means of secure orchestrated access and processing of documents by all city employees, citizens, and businesses. Cities of similar size, including **Terrassa, Spain** and **Newport Council, South Wales**, did similar city-wide, multi-departmental projects with Oracle Universal Content Manager but added Google Search. Likewise, **Agencia Gubernamental de Control del Gobierno de la Ciudad de Buenos Aires** (Government Administration Agency of City of Buenos Aires) built out a similar configuration (though they used WebLogic Portal instead of WebCenter Suite as the front-end) to enable on-line provision of licenses and imposition of sanctions on all business activity in the city of Buenos Aires. In the case of the Buenos Aires agency they handled and administered data on more than 250,000 business licenses in the city of Buenos Aires efficiently, accelerating simple business licensing transactions by 80% and reducing IT administration and maintenance costs by 20% - all within the first year of operation.

In other cases it's not the automation of a set of paper-based or non-optimized process around a specific set of services that needs to be targeted but a common back-end component to all services. In many cases, this new component adds a dimension to the service that makes it not just an improvement in efficiency or transparency but enables a real transformation in the use of that service or additional value-add services are created as a result. An example of this for an Oracle customer is the **City of Chicago**. By leveraging Oracle Business Process Management Suite and SOA governance, City of Chicago's Business Information Services identified reusable business processes from a given project and associated IT resources and scaled-up and reused them as best-in-class across all its municipal departments as a shared service. In this particular case, the shared service identified was a payment engine and a front-end portal framework for using the payment engine with existing departmental-level websites. In order to connect the appropriate data and applications, necessary to use the payment engine, Oracle Service Bus and Data Integrator were also part of the shared services platform. In this particular case, the result was not simply an on-line transactional service for each of the departments, but in many cases, a change to the level of services and results across both city departments and even private industry. The new on-line service for calling a taxi if you were drunk and paying for it by credit card netted more taxi calls and increased revenue for taxi services. The new parking registration service for parking permits in congested neighborhoods led to an increase of 30% in revenues for the parking citation group, as BPM was used to re-orchestrate the process to take advantage of checking outstanding parking ticket status before granting the permit.

Oracle's City Platform Solution Key Features

- Oracle Public Sector CRM for integrated contact center, process, policy and case management
- Oracle WebLogic Portal, Communications Platform and Webcenter Interaction for integrated multi-channel access
- Oracle Database and Enterprise Options to provide a secure, robust and reliable data management platform for citizen service information
- Oracle Enterprise Policy Automation and SOA Governance to ensure policy are mapped to service delivery operations
- Oracle Identity Management Suite for secure role-based access, authorization to shared services
- Oracle BPM Suite for modelling, simulation and streamlined service delivery operations
- Oracle SOA, WebLogic and Tuxedo Suites for integration and reuse of new and legacy silo assets as municipal shared services
- Oracle Universal Content Management, Data Integrator and Master Data Management for information sharing across city and peer government silos

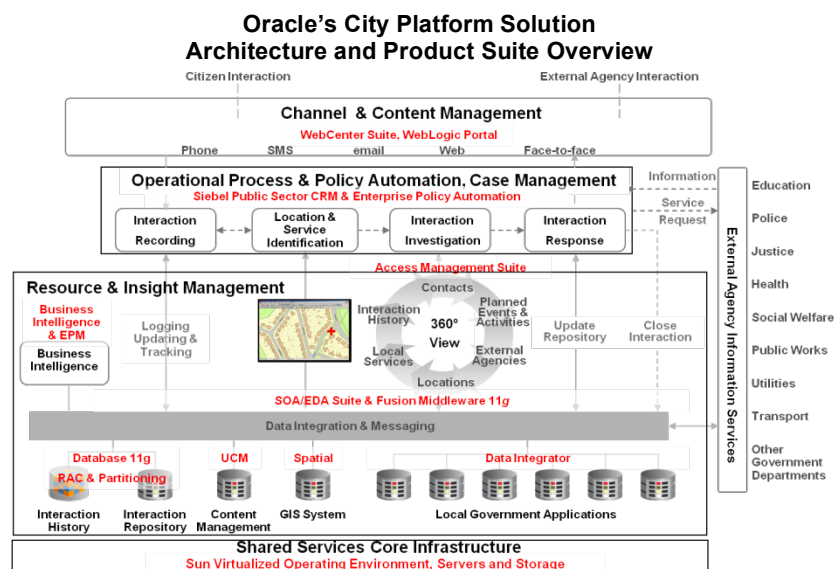
"With Oracle Database and Oracle's Siebel applications, the Municipio of Querétaro has developed a consolidated IT infrastructure, unifying financial processes where 70% of the operation of the entire Municipio is running under the same platform."

Alejandro Tapia Zaldivar, Director of Information Systems, Municipio of Querétaro, Mexico

Oracle's End-To-End Solution

Oracle's City Platform Solution is based on proven, deployed technologies that increase the organizational reach, flexibility, and effectiveness of local governments. Oracle's enterprise-class architecture leverages the ubiquity and scalability of the Web, enabling the rapid development of shared services platforms, spanning existing, siloed mission-critical information in a reliable, scalable, secure manner. Oracle understands that local governments cannot afford to rapidly decommission existing IT assets, let alone force peer government organizations or commercial vendors and business partners to move to a single mandated architecture, and that therefore, Oracle applications, middleware and technologies must be capable of integrating into and bringing together a disparate heterogeneous set of silos into a set of shared extensible services.

Oracle's City Platform Solution takes a modular approach to your local government challenges,



providing your with plug-and-play product suites for each major area: Channel and Contact Management, Operation Process and Policy Automation, Case Management and Information and Insight Management. Depending on your immediate, annual, or long-range mission objectives and budget, local governments can start at any point within the Oracle solution architecture.

Only Oracle has a proven track record of success with SNEN implementations including major US 311 services, and their equivalents in Europe and Asia as well as Government services portals around the world. Oracle is well positioned to assist your local government to build a converged and intelligent SNEN/Government portal platform.

CONTACT US

To learn more, call +1.800.ORACLE1 to speak to an Oracle representative or visit oracle.com/government/.

Outside North America, visit oracle.com/corporate/contact to find the phone number for your local Oracle office.



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