Zoning Turns 100 – It's Time We Fixed the Technology Gap

WAPA Fall Conference 2016

Photo by Vdibrova | 123rf.com

Adam Tegen, EDFP
Director of Planning & Economic Development, Wisconsin Rapids

The Technology Gap
What is it?

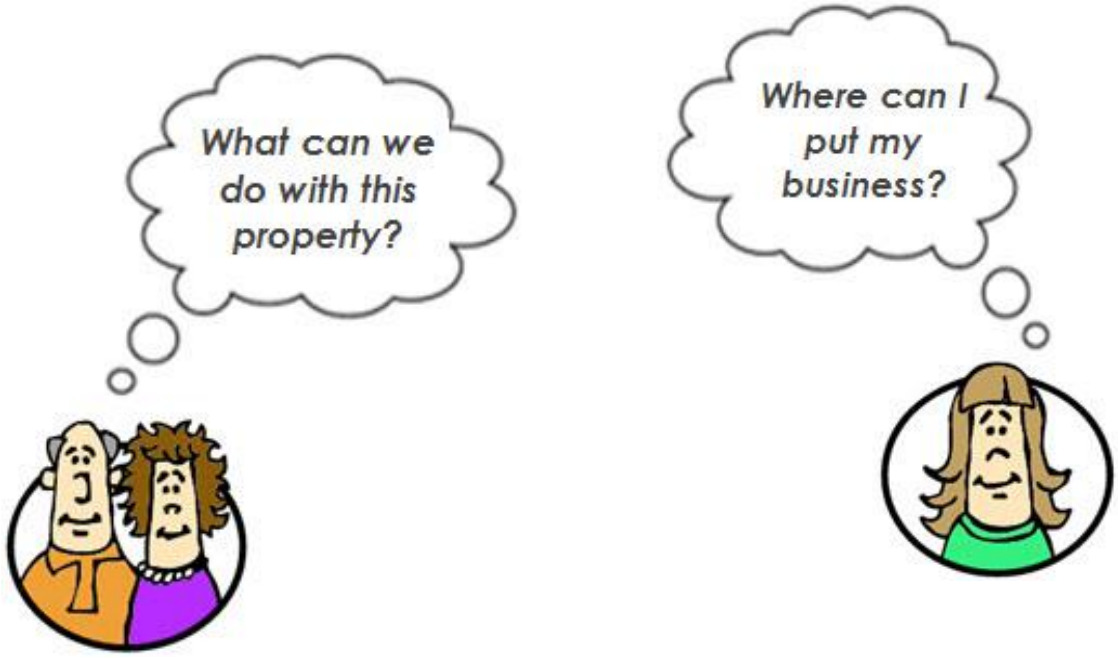
Current State of Affairs

- Paper document (must have)
- PDF of Zoning Map and Code
- Online Text (Municode, eCode360)
- Zoning District Layer on GIS site

Helpful, but not a complete solution

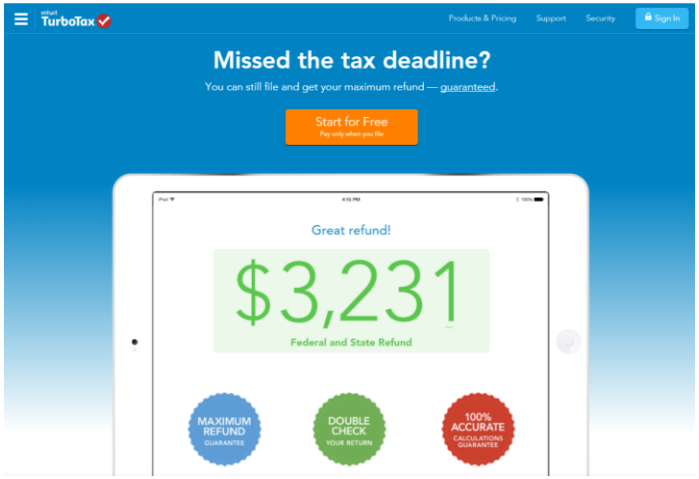
Closing the Technology Gap

Anyone should be able to answer the most important questions, in a matter of a few clicks.



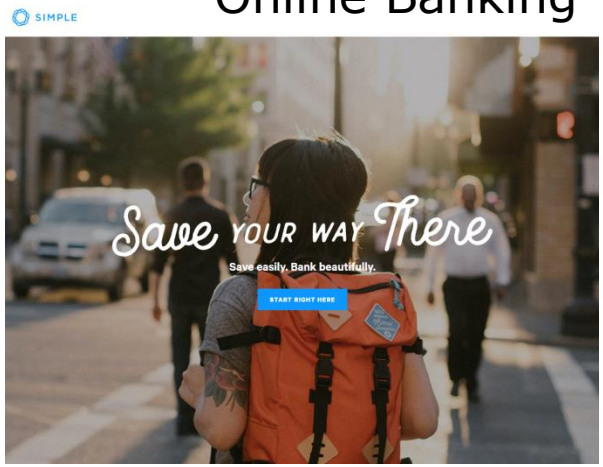
Compare to…

Online Tax Returns



"There's an app for that!"

Online Banking



The Technology Gap

Affects a wide variety of groups

Developers

Plan Commissioners

Residents

Staff

Elected Officials

Realtors

Business Owners

The Technology Gap

An "off-line" zoning code can stifle your community's economic development efforts!

Pop Quiz

Is the Technology Gap something to worry about?

What do you think?

The Technology Gap

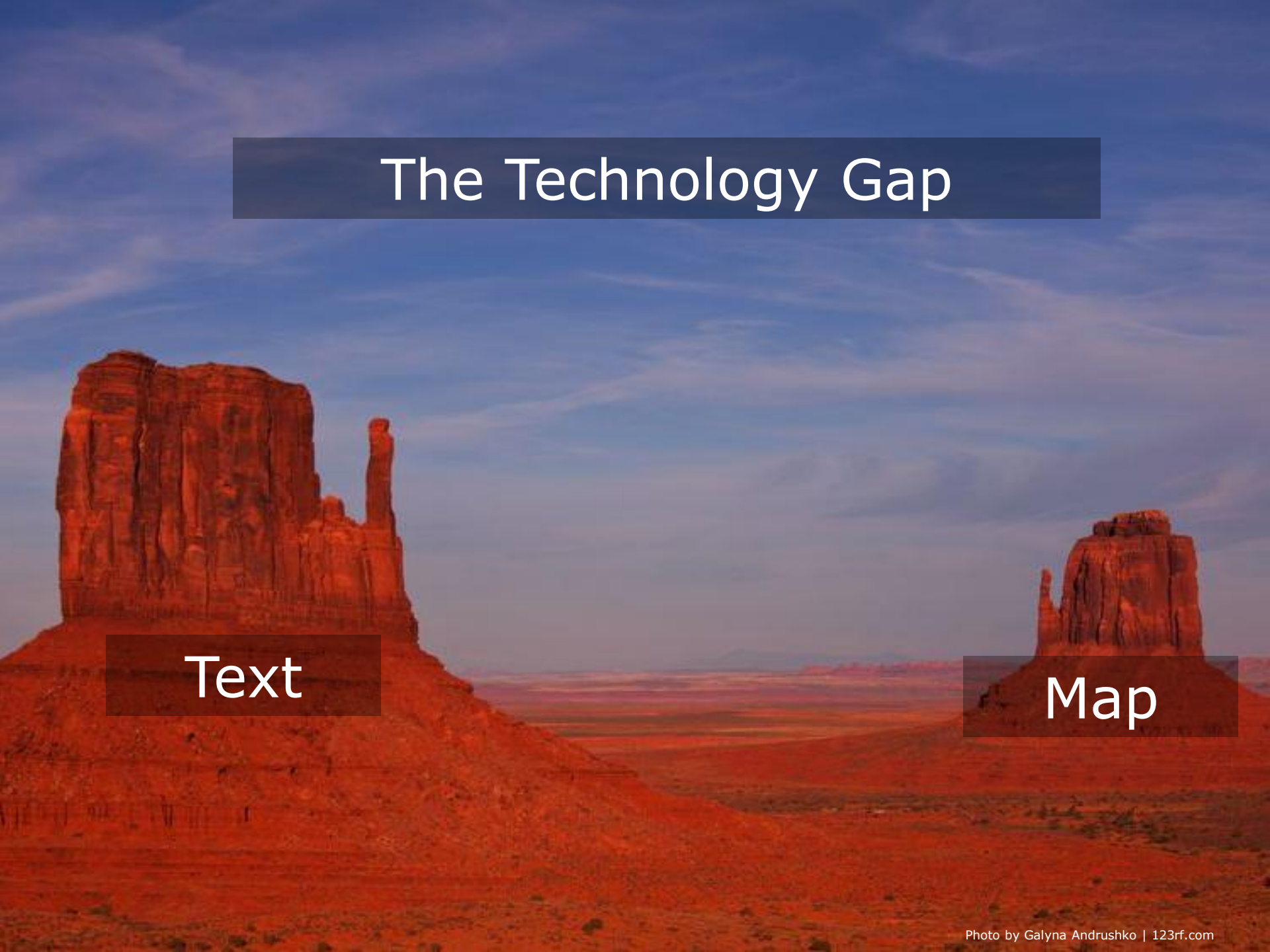
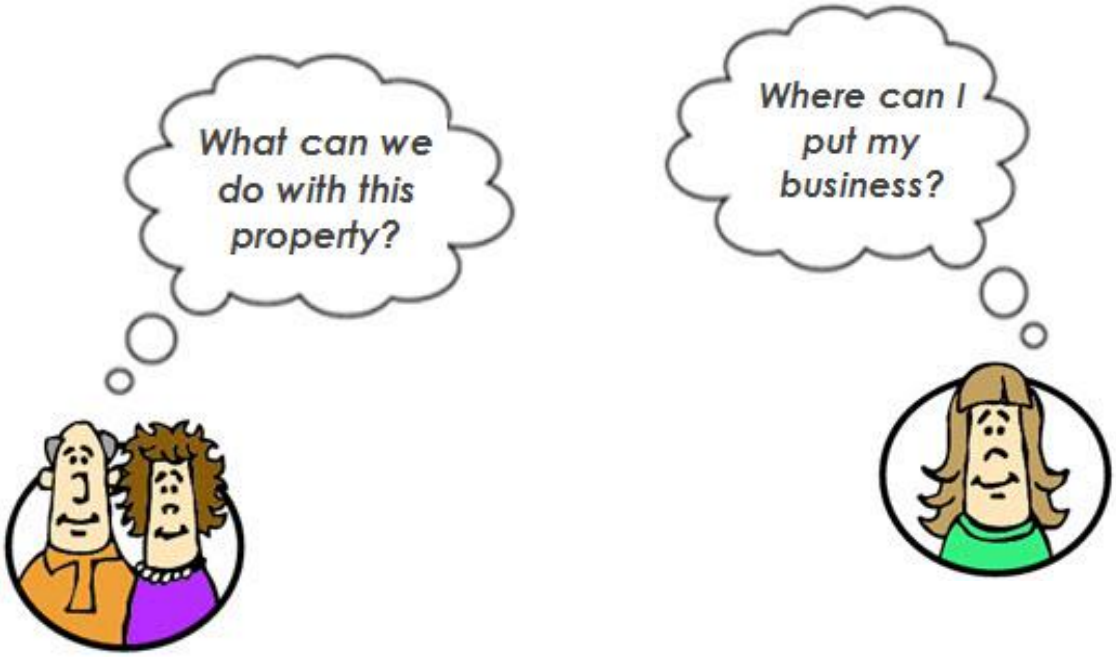


Photo by Galyna Andrushko | 123rf.com

Photo by Galyna Andrushko | 123rf.com

Integrated Solutions

Anyone should be able to answer the most important questions, in a matter of a few clicks.



Integrated Solutions

Some Options to Consider

Integrated Solutions

Some Options to Consider

From Scratch

Photo by David Cabrera Navarro | 123rf.com

Photo by Lyubov Kobyakova | 123rf.com

- You enjoy the process
- You like how fresh bread smells

- You like how quick it is and the results are pretty much guaranteed
- You like how fresh bread smells

Website Build Options

It’s Just Code (from Scratch)

```
588         protected void saveEmailButton_click(object sender, EventArgs e)
589         {
590
591             BusinessTier.Insights.ApplicationAlert alert = new BusinessTier.Insights.ApplicationAlert();
592             alert.ApplicationId = CurrentRecord.RecordId;
593             alert.Email = emailValue.Value;
594             alert.CreatedDate = DateTime.Now;
595             alert.EmailType = Convert.ToInt32(emailTypeValue.Value);
596             alert.Save();
597             Response.Redirect("/insights/tables/record/record.aspx?TableId=" + CurrentLayout.LayoutId + "&RecordId=" + CurrentRecord.RecordId);
598         }
599
                0 references
600         protected void saveCommentButton_click(object sender, EventArgs e)
601         {
602             BusinessTier.Insights.Application app = (BusinessTier.Insights.Application)CurrentRecord;
603             BusinessTier.Insights.ApplicationComment com = new BusinessTier.Insights.ApplicationComment();
604             com.ApplicationId = CurrentRecord.RecordId;
605             com.Comment = comment.Value;
606
607             com.CreatedDate = DateTime.Parse(commentDate.Value);
608             com.UserName = CurrentUser.FirstName + " " + CurrentUser.LastName;
609             com.Save();
610
611             BusinessTier.Insights.ApplicationAlerts alerts = new BusinessTier.Insights.ApplicationAlerts();
612             alerts.ReadByApplicationId(CurrentRecord.RecordId);
613
614             foreach (BusinessTier.Insights.ApplicationAlert alert in alerts)
615             {
616                 StatusUpdateEmailTracking tracking = new StatusUpdateEmailTracking();
617                 tracking.ApplicationAlertId = alert.ApplicationAlertId;
618                 tracking.ApplicationCommentId = com.ApplicationCommentd;
619                 tracking.EmailSent = false;
620                 tracking.Save();
621             }
```

User Interface - > 3,000 lines of code

Content Management System - > 2,700 lines

A Coding Truism

Tanvi Misra @Tanvim · 51m

Another one by @eads: coding is like plumbing. Most of the time you're fixing a leak.

Source: Twitter - June 5, 2016

Server Error in '/' Application.

Object refe

Description: An un
the stack trace for mo

Exception Details:

Source Error:

```
An unhandled e
web request. I
exception can
```

Stack Trace:

```
[NullReference
object.]
```

Server Error in '/' Application.

Object reference not set to an instance of an object.

Description: An unhandled exception occurred during the execution of the current web request. Please review the stack trace for more information about the error and where it originated in the code.

Exception Details: System.NullReferenceException: Object reference not set to an instance of an object.

Source Error:

```
Line 373:                        <ItemTemplate>
Line 374:
Line 375:                            <div style="margin-bottom: 0px;"
```

Building a Website from Scratch

- Define purpose(s)
- Sketch a prototype
- Build site (coding)
- Add content
- Internal testing and iterations
- Formalized user testing
- Soft launch (beta release)
- Launch
- Improvements

Software-as-a Service

Vendor supplied solution

- Cloud-based
- Vendor creates framework
- Vendor maintains framework – fixes the plumbing
- Vendor ensures security
- Municipality adds their content and pops it in the oven

Some Website Principles

1. User-centric design
2. Mobile first
3. Anticipate new technologies
4. Know your users

#4 – Know Your Users

1. Who are they?
2. What do they want to do?
3. How often will they use the site?

Audiences

	Neighbors	Something is happening that they are concerned about
	Design professionals	They are hired to design a project and get it approved
	Applicants	See what they can do, and get it approved
	Realtors	Find information for a seller or a potential buyer
	Appraisers	Find zoning classification for a specific property

Frequency

	Infrequent	Frequent
Neighbors	◉ ◉ ◉ ○ ○ ○ ○ ○ ○ ○	
Design professionals	◉ ◉ ◉ ◉ ○ ○ ○ ○ ○ ○	
Applicants (Residents and Developers)	◉ ◉ ◉ ○ ○ ○ ○ ○ ○ ○	
Realtors	◉ ◉ ○ ○ ○ ○ ○ ○ ○ ○	
Appraisers	◉ ◉ ○ ○ ○ ○ ○ ○ ○ ○	

Who Wants What?

	Neighbors	Design Professionals	Applicants	Realtors	Appraisers
Get notified when development happens					
Receive periodic updates during review process					
Submit comments online					
View general zoning information					
View parcel-specific zoning details					
Review procedures					
Research “closed” applications					
Get application forms online					
Submit applications online					
Parcel-specific massing analysis (3-D)					

Who Wants What?

	Neighbors	Design Professionals	Applicants	Realtors	Appraisers
Get notified when development happens					
Receive periodic updates during review process					
Submit comments online					
View general zoning information					
View parcel-specific zoning details					
Review procedures					
Research “closed” applications					
Get application forms online					
Submit applications online					
Parcel-specific massing analysis (3-D)					

Who Wants What?

	Neighbors	Design Professionals	Applicants	Realtors	Appraisers
Get notified when development happens					
Receive periodic updates during review process					
Submit comments online					
View general zoning information					
View parcel-specific zoning details					
Review procedures					
Research “closed” applications					
Get application forms online					
Submit applications online					
Parcel-specific massing analysis (3-D)					

Who Wants What?

	Neighbors	Design Professionals	Applicants	Realtors	Appraisers
Get notified when development happens					
Receive periodic updates during review process					
Submit comments online					
View general zoning information					
View parcel-specific zoning details					
Review procedures					
Research “closed” applications					
Get application forms online					
Submit applications online					
Parcel-specific massing analysis (3-D)					

Who Wants What?

	Neighbors	Design Professionals	Applicants	Realtors	Appraisers
Get notified when development happens					
Receive periodic updates during review process					
Submit comments online					
View general zoning information					
View parcel-specific zoning details					
Review procedures					
Research “closed” applications					
Get application forms online					
Submit applications online					
Parcel-specific massing analysis (3-D)					

Some Features In Depth

- Get notified when development happens ✳
- Receive periodic updates during review process
- Submit comments online ✳
- View general zoning information
- View parcel-specific zoning details ✳
- Review procedures
- Research “closed” applications ✳
- Get application forms online
- Submit applications online
- Parcel-specific massing analysis (3-D)

Get notified when development happens

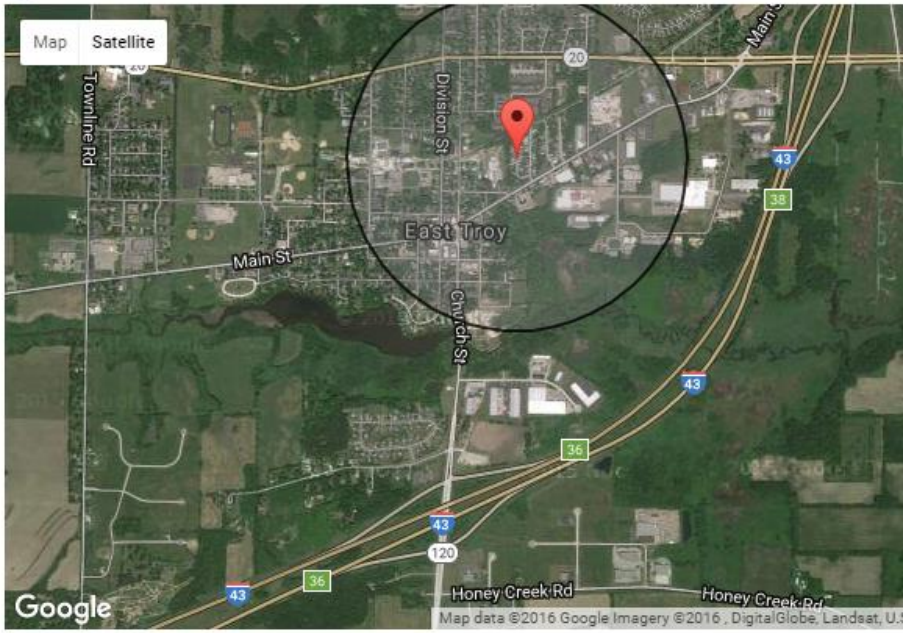
Easy sign-up

1 **Email Address** *

2 **Select Geography**

- Anywhere in the municipality
- Within a specified distance of a defined location (e.g., within 500 feet of my property)

3 **Set Location - Grab the map marker and drag it to your desired location.**



4 **Set Distance of Search Circle**

- 500 feet
- 1,000 feet
- 2,500 feet
- 1 mile
- 2 miles

Get notified when development happens

Automated email with link to access more details

Hello,

The Village of East Troy just received a new development application that is located in your defined area. Basic information about the application is listed below. To view all of the details, click the Open Application link below.

If you should have any questions about this matter, you may contact me at 262-642-6255 (x1482) or by email.

Sincerely,

Eileen Suhm, Administrator Clerk-Treasurer

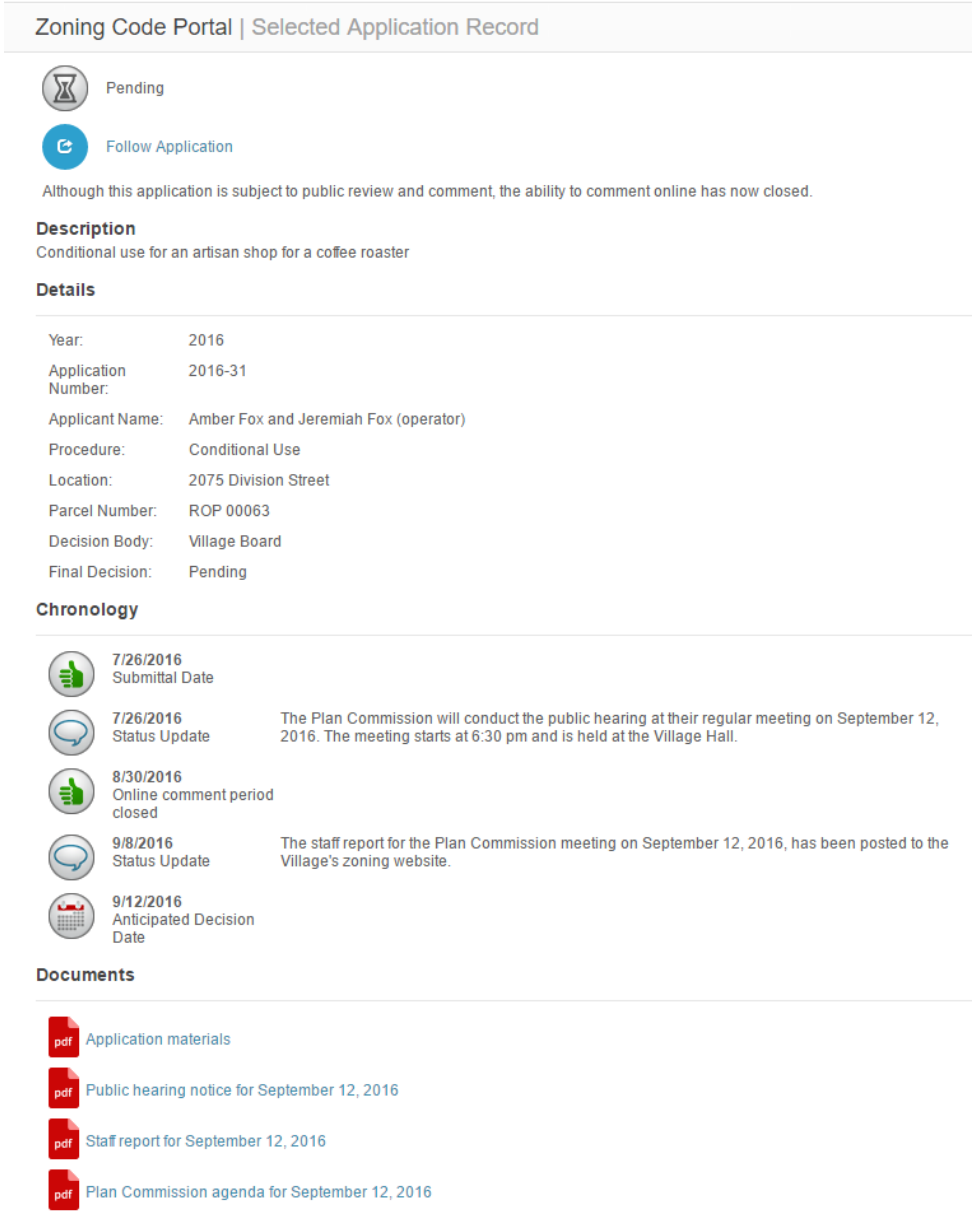
Open Application

Year:	2016
Application Number:	2016-35
Date Submitted:	8/19/2016
Applicant Name:	Tim O'Leary
Procedure:	Other
Description:	Extraterritorial review of a one-lot CSM (boundary line relocation)
Location:	W2299 O'Leary Lane

Please do not reply to this email - it is not monitored. You are receiving this message because you signed up for this service. To unsubscribe, follow this link Unsubscribe.

Get notified when development happens

Pending application details



Zoning Code Portal | Selected Application Record

Pending

Follow Application

Although this application is subject to public review and comment, the ability to comment online has now closed.

Description

Conditional use for an artisan shop for a coffee roaster

Details

Year:	2016
Application Number:	2016-31
Applicant Name:	Amber Fox and Jeremiah Fox (operator)
Procedure:	Conditional Use
Location:	2075 Division Street
Parcel Number:	ROP 00063
Decision Body:	Village Board
Final Decision:	Pending

Chronology

7/26/2016 Submittal Date	
7/26/2016 Status Update	The Plan Commission will conduct the public hearing at their regular meeting on September 12, 2016. The meeting starts at 6:30 pm and is held at the Village Hall.
8/30/2016 Online comment period closed	
9/8/2016 Status Update	The staff report for the Plan Commission meeting on September 12, 2016, has been posted to the Village's zoning website.
9/12/2016 Anticipated Decision Date	

Documents

Application materials

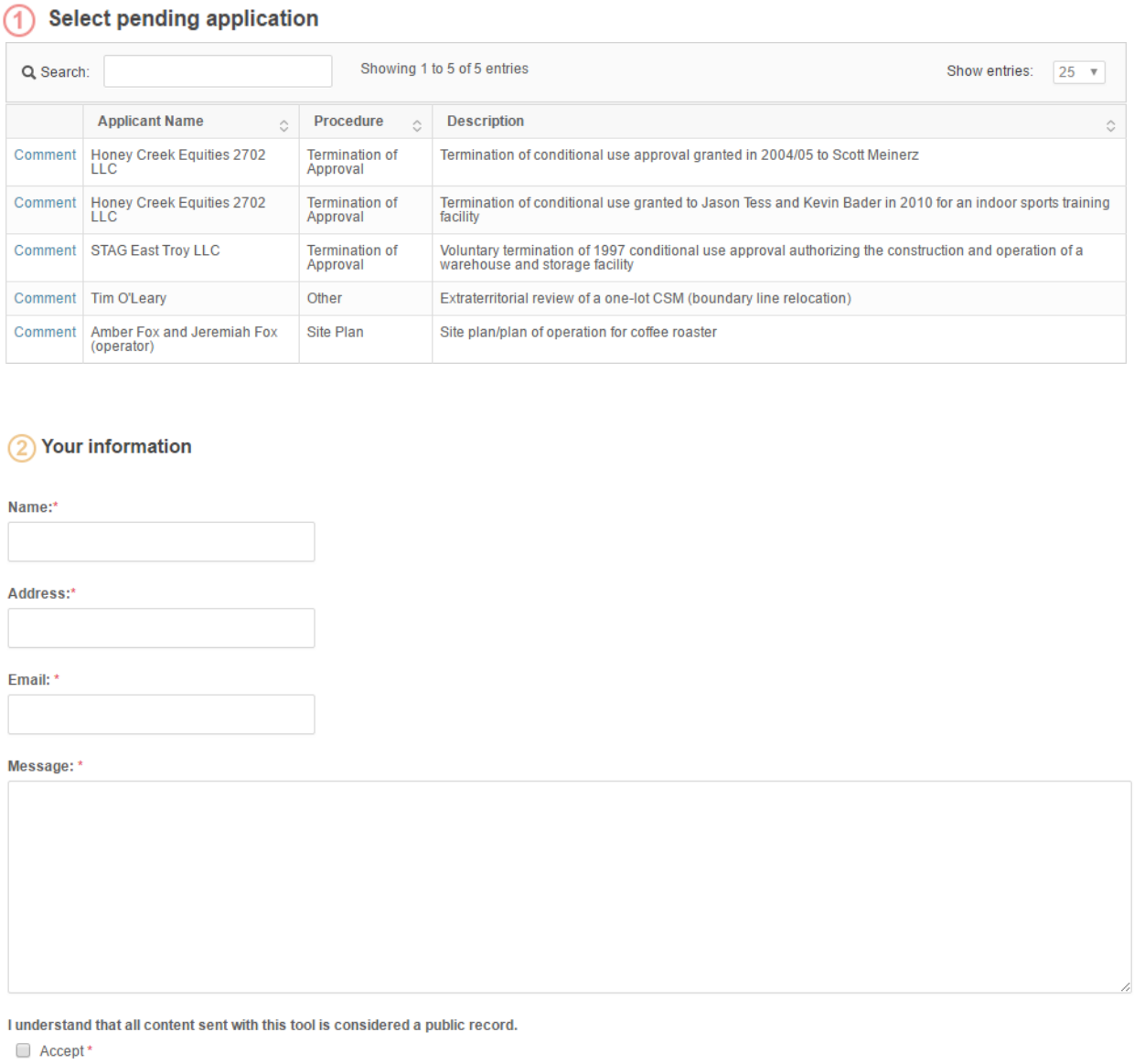
Public hearing notice for September 12, 2016

Staff report for September 12, 2016

Plan Commission agenda for September 12, 2016

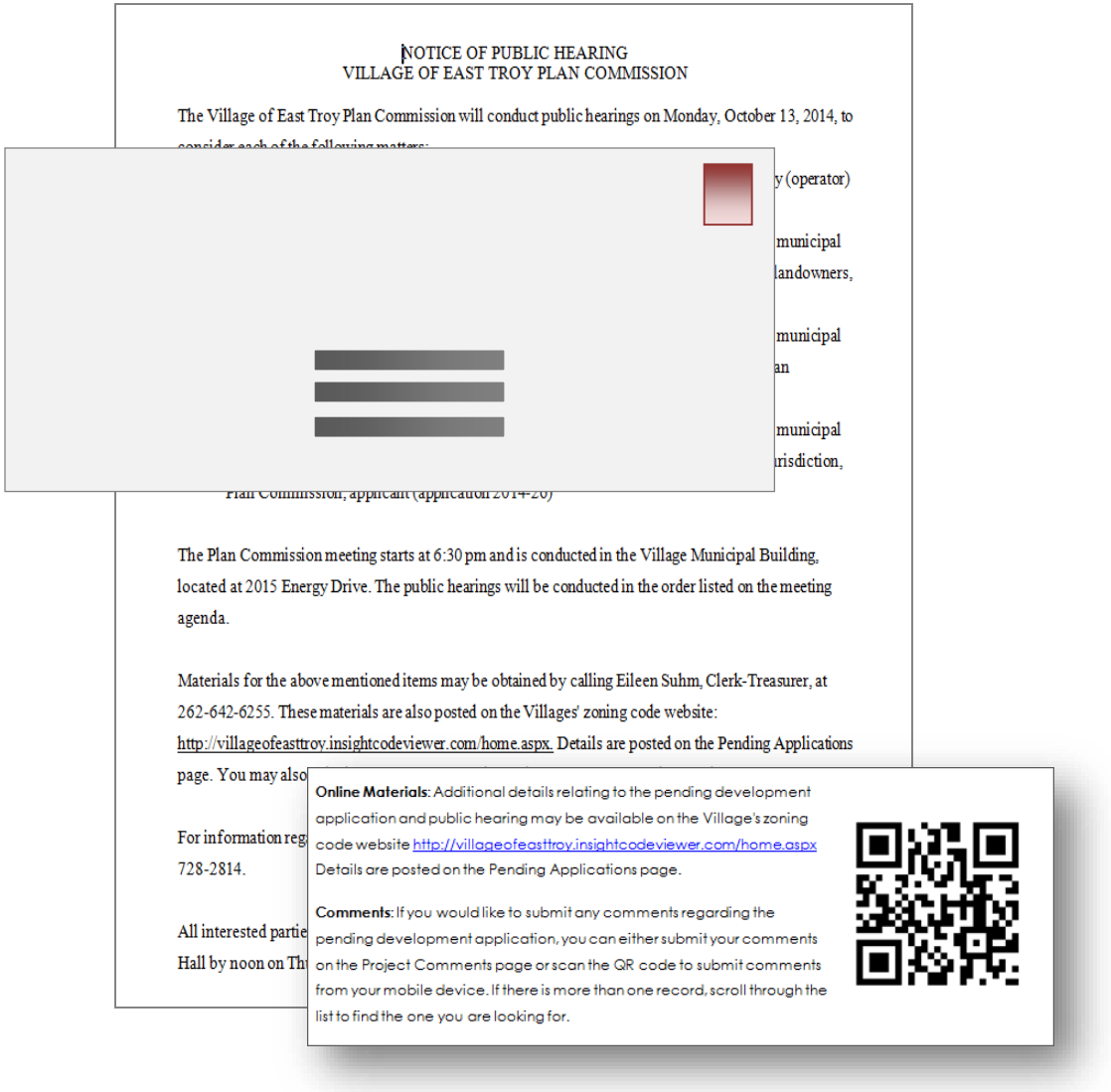
Submit comments online

Two steps



Submit comments online

One more option – QR Code



NOTICE OF PUBLIC HEARING
VILLAGE OF EAST TROY PLAN COMMISSION

The Village of East Troy Plan Commission will conduct public hearings on Monday, October 13, 2014, to consider each of the following matters:

y (operator)

municipal landowners,

municipal an

municipal risdiction,

Plan Commission, applicant (application 2014-20)

The Plan Commission meeting starts at 6:30 pm and is conducted in the Village Municipal Building, located at 2015 Energy Drive. The public hearings will be conducted in the order listed on the meeting agenda.

Materials for the above mentioned items may be obtained by calling Eileen Suhm, Clerk-Treasurer, at 262-642-6255. These materials are also posted on the Villages' zoning code website: http://villageofeasttroy.insightcodeviewer.com/home.aspx. Details are posted on the Pending Applications page. You may also

For information reg
728-2814.

All interested partie
Hall by noon on Th

Online Materials: Additional details relating to the pending development application and public hearing may be available on the Village's zoning code website http://villageofeasttroy.insightcodeviewer.com/home.aspx Details are posted on the Pending Applications page.

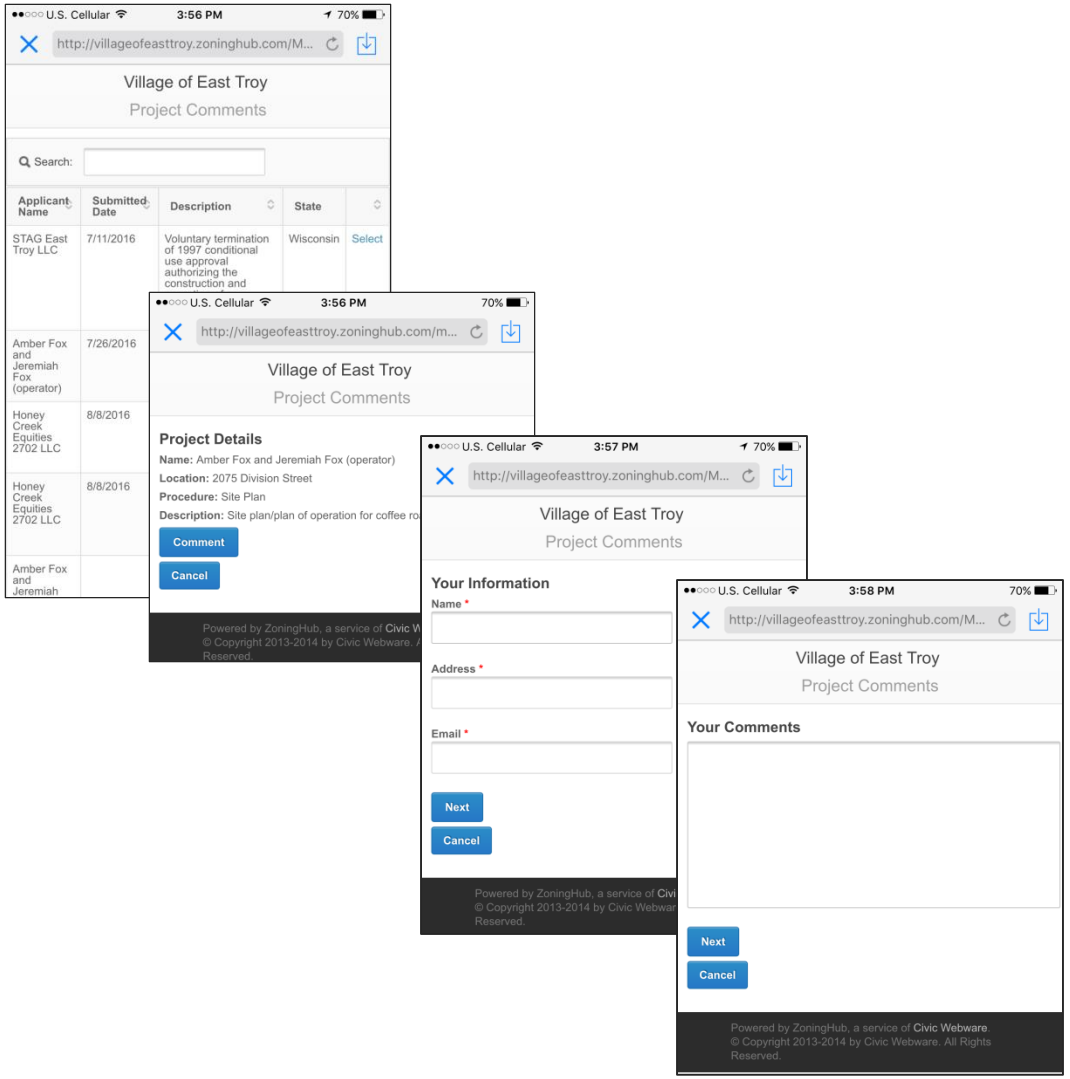
Comments: If you would like to submit any comments regarding the pending development application, you can either submit your comments on the Project Comments page or scan the QR code to submit comments from your mobile device. If there is more than one record, scroll through the list to find the one you are looking for.

Submit comments online

One more option – QR code

Submit comments online

One more option– QR code



Village of East Troy

Parcel details

- Zoning classification
- Dimensional standards
- Land uses that are allowed
- Procedures to move ahead with a project
- Prior development applications
- Nonconformities
- Current violations

Parcel details – An example

Village of East Troy.

Home | Interactive Map | Highlights | Administration | Tools | Document

Zoning Code Portal | Parcel Details

Owner: CHAPMAN OIL INC
Address: 1880 CTY TK ES EAST TROY
Parcel Number: RA287200002
Acres: 3.00

Zoning District(s)

HB - Highway Business

– Interactive Zoning Details

HB Highway Business –

District Description +

Dimensional Standards +

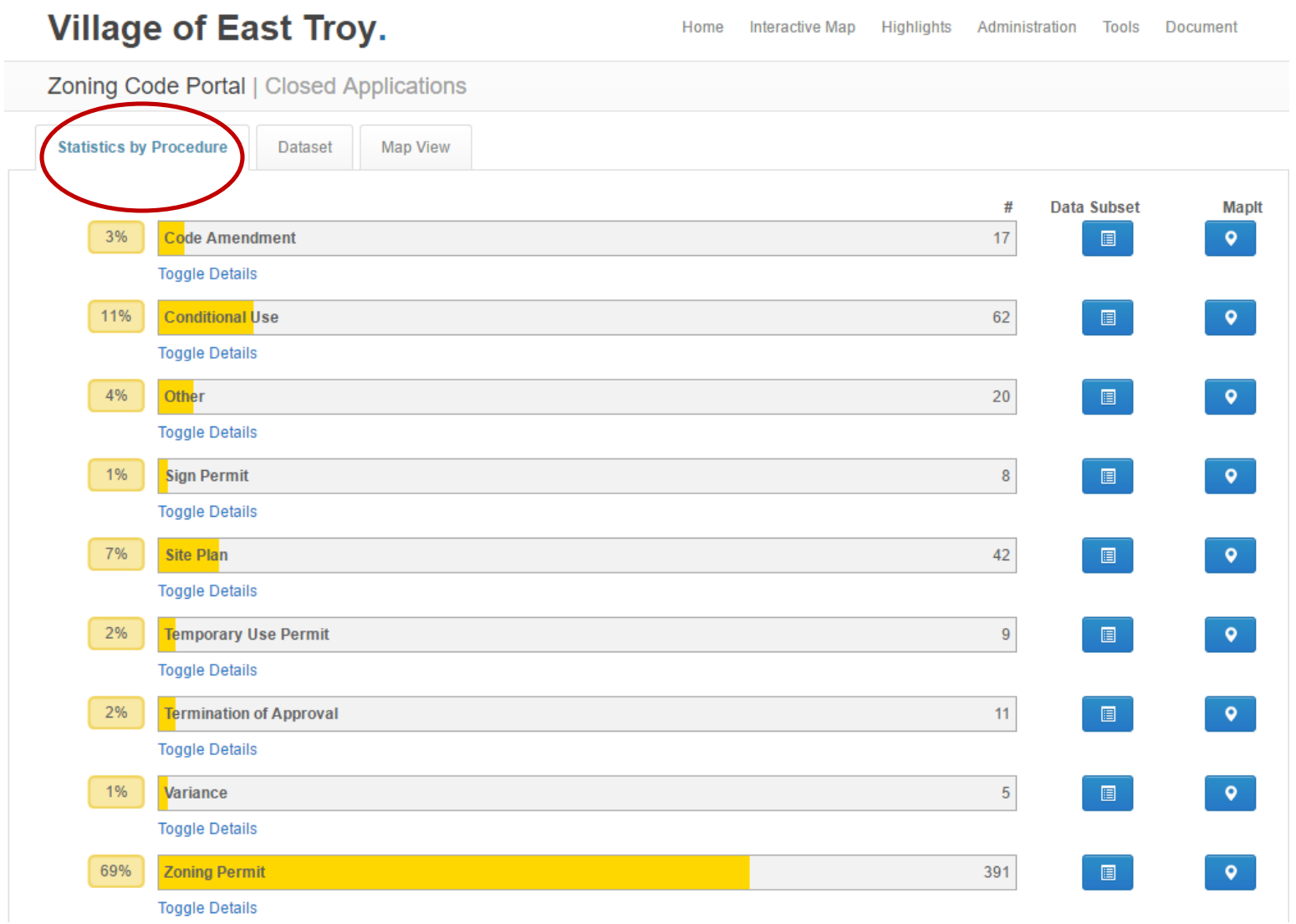
Allowable Land Uses +

+ Development Applications (8)

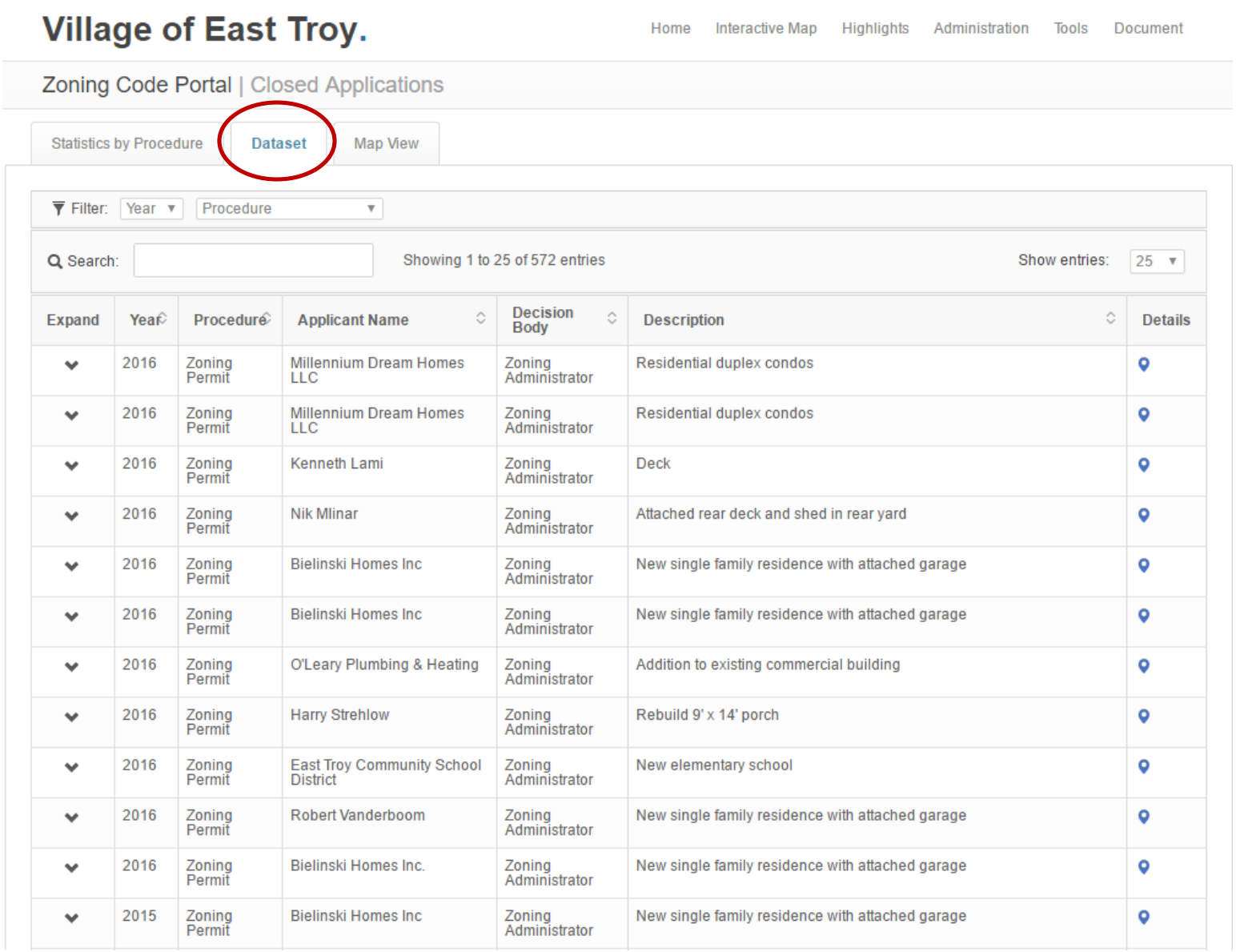
+ Nonconformities (0)

[Demo]

Research closed applications



Research closed applications



Village of East Troy.

Home Interactive Map Highlights Administration Tools Document

Zoning Code Portal | Closed Applications

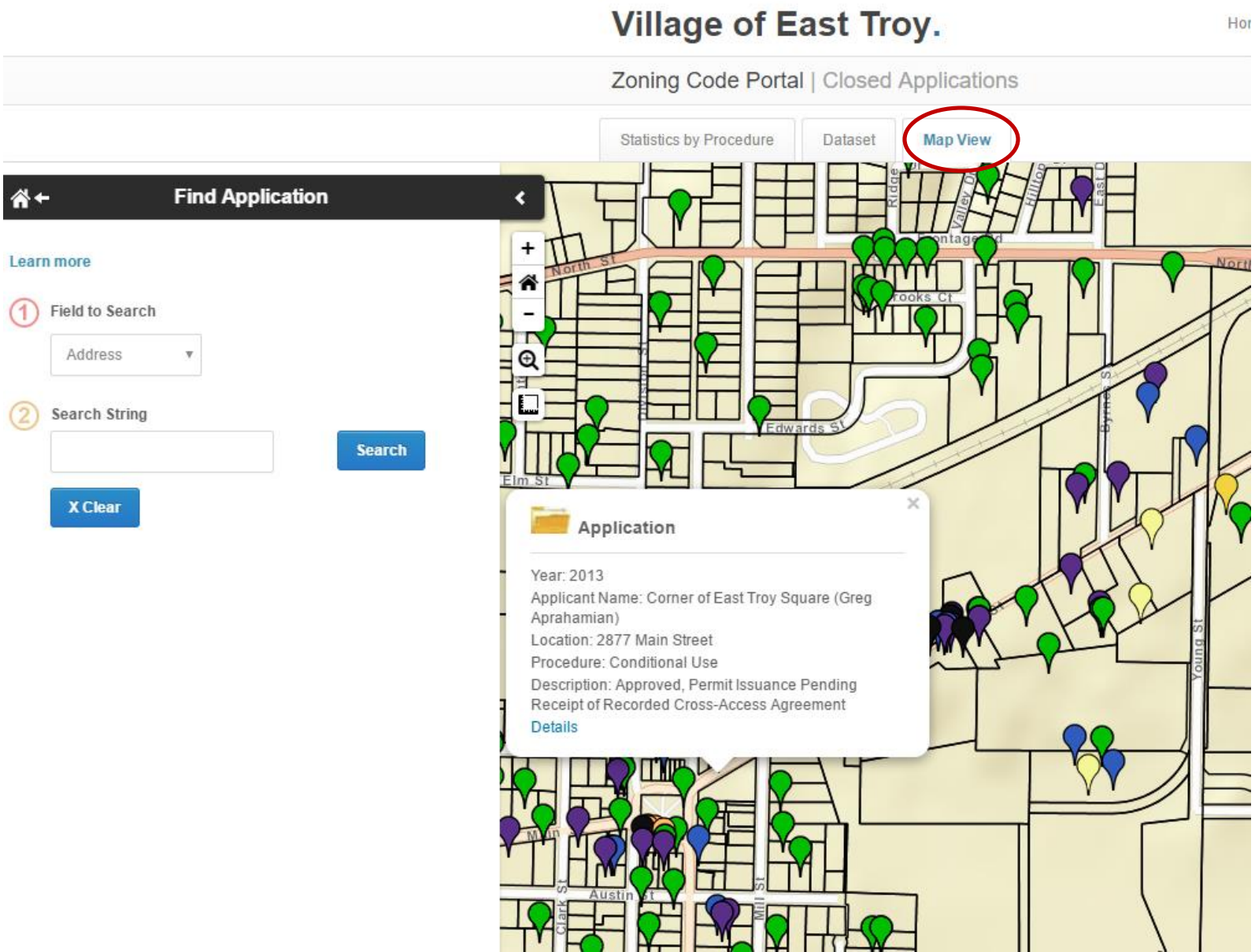
Statistics by Procedure | Dataset | Map View

Filter: Year ▾ Procedure ▾

Search: Showing 1 to 25 of 572 entries Show entries: 25 ▾

Expand	Year	Procedure	Applicant Name	Decision Body	Description	Details
⌄	2016	Zoning Permit	Millennium Dream Homes LLC	Zoning Administrator	Residential duplex condos	
⌄	2016	Zoning Permit	Millennium Dream Homes LLC	Zoning Administrator	Residential duplex condos	
⌄	2016	Zoning Permit	Kenneth Lami	Zoning Administrator	Deck	
⌄	2016	Zoning Permit	Nik Mlinar	Zoning Administrator	Attached rear deck and shed in rear yard	
⌄	2016	Zoning Permit	Bielinski Homes Inc	Zoning Administrator	New single family residence with attached garage	
⌄	2016	Zoning Permit	Bielinski Homes Inc	Zoning Administrator	New single family residence with attached garage	
⌄	2016	Zoning Permit	O'Leary Plumbing & Heating	Zoning Administrator	Addition to existing commercial building	
⌄	2016	Zoning Permit	Harry Strehlow	Zoning Administrator	Rebuild 9' x 14' porch	
⌄	2016	Zoning Permit	East Troy Community School District	Zoning Administrator	New elementary school	
⌄	2016	Zoning Permit	Robert Vanderboom	Zoning Administrator	New single family residence with attached garage	
⌄	2016	Zoning Permit	Bielinski Homes Inc.	Zoning Administrator	New single family residence with attached garage	
⌄	2015	Zoning Permit	Bielinski Homes Inc	Zoning Administrator	New single family residence with attached garage	

Research closed applications



An Online Zoning Code

It’s not a substitute for a well-written code.

It’s not a substitute for top-notch customer service.

Proprietary Sites

Vendor builds and maintains site with municipal zoning content …

then charges users

Zonar

gridics **ZONAR**

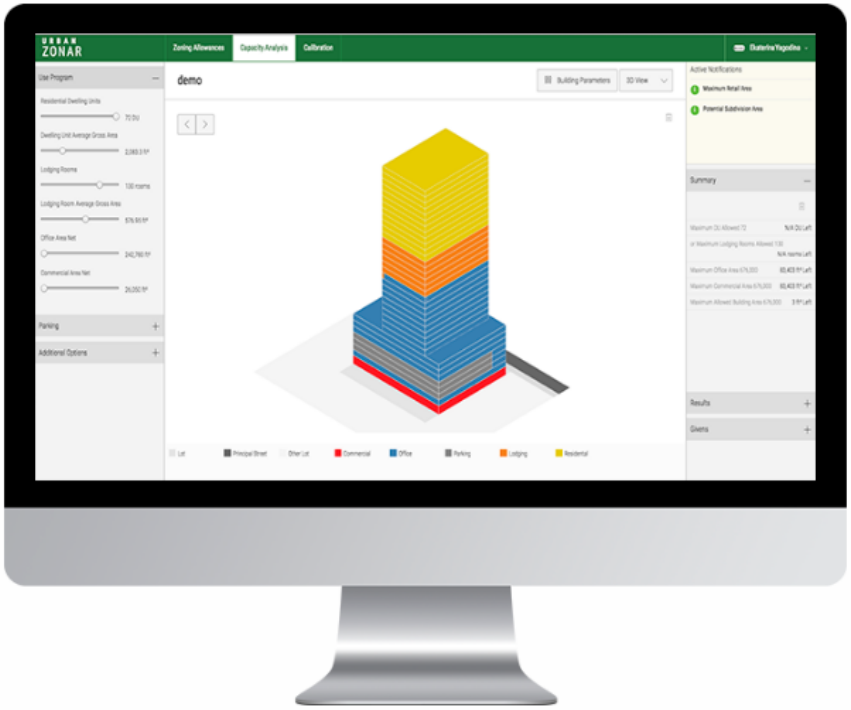
Perform days or weeks of real estate planning and zoning analysis with the click of a button

The functionality of the analysis - as well as the savings in time and money - are game changers for real estate professionals.

Developers, architects, town planners, commerical brokers, land-use attorneys, property owners and appraisers are changing the way they work forever using this next level planning tool.

Learn more about ZONAR →

Go to ZONAR ›



Zonability

zonability

Login
Zoning Decoder Partners About

Zonability is designed to help property owners or potential buyers get a jump start on assessing the highest and best use for that location. This is information not readily available but through our patented technology, we're able to serve very specifics data at the parcel level to be used in the context of an initial evaluation. This is not something you can "google and get."

Zonability gives you the power to:

- Envision more than the obvious potential use.
- Learn if the lot is already built out to a maximium.
- Find out use, size and height potential for next door or nearby.

How do I get Zonability?

In Texas, you can request a Zonability Report through one of our partners. For properties located outside of our Texas coverage area, just send us the address. A complete list of currently available cities can be found here.

FluxMetro

FLUX METRO
AUSTIN PREVIEW

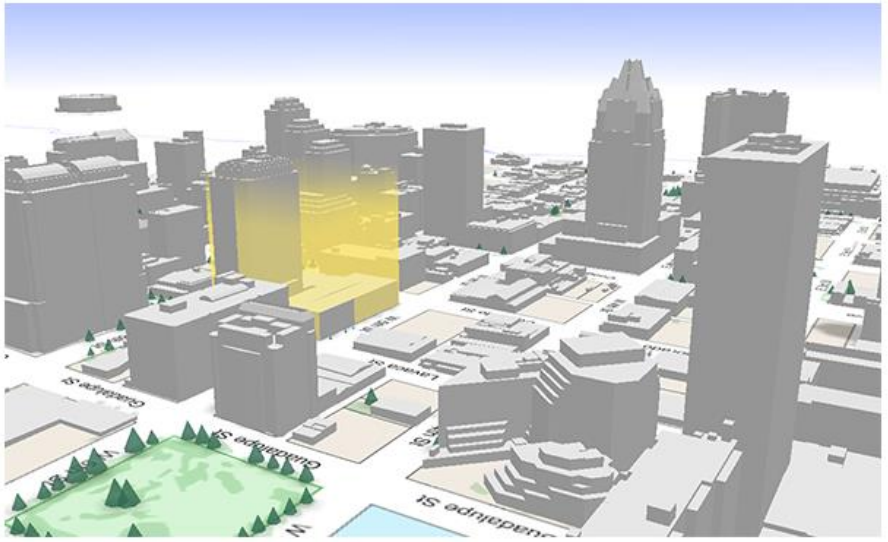
LOG IN SIGN UP

A better way to visualize Austin's development code

Visualize

Your parcel in context

An interactive 3D map of the neighborhood gives you a sense of place, situating your proposed project into the surrounding landscape.



Open Discussion

What barriers do you see for getting your zoning online?

A Word of Encouragement

villageofeasttroy.zoninghub.com

Zoning Turns 100 – It's Time We Fixed the Technology Gap

WAPA Fall Conference 2016

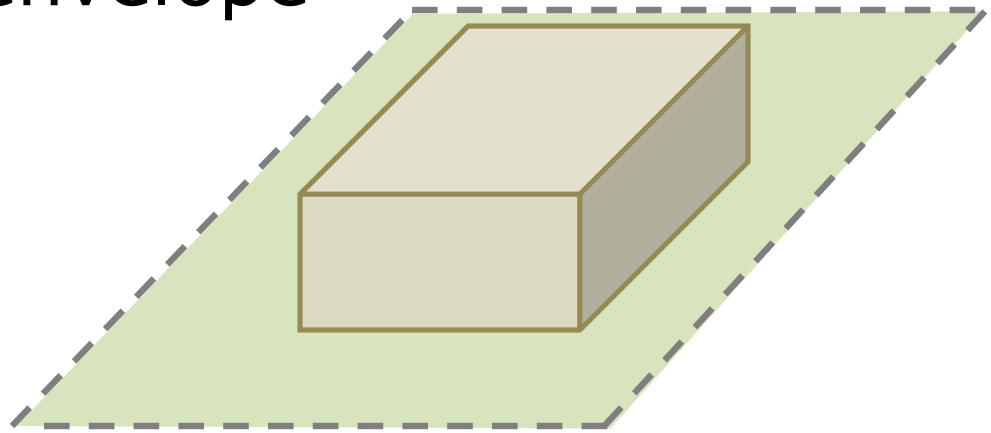
Photo by Vdibrova | 123rf.com

Adam Tegen, EDFP
Director of Planning & Economic Development, Wisconsin Rapids

Parcel-specific massing analysis

Dynamic Analysis

- Select a parcel
- Apply setbacks
- Display required buffer-yards
- Display building envelope
- Add buildings



#1 - User-Centric Design

- Simple interface
- Graphics
- Landing pages, especially for multi-layered content
- Multi-directional navigation Users can start at various points in the site and are able to find the information they want

#2 – Mobile First

85% of citizens expect the same or more from governmental digital services compared to commercial digital services.

Source: "Stealing a Page from the Private Sector Digital Playbook"

Photo by Antonio Guillem | 123rf.com

#3 – Anticipate New Technologies

Conversational Interface

"Alexa, what is the zoning for 135 Main Street?"

"Alexa, I want to open a restaurant. Where can I put it within 5 blocks of city hall?