FROM THE CHAPTER

This has been an exciting and a challenging year. It was exciting because in March CNU Colorado was officially recognized as a chapter and in June CNU 17 was held in Denver. For the first time in CNU’s history the local chapter took the responsibility of publishing the “regional projects book.” CNU Colorado published *Colorado Urbanizing: Experiencing New Urbanism*, a reference book providing valuable discussion about recent developments of urbanism in the region by referring more than a hundred projects. The book is edited by Kathleen McCormick and written by a committee formed by Cheney Brooke Ferguson (chair), Niccolo Casewit, Korkut Onaran, Deana Swetlik, Michael Tavel, Tim Van Meter, and Todd Wenskoski. (The book is available for sale at our web page.)

It was a challenging year because of the financial difficulties that especially the design and construction related professions have been facing. Nevertheless, in spite of the economic downturn, and thanks to the urbanism enthusiasts’ support, we were able to finance the book (actually, we were able to pay it back as of November). On the other hand, we were short of providing three issues of *The Colorado Urbanist*, as we promised in the beginning of the year. We still need your support. In these hard times supporting urbanism is particularly important for a sustainable future. How can you support us? (1) Urge your friends and colleagues to become a CNU member and attend CNU 18. (2) Become a chapter founder or annual sponsor. The details are provided on the back cover of this issue. (3) Become active in the chapter. We can always use more help in organizing events, editing *The Colorado Urbanist*, or broadening the scope of the chapter towards new horizons. But most importantly, this is the month of giving donations and we are in the line too! (We are a 501c3 non-profit organization).

Please contact me or any of the board members (Sean O’Hara, vice president, John Olson, treasurer, Cynthia Patton, secretary, Cheney Brooke Ferguson, Kevin Handley, Melissa Nelson, Peter Park, Ronnie Pelusio, Gary Taipalus, Jeff Winston, if you are interested in becoming active in the chapter.

Korkut Onaran
President, CNU-Colorado
Principal, Wolff-Lyon Architects

*During CNU 17 the Colorado Chapter “meet-up” event was at the same time the book release party for the book Colorado Urbanizing. The event was hosted by Van Meter Williams Pollack and sponsored by Streetscapes on June 12, 2009.*
“WHY URBANISM?” PANEL, MARCH 12, 2009

It is always helpful to remember good arguments for urbanism. We held this panel to help the Local Host Committee’s fundraising efforts for CNU 17. As the name implies, we wanted to remember why supporting urbanism as a cause is important, especially in these financially difficult times. We had three presentations. The first one by Scott Rodwin discussed urbanism from a sustainability point of view. The second by John Desmond provided the business perspective. John Norquist gave the third presentation and summarized CNU’s recent efforts in being an effective voice in guiding urban policies. The texts provided here are revised and edited versions by each author after their presentation. The following discussion however, is directly transcribed from our recording of March 12, with our minor edits. We express our gratitude to Tryba Architects, who gracefully hosted this event.

URBANISM AND SUSTAINABILITY

Scott Rodwin, AIA, LEED AP
Principal, Rodwin Architecture
Member, Sprawl and Transportation Committee, Sierra Club

Many of us intuitively understand the connection between planning and sustainability. We know that a green building represents only a fraction of what makes a place truly sustainable. The building must be woven into a larger fabric that can support a socially and ecologically responsible lifestyle.

The United States is the largest emitter worldwide of the greenhouse gases (GHG) that cause global warming. Transportation is the fastest growing source of CO₂ emissions and accounts for a full third of GHG in the United States. That share is growing as others shrink in comparison, and personal vehicle use represents 60% of those CO₂ emissions (U.S. Dept. of Energy, 2003). This is due to the fact that we are making our buildings more energy efficient, while at the same time we are still largely practicing the same auto-centric land use policies developed over the last 50 years. Those have resulted in a rate of increase in vehicle miles traveled (VMT) three times that of population growth between 1980 and 2000 (U.S. Bureau of Transportation). Since the Arab Oil Embargo of 1973, America’s per capita VMT -- the amount of driving per person -- has increased by roughly 250%. The U.S. Department of Energy forecasts that over the next 25 years, VMTs will increase another 48 %. Similarly, across the U.S., land was consumed for development at three times the rate of population growth between 1982 and 2002, as new roads and highways literally paved the way for endless sprawling subdivisions (ULI & SGA. “Growing Cooler”, 2007).

A large portion of our energy demand is being driven by land use patterns that require or encourage more driving, a concept known as “induced traffic.” When you make it easier to drive than to use alternative methods, this encourages people to do so. Over 60% of the growth in driving and associated forms of energy consumption is due to land use factors (Funders Network for Smart Growth, 2005). An analysis of 83 metro regions found that the degree of sprawl was the strongest influence on VMT per person - more than population growth and per capita income (SGA, Ewing, “Measuring Sprawl and its Impact”, 2002). Studies around the country have fairly consistently found that people in walkable, compact, mixed-use neighborhoods connected to mass transit drive upwards of 30% less than those in conventional auto-oriented settings, even after adjusting

Figures 1 & 2: Typical car landscapes from anywhere in U.S. (a view from Miami, FL, on the left, Longmont, CO on the right). The more we build for car the more we will drive. Induced traffic increases the dependence on oil in an unnecessary way.
for household size, income and auto ownership. “Smart Growth can reduce the need to drive. Just as inefficient land use increases VMT, a smarter approach can reduce it, lowering energy consumption and reducing harmful emissions” (SGA).

We all know that from a sheer quality of life perspective, walking to the neighborhood market is more enjoyable and convenient than driving to Walmart; letting your kids play with the neighbors’ in a nearby pocket park is more convenient and community-building than driving them through rush hour traffic for a “play date”; and that having dinner with friends next door is more economical and relaxed than going out on the town. But what if all those things also helped save the planet? That’s not a bad side benefit.

For climate stabilization, a commonly accepted target would require the United States to cut its CO₂ emissions by 60 to 80 percent as of 2050, relative to 1990 levels (ULI & SGA, “Growing Cooler”, 2007). “CNU is committing to a goal of reducing carbon emissions through a major reduction in driving miles, targeting a 50% reduction in per capita VMT by 2030. Through the 2030 Communities Campaign, CNU and its partners will help provide development models to help communities create valuable, low-carbon development along with tools such as form-based codes and street-design alternatives to help them break down the barriers that encourage auto-dependent sprawl.” (CNU)

The carbon footprint benefit of urban living is quantifiable. In the City Journal’s 2009 “Green Cities” report they present statistical graphs showing a strong correlation between density and decreased pounds of CO₂ per household. As a city becomes more dense, it typically becomes more walkable, bikeable and mixed in terms of uses and is able to support the critical mass necessary to make mass transit economically viable. If towns and cities are proactive in their planning, they can implement Transit Oriented Development to channel new growth into those areas best served by mass transit. People who live close to transit stops tend to use mass transit. A 2006 study in the Bay Area by the Metropolitan Transportation Commission found that for people who both live and work within a half mile of a rail or ferry stop, 42% of them commute by transit. For those who neither live nor work within such proximity, the number falls to 4%. Is mass transit really that much more efficient at moving people from one point to another? In one hour, one road-mile can accommodate approximately 2,000 people by car, or 8,000 people riding the bus, or 20,000+ people via rail (extrapolated from Tunlin, D.C. Great Streets Conference, 2006). What form of transportation we elect to use affects energy, land use, and the material resources (rock, water, steel, cement, etc.) necessary to provide that transportation. Obviously it makes sense to be as efficient with all those resources as possible.

Sierra Club has a handy online “Healthy Growth Calculator” so you can directly see the quantified environmental impacts of various land use choices: www.sierraclub.org/sprawl/density

So, if we do decide that for the sake of environmental sustainability we are going to transform our auto-dependent planning in for a smarter and more ecologically friendly development patterns, what would that look like and how do we do it? Visit www.cnu.org or www.smartgrowthamerica.org for a comprehensive look at the tools and thinking behind this approach. Or for a quick and really fantastic visualization tool to see what the various alternatives look like, go to www.sierraclub.org/sprawl/community/transformations/index.asp.

Sierra Club, a flagship of environmental protection, has in fact become one of the leading advocates for smart growth because they understand the connection to both rural/wild land preservation and to fighting global warming. Smaller grass roots environmental activist groups like the YIMBYs (Yes in my back yard) of Liveable Berkley are a sign of a growing shift in understanding in the eco community. People that have historically fought all new development in an effort to protect local lands are coming to realize that stopping development in their environmentally friendly cities simply pushes it out further causing sprawl and leading to more traffic and GHG. We are beginning to take a more regional and global perspective. And not a moment too soon. With two thirds of the buildings that we expect to exist in 2050 as of yet unbuilt, what we do over the next 40 years will have a dramatic impact on energy use and the associated climate impact (Funder’s Network, 2005).

Figure 3: An example for a multi-modal walkable street with street car; Christ Church, New Zealand.
GOOD URBANISM IS GOOD FOR BUSINESS

John Desmond,
Vice President
Urban Planning and Environment
Downtown Denver Partnership

Good evening and thank you for attending this evening. I’m John Desmond and this evening I am going to give you a brief presentation about why I believe good urbanity is good for business.

My organization, The Downtown Denver Partnership, or DDP, is a nonprofit business association that leads private sector efforts to improve Downtown. We were formed in 1955, and currently represent over 600 member businesses, most of whom are located in Downtown. For more detailed information about DDP, please visit our website at www.downtowndenver.com.

Our definition of good urbanity is manifested in the 2007 Downtown Area Plan (figure 5), which we completed in collaboration with the City of Denver in 2007. The five key vision elements of the plan are that Downtown is prosperous, walkable, diverse, distinctive, and green. Some of the phrases from the plan that define good urbanity include “an inviting and attractive environment,” “high quality design,” a dense mix of compatible activities and land uses,” and “preservation of historic assets.” There is much more information in the Plan document, which you can download through the City’s website.

David Engwicht, an Australian advocate of traffic calming, gave a much broader and more profound definition of good urbanity. He has stated that “The city is an invention to maximize exchange by minimizing travel,” and adds that the greater the number of exchanges, the more successful the city. Exchange in this definition can be social, economic or cultural exchange. Cities are divided into two types of space – exchange space and movement space. Exchange space is typically defined as the space within private property and buildings, while movement space is primarily the public realm – our streets, sidewalks and rail lines. In Downtown Denver, 60% of the land area is private exchange space, and 40% is the public realm.

In the most successful cities, a large number of exchanges occur in the public realm as well as the private. An example of that is this street in Penang, Malaysia (figure 4) – there are a huge number of vendors under all of the colorful awnings and the street is packed with people. There is still room for cars to move slowly through the middle, but the bulk of the street is dedicated to commerce and exchange. The 16th Street Mall here in Denver is a good example of a local street that has space for many exchanges (figure 3).

Engwicht further defines two types of exchanges – planned and spontaneous. Let me illustrate with a couple of examples. Let’s say you make an appointment to see your insurance agent. This is a planned exchange. In the first example, you leave your house in your car, drive to the agent’s suburban office, park in the free parking lot, walk in the office, say hello to his receptionist, meet your agent,
finish, and then get back in your car and return home. That is two exchanges – one planned, with your agent, and one spontaneous, with the receptionist. Now, in the second example, you walk from your house to the light rail or bus, and ride transit downtown to meet your agent. En route, you say hello to a neighbor on the street, strike up a conversation with someone on the bus, get a cup of coffee at a coffee shop near your agent’s office, go into the office, say hi to the receptionist, have your meeting, leave, visit a store on your way back to the bus, and get information about upcoming events in downtown from an information kiosk on the 16th Street Mall. That is seven exchanges – six spontaneous and one planned. The fact that you could have so many incidental exchanges in the course of one planned exchange in Downtown is why good cities are successful and efficient, when compared to typical suburban development.

Unfortunately, in the second half of the 20th century, U.S. cities devoted more and more space to transportation, especially automobile-related transportation. This policy diluted exchange space and reduced spontaneous exchanges. The only spontaneous exchanges you are likely to have in this situation may be a speeding ticket from a police officer or a nonverbal exchange with someone that cut you off while passing.

Downtowns in particular suffered from this emphasis on highway-building, as urban policies focused on the development of wide, fast-moving streets that facilitated the rapid movement of vehicles, inappropriate zoning that separated land uses and fostered speculation and huge disparities in land-use intensity, and elevated highways that further isolated and divided neighborhoods.

Today, the automobile continues to dominate Downtown Denver. 38% of Downtown Denver’s area is devoted to vehicular uses, including 21% of private area devoted to surface parking lots (not including structured parking) and 60% of the public right-of-way accessible to private vehicles (figures 6, 7, and 8). Of that 60%, 95% is accessible to cars, with 3% dedicated to transit lanes and 2% devoted to

Figure 9a and 9b: 16th Street Mall, Downtown Denver (photo: Randy Brown, Denver Metro Convention and Visitors Bureau).
bicycle lanes. This is in direct contrast to current commuting patterns – more than 40% of Downtown commuters travel via transit and an additional 6% travel by bicycle. So, by this measure the public right-of-way space is significantly over-allocated to cars and trucks.

Another way to look at how this is out-of-balance is to compare the relative “success” (e.g., rent per square foot, number of visitors, what streets people remember and cherish) of an urban street to its vehicular share. Even extremely busy streets in major cities, such as Fifth Avenue in New York (45%) and the Champs Elysees in Paris (31%) (figure 8), have less than half of their area dedicated to vehicular traffic. Here in Denver, the 16th Street Mall dedicates 28% of its area to vehicular traffic and Larimer Street as it passes through Larimer Square allocates 50% of its area to vehicular traffic. Contrast that with a street like West Colfax Avenue as it passes through Downtown, in which 80% of the area is for vehicular traffic. Which would you define as the more “successful” urban street?

So here is the fundamental problem from a businessperson’s point of view: no one spends money in a moving vehicle! In order to foster more business, that is more economic exchanges, we have to get people out of their cars. A key turning point here in Denver occurred in 2004, when metro voters overwhelmingly approved the $4.7 billion dollar FasTracks proposal, ending 50 years of automobile-oriented public infrastructure policy, and giving the rest of us leverage to work with our city planners and traffic engineers to diminish the car’s dominance in our urban centers and make them more successful.

Successful downtowns need at least five attributes: connections (for access of goods, employees and customers); options (different modes of travel and different land use options to respond to the changing market); diversity (in activities, types of buildings and businesses); efficiency (every square inch of land and building is important because of the high costs of doing business); and humanity, because business is still about interactions and exchanges between people.

In order to enhance these attributes, I want to mention three issues for us to focus on immediately. The first is to create multimodal streets. The picture 9 illustrates how few people can actually be accommodated in a street filled with automobiles. With cars each person takes up more than 250 square feet of right-of-way, and the whole block can accommodate about 40 people. These 40 people could easily fit into one bus or could be comfortably spread out on the sidewalks and bike lanes with plenty of room for other things. The bottom line is – if we want our downtowns to have more efficiency, connections and options, we need to provide more transportation alternatives that take up less space than the car.

The second issue is that no matter how we arrive at a place, we are all pedestrians once we get there.
paraphrase Jan Gehl, we must design the city for walking speed – 3 miles per hour, treat the street as a living room and make walking a joy. This entails a much greater level of detail and quality, but will foster more interaction and exchange, and give our downtowns needed diversity and humanity as well.

Thirdly, we must preserve and construct buildings with human scale, transparency and interesting facades. Building on the 3 miles per hour concept, this principle will more strongly tie our private exchange spaces to our public movement spaces – adding to the sense of joy, the humanity, the diversity and the efficiency of both. All of this makes people want to experience downtowns, makes them want to conduct exchanges, and makes the downtown successful and sustainable. Thank you for your allowing me to come here tonight and talk with you.

What are the opportunities for Denver? How can urbanism strengthen Denver’s economy and culture. First let’s look at how post WW II sprawl came to Denver. What were the factors? I believe they were oversized roads coupled with inadequate transit, separate use zoning and excesses of the Modernist movement. Le Corbusier, the great modernist designer and organizer of CIAM (Congrès International d’Architecture Moderne, International Congress of Modern Architecture), offered the vision of the City of Tomorrow in 1922 (figure 14). You can see it built out throughout the US. For example (figure 15) in Crystal City, Virginia, near Reagan DC Airport. Le Corbusier’s utopian vision of grade separated streets with pedestrians out of the way of vehicles became the template for US road policy in the second half of the 20th century. In Europe there was enough resistance
and the existing urbanism was so strong that Le Corbusier was not able to “kill the street” as he advocated at CIAM’s 1927 meeting. But it did happen in the US, most notably in Detroit’s (figure 16) Woodward Avenue. Chicago’s Wicker Park (figure 17) like the European cities had an intense urbanism that largely survived the post war era. This is Berlin on May 8, 1945, at the end of WW II (figure 18). Now it is rebuilt (figures 19 and 20) at Potsdamer Platz. Detroit (figures 21 and 22) however looks like WW II happened there. Who won the war? Germany or the US? If you look at Berlin or Dresden and compare them to Detroit you would think that the US was the epicenter of the world’s most destructive war.

Now conditions and trends are changing. The Federal and state DOTs are broke and their infrastructure, particularly urban freeways, are largely at the end of their
40 year design lives. There is now an opportunity to change anti urban road plans to pro urban street network plans. In 1975 NYC’s West Side Highway collapsed (figures 23 and 24) and was replaced with a street (figure 25). In Milwaukee we replaced a freeway with a boulevard, saving $60 million in the process (figures 26 and 27). Most spectacularly Seoul South Korea replaced a freeway (figures 29 and 30) that had covered its major river. The streets that replaced the road had far less capacity, but utilized the intense and complex street networks of Seoul to absorb the displaced traffic. In all three instances road removal has proved successful and popular. Seoul’s mayor, Lee Myung-bak is now President of South Korea, in part because people admired his creative work as Mayor of Seoul. See he how happy he is (figure 31).
The impact of separate use zoning was equally damaging to American cities as the insertion of oversize roads. In the interest of time I have no Zoning slides tonight, but make no mistake, separate use zoning was quite destructive. CNU came to Denver in 1998 and helped energize the effort to build and expand light rail. CNU helped Denver see itself as an urban place and 11 years later it has become more of a real city. Denver may find itself during the 21st century become one of America’s most important five cities. Good coding that allows urban form and excellent transit and properly scaled streets are keys to that future. New urbanists can help Denver enrich its economy and culture. It happened in 1998 and now it can happen again in 2009.

Figure 31: Lee Myung-bak, former mayor of Seoul and current president of South Korea, at Cheonggye-Cheon, enjoying the water on a sunny day.

Questions and Answers

Marilee Utter: John, what do you think about our one-way streets in downtown Denver? Have there been any discussions within the Downtown Denver Partnership?

John Desmond: We think that Cleveland, Court, and Tremont (Glenarm already is two-way) can be turned into two-way streets. By doing so we can show everybody that two-way streets are good for business, good for the neighborhood. We did this in Wazee Street in Lodo several years ago. People realized that it wasn’t the end of the world. Last year when we went on the Urban Exploration trip in Portland, one of the things we focused on was the freeway that was replaced with McCall Park and how all of the traffic engineers predicted the end of civilization as we knew it when that freeway was taken out back in the 70s. And there was almost no delay in travel time. People found other ways to reach where they needed to. I think that we need to show in Denver as well that similar changes are possible. We just have to keep doing it every opportunity we have. It’s going to be a long battle. For instance, there’s no reason the 19th and 20th Avenues need to be one-way. You could turn them into bike boulevards and connect City Park to Downtown and have a great bicycle commuting route. You could do that in Arapahoe Square and Curtis Park. There are a lot of streets that are still one-way for no reason whatsoever other than its just convenience.

John Norquist: There’s a sneaky technique that we used once in Milwaukee. We had some traffic diversion going on one street. So when we closed that street, we needed to make the next street over two-way to make up for the fact that one of the streets was being fixed. Then somehow it just never got put back. It just sat there for awhile and people got used to it. You really need to create facts on the ground.

John Desmond: That’s exactly right, you just need to show that it can be done.

Marilee Utter: Is this a political problem?

John Desmond: It’s a cultural problem, as well as political. It’s a cultural problem whether it be within public works or other city agencies. You always hear: “we’ve always done it this way.”

John Norquist: How about the downtown business people?

John Desmond: I think the business people are completely behind it. We’re having a great fight right now about 14th Street. We are trying to get that street reduced from three lanes to two lanes as part of the streetscaping. We are trying to get the city to show us, document to us, why it needs to stay three lanes. They can’t do that right now.

John Norquist: Well, they need to decide. Do they want a tax base for the city or do they want to have free-flowing traffic? You could ask the city engineers: how many of you want to draw your pension when you retire? Do you want to have that pension funded or do you want to get an empty envelope in the mail because the City cannot afford your pension?

Marilee Utter: Did CNU get involved in the Alaska Way deal in Seattle?

John Norquist: Yes, we did. Marilee Utter: Is that the kind of thing that CNU could do here? I don’t know if you all care about two-way streets as much as I do but that could be one focused effort that CNU Colorado, our new chapter, could think about doing and take on to help organize and create pressure, make the case, and do whatever it takes to start expediting the change.

John Norquist: Yes.

Tim Van Meter: And to follow up with that – there was the FasTracks discussion on the paper today – we’ve got to go back to the vote again, we’ve got to double our sales tax and finish out FasTracks. It will be a political battle. The time of the vote will be one year into the Obama administration. You can imagine the kind of opposition we will face.

I think that’s one of the subjects CNU can bring to bear. That’s not so much about us helping CNU, but CNU helping us defending what is right for Denver and the region. The country has been focusing on the west and especially on the transit and TODs in Denver. But we haven’t done that much, quite honestly. We’re at risk, you know. We’re still purple. It will be very, very interesting to see.

John Norquist: You avoided the ground work.

Dick Farley: John, can you put the same pressure on Colfax between Speer and 14th? You know, Jeremy [Klopp] here, showed that you can take two lanes out. You know, it falls in the crease between Downtown and the Golden Triangle, between the Justice Center and 16th Street if you take Tremont down there. It is also part of the old plan, linking Civic Center to Speer. Some parts of Colfax there is only 5 feet of sidewalk left. We have got to do something about that and congestion is not the end of the world. That kind of street deserves better pedestrian environment. I’m not necessarily putting that on your plate but the Downtown Partnership, though its sphere of influence extends, its focus really ends at Colfax.

John Desmond: We certainly weighed in on Colfax through the plan several years ago. And it came out pretty strongly that it should be as the way Jeremy [Klopp] wanted it to be. We recognize how important Jeremy’s feelings are but even that wasn’t enough to accomplish it. Because one of the things we found was when we widen those streets – and we did that with our own urban renewal area and Skyline Urban Renewal in Denver and destroyed a lot of our great buildings there – we widened the streets and stuck all these utilities under them. So now when we want to narrow these streets and change the crowns, all of a sudden (and we’re finding this on 14th Street: we changed that crown in order to widen the sidewalk and get it down to two lanes) we’re adding millions and millions of dollars of cost to it. It’s a bitter
pill to swallow. Not only do you have to deal with the philosophy of “cars trump everything else and Level of Service D or better equals nirvana,” you also have to come up with a lot of money in a cash strapped city that’s spending a lot of its bond issue to catch up with stuff that’s deferred maintenance over the last 20 years. So it’s an enormous challenge.

**Marilee Utter:** Can’t you just change the stripes and the lights? I mean, you have to change the crown to make it two-way?

**John Desmond:** You don’t have to make it two-way but if you change the profile and you squeeze it down then you have slopes that are too great for ADA standards and drainage and etc.

**Marilee Utter:** So if we start with two-way, then we could work on narrowing next.

**John Desmond:** Yeah, or you can add bike lanes or there are a lot of things that you can do. You can strengthen the corners and focus on the crosswalks and calm the traffic. You know, one of the problems with one-way streets is the speed and the feeling of impunity that they generate. All of a sudden you go down to two lanes and they’re ten feet instead of eleven feet and you have to drive at 12-15 miles an hour instead of 30 miles per hour and it can completely transform the feeling of the street.

**Jeremy Klopp:** I am Jeremy Klopp and I’ve been known to consort with a traffic engineer or two, some of the best ones at our company, Fehr and Peers. For instance, Jerry Walters has written the book Growing Cooler. We’ve been thinking a lot about these things. One of the things I’d like to see CNU contribute to the discussion is the regional question of VMT (vehicle miles traveled) reduction. It really is a regional question. The avenue, John, you highlighted, and I think it is really critical, is the housing affordability and transportation affordability. I spoke last week at the Rocky Mountain Land Use Institute about sustainable mobility. One of the measures of sustainable mobility that we talked about there was the percent of household income spent on transportation. I really do think that we should start drawing the maps. ULI just had a great report from the Washington DC area where they showed transportation costs for living in different portions of the DC Metro Area. I think if we could create similar images for Denver with and without FasTracks, it would be a huge ballot benefit for this fall. But these regional conversations, which are much more challenging in many respects, it would be great to have a voice like CNU arguing for good urbanism, for good compact growth, for all the benefits we’ve heard about tonight. We’re really at a pivot point this year and we’ll see what happens but we’ll have to live with those choices for a long time. I have three little ones that I would love to have grow up in this community and have lots of mobility choices – but I’m only one vote.

**Catherine Cox Blair:** In CNU, have you thought about broadening your influence and your message – and this relates to what Jeremy just said – talking to HUD and EPA about urbanism?

**John Norquist:** Yes, we actually are meeting with Donovan’s people. One of the greatest things that CNU ever did was do the design guidelines for Hope VI. We want to jump back into that. There wasn’t much to do when the previous administration was there trying to kill Hope VI. It was interesting how that happened. Howard Husock was working for the Manhattan Institute, conservative, occasionally forward but mostly just conservative group in New York. Howard wanted to kill Hope VI and his boss, Myron Magnet called up Karl Rove and Rove said “fine.” The next day Rove contacted Mel Martinez, the secretary of HUD, and said “kill Hope VI.” They just took all the money out from the budget. They just did it – just like that. They didn’t say why, except that they argued it was an inefficient social program. Actually it was one of the few efficient things HUD has ever done. That was pretty bad but
there are a lot of ways that we need to weigh in on housing. As Fannie and Freddie evolve they may eventually shrink way down, or they could grow. But right now they are over half mortgages. They have some really anti-urban criteria that have never been challenged. They were big and powerful and couldn’t be challenged but I think now we can. The twenty percent or twenty-five percent non-residential rule has had a devastating effect. You cannot build urban streets and use Fannie May money for residential above shops unless you’re in a place like New York where you have retail and then thirty stories where you can meet that twenty percent limit. For the Midwest, if you wanted to do a main street in Des Moines, Iowa, you couldn’t do it using Fannie or Freddie money. So that needs to change. There are just a number of programs that need to be redone. For instance, just the whole idea that home ownership is an unvarnished virtue. It isn’t – it’s a very varnished virtue. People who want to rent should be encouraged to do that. You shouldn’t be encouraged to own an asset for a long period of time – you can rent it by the month. We need to get those kinds of ideas back in. There are a lot of things we need to do on housing and we’re trying to do it. There are rules that are coming out now on the public housing money, the energy efficient money, and this new creativity grant that HUD will administer – we’re trying to weigh in on those.

If there are other things you think we should be dealing with, let us know.

I also wanted to comment on the congestion issue. Congestion isn’t that important. The whole pavement policy is built on defeating congestion. People say “you can’t defeat congestion.” That’s not true. It is a very effective policy: if you built all those big roads and blown-out streets, it works. Congestion is not a problem in Detroit. They defeated it. It is the most successful city in the world at defeating congestion. And the next time people tell you that we need to defeat congestion, tell them: “You should get tickets right away and head to Detroit. Because there you can see what happens when you defeat congestion.”

HIGHLIGHTS OF CNU 17

Cheney Ferguson, LEED-AP
Board Member, CNU Colorado
Designer,
Van Meter Williams Pollack

After attending CNU 17 I have read reviews of the Congress online, some touting New Urbanists are going to save the world and some criticizing that we need to start talking in real terms that real people understand. Regardless, I think this Congress was full of a new kind of hope: a desperate one. These times are real, and they beg for real solutions, not imaginary ones.

On an experiential basis, I learned how proud I am to call Denver “home.” The Mall was bustling with people, performers and impromptu gatherings. I even caught a lunchtime jazz concert in Republic Plaza. The sun shined, as usual, ninety percent of the time and the recent rain made the backdrop of the city very lush and green.

On a metaphysical basis, I learned that from an insider looking out, America has a lot to learn from other countries in terms of being able to experience a place with your heart and feelings. To put it bluntly, strip malls just don’t bring about the most transcendental state of being like standing in the center of the Pantheon does. The Metaphysical Planning session discussed what a spiritual city today might look like. Instead of churches and civic space being at the center of a city, we now are driven (pun intended) by retail. I also learned that from an outsider looking in, America has a lot to teach other countries in terms of being able to live in peace with competing views of spirituality. Because our culture is not so religiously driven, “spiritual” may mean something completely different than an ancient temple with a giant oculus that allows sunshine to pour in and dance around. What would America’s spiritual city look like?

On a practical basis, I learned that we must find ways to alleviate our long emergencies symbiotically. For example, street trees reduce CO2 and create more walkable places, which in turn spur economic development and reduce VMTs. I learned that by simply increasing talent and reducing poverty by a minuscule amount, we can reap the benefits
A BRIEF INTERVIEW WITH LEON KRIER AFTER HIS TALK IN CNU 17

Leon Krier, Architect and Urban Planner

Korkut Onaran: In your session you made a comment about the building height in the cities, you do not want to see buildings higher than 4 or 5 stories. You asked CNU to take a position on this. In your book you are calling the skyscrapers vertical cul-de-sacs.

Leon Krier: Yes, network congestors or killers.

Korkut: I was wondering, given that this year CNU 17’s theme is “experience,” how do you see the difference between a fabric with vertical cul-de-sacs and a fabric with lower urban buildings, in terms of the social relations and experience on the street?

Leon: Well, vertical cul-de-sacs have the same characteristics as the horizontal cul-de-sacs, namely that they are gated communities. They are a mere address on a public network but do not enlarge or enrich it. People who live and work in vertical cul-de-sacs think that it is their holy right to use the network on which they are plugged but that their own circulation network is exclusively theirs. So it’s not a reciprocal love story. A robust urban network can of course accommodate a number of cul-de-sacs, I mean, a monastery, a hotel or any large building is in a way a cul-de-sac. The problem is not the single type but it becoming a repetitive or exclusive phenomenon. The major question which is addressed here is the relative amount of public versus private space and at what point privatization of urban space menaces the constitution and maintenance of a civil society.

Korkut: In your talk you mentioned the “The Long Emergency” by Kunstler. Lately there are a lot discussions about how we will need to live more locally and produce food. How do you think that will change the urbanism, especially the way we build? What kind of future do you see there?

Leon: When you use local materials, there is not that much you can go wrong with architecture. Even an idiot cannot do the wrong arch because otherwise it will simply not stand up. Bad experience teaches you how to do it correctly. Whereas you can put a fake arch up-side-down and it will still stand. The Libeskind building here in Denver could be built up side down or laid side ways and it would still stand up . . .

Korkut: How about this building we are in now (the Sheraton Hotel in Downtown Denver)?

Leon: This building is a mega structure stretching under a public road. I had this extraordinary feeling of disorientation the other day. It will take some time even for a professional to realize that some of the main conference accommodations are located under a major public street. I have a good sense of spatial orientation but it took a real mental effort for me to intuit where I was and how it all worked. I imagine that normal users here just follow signs and never really understand how the beast is configured. But perception and use are not the only problems related with mega structures, there are other ones too. Just take the air-conditioning. In times of crisis when air-conditioning is not ensured, this place becomes a slum within days. It’s a very risky conception and for what gain? Other than the view from your hotel room, from no place in the conference center do you have any view towards the hosting city. You could just be anywhere in the universe and one wonders what is the point of so many people travelling this far if for three days they are voluntary prisoners in a blind nowhere?
Throughout the history growing food had been an important part of urban daily life, an aspect the modern urban life excluded completely. In the modern city our food comes from far away and few of us urbanites are aware of the processes through which our food reaches us. However, there have been recent movements to bring back the food production to urban life and integrate it to new development patterns. These efforts depict exciting prospects for us urbanists, along with its challenges. To review these efforts and have a discussion about the related issues, we organized a panel discussion on recent local developments of agricultural urbanism. There were six brief presentations followed by a discussion between the panel and the audience. Here we are including the shortened and edited versions of each presentation and the discussion. We express our gratitude to Marilyn Megenity, the owner of Mercury Café, who gracefully hosted this event at Mercury Café in Denver, a venue that suited the subject well.

**URBAN AGRICULTURE AND SUSTAINABILITY**

James Van Hemert  
Executive Director,  
Rocky Mountain Land Institute

The Rocky Mountain Land Institute is at the University of Denver. Our mission is to provide a forum for debate and dialogue on critical land use issues in the West. For the last two years we’ve begun addressing agriculture which traditionally hasn’t been on the agenda at all. But increasingly with respect to energy use, climate change, public health it’s seen as a real planning issue. I just want to make a few short comments by way of introduction to the subject. I’d like to start with a road trip I just took, maybe the last road trip of it’s kind. I travelled a long ways in two days in the car, and it’s more than I can stomach. The landscape between Denver and Minneapolis, what does it look like? It’s all soy beans and corn. And more soy beans and more corn. Actually none of it is edible immediately. Although it’s only edible in the form of fast food in the restaurants that we would stop to along the way. That’s pretty much all the food we had available. A lot of that food is genetically modified. It takes a tremendous amount of energy to grow. In fact it takes roughly 8-10 calories of energy per calorie of food to produce our national food system which is exceedingly high. It is simply not sustainable, and as we look at higher fossil fuel prices, our entire system of food production is as sprawled as our physical environment. This is something we really need to address if we’re going to obtain a more sustainable future.

With my family I am part of a quasi-CSA (community supported agriculture) “door-to-door organics.” We get a box a week. But a lot of our food is grown in our yard here in Denver. And I have to confess that my wife (who is here, Shannon) told me to make sure that everyone here understood that all I do on agriculture is talk about it. She does all the growing and the hard work. Although, I do say that I’m doing my contribution, and I am raising chickens.

Back to my road trip and the energy consumption and environmental impact of our current food production. Our industrialized food system, most of which is outside of cities, is exceedingly unsustainable, and therefore we are very vulnerable to spikes on oil prices. Our environment is very vulnerable too. The amount of damage to the soil, to the water and to the air, from our industrialized food production system is very significant. We have completely ignored this fact over the last few generations, especially in the field of planning (and I’m a professional urban planner). We have ignored food in the city because food is something that happens and that is grown somewhere “out there.” Historically that’s not how it has been. We have basically zoned food out of our lives. The current zoning code update in Denver is beginning to address that in a small way. At least community gardens will now be legalized in Denver. There are communities in this country which don’t allow you to grow food in your front yard. You must only grow Kentucky Blue Grass. The list goes on of the things that cannot be done.

I want to draw your attention to the latest Planning magazine of the national American Planning Association, an association of over 40,000 professional planners in this country. The issue is top priority - food, food systems, community and regional food planning. There is a recognition on how important this is for a sustainable future. I have one final pitch for those of you who care about urban food and chickens: you need to contact your council person and ask that permission to have chickens, at least 6, be by right and without any fees. Thank you.
CITY FARMS FOR CITY PEOPLE

Lisa Rogers,
Executive Director,
Feed Denver:
Urban Farms & Markets

Feed Denver is aimed at sustaining and securing our food shed here in Denver and in the metro area of Denver. Our number one objective is to talk about it, to our city people and to our neighbors. But we also want to start creating model farms for the city.

We’re not producing our food anymore. We expect somebody “out there” to be producing our food. We’re in the midst of an energy crisis. We are all very aware of it. Our food is incredibly fossil fuel heavy, not only in the production of it, but the transportation of it as well. For every dollar that we pay for food, 65 cents goes to fossil fuels and chemical pesticides and fertilizers, 34 cents goes to packaging. This means nothing goes to the farmer. They only survive on subsidies. And really, there aren’t any farmers anymore. We have about 354 farms in Colorado that are producing vegetables for people to eat. Those 354 farms are part of the fastest and largest growing portion of agriculture these days. The small market farm is really picking up steam. But it’s going to be a while before our farms are able to feed us. I know the number one complaint most people talk about regarding farmer’s markets this year is that there aren’t many farms at our farmer’s markets. Part of that problem is that we just don’t have many farms, and those 354 can’t be at every farmer’s market at all of our towns and cities.

We’re in the midst of a health crisis. We all understand that we need healthier food. We all understand that we’re eating too much processed food, that many neighborhoods are only served by fast food or processed corner stores or the liquor store that happens to have some food. Fresh food access is becoming rarer and rarer. The fresh food that we think we’re getting is less and less nutritious. So we’re in the midst of an incredible health crisis with obesity flying up, diabetes flying up, and malnutrition at the same time.

Denver is a food desert. Right now the State of Colorado produces 0.2 % of the food we eat. The industry for food in the Denver metro area is $5.7 billion. We’re spending $5.7 billion on food, and only 4.9% of it we paying to the farmers in Colorado. $3.2 billion is what we could reach for in the market of farmer to consumer goods, actually buying from Colorado farmers. $5.5 billion is how much money we set out of the State every single year on food. (Ken Meter, Crossroads Research Center. 2008. Denver Metropolitan Region Local Farm and Food Economy).

We need to start thinking about producing our food here. City food for city people. We need to start creating small family farms. And that’s what we are doing as Feed Denver. But first let’s talk about what farming in the city looks like. First, the techniques of small farms are proving to be much more viable than the large farms. The reason is that the small market farms are growing quickly. More and more people are seeing that if you grow things closer together and with modest techniques different than our conventional agriculture, we can actually produce more and better food. Urban farming is a stable productive business. People are starting to find that out. There are few organizations around the country who are already proving that this is working. One of them is Growing Power in Milwaukee. One of the reasons I’m really excited about bringing food production into the city is that there are many other food processing businesses that can be started in the city or can be expanded in the city in this time of recession. Not only can we be growing food, but we can be canning, we can be making the next greatest salsa, or a new kind of ketchup or cheese. In time we have given away the processing of food. We expect Safeway or McDonald’s to do it for us. Urban agriculture does create small businesses and it does create the greenest

Figures 1, 2, and 3: Community gardens in urban settings. Beyond food production community gardens enhance the sense of community by bringing people together, letting them know each other and work together.
of jobs. Then there is the use of energy. The energy that we’re using is the energy of the sun and the energy of people. So, what it comes down to is creating or strengthening our local economy, creating more green jobs and sustainable jobs and improving the health of everybody because we’ll actually have access to food that is grown somewhere near us.

Let me introduce you to some of the farming techniques that the city is already using. There is the backyard farming that James already mentioned -- the CSA model; people digging up front yards and back yards; people taking other people’s yards, five or ten of them, and making a small farm out of that. There’s also community-based farms that are starting recently. The community garden is one of those. Churches are getting together to have farms. Organizations are getting together. Non-profits who serve certain populations are getting together to start producing food and learning the skills for farming.

Feed Denver is creating model farms and a training center. We have partnered with Growing Power to create a Growing Power center here in Denver and start teaching the techniques of the business of farming and especially farming inside greenhouses, aquaculture farming, growing fish as well as greens and vegetables. We also hope that in five years we’ll have 500 farms in Denver on main streets.

Urban agriculture makes a better city - jobs, health, training, stronger local restaurant industry, stronger cottage food industry, and better school and institutional food. Hopefully in the future, when I ask where your food comes from you’ll have pictures of the City of Denver.

GROWING COMMUNITIES ONE GARDEN AT A TIME

Tori Ford
Community Initiatives Coordinator, Denver Urban Gardens

If you saw the program for tonight, you’ve saw the heading “Growing Community One Garden at a Time” which is actually the mission of Denver Urban Gardens. We’ve been around for nearly 25 years. We’re celebrating our 25th anniversary next year which is quite exciting. That also when we expect to break ground on our 100th community garden.

Urban agriculture takes a lot of different looks as Lisa just showed us. The role that Denver Urban Gardens plays is supporting community gardens throughout the city. We do have a network of over 90 community gardens at this time. Community gardens really fit well into the new urbanism model where people don’t necessarily have big backyards for the gardens that I remember my grandparents had when I was growing up. We collaborate with Denver Housing Authority with their plans of South Lincoln Homes and the Lincoln Park Neighborhood, which is going to be a neighborhood with mixed-use homes, hopefully some retail and a large community garden where people may not necessarily be rubbing up against each other at the Light Rail station or off on their bikes or walking to work or to the parks. But this would be a space where people do come together and actually connect and grow community.

Also, Denver Urban Gardens partners with Aurora Parks & Recreation to support a CSA at the Delaney Heritage which was I believe in the National Registry. It was an old farm, and is again a farm. We have about fifty full shares. People from across the metro area engage through volunteer hours and through shareholder pickups and other educational classes to come out there and receive a weekly supply of produce of that which was harvested. When we had hail a couple of weeks ago, the shareholders missed a couple of weeks of pickups because we needed a little bit of time to clean up the farm and get some of the seeds replanted because of the hail damage.
Community gardens are really quite productive. I have some numbers with me to share with you about what they contribute to our food system. We have some wonderful partners in our community gardens who have participated in a weighing project. In these community gardens across the city, we’ve got anywhere from our smallest is about 8 plots to some of our bigger gardens who have 60 members, gardening generally for themselves, for their family, maybe for their friends. They also provide produce back into the community through baskets, through providing produce to their neighbors, supporting shelters and food pantries that use that produce and share it for those who need it. Some of our gardeners participated in this weighing project and actually tracked all season long the things that they grew. On average community gardens grow about 1.45 pounds of produce per square feet a year. On average our plots are about 10’ x 15’, 150 square feet, or 218 pounds of produce per household growing in a plot. Most of our gardens average around 25 plots so that’s looking at 5,450 pounds of produce, well over 2.5 tons of produce just from a single community garden a year. With over 90 community gardens in our network, we’re looking at 490,500 pounds of produce. This is produce that unfortunately will not show up in the numbers like Lisa is showing because this is not something people are paying for, this is something they are working for themselves. This is helping to support the local food movement, provide some food security for households of all shapes and sizes.

We have a very diverse base of gardeners across the city. In general when you look at the members of any given community garden, you’ll see all kinds of folks – young and old, families, single people, maybe a couple of single people sharing a plot because 218 pounds of produce is a lot to eat. We also have great racial diversity as well as social economic diversity. Within these community gardens, we’ve got lots of food. It’s a really great use of institutional or public lands. We’ve got gardens in public spaces managed by the Parks and Recreation, at we have gardens at schools. We have worked with housing authorities. We don’t actually own too many of the properties where we have gardens, but this is an opportunity where people from all over the neighborhood participate. It is an important endeavor for public purpose.

COMMUNITY SUPPORTED AGRICULTURE

James Hale,
Co-owner,
Produce Denver

Produce Denver focuses on Consumer Supported Agriculture. As Tori talked about, it is a joint venture between the farmer and the household. A household buys a share from the farmer—whether he produce farmer or farmer raising beef, cattle, milk. So the consumer shares the risk. For instance, in the event of a hail, the households receive less. The idea is to support local farmers by strengthening the relationship between the community and the farmers. We are implementing a version of this model right now. We have agreements with households – we are growing food in their yards actually – where they absorb some up front costs for water, compost, irrigation, etc., and they get to share what we grow and we distribute the rest amongst our CSA network, and also sell it to restaurants and donate a little bit of it as well.

I want to talk about some of the challenges. One thing we have been experiencing is the amount of labor we put in. It is significant and the compensation is not enough. That is to say that true local food system is going to be more expensive. Food is going to be more expensive especially if we want to support the local farmers. It is a marketing challenge as well. We need to emphasize the value in supporting a local food production system. We are also looking at larger spaces to grow food in a more efficient way. Another line of service we provide is similar to a regular landscaping service, but food oriented. People pay us to install medicinal plants, herbs, trees. We even set beehives, chickens, etc. And they take it on, maintain them and we walk away from it. It creates synergies. We help them and they buy food from us. It raises awareness about using land and resources differently. We also have some socially conscious policies. We have a sliding scale according to income for CSA shares. We are also doing that for labor; we charge depending on income. It has been a great experience for us and we keep learning and going further. Thank you.
COMMUNITY BENEFITS

Marilyn Megenity
Owner and Chef,
Mercury Café

I am the owner and the chef here. This business is an exploration of food and community, arts, and politics that surround food. It started in 1975. I moved into this building in 1990. The food that we’re growing here in our urban landscape are apricots, apples, hawthorne leaf and berry, lots of herbs, grapes… We have some tomatoes and some beets, some amaranth, and a lot of different kinds of squash. The food that you’re eating here doesn’t really come from our gardens except for the grapes on your plate or herbs that we cook with. But your food is local. And I would guess that 90% of the food you’re eating here is local - not the coffee. Maybe you didn’t choose a local wine, but there are local wines to choose. When I was looking for this building, I started riding my bike around because I’ve been walking to work for 35 years and I wanted to continue doing that. I think that’s really important in new urbanism. Think about those choices in your life - try to live near where you work, and try to insist on a good school for your children near where you live. I wish somebody would buy the rest of this block, this parking lot, and we could turn it into a green housing and a lot of urban farming.

The meat that we serve here is all local. The fish comes from Alamosa – it’s striped bass. When I was learning culinary stuff, nobody would buy farmed fish. I didn’t buy any farmed fish. Then I realized that the fish is actually flying miles from the oceans to Colorado and that contributes to pollution and global warming. So I started to find out where I could buy fish. For a couple of generations Cline Trouts have been fishing those streams and ponds of Colorado with trout. And they deliver trout to us. The pork is from Windsor. If you’re having elk, Jim Carver of the Colorado Elk and Game Meats raises elk on fenced mountains – it’s not pasture. They get some pastured hay in winter, and he cares about and loves his animals too. So does Julie (of Campbell Hansmire Sheep) who raises our lambs. Her herds run wild from Vail to Utah. The poultry is the same. We buy from all of the local farmers who deliver and some who don’t. Growers Organic is an organic food distribution company who started with the farmers creating a co-op in the draught in southern Colorado to distribute their food and other people’s food in Denver so they could hold onto their farms. I still buy lemons, limes, and oranges from them.

I’ve got local gin, local vodka, local wine, and local beer. I only want to buy organic food. There’s only one organic winery in Colorado – Jack Rabbit Hill Winery. There’s one only organic spirit maker in Colorado – that’s Peak Spirits. I’m trying to convince the other wineries and beer makers to become organic because I think that’s a big part of our survival in the future and the survival of my grandchildren on the planet. If you are a beer lover, I urge you to contact the governor and the Colorado Department of Agriculture and tell them that what we need most in Colorado is a barley malter. Because the barley that is grown in Colorado is shipped to Canada and malted there and then shipped back. We can’t afford that kind of transportation pollution. It’s wasteful. It’s ridiculous. Wynkoop produces one organic beer. Great Divide doesn’t have any organic beer. Belgium Brewery produces one. None of these people are able to have organically grown, locally malted barley to make their beer out of. I think that’s crazy. The farmers in southern Colorado would be thrilled to have a guaranteed market for organic barley. So, write to the governor about that.

Your cheese is from Haystack Mountain Goat Dairy or from Rockhill Creamery. Rockhill is just on the other side of the border in Utah, and they have six cows. It’s a mom and pop organization, and their cows are named Greta, Ruby, Inga, Ingrid, Elsa, and Claire. They love their cows, and I love their cheese. The green chilies that you’re eating come from Alvarez Farm in New Mexico. They are the...
oldest organic farm in New Mexico. The Alvarez family loves their chilies.

Community is important. In small towns Saturday night dances used to be an essential event that brought people together. We all used to make music and dance together. We have dancing here too. I hope that you’ll come dance with me here. My grandfather participated in that kind of culture. He died in the 1950s. He never bought any food in his life. He grew it, and he traded it. That’s my own grandfather, and we’ve lost that in just two generations. If we cook together, eat together, and dance together, then we will love each other so much that maybe we won’t let someone talk our young into joining the army to go fight strangers. I think it’s all interconnected.

We can use our urban gardens to reduce our energy use. This south wall is an example. This vine here is Virginia Creeper. It has never been watered. It cools this whole room in the summer, and in the winter the leaves fall off and it lets the light in. I’m excited that there are organizations like CNU. I hope we can all work together to ensure a much more beautiful way of life in the future than the one we’ve grown up with. We’ve grown up kind of alienated. We learned to own – own our own homes, machines, toys, tools. And we don’t share. People used to share cooking. They used to share the tools to keep their landscaping. We don’t share anything – we all have our own. I have my computer, I have my phone. I don’t borrow my neighbor’s phone. I don’t wash the clothes with my neighbor. All of that creates alienation and diminishes the sense of living in a community. And it also creates pollution in the production of these things and the disposal of these things. Food is no different.

**AGRIBURBIA – A NEW PARADIGM**

Matthew ‘Quint’ Redmond,
Chairman and CEO,
The TSR Group

My wife Jennifer and I started our firm 12 years ago. Our specialty is natural resource management. I’m originally a geologist, Jennifer is a biologist. We both have our Masters in Urban Regional Planning and Landscape Architecture. She grew up on a farm in Pennsylvania, and I grew up farming and ranching here in Colorado. I think the point is that this is a unique set of traits. We never thought these traits would ever be valuable together. But for we are doing now, agriburbia as we call it, you need to know how all interact -- the natural resource management, land use planning, and farming -- and glue them together.

These are the big ugly issues out there: increasing cost of fuels and food, global warming, decreasing water quality, the scale of our carbon print, etc. A lifestyle that depends on growing food is related with all of them. When we started in earnest a project six years ago and when I suggested that growing food would be an actual alternative as an amenity, as a productive part of the community, I was laughed out of the room on the first hearing. I had to go outside to compose myself. This was a community that actually had agriculture in it’s comprehensive plan.

Just a year ago we were reminded that when the gas prices go up all changes. And now in this economic environment everyone is looking for an easy fix. The idea is to make ourselves comfortable. That’s not always the greatest thing for the planet. We’re in a period in history where all of the land surface has to provide all of the resources for basic humans needs: food, shelter, transportation. We need to change our attitude about resource consumption. We also need to change the way we use the land. Agriburbia is all about changing the way we use the land. We’re land use
people. We count everything by the square foot. In fact we’re introducing ideas of micro-zoning so that if you actually have a lot and are productive on that lot, you don’t get taxed entirely as a residential lot.

Along the way we developed a framework to defend our model. We call it the carbon triangle (figure 11). Zero carbon imprint is in the middle, and 100 % imprint (the maximum impact) due to transportation, shelter, and food are at the three corners. U.S. Green Building Council, by LEED (Leadership in Energy and Environmental Design), has been working on reducing the shelter’s imprint percentage for quite a while now. But living in a green building is not the whole story. What is your transportation impact? Where is your food coming from? The carbon triangle addresses the food and the transportation together with the shelter.

This (figure 12) is a typical suburban carbon triangle. Your food is pretty high. You eat out of a supermarket. Your transportation depends on where you live, but usually high. Shelter depends on when it was built. This (figure 13) is the industrial farmer – you’d think their food carbon would be almost zero. Well, they eat out of the grocery store like all of us. Their transportation is high. There used to be a different lifestyle – if you wanted to live out in the country, you didn’t get to see the doctor all the time. Your education was different. Now the expectations are different, the standard is called air helicopter. The standards have changed for the world. This (figure 14) is the TOD (Transit Oriented Development) scenario. More emphasis on alternative fuels. The reality is that by TOD pattern you may reduce the transportation related imprint but not the food’s impact. If you live in a TOD, typically your food carbon is the highest that it can be. Currently there’s no infrastructure. There’s not enough growing space. I’m talking about really feeding people. One of the things we’re doing as a firm is counting calories by census track – where the calories are really created and where they’re consumed. What we’re saying is there is a choice you make. The overall triangle is still smaller if you live in a TOD, but it can be even lower.

This is Agriburbia carbon triangle (figure 15). The overall goal of agriburbia, as a concept, is to try to work on all three pieces -- transportation, shelter, and food. Agriburbia combines positive social, cultural, political, physical, and financial characteristics from both urban and rural lifestyles. It’s really a new land use concept. All urban land use in the last four or five decades, has been consumptive except for the industrial use. Agriburbia integrates food into the mix. This does not preclude all of the other urban amenities to support a healthy community. It’s an inclusionary idea. We don’t know how much food you can grow, that’s not the point. The point is to look into it and find out who much you can grow and attempt to do it.

Back in the 18th Century, if you had more land than you needed to subsist, that’s how you showed your wealth. That’s why a lot of people in the world think it’s crazy that we take a house, put it on the middle of a quarter of an acre and don’t do anything with the rest of the quarter acre.

Some farmers think there is not a need for any new farmers. The authors (Sharon Astyk and Aaron Newton) of
a book called *Nation of Farmers* suggest that there should be 100 million new farmers to feed us. We tried to figure out how many new farmers we really need. If you think about it, lawyers account for between 1 and 5% of the population, doctors between 1 and 3%, architects 1 and 6%. You only use those occasionally, but you eat every day. We really think you need 30 million active farmers for profit to feed rest of us effectively.

Here are the Agriburbia principles we use as guidance in our projects:

- No net loss of agriculture value or revenue.
- Production of a significant portion (up to 50%) of dietary requirements.
- Provide viable opportunities for enhanced self-sufficiency and local markets.
- Integrate all sustainable energy practices including solar, wind, geothermal, and other sources.
- Provide opportunities for all landowners to participate.
- Provide opportunities for professional high quality agriculture and farm jobs.
- Bring better infrastructure and services (medical & education) to rural areas.

We’re not trying to go back in time. We’re trying to figure out how we’re going to go forward in time. We’re using all of the financial mechanisms that the real estate industry already has in place. For instance in the project I am about the show, there was a $1.5 million line item in the service plan budget that was approved by the town for the drip irrigation of the vineyards. They approved that just like they did the water and the sewer. We think of the agriculture as part of the infrastructure. You have to have it.

![Figure 19: An example for Agriburbia: The site plan for a new green field community at Milliken, Colorado](image1)

Figure 19: An example for Agriburbia: The site plan for a new green field community at Milliken, Colorado

![Figure 20: The summary of the project.](image2)

Figure 20: The summary of the project.

In summary, the net agriculture value created here is $3 million. That’s all bio-intensive, high quality, high input agriculture. People say that’s a lot of labor. Well, we are trying to create jobs here. Green jobs. That’s the point. And all this for the third the water the conventional farmer would use for this amount of production. We can use less because we have drip irrigation. A farmer usually cannot do this alone. Where will the farmer find $1.5 million from? There is a true synergy in agriburbia between the urban development and the agriculture.

To conclude, we must address all three components of food, shelter, and transportation together. As designers, that’s our philosophy – if you leave one off the table, you’re not really servicing the community. We need to connect more of the population to the land and the source of their food. It will provide greater mutual respect for all concerned. We need to teach our kids to know and love the land, even if it is a quarter acre. It’s not how much you produce but the quality of food you produce and the amount of labor you put in.
Bill Hughes: I have a land in Aurora and half of it is in the floodway. We thought living there and farming would be a good use. I went to the Planning Department and the planning director looked at me like I was crazy and he sent me to the city engineer. The city engineer spent next half our lecturing me about how in last hundred years we tried to get away from that. But he did bring up an issue which is noise. How do you address noise -- cows and other animals, for instance?

Quint Redmond: If you grow veggies no one complains. You are halfway there. And actually for protein you do not need animals. But really the issue is the codes and tolerance of the neighbors. James was right on when he said we basically ruled ourselves out of decent living and growing our own food. Trying to undo that -- you know, that’s what I wake up into, each morning; trying to figure out how to get through these rules. And we do. It’s surprising how much the attitudes of the reviewers changed in just last two years.

Marilyn Megenity: I think it’s all about getting used to a new idea. For instance, Mercury Café has Denver’s only windmills. At first the Building Department said no, you can’t. Denver’s zoning code said you can’t. I went my way through the rules and finally now I have the windmills. But since then there have been several other windmill proposals and they have turned down, because there is one bureaucrat in the Building Department who feels that windmills are not safe (as if living with cars are safe or the power lines are safe).

Carol McLennan: This question is for James and Tori. You’re out there functioning on a very small neighborhood scale. You’re growing vegetables on front yards next to neighbors who have never seen that done before. What kind of reaction are you getting from the neighbors?

James Hale: They have actually been mostly supportive. Usually neighbors are excited about what we are doing and want to learn more about it. People realize that this is a positive lifestyle change. Sometimes it’s struggling but rewarding too, especially when people’s attitudes start shifting.

Tori Ford: For the community gardens a lot of enthusiastic people come to us and inquire if having a garden is possible in their community as well. And of course there is always the neighbor who grumbles and talks about compost being smelly or attracting rats. Compost doesn’t attract rats and it doesn’t smell. We have code of conduct for our gardeners who sign a plot agreement that we expect they will follow these maintenance guidelines. They won’t be putting awful things in the compost pile. The garden needs to be planted by certain date and taken down by certain date. So, you’re not going to be walking by an eye-sore all winter. In one of our gardens in Lakewood, we had one neighbor who would constantly complain. But really the issue was that he felt left out. He wanted to be a part of that community garden. They would bring him baskets of vegetables. They’d talk to him when he was outside. A year later, we got a beautiful letter from this neighbor saying that he realized that this was adding value to his neighborhood, creating community, people were getting outside and making connections.

We’ve partnered with the University of Colorado, School of Public Health to contact a research on the social aspects of the gardens. The project is ongoing. The results suggest that community gardens aren’t just about the produce, it’s about the connection. People are now getting involved in other civic opportunities — improving their neighborhood, streetscape, light, parks, and creating walking clubs, etc. Out of a community garden, you get a much stronger place, where people socialize, where neighbors come together and find their collective voice.

Lisa Reynolds: I have a lot of zucchini this year. I would love to be able to sell it some place. Your idea about urban greenhouses — is there a relationship with the community where I could do something with it at the market you’re talking about?

Lisa Rogers: There is “eating it yourself and giving it to friends.” There are many places you can donate it: to food shelters, food kitchens, and cafes run by donated food. Also, a number of us have looked into what our rights as growers are. Are we allowed to grow food and sell food? We are. The biggest thing that food growers have to deal with is selling from your home because according to our zoning code, you’re not allowed to have a shop at your home because they don’t want all of the cars coming through. So you might have to go to a farmer’s market, start forming coops, or find ways to enter the retail market. It’s all about taxes. Every farm is not going to grow everything you need. We hope we can have a little distribution network. In some of the community based models we are working on, we will be having a greenhouse, employing people from the community, training and teaching methods of growing and processing food, and working with the neighbors. We have someone who’s trying to retrofit garages as a greenhouse.

Quint Redmond: If you think health care is a mess, the food laws are even more crazy. Internet sales are unregulated. But if you want to sell out of your home, they’ll come and handcuff you.

Tori Ford: There are movements besides ours that are looking at these same questions as well. Denver Urban Homes is working to become a local market and a center where people can provide training. It’s something that can happen in any neighborhood if the interest is there.

Lisa Rogers: I would also add that we’re dealing with new zoning code for Denver. This concept of our residential areas and our homes not being a marketplace and not being a place of business is a really important issue for us right now. Many of us don’t have jobs. Many of us still have skills. And perhaps we can support ourselves from our homes. And our zoning does not recognize that, because everything is sectioned off: you go somewhere to do your work, someone somewhere else makes your food. Our housing has been completely separated from food growing lifestyle. Anyone who’s tried to have a home office knows how many hoops you have to go through. But we’re in the middle of this updating our zoning, and it’s our chance to communicate to the city council members what is important and the right to create a livelihood in the home you live in is really important because we don’t know what the future is bringing to us.

James van Hemert: From an historic perspective, what we consider to be normal in this country where we have sliced and diced all of our land uses into separate categories, is an historic aberration. It’s part of the problem with our excessive amount of fuel consumption in this country. No other country in the world aside from Kuwait and Saudi Arabia consume as much fossil fuel per capita as the United States. And it’s not necessarily that we’re living better. They consume far less in Europe, for example, and they have very high quality lives. A lot of it has to do with how we arrange our land uses. We’ve put this on ourselves. It’s your own neighbors and even yourself who have prevented things from changing and progress from occurring. Why can’t we make some money on our own private property? Historically, it used to be that land where you lived was an economic enterprise. Now it’s a money sink for the most part. You can’t make money on residential property anymore.

One last point: The Denver Zoning Code update was supposed to simplify things but it is proposing 100 different zone districts. We currently have 78.

Linda Riley: This is for Quint. As an engineer, I’ve seen development projects be proposed in phases. Sometimes the development of them in phases causes them their self-destruction, for instance live-work: since the non-residential uses wait for long live-work fails. Are these projects you’re working one are they being developed all in one phase?

Quint Redmond: Our phasing plan is probably the most sustainable quality of the project. There will be production in all phases. We can tailor the infrastructure and the planning and phasing of the project, so that you’re never
exposed to a more than certain amount of money. Our expectation as a society has come to mean that when I buy a house it will look like when I bought it until the day I sell it or the day I die. Whereas in our concept you could take that 618 acres project and sell 3 homes, and the rest of it will all be in production, and it could take three years to sell the next house. As long as there is production it really doesn’t matter. The ultimate plan is there for everyone to see. That doesn’t mean it has to be that way on Day One or Day Ten. In fact, this economy has created many troubled properties: banks know that they will never be able to sell these. Sometimes they come to us and ask what we can do. If you go into those projects and look at the CCRs and the HOA guidelines and plat stipulations, you have to change all of that to allow for production of food. In our CCRs, it’s a requirement to have cool storage. Anyone know what cool storage is? A root cellar. We couldn’t use the word root cellar because nobody knew what it is. That’s why retrofitting is so hard.

Linda Riley: In retrofitting, could the HOA go to funding the farmer in the neighbor versus irrigating the bluegrass?

Quint Redmond: The most compelling part of the agriburbs is not the physical design but the economic one. When you figure out how to make the land more productive, that’s exciting. You start to produce value. Think about an HOA whose revenue is not just the HOA fees, but the agricultural revenue from the common land. Everything starts to change.

Michael Tavel: It has been argued that the lowest resource consumption per capita is in really dense environments like Sao Paolo, Manhattan and Hong Kong. In these places building energy and transportation related consumption is lowest. As we are growing more crowded we need to plan for the next hundred years and we need to incorporate agriculture into the equation. What do you think is the pattern? Would it be dense cities that are transit oriented, with food coming from within 150 miles or would it be more like returning to this preindustrial situation of growing your own food and living in suburban sprawl all across the planet?

James van Hemert: I think the numbers will show you that clearly high density like Manhattan will be the most resource efficient. But what we haven’t really calculated is the food piece. We can stay within 150 miles I would argue that dense urban areas would be the most efficient pattern. But that kind of thinking starts to be unidimensional. Quiet frankly we are not all going to live in Manhattans. And in fact much of America already looks like agriburba. But I also think that density brings so many other amenities to life, gives you greater choices in mobility, culture, gives you better choices in jobs. What about people who want to hobby farm? Why can’t we have some of that? I don’t think Quint is recommending that everything become agriburba, but I do think that if we look at the resource consumption piece, much high density would win out.

Quint Redmond: Where are the thirty million new farmers going to live? We have to think about this in every density and every stage. We have to make life livable and as efficient as we can at all of those stages. That’s the critical component here. I’m not defending the suburbs the way they are. There is a lot of wasted space in the suburbs. If you chose to live in the suburbs, you should grow most of your own food. That’s the idea behind the carbon triangle analysis. If you live in a low density area you need to focus on other ways to reduce your carbon imprint.

James van Hemert: One of the major challenges with agriburbs is that it is automobile dependent. You’re never going to bring light rail there, and bus service isn’t likely.

Lisa Rogers: We need to talk about our food shed. We are crowded here and where is our food coming from? Like I’ve said, we only 0.2% of what we eat here in Denver Metro area is being produced here in Colorado. Last month the Mayor of San Francisco announced an executive directive that within 60 days they were going to survey all the available public land and abandoned land in the City of San Francisco for permanent agricultural use. Then he said within 180 days they are going to have sustainable food shed proclamation. This is San Francisco where they actually produce food. We don’t. Seven other mayors followed this route within last few weeks: Chicago and New York are talking about it. We still don’t here. Talking about developments, we have all these rules about impacts: green space offset, carbon offset, but really, where’s our food offset? If you’re putting in homes for 95 homes, you should put the food in somewhere.

James van Hemert: In some cities, providing agriculture land or roof top gardens offsets in lieu of park requirements.

Quint Redmond: The open space policies and regulations usually lead to resource depletion. Most of the times agricultural land does not count as open space. If it’s a vineyard, for example, it’s not open space. But if it is wheat-free pesticide sprayed golf course, or just lawn, that’s open space.

James van Hemert: Some of the most densely populated urban places in the world have very high percentages of their food grown there – Singapore, Toronto, Vancouver, Havana, Cuba. It can be done.

Marilyn Megenity: Because of the global warming, there are going to be more bugs. And if we’re going to be organic, the way to get rid of those bugs is to get more chickens.

Kale Prewitt: Under the assumption that fossil fuel reserves are diminishing and all of the damage that has been done through the use of these fossil fuel inputs into our system, afterward will we have a sufficient amount of arable land left to support our population in the US? As we see other countries scramble to buy arable land, do you feel we’re poised to properly feed ourselves?

Lisa Rogers: The urban agriculture greenhouse movement is talking about moving it inside, ways of doing it that are lower technology but also are going vertical. We are living vertical, we can use less land. We have to create the soil that we’re going to grow in since we have a hard time finding uncontaminated soil.

Quint Redmond: The Middle East has been buying huge ranches from Central America. You can’t grow food in the sand. They know it’s coming. There’s going to be a huge political decision as to whether the country is willing to keep it’s own soil. If you buy a piece of land here, will you be able to take food out of the country to feed another? That’s the issue right now. There’s not enough room for both liquid fuels and food unless we do all the kinds of things we’re talking about doing here. The food problem in the world has always been distribution not production. It’s a policy issue, not a technical land issue.

Lisa Rogers: It’s a responsibility issue and knowledge of yourself as a part of this organism called Earth. Most organisms are able to feed themselves by instinct. We’ve lost that, especially if we’re in the city. We have to start learning to do it that again. We are in a recession – what can we do? What is the core of survival? Food, shelter, transportation. How close are you being able to support yourself at a core level? Every business has to ask that. We have to think about that in our own individual lives. And then put all of your skills and talents to it. Then our local economy will start turning back around. We need to reskill ourselves to live on this planet.
HOW TO BECOME A CHAPTER FOUNDER OR ANNUAL SPONSOR

We need your help to be able to continue. This is the time to support the CNU Colorado by becoming either a “Chapter Founder” or an “Annual Sponsor.” We are offering the “Chapter Founder” program only until the end of the year 2009. Beyond the honor and your well-appreciated support to the cause of urbanism, being a “founder” or “sponsor” will award you with the following benefits:

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If you are interested in becoming a “CNU-Colorado Chapter Founder” or “annual sponsor” please do not hesitate to contact Korkut Onaran: korkut@wlarch.com (303.557.8188) or Sean O’Hara: Sean@evstudio.us (303.322.4964).

FUTURE EVENT:

FILM: SPRAWLING FROM GRACE

Time: Saturday, December 5, 2009, 2:00 pm
Place: Mercury Café, 2199 California Street, Denver
Guests: David M. Edwards, Director of the movie Niccolo Casewit, Coproducer
Schedule: 2:00 pm A brief introduction
2:10 pm Screening of the movie
3:10 pm Q and A with D. Edwards & N. Casewit

Sprawling from Grace: Driven to Madness is a well-prepared documentary about the state of urban development and urbanization in U.S. This event is a great opportunity to view the movie and meet the director and the coproducer.

FUTURE EVENT:

PANEL DISCUSSION: URBANISM AND COHOUSING

Time: Thursday, January 7, 2010, 6:00 pm
Place: Historic Washington School, 1215 Cedar Avenue, Boulder

At our next panel presentation we will explore New Urbanist principles as they connect to cohousing. Representatives from four established Colorado based cohousing communities will share their experiences and thoughts on living in their communities. These communities; Silversage, Wildsage, Hearth Stone and Nomad, have rich social connections that integrate into the larger neighborhoods around them.

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