CAG Report
on the
Natural & Built Environment
Prescription Paper

Natural & Built Environment Working Group
of the
Code Advisory Group

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I. EXECUTIVE SUMMARY

This report serves as the Land Development Code Advisory Group's (CAG) response to the Natural and Built Environment Code Prescription, the first of four "prescription papers" authored by City staff as a part of CodeNEXT. The prescription papers are meant to discuss the finer details of major issues the City has identified the code rewrite will address. As the first of these papers, it is apparent from the process and content that much can be learned that could improve the remaining three papers. Additionally and most importantly, this report aims to ensure that CAG member and public comments are considered by the code-writing team.

This report begins by tying code elements of the natural and built environment back to Imagine Austin with a **CAG Overall N&BE Vision**. This report also offers an **N&BE Prescription Paper Critique** and serves to summarize the **CAG Comments and Responses** to the paper. Individual CAG member comments are in **Appendix A**. Next, this report identifies **Missing Sections** that would have made the paper more clear, such as an Executive Summary and Glossary (suggested draft in **Appendix B**), followed by a list of **Missing Topics** that the code-writers should consider. The report also includes a **Public Participation Critique,** which offers some suggested improvements to utilizing public feedback moving forward. Finally, this report summarizes the **CAG Event Public Comments** we have received at three of our meetings dedicated to the N&BE Prescription, and includes the notes from our public comment meeting on April 4, 2016 in **Appendix D**. **Appendix C,** is a copy of our May 2, 2016 CAG Resolution, which calls on City Council to provide additional assistance, such as funding a public engagement consultant for the final phase of CodeNEXT. At the time this report was completed, no action had been taken.

CAG RECOMMENDATION: NEED FOR RESPONSE TO COMMENTS

Because the time devoted to the N&BE Paper was limited, and the paper was incomplete, the CAG suggested releasing an additional draft of the paper with more firm positions on detailed prescriptions. We now know that an additional draft is not an option. Therefore, in the alternative, we recommend that staff release a response to comments that identifies at least 3-5 specific questions that staff are still working to incorporate into the draft code and request specific public feedback on those particular questions.

II. CAG OVERALL N&BE VISION

On June 18, 2015 the city council reaffirmed the Approach for the CodeNEXT rewrite with a focus on Green Infrastructure and Sustainable Water Management – two of the eight priority programs in Imagine Austin. Recently, the city council Open Space, Environment, and Sustainability Committee supported the vision of Austin as a Biophilic city – a city that celebrates the green, living environment within the urban core.

Our CAG Vision is of a Compact and Connected City with the integration of Green Infrastructure (GI) and Sustainable Water Management (SW) into all aspects of the code. While the Natural and Built Environment Prescription Paper (N&BE Paper) provides an overview of some of the related topics such as water, trees, and open space, it does not yet provide a comprehensive view of how the natural and built environment can be connected in a meaningful way to create a vibrant, Biophilic city. We believe that the new code rewrite should be leading the way toward a more sustainable, green future for the next fifty years. To that end, we offer the following lens through which to view any proposed code modifications.

Natural Environment

The land and climate of Central Texas comprise the natural environment upon which the built environment is placed. To the west is the Edwards Plateau with rolling limestone hills and thin soils. To the east and north are the Post Oak Savannah and the Blackland Prairie with deep, clay soils. The vagaries of our climate result in droughts and floods, with Austin being in the middle of "Flash Flood" alley. As a result, any effort to provide a more compact and connected city needs to recognize and respond to the challenges of our natural environment.

Our citywide natural GI encompasses urban watersheds and creeks, urban open space, and the urban forest. Each of these elements provide critical functions and ecosystem services. Healthy watersheds and their creeks sustain the health of Lady Bird Lake, help control flood impacts, reduce channel erosion and property loss, and help maintain good water quality. Healthy open space provides land area for infiltration of stormwater and erosion control. A healthy urban forest provides pollutant removal, canopy cover, and carbon storage.

Due to the city's history of droughts and our dependence on the Edwards Aquifer and the Highland Lakes water storage capacity, SW recognizes stormwater as a precious resource to be managed. Excess stormwater that cannot be absorbed leads to flooding. Stormwater needs to be either captured for reuse, absorbed by plants and soils, or infiltrated back into the ground.

Built Environment

The built environment consists of citywide gray infrastructure, buildings, and signs. Gray infrastructure encompasses the road and sidewalk network, storm drainage, and utility networks: water, sanitary sewer, electric, gas, and fiber. In private site development, automobile access drives and parking, utility connections, exterior lighting, buildings, and trash collection provide the major elements. Signs in both public and private development offer directional, identity, and advertising functions. The elements of the built environment create impervious cover that interrupts natural environmental functions if their layout, placement, and materials are not considered in a sustainable, integrated fashion. Mitigation of visual and noise pollution needs special consideration.

Integration of the Natural and Built Environment and the Land Development Code Rewrite

In the public portions of the urban core, the land development code (LDC) rewrite should support innovative, leading edge solutions that serve as positive physical models of an integrated natural and built environment. An integrated code should also support great public outdoor spaces in all categories. The code should address beneficial GI and SW functions of the following:

- Watersheds and Creeks – Flooding, Water Quality, and Creek Restoration
- Green Streets – Shaded Sidewalks/Bike Lanes, and Stormwater Infiltration,
- Parks, Public Open Space, and Urban Trails – Urban Core Parkland Acquisition, Great Public Spaces, Neighborhood Pocket Parks, Greenways, and Wildlands and Wildfire Protection
- Trees, Landscape, and Biodiversity – Urban Forest, Plant and Animal Habitat Protection and Enhancement, and Native and Adapted Plants
- Sustainable Water – Potable Water Efficiency, Auxiliary Water Use

In the private development of the urban core, both in commercial and missing middle transition zones, the LDC rewrite should address the GI and SW functions of the following:

- Compatibility and Green Transitions – Green Infrastructure in Compatibility Setbacks
- Redevelopment and Remodels – Reduction of Asphalt/Increase of Green, Shaded Areas/Pervious Pavement
- Private Open Space – Stormwater Infiltration, Tree Protection
- Stormwater Quantity and Quality – Beneficial Use of Stormwater through Rain Gardens, Green Roofs and Walls
- Trees, Landscape, and Biodiversity – Urban Forest, Plant and Animal Habitat Protection and Enhancement, and Native and Adapted Plants
- Sustainable Water - Potable Water Efficiency, Auxiliary Water such as Rainwater, HVAC Condensate, and Graywater

Outside the urban core on vacant parcels, all of the above GI and SW will need to be incorporated in Greenfield development codes and standards with a specific focus on innovative site layouts that cluster development, preserve environmental features, and provide connectivity by hike and bike trails.

Conclusion

Green Infrastructure and Sustainable Water Management can provide a "green" lens through which to view all aspects of our Land Development Code. Austin has an opportunity to provide an exemplary environmental vision in the code rewrite that not only creates a better natural and built environment for its citizens, but also serves as a model for other communities throughout the country.

III. CAG COMMENTS AND RESPONSES

The CAG members recognize that the N&BE Paper is the product of a significant amount of work by City staff among several different departments. We sincerely thank the staff for all of their work on the N&BE Paper. CAG members offered dozens of comments and responses to the N&BE Paper. Because the suggestions varied, and there was not time to discuss and agree on any one set of recommendations, what follows are the anticipated conflicts and identified tradeoffs that deserve serious attention and perhaps more public engagement. Also, in a following section, is a list of missing topics that the CAG feels should be considered by staff and code writers. Finally, a chart of individual CAG member comments is attached as **Appendix A**

LACK OF DETAIL

At several public meetings leading up to the N&BE Paper, many members of the CAG expressed their frustration with the lack of progress to date, particularly that no draft code was available for review and that the release of code was planned for January 2017, at which point the entire draft code will be released all at once. The staff's plan includes, in the meantime, the release of four prescription papers meant to catalyze some of the more difficult conversations surrounding important themes. Still, many CAG members have repeatedly expressed their concern with staff's timeline – a concern that the papers are not a productive use of staff time when they should be focused instead on completing draft code and releasing it for public review. Many are also concerned that the extended timeline and all-at-once release will not allow for meaningful public participation and could lead to an overwhelming amount of controversy.

Ultimately, the CAG agreed to allow the first prescription paper, the N&BE Paper, to serve as a test as to whether this process would truly be productive. Although the N&BE Paper does define some clear prescriptions, most of the CAG members agree there is simply not enough detail or firm positions to enable the type of discussion the CAG and the community need. Staff was clear from the beginning that the prescription paper is staff-authored paper, and that feedback from CAG members and the public provided would not necessarily be incorporated into the final paper. We appreciate being told this up front. However, it wasn't until several weeks after the draft was released that many CAG members were aware that

no edits would be made to the Draft N&BE Paper based on any feedback by CAG members or the public. This has left some CAG members feeling that many N&BE topics have not been sufficiently discussed.

Lack of Integrated and Ambitious Prescriptions

The city council supported the focus of a Green Infrastructure and Sustainable Water Management approach to rewrite of the code, yet the N&BE Paper did not offer a comprehensive review of this approach. Rather the paper broke out certain relevant topics while ignoring other topics. This resulted in a fragmented review and missed the opportunity to create a new green infrastructure and sustainable water management vision for the city for the next 50 years. In similar fashion, some CAG members felt that the prescriptions did not feel ambitious enough, but were instead, largely a continuation of the status quo. Perhaps this is the case, or perhaps this feeling is due to insufficient detail.

Water and Watersheds

The biggest issue to come out of the water and watersheds piece is undoubtedly the requirement for redevelopment to meet pre-developed conditions. It is likely the biggest topic of concern for two reasons: it constitutes a big change from what we require today, but also because as a prescription, it took a firm and clear position on a highly debatable issue - something we did not see much of elsewhere. While the CAG members do not all agree as to whether this is a positive or negative prescription, it is a great example of a detailed and clear prescription that has had the effect of initiating the discussions that we need.

In addition, there has been general support for the ability to double-count on-site stormwater retention and treatment with other provisions, such as open space and trails. Also generally supported, are the opportunities to address stormwater management at a regional level, but also the support to manage other requirements, such as parking, open space, and mobility on a regional scale. Flooding, for example, must at some degree be managed on at least a watershed level basis, realizing that individual sites can only do so much.

TREES AND BIODIVERSITY

Despite the attention given to trees and landscape, the N&BE Paper gives less attention to preserving biodiversity. CAG members are generally supportive of allowing for "context-sensitive" consideration for trees, so long as the process helps ensure a more robust and healthy urban canopy overall. Special attention should be paid to the disparity in the current tree canopy between the west and east sides of Austin, and the context-sensitive aspects of the code should take into account the need to plant and protect smaller trees on the east side. Additionally, language should be added that redevelopment on historical agricultural and degraded land on the east side, which is also in the desired development zone, should be accompanied by aggressive replanting of diverse native and well adapted species to preserve and restore tree cover.

COMPATIBILITY

Compatibility will be one of the most important topics to address with regard to redevelopment, as many advocate for strict compatibility standards, while others argue that flexibility will be the only way to reduce costs and encourage infill. Many warn that too much flexibility means a site-by-site analysis to ensure that redevelopment is still sensitive to the surrounding environment, and this is contrary to the stated goal of more predictability in the code.

The design elements, other than height requirements, should be fleshed out in more detail so that we can talk about for what we are trading height preferences. This is an example of the need for greater detail in the prescription paper in order to understand what might be proposed in the new code. Compatibility is expected to be a very contentious and very personal issue to many people, especially those who are already experiencing new construction near them. There does seem to be general agreement that compatibility is extremely valuable and must be retained, but the current standards can be improved both to help encourage redevelopment and improve design elements that provide actual compatibility.

MOBILITY

CAG members generally agree that the prescriptions surrounding mobility are vague, but anticipate more detail in the third prescription paper devoted entirely to mobility. For now,

more detail on "greenway," connectivity, and "complete streets" is needed to fully understand the cost impacts and potential loss of site area, which are the identified tradeoffs. Incentives for compact and transit oriented development will be most effective near rapid bus or rail lines.

REDEVELOPMENT

Many members of the CAG were concerned with vague terms and insufficient detail to know exactly what the prescriptions would demand from Redevelopment. The incentives for redevelopment will be a contentious issue, with some advocating for removal of certain incentives while others advocating for preserving existing incentives and emphasis on or addition of other incentives, as the only way to achieve urban density. Staff should identify how current design standards will be included.

PARKING

As reflected by the amount of time spent discussing it, the CAG predicts the topic of reduced parking requirements will be a very important one, although more likely to be discussed in depth in the mobility paper. For now, the CAG generally agrees that any reductions in on-site parking requirements must ensure public benefits, either toward affordability, increased green space, or elsewhere. Many CAG members recognize that reduced parking requirements may not work well everywhere, but agree that sites located near transit are some of the best candidates for reduced parking incentives. Response to modification of the residential parking permits acknowledged the need for context sensitive approaches. For safety reasons, on-site parking requirements are a very important issue for AISD schools and in areas that serve vulnerable populations, and for these reasons, the CAG requests that staff take a position on buffers in these situations before the draft code is released in January 2017.

GREENFIELD DEVELOPMENT

The CAG generally agrees that Greenfield development is where Austin has the most potential to use the land development code to create what Imagine Austin envisions. The goal is not to prevent Greenfield development, but to ensure it is the best it can be. Many CAG members agree that more detail on the changes we can expect would be useful in analyzing this set of prescriptions. Several CAG members acknowledged that Greenfield

development facilitates the preservation of trees, open space, and parkland, and that this could be better planned for in the new code. Furthermore, there should be special attention paid to connectivity of Greenfields, so as to support all forms of transportation better and allow residents to easily travel within their area and find job and activity centers, especially groceries, nearby. Our code must also take into account a range of family-friendly designs specifically, as well as accessibility designs. Finally, this section of the code should be reviewed in context of the new draft subdivision code.

PARKS AND OPEN SPACE

As with other prescriptions, the details matter in determining what the tradeoffs for these prescriptions will be. Requiring off-site improvements, depending on the location of nearby parkland, can come at a cost, and if the off-site improvements are to be paid in lieu of a parkland fee, then it may not be a net increase. Most CAG members agree that a context sensitive approach is appropriate with regard to Parks and Open Space requirements, as long as any flexibility provides an additional benefit.

Incentives given to developers for privately owned publicly accessible green spaces need to ensure the space remains publicly accessible and that the city does not give away too much in extra entitlements. There is greater value in publicly-owned public space, although we recognize the limitations in buying and maintaining it. Furthermore, the code should place additional emphasis on the need for multiple purpose open spaces, for example, those that will also assist in wildfire protection and flood mitigation.

IV. MISSING SECTIONS NEEDED FOR CLARITY

CAG members identified topics that were not covered in the N&BE Paper, which several felt would have made the paper clearer and more accessible to the public.

GLOSSARY OF KEY TERMS

Since the original paper did not include a Glossary, the CAG requested definition of 32 items from the staff for clarity. The CAG's suggested N&BE Glossary is included in **Appendix B**.

EXECUTIVE SUMMARY

An Executive Summary could quickly identify a few major trade-offs and unintended consequences of certain prescriptions; even further, a list of things that staff really wants to know from the public would show the public that you value their feedback and would help the public hone in and provide feedback with specificity. The CAG suggests the following Executive Summary for the N&BE Paper:

Introduction

As Austin's urban core continues to grow and develop, protection of the natural environment becomes critical for preservation of quality of life. At the same time CodeNEXT promotes a compact and connected approach in the Centers and Corridors. How can we integrate these two basic needs of our city in a thoughtful and comprehensive way? The Natural and Built Environment Prescription Paper focuses on seven different areas of the code that impact both aspects of development: Water and Watersheds, Landscape and Trees, Compatibility and Transitions, Design for Mobility, Redevelopment, Greenfield Development, and Parks and Open Space.

1. How might we revise our LDC to consider stormwater and flooding, water as a resource, and impervious cover?

- Maintain current watershed ordinance
- Review drainage capacity for new and redevelopment
- Require redevelopment to mitigate share of downstream flooding
- Require beneficial use of stormwater on-site
- Require green stormwater infrastructure to retain stormwater on-site

- Reclaim excess right-of-way for green infrastructure
- Incorporate Green Streets

2. How might we integrate nature into the city through green infrastructure?

- Maintain current landscape and tree ordinances
- Require a comprehensive approach to landscape treatment
- Encourage low impact development
- Adopt a context based approach with a 'Functional Green' system that allows choices such as green roofs, green walls, rainwater collection, previous pavement, and rain gardens to meet landscape requirements
- Prioritize protection of significant trees
- Promote land cover that performs multiple ecosystem functions
- Set impervious cover limits as a maximum, not a guarantee of buildable land
- Use a site-by-site approach to tree preservation
- Allow more creative site layouts to preserve trees
- Explore opportunities to improve tree preservation in missing middle developments

3. How might we provide true compatibility between land uses and provide graceful transitions?

- Institute form based building standards that provide transitions in scale between large scale commercial development and single family residential
- Provide a diversity of building and housing types
- Employ landscape as a means of promoting compatibility
- Customize compatibility to topography

4. How might we design for mobility? (See also future Mobility Prescription Paper)

- Reduce parking minimums in areas targeted for compact development
- Use form based standards to move parking lots to rear of development
- Require parking lots to be shaded with trees
- Provide sign rules that are not solely oriented around automobile visibility
- Provide roadway design based on the urban context that encourages all modes of travel - pedestrian, bicycle, transit, and automobile

- Use form based coding to enable compact development in transit rich environments
- Provide connectivity through pedestrian and bicycle connections and greenways

5. How might we promote redevelopment and infill that protects the environment and promotes hosing and building diversity?

- Reduce parking minimums to improve stormwater and water quality and provide opportunities for open space and landscape treatments
- Require green connectors
- Promote walkability through reduction in block sizes
- Integrate the current Commercial Design Standards into the base zoning districts
- Require functional landscape and open space
- Use form-based standards to allow a wide array of uses

6. How might we reduce sprawl in Greenfield development with standards that provide compact development, greater connectivity, and protection of the environment?

- Provide for greater diversity of housing choices
- Reduce block sizes and re-examine minimum lot size
- Encourage conservation subdivisions
- Retain environmental protections
- Preserve land for networks of greenways and urban trails
- Require stormwater to be retained on-site

7. How might we increase the variety of parks and open spaces in the urban core and insure that they are providing both recreational and ecosystem services?

- Increase parks and open space types
- Increase access to recreation
- Develop standards for public spaces that are well-designed and tree-covered
- Integrate new parkland dedication ordinance into the new code
- Include metrics for pervious areas and incentivize recreational space
- Improve the definition of Open Space
- Incorporate metrics for green infrastructure
- Require connections to adjacent or nearby parkland
- Create a common language for a variety of open space typologies

V. MISSING TOPICS THAT SHOULD BE ADDRESSED BY CODE WRITERS

In addition to missing sections, some CAG members identified missing topics that should receive attention by staff and the code writers. Those topics include:

INTENT LANGUAGE OF THE NEW LDC

Dr. Frances Kuo's research on the health benefits of green elements needs to be written into the intent language of the new LDC. Include descriptions of how tree canopy mitigates the Urban Heat Island (UHI) effect and how plantings absorb and clean stormwater.

OVERALL SITE PLAN PROCESS: CONCEPTUAL SITE PLAN SUBMITTAL

In order to ensure that a green infrastructure best management practice approach is being considered for a particular site, a Conceptual Site Plan (CSP) submittal is proposed prior to Completeness Check. The CSP submittal process is currently used successfully in other jurisdictions throughout the United States, in particular for stormwater mitigation.

In Austin, the CSP could review the overall context of a site as it relates to connectivity to nearby parks, open space and mobility; the preservation of a site's natural assets such as trees and environmental features; and the implementation of flood controls and beneficial use of stormwater on-site.

A CSP could be similar to a previous practice by Development Services in which the case manager and review team met the project design team early in the process. The advantage of this early review was that the design team was able to receive critical input prior to going too far in the process, thereby saving time and money in the site plan stage. The CSP should include the Landscape Architect in the submittal and review meeting to ensure that the green infrastructure approach to site plan layout will be a top priority for the site.

WATERSHED CAPACITY ANALYSIS

A watershed capacity analysis should be implemented to inform the LDC rewrite and form-based code (FBC) mapping. Any proposed increase in land use density should be tied to the adequacy of the watershed's infrastructure capacity. If a watershed has been determined to be at capacity by the Watershed Protection Department (WPD), then the LDC should

require that any new development in that watershed detain all stormwater. Do not allow payment in lieu, waivers, or variances. An incentive and assistance program should be established to help property owners improve upon existing infrastructure.

ENVISION TOMORROW MODELING TOOL

The Envision Tomorrow Modeling Tool (ET), developed by the CodeNEXT consultant Fregonese Associates, enables the city to test various scenarios for the LDC rewrite, such as the impacts of parking, compatibility, floodplain, impervious cover, etc., on a particular site. Sylvia Leon Guerrero, formerly of Planning and Zoning (PAZ), added Austin-based watershed modules to the ET to assist in the analysis of increased density and environmental regulations. WPD provided technical support to ensure that her sizing, infiltration, and cost assumptions were accurate. To date more information is needed from Fregonese to proceed with a deeper analysis prior to provision of recommendations.

Until the public can see these recommendations and their impacts on future code, the N&BE Paper is technically incomplete. Watershed Protection estimates that the recommendations will be available in fall of 2016. The N&BE Working Group will revisit the paper at that time to provide CAG input and feedback.

WATER QUALITY

Water quality controls should be required for all development in which the total disturbed area exceeds 5,000 square feet rather than the current requirement of 8,000 square feet of impervious cover. Water quality controls (i.e., green stormwater quality infrastructure) that are better at removing nutrients (nitrogen and phosphorus) should be required or incentivized in comparison to conventional stormwater controls, such as sand filters.

A Homeowners Association (HOA) should be created for all new developments that include micro-scale residential water quality controls (e.g., rain gardens); the HOA shall assume responsibility for the maintenance of such controls.

FLOOD CONTROL

Generally, near the headwaters, detention can be at grade or underground on-site or off-site. Toward the middle of the watershed off-site conveyance improvements such as

upgrading storm drains and culverts are appropriate. In the lower reaches, payment into the Regional Stormwater Management Program (RSMP) might be appropriate.

Creek Erosion and Restoration

Commercial developments that impact creeks should provide a visual impact watershed creek survey that documents existing conditions including erosion, trash, etc. In addition, they should propose on-site or off-site mitigation commensurate with development impact.

The "draw-down" time for detention ponds following a storm event should be increased to help minimize stream erosion.

Incentives should be provided to sites that restore floodplains, waterways, and urban forests.

On-site Beneficial Use of Stormwater

The intent to prevent off-site discharge from average rainfall events is beneficial since it improves stormwater infiltration, increases stormwater quality, reduces subsidence, refills aquifers, diverts trash from waterways and aids in irrigation of landscape areas. Any payment in lieu needs to be carefully calibrated to ensure an equitable offset.

Watershed Impervious Cover

Site specific environmental considerations – like karst, sinkholes, and bluffs – may impact the final allowable impervious cover relating to watersheds. Ensure that these considerations are included in determining impervious cover limits.

'Functional Green'

The Planning and Zoning Department with the assistance of the Development Services Department is in the process of adding a sub-consultant to the team to develop a point based landscape system for infill projects. Currently, our Landscape Ordinance is geared toward a Drivable Suburban context. We need an ordinance that addresses urban infill projects in Walkable Urban settings. 'Functional Green' is proposed will be a point based system similar to our existing alternative compliance in the Environmental Criteria Manual (ECM). The system will be based on providing ecological services and function for the site with a focus on beneficial use of stormwater, creation of habitat, urban heat reduction, and

groundwater infiltration. Functional Green will be required in projects with 80 percent or greater impervious cover.

New and infill development in all land use zones should have a significant percentage of on-site green elements-and particularly in the new 'Transition Zones' with missing middle housing. Establishing performance benchmarks of ecological function will help to steer this prescription's development. A Functional Green approach incentivizes such items as protection of existing trees, increased soil depth, green walls, green roofs, and permeable pavements. It could also help to make documented on-site life cycle implementation and maintenance plans more commonplace.

Until the public can see the recommendation for the Functional Green landscape system and its impacts on future code, the NBE Prescription paper is technically incomplete. PAZ estimates that the draft of Functional Green system will be available in fall of 2016. The N&BE Working Group will revisit the paper at that time to provide CAG input and feedback.

WATER CONSERVATION

In alignment with Sustainable Water Management, tools for conservation of potable water resources need to be added to the prescription, such as 1) use of potable water budgets that are supported by the use of auxiliary water sources such as rainwater harvesting, HVAC condensate, and graywater; and 2) incentivizing efficient irrigation through drip irrigation and smart controllers with soil moisture sensors.

URBAN HEAT ISLAND MITIGATION

In order to mitigate the urban heat island, the nationwide goal of 40 percent urban tree canopy should be added to the intent language of the new code. Currently, Austin has up to 38 percent tree canopy in the western part of the city and as little as 15 percent tree canopy in the eastern part of the city. Therefore, to the west preservation of existing tree canopy should be the priority whereas in the eastern part of the city new tree planting should be the priority. The code should reflect the context sensitivity of the different areas of the city.

Priority should also be given to shading buildings and parking lots. In parking lots, new trees should be planted at a maximum of 30’ on-center in parking lot medians rather than 100’ on-center criteria in the existing code.

TREE PLANTING AND TRANSPLANTING

Options to promote transplanting of trees to nearby dedicated open spaces with attendant automatic irrigation should be incentivized before payment in lieu is permitted. CodeNEXT should integrate the GIS data for *2015 Tree Planting Prioritization* issued by the City Arborist and the findings from *Austin's Urban Forest 2014* issued by the USDA. For example, if development occurs in an area that is deficient in Cedar Elm and other valued native species, there could be incentives to harmonize the tree composition of that area.

RESOLUTION OF TREE REGULATIONS AND OTHER REGULATIONS WITHIN THE CODE

A clear, formal administrative process needs to be created to evaluate hardship cases relating to conflicts between regulated trees and impervious cover limits, utility conflicts, building setbacks, etc.

GREEN COMPATIBILITY

In the prescription paper, under 'Where Do We Want to Be?' item #3, it was noted that "the Green Infrastructure Working Group recommended using landscaped transitions as a means of achieving compatibility between adjacent development." Also, under 'What's the Prescription?' item #1, it states that "the new standards will employ landscape as a means of promoting compatibility." However, there is not yet a similar graphic to missing middle housing showing how landscape form can be used to create green infrastructure in a compatibility setback. More detail is needed on Green Compatibility to understand how it is proposed to be employed in the new code.

DESIGN FOR MOBILITY

In 'What's the Prescription?' item #1, where parking requirements are proposed to be reduced, vegetated pervious space should be increased. Parking maximums, shared parking, and leased parking separate from unit rentals should be tied to increased green space.

Under item #4, Roadway Design, the concept of Green Streets is missing from the paper. Green Streets not only include shade trees for pedestrian comfort and safety, but also bio-swales to treat stormwater for water quality. Excess ROW beyond that needed for the bicycle network of the *2014 Austin Bicycle Plan* should be used for Green Streets. Green

Streets enhance pedestrian and bike-friendly connectivity in addition to improving water quality and reducing peak stormwater flows. Standards and specifications shall be defined for all right-of-way construction and in the various transect zones. Clarification is needed from CodeNEXT for which public or private entities will build Green Street features and how they will be implemented in incremental development. Infill development should be required to connect Green Streets whenever possible and restrict the use of controlled access gates.

Under item #6, "Connectivity: using greenways to build new transportation systems" is highly desirable. The *COA Urban Trails Master Plan* needs to be referenced in the new code.

BUILDING SETBACK ON CORE TRANSIT CORRIDORS

Under 'What's the Prescription?' item #6, Subchapter E is proposed to be incorporated into the base zoning districts. Currently, in Subchapter E along Core Transit Corridors, building facades are required to be built to the property line. While placing the parking at the rear of the property creates a more cohesive street wall, there is an unintended loss of the previous landscape ordinance street yard. To mitigate the urban heat island effect and increase pedestrian comfort, buildings could be set back to create a landscape area between the building and the sidewalk clear zone. This setback allows for green landscape on both sides of the sidewalk, both in the ROW and on private property. (The landscape setback is used in other jurisdictions throughout the country.) Consideration of a new landscape setback needs to be addressed in the code rewrite.

REMODELS

While redevelopment is desirable, commercial remodels of existing buildings for small iconic businesses are also desirable in maintaining Austin's character. Currently, remodels are not allowed to disturb more than a certain square footage without triggering an expensive site plan submittal. This often leaves large areas of asphalt surface parking without the benefits of green infrastructure. Also, on some corridors there is not enough width in the ROW to accommodate shade trees. If the city were to modify the Site Plan Exemption to allow greater disturbed area for the sole purpose of reducing impervious cover and adding pervious landscaped areas, that would greatly benefit the overall natural and built environment.

GREENFIELD DEVELOPMENT

The section 'Where do we want to be?' should incorporate Imagine Austin references to "permanently preserve areas of greatest environmental and agricultural value" and "limit development in environmentally sensitive areas."

The prescriptions need to address incentives to provide conservation easements for aquifer protection, wildlife habitat, and wildfire protection.

PARKLAND DEDICATION

Parkland required of subdivision and site plan applicants should be provided on-site, especially in areas of the city that are identified in the Parks Department's master plan as deficient in open space and parks.

PARKLAND ACQUISITION

The City should acquire private land to convert to public open space pocket parks in the urban core within a one-quarter-mile radius of proposed higher density districts and corridors prior to increasing density in areas that are already parks deficient. Areas for immediate acquisition should include the centers and corridors identified in Imagine Austin.

PUBLIC OPEN SPACE STANDARDS

Imagine Austin asks for standards for public spaces that integrate tree-covered places. Calibration should include the design elements for the interface between the natural and built environment. The code also needs to address protection of these places, for example, development next to the Barton Creek Greenbelt should protect the greenbelt from fire hazards. Standards are needed for buildings located next to parkland, for instance, setbacks, curb cuts, screened garages, heights, entrances facing the park, etc.

Green infrastructure and park metrics need to be developed which should include factors such as wildlife habitat, natural play for children and persons of all ages, biodiversity, and wildfire protection.

Public parks and open space should achieve the goal of 40 percent canopy citywide, promote tree health, and provide clear open space for solar access and views at appropriate intervals.

PRIVATE OPEN SPACE

The existing 5 percent private open space ordinance for commercial and multifamily needs to be maintained or increased. This requirement should also be extended into new 'Transition Zones' that are planned for redevelopment or up-zoning. On-site private open space is critical to preserving pervious cover, existing tree canopy, and on-site infiltration of stormwater.

Better definitions are needed for private personal open space, private common open space, green infrastructure, and public open space on-site. Private common open space includes accessible green roofs, playgrounds, educational areas, swimming pools, sport courts, multiuse-trails, and water quality as an amenity. Centers and corridors, particularly where transit is a key characteristic, may need their own set of requirements for space usable by the public. Transit plazas at bus stops need to be prioritized. Location of open space on the property also needs to be calibrated to the surrounding context.

A common language needs to be developed for the term 'Open Space.' The code needs to address the amount of open space needed on a site, within the different transect zones, and in the region. The open space needs to correlate with amounts needed for stormwater infiltration and preservation of existing trees. A minimum of 30 percent pervious area should be provided in all open space categories. Each category needs sets of minimum standards such as natural play for children, shade, gathering areas, recreation, etc.

CULTURAL LANDSCAPE

The 'Cultural Landscape' goes beyond buildings to the open space itself. Preservation not only should address the footprint of the open space, but also such elements as sloping land, environmental features, and existing trees that define the character of the public space. These elements should be celebrated instead of altered.

OPEN SPACE TYPES

The following need to be added to the Open Space Types:

- Public Parkland – Trails (Greenbelts), Greens, and Recreation Centers
- Conservation Lands – Nature Preserves, Wilderness Areas, and Wildfire Protection Areas
- Public/Civic Spaces – Greens, Transit Plazas, and Cemeteries
- Green Infrastructure – Water Quality, Water Detention, Bio-filtration, Critical Environmental Features, and Natural Waterways
- Urban Agriculture – Urban Farms, Community Gardens, and Front and Backyard Vegetable Gardens

GRAY INFRASTRUCTURE

The paper neglected to discuss a major scope of work which addresses where the natural meets the built environment – the gray infrastructure. In addition to the lack of prescription in the area, any mention of the capacity of gray infrastructure utilities for increased density seemed to be ignored. The gray infrastructure, or lack of infrastructure, is one of the reasons for the large floodwaters in Austin. The N&BE Paper is concerned about the flood waters, but nothing has been mentioned as to the infrastructure to remove the flood water. Furthermore, the Paper suggests new standards to require revision of site stored flood waters to pre-development conditions to help mitigate flood damage. However, the prescriptions completely neglect the role of gray infrastructure in the solution. Imagine Austin calls for increased density of housing, which automatically calls for increased infrastructure to manage the stormwater of the denser development.

VI. N&BE PUBLIC PARTICIPATION CRITIQUE

As the first prescription paper, the N&BE Paper was rushed, and as discussed previously, the paper was lacking in detail. Additionally, staff's only plan for collecting CAG and public feedback up to this point, is simply assurances that any comments staff receives will be passed along to the code writing team.

Many CAG members likened this vague public input process to "speaking into a black hole." This lack of a more clearly defined and responsive public input process was a very disappointing aspect of the first prescription paper. Additionally, the time and energy spent understanding and discussing staff's plans for public input and the timeline leading up to the release of draft code language detracted a lot of attention from the substantive issues in the paper.

Most CAG members agree that staff's original plan to simply pass along public comment to code writers input as it is received is unacceptable, and that there should be some clearly-defined mechanism by which to collect and track public input, and to respond in a way that alerts the public to what information is making its way into the code and what is not. At the same time, the CAG is sensitive to the workload and limited resources of City staff, and aims to avoid any unnecessary work and help streamline the CodeNEXT process. Still, most CAG members feel that a healthy public participation process is integral to a successful code rewrite and final community buy-in, and is thus, an absolutely necessary component of each prescription paper.

On May 2, 2016, the CAG unanimously passed a resolution asking City Council to authorize more resources to CodeNEXT in the form of public engagement consultants. A copy of this resolution is attached as **Appendix C**.

Initially, the CAG suggested releasing an additional draft of the paper, incorporating feedback from CAG members and the public, with more firm positions on detailed prescriptions. We now know that an additional draft is not an option. Therefore, in the alternative, we recommend that staff adopt a public input process to alert the public to what they can expect from the draft code.

A public input process could take several forms, the following being examples that the CAG suggests. For one, the consultants could release some type of response to comments that identifies at least 3-5 specific questions that they and the staff are still working to incorporate into the draft code. We recommend requesting pertinent and valuable public feedback on those particular questions by providing an accompanying explanation of the anticipated tradeoffs or balance of values.

The consultants could also collect comments, collate those comments into common themes, and then respond to those themes letting the public know whether any changes were made to code in accordance with those comments. Alternatively, the consultants could simply collect comments in a place where they are accessible in their entirety, and then simply acknowledge which recommendations staff agreed with and when those recommendations were passed along to the code writers. Obviously, there are other possibilities, but a key component in any public input process must be that the public feels that their comments were received and seriously considered.

It is for these reasons the CAG recommends the consultants develop a simple, but responsive public input process to demonstrate how feedback is being incorporated into the code writing, and that they use this process to especially continue the conversation on the N&BE topics that did not receive adequate attention..

VII. CAG EVENT COMMENTS

This section contains a brief summary of each CAG event at which the N&BE Paper was discussed.

MARCH 21, 2016 - REGULAR CAG MEETING

At this public comment meeting, six individuals signed up to make public comment. With 15 minutes of time divided among them, each was given 2.5 minutes.

Several made general comments on the process of CodeNEXT. Jeff Jack warned the CAG about the potential for a select few to make the decisions without public input (DEAD Planning). He also reminded the CAG that our goal is to make the necessities of life accessible and affordable to all, but that boiling this goal down into "compact and connected" shortchanges this goal. He commented that the Prescription Paper will not get us to Imagine Austin. Fred Lewis commended the CAG on collecting public feedback to date, and reminded the CAG that in addition to feedback, the CAG should also provide feedback on code, and that it's crucial to have sufficient months for both the CAG and the public to do this. He recommended adjourning public meetings, so City planning staff can get us draft code, then reschedule hearings within two weeks. Frank Herron urged the CAG not to limit central neighborhoods to single family housing, saying that no major city restricts central city to such. According to his figures, since 2012, homes in central Austin have nearly doubled in price.

Others provided feedback directly related to the N&BE Prescription Paper. Ryan Nill, a renter in a housing Co-Op explained the benefits of cooperative housing on affordability and home ownership. He described how his site was nearly 100 percent impervious cover, because of when it was built, and about 40 percent of lot is parking, saying it is currently over-parked. For reasons such as these, he appreciates the context sensitivity with regard to parking in the prescription paper because it provides some flexibility should they want to increase green space, yard space, more units, etc. Joyce Basciano urged the CAG to include certain definitions to help understand the intent of the paper, (which have been included in this suggested glossary), and asked several questions of how particular numbers were reached. She also suggested that footnotes and sources include a link to the Neighborhood Plans, Future Neighborhood Plans, and Community Character-in-a-Box materials. Finally, John Woodley, a disability advocate, acknowledged that enforcement of current bicycle and

pedestrian drive-through requirements is lacking. He recommended that the prescription papers require all businesses to include bike racks, so that people cannot be turned away. He also would like to see greenfield development include bike and pedestrian paths to ensure mobility for those with handicaps.

APRIL 4, 2016 - CAG PUBLIC COMMENT MEETING

The N&BE CAG public comment was held at the McKean-Eilers Building in downtown. Overall, most CAG members agreed that the event did provide a good format through which we received some feedback we had not received before. The event felt very impartial, and as if we were truly eliciting information and listening. Attendees enjoyed the staff's presence and thought it was handled very well. Several CAG members and members of the public mentioned that the venue and style of event was a nice change of pace, because it allowed for more in-depth discussion and one-on-one interaction between staff and the public.

The four table groups were focused around the following topics which produced specific innovative ideas:

1. Water and Watersheds, Landscape and Trees
    a. Water and Watershed: Incentivize shared parking in order to reduce the need for more surface asphalt and impervious cover.
    b. Landscape and Trees: Institute a Functional Green landscape program in walkable urban areas to provide credit for an increase in functionally pervious areas.
2. Greenfield Development
    a. In future subdivision areas virtually "build out" the city with existing zoning, watershed regulations, neighborhood plans and contrast this with new subdivision regulations.
3. Redevelopment, Compatibility and Transitions, Design for Mobility
    a. Redevelopment: Create overlay districts for historic preservation and tie any increase in entitlements to provision of public benefits such as green space and affordable units, i.e. a density bonus program.
    b. Compatibility and Transitions: Develop green compatibility standards to encourage green infrastructure in the compatibility setback.

c. Design for Mobility: Reduction of parking tied to an increase in green space and beneficial use of stormwater on-site and to private sector funding of increased sidewalk extensions into the neighborhood.

4. Parks and Open Space
    a. New trail connections need to be explored in abandoned railroad rights-of-way. Design floodplains and water quality ponds to be used as open space. Incentivize publicly accessible green roofs in private development.

The Executive Working Group already provided staff with feedback on how to improve on the public comment meeting, but a few points that bear repeating are as follows. CAG members agreed that we must ensure to reach other places with future meetings, especially those along the corridors impacted by the new code. This particular venue was too loud, and along with the nature of the event, it was difficult to record all comments being made. We should have a way to allow those wishing to provide specific comments to make sure those are received and considered. We should also make sure CAG members and the public have the opportunity to participate in discussions on more than one topic. Finally, the event should have been scheduled with more advanced notice so that the CAG members and public could better prepare.

Posters and detailed narratives from each table group can be found in **Appendix D**.

APRIL 18, 2016 - REGULAR CAG MEETING

At the final meeting specifically devoted to the N&BE Paper, nine people provided public comments with only 1.5 minutes each. Several speakers expressed their frustration with the time limit. A couple of folks spoke generally about CodeNEXT. Ryan Nill fears Euclidian zoning in outlying regions of Austin, and that the efficiency based mechanism will lead to blight, and this is where there is a lot of poverty, and so while it may be efficient, it is not going to give those communities the tools they deserve. Joyce Basciano asked for a more user friendly website.

Kristy Street provided comments on behalf of ASLA of Central Texas and recommend including provisions for green infrastructure, especially the functional green point-based system, and especially in the urban core. David King, from the Zilker Neighborhood stated

that single family homes in Austin's urban core are already declining under current code, so there is a concern about accelerating it under form-based code, which will have the result of less diversity of housing. Amy Rampy, a landscape architect supported ASLA's comments. Mary Ingle, president of Austin Neighborhood's Council, pointed to a 2012 study that said we could double our population with zoning on the ground now. She asked for a baseline of what our current code would allow, what we've already built out, and what still exists to build out. Frank Heron stated that it is not uncommon for large cities to get rid of single family homes in the urban core. Betsy Greenberg, UT professor, took issue with the Austin Housing Plan Dialogue and survey, which is unconnected to CodeNEXT, but is happening simultaneously, and is related but misleading in the questions provided. Evan Gill expressed concerns that the green infrastructure, while positive in nature, must be considered in the context of affordability, and urged staff to consider it as an incentive rather than mandate. Geoffrey Tauhauha of the Home Builders Association of Greater Austin provided a formal written response to the N&BE Paper, citing their sensible landscaping guidelines (a copy of comments and guidelines were provided to staff), and his oral comments were simply to apprise the CAG of these written comments.

APPENDIX A – CAG MEMBER COMMENTS

The following spreadsheet contains comments from CAG members through June 20, 2016.

CAG Member/Date	What Did You Like?	What Needs Improvement?	What's Missing?
Dave Sullivan 4/10/16			Much of what is important about our built environment was left out. In particular, there should be sections on historic & cultural preservation, the arts & music, and small iconic businesses.
Susan Moffat 4/12/16		More specificity, please.	1. All new greenfield development should require connected street grids to support all forms of transportation including bike/ped (no more cul de sacs). 2. For safety reasons, on-site parking requirements should not reduced within 300 feet of a public school boundary or other use that serves vulnerable populations. 3. Reductions in on-site parking requirements must be contingent on a mechanism to ensure public benefits, such as reduced rents or purchase prices on units or increased green space; staff assured attendees that onsite parking requirements would only reduced through a density bonus program that would ensure public benefits for any reductions.
Dave Sullivan 4/12/16			Despite the attention given to trees & landscaping, there is little attention given to preserving biodiversity.
Eleanor McKinney 4.16.16	Environmental concerns are brought forward concurrently with development issues.	- Greater collaboration and integration between the various departmental sections of the paper and ultimately the code. - Green Infrastructure needs to be a heading similar to Redevelopment. Sustainable Water Management needs greater emphasis. - Health benefits of connection to nature needs greater emphasis..	Missing Overall: - **Executive Summary** identifying trade-offs and unintended consequences of items. - **Process Section** for proposed changes to the site plan process. - **Glossary** of key terms - **Gray Infrastructure Section** on capacity of utilities for increased density

Eleanor McKinney 4.16.16			Missing Items within sections: **Water and Watersheds** - Creek restoration and biodiversity **Redevelopment** - Greening remodels - Subchapter E greening modifications **Parks and Open Space** - **Private Open Space Section** (correlates w/ Redevelopment) and added typologies **Open Space Typologies** -Family-friendly Play Areas w/ Children's Connection to Nature -Transit Plazas and Green Streets(correlates w/ Mobility) - Wilderness Areas and Wildfire Protection All of the above need clear development standards
Eleanor McKinney 4.17.16	Scientific basis for policy that drives the code. Coupling of watershed and landscape requirements.	Explanation of watershed modelling to date Explanation of Functional Green Categories	Missing analysis and resulting data of: - Continued watershed modelling as defined in Sound Check Report - "Functional Green" landscape program for infill projects - Flood Mitigation Task Force Report
Nuria Zaragoza		Explanation of compatibility 1) "Simplistic reliance on height"	Current compatibility regulation currently regulates: Screening requirements for off-street parking, mechanical equipment, storage and refuse collection. Design regulations over exterior lighting, noise level of mechanical equipment, placing of refuse receptacles, regulation of reflective materials, placement of parking and driveways.
Nuria Zaragoza		Compatibility- Exaggerated impact of height component of compatibility standards.	Outside of downtown, where compatibility has already been addressed through the Downtown Plan, the only zoning category with a height entitlement that is affected by compatibility after 300' is MF-6, all other zoning categories can reach maximum height by a distance of 300' form a triggering property. The repeated emphasis

			on 540' (or the distance of two football fields) only affects 15 MF-6 parcels in the entire City.
Nuria Zaragoza		Compatibility- Explanation of design elements that are more effective than regulating height only.	Design elements that are more successful in creating transitions than mitigating height have been alluded to for a couple of years now. They need to be fleshed out in this paper so people can understand what they might be trading height protections for.
Nuria Zaragoza		Compatibility- There appears to be an inference that the green infrastructure working group might have supported a landscape transitions instead of the protections currently provided by compatibility. My understanding was that their recommendation was in addition to, not in lieu of.	
Nuria Zaragoza		Current levels of infrastructure	It seems to me that this paper would have included limitations on all different areas of infrastructure in the built environment portion of this report (roads, sidewalks, bike lanes, utilities, drainage)
Nuria Zaragoza		Compatibility- sensitivity of current compatibility, it is not one size fits all.	When we rezone a property at the planning commission, we make that decision knowing that there is a mechanism to automatically be sensitive to the surrounding environment. If Compatibility weren't there are as an umbrella of protection, we would have to make those very specific decisions with every case.
Guy Dudley			Water and Watersheds - Redevelopment is now required to build detention facilities to pre-developed conditions. This impacts all redeveloped projects that now have to build a detention pond (price varies based on a lot of mechanisms) where they did not have to build one previously. Affordability?
Guy Dudley			Water and Watersheds - Offsite conveyance improvements – If this is required above and beyond RSMP fees or construction of on site detention, this is a significant increase in cost. In short this means bringing City facilities downstream of a property up to appropriate size.
Guy Dudley			Water and Watersheds - Reuse of storm water on-site with retention irrigation facilities or others is costly both at the onset of construction but also costly in terms of maintenance of facilitates.

Guy Dudley		Mobility - Connectivity notes are vague but will have an impact. How much 'greenway' type improvement is required. If we are building next to a floodplain are we now required to build a 10 foot trail? This one has a cost impact that will really vary based on the exact language of the code.	
Guy Dudley		Redevelopment - 3. This items refers to requiring connections beyond the limits of a redevelopment in order to connect neighboring properties to amenities provided with the redevelopment. 3a refers to improvements as 'opportunities allow', which is vague and concerning as it relates to what the request from the City could be.	
Guy Dudley		Open Space -7. Connections to Parkland is similar to the Redevelopment note above; They are asking to require off-site improvements to nearby parkland, such as sidewalks and trails. Depending on the location of nearby parkland, this can have a significant cost. If this is written in such a way that the cost of these improvements is to be paid in lieu of a parkland fee, then it may not be a net increase, but that is not clear in the prescription.	
Melissa Neslund		Water and Watersheds - concerned with requirement to detain to pre-developed conditions for all redevelopment. Impacts to costs related to having to fix the City's aged and/or non-existent infrastructure downstream. Added costs and a lost incentive to promote redevelopment in the core. There's no mention technical criteria manual changes that would be necessary to support the recommended prescriptions. Impervious cover maximums should be analyzed contextually based on Imagine Austin recommendations for targeted growth areas. RSMP and other mitigation should be analyzed.	Cost impacts/affordability impacts.
Melissa Neslund		What is a "significant tree"? Allow for specific sites to be evaluated based on their unique conditions. Re-analyze species and variation between urban context and more suburban	Cost impacts/affordability impacts

		context. One size fits all, given other site requirements may not be appropriate.	
Melissa Neslund		Compatibility and Neighborhood Transitions - Address applicability and triggering uses/zoning. Address site constraints such as topography, definition of height as it relates to topo, etc. Look at Sub E as it relates to Neighborhood Design Standards for VMU projects. Some overlap in what we may be looking at for context approach to comp standards.	Cost impacts/affordability impacts
Melissa Neslund		Design for Mobility - need more concrete design and technical comments to really add anything substantive. Complete streets and connectivity is all positive but need to understand how it will be applied, cost impacts, loss of potential site area and added costs will be a challenge. A public investment in the complete streets policy will be necessary. Need to align with technical manuals as well.	Cost impacts/affordability impacts
Melissa Neslund		Redevelopment - concerned with the removal of the existing redevelopment incentives. No mention of Sub E and the definitions, regulations associated with redevelopment under that ordinance.	
Melissa Neslund		Greenfield - not a lot of clarity on what code and technical changes we will see. Generally speaking the more suburban development could be much better connected, but it does pay for its infrastructure (in most cases; see the City's SER process - the City no longer cost-shares with Developers in most cases - don't use Pilot Knob as an example - that's not common). Maintenance is on the tax payers and rate payers which is reasonable. Parkland, open space is provided per Code which could be better planned. Need to review in context with the new draft subdivision code as well.	Cost impacts/affordability impacts
Melissa Neslund		Parks and Open Space - more options for what qualifies as parkland, parks, types of places. No consideration was made regarding Open Space requirements (found in Sub E). Differences in context, ie areas within proximity to transit, closer to the core vs greenfield. Context approaches should be considered.	Cost impacts/affordability impacts
Lauren Ice	Water and Watersheds - prescription 3 seems to be aimed at allowing for more dense redevelopment	Expect this will be met with concerns over affordability and that increased redevelopment costs will spur greenfield development. Could use data on these concerns.	

	and simultaneously meeting concerns of downstream neighbors.		
Lauren Ice	Water: That new and redevelopment will be required to retain and beneficially use stormwater. Good start at metrics in prescriptions 4 and 5.	On high impervious sites, how will decision be made when indoor re-use opportunities are required and payment-in-lieu.	
Lauren Ice	Mobility: prescription 6 to increase connectivity through greenways is a good idea.	But not enough detail to know how it will be implemented.	
Lauren Ice	Greenfield chapter acknowledges the harmful impacts of unfettered greenfield development, in particular those related to auto-centric transportation and congestion.	Connectivity prescription only addresses block lengths and min lot sizes.	Should we also include prescription on how to encourage job/activity centers with greenfield development to minimize need for long-distance commuting? And address the need for connectivity between subdivisions.
Lauren Ice			General Comment: Not enough metrics, complete lists of standards, or detail overall to tell how the prescriptions will really be implemented and the details matter. Especially with regard to "site-specific" decisions.
Lauren Ice	Acknowledgement that existing watershed protection ordinance shall be maintained.	Even with these existing protections, we need to mitigate the effects of impervious cover in some existing developments (and reduce impervious cover in some places) to allow for new development.	
Lauren Ice			Water quality and biodiversity, and impacts impervious cover has on erosion.
Farzad Mashhood	I like that the code will reconsider compatibility	I'd like to see more detail about how the greater array of housing types will mitigate compatibility issues.	
Farzad Mashhood [Rich Heyman shares Farzad's	Providing incentives for privately owned public space can be helpful, but I recommend it be	Incentives given to developers for privately owned publicly accessible green spaces need to have strongly worded language to make sure the space remains publicly accessible and that the city doesn't give too much in	

concerns here]	wielded carefully.	extra entitlements in exchange for the privately owned, publicly accessible space.	
Farzad Mashhood	It's good to see that development density considers proximity to transit.		Regarding the new code including incentives for compact and transit oriented development, it would be helpful for these incentives to be for developments located along the rapid bus lines as those are an increasingly population way for people to get downtown and to UT. Reduced parking requirements should be done in tandem with transit-oriented development. That is, a developer should be allowed to provide less parking for residential when it is near to a transit stop.
Farzad Mashhood			For subdivision and site plans that require connectivity, the code ought to limit exemptions to this.
Rich Heyman			One thing that should be added to the section on trees & urban forest is language in the code that recognizes the context that canopy cover, which is so valuable in many ways, is very unevenly divided between east and west sides of the city. Language should be added that redevelopment on historical agricultural and degraded land on the east side, which is also in the desired development area, should be accompanied by aggressive replanting of diverse native and well adapted species to preserve and restore tree cover to pre-agricultural levels, much like the code recommendations that redevelopment requires returning site run-off to pre-development levels.
Elizabeth Mueller 4/25/16	The language about calibration to context is good.	It would be great to provide more information about how you will adjust for context in cases where this is not site specific. Are there typologies of contexts that you can share?	In addition to differences in environmental conditions, need to take historical context in east Austin into account too. See discussions of historic preservation below.
Elizabeth Mueller 4/25/16	Use of FB code to improve outcomes in areas of town that will be most affected by Imagine Austin		Need to provide a map showing boundaries of centers and corridors. Hard to judge impact of impact of proposed changes to compatibility standards in particular, without this.
Elizabeth Mueller 4/25/16	Trees: 10.b. "adopt policies to define more effectively the varying contexts…and how best trees can be preserved in these	Need to ensure any such policy considers need to increase the tree canopy on the east side of town.	Presentation to CAG made clear the huge disparity in canopy. This should be specifically addressed in the code so that future development on the east side helps remedy this disparity.

	varied contexts."		
Elizabeth Mueller 4/25/16	Compatibility: Discussing compatibility as not just affecting SF homes. Great to encourage better design for adjacent MF and commercial properties too.	The image on p 22 shows missing middle as being located in a transition zone between an activity corridor and SF neighborhood. Would be helpful to clarify which corridors can accommodate this form of compatibility. Will this only be possible in corridors with deep parcels that can incorporate a transition zone? Or are you suggesting that a zone of SF properties adjacent to a corridor with shallower lots be allowed to develop MM housing types?	
Elizabeth Mueller 4/25/16	Compatibility: I like the attention to use of green features as part of compatibility.	Would such strategies be used in lieu of other features or in addition to?	
Elizabeth Mueller 4/25/16	Mobility:	Use the same "context sensitive" language in regard to improving streetscapes across town.	I heard a lot of complains about lack of safe sidewalks, crosswalks, etc in district 1 and generally in east Austin. In addition to rules for new development, we need to adopt policies that prioritize areas historically poorly served by pedestrian infrastructure. (Consult with ATD on their recent Mobility Talks intiative—they gathered info at the last District 1 townhall on this).
Elizabeth Mueller 4/25/2016	Mobility: Promoting connectivity within subdivisions, use of greenways for trails.	Ensure that greenfield development includes streets designed for transit, a transit hub and other features to enable residents to use transit to commute.	
Elizabeth Mueller 4/25/16	Redevelopment: I appreciate attention to connectivity on large sites, so that they don't become huge barriers to walking to nearby places.	This section should include discussion of things to protect as redevelopment happens: existing affordable housing (I know this is covered in next paper but it should be referenced here), and historic preservation for social equity.	There was a lot of discussion of what preservation should mean at our public event. This also came up at the District 1 meeting. There are two distinct elements to call out: 1-how requests for permits for redevelopment of properties currently housing low income renters should be directed. The tenant relocation policy, if adopted, would need to be referenced here. 2-whether and how historic zoning for areas that emerged as cultural communities under segregation should be adopted. While this is a policy decision, and only a few such areas exist, the code should indicate how a historically zoned area fits into code requirements.

Elizabeth Mueller 4/25/16	Greenfield development: I appreciate the language about improved connectivity and resources consumed by low density development.	I don't see this language reflected adequately in the prescriptions. Several things were cited as being dealt with elsewhere—but in things that will not be covered in these papers (subdivision regs, for one). Need to clarify how base zoning, for example, will ensure that the same low density pattern does not result.	This section needs a substantial discussion of how we will ensure that we don't recreate the current pattern of income inequality through subdivisions that are homogeneous in lot/home size/price. This is our chance to create a different pattern in greenfield development,that provide greater housing choice and the opportunity for less auto dependence. These are both critical for providing more affordable (small A) options in the city.
Elizabeth Mueller 4/25/16	Parks and Open Space:	The opening statement about the importance of parks should also highlight the importance of public spaces, esp in dense areas. These are the places where we learn to be with others unlike ourselves on a daily basis. Arguably a very important aspect of city life.	I agree with Farzad and Rich's statements above about the importance of ensuring that public spaces created through negotiation with private developers be accessible to all.
Roger Borgelt			No mention of historic preservation at all. This is a major oversight that must be rectified.
Roger Borgelt		Water and Watersheds- Too much burden put on redevelopers of property for the failure of very old infrastructure structure. Our nearly annual flooding events cannot depend upon potential and costly redevelopment to alleviate the flooding issues. Also flooding has become a an issue than msu be addressed on a regional, or at least watershed level basis, not left to specific site plan regulation to resolve.	
Roger Borgelt		Landscape and Trees - the prescriptions are generally too focused on preservation of specific existing trees rather than emphasizing creating an overall net increase in the urban forest of desirable trees. Also no mention of mitigation for or potential impacts caused by wildfire danger due to dried out trees and vegetation.	
Roger Borgelt		Compatibility and Neighborhood Transitions- These need to emphasize site specific flexibility,as well as different triggers for compliance based on a structure's actual use.	
Roger Borgelt	Design for Mobility - Generally agree with these prescriptions.-		
Roger Borgelt		Redevelopment - There needs to be much more emphasis on the incentives for this, not just allowing it, and not just by reducing parking requirements. We can't achieve the urban density we need without actively promoting diverse housing types. This is also where some flexibility in compatibility regulations must be allowed. There must also be a strong emphasis on available means to reduce costs of this. Otherwise, we are not serious about promoting it.	

Roger Borgelt	Greenfield - Generally agree with these prescriptions		
Roger Borgelt		Parks and Open Space - These need additional emphasis on the need for multiple purpose open spaces which will also assist in wildfire and flooding mitigation. Also, flexibility in dedication requirements based on context should be emphasized.	
JIm Duncan 4.25.16	p. 13 Improve and update landscape regs. (do not reduce) p. 14 Strengthen Heritage Tree ordinance p. 15 Maintain strong emphasis on preservation' p. 16 For higher densities, require functional green solutions p. 22 (2.) Can use transect with use-based zoning as well as form-based p. 23 (4.) Keep compatibility standards p. 26 Reduced parking downtown and near transit p. 27 (3.) Sign rules oriented to pedestrians and not cars p. 29 "No real understanding of maximum commercial needs." Agree! p. 35 (2.) Like conservation subdivisions, but what do they have to do with connectivity?	p. 20 (1.) Consider adding elevation changes to compatibility p. 20 (4.) Agreed, but difficult for staff to determine good design p. 20 (5.) Many of these provisions were in original ordinance. p.22 (1.) Form-based coding not needed to achieve compatibility, but transect is. p. 27 (2.) Use-based standards can accomplish this as well as form-based. p.27 (5.) Use-based standards can accomplish this as well as form-based (also "transit-rich environment" is oxymoron in Austin). p. 35 (2a) Block lengths need to relate to contextual circumstances, such as terrain. p. 35 (3.) Greenfield development (e.g. cluster) facilitates preservation of trees and open space. p.39 Include map of park deficient areas.	Where's the beef? (Could use more specificity) p. 16 (5.) What are the tools? p. 16 (10a) How do you determine "reasonable use"
Kevin Wier 06/20/16		1. Compatibility and Transitions: It can't be a "one size fits all" approach for the whole city regarding transition zones along transit corridors. Some corridors such as North Burnet have no room for any transition as single family homes are directly behind commercial property along Burnet Rd. The "missing middle" idea and graph will not work in these areas.	
Kevin Wier 06/20/16		2. Design for Mobility: The actual transportation systems have to be the other half of the coin. They have to get planned and built along with this code planning if there is to be any success. Bike lanes are nice, but without a clean, reliable mass transportation system, we are going backwards.	

Kevin Wier 06/20/16		3. Redevelopment: Redevelopment must also have as keys to success a) awareness of increase likelihood of flooding, b) the necessity of open and open green space for human well-being, and c) the necessity of trees including large, old trees.	
Kevin Wier 06/20/16		4. Greenfield Development: Greenfield Development should include planned central areas as a mass transportation hub of many types of transportation and include basic retail (groceries, medicine) and some work space as well. It must also have as keys to success a) awareness of increase likelihood of flooding, b) the necessity of open and open green space for human well-being, and c) the necessity of trees including large, old trees.	
Kevin Wier 06/20/16		5. Parks and Open Space: Must include the necessity of trees including large, old trees.	

APPENDIX B – GLOSSARY

1. Accessory Dwelling Units: as defined in Imagine Austin accessory dwelling units "are residential buildings located on single-family lots; are smaller than the primary house; and are generally located toward the rear of the lot. Also known as garage apartments, mother-in-law apartments, or granny flats."

2. Affordability: as defined in Imagine Austin and the Household Affordability Prescription, affordable housing is "dwelling units for sale or rent that are deemed affordable for lower or middle income households. It is also housing that does not create an economic burden for a household and allows residents to meet other basic needs on a sustainable basis." Household affordability is the ability of a household to afford its housing and associated costs, including rent or mortgage, transportation, and utilities.

3. Biodiversity: as defined in Imagine Austin, biodiversity is "the degree of variation of life (plants and animals of different species) within a given area."

4. Built Environment: as defined in Imagine Austin, the built environment is "the urban environment consisting of buildings, roads, fixtures, parks, and all other improvements that form the physical character of a city."

5. City Core: while not precisely defined, city core general refers to the area bounded by MoPac, 183, and Ben White; this can also be used in reference to the Walkable Urban and Transitional areas identified by CodeNEXT.

6. Compact and Connected: as defined in Imagine Austin, a compact community is one "in which housing, services, retail, jobs, entertainment, health care, schools, parks, and other daily needs are within a convenient walk or bicycle ride of one another. A compact community is supported by a complete transportation system, encourages healthier lifestyles and community interaction, and allows for more efficient delivery of public services." A connected community has "the parts or elements of an area (city, county, subdivision, etc) logically linked together by roads, transit, trails and paths, sidewalks, and bicycle routes and lanes.

7. Complete Streets: as defined in Imagine Austin, complete streets are "roadways designed and operated to enable safe, attractive, and comfortable access and travel for all users, including pedestrians, bicyclists, motorists, and public transport users of all ages and abilities. For more on the City of Austin's Complete Streets Program, visit www.austintexas.gov/complete-streets.

8. Comprehensive Plan: as defined in Imagine Austin, a comprehensive plan is "a document or series of documents for guiding the future development of a city or country and is based upon the stated long-term goals and objectives of that community. It provides guidance for making land use decisions, preparation for implementing ordinances, preparations for capital investments, and the location for future growth."

9. Contextually Appropriate Public-Private Interface: means that not all space between private uses (a residence, for example) and public uses (the street, for example) look, feel, and function the same.

10. Detention: the storage of storm runoff for a controlled release during or immediately following a storm.

11. Evapotranspire: the water loss into the atmosphere by evaporation and transpiration; this accounts for the movement of water to the air from sources such as the soil, canopy interception, and water bodies.

12. Green Infrastructure: as defined in Imagine Austin, green infrastructure is "strategically planned and managed networks of natural lands, parks, working landscapes, other open spaces that conserve ecosystems and functions, and provide associated benefits to human populations."

13. Green Streets: as defined in Imagine Austin, green streets are "an area that incorporates stormwater management design features into the right of way to reduce demand for expensive stormwater infrastructure, control flooding, and reduce stormwater runoff. Green street elements include trees, permeable pavers, drought tolerant plants, rain overflow drains, and underground cisterns."

14. Impervious Cover Limits: the maximum percentage of impervious cover allowed on a site. As defined in Imagine Austin, impervious cover are "surfaces or structures that prevent

rainwater from soaking into the ground and includes roads, sidewalks, driveways, parking lots, and buildings."

15. Infiltrate: the process by which water on the ground surface enters the soil.

16. Livable or Livability: as defined in Imagine Austin, livability "refers to the suitability of a place (town, city, or neighborhood) to support a high quality of life that contributes to the health and happiness of its residents."

17. Lots of Space: the predominant pattern of more space between a building and street in suburban development as compared with more urban development patterns.

18. Low-Impact Development: innovative stormwater management practices that mimic a site's pre-development hydrology. Low-impact development uses design techniques that reuse runoff and allow it to soak into the soil, helping to protect local water quality.

19. Mapping Decisions: this refers to a series of decisions that must be made to map the Land Development Code to particular parcels.

20. Missing Middle: as defined by Opticos Design, missing middle is "a range of multi-unit or clustered housing types compatible in scale with single-family homes that help meet the growing demand for walkable urban living." For more on missing middle housing, visit www.missingmiddlehousing.com.

21. Open Space: as defined in Imagine Austin, open space is "a parcel of land in a predominantly open and undeveloped condition that is suitable for natural areas; wildlife and native plant habitat, wetlands or watershed lands; stream corridors; passive, low-impact activities; no land disturbance; and/or trails for non-motorized activities." Open space can be publicly or privately owned and is provided for public use and/or benefit.

22. Porous Pavement: a system comprising a limited capacity load-bearing, durable surface together with an underlying layered structure that temporarily stores water prior to infiltration and releases the temporarily stored water by infiltration into the underlying permeable subgrade.

23. Rain Garden: a vegetated, depressed landscape area designed to capture and infiltrate and/or filter stormwater runoff.

24. Regional Stormwater Management Program: an alternative to on-site detention for flood control purposes that uses a watershed wide approach to analyze potential flooding problems and to identify appropriate mitigation measures.

25. Retention: the amount of precipitation on a drainage area that does not escape as runoff. It is the difference between total precipitation and total runoff.

26. Robust Transit: access to transit service that provides both route options and frequency of service.

27. Setbacks: according to the Land Development Code, a setback typically refers to the distance between a lot line and the closest exterior wall or building façade of the principle structure located on the lot.

28. Significant Trees: tree condition assessments per the Environmental Criteria Manual that identify healthy trees.

29. Stormwater: any precipitation in an urban or suburban area that does not evaporate or soak into the ground, but instead collects and flows into storm drains, rivers, and streams.

30. Transect Districts/Zones: the transect defines a series of zones that transition from rural to urban. According to the Center for Applied Transect Studies (www.transect.org), "to systemize the analysis and coding of traditional patterns, a prototypical American rural-to-urban transect has been divided into size Transect Zones, or T-zones, for application on zoning maps…the six Transect Zones provide the basis for real neighborhood structure, which requires walkable streets, mixed use, transportation options, and housing diversity."

31. Walkable: as defined in Imagine Austin, this refers to "areas conducive to walking." As defined in the Community Character Manual, walkable urban areas are "those places in which a person can (easily) walk or bike to home, work, and to fulfill most daily needs, including shopping and recreation."

32. Watersheds: the area of land that drains to a particular creek, lake, or aquifer.

APPENDIX C – CAG MAY 2, 2016 RESOLUTION

CodeNEXT Resolution

Whereas, work on the new Land Development Code by CodeNEXT staff, consultant and Citizens Advisory Group (CAG) members is of great importance to the future of Austin, and

Whereas, the CodeNEXT project is at least a year behind schedule, and

Whereas, there are apparently several existing vacant CodeNEXT staff positions, and;

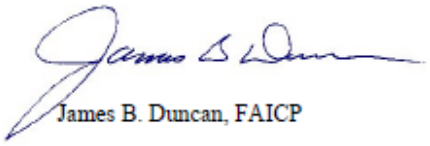
Whereas, the consultant is considered a critical partner in the CodeNEXT project.

Now therefore be it resolved that the CodeNEXT Citizens Advisory Group respectfully asks Mayor and City Council to authorize and encourage the City Manager to:

1. fill existing vacant CodeNEXT staff positions as soon as possible,
2. allow our consultant to participate more frequently with CAG, and
3. fund a public engagement consultant for our final phases.

Passed unanimously by the CodeNEXT Citizens Advisory Group at its meeting of 2 May 2016.

Signed:



James B. Duncan, FAICP

Chair, CodeNEXT Citizens Advisory Group

APPENDIX D – NOTES FROM N&BE PUBLIC COMMENT EVENT

Below are posters that were presented at each table during the April 4, 2016 CAG Public Comment event, followed by narratives that synthesize the public comment.

Water and Watersheds

Protecting watersheds and water quality, conserving rainwater, and managing flooding

Key Prescription Recommendations





- Retain Austin's Watershed regulations, including recent Watershed Protection Ordinance improvements
- Strengthen the rules so as to require redevelopment (of already developed sites) to mitigate for downstream flooding, reducing discharge to match undeveloped conditions
- Develop new rules requiring redevelopment and new development to retain and beneficially use stormwater onsite
- Reclaim excess right-of-way for green infrastructure

Examples of Potential Benefits and Side-effects

How might we balance growth and development with protecting our watersheds and water quality, conserving rainwater, and managing flooding?

- Opportunity to incorporate more water quality and green elements into a site, such as rain gardens, green roofs, porous pavements, etc and to preserve rainwater
- Proposed requirements could help with water quality and small-scale flooding issues, but might mean that redevelopment is more difficult, especially on smaller lots
- Incorporating more green and gray infrastructure may need to trade-off with space for other uses, such as parking and additional building coverage





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The capacity of an urban watershed for greater density should be the basis for assessment, modeling, and mapping of the land development code rewrite. Different watersheds have greater capacities for increased density than others considering older drainage infrastructure in the urban core. Costs for upgrading this infrastructure are prohibitive on a city wide basis. Recent extreme weather events with increased flood hazards are exacerbating the problem and need to be considered.

In some areas, urban watersheds are already overbuilt and causing flooding where current standards are not adequately addressing the problem. Gray infrastructure studies are needed in areas such as Waller Creek from Dean Keaton to 45th, Shoal Creek from downtown to 183, and East and West Bouldin Creek in South Austin. The studies need to inform any mapping for proposed increase in density.

In redevelopment areas, tools to address flood mitigation include subsurface controls, off-site improvements, and payment into the Regional Stormwater Management Program. Need to determine if these tools are sufficient to handle flooding problems in specific areas. According to staff, payment in lieu for water quality and beneficial re-use will be allowed under certain conditions in the urban core. It will also be allowed for flood mitigation in conditions where there is no adverse impact on downstream flooding.

Cost data is needed for mitigation for increased density – both on the public side and the private side. There is concern that proposed watershed prescriptions may hinder redevelopment and decrease affordability. Consider allowing small and redevelopment sites to contribute to large scale drainage solutions which may be more effective and cost-efficient than accommodating drainage solutions on each individual site.

A regional green infrastructure strategy is needed on a district or transect basis. Need to look at a broader, holistic approach that includes "Green Streets" for stormwater management as well as detention on individual sites. A performance-based code is needed where pervious cover is incentivized rather than simply focusing on impervious cover. There is support for use of open space and pervious pavement to achieve multiple objectives such as stormwater detention and landscape requirements. Other tools for retaining stormwater for beneficial use include rain gardens, green roofs and rainwater harvesting.

Sustainable water management for long term water supply needs to be integrated into CodeNEXT. We need data on how many people Austin can accommodate and for how long given our current

water supply contract with LCRA in order to make informed decisions. Also, how are Austin Water Utility recommendations for a "water efficient economy" being incorporated into the new code?

Innovation Idea: Incentivize shared parking in order to reduce the need for more surface asphalt and impervious cover

Landscape and Trees

Preserve nature and incorporate green spaces while allowing our city to become more compact and connected

Key Prescription Recommendations

- In low- and mid-density contexts, require landscape elements throughout a site rather than relying solely on a "street" (front) yard
- In higher density contexts, use an options-based palette of urban green options to meet landscape requirements
- Set impervious cover limits as a maximum, not a guarantee of buildable land
- Allow double counting of Landscape and Watershed Protection requirements
- Use a site-by-site approach to tree preservation rather than a quantitative, one-size-fits-all approach









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Examples of Potential Benefits and Side-effects

How might we create a context-sensitive method of preserving nature and incorporating green spaces?

- When some new buildings are allowed to move closer to the street, landscape elements may be incorporated throughout the site. This also allows for a greater variety of building types.
- Setting impervious cover as a maximum, rather than a guarantee of buildable land, can help preserve trees. The trade-off is that this may make development more difficult in certain contexts.

According to the Austin's urban tree canopy is worth 16 billion dollars according to a study by the US Forest Service. Benefits include canopy cover to mitigate the urban heat island, pollutant removal, and stormwater capture and run-off reduction. Concerns are that with population growth and increased density these benefits could be permanently reduced via the cumulative impact of tree removals.

One of the goals of the code rewrite is to maintain the current environmental protection ordinances and extend them into the new missing middle transition zones. The current site-by-site approach to the assessment of protected and heritage trees will continue. More flexible site layouts to preserve trees will be examined. The health and diversity of individual trees will be considered in the assessment. The landscape architect on the project will be instrumental in site analysis of existing trees. Comments ranged from strong support for this approach to concerns for clarity in expectations.

Beyond the importance of our urban trees, comments were that bio-diversity was not addressed. A management strategy needs to be incentivized in the code to protect, restore, and enhance bio-diverse ecosystems, especially along our creek corridors.

On the landscape ordinances, the new approach will be to correlate required landscape treatment to land use context such as walkable urban vs. suburban zones. A "Functional Green" treatment is proposed in highly urbanized environments. The treatment will seek to provide or restore healthy ecosystems. There was general support for this approach.

The goal is for a landscape treatment to provide multiple functions with credits toward such items as green stormwater infrastructure. Concerns were that multiple overlaps could get complicated to administer.

Innovation idea: Institute a Functional Green landscape program in walkable urban areas to provide credit for an increase in functionally pervious areas.

Greenfield Development

Reduce sprawl; ensure that greenfield development respects the natural environment and can be connected with the rest of the city

Key Prescription Recommendations

- Require walkable block sizes
- Require road, alley, bike lane, trail, and sidewalk connectivity to adjacent areas as opportunities allow
- Use new tools to encourage creative design that respects the natural environment, such as conservation subdivisions
- Promote green spaces that are connected, desirable, and multi-functional









Examples of Potential Benefits and Side-effects

How might we reduce sprawl, develop new walkable communities, and ensure that greenfield development respects the natural environment and can be connected with the rest of the city?

- Requiring walkable block sizes and connectivity for vehicles, bikes, and people means that greenfield development can more easily connect with the rest of the city as we grow.
- Promoting connected green spaces, even if those connections are phased in over time, will give recreation and transportation options.
- Greenfield development is often less expensive than an equivalent product in the center city, but the extension of water, electric, and road infrastructure can be expensive to construct and maintain

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Greenfield Development is projected to accommodate 80 percent of Austin's population growth. New subdivision regulations provide the opportunity to plan, design, and implement compact and connected integrated with green infrastructure and sustainable water management. We need to start with Greenfield development that we can control within the corporate limits. These new regulations can provide a model for the ETJ and outlying areas of Travis County. Coordination is needed between the city and county to achieve the desired goals.

The critical issue prior to subdivision layout is to identify floodplain and environmental features for protection and enhancement. The entire floodplain should be permanently dedicated for publicly accessible green space. Critical areas for stormwater management, parkland, greenways, urban farmland, and recreational play need to be set aside. Collaboration between PARD, AISD, non-profits, hospitals, etc. needs to be coordinated to ensure that equitable green space is captured and connected. Conservation subdivisions which cluster development and leave significant undeveloped open space can use innovative design and green infrastructure for more than one function or role. Yards in traditional single family areas need to be designed for maintaining beneficial stormwater on-site.

The code needs to acknowledge the differences between the watersheds, topography, hydrology, and soils to the east and west of Austin. Requirements such as impervious cover need to be tailored to these differences.

Mass transit infrastructure needs to be designed in from the beginning with transit hubs, plazas, and parks. Frequent transit service need to be coordinated with Capital Metro. Major roadway connections need to incorporate bike lanes.

New neighborhoods need to have good street connectivity, roadways capable of supporting future transit needs, support the possibility of complete communities and provide a greater diversity of housing types. Current trends are that families with children will be primary residents, as greenfields are assumed to be more affordable than central city neighborhoods. Internal connectivity needs to accommodate pedestrians and bicycles on roadways and trails. Shaded sidewalks and bike lanes need to be accommodated.

The subdivision layout needs to strive for a village design with commercial employment centers, mixed use, and different housing types to serve diverse needs. Live/work spaces to serve the creative population need to be accommodated. Sites need to be designated for farmers markets, grocery stores, small service businesses, shared work spaces, cafes, etc.

Green building materials and technology need to be required such as masonry cladding, recycled materials, cool roofs, and energy conserving structures. Rainwater harvesting, solar panels, green roofs, rain gardens, and pervious pavement need to be incentivized.

Innovation idea: In future subdivision areas virtually "build out" the city with existing zoning, watershed regulations, neighborhood plans and contrast this with new subdivision regulations

Redevelopment

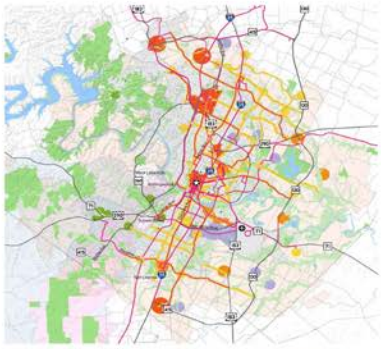
Prioritize infill development over sprawl

Key Prescription Recommendations

- Allow for a diverse set of building and lot sizes
- Reduce parking requirements in walkable urban areas
- Require road, alley, bike lane, trail, and sidewalk connectivity as opportunities allow
- Require walkable block sizes
- Integrate components of existing programs, such as the sidewalk standards and affordability programs of Subchapter E, into base zoning









Examples of Potential Benefits and Side-effects

How might we prioritize infill development over sprawl?

- Allowing for a diverse set of building and lot sizes increases opportunities for affordability since a greater variety of lots and buildings will be allowable, and some buildings could be smaller. This will need to be balanced with green infrastructure strategies
- Increased connectivity (roads, bike lanes, trails, smaller block sizes, etc) can make it easier to get around Austin, but requires a financial investment

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Redevelopment is projected to accommodate 20 percent of Austin's population growth. Redevelopment is supported in Imagine Austin, yet challenges include historic, neighborhood and small business preservation, affordable housing, missing middle housing, parking, and impervious cover.

Redevelopment without the proper tools to ensure some sense of stability can create rapid change in neighborhood character. The new code needs to include tools to prevent these rapid changes and provide some continuity of neighborhood character over time. Overlay districts with standards specific to the character of a district are used in other cities such as San Antonio for historic preservation. These districts have been shown as a relatively quick and effective tool for moderating rapid redevelopment and tear downs which can destroy the historic fabric. Concerns were voiced that these overlay districts might decrease affordability.

Application of the new form-based code and missing middle housing should be restricted to the centers and corridors of Imagine Austin and not the current single family neighborhoods. Concerns were voiced as to how far into the neighborhoods the code might apply. Certain neighborhoods would be affected more than others by a one size fits all ruling. Mapping of redevelopment needs to respond to context. Concerns were voiced that up-zoning could displace long term residents. Up-zoning in the transition zones could result in tear downs and replacement with more expensive housing. If more affordable and diverse units could be written into the code, then there might be greater acceptance. Other concerns were that over-regulating land can increase housing costs.

Small businesses frequently can only afford to remodel. Fortunately, these remodels on the corridors provide the continuity of Austin's iconic character. If redevelopment is all that is encouraged on the corridors, then the city is in danger of losing this iconic character and becoming more like other large cities in the state. Tools are needed to assist small businesses to remain in place.

Enhanced entitlements for redevelopment (such as additional height or decreased parking) that might be available through the new code need to be balanced with requirements for the provision of some public benefit such as more green space or affordable units.

Innovation ideas: Create overlay districts for historic preservation and tie any increase in entitlements to provision of public benefits such as green space and affordable units, i.e. a density bonus program.

Compatibility and Transitions

Create compatibility between uses and in transition areas that extends beyond height, and allows for a variety of building types

Key Prescription Recommendations





- For areas zoned to new form-based standards, ensure compatibility through development standards built into the base zoning and specific building types allowed by that zoning. Examples: building placement, height, and mass; parking placement, four-sided design; and landscape.

- Retain the generic, city-wide Compatibility Standards for areas that retain use-based zoning.

- Use a variety of building types, including "missing middle housing," as a way of promoting graceful transitions.

Potential Benefits and Side-effects

How might we create appropriate transitions between different uses that extends beyond a simple calculation of height?

- Looking beyond height means that we can require other elements of compatibility, such as parking placement and design standards for more than just the front of a building; this will help new development to fit existing neighborhood-scale patterns.

- Areas with use-based zoning will still rely on something similar to our current height-based method of calculating compatibility.

- A variety of building types and sizes can increase opportunities for affordability and accommodating additional growth as smaller spaces are allowed to be built.



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Current Compatibility Standards provide a one-size fits all approach to compatibility between commercial and single-family zoning. The purpose of the compatibility standards is to ensure adequate separation in the form of setbacks and height between the two categories in order to protect single family residential from the visual and noise encroachment of commercial use.

Yet there are multiple conditions where the application of the standards may not quite work with specific conditions. The standards can be unpredictable because they are associated with factors (use and zoning) that may change over time. They don't take into account changes in topography. The standards create restrictions on development where restrictions may not be necessary based on conditions to a particular site.

Of specific concern are the height restrictions beyond 100' from the single family property. Some believe that these restrictions are counter to the compact and connected goals of Imagine Austin.

Other concerns are that there are no detailed requirements in the first twenty five foot setback on the commercial property. Frequently, this area becomes turf with a 6' privacy fence by default with no apparent functional use. A proposal for 'Green Compatibility' provides a green infrastructure approach with sound walls to mitigate noise, tall evergreen shade trees, evergreen hedges, bio-swales, and green walls on the commercial buildings. It also proposes restricting balconies overlooking the single family property.

Comments are that the current compatibility standards should not be thrown out as they do provide some protection. Instead they should be refined. While missing middle zoning may provide one answer, it also will not provide the entire answer with different conditions all over town. The topic of compatibility standards needs its own stakeholder group to develop options for policy consideration.

Innovation idea: Develop Green Compatibility Standards to encourage green infrastructure in the compatibility setback.

Design for Mobility

Improve connectivity and coordinate our transportation systems and land use patterns so they better serve Austinites

Key Prescription Recommendations



- Reduce parking minimums in areas targeted for compact development, especially in the presence of transit
- Mitigate the negative effects of parking, such as "drivewalks" and parking lots without trees
- In addition to road function, integrate context into making road design decisions
- Require road, alley, trail, bike lane, and sidewalk connectivity between developments as opportunities allow
- Use greenways to build new transportation systems







Examples of Potential Benefits and Side-effects

How might we improve the ways we get around and better match our transportation and land use patterns to better serve Austinites?

- Decreased parking minimums can mean more space for green infrastructure, buildable area, and provide an opportunity for more affordable development.
- Requiring less parking may be challenging for some businesses, who prefer to have parking immediately in front of a building
- Increased connectivity (roads, bike lanes, trails, etc) can make it easier to get around Austin, but requires a financial investment

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Austin's mobility challenges are experienced daily by its citizens and visitors. Beyond corridor-level strategies of increased transit, bicycle lanes, shaded sidewalks, and Green Streets the land development code can offer some mobility incentives to offset increased density. Parking and sidewalks are two areas for review and discussion. (The Mobility Prescription Paper provides a more thorough review of these mobility items.)

Parking requirements can make or break the feasibility of some redevelopment projects and substantially add to cost. However, trade-offs can occur between parking reductions and the subsequent imposition of commercial parking in residential neighborhoods. One suggestion is that the city should abolish parking minimums and let the market determine how much parking is provided. Yet this might encourage businesses to under park their projects.

The current Off-site Shared Parking program may be too restrictive in terms of distance from the project. Lots may be available nearby which could be a win-win for both the business and the neighborhood. Also, vacant parking lots at night or on Sundays when commercial businesses are not using them seem to be a waste of resources and contribute to an increase in impervious cover. Evaluation of this program may result in some savings.

The Residential Parking Program which restricts on-street parking to certain hours has been shown to provide a safer neighborhood environment. Some suggest that limiting the hours to when protections are most needed for public safety might be more productive.

Reductions of parking requirements for businesses should only be allowed when nearby neighborhoods have an adequate sidewalk network to ensure that pedestrians do not have to walk in the street. Public sector estimates for the build out of a city-wide sidewalk network is over 50 years. Funds collected through any fee-in-lieu program and fines collected by Code Enforcement for sidewalk violations should prioritize centers and corridors. Sidewalk construction cost is much less expensive when built by the private sector. Increased entitlements could be balanced by extended sidewalk construction at the time of redevelopment.

Innovation ideas: Reduction of parking tied to an increase in green space and beneficial use of stormwater on-site and to private sector funding of increased sidewalk extensions into the neighborhood.

Parks and Open Space

Increase the amount of park space and ensure that all residents have access to them

Key Prescription Recommendations

- Increase the range and diversity of park and open space types; calibrate to particular contexts
- Infuse recommended code changes from the Parkland Dedication Ordinance
- Develop a rating system for green infrastructure and open space, and incentivize these types of spaces in new and redevelopment projects
- Incentivize the creation of green infrastructure that provides environmental function and active recreation options
- Require connections between new and infill projects to adjacent or nearby parkland









Potential Benefits and Side-effects

How might we increase the amount of park space to ensure that all residents have access to them?

- Developing a variety of park and open space types allows for creativity in areas where parkland may not be readily available. A pocket park may be more appropriate and realistic than a large park in some areas, for example.
- Combining green infrastructure with environmental and recreation options allows green space to serve multiple purposes.

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Parks and open space provide multiple functions from access to recreational areas, to urban trails, to urban forest preservation, to stormwater management. A variety of parks and open spaces are needed to address these functions. They need to be designed for multiple uses.

Public Open Space

The PARD Long Range Master Plan and the Parkland Dedication ordinance need to be integrated into CodeNEXT. One needs to inform the other and vice versa. Existing cultural open spaces, such as historic cemeteries need to be set aside with overlays for future protection. The biodiversity of urban forests and creeks need conservation, restoration, and preservation. The connections between children and natural areas need to be given priority.

Urban core areas that are park deficient need to be aligned with the mapping of the code so that parkland is acquired concurrently with any proposed new density. An aggressive parkland acquisition policy needs to be coordinated with land bank options. COA rules for acquiring land need to be revised so that PARD is not paying more than appraised value.

The council resolution for parkland within a ¼ mile radius of all residences needs to be the basis for decision making. Specific recommendations include the following: Determine a percentage for public open space that makes sense for centers and corridors and not just for a project. Incorporate the new parkland dedication ordinance into the code rewrite so that on-site open space is given a priority over fee-in-lieu in park deficient areas. Require pedestrian and bicycle connections from neighborhood streets. Have public open space review be a public comment requirement for all development.

Create a connected green network of open spaces throughout the city. Incorporate urban trails along creeks, transit plazas and parks with mobility planning for corridors and redevelopment. Integrate with new Greenfield development. Make urban parks closer to neighborhoods, walkable, child-friendly, and useable for diverse populations. Use national guidelines to assess the current gaps in park diversity. Provide a variety of park sizes and programming with flexible spaces that accommodate recreational activity as well as great public gathering spaces. Elevate quality and long term maintenance into design.

Increase public private partnerships to increase funding options for design, construction, and maintenance of publicly accessible open space. Coordinate long range planning, parkland dedication, code requirements, and the private sector to create an exemplary urban park network.

Develop clear and predictable standards for privately owned and maintained public spaces. Enhance and provide better maintenance for the parkland that we have now. Incorporate a basic level of funding, service, and maintenance for any park in the system.

For sustainable water management, expand the use of reclaimed water to all parks and open spaces. Include irrigation to protect the urban forest and encourage park use during the summer.

Wildlands and water conservation areas interface between the natural and built environment. Code needs to be developed to protect humans and property from fire hazard.

Private Open Space

Maintain the requirement for 5 percent on-site private open space in commercial and multifamily development. Develop standards that ensure useable open space for the occupants and not leftover setback areas. Incorporate green stormwater infrastructure. Incentivize public access with density bonus or other programs. Prioritize tools such as pocket parks or trail connections depending on context.

Innovation ideas: New trail connections need to be explored in abandoned railroad rights-of-way. Design floodplains and water quality ponds to be used as open space. Incentivize publicly accessible green roofs in private development.