

Zoning Code Sustainability Ideas

In October 2008, the Zoning Code Rewrite Advisory Committee (ZCRAC) approved an approach to gathering information on sustainability issues that should be considered in the rewrite of the City of Madison's zoning code. The code sets the rules and procedures for the use of land (residential, commercial, etc.) and the scale, mass and form of buildings (height, placement on lot, densities, parking standards, etc.) within the City. The rewrite of the zoning code presents the opportunity to provide recommendations to remove obstacles to sustainability, create incentives for sustainability and enact standards for sustainability.

The approach for gathering input on sustainability issues entailed:

Holding two discussion meetings during the month of November with a cross section of sustainability advocates who represented various topic areas in the sustainability spectrum – energy conservation, renewable energy, water resource conservation, green building – to generate ideas.

Holding a public meeting in early December for feedback on the ideas identified by the discussion groups.

Providing all of the information gathered to the ZCRAC and the consultants who are working with the City to rewrite the code in time for consideration in the draft documents they will present to the committee in January and February.

During the two discussion meetings on November 14th and 25th, a variety of ideas were generated and categorized into broad theme areas, such as Residential and Commercial Districts, Energy, Water, etc. Broad strategies that could be applied to the rewriting of the zoning code to encourage sustainability were also identified. City zoning staff was asked whether they qualified as zoning issues. In each category, those ideas that can be addressed through zoning and which are listed first, are already addressed to some extent in the code. Those marked with ** would be possible to include in the new zoning code. Those ideas that can not be addressed through the zoning code (e.g. issues or topics covered by other ordinances or plans, or ones addressed by state or federal law) are listed separately.

The public meeting held on December 10th was attended by 24 people, including staff, discussion group and committee members; six individuals spoke. They expressed general support for the effort, and felt that the Zoning Code should remove barriers to sustainability wherever possible. They also encouraged the City to think outside the boundaries of traditional zoning, and to develop its own standards for green development that can be utilized by city commissions to evaluate the sustainability of proposed projects. Several specific ideas were suggested, and those have been added to the lists. At the conclusion of the meeting, people were encouraged to stay involved with these issues, and in the Zoning Code rewrite process which will be ongoing for the next year or two; they were also encouraged to visit the website and contact other standing City committees that discuss areas of interest, e.g. Sustainable Design and Energy, and the Commission on the Environment.

Sustainability Ideas that can be addressed through Zoning

ENERGY:

1. Remove obstacles and provide incentives for other renewable energy opportunities
(wind, geothermal, etc)
2. Allow for district cogeneration of heat and power, including geothermal
3. Permit district co-op for alternative energy generation & neighborhood distribution
4. Remove obstacles to renewable energy systems on buildings
5. Allow solar power plants (small and large)
6. Allow for solar orientation—solar access, building placement, street design
7. Allow violations of set-backs when implementing renewable energy systems
8. Provide wind overlay on zones / districts
9. **Create incentives for district heating/cooling in multi-use developments,
industrial and office parks
10. **Allow for electric car plug-in, set aside space for infrastructure

WATER:

1. Allow water storage tanks, cisterns and rain barrels
2. Build in tree protection /tree replacement policies
3. Allow for natural lawns and green space
4. Reduce green space requirement if using non-mowed (natural lawn) surface
5. Establish rules for waterfront development or development close to bodies of water

Sustainability Ideas that can be addressed through Zoning

GREEN INFRASTRUCTURE / URBAN AGRICULTURE:

1. Protect trees, but when they are lost in the process of development they must be replaced.
(e.g., if 1 tree is removed, 2 or more must replace it)
2. Make community gardens a permitted use in all districts
3. Provide urban agriculture (soil) overlay on zones / districts
4. Eliminate/reduce landscape requirement for permeable paving
5. Reduce required green space if implementing non-mowed surfaces-natural lawns,
rain gardens and prairies
6. Allow larger food production and distribution operations within city limits
7. Allow beehives
8. Allow agriculture related accessory structures
9. Allow for farmers markets as permitted use in different zones
10. Mixed use should include urban agriculture, commercial gardens and vertical farms
11. Allow green roofs to count towards open space requirements
12. Percent of lot open space is permeable
13. **Preserve and develop urban land for biomass production
14. **Allow permeable surface requirements
15. **Guidelines (bulk, design) to minimize amount of impervious surface, and/or
require pervious/permeable surfaces

Sustainability Ideas that can be addressed through Zoning

PUBLIC HEALTH:

1. Use permit process to limit number/density of fast food outlets and drive-through windows
(similar to fast cash businesses, etc.)
2. Allow for pedestrian connectivity
3. Allow for “woonerf district”—zone that is ‘car lite’ and ped / bike friendly zones

DENSITY:

1. Increase density in nearly all, if not all, zoning districts; especially downtown
2. Provide bonus for sustainable provisions that exceed minimum standards
3. Allow density bonuses for green features

MIXED USE/TRANSIT ORIENTED DEVELOPMENT:

1. Zoning should encourage mixed use, transit oriented development, especially downtown
2. Transit hubs (and 1/8 mile radius around) should be designated TOD zones, and require mixed use and minimum densities
3. Use incentives for transit alternatives—discourage individual parking options
4. Allow micro, mixed use areas (‘spot’ zoning)-residential / commercial infill, corners, retail, employment, agriculture in all zones / districts
5. Require office parks to include commercial areas so tenants can reduce transportation at lunch time
6. Allow mixed use to include range of uses – residential, commercial, green infrastructure and urban agriculture

Sustainability Ideas that can be addressed through Zoning

RESIDENTIAL DISTRICTS:

1. Small front yard setbacks (and porches) encourage community interaction
2. Permit dwelling units in accessory structures –e.g. “granny-flats”
3. Use of accessory structure for home-based business: crafts, arts, food, ‘stock in trade’
‘commodity’ selling
4. Reduce number of garage spaces allowed
5. Specify a mixture of housing types (densities) to be provided on each block in new developments
(minimum 4 types/block, e.g. affordable, accessible, twin, single family, apartment)
6. Remove large lot size requirements and/or decrease minimum lot size in suburban districts to
encourage density
7. Control maximum square footage (of dwellings)
8. **Allow for lower minimum square footage (of dwellings) *amend building code*
9. **Provide for resource sharing between parcels (water, energy from one building to another)
10. **Maximize flexibility for sustainable practices (urban ag, permaculture, etc)

COMMERCIAL DISTRICTS:

1. Create infill opportunity zones; areas where projects are encouraged with incentives to
developers (tied to transportation)
2. **Density bonus available for LEED certification
3. **Permit buildings to exceed established height limits if they are designed to green building
standards (not necessarily LEED), incorporate renewable energy systems and/or green roofs
4. City should develop its own (non-LEED) standards for green building & development.
5. Encourage preservation of existing buildings to utilize their “embodied energy”

Sustainability Ideas that can be addressed through Zoning

PARKING:

1. Allow greater flexibility for shared parking, perhaps in zones, with guidelines that acknowledge the reality of shared parking and provide incentives to participate
2. Reduce number of cars permitted in accessory parking spaces
3. Reduce parking lot size if based on usage study
4. Change parking focus from floors (minimums) to caps (maximums)
5. Parking zones should be flexible to allow no parking in areas of high density, transit
6. Allow front-faced non-residential parking if using permeable surfaces
7. Require landscaping for off-street parking, include rain gardens
8. Discourage individual parking options; provide incentives for transit
9. Require permeable pavement wherever feasible
10. **In some cases, consider allowing on-street parking to count towards parking ceiling
11. **Eliminate incentives to build underground parking (e.g. density bonus)

Sustainability Ideas that cannot be addressed through Zoning

The following ideas, generated by the Sustainability Focus Group would typically be addressed by something other than the Zoning Code. Staff could provide more complete information on the ability to amend local ordinances to implement these suggestions and any limitations which may exist because of state and/or federal law.

1. Provide incentives for construction that meets green building standards.
2. Prohibit heated sidewalks/driveways
3. Prohibit restrictive covenants on renewable energy
4. Require businesses to turn off lights and signs when buildings are unoccupied
5. Require solar on all commercial and institutional buildings
6. Street trees should be placed and managed for max. solar access
7. Household grey water should be used for flushing toilets, irrigation
8. Require % of irrigation water to be from collected grey water or harvested rainwater
9. Require monitoring of infiltration systems to insure continued successful operation
10. Allow for 100% on-site control or containment of water
11. Allow composting toilets
12. Neighborhood development standards for rain gardens – area/homeowner (e.g. Vilas)
13. Implement Passive House Standard (90% reduction in energy use) by removing obstacles
(if any) to “new” architectural designs, and providing incentives for houses that achieve it
14. Implement Green Affordable Housing Land Trusts (see “The City-CLT Partnership” from
Lincoln Institute. www.lincolninst.edu)
15. Neighborhood streets should be narrow with high curbs (to manage storm water runoff)
16. Combine sidewalks with no sidewalks (on one side of street only)
17. Require drive-up windows to close on air quality alert days
18. Encourage greater variety of parking lot spaces.

Broad Strategies to apply to the Zoning Code Rewrite

1. Zone for future code should reflect future needs and desires – provide a framework for what the community wants to happen (not a structure for what we can't do)
2. Pursue intensive non-single-occupancy-vehicle orientation
3. Code should follow new urbanism principles
4. Zoning code should apply to all districts (all uses allowed in all districts)
5. Consider establishing a Transfer of Development Rights program
6. Provide incentives for doing the right thing
7. Focus the code on permissible uses
8. TNS: Implement the City's policy on The Natural Step, define what sustainability (success) means for zoning, consider the human needs element (conceived broadly) as a part of the equation in every category
9. Inventory special requests (variances, conditional uses, etc) that could be made permitted to remove barriers to sustainability
10. Zoning should adapt to meet the demands of climate change; use zoning to address or mitigate effects, or adapt to climate change; remove any barriers to mitigating the effects, adapting to climate change (trees, green space, mobility, renewable energy, land use)
11. Write the code to allow the city to function when automobile travel will be severely limited and oil-related products, including food and heating fuel, become prohibitively expensive because of the scarcity and high-cost of fuel.
12. Embrace and adapt to take advantage of new technologies.
13. Projects that meet sustainability principles should be eligible for waiver or bonus of zoning regulations that would otherwise limit their success. (e.g. Passive House)

Broad Strategies to apply to the Zoning Code Rewrite (cont.)

14. Establish baseline criteria for determining sustainability of proposals covered by code
15. Provide incentives for sustainable practices – foster innovative design, fast track green building
16. Create “innovation zones” to permit cutting-edge ideas, perhaps utilizing overlay districts.
17. Enable retrofitting of existing neighborhoods for greater sustainability.
18. Codify sustainability elements of site design, e.g. landscaping, water retention, parking and pedestrian connectivity.
19. Keep in mind that technology will evolve, keep code flexible enough to respond.
20. Be innovative with the new code; change statutes necessary to make this possible.
21. Consider creation of a “sustainability review commission” and standards to evaluate projects.
22. Embrace the concept of “wholeness” to promote mixed-use, walkable development.
23. Use incentives rather than police powers to encourage sustainability.
24. Look for ways to say YES, rather than NO.