



County of Los Angeles
CHIEF EXECUTIVE OFFICE

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SACHI A. HAMAI
Interim Chief Executive Officer

July 30, 2015

To: Mayor Michael D. Antonovich
Supervisor Hilda L. Solis
Supervisor Mark Ridley-Thomas
Supervisor Sheila Kuehl
Supervisor Don Knabe

From: Sachi A. Hamai 
Interim Chief Executive Officer

Richard Sanchez 
Chief Information Officer

Board of Supervisors
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First District

MARK RIDLEY-THOMAS
Second District

SHEILA KUEHL
Third District

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Fourth District

MICHAEL D. ANTONOVICH
Fifth District

**REPORT BACK ON REASSESSING PERMIT AND LAND MANAGEMENT SOLUTIONS
(BOARD MOTION, AGENDA ITEM NO. 5, JUNE 2, 2015)**

This memorandum is in response to the June 2, 2015, Board Motion by Supervisor Ridley-Thomas that directed the Interim Chief Executive Officer (CEO) and Chief Information Officer (CIO) to identify and contract with an independent third-party agency with the necessary expertise to take the following actions and report back to the Board within 60 days:

1. Review and assess the Woolpert, Inc. (Woolpert) report, which identified opportunities to streamline and improve permitting and land development business processes, to ensure that it meets the current County of Los Angeles (County) requirements and current Information Technology (IT) Solutions, with the assessment to also address and evaluate the redesign of business processes referenced in the Woolpert report to ensure proper software development and implementation that meets these processes requirements;
2. Conduct a survey with the Department of Assessor, Fire, Parks and Recreation, Public Health, Public Works, and Regional Planning to identify the best approach for having effective information sharing, whether with a customized commercial off-the-shelf (COTS) system or an independent system with middleware that serves as a hub for information exchange; and
3. Based on the recommended approach, include a study in the report for implementing a single-web interface for the public to submit permit applications so that once applications are submitted, the required documents can be seamlessly and securely distributed to all concerned Departments.

"To Enrich Lives Through Effective And Caring Service"

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Intra-County Correspondence Sent Electronically Only**

On June 30, 2015, the CEO executed a Work Order with Gartner Consulting (Gartner) under the CEO's Delegated Authority Agreement to conduct this assessment.

Gartner performed an analysis of past and current documents related to the County's Permit and Land Management Solution, including the Woolpert report, past Board Motions, the proposed Amendment No. 2 to Agreement No. 78227 with Tyler Technologies for Regional Planning and Public Works, and the Electronic Permitting and Inspections County of Los Angeles (EPIC-LA) implementation progress reports. Gartner also conducted in-person stakeholder interviews with the Department of Assessor, Fire, Parks and Recreation, Public Health, Public Works, Regional Planning, and CIO.

Based on the document study, interviews, and Gartner's understanding of public sector land development permitting and electronic permitting solution spaces, Gartner concluded that:

- Expanding EPIC-LA to Public Works as requested by Amendment No. 2 to Agreement No. 78227 with Tyler Technologies is an appropriate next step;
- Overall, the Woolpert report addresses the current County requirements for IT Solutions regarding land development and permitting;
- With the exception of Fire, all of the named departments have undergone business process analysis efforts and have addressed, or plan to address, the Woolpert Report recommendations;
- A single instance of the COTS EnerGov solution for Regional Planning and Public Works will enable seamless workflows and data sharing across the departments using the EPIC-LA solution, helping the County achieve more complete data sharing for land development permitting;
- EnerGov's portal solution meets the County's needs for a single portal for land development permitting, but has limited support for non-land development services. If a single portal, including both land development and other services is desired, the County should assess whether the County-standard IBM WebSphere portal platform could be expanded to fill that need;
- There are several go-forward recommendations that will help mitigate risk in the EPIC-LA implementation:
 - Establish a formal governance team;
 - Convene a work group of participating departments to plan for impact related to the November 2015 EPIC-LA Go-Live;
 - Implement a formal information sharing plan regarding data for land development;

Each Supervisor
July 30, 2015
Page 3

- Develop a long-term implementation roadmap for EPIC-LA; and
 - Consider engaging an independent vendor for periodic quality assurance and risk assessments.
- Additional consideration regarding the modernization of Assessor, Fire, and Parks and Recreation legacy systems and the evaluation of existing Fire business processes is recommended as it relates to EPIC-LA. However, these assessments do not need to occur before moving forward with the Regional Planning and Public Works implementations.

The stakeholders of the EPIC-LA participating departments interviewed by Gartner have reviewed the detailed report and agree with the assessment and recommendations.

An executive summary of the Gartner report is included as Attachment I, and the detailed report is included as Attachment II.

If you have any questions or require further information on this matter, please feel free to contact Richard Sanchez, CIO at 213-253-5600 or your staff may contact John Arnstein, Sr. Associate CIO at 213-253-5621 or jarnstein@cio.lacounty.gov

SAH:JJ:RG
AB:kd

Attachments (2)

c: Executive Office, Board of Supervisors
County Counsel
Assessor
Fire
Parks and Recreation
Public Health
Public Works
Regional Planning

U:\CHRON 2015\Budget\Reassessing permit and land management solutions



Reassessing Permit and Land Management Solutions (PALMS): EPIC-LA System Assessment Summary Report

July 28, 2015

On June 2, 2015, the Board of Supervisors adopted a motion, Reassessing Permit and Land Management Solutions (PALMS), which called for an independent third party agency to assess EPIC-LA to confirm it is the appropriate technology to move forward with for PALMS prior to considering expanding to Public Works, including:

- Review and reassess the Woolpert, Inc. report to ensure that it meets the current County requirements and current Information Technology Solutions.
- The assessment should also address and evaluate the redesign of business processes referenced in the Woolpert, Inc. report to ensure proper software development and implementation that meets these process requirements.
- Conduct a survey with the Departments of the Assessor, Fire, Parks & Recreation, Public Health, Public Works, and Regional Planning to identify the best approach for having effective information sharing, whether with a customized off-the-shelf system or an independent system with a middleware that serves as a hub for information exchange.
- Based on the recommended approach, the report shall include a study for implementing a single web interface for the public to submit permit applications; once applications are submitted, the required documents should be seamlessly and securely distributed to all concerned departments.

Purpose of the Summary: To provide a high level overview of the final report submitted by Gartner to the CIO's Office in response to the Board's Motion regarding reassessment of Permit and Land Management Solutions (PALMS).

Background

- The CIO engaged Gartner to address the June 2015 Board Motion by conducting a high-level assessment of the EPIC-LA implementation, which included interviews with six departments impacted by the EPIC-LA implementation, and development of a final report, summarized below.

Gartner EPIC-LA Assessment Final Report Conclusions

- **Highlights**
 - Expanding EPIC-LA to Public Works is an appropriate next step for the County.
 - Extensive due diligence and study was conducted by DRP and DPW prior to selecting Tyler Technologies' EnerGov solution for EPIC-LA.
 - Most departments have taken action to comply with the Woolpert Report recommendations.
 - The single instance of the EnerGov solution for both DRP and DPW will enable seamless workflows and data sharing across departments using the EPIC-LA solution.
- **Findings specifically to the Board Motion**
 - **Reassessment of Woolpert Report:** Overall, the Woolpert Report addresses the current County requirements and current needs for Information Technology Solutions regarding land development and permitting.
 - **Evaluation of Redesign of Business Processes:** With the exception of Fire, all departments have undergone business process analysis efforts and have addressed, or plan to address, the Woolpert Report recommendations. Notably, planning among Public Works, Regional Planning, and Fire to address the 'One Stop Shop' co-location recommendation is ongoing, but has not been completed.
 - **Interdepartmental Information Sharing:** Expanding EPIC-LA to Public Works will help the County achieve more complete interdepartmental information sharing for land development within EnerGov. Potential approaches for other departments are discussed in the report.
 - **Implementation Approach for Single Countywide Permitting Portal:** For land development, EnerGov's ePortal product may meet the County's needs. However, the ability for EnerGov ePortal to be a front-end portal for non-EnerGov systems is limited. Therefore, if a single portal including non-land development services is desired, the County should assess its IBM WebSphere platform to determine if it could be expanded to meet this need.
- **Go-forward Recommendations for EPIC-LA** – Below are recommendations from Gartner that will help mitigate the risk areas identified in the EPIC-LA implementation:
 - Implement a formal governance team with the mandate and authority to drive the project, and make scope and policy decisions as the project expands from a single department to a multi-department implementation. Formal governance will

also help the County better define and track EPIC-LA strategic benefits, key performance indicators and other metrics.

- Convene a multi-departmental working group to begin planning for the November 2015 implementation's impact on all affected departments, as well as initiate change management activities well in advance of Go Live across all departments. Solidify goals, strategy, and governance for a public facing portal in close coordination with core public stakeholders to determine breadth and scope (e.g. a portal just for land development only or a broader portal). Then, based on the selected strategy, consider if either the EnerGov ePortal or County's existing IBM WebSphere platform for online portals should be leveraged.
- Implement a formal plan for information sharing between departments (e.g. interfaces needed, reporting extracts). As part of this plan, the County should establish objectives around data sharing for land development which will help inform an appropriate technical approach. This will help determine the extent EnerGov can facilitate data sharing versus any needs for a more independent data sharing hub solution.
- Develop a long-term implementation roadmap that explores opportunities to continue to enhance EPIC-LA and incorporate additional departments. The roadmap should identify how EPIC-LA is envisioned to be integrated into the County's business (e.g. organizational change management) and technology ecosystem after it is fully expanded.
- With expansion of the project, the complexity of the implementation as well as the reliance on Tyler Technologies as a vendor partner will increase. To ensure ongoing project success, the County should consider engaging an independent vendor with relevant expertise for periodic (quarterly or event driven) quality assurance and risk assessments. This will allow the County to proactively manage project risks related to vendor performance and benefits realization. An independent vendor will also benefit the County by providing specialized expertise the County may not which can match or exceed the expertise of Tyler Technologies.

- **Additional Findings**

- Parks & Recreation and the Assessor both plan to commence projects to modernize their legacy systems in the near future. As part of those efforts it should be considered how those systems might interface with EPIC-LA, even if such interfaces are not included in the initial releases. Note: This does **not** need to occur before moving forward with EPIC-LA for Public works.
- Fire reported numerous legacy processes and systems that would benefit from further business process analysis and assessment. Note: This does **not** need to occur before moving forward with EPIC-LA for Public works.

ATTACHMENT II

**LA County EPIC-LA Assessment
EPIC-LA Final Assessment Report**



Prepared for: County of Los Angeles

July 28, 2015

GARTNER CONSULTING

Project Number: 330030112

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Gartner

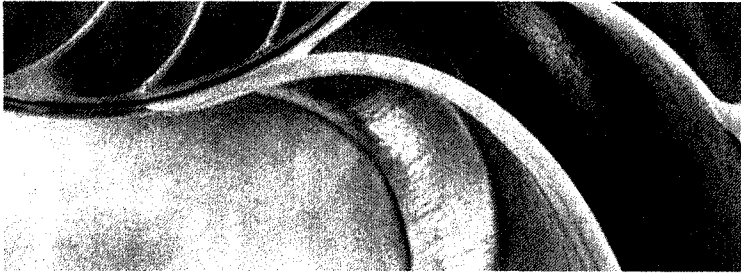


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 - 2.1 Current and Future State Analysis by Department
 - 2.2 EPIC-LA Technical Solution Analysis
 - 2.3 Final Recommendations and Conclusions





Section 1.0 – Introduction

- 1.1 Executive Summary
- 1.2 Project Background
- 1.3 Report Objectives
- 1.4 Approach
- 1.5 Purpose of Assessment

1.1 Introduction – Executive Summary

On June 2 2015, the Board of Supervisors adopted a motion, Reassessing Permit and Land Management Solutions (PALMS), which called for an independent third party agency to assess EPIC-LA to confirm it is the appropriate technology to move forward with for PALMS prior to considering expanding to Public Works. Gartner was selected and the ensuing assessment yielded the following general conclusions:

Summary of Board Motion

Review and reassess the Woolpert, Inc. report to ensure that it meets the current County requirements and current Information Technology Solutions.

Address and evaluate the redesign of business processes referenced in the Woolpert, Inc. report to ensure proper software development and implementation that meets these processes requirements.

Survey the Departments of the Assessor, Fire, Parks & Recreation, Public Health, Public Works, and Regional Planning to identify the best approach for having effective information sharing, whether with a customized off-the-shelf system or an independent data sharing hub.

Include a study for implementing a single web interface for the public to submit permit applications; once applications are submitted, the required documents should be seamlessly and securely distributed to all concerned departments.

Gartner's General Conclusion

Overall, the Woolpert Report addresses the current County requirements and current needs for Information Technology Solutions regarding land development and permitting.

With the exception of Fire, all departments have undergone business process analysis efforts and have addressed, continue to address, or plan to address the Woolpert Report recommendations.

Expanding EPIC-LA to Public Works will help the County achieve more complete interdepartmental information sharing for land development within EnerGov, Tyler Technologies' commercial-off-the-shelf (COTS) product selected for EPIC-LA. Potential approaches for other departments are discussed in the report.

For land development, EnerGov's ePortal product may meet the County's needs. However, the ability for EnerGov ePortal to be a front-end portal for non-EnerGov systems is limited. Therefore, if a single portal including non-land development services is desired, the County should assess its IBM WebSphere platform to determine if it could be expanded to meet this need.

1.1 Introduction – Executive Summary

Gartner concluded that expanding EPIC-LA to Public Works is an appropriate next step for the County.

- Highlights:**
- ✓ Extensive due diligence and study was conducted by DRP and DPW prior to selecting Tyler Technologies EnerGov solution for EPIC-LA.
 - ✓ The single instance of the COTS EnerGov solution for both DRP and DPW will enable seamless workflows and data sharing across departments using the EPIC-LA solution.
 - ✓ To date, the EPIC-LA implementation has been successful and is overall highly consistent with the Woolpert Report recommendations.
 - ✓ The County has developed a good working relationship with the Systems Integrator, Tyler Technologies.

Key Observations going forward:

- Most departments have taken action to comply with the Woolpert Report recommendations. Work is in progress and should continue to be completed across all departments.
- Continued expansion of EPIC-LA, as long as it is well-planned and logical, will continue to help the County realize the expected benefits outlined in the Woolpert Report.
- Creating a formal governance structure will be a key success factor to the EPIC-LA expansion beyond DRP and DPW.

1.1 Introduction – Executive Summary

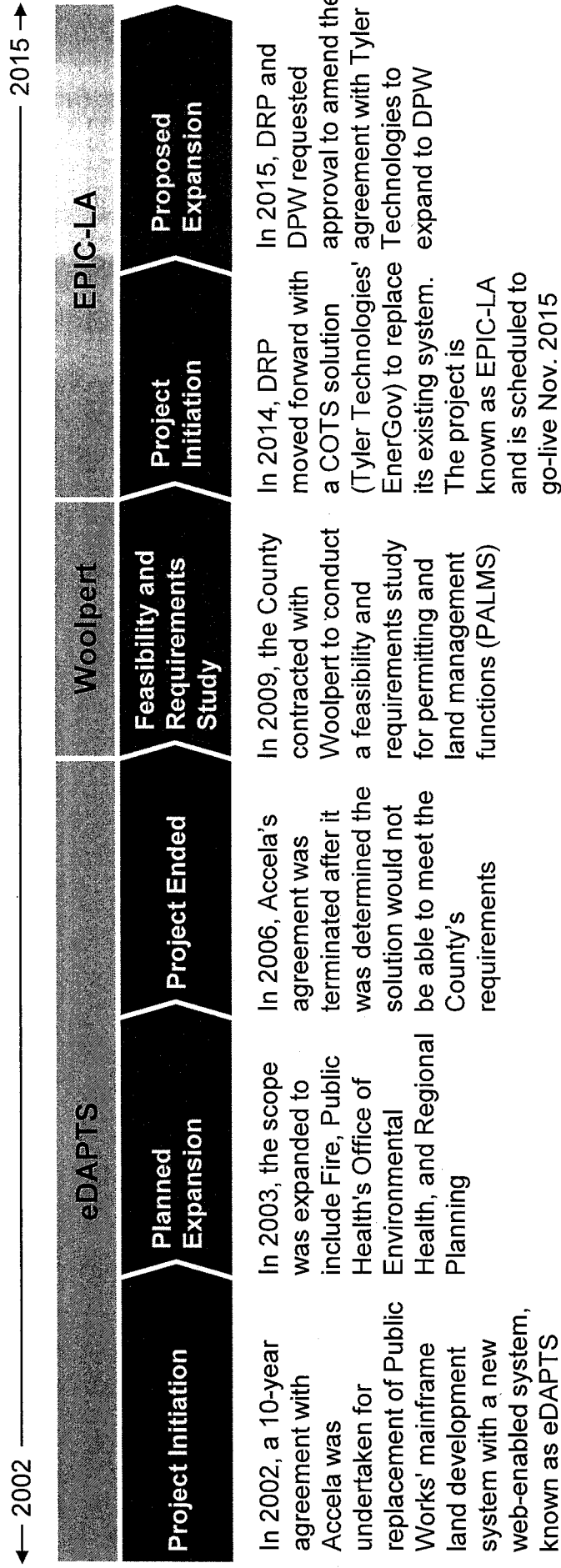
Summary of Recommendations – While Gartner concluded that it is appropriate for the County to move forward with the expansion of EPIC-LA for Public Works, our assessment has also identified opportunities to refine and improve the current project:

- **Go-Live Preparation:** Convene a multi-departmental working group to begin planning for the November 2015 implementation's impact on all affected departments.
- **Governance:** Expansion of EPIC-LA will significantly increase the importance of implementing a formal governance team with the mandate and authority to drive the project, and make scope and policy decisions.
- **Online Portal:** The County should solidify its strategy, objectives and governance for a public facing Land Management portal in close coordination with core public stakeholders. The County's existing IBM WebSphere platform may be leveraged to extend the EnerGov portal solution, which has some limits for broader use.
- **Data Sharing:** Implement a formal plan for information sharing between departments. Establishing objectives around data sharing will help inform the technical strategy of EPIC-LA. This will also help determine the extent EnerGov can facilitate data sharing versus any needs for a more independent data sharing hub solution.
- **Long Term Roadmap:** Develop a long-term implementation roadmap that explores opportunities to continue to enhance EPIC-LA and incorporate additional departments.
- **Independent Quality Assurance and Risk Assessments:** With expansion of the project, the complexity of the implementation will increase reliance on Tyler Technologies as a vendor partner. To ensure continued project success, the County should consider engaging an independent vendor for periodic (quarterly or event-driven) quality assurance and risk assessments. This will help ensure proactively managing project risks related to vendor performance and benefits realization.

1.2 Introduction – Project Background

For many years, Los Angeles County has attempted to successfully implement an enterprise solution for land development and permitting. Regional Planning is scheduled to go-live with a commercial-off-the-shelf (COTS) licensing and permitting solution, known as EPIC-LA, in November 2015. Public Works has recently submitted a request to the Board to extend the EPIC-LA implementation for its needs as well. Gartner was selected as an independent third-party to conduct a rapid assessment of EPIC-LA and the proposed expansion to assist in informing this critical decision.

History of Land Development and Permitting Solutions in LA County



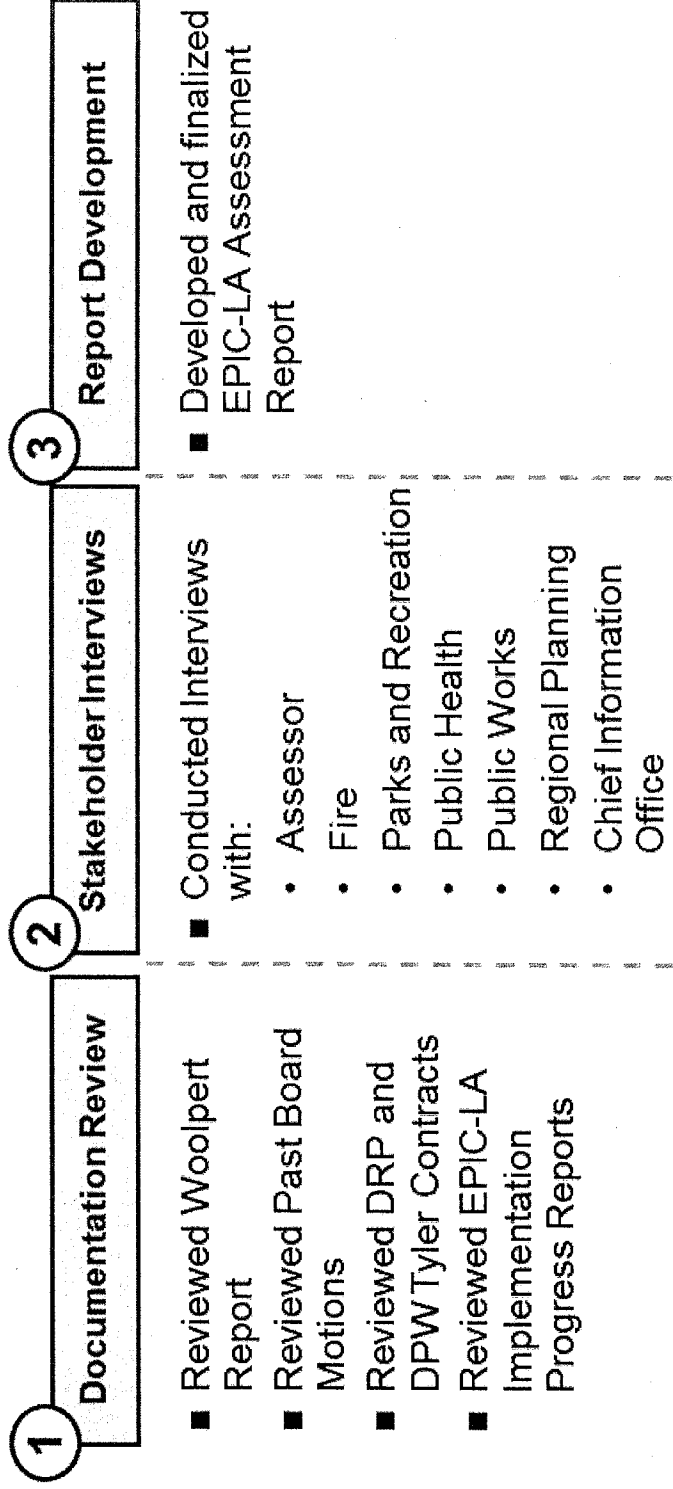
1.3 Introduction – Report Objectives

Gartner’s report is intended to achieve the following key objectives:

- Document findings and conclusions regarding whether the EPIC-LA approach is consistent with the Woolpert Report’s recommendations.
 - Report key outcomes of Gartner’s meetings with various departments, including key business change initiatives undertaken by the departments since the Woolpert Report.
- Assess the proposed expansion of EPIC-LA to Public Works.
- Document findings and conclusions regarding results of EPIC-LA’s technical solution, and provide recommendations on County approach in undertaking other permitting and licensing-related initiatives, including:
 - Implementation of a single online portal for intake of all County permit applications.
 - Best approach for effective information sharing between departments.

1.4 Introduction – Project Approach

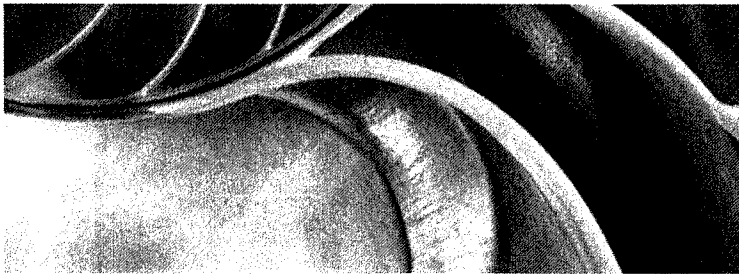
Gartner initiated a rapid data gathering effort in order to provide an assessment and recommendations within the limited timeframe. Specific elements of the engagement included the following:



Ongoing Project Management

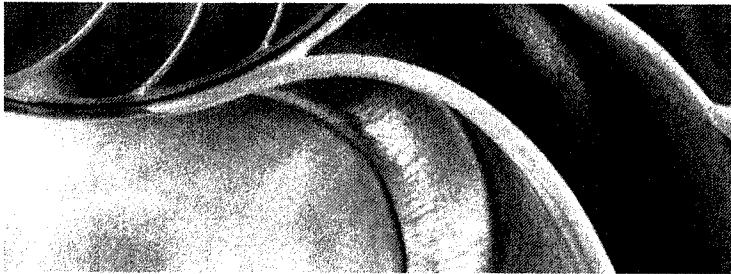
1.5 Purpose of the Assessment

- An independent, objective, third-party perspective regarding EPIC-LA has been requested by the Board prior to expanding the current EPIC-LA implementation:
 - High-level assessment of the proposed EPIC-LA solution expansion from Regional Planning to Public Works, and beyond, from a multi-departmental perspective.
 - Determine if the proposed system developed by Tyler Technologies will meet the technology needs for the County moving forward.
 - Help the County avoid and learn from past challenges experienced with similar initiatives.
- Provide recommendations and guidance on how the County should approach providing a single, public facing portal for other types of permits, as well as ensure effective information sharing between departments.



Section 2.0 – EPIC-LA Assessment Final Report

- 2.1 Current and Future State Analysis by Department
- 2.2 EPIC-LA Technical Solution Analysis
- 2.3 Final Recommendations and Conclusions



Section 2.1

Current and Future State Analysis by Department

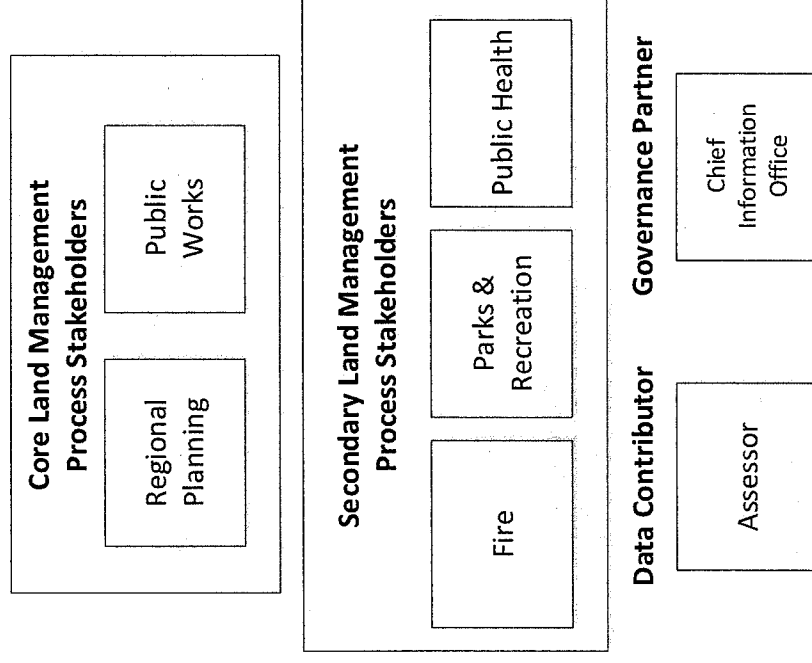
EPIC-LA Assessment Report

2.1 EPIC-LA Assessment Report – Current and Future State Analysis by Department Status of EPIC-LA Implementation

EPIC-LA Implementation Overview

- Regional Planning is scheduled to go-live with EPIC-LA in November 2015.
 - Public Works, Fire, Parks & Recreation, and Public Health will be secondary end users of the application beginning November.
 - Limited number of licenses to log in and enter information.
- EPIC-LA is expected to consume GIS information owned by individual Departments, such as the Assessor (e.g. parcels), that is made available in the County's Central GIS Repository.
- The CIO is currently partnering with Regional Planning and Public Works in an informal advisory capacity, as needed.
- Public Works has submitted a request to the Board to expand contract with Tyler to include Public Work's workflow. Implementation is estimated to take 2 years.

EPIC-LA Major Stakeholders

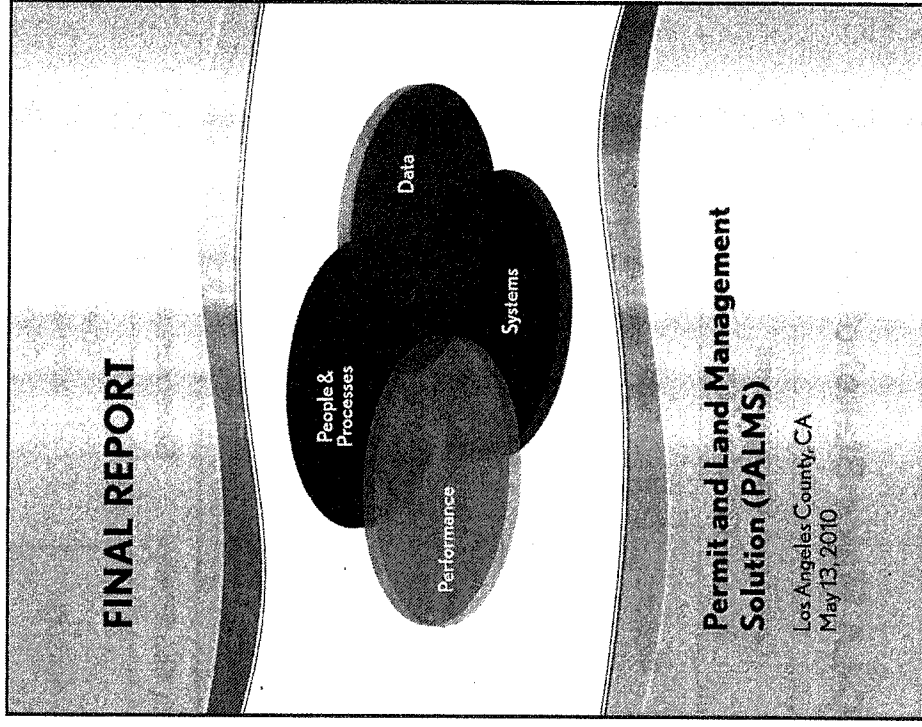


2.1 EPIC-LA Assessment Report – Current and Future State Analysis by Department Permit and Land Management Solution Report (aka Woolpert Report)

Gartner reviewed the Woolpert Report, developed in 2009/10. Gartner conducted a series of interviews with key stakeholders to:

- Validate Gartner’s understanding of the key findings and recommendations of the Woolpert Report for the various departments
- Identify key business process improvements undertaken by the departments since the Woolpert Report
- Determine how future expansion of EPIC-LA to other departments will be consistent with the Woolpert Report recommendations
- Confirm the needs and business capabilities of each department, as well as other key information to inform the assessment

A summary of the key observations and findings from each department’s interview is provided in the subsequent slides.



2.1 EPIC-LA Assessment Report – Current and Future State Analysis by Department Department of Regional Planning



Mission:

- Performs all land use planning functions for the unincorporated areas of Los Angeles County. Includes long range planning, land development counseling, project/case intake and processing, environmental review and zoning enforcement.

Role in Land Management and Permitting:

- Designs long range plans and prepares ordinances for approval by the Regional Planning Commission on subjects such as ecological areas, senior citizen housing, and parking.
- Prepares and develops amendments to the County of Los Angeles General Plan, a document that includes elements such as land use, housing, safety, and noise, and Community Specific Plans (CSDs) for unincorporated areas.
- Holds regular hearings on discretionary, non-legislative land development cases. Decisions are subject to appeal to the Regional Planning Commission.
- Provides responses to enforcement and permitting requests, and considers long-range development issues. Includes consideration of and outreach to a broad range of constituents, from individual homeowners, to large land owners, to community groups, to future generations of Los Angeles County residents.

Key Interview Observations

Level of Role in Land and Development Permitting Functions	High
Level of Alignment with Woolpert Report Recommendations	High
EPIC-LA to be Primary System	Yes

2.1 EPIC-LA Assessment Report – Current and Future State Analysis by Department Department of Regional Planning

Department's Status on Major Woolpert Report Recommendations (1 of 2)

Focus Area	Woolpert Report Key Change Initiative	Status Summary
Organization	Co-location: establish a single site to better serve the customers and to provide operational efficiencies that cannot be otherwise achieved.	DRP has facilitated co-location with other departments for some of its plan reviews, available only certain days during the week. Co-location occurs in Regional Planning space and not in a new single site as Woolpert recommended.
Process	Electronic Document Submissions: implement for applications and plans to achieve savings and customer service improvements.	DRP has the ability to accept plans electronically from the public, but not all applications electronically. These digital files can also be shared with other departments to facilitate paperless reviews.
Process	Conditions of Approval Tracking: redesign conditions tracking processes and leverage new PALMS system capabilities (e.g. GIS).	DRP will leverage both EPIC-LA and GIS to improve conditions of approval tracking and processes, however it is not a substantial multi-department initiative.
Process	Agency Referral Process: implement a consistent method of managing both internal and external referrals.	DRP plans to leverage the EPIC-LA system to refer action items to other departments, however this is not a County-wide approach.

2.1 EPIC-LA Assessment Report – Current and Future State Analysis by Department Department of Regional Planning

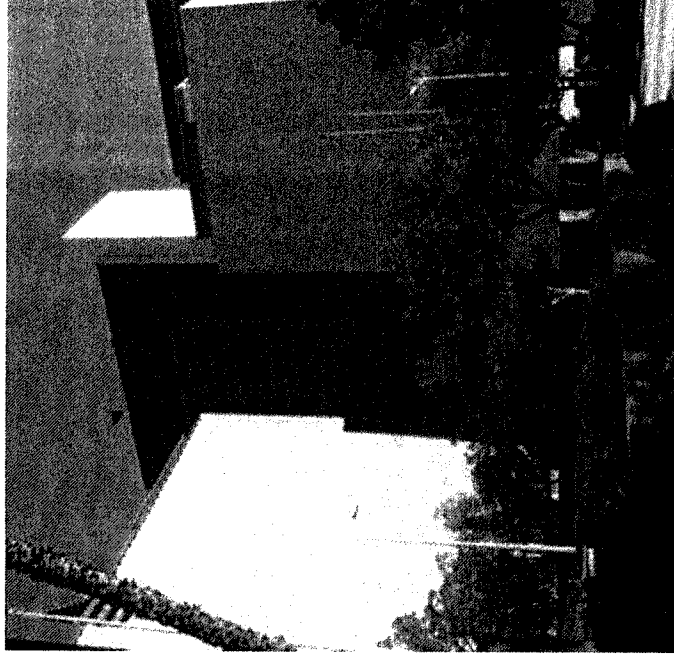
Department’s Status on Major Woolpert Report Recommendations (2 of 2)

Focus Area	Woolpert Report Key Change Initiative	Status Summary
Process and Technology	Electronic Plan Checking and Mark Up: Establishing such processes and County-wide standards reduces customer costs and streamlines the review process. Acquire and implement digital plan mark up technologies.	DRP established processes to digitally review and comment on plans, with plan review occurring in Bluebeam (DRP’s electronic plan review tool). DRP will also leverage EPIC-LA to manage electronic plans once implemented. County-wide electronic plan standards are not yet developed.
Technology	COTS Solutions: Acquire and implement County-wide COTS solutions for PALMS.	DRP went through a detailed selection process and selected EnerGov from Tyler Technologies. However, this solution is specific to DRP and was not part of a County-wide driven enterprise effort.
Technology	e-Commerce Applications: Support customer application and document submissions, automated error checking and online payments.	DRP plans to provide customers an e-Commerce front-end to facilitate online submission of applications and supporting documents, and to make payments with its implementation of EPIC-LA.
Technology	Web and Video Conferences: To better support collaboration between land development agencies, Regional Centers, and customers.	Video conferencing capability is integrated into DRP business processes. Note: It is not required for customers to use video conferencing.

2.1 EPIC-LA Assessment Report – Current and Future State Analysis by Department Department of Regional Planning

Major Findings and Conclusions

- Regional Planning has spent significant time thinking about the lessons learned from the eDAPTS implementation and is taking extra care to avoid such challenges with EPIC-LA.
- Regional Planning reported a good working relationship with Tyler Technologies and that they expect their implementation of EPIC-LA to proceed as planned.
- Gartner did not discover any major issues that would warrant a re-evaluation of Regional Planning's EPIC-LA implementation plans.
- Gartner did identify some areas of risk that should be considered, and have provided high-level recommendations for mitigation in Section 2.3 of this report.



Source: <http://www.lacountyarts.org/UserFiles/Image/2.5.08%20001.jpg>

“Approximately 85-90% of all process activity in land development occurs between Public Works and Regional Planning”

- Woolpert Report

2.1 EPIC-LA Assessment Report – Current and Future State Analysis by Department Public Works



Source: <http://dipw.lacounty.gov>

Agency Mission

- Provide public infrastructure and municipal services to protect and enrich the daily lives of over 10 million people in Los Angeles County.

Key Interview Observations

Level of Role in Land Development Permitting Functions	High
Level of Alignment with Woolpert Report Recommendations	High*
EPIC-LA to be Primary System	Yes (if Phase 2 approved)

*Completion of in-flight projects should result in high Level of Alignment

Role in Land Management and Permitting

- Public Works is divided into six (6) core service areas: Transportation, Water Resources, Waste Management, Public Buildings, Development Services, and Emergency Management.
- The primary users of the EPIC-LA solution will be two divisions within Development Services, Building and Safety, and Land Development.
 - Building and Safety: Building Permits
 - Land Development: Subdivisions
- Other Public Works divisions will have access to the system as needed in a review capacity (e.g., Transportation).
- The Public Works implementation will be a larger, more complex effort than the Regional Planning implementation due to the increased number of workflows and permit types EPIC-LA will support. Public Works will require approximately four times the number of licenses that Regional Planning uses today.

2.1 EPIC-LA Assessment Report – Current and Future State Analysis by Department Public Works

Department's Status on Major Woolpert Report Recommendations (1 of 2)

Focus Area	Woolpert Report Key Change Initiative	Status Summary
Organizational	Co-Location: Co-locate the bulk of Land Management personnel from Public Works, Regional Planning, and Fire in a single, convenient location.	Public Works reports that steps toward co-location are ongoing, however it is significantly complex effort (as noted by Woolpert). In the interim, Public Works has undertaken a number of IT projects to enhance customer service, including but not limited to exploring options for an online permit portal, video conferencing, enhancing their existing websites and 'The Works' app.
Organizational	Consolidation: Create a centralized Land Development Organization, comprised of Land Development personnel from Regional Planning, Public Works, and Fire. Create technical support units for both planning and public works functions.	Public Works and Regional Planning have formed an informal partnership and worked through several implementation decisions already. They have developed a MOU and are ready to implement a Steering Committee upon their contract's approval. Public Works also reorganized their divisions internally into six departments, organized by service area.
Technology	Right-of-Way Permits: Involve the Construction Division in selection of the permitting and inspections software as their needs are similar to Building and Safety. Construction Division issues permits for public right of way construction and other activities.	According to the contract submitted to the Board for Public Works, Right-of-Way Dedications and Processing, and Right-of-Way waivers will be part of Public Works' implementation.

2.1 EPIC-LA Assessment Report – Current and Future State Analysis by Department Public Works

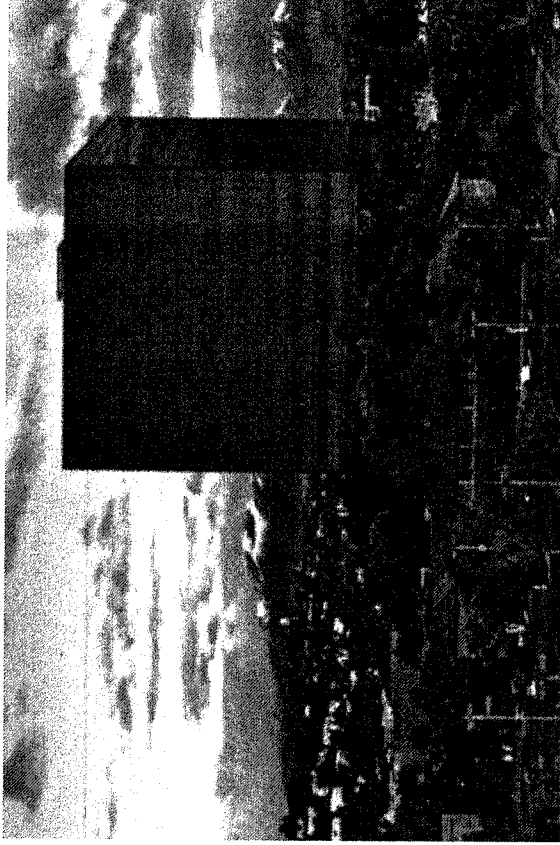
Department's Status on Major Woolpert Report Recommendations (2 of 2)

Focus Area	Woolpert Report Key Change Initiative	Status Summary
Process	<p>Plan Review: Plan checking process should be consistent across all departments, including use of common terminology.</p>	<p>Public Works users will have access to EPIC-LA to participate in the plan check process as part of Regional Planning's implementation and would serve as a 'gatekeeper' entering results in the DRP portion of EPIC-LA.</p> <p>If the EPIC-LA implementation is approved, Public Works would be able to continue using Bluebeam (Public Works' electronic plan review tool) for it is compatible with EnerGov and presumably would have a more seamless plan review workflow with DRP, as both Departments would be operating in the same EnerGov instance.</p>
Process	<p>Plan Review: Approval of a plan should be comprehensive and include all departments' statuses.</p>	<p>Due to Public Works' workflow occurring outside of EPIC-LA it is assumed by Gartner that no detailed information about the review will be available except review status and overall result, until Public Works' EPIC-LA implementation (if approved).</p>

2.1 EPIC-LA Assessment Report – Current and Future State Analysis by Department Public Works

Major Findings and Observations

- Public Works reports a good working relationship with the Tyler implementation team, and has reportedly done their due diligence in vetting EnerGov.
- Gartner did not discover any major issues that would warrant deviating from the proposal to extend Tyler's agreement to include Public Works' implementation.
- Expansion of EPIC-LA to include Public Works would be consistent with the recommendations of the Woolpert Report.
- Gartner did identify some areas of risk that should be considered, and have provided high-level recommendations for mitigation in Section 2.3 of this report.



Source: <http://dpw.lacounty.gov>

“Approximately 85-90% of all process activity in land development occurs between Public Works and Regional Planning”

- Woolpert Report

2.1 EPIC-LA Assessment Report – Current and Future State Analysis by Department Department of Public Health



COUNTY OF LOS ANGELES
Public Health

Mission:

- To protect health, prevent disease, and promote health and well-being

Role in Land Management and Permitting:

- Environmental Health, a program within Public Health, is responsible for enforcement and assessment of environmental conditions, and reducing exposure to health risks.
- The Land Use Division within the Bureau of Environmental Protection is responsible for receiving plans from Regional Planning and coordinating with 30+ programs (i.e. water, septic, group living) within Environmental Health to coordinate a response, as well as completing inspections for some projects.
- Public Health is a large agency and Land Management is a small subset of their overall responsibilities. Public Health's jurisdiction also exceeds that of the County (e.g., supports the cities as well, not only the County unincorporated areas).

Key Interview Observations

Level of Role in Land Development Permitting Functions Medium

Level of Alignment with Woolpert Report Recommendations High

EPIC-LA to be Primary System No

2.1 EPIC-LA Assessment Report – Current and Future State Analysis by Department Department of Public Health

Department's Status on Major Woolpert Report Recommendations

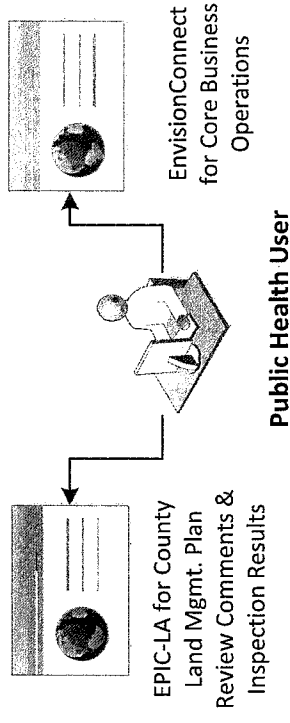
Focus Area	Woolpert Report Key Change Initiative	Status Summary
Process	Plan Review: Plan checking process should be consistent across all departments, including use of common terminology.	Public Health users will have access to EPIC-LA to participate in the plan check process as part of Regional Planning's implementation. Public Health's workflow will occur outside of EPIC-LA, with a 'gatekeeper' entering results in EPIC-LA.
Process	Plan Review: Approval of a plan should be comprehensive and include all departments' statuses.	Due to Public Health's workflow occurring outside of EPIC-LA it is assumed by Gartner that no detailed information about the review will be available except for whether the review has been completed or not and the results of that review.
Technology	Lack of Technology: Public Health was deemed 'low' on the technology scale and required investment in technical infrastructure to be able to realize PALMS benefits.	Procured EnvisionConnect in 2013, a solution specifically designed for public health departments. Reportedly EnvisionConnect should be capable of integrating with EPIC-LA as well as other cities' electronic plan review and permitting systems in the future. However, integration requirements are not defined at this time and Public Health users will be working in multiple systems.

2.1 EPIC-LA Assessment Report – Current and Future State Analysis by Department Department of Public Health

Major Findings and Conclusions

- Due to unique business needs, as well as the large population it supports, Public Health business operations are supported by EnvisionConnect, a market-leading Environmental Health Permit and Inspection Management System recently acquired by Accelea.
- Public Health will log on to EPIC-LA as needed (e.g., a gatekeeper will enter plan review or inspection results), but their workflow will occur outside of the system.
- The future state vision for EnvisionConnect is for the system to integrate not only with the County's EPIC-LA system, but the systems of the other cities they serve as well. However, there are no integration requirements, or a roadmap for integration established at this time.

Public Health will be a Secondary User of EPIC-LA



- As part of Gartner's final recommendations (located in Section 2.3 of this report) Gartner recommends a multi-departmental working group be established to confirm the changes in workflow and number of licenses are sufficient for Public Health for the November 2015 go-live.
- Our concern is that the 'gatekeeper' concept has the risk of becoming burdensome to the secondary departments, especially considering Public Health user(s) may be working in two systems.

2.1 EPIC-LA Assessment Report – Current and Future State Analysis by Department Office of the Assessor



Mission Summary:

- Creating an accurate and timely assessment roll, including locating all taxable property in the County and identifying ownership and establishing a taxable value for all property subject to property taxation.

Role in Land Management and Permitting:

- Assigns parcel numbers to taxable lots throughout the County of Los Angeles.
 - This data, which includes GIS polygons, is leveraged by other departments in their land development permitting processes via the County's GIS repository.
- Updates assessment value and other information based on land development permitting data received from other departments.
- Currently this data is received in a number of different formats, typically via e-mail.

Key Interview Observations

Level of Role in Land Development Permitting Functions	Low
Level of Alignment with Woolpert Report Recommendations	Partial
EPIC-LA to be Primary System	No

2.1 EPIC-LA Assessment Report – Current and Future State Analysis by Department Office of the Assessor

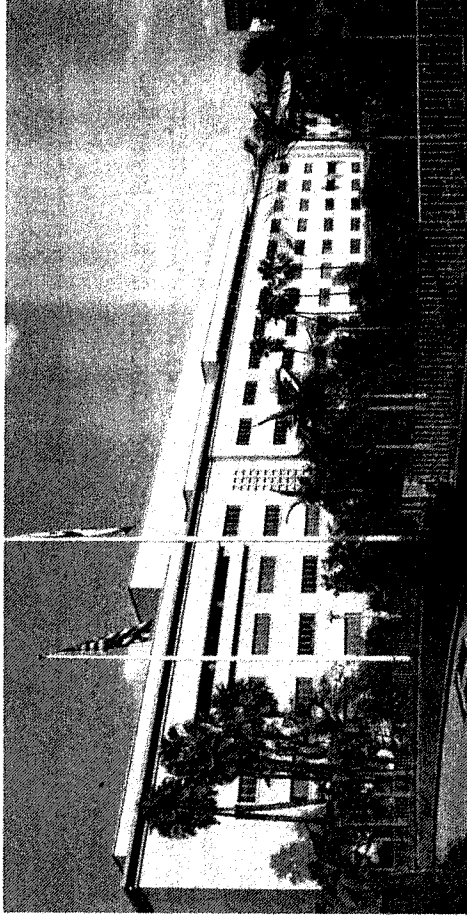
Department's Status on Major Woolpert Report Recommendations

Focus Area	Woolpert Report Key Change Initiative	Status Summary
Process	Parcel Genealogy: In collaboration with the Assessor, establish a standard definition and process for tracking parcel changes and history.	The Assessor acknowledges that some of its processes and supporting systems need to be better positioned to digitally capture additional parcel metadata and some history. However the Assessor is not necessarily viewing parcel genealogy from the perspective of supporting the EPIC-LA system.
Technology	GIS: Leverage GIS technology in PALMS applications. Closely coordinate GIS activities with the County Assessor and the Geographic Information Officer (GIO).	The Assessor is a core contributor to the County's GIS repository and plans to incorporate GIS into its upcoming legacy system modernization project. However both supporting EPIC-LA and driving requirements from a County-level in coordination with the GIO are secondary considerations for this effort. For instance, understanding EPIC-LA system requirements for consuming parcel data from the GIS repository and ensuring future updates and changes to the structure of that layer will support EPIC-LA seamlessly.

2.1 EPIC-LA Assessment Report – Current and Future State Analysis by Department Office of the Assessor

Major Findings and Conclusions

- Though the Assessor's involvement in land management is limited, its parcel data is critical to the successful implementation of EPIC-LA in other departments. Woolpert also drew similar conclusions with its recommendation to improve tracking around parcel genealogy.
- Gartner did discover the Assessor may not be fully considering EPIC-LA in its business process and technology plans.
- As the Assessor moves forward with its migration to a modern system, ensure that integration requirements with EPIC-LA are properly addressed and documented.
- Gartner did identify some areas of risk that should be considered, and have provided high-level recommendations for mitigation in Section 2.3 of this report.



Source: http://www.you-are-here.com/los_angeles/hahn.jpg

“The County Assessor plays a key role in the land development processes. Their mapping unit is the **source for most of the parcel-level GIS information**. They will also play a key role in determining how best to implement a parcel genealogy process that provides a seamless method for tracking parcel condition and information through parcel division processes.”

– Woolpert Report

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2.1 EPIC-LA Assessment Report – Current and Future State Analysis by Department Fire Department



Mission:

- Protect lives, the environment, and property by providing prompt, skillful, and cost-effective fire protection and life safety services.

Role in Land Management and Permitting:

- The Department's Land Development Unit (LDU), within the Fire Prevention Division, sets Fire Department conditions, specifically with regard to water and access, on every land development issue within Los Angeles County.
- Provides plan review for tract and parcel maps, Environmental Impact Reports, Conditional Use permits, zone changes, variances, street vacations, speed hump proposals, traffic calming plans; and provides requirements and staffing for the County's Land Development Management Agency.
- Issues final approval for all subdivision matters and maintains "Strip Maps" which identify all past and present subdivisions and all new hydrant locations County-wide.
- The Department's Engineering Section provides plan review for certain fire and life safety requirements as a condition of the Department of Public Works building permit process and under the authority of the State Fire Marshal.

Key Interview Observations

Level of Role in Land Development Permitting Functions	Medium
Level of Alignment with Woolpert Report Recommendations	Low
EPIC-LA to be Primary System	TBD

2.1 EPIC-LA Assessment Report – Current and Future State Analysis by Department Fire Department

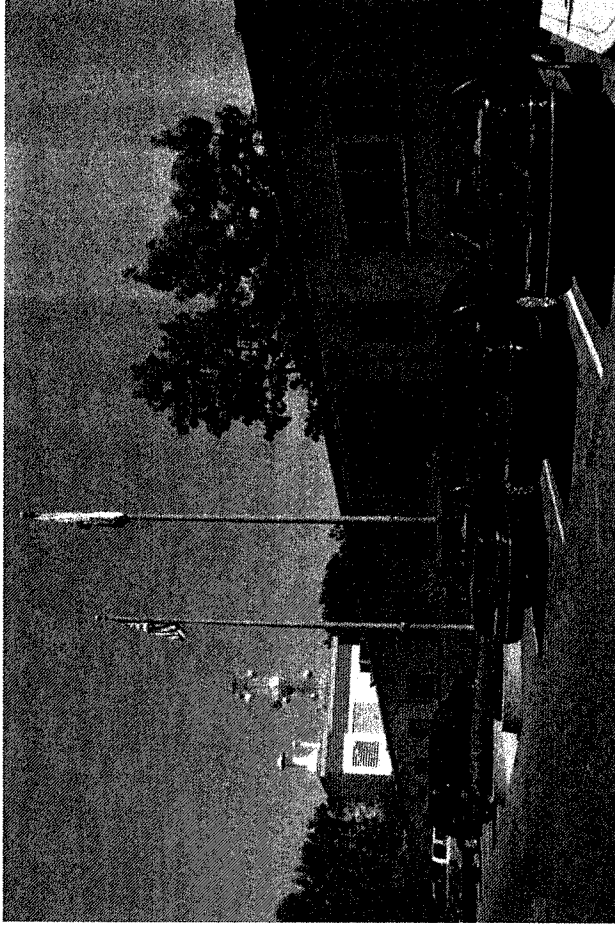
Department’s Status on Major Woolpert Report Recommendations

Focus Area	Woolpert Report Key Change Initiative	Status Summary
Process	Agency Referral Process: Implement a consistent method of managing both internal and external referrals.	Fire currently takes action on referred records in eDAPTS and plans to continue a similar process once EPIC-LA is implemented. However these referrals rely on Fire logging into Regional Planning’s application and the end-to-end processes on the Fire side are not integrated or planned to be integrated with Fire applications.
Technology	Technology Assessment: Assess the capabilities of each PALMS department to ensure their technology, platforms, tools, and personnel are adequate for PALMS implementation.	<p>Fire discussed many PALMS and non-PALMS related processes and technologies during their interview. It is clear Fire would benefit from a detailed technology assessment to determine if and how EPIC-LA could be leveraged as a technology solution for Fire. Without this assessment:</p> <ul style="list-style-type: none"> • The ability for Fire to integrate effectively with EPIC-LA deployments in other departments is limited • It would be challenging to realize the full benefits of an EPIC-LA implementation at Fire • There is significant risk trying to expand EPIC-LA in the future to include detailed Fire-specific workflow

2.1 EPIC-LA Assessment Report – Current and Future State Analysis by Department Fire Department

Major Findings and Observations

- Fire stated they do not have sufficient resources to conduct a thorough business process and technology assessment, a critical prerequisite to considering further EPIC-LA expansion for Fire in the future.
- The numerous processes Fire communicated to Gartner during the interview suggested this is an accurate representation.
- Gartner did identify some areas of risk that should be considered, and have provided high-level recommendations for mitigation in Section 2.3 of this report.



Source: http://www.massfiretrucks.com/LA_County_Headquarters.jpg

“It is recommended that Fire Department personnel from the Land Development and Fire Engineering units also be co-located with the Regional Planning and Public Works personnel. Their organization reporting will not be changed under any of the Options.”

– Woolpert Report

Gartner

2.1 EPIC-LA Assessment Report – Current and Future State Analysis by Department: Department of Parks & Recreation



Mission:

- Provide Los Angeles County with quality recreational opportunities that promote a healthy lifestyle and strengthen the community through diverse physical, educational and cultural programming.
- Enhance the community environment by acquiring, developing and maintaining County parks, gardens, golf courses, trails, and open space areas.

Role in Land Management and Permitting:

- The Planning and Development Agency within Parks & Recreation ensures that County parks and trails are well planned, designed, and developed properly.
- The Agency is responsible for reviewing subdivision maps and recommending map conditions of approval for parks, trails, and natural open space areas within those subdivisions. This includes enforcing the Quimby Act:
 - Most residential development projects requesting a subdivision or a zone change are required, as a condition of approval of the project, to either dedicate land for recreation and park purposes or pay a fee in-lieu (Quimby Fees – see CA Government Code §66477).
- The majority of the review processes occur manually and communication with Regional Planning occurs by email. There is an internal FoxPro database used to support some aspects of the Quimby process, but it does not meet Park & Recreation's needs.

Key Interview Observations

Level of Role in Land Development Permitting Functions	Medium
Level of Alignment with Woolpert Report Recommendations	Low
EPIC-LA to be Primary System	TBD

2.1 EPIC-LA Assessment Report – Current and Future State Analysis by Department Department of Parks & Recreation

Department's Status on Major Woolpert Report Recommendations (1 of 2)

Focus Area	Woolpert Report Key Change Initiative	Status Summary
Technology	Parks & Recreation was deemed 'low' on the technology scale and required investment in technology, process, and infrastructure to realize benefits.	Parks & Recreation has undertaken a ~2 year internal business process assessment and documentation effort to streamline and standardize business processes, in preparation for technology improvements. However, no technology improvements have been undertaken at this time.
Technology	Recommended that 'Parks In Lieu Fees' aka 'Quimby Fees' be included in the Land Development applications, as a custom portion of the application. If not included, Woolpert identified this as a substantial risk.	Parks & Recreation have recently undergone an internal ISD-led feasibility study to pursue replacing the outdated FoxPro Quimby system. ISD recommended procuring a custom-built application. To mitigate the risk identified in the Woolpert Report, Gartner recommends two options: (1) EPIC-LA interface with the new Quimby replacement system, if a separate system is developed, as part of a future implementation phase; (2) A new feasibility study be conducted to determine if EnerGov or other COTS solution could support this functionality and evaluate this alternative. Energov's Impact Management module could potentially be configured to support Quimby fees.

2.1 EPIC-LA Assessment Report – Current and Future State Analysis by Department Department of Parks & Recreation

Department's Status on Major Woolpert Report Recommendations (2 of 2)

Focus Area	Woolpert Report Key Change Initiative	Status Summary
Process	Approval of a plan should be comprehensive and include all departments' statuses.	Due to Park & Recreation's workflow occurring outside of EPIC-LA it is assumed by Gartner that no detailed information about the review will be available except for review status and results.
Process	Plan checking process should be consistent across all departments, including use of common terminology.	Parks & Recreation continues to rely mostly on email communication and manual processes to communicate with Regional Planning and participate in the review process. However, Parks & Recreation user(s) will reportedly have access to EPIC-LA to participate in the plan check process as part of Regional Planning's implementation. It is assumed that Park & Recreation's workflow will occur outside of EPIC-LA, with a 'gatekeeper' entering results in EPIC-LA, similar to other departments' access. A future implementation phase could potentially include building out Park & Recreation's detailed workflow.

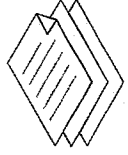


2.1 EPIC-LA Assessment Report – Current and Future State Analysis by Department Department of Parks & Recreation

Major Findings and Observations

- Parks & Recreation's access to EPIC-LA as part of the November 2015 implementation will greatly improve the communication between the Parks & DRP, as well as streamline and automate business processes.
- Parks has a great need for technology improvements given numerous manual processes and an unstable legacy FoxPro system supporting subdivision map review processes and Quimby calculations.
- Potential future Parks & Recreation technology initiatives:
 - Expansion of EPIC-LA to include Parks & Recreation's detailed plan review workflow
 - Expansion of EPIC-LA to support Quimby functionality, or integrate with Quimby replacement (see sidebar)
 - Expansion of EPIC-LA to support park land property management and license agreements (currently manual process)
 - Expansion of EPIC-LA to support the Oak Tree permitting process and Oak Woodland Special Fund administration (interdepartmental process led by Parks & Recreation; policies and procedures currently being finalized)

Internal Services Department (ISD) Assessment for FoxPro Replacement:



- Quimby Application Functionality Assessment
- Quimby Application Cost Estimate

Gartner reviewed at a high level the ISD assessment recently provided to Parks & Recreation (June 2015) for a custom-built system to track and report on Quimby subdivision projects as well as to allocate and track funds. ISD estimated the cost at ~\$265K with a \$27K annual cost. Parks & Recreation had not made a decision on next steps at the time of our interview.

Gartner Review of ISD Assessment

- Further study should be done to consider whether EPIC-LA could encompass this functionality in the future, as an alternative solution.
- Further study should be done to determine if other COTS applications are available to support this functionality, as an alternative solution. Energov's Impact Management module should be evaluated.
- If a separate application is pursued, it should interface with EPIC-LA (this is not currently included in functionality assessment).

2.1 EPIC-LA Assessment Report – Current and Future State Analysis by Department Chief Information Office

Mission:

- To provide vision and strategic direction for the effective use of information technology to achieve business objectives and improve the delivery of services throughout the County of Los Angeles.

Role in Land Management and Permitting:

- The CIO does not participate in the land management process and would not be an end-user of the EPIC-LA system.
- The CIO is responsible for supporting County departments by providing business and technical analysis of IT projects and initiatives, facilitating departments' alignment with the County's strategic plan and ensuring compliance with technical standards.
- The CIO has provided advisory support to the EPIC-LA implementation in an informal capacity to-date. As the EPIC-LA implementation progresses and becomes more complex, the CIO plans to facilitate a discussion with the departments on how to proceed with a formal governance structure.

Key Interview Observations

Level of Role in Land Development Permitting Functions Low

Woolpert Report Recommendations Implemented Yes

EPIC-LA to be Primary System No

2.1 EPIC-LA Assessment Report – Current and Future State Analysis by Department Chief Information Office

Department’s Status on Major Woolpert Report Recommendations (1 of 2)

Focus Area	Woolpert Report Key Change Initiative	Status Summary
Technology	<p>COTS Solutions: Acquire and implement a County-wide COTS solution to replace PALMS.</p> <p>Vendor Framework Development: Utilize an ECM framework suite for PALMS.</p>	<p>Woolpert’s report recommendations are outdated in this area. The County has pursued EnerGov which supported both land development and permits, inspections, enforcement and administration.</p>
Technology	<p>Custom Development: Reserve only for those functions where COTS solutions are not available.</p>	<p>The CIO understands the challenges and risks of unnecessary custom development, and has worked with DRP and DPW to minimize custom development in EPIC-LA.</p>
Technology	<p>Document Management: Implement a robust solution that includes support for electronic submission and workflow.</p>	<p>The County leverages an EMC solution (Documentum) for some elements of document management and is considering Tyler Content Manager for others (or to migrate to TCM completely). A cohesive strategy has yet to be established.</p>
Technology	<p>Workflow: Acquire and utilize workflow capabilities for PALMS applications.</p>	<p>The CIO understands the benefits of workflow capabilities for PALMS applications, however departments like Parks are pursuing custom development solutions with ISD that have PALMS impacts but don’t have workflow engine capabilities.</p>

2.1 EPIC-LA Assessment Report – Current and Future State Analysis by Department Chief Information Office

Department’s Status on Major Woolpert Report Recommendations (2 of 2)

Focus Area	Woolpert Report Key Change Initiative	Status Summary
Technology	GIS: Leverage GIS technology in PALMS applications. Closely coordinate GIS activities with the County Assessor and the GIO.	A significant role for GIS is planned, however robust GIS technical governance for PALMS has yet to be defined at the County level.
Technology	Data Warehouse, Business Intelligence, and Portals: Implementation of these technologies to support reporting and analytics requirements.	The CIO is still developing its strategy for these technologies in relation to EPIC-LA.
Technology	e-Commerce Applications: Support customer application and document submissions, automated error checking and online payments.	The CIO is supportive of a consistent County-wide e-Commerce approach. There is a standing eCommerce committee within the County, and there is a designated third party used to process credit card transactions.
Technology	Central Server: A central server facility should be established for all PALMS applications.	DRP and DPW agreed to use the same EnerGov instance hosted on the ISD eCloud infrastructure. The CIO sees the value of following this approach wherever possible.

2.1 EPIC-LA Assessment Report – Current and Future State Analysis by Department Chief Information Office

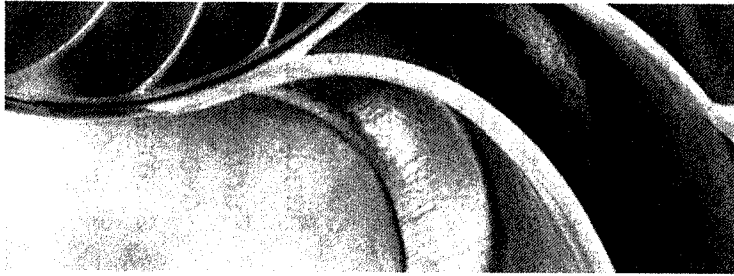
Major Findings and Observations

- Many tough decisions will have to be made in the future as the EPIC-LA implementation continues to grow and evolve. The CIO plans to facilitate a discussion with the departments on how to proceed with governance, assume a mediation role, and help ensure adherence to County technical standards.
- The CIO will also be able to ensure that EPIC-LA continues to abide by the County's technical standards and the IT Strategic Plan as the implementation continues and if additional departments have future needs that could potentially be satisfied by EPIC-LA.
- Further, the CIO has an opportunity to expand its governance of GIS data to land development and permitting – the backbone of the Tyler EnerGov solution.

“Although many enterprise projects have a stated direction of “vanilla” (that is, no frills) implementation, users often find reasons to deviate from that direction. This is often tied to politics in the organization.

Bigger regions or business units tend to have more political clout, more budgetary freedom and more say in the project, often resulting in more modifications. At the opposite end of the spectrum, smaller regions or business units tend to accept what they are given.”

- Gartner Research



Section 2.2

EPIC-LA Technical Solution Analysis

EPIC-LA Assessment Report

2.2 EPIC-LA Assessment Report – EPIC-LA Technical Solution Analysis Overview

As part of the engagement, the EPIC-LA technical solution was reviewed to determine how well the technical solution elements are positioned for a County-wide enterprise technology initiative. For EPIC-LA, the “enterprise” is largely comprised of DRP and DPW.

Gartner did not have any observations or findings that should cause the County to disapprove or delay the EPIC-LA expansion to DPW.

The following slides contain details on the observations and findings around six (6) key themes identified by Gartner:

- Tyler Technologies products are appropriate to consider for the EPIC-LA technical solution
- The technical solution is not formally governed
- Governance and strategies for GIS data relevant to EPIC-LA are not formalized
- EPIC-LA is not viewed by departments in the context of a broader County-wide IT roadmap
- EPIC-LA’s data sharing strategy and governance is not formalized
- EPIC-LA’s role supporting a County-wide public portal is not yet defined

2.2 EPIC-LA Assessment Report – EPIC-LA Technical Solution Analysis Observations and Findings

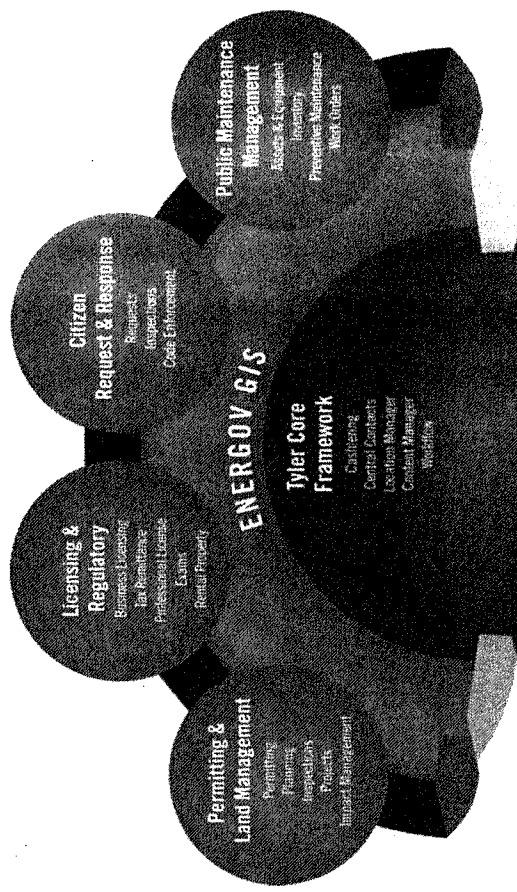
Tyler Technologies products are appropriate to consider for the EPIC-LA technical solution.

- Tyler Technologies is becoming a leading vendor in IT government solutions.
 - In 2014, Tyler's revenue grew more than 18% overall in the government space.
 - As of 2015, Tyler reports more than 13,000 government and education clients worldwide.
- Tyler has a singular focus on U.S. state and local governments, and an overall go-to-market strategy of extending across all major government agencies with a broad portfolio of solutions supported with domain expertise.
- Tyler's approach aligns with state and local governments trending away from implementing highly customized solutions led by large-scale system integrators.

Above based on Gartner Research article:
"Market Share Analysis: Vertical-Specific Software, Worldwide, 2014"

"Tyler, through its acquisition of EnerGov in 2013 and continued success with Munis and other solutions, has been awarded a significant number of contracts of late. In particular, its success in the licensing and permitting market in the last 12 months has been evident

- Gartner Research, "Market Guide for North American Local Government IT Solutions, 2015"



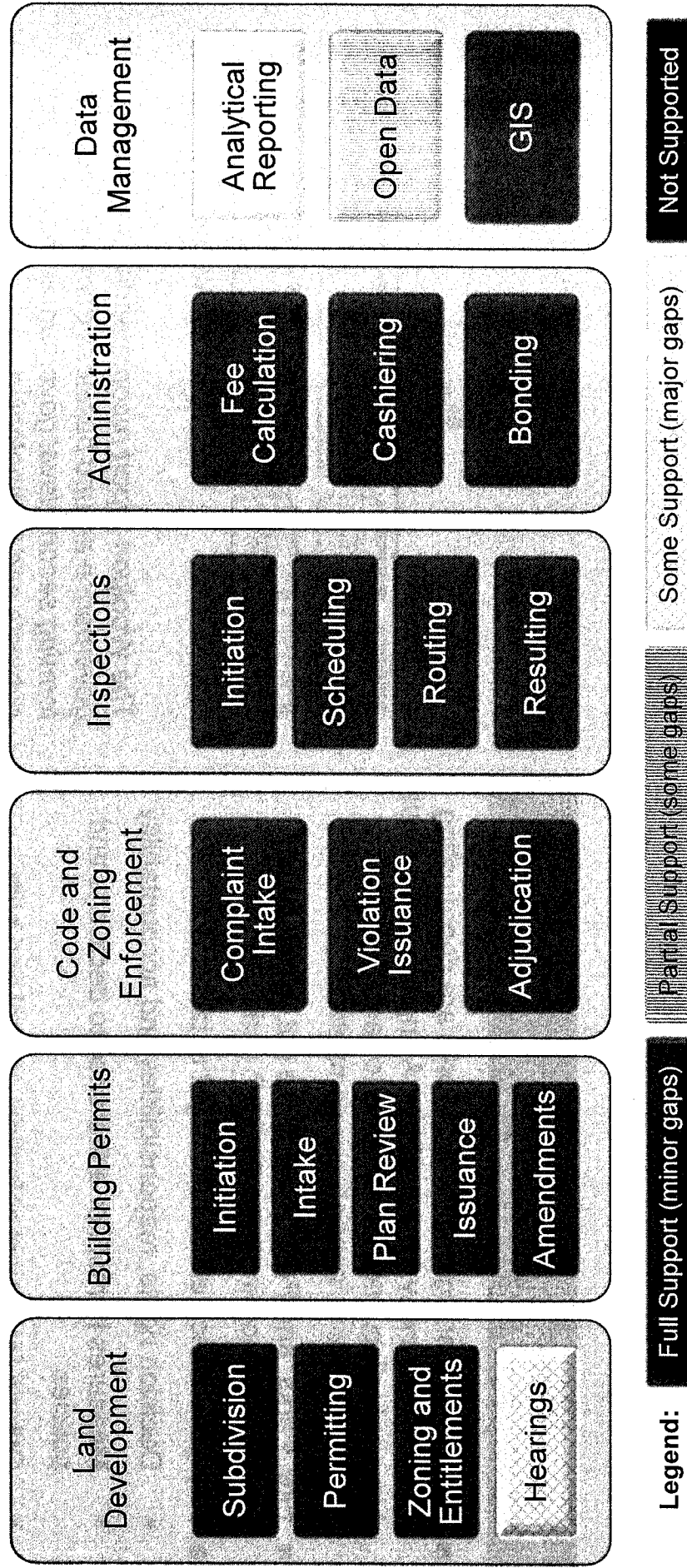
EnerGov Product Suite Representation

Source: <http://www.tyler-tech.com/portals/0/Images/EnerGov650-new.jpg>

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2.2 EPIC-LA Assessment Report – EPIC-LA Technical Solution Analysis Observations and Findings

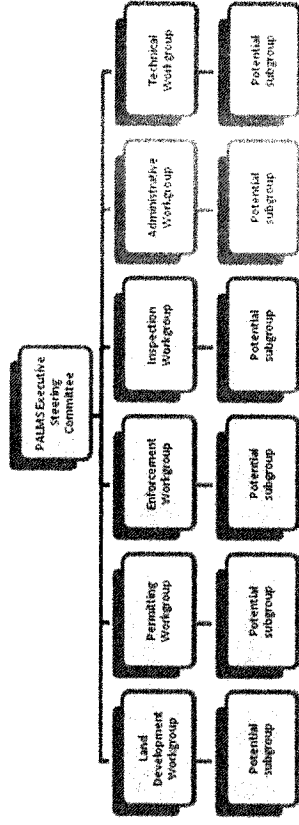
The diagram is adapted from Figure 2-1, page 11 in the Woolpert Report, which represents the business functions the County performs for permitting and land management operations. It provides a “heat map” showing how well Tyler EnerGov supports each of these business capabilities. The classifications are based on Gartner’s high-level understanding of the County’s requirements.



2.2 EPIC-LA Assessment Report – EPIC-LA Technical Solution Analysis Observations and Findings

The technical solution is not formally governed

- Regional Planning and Public Works are coordinating in an informal way for the EPIC-LA implementation but have only discussed initial steps towards formal governance (e.g. “consistency committees”).
- Fire, Parks, and Public Health are not significantly involved in coordination with DRP and DPW.
- Key governance elements not yet established:
 - Decision rights, responsibilities and accountability
 - Measures to monitor adherence to decisions and policies
 - Criteria for project selection, control and post-investment evaluation
 - Documentation procedures
 - Audit and quality assurance



Source: Woolpert Report, p. 69

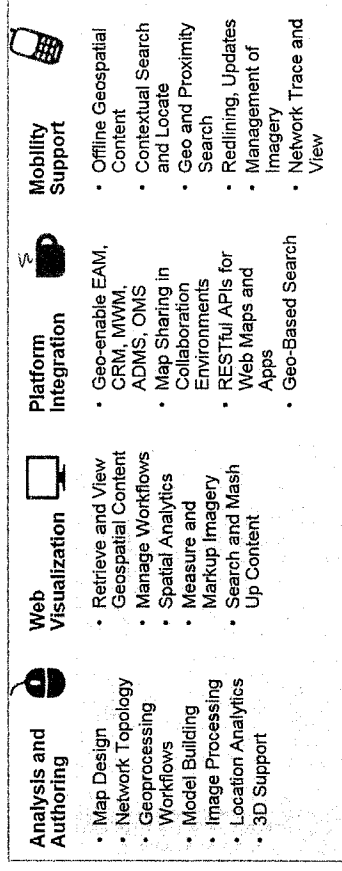
The Woolpert report recommended structuring governance around business domains and forming second-level governance around specific subjects and technologies.

The report does not provide a detailed “turnkey” governance plan for the EPIC-LA technical solution.

2.2 EPIC-LA Assessment Report – EPIC-LA Technical Solution Analysis Observations and Findings

Governance and strategies for GIS data relevant to EPIC-LA are not formalized

- EPIC-LA departments plan to leverage the County's GIS repository in its current state.
- Individual departments currently have much latitude in terms of updating their layers in the GIS repository.
- Discretionary, ungoverned actions by departments in the GIS repository may unintentionally disrupt EPIC-LA applications, once deployed.
- Key GIS strategy and governance not yet established:
 - Determine set of geospatial platform capabilities necessary to meet EPIC-LA needs (e.g. analysis and authoring, web visualization, platform integration, mobility support).
 - Implement an information governance model around GIS data (e.g. standards and protocols for data quality, updates and availability)

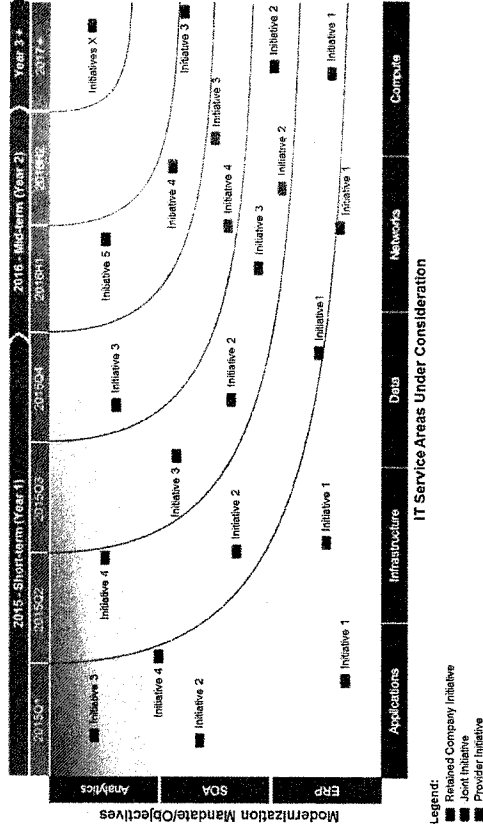


Core Geospatial Platform Capabilities

2.2 EPIC-LA Assessment Report – EPIC-LA Technical Solution Analysis Observations and Findings

EPIC-LA is not viewed by departments in the context of a broader County-wide IT roadmap

- EPIC-LA (EnerGov) may not be the appropriate primary system for all Departments. However, as a major County system it should be considered as an option by Departments when planning technology initiatives (e.g. integration / data sharing).
- It was unclear if Departments and ISD (in their feasibility study for the Quimby application) sufficiently consider EPIC-LA as an option when developing other solutions.
- Key roadmap elements not yet established:
 - Clear communication of EPIC-LA role in the County's broader IT strategy
 - EPIC-LA's prioritization vis-à-vis other County IT goals and initiatives.
 - Association of EPIC-LA beyond broad business goals to specific County IT modernization objectives.

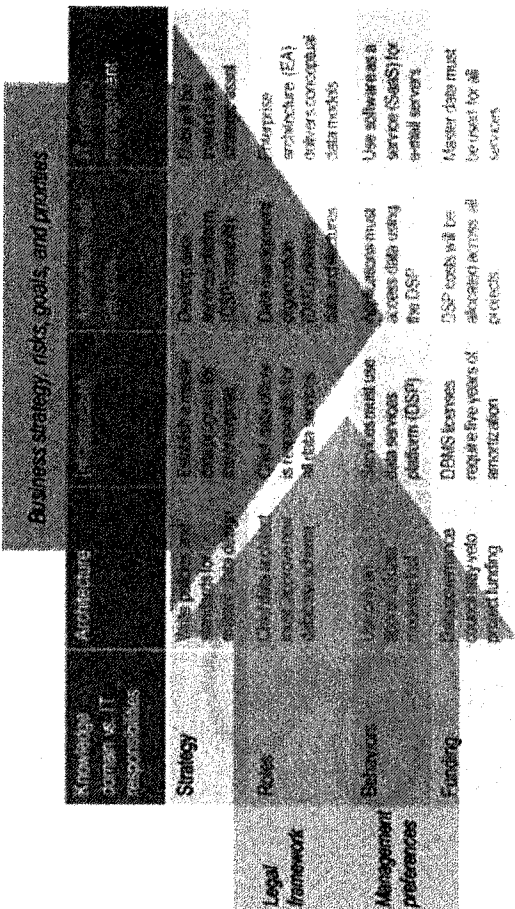


Example of an IT Modernization Roadmap Linked to Modernization Objectives

2.2 EPIC-LA Assessment Report – EPIC-LA Technical Solution Analysis Observations and Findings

EPIC-LA's data sharing strategy and governance is not formalized

- Departments communicated the importance of data sharing and governance, however incorporating a robust technical strategy into the EPIC-LA solution has yet to occur.
- Key data sharing technical elements not yet established:
 - Comprehensive analysis of all current and planned data sources.
 - Determining a core set of use cases and data types the technical solution must support.
 - Identifying tool types the solution must support (e.g. bulk data delivery, real-time data delivery, data sharing with cloud systems).

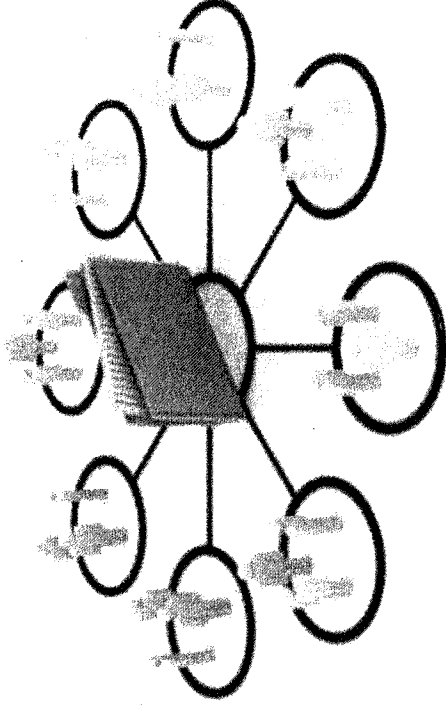


Deciding and Writing Data Governance Precepts Example

2.2 EPIC-LA Assessment Report – EPIC-LA Technical Solution Analysis Observations and Findings

Tyler Technology data sharing capabilities:

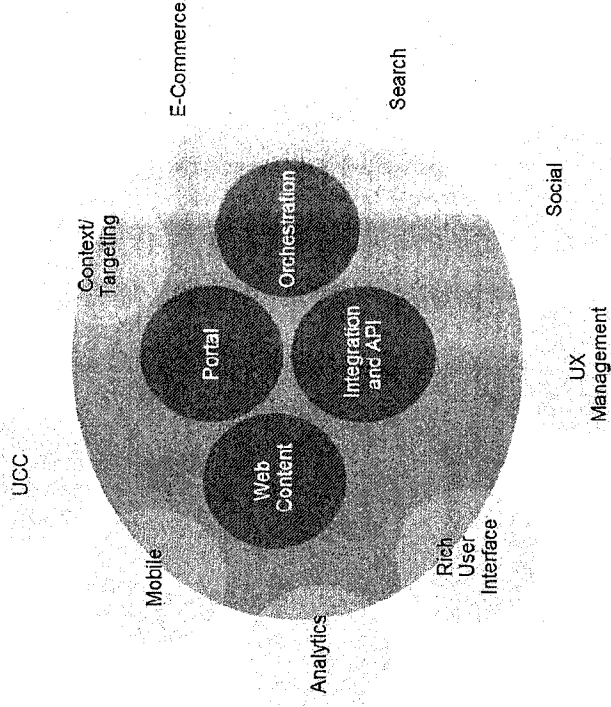
- Departments operating within the same EnerGov instance are able to share data and other information.
- EnerGov includes infrastructure to exchange data via building custom interfaces:
 - Ability to interface with external data sources using standard REST-based APIs for bi-directional interfaces and web services.
 - EnerGov's open data service, EnerGov Odata, provides the ability to create specialized applications which can be designed to provide and consume data to and from external systems.



2.2 EPIC-LA Assessment Report – EPIC-LA Technical Solution Analysis Observations and Findings

EPIC-LA's role supporting a County-wide public portal is not yet defined

- Though the County has identified the goal of a single portal for the public for County services, EPIC-LA's involvement in that technical strategy is not yet defined.
 - For example, EPIC-LA could be the portal for land development and permitting, or it could integrate with the County's IBM WebSphere platform which may serve areas beyond land development
- Key public portal elements not yet established:
 - Selecting a portal model (e.g. informational and/or transactional)
 - Establishing the policy, business processes, and roles of departments with regard to the portal.
 - Identifying the core technology components the portal must support to meet functionality requirements and enable a positive user experience (e.g. credentialing, intake and distribution of common data).



The essential functions of a user experience platform (UXP)

2.2 EPIC-LA Assessment Report – EPIC-LA Technical Solution Analysis Observations and Findings

Tyler Technology public portal capabilities:

- Tyler's EnerGov product, the basis for EPIC-LA, has an ePortal component which is integrated with the core back-office product.
- EnerGov ePortal includes functionality such as application submission and processing, application status checks, inspection requests and cancellations.
- EnerGov's eReview feature allows ePortal to allow users' plans to be digitized and entered into the plan submission and review process. Plan can also be accessed, monitored, and managed by all parties involved.
- The ability for EnerGov ePortal to be the front-end portal for non-EnerGov back-office products may be limited.
- The above are very common, "standard" functions for portals provided by major licensing and permitting solutions in the market.

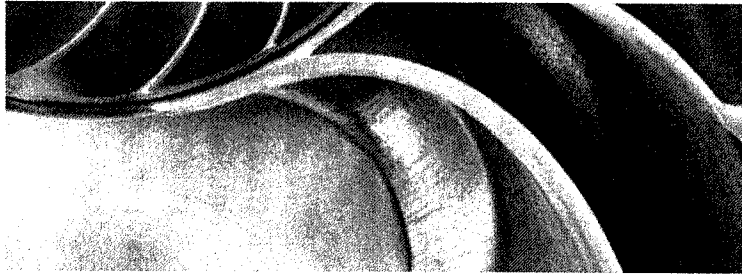
The screenshot displays the City of Clovis public portal interface. At the top, there is a navigation menu with options: Home, Permits, Plan, Inspections, Other Links, and Make Payment. The main header features the City of Clovis logo and the slogan "GATEWAY TO THE SIERRAS". Below the header, the permit details are shown:

- Permit Details:**
 - Application Date: 1/22/2013
 - Issued Date: 1/22/2013
 - Expiration Date: 7/22/2013
 - Finalized Date: 1/22/2013
- Project Information:**
 - Permit Number: 158876
 - Project Name: City of Clovis
 - District: City of Clovis
 - Square Feet: 0.00
 - Valuation: 2800.0000
- Property & Address Details:**
 - Parcel: 491140615
 - Address: 1433 Menlo Ave 112, Clovis, CA 93211
 - Property: 491140615
 - City: Clovis
 - County: Fresno
- Inspection Status:**

Inspection Type	Status	Inspection Date	Inspector
Specul Inspection	Approved	1/14/2013	Wagner, Jeffrey
Plan Building	Approved	1/14/2013	Wagner, Jeffrey
Final	Approved	1/14/2013	Wagner, Jeffrey
- Contract Units:**

Type	Contract/Category	Unit Number	Unit Status
Contractor	Contract	158876	Open

Screenshot of EnerGov public portal page from City of Clovis, CA
Source: <http://cap.ci.clovis.ca.us/CAP/Site/Permit/Search>



Section 2.3

Final Recommendations and Conclusions

EPIC-LA Assessment Report

2.3 EPIC-LA Assessment Report – Final Recommendations and Conclusions

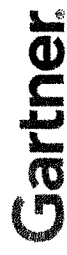
Summary of Major Findings: SWOT Analysis

Strengths
<ul style="list-style-type: none">Regional Planning and Public Works report good working relationship with the Tyler implementation teamRegional Planning and Public Works report that EnerGov meets their requirements, after a lengthy and detailed studyImplementation is overall highly consistent with Woolpert Report recommendations across process, technology, and organizational areas of focus

Weaknesses
<ul style="list-style-type: none">Lack of formal governance structure and communication with departments outside of the inner circle of Regional Planning and Public WorksSecondary departments' workflows will occur outside of EPIC-LA, which limits the transparency of the end-to-end process

Opportunities
<ul style="list-style-type: none">Develop a formal short-term roadmap for Nov. 2015 implementation that solidifies departments' understanding of implementation impact to business processesInitiate organizational change management activities ASAP for the November 2015 go-liveImplement a formal governance program that includes all impacted business departments, as well as IT (CIO, ISD, GIS)

Threats
<ul style="list-style-type: none">Planned workarounds and number of licenses allocated for secondary departments may not be sufficient and could cause 'bottlenecks' in the processLack of independent oversight of complex implementation potentially limits objective reporting of project status and quality of implementation, and risk monitoring



2.3 EPIC-LA Assessment Report – Final Recommendations and Conclusions

Overview of Final Recommendations

Overall recommendation: Gartner has concluded that Tyler Technologies' EnerGov solution meets the County's needs for DPW and recommends DPW be approved to move forward with its EPIC-LA implementation.

Gartner identified several opportunities to refine the approach to increase the likelihood of success and realize the intended benefits of the investment in EPIC-LA.. A summary of this information is presented below with additional details on the following slides:

#	Category	Recommendation
1	Go-Live Preparation	Convene a multi-departmental working group to begin planning for the November 2015 implementation's impact on all affected departments.
2	Governance	Expansion of EPIC-LA will significantly increase the importance of implementing a formal governance team with the mandate and authority to drive the project, and make scope and policy decisions.
3	Online Portal	The County should solidify its strategy, objectives and governance for a public facing Land Management portal in close coordination with core public stakeholders. The County's existing IBM WebSphere platform may be leveraged to extend the EnerGov portal solution which has some limits.
4	Data Sharing	Implement a formal plan for information sharing between departments. Establishing objectives around data sharing will help inform the technical strategy of EPIC-LA. This will help determine the extent EnerGov can facilitate data sharing versus any needs for a more independent data sharing "hub" solution.
5	Long Term Roadmap	Develop a long-term implementation roadmap that explores opportunities to continue to enhance EPIC-LA and incorporate additional departments.
6	Independent QA and Risk Assessments	With expansion of the project the complexity of the implementation as well as the reliance on Tyler Technologies as a vendor partner will increase. To ensure continued project success, the County should consider engaging an independent vendor for periodic (quarterly or event driven) quality assurance and risk assessments. This will help ensure proactively managing project risks related to vendor performance and benefits realization.

2.3 EPIC-LA Assessment Report – Final Recommendations and Conclusions

Detailed Final Recommendations

Go-Live Preparation

Recommendation	Rationale
<ul style="list-style-type: none"> ▪ Convene a Multi-Departmental Working Group to begin planning for the November 2015 implementation's impact on all affected departments' business processes, reporting, data sharing, and other areas to ensure workflow and licenses are adequate to meet all department's needs, and initiate organizational change management activities for the November 2015 go-live immediately. 	<ul style="list-style-type: none"> ▪ Most departments outside of the inner circle of Regional Planning and Public Works are not adequately informed of the implementation. ▪ Planned workarounds and number of licenses allocated for secondary departments may not be sufficient and could cause 'bottlenecks' in the process. Departments may be utilizing data stored in EPIC-LA that Regional Planning or Public Works are unaware of. ▪ The County must ensure it is developing an actionable Organizational Change Management Strategy (with specific activities and tasks assigned) that enables a comprehensive cultural change program, and engagement with specific, key influencers among the departments. This should not be a series of last minute activities and should not be assumed to be satisfied through end-user training.

"It is important to ensure that senior management at the business-unit level is also committed to the project, because it is difficult... to change behaviors and mandate major change without the support of the business unit managers."

– *Gartner Research*

2.3 EPIC-LA Assessment Report – Final Recommendations and Conclusions Detailed Final Recommendations

Governance

Recommendation	Rationale
<ul style="list-style-type: none"> ▪ Before EPIC-LA expands beyond DPW, implement a formal governance team with the mandate and authority to drive the project and make scope and policy decisions, with roles and responsibilities assigned that address the impact of the implementation on the department. <p>“Good governance is vital to a successful IT program. Involving senior leaders and business unit executives early and often helps keep projects and programs aligned with enterprise or agency strategies and objectives.”</p> <p>– <i>Gartner Research</i></p>	<ul style="list-style-type: none"> ▪ DRP and DPW have implemented an informal governance structure that has resulted in early successes for the project. However, formal governance will become more critical with future expansions. <ul style="list-style-type: none"> – Woolpert found one of the contributing causes of failure of the previous eDAPTS initiative was due to a lack of a single “chain of command” that made (or mediated) configuration and design decisions. ▪ Gartner recommends a governance team that is a blend of the major Land Development stakeholders (Regional Planning, Public Works) along with secondary stakeholders (Fire, Public Health, Parks and Recreation), with additional contributors from the CIO, ISD, and the County’s GIS team. ▪ This is not a recommendation to design EPIC-LA by committee, but to put a framework in place that ensures executive sponsorship, scope management, and clarity of authority and accountability.

2.3 EPIC-LA Assessment Report – Final Recommendations and Conclusions

Detailed Final Recommendations

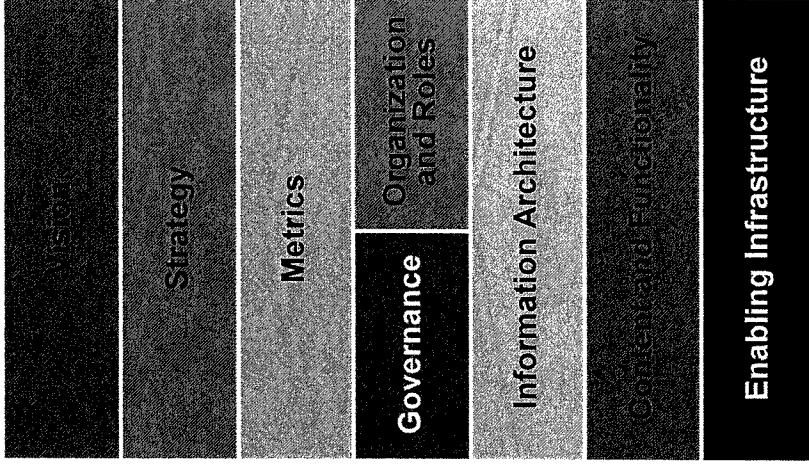
Online Portal

Recommendation	Rationale
<ul style="list-style-type: none"> ▪ Solidify the County’s goals, strategy, and governance for a public facing portal in close coordination with core public stakeholders. ▪ Initiate a project focusing on determining if the County’s existing IBM WebSphere-based platform can serve as the single web interface for the public for both land development and non-land development permits. <ul style="list-style-type: none"> – If it is determined the portal should be limited to land development and permitting, consider leveraging EnerGov’s ePortal solution as it is designed to work with the EnerGov back office. <p>“Good portals drive service improvement and value, and represent an ideal transition platform to digital government.”</p> <p>– <i>Gartner Research</i></p>	<ul style="list-style-type: none"> ▪ Many public portals are not being used to the degree expected. As a result, benefits anticipated in the original business case are not being realized. This is a core reason as to why public user engagement is critical prior to settling on a portal approach. ▪ Failing to simplify and integrate policy, processes and transactions to support digital government processes will likely force the County to compromise on the citizen-centric design of these portals. This will limit potential service delivery and will constrain operational benefits. ▪ Strong governance is required to ensure as processes, regulations and technology change over time such changes are seamlessly and consistently integrated into the portal.

2.3 EPIC-LA Assessment Report – Final Recommendations and Conclusions

Detailed Final Recommendations

Online Portal – Defining the Strategy: “Eight Building Blocks”

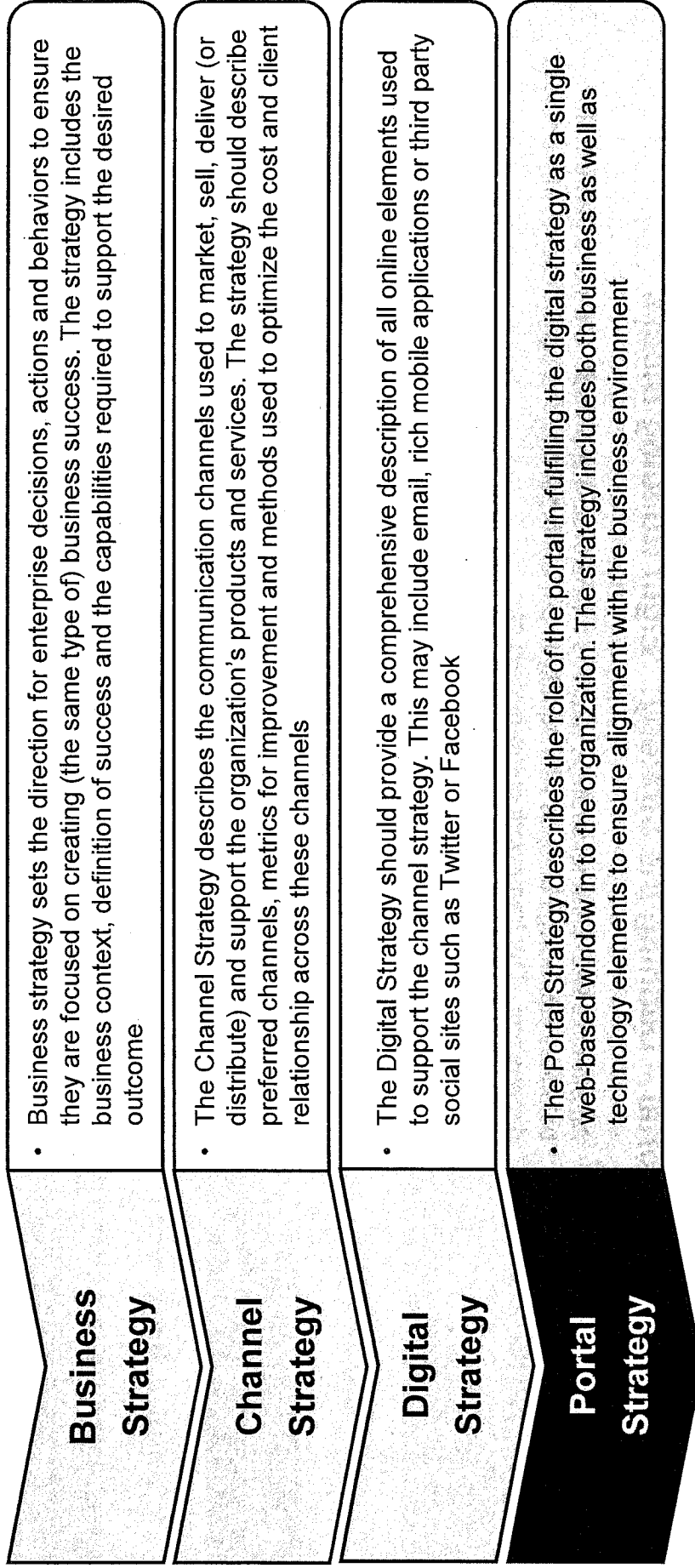


An effective web channel strategy requires an integrated approach. Gartner’s framework balances technology choices with equally important organizational, governance, and process dimensions. The framework comprises of:

- **Vision** — Describes what the purpose of the portal is, why is needed, how it supports the business vision and who it serves
- **Strategy** — Articulates how the portal vision will be realized. Identify and prioritize audiences (user personas) and supporting projects
- **Metrics** — Captures how the progress and business contributions of the portal are measured
- **Governance** — Establishes the decision rights framework and assigns roles and responsibilities
- **Organization and Roles** — Forms the groups and organizational structures to support the portal or Web presence
- **Information Architecture** — The framework (hierarchy, navigation, labeling and metadata) that defines the branded user experience
- **Content and Functionality** — content—both published and user-generated as well as functionality directly serves the user needs
- **Enabling Infrastructure** — Provides the technology capabilities to achieve the scale, policy enforcement and customization required to deliver an optimal user experience

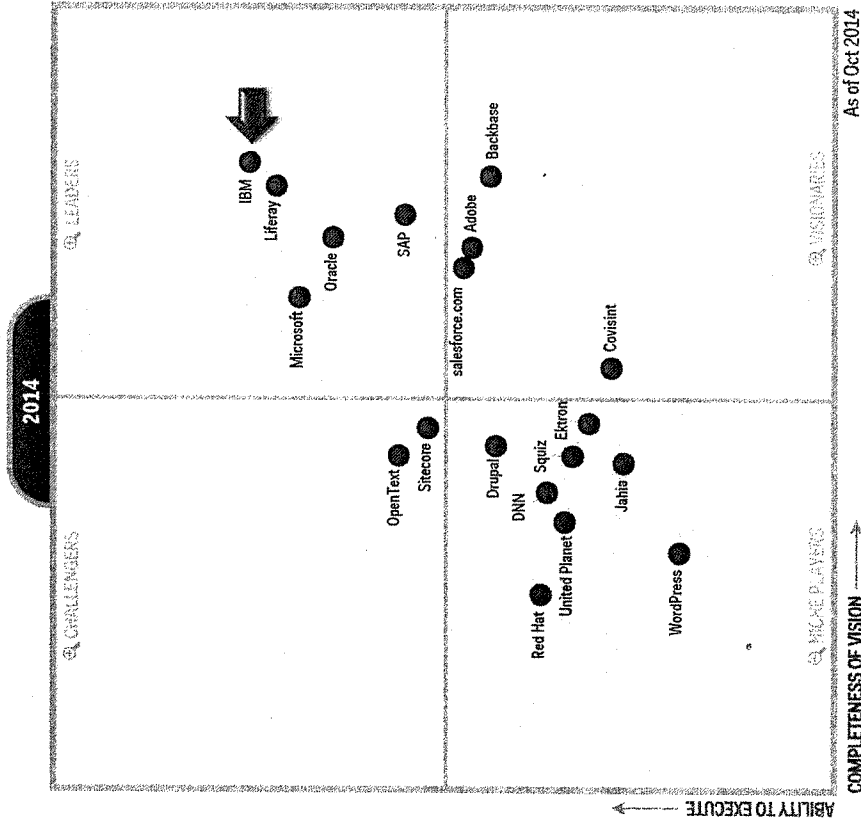
2.3 EPIC-LA Assessment Report – Final Recommendations and Conclusions Detailed Final Recommendations

Online Portal – Defining the Strategy: Aligning with Business Priorities



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Online Portal – Defining the Strategy: Considering IBM WebSphere



- A detailed assessment is required to determine if the County's current IBM WebSphere platform will meet the goal of a single public portal.
- The Gartner Research *Magic Quadrant for Horizontal Portals* (left) shows IBM WebSphere to be a well positioned product for consideration.
- IBM WebSphere product strengths include:
 - Broad feature set.
 - Customers report product is highly reliable, scalable, secure and well-architected for portal initiatives requiring complex integrations and mixtures of content and applications.
- IBM WebSphere product cautions include:
 - Can become complex and expensive to deploy.
 - Regarded as “traditional portal software” and therefore may not always reflect newer approaches and experiences.

2.3 EPIC-LA Assessment Report – Final Recommendations and Conclusions

Detailed Final Recommendations

Data Sharing

Recommendation	Rationale
<ul style="list-style-type: none"> ▪ Implement a formal plan for information sharing between departments (i.e. interfaces needed, reporting extracts, etc.). <ul style="list-style-type: none"> – Include establishing governance, standards, protocols, and expectations around data sharing (e.g. data classification) – Determine a County-wide technical infrastructure that can more robustly support data exchanges between departments. <p>“Digital business will intensify data integration challenges. In response, integration leaders need to update data integration strategies to incorporate a portfolio-based approach and combine cloud and on-premises deployment models.”</p> <p>– <i>Gartner Research</i></p>	<ul style="list-style-type: none"> ▪ The County needs to further solidify its interdepartmental data sharing objectives and strategy in order to determine if EnerGov can facilitate data sharing or if a more independent solution (e.g. data sharing “hub”) is required. ▪ The County should not assume EnerGov will be the sole technology needed to support EPIC-LA especially in secondary departments. As such to meet currently identified EPIC-LA goals, a robust data sharing plan is needed. ▪ A robust approach for data sharing will better be able to adapt to new unforeseen use cases for generating more business value from the County’s data. ▪ As additional departments implement EPIC-LA, the complexity of data integration will increase and requirements will expand (e.g. data exchanges requiring a mix of latencies and patterns).

2.3 EPIC-LA Assessment Report – Final Recommendations and Conclusions

Detailed Final Recommendations

Long Term Roadmap

Recommendation	Rationale
<ul style="list-style-type: none"> ▪ Develop a long-term implementation roadmap that explores opportunities to continue to enhance the EPIC-LA implementation, incorporating additional departments' detailed workflow to streamline interdepartmental processes and reduce dependence on legacy, disparate applications. 	<ul style="list-style-type: none"> ▪ It is critical that the departments do not continue to operate in silos with disparate applications and inconsistent processes. Focus should be on a customer-centric service delivery model. ▪ Potential future initiatives that the County should evaluate include the following: <ul style="list-style-type: none"> – Expansion of EPIC-LA to incorporate plan review and inspection workflows for the secondary departments (Parks & Recreation, Fire, Public Health), which may include integration with Public Health's EnvisionConnect – Expansion of EPIC-LA to replace Fire's legacy permitting applications, or integration with the selected replacement solution(s) – Expansion of EPIC-LA to replace Park & Recreation's Quimby database, or integration with the selected replacement solution – Expansion of EPIC-LA to automate Park & Recreation's manual processes (e.g., Land Property Management) or integration with the selected replacement solution(s)
<p>"Citizens have grown accustomed to having many of their individual wants and needs satisfied quickly in the course of every day transactions. A high degree of service coordination and personalized response is now the baseline against which the performance of government is being measured."</p> <p><i>Gartner Research</i></p>	

2.3 EPIC-LA Assessment Report – Final Recommendations and Conclusions Detailed Final Recommendations

Independent Quality Assurance

Recommendation	Rationale
<p>▪ To ensure continued project success, the County should consider engaging an Independent Quality Assurance vendor to conduct periodic or event driven Quality Assurance and Risk Assessments. As EPIC-LA expands beyond DPW its complexity will increase, as well as the dependence on Tyler. An independent QA vendor can help ensure Tyler is meeting expectations and is approaching their work efficiently and effectively (e.g. avoiding unnecessary change orders and costs).</p> <ul style="list-style-type: none"> – As needed, an Independent QA vendor can also assist with governance issues, provide subject matter expertise, objective project status reporting and proactively mitigate upcoming risks. <p>“Gartner benchmarks and other studies show that project failures are more likely on large software efforts, especially those performed by DDI (Design, Development, Implementation) Contractors.”</p> <p>– <i>Gartner Research</i></p>	<ul style="list-style-type: none"> ▪ As projects expand, DDI (Design, Development, Implementation) contractors may tend to “bloat” or over-complicate their implementation – Independent QA can help mitigate this. ▪ Many other risks beset large contract projects, stemming from their size, cost, complexity, and other factors. Independent QA can help proactively identify and mitigate these risks and issues. ▪ A range of verification and validation activities address project and vendor quality management, and are available from a variety of external service providers. <ul style="list-style-type: none"> – Such providers should also be able to bring in specialized expertise at critical junctures on an as-needed basis. ▪ An independent verification and validation provider can also help mitigate schedule and budget pressures and other internal political drivers which can, and often do, result in quality shortcuts or a fatally flawed system entering into production.

2.3 EPIC-LA Assessment Report – Final Recommendations and Conclusions

Final Conclusions

- Expansion of EPIC-LA from Regional Planning to include Public Works is an appropriate next step for the County.
- Gartner has identified a number of recommendations that the County should consider to help ensure success of the EPIC-LA program and mitigate risk. First and foremost is implementation of formal program governance.
- Most departments have taken action to comply with the Woolpert Report recommendations
- Continued expansion of EPIC-LA, as long as it is well-planned and logical, will continue to help the County realize the expected benefits outlined in the Woolpert Report.

EPIC-LA Assessment Report – Gartner Contacts



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