Memorandum

To: Members of the Zoning Rewrite committee, Cunningham Group, Matt Tucker, Rick Roll
From: Eric Sundquist
RE: Parking standards in the zoning rewrite
Date: 2/1/2009

This note follows an Oct. 20, 2008, meeting that included Tim Gruber, Robbie Webber, Matt Tucker, Rick Roll, Suzanne Rhees, and myself, and several subsequent conversations. The meeting addressed two major concerns with regard to parking: 1) Snow removal in bike parking areas, and 2) car parking standards. The former was addressed at the meeting, while discussion on the second raised several questions, prompting this memo. Below I suggest: 1) a way to decouple car and bike parking, so that changing standards for one does not affect the other, 2) revision of car parking minimums and maximums, 3) a revision of shared car parking rules, and 4) a revision of car parking placement and materials standards.

1. Bike and car parking. Some current bike parking minimums are tied to the number of required car parking spaces, which prevents adjustments to one standard without affecting the other. A solution is to tie the bike requirement directly to the land use, removing the intervening calculation involving cars. For example, museums must provide one car space per 800 square feet of floor area, and one bike space for every 10 car spaces (with a minimum of two spaces). This requirement converts to one bike space for every 8,000 square feet of floor area (with a minimum of two spaces). Such conversions are shown in Table 1 below.

Table 1. Converting current bike parking requirements directly to land use.

Land use	Current bike*	Current auto	Converted bike*
Galleries/museums/libraries	1 per 10 auto	1 per 800 square feet	1 per 8,000 square feet
Places of assembly A (airports, small golf courses, fairgrounds, parks, etc.)	1 per 10 auto	As determined by Zoning Administrator	As determined by Zoning Administrator
Places of assembly B (bowling centers)	1 per 10 auto	5 per lane plus spaces for affiliated uses per relevant standards	1 per every 2 lanes plus spaces for affiliated uses per relevant standards
Places of assembly C (churches)	1 per 10 auto	1 per 10 seats, or per 180 lineal inches of pew, or per 70 square feet of floor area for seating	1 per 100 seats, or per 1,800 lineal inches of pew, or per 700 square feet of floor area for seating
Places of assembly D (amusement establishments, convention halls, swim/tennis clubs, community centers, non-school stadiums, etc.)	1 per 10 auto	10 percent of capacity	1 percent of capacity
Places of assembly E (school and college stadiums, auditoriums, etc.)	1 per 10 auto	1 per 6 seats, or per 108 lineal inches of pew, or per 42 square feet of floor area for seating	1 per 60 seats, or per 1,080 lineal inches of pew, or per 420 square feet of floor area for seating
Places of assembly F (indoor theaters)	1 per 10 auto	1 per 4 seats	1 per 40 seats
Places of assembly G (restaurants, taverns, meeting halls)	1 per 10 auto	30 percent of capacity	3 percent of capacity
Commercial/manufacturing A (agricultural, materials processing, construction offices, highway maintenance shops, junkyards, laboratories, truck terminals, printing establishments, rail yards, warehouses, weigh stations, wholesale establishments, etc.)	1 per 10 auto	1 per 2 employees	1 per 20 employees
Commercial/manufacturing B (automobile laundries)	1 per 10 auto	1 per 2 employees plus 1 for the manager, plus spaces for cars being washed	1 per 20 employees, counting the manager
Commercial/manufacturing C (auto repair shops)	1 per 10 auto	1 per 2 employees plus 1 for the manager, plus spaces for cars being repaired	1 per 20 employees, counting the manager
Commercial/manufacturing D (banks, medical clinics, retail stores, etc.)	1 per 10 auto	1 per 300 square feet of floor area	1 per 3,000 square feet of floor area

Commercial/manufacturing E (cartage and delivery)	1 per 10 auto	1 per 2 employees, plus spaces for vehicles housed on the premises	1 per 20 employees
Commercial/manufacturing F (schools of music, dance and trade)	1 per 10 auto	1 per 2 employees plus one per 5 students at maximum attendance	1 per 20 employees plus one per 50 students at maximum attendance
Commercial/manufacturing G (funeral parlors)	1 per 10 auto	8 per parlor, plus spaces for vehicles housed on the premises	2 per parlor*
Commercial/manufacturing H (business offices)	1 per 10 auto	1 per 400 square feet of floor area	1 per 4,000 square feet of floor area
* Minimum number of bike spaces is 2, per Sec. 28.11(3)(l)1			

2. Car parking minimums and maximums. As we discussed in October, cities around the country are revisiting parking standards in an attempt to reduce costs and move toward sustainability. Ideally, we would remove minimums and let the market dictate parking provision, using residential parking permits, meters, and other tools to avoid conflicts over street parking where needed. We might also ratchet down maximums. If a blanket no-minimum policy seems too great a change, however, another choice would be to find guidance in other cities' experience. Fortunately, Wisconsin offers an example of a city that has done quite well with relatively low minimums for many years – Milwaukee. While Milwaukee's land use classifications do not match Madison's exactly, Table 2 shows our standards with the closest equivalents in Milwaukee. With only a few exceptions, Milwaukee's minimums improve on ours. (In some cases the metrics do not match and some further work would be needed to judge the two on a similar standard.) Milwaukee has tighter maximums on residential and retail, as well, but no maximums on office uses. A starting point then, would be to consider adopting Milwaukee's minimums and maximums where they improve on Madison's, and to retain existing minimums and maximums that are below Milwaukee's.

Table 2. Madison and Milwaukee parking standards compared.

		Current Madison		Milwaukee	
	Use	**Min**	**Max**	**Min**	**Max**
Residential (subsection 2)	DU -- efficiency detached/duplex	.5 - 1	None	0	4
	DU -- efficiency multifamily	.5 - 1	None	.66-1	None
	DU -- 1 BR detached/duplex	1 - 1.5	None	0	4
	DU -- 1 BR multifamily	1 - 1.5	None	.66-1	None
	DU -- 2 BR detached/duplex	1 - 1.75	None	0	4
	DU -- 2 BR multifamily	1 - 1.75	None	.66-1	None
	DU -- 3+ BR detached/duplex	1 - 2	None	0	4
	DU -- 3+ BR multifamily	1 - 2	None	.66-1	None
	DU in fraternity/sorority	1	None		
	DU in hotel/motel	1	None		
	LR	.33-1	None		
	LR -- in private club	30 percent of capacity	None		
	LR -- in fraternity/sorority	0.33	None	0.5	None
	LR -- in hotel/motel	1	None	1 per 1,000 square feet	
Community service and institutional (subsection 3)	Art galleries, museums, libraries	1 per 800 square feet	1 per 400 square feet*	None	None
	Colleges, universities, day care centers, K-12 schools	1 per 2 employees	1 per 1 employee*	None	None
	Convalescent/nursing homes, homes for aged and children, sanitariums	1 per 2 beds	1 per bed*	1 per 4 beds	None
	Hospitals	1.5 per bed	3 per bed*	1 per 4 beds	None

Places of assembly, recreation, entertainment and amusement (subsection 4)	Airports, fairgrounds, carnivals, athletic fields, land/water preserves, golf courses, parks, playgrounds	As determined by Zoning Administrator	As determined by Zoning Administrator	None	None
	Bowling centers	5 per lane	10 per lane*	1 per 1,000 square feet	3.5 per 1,000 square feet
	Bars, restaurants in bowling centers	As determined by Zoning Administrator, based on standards for similar uses	As determined by Zoning Administrator, based on standards for similar uses	1 per 1,000 square feet	3.5 per 1,000 square feet
	Churches	1 per 10 seats, or per 180 lineal inches of pew, or per 70 square feet of floor area for seating	1 per 5 seats, or per 90 lineal inches of pew, or per 35 square feet of floor area for seating*	1 per 6 seats	None
	Misc. "amusement establishments," including dance halls, driving ranges, gymnasiums, skating rinks, convention halls, swim/tennis clubs, community centers, and non-school arenas	10 percent of capacity	20 percent of capacity*	1 per 1,000 square feet for indoor; as required by board for outdoor	3.5 per 1,000 square feet for indoor; as required by board for outdoor
	School stadiums, gyms, stands	1 per 6 seats, or per 108 lineal inches of seating, or per 42 square feet of floor area for seating	1 per 3 seats, or per 56 inches of seating, or per 42 square feet of floor area of seating*	None	None
	Indoor theaters	1 per 4 seats	1 per 2 seats	1 per 100 square feet in auditorium	None
	Restaurants, taverns, meeting halls	30 percent of capacity	60 percent of capacity*	1 per 1,000 square feet	3.5 per 1,000 square feet
Commercial and manufacturing (subsection 5)	Agricultural, materials processing, construction offices, highway maintenance shops, junkyards, laboratories, truck terminals, printing establishments, rail yards, warehouses, weigh stations, wholesale establishments, etc.	1 per 2 employees	1 per employee*	None	None
	Automobile laundries	1 per 2 employees plus 1 for the manager, plus spaces for cars being washed	1 per employee plus 2 for the manager, plus spaces for cars being washed*	None	None
	Auto repair shops	1 per 2 employees plus 1 for the manager, plus spaces for cars being repaired	1 per employee plus 2 for the manager, plus spaces for cars being repaired*	None	None
	Banks, retail stores, etc.	1 per 300 square feet of floor area	1 per 150 square feet of floor area*	1 per 1,000 square feet	3.5 per 1,000 square feet
	Medical clinics	1 per 300 square feet of floor area	1 per 150 square feet of floor area*	1 for each 500 square feet of first 2,000, plus 1 for each additional 1,000 square feet	None
	Cartage and delivery	1 per 2 employees, plus spaces for vehicles housed on the premises	1 per employee, plus space for vehicles housed on the premises*	None	None

	Schools of music, dance and trade	1 per 2 employees plus one per 5 students at maximum attendance	1 per employee plus 1 per 2.5 students at maximum attendance*	None	None
	Funeral parlors	8 per parlor, plus spaces for vehicles housed on the premises	16 per parlor, plus spaces for vehicles house on the premises	4, or 1 per 100 square feet of chapel	None
	Business offices	1 per 400 square feet of floor area	1 per 200 square feet of floor area*	1 for each 500 square feet of first 2,000, plus 1 for each additional 1,000 square feet	None
Miscellaneous (subsection 6)	Cemeteries	10 per interment per hour	20 per interment per hour*	None	None
	Convents/monasteries	As determined by Zoning Administrator, based on standards for similar uses	As determined by Zoning Administrator, based on standards for similar uses	1	None
	Fire stations, utility/public service, radar, sewage treatment plants	1 per 2 employees, plus space for the public as determined by the Zoning Administrator	1 per employee, plus space for the public as determined by the Zoning Administrator*	1 for each 500 square feet of first 2,000, plus 1 for each additional 1,000 square feet	None
	Bed and breakfasts	1 per guest room, plus spaces for family of owner	2 per guest room, plus spaces for family of owner*	1 per room plus 1	None
			*Max as shown or 15, whichever is greater.		

3) Shared parking rules. Though city staff laudably attempts to find shared-parking solutions in order to minimize the area devoted to parking, our current standards work against such arrangements by requiring that shared parking equal the sum of the requirements for each use (Sec. 28.11[3][d]). So if a church, which needed 100 spaces on Sundays, shared its lot with an office building, which needed 100 spaces on weekdays, the ordinance would require 200 spaces in the lot. Many cities have formal means of determining shared parking requirements that avoid this problem. An example is Minneapolis, whose ordinance follows:

ARTICLE IV. REDUCING OFF-STREET PARKING REQUIREMENTS

541.190. Shared parking. The zoning administrator may authorize a reduction in the total number of required parking spaces for two (2) or more uses jointly providing off-street parking when their respective hours of peak operation do not overlap. Shared parking shall be subject to the location requirements of section 541.250 and the following conditions:

(1) *Computation.* The number of shared spaces for two (2) or more distinguishable land uses shall be determined by the following procedure:

a. Multiply the minimum parking required for each individual use, as set forth in Table 541-1, Specific Off-Street Parking Provisions, by the appropriate percentage indicated in Table 541-2, Shared Parking Calculations, for each of the six (6) designated time periods.

b. Add the resulting sums for each of the six (6) columns.

c. The minimum parking requirement shall be the highest sum among the six (6) columns resulting from the above calculations.

d. Select the time period with the highest total parking requirement and use that total as the shared parking requirement.

(2) *Other uses.* If one (1) or all of the land uses proposing to make use of shared parking facilities do not conform to the general land use classifications in Table 541-2, Shared Parking Calculations, as determined by the zoning administrator, then the applicant shall submit sufficient data to indicate the principal operating hours of the uses. Based upon this information, the zoning administrator shall determine the appropriate shared parking requirement, if any, for such uses.

(3) *Process.* An application for shared parking shall be submitted on a form approved by the zoning administrator, as specified in Chapter 525, Administration and Enforcement.

Table 541-2 Shared Parking Calculations

TABLE INSET:

General Land Use Classification	Weekdays			Weekends		
	1:00 a.m.-- 7:00 a.m.	7:00 a.m.-- 6:00 p.m.	6:00 p.m.-- 1:00 a.m.	1:00 a.m.-- 7:00 a.m.	7:00 a.m.-- 6:00 p.m.	6:00 p.m.-- 1:00 a.m.
Office	5%	100%	5%	0%	15%	0%
Retail sales and services	0%	100%	80%	0%	100%	60%
Restaurant (not 24 hr)	20%	70%	100%	30%	75%	100%
Residential	100%	60%	100%	100%	75%	90%
Theater	0%	60%	100%	0%	80%	100%
Hotel						
Guest rooms	100%	55%	100%	100%	55%	100%
Restaurant/lounge	40%	60%	100%	50%	45%	100%
Conference rooms	0%	100%	100%	0%	100%	100%
Religious institution	0%	25%	50%	0%	100%	50%

4) Placement and materials standards. I understand from the briefing by Cunningham at the Jan. 26 Plan Commission meeting that the current draft of the code rewrite would require parking at the side or back of many or all retail and office buildings, a move that comports well with current thinking on sustainable infrastructure. I hope this provision is widely applied.

I also understand the Rewrite Committee is considering loosening Madison's ban on pervious pavements (Sec. 28.11[3][h]2). This would be another important reform to lessen runoff-borne pollution and the need for costly stormwater infrastructure.

From: k McBride [mailto:k2berly2@hotmail.com]
Sent: Monday, March 09, 2009 3:52 PM
To: Roll, Rick; Alice Erickson; Sally Miley
Subject: zoning rewrite concerns

Hi Rick, I spoke to you and the committee on February 26th with concerns about the lakefront building bulk limitation. In our neighborhood along Lake Mendota several houses have already managed to over build on small lots in the last few years. I am concerned that the Building Bulk Limitation, paragraph B in the Zoning Rewrite document will continue this trend for houses on our street (Spring Ct) and other small lake front lots on Lake Mendota Dr. to expand beyond a reasonable size. The 5 developed lots or 300' on either side will affect many of the small lots on our street. I feel lot size has to be addressed in this issue.

I am also concerned about the height of these new homes which are often 30 to 35 feet tall. They are creating a walled in effect. Many have raised the houses up due to the high water table to create exposed basements or the desire for soaring ceilings or additional attic storage.

I would like to see a real building bulk limitation that welcomes growth but at a reasonable width, depth and height for the lot size. This would greatly diminish the need in our neighborhood for uncomfortable Zoning Board meetings that pit neighbor against neighbor and maintain our neighborhood character. Thanks for listening! I would welcome any information that you could pass along on this topic in the Zoning Rewrite process. Kim

From: Alice Erickson [mailto:alicatraz@sbcglobal.net]
Sent: Sunday, March 08, 2009 6:10 PM
To: Roll, Rick
Cc: 'Alice Erickson'
Subject: zoning rewrite

Rick,
I was unable to attend the public zoning rewrite meeting the other week but my neighbor gave me some notes on it (listed at the bottom of this email).

As a 30 year resident of Spring Court I do have concerns regarding bulk having watched the Spring Harbor neighbor being reconstructed over the last decade.

Regarding bulk - it looks like it is based on square footage of the main floors. I'd like to give an example where this rule would not prevent bulk.
Look at 5110 Spring Ct (3570 sq ft on the accessor page) and 5116 Spring Ct (3469 sq ft on the accessor page). While 5116 would qualify as being smaller it dwarfs 5110 in mass. If you haven't visited Spring Ct, a quick trip is worth a million words. The problem is that 5116 hit water when they were constructing the house and raised it. Thus their basement is raised, making the house huge. Additionally they were allowed to attach a 2nd floor walkway to the garage which again enhances the feeling of mass. (meanwhile the accessor page calls it a 'detached' garage).

Secondly for the rule indicating floor space can be increased dependent on the 5 developed neighbors on either side makes me worry that large houses like 5116 can slide in and then be used as precedent for neighboring houses to increase in size. Again, as an example on spring Ct, 5118 (2922 sq ft) was the largest house on spring ct for years. In the last 10 years, with tear downs, the general size has inched up and now 5118 is miniscule next to the giant houses surrounding it. Thus when it is finally sold, it will be a tear down and another house of great mass will go up to match the neighbors.

Thank you for your efforts on the rezoning rewrite.
Sincerely,
Alice Erickson
5109 Spring Ct

Lakefront Development Building Bulk Limitation.
The total floor area of the principal building on the lot shall not exceed 50% of the lot area or 2,500 square feet, whichever is greater. (Attic and basement spaces are typically not included in total floor area). The following exceptions to this standard are allowed:

A. For buildings that already exceed the maximum floor area, an addition of up to 500 square feet may be permitted within any 15 year period.

B. Floor area may be increased beyond the maximum when the established floor area of at least 50% of the principal buildings on the 5 developed lots or 300 feet on either side already exceeds the maximum floor area ratio. If this method is used, floor area shall not exceed that of the largest residential building within the specified distance (5 lots/300 feet).

From: David Williams [mailto:dvdwilliams51@yahoo.com]
Sent: Monday, December 08, 2008 9:56 AM
To: Rhodes-Conway,Satya
Subject: another item for zoning?

Several weekends ago I attended the Family Farm Expo with John Peck in Chicago--there was a big workshop there on urban ag and one of the issues emphasized was the huge obstacle posed in many cities by zoning and other restrictions on composting--you have probably already thought of this (maybe it was on one of those lists we compiled--I can't recall) but I just thought I'd mention it--DLW

Subject: FW: Zoning Code Rewrite Draft - Residential Districts
Date: Fri, 17 Oct 2008 08:16:03 -0500
From: rguest@veridianhomes.com
To: cschaeff@smartgrowthgreatermadison.com
CC: dsimon@veridianhomes.com; jrosenberg@veridianhomes.com; BMunson@vandewalle.com

Good morning Carole, thank you for providing us with a draft of the residential rewrite proposal. Attached are our initial comments - as we knew, the details are very important and are the focus of our concerns particularly with regard to smaller sites and TND neighborhoods, both of which are tools to create affordable market rate housing opportunities in the city. Comments with respect to those particular concerns are found under specific district review, section 3) TR-P. We want to be sure these concerns are made clear to the appropriate parties with both the city and consultant group. This review memo can definitely be used as we have presented it and/or we can attend any meetings where these items will be discussed. I will also send a printable version of these notes by separate e-mail immediately following this message.
Roger

-----Original Message-----
From: Roger Guest
Sent: Thursday, October 16, 2008 1:11 PM
To: Roger Guest
Subject: Zoning Code Rewrite Draft - Residential Districts

1. General Provisions
    A. Permitted Yard Encroachments
        a) Don't understand eaves and gutters 3' all yards but 2' front yard note
        b) Is there a maximum projection of uncovered decks above 3' into rear yard, used to be 6' maximum
        c) Is a 74' high communication tower really allowed in side yards, and if so why not in rear also?
        d) Should some of these permitted encroachments have standards associated with them similar to Residential Use District
        Chart? For example would a "Bilco" egress window permitted in front yard require screening?
    B. Accessory Buildings
        a) Is there a maximum number of accessory buildings allowed as well as maximum area and percentage of yard covered?
    C. Front Yard Averaging
        a) No comments
    D. Design Standards
        a) These appear now to apply to all residential districts as opposed to originally applying to the R2-S,T,Y and Z districts as tradeoffs for increased density. I will discuss the sidewall offset and garage setback requirements in review of specific zoning districts to follow, and while I agree from a design standpoint with the garage requirement there may need to be the possibility of exceptions due to site conditions and/or a phase in time for districts where they do not currently apply. This will likely be addressed by builders of this plan type.
        b) The nonresidential long façade articulation might better address street facades over 40' in length with plane break requirements rather than increased setbacks
2. Residential District Uses
    I have not compared conditional and permitted uses on a line by line format with those in existing code but these are some general comments
        a) Is there a way to highlight changes (if any) from existing code?
        b) The articulation of applicable standards for the permitted uses will be important here – I know that's yet another level of detail but want to mention it – for example limits on day care occupancy, location of chicken housing, requirements for leased parking, increased setbacks for certain building types or uses, etc. I'll review this more specifically in zoning district review to follow.
3. Specific Zoning District review
    For this I'm going to comment on three of the districts, SR-C2 as compared to old R2, SR-V2 as typical of multi-family though I'm sure there will be more comments from builders of predominantly these building types, and TR-P as replacement for R2S, T, Y and Z.
        A. SR-C2

a) This seems comparable to R2 as intended with a slightly reduced rear yard requirement except that the garage setback design standard is introduced to this zoning district which may cause some resistance. Also if this district replaces the current R2, what happens when someone wishes to substantially remodel what is now a non-complying structure due to garage location?
b) Should there be a height limit on civic/institutional buildings when located in this district further than that created by increased setback requirement?

B. SR-V2
a) No height limit on civic/institutional buildings other than dictated by increased setbacks
b) General definition of how building height is determined would be helpful – does one element of structure (ie: church steeple) determine height, how is height of pitched roof building determined?
c) Why is single-family attached (rowhouse) setback less than detached single family and multi-family? The difference in setback from multi-family is interesting in that a design requirement for mult-family is that 1st floor units have direct street access creating a building likely very similar in appearance to rowhomes. Also single family front setback in presumably less dense TR-P district is only 15' vs.the 25' required here.
d) If this is the district alley access rowhomes are most likely to be built in, there needs to be some way to address the rear yard setback to allow this configuration as part of standard zoning.

C. TR-P
This district as a replacement for R2-S, T, Y and Z, which recently have been used frequently to create well designed, higher density single family neighborhoods, seems to have the most differences from the districts combined.
a) The R2-Z district has been eliminated. As noted in the draft, the 3500sf site minimum has been increased to 4000sf minimum. From our development standpoint this eliminates two alley access site types, 37'x95' (3515sf) and 45'x80' (3600sf) which currently comply with existing R2-Z standards. These smaller site sizes seem appropriate to the alley access sites where more people are looking for reduced home and yard maintenance but preferring a single family home. This difference in site size was one reason the existing ordinance separated alley access and street access districts, having previously been shown one size did not fit all very well. Additionally, the smaller alley access sites helped create more affordability in market rate housing. Finally, would both alley and street access sites in the same zoning district create a possible streetscape scenario of mixed garage forward and garage rear within the same block if sites were individually sold?
b) The addition of the sidewall offset standard in this district – it was not applicable in the replaced districts – creates more inefficient construction and land use particularly on 1 story street access and all alley access homes. With respect to alley access neighborhood and home planning the zero lot line concept has been widely used with a variety of interpretations but the focus was to create usable sideyard space by giving one home land rights up to the wall of the adjacent home. The home with land rights would have a courtyard space with deck or patio and the adjacent home deliberately had a flat neutral wall with minimum and/or high windows to preserve outdoor privacy for the neighboring courtyard. Offsetting this neutral wall reduces courtyard space by forcing rear portion of home into it and complicates descriptions of land use rights, currently a simple straight front to rear sideyard use easement. On single story street access homes, the footprint usually is greater than 40' in depth, in part due to the rear wall of the home ending up further back because of recessed garage facade requirement, this was one of the trade-offs for the improved garage design – in short the design emphasis was placed on an attractive streetscape as well as efficient land use and construction.
c) This district, replacing those originally all single family, would appear to include twin homes by right on any lot greater than 44' wide. It would be interesting to hear the rationale that 22' of site width works for a twin home, add a second side yard of minimum 5' for A total of 27', but a 37' single family site doesn't. Further, if this zoning replaces current exclusively single family zoning, how does it relate to existing neighborhoods built under the old ordinance in which there are plenty of sites wider than 44'?
d) I don't understand the 60' minimum site width for accessory dwelling unit – is this another example of how requirements don't work well when applied to both street and alley access sites? On an alley site, you may want a bit more usable open space, but a "granny flat" over the garage does not add width to the structure. Also the height of an accessory structure should be limited to the lesser of height of principal building or 2 stories/35' – a flat over garage of a 1 story structure would just look bad! Finally, why a 1' difference in rear setback if unit over garage?
e) As mentioned in previous districts, height limit for civic/institutional uses? Also greater side yard might be desirable depending on use or size of structure.
f) Why is 2' rear yard setback limited to attached garage, I know it's Wisconsin but if someone wanted I would think detached should also be allowable with same setback. I am of the opinion that too much is being attempted in one district here. We went down that route with R2-S, which was not widely used in part due to issues reoccurring here. Further, in districts that have the best possibility of achieving market rate affordable housing, we should be careful in adding zoning requirements that

translate rather directly into construction dollars, more wall offsets, roof breaks, increased site size, etc.

D. Definitions and general questions
   a) Seems to be some gray area in pervious pavement and parking – pervious pavement can be included in usable open space, but usable open space really isn't intended for parking. Also, is gravel pervious pavement?
   b) Does usable open space area still have same dimensional requirements as in old ordinance? Are decks and patios usable open space? Which of these definitions are additions and which replacements – if something not here is it as it was?
   c) How will these new requirements relate to current zoning requirements in areas of existing construction, are some of the new districts intended only for new construction and others for primarily existing areas.

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From: Paul Hampton [mailto:pham@vierbicher.com]
Sent: Thursday, October 16, 2008 4:09 PM
To: Paul Hampton; Diane Milligan; Roll, Rick

Hello Everyone,

ADU comments:

- As some people have already mentioned, parking is certainly a potential concern. In particular, many of the neighborhoods in Madison feature housing which has only a one car garage or no garage. In those places many residents are already using the street as a primary parking spot. Adding ADUs would increase that practice. I do not necessarily feel like street parking is bad, but in neighborhood planning processes I have heard many residents express concern over parked cars and the reduction in visibility they cause.
- How will ADUs be considered in density calculations? For example, if a neighborhood drafts a plan which recommends residential density remain at 8 units per acre would ADUs be counted towards that density requirement, or would only principle structures be considered?
- I have read and heard a lot of concern over ADUs becoming student housing. I agree that there is potential for that and if possible some regulation should be involved. However, the living situation of an ADU (a small efficiency like space) doesn't seem conducive to the type of student people are apprehensive about. As someone mentioned earlier, an ADU would be a great place for a grad student to live. I am not sure that is necessarily a bad thing.
- I agree that some requirement must be made to limit the mass of an ADU added onto an accessory structure (i.e. detached garage).
- I second what Mike Slavney said in regards to the potential for ADUs to address affordable housing needs; especially because they are targeted at the aging population, and studies have shown that the greatest economic inequality occurs in the age cohort over 50. Because of this I don't think I like the idea of requiring the ADU resident be a relative of the home owner. What if a resident wanted to offer the space to a different senior? The need to provide affordable housing to the population outweighs, in my opinion, the need to regulate out certain groups of people (like students). Of course that is not to say both could be achieved with some type of creative solution.

Thanks,
Paul D. Hampton
Community Planning and Development
Vierbicher Associates, INC.
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Madison, WI 53717
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Fax: (608) 826-0530
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From: Ledell Zellers [mailto:lzellers@mailbag.com]
Sent: Monday, September 15, 2008 9:34 PM
To: Roll, Rick
Subject: Green growth gambit

Green growth gambit

Albuquerque's new "form-based codes" could offer city planners another model for denser, more pedestrian-friendly growth.

http://newmexicoindependent.com/view/abqs-form-based

This may be of interest to members of the Zoning Rewrite Committee:
http://www.preservationnation.org/issues/teardowns/

Ledell Zellers
510 N Carroll Street, Madison, WI., 53703

From: Ecodensity
To: Ecodensity
Sent: Thursday, June 12, 2008 5:00 PM
Subject: Council Approves EcoDensity Charter

Council Approves EcoDensity Charter
Vancouver City Council unanimously voted on June 10 to adopt the EcoDensity Charter.

The EcoDensity Charter commits the City to make environmental sustainability a primary goal in all city planning decisions - in ways that also support housing affordability and livability.

The first two actions to be implemented by the City immediately are:
1. Rezoning policy for greener buildings: Applications for new rezoning will need to meet a minimum LEED™ (Leadership in Energy and Environmental Design) Silver rating, or similar equivalency in green design. The City will also be expecting that energy performance, water efficiency and storm water use be considered.

2. Rezoning policy for greener larger sites: Changes to rezonings for land that is two acres or more. A number of sustainability measures will be required for these rezonings, and for sites with housing, a range of types and tenures must be considered to increase affordable housing opportunities.

Longer-term actions that will receive priority include: an interim EcoDensity rezoning policy; options for backyard/laneway housing; more options for secondary suites; and removal of barriers to green building approaches.

Council initiated the EcoDensity program in July 2006. The final Charter and Actions incorporated public input from a Special Council Meeting that lasted seven sessions, amongst numerous other public consultation opportunities.

To view the EcoDensity Charter and Initial Actions and for more information: vancouver.ca/ecodensity

From: <RICKSWANSONW@aol.com>
Date: Tue, Jun 10, 2008 at 8:43 PM
Subject: a quick note on the zoning
To: satya.vadia@gmail.com

I just wanted to say the zoning on unrelated people is not all bad. In the past our neighborhood was able to keep a home for sex offender out due to this. Please remember there is good and bad in this. Plus does another truly care when no one is creating a problem. Plus I believe it is up to 4 unrelated people in a resident but I am not positive on the number. Let put out all of the information actually before one leap to an opinion. By not having all of the information peoples do and can just become un inform and ignorant of the whole picture.

But as for the chicken why would anyone keep them in an apartment. They are not the cleanness animal and can become a problem with odor and noise. And yes I have had the chicken at different point in my life before and I speak with personal knowledge on them. But if this changes does the landlord has the right to simply say no to them and evict people quickly if they do not do it within a reasonable time period as a couple of days. Then what would happen if someone has allergies to them if they move in afterwards? Lots of question here.

Just a concern person. Carl

From: Lisa MacKinnon [mailto:lmacmadison@gmail.com]
Sent: Monday, June 16, 2008 5:29 PM
To: Roll, Rick; Tucker, Matthew; Nan Fey; Fruhling, William
Subject: Resource on Health Impacts of Green Building/ LEED ND

Hi All:

Here's a resource that might be useful for the zoning re-write committee.
https://www.usgbc.org/ShowFile.aspx?DocumentID=3901

Cheers,

Lisa MacKinnon

From: Nan Fey [mailto:nanfey2@gmail.com]
Sent: Tuesday, June 17, 2008 4:28 PM
To: Roll, Rick; Murphy, Brad
Subject: Article: Is America's Suburban Dream Collapsing?

This article is circulating on the RNA list serve today. Food for thought in the Zcode Rewrite process…..

Is America's Suburban Dream Collapsing?
by Lloyd Alter, Toronto on 06.17.08
DESIGN & ARCHITECTURE

For a long time, Toronto ran counter to events in the United States; in the last 40 years there has been a dramatic switch where the rich live in the centre, and the poor have moved to the suburbs. The downtown rapidly gentrifies, while the new suburbanites have fewer social services, lousy transit and lots of cars.

Now it is happening, rapidly, in American cities as well. Lara Farrar writes for CNN a depressing article titled Is America's suburban dream collapsing into a nightmare? While the foreclosure epidemic has left communities across the United States overrun with unoccupied houses and overgrown grass, underneath the chaos another trend is quietly emerging that, over the next several decades, could change the face of suburban American life as we know it.

The article continues: This trend, according to Christopher Leinberger, an urban planning professor at the University of Michigan and visiting fellow at the Brookings Institution, stems not only from changing demographics but also from a major shift in the way an increasing number of Americans -- especially younger generations -- want to live and work."The American dream is absolutely changing," he told CNN. This change can be witnessed in places like Atlanta, Georgia, Detroit, Michigan, and Dallas, Texas, said Leinberger, where once rundown downtowns are being revitalized by well-educated, young professionals who have no desire to live in a detached single family home typical of a suburbia where life is often centered around long commutes and cars.

Then the article turns nasty: [Metropolitan Institute Director Arthur] Nelson estimates that in 2025 there will be a surplus of 22 million large-lot homes that will not be left vacant in a suburban wasteland but instead occupied by lower classes who have been driven out of their once affordable inner-city apartments and houses. The so-called McMansion, he said, will become the new multi-family home for the poor. "What is going to happen is lower and lower-middle income families squeezed out of downtown and glamorous suburban locations are going to be pushed economically into these McMansions at the suburban fringe," said Nelson. "There will probably be 10 people living in one house." John Laumer reminds us that this happened before- after World War II all the big downtown houses were converted to rooming houses while those with money chased the suburban dream, and also notes that new urbanism isn't the only thing driving this trend, it is also the price of gas and where the job growth is. Having seen it in Toronto, I can say from personal experience that it is not without its challenges.

full article at http://www.cnn.com/2008/TECH/06/16/suburb.city/index.html?iref=werecommend

General Information
Name : Chris Lukas
Business :
Address : 2138 Sommers Ave.
City : MADISON
State : WI
ZIP : 53704
Email : lukas@luhala.com

Message :
My primary comment on the zoning rewrite is that I am concerned with increased density in existing residential buildings.

I think it's fine to build new apartments or condos in appropriate areas to increase density.

What I don't think is a good idea is allowing more unrelated people to live in existing houses or apartments. I also don't think it's a good idea to easily allow additional apartments to be built within existing houses/buildings.

Thank you,

Chris Lukas

General Information
Name : Deborah Aguado
Business :
Address : 1917 E. Dayton St. #1
City : Madison
State : WI
ZIP : 53704
Email : madcitydeb@yahoo.com

Message :
Sorry, chickens belong on farms not in city neighborhoods - buy a farm if you want farm animals. The noise from airplanes, trains, traffic, and barking dogs is bad enough now you want to add chickens into the mix!!!

My quality of living would be greatly disturbed by paying rent on a 2-flat and being forced to share the backyard I was paying for with chickens, their mess, and their smell.

My suggestion is to keep farm animals on a farm where they belong.

From: Tom Haver [mailto:thaver@tds.net]
Sent: Tuesday, June 10, 2008 1:45 PM
To: Tom Christensen
Cc: Roll, Rick; Rummel, Marsha; council; Mayor; Dave Zweifel
Subject: Re: Zoning code rewrite

Dear Tom et al,
I heartily agree with your assessment. As a business person, homeowner and rental owner on the near east side, I couldn't have said it better. Where we have been granted a variance to build on the existing third floors of area apartments, the city building department has rightly insisted on the upgrading of smoke detection systems through out the building to an interconnected, hard wired, battery back-up alarm system. This insures timely warning in the event of a fire. I think this goes a long way toward addressing the safety concerns associated with this option.

Green space is more easily provided in this neighborhood by the numerous lovely parks available, rather than requiring individual parcels to provide parking and recreational outdoor space. Parking is of little concern to a sizable portion of the residents of the near east side. A large percentage of the residents find walking, biking and public transportation viable for their needs.

Zoning is how we shape our communities. Let's not apply a city wide standard that ignores the needs of individual neighborhoods.

Thank you Tom, for your thoughtful comments.
Tom Haver

Tom Christensen wrote:
Rick,
I've been a resident of 1243 Jenifer for 30 years, a major Real Estate Broker in central Madison for 25 years, a property manager of 64 living units mostly in Central Madison, am a current owner of 4 businesses in Central Madison, a parent having sent 3 kids thru the full school system here, and past President 2 times of The Greater Williamson Area Business Association. I have one request regarding the zoning rewrite: **Please have the zoning rewrite permit adding third floor living units in already existing residential buildings, at least those that have the space already present but not yet finished off.**
I live in a 3 flat, one of many in central Madison that would not meet the current zoning requirements for adding a 3rd floor unit. Currently it is forbidden to finish off other 3rd floor spaces in Central Madison, due to green space and parking requirements. The argument for removing this limitation includes the following points:

- With the emergence of Community Car, the push for more mass transit, the unrelenting increase in gas prices, the parking requirement is outdated, and its removal will bring more people closer to their full range of destinations and thus reduce transportation costs and pollution.
- Since I could give you a long list of buildings that had their third floors finished off prior to the 1976 zoning code arrival, and without a single owner, or tenant, ever having shared a complaint with me, I think there is history to prove finishing off these spaces is desirable and not a hazard in any way but some far-fetched, fear based, reaction.
- We all know that increased density is the most obvious remedy for the sprawl that has so many detrimental costs connected with it, and this change does enable a small, widely distributed, and thus hardly noticeable, increase in density.
- Adding a 3rd floor unit to most properties with available and unfinished space will add 20% +/- to the value of the property. Presuming an average current value of $300,000, and, say 100, of these properties, we can project a tax base increase of $6 mil. Given a mil rate of .0021, this represents an increase in annual tax revenue of $126,000 PER YEAR, enuf to pay for probably 3 more teachers per year in our schools. Change the numbers if you don't accept my estimates. In any case the financial outcome is very positive.
- Should this change be put in place, there will be a significant amount of construction income enjoyed by those in the trades as the buildings are upgraded. Assuming a modest $30,000 per unit, and again 100 units, this represents $3 million dollars of one time income to add to the Central Madison revenue cycle.
- Post construction there will be more units needing repair attention adding to the income base of the local tradespeople.
- Post construction there will be additional rental income accruing to the owners, many of whom are owner occupants who will enjoy a cushion against rising living expenses as we age, and/or provide additional income to devote to keeping the properties in good repair.
- Of significant importance, these units will rent for less than new construction, and thus be more affordable than newly constructed housing…without requiring TIF's or any other subsidies!
- Permitting housing on the third floors of these already constructed buildings, which has proven itself over more than 30 years as workable, is one more tool we have to reduce our carbon footprint here on this big rock, i.e. the most costly and resource intensive elements are already constructed.
- The business districts in Williamson and E. Johnson, always benefit from increasing the number of residents in an area. The current small biz environment suffers from the fact that the Isthmus will never get wider, and thus we have a natural constriction on the growth of the customer base for these areas. Any increase in density, fosters an increase in business viability. This is not a minor point. Healthy businesses hire more local people which sets up a nice income circle multiplying the healthy financial impact from the business. Further, much of community cohesiveness emerges out of the chance meetings of people carrying out their shopping needs. Additional businesses, or current ones expanding, provide more opportunities for this essential community building "accident".

I really can't imagine what the argument would be to continue prohibiting finishing off these existing 3rd floor spaces. If there is a rationale, please advise me, and I will debate it with the experience and information base I have accumulated over these past 30 years.
Best Wishes – Tom C.
p.s. Please forward this wherever it might prompt the thinking of those interested in this topic.
p.s. 2. Comments to the TO: and CC: people, if you support this notion, would make a difference.

Tom Christensen, Broker SRES, RECS, ABR, GRI, CRS
Robin Kaltenberg, Office Manager

T. Christensen Co. LLC
Central Madison Residential and Investment Real Estate
Solving People's Real Estate Problems Since 1983
1243 Jenifer, Madison, WI, USA 53703
Ofc 608-255-4242 Fax 608-255-4999
www.centralmadison.com

From: Roll, Rick
Sent: Tuesday, June 10, 2008 3:59 PM
To: Ethington, Ruth
Cc: Murphy, Brad; Waidelich, Michael
Subject: Link to Sustainable Community Development Code

Dear Plan Commissioners,

This is the link to the Sustainable Community Development Code I mentioned at last night's meeting. This is a work in progress, but I believe it provides some interesting information.

http://www.clarionassociates.com/pdf/Sustainable%20Community%20Development%20Code%20Beta%20Version%201.1.pdf

Rick Roll, AICP
Senior Planner
Department of Planning and Community
and Economic Development
Planning Division
215 Martin Luther King, Jr. Blvd.
P.O. Box 2985
Madison, WI 53701-2985
608-267-8732 PH
608-267-8739 FAX
rroll@cityofmadison.com

From: Rhodes-Conway,Satya
Sent: Tuesday, June 10, 2008 12:04 AM
To: Roll, Rick
Cc: Waidelich, Michael
Subject: for zoning advisory committee

Rick -

I found this paper on flexibility vs. certainty in zoning codes helpful in think about our rewrite and some of the issues raised. Would you please share it with the committee? The link is http://www.city.palo-alto.ca.us/knowzone/news/details.asp?NewsID=872&TargetID=239.

Here's another resource to share:

Overcoming Obstacles to Smart Growth through Code Reform

http://www.lgc.org/freepub/PDF/Land_Use/sg_code_exec_summary.pdf

Thanks
Satya

General Information
Name : Jim Winkle
Business :
Address : 813 Emerson Street
City : Madison
State : WI
ZIP : 53715
Email : jim@EventsGalore.net

Message :
Hi,

I understand you're interested in hearing comments from the public about zoning. In general, I'd like to see a strong focus on sustainable ideas. What does this mean? For me, it means at least the following.

Encourage building design to use as little electricity as possible. Electricity consumption is the #1 cause of global climate change not cars, as many think. For example, I believe every new house should include a whole house fan. They're cheap to install at build time, and will save a large percentage of a house's electricity consumption because air conditioning won't be needed.

Encourage the use of renewable electricity. We converted to solar, but the up-front costs can really scare people away, even though long-term it's far less expensive than paying your electric bill. Can a program be started to encourage people to make these investments, like in Berkeley? Small roof-mounted wind generators will be hitting the market soon encourage people to start using these, too.

Encourage the use of solar for lighting and heating.

Encourage good quality affordable housing options, like co-housing.

Encourage better mass transit higher densities are fine. In particular, I'd like to see buses run more frequently, about twice as often as they do now. This doesn't necessarily mean twice the number of buses and drivers... just stagger the routes that go down frequently used corridors.

Have more paved bike/ped paths. Clear them quickly in the winter. Make them wider in frequently used areas, especially where there are many walkers and bikers.

Devote more space to community gardens. Community gardens in Madison are wildly popular... let's get them in more neighborhoods.

Encourage shorter car trips by meeting most of people's needs within a shorter distance. Better yet, eliminate car trips by meeting most of people's needs right in their neighborhood.

Thanks for allowing me to provide input!

General Information
Name : Marginboredom
Business : transportation
Address :
City :
State :
ZIP :
Email : marginboredom@gmail.com

Message :
If I see another historic building torn down for some piece of crap capitalistic want I will leave Madison. I am a professional driver. I was born at Madison General. In the 28 years I have lived in Madison almost my whole life I left once and should have stayed away.
If Madison gets this one wrong....I will take my advice and come back only to say, "I told you so." Look to the natives or the people that have seen things change. I am proud to live in Madison, but its spiraling out of control with young aspiring politicians who are using Madison as a stepping stone to enter a very very broken political United States of Corpocracy and the almighty Dollar. Think long and hard about this one and if you want my input, its free!

From: Gari Berliot [mailto:gberliot@ameritech.net]
Sent: Tuesday, August 05, 2008 11:34 PM
To: Roll, Rick
Subject: Zoning Re-Write

Mr. Roll,

The following comments came from the email send outs.. These are items that one citizen would like included. I have comments.

(1) Ordinance allowing chickens is good!
(2) Would like to be able to create a second dwelling unit in large older house in R1 district, to rent out. Says that many folks need additional income to stay in their homes.
(3) Would like to see more cooperative living/housing in city.

My comments -

#1. Allowing chickens is bad! Disease, manure, odor, lice, rodents are attracted (more disease), noise, feed scattered about the back yards, wire fencing, small buildings for shelter, feathers flying around (all detrimental to housing value). How do they propose to dispose of the manure? There is a reason that most farmers keep their chickens away from the house; they are DIRTY.

As an interesting aside. The city licenses pets. The city fines you if you don't have a license and/or current shots and then makes you get that done. Yet here we have chickens! Go figure.

#2. I've commented before on elderly being taxed out of their homes!
This is criminal. They need tax relief! So now there is a proposal to let them add rental space so they can pay their taxes!

#3. What is cooperative housing?

These proposals are medieval or at least 19th century.

Gari Berliot
221-2022

General Information
Name : Doug Carlson
Business :
Address : 1018 Oakland Ave.
City : Madison
State : WI
ZIP : 53711
Email : dcarlson5dc@aim.com

Message :
I live in an historic neighborhood (Vilas), zoned R4A. The majority of the houses in the area do not comply with the setbacks in R4A. For instance, approximately 3/4 of the houses on my block have front setbacks

From: Hall, George E - DOA [mailto:george.hall@wisconsin.gov]
Sent: Wednesday, July 16, 2008 1:53 PM
To: Roll, Rick
Subject: Form-based codes

Here's some interesting reading you might want to share, containing a number of links to articles as well as other web sites.

The message is ready to be sent with the following file or link attachments:
Shortcut to: http://www.formbasedcodes.org/resource.html

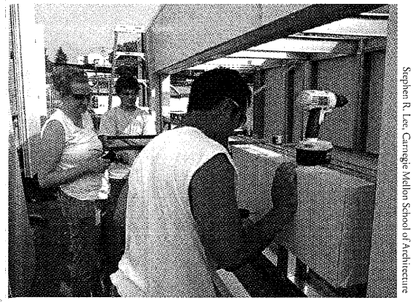
General Information
Name : Amanda Hower
Business :
Address : 513 S Mills St
City : Madison
State : WI
ZIP : 53715
Email : amandahower952@gmail.com

Message :
I am researching the affordable housing components of the zoning code rewrite. Are there any provisions in the new zoning code that requires certain districts to maintain a certain amount of housing as affordable? Or, are there any specific changes that give incentives to developers for building affordable units such as density bonuses?

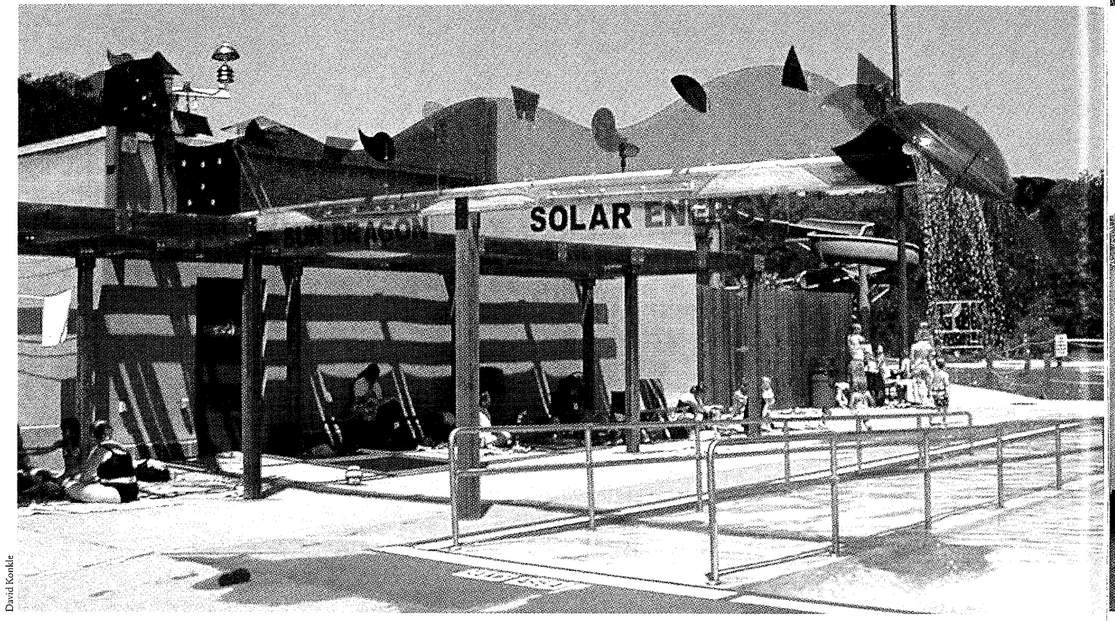
I would like to gather as much information as possible about the residential districts and how the City is planning to maintain and expand its affordable housing stock.

Thank you.

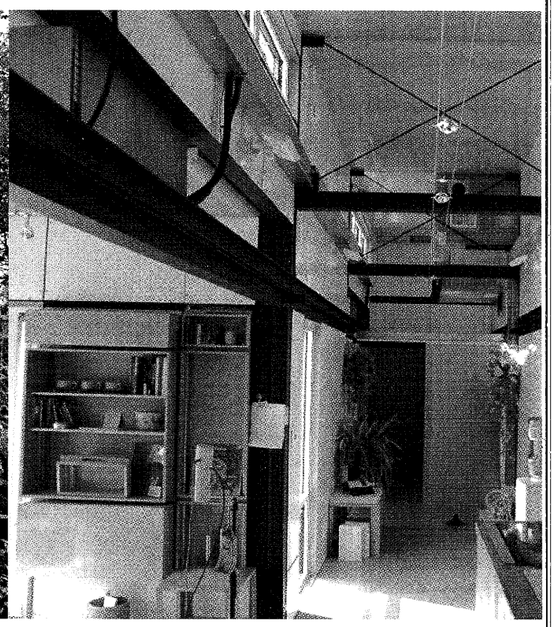
Solar collectors disguised as a "sun dragon" are used to heat water at Ann Arbor's Fuller Swimming Pool. Right: Students from Carnegie Mellon University working on the school's entry in the 2007 Solar Decathlon held in Washington, D.C.



Stephen R. Lee, Carnegie Mellon School of Architecture



David Konkle



Let the Sun Shine In

Recent federal funding encourages planning departments to take the lead in residential solar programs.

By Corry Berkooz

With plans in hand, Michele Hannoosh and Richard Janko approached the Ann Arbor, Michigan, building department in mid-2007 for permission to install a photovoltaic solar system on the roof of their single-family house. After some initial confusion, Hannoosh says, "it was pretty easy" to pass the inspections. The whole process—from contacting local solar contractors to getting permits to turning on the lights—took about five months.

Ann Arbor is not the only city that is catching up with residential demand for renewable energy. Home owners baffled by confusing

permit requirements are approaching planning departments for help all over the country. In response, planners from Pittsburgh, Pennsylvania, to Portland, Oregon, are scrambling to revise their codes and streamline permitting processes.

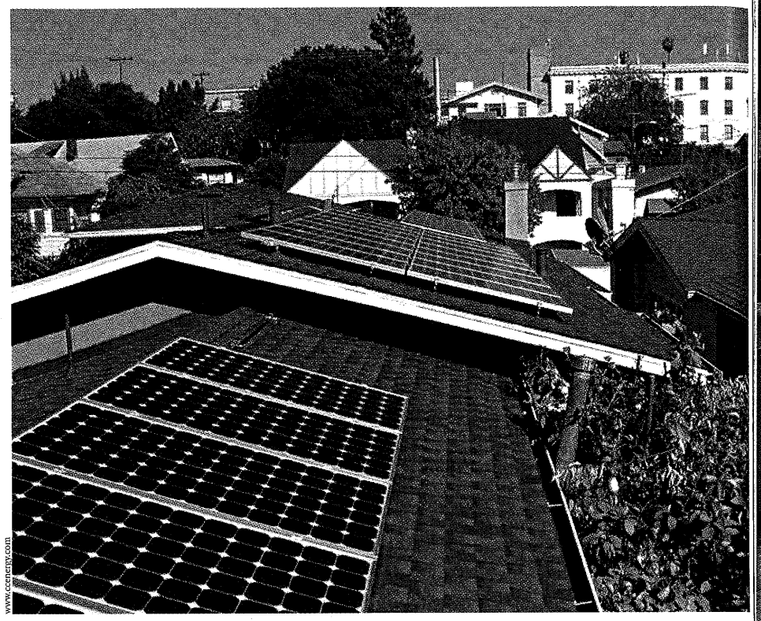
But incorporating solar technology into zoning codes can be complicated. Solar energy systems involve a broad spectrum of planning interests: safety, economics, environmental, and visual aspects that affect the quality of life and involve many groups, from home owners to utility companies to fire departments. Even more stakeholders will be involved in the future, given the federal government's growing support of renewable energy sources.

Today, solar accounts for about one percent of the total renewable energy sources nationally, most of that in the residential sector, according to the U.S. Energy Information Administration. But the industry is flourishing, thanks both to consumer demand and to tax credits. The Solar Energy Industries Association estimates that its members' total revenue grew by 116 percent and employment in the solar energy field more than doubled in 2006–07. Federal tax credits for solar projects, which are available through the end of this year, have helped to spur growth, as have state credits and rebates.

The U.S. Department of Energy has furthered the momentum with one-time grants to 25 cities as part of its Solar America Initiative, which aims to increase public awareness of the benefits of solar energy. Last year, DOE awarded $200,000 grants to 13 cities, including New York, San Francisco, Boston, and New Orleans. Twelve more grants were announced on March 28 of this year.

The DOE describes the Solar America Cities as "large cities with high electricity demand," representing "a diverse geography, population, and maturity of solar infrastructure." Each has a minimum population of 100,000. Eight of the 2007 cities are among the 50 largest cities in the U.S., according to Hannah Muller, a presidential management fellow with DOE's Solar Energy Technologies Program. "Cities were selected for their plan and commitment to a comprehensive, citywide approach," she says.

The two-year funding programs allow the cities to educate the public, offer incentives or rebates, and revamp their zoning codes and permitting processes. The project overview identifies planning as an important prerequisite. The two goals of the grants are to "integrate solar technologies into city energy planning, zoning, and facilities" and to "streamline city-level regulations and practices that affect solar adoption by residents and local businesses—including permitting, inspections, local codes."



Courtesy Energy Trust of Oregon

West Coast versions: A rooftop retrofit in Oakland, California, (above) and a garage in Portland, Oregon, show how solar panels can be made to fit into a community.

Looking at the recent experiences of several of the cities offers insights into the role of planning departments in supporting the use of solar power.

Heading off problems

While traditional zoning and building codes did not address alternative energy systems, there are exceptions. According to Corey Layman, a design review specialist in Pittsburgh's Department of City Planning, solar energy systems are already permitted by-right in residential districts. Now the city is considering ways to make the code even more accommodating. Pittsburgh is a 2007 Solar America Cities award recipient. The city is also home to the Green Building Alliance, which supports solar installations on public and private buildings.

Ann Arbor, another 2007 winner, has a history of supporting alternative energy use. "I've never had a negative comment about our renewable energy programs from any of our citizens," says Mayor John Hieftje. In 2005, Hieftje issued an Energy Challenge that included plans for placing solar panels on 5,000 rooftops by 2015, a far-reaching goal for a generally cloudy city. Ann Arbor has its own Energy Office, headed by the city's 19-year veteran energy coordinator, David Konkle. Konkle is preparing to use the SAC funding to launch various initiatives that support solar implementation.

Meanwhile, there's work for the city's planning and development services department in ensuring that existing codes are solar-friendly. To date, according to local solar installers, there are only a few solar permit applications every year, and a sudden surge of interest could catch the city off guard. Planner Jill Thacher, AICP, says that solar panels are not directly addressed in the zoning code unless a building is in a historic district. However, the historic district regulations "only address visibility." According to Thacher, the planning department and Konkle's energy office plan to team up soon to address the gaps.

Encountering new technologies often means consulting with experts. Judging from the experiences of the solar cities during the past year, input is needed from engineers, utilities, and solar installers. The list may also include an emergency management coordinator, representatives of citizens groups, an affordable housing coordinator for multitenant buildings, and the local fire department for safety considerations.

Deborah Cleek is the green building specialist for the Office of Sustainable Development in Portland, Oregon, another 2007 SAC awardee. Cleek notes that conflicts are inevitable as the use of solar spreads. "I would recommend that planners look at their zoning codes and look for existing conflicts before they have a barrage of new solar applications," she says.

One conflict that has garnered national headlines is that between environmentalists and solar advocates over tall trees that shade solar installations. Attempting to mitigate such conflicts as long ago as 1991, Boulder, Colorado, approved an ordinance guaranteeing solar access for home owners and renters. The law limits the shading associated with new construction and says new buildings must be sited to provide good solar access.

In parts of the country with mature, deciduous trees, it may be possible to install solar water heaters, which can operate with ambient light and tolerate some tree shading, in place of photovoltaic panels, which require full, direct sunlight.

A second potential area of conflict is the visual clash of modern solar panels on Victorian or bungalow rooftops. Lee Rahr, Portland's solar program coordinator, describes a recent case in which a $20,000 solar installation was completed in a local historic district before the city had updated its codes. The solar panel was 18 inches higher than the roofline. Today, "it probably wouldn't have cleared design review," she says. "It's an example of something that slipped under the radar in the past, and that we are trying to prevent in the future."

Smoothing the process

James Duncan, FAICP, of Duncan Associates in Austin, Texas, says the most important action planners can take to encourage solar is to remove permitting barriers.

In Ann Arbor, according to Jill Thacher, the process currently consists of "residential solar contractors pulling electrical and plumbing permits." But that is now changing, she says, because planners realize that basic permits don't take into account critical issues of roof load, hardware, and other safety factors of solar construction.

In Portland, planners, engineers, solar experts, and green building specialists spent a year drafting a solar program guide. The guide requires residential solar projects to fulfill these

three conditions in addition to meeting building code requirements:

- All supporting roof framing must meet minimum standards.
- Collector panels must meet certain rail anchoring standards.
- The top of the panels may not be more than 18 inches above the roof surface.

"The staff believes that the application process will be faster for 99 percent of the projects" if these conditions are met, says Rahr.

Other locales are already ahead. The town of Ithaca, New York (pop. 18,000), streamlined its permit process in 2006 and created a detailed worksheet for photovoltaic installation. "We were finding that many people, including installers, were not sure what information was needed to verify that the proposed installation would meet the state building code," says Kristie Rice, Ithaca's senior code enforcement officer.

The worksheet covers wiring, array, overcurrent protection, and roof and ground mounting information. Could the worksheet's more than 50 questions scare off potential applicants? Rice doesn't think so. Rather, she says, "most applicants have found it very helpful. The number of permits has actually increased since the worksheet was introduced," she says.

Colorado-based planning consultant Christopher Duerksen, coauthor of the new Sustainable Community Development Code, would go further to promote solar. "The number-one thing that needs to be done," he says, "is to permit solar projects as by-right accessory uses." While there are examples of solar projects as permitted uses (in larger cities like Seattle as well as in rural counties like Fillmore County, Minnesota), most areas have not taken steps to support solar.

High permit fees are another potential barrier to solar installations. Typically, the fees are based on a percentage of total construction costs, which could be a problem for small-scale installers. "A lot of these solar companies are mom-and-pop operations. A $200 or $500 permit is a big thing when you are talking about solar," says Duerksen. He suggests greatly reducing or waiving permit fees.

An example might be Piedmont, California, which recently passed a resolution to waive building permit fees for solar installations. Of course, California's situation is unique in the U.S. In 2005, the state passed a solar state law protecting all solar installations.

In other words, planners need to look for loopholes and to ease the process for the simplest installations.

In some cities, however, a waiver could complicate the existing fee structure. Rahr notes that Portland's Bureau of Development Services is fee-based, "so waiving fees has to be done thoughtfully because we still have to pay for the folks doing the engineering, permitting, and planning." To keep a balance of home owner cost and city income, Portland created a special system for solar permit fees. "Permit costs are planned to be based on the cost of the construction work, but not including the costs of panels or inverters, which are very expensive and drive up the overall cost of the installation," explains Cleek.

Oversight

After permit fees are balanced to meet a community's needs, planners may want to consider the qualifications of solar installers. Here, Austin is a model.

The city has plenty of experience. Compared to the handful of residential solar projects installed annually in many northern cities, sunny Austin sees some 150 photovoltaic installations a year, according to Leslie Libby, the manager of solar programs for Austin Energy, the municipally owned electrical power company.

Austin planning director Gregory Guernsey, AICP, notes that the relationship between the planning department and the utility "is much closer than in other places." This proximity allows for some coordination, and the utility closely monitors the installation process.

"We have monthly contractor meetings with the 10 registered solar installers or their surrogates, who are required to attend the meetings to keep their registered status," says Libby. "At the meetings we keep abreast of new technologies and share information." For each project, "we require a site survey to be conducted before the system is installed." A new wrinkle is that failure to comply with the guidelines could result in a 30-day suspension from the list of registered contractors. "Their boss won't like that very much," says Libby. "It doesn't happen often."

Of course, a city doesn't have to own a utility company to develop training standards for solar installers. The town of Ithaca amended its code in 2006 to clarify qualifications for a solar installers. Eligible contractors must be on the New York State Energy Research and Development Authority list, or be certified by the North American Board of Certified Energy Practitioners, says Kristie Rice. The town allows installers not on the lists to bid only if they have received "adequate training" for the work.

The next great idea

Chris Duerksen tells a story that may sound familiar to planners. At the end of a long evening meeting, a council member introduces the "next great idea." What is it? "We want some of that sustainability stuff in our zoning code." It's up to the local planners to figure out what that means, says Duerksen.

With national interest growing in sustainable planning and renewable energy, "planners have this enormous opportunity. They are right in the center of things as they haven't been for a while," says Duerksen. It's planners, he says, who are best able to resolve issues of compatibility, in adapting solar installations to historic district specifications, for instance. He notes that technology might make such things easier with inventions like the solar roof shingle.

Several of the Solar America Cities—Tucson, Ann Arbor, and particularly San Francisco—are leading the way technologically by mapping for solar. San Francisco residents can click on their building on a computerized map and find out "how much of the roof is solar-capable, how much PV it can support, and what rebates are available," says Johanna Partin, renewable energy program manager for the San Francisco Department of the Environment. The city is using part of its SAC funding to form neighborhood solar buying groups that allow customers to "identify installers and band together for a better rate."

On the national level, Dick Fate, a Sandia National Laboratory manager, is developing a proposal for a SunCity Urban Planning Model that planners could use to change "key variables such as local tax credits, PV efficiency, the effect of a shading law, and pros and cons of each in real time." SunCity is expected to be released in about two years.

Solar America Cities are breaking new ground in other areas. New Orleans will address emergency management preparation through solar development. Both Boston and San Francisco, with high percentages of multifamily housing stock, are tackling solar use in high-density and affordable housing projects.

In the meantime, as Partin of San Francisco says, "cost is still the main barrier." Solar energy promoters hope that as technology improves and prices come down, solar panels will be as accessible as a local hardware store shelf. In the meantime, planners can revisit zoning codes, permits, and fees, as well as considering mapping in order to support solar energy construction in their communities.

Corry Berkooz is an environmental writer in Ann Arbor. She was formerly planning director of Schuyler County, New York.

Resources

Winners. The 2007 Solar America Cities are Ann Arbor, Austin, Berkeley, Boston, Madison, New Orleans, New York, Pittsburgh, Portland (Oregon), Salt Lake City, San Diego, San Francisco, and Tucson. The 2008 awardees are Denver, Houston, Knoxville, Milwaukee, Minneapolis-St. Paul, Orlando, Philadelphia, Sacramento, San Antonio, San Jose, Santa Rosa (Colorado), and Seattle.

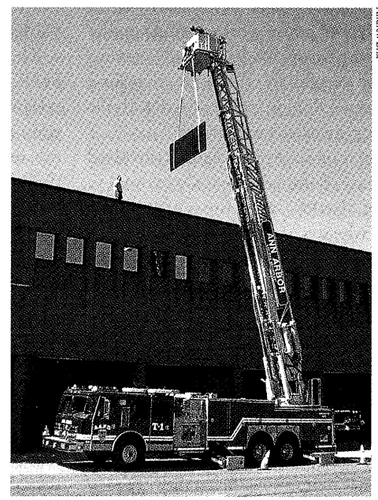
Solar basics. Solar collectors come in two forms: photovoltaic (PV) arrays, which are glassy rooftop panels that connect directly to the electric grid. Solar hot water heaters rely on sunlight to heat a glycol solution that cycles through a heat exchanger. PV arrays do not work well in shade, but hot water heaters keep collecting sunlight in ambient light. It is worth checking a local area's solar availability before promoting a certain system. Also note that cost and ease of PVinstallations are affected by net metering rules, which vary widely from state to state. Net metering is the process of selling electricity back to the utility.

On the web. Portland's Bureau of Development Services has updated its residential and commercial solar permitting process at www.portalndline.com/bds/index.cfm?c=36814.San Francisco's solar mapping tool is at www.sf.solarmap.org. Also see www.solar-alliance.org (policy issues); www.irecusa.org (Interstate Renewable Energy Council: state incentives for solar and model inspection guidelines for PV systems); www.seia.org (Solar Energy Industries Association); www.eere.energy.gov/states (DOE webpage for solar activities for each state); www.eia.doe.gov (U.S. Energy Information Administration: facts about renewable energy); www.law.du.edu/rmlui/Programs/Sustainable%20Code/betaV1.pdf. (Sustainable Community Development Code).

In print. "Saving the World Through Zoning," by Christopher Duerksen, *Planning*, January 2008; "A Solar Grand Plan," by Ken Zweibel, James Mason, and Vasilis Fthenakis, *Scientific American*, January 2008.

Mark DeLoura, astropi.org

The fire department to the rescue (right): installing a solar panel in Ann Arbor. Above, solar panels on the atrium entrance to Austin's convention center.



Andrew Brix

Roger Guest

From: Roger Guest
Sent: Thursday, October 16, 2008 1:11 PM
To: Roger Guest
Subject: Zoning Code Rewrite Draft - Residential Districts

1. General Provisions
   A. Permitted Yard Encroachments
      a) Don't understand eaves and gutters 3' all yards but 2' front yard note
      b) Is there a maximum projection of uncovered decks above 3' into rear yard, used to be 6' maximum
      c) Is a 74' high communication tower really allowed in side yards, and if so why not in rear also?
      d) Should some of these permitted encroachments have standards associated with them similar to Residential Use District Chart? For example would a "Bilco" egress window permitted in front yard require screening?

   B. Accessory Buildings
      a) Is there a maximum number of accessory buildings allowed as well as maximum area and percentage of yard covered?
   C. Front Yard Averaging
      a) No comments
   D. Design Standards
      a) These appear now to apply to all residential districts as opposed to originally applying to the R2-S,T,Y and Z districts as tradeoffs for increased density. I will discuss the sidewall offset and garage setback requirements in review of specific zoning districts to follow, and while I agree from a design standpoint with the garage requirement there may need to be the possibility of exceptions due to site conditions and/or a phase in time for districts where they do not currently apply. This will likely be addressed by builders of this plan type.
      b) The nonresidential long façade articulation might better address street facades over 40' in length with plane break requirements rather than increased setbacks

2. Residential District Uses
   I have not compared conditional and permitted uses on a line by line format with those in existing code but these are some general comments
      a) Is there a way to highlight changes (if any) from existing code?
      b) The articulation of applicable standards for the permitted uses will be important here – I know that's yet another level of detail but want to mention it – for example limits on day care occupancy, location of chicken housing, requirements for leased parking, increased setbacks for certain building types or uses, etc. I'll review this more specifically in zoning district review to follow.

3. Specific Zoning District review
   For this I'm going to comment on three of the districts, SR-C2 as compared to old R2, SR-V2 as typical of multi-family though I'm sure there will be more comments from builders of predominantly these building types, and TR-P as replacement for R2S, T, Y and Z.
      1) SR-C2
         a) This seems comparable to R2 as intended with a slightly reduced rear yard requirement except that the garage setback design

standard is introduced to this zoning district which may cause some resistance. Also if this district replaces the current R2, what happens when someone wishes to substantially remodel what is now a non-complying structure due to garage location?

b) Should there be a height limit on civic/institutional buildings when located in this district further than that created by increased setback requirement?

2) SR-V2
   a) No height limit on civic/institutional buildings other than dictated by increased setbacks
   b) General definition of how building height is determined would be helpful – does one element of structure (ie: church steeple) determine height, how is height of pitched roof building determined?
   c) Why is single-family attached (rowhouse) setback less than detached single family and multi-family? The difference in setback from multi-family is interesting in that a design requirement for mult-family is that 1st floor units have direct street access creating a building likely very similar in appearance to rowhomes. Also single family front setback in presumably less dense TR-P district is only 15' vs. the 25' required here.
   d) If this is the district alley access rowhomes are most likely to be built in, there needs to be some way to address the rear yard setback to allow this configuration as part of standard zoning.

3) TR-P
   This district as a replacement for R2-S, T, Y and Z, which recently have been used frequently to create well designed, higher density single family neighborhoods, seems to have the most differences from the districts combined.
   a) The R2-Z district has been eliminated. As noted in the draft, the 3500sf site minimum has been increased to 4000sf minimum. From our development standpoint this eliminates two alley access site types, 37'x95' (3515sf) and 45'x80' (3600sf) which currently comply with existing R2-Z standards. These smaller site sizes seem appropriate to the alley access sites where more people are looking for reduced home and yard maintenance but preferring a single family home. This difference in site size was one reason the existing ordinance separated alley access and street access districts, having previously been shown one size did not fit all very well. Additionally, the smaller alley access sites helped create more affordability in market rate housing. Finally, would both alley and street access sites in the same zoning district create a possible streetscape scenario of mixed garage forward and garage rear within the same block if sites were individually sold?
   b) The addition of the sidewall offset standard in this district – it was not applicable in the replaced districts – creates more inefficient construction and land use particularly on 1 story street access and all alley access homes. With respect to alley access neighborhood and home planning the zero lot line concept has been widely used with a variety of interpretations but the focus was to create usable sideyard space by giving one home land rights up to the wall of the adjacent home. The home with land rights would have a courtyard space with deck or patio and the adjacent home deliberately had a flat neutral wall with minimum and/or high windows to preserve outdoor privacy for the neighboring courtyard. Offsetting this neutral wall reduces courtyard space by forcing rear portion of home into it and complicates descriptions of land use rights, currently a simple straight front to rear sideyard use easement. On single story street access homes, the footprint usually is greater than 40' in depth, in part due to the rear wall of the home ending up further back because of recessed garage facade requirement, this was one of the trade-offs for the improved garage design – in short the design emphasis was placed on an attractive streetscape as well as efficient land use and construction.
   c) This district, replacing those originally all single family, would appear to include twin homes by right on any lot greater than 44' wide. It would be interesting to hear the rationale that 22' of site width works for a twin home, add a second side yard of minimum 5' for A total of 27', but a 37' single family site doesn't. Further, if this zoning replaces current exclusively single family zoning, how does it relate to existing neighborhoods built under the old ordinance in which there are plenty of sites wider than 44'?
   d) I don't understand the 60' minimum site width for accessory dwelling unit – is this another example of how requirements don't work well when applied to both street and alley access sites? On an alley site, you may want a bit more usable open space, but a "granny flat" over the garage does not add width to the structure. Also the height of an accessory structure should be limited to the lesser of height of principal building or 2 stories/35' – a flat over garage of a 1 story structure would just look bad! Finally, why a 1' difference in rear setback if unit over garage?

e) As mentioned in previous districts, height limit for civic/institutional uses? Also greater side yard might be desirable depending on use or size of structure.
f) Why is 2' rear yard setback limited to attached garage, I know it's Wisconsin but if someone wanted I would think detached should also be allowable with same setback.

I am of the opinion that too much is being attempted in one district here. We went down that route with R2-S, which was not widely used in part due to issues reoccurring here. Further, in districts that have the best possibility of achieving market rate affordable housing, we should be careful in adding zoning requirements that translate rather directly into construction dollars, more wall offsets, roof breaks, increased site size, etc.

4) Definitions and general questions
   a) Seems to be some gray area in pervious pavement and parking – pervious pavement can be included in usable open space, but usable open space really isn't intended for parking. Also, is gravel pervious pavement?
   b) Does usable open space area still have same dimensional requirements as in old ordinance? Are decks and patios usable open space? Which of these definitions are additions and which replacements – if something not here is it as it was?
   c) How will these new requirements relate to current zoning requirements in areas of existing construction, are some of the new districts intended only for new construction and others for primarily existing areas.

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