CREATING A UNIFIED DEVELOPMENT CODE

Web Access and Hosting: Limitations and Recommendations

AUGUST 2014

City of Tacoma
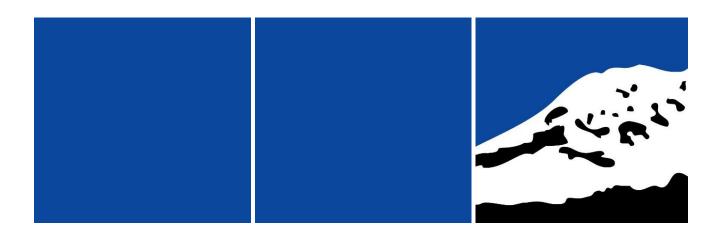WASHINGTON

PLANNING AND DEVELOPMENT SERVICES

Chapter 1 Purpose

The City of Tacoma (City) Planning and Development Services (PDS) Department has contracted Parametrix to assess the accessibility and efficiency of how the Municipal Code is made available to customers through the City's website. PDS would like the online publishing of City municipal code to be:

- Transparently accessible to the customer.
- User friendly.
- Easily navigable.
- Conducive to City staff working efficiently.

These qualities in the organization and functionality of websites comprise what is being termed as "best practices." Parametrix has reviewed the City website (CityofTacoma.org), the PDS permits website (TacomaPermits.org), and the websites of other cities around the nation to identify best practices in the online publishing of municipal code and other online resources. This best practices report will discuss:

- Limitations of the City's current online resources,
- Findings on the successful practices of other cities, and
- Recommendations for action that will ensure that City of Tacoma customers and staff can easily access and navigate City municipal code online.
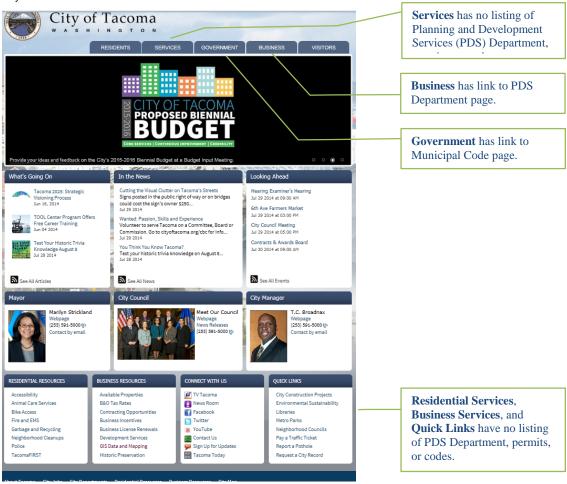
Chapter 2 Current Limitations

1 City Website

One way to ensure that users can locate information online, is to have it available quickly within the structure of a website, instead of embedded within the structure requiring users to follow a path of individual links and pages within the website. The Tacoma Municipal Code is available through the City Clerk's Office page within the CityofTacoma.org website. Users who view the current CityofTacoma.org website do not have a direct link to municipal code, even in the Quick Links tool at the bottom of the page (see Exhibit 2-1). The most direct pathway to access the municipal code is under the "Government" tab near the top of the website, the fewest "clicks." When a user browses to the PDS Department page on the City website, the user must first select the "Planning" heading before a link to the municipal code is available.

Limitation: Users may spend more time than what is desirable to find the Municipal Code, as it is not directly accessible from the home page of the website.

Exhibit 2-1
City of Tacoma Website

Services has no listing of Planning and Development Services (PDS) Department,

Business has link to PDS Department page.

Government has link to Municipal Code page.

Residential Services, Business Services, and Quick Links have no listing of PDS Department, permits, or codes.

2   Tacoma Municipal Code Online Access

When users access the Tacoma Municipal Code online, the code is broken up into 17 titles listed by number and name. Title 13 Land Use Regulatory Code is 562 pages (the longest title) and Title 3 Fire is 46 pages (the shortest title). In addition to being the longest title, Title 13 is probably one of the titles most often relevant to user queries as it relates to permits, zoning, and regulatory and environmental limitations on land use.

When a user selects a title to view, a single PDF file opens containing the text of the entire title. For example, selecting Title 13 opens a PDF file that is 562 pages in length and 13.38 megabytes (MB) in size.

Limitation: Number of pages is too large on the larger Municipal Code titles, potentially overwhelming the user with content.

Limitation: If a hyperlink to a specific portion of code is desired on a website, the City can only create a hyperlink to an entire title, not a specific chapter or section.

Limitation: File size of PDF files can be large. Users on less powerful systems and mobile devices may experience longer load times and poor performance.

Once the PDF is open in a web browser, there are two tools that users can use to locate specific information within that title: bookmarks or search.

Bookmarks

There are bookmarks in the Bookmarks panel on the left side of the window for the chapters within the title (see Exhibit 2-2). Title 13 for example, has bookmarks for 14 chapters and one subchapter.

Selecting a bookmark allows the user to go directly to that chapter or subchapter within the PDF file. Chapter sizes range from four pages (Chapter 13.17 Mixed-Use Center Development) to 226 pages (Chapter 13.06 Zoning).

Limitation: To navigate by chapter using the bookmarks, the user must know what chapter contains the information they seek. If the user does not know what chapter is relevant to the desired information, the bookmarks are not a helpful navigation tool.
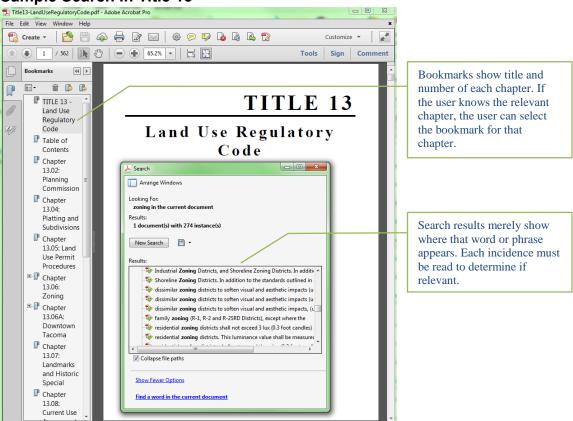
Search

If the user does not know what chapter contains the needed information, a user can then use the search tool to search for a single word or phrase within the title (see Exhibit 2-2). A sample search in Title 13 alone yielded 274 results for the term "zoning," 1,182 results for "permit," and 530 results for "application."

Limitation: The search tool is not an efficient or user-friendly navigation tool as the user must review each individual incident where the search term appears to determine if the content of the Municipal Code is relevant to their information query.

Exhibit 2-2
Sample Search in Title 13

Search made in Adobe Acrobat Pro after PDF was downloaded from City website to determine number of results. Web users would see search results as highlighted text within the text of the code, not in a separate search window as seen here.

Chapter 3 Findings

During a review of the websites of Tacoma and other cities, best practices were identified and are discussed below.

1 TacomaPermits.org Website

In addition to the City website, CityofTacoma.org, the Development Services Department website TacomaPermits.org also contains online resources related to Tacoma Municipal Code, focusing on the permit process.

The TacomaPermits.org website highly contrasts the online access to the Municipal Code found on the City website:

- Users sift through topics, questions, and tools instead of viewing the hundreds of incidences a term appears in a large document. Users do not search by a term or phrase, but are instead guided to the needed information or resource.

- Users can choose from tools such as *Frequently Asked Questions*, *Tip Sheets*, *Message Board* for updates and announcements, and links to other resources such as *Map My Property* and the Municipal Code.

Instead of a linear document that is available online, TacomaPermits.org is an interface which *assists the user in determining what information is needed and connects the user to that information*. We believe this user-friendly website could be modified to connect users to the permit process, *and* to the Municipal Code.
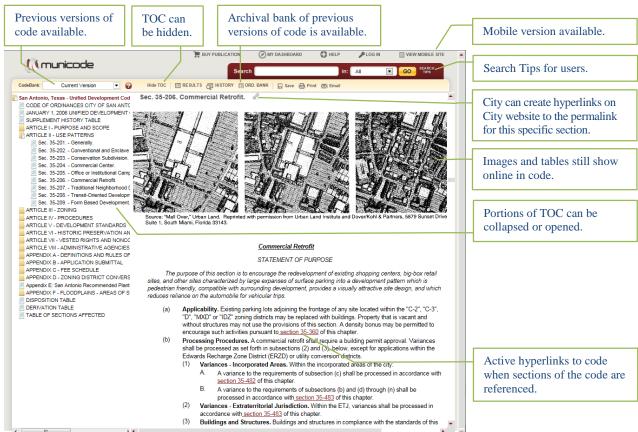
2   External Online Publishers of Municipal Code

Research of the best practices of cities, including San Antonio, Texas, revealed that a predominance of cities utilize an external service provider to publish city code online. In comparison to the current access to Tacoma Municipal Code that was explored in Chapter 2, these online publishers offer significant advantages (see Exhibit 3-1):
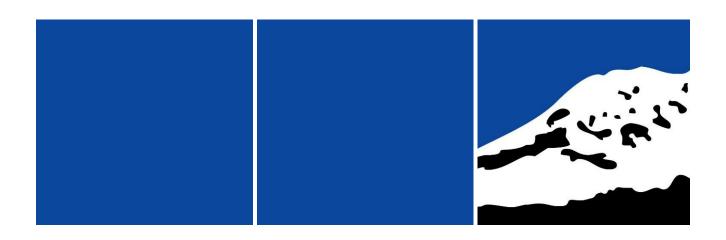
- The table of contents (similar to the bookmarks on the left of the PDF window in Exhibit 2-1) is not limited to only show the titles, but may be expanded to include *every* level of organization (titles, chapters, and sections).

- References to other portions of the code are active hyperlinks that take the user to the referenced portion of the code.

- Hyperlinks to specific chapters and sections of Tacoma Municipal Code can be created for use in City webpages. Currently the City can only hyperlink to an entire title.

- Helpful tips and examples on conducting advanced searches are provided:

  - Users may conduct more specific searches with boolean logic operators (and, or, not). For example, searching for "permits NOT commercial" would narrow the "permits" results to exclude incidences where "commercial" appears.

  - Users may narrow search results to include only designated portions of the table of contents.

- If the code is revised or reorganized, the previous version is archived and still available online.

- Users may print code portions, email code portions, and save portions of the code as an editable MS Word document which can then be inserted into permit plans, permit applications, or other documents.

- Code publishers provide mobile versions of the website to increase accessibility for users.

Exhibit 3-1
Municipal Code Publishing Features

A number of local municipalities and other agencies utilize these code publishing services including the City of Black Diamond, City of Seattle, Town of Ruston, Thurston County, and Pierce Transit.

Chapter 4 Recommendations

The following list of recommendations has been used to organize and track "next steps" for the UDC Code Compilation project. Item #1 includes on-going activities that are expected to continue throughout the year as the Department continues to address people, process, and policy issues surrounding the larger consolidation and reorganization. Tasks in Item 2 are complete. Recommendations resulting from this report, and specific to web access and navigation enhancement, is included in Item #3 below.

#	Recommendation	Action Item(s)	Implementation Team	Milestone/ Schedule
1.	Continue to work concurrently on all levels of the bigger land use simplification project	People – continue to refine roles, integrate departments and groups, train, and foster leadership and culture of collaboration	Huffman Johnson Huffman	On-going
		Process – Adopt and utilize Accela, continue permit expediting process	COT	On-going
		Policy - Address regulatory/code issues (UDC)	COT, PMX	On-going
2.	Create an Internal Alignment Plan	Outline communication plan and protocol, internally and between departments	Huffman PMX	February 2014
		Address expectations for the outcome		May 2014
		Consider forming Steering Committee and Technical Advisory Committees for UDC review and draft		3rd Qtr 2014

#	Recommendation	Action Item(s)	Implementation Team	Milestone/ Schedule
		Identify outside stakeholders that should be engaged, and when		Conducted 1st and 2nd Qtr 2014
3.	Assimilate the current codes into a single document	Compile existing regulations, codes, and ordinances into one document, in Word format	PMX	2nd Qtr 2014
	Conduct a "first step audit" of existing codes to highlight: o Conflicts o Inconsistencies o Duplication o Alignment issues o Outdated technologies	Consider recommendations for changes to accessibility and navigation of existing code on current city web site and tacomapermits.org (see details below)	PMX	3rd Qtr 2014
		Prepare summary table that identifies issues and provides recommendations for resolution	COT	4th Qtr 2014
4.	Based on results of Internal Alignment Plan, Code consolidation, and initial audit, retain consultant services to prepare code language for the UDC	Develop draft RFP language for review, approval, and distribution	PMX COT	1st Qtr 2015
		Publish RFP	COT	1st Qtr 2015
		Review proposals, conduct interviews, select code consultant	COT, PMX	1st Qtr 2015
		Negotiate code consultant scope, schedule, fee	COT	April 2015
5.	Develop UDC	Starting with summary table from initial audit, prepare UDC	COT PMX Code Consultant	April 2015-October 2015
6.	Review, Approve, and Adopt UDC		COT PMX Code Consultant	Adopt December 2015

Action Items specific to Recommendation #3 above, with a goal of creating a more user-friendly, and navigable tool for both external customers and City staff, include:

- Add a Quick Link on the CityofTacoma.org website (see Exhibit 2-1) that directs the user to the TacomaPermits.org website.

- Redesign the TacomaPermits.org website to incorporate more references to the Tacoma Municipal Code and change the organization to mirror the four chapters proposed for

the Unified Development Code organization: Land Use, Building, Utilities, and Site.

▪ Publish the Tacoma Municipal Code online through an external company (such as MuniCode) that provides this service.

Each recommendation is discussed in more detail below.

1   Tacoma Permits Quick Link

This is the simplest action, in both cost and staff effort. This would require the City's Information Technology Department to place a hyperlink in the Quick Links portion of the CityofTacoma.org website that links to the TacomaPermits.org website (See Exhibit 2-1).

2   Tacoma Permits Website Redesign

As discussed in Chapter 3, the TacomaPermits.org website is a user-friendly website that with minimal modification can serve as the portal to the Tacoma Municipal Code.

The City of Tacoma Development Services webpage initially seen by users would remain unchanged when they visit the TacomaPermits.org website (See **Error! Reference source not found.**). The only proposed change is adding a direct link to the Tacoma Municipal Code on this webpage. This could be done as an additional gray colored button under the "Direct Access" button in the frame on the left of the webpage (see red arrow), or elsewhere on the webpage.

Exhibit 4-1
Tacoma Permits Current Website

No changes proposed to the initial webpage except adding a link to the Tacoma Municipal Code. Red arrow shows possible location of link.

See attached pages for additional proposed modifications to current site.

3   Municipal Code Online Publishing Service

A number of online municipal code and ordinance publishers were viewed including: Code Publishing Company, American Legal Publishing Corporation, General Code, Quality Code Publishing, Sterling Codifiers, Coded Systems, and Municipal Code Corporation. Municipal Code Corporation (or MuniCode.com) is currently used by the City of Seattle, as well as numerous cities through Washington State and the US.

Publishing the code online in this manner eliminates many of the current limitations identified in Chapter 2. Tacoma Municipal Code will be more organized, easier to navigate, load faster, and have more advanced search options. In addition, the City will be able to direct users to specific portions of code instead of an entire title with hyperlinks on the City's website. This will improve the user experience when looking at online resources that refer to specific portions of Tacoma Municipal Code.

While the services provided by each vendor are similar, Municipal Code Corporation is the only provider that included all of the following services: archived or previous versions of codes, mobile device platform, and ability to purchase a printed copy of code, ability to email code, and search tips.

Specific information regarding pricing and what materials must be initially provided are not available at this time. Parametrix has contacted Municipal Code Corporation for more specific information.

If a service such as MuniCode is utilized to make code more accessible, this will be a major step in the eventual creation of a UDC. Future changes, consolidations, or new code elements can be much more easily organized into a UDC once the current code is organized.