

CSPH 3101: ECOSYSTEMS OF WELLBEING

# UMORE Park Design Plan

---

Envision a Dynamic Community of Wellbeing

Sarah Harper, Jacob Haug and Natalie Walker

12/9/2012

## **The Umore Park Master Plan: Our Vision**

The current master plan describes the goal of the Umore Park Community as a chance to “establish a model for development in the 21st century” by “creatively advancing goals for environmental and renewable energy, innovative education and wellness practices, and transportation alternatives.” By designing with systems in mind, the wellbeing and resilience of individuals, families, the community, and the natural environment they are a part of, can be improved and ensured. Our vision for Umore Park is not a static sterile utopian community without problems, but a dynamic place to live and work that challenges the way we currently live both physically and socially, a community that prides itself on being self-sufficient, but also one where interdependence is equally indispensable, and finally a community that can serve as an incubator for innovation that can be exported outside of its boundaries.

## **Umore Park: Ecosystems of Infrastructure**

Infrastructure refers to all the components that a society needs to function effectively. Traditionally two kinds of infrastructure have been recognized. Hard infrastructure comes to mind first, first because we see and use it every day in the form of roads, buildings, power lines, stoplights, energy plants, water pipes, when the garbage truck takes our trash away to the treatment plant etc. The natural environment is also a critical part of this hard infrastructure. The second kind, soft infrastructure, refers to the less tangible components that a community or society needs to operate successfully. Soft infrastructure encompasses the government, the financial system, education, healthcare, and law enforcement etc. Soft infrastructure consists of the rules, organizational models and services that when combined with hard infrastructure create the life that modern societies and communities afford us.

The current master proposal emphasizes the hard infrastructure, and limits discussion of soft infrastructure to loosely alluding to ways that the University of Minnesota can interact with residents. The Umore Park community is an unprecedented opportunity to reorganize agricultural hard infrastructure, and to integrate hard and soft infrastructure together in ways that increase the wellbeing of the whole community, natural, individual and social.

### **Factors of Wellbeing and Affective Goals:**

Six factors of wellbeing were determined to assist in the creation of designs that are rooted in an approach that creates a system that increases overall wellbeing. The following factors of wellbeing provide an anchor for developing designs that have harmonious effects throughout the community and help the community self-organize effectively:

- **Balance self-sufficiency and dependence:** Facilitate opportunities for residents to support themselves and each other. Favor people to people interaction over resource heavy or unneeded technological fixes. Distribute and integrate healthcare throughout the community.
- **Sustainability:** Close the resource and energy loop. Reduce the resource: person ratio through innovative sharing systems. Strengthen local agriculture.
- **Effective Action:** Enable community engagement and reduce barriers to creative problem solving.
- **Education and Learning:** Provide varied forms of education and acknowledge learning and skill development.

- **Mutuality:** Enhance and facilitate mutually beneficial relationships between private and public institutions.
- **Smart Contextual Governance:** Allow for flexibility and innovation. Regulation needs to be smart and flexible. Provide real time feedback.

### **Organizing Design Concepts**

Designing with systems requires acknowledging that a design can have far reaching effects. The following design concepts are not intended as heavy handed top down edicts, but guiding principles/designs that when combined with our six factors can help the wellbeing of a community ecosystem through positive effects the spread throughout it.

### **Decentralize, Distribute and Circulate**

How can the resources that are needed and used be available when they are needed, and how can they can they be made to flow throughout the community, creating mutual benefits? A systems based answer to this question is a variety of enabling designs that let the community access and use the resources they need, whether that is help from others in the community, physical goods, food, health services or even knowledge.

### **Complimentary Local Currency: The U Note**

Introducing a complementary local community currency that can be integrated into the Umore Park community in endless ways facilitating productivity, rewarding community service, circulating resources and allowing for creation of value amongst citizens, businesses and the university. By doing so the community will be less dependent on the volatile “too big to fail” boom and bust economic environment.

## **Integrate Agriculture**

Integrating agriculture throughout the community can reduce consumption of limited resources and reduce/eliminate pollution (especially during the winter months), provide meaningful activities for residents, make healthy food more available and be a source of learning basic biological and ecological scientific principles. Enabling and creating a diverse agricultural ecosystem strengthens the community at many levels; hard and soft infrastructure complements each other synergistically.

## **Share Not Own**

Enabling sharing systems for products that are used only periodically can reduce the use of physical resources. Another benefit is that people's financial resources are freed to circulate throughout the community and not be locked into products.

## **Participatory Design, Transparency and feedback**

Judging whether or not an element of the system is working the best that it can and is mutually beneficial to the community cannot be done without proper feedback. Transparency is critical for all residents to be able to make suggestions and to actively adjust their behavior. This design concept is critical for smart contextual government that aids the system rather than controls it.

## **Districts**

The current community plan has six distinct districts which all have their own unique characteristics and purposes. To illustrate how our vision of the community (driven by our organizing design concepts) can positively influence and interact with our six factors of

wellbeing, each section is described below followed by suggestions of how the district could be further improved.

### **District I**

District I is the UMore Park's visionary anchor. It combines everything that is crucial to the idea of a sustainable community, including mixed use and mixed income housing with the Eco-Industrial Park, a stamp of ecological sensibility. This district, dotted with the windmills of energy production and bordered by County Road 42, will serve as UMore Park's hallmark area.

Education and recreation will take the front seat in District I, with schools and parks.

Here we will focus on the educational institutions. In order to systemically foster wellbeing, they ought to consider the following principles and concrete elements:

- Diversity in teaching staff and students
- Experiential learning outside of education institutions
- Application of the "gift economy" to learning for adults (i.e., "You teach me how to fix my car and I'll teach you how to make a website")
- Opportunities to learn without stifling form and structure
- Payment of teachers equitable to other professions

These concrete moves are a platform from which to jump off of--once we begin to think of education in a new light, the progress will propel itself forward naturally. We need to champion education as one of the most important efforts of the community; however, we find that the overall wellbeing of UMore Park will improve if more draconian measures and structures are out of the picture. Creativity and flexibility will allow learning to flourish. That will strengthen

just about every element of District I as well as the greater community.

## **District II**

District II is planned to be the “mixed-use employment core of the new community.” The district will be home to the Eco-Industrial Park, the office and wellness complex, and larger employers as well as a variety of public spaces. The current plan emphasizes large employers and the transit system. While larger employers are important it is also critical to allow new businesses to emerge and to foster diversity.

The authors propose that the business and commercial sector should be designed to accommodate adaptive, changing mixed use spaces, where the Unote currency is accepted.

Some potential uses and purposes might include:

- Incubators for entrepreneurs
- Co-op work spaces
- Markets for locally produced agriculture and goods and as
- Connection points for the education system and the community
- Health care and wellness initiatives (education, check-ups etc.)
- Child care
- A program that provides high school and college students the opportunity to sell goods and run a small business

This is not an exhaustive list all the potential opportunities of such adaptive spaces but a sampling of how blending hard and soft infrastructure by design can allow the community to self-organize to meet various needs. Such adaptive spaces would intrinsically require smart

governance in the form of regulations and zoning that accommodates the varied and constantly shifting use of the spaces.

### **District III**

District III is currently classified as a 'garden suburb' with mostly residential single-family homes and small, local retailers intermingled in the community. It is set next to the lake, therefore streets and blocks respond to the natural topography of the existing site. As a part of our redesign, we believe this district is well-laid out with its current infrastructure but is capable of being enhanced further.

In an effort to enhance District III and create a whole systems view for the community, we propose integration of agriculture throughout the neighborhood. This is in contrast to the conventional paradigm of large scale farming operations, which systematically segregates food production away from the public and often involves food being shipped from hundreds and thousands of miles away. Integrated agriculture would take the form of local community gardens, community supported agriculture (CSA) services, hydroponic production, etc. Not only will these elements increase sustainable practices, but will also enhance personal wellbeing and community involvement.

Community gardens encourage residents to participate in utilizing natural, available space to plant gardens of fruit, vegetables, flowers, etc. Not only will comradery be built amongst residents, but will use land in an environmentally sound manner. Residents can use their harvest by starting a community farmer's market and generating revenue. Community supported agriculture, or CSAs, are another option for providing fresh produce to others even if they are not directly involved in the community garden. Incorporating hydroponics is our next



recommendation. Hydroponics is an innovative option for implementing agriculture into unique settings, because it allows crops to be grown year-round in a variety of environments. Besides being environmentally beneficial by the continuous recycling of inputs and outputs and fostering a systems oriented perspective of the residents, implementing community-wide agriculture can also benefit personal wellbeing. Integrated agriculture would ensure that fruits, vegetables, and healthy fresh produce will be much more readily accessible to residents. This will encourage people to be more conscious of their nutrition. In addition gardening also provides a great source of exercise, and a rewarding community activity.

Integration of agriculture is a crucial step in the creation of a healthy local food economy. Implementing/incorporating other supporting soft infrastructure can ensure that the benefits of integrated and local agriculture are maximized. Share centers distributed throughout the community can house the tools and machinery that residents need to be successful. The Unote local currency can act as the vehicle that helps move the produce throughout the community and a real time database system that is easy to update and connect can allow residents to let the community know when there is extra food that needs to be utilized.

#### **District IV**

District IV is described as the “urban, civic, and commercial core” of the new Umore Park community; a vibrant neighborhood with diverse building types, entertainment and civic venues, restaurants, stores, educational facilities and places to live. This is an exciting district that is essential for a vibrant healthy community, because it provides places for genuine interactions with others, opportunities to enrich themselves through education and arts etc., all easily accessible through the transit system from anywhere in the community.

This district is the perfect environment to foster and develop what is called a *third place*. Meyer Adjunct Professor at USC's School of Policy, Planning and Development states that: "Without the physical encouragement to engage socially, our built environment will, as it does in many places in America, lack the vitality of a free democratic society. These third places, which encourage diverse populations to come together and interact, may be the key to civility and the sustainability of our cities" (<http://www.fastcodesign.com/1665202/3-keys-to-creating-great-good-places>).

District IV is the perfect home for a third place by developing a new vision of what a "library" can be in the 21st century: a civic institution that supports personal growth, community connections and wellbeing. Listed below are several characteristics for the space:

- A community *Makerspace*: a place where people can access tools to create new tools, objects, art and to experiment with technology.
- A greenhouse (especially important during the long Minnesota winter)
- Community forums, educational facilities, computer labs and small traditional library
- Space for Areas for display of community art, game playing and conversation
- Small private businesses, cafes and shops

Ensuring that such a space that fosters community interaction and provides another welcoming place to go that is not home or strictly a commercial place. Such a place can serve as a vibrant hub of the district and provide equivalent inside public places to those outside during the winter.

## District V

This district is different from the others, as the “small town,” still connected to the UMore Park but very much so its own entity. Chock full of single-family residences, this neighborhood will also have its own main street aimed at the lake’s edge. The marina-focused retail scene is meant to foster a strong sense of community.

We believe the following must happen in District 5:

- Safeguards must be in place so that District 5 does not become UMore Park’s upper crust. Mixed income is key.
- Ecological standards to ward off the damaging vanity that accompanies having a big yard
- Education for retail owners on how to treat the marina
- Fishing regulations
- Community efforts outside of the retail realm: spiritual, recreational
- Smart contextual building regulation to encourage green experimentation and different housing configurations
- Distributed healthcare, wellness and exercise facilities with potential access to all

In addition, District 5 ought to strive to be something of a tourist attraction, both for people living in other districts and visitors to the community. We just have to ensure that it does not become the bourgeoisie/too-high-income part of town. The houses built ought to encompass a wide range of the market. District 5 has potential if we ward against inequality and ecological disaster.

## **District VI**

District VI is currently classified as a transition zone between the UMore Park community and the Vermilion Highlands establishment. The Vermilion Highlands is a research, recreational and wildlife area instrumental in enhancing the nearby community and sustainability. I believe the Highlands can be utilized even more efficiently with implementation of more education and teaching the community about the benefits of natural areas.

District VI is currently mostly residential and small retail, but we believe implementing some sort of educational facility or nature conservancy facility may be beneficial on informing the community of the benefits of the Highlands. The Rosemount Research and Outreach facility already exists to act an educational facility. However, we believe another educational outlet may also be beneficial to focus on the nature conservancy sector rather than solely on research. Residents should be aware of the benefits of 'untouched' land. Today, so many of cities disregard the land and simply build and build upon it. Yes, industrialization is necessary but land conservancy is just as important if not more important to continual hard infrastructure development. We need to enforce the importance of soft infrastructure and educate on land use and preservation.

Since this district has such a wide expanse of green space, this is obviously the perfect space for another educational facility. Not only will visitors be able to learn but they will also be able to enjoy the recreational benefits offered in the area. It will be kid-friendly and family oriented to also build personal wellbeing relationships on a family engagement front.

District VI is already well-developed as a residential area, but we feel our additions to the plan will only enhance the community and its residents. Other than that, I feel it does not need any more physical infrastructure added. Its existing mission is to act as a transition between the city sector and the natural sector. Therefore, we like how they already implemented the natural pathways and followed the contours of the land.

### **Conclusion**

UMore Park is already a very well established plan with considerations for its residents, their community interaction and the sustainable environment. We utilized the organizing concepts which we established as a group to enhance each existing district. Through increased circulation, integration of agriculture, shared mentality and participatory feedback we believe we were able to successfully develop the factors of wellbeing we considered to be of most importance. Those factors which are now more enhanced in the UMore Park setting include: balance of self-sufficiency and dependence, sustainability, effective action, education and learning, mutuality, and smart contextual governance.