

## Staff Report

**AMES PLAN 2040 UPDATE- WORKSHOP #3  
Scenario Analysis Task Description**

April 23, 2019

**BACKGROUND:**

City Council received an update on April 2nd from RDG on the emerging themes from the public engagement phase of the project and initial population projections in support of moving to the next major task of the project, which is scenario analysis. The RDG presentation from April 2<sup>nd</sup> is available on the [Ames Plan 2040 website](#). **City Council is asked at this meeting to provide direction to RDG on the preferred approach to conducting scenario analysis that will help inform later decisions on growth of the community as well as vision and goals for the community through 2040.**

Based upon current information on growth projections, as described by RDG on April 2<sup>nd</sup>, we reasonably forecast a 1.5% increase in population with a higher level growth rate of 2% as an option as well. Both population rates contemplate minimal change to the student enrollment numbers of ISU. The total population increases are roughly 15,000 people and 20,000 people respectively with these growth rates. Additionally, job growth is estimated at about 1% annually, or approximately a 25% increase in jobs for the City.

The scenario evaluation step will use these initial projections to consider the mix of housing, commercial, and employment land use needs for the City. RDG will continue to refine their work and assumptions for the projections during this phase as well. **The outcome of this evaluation task will be a broad analysis of growth and change to help create a comparison of options and context for selecting a preferred scenario at the end of this task.**

**SCENARIO OPTIONS:**

City Council is being asked on April 23<sup>rd</sup> to endorse an approach to scenario planning to allow for RDG to begin the next phase of the work plan. On April 2<sup>nd</sup> RDG provided a short introduction to the topic in preparation for the 23<sup>rd</sup>. City Council discussed with RDG approaches to scenario analysis that could be based on preferred land use or development “philosophies” to guide this task. Attached to this report is a memo with information from RDG on approaches that they have utilized with prior communities. This information is meant as background material to help guide a discussion April 23<sup>rd</sup> for its preferences on how to proceed. In addition to philosophies as the basis for scenarios, locational choices could be the defining approach to the scenarios evaluation. The April 2<sup>nd</sup> meeting also included a high level introduction to issues related to the expansion of the City. City Council discussed on the 2<sup>nd</sup> what were truly viable areas for growth and asked for more refined information or recommendations for expansion areas.

Staff has prepared three options for scenario evaluation in response to the information discussed on April 2<sup>nd</sup>.

### **Option 1- Infill Redevelopment Opportunities**

The City likely has opportunities to support growth within the current City boundaries and not all growth needs to be planned for with expansion of the City. Infill options were also identified in the community survey as preferred area for growth. However, staff does not believe an infill option that houses all of the projected growth is likely and some areas of expansion will also be necessary.

This scenario would include consideration of infill redevelopment opportunities. Infill can include housing and commercial activities. Staff initially recommends the basis for this scenario focused on the following areas:

1. Lincoln Way Corridor Plan Focus Areas,
2. South Lincoln Mixed-Use District,
3. East of South Duff Avenue and south of the Union Pacific railroad,
4. Campustown,
5. State nursery site,
6. Other underutilized or advantageously located commercial and higher density areas for meeting housing needs, transportation access, or commercial development needs.

### **Option 2- Comparative Land Use Concepts**

This scenario would begin with evaluation of a range of buildout concepts (philosophies) to create a comparison of land use needs and patterns for growth. This approach would consider projected development yields with different priorities for how to develop land, such as a philosophy of prioritizing one pattern or feature of development over another. Examples of development philosophies that could guide this option are conservation subdivision design, access to transportation, efficiency of development, new urbanism (village concepts), traditional suburban design features, green or sustainable development principles, housing densities, commercial areas, etc. **City Council would need to define two or three priorities to help RDG create distinct scenarios for comparison.**

This option would first focus on comparing readily serviceable areas abutting the City, typically areas previously analyzed by the City in the current LUPP as allowable Growth Areas. This exercise would establish land area needs through evaluation of identified philosophical priorities to create comparisons of scenarios. City Council would then iteratively consider where to locate planned growth as a subsequent step upon completing the first step of the evaluation with philosophical approaches. **This options consider land use preferences first and then addresses locational issues.**

### **Option 3- Location Directed Growth**

This approach is distinct in its approach to answer location related issues for significant growth assumptions first, before refining details on land use planning priorities. Through the initial assessment of existing conditions, it has been identified that there are significant infrastructure needs for virtually all major potential areas of city expansion. Because of this, knowing serviceability may be a higher priority as the first step of the evaluation process compared to land use planning preferences.

The intent of this option is to look individually at the capacity and attributes of an area related to supporting 15,000 people. RDG would apply their professional expertise with a best practices or hybrid approach to identify the land use mix for each area along with major constraints to reaching the projected population total. City Council would then review the comparison of these four areas serviceability and the underlying land use assumptions before giving direction on a preferred concept.

Staff has provided an initial diagram (Attachment A) of general evaluation areas for West, East, North, and South. Staff has eliminated some areas that there are known constraints from the April 2<sup>nd</sup> presentation in an effort to focus on the potentially more viable areas. City Council with this option would endorse general areas to evaluate by RDG using a mix of land use practices that they deem appropriate to each area. Each area may end up with different land use assumptions due to unique conditions or opportunities.

### **STAFF COMMENTS:**

With scenario analysis an approach must be endorsed for RDG to move forward on this important task. Essentially, City Council needs to identify what information is preferred in the first round of evaluation to guide its final decisions. **Staff has laid out Option 1 for considering infill options first which would inform land use needs for expansion, Option 2 first identifies the preferred approach to land use planning and development philosophies before vetting location preferences, and Option 3 highlights location issues first before considering detailed land use assumptions.**

**Within all of these options, staff believes that it is understood that major land use differences to be considered will focus on housing (single family and multi-family) and local/community commercial components, while the industrial and regional commercial assumptions are that the East Industrial, ISU Research Park, and 13<sup>th</sup> Street areas respectively will remain unchanged from the current the LUPP.**

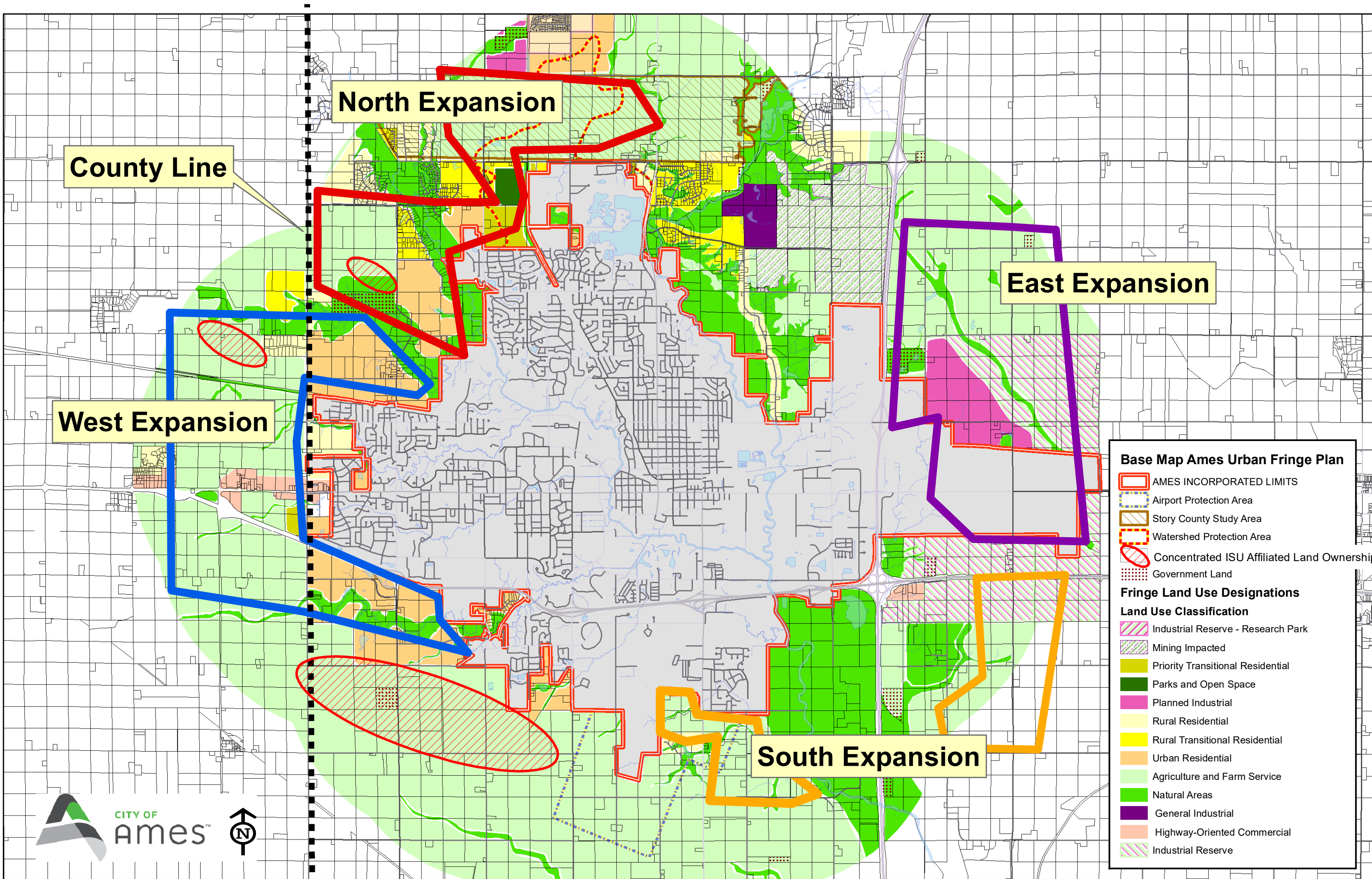
**Staff believes that choosing Option 1 and Option 3 would best serve the City at this time due to the significant unknowns about the viability of the location of growth and changes. Additionally, choosing Option 3 lets the City consider its longer term growth needs beyond 2040 by evaluating 15,000 people four different times (essentially 60,000 people), which may be important in making decisions about priorities for the next 20 years that will also influence the long term future of the**

**City. City Council would choose Option 2 if defining specific philosophies for growth up front are the priority for the City.**

**Because this direction that is being requested from RDG is an important step in the work plan of defining the scope for evaluating options before selecting a preferred option later this summer, staff would recommend that public input be taken at this meeting.**

**NEXT STEPS:**

Any of the options listed above will help lead to the ultimate step of selecting a preferred scenario to serve as the basis for writing the Plan. City Council will receive information on the evaluation of scenarios this summer. City Council will then consider the comparisons and provide direction of how to refine the options into a preferred scenario. This scenario task is expected to be completed within the next six months. In addition to the comparative analysis of the scenarios, City Council will also begin discussion this summer of its vision and goals for the City and how these interests will help shape a preferred scenario as well.



**North Expansion**

**County Line**

**East Expansion**

**West Expansion**

**South Expansion**

**Base Map Ames Urban Fringe Plan**

- AMES INCORPORATED LIMITS
- Airport Protection Area
- Story County Study Area
- Watershed Protection Area
- Concentrated ISU Affiliated Land Ownership
- Government Land

**Fringe Land Use Designations**

- Land Use Classification**
- Industrial Reserve - Research Park
  - Mining Impacted
  - Priority Transitional Residential
  - Parks and Open Space
  - Planned Industrial
  - Rural Residential
  - Rural Transitional Residential
  - Urban Residential
  - Agriculture and Farm Service
  - Natural Areas
  - General Industrial
  - Highway-Oriented Commercial
  - Industrial Reserve



**TO:** Mayor and City Council

**FROM:** Kelly Diekmann, Planning & Housing Director

**DATE:** April 16, 2019

**SUBJECT:** Ames Plan 2040 Scenario Planning Background

In accordance with the consultant's work plan, the next step following the Ames Today/Public Engagement phase of the Ames Plan 2040 project is Scenario Analysis. Prior to starting this phase, the City Council is being asked to provide direction to RDG at its April 23<sup>rd</sup> meeting on the preferred approach to scenario analysis. The Scenarios task is intended to help provide a broad evaluation of a number of alternatives for the City's growth and change over the next 20 years. Ultimately, the goal at the end of this task is for the City to identify a preferred option on both the locations of growth and the anticipated types of development that the City would support for those areas. The preferred option will then become the basis for formulating the actual new Plan.

At the April 2<sup>nd</sup> workshop the concept of scenarios was discussed in preparation for the April 23<sup>rd</sup> meeting. RDG has conducted scenario analysis a number of different ways to assist cities in preparation of a comprehensive plan. RDG introduced at the April 2<sup>nd</sup> workshop the concept of using "philosophies" on growth to help shape the evaluation of scenarios. For the purpose of this discussion, philosophy is equated with assumptions on the land use mix and primary layout elements of development that affect the amount of land needed in an area for growth. Generic examples of philosophies could include prioritizing conservation principles, housing density, mix of housing types, efficiency, green/sustainable design, transportation access, market demand, new urbanism (village concepts), suburban, etc. Attached to this memo are examples from RDG of prior work they have done for other cities in regard to applying philosophies/approaches to analyzing growth within scenarios for Oklahoma City, Cedar Rapids, and Brookings South Dakota.

Examples of "philosophies" in the current LUPP would be the embodiment of the vision statement in our land use concepts for a preference for village development, commercial areas, conservation planning, and also support for suburban development options. Rarely does a City choose one overarching philosophy for all development in a City due to multiple interests and locational differences within a city. It is common that a hybrid expectation materializes out of the evaluation or discussion on the needs of a community.

Scenarios analysis for Ames must also include a locational or directional growth element as was also discussed on April 2<sup>nd</sup>. Philosophies alone are not likely to address core issues about where and how to grow due the known constraints to growth around the City. An assessment of locational differences of similar growth assumptions may be the more significant component of the Scenario analysis task compared to philosophies. Addressing infill opportunities is likely a separate scenario from the evaluation of the expansion of the City outward.

Council will receive additional information on Friday in preparation for the 23<sup>rd</sup> meeting about a recommended approach to the task. City Council will then review information from RDG about the scenario options on the 23<sup>rd</sup> and provide direction to RDG on a preferred approach to the scenario task.

LIVE.  
GROW.  
BELONG.



## Workshop #3: Land Use Projections and Scenarios

April 23, 2019

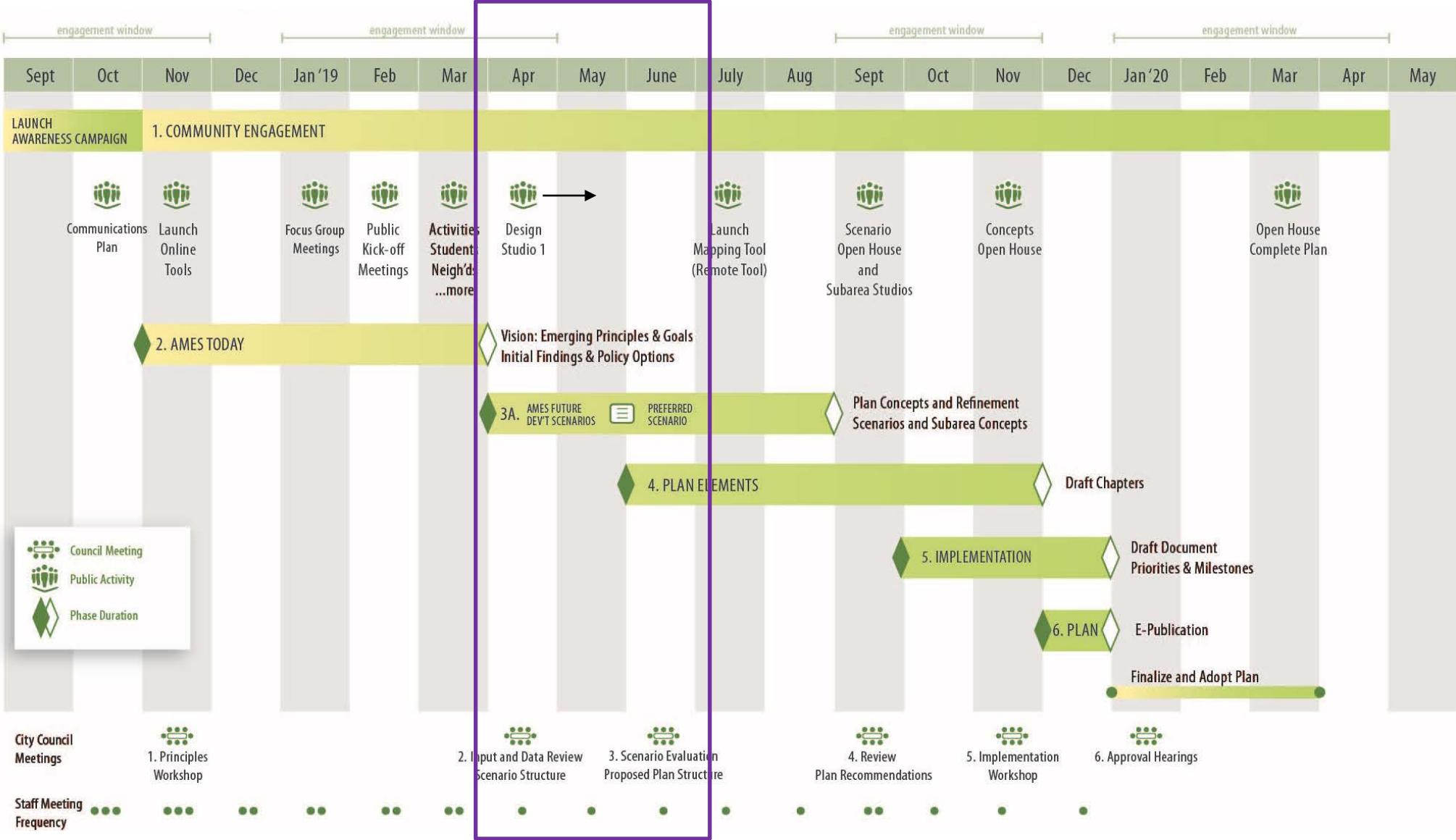




**Scenarios: April to August**



# Schedule



## SOUND BITES

**April –** Council to provide direction for developing scenarios. RDG to then prepare concepts.

**May/June–** Public event to contribute to emerging scenarios.

**June/July –** Evaluating outcomes of scenarios and providing [re]direction for refinement.

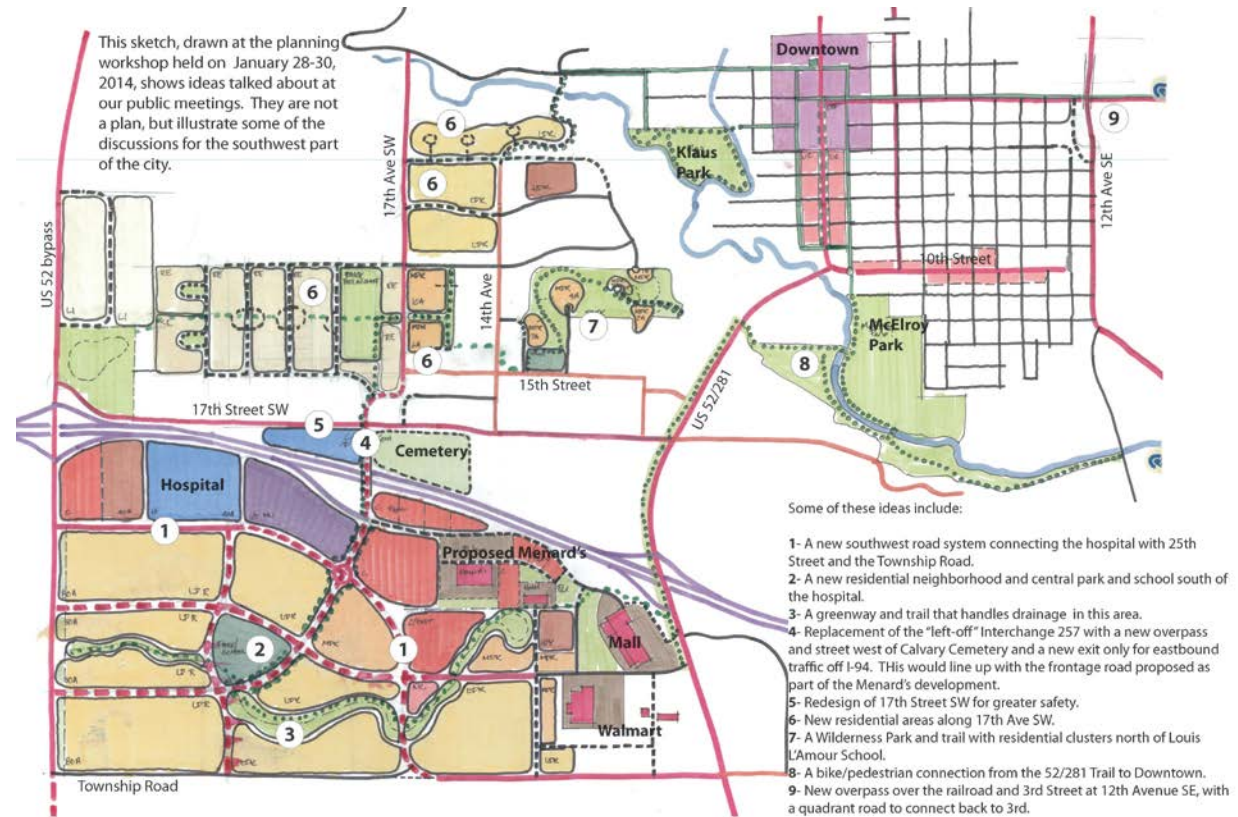
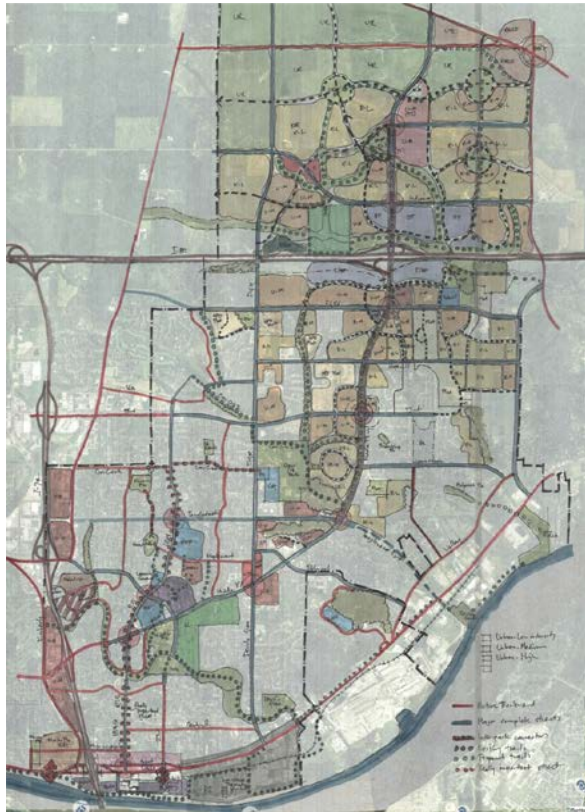


# Tasks > Examples

**April/May:** Concepting

**June:** Evaluating scenarios to identify a preferred land use concept.

**July- September:** Refining the preferred concept.



Developing possible future land use designs that will be evaluated in June.

Preparing supportive narrative that identifies land use and connectivity. Initial evaluation will include possible yields for residential/commercial/industry while identifying space for conservation/parks and constraints.

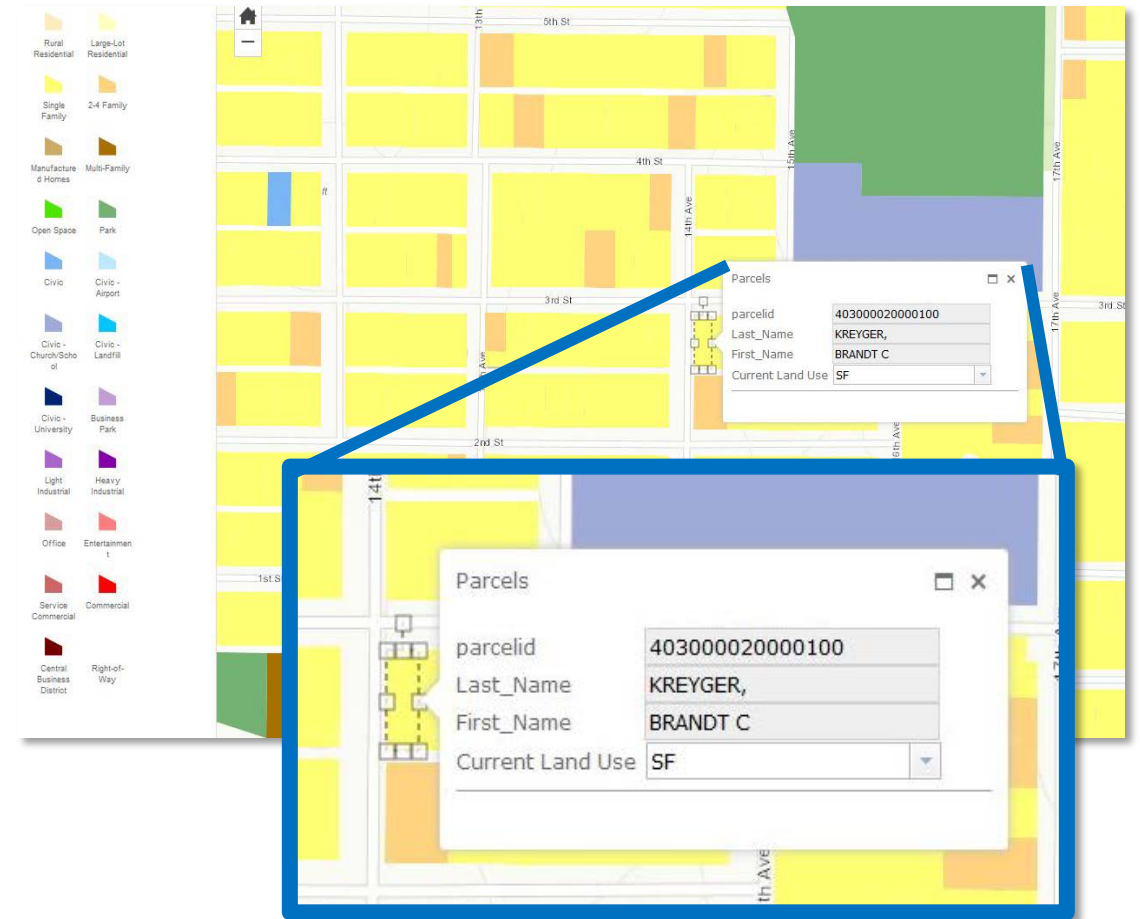
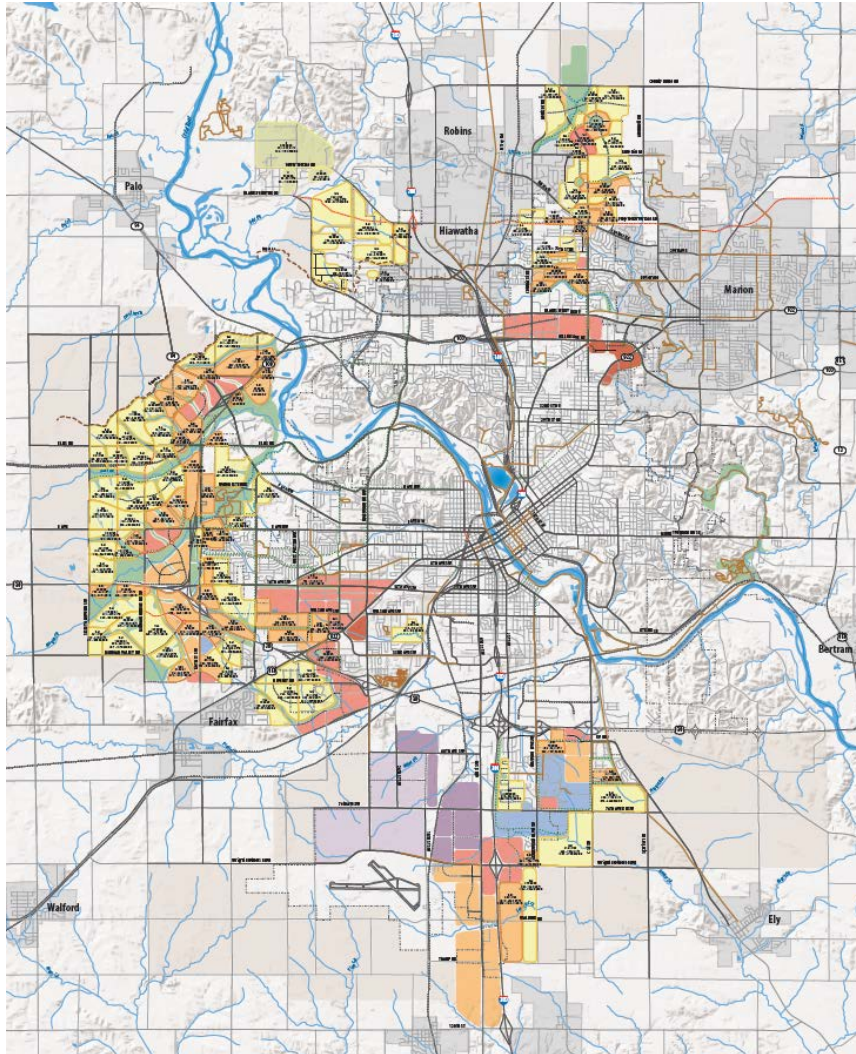


# Tasks – Refine Concept to GIS

**August:** Refining the concept to GIS.

**Sept-Dec:** Refining the concept more, if desired.

**Fall:** Advancing the details of the plan.





**Land Use Planning Philosophy/Approaches**

# Ames Plan 1997 > Current Approach

## NEW LANDS POLICY OPTIONS.....

Delineation.....

Village Residential.....

Suburban Residential.....

Commercial Expansion Areas.....

Neighborhood Commercial.....

Convenience Commercial Nodes.....

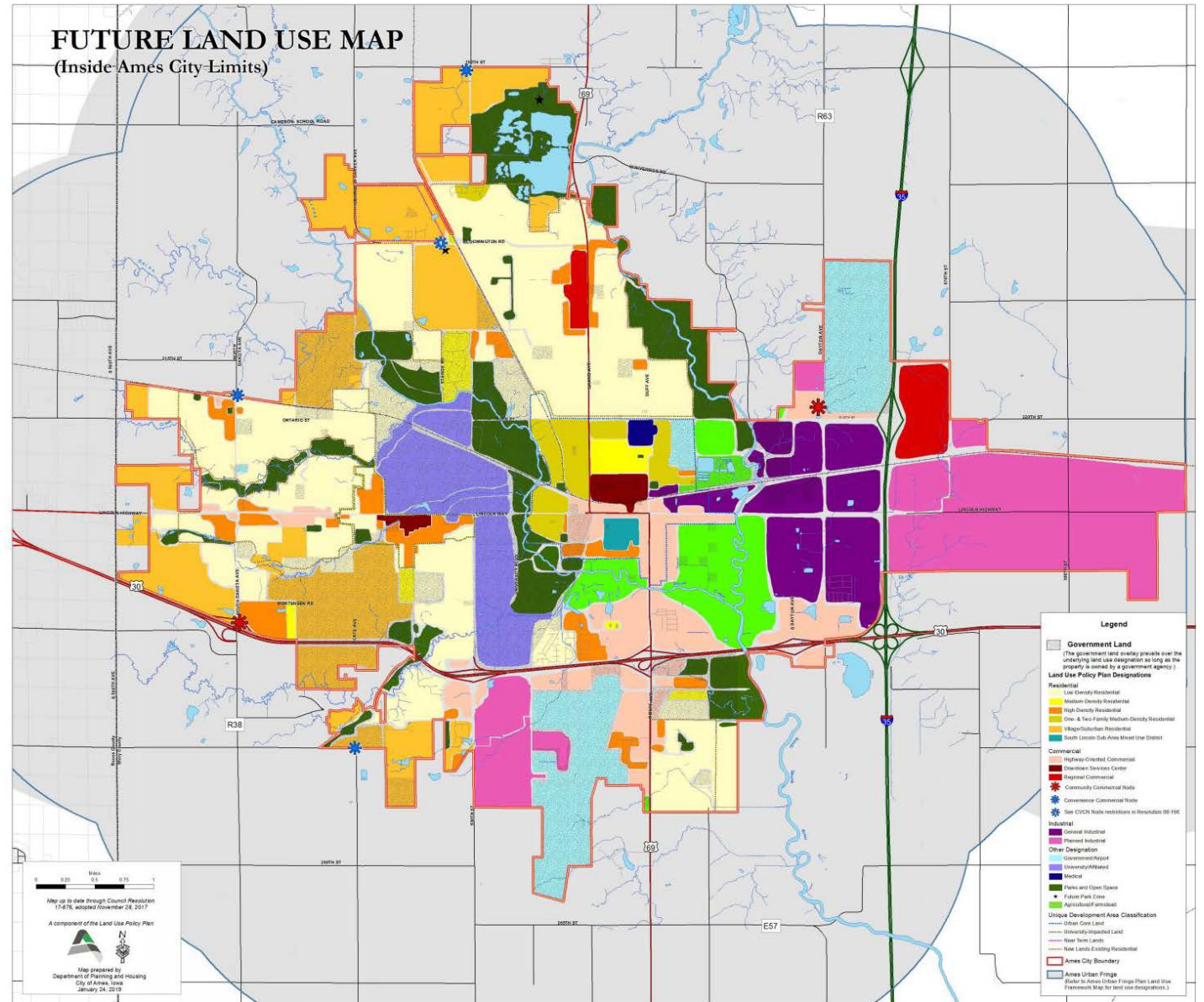
Community Commercial Nodes.....

Regional Commercial.....

Industrial Expansion Areas.....

Planned Industrial.....

General Industrial.....



# Land Use Scenario Demonstrations

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## AMES - 1997

Traditional-  
Identified growth  
capacity, preferred  
areas

## OKLAHOMA CITY

Trends Model  
Trends+Market Model  
Market+Efficiency+Revitaliz-  
ation

SELECTED:  
Trends+Market

## CEDAR RAPIDS

Business-as-usual  
Urbanism Priority  
Conservation (site  
layout) priority

SELECTED: New  
Hybrid

## BROOKINGS, SD

Preferred Concept  
with Refinement

SELECTED: No Scenarios,  
just refined a preferred  
concept





Colcord

Sheraton

Continental

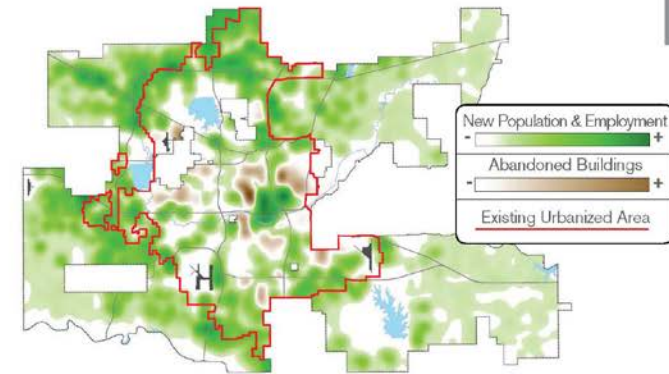
planokc  
planning for a healthy future

# planOKC: Land Use Scenario Approach

## SCENARIO A (Past Trends Continued)

This scenario assumes that development patterns over the past 20 years will continue. The city would continue to spread out in a somewhat casual, spontaneous way, with most new housing (75%) located in single-family-detached subdivisions on medium or large lots.

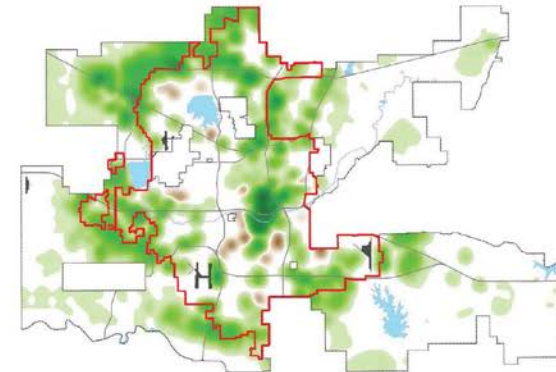
Workplaces would be located relatively far from homes, meaning commute times would be a little longer than they are now. New commercial development would most often be located at the corners of busy streets, and would not be easily accessible from nearby neighborhoods except by car. City services and infrastructure would have to be extended farther into undeveloped areas. Only a small amount of redevelopment and infill would occur in existing neighborhoods, and decline and abandonment will continue in areas currently experiencing these challenges.



## SCENARIO B (Trends+Market+Efficiency)

This scenario is influenced by past development patterns, but it assumes that new development is located near existing infrastructure and services like streets, water, police, and fire. It is also shaped by expected housing needs based on changing demographics. Single family lot sizes would be a little smaller on average so that they more closely match what residents say they want according to the 2013 Housing Demand Study.

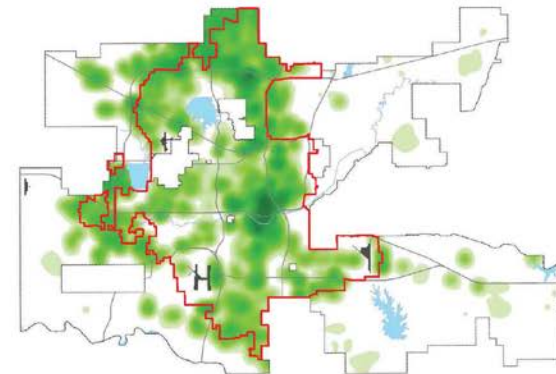
Mixed-use nodes and corridors that integrate commercial and residential development are more prevalent, making it possible to bike, walk, or ride transit to multiple destinations. A more compact development pattern means workplaces and homes would be closer, allowing for shorter commutes. There will be some redevelopment in urban neighborhoods; however, some decline and abandonment would continue to occur.



## SCENARIO C (Market+Efficiency+Revitalization)

This scenario illustrates efficiency and high performance for residents, public services and infrastructure. It does not reflect past land development trends but instead optimizes the location and density of new development to reduce cost and negative impacts of growth. It accomplishes this while reflecting citizens' desires for adequate housing of all types, including medium- and large-lot single-family-detached homes. This scenario still assumes that most (67%) new homes would be single-family-detached, but lot sizes would be a little smaller on average.

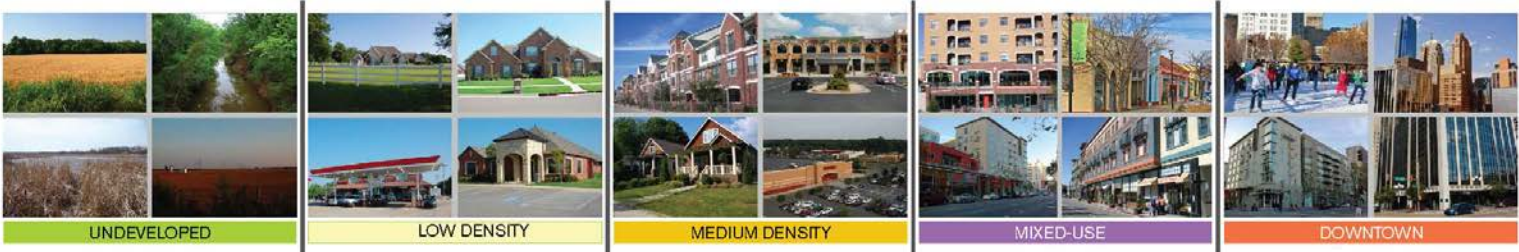
More new development would be concentrated into and around mixed-use nodes and corridors. Workplaces, homes, parks, and stores would be closer to each other, and streets and sidewalks would be more connected, allowing for even shorter commutes and more walkable neighborhoods. High amounts of rehabilitation and redevelopment would be expected to occur in existing neighborhoods, leading to a turnaround in currently challenged areas.



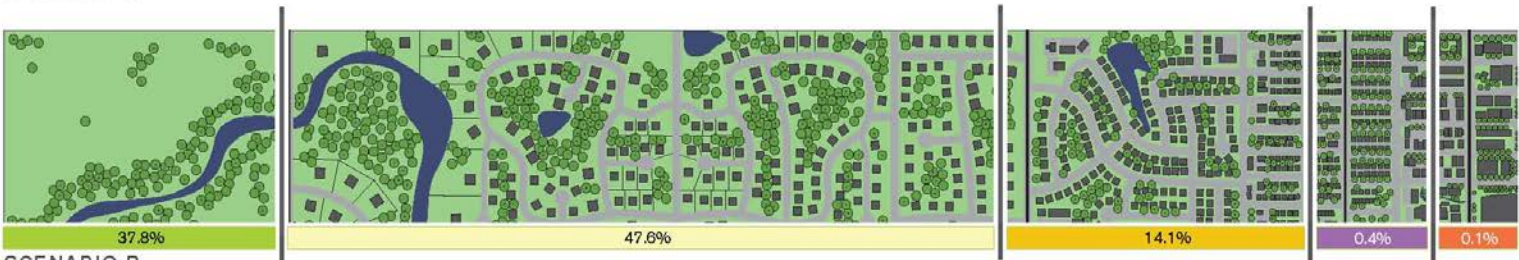


# planOKC: Land Use Scenario – Development Patterns

## DEVELOPMENT CHARACTER



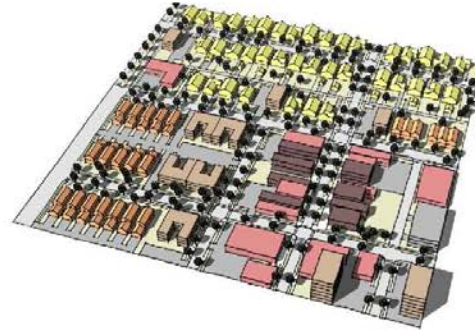
## DEVELOPMENT PATTERNS



# planOKC: Demonstration of Land Use Typology Area (LUTA)

## URBAN – MEDIUM INTENSITY LAND USE TYPOLOGY AREA (UM)

UM applies to fully urbanized areas of the city, most of which were built prior to the 1960s. Developments are expected to be larger in scale and have greater intensity and mixture of uses than developments found in UL. Development within UM areas should support efficient transit usage and provide pedestrian and bicycle access to retail, services, parks, and other destinations. Priorities for the UM areas include “infill” development on vacant lots, rehabilitation of underutilized property, and development that supports revitalization of distressed neighborhoods.



### DENSITY RANGE

Target Density Range	10 – 40 du/acre
Minimum Density	7 du/acre
Non-residential Floor to Area Ratio (FAR) Range	0.40 – 1.20, typical FAR of 1.0

## DEVELOPMENT POLICIES

### 1.0 Site Design, Building Form, and Location

#### 1.1 SITE DESIGN

- Avoid developing within 100 year floodplains or floodways.
- Maintain historical lot and block sizes where possible and appropriate.
- Utilize Best Management Practices (BMP) for stormwater.
- Structured parking may be appropriate to achieve desired intensity levels.
- Incorporate commercial uses at street level to maintain an active, pedestrian friendly streetscape.
- Design buildings to include facades, storefront windows, and attractive signage and lighting to create pedestrian-scale visual interest.

#### 1.2 LOCATION

- Locate large-scale commercial and office development on arterial streets.
- Mixture of density, lot size and building scale is appropriate as long as land use compatibility is achieved.

### 2.0 Automobile and Pedestrian Connectivity

#### 2.1 AUTOMOBILE CONNECTIVITY

- Maintain and enhance the connectivity of the street network.
- For projects on sites 5 acres and larger that propose new public or private streets, maintain, create, and enhance an overall network that is highly connected, and avoid dead end streets and cul-de-sacs.
- Protect existing traditional street grid and reconnect it where possible.
- Keep alleys open and functional.
- Limit curb cuts on arterial streets and where possible, concentrate access for retail development at shared entrance points.
- Development fronting arterials should take access from intersecting streets where possible.
- Primary entrance points should be aligned with access points immediately across the street.

#### 2.2 PEDESTRIAN CONNECTIVITY

- Provide sidewalk connections to nearby uses.
- Discourage widening of neighborhood streets and increasing curb radii.



### URBAN – MEDIUM INTENSITY CHARACTER

Small lot single family, multifamily buildings, and urban commercial districts are representative of the UM Typology.



# EnvisionCR



# EnvisionCR Scenarios

STANDARD  
DEVELOPMENT PRACTICES



URBANISM



CONSERVATION



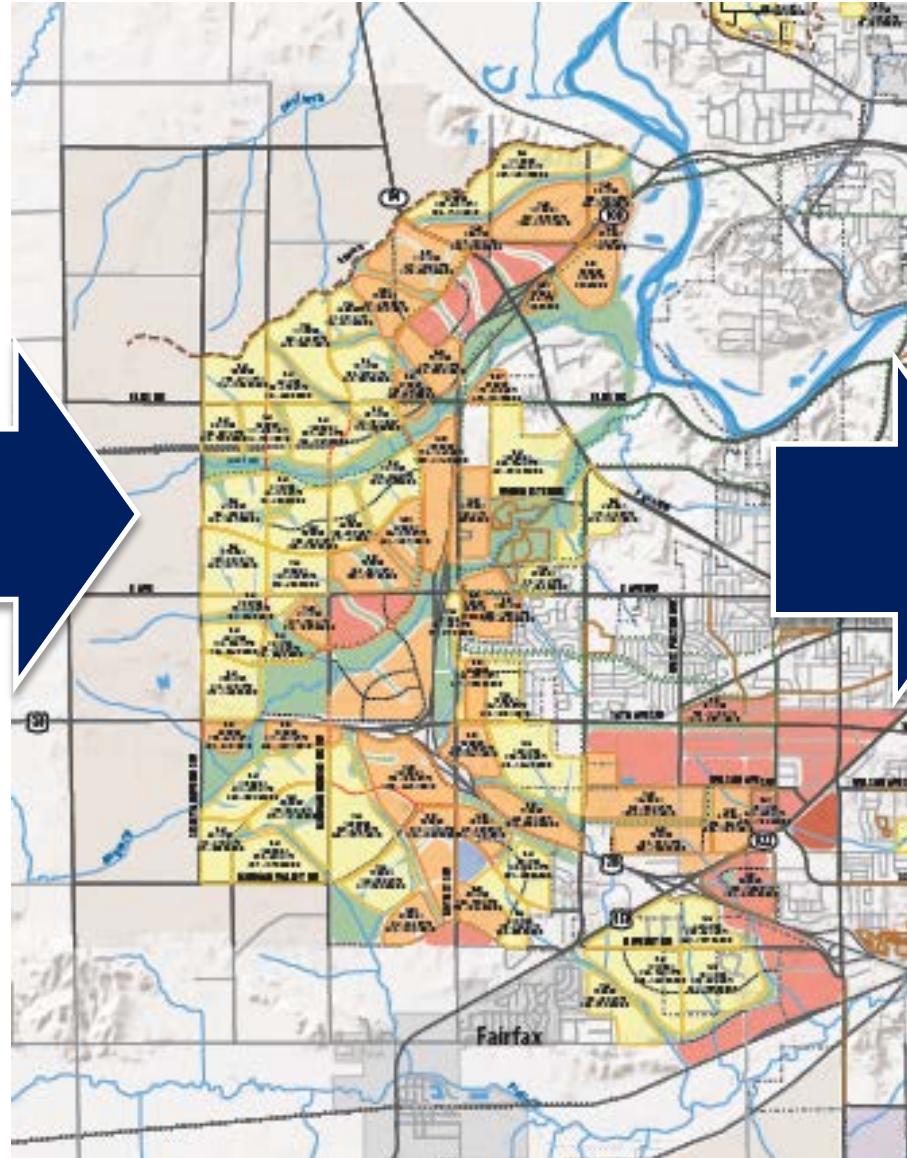
- Low Density Residential
- Medium Density Residential
- Mixed Use
- Open Green Space
- Park

Initial concepts which were then evaluated for advantages and disadvantages.

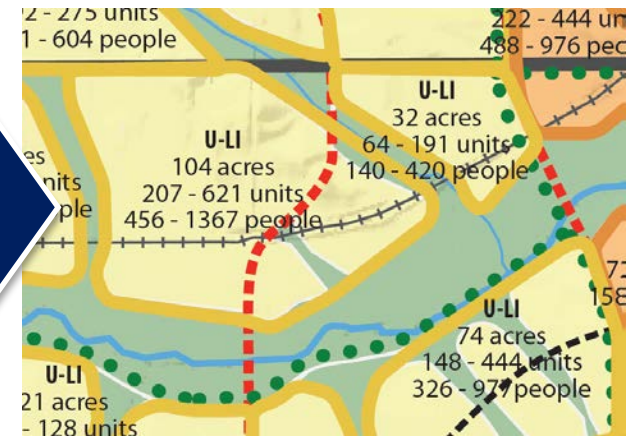
# Concept Refinement > Hybrid Model

[May/April/June]

[July-August]



New hybrid concept prepared after review.

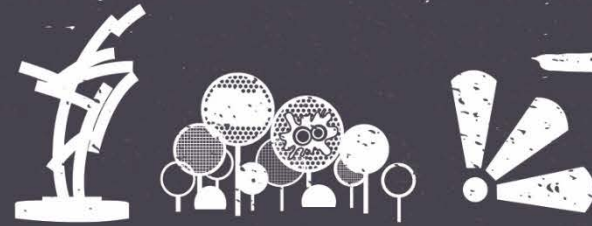


Additional refinement adopted an intensity-based land use approach



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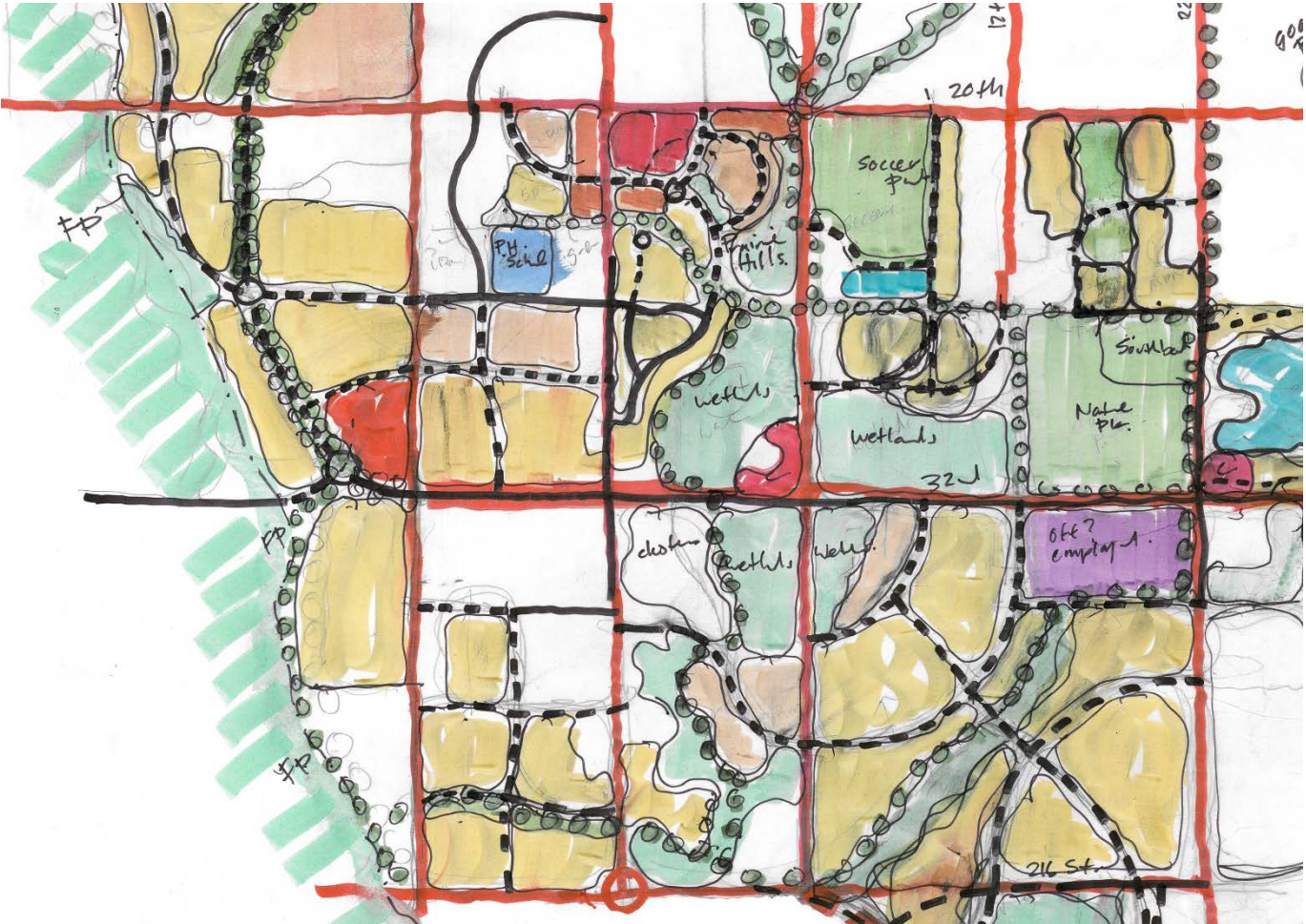
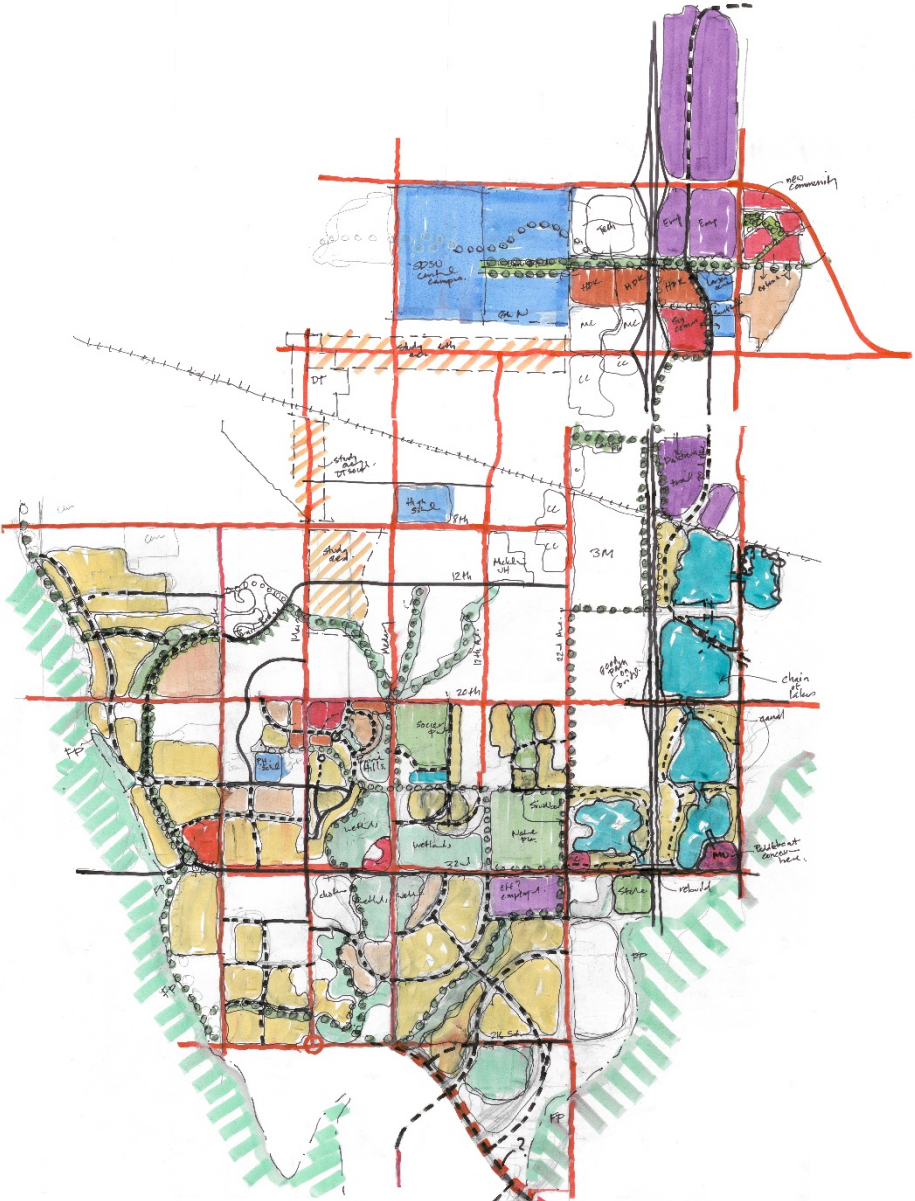
brookings  
SOUTH DAKOTA  
comprehensive plan



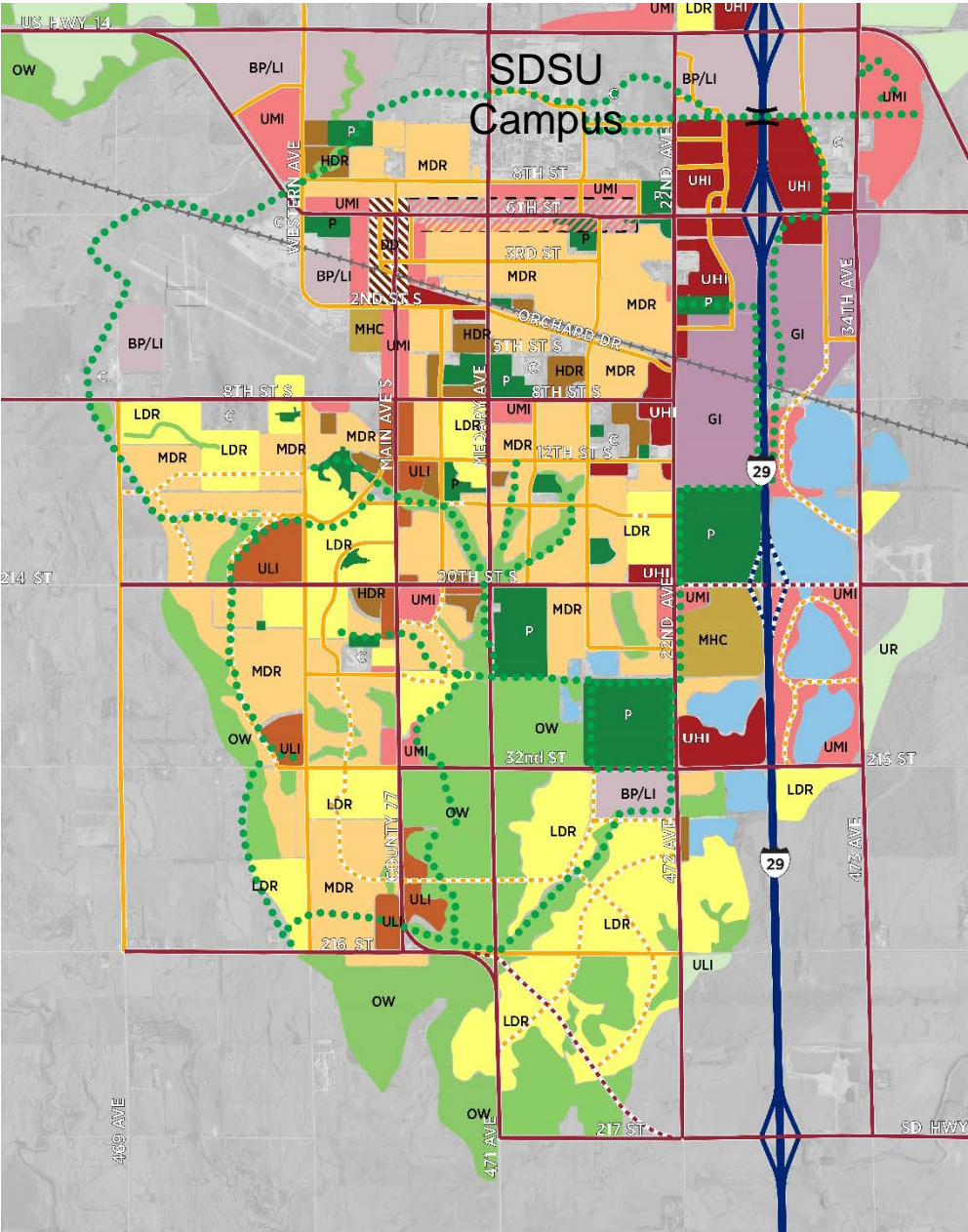
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# Brookings – Best Practices Approach



# Brookings > Future Land Use Plan

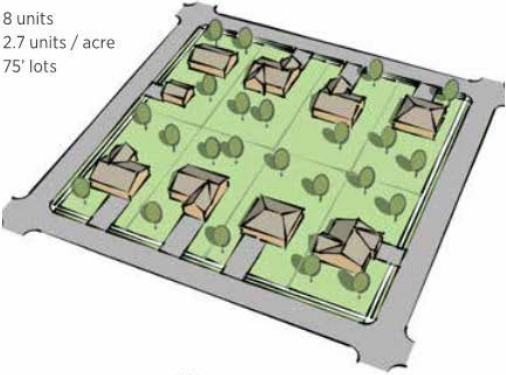




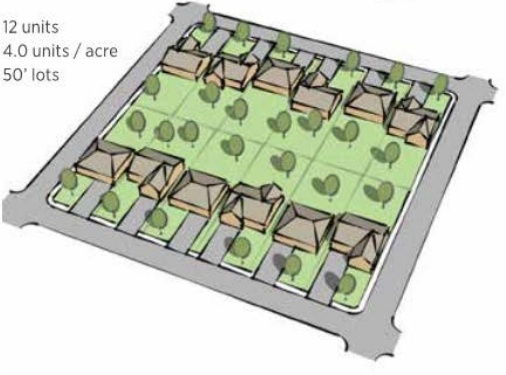
# Brookings Plan > Use and Density

## SINGLE FAMILY DETACHED

8 units  
2.7 units / acre  
75' lots



12 units  
4.0 units / acre  
50' lots

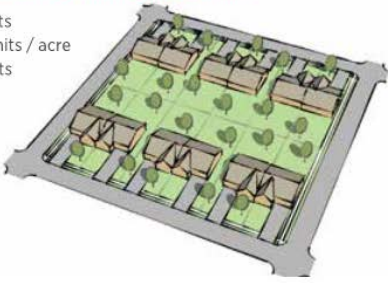


16 units  
5.4 units / acre  
40' lots

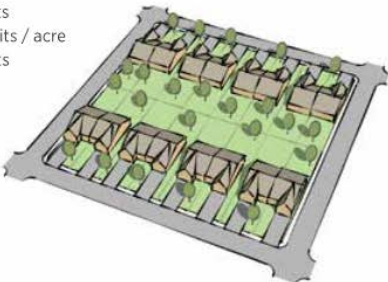


## SINGLE FAMILY ATTACHED

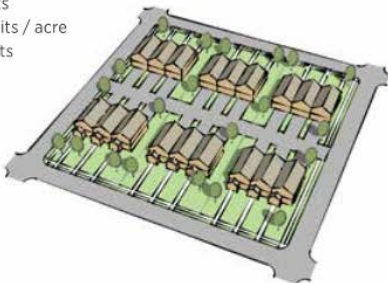
12 units  
4.0 units / acre  
50' lots



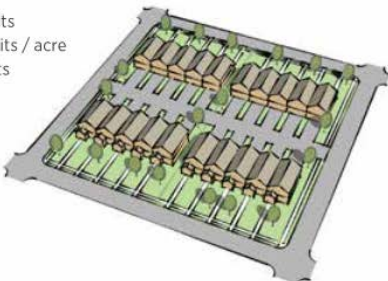
16 units  
5.4 units / acre  
40' lots



18 units  
6.0 units / acre  
-35' lots

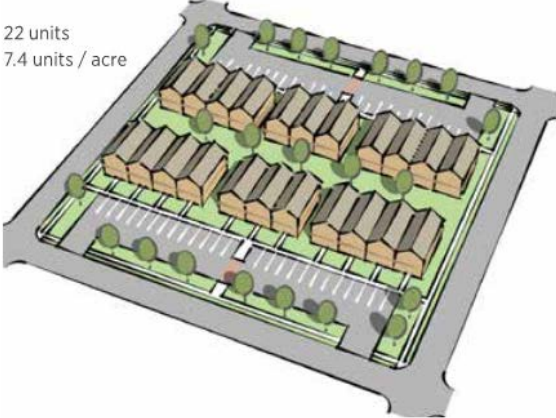


20 units  
6.7 units / acre  
30' lots

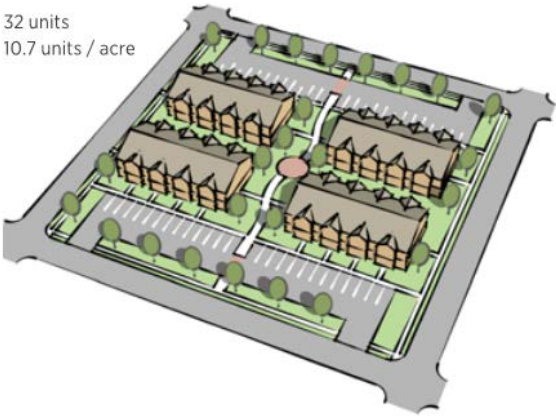


## MULTI-FAMILY

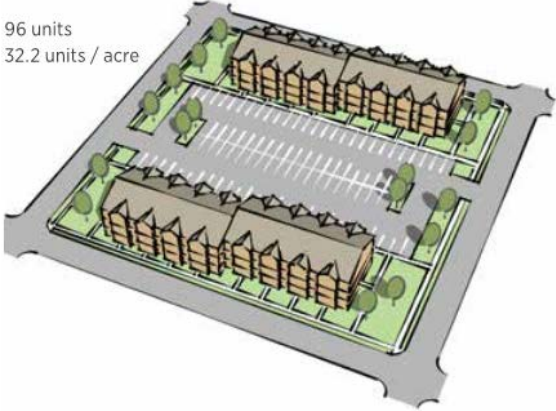
22 units  
7.4 units / acre



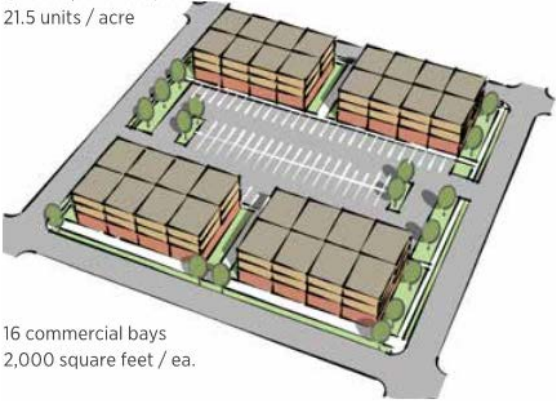
32 units  
10.7 units / acre



96 units  
32.2 units / acre



64 units residential  
1,000 square feet / ea.  
21.5 units / acre



16 commercial bays  
2,000 square feet / ea.



# Possible Council Direction – Part 1

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## POSSIBLE DIRECTION FROM CITY COUNCIL

### 1. Yes, we want to look at scenarios to compare approaches.

- Use example from Cedar Rapids or Oklahoma City
- This may possibly result in a new approach to future land use policy.

### 2. Yes, we want to look at scenarios focused on locations.

- We want to use a baseline concept and use best practices in land use planning for a new concept. (Brookings Example)
- This approach may align closer to our current future land use policy.

Both approaches result in preliminary concepts that will be reviewed in June and be refined through August. Both options would ultimately include locational components.

