

Consultant and Staff Responses To the Zoning Code Sustainability Ideas Document

October 14, 2009

Note: Staff and Consultant Responses are in bold italics

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 cannot 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)
Obstacles have essentially been removed by State statute and local ordinances for solar and wind; the zoning code does not contain any obstacles we are aware of.
2. Allow for district cogeneration of heat and power, including geothermal
The zoning code allows “electric power production as a principal use” in the employment districts; this should allow district cogeneration (see 28.082, Table 28F-1). The question remains: should electric power, steam and chilled water production be allowed as a principal use in other districts as a permitted or conditional use? Geothermal is allowed in all districts and is not regulated by zoning.
3. Permit district co-op for alternative energy generation & neighborhood distribution
This would be treated like any other business enterprise; distribution would be a public utility use.
4. Remove obstacles to renewable energy systems on buildings
See Item 1 above
5. Allow solar power plants (small and large)
See Item 1 above
6. Allow for solar orientation—solar access, building placement, street design
The zoning code does not restrict or determine solar orientation. See subdivision standards for layout of new streets.
7. Allow violations of set-backs when implementing renewable energy systems
Solar and wind equipment already allowed to be located in setbacks (28.132).
8. Provide wind overlay on zones / districts
Not needed.
9. **Create incentives for district heating/cooling in multi-use developments, industrial and office parks
The use of incentives to encourage a specific activity or type of development is frequently suggested throughout this paper. The creation of incentives is often a policy issue. The approach used throughout the zoning code rewrite has been to “right-size” the level of

Sustainability Ideas that can be addressed through Zoning

development allowed under the base zoning, rather than using incentives to achieve the desired level of development.

10. **Allow for electric car plug-in, set aside space for infrastructure
Nothing in code would prohibit electric car plug-in sites; largely a site planning issue.

WATER:

1. Allow water storage tanks, cisterns and rain barrels
Nothing in code would prohibit these features; encroachment into setbacks is an issue to be discussed.
2. Build in tree protection /tree replacement policies
Policy issue. Would be more appropriate to consider in a separate tree protection ordinance, like those in use by many other cities. Such ordinances typically include standards for protection of trees during construction, limits on tree removal, and tree replacement requirements.
3. Allow for natural lawns and green space
Nothing in code would prohibit these features.
4. Reduce green space requirement if using non-mowed (natural lawn) surface
Creation of incentives is a policy question to be discussed – continuing maintenance of natural lawn surface is also difficult to monitor.
5. Establish rules for waterfront development or development close to bodies of water
Waterfront development standards in new code would establish new standards for building bulk and setback determination.

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)
See discussion above under Water, item 2
2. Make community gardens a permitted use in all districts
Done
3. Provide urban agriculture (soil) overlay on zones / districts
Urban Agriculture District is included in new code.
4. Eliminate/reduce landscape requirement for permeable paving

Sustainability Ideas that can be addressed through Zoning

Creation of incentives – policy issue

5. Reduce required green space if implementing non-mowed surfaces-natural lawns, rain gardens and prairies
Creation of incentives – policy issue. Could reduce usable open space by 25% if a natural lawn is provided.
6. Allow larger food production and distribution operations within city limits
Done
7. Allow beehives
Allowed in Agriculture, Urban Agriculture and Employment districts under “Animal husbandry”.
8. Allow agriculture related accessory structures
Allowed in Agriculture, Urban Agriculture districts; most structures would be allowed in other districts (accessory building exceeding maximum size = conditional use).
9. Allow for farmers markets as permitted use in different zones
Allowed in most Mixed-Use, Commercial, Employment districts. They were not included in Residential, but will be added as an accessory use to an institutional or nonresidential building (per recent zoning text amendment).
10. Mixed use should include urban agriculture, commercial gardens and vertical farms
See distinction in all use tables between community and market (for-profit) gardens; vertical farms not specifically addressed but would be allowed within height limits.
11. Allow green roofs to count towards open space requirements – *Green roofs count towards ‘pervious’ surface (not included in lot coverage – see 28.211, “lot coverage” definition); roof decks may count towards usable open space in TR-U, mixed-use and nonresidential districts (28.140(1)(d)).*
12. Percent of lot open space is permeable – *New code usable open space requirements disallow paving except for paths no wider than 5 feet and pervious pavement for recreational purposes (28.140(1)(b)).*
13. **Preserve and develop urban land for biomass production
Would be considered as an agricultural use (“Agriculture, Cultivation”), allowed wherever those are allowed.
14. **Allow permeable surface requirements

Sustainability Ideas that can be addressed through Zoning

See discussion under (11) and definition of lot coverage.

15. ****Guidelines (bulk, design) to minimize amount of impervious surface, and/or require pervious/permeable surfaces. *See discussion under (11) and definition of lot coverage.***

PUBLIC HEALTH:

1. Use permit process to limit number/density of fast food outlets and drive-through windows (similar to fast cash businesses, etc.)
Policy issue – may be difficult to define “fast food” or justify from public health standpoint since many chains emphasize healthier options.
2. Allow for pedestrian connectivity
Done
3. Allow for “woonerf district”—zone that is ‘car lite’ and ped / bike friendly zones
Zoning Code does not prohibit Woonerfs, has greater relationship to street standards than to zoning.

DENSITY:

1. Increase density in nearly all, if not all, zoning districts; especially downtown
Lot sizes in many districts have been reduced, thereby increasing potential density; code has been simplified to remove many penalties that prevented density from being realized. Downtown districts are being developed.
2. Provide bonus for sustainable provisions that exceed minimum standards
Creation of incentives – policy issue
3. Allow density bonuses for green features *Same as (2)*

MIXED USE/TRANSIT ORIENTED DEVELOPMENT:

1. Zoning should encourage mixed use, transit oriented development, especially downtown
Downtown districts (TBD) and mixed-use/commercial districts address this issue. TOD overlay (28.104) establishes a basic framework but will be further detailed by station area plans.
2. Transit hubs (and 1/8 mile radius around) should be designated TOD zones, and require mixed use and minimum densities
See under (1) above

Sustainability Ideas that can be addressed through Zoning

3. Use incentives for transit alternatives—discourage individual parking options
TOD Overlay reduces parking requirements; general parking standards (28.141) reduce minimums overall and eliminate minimum requirements in some districts.

Sustainability Ideas that can be addressed through Zoning

4. Allow micro, mixed use areas ('spot' zoning)-residential / commercial infill, corners, retail, employment, agriculture in all zones / districts
This is a policy issue to be discussed – some reviewers prefer small “spot” zones and others prefer a greater level of mixed use in all districts. The current draft allows small-scale corner commercial in most residential districts, community gardens in all districts, home occupations, etc. (see use tables).
5. Require office parks to include commercial areas so tenants can reduce transportation at lunch time
A limited amount of medium-sized commercial and service uses are allowed in employment districts (including office parks) so that commercial uses don't dominate (28.082 and 28.157).
6. Allow mixed use to include range of uses – residential, commercial, green infrastructure and urban agriculture
Mixed-use “mix” varies by district; the most inclusive are the Mixed-Use and Commercial districts, but most districts allow some degree of diversity.

RESIDENTIAL DISTRICTS:

1. Small front yard setbacks (and porches) encourage community interaction
Many front yard setbacks have been reduced; porches may encroach into front yard setback.
2. Permit dwelling units in accessory structures –e.g. “granny-flats”
Allowed via ADU Overlay District (28.108) and in TR-P district (28.052).
3. Use of accessory structure for home-based business: crafts, arts, food, 'stock in trade' 'commodity' selling
Home occupation standards (28.155(1)) allow use of an accessory building by conditional use. Types of uses are limited.
4. Reduce number of garage spaces allowed
Parking standards in new code establish maximums for outside spaces and allow “reservation” of residential spaces without construction (28.141(5)).
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)

Sustainability Ideas that can be addressed through Zoning

Some districts include ‘dispersion requirements’ (SR-C3, SR-VI) to maintain a mix of densities; no districts require a mix on each block. TR-P district calls for a mix of building types in larger projects (28.052(3)).

6. Remove large lot size requirements and/or decrease minimum lot size in suburban districts to encourage density
Lot sizes in some suburban districts have decreased for housing types such as two-family; TR districts generally have smaller lot sizes and could be used for redevelopment in suburban areas.
7. Control maximum square footage (of dwellings)
Buildings of >10,000 SF remain conditional uses in residential districts.
8. **Allow for lower minimum square footage (of dwellings) amend building code – **not a zoning code issue**
9. **Provide for resource sharing between parcels (water, energy from one building to another)
Not a zoning code issue.
10. **Maximize flexibility for sustainable practices (urban ag, permaculture, etc)
Zoning code addresses these issues.

COMMERCIAL DISTRICTS:

1. Create infill opportunity zones; areas where projects are encouraged with incentives to developers (tied to transportation)
Creation of incentives – policy issue. Transit-oriented development allows this.
2. **Density bonus available for LEED certification - *same*
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 – **same. Note that green roofs qualify as “pervious,” thus reducing total lot coverage.**
4. City should develop its own (non-LEED) standards for green building & development.
Not part of zoning rewrite.
5. Encourage preservation of existing buildings to utilize their “embodied energy”

Sustainability Ideas that can be addressed through Zoning

The zoning code neither encourages nor discourages preservation of existing buildings, but reducing minimum lot sizes and parking requirements may help deter demolitions of existing buildings.

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
New parking standards include updated standards for shared parking (28.141(7)); incentive is the ability to construct fewer spaces.
2. Reduce number of cars permitted in accessory parking spaces
Parking standards (28.141) reduce minimums for most uses and eliminate minimums in some districts.
3. Reduce parking lot size if based on usage study
Parking area can be reduced through various methods (28.141(5), Table 28J-4).
4. Change parking focus from floors (minimums) to caps (maximums)
Both minimums and maximums are included for most uses.
5. Parking zones should be flexible to allow no parking in areas of high density, transit
No minimum parking required in NMX, TSS, MXC, CC, TW, EC, SEC, IL and IG except under certain circumstances (28.141(3)); no minimum in TOD Overlay unless specified in station area plan (28.104(8)).
6. Allow front-faced non-residential parking if using permeable surfaces
Not part of draft code; front-faced parking allowed in some districts (CC, SEC) or by waiver based on site constraints.
7. Require landscaping for off-street parking, include rain gardens
Landscaping continues to be required; rain gardens are an option but not a requirement (28.142).
8. Discourage individual parking options; provide incentives for transit
Incentive “policy issue” needs further consideration – what incentives might be appropriate?
9. Require permeable pavement wherever feasible
Permeable pavement may be required as a condition of allowing additional parking that exceeds maximum parking (28.141(6)(a)).

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10. ****In some cases, consider allowing on-street parking to count towards parking ceiling
Not included in the zoning code but can be considered as part of a parking reduction requirement.**
11. ****Eliminate incentives to build underground parking (e.g. density bonus)
Not included in the zoning code**

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)
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. Create 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.

These are broad philosophical issues that need to be addressed at a policy level, thus are difficult to respond to in this format. The new code is oriented towards principles of new urbanism and includes many aspects of sustainability, but will need to be revised and upgraded in the future to address many of these questions.