Albemarle County Planning Commission
July 24, 2012

The Albemarle County Planning Commission held a regular meeting on Tuesday, July 24, 2012, at 6:00 p.m., at the County Office Building, Lane Auditorium, Second Floor, 401 McIntire Road, Charlottesville, Virginia.

Members attending were Richard Randolph, Bruce Dotson, Ed Smith, Thomas Loach, Don Franco, Calvin Morris, Chair; and Russell (Mac) Lafferty, Vice Chair. Julia Monteith, AICP, Senior Land Use Planner for the University of Virginia was present.

Other officials present were Elaine Echols, Principal Planner; Andy Sorrell, Senior Planner; Wayne Cilimberg, Director of Planning, Amelia McCulley, Director of Zoning/Zoning Administrator; J.T. Newberry, Senior Planner; and Greg Kamptner, Deputy County Attorney.

Call to Order and Establish

Mr. Morris, Chair, called the regular meeting to order at 6:00 p.m. and established a quorum.

Other Matters Not Listed on the Agenda from the Public:

Mr. Morris invited comment from the public on other matters not listed on the agenda.

Diane Webber spoke regarding allowing restaurants at wineries to benefit tourism and serve County residents.

Kellyn Kusyk spoke in support of urban agriculture and specifically the raising of American Guinea Hogs in the R-1 residential zoning.

Charles Battig, county resident, spoke regarding the Comp Plan Update and the negative consequences of "smart growth". (Attachment A - Memo dated 7-24-2012 to Albemarle County Planning Commission from Charles Battig)

Staff noted that comments regarding Urban Agriculture and the Livability Project Goals should be taken during the work session.

There being no further comments, the meeting moved to the next item.

Work Session

Comprehensive Plan -
Urban Agriculture - Supporting small-scale agricultural production in the Development Areas

Andy Sorrell presented the Power-Point presentation, as follows.

Tonight's discussion is urban agricultural and how they can discuss that in our

Comprehensive Plan.

Perspective
Earlier in the 20th century urban agriculture involved having chickens and community gardens. Urban agriculture was something commonly seen in cities and urban areas, especially during World War I and II and something the government encouraged citizens to do.

How Do We Get Food Now?
Basically now food comes from far away. There is a large cost to get that food to us wherever it may come from.

Examples – Rural Chickens
- A rooster was something they would not want in an urban center.

Examples – Urban gardening
- Community garden
- Rooftop garden in a city

Examples – Chickens, Goats
- Backyard Hens & backyard goat

Examples – Beekeeping
- Bee hives on suburban style lot (limited #)
- Beehive and keeper in a city setting

How is it Currently Addressed?
- Comp. Plan supports agricultural uses in Rural Areas
- Silent on support for small-scale agricultural uses in DAs
- Zoning permits all forms of agriculture in RA and Village Residential (VR) districts
- Zoning only permits gardening as accessory use to a dwelling in residential districts
- Recent years have included requests for laying hens, pigs, and goats.

Albemarle's Comprehensive Plan supports agriculture in the Rural Areas, but does not mention support for small-scale agriculture in the Development Areas. The zoning ordinance allows for all forms of agriculture in Rural Areas and Village Residential zoning districts. In the urban zoning districts (which include all residential districts) production of fruits and vegetables is permitted as an accessory use to a dwelling (i.e. gardening). However, such use is not permitted as a primary use of a property. While the typical requests from the public to the Zoning Administrator are for the keeping of a few laying hens (backyard chickens) or keeping of a few goats for milk production, it should be noted that gardening as a stand-alone use is not permitted in urban zoning districts Beekeeping has not been a request, although it is likely occurring. A request to keep pot-bellied pigs as pets was made by an owner several years ago, but the Board determined that this should not occur in the Development Areas due to significant impacts of pigs.

What's the Problem?

There are animals that are already currently permitted in Development Areas or growth areas such as dogs that have the potential for noise and being nuisances.

When it comes to urban agricultural activities they want to make sure that the people that are getting involved in those activities know what they are getting into. There may be certain limitations on it. If they have animals that escape or they expect were hens but ended up being roosters – a place where they can go. Most of the times SPCA's and places like that are not equipped to take farm animals. So they would have to find other means for taking stray animals that might be caught or other situations.

Purpose of Work Session:

- Consider whether Albemarle's Comp. Plan should support urban agriculture in the Development Areas.
- If so, then ZTAs would follow to allow for this use under certain conditions

Background:
Current interest in:

- Locally grown
- Organic
- Chickens (laying hens)
- Pigs
- Goats
- Bees

What is Urban Agriculture

- producing, raising and cultivating items for local sale and consumption within an urban context
- Wide variety of activities can include:

What is Urban Agriculture?
As found in a piece written by Ms. Kate Voight for the Boston College Environmental Affairs Law Review,

"The terms "urban agriculture" and "urban farming" encompass a wide variety of activities. They can include: growing tomatoes on a roof to supplement a family's dinner; cultivating a variety of crops on vacant, industrial plots to sell at a local farmers' market; and raising chickens in a backyard coop to produce enough eggs for a few families. Assigning one definition is difficult because of this diversity, but in general, urban agriculture includes "any processes that produce traditional subsistence, nutritional or commercially profitable food or other grown or raised products, removed from rural domains, and instead cultivate them in special intensive conditions within the urban context or in its surrounding buffer, peri-urban, regions." **Urban agriculture often employs "resources (unused or under-used space, organic waste), services (technical extension, financing, transportation), and products (agrochemicals, tools, vehicles) . . . and, in turn, generates resources (green areas, microclimates, compost), services (catering, recreation, therapy), and products (flowers, poultry, dairy) largely for this urban area."**

How is it addressed elsewhere?

- Most information found in localities zoning ordinances
- some urban localities do not support agricultural production in residential areas or discourage it
- Some support agriculture production in residential districts with limitations
- Enforcement usually by zoning or animal control

– Many urban areas searching for ways to support concept without compromising resident health and safety
– Staff reviewed Comp. Plans of multiple localities – found that most address urban agriculture as part of an overall sustainability theme
– Most information found in localities zoning ordinances
– some urban localities do not support agricultural production in residential areas (Rockingham Co., City of Portsmouth) in residential districts) or discourage it (Chesterfield Co. – req. SUP)
– Some support ag. production in res. districts with limitations (Town of Culpeper, City of Charlottesville)
– Enforcement usually by zoning or animal control

Charlottesville

- Charlottesville
  - Permits chickens (no roosters), small goats (limit 2) & bees
  - Does not permit cows, pigs or sheep
  - Enforced by Animal Control
  - Have had no major issues with diseases, cruelty/mishandling; biggest issue is chickens running loose

Common Regulatory Themes:

- Limits on # of animals permitted per household;
- Limits on types/ size of animals kept;
- Nuisance clauses for noise, odor disease, pests, waste disposal and predation;
- Permits/fees for keeping animals;
- Enclosure/containment & slaughtering restrictions;
- Setbacks for animal enclosures from dwellings and or property lines

Where localities allow for urban agriculture, there are common regulatory themes which include:
--Limits on the number of animals permitted per household **(commonly 3-4 chickens are permitted per household, with more possible by special use permit if meeting certain standards. Some require a minimum square footage per animal);**
--Limits on the types of animals that could be kept. **The most commonly permitted were chickens (hens), ducks, quail, small goats, rabbits and bees. The following animals are not usually permitted due to issues with excessive noise, space constraints, difficulty in containing the animals, etc.: roosters (male chickens), geese, guinea fowl, pigs, larger goats, cows, sheep and horses;**
--Limits on the size of goats;
--Rules concerning odor and waste disposal;
--Nuisance clauses for noise, odor, disease, pests, waste disposal and predators

--Permits and fees required for keeping animals **(no different than for keeping dogs or cats);**
--Enclosure/ containment restrictions **(no at-large running; Coops are best treated like dog houses which don't require building permits);**
--Slaughtering restrictions **(either not at all or only in an enclosed structure);** and
--Setbacks for animal enclosure areas from property lines **(common range is 10 – 90 feet) and distance restrictions in relation to dwellings (often range from 20-50 feet).**

Important to also keep in mind:
Urban agriculture regulations that incorporate citizen input in the creation stage ensure an ordinance that best fits the needs (and is supported by) the community; and
If regulations are unclear and guidance is not provided to citizens, a higher percentage of code enforcement issues and neighbor disputes will arise.

Considerations for Albemarle:

- If regulations changed, what kind of enforcement would be necessary & how would it be done?
- What happens to strays? (loose animals)
- Level of production desired?
- How would community education be provided?

-- If regulations changed, what kind of enforcement would be necessary & how would it be done?

-- Staff time to investigate complaints will be needed, either by the Zoning Division or by the Animal Control staff.

- Investigations of complaints takes time and staff resources.

-- Cross-training of departments would be needed since typically both Zoning and Animal Control receive complaints and questions.

-- Staff would need to be available to assist residents in permitting and understanding regulations.

-- Animal control staff was wary due to the additional enforcement & they are at capacity with 3 officers covering the whole County.

-- Zoning enforcement staff has been reduced from 7→ 3 in recent years.

-- Complaints about potential zoning violations are up 10% with remaining staff handing a greater workload.

-- Additional enforcement responsibilities may delay response times or times to abate violations in general depending on the extent of the Zoning Division's involvement.

-- Cville Animal Control fields several calls a month – mostly asking permitting questions

-- What happens to strays? **Most groups like SPCA are not equipped to take farm animals – need alternatives for strays**

-- Most localities enforce through Animal Control or Zoning Dept.

-- Albemarle has had a minimal # of complaints – last one took about 4 hours not including adjudication if needed

-- Level of production desired?
-- Support in all or part of the DAs? Some places not appropriate? How many & what kind should be allowed? Should permits be required? What parameters are needed to protect residents, adjacent property owners as well and livestock?

-- How would community education be provided?

-- **Many in the community believe that local food production should be supported in the Development Areas.**

-- But, there are residents who have strong feelings that livestock should not be allowed in residential areas.

-- Activities would be needed to help people understand how urban livestock and bees can be managed in residential areas without negative impacts.

Relation to Comp Plan

- Support for urban agriculture in the Development Areas requires additional Comp. Plan guidance on:
  - what types of agriculture are appropriate in the Development Areas and
  - how activities/uses should be managed so that zoning regulations could follow that allow the activity

Language to Consider:

Objective: Support local food production and consumption through the use of urban agriculture practices as a means for increasing access to healthy, local and affordable foods and encouraging the productive use of vacant land.

Strategy: Encourage and promote appropriate agricultural uses of urban land.

Adopt zoning regulations that:

- Clearly define urban agriculture, including the allowance for gardening as a stand-alone use as well as stipulation of what animals is permitted and which ones are not and other limitations. Strong consideration should be given to only allowing chickens (no roosters) and small goats which have been neutered.
- Allow for beekeeping with restrictions on the number of hives and performance standards to prevent negative impacts to adjoining residents and people.
- Discourage health and nuisance hazards sometimes associated with agricultural activities, which may include setback requirements, yard size requirements, and complaint procedures
- Require a permit be issued for keeping of bees, small livestock, and poultry to ensure that operators understand the regulations and also to provide guidance on resources for assistance.
- Require a waste management plan with keeping of small livestock and poultry
- Provide staff resources for enforcement, primarily for investigating complaints. Assign county staff to serve as the point of contact for permitting and urban agricultural questions.

– Partner with local organizations to provide education on how to keep backyard chickens and goats as well as on local regulations.

Commission Action

- Staff asks that the Commission provide direction regarding the inclusion of language in the Comprehensive Plan supporting local food production and consumption through the use of urban agriculture practices.

Ms. Echols pointed out what staff was looking for is direction on whether or not this is something they should be pursing and, if so, what are the perimeters they think they ought to be putting around this. Some of those things in the staff report they were talking about would be direction for future zoning text amendments.

Urban Agriculture Discussion

The following comments came from the public:

1. Amy Coffman – Spoke in opposition to permitting agricultural activities in the Development Areas. Spoke of past issues with a neighbor in Ednam Forest with pigs and how that impacted her property. Specifically spoke of guinea hogs and how hard they were to contain and the vectors they attracted like rats. Also felt that current county staffing levels were inadequate to add additional regulations to enforce.
2. Lonny Murray – Represented the Natural Heritage Committee and spoke of urban agriculture's relationship to sustainability. Stated that people currently living in the rural areas may be encouraged to live in the urban areas if they knew they could do some of the activities they can do in rural areas. Liked the idea of not permitting roosters and keeping the number of permitted animals small. Encouraged staff to review Charlottesville's urban agriculture regulations.
3. Diane Webber – Supports urban agriculture and suggested the county work with the Virginia Tech Cooperative Extension Agency as they were helpful to her when she raised bantam chickens. Stated chicken manure is good fertilizer and that neutered goats may conflict with the goal of milk production.
4. Kellyn Kusyk – Supports urban agriculture and specifically the raising of American Guinea Hogs in R-1 residential zoning. Stated the hog is a heritage breed important to the history of Albemarle County as Thomas Jefferson also had this breed.
5. Robert Kusyk – Owner of American Guinea Hogs that used to live on his property in Ednam Forest. Supports urban agriculture and would like it to also include hogs such as these. Raising the animals is a good hands on experience for children and promotes sustainability.
6. Albert Connette – Once lived on Garth Road and had chickens but moved to St. George Avenue in Crozet and cannot have them there. However, originally people probably moved to this older part of Crozet and brought their chickens and other animals with them.
7. Helen Swift-Dovel – Asked to make sure that sale of produce is possible. Referenced farmer in Fauquier County being fined by the FDA for selling his produce.

8. Dr. Michael Johnson – Supports urban agriculture, but also felt roosters were needed to maintain a sustainable chicken flock. Roosters will have to be sent somewhere since it is hard to tell the sex of a chicken when they are small.
9. Greg Quinn – Asked the Commission to use common sense when considering new regulations and keep things simple. Let neighbor have a vote when it comes to nuisance concerns.
10. Dana Turname – beekeeper and chicken keeper off of Profit Road. Supports urban agriculture. Noted that chickens are flock animals and need company. Did not feel permits were necessary given the staff constraints.
11. Ashley Kippers – She has a bachelor degree in animal and poultry science from Virginia Tech. She recently moved to an Albemarle County residential district and brought her two goats and chickens. She consulted the zoning laws and they were very unclear. She found out later they were not permitted by zoning. She could not find it stated in the ordinance where such animals were not permitted. She stressed that the County needs to make the zoning regulations very clear when it comes to what is permitted and what is not. She was in the process of being forced to get rid of her animals at this current time and asked that the regulations be changed.
12. Joseph Jones – past President of the Albemarle County Farm Bureau, said the Farm Bureau supports urban agriculture and would be happy to work with the county to find homes for stray farm animals. Liked the idea of working with neighbors to get a setback reduced if the neighbor did not mind. He stated that children that grow up with fur bearing animals and chickens have fewer allergies. He suggested high schools should reinstate agricultural instruction so that younger generations can learn of agriculture.
13. Charles Battig – Asked that if urban agriculture activities were to be permitted, then not to allow commercial sale of produce and other items from such activity because it would need to be inspected. He asked who would do that.

Commissioners made the following comments or asked the following questions:

1. What is the size of a small goat?
2. Safety, welfare, and protection of the community are essential.
3. If the Commission supports this change, any proposed regulations should be published in the newspaper for a month.
4. It may not be appropriate to allow urban agriculture in denser areas such as with apartment buildings or condos. The County will need to pick and choose where such activities will be allowed.
5. The County should align its regulations with the City; the area has been historically agricultural.
6. If the County goes this way, minimum standards are needed for poultry and livestock, and also for bees.
7. Negative comment made concerning personnel and effective enforcement. Enforcement and penalties will need teeth to work. Any permit fees should go to a dedicated revenue stream that goes to fund enforcement.
8. The idea of permitting community gardens as a primary use is good; however, a measured approach is needed on the other aspects of urban agriculture due to potential enforcement costs.

9. There does not seem to be a high demand for this change based on the attendance at the meeting tonight. Some people are committed to urban agriculture activities, but others are not.
10. It is important to hear from animal control first.
11. Consider making a survey of urban area residents to assess the level of support that exists.
12. Neighbor input is important.
13. Decisions for urban agriculture should be dependent on what the neighbors think.
14. The County should not enable what we cannot enforce.
15. Consider phasing in different species of animals over time. Could start with chickens and see how it works.
16. Consider grandfathering in people who may have chickens now but haven't had complaints lodged against them.
17. They should be aware of the difference in the breeding of animals.

The Planning Commission cautiously supports modifying the Comprehensive Plan and the Zoning Ordinance to allow for urban agriculture. The Planning Commission overwhelmingly supports removing the prohibition against community gardens.

It was the consensus of the Planning Commission to support the following proposed language to make it more general:

- The objective would be modified to say consider supporting local food production through urban agriculture rather than support.
- On the strategies investigate zoning regulations about the different items in taking out the particulars, such as strong consideration should be given to only allowing chickens and small goats which have been neutered.

The Planning Commission took a break at 7:32 p.m. and the meeting reconvened at 7:42 p.m.

Livability Project Goals

Topics for Joint Comprehensive Plan Goals: Land Use and Transportation (Summer Frederick)

Summer Frederick presented a PowerPoint presentation and summarized the executive summary.

Purpose of Work Session: The purpose of the work session was to discuss county goals related to Land Use and Transportation, and to identify specific opportunities within these topic areas for the City and County to work together on joint goals. This work session is the second in a series of Commission meetings being held in advance of meeting with the City Commission.

The Commission reviewed, discussed, took public comment, and advised on potential areas for joint goals with the City, as follows:

Livability Project Discussion

The Commissioners suggested the following ways to work with the City on the following

geographic areas:

1. The Woolen Mills Neighborhood
2. The L-shaped corridor along Route 29N and Route 250 E
3. The portion of Rio Road referred to as "Gasoline Alley", and
4. The Rivanna River

Woolen Mills

- Plan together for a bike/pedestrian path/ bridge across the Rivanna River
- Bring in Dan Mahon and Chris Gensic to talk about City and County greenway trail opportunities
- Plan for recreational opportunities on the Rivanna River
- Both Planning Commissions should take a field trip to walk the area
- Neither locality should turn its backs to the River
- There should be access to the resource

L-Shaped Area

- There need to be more bridges across the Rivanna River to make the traffic flow better in this area
- City-County cooperation must take place when dealing with traffic
- Make sure we are working on the Northtown trail together. This is a City-County trail that could go through Hollymead Town Center. It opens the possibility of walking and commuting from Hollymead to Downtown
- We may be able to use existing piers for a river crossing

Gasoline Alley

- Completion of Meadowcreek Parkway and additional traffic plus intersection of Rio Road and Rt. 29 means that we need the grade separated interchange built
- We need input from the City on the appearance of the entrance corridor there
- Walking across Rio Road is dangerous at Gasoline Alley.

The Rivanna River

- Making the Rivanna River an amenity and not a backyard is important
- Our Comprehensive Plans should make more substantive statements to allow the area between Darden Towe and Free Bridge to develop towards the Rivanna River
- We are limited by some of the current activities on the City side
- What about a ferry across the Rivanna River?
- Trails are on both sides of the Rivanna River – look for bike accessibility as well as riverfront recapture
- Plan together for future opportunities – bridges are needed for alternative transportation

Other Commission comments:

- Mr. Franco suggested that Stribling Avenue and the Granger property be looked at due to the large amount of traffic involved. Ms. Echols indicated it would be coming back after the traffic study was completed.
- Ms. Monteith noted when they are talking about bus service there is a lot of thought being put into that. CAT does not have a current director. So anything they would try to put a lot of energy into bus service would be conjecture at this point. The broader idea of expanding bus service is good, but specifics about that are going to come out of the current study that is looking at the way that the system is working. It is the second study in the last two years. She was not sure they were going to come out with firm conclusions. The general idea of expanded service is good. However, for specifics they need to wait for more information.

Public Comment Livability Project

1. Helen Swift-Doval – current President of the Jefferson Area Tea Party, spoke of the need for limited government as a representative for the Tea Party.
2. Charles Battig – also represented the Tea Party and spoke of the need for less government interference. He noted that so called public input is not the same thing as a scientific survey.
3. Lonny Murray – encouraged the Commission to rethink the Stribling/Granger area. The Natural Heritage Committee in looking at that area has identified a lot of biodiversity in that area. It is one of the few areas that they can find trees like Umbrella Magnolia. It would be nice to see a greenway coming down from that corridor through the mountains west of 29. He encouraged people to put more attention to our National Bike Route that goes through Charlottesville and Albemarle. He encouraged adding bike lanes in areas other than areas being developed. He spoke of the need for better connections particularly for bike connections between the rural and development areas. They need to separate the pedestrians, bicycles, and cars.
4. Greg Quinn – Felt that local government should be managing itself and they do not need outsiders telling us how to plan our community.
5. Jim Moore – Addressed comprehensive Planning and spoke of mass transit and its impact on the air quality especially when the buses are running empty and not at their capacity.
6. Morgan Butler – Spoke of taking better charge of improving the water quality of the Rivanna River. Should not just rely on TMDLs. Should take more charge of improving the water quality now that will affect the larger goals as well.

Staff was asked to take the Commission's comments into consideration in the Comp Plan Update. No formal action taken.

Old Business

Mr. Morris asked if there was any old business. There being none, the meeting proceeded.

New Business

Mr. Morris asked if there was any new business.

- Next regularly scheduled meeting Tuesday, July 31, 2012

Adjournment

With no further items, the meeting adjourned at 8:55 p.m. to Tuesday, July 31, 2012 at 6:00 p.m. at the County Office Building, Auditorium, Second Floor, 401 McIntire Road, Charlottesville, Virginia.

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V. Wayne Cilimberg, Secretary

(Recorded and transcribed by Sharon C. Taylor, Clerk to Planning Commission & Planning Boards)

Attachment A - 7-24-2012
Planning Commission Minutes

Members of the Albemarle County Planning Commission, July 24, 2012:

My name is Charles Battig. I am a resident of Albemarle County.

Since last speaking before you at the combined City/County Planners meeting of April 17, 2012, I note that there has been published a highly significant paper in the Journal of the American Planning Association. The May 2012 paper *"Growing Cities Sustainably"* by M. Echenique et al is likely well known to you. It is attached to my handout. My question to you is: are you now moving to implement changes in your planning documents to reflect these new findings published in your key journal?

The official abstract of this paper notes that: *"It is commonly asserted that so-called compact development is the urban form most able to sustainably accommodate growth by reducing travel distances and conserving land, but credible supportive evidence remains limited. This study rigorously and realistically tested the relative performance of spatial options over the next 30 years for three distinct kinds of English city regions."* The take-away conclusion of this study notes that: *"Urban form policies can have important impacts on local environmental quality, economy, crowding, and social equity, but their influence on energy consumption and land use is very modest; compact development should not automatically be associated with the preferred spatial growth strategy."* I believe the local term for that urban form is labeled "the neighborhood model."

The conclusion portion of the paper states: *"The current planning policy strategies for land use and transport have virtually no impact on the major long-term increases in resource and energy consumption. They generally tend to increase costs and reduce economic competitiveness. The relatively small differences between options are overwhelmed by the impacts of socioeconomic change and population growth...*
Smart growth principles should not unquestioningly promote increasing levels of compaction on the basis of reducing energy consumption without also considering its potential negative consequences. In many cases, the potential socioeconomic consequences of less housing choice, crowding, and congestion may outweigh its very modest CO_2 reduction benefits."

"Smart Growth" no longer seems so smart when examined scientifically.

The February 15, 2012 Charlottesville-Tomorrow reported the results of the TJPDC Livability survey which had documented that: *"Most of the 508 respondents 'said they would prefer to live in the rural areas of Albemarle County if there were no barriers in choice of housing.' Sixty-one percent said they commuted from outside the Charlottesville-Albemarle area because they found housing elsewhere more affordable or a better value."*

The unanswered question remains: Will you continue to pursue "Smart Growth" policies which are now scientifically shown to increase land, housing and transportation costs, increase air pollution, diminish choice of housing types to mostly rack' em and-stack' em townhouses, increase traffic congestion, and defy the real-world wishes of your taxpayers?

As this basic claim of Smart Growth" is no longer tenable, is the real reason for pursuing it the one given by President Clinton's advisor, Gary Lawrence in his 1998 paper *"The Future of Local Agenda 21 in the New Millennium"*? He commented that *a "segment of our society who fear 'one-world government' and a UN invasion of the United States through which our individual freedom would be stripped away would actively work to defeat any elected official who joined 'the conspiracy' by undertaking LA21. So, we call our processes something else, such as comprehensive planning, growth management or smart growth."*

Thomas Jefferson voiced his own concerns in his 1787 letter to James Madison: "I think our governments will remain virtuous for many centuries; as long as they are chiefly agricultural...When they get piled upon one another in large cities, as in Europe, they will become corrupt as in Europe."

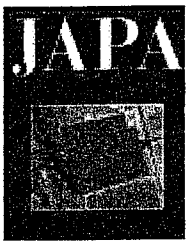
A presentation by the TJPDC on its "Livability Project" is on your agenda today. I have participated in their process, and compliment their efforts to provide a fair and open public assessment of their selected portions of City and County Comprehensive Plans, and the 1998 Sustainability Accords. However, good-faith efforts do not alone make for a scientifically valid survey result. They reported that a bit over 600 respondents had chosen to take the Livability Survey. The survey itself was not constructed as a statistically valid study, and was open to anyone wishing to answer. That

might include activists having a vested interest in various components of the plan, be it bike paths, hiking trails, green-energy advocates, historical preservation activists, or rural residents requesting better county roads. The greater Charlottesville/Albemarle County population is over 100,000. The responses of these 600 individuals to a non-scientific questionnaire cannot be fairly described as representing the wishes of the public at large.

Thank you,

Charles Battig, MD
VA-Scientists and Engineers for Energy and Environment

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Growing Cities Sustainably

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Conclusions

The current planning policy strategies for land use and transport have virtually no impact on the major long-term increases in resource and energy consumption. They generally tend to increase costs and reduce economic competitiveness. The relatively small differences between options are overwhelmed by the impacts of socioeconomic change and population growth. The differences between land use and transport policies are greater for a smaller area with pressure for growth as in die CSR. The impacts of a policy, though, tend to even out when applied over a larger, more diverse area.

Smart growth principles should not unquestioningly promote increasing levels of compaction on the basis of reducing energy consumption without also considering its potential negative consequences. In many cases, the potential socioeconomic consequences of less housing choice, crowding, and congestion may outweigh its very modest CC>2 reduction benefits.

Achieving the targets on reducing CC>2 emissions can be more effectively pursued using technological improvements such as switching to non-fossil energy sources. This can also be achieved by substantial behavioral changes such as shifting from the automobile to public transport. The latter demands strong incentives or penalties to make a significant difference, which would have a detrimental effect on some of the social and economic indicators. Relying on technological improvements is arguably more plausible because it has been estimated that they can contribute an order of magnitude to the abatement of CO2 emissions for transport (King, 2007; McKinsey & Company, 2010) and buildings (MacKay, 2009).

Creating successful communities means first having broader planning objectives. Appropriate green technologies designed along ecological principles can be included to reduce the environmental impacts. Urban form can affect the feasibility of introducing green technologies. Ground-source heat pumps, for instance, require relatively low-density development, while combined heat and power systems require a concentration of activities provided by compact forms of development. These interrelationships between urban form and green technologies are being explored by further ongoing research (see www.regionalvi-sions.ac.uk) to reach a broader understanding of the sus-tainability of spatial planning policies.

References

Banks, N., Bayliss, D., & Glaister, S. (2007). *Roads and reality; Motoring towards 2050.* London, UK: RAC Foundation. **Barker, K.** (2004). *Barker review of housing supply.* Norwich, UK: HMSO.

Boarnet, M. G., & Crane, R. (2001). *Travel by design: The influence of urban form on travel.* Oxford, UK: Oxford University Press. **Breheny, M.** (1996). Centrist, de-centrists and compromisers: Views on the future urban form. In M. Jenks, E. Burton, & K. Williams (Eds.), *The compact city: A sustainable urban form? (pp.* 10-29). London, UK; E. & F. N. Spon.

Bruegmann, R, (2005). *Sprawl: A compact history.* Chicago, IL: University of Chicago Press.

BurcheU, R., Lweenstein, G., Dolphin, W., Galley, C., Downs, A., Seskin, S.,... &Moore,T. (2002). *Costofsj>rau>l-2000(TCKP* Report74). Washington, DC: Transport Research Board, National Research Council.

Busquets, J. (2005). *Barcelona: The urban evolution of a compact city.* Nicolodi, Italy: Harvard University Graduate School of Design.

Calthorpe, P. (1993). *The next American metropolis: Ecology, community and the American dream.* New York, NY: Princeton Architectural Press.

Cerda, I. (1991). *Teoria de la construccion de ciudades* [Theory of city construction]. Madrid, Spain: Ministry of Public Administration, City of Barcelona, and Madrid City Council. (Original work published 1859)

Commission for Integrated Transport. (2009). *Land use and transport: Settlement patterns and the demand for travel.* London, UK: Hal-crow Group Ltd.

Dematteis, G. (1998). Suburbanization y peri urbanization: Ciudades anglosajonas y ciudades Latinas [Suburbanization and peri-urbanization: Anglo Saxon and Latin cities and towns[. In F. J. Monclus (Ed.), *La ciudad dispena* [The dispersed city] (pp. 17-35). Barcelona, Spain: Centra de Cultura Contemporanea de Barcelona. **Department for Communities and Local Government.** (2005). *Planning policy statement I; delivering sustainable development.* Retrieved February 8, 2012, from http://www.communities.gov.uk **Department for Communities and Local Government.** (2007). *Eco-town prospectus.* Retrieved February 8, 2012, from http://www.commu-nities.gov.uk

Department for Communities and Local Government (2008). *Landuse changes in England: Residential development to 2006.* London, UK: HMSO.

Department of Environment, Transport and the Regions. (2000). *Our towns and cities-Delivering an urban renaissance.* Norwich, UK: Department of the Environment, Transport and the Regions, HMSO.

Donovan, N., & Halpern, D. (2002). *Life satisfaction: The state of knowledge and implications for government.* Cabinet Office analytical paper, December, 2002. London, UK: Cabinet Office. Retrieved April 2, 2012, from http://webarchive.nationalarchives.gov.uk/20070101092320/http://cabinetoffice.gov.uk/strategy/downloads/seminars/ls/paper.pdf

Duany, A., & Plater-Zyberk, E. (1991). *Towns and town-making principles.* New York, NY: Rizzoli.

Echenique, M. H. (1994). Urban and regional planning at the Martin Centre: Its origin, its present, and its future. *Environmental Planning B, 21(5),* 517-533.

Echenique, M. H. (2004). Econometric models of land use 8£ transportation. In D. Hensher, K. Button, K. Haynes, & P. Stopher (Eds.), *Handbook of transport geography & spatial systems* (pp. 185—202). London, UK: Elsevier Sciences.

Echenique, M. H., Barton, H., Hargreaves, A. J., & Mitchell, G. (2010). *SOLUTIONS Final report sustainability of land use and transport in outer neighbourhoods.* Retrieved February 15, 2012, from http://www.suburbansolutions.ac.uk

Evans, A. (1998). *Of growth controls, green belts and economics.* Reading, UK: University of Reading.

Ewing, R,, Bartholomew, K., Winkelman, S., Walters J., & Chen, D. (2007). *Growing cooler: The evidence on urban development and climate change.* Chicago, IL: Urban Land Institute.