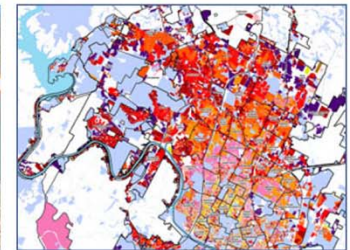




## Code Diagnosis Introduction

**Presented by:**  
Daniel Parolek, Principal  
Opticos Design, Inc.  
dan@opticosdesign.com

**Presented to:**  
City Council:  
May 20, 2014



AUSTIN, TEXAS  
LAND DEVELOPMENT CODE DIAGNOSIS



## Need for an Update: LDC is 30 Years Old and Showing Its Age



## Need for an Update: LDC is 30 Years Old and Showing Its Age



# 1.Introduction

## 2.Top 10 LDC Issues

### 3.Conclusion



Northwest Hills: Residential Character

Austin, Texas  
November 2013

**CODENEXT**  
SHAPING THE AUSTIN WE IMAGINE

Introduction

---

# Foundation for the Process and Process to Date



# CODENEXT

SHAPING THE AUSTIN WE IMAGINE



Compact & Connected

Creative Economy

Sustainable Water

Household Affordability

Workforce & Education

Healthy Austin

Green Infrastructure

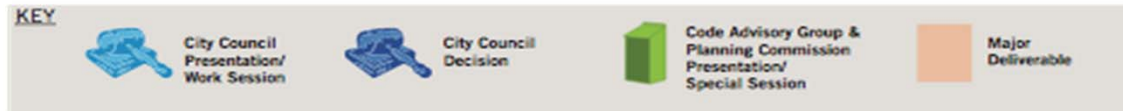
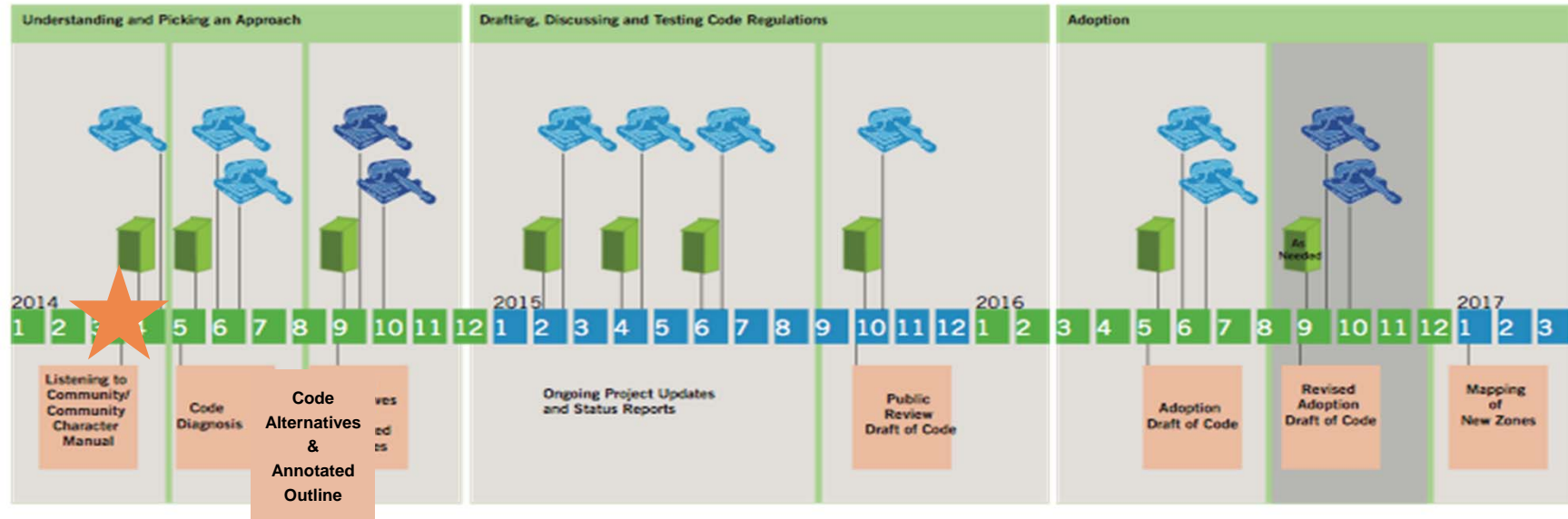
Development Regulations

## Next Steps: Major Deliverables

### Austin Land Development Code Rewrite Schedule

Austin, Texas

February 2014







**CODENEXT**  
SHAPING THE AUSTIN WE IMAGINE

# Listening to the Community Report Summary

INITIAL LISTENING PHASE | Released April 2014





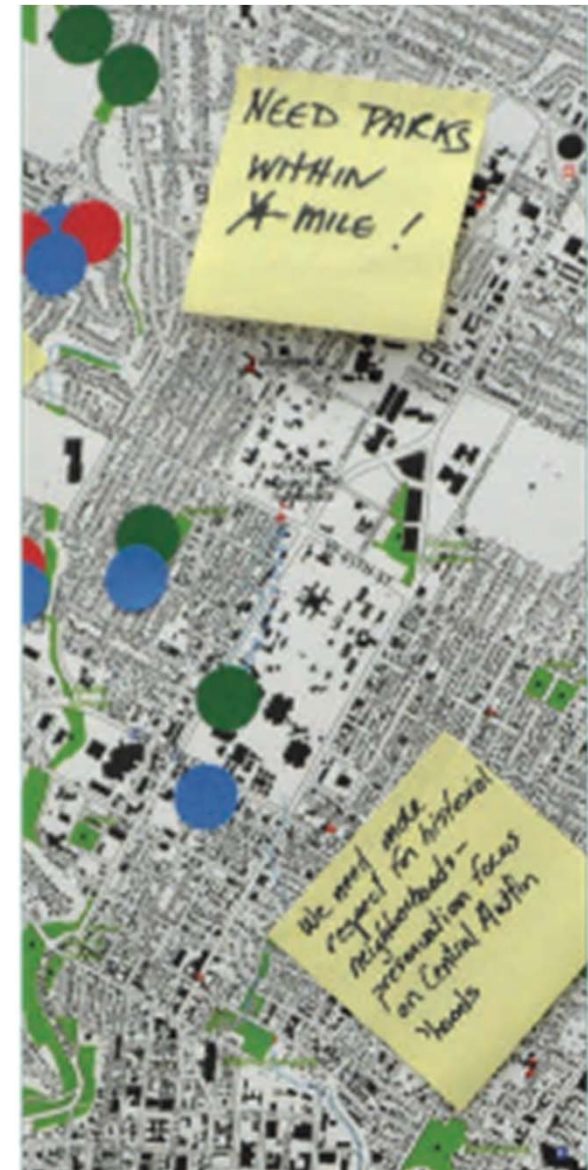
# What We Heard

- Compiled thousands of comments from nearly 800 Austin participants.
- Comments were analyzed using a key word identification approach.
- Method identified patterns to identify the main issues, or themes.
- Most frequently mentioned themes are listed here.
- Participant's comments were categorized under the themes that best represented their ideas.
- Themes may not be fully representative of the all the key issues or points of view of the community at large.



# What We Heard: Six Key Theme Categories

- Affordability
- Environment/Open Space
- Neighborhood Characteristics
- Design of Development
- Transportation
- Code Issues



# What We Heard: Six Key Theme Categories

## **Affordability**

Business Costs  
Housing Costs and Diversity  
Policies & Incentives for Affordable Housing

## **Environment/Open Space**

Green Building & Infrastructure  
Parks & Open Space – includes urban agriculture  
Environmental Protection – includes clean air and water, habitat, trees

## **Neighborhood Characteristics**

Historic Preservation  
Gentrification  
Neighborhood Plans  
Social Values – ideals and beliefs such as family-friendly, diverse, inclusive, safe, quiet

## **Design of Development**

Site Design – How buildings are located on a site, access, parking, watershed, drainage, impervious cover limits and landscape

Subdivision Design – includes block length, multi-modal road network, lot types and sizes, open space and trails, connectivity to surrounding areas

Building Form & Design – includes building height, density, design and relation to nearby buildings

Land Uses and Mixed Use – includes the range and combination of uses allowed on a site or in an area

Compatibility – regulations to achieve compatible buildings and developments

Special Agreements – includes incentives, density bonuses, Planned Unit Developments (PUDs)



# What We Heard: Six Key Theme Categories

## Transportation

Parking Accessibility– the ease or difficulty of finding a space to park, either on-street or off-street

Traffic Congestion – the ease or difficulty of driving in an area

Bicycling – the ease or difficulty of bicycling in an area

Walkability - the ease or difficulty of walking in an area

Transit – the ease or difficulty of using public transportation

## Code Issues

Clarity, Flexibility, Predictability – how understandable and consistent are the rules

Structure and Organization of the Code

Complexity & Usability of the Code

Staff Interpretation & Enforcement – how consistent and coordinated are development reviews, inspections and enforcement

What Are the Top 10 Issues With the Land Development Code?

---

## Summary of Key Findings: Providing Focus to the Rewrite

1. Ineffective Base Zoning Districts
2. Competing Layers of Regulations
3. Complicated “Opt-in, Opt-Out” System
4. Lack of Household Affordability and Housing Choice
5. Auto-Centric Code
6. LDC Not Always In Line with Imagine Austin
7. Lack of Clarity and Usability
8. Ineffective Digital Code
9. Code Changes Adversely Affect Department Organization
10. Incomplete and Complicated Administration and Procedures



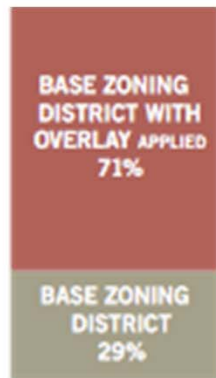


# Ineffective Base Zoning Districts

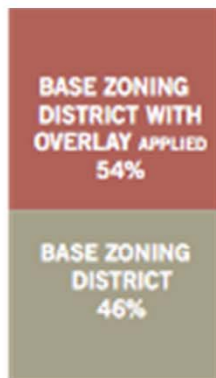
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Base Zone Districts Do Not Recognize Appropriate  
Form or Different Types of Places

## Less than 50% of City is Regulated without Overlays

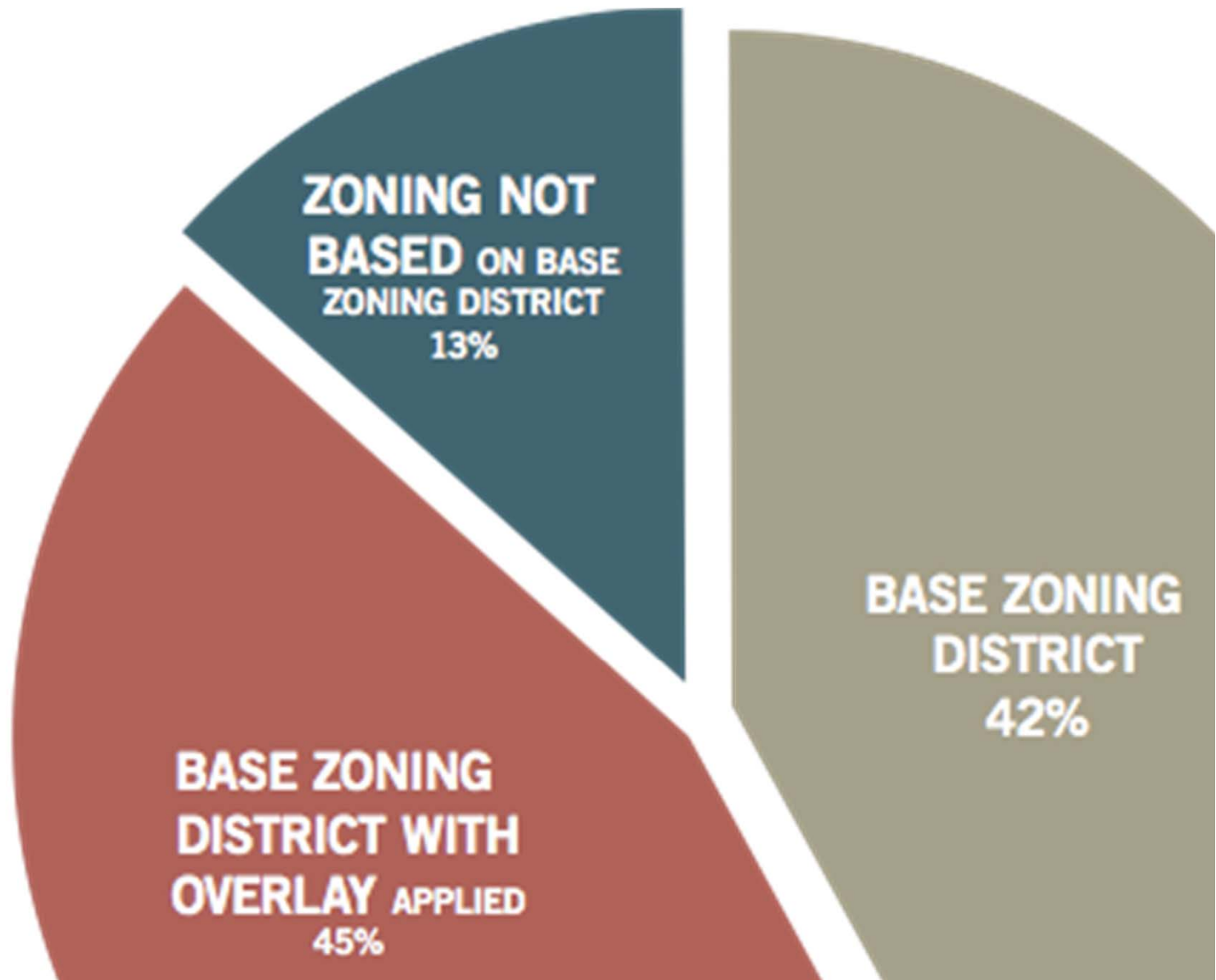


COMMERCIAL ZONING DISTRICTS

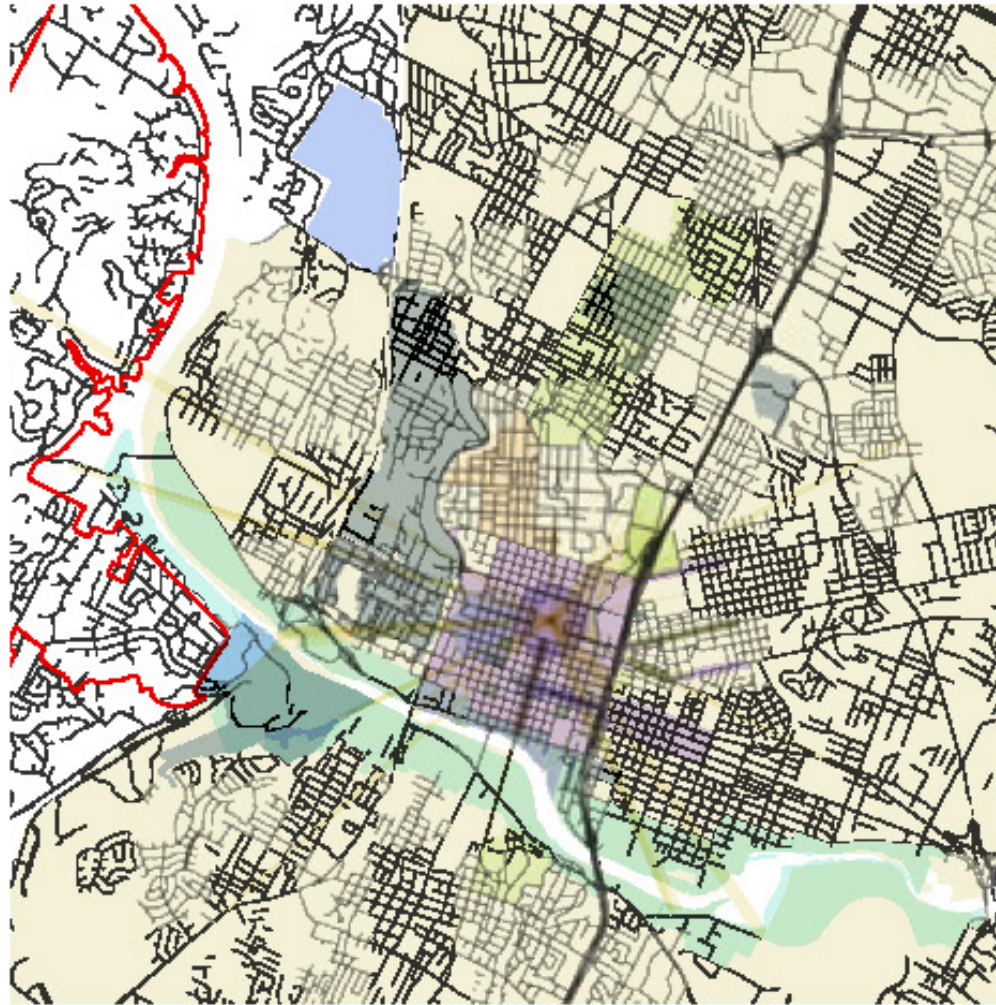


RESIDENTIAL ZONING DISTRICTS

*Graphs representing the percentage of land citywide and how it is regulated*



## Assessing Where the Overlays (CDs) Apply Geographically



*The ineffectiveness of the current zoning code is evident when mapping the combining districts, which exist primarily in these pre-1950s neighborhoods*



## Regulating Single Family Too Broadly: Example SF-3





## One Issue: Duplex as a Use Can Have a Wide Range of Forms

### Considering Different Types of Duplexes

A code is most effective at addressing compatibility in different neighborhoods when duplexes are treated as a range of allowed forms, rather than just allowed uses. Austin's older duplex types have small building footprints (widths and depths) and are primarily one or two stories, thus enabling them to be compatible with single-family neighborhoods. Most new duplexes being built in the city today are simply two large, single-family homes placed front-to-back, which may be appropriate in some neighborhoods but not others.

#### Side-by-Side Duplex



This duplex building type consists of structures that contain two side-by-side dwelling units, both facing the street and sharing one common party wall.

#### Stacked Duplex



This duplex building type consists of structures that contain two units, one on top of the other.

#### Front-to-Back Duplex



This duplex building type consists of structures that contain two dwelling units, one set in front of the other, potentially with one unit facing the street and one not, and with both units sharing a common party wall.

Thinking more fine grain: Certain forms may be ok and others not in different neighborhoods



## Need to Establish Hierarchy Along Corridors



Top: Conventional approach to regulating a corridor: No Hierarchy. No Flexibility.



Form-based approach to regulating the same corridor. Clear Hierarchy. Focused Flexibility.



# Rich Palette of Base Zones Must Recognize Different Contexts

Walkable Urban



Transitional



Driveable Suburban





2

# Competing Layers of Regulations

---

Many Layers of Regulations Create Competing  
Systems

$$33 \times 19 = 627^*$$

Base Zoning  
Districts

Combining  
Districts

Possible  
Combinations

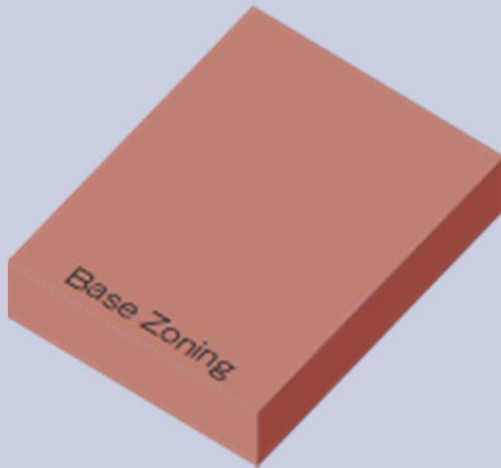
\* Not all over-  
lays can be  
applied to all  
base zoning  
districts.

400+

Found Combinations in the LDC

## Added Layers of Regulation

33 base zoning districts were originally created.



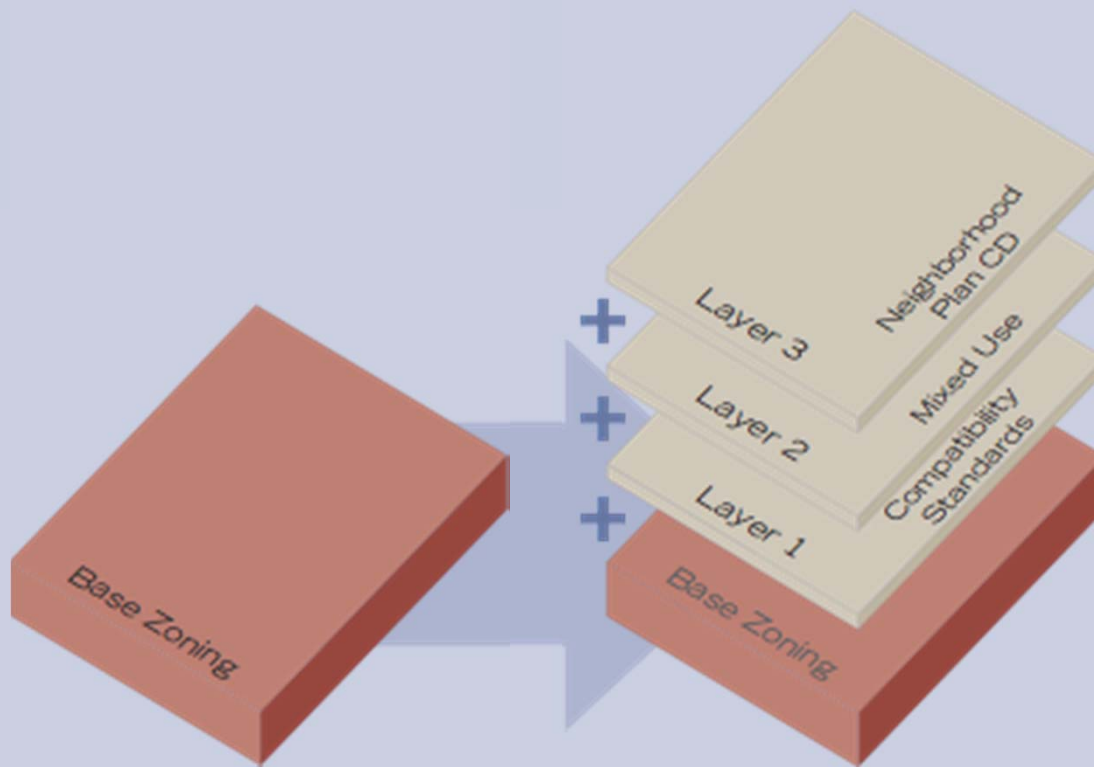


## How Did You Get Here?

### Added Layers of Regulation

33 base zoning districts were originally created.

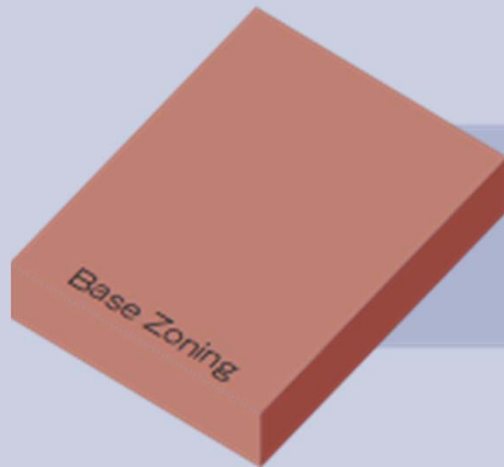
Supplemental layers of regulations were added to address incompatibilities.



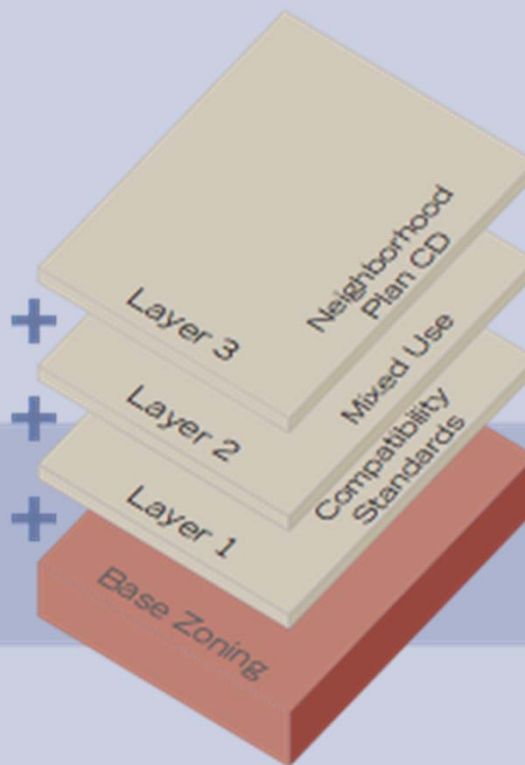
## How Did You Get Here?

### Added Layers of Regulation

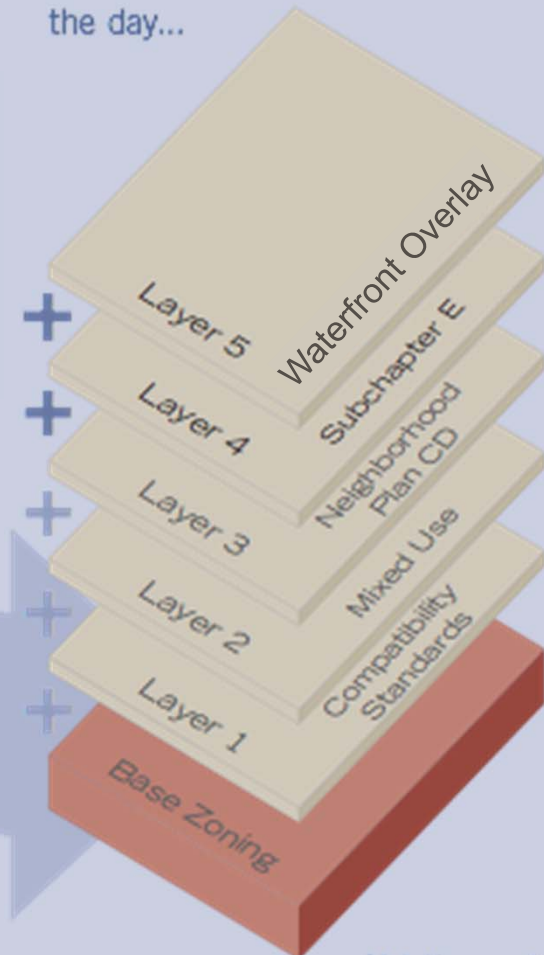
33 base zoning districts were originally created.



Supplemental layers of regulations were added to address incompatibilities.



Still more supplemental layers added to address top issues of the day...



...Yet the root of the problem was never fixed.

# The Potential Combinations are Complex

Base District

Combining Districts

**NO**  
Neighborhood  
Office



**MU**  
Mixed  
Use




**H**  
Historic



**NP**  
Neighborhood  
Plan

**NO-MU-H-P**



# Complicated “Opt-in, Opt-Out” System

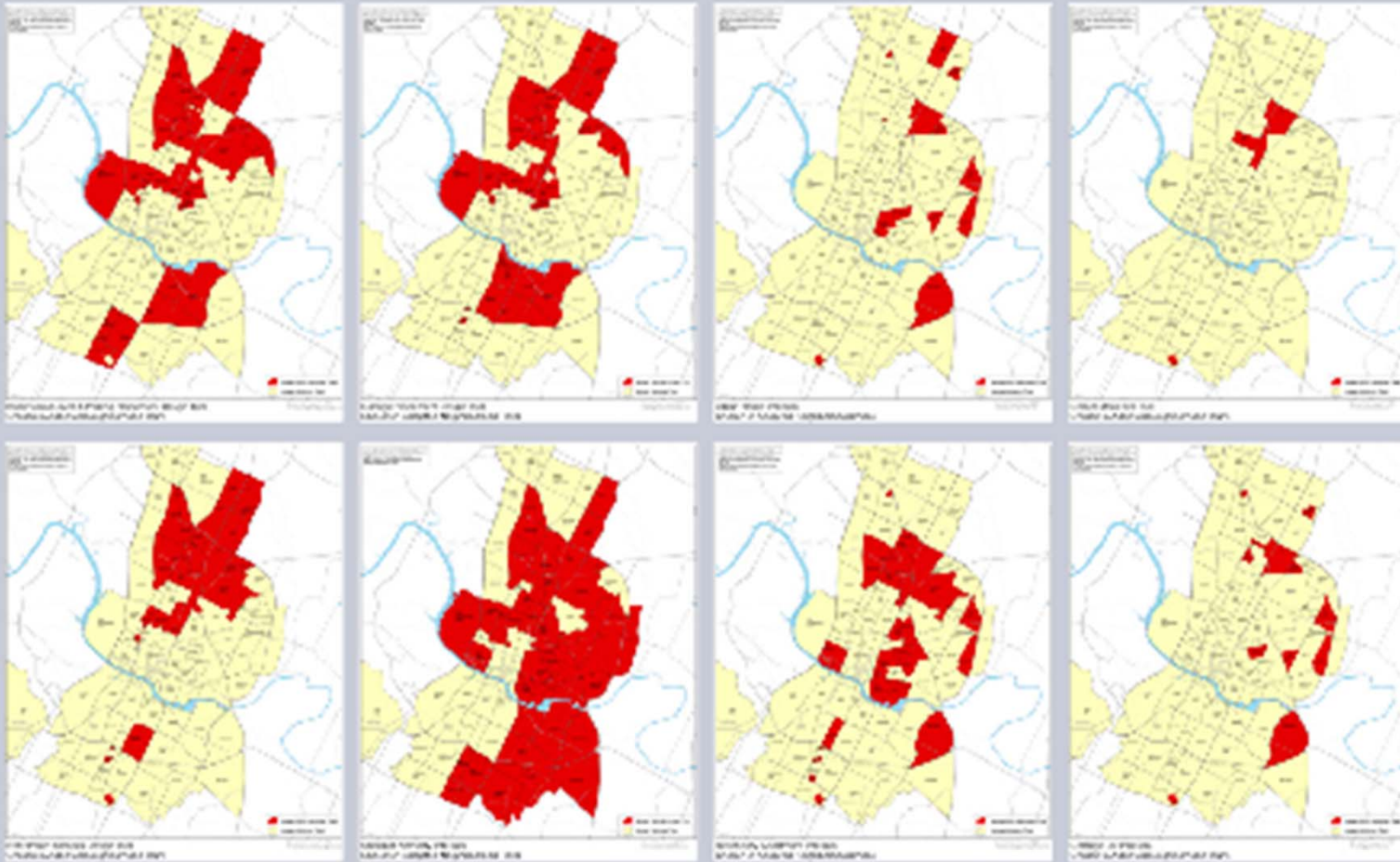
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This is Over-Complicating the Code



## Tools: Good Intent. Ineffective Application

### Applicability of Neighborhood Plan Tools



*The maps above represent the areas within the neighborhood plans that use or may use additional planning tools. Note that these areas are not*

*represented on the zoning map and instead must be referenced separately, adding an additional layer of complexity to the usability of the code.*



## Conditional Overlay Combining District: Good Intent. Wrong Tool



Need to rethink allowed uses in districts based on application of CO



4

Lack of Household Affordability and Housing Choice

---

## Household Affordability “Gap” Continues to Grow



1. Restrictive Limits on Density in Some Areas Unduly Impacts Construction Costs
2. Inefficient Approval and Permitting Processes Drive Up Development Costs
3. Few Policy Levers in Place to Preserve or Enhance Existing Affordable Housing
4. Current Density Bonus Programs Are Not Yielding Needed Results



*Carriage House*



*Fourplex*



*Duplex*



*Mansion Apartment/Apartment House*



*Duplex*



*Large Multiplex (6 – 8 units)*



# Household Affordability

1. Impacts Construction & Development Cost
  - A. Inefficient Approval and Permitting Processes
  - B. Restrictive Limits on Density in Some Areas
3. Few Policy Levers in Place to Preserve or Enhance Existing Affordable Housing
2. Current Density Bonus Programs Are Not Yielding Needed Results



*Carriage House*



*Fourplex*



*Duplex*



*Mansion Apartment/Apartment House*

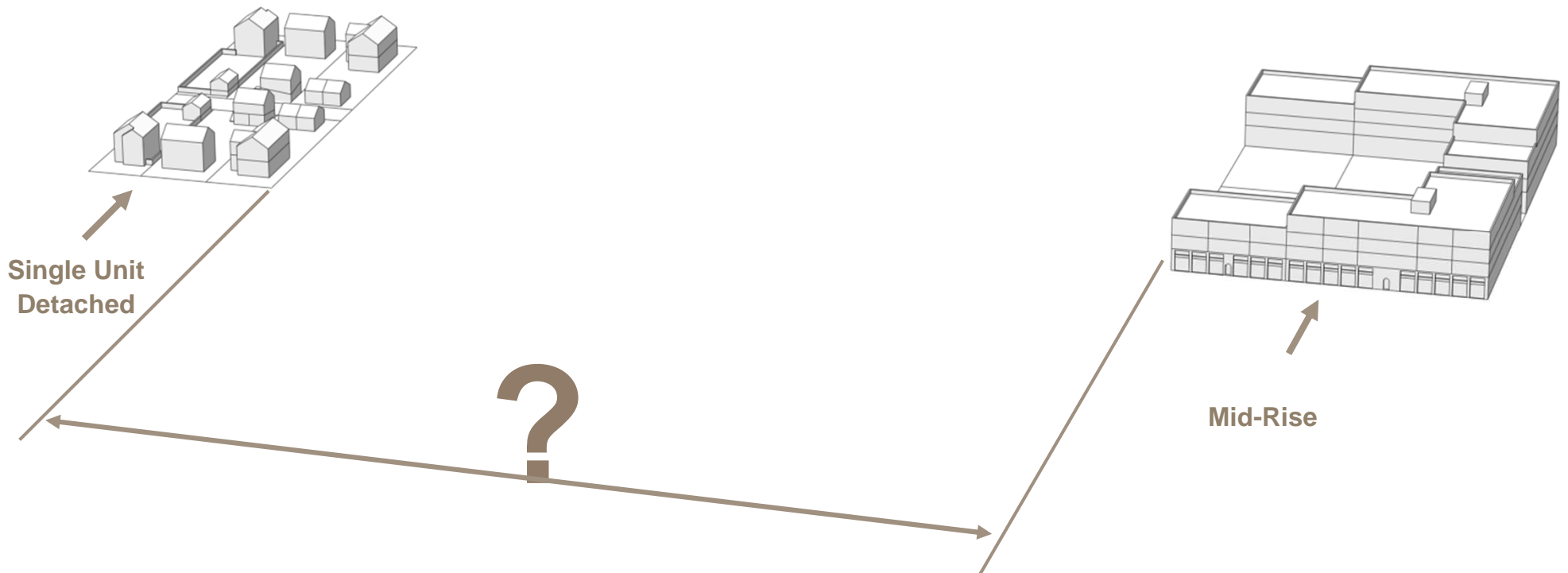


*Duplex*

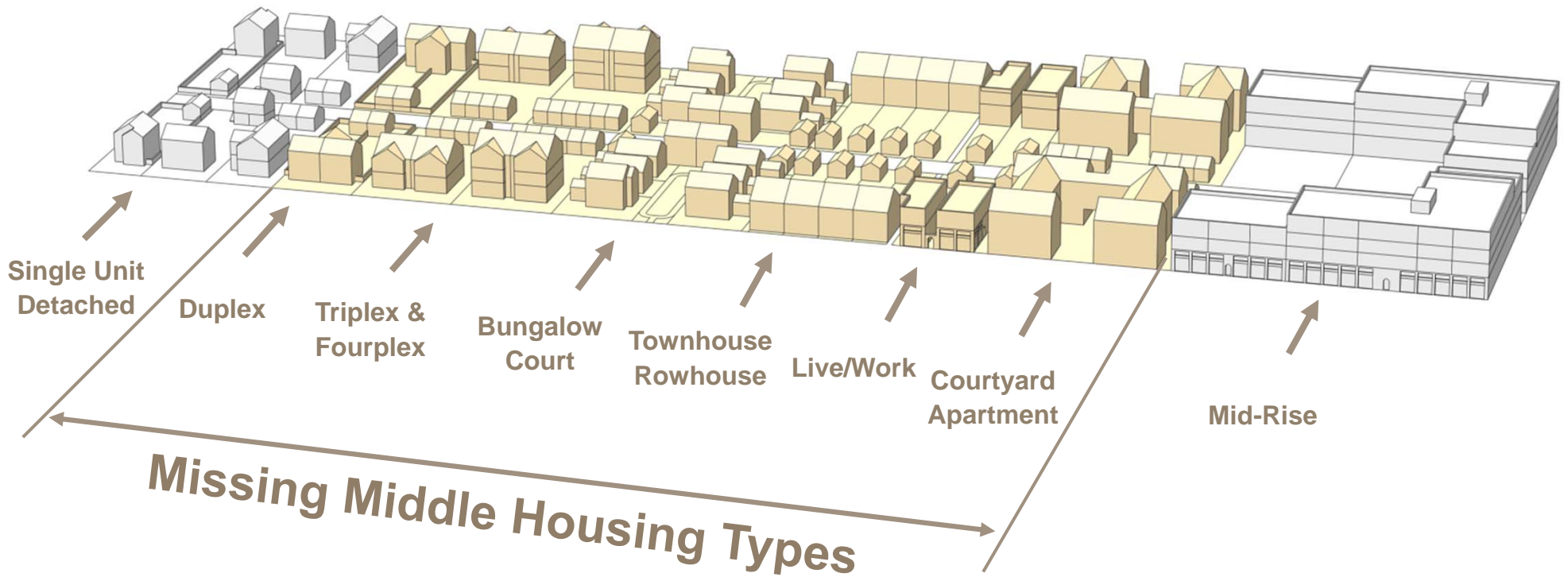


*Large Multiplex (6 – 8 units)*

## Limited Housing Choices Regulated by Existing Code



## Limited Housing Choices Regulated by Existing Code



These Types are Critical to Provide Choice & Affordability





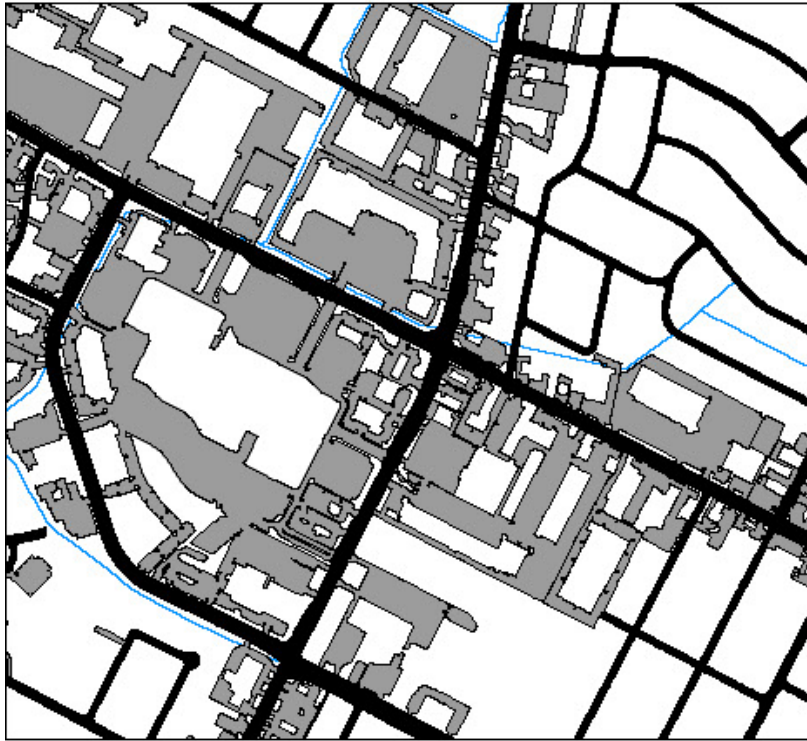
5

# Auto-Centric Code

---

An Obstacle to a Compact, Connected Austin and  
Protection of Community Character

## Regulations are Creating Auto-Dependent Density



*Diagram of parking lots and driveways, shown in grey*



*structure abuts one story single-family houses*



*Parking surrounding buildings*



*First 3 floors are reserved for parking*



*Lots paved over for parking*



## Parking Regs are Prohibiting Small Scale, Compatible Infill





6

LDC Not Always In Line with Imagine Austin

---

## Current Land Development Code Does Not Proactively Implement Imagine Austin



## Priority Program 1: Invest in a Compact and Connected Austin



City and partners have invested in transit, bicycle and pedestrian infrastructure, but...



## Transportation Infrastructure Has Not Kept Pace





## Stormwater Regulations





## Priority Program 2: Sustainably Manage Water Resources

Less Urban



More Urban



Vegetated Swale



Urban  
Channel

Stormwater Tools: Choose Right Tool Based on Context



## Priority Program 4: ....and Integrate Nature into the City



Tree Preservation: Very Important for Character of Place

Projects are finding creative  
ways of preserving existing

trees  
**CODENEXT**  
SHAPING THE AUSTIN WE IMAGINE





7

Lack of Clarity and Usability

---

Adversely Affect LDCs Effectiveness

## Inconsistent Structure and Location of Content

### ORGANIZATION OF CONTENT

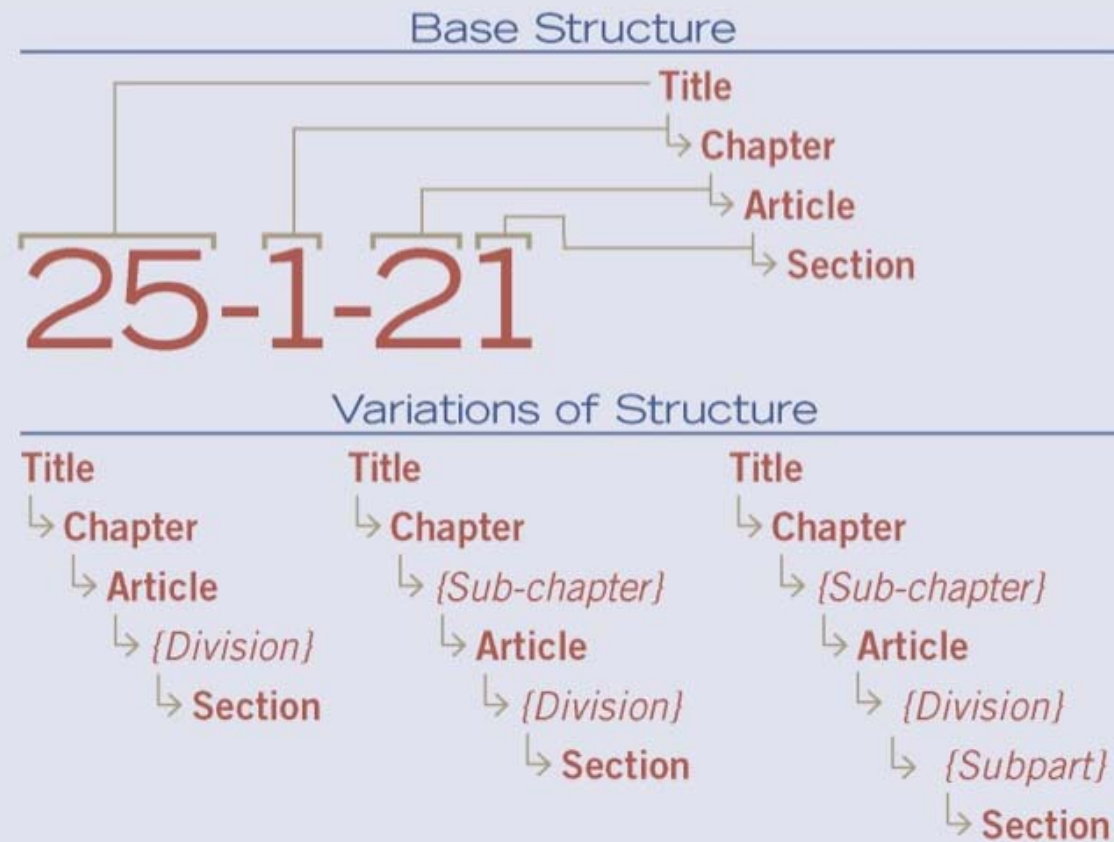
The basic structure of the existing Land Development Code has four major structural levels below Title 25 Land Development Code:

- Chapter
- Article
- Section

This organizational structure has been amended over the past 30 years with additional layers added, such as:

- Division
- Sub-chapter
- Subpart

While these new layers have been added, the methodology for numbering the layers for ease of referencing has not been updated, making the numbering system ineffective at allowing a user to understand where in the hierarchy of the LDC the reference exists.





## Basic Graphic Design and Usability in New Code

**A** **Specific to Building Types** 1703-3.120  
Stacked Flats

**D**

**Key**

--- ROW / Lot Line  
--- Setback Line

**B. Number of Units**

Units per Building	12 min.
Stacked Flat Building per Lot	1 max.

**C. Building Size and Massing**

**Height**

Height	2 stories min. <sup>1</sup>
--------	-----------------------------

<sup>1</sup>Height shall also comply with transect zone standards in Section 1703-2 (Specific to Transect Zones).

**Main Body/Secondary Wing(s)**

Width	200' max. <b>A</b>
Depth	200' max. <b>B</b>

**Accessory Structure(s)**

No accessory structures are allowed.

**Key**

--- ROW / Lot Line  
--- Setback Line

**D. Allowed Frontage Types**

Porch: Projecting	1703-4.50
Scoop	1703-4.70
Forecourt	1703-4.80

**E. Pedestrian Access**

Units shall enter from a courtyard or a street.

Courtyards shall be accessible from the front street. **C**

Each unit may have an individual entry.

**F. Private Open Space**

No private open space requirement.

**G. Courtyard(s)**

Width	40' min.; 150' max. <b>D</b>
Width-to-Height Ratio	1:2 to 2:1
Depth	40' min.; 150' max. <b>E</b>
Depth-to-Height Ratio	1:2 to 3:1
Area (Total)	400 sf min.; 50 sf/unit min.

City of Cincinnati Form-Based Code Final Draft 2/15/13 3-23

**B** **Section 1703-2: Specific to Transect Zones**

**Subsections:**

- 1703-2.10 Purpose
- 1703-2.20 Applicability
- 1703-2.30 Transect Overview
- 1703-2.40 T3 Estate (T3E)
- 1703-2.50 T3 Neighborhood (T3N)
- 1703-2.60 T4 Neighborhood Medium Footprint (T4N.MF)
- 1703-2.70 T4 Neighborhood Small Footprint (T4N.SF)
- 1703-2.80 T5 Main Street (T5MS)
- 1703-2.90 T5 Neighborhood Large Setback (TSN.LS)
- 1703-2.100 T5 Neighborhood Small Setback (TSN.SS)
- 1703-2.110 T5 Flex (TSF)
- 1703-2.120 T6 Core (T6C)

**1703-2.10 Purpose**

This Section provides regulatory standards governing building form and other topics, such as land use and signage, within the transect zones. The form-Based Code is a reflection of the community vision for implementing the intent of the Comprehensive Plan to create places of walkable urbanism. These standards are intended to ensure that proposed development is compatible with existing and future development on neighboring properties, and produces an environment of desirable character.

**1703-2.20 Applicability**

A. The standards of this Section shall apply to all proposed development within transect zones, and shall be considered in combination with the standards in Sections 1703-3 (Specific to Building Types), 1703-4 (Specific to Frontage Types), and 1703-5 (Supplemental to Transect Zones). If there is a conflict between any standards, the stricter standards shall apply.

**C**

**A** **Strong headers and footers explain where you are inside the document.**

**B** **Table of Contents in each new section.**

**C** **Clear indenting, section breaks, and labeling.**

**D** **Clear graphics and illustrations visually explain regulations.**

City of Cincinnati





8

Ineffective Digital Code

---

Feels Like Stepping Back To 1984

## Code Usability Further Hindered by Dated System

The screenshot shows the Austin Texas City Code website. The sidebar on the left contains a tree view of the code structure, with 'CHAPTER 25-5. SITE PLANS.' highlighted. The main content area displays the following text:

**ARTICLE 1. SITE PLANS GENERALLY.**

**Division 1. Site Plan Requirement and Notice.**

**§ 25-5-1 SITE PLAN REQUIRED.**

Except as provided in Section [25-5-2](#) (*Site Plan Exemptions*), a site plan must be approved and released under this chapter before:

- (1) a person may change the use of property;
- (2) a person may develop property; or
- (3) the building official may issue a building permit.

*Source: Section 13-1-600; Ord. 990225-70; Ord. 031211-11.*

**§ 25-5-2 SITE PLAN EXEMPTIONS.**

(A) The director shall determine whether a project is exempt under this section from the site plan requirement of Section [25-5-1](#) (*Site submit information necessary to make a determination under this subsection. The director may require an applicant to revise a previous Released Site Plans*).

(B) A site plan is not required for the following development:

- (1) construction or alteration of a single-family residential, single-family attached residential, duplex residential, two-family reside accessory structure, if:
  - (a) not more than one principal residential structure is constructed on a legal lot or tract; and
  - (b) a proposed improvement is not located in the 100 year flood plain, or the director determines that the proposed improvement
- (2) removal of a tree not protected by this title;
- (3) interior alteration of an existing building that does not increase the square footage, area, or height of the building;
- (4) construction of a fence that does not obstruct the flow of water;
- (5) clearing an area up to 15 feet wide for surveying and testing, unless a tree more than eight inches in diameter is to be removed;
- (6) restoration of a damaged building that begins within 12 months of the date of the damage;



9

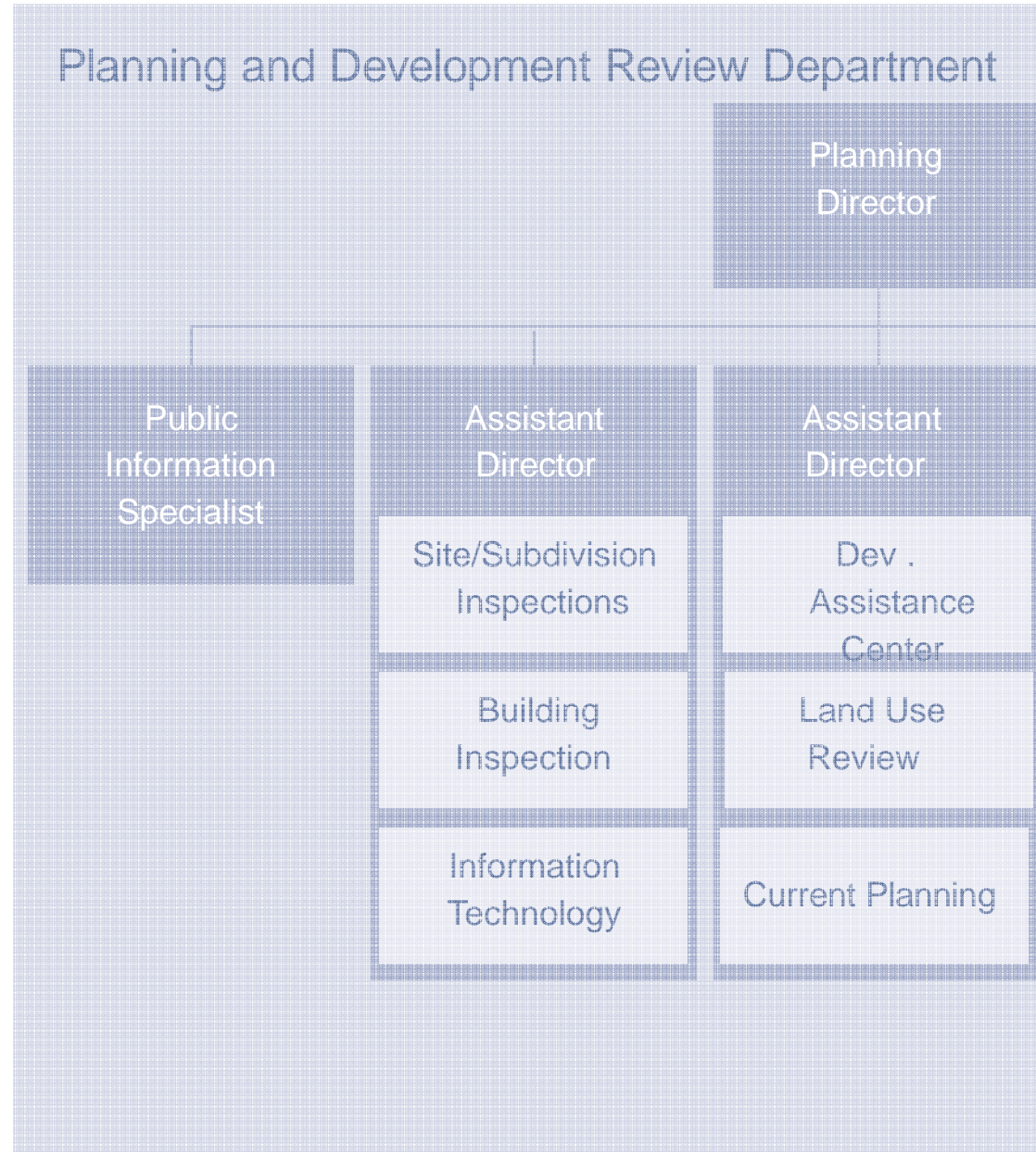
Code Changes Adversely Affect Department Organization

---

# A Complex Code Generates a Complex Entity

1. Multi-Layered System Lacks a by-right discipline
2. Difficulty of Maintaining a Common Interdepartmental Mission
3. Continuous amendments complicate administration and staff training

This Effort Is the Opportunity to Break Down Silos to Improve Integration





## Side Effects of LDC Complexity

1. Strains the Development Assistance Center Workspace
2. Increases Potential for Conflicting Department Requirements





10

Incomplete and Complicated Administration and Procedures

---

Creates Inconsistent and/or Lengthy Reviews

## Creates Inconsistent and/or Lengthy Reviews

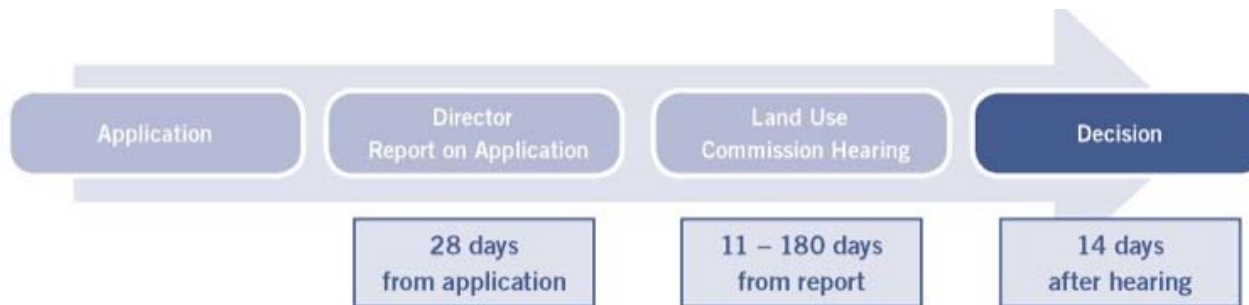
Application Review Time Table								
Permit	Subdivision		Site Plan		Commercial Building		New Residential	
Fiscal Year	2013	2012	2013	2012	2013	2012	2013	2012
Average Days	33	30	29	28	33	34	11	5
Percent On-Time	41%	59%	42%	42%	25%	22%	82%	84%

Source: City of Austin, Development Process Tracking, September 2013

Cycle Time Table								
Permit	Subdivision		Site Plan		Commercial Building		New Residential	
Fiscal Year	2013	2012	2013	2012	2013	2012	2013	2012
Average Days	108	102	114	112	209	188	94	45
Approved within 120 Days	51%	65%	49%	50%	25%	32%	67%	91%

Source: City of Austin, Development Process Tracking, September 2013

- 1) Process not well defined
- 2) Administration information spread throughout document
- 3) Missing or incomplete code administration information
- 4) Inconsistent interpretations
- 5) Overlapping layers of boards and commissions
- 6) Convoluted variance and appeal process, etc.



To put the above tables in context, the graphic above provides targeted time frames for site plan review and approval. (The time frames do not include the applicant request for a review extension of up to 180 days.)

## Lack of Flexibility to Add Staff During Upswings - Inability to Respond



## Lengthy, Unpredictable Review Process

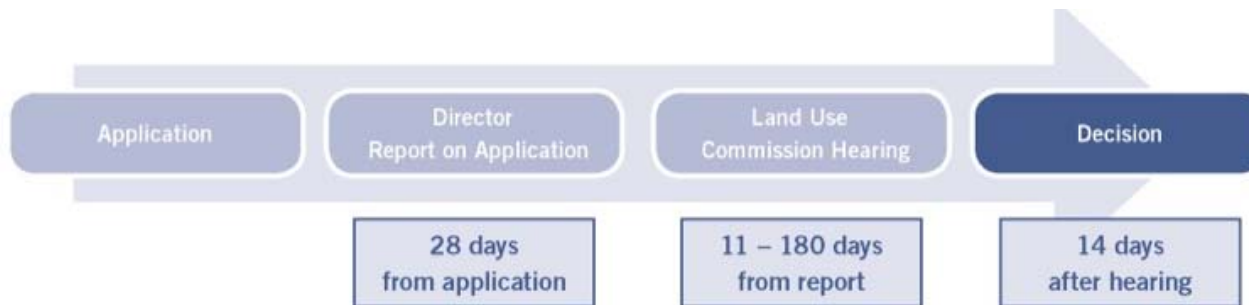
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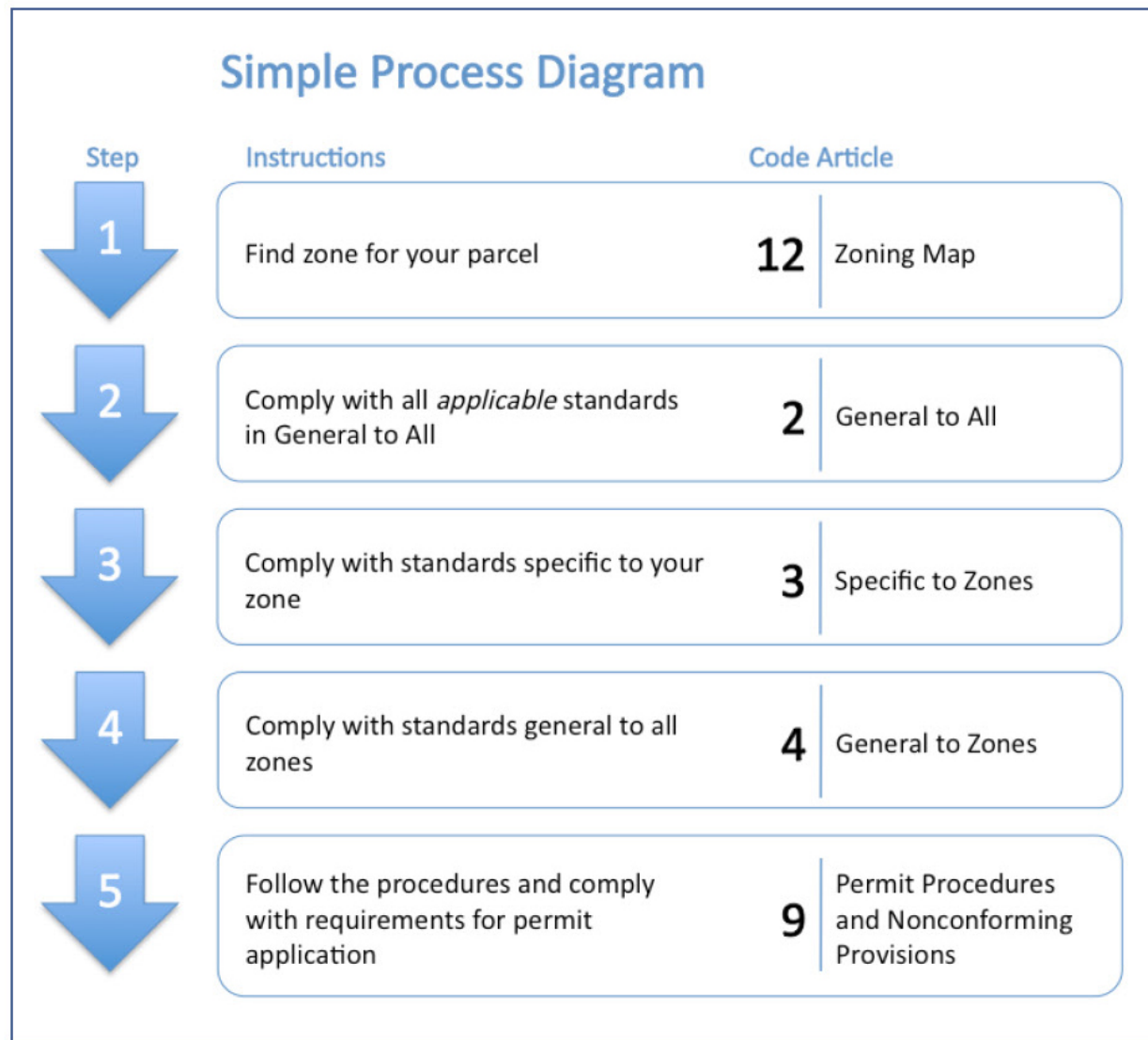
- 1) Involvement of numerous city departments, city boards and commissions, and outside entities;
- 2) Lengthy and unpredictable Review Process;
- 3) Process not well defined;
- 4) Convoluted Variance and Appeal Process, etc.



To put the above tables in context, the graphic above provides targeted time frames for site plan review and approval. (The time frames do not include the applicant request for a review extension of up to 180 days.)

## Lack of Flexibility to Add Staff During Upswings - Inability to Respond

## Clarity is Needed in the Process



*Sample Process Diagrams from Livermore Development Code*

Conclusion

---

What's Next & a Few Final Thoughts



# This is a Foundation for Making a Plan to Untangle the Mess



# Hybrid Code is Likely Good Approach

PLANNING PRACTICE

## Going Hybrid

*How one city overhauled its zoning code while combining form-based and conventional elements.*

By Roger E. Eastman, AICP, with Daniel Parolek and Lisa Wise

**F**LACSTAFF, ARIZONA, entered an exclusive club in November. It is now one of the few cities in the U.S. that have adopted a hybrid zoning ordinance with both form-based components and conventional Euclidean elements as part of a complete code rewrite. "Simplified, streamlined, predictable," raved an editorial in the *Arizona Daily Sun* while praising both the code and the process used to adopt it. Getting the new code adopted wasn't easy, but many city residents think the effort will be repaid in a more efficient, more equitable, and easier-to-use zoning system. The adoption of the new zoning code also caps off a successful public engagement process that has changed the generally negative perception of city planners.

### TIME FOR AN UPDATE

An important first step in approaching a new code was differentiating between what number 141-better calls "walkable urban" and "drivable suburban" areas. In *Cityform*, Island Press, 2008), this distinction, Hagstaff code is the walkable urban code, generally leaving the drivable suburban code in place in the

Thus, a new transect-based hybrid code resulted that details to promoting and allowing for walkable urbanism while seamlessly incorporating refined yet otherwise conventional Euclidean zoning tools for the drivable suburban areas. Because the regulations for the two different types of areas are not muddled together, the form-based code could be kept intact—and development opportunities could emerge in a manner con-

Hagstaff (pop. 62,000), at an elevation of about 7,000 feet, is the regional hub of northern Arizona. Established as a stop on the early transcontinental railway in 1882 and later Route 66 and Interstate 40, Hagstaff quickly grew as a logging and ranching town, and as a gateway for tourists visiting the Grand Canyon and other national parks and monuments. Residents appreciate the natural beauty of the area and enjoy outdoor pursuits such as hiking, skiing, hunting, fishing, and camping.

The downtown and oldest neighborhoods were planned with small blocks and lots, and today are valued for their historic buildings and inherently walkable urban character. Typical of many American cities, Hagstaff's urban form changed after World War II as auto-oriented suburban developments were added to the periphery of the city. Until recently Hagstaff's zoning ordinances have actively promoted these driveable suburban development patterns.

The need for a comprehensive update of the city's land development code had been apparent for some time as developers, contractors, design professionals, and residents complained about the code's complexity and inconsistency. Some even blamed the cumbersome nature of the code for contributing to the high cost of development and the failure of big projects and economic develop-

- Hybrid codes apply different zoning tools in different places within a city.
- Ability for city to "right-size" the zoning tools needed in a predictable and clear manner.



## Form-Base Zones-Good Starting Point for Simplicity & Compatibility



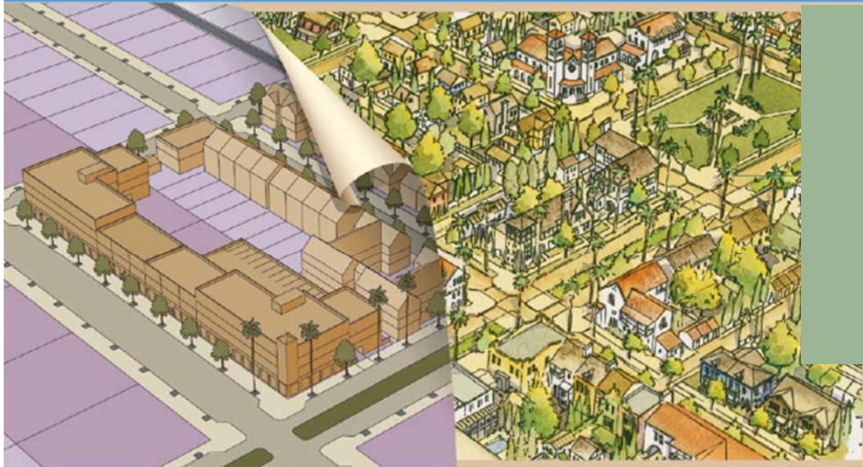
Cincinnati Form-Based Code

**Small Footprint Urban Neighborhood Zone**



We Will Continue to Provide Information and Best Practices

## Form-Based Codes



A Guide for Planners, Urban Designers,  
Municipalities, and Developers

Daniel G. Parolek, AIA • Karen Parolek • Paul C. Crawford, FAICP

Forewords by Elizabeth Plater-Zyberk and Stefanos Polyzoides

FBCI Form-Based  
Codes Institute

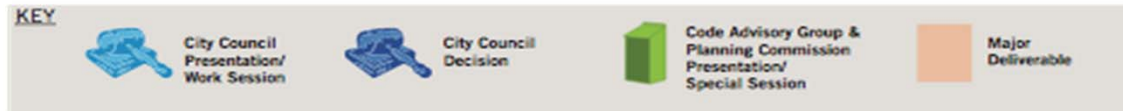
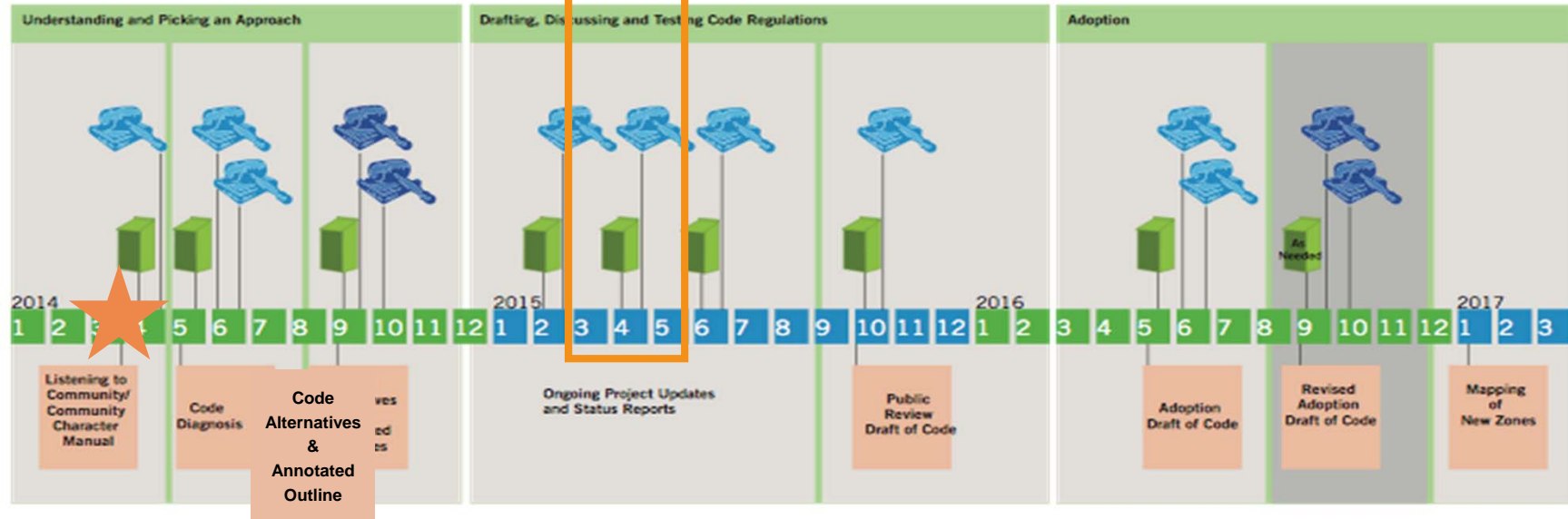
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## Next Steps: Major Deliverables

### Austin Land Development Code Rewrite Schedule

Austin, Texas

February 2014





<http://www.austintexas.gov/codenext>