

City of Austin



**A Report to the  
Austin City Council**

**Mayor**  
Lee Leffingwell

**Mayor Pro Tem**  
Sheryl Cole

**Council Members**  
Chris Riley  
Mike Martinez  
Kathie Tovo  
Laura Morrison  
Bill Spelman

**Office of the  
City Auditor**

**City Auditor**  
Kenneth J. Mory  
CPA, CIA, CISA, CRMA

**Deputy City Auditor**  
Corrie E. Stokes  
CIA, CGAP, CFE

AUDIT REPORT

# AustinGO: Website Governance and Management Audit

August 2013



## REPORT SUMMARY

City management has not adopted a strategic framework or an effective implementation plan for open government, which is hindering the successful implementation of open government practices, intended to promote transparency and openness of data, as directed by Council resolution. Furthermore, governance of the City's website does not ensure that all City web content is managed in accordance with best practices, which may impact the quality of the information provided to citizens.

**TABLE OF CONTENTS**

---

**BACKGROUND** ..... 1

**OBJECTIVES, SCOPE, AND METHODOLOGY** ..... 1

**AUDIT RESULTS** ..... 2

**Appendix**

Appendix A: Management Response ..... 8

**Exhibits**

Exhibit 1: Strategic Areas of Open Government ..... 3

Exhibit 2: Requirements for Open Data in Council Resolution 20111208-074 ..... 4

Exhibit 3: AustinGO Components ..... 5

Exhibit 4: Web Content Management for Content Management System ..... 5

Exhibit 5: Inconsistencies for Web Content Managed Outside of Content Management System ..... 6

**GOVERNMENT AUDITING STANDARDS COMPLIANCE**

---

We conducted this performance audit in accordance with Generally Accepted Government Auditing Standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

**AUDIT TEAM**

---

Niki Raggi, CGAP, CRMA, CICA, Assistant City Auditor  
Neha Sharma, CPA, CIA, CISA, Auditor-in-Charge  
John Anthony Martin, Auditor  
Amy Carte, Auditor

**Office of the City Auditor**  
**Austin City Hall**  
**phone:** (512)974-2805  
**email:** oca\_auditor@austintexas.gov  
**website:** <http://www.austintexas.gov/auditor>

Copies of our audit reports are available at <http://www.austintexas.gov/auditor/reports>



*Printed on recycled paper*  
*Alternate formats available upon request*

August 2013



## Audit Report Highlights

### Why We Did This Audit

This audit was conducted as part of the Office of the City Auditor's (OCA) FY 2013 Strategic Audit Plan.

### What We Recommend

We recommend that the City Manager's Office develop, document, and implement a strategic framework and an implementation plan for open government, as per City Council resolution 20111208-074; and implement a complete web governance structure for the management of all City web content.



For more information on this or any of our reports, email [oca\\_auditor@austintexas.gov](mailto:oca_auditor@austintexas.gov)

# AUSTINGO: WEBSITE GOVERNANCE AND MANAGEMENT AUDIT

Mayor and Council,

I am pleased to present this audit on AustinGO: Web Governance and Management.

## BACKGROUND

In January 2012, the City launched a new website, known as AustinGO. The City's website was redesigned with the goal of improving resident access to needed information and educational resources and increasing transparency and accountability for the entire City organization.

AustinGO is sponsored by the City Manager's Office and is managed by the City's web team which is comprised of senior staff from the Communication and Public Information Office and the Communications and Technology Management Department.

## OBJECTIVES AND SCOPE

The objectives of the audit were to evaluate City progress made towards the implementation of City Council resolution for Open Government as it relates to open data and to determine whether AustinGO policies and procedures are aligned with best practices related to web content management.

The audit scope included current City policies and procedures related to web governance and efforts to address the Open Government initiative in place as of July 2013.

## WHAT WE FOUND

The City redesigned website, AustinGO, has received numerous recognitions since its go live, in January 2012 and the City's web team has undertaken several initiatives to gauge customer satisfaction and promote continuous improvement.

The City has also undertaken several initiatives related to open government; however, City management has not adopted a strategic framework or an implementation plan for open government, as directed by the 2011 Council resolution. The lack of defined responsibilities, priorities, and timelines is hindering the successful implementation of open government practices intended to promote transparency and openness of data.

We also found that the current governance of the City's website does not ensure that all City web content is managed in accordance with best practices, which may impact the quality of the information provided to citizens.

We appreciate the cooperation and assistance we received from staff in the Communication and Public Information Office and the Communications and Technology Management Department during this audit.

  
Kenneth J. Mary, City Auditor

## **BACKGROUND**

---

In January 2012, the City launched a new website, known as AustinGO. The City website was redesigned with the goal of improving resident access to needed information and educational resources and increasing transparency and accountability for the City of Austin.

AustinGO is sponsored by the City Manager's Office and is managed by the City's web team which is comprised of senior staff from the Communications and Public Information Office and the Communications and Technology Management Department.

## **OBJECTIVES, SCOPE, AND METHODOLOGY**

---

The AustinGO: Website Governance and Management Audit was conducted as part of the Office of the City Auditor's (OCA) Fiscal Year (FY) 2013 Strategic Audit Plan, as presented to the City Council Audit and Finance Committee.

### **Objectives**

The objectives of the audit were to:

- evaluate City's progress made towards the implementation of City Council resolution for Open Government as it relates to open data, and
- determine whether AustinGO policies and procedures are aligned with best practices related to web content management.

### **Scope**

The audit scope included the following:

- The City websites as of July 2013
- The City efforts to address the Open Government initiative as of July 2013
- Policies, procedures, and practices in place as of July 2013 for web site content management

### **Methodology**

To accomplish our audit objectives, we performed the following steps:

- Conducted interviews with the City's web team and relevant stakeholders
- Reviewed relevant laws and regulations
- Reviewed best practices for web content management
- Reviewed recordings of relevant Austin Community Technology and Telecommunications Commission (ACT&TC) meetings and Council Committee for Emerging Technology and Telecommunications (CET&T) meetings
- Surveyed 113 City departments' web content liaisons (Drupal authors and publishers) about departmental practices related to web content management and resources; out of the 113 users surveyed, we received responses from 70 users, which translates in a 62% response rate
- Reviewed the AustinGO website content and data sets uploaded to the City's Open Data Portal

## AUDIT RESULTS

---

The City redesigned website, AustinGO, has received numerous recognitions since its go live, in January 2012. Furthermore, we noted that the City's web team has undertaken several initiatives to gauge customer satisfaction and promote continuous improvement. The City has also undertaken several initiatives related to open government; however, City management has not adopted a strategic framework or an effective implementation plan for open government. The lack of defined responsibilities, priorities, and timelines is hindering the successful implementation of open government practices intended to promote transparency and openness of data. Furthermore, governance of the City's website does not ensure that all City web content is managed in accordance with best practices, which may impact the quality of the information provided to citizens.

### **Observation: The City has undertaken various initiatives to gauge customer satisfaction since the launch of the AustinGO website and has received numerous recognitions.**

The City has undertaken various initiatives to gauge customer satisfaction, including:

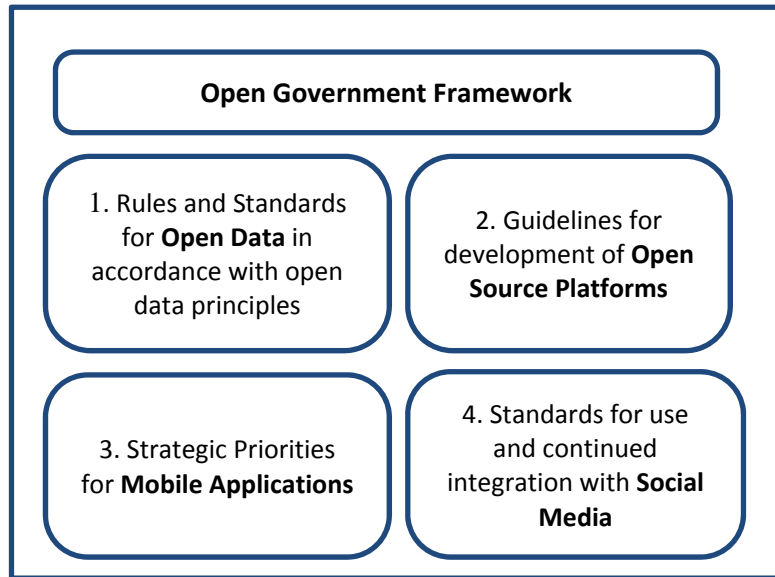
- Established mechanisms to solicit customer feedback on the web site and using such feedback to make service improvements.
- Contracted with a vendor to conduct a usability study for improving customer experience in interacting with the website.
- Established performance measures to track several indicators, such as:
  - cumulative error rate reported for all City webpages,
  - total number of unique visits to City website, and
  - percent of users who report that information is easy to find on City website.

In addition, the redesigned website, has received numerous awards. AustinGO received Best Website award for local governments with population over 100,000 from the Texas Association of Municipal Information in June 2012 and the 5<sup>th</sup> place in the Best of the Web (BOW) competition from the Center for Digital Government in August 2012. Furthermore, Austin Finance Online received an Award for Excellence in Government Finance in the area of eGovernment and Technology from the Government Finance Officers Association (GFOA) in July 2012.

### **Finding 1: The lack of a defined strategy is impacting the City's ability to successfully implement the Open Government initiative, as directed by Council resolution.**

In December 2011, the City Council passed a resolution directing the City Manager to work with the Austin Community Technology and Telecommunications Committee (ACT&TC), a citizen advisory board, to develop recommendations for Council for the adoption of an open government framework. The resolution also codified the Council's commitment to fostering openness and transparency of City data. In order to achieve open government practices, the resolution identified four strategic areas, as shown in Exhibit 1.

**EXHIBIT 1**  
**Strategic Areas of Open Government**



**SOURCE:** OCA analysis of City Council resolution 20111208-074, July 2013

Since the adoption of the Council resolution, City management has undertaken several initiatives related to open government, including the launch of the redesigned City website and the launch of the City's data portal, a tool to provide increased public access to City data sets. Additional initiatives include participating in the Code for America fellowship, leveraging development of community applications, participating in national dialogue on standards for open data, and sponsoring the 2013 Open Government Symposium.

However, these initiatives have occurred without the context of a defined framework as well as the development of rules, standards, and strategic priorities, as called for by the Council resolution. Exhibit 2 shows the progress made by the City towards meeting the specific requirements laid out in the Council resolution for the implementation of open data, which is a fundamental aspect of open government.

**EXHIBIT 2**  
**Requirements for Open Data in Council Resolution 20111208-074**

Resolution Requirements	OCA Observations
Develop rules and standards for the implementation of open data	While a draft exists, rules and standards have not been adopted or implemented
A program for setting priorities of data sets	In 2011, the City did a public scoring process to identify data sets for the portal, but based on our review of the data portal, it is unclear as to whether these priorities have been used to guide the publishing of data No program for identifying data sets for publication developed ACT&TC indicated limited opportunities for input in the identification of data sets for the portal
Timeline of publication of data sets in each department	We were unable to identify a timeline for the publication of datasets
A design for user-friendly access of datasets	The City has launched the Open Data portal which is developed by Socrata, an open data solution commonly used by government entities and a best practice
Ongoing metrics to assess progress	No formalized metrics to evaluate progress or performance measures have been developed

**SOURCE:** OCA analysis of City practices for implementation of Open Data requirements included in Council resolution, July 2013

City staff has drafted an Open Government directive, which includes guidelines for making departmental data more accessible. However, to date, the directive has not been adopted, and City management stated the draft is being evaluated in light of other related initiatives. Meanwhile, the City web team has taken on several tasks related to open government in addition to their regular duties and responsibilities. However, without a defined strategic framework, elements of the resolution may be implemented ineffectively.

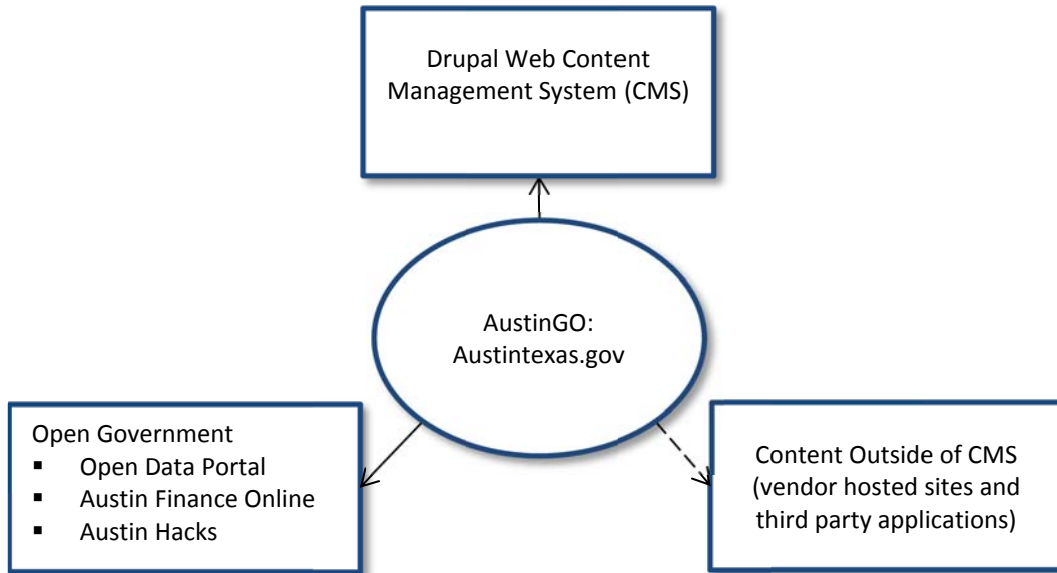
For example, while the resolution calls for every department to make reasonable efforts to make all data sets under the department’s control available for publication, to date, only about a half of the City departments have published datasets on the portal, for a total of approximately 100 datasets. We also noted that not all datasets are consistently updated or include descriptive information needed to understand the data.

**Finding 2: Governance of the City’s website does not ensure that all City web content is managed in accordance with best practices, which may impact the quality of the information provided to citizens.**

AustinGO is the official website of the City of Austin. AustinGO is managed by the City’s web team and covers all City departments, with the exception of Austin Energy, Austin Finance, and the Convention Center, who create and maintain their websites independently.



**EXHIBIT 3  
AustinGO Components**



**SOURCE:** OCA analysis as of AustinGO components, July 2013

The City’s web team manages AustinGO content via Drupal, a content management system. We compared City practices for managing web content to best practices issued by the federal government and concluded that management of the web content is generally in accordance with best practices, as shown in Exhibit 4.

**EXHIBIT 4  
Web Content Management for Content Management System**

<b>Web Content Management Best Practices</b>	<b>OCA Observations of City Practices</b>
<p><b>Content management system</b> Adopt a content management system which allows publishing and formatting of digital content in a consistent and structured manner and also ensures content is structured consistently, which is critical to improving how government exposes and shares information and data</p>	<p><b>In compliance</b> The City of Austin uses Drupal, a content management system, which has several built in capabilities, such as ensuring consistency in web content layout, managing accessibility, and mitigating security risks</p>
<p><b>Create design templates</b> Create web page templates that are applicable to each department</p>	<p><b>In compliance</b> PIO supplies templates to each department; in the survey of Drupal users, approximately 59% responded indicated satisfaction with templates</p>
<p><b>Privacy policy</b> Provide a link to privacy policy on every page (can be included in overall site policies)</p>	<p><b>In compliance</b> The City includes a privacy policy in the webpage footer</p>
<p><b>Naming and Branding</b> Host the web site on a .gov domain; clearly display the name of entity on each page</p>	<p><b>Partial compliance</b> The City has a .gov domain, which is consistently branded across AustinGO, with some exceptions</p>

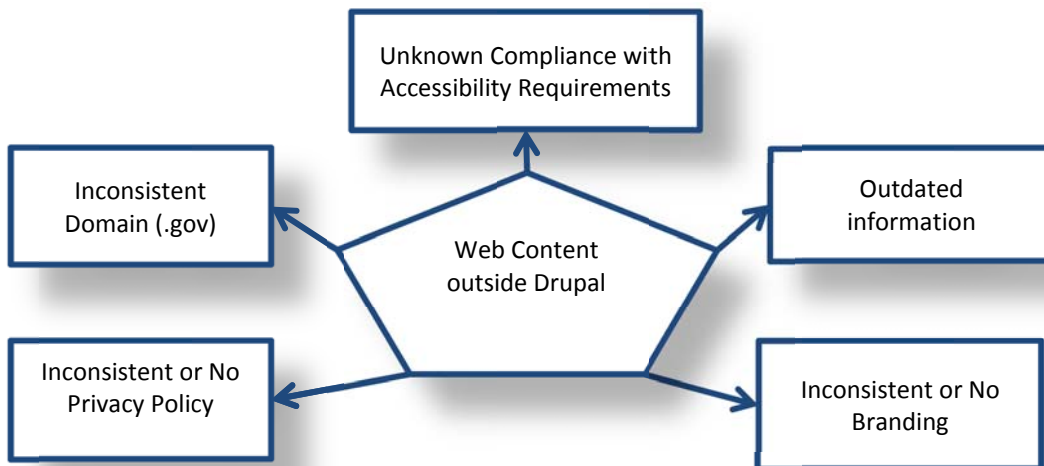


Web Content Management Best Practices	OCA Observations of City Practices
<p><b>Web writing training</b> Web writing training educates the content creator on the practice of writing useful, usable content specifically intended for online publication</p>	<p><b>Partial compliance</b> The City primarily provides technical guidance to departments, including a training on developing web pages in Drupal; however, there are no written guidelines on writing useful, usable content; in our survey of Drupal users, approximately 59% indicated satisfaction with trainings</p>
<p><b>Web content review</b> Web content should be reviewed on an established schedule and should include review of functionality, quality of web page, review of internal and external links</p>	<p><b>Partial compliance</b> While the City web team has reviewed web content for several departments, there is neither an established schedule nor a documented criteria for such review</p>
<p><b>Linking policy</b> Publish a policy describing how and why there are links to other websites, including criteria or guidelines for how the agency select links to other entities</p>	<p><b>Partial compliance</b> The City linking policy does not include specific guidelines or criteria for linking to external websites</p>

**SOURCE:** OCA analysis as of City web content management practices and OCA survey of City’s Drupal users, July 2013

We also found that there are limited controls to prevent the creation of web information outside of the content management system. For example, departments can, and have, independently create websites without the knowledge of the City’s web team, which has resulted in several inconsistencies in the way information is presented, branded, and maintained. Exhibit 5 shows some examples of inconsistencies and deviations from web content management best practices.

**EXHIBIT 5**  
**Inconsistencies for Web Content Managed Outside of the Content Management System (Drupal)/AustinGO**



**SOURCE:** OCA analysis of available web content outside of Drupal, July 2013

For example, while best practices recommend hosting governmental websites on a .gov domain and clearly displaying the name of entity on every page on the website, we identified websites created outside of Drupal that do not have a .gov domain and that do not clearly indicate that the site is maintained by the City. Also, websites should comply with accessibility requirements. While accessibility requirements are programmed into Drupal, we could not always determine compliance with these requirements for the web pages created outside of Drupal.

These inconsistencies stem from a gap in the governance of City's web content. In fact, while the City's web team manages the City website, they do not have oversight authority over the management of all City web content. The absence of such governance structure may impact the quality of web content, result in an inefficient use of resources, low user satisfaction, and could affect the City's reputation.

Further, because the City's web team does not have a complete inventory of the City's web pages created outside of Drupal, the City may not be able to address security incidents in a timely manner and effectively oversee what is provided to stakeholders.

## RECOMMENDATIONS

---

The recommendations listed below are a result of our audit effort and subject to the limitation of our scope of work. We believe that these recommendations provide reasonable approaches to help resolve the issues identified. We also believe that operational management is in a unique position to best understand their operations and may be able to identify more efficient and effective approaches and we encourage them to do so when providing their response to our recommendations. As such, we strongly recommend the following:

- 1. The City Manager's Office should develop, document, and implement a strategic framework and an implementation plan, which includes milestones and clear roles and responsibilities, to effectively implement open government as per City Council resolution 20111208-074.**

MANAGEMENT RESPONSE: **Concur.** Refer to Appendix A for management response and action plan.

- 2. The City Manager's Office should ensure that a complete web governance structure is developed, documented, implemented, and monitored to address current gaps.**

MANAGEMENT RESPONSE: **Concur.** Refer to Appendix A for management response and action plan.

### MANAGEMENT RESPONSE



### MEMORANDUM

**TO:** Ken Mory, City Auditor

**FROM:** Anthony J. Snipes, Assistant City Manager *ASJ*

**DATE:** August 26, 2013

**SUBJECT:** The AustinGo: Website Governance and Management Audit

---

I have reviewed the draft report of the AustinGo: Website Governance and Management Audit and concur with the recommendations made to address the audit findings.

The City Manager, CTM, and PIO staffs are fully committed to creating a culture of transparency and collaboration. Significant process has been made over the past several years in making City data available to the public as well as in creating plans to further the goals of Open Governance. We strive to institute best practices in all areas and welcome the City Auditor's input and support in improving our processes and procedures.

Your office made two recommendations – to develop, document, and implement a strategic framework and implementation plan for open government, as well as to ensure that a complete web governance structure is implemented to address current gaps. Staff has created a plan of action to address these recommendations with several steps in those processes having already been completed.

The City Manager approved release of the City of Austin Open Government Directive this week. This Directive lays out specific steps for Departments to publish government information online, create and institutionalize a culture of open government, utilize accessible and emerging technologies and tools, and create an enabling policy framework for open government.

The City Manager has also developed a structure for a Standards Governance Board to address and institutionalize technical standards and citywide guidelines for open government initiatives. This will be in place by fall of 2013, when the Innovations Officer and new Data Manager have been hired.

To address web governance structure, trainings have recently taken place in several departments. The web team is in the process of developing best practices for setting controls in place for websites conducting City business. This will be disseminated via an administrative bulletin following review by the Standards Governance Board.

The City Manager's Office and all staff remain committed to furthering our goals toward Open Government. We believe that the Auditor's input and subsequent improvements being made will enhance our processes and further our progress toward these endeavors.

Should you have any questions or comments, please do not hesitate to contact me.

**CC:** Marc A. Ott, City Manager  
Michael McDonald, Deputy City Manager  
Stephen Elkins, Chief Information Officer  
Doug Matthews, Chief Communications Officer

**APPENDIX A**

**ACTION PLAN**

**AustinGO: Website Governance and Management Audit**

Recommendation	Concurrence and Proposed Strategies for Implementation	Status of Strategies	Proposed Implementation Date
<p>1. The City Manager’s Office should develop, document, and implement a strategic framework and an implementation plan, which includes milestones and clear roles and responsibilities, to effectively implement open government as per City Council resolution 20111208-074.</p>	<p><b>Concur</b></p> <p>By now, there should be good familiarity with the goals of open data throughout the city. The City Manager via memo and through emphasis at his Department Head meetings has re-emphasized the importance of releasing data to the public.</p> <p>To date, the Executive Team is in the process of:</p> <ol style="list-style-type: none"> <li>1. Reviewing an 11-page City of Austin Open Government Directive that addresses all areas in the Audit.</li> <li>2. Finalizing a new governance structure that will oversee our open government initiatives.</li> <li>3. Creating an Administrative Bulletin with guidelines that will govern our open government strategies.</li> </ol>	<p><b>Recommendation 1:</b> Austin Open Government Directive has been developed over the past several months and was approved on August 23, 2013 and will be released by the City Manager on August 26, 2013. <b>(Action Complete)</b></p> <p><b>Recommendation 2:</b> This recommendation is planned and underway. The City Manager has developed a draft structure for creating a Standards Governance Board to determine security, content, accessibility, currency (timeliness), and technical standards by the Fall of 2013 when the Innovations Officer and new Data Manager are hired. <b>(Underway)</b></p> <p><b>Recommendation 3:</b> Upon official creation of Standard Board, the group will be tasked to develop citywide guidelines. <b>(Planned)</b></p>	<p><b>Recommendation 1:</b> Completed on August 23, 2013.</p> <p><b>Recommendation 2:</b> Will be in place by December 1, 2013.</p> <p><b>Recommendation 3:</b> Will be in place by January 1, 2014.</p>

**APPENDIX A**

Recommendation	Concurrence and Proposed Strategies for Implementation	Status of Strategies	Proposed Implementation Date
<p>2. The City Manager’s Office should ensure that a complete web governance structure is developed, documented, implemented, and monitored to address current gaps.</p>	<p><b>Concur</b> Status: Underway.</p> <p>The web team is aware that various nonstandard websites have been implemented outside of Drupal and outside of its purview, primarily using web hosting services, outside the City of Austin infrastructure. The web team used a comprehensive set of best practices in implementing AustinGO, and these can be used as part of a model set of standards.</p> <p>Members of CTM, Purchasing, and Law recently participated in a two-day training on procurement of IT services provided through the web.</p> <p>These two existing areas of knowledge will directly translate for use in providing best practices for contract and legal issues to be defined in a directive and administrative bulletin.</p>	<p><b>Recommendation 1:</b> The web team will develop a list of best practices for City of Austin websites, including matters of branding, fresh content, regulatory compliance, and protection of City IP, performance, retention of City data, contractual issues, and more. <b>(Planned)</b></p> <p><b>Recommendation 2:</b> The City Manager will promulgate a directive to City departments based on the work of the web team as described in Recommendation 1. Noncompliant websites will be either brought into compliance or replaced by an AustinGO site supported by the web team. <b>(Planned)</b></p> <p><b>Recommendation 3:</b> The City Manager will continue to work with the web team and the CIO to develop and promulgate an Administrative Bulletin to set in place standing controls for websites implemented for City business. <b>(Planned)</b></p>	<p><b>Recommendation 1:</b> Will be completed by September 30, 2013.</p> <p><b>Recommendation 2:</b> Will be completed in full by November 15, 2013.</p> <p><b>Recommendation 3:</b> Will be completed by December 16, 2013.</p>