



Austin Parks and Recreation Department
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To: The CodeNEXT Advisory Group

Today's children are spending over 50 hours a week on an electronic device and 90% of their time indoors. In the last 30 years childhood obesity rates have risen from 7% - 18% and preschoolers are currently the fastest growing market for antidepressants.

Over the past decade studies have shown that exposure to natural environments help reduce stress, maintain a healthy weight, increase the ability to focus, and can even raise test scores. When children have regular interaction with the natural world they are healthier, happier, and smarter. We want to ensure that every child in Austin has the opportunity to experience nature on a daily basis.

In March of 2016 The City of Austin was awarded a \$25,000 Planning Grant by the National League of Cities, in partnership with the Children & Nature Network, designed to help city leaders develop strategies for getting more young people outdoors and connected to nature with a particular focus on children and youth in economically stressed communities.

The Parks and Recreation Department (PAR) is spearheading the effort to create an Implementation Plan that will act as guide for how city government, schools, non-profits, and hospitals can collaborate to provide consistent and equitable access to nature for all of Austin's children. PAR has also dedicated an additional \$25,000 in funding to assist in the planning effort.

Over the next several months PAR will lead a Core Planning Team consisting of leaders from ten city departments, AISD, and major non-profits and hospitals. This team is currently in the process of conducting a city-wide Gap Analysis that is assessing GIS data, programmatic content, and current policy initiatives that could potentially impact children's access to nature in Austin over the next 3 - 5 years.

In alignment with the policy goals the Core Planning Team is developing, we believe it is crucial to the health and development of Austin's children to ensure that "access to nature" is an essential component to any policy that will be written and adopted concerning Austin's Natural and Built environment.

On behalf of Austin's Cities Connecting Children to Nature Core Planning Team, the Parks and Recreation Department would like to submit the following edits and additions to Austin's CodeNEXT Natural and Built Environment Code Prescription for consideration.

Please see full list of CCCN Core Planning Team attached.

Thank you,

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Cities Connecting Children to Nature Planning Grant
Parks and Recreation Department



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SUGGESTED EDITS AND ADDITIONS TO CodeNEXT NATURAL AND BUILT ENVIRONMENT CODE PRESCRIPTION:

*Edits and additions have been made in blue.

Page 5: (Introduction)

Based on the goals of Imagine Austin and what we have learned from more than three years of code-specific outreach and work, this Prescription includes:

1. Treating water like a precious resource. Austin needs to be strategic about how we treat rainwater, adopting a conservation mindset.
2. Addressing flooding through a variety of active and passive technologies.
3. Finding better ways to integrate nature into the city **with a focus on providing children, families and individuals of all ages and abilities equitable access to the natural world.**
4. Increasing road, sidewalk, and trail connectivity, giving people more transportation options.
5. Allowing for a diversity of lot sizes and building types, increasing the opportunity for affordability in residential and commercial development.
6. Encouraging redevelopment and infill, which better utilizes existing infrastructure and fosters community through increased connectivity and proximity.
7. Reducing sprawl in greenfield development with requirements for connectivity and tools that respect the natural environment, such as conservation

In all sections of the following Prescription Code for the Natural and Built Environment, key tenants of the Permaculture Model should be kept top of mind while developing city code. Permaculture is a “Whole Systems” design approach that mimics the patterns and eco-systems evident in nature to achieve harmonious relationships. This design strategy can be applied to all areas of human influence, including ecological dwellings, agriculture, landscaping, education, technology, and economics to achieve an ethical balance in our developed world.

Ultimately, the Land Development Code reflects a grand balancing of our public values – livability, affordability, environmental protection, mobility, **equity**, and preservation versus change. CodeNEXT has benefitted from valuable community engagement for more than three years, and these Code Prescriptions represent a proposal for how the new code can strike a balance that achieves our city’s vision for itself as expressed in Imagine Austin.

Page 9: (Water & Watersheds - Where are we Now)

3. Impervious Cover

Impervious cover, which is anything that stops rainwater from soaking into the ground including roads, sidewalks, driveways, parking lots, swimming pools, **hard surface playgrounds and sport courts**, and buildings, has a major impact on Austin. In an environmental context, impervious cover contributes to the urban heat island effect, and since it prevents rainwater from soaking into the ground, large quantities of water are instead channeled to surrounding land, waterways, and roads, causing flooding. Due to the pollutants often found on roads and driveways, impervious cover contributes to environmental contaminants entering Austin’s waterways.



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In addition, an abundance of parking lots and sidewalks that merge with driveways create an unfriendly and sometimes unsafe environment for pedestrians and bicyclists that is also visually unappealing.

Page 10: (Water & Watersheds - What's the Prescription?)

4. Tools for mitigating flood impacts could include on-site detention, off-site detention, off-site conveyance improvements, or participation in the Regional Stormwater Management Program (RSMP). Determining the appropriate flood mitigation tool will depend on the location in the watershed (e.g., headwaters) as well as the available downstream capacity. [Amenities such as constructed wet ponds, sloughs, and cascading ponds should be considered to provide children, families, and individuals of all ages and abilities interactive access to the natural environment.](#) Generally, on-site detention is appropriate in the upper portions of a watershed, whereas lower portions of a watershed are more suitable for conveyance upgrades or participation in RSMP.

Page 11: (Water & Watersheds - What's the Prescription?)

5. New and redevelopment sites will be required to retain and beneficially use stormwater onsite -- a practice already implemented by numerous states and major cities around the country. [The creation of water elements can be implemented to support pollinators and provide accessible natural oases within the city to encourage exploration, play and learning opportunities in nature.](#)

Page 12: (Water & Watersheds - What's the Prescription?)

Spotlight:

The Austin Creeks Plan proposes a city of greenbelts with continuous pedestrian and bicycle trails along Austin's 18 creeks. These trails would link all areas of the city and promote cultural, recreational, and commercial development while restoring or preserving natural areas [with a focus to provide children, families, and individuals of all ages and abilities the opportunity to have an interactive experience with the natural environment, especially in Austin's underserved communities.](#)

7. Reclaim excess right of way for green infrastructure [and provide opportunities to incorporate learning and play experiences in the natural environment.](#)

Page 14: (Landscape & Trees - Where are we now?)

1. Incorporating natural elements into a rapidly growing city:

As Austin grows, it is critical for trees, plants, and natural beauty to be incorporated into the city; benefits include air and water quality improvements as well as aesthetic beauty. [Additionally, it is critical to provide children, families and individuals of all ages and abilities equitable access to and interaction with natural areas on a regular basis for overall health and wellbeing.](#)



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Page 15: (Landscape & Trees - What's the Prescription?)

2. Require a comprehensive approach to landscape treatment throughout the site, creating opportunity to integrate environmental, aesthetic, and site-use functionality **with a focus on preserving wild natural so that they are accessible to children, families and individuals of all ages and abilities. To maintain a balanced ecology in Austin tenants from the Biophilic Cities and Permaculture models should be considered.**

Page 16: (Landscape & Trees - What's the Prescription?)

4. B. For the higher-density Centers and Corridors called for by Imagine Austin, which may offer fewer opportunities for vegetated landscape, the new code likely will offer an options-based palette of urban-green options aimed at providing high functioning landscape in small spaces. This could operate similar to "Functional Green," a point-based system that allows choices among elements such as green roofs, green walls, stormwater collection and reuse, pervious pavement, rain gardens, **and interactive or interpretive natural features for people of all ages and abilities**, etc. to meet landscape requirements.
6. Promote land cover that performs multiple ecosystem functions, requires fewer resources, **provides accessible, hands-on, outdoor learning experiences for children, families and individuals of all ages and abilities (such as fruit bearing trees), promotes pollinator activity**, and provides better planting environments for a more sustainable urban landscape.
 - a. Bring forward improvements to the Landscape code that account for advances in urban environmental science, especially in soil science and hydrogeology, as well as technological improvements in water-reuse, and understanding of urban heat-island effects.
 - b. Set minimum soil quality and quantity standards.
 - c. Allow double-counting of Landscape and Watershed Protection requirements, thereby encouraging development to incorporate green infrastructure and sustainable water management best practices into landscape areas.

Page 27: (Design for Mobility - What's the Prescription?)

6. Connectivity:
 - a. Subdivision and Site Plan standards that promote connectivity by: ensuring that development sites include roadway connections, and where that is not possible, through pedestrian and bicycle connections; and through block sizes and patterns that promote walking, biking, and efficient automobile circulation.



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- b. Using greenways to build new transportation systems; for example, by utilizing a certain number of feet from a floodplain to provide trails, bank stabilization, and to keep natural flooding areas free from development. Encourage people to use these systems and make them inviting by incorporating the natural diversity of the landscape (tree cover, natural features, etc.). Urban trails offer the chance for brief respites, to see and experience nature close to where we live and work, and to provide a unique and different way to see and experience the city. The trail system should accommodate a variety of different ways of moving through these spaces.
- c. Increase utilization of the built environment, (sidewalks, trails, bike lanes) to promote active transit, (walking, biking, public transit) for commuters traveling from home to school, work, community center, entertainment venue and market safe pathways for travel while promoting physical activity, and reducing traffic-related fatalities and serious injuries and promoting interaction with the natural environment.

Page 33: (Green Field Development)

As noted earlier, Imagine Austin prioritizes growth within our Corridors and Centers through redevelopment instead of unfettered sprawling, low-density development far from the city's core. Redevelopment in Corridors and Centers will not, however, accommodate all of Austin's new growth, and some development will occur in previously undeveloped areas. This is known as greenfield development. As these previously undeveloped areas become home to new residents and businesses that need streets, utilities, buildings, and access to nature, how we develop is critically important to environmental sustainability, biodiversity, household affordability, fiscal health, and maintaining the health and quality of life for all Austinites.

Where Are We Now?

Greenfield development can be attractive to developers and buyers because the land (and resulting product) is often less expensive than equivalent development in the center city. However, this type of development can have serious fiscal and environmental consequences. The tradeoff is that green-field development often requires extending existing water, electric, and road infrastructure, which is expensive to construct and maintain. In some cases it also means the reduction in usable farm / ranch lands. Low-density greenfield development typically also consumes more natural resources when compared with more compact development near the city's core. In addition, without appropriate connectivity and non-single occupant vehicle options, development on the city's outskirts can dramatically increase individual dependence on the automobile, lead to higher reliance on automobile (accompanied by higher greenhouse gas emissions and air pollution), promote highway-style road development, and exacerbate Austin's traffic woes. These consequences are the reality of our current development standards, so we must start growing in a more strategic way.

Page 35: (Green Field Development - What's the Prescription?)

- 2. Promote connectivity:



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As the city grows, it is increasingly important to create a built form that promotes walking and other [active](#) mobility options, and that can be connected with other parts of the city, both existing and future. Our current greenfield development does not usually meet this standard, leading to isolated developments that generate car traffic and are often unsafe for other modes of transportation, such as walking and biking.

- a. The Code prescription for new development will include increased connectivity through shorter block lengths, such as 400-500 feet, and by re-examining our minimum lot size to allow for a variety of building types on varying lot sizes.
- b. New tools to encourage creative design that respects the natural environment, such as conservation subdivisions.

3. Protect the natural environment as growth occurs:

Natural features such as rivers, creeks, trees, and open space are critical to creating a people-friendly Austin. One concern with greenfield development is that trees and open space may be lost, resulting in fragmented areas of private green space that are not accessible to everyone, and poor water quality when runoff from the new development reaches existing creeks and rivers. Therefore, the Code prescription entails:

- a. Retain many of our current environmental protections, such as stream setbacks, tree preservation requirements, sensitive feature protection, and impervious cover limits.
- b. Promote green spaces that are connected, desirable, [and](#) multi-functional, [and preserve wild natural areas](#). Examples of this could include preserving land for a network of greenways and urban trails which could be used for recreation and commuting by bicycle or foot, giving people an alternative to roadway connections. [These natural connections can contain areas for nature discovery and play for children, families and individual of all ages and abilities.](#)
- c. Require stormwater to be filtered, retained, or otherwise reused onsite to support vegetation, supply baseflow to local springs and waterways, and reduce potable water consumption. For more information, please reference the previous sections on Water and Watersheds, and Landscape and Trees.

Page 37: (Parks & Open Space: Build Great Public Spaces - Where Are We?)

We're all drawn to people-friendly places where we can interact with nature and the outdoors. [Interaction with nature and the outdoors has been proven to increase the health and wellness of citizens of all ages.](#) Civic and open spaces are important components within a city's overall inventory of outdoor public space. These include metropolitan parks, downtown squares, pocket parks, [waterways, greenbelts](#), and natural preserves, among other types of natural and public spaces. With improved code standards, we have the opportunity to [meet the demand for welcoming and equitable outdoor exploration as Austin grows](#) ~~create more such spaces as Austin grows~~ [by increasing access to](#) places that are active, accessible, comfortable, and sociable. In any city, the places between the buildings need to be designed



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to connect people. Great city parks, plazas, trail systems, open-air and farmers markets, streetscapes, waterfronts, gardens, and other public places all enhance our city's [health](#), attractiveness and livability.

The demand for urban life has increased, but humans also want (and need) access to the outdoors. [Over the past decade studies have shown that exposure to natural environments help people live healthier and happier lives.](#) For example, it's no coincidence that Downtown's residential population growth has largely occurred within blocks of Lady Bird Lake and its wonderful outdoor opportunities. However not all Austinites have access to nearby park space. Thus, as we become a more compact city, we will need a variety (size and function) of parks and open spaces [that are accessible by all ages and abilities](#) distributed across our urban places, [especially Austin's historically underserved neighborhoods and communities](#)

Page 39 - 41: (Parks & Open Space: Build Great Public Spaces - What's the Prescription?)

1. Increase park, [natural wild area](#), and open space types; calibrate them to complement particular contexts; and incentivize the creation of great, active public spaces.
2. Increase access to recreation, as recommended in Imagine Austin, by expanding the number of parks, [preserves](#), [natural play areas](#), and outdoor play spaces [with high biodiversity](#) available to residents.
3. Develop standards for public spaces that are well-designed, ~~and~~ tree-covered, [include interactive opportunities for children to connect with nature](#), and incentivize such spaces in new and redevelopment projects.
4. Infuse recommended code changes from the Parkland Dedication Ordinance:

Parkland Dedication requires developers of dwelling units to provide land for parks or pay a fee in-lieu of land in proportion to the impact their development has on the park system.

- a. Expand the amount of parkland options by setting fees to current land and construction costs and increase the amount of land required to meet the City's current level of service for neighborhood parks (9.4 acres of parkland per 1,000 residents).
- b. Increase credits for developments that agree to provide outdoor spaces that, while not dedicated parkland, are designed and designated for active use by the public. These private park spaces are maintained by the development and can provide unique play areas throughout the city.
- c. Develop standards for public spaces to be used in giving parkland dedication credits. Practices for making earlier decisions about whether land will be given or fees paid on a residential development also give the development community increased assurances about incorporating public space and parkland into their project.
- d. Retain the City's Park level-of-service as codified in the new parkland dedication ordinance. Intense competition for space on parcels in the City's core usually makes parkland an afterthought. Items



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labeled Open Space are routinely stormwater detention and drainage areas, protected tree stands, a swimming pool area for residents, or transitional elements between building types where no recreation items are allowed under current Compatibility Standards. The Code must include:

- i. Metrics or design standards that retain percentages or pervious areas while incentivizing options for active recreation in urban and dense areas, as there is intense competition for space in the city's core.
 - ii. Improve the definition of Open Space to counteract current ambiguity in code.
 - iii. Open space in a project may be designated as a transitional element between building types where no recreation items are allowed under current Compatibility Standards.
 - iv. Open space may also be identified in the stormwater detention or drainage area.
 - v. **Open Space to be equitably prioritized and constructed to provide children, families and individuals of all ages and abilities the opportunity for interactive and educational contact with the natural environment.**
5. Incorporate a metric for green infrastructure, for public space, and other items to obtain higher quality Open space.
 6. Incentivize designing green infrastructure with dual active recreation options to meet dual purposes in the code.
 7. Require connections between new and infill projects to adjacent or nearby parkland.

In 2014, the City Council adopted the Urban Trails Master Plan to guide the creation of an urban trail system. Many connections are needed through private property. Current code has an option for non-residential projects to make connections from their front entrances to adjacent parkland, but it is not mandatory. Requirements for connections to urban trails and nearby parkland will be included in the code.

8. Create a common language and incentivize the use of varied park and open space typologies as identified below:
 - a. Parks:
 - i. Metropolitan Parks
 - ii. District Parks
 - iii. Neighborhood and School Parks
 - iv. Neighborhood and Urban Pocket Parks
 - v. Special Parks



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b. Sub-category of Parks:

The code will address additional sub-categories of parks not included in the PARD Long Range Plan for Land, Facilities and Programs. These sub-categories would help refine the palette of parks. This list generally adds additional parks that are not intended for structured sports activities, such as baseball, football or soccer, [including community gardens, natural play areas and food forests](#). The palette of sub-categories will include standards including placement and location based on context. Sub-categories could include:

- i. Greenway
- ii. Green
- iii. Square
- iv. Plaza
- v. Pocket Plaza
- vi. Pocket Park
- vii. Nature Preserve
- viii. [Wilderness Areas](#)