

Sustainable Community Case Study:

An Assessment of EPA's Sustainable Development Plan for Stella, Missouri



Office of Research and Development
Land Remediation and Pollution Control Division

Sustainable Community Case Study: An Assessment of EPA's Sustainable Development Plan for Stella, Missouri

Prepared by

Verle E. Hansen, PhD
Land Remediation Pollution Control Division
National Risk Management Research Laboratory
Cincinnati, OH 45268

National Risk Management Research Laboratory
Office of Research and Development
U.S. Environmental Protection Agency
Cincinnati, OH 45268

Notice

Copy Right Notice

This document contains no copyrighted material.

Disclaimers

The U.S. EPA had two primary goals in this project: to enable the community of Stella, Missouri to make its own decisions that would make it possible to meet citizen needs now and in the future; and to learn from this effort so as to help other communities become more sustainable. This necessitated a close working relationship between the community and an agency of the Federal Government which needed constant clarification. The EPA made it clear to the community that this was not a government program to take control over local decisions; and the government would be making no monetary investments in the community. However, the community subsequently applied for and received grants from various government agencies which were beyond the scope of this project.

Members of the planning team were unpaid volunteers with the exception of EPA employees who were paid their salaries. No additional funding was provided by the EPA, government agency, or non-governmental organization. Funding for community projects was raised by the community.

Mention of trade names or commercial products does not constitute endorsement or recommendation for use.

This document has been reviewed in accordance with U.S. Environmental Protection Agency policy and approved for publication.

Foreword

The U.S. Environmental Protection Agency (EPA) is charged by Congress to protect the Nation's land, air, and water resources. Under a mandate of national environmental laws, the Agency strives to formulate and implement actions leading to a compatible balance between human activities and the ability of natural systems to support and nurture life. To meet this mandate, EPA's research program is providing data and technical support for solving environmental problems today and building a science knowledge base necessary to: manage our ecological resources wisely; understand how pollutants affect our health; and prevent or reduce environmental risks in the future.

The National Risk Management Research Laboratory (NRMRL) is the Agency's center for investigation of technological and management approaches for preventing and reducing risks from pollution that threaten human health and the environment. The focus of the Laboratory's research program is on methods and their cost-effectiveness for: prevention and control of pollution to air, land, water, and subsurface resources; protection of water quality in public water systems; remediation of contaminated sites, sediments, and ground water; prevention and control of indoor air pollution; and restoration of ecosystems.

NRMRL collaborates with both public and private sector partners to foster technologies that reduce the cost of compliance and to anticipate emerging problems. NRMRL's research provides solutions to environmental problems by: developing and promoting technologies that protect and improve the environment; advancing scientific and engineering information to support regulatory and policy decisions; and providing the technical support and information transfer to ensure implementation of environmental regulations and strategies at the national, state, and community levels.

The concepts of prevention and protection noted above are ideally achieved in making planning decisions that will align with preferred environmental outcomes as noted above. The small town of Stella, Missouri gave NRMRL the opportunity to explore this challenge at a scope and scale where the relationship between planning decisions and preferred social, economic and environmental systems outcomes can be more easily expressed, observed and understood. The EPA is grateful to citizens of Stella for this opportunity and is hopeful that lessons learned there will eventually enable towns and cities of all sizes to become mature and sustainable communities.

Cynthia Sonich-Mullin, Director
National Risk Management Research Laboratory

Abstract

In 2006, citizens of Stella, Missouri asked the EPA for technical assistance in demolition and site remediation of an abandoned hospital; and how to redevelop the site to help the community be more sustainable. EPA Region 7 teamed with EPA Office of Research and Development (ORD) to provide this assistance. Region 7 addressed issues related to the deteriorating hospital while ORD sought to help stakeholders in Stella make sustainable decisions regarding the site and community. Typically, sustainable land use decisions require understanding the systems that sustain human life or communities and the impacts of those decisions on systems so land use decisions can be placed in context and supported by intact and functioning systems. ORD offers land use models and tools that might help align decisions with systems, but Stella lacked the resources to interpret or to apply them. Therefore, ORD researchers sought to find a simple and more accessible way for Stella and other communities to make short-term decisions within a long-term context. It did so using planning theory. Planning enables decisions that meet specific objectives within sets of criteria, such as zoning and building codes. Planning could also be used to make decisions that improved a community's long-term outlook if it had criteria related to maintaining intact and functioning social, economic and natural systems. In 2006-2007, the EPA helped Stella envision its future by expressing its preferences; identified the systems contexts within which decisions could be made; and applied them at the community scale. The result was a community plan that provided an array of choices and options that would enable the community to meet its needs while maintaining the integrity of the systems that make human life and communities possible. This report covers the period of planning from May 2006 to its presentation in May 2007, and the community's progress in implementing the plan through January 2014.

Acknowledgements

The United States Environmental Protection Agency Office of Research and Development expresses our thanks to the following people for their participation and help in this project:

- Citizens of Stella, Missouri;
- the Stella Betterment Committee:
 - Bill Alsop Mayor
 - Mona Hart Chairperson
 - Bob Hart Member
 - Doris Dalbom Member
 - Chuck Dalbom Member
 - Lamelia Beckett Member
 - Bill Beckett Member
 - Nina Johnson Member
 - Don Johnson Member
 - Loretta Taylor Member
- Elk River Watershed Group
 - Drew Holt Executive Director Elk River Watershed Improvement Assoc.
Pineville, MO
- U.S. EPA Region 7
 - David Doyle Revitalization Coordinator US EPA Region 7, Kansas City, KS
 - Belinda Young Public Affairs Specialist US EPA Region 7, Kansas City, KS
 - Jaci Fergusson Hydrologist US EPA Region 7, Springfield, MO
 - Kathleen Fenton Community-Based Coordinator US EPA Region 7, Kansas City, KS
 - Dave Williams On-Scene Coordinator US EPA Region 7, Kansas City, KS
- Project Team
 - Kelly Black Sociologist Neptune and Co. Inc., Lakewood, CO
 - Mark Hooten Quantitative Ecologist Neptune and Co. Inc., Lakewood, CO
 - Doug MacCourt Lawyer Ater Wynne LLP, Portland, OR
 - Sabine Martin Hydrologist Kansas State University, Manhattan, KS
 - Peter Meyer Economist The E. P. Systems Group, Inc., Taylor Mill, KY
 - Steve Soler Developer/Market Analyst New York University, New York, NY
 - Allison Roy Aquatic Ecologist US EPA/ORD/NRMRL/SSD, Cincinnati, OH
 - Matthew Morrison Ecologist US EPA/ORD/NRMRL/SSD, Cincinnati, OH
 - Jim Weaver Hydrologist US EPA/ERD, Athens, GA
 - Ann Vega Physical Scientist US EPA/ORD/NRMRL/LRPCD, Cincinnati, OH
 - Kim McClellan Microbiologist US EPA/ORD/NRMRL/LRPCD, Cincinnati, OH
 - Verle Hansen Architect/Community Planner US EPA/ORD/NRMRL/LRPCD, Cincinnati, OH
- Reed Haslach and Susan Piedmont-Palladino of the National Building Museum, Washington, D.C. for their display and publication of this project

Table of Contents

Notice	i
Copy Right Notice	i
Disclaimers.....	i
Foreword	ii
Abstract	iii
Acknowledgements	iv
1.0 Introduction and Background	1
2.0 Sustainable Endpoints	2
3.0 Planning Process	3
1. Help Stella clarify its vision of a sustainable future.....	3
2. Identify EPA’s vision of sustainability.....	4
3. Identify potential planning responses to Stella’s vision.....	5
4. Verify the accuracy and consensus of Stella’s vision.....	5
5. Develop and present the final plan	6
6. Identify a selection of project portions of plan.....	6
7. Follow-up on community progress.....	6
4.0 Planning Principles	6
5.0 Final Plan	7
Theme 1: Securing human life	7
Theme 2: Securing ecosystem integrity.....	7
Theme 3: Securing economic system integrity.....	8
Theme 4: Securing social system integrity	9
6.0 Implementation of the Plan	10
7.0 Evaluation of EPA’s Efforts/Lessons Learned	15
Part A: Value of this project to Stella’s future	17
Part B: Relevancy of this project to EPA’s Mission	18
Part C: Applicability of this project to other communities	19
Part D: Lessons Learned.....	20
8.0 Conclusion	22
List of Figures	24
List of Tables	24

Acronyms and Abbreviations	25
Acronyms	25
Meaning	25
CERCLA	25
Comprehensive Environmental Response, Compensation, and Liability Act	25
References	26
Appendix A	27
Appendix B	33
Appendix C	38
Appendix D	59

1.0 Introduction and Background

In the late 19th and early 20th centuries Stella, Missouri was a vibrant community with a population of 500 people that supported family farms and a hospital. Stella's population began to decline after World War II as large corporate farms began to replace many of the family farms. Cardwell Hospital closed in 1977 and, in its deteriorating condition, became a health hazard in the center of Stella's downtown. Fewer than 200 people now enjoy the quiet rural setting, but without local stores, service providers, opportunities, much less resources to remove its abandoned hospital. If Stella is to resolve its issues, the community needed to focus its energies and find resources. As a first step toward resolution, citizens formed the Stella Betterment Committee (SBC), headed by Mona Hart.

In 2004, the EPA Brownfield Conference was held in St. Louis where the SBC connected with personnel from EPA Region 7 (R7). The committee presented their issues regarding Stella's abandoned hospital and persuaded R7 to look into the issue. Dave Williams, On-Site Coordinator from R7, assessed the building and discovered that it contained asbestos which was migrating off-site. This qualified the building as a Superfund site and in 2006 the building was razed and the land was remediated. Stella then had a cleaned site which offered an opportunity to plan the community's future.



Figures 1-3: Cardwell Hospital, demolition, and cleared site

Knowing that removal of the hospital would leave a void in the heart of the community, the SBC asked the EPA how the Cardwell Hospital site might be developed sustainably. Typically, sustainability relates to the condition of economic, social and environmental systems that are vital to a community's existence. Therefore, a community's decisions should align with maintaining those systems. However, Stella had little capacity to assess those systems; and the science of human/environment relationships is not sufficiently developed to understand how a community's decisions would affect systems. This impasse was resolved through planning.

Planning and design decisions are made to meet specific objectives within sets of criteria, e.g., zoning codes, laws of physics, strength and properties of materials, monetary budgets, etc. If the desired conditions of the social, economic and environmental systems that sustain this and future generations can be identified, those conditions can act as criteria for making land-use decisions. The challenge is to identify those conditions and to make decisions to fulfill a community's vision within those conditions; and as constrained by local preferences and resources.

This plan is fundamentally about resolving two visions of the future in one plan, i.e., a community vision and an environmental quality vision. Heavily invested communities that did not survive, such as Angkor Watt, Thebes, Mesa

Verde, Chaco Canyon, and Machu Picchu, may illustrate the importance of resolving a community's vision of itself with the maintaining the integrity of the systems that sustain it.

There are no guarantees that a community will survive and none will survive in its present form forever. The physical buildings, spaces and infrastructures that compose urban form are all subject to the laws of nature and will exist as long as individuals and community leaders are willing and able to invest in counteracting the second law of thermodynamics, i.e., entropy. Therefore, planning for a sustainable community is not about managing the environment. It is about managing community and land-use decisions with regard to maintaining functioning environmental conditions that make human existence and communities possible. The measure of this planning effort is about whether community decisions enhance, maintain, or degrade those systems.

2.0 Sustainable Endpoints

The Brundtland Commission's definition of sustainable development, "Meeting needs of this generation without compromising the ability for future generations to meet their needs (UNWCED, 1987)", identifies a conditional relationship between generations. The fundamental condition of this relationship is that the social, economic and environmental structures that sustain human life must remain intact and functioning. This makes it possible to estimate the systems qualities that are required; and these qualities become the endpoint conditions that should be maintained to sustain this and future generations. These endpoints provide adequate planning criteria to make short-term decisions that account for the future we want; and provides the sustainability context for Stella to reuse the Cardwell site and make decisions that meet community needs.

Goal	Objective	General Condition	Land-use Endpoints
Human life is able to remain and adapt in place.	Ecosystem integrity is maintained.	<p>"The integrity of interactions between species is critical for the long-term preservation of human food production on land and in the sea (MEA, 2005)."</p> <p>Soil regeneration and renewal \geq (erosion + depletion)</p> <p>Water quality and quantity are sufficient to replenish living cells with nutrients, regulate temperature, renew body fluids, and remove wastes.</p>	<p>Habitats exist that will sustain minimum viable and minimum effective populations of native species.</p> <p>Connectivity between habitats enables flow of genes between populations and allows for repopulation of habitats.</p> <p>Habitats are distributed widely enough so that native communities are beyond the reach of any multiple or widespread natural disturbance regime.</p> <p>Birthing, spawning, and maturation habitats are useable and accessible. Distribution of redundant species is maintained across multiple time and space scales (Alberti, 2005).</p>

Table 1: Example: How Sustainable Endpoints for Land Use are Compiled

Starting with a goal of making it possible for human life to remain and adapt in place, as illustrated in Table 1 above, EPA researchers compiled a list of sustainable endpoints related to land use, e.g., maintaining the integrity of soils, natural productivity, native biodiversity, etc.¹ These land-use related conditions enable communities to identify the local parameters of acceptable individual land uses. A list of these system endpoints was compiled ([Appendix A](#)) and used as criteria to draft planning responses ([Appendix C](#)) that specifically address community goals and objectives. These endpoints enable planners and land users to assess potential impacts of land use decisions before they are enacted so that alternative decisions can be made before systems are lost; and they measure how well decisions were made and the effectiveness of efforts to counteract losses.

3.0 Planning Process

A seven step procedure was created to apply this sustainability planning to the community of Stella, Missouri.

1. **Help Stella clarify its vision of a sustainable future.** A vision helps generate planning responses that can directly respond to community needs while providing a measure for making decisions. An initial community meeting was convened by the SBC in August 2006 in the Stella Senior Citizens Center after a community dinner. Approximately 150 people attended from the town and surrounding farms. EPA Region 7 facilitators encouraged citizen participation by asking seven questions of the community.
 - a. *What makes a place livable?*
 - b. *What makes a place inspiring?*
 - c. *What aspects of Stella would you like to be able to pass on to your grandchildren?*
 - d. *What makes a community unjust or unfair?*
 - e. *What should the town of Stella offer its citizens to add quality to life?*
 - f. *What does the town of Stella do very well for the people who live here?*
 - g. *What change in Stella would make it an even better place to live?*

Answers were compiled on flip charts that documented the community's needs, wants and values (see [Appendix B](#)); and these answers form the details of Stella's vision of itself which guide setting goals and objectives.

A clear vision statement that describes the future state of the community that Stella is trying to reach was not formally agreed. The closest fit may be "a livable, inspiring, enduring, and equitable place...where the quality of life and the long-term quality of human existence will be enhanced rather than depleted" (Beatley and Manning 1997). This vision helps citizens and EPA to focus their efforts and move toward a sustainable community.

¹ Although many fine-scale criteria exist, e.g., bees must exist to pollinate plants, land use decisions are not typically related to how pollinating insects access plants, so endpoints not related to land use are excluded.



Figures 4 and 5: Community dinner and meeting

2. **Identify EPA's vision of sustainability.** EPA strives to achieve a world where conditions are created and maintained that permit fulfilling the social, economic and other requirements of present and future generations². This vision enabled the team to identify a workable set of sustainable endpoints described in section 2.0 above.

These endpoints can be used as parameters within which design responses can be formulated. Examples: Figure 6 identifies flood plains which should be avoided to protect human life; Figure 7 identifies streams, natural springs and forested hillside backdrop that can be used as natural assets; Figure 8 illustrates riparian corridors that should be restored and maintained to protect native biodiversity; and Figure 9 shows distance from the community center that is easily walkable. Other information, e.g., buildings and places of historic or natural significance, geography, lists of native species, etc. was also considered. This information helped delineate where development of the town can occur so as to preserve existing assets; and where development should not occur so as to keep human life and property safe.

² <http://www.epa.gov/sustainability/basicinfo.htm> . Sustainability is based on a simple principle: Everything that we need for our survival and well-being depends, either directly or indirectly, on our natural environment. Sustainability creates and maintains the conditions under which humans and nature can exist in productive harmony, that permit fulfilling the social, economic and other requirements of present and future generations



Figure 6: Flood Potential Map

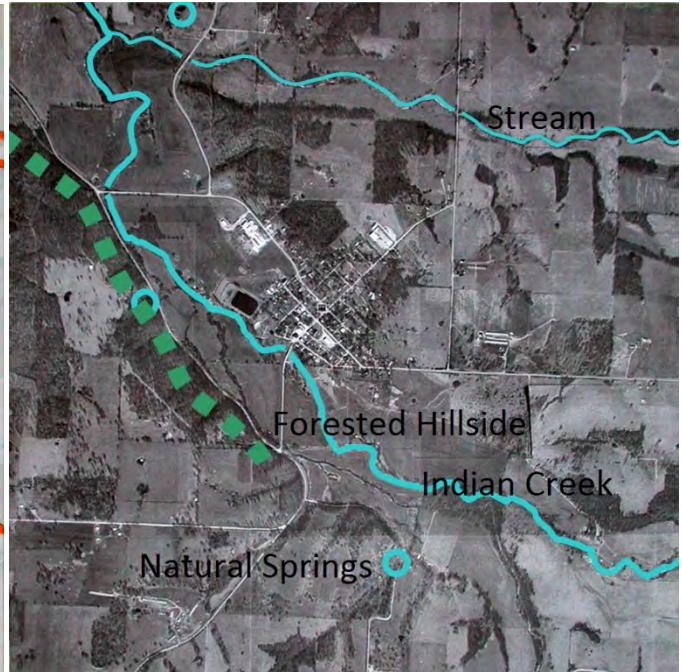


Figure 7: Natural Assets

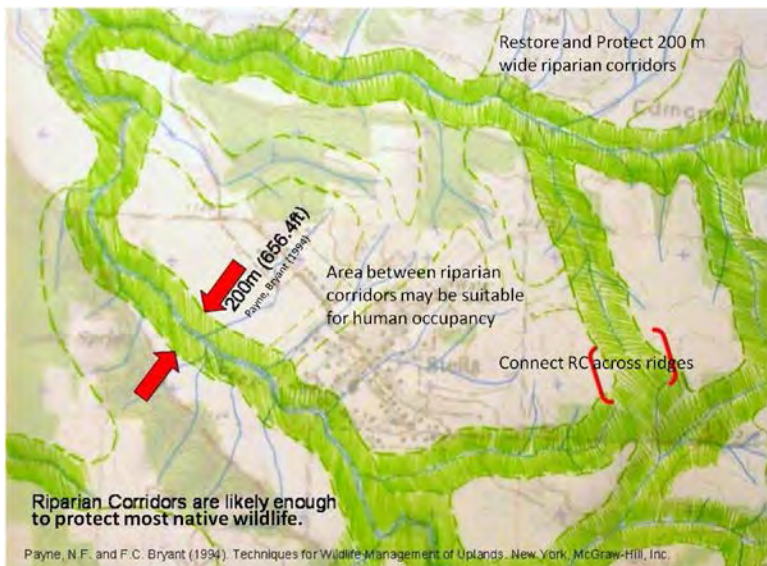


Figure 8: Riparian Corridors



Figure 9: 1/4 mile walking radius from town center

3. **Identify potential planning responses to Stella's vision.** Community input ([Appendix B](#)) was used as planning objectives by a volunteer planning team³. The charge to the team was to identify ways to achieve the community's vision whereby EPA's vision is also achieved.
4. **Verify the accuracy and consensus of Stella's vision.** A draft comprehensive plan was presented to the community at a community dinner-meeting in February 2007 to show how EPA proposals directly respond to Stella's vision of its future as interpreted by EPA. This draft helps citizens to visualize how

³ Planning team members are listed in "Acknowledgements" on page 8

the planning team interpreted their description of their future and to assess whether they agree with the interpretation and/or whether citizens want to change their vision so revisions can be made to the plan.

5. **Develop and present the final plan.** Revisions were made to the comprehensive plan in response to input in item 4 above and in May 2007 the [final plan](#) and [tabulated list of alternatives](#) was presented to the town at a third town dinner-meeting.
6. **Identify a selection of project portions of plan.** The scope of suggested planning responses might be overwhelming in total, but manageable in small portions; and these projects offer the chance for individual groups to engage within their capabilities. Although the community has little money, it has numerous community groups, e.g., Girl Scouts, Boy Scouts, Cub Scouts, 4H, FFA, Masonic Lodge, and various church groups in two congregations. These groups will have differing capabilities and interests, but a general purpose of each group is to build a better community; and this plan offers opportunities to do so.
7. **Follow-up on community progress.** Monthly conference calls were convened between the Stella Betterment Committee, Sabine Martin from Kansas State University, and researchers at EPA's National Risk Management Research Lab in Cincinnati. Their purpose was to identify additional ways to help the community and to learn from and assess the EPA's efforts with regard to this small community. These calls became bi-monthly calls after 4 years and were suspended at the end of 2013.

4.0 Planning Principles

Planning responses to meet community needs as noted in [Appendix B](#) were initially guided by criteria that indicated whether environmental, social and economic systems were intact and functioning. However, as responses were compiled, it was learned that it was possible for some responses to meet community wants/needs and desired endpoints without improving the community's ability to survive; or could extend the community's future, but were beyond Stella's capability. Therefore, the following six principles were overlaid onto the planning criteria to better assure that planning responses would be effective and achievable.

1. The most important and valuable resource that Stella has is its people. Therefore, expanding, developing and empowering human resources is a primary consideration when making planning responses.
2. Financial capital is a limited resource that will be required to fulfill many of the community goals. Therefore, it is essential that money be kept in local circulation for as long as possible. This will require minimizing energy and food purchases from outside sources, growing food and generating energy locally, minimizing waste, and relying upon local materials and labor as much as possible.
3. Sustainability is not only about assuring the future, it is about assuring that citizens are able to survive each day. Services and institutions must be sustaining at whatever population levels exist. Stella's small population made it necessary to reconsider the forms of those services and institutions so they are not strictly based upon population; and to compare how these services are obtained in a small town with how they are obtained in a city. The community expressed their needs, but the planning team identified the limitations within which needs would have to be met and how.
4. If local decisions were to move toward sustainability, it is necessary to give the community some tools that can guide immediate and daily decisions in a sustainable direction even though scientific guidance is incomplete.

5. The core planning challenge is to create “livable, inspiring, enduring, and equitable places...where the quality of life and the long-term quality of human existence will be enhanced rather than depleted” (Beatley & Manning, 1997). This also becomes the procedural measure of the plan’s performance.
6. A presumption was made that people are more likely to remain and provide stability to the town if options and opportunities to live a quality life for individuals and families are greater relative to another place. If this presumption is correct, one place is more attractive than another whenever:
 - a. That place provides options and opportunities that are not available elsewhere.
 - b. Chance interactions between citizens provide the networks for giving and receiving a helping hand and to share ideas so that opportunities can be grasped.
 - c. Local activities give opportunities to enjoy life and attract others to the community.
 - d. The concept of justice applies to and benefits everyone.
 - e. The balance of benefits to costs of living exceeds similar balances in other places.

Guided by these six principles, the planning team envisioned numerous ways to achieve Stella’s vision within criteria that systems that sustain the community remain intact and functioning. The result, [Appendix C](#), is a list of potential alternative actions; and a selection of these was used to create a visual image or plan for the community.

5.0 Final Plan

The final plan consists of three documents: a tabulated list of potential alternative actions the community could take ([Appendix C](#)); a graphic plan of the entire town and its immediate surroundings (Figure 12); and a detail plan of the heart of town (Figure 13). Not all potential actions can be graphically represented; therefore, these plans represent a selection of alternative actions that lend themselves to graphic illustration. These drawings were created using overlays on aerial photography and the town plat; and designed to meet community needs within four main themes.

Theme 1: Securing human life

- Two floodplains were identified as potential risks to life and property: a FEMA flood risk area; and a risk area based upon field observations of a floodplain defined by the general topography (Figure 6). Land in the floodplain should not be used for buildings or human occupancy, but for agriculture and seasonal recreation.
- New residential areas were planned around a common area (Figure 10) so that children would have a secure place to play within the watchful eyes of several parents. This also provides more usable open space than dividing it into separately owned backyards.
- The plan suggests developing a walkable community where most of the town’s residents are within about ¼ mile from a central activity zone (Figure 9). This promotes physical exercise and a healthier lifestyle.

Theme 2: Securing ecosystem integrity

- Ideally, habitat requirements for indigenous species should be mapped and sufficient habitat retained to maintain minimum dynamic populations and habitat connectivity. However, without resources to identify and map this, the option was taken to accommodate the greatest amount of biodiversity by maintaining 200 meter wide riparian corridors (Payne & Bryant, 1994) and adding upland connectors between corridors (Figure 8). It was estimated this would provide habitat for approximately 90% of native species. The plan also restored tree canopy to those portions of the riparian corridor where it is missing.
- Maintaining developable area outside of the floodplain and bordered by riparian corridors provides a natural greenbelt around the town, and uses the surrounding agricultural lands as undeveloped open space.

- Waste water after treatment is returned to Indian Creek. The addition of a constructed wetland would “finish” wastewater before discharge to Indian Creek. Such wetlands could also be stocked with fish to eat insects and be a resource for fishermen.
- If storm water is an issue, several dry holding ponds could be created to retain runoff during storm events to reduce storm surges in Indian Creek.

Theme 3: Securing economic system integrity

- Development should avoid agriculture land to protect the most robust part of the local economy, i.e., agriculture.
- Agricultural land along Indian Creek could provide the community with food stocks and employment.
- Low-lying land could also be used for recreation, e.g., golf course, soccer and football field, baseball/softball diamond, and park. These land uses could provide needed activity for the town and encourage others to spend time and money in Stella supporting local businesses and providing local jobs.
- Triway School is a major part of town existing on about 12 acres of land. The plan proposed this area be expanded to approximately 28 acres to give the school flexibility to develop new programs that respond to yet unknown needs of future generations.
- Stella exists off the “D” Highway and there is little reason for passersby to go through town. This bypassing of the town reduces the viability of local businesses. “Gateway” gardens were designed at the entrances to Stella to attract people into town and to symbolize that Stella is different from other towns and worthy of a side trip into town.
- Stella was once known for its flowering dogwood trees. These trees grow best in the shade of larger trees and could be replanted to provide glimpses of their white flowers from numerous places in town. Their re-establishment could also entice people from other communities to Stella and help support local businesses.
- Commercial development should be located in one small area to increase the efficient use and sharing of costly infrastructures such as parking, landscaping, and public spaces.
- Development of the town should make the most efficient use of existing infrastructures and services as possible. This keeps the cost per capita low by keeping utility lines and streets short; and minimizes the geographic area that police and fire protection must monitor. This increases density of dwelling units, but designed well, open space is thereby increased.
- Four development strategies were recommended to provide space for an expanded population⁴. The orientation of each of these new areas should be on the east-west axis. This honors and preserves the character of the old town that is laid out at a 45 degree angle from north, and allows better access to solar energy.
 1. Infill development of the town on existing platted sites.
 2. Add single family housing areas to the north.
 3. Add multi-family dwellings to as much as 12 dwelling units per acre overlooking Indian Creek and out of the flood zone.
 4. A pasture east of town could become tight clusters of housing (Figure 11) along the forest edge to efficiently use infrastructures, minimize the visual impact on the landscape, create areas where neighbors can better interact, and maintain existing pasture as open space. This allows everyone in the development to “own” the entire area rather than fenced plots where no open space remains.

⁴ The need for new housing does not yet exist. However, planning must accommodate growth that may occur or is deemed necessary to meet community needs in a manner that maintains the systems that sustain the community and its citizens.

- Energy should be produced locally to maximize the amount of money that is used in town. Passive solar collection can be utilized by new or retrofit buildings which will be on an east-west axis. Organic wastes can be collected from the town and surrounding farms to produce natural gas and compost to rebuild soils. A wind energy farm could be located on an open plateau at the south-west side of town.
- The town cannot support a grocery store that citizens want. Nevertheless, citizens can contract with local farmers to provide the food required. This would support the local farming community and provide more local jobs. Plots could also be leased to citizens for community gardens.

Theme 4: Securing social system integrity

- The school and community should share cultural and recreation programs as much as possible.
- A central activity zone for local services and businesses should be developed in the heart of the existing town to create a visually attractive place overlooking Indian Creek and with a forested backdrop where people are most likely to want to relax and converse with fellow citizens. Combining as many businesses, facilities and activities as possible in one central place make it possible for people to have chance interactions and networking. This builds community and enables people to share ideas and create opportunities.
- The plan suggests development of a local park and a baseball diamond. These would help facilitate local events, draw people to town, and provides opportunities to interact.
- Surrounding the old town should be a disk golf⁵/BirdieBall⁶ park golf course⁷. This further honors the old town by putting a necklace of parkland around it that serves two other functions. It provides needed activity space in town, and more valuable building sites overlooking parkland.
- A skateboard park for youth located in the heart of the central commercial and services center would provide exciting visual activity to those involved and observing. It also makes a strong statement that the town's youth is important enough to place at a highly visible location.
- A network of trails should be developed throughout much of the surrounding riparian corridors and to the three local natural springs in the area. These trails can be used for walking, hiking, bicycling, horseback riding, and hunting and fishing access.

⁵ http://en.wikipedia.org/wiki/Disc_golf

⁶ <http://www.birdieball.com/customdocs/birdieballs.asp>

⁷ 18 "holes", i.e., flags/poles/baskets, can be played in either direction simultaneously providing multiple play options: four 9-hole courses; two 18-hole courses by playing a 9-hole course in both directions; and two 18-hole courses played from either end (equivalent of 108 holes while installing only 19 holes).

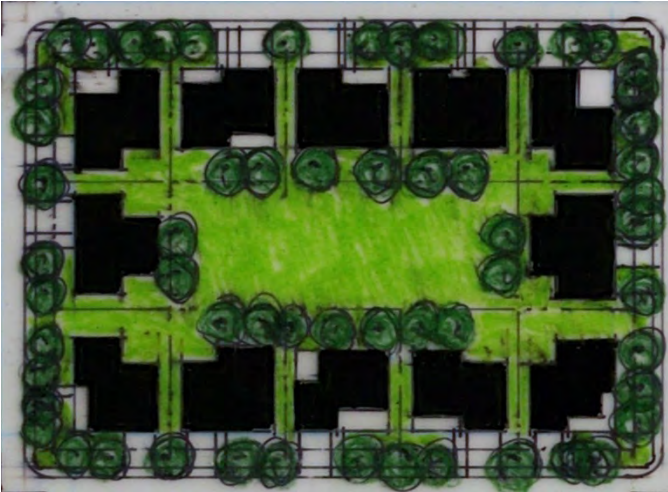


Figure 10: Typical Block Layout around Commons

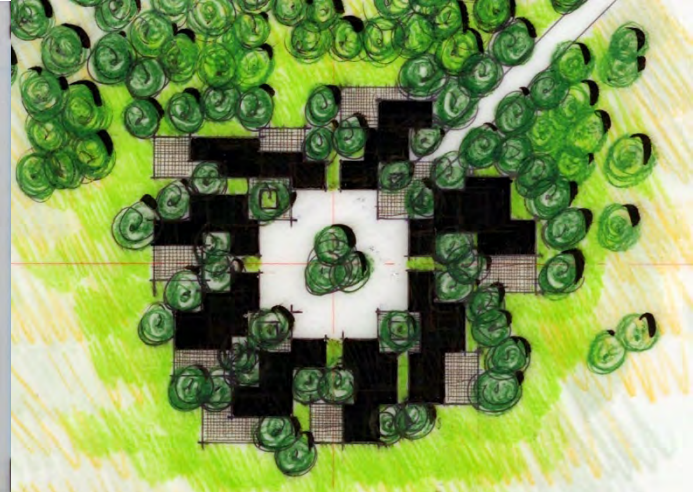


Figure 11: Typical Cluster Layout around Autocourt

6.0 Implementation of the Plan

As the completion of this project neared, both EPA and the SBC expressed concern that this plan may die if it appears overwhelming. Therefore, three steps were outlined to enable citizens to enact the plan and build confidence in their abilities to build their community.

The first step was to identify local resources. Although economic resources are slight, the community has: 1) the Stella Betterment Committee that has the support of the Board of Trustees; 2) intelligent and committed people who support this effort; 3) one or more energetic person to drive this project; 4) support from local businesses; 5) support from local and regional communities; 6) support from County officials to help write grants; 7) support from EPA's SMARTe program to provide information; and 8) numerous community groups, e.g., church groups, Masonic Lodge, youth groups, and the local school, that can be encouraged and enabled to complete parts of the plan.

The second step was to suggest a process for implementing the plan, beginning with identifying and focusing on opportunities. The community can take advantage of the above resources to build a local government with skills and authority to act. This enables leaders to identify incentives that will encourage cooperation and sharing resources; develop ways to involve all citizens, institutions, and all levels of government; and develop its youth with abilities and tools to make decisions.

The third suggestion is to define and aim at close targets, such as presenting to local regions a community that cares about itself. This may require cleaning and sprucing up the community, planting gateway gardens, developing parkland that the town already owns, negotiating with neighbors to open natural springs for public use or to develop a trail system. Other relatively simple projects are to develop youth activities that monitor water quality and teach about environmental issues.



Figure 12: Stella Comprehensive Plan



Figure 13: Plan Detail of Downtown Stella

The final plan⁸ for Stella generated three initial reactions. First, some people expressed doubt that Stella was capable of anything the plan suggested. This skepticism waned when citizen involvement and progress became evident. However, some skepticism regained a foothold as the National economy faltered beginning in 2008. Second, the plan invigorated a community that languished for a half century to realize that with some volunteer

⁸ Overall plan, detail of plan, and tabulated list of potential alternative actions

labor it could accomplish much. When the plan was broken down into 30 “Building Community” projects (see [Appendix D](#)), numerous local groups volunteered to take on individual projects. Third, the visual plan enabled people from outside the community to assess how they might help Stella to achieve some of its goals. The Missouri Department of Natural Resources⁹ wanted a demonstration project to educate people about local and regional wildlife. Knowing about Stella’s plan, the MDNR volunteered to develop and install signage along trails. Fourth, the plan gave the community a useful reference on which to base its application for outside funding and grants.

Work began immediately on three projects:

Moses Eagle Park: A plot of land designated as “PARK” on the original town plat had been used for public gatherings, but was never developed and its ownership was uncertain. A lawyer determined the site was owned by the town and a citizens group was established to build a park. An eroding stream bank was stabilized, grass planted, and a fence was built surrounding the park to exclude automobiles. The park was named after the town’s founding father, Moses Eagle, and a sign was erected in his honor. Playground equipment and picnic tables and benches were purchased and installed. Negotiations took place with the adjacent property owner to the south to use land for automobile parking. After agreement, a design for rain gardens and plants were provided by the Missouri Department of Natural Resources. The park, rain gardens and parking were completed within a year of presenting the community plan.

Veterans Memorial: Adjacent to the Senior Citizens Center was a vacant corner site where senior citizens hoped to build a Veterans Memorial park for the southwest Missouri region. Their vision was to fund this project by selling engraved bricks and preliminary market research by citizens showed that people in the region would support it and the memorial was planned. The community received an offer to match the \$18,000 in brick sales and an additional gift of \$4000 was received. The memorial was completed and dedicated within 18 months of presenting the community plan. The mood of the community changed dramatically when this memorial was dedicated. People who may have been skeptical of Stella’s ability to help itself realized that being a small community enabled it to act quickly without the need for obtaining long and drawn-out approvals.

Lentz-Carter Merchandise Building: One of the oldest buildings in town, this building established the architecture heritage of Stella, but the building was abandoned and deteriorating and left full of artifacts from a previous era. Everyone seemed to be waiting for it to fall down so they could get rid of it. However, EPA community planner, Verle Hansen noted the building’s historic significance and urged that it be restored. Doris and Chuck Dalbom, a retired couple living near town and members of the SBC, now possess the building. These new owners applied for and received National Historic Registry status for the building. However, a structural survey of the building determined that the building was in poor shape. Therefore, the Dalbom’s worked with the NHR board to assess what could be done to restore the building. The NHR board determined the building could be totally rebuilt to be visually historically accurate and that the façade could be saved and restored. This rebuilding was completed in 2009 and a restaurant opened in the building. Although the restaurant was initially successful, it closed after a few months. A popular barbeque restaurant occupied the building from 2010 and attracted people from throughout the region. This created 20 new jobs in town and revenue for the town. However, the restaurateur closed after 3 years and in 2013 a new restaurant opened. It has become a social gathering spot for the community and is profitable.

⁹ <http://www.dnr.mo.gov/>



Figures 14, 15, 16: Veterans Memorial¹⁰, Moses Eagle Park, Lentz-Carter Historic Building¹¹

Citizen involvement in building a community with the help of the plan has been substantial. During the first two years after the plan was presented, the town also accomplished the following:

- The only convenience store and gasoline station, "Clicks", was reopened under new ownership.
- LeRu¹² telephone/cable TV/internet provider has been expanded with a kitchen, dining area and restrooms that can be used by the community during power outages and natural disturbances.
- Murals were painted to depict the history of Stella and were installed. The town is now on a twice annual tour of historic murals in the state.
- Gardens at the entrances to the town were cleared by the Missouri Department of Transportation and planted by local Girl Scouts.
- Flowering Dogwood, *Cornus florida*, trees were donated by LeRu and planted throughout the town as a precursor to restoring the town to the region's annual Dogwood Tour beginning in Neosho, Missouri.
- A government grant was obtained for an emergency shelter and construction was completed in 2010.
- The master plan was included as part of an exhibit at the National Building Museum in Washington, DC. The exhibit was open to the public from 26 October 2008 until October 2009.
- Rhonda Headland, Community Conservationist for the Missouri Department of Conservation completed a landscape plan for the Park and the off-street parking area in Stella. This plan includes rain gardens and 2,222 new plants. Citizen volunteers completed this work in spring of 2008.
- A trail is planned to connect the school to downtown. Negotiations are underway with property owners to obtain permission to install the trail. MDC plans to install part of the trail and place nature markers.
- A public Bald Eagle, *Haliaeetus leucocephalus*, viewing event¹³ is held every January. Boy Scouts use this as a fund raising event, churches provide free refreshments, and the Missouri Department of Natural Resources provides educational talks about the eagles.
- An Easter sunrise service was held in the town park. Both churches of Stella plan to hold a joint service annually.
- The town also united to recover from one the worst ice storms in memory and twice flooding of Indian Creek. These events emphasized the importance of planning the built environment to minimize the impacts of natural disturbance regimes that are both unpredictable and beyond human control.

¹⁰ <http://www.greenrightnow.com/keye/2011/06/23/stella-veterans-memorial/>

¹¹ <http://historical-places.findthedata.org/l/88765/Lentz-Carter-Merchandise-Store>

¹² <http://www.leru.net/>

¹³ <http://www.bigmomma.newsvine.com/news/2011/02/02/5967126-we-counted-21-eagles-this-weekend-and-got-more-pics>

Planning documents provided by the EPA have served as a general guide for the community and have motivated much of the activity that has occurred since 2007, but none of these documents have been rigorously followed.

7.0 Evaluation of EPA's Efforts/Lessons Learned

EPA's work with Stella can be measured by its beneficial outcomes to the community and the EPA. First, the close working relationship between a research and development agency of the Federal Government and citizens of Stella was extraordinary. The community welcomed EPA's help and citizens were eager to participate. This relationship was forged by personnel from EPA Region 7 who directly addressed the community's primary concern, i.e., an existing Superfund site in town. Their responsiveness gave credibility to the Federal government generally and to EPA in particular; and established a trusting relationship. This trust allowed the research team to develop a broader sustainability plan for the community. Second, a goal of ORD research involvement in Stella was to determine whether the EPA could help communities make decisions that would align with maintaining systems that sustain the community and its citizens.

This project is the outcome of a question asked by the community of Stella. "How can this vacant site be used so that the community would be sustainable?" The project grew into a plan for the community due to a concern that use of one site would not make the community sustainable. [Part A](#) expands on this issue and the community's capability to act upon the plan. [Part B](#) answers whether the work enabled the EPA to fulfill its purpose "to create and maintain conditions, under which humans and nature can exist in harmony, that permit fulfilling the social, economic, and other requirements of present and future generations". [Part C](#) evaluates whether this project facilitated EPA's understanding of the implications for and interactions among human health, ecosystems services, economic vitality, and social equity so that communities can make decisions that will sustain this and future generations. [Part D](#) lists lessons learned in the course of this project.

The 16 projects noted above illustrate how much has been accomplished, but not all this effort has met SBC or EPA expectations. David Doyle and Whitney Rawls from EPA Region 7 revisited Stella on 18 May 2012 to evaluate progress. They met with SBC members/community leaders Bob and Mona Hart, Chuck and Doris Dalbom, and several residents that were involved on various projects listed below. The Stella Betterment Committee has not had any new members and although the committee still exists, it is not active. The new head of the town's Board of Trustees was invited to the meeting, but did not attend. Discussion focused on the status of most of the projects in the plan and efforts to implement them. Doyle and Rawls surmised that there is a serious disconnect between the community champions, most of who live just outside of the village, and the elected Board of Trustees. Overall, the community seems to have been concentrating on a limited number of things that have had some success.

- Stella takes great pride in the village park and the rain gardens they developed with the help of the Missouri Department of Natural Resources. MDNR is in the process of putting name plates near each native plant; and field trips to the park from the local Triway School¹⁴ teach students how the garden works.

¹⁴ <http://publicschools12.com/elementary-schools/mo/newton-county/293042002085.html>



Figure 17: Park Signage

Figure 18: Rain garden at park

- Stella's Senior Citizens¹⁵ continue to work on the Veterans Memorial. It has experienced some vandalism, but donations and improvements continue.
- The FEMA storm shelter¹⁶ located on the former hospital site has been used several times. Citizens would like to also use it as a community room but cannot until poor acoustics are improved.



Es



Figures 19, 20, 21: FEMA Emergency Shelter

- Three different restaurants have occupied the Lentz-Carter building since it was rebuilt in 2009.
- A 2-bedroom apartment was built in the upper floor of the Lentz-Carter building and is rented. This apartment is the only new housing to be built in town and the general housing stock of Stella continues to deteriorate with many homes empty due to foreclosures that accompanied the economic recession beginning in 2008. Home sales have partially recovered in 2014.

Other projects have had little success.

- A walking trail was planned from the downtown to the Triway School, but it is tied up in property ownership/acquisition issues.

¹⁵ <http://www.nonprofitfacts.com/MO/Stella-Senior-Citizens-Inc-Stella-Veterans-Memorial.html>

¹⁶ <http://www.neoshodailynews.com/article/20091216/NEWS/312169838>

- The SBC is exploring establishing a farmers market.

Some projects have been more successful.

- Two options were discussed regarding construction of a new Town Hall¹⁷: (1) to build on the former Cardwell Hospital site; (2) to build it as an addition to an existing building such as the LeRu telephone company. However, after the Masonic Lodge ceased operations in 2014, the building was acquired and is being remodeled to accommodate the town's administration.
- "Click's", the local convenience store, has reopened under new ownership and is thriving with an improved relationship with Triway School.
- "Eagle Days" at the end of January has become a big success. Over 200 eagles were counted in 2012 and over 1000 viewers. The number of viewers increased to more than 1500 people in 2014. The Missouri Department of Conservation provides literature, activities, viewing scopes and a film about eagles. Warming shelter and restrooms are provided at the Methodist Church and FEMA emergency shelter; and the restaurant in the Lentz-Carter Building is also open for business.
- Streets are maintained.
- Several murals were painted by local artists to highlight the history of Stella and the LaRue Telephone Company and are on display in its building. These murals are included in the self-guided Newton County Murals Tour¹⁸.

Local representatives indicated that the assistance from EPA, notably the demolition of the hospital, definitely changed their community for the better, since it would have continued to deteriorate and was an eyesore in the middle of their downtown.

The value of this exercise is not only what Stella *was* able to accomplish, but include exposing strengths and weaknesses in EPA's ability to inform community decisions, where it can be most useful in this process, the limitations of EPA involvement, and how EPA can help develop science of human-environment relationships ([Part C](#)).

Part A: Value of this project to Stella's future

The value of this planning effort to Stella is, foremost, whether it helped to "create a livable, inspiring, enduring, and equitable place...where the quality of life and the long-term quality of human existence will be enhanced rather than depleted" (Beatley and Manning 1997, noted earlier in section 3, p.11). Adding capacity to a system increases the possibility that this and future generations will have options and opportunities they will need to survive. Cleaning the air, working toward renewable energy, reducing the effects of climate change, improving chemical safety, cleaning the water, enhancing the security of water systems, etc. help to assure the homeland is secure and lowers risks to human health and the environment. These improvements are essential and will make it possible for the community to extend its life into the future, but it does not assure that it will.

No community can survive if more people are leaving than are arriving or staying. Therefore, Stella's quality of life and long-term quality of human existence appears to pivot on two scenarios: whether it attracts growth; and

¹⁷ The Masonic Lodge was purchased by the town after the lodge closed in 2014 and will be the new Town Hall.

¹⁸ http://newtoncountymotourism.org/docs/newton_co_driving.pdf

whether it strengthens its connections with the inter-dependent region of rural area, villages, towns and cities to which it is a part to support each other¹⁹.

This interdependency between communities seems to be contrary to what Stella wanted, but it is not. Citizens of Stella described the community they wanted ([Appendix B](#)) where they expressed concern about the time required to access emergency medical and police services; and about the cost and accessibility of goods and services that must now be acquired from distant communities. Citizens of Stella and the EPA preconceived that this outcome would be the product of a larger population in Stella, but Stella's concerns are not related to the size of the community, but of characteristics of living in a community that is too small to make services and goods economically viable. If growth does not occur, or until it does, Stella's challenge is to envision itself as a participant in a regional community and design strategies for the timely and efficient provisioning of goods and services within that regional community. This will require Stella to: (1) redefine the concept of "community" and its relationship to it; and (2) adapt new technologies and practices to meet citizen and community needs where goods and services are provided under different paradigms of socio-economic development²⁰.

Part B: Relevancy of this project to EPA's Mission

Although many species may benefit from a human concern for sustainability, it is a conscious goal of only one species, *Homo sapiens*. We humans want some assurance that human life will be able to remain and adapt in place. However, the most assurance possible exists when the systems within which humanity evolved remain sufficiently intact and functioning to meet human needs and within human tolerances. EPA cannot make land-use decisions that keep systems intact and functioning, but it can identify the systems parameters and qualitative conditions that must exist so that human society can make choices and decisions that maximize assurances to humanity.

This project demonstrated the use of a planning process that enables communities to make decisions that align with maintaining economic, social and environmental systems that sustain human life. First, it identified the systems context for making decisions (See [Appendix A](#)). Secondly, it illustrated how a community could make decisions that meet its needs within this systems context (See [Appendix C](#)). The product of this work was a plan for Stella. Whether that plan is sufficient to enable individuals and the community to align their decisions with maintaining the integrity of systems is discussed below.

Stella's initial perception was that it had very little capacity to make decisions for two reasons, i.e., its lack of money and the pace of change did not offer opportunities to make decisions. However, the opportunity to make decisions exists in making daily decisions that are required to meet needs and address problems. Infrastructures wear out or require updating. Potential storm events could threaten citizens if they are not anticipated and how to respond is not planned. An individual act could pollute groundwater if decisions are not made to avoid this problem. Or, improper land-uses could cause expensive inefficiencies in public services or decrease the overall quality of life for citizens. The plan for Stella provided a long-term perspective for making these short-term decisions. The plan does not provide more resources, but the context for making decisions can be used to justify requests for outside

¹⁹ Marketplaces in the heart of towns and cities reveal that rural and urban areas have always been integrally linked. The Agora in Athens dates to the 6th century BC. Istanbul's Grand Bazaar, the oldest indoor marketplace, dates to 1493.

²⁰ Small towns have never had populations the made locally provided goods and services viable. Catalogue mail order companies once provided needed goods and some medical specialists were and are now located in only a few States.

assistance. It also focuses the resources that are available to meet local needs and objectives. The plan also inspired the community to fulfill part of its vision. Stella's park, Memorial to veterans, and restoration of a historic building were accomplished by citizens within a two year span. Planning for Stella:

1. Enables decisions to be made today that are consistent with EPA's mission to protect the environment; and provides a valid systems context to all planning decisions.
2. Enables communities and land-users to make decisions that align with sustainable outcomes and, in the process, provides living laboratories where outcomes can be measured.
3. Provides a catalogue of alternative land-use options that can be applied in other communities and modified as necessary to fit different local environments.

Whether Stella has done enough to be sustainable will be determined years from now, but Stella has done much more than citizens thought possible; and it has the decision framework to make certain its future decisions are sound.

Part C: Applicability of this project to other communities

EPA has an oversight role under CERCLA and RCRA for approximately half a million sites encompassing more than 20 million acres (US EPA, 2011). According to the United States General Accounting Office, about 5 million acres of abandoned property are in urban areas. Although these sites drain community's resources, they offer an opportunity to use these sites to accommodate new urban development that more efficiently uses local infrastructures and services while generating new tax revenues, avoiding environmental impacts on yet undeveloped sites, and their cleanup reduces cumulative risks to human health. Their position at this nexus allows them a key role in sustainable development if these sites can be redeveloped within the context of intact and functioning systems, and if communities can take advantage of this opportunity. Stella, MO offered an opportunity to learn how such development might work.

The Stella Betterment Committee hoped that the Cardwell Hospital site could be redeveloped and play a key role in the community's future. However, with no immediate use for the site, development could not proceed; and site cleanup does not constitute a sustainable use. The site was long ago removed from its historic roles in natural systems, which cannot be restored by either cleaning the site or finding a new use of the site. The most that could be accomplished in the short-term is to define the systems context for the use of this site and the community generally so that at a later date the community's development will be in harmony with the systems that sustain it.

EPA established this comprehensive context, then was able to evaluate individual sites as they relate to those systems. A new building was designed that included a new town hall, post office, library, police office, restaurant, and apartments. Stella's land uses in this area are consistent with this intent, i.e., development of an emergency shelter on site and a memorial for veterans on the adjacent site. Plans for the building were abandoned in 2014 when the Masonic Lodge across the street ceased operations and the lodge was acquired to be modified as the town hall.

According to Stella's citizens, local real estate transactions, new telephone accounts, and growth surrounding nearby Bentonville, Arkansas (home of Walmart) indicated that Stella's population would increase. Citizens hoped growth would be enough to support a grocery store and medical provider. The plan for Stella was designed to accommodate

that increased growth. However, the plan is no less valuable because growth did not materialize. Making decisions that increase and maintain the capacity of a community's economic, social and environmental systems is essential whether a town is growing, shrinking, large or small.

Part D: Lessons Learned

Communities are the product of incremental land uses layered over time and space; and are the physical expression of humanity's occupancy of planet Earth and the use of its resources to meet daily needs. These resources will inevitably be impacted by individual land uses. Although environmental impacts of each individual land use may be negligible, collectively they can erode the natural systems that sustain human life and communities. It is not possible to avoid this problem by regulating individual land uses or undo their collective impacts on a site-by-site basis. It is possible to plan a community to achieve an alternate vision of the future, e.g., "a livable, inspiring, enduring, and equitable place...where the quality of life and the long-term quality of human existence will be enhanced rather than depleted" (Beatley and Manning 1997), or an environment where the capacity of natural systems to provide goods and services that humanity needs is not diminished (see [Visions](#)). Stella helped the EPA to understand the following:

1. Communities are a major forum for moving toward sustainability.
 - a. Typically the impacts of individual land use decisions are too small to observe, but the cumulative risks can push an ecosystem toward irreversible collapse. Each individual land use decision will impact the environment and human life both on and off-site, but land users are legally restricted to making decisions only within the site's property boundaries. Any impact of land use that radiates off-site cannot be recalled by any additional on-site land use decisions. Impacts on the environment must be addressed where they occur, but since individual land users have no authority to make decisions beyond the boundary lines of their site, actions to systematically counteract any loss must be made by a party that has this authority, i.e., a community.
 - b. If environmental systems are to retain their capacity to sustain human life, cumulative losses from incremental land use decisions must be systematically counteracted. Site-level land users cannot do this, but communities can.
 - c. Typically site development occurs on one of several sites that are carved out of the natural environment. As a site reaches the end of its useful life, new decisions can be made to revitalize the site. However, cleaning and replanting the site cannot restore a site's historic functional roles in environmental systems. A community *can* identify this context and provide guidance to individual site users to make decisions within this context.
 - d. A community has the authority to consider general interests of citizens. Communities exercise this authority in creating public infrastructures and services, developing policies, enacting ordinances and regulations, etc. They also have the authority and the capability to identify the local and regional contexts and functional status of environmental, social and economic systems that sustain human life and the community itself; and to initiate public programs for restoring and maintaining these systems.

- e. The concept that “no man is an island”²¹ applies equally to every village and city on Earth, and community planning should include their connections and inter-dependencies.
 - f. Only the community and its land users can make decisions. EPA’s involvement in Stella did not supersede the community as decision maker; and the community did not relinquish its will to make its own decisions.
2. Two vision statements are essential to progress toward a sustainable community: the future state of being that the community hopes to experience; and a vision of the future state of the world wherein the community’s vision will exist. The first vision provides the ability to develop goals and objectives. The second vision provides parameters within which those goals and objectives are to be met.
 3. Every community constantly adapts to dynamic environmental, social and economic systems. These adaptations themselves are dynamic and influence these systems. The challenge is to maintain viable systems while changing them.
 4. A community should achieve consensus on how it will adapt, but that consensus is still subject to the inviolable laws of Nature and thermodynamics. Nature cannot be protected without people agreeing to do so, but Nature does not care whether people agree or whether they think they cannot afford to protect the systems that sustain humanity.
 5. The extent of a community’s commitment to adapt is determined by those in the community who make decisions and are willing to continually invest labor and money to counteract the second law of thermodynamics.
 6. A community’s survival requires investment in adapting to complex and dynamic systems, not in preserving the status quo²².
 7. Impact of investment is relative to scale. A smaller community can invest human energy and can have a larger visual impact that a larger community can obtain by spending millions of dollars.
 8. A community has three primary concerns: (a) to efficiently and equitably provide a place where citizens can enjoy a fulfilling and agreeable quality life; (b) to enhance and facilitate connections and inter-dependencies with other towns, etc., that provide goods and services to the community; and (c) to actively build capacity into the social, economic and environmental systems that sustain the community.
 9. The credibility of our research team rested on EPA’s ability to quickly address issues that the community saw as its highest priority. That was accomplished by EPA Region 7 when they responded to the community’s issues with the deteriorating condition of Cardwell Hospital. Once credibility was established, the community granted a lot of flexibility to our team’s planning efforts and citizens became eager participants.
 10. The question of how to reuse a single site in a sustainable way is rhetorical. Sustainable use of any site must be in context with intact and functioning systems. Each individual land use will inevitably impact systems beyond site boundaries. Therefore, development of any site must be coordinated so as to minimize environmental impacts and to systematically counteract the cumulative impacts from individual land uses.
 11. A vision of a sustainable future inspires progress toward sustainability. It is not the number of visions of what is sustainable that keeps us from that goal; it is the lack of a vision (Costanza & Kubiszewski, 2014).
 12. Planning solutions may differ from one community to another, but the principles that underpin them are the same; i.e., intact and functioning environmental, social and economic systems. The local variations in these

²¹ John Donne, 1624, Meditation XVII

²² Anuradhapura, Polonnaruwa, Chechen Itza, Uxmal, Thebes, Ephesus, Pergamum, Angkor Watt, Machu Picchu, Chaco Canyon, Mesa Verde and hundreds of other heavily invested communities no longer exist.

systems and different opportunities for communities to meet their needs is what makes each community unique.

13. There is power in numbers. One person can do little, but 10 people can build a park. One community with 10 people working toward creating a community that aligns with the systems that support it cannot protect the environment, but a thousand communities with 10 active people is equivalent to 10,000 people working toward a sustainable world.
14. A community needs a champion for change.
15. Sustainability is all about considering long-term outcomes in decisions that must be made now. The more systems context that can be provided now, the easier it will be to make those decisions.

8.0 Conclusion

The sustainability of Stella largely hinges upon the community's ability to make decisions that advance toward the community's vision while maintaining viable and highly productive systems that are relied upon to meet that vision. This requires that decision-makers understand community goals, boundaries of systems, feedback loops, land use tools/models and how to use them as they relate to Stella. The less self-reliant a community is, the more it relies upon systems that are beyond community borders; and the more difficult it is to define boundaries of systems, feedback loops and how models apply. Also, smaller communities have fewer financial resources, personnel and time, or will to know all it takes to make short-term decisions within a long-term outlook. This suggests that Stella and other small communities need a simpler way to make decisions that relate to sustainability and to measure their outcomes. Planning theory offers that option.

Planning theory offers the ability to make decisions by knowing local values and the systems contexts which govern those decisions. Whether proposed decisions might be suitable in the long-term can be provided by the following measures.

Measure 1: The measure of sustainability according to the Brundtland Commission (UNWCED, 1987) is whether opportunities and options exist to meet needs of the current generation within the condition that future generations also have options and opportunities to meet their needs. Since the existing generation cannot observe future generations, they must measure their decisions by whether the conditions they bequeath to future generations provide opportunities and options.

Stella will likely continue to meet the needs of some of its citizens and this community may be sustainable to them, but not sustainable to others. Similarly, those needs that are not met locally will be met by expanding the boundaries of social, economic, or environmental systems. If those broader systems retain the capacity to meet these local needs, citizens are sustained. Therefore, whether the community itself is sustainable may rest upon how the concepts of "community" and "viability" are defined. Modern forms of personal connectivity are redefining the concepts of networks and neighbors; and same-day e-tailing is changing the concept of where a business must be located and how many people it can serve. Medical care in Stella's early years was provided by doctor house-calls. Modern forms of communication may enable "virtual house-calls" that change where a clinic can be located and who it can serve.

Measure 2: Sustainability is the continued assurance of human health and well-being, environmental resource protection, and economic prosperity—today and for generations to come (Fiksel, 2012). Humanity and planet Earth

itself is vulnerable to catastrophic events that cannot be controlled. Therefore, there are no assurances that humanity will survive. The most assurance possible is when the systems that sustain human life are sufficiently intact and functioning to continue to provide goods and services that meet daily needs of the human population. However, there is no stasis of economic, social or environmental systems that will predictably sustain human life. Therefore, humanity has two choices: 1) accommodate these dynamics through adaptive management of the environment; and/or 2) avoid being the cause of its own demise by aligning land use decisions with laws of thermodynamics. Providing the context for making decisions in Stella enables this second choice.

The EPA is working to incorporate sustainability into its regulatory decisions (NRC, 2011). This challenges the EPA to: (1) sufficiently inform communities of the environmental and human health implications of decision-making so that near-term decisions will not compromise and will ultimately improve the long-term outlook for those communities; and (2) clarify its vision of a sustainable world so that communities and individuals can determine for themselves how to use and develop land so that it moves toward that target. Planning theory presented one potential way to meet this challenge.

Whether this is sufficient to sustain social, economic and environmental systems for this and future generations will not be decided in a few short years, but in generations. However, finding fifty years from now that the answer is “no” cannot undo all the decisions that were made to get to this point. We live in a complex and dynamic world where communities embody all decisions that came before and are the physical response to all existing pressures on them. Communities cannot be easily undone or created anew. However, they can be remodeled to reflect a new vision of the future, if communities have the knowledge and vision to create it.

EPA can present the science it has today. However, when it does not exist or is insufficient, one recourse is to lead by sharing a sustainable vision that includes some redundancies and safety features for maintaining intact and functioning systems. This enables decisions that meet current socio-economic objectives that align as much as possible with the systems that make human life and communities possible.

List of Figures

Figure 1: Cardwell Hospital	9
Figure 2: Cardwell Hospital, demolition	9
Figure 3: Cardwell Hospital, cleared site	9
Figure 4: Community dinner	11
Figure 5: Community meeting	11
Figure 6: Floodplain overlay on aerial photograph	12
Figure 7: Natural assets overlay on aerial photograph	12
Figure 8: Riparian corridors overlay on aerial photograph	12
Figure 9: Diagram of ¼ mile walking radius from town center overlay on aerial photograph	12
Figure 10: Typical Block Layout around Commons	16
Figure 11: Typical Cluster Layout around Auto Court	16
Figure 12: Stella Comprehensive Plan	17
Figure 13: Plan Detail of Downtown Stella	18
Figure 14: Veterans Memorial.....	20
Figure 15: Moses Eagle Park	20
Figure 16: Lentz-Carter Historic Building	20
Figure 17: Park Signage	21
Figure 18: Rain garden at park	21
Figure 19: FEMA Emergency Shelter	22
Figure 20: FEMA Emergency Shelter	22
Figure 21: FEMA Emergency Shelter	22

List of Tables

Table 1: Example: How Sustainable Endpoints for Land Use are Compiled	10
---	----

Acronyms and Abbreviations

Acronyms	Meaning
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
EPA	United States Environmental Protection Agency
FEMA	Federal Emergency Management Agency
L&C	Lentz-Carter Historic Merchandise Building
LeRu	LeRu Telephone, Cable TV and Internet Provider
LRPCD	Land Remediation Pollution Control Division
MDC	Missouri Department of Conservation
MDNR	Missouri Department of Natural Resources
ML	Masonic Lodge
NGO	Non-Governmental Organization
NHR	National Historic Registry
NRMRL	National Risk Management Research Laboratory located in Cincinnati, Ohio
ORD	Office of Research and Development
RCRA	Resource Conservation and Recovery Act
SBC	Stella Betterment Committee
SDM	Structured Decision Making
SHC	Sustainable and Healthy Communities
U.S.	United States of America
USDA	United States Department of Agriculture

References

- Alberti, M. (2005). The Effects of Urban Patterns on Ecosystem Function. *International Regional Science Review* 28(2), 168-192.
- Beatley, T., & Manning, K. (1997). *The Ecology of Place: Planning for Environment, Economy, and Community*. Washington, DC: Island Press.
- Benyus, J. M. (1997). *Biomimicry: Innovation Inspired by Nature*. New York: Harper Collins Publishers, Inc.
- Caldwell, L., & Shrader-Freschette, K. (1993). *Policy for Land: Law and Ethics*. Lanham, Maryland: Rowman & Littlefield.
- Costanza, R., & Kubiszewski, I. (2014). *Creating a Sustainable and Desirable Future: Insight from 45 Global Thought Leaders*. New Jersey: World Scientific.
- Ehrlich, P. R., & Ehrlich, A. H. (2004). *One with Nineveh: Politics, Consumption, and the Human Future*. Washington, DC: Island Press.
- Fiksel, J. (2012). A Systems View of Sustainability: The Triple Value Model. *Environmental Development*.
- IUCN. (1997). *An Approach to Assessing Progress Toward Sustainability*. Cambridge, UK: International Union for Conservation of Nature and Natural Resources.
- Lyman, J., & Herdt, R. (1989). Sense and Sensibility: Sustainability as an objective in International Agriculture Research. *Agricultural Economics* 3(4), 381.
- MEA. (2005). *Ecosystems and Human Well-Being: Biodiversity Synthesis*. Washington, DC: World Resources Institute.
- NRC. (2011). *Sustainability and the U.S. EPA*. Washington, DC: The National Academies Press.
- Payne, N., & Bryant, F. (1994). *Techniques for Wildlife Habitat Management of Uplands*. New York: McGraw-Hill, Inc.
- Pearce, D., & Turner, R. (1990). *Economics of Natural Resources and the Environment*. New York: Harvester Wheatsheaf.
- ULI. (2011). *What's Next? Real Estate in the New Economy*. Washington, DC: Urban Land Institute.
- UNWCED. (1987). *Our Common Future*. New York: Oxford University Press.
- US EPA. (2000). *Projecting Land-Use Change: A Summary of Models for Assessing the Effects of Community Growth and Change on Land-Use Patterns*. Reston, VA: U.S. Environmental Protection Agency, Office of Research and Development.
- US EPA. (2011). *Handbook on the Benefits, Costs, and Impacts of Land Cleanup and Reuse*. Washington, DC: Office of Policy and Office of Solid Waste and Emergency Response.

Appendix A

Conditions of Intact and Functioning Systems

ID	Future State	Future Assurance Need	Precondition	End-Point	Requirement to meet goals and endpoints
ID	Imagine the Future that we want and will need	What the Future must be to provide some assurance that humanity will have what it needs.	Precondition - Ecosystems are sufficiently intact and functioning to provide continuous services to human life. 1. Goods and services exist. 2. Conditions are right for human life.	End-Points – "... the basic conditions for that society (e.g., absence of large scale poverty and environmental degradation and intergenerational responsibility) (UNWCED, 1987)." (NRC, 2011)	Requirement to meet goal, sub-goals, preconditions, and end-points "...Take into account thousands of communities, species, and individuals, all relative to the health of an entire ecosystem – or the entire biosphere, and then specify how to maintain the health or balance of the entire system (Caldwell & Shrader-Freschette, 1993)." This "lite" version of PLACES enables a community to do this with few resources and time and still have a large impact.
Natural Systems					
1	Goal: Assure that planet Earth will be able to sustain human life, and provide opportunities for Human life will to remain and adapt in place (Benyus, 1997)	The condition of the environment within which human life has evolved remains within human tolerances. "For the modern mind... an ecological view of the earth has had to be acquired through learning...It	Ecosystem Productivity	Native plants predominate.	Identify native plant communities and use these as models for landscaping the built environment and bordering agricultural areas. This also helps sustain native plant and animal species and establishes a unique local feel to the community that can be sustained by the local climate regime.
2			Biodiversity	Native coastal mangroves, wetlands, sea grass beds are intact.	Institute a policy to prevent any future losses of these assets, identify damaged assets, and initiate community discussions concerning their restoration.
3			Biotic integrity of native species composition	Habitats exist in configurations, sizes, and quality that meet physiological and behavioral needs of native species and their communities.	Approximately 90% of biodiversity will exist in riparian corridors; therefore, protect 75% of all riparian corridors to the full width of the corridor. Widen the corridor to a minimum of 100 meters (328 feet) on each side of the stream or 200 meters (656 feet) total In the most productive stretches of corridors.

ID	Future State	Future Assurance Need	Precondition	End-Point	Requirement to meet goals and endpoints
4		will be an unavoidable feature of postmodern society (Caldwell & Shrader-Freschette, 1993) .”	and community structure exists.	Natural disturbance regimes fulfill their necessary roles in natural systems	Identify and maintain with native plants all flood plains, forests, shrubs, chaparral, and grasslands that are subject to floods, fires, landslides, avalanches, and severe winds. (These areas can be managed to maintain pasture and production of native grains, berries, nuts, and fruits.)
5				Unique environments remain intact.	Identify and protect existing unusual and/or unique biological and geological sites and remnants of native/near-native sites in the region.
6			Soils	Soil quality and quantity are maintained.	Refrain from plowing of soils that are inherently unstable and hold soils in place with wind breaks per State recommendations and vegetated buffers of native planting 20 meters (66 feet) wide between disturbed soils and streams.
7			Water	Ground water recharges < withdrawals. Surface water recharges < all combined water uses.	Develop a strategy that would allocate groundwater and surface water on the basis of hydrological data covering the broadest available time period and remain flexible as our understanding of hydrology is expanded or altered by climate change or apply the following formula: Water Use (direct+ indirect+ amount needed to sustain other essential life) ≤ Water Replenishment (natural hydrological cycles + technology + recycling)
8			Water quantity is assured	Identify and maintain natural avenues for surface and groundwater water recharge that are affected by the community.	
9			Water quality is assured	Purify waste water and stormwater before discharge into streams/rivers.	
10			Climate	Human-caused climate change is systematically counteracted	Develop a strategy to sequester greenhouse gases in new forests and renewable energy replaces fossil energy use.

ID	Future State	Future Assurance Need	Precondition	End-Point	Requirement to meet goals and endpoints
11			Coordination	Time, effort and resources expended to protect the environment are used efficiently.	Identify other organizations or agencies that are working in the region to conserve and/or protect environmental features, characteristics, or resources. Propose a strategy that would coordinate and augment their efforts with responses to requirements herein.
ID	Future State	Future Assurance Need	Precondition	End-Point	Requirement to meet goals and endpoints
Social Systems					
12	Goal: Assure that the built environment and social systems are able to provide opportunities and options for people to meet their needs.	Social systems have the capacity to meet citizen needs.	People can take advantage of options and opportunities	Places that provoke spiritual and engender cultural feelings remain intact.	Identify local and regional characteristics of place, i.e., natural topography, hydrology, climate, views, and local cultural responses to them; and use these to develop design guidelines for planning and development of the community so that the community establishes a unique identity and visual panoramas.
13				The built environment facilitates human interactions rather than impeding them.	Concentrate as many activities as possible around one location (preferably around transit centers) to enhance local social networks and chance person-to-person interactions.
14					Expand the concept of community as broadly as possible using advanced technologies such as next-gen broadband so that individuals, small groups and small communities can participate in large projects and programs.
15			Social advancement	Quality of life for all	Food, water and health care are sufficient to meet the needs of all people and are distributed to all as a human right and a foundation of true societal and economic development.
16				Education is a foundation of civilization and the means for it to meet human and societal needs for more people with limited resources. Education is the right of everyone and necessary for a	

ID	Future State	Future Assurance Need	Precondition	End-Point	Requirement to meet goals and endpoints
					civilization to advance. A society should work towards diverse forms of education to capture the richness of different ways of thinking and to fill the various roles that will be available in an advanced society.
17				Social cohesion	Society works toward equality, universal rights, justice, employment, adequate income, food and water, health care, education, housing, free will, pursuit of life, a responsibility to helping achieve these things for others and the pursuit of balance in mind, body and spirit.
18			Risks are averted.	Risks to human life/health are known and monitored.	Identify and map land areas contaminated by materials/substances that pose a risk to human life and keep them isolated from human life.
19				Human life is isolated from potentially harmful events.	Identify and map local and regional areas subject to probable flooding, fires, and tornados; and keep these areas free from development.
ID	Future State	Future Assurance Need	Precondition	End-Point	Requirement to meet goals and endpoints
Economic Systems					
20	Goal: Assure that government and institutions are able to provide opportunities and options for people to meet their needs.		Production and consumption is compatible with Earth's capacity		Output is not artificially inflated by over-consumption of the earth's natural resources (Ehrlich & Ehrlich, 2004, p. 319). Governance and economic policy is made compatible with achieving long-term sustainability.
21					The world's population must be an appropriate size, balance by an appropriate average level of consumption, and with mechanisms in place to maintain that balance.
22				Work reflects people's identity	Work directly relates to fulfillment of a worker need.
23			Sustainable land policies make economic	Energy net-zero	Develop a model for public policy that requires local energy use and production to be balanced.

ID	Future State	Future Assurance Need	Precondition	End-Point	Requirement to meet goals and endpoints
24			expansion possible. (Caldwell & Shrader-Freschette, 1993, p. 15)“...in virtually every collapse, environmental and resource	Financial resources are sufficient to maintain community infrastructures, institutions, and services.	Plan the built environment to maximize the efficient use of existing infrastructures, services and institutions with approvals of new development contingent upon a certified balance sheet showing how costs of building and maintaining new or extended infrastructures and services are to be paid.
25			(consumption) factors broadly considered played some role...” (Ehrlich & Ehrlich, 2004, p. 333)	Maximize the local impact of monetary resources and Sense of place	Identify as many ways as possible to keep money moving in the local economy as long as possible (local activities, local energy production, local services, locally grown food, local processing, local waste recycling, local design, provide local gathering places, combine school and community entertainment, recreation, sports, emergency support, environmental monitoring and reporting, Localization also permits people to orient to a world they know and helps maintain food security and other forms of self-sufficiency in a world with a trade systems that is increasingly vulnerable. (Ehrlich & Ehrlich, 2004, p. 325)
26				Accounting is right	Internalize environmental and social externalities of economic activities
27				Accessible, accountable, and transparent information	Provide equal and diversified access to information
28				Balance economics	Promote trends that solve long-term environmental and economic problems (Ehrlich & Ehrlich, 2004, p. 291)
29				Accountable	Reduce the power of special interests
30			Local resources are sufficient to meet demands placed upon them.	Local and regional governance is effective	Cost of local governance is within the capacity of citizens to pay. When costs exceed income, a new form of local governance is designed so that costs never exceed income. (Perhaps governance can be shared across several small communities.)

Created by Verle Hansen, PhD, USEPA/ORD/NRMRL/LRPCD/RRB, Cincinnati, Ohio

Appendix B

Sustainable Community Visioning Session for the Village of Stella
Notes from the Open House and Town Meeting
21-22 August 2006

Questions and Responses:

1. *What makes a place livable?*

- city council—local, approachable, know problems
- regulations
- services: health, retail, recreational
- school (this *must* stay to keep it a viable community)
- local businesses
- infrastructure (e.g., water and sewer, utilities)
- proximity to stores, services, institutions.
- accessibility (ability to get to everything, conveniences, limited travel...but still with small town atmosphere)
- uncrowded community (large enough lots, easements, not congested)
- area for play
- quiet, low noise
- low population
- social activities (people for company)
- no smog
- green (minimal concrete)
- ability to see the stars
- wildlife: eagles, wild turkey, deer, beaver, possums, armadillos
- good churches
- police
- no suburban sprawl
- opportunity for growth
- low crime rate, safe streets – “...where being by yourself is still safe”.
- clean air and water

2. *What makes a place inspiring?*

- quiet, friendly
- rural setting
- small, country town
- things within walking distance
- know your neighbors
- no neon lights or big advertisements
- slow pace
- historical character
- deeply rooted sense of place
- church family
- embracing people from the outside (other parts of the country or other countries)
- accepting of traditions/cultures
- family values, ability to raise kids
- security
- affordable housing

- support for all types of families (single parent, multi-racial)
- farms
- river
- low traffic
- open space
- natural beauty: trees, flowering trees, flowers, hills– diversity
- creeks, springs (clear, healing)
- wildlife
- low odor
- historical aspects (pioneering): old hospital, farmers, agricultural area, horse pulls, fox hunting, grist mill “...make sure ‘new’ buildings will still look historical.”
- water control: clarity, purity, volume...protect springs, swimming, trout fishing (stream formerly stocked every March 1st)
- flag flying
- landscaping– a welcoming look

3. *What aspects of Stella would you like to be able to pass on to your grandchildren?*

- good, friendly neighbors; ability to rely on each other (“networking”); willingness to help one another
- small town atmosphere
- history/oral tradition
- natural beauty (creeks, hills, trees)
- wildlife
- ability to fish
- open space
- see bald eagles
- walk in the woods
- safety, security
- money (or ability to get money) to support family
- brick memorial walkway
- native trees with plaques (remembrance/memorial)
- Moses Eagle (founding name, daughter = Stella)
- post office (historic building)
- main street shops (general merchandise)
- community fellowship

4. *What makes a community unjust or unfair?*

- crime (hospital used to be center of crime–fence didn’t work!)
- old, dilapidated housing
- abandoned buildings (safety hazard)
- unclean/trashy/old cars
- unmowed/unpainted properties
- disconnect between village and school (town different 9 months/year)
- not being welcomed
- condescending comments
- resistance to change
- slow to accept new people and integrate them into the community
- “Good Ol’ Boy” syndrome

5. *What should the town of Stella offer its citizens to add quality to life?*

- zoning restrictions
- medical clinic/ health care
- name “Cardwell” after hospital– historical references

- at least a satellite health building (e.g., dentist & doctor 1 day/week)
 - new city hall
 - general store (“with needle and thread”)
 - gas station
 - grocery store (small or full service)
 - restaurant/café (coffee, cappuccinos, hang-out space for kids)
 - street frontage strip
 - things for kids: park, skateboard park (rather than church steps–liability!), movies, bikes, 4-wheelers, go-carts, basketball court, tennis courts, walking trails, biking trails (things that are “timeless”, not just fads)
 - baseball field– (school is putting this in but community would need to start little league and concession stands, school willing to cost-share on lights)
 - place for outdoor music– fiddling
 - parks (swimming, fishing)
 - Dollar General
 - library/learning center (genealogical research)...there used to be a bookmobile
 - adult education classes (e.g., computer)
 - dance for kids (6th-8th grade, 9th-12th grade...note school puts on 2 dances/year)
 - sidewalks and bike lanes (extend to school)
 - police presence/enforcement (hard to get officer in any reasonable time frame, suggest patrol 2x/day)
 - housing: single family, with land (1-2 acres), privacy, apartments?, both new & rental
 - affordable housing (esp. for teachers, prospective employees for steel company)
 - walkable community (not their suggestion, but nods to our suggestion)
 - good schools, big enough for people to be drawn in
 - better maintenance of infrastructure (e.g., roads)
 - leash law (stray dogs run in packs)
 - day care
 - Laundromat
 - Retail
 - services for all
- 6. *What does the town of Stella do very well for the people who live here?***
- infrastructure: water and sewage system
 - telephone company, internet, television
 - good school system
 - historical society
 - churches
 - PTA
 - human resources: senior citizens, kids, volunteer labor, FFA
 - senior center with Friday night dances & small meal
 - boy scouts
 - people take care of each other
 - friendly (nice post office lady!)
 - good roads
 - reliable power supply
 - access to internet & cable television
 - good cooks
 - village atmosphere
 - kids can play outside
 - trash pick-up
 - employers (Mid-America Precision Products sheet metal company)

- job potential
- good weather
- Indian Creek

7. What change in Stella would make it an even better place to live?

- strong local infrastructure – and support of surrounding rural population
- low income housing: government supported? duplexes?
- integrate the school into the community better
- have a physical center of activity
- re-assert as commercial center
- be a “destination”
- self-guided tour of historic Stella (possibly put of National Register of Historic Sites)
- trees (esp. dogwoods)...Note: Bob Hart will give 100 trees away next year
- library for all ages
- café/ice cream (use to be a Dairy Queen?)
- sidewalks
- bike trail/ road right-of-way
- outside gathering place, park benches (already have good inside gathering place)
- park/playground
- pool hall? place for teenagers (glass wall separating adults from kids)
- ball field
- outside concert area (at park)
- pool or swimming hole in creek
- skateboard area
- Dollar General (central merchandise, build from there)
- golf course (for the sake of preventing housing, but concern that it wouldn't serve the community, but higher income people)
- Farmer's Market (ability for locals to sell produce)
- place for locals to sell arts & crafts, baked goods, homemade items (reference to shop on 86 highway which has bakery, deli, and local products)
- storm/tornado shelter
- attracting industry, job creation
- teen/youth center
- coffee shop
- new city hall
- downtown area landscaped and cleaned up with old buildings restored or replaced
- services for elderly: Social Security help, tax help, estate planning, etc.
- cell phone tower!!
- area along creek for recreation, picnic areas
- essential local businesses

Other Citizen Comments/Concerns

- There is not enough of a tax base with 178 people...how do we get that?
- Many people drive thought Stella, going to/from Wheaton, Cassville, Neosho—good opportunity to capitalize on high traffic
- Tax Business (Loretta Taylor): 800 clients, 3 employees (including her) and filers in evening
- Median income <\$20K
- School sports: cross-country, track, basketball, volleyball, peewee football (N of town)
- School demographics: 1684 students in two K-8 schools and one high school; 465 students at Triway (local K-8 school...filled to capacity)

- < 1% African American, 6% Native American, Hispanics, Caucasian (Scotch/Irish)
- growing % Hmong (“kin-related migration,” own poultry farms, observe lunar new year, no written language until recently)
- low migrant population– no federal funding for this
- School has high technological power (computers, labs)
- School system has its own mechanics for bus repair
- School offers after-school program for kids (until 4:30 or 5:00pm) – funding for transportation for this runs out in 2007-08 school year
- Previous businesses included: Casey’s gas station (well lit & well maintained), Click’s (pre-packaged sandwiches)
- Missouri Department of Conservation– wants to plant native trees
- Want to have brick walkway– memorials
- Several bits of historical character remembered (Lyle, Assistant Superintendent of Schools, offered to gather stories and record oral tradition)
- Grist mill on the creek (taken down in 1969)
- Benches under awnings along main street
- Indians camped along creek– found arrowheads tell what era?
- Civil War activity (founded in 1844)
- Dry goods store (material for clothing)
- Churches: Baptist, Methodist, Church of Christ (disbanded; now tax building)
- Springs
- Stella serviced by volunteer 1st responders; Longview Fire Dept. (3 miles), Ambulance (6 miles)
- Stella was originally settled because the Indians drove settlers back to the area as they were moving west. Water was central to why it was settled, and must remain central.
- Suggest rehabilitating houses/buildings as a community, so the community benefits
- Mr. Cullers plans to build a cattle ranch on the north side of town; interested in fencing/protecting the stream; concerned about erosion when it rains– problem keeping fences up; wonder how to get water to cattle if they can’t go into the streams (family previously had cattle in stream)
- General interest in knowing more about conservation easements...can they be used to maintain land along the creeks? (for bird habitat, barn owls, falcons, eagles, red-tailed hawks)
- Belief that people will come (i.e., drive to Stella) if offered the *best* (e.g., doctors, dentists, restaurants)
- Beaver are a problem with streams/water volume– no trapping
- Black panther/cougar in area
- Suggest on corner of A & O highways near school (Cullers property) build gas station/convenience store
- Mr. Erryl Cullers’ son Michael and fiancée are interested in starting up a business (he’s a builder)
- Need respect for private property or lose access (e.g., Mr. Cullers doesn’t mind kids crossing his property to fish in creek, but concerned if they don’t close the fence and liability concerns)
- Problem with people throwing trash– discussed possible solutions like Adopt-A-Stream/Highway, police patrolling (Note: trash transfer station is in Neosho)
- Residents observed there is more silt in the stream than “normal” – doesn’t flush out
- Developer from Arkansas has built 1 house & lake (talk of the town; residents concerned that upslope development on stream with cause storms to blow out the cemetery)
- Civil War building in Stella that is on the National Registry of Historic Buildings
- Back part of hospital used to be housing for nurses– perhaps make similar “hospitality house” as housing for teachers
- Suggest keeping the post office where it is...pressed tin ceiling, used to have stairs on outside (restore and build apartments above to utilize existing space?)
- Suggest designating historical boundaries around town with guidelines for developing (e.g., materials, location, etc.)
- Concern that if the population of the town increased, the school would not be able to accommodate them (currently overcrowded)
- Sewer system is set up for thousands of people

- Three thousand-foot wells in town (2 active)
- Need to address 4 vacant homes (“cabins”) – tear down or repair
- Suggest connecting middle school, high school, and college students up with Stella community projects (e.g., community service requirements before graduation) and ask local businesses to join in (e.g., Home Depot, Walmart, Mid-America Products)
- Suggest connecting a productive grist mill with local chicken/turkey producers or ethanol plant– using ground corn for their production purposes
- Revitalizing doesn’t mean huge growth encouraged– like the small, comfortable size
- How this will affect taxes? What is the timeline?
- Can we do all these improvements but remain “small town”?
- You want to be able to come back after college and feel like Stella is still “home”.

Appendix C

Possible Planning Responses to Stella Citizen Input

21 May 2007

The following principles guide many of the recommended planning responses:

1. The most important and valuable resource that Stella has is its people. Therefore, it is essential that local people are directed and empowered to achieve community goals. Expanding and developing the human resource is paramount and essential.
2. Because money is a limited resource that will be required to fulfill many of the community goals, it is essential that strategies be set in place to keep money moving around within the community for as long as possible. This will require re-establishing old resource efficient ways to serve local needs by applying local human resources, i.e., converting what resources the community has into different forms to achieve synergistic effects with minimal losses.
3. Because we cannot predict whether the population of Stella will grow to threshold numbers required to sustain the kinds of services and institutions citizens desire, and because services and institutions must be sustainable at whatever population levels exist, it is necessary to reconsider the forms of those services and institutions so they are not strictly based upon population.
4. Because Stella is a small town with limited financial resources, planning responses are intended to limit governance and regulations by empowering people to take responsibility and to build community.
5. Although it is true that Stella has limited resources, it is also true that even small actions can have major impact. Larger towns and cities might have more resources, but it also takes a lot more to have any visual and/or practical effect.
6. Assumptions:
 - a. People’s quality of life is an essential focus of development and these responses.
 - b. The concept of justice applies to everyone. Everyone must be involved and benefit.

Note: Responses shown in underlined *italics* can be shown graphically on master plan.

ID	Desired Endpoints as provided by Community Input ²³	Planning Responses
A	Clean, well-kept	<ol style="list-style-type: none"> 1. Adopt a road program 2. Remove and/or screen unsightly areas with evergreen vegetation 3. Repair and repaint buildings 4. Mend fences, paint as needed

²³ Much of the desired character of Stella that was provided by the community coincides with sustainable endpoints shown on the Sustainable Communities Online website <http://www.sustainable.org/>

ID	Desired Endpoints as provided by Community Input ²³	Planning Responses
		<ol style="list-style-type: none"> 5. Restore or reconstruct historic buildings 6. Enact a mowing plan to keep streetscape looking good. 7. Road repairs 8. Establish a volunteer group to bury road killed animals on a daily basis.
B	<p>Deeply rooted sense of place A destination A place where people want to be. Strong physical center of community activity Re-assert commercial center Strong local infrastructure and support of surrounding rural community.</p>	<ol style="list-style-type: none"> 1. Establish historic architectural precedent as future direction of desired character of buildings in town. 2. Every community resource should be directed inward to <i>a central plaza</i> for gathering and crossing paths. This inward focus would strengthen the community core and provide more opportunities for chance meetings and sharing ideas. New and existing businesses that relate to the public as well as all <i>public services should be concentrated around one plaza</i>. This plaza should also incorporate <i>places to have public events, e.g., markets, bazaars, art sales, play spaces, entertainment spaces, and parking</i>. 3. Provide <i>protected view corridors from public places with well-kept backdrop and water feature</i>. 4. Designate steeper forested land south of highway D as no-build zone and to remain in forest to keep as backdrop for the town.
C	<p>Historical character Make sure new buildings honor historical precedent Main Street shops – street frontage strip</p>	<ol style="list-style-type: none"> 1. Historic buildings clearly show that buildings were wood-frame with lap board siding, deep porches to provide welcome shade, high ceilings, dormers at the face of the exterior wall, 4 pane double-hung windows, shingle roofs, stone foundations, and white color. This architecture made sense for the local materials availability and for local climate and trades availability. It is a beautiful and simple character that should be encouraged. It should be documented in a community design guidelines booklet to guide the architectural character of the community. http://nipc.org/environment/sustainable/development/communities/BSC%20Series%20Community%20Character%20and%20Historic%20Preservation.pdf#search=%22how%20to%20establish%20architectural%20character%20in%20community%22 2. There needs to be a <i>concentrated place for commerce</i>. It may be a traditional street front strip, but it may not. That form may have never been typical in Stella to have established an historic character for the town and it may not be appropriate for Stella today. Perhaps a better solution is to develop a “<i>backyard architecture</i>” for concentrated commerce. It is usually more interesting and less formal than the front and could develop in a more unplanned way giving more flexibility to development.
D	<p>Historic preservation Memorial walkway (brick) Pioneering Cardwell hospital Agricultural contributions Traditional activities Horse pull contests Fox hunting Oral tradition maintained Memorial to Moses Eagle</p>	<ol style="list-style-type: none"> 1. Celebrate cultural heritage <ol style="list-style-type: none"> a. Document/collect oral tradition and maintain b. Restore old post office c. Restore Lentz-Carter General Merchandise building 2. Restore local traditions <ol style="list-style-type: none"> a. Horse-pull, pony-pull, oxen-pull, tractor-pull contest, and modern equivalents or variations (row-boat pull, jeep-pull) b. Rope pull across Indian Creek c. Town picnic d. Fiddle concerts e. Restore the local ‘fox hunt’ but bring it up-to-date (without the fox). Plan the valley so a ‘hunt’ can take place, include fence rail jumps, rock wall jumps, obstructions, fields,advertise event venue to hunt clubs across America. 3. Make people the most important part of the town

ID	Desired Endpoints as provided by Community Input ²³	Planning Responses
		<ol style="list-style-type: none"> a. Commemorate those who played a part in Stella’s history b. Refurbish and restore cemeteries c. Place plaques of uniform design on buildings or at property fronts to list names of present and past owners. 4. Identify locations where historic schools, etc. stood and mark with plaques. 5. Create central public plaza that includes names of everyone related to Stella, past and present, then maintain ceremoniously when new names are added. Make it clear that people are the most important part of this town. 6. Include plaques at key locations in the plaza that describe major contributions to the community... agricultural, commercial, Cardwell hospital, etc. 7. Compile and maintain oral history. Include the most interesting of these in a book. 8. Use existing historical society to be a center of historic preservation. 9. Designate historic downtown and develop guidelines for preservation/change
E	<p>Natural history preservation</p> <p>Native trees with plaques-remembrance/memorial</p>	<ol style="list-style-type: none"> 1. Research native tree species 2. Map how much of the Stella region should be characterized with these species. 3. Identify outstanding native tree specimens in town and mark with plaque or tag that tells people what they are. Include data concerning common name, genus, species, age, normal expected size. May include references such as “This tree was 100 years old when Moses Eagle established a home here.” 4. Encourage people to plant native trees as memorials to loved ones and tag with plaque. 5. <i>Restore human interaction with local springs:</i> Lentz (Big Spring), Macedonia, and Spring Hill. Construct <i>pathway to Lentz</i>. Provide place to sit, contemplate, and get a drink of water, or to fill a bottle. 6. Provide <i>parking area where cars/trucks can pull off of highway D</i>. 7. Document native species of animals and plants within the area – <i>determine habitat requirements to maintain MVP and MEP – develop a plan to maintain habitat requirements</i>. 8. Develop education plan for school and community so people understand local natural history and its value to people.
F	<p>Small “country” town atmosphere</p> <p>No neon lights or big advertisements</p>	<ol style="list-style-type: none"> 1. Adopt a sign ordinance from another community that works for Stella. http://www.scenicwisconsin.org/ModelSignOrdinance.doc http://www.co.monroe.pa.us/planning_records/lib/planning_records/model_sign_ordinance/model_sign_ordinance.pdf#search=%22model%20sign%20ordinance%22 2. Develop visual resources <ol style="list-style-type: none"> a. <i>Create scenic corridors</i> around and through town by selective plantings, tree trimming, opening up vistas from roadways. b. <i>Develop view sheds</i> from key locations in town and maintain treed hillsides as backdrops. 3. Develop a ‘community character’ palette for new and remodeled buildings based upon historic buildings. 4. Maintain a <i>small concentrated downtown</i> rather than disbursed businesses. 5. Develop and maintain <i>rigid urban boundary surrounded by agricultural land</i>. 6. Maintain streets with grass edges rather than curbs and gutters. 7. Develop <i>sidewalks of packed clay or stone pavers</i> rather than concrete ribbons. 8. Develop <i>equestrian trails and hitching posts</i>. 9. Create events centered on the past. <ol style="list-style-type: none"> a. Tractor pull, antique cars or buggies, horse shows, town picnics, etc. 10. Restore ringing of church bells to mark time, Sunday services, funerals, weddings, etc.
G	Rural setting	<ol style="list-style-type: none"> 1. Enable agricultural community to thrive by supporting it. http://casfs.ucsc.edu/community/csap.html

ID	Desired Endpoints as provided by Community Input ²³	Planning Responses
	Farmland surroundings	<ol style="list-style-type: none"> a. Contract with local farmers and ranchers to provide food for local consumption. b. Create farmers market. c. Develop organic farm operations. <ol style="list-style-type: none"> 2. Keep roads narrow -- Develop and maintain walkable community so that it is unnecessary to widen and expand roads. (Narrow roads have been shown to be safer because they slow traffic.) Encourage off-street parking whenever possible. Occasional on-street parking can occur on grass area beside the road. 3. Maintain <i>open farm-land up to the edge of town</i>. 4. Keep <i>development within urban boundary and increasing in density</i> so as to accentuate the contrast between town and rural areas, maintain as much open-space as possible, and limit sprawl that blurs the line between urban and rural. 5. <i>Establish urban growth boundary</i>. 6. Designate all riparian corridors, minimum habitats, as open-space. Acquire development rights for a ring of land around town as greenbelt, but to remain in agriculture use. 7. Encourage legal designation of ‘wildlife corridor’ crossing private property. 8. Locate buildings for large animal operations, e.g., CAFOs to be located so as to allow them to be <i>screened from roadways</i> with shrubbery and trees. 9. Encourage owners of rural sites to <i>limit driveway widths to one vehicle</i> wide with <i>grass pull-off space</i> to accommodate occasional vehicles traveling in opposite directions. 10. <i>Long driveways should be winding</i> so as to hide its length and create places for vegetation.
H	Landscape – welcoming look	<ol style="list-style-type: none"> 1. <i>Entrances to town should be landscaped in natural looking garden</i> and maintained with native flowers, bushes, accentuated with spring and fall colors, and form picturesque winter settings. 2. Grasses along streets are to be mowed to approximately 4 feet from edge of road to give neat look and place for walkers to be off the road for vehicular traffic and provide a buffer for wildlife. 3. <i>Plant trees along streets to create allées</i>. 4. Place all trash cans within fenced enclosure that are also hidden by shrubbery. Combine trash locations from nearby housing into one location. 5. Research native wildflower varieties and selectively plant for visual impact at gateways to town.
J	Natural beauty	<ol style="list-style-type: none"> 1. Maintain clean environment. 2. Develop so as to minimize impact on the natural environment and so as to mend an already damaged site rather than a natural looking site. 3. Identify natural disturbance regimes that were common in this area – restore the disturbances whenever possible. Where natural disturbances are not possible, they should be restored with management practices. Such disturbances create variety in the landscape and provide periods of plant successions that also provide interest and maintain native flora and fauna. 4. Identify non-native plants and selectively remove. 5. Restore wetlands if/wherever they once existed. 6. Restore Indian Creek to best protect the watershed. 7. Restore drainage swales with native vegetation. 8. Maintain tree cover. 9. Maintain forest backdrop on hillsides. 10. Maintain view corridors into forested areas. 11. Open up view corridors and open spaces along valley floors and along Indian Creek. 12. <i>Develop trails/pathways through open spaces and along streams</i> so that people can enjoy the natural beauty.

ID	Desired Endpoints as provided by Community Input ²³	Planning Responses
		<p>13. <u>Develop housing so as to allow as many people as possible to appreciate view corridors, and open spaces.</u></p> <p>14. Develop no-till farming methods.</p>
K	Indian Creek Viewable Accessible	<p>1. Provide <u>view corridors from downtown and from selected points</u> by clearing trees and shrubbery near the creek.</p> <p>2. <u>Widen the creek near the downtown to provide backdrop for the downtown, point of interest, water feature, and overlook</u> from downtown. Create holding area to maintain water in widened area so that it does not fall below a minimum depth.</p> <p>3. Provide <u>walking path and equestrian trails near creek.</u></p> <p>4. Provide <u>access points for fisherman.</u></p> <p>5. Educate and involve citizens and rural community on improving water quality.</p>
L	Open space Hillsides Forests, trees, creeks	<p>1. Retain <u>hillsides as forested backdrop</u> for the town.</p> <p>2. Keep all development within town limits.</p> <p>3. Encourage increased density within town rather than sprawl. Encourage development of brownfield sites before green field sites.</p> <p>4. Selectively thin vegetation to open <u>view corridors into open spaces</u> in lowlands, streams, and stream beds.</p> <p>5. Identify opportunities for looking into opens spaces from residential areas, develop such opportunities, and enable development to occur in such areas so people can appreciate such spaces from their homes, places of business, and for recreation, entertaining, and dining.</p> <p>6. Provide tax credits to encourage people to donate real property to the town for open space.</p> <p>7. Convert all publicly held lands to native vegetation so as to lower maintenance costs.</p>
M	Wildlife habitat Bald eagles Beavers Wild turkeys Deer Opossums Armadillos	<p>1. <u>Determine minimum viable habitat and minimum effective habitat for all native species, and develop a local program to keep intact/restore such habitat requirements.</u> Create a public program whereby all developers can participate in habitat programs.</p> <p>2. Designate protected <u>riparian corridors 100 meters on each side of streams and creeks.</u> Allow to revert to natural maintenance.</p> <p>3. Maintain control of domestic animals and pets. Keep domestic animals, pets, and feral animals out of wildlife corridors and habitats.</p> <p>4. Provide <u>connecting corridors</u> at the upper ends of adjoining riparian corridors and between designated riparian corridors and isolated patches of forest.</p> <p>5. <u>Roads and drives are to be kept out of this area and crossing roads should do so at shortest route.</u></p> <p>6. <u>Maintain tree canopy above and across roads.</u></p> <p>7. Monitor hazardous locations for animals crossing roads – provide continuous wildlife corridors that bridge or tunnel across roads or cause traffic to slow and give caution to crossing wildlife.</p>
N	Vegetation Trees Flowering trees Flowers Diversity	<p>1. <u>Restore historic community character by planting flowering dogwood in the afternoon shade of larger trees.</u></p> <p>2. <u>Plant native shade trees at recommended spacing (crown width) along all town streets.</u></p> <p>3. <u>Plant major flowering trees and/or fall color trees at locations where they will be focal points</u> at the end of streets or curves in streets.</p> <p>4. <u>Plant tree groupings</u> that augment bird habitat requirements.</p> <p>5. Limit non-native landscapes such as lawns to smaller areas – perhaps sized to accommodate play spaces or games, e.g., croquet.</p> <p>6. Create non-native landscapes so they provide welcome contrast to natural vegetation.</p>
P	Uncrowded, not congested	<p>1. <u>Concentrate activity zones</u> so as to be able to control traffic movement in smaller areas rather than allowing it to spread into areas were traffic is not desirable.</p> <p>2. <u>Plan traffic movement ingress and egress and sufficient parking</u> to meet demand.</p>

ID	Desired Endpoints as provided by Community Input ²³	Planning Responses
		3. Celebrate occasional times when local events bring a lot of people to town so as to accentuate contrasts so benefits of crowds and no crowds can be better appreciated.
Q	No suburban sprawl	1. Regulate development so that it can happen only within town limits or as principle buildings on true agricultural land. 2. Establish and maintain <u>visual screening around rural structures.</u>
R	Quiet	1. Enact dog ordinances that prevent owners from allowing dogs to bark continuously. 2. Keep local roads narrow to keep vehicular speeds low. 3. Increase density of development so as to create enough buildings throughout the area to block movement of noises. 4. <u>Create berms along noisy roads</u> so as to divert sound away from residential areas. 5. <u>Create dense tree groupings</u> to help screen noise. 6. Reduce the amount of lawn so that lawn-mowers can operate for shorter time periods, and encourage use of electric mowers rather than combustion engine driven. 7. Reduce vehicular generated noise by maintaining a walkable community. Keeping activity in one location will also prevent people from using vehicles to go from one activity to another. 8. Maintain low speed limits in downtown area.
S	Friendly	1. <u>Create a common area central to multiple activities</u> (including parking) so as to provide opportunities for chance encounters. 2. Establish a coffee <u>shop/soda fountain/café at this central area</u> to encourage extending the time of chance encounters. 3. Plan events to occur within this common area to encourage more people to come to the area. Provide bill-paying facility at the common area where people have to get out of their car to submit payment. 4. Plan public events such as town picnics, fund-raisers, sports events, etc. 5. Plan identifiable neighborhoods that small groups can identify with. 6. Plan residential areas around a common auto court or a common backyard to encourage neighbor interactions.
T	Low population – What are the qualities of low population that are desired?	Must respond to qualities so as to meet the desired outcome rather than population number, which is harder to control. 1. Maintain development within growth boundary. 2. Encourage master planning of neighboring communities so that they are prepared to accept growth pressures so as to create a network of communities that enhance each other.
U	Low traffic – What are the qualities of low traffic that are desired?	Must respond to qualities of low traffic rather than traffic volume. 1. Develop within designated community boundary to achieve walkable community where people do not need to drive. 2. Maintain core activity area to minimize the need to drive from one place to another within town. 3. Keep core development central but at the edge of the urban area so that it accepts traffic from the surrounding area without the need to drive through town to arrive at the core area.
V	Walkable community Sidewalks and bike lanes extending to school	1. <u>Identify developable areas within walking distance from schools and central activity area.</u> 2. <u>Plan roads within this developable area to provide multiple routes to all areas of town.</u> 3. <u>Provide sidewalks, pathways, twittens, bike paths, and perhaps equestrian paths throughout the community.</u> 4. <u>Locate central activity zone.</u> 5. Enable development of new sites within town borders, and enable and encourage infill development to increase density. 6. Designate ‘blue-line’ as a physical limit to properties that will be served with utilities.

ID	Desired Endpoints as provided by Community Input ²³	Planning Responses
W	Clean air without odors	<ol style="list-style-type: none"> 1. Clean up all activities that generate odors. 2. Locate all odor generating facilities in areas downwind from populated areas.
X	Clean water	<p>“Water is the primary reason Stella was established where it is and it must remain central.”</p> <ol style="list-style-type: none"> 1. Obtain land along Indian Creek in public ownership or natural easements. 2. Provide constructed wetlands between wastewater discharge and Indian Creek. 3. Provide ponds to collect stormwater from town before it enters Indian Creek, 4. Provide dry ponds to collect stormwater surges allowing groundwater recharge and slow discharge to Indian Creek. 5. <i>Open up vistas into the creek</i> by clearing away some trees and small brush. 6. <i>Widen the stream so as to become a backdrop for the downtown and a water-feature for the downtown area.</i> 7. Create <i>activity along the creek – pathways, fishing, swimming, picnic areas, play spaces, golf course, equestrian trails.</i> 8. Golf course should be designed, constructed, and maintained to be environmentally friendly per http://www.audubonintl.org/programs/acss/golf.htm 9. Reclaim the <i>natural springs as public spaces and restore trails to them</i> so they can be enjoyed by everyone, <i>create rest areas by each spring</i> with stones for sitting/lunching and trash receptacles. 10. Provide <i>vegetated buffers between all agricultural areas and streams</i> so as to filter all runoff before it gets to streams. See calculator -- http://greenvalues.cnt.org/green-infrastructure <ol style="list-style-type: none"> a. Provide roof drains to rain gardens at all downspouts. b. All driveways should be porous pavement. c. Provide green roofs on new buildings whenever possible. d. Provide urban ponds near roads to collect and filter runoff, and allow infiltrating into the ground or be released slowly to streams. 11. Limit the amount of fertilizers and organic material that is allowed to be placed on the ground so that it does not migrate into the groundwater. Local soils are so permeable that groundwater can be easily contaminated.
Y	Vegetation – minimal paved areas	<ol style="list-style-type: none"> 1. All temporary and occasional parking areas should be planted with grass. 2. <i>Parking lots are to be paved with turf-block</i> or variety of pervious paving material. 3. Roadside parking is normally to be grass without curbs. 4. Change lawns to native landscaping. <ol style="list-style-type: none"> a. See calculator -- http://greenvalues.cnt.org/green-infrastructure
Z	Viewable stars	<ol style="list-style-type: none"> 1. Limit number of streetlights (night lighting has not proved to be ‘safer’) 2. Reduce wattage of outdoor lighting to 40w maximum 3. Turn off lighting after 9pm on week-nights 4. Lights needed for walking areas should be below waist level, directed at the ground, low wattage fixtures. 5. Sign lighting must be shielded so it is on sign only and lighting does not extend off-site or toward the sky.
ID	Desired Endpoints as provided by Community Input	Planning Responses
A ¹	Security Low crime, safe streets “where being by yourself is still safe”	<ol style="list-style-type: none"> 1. <i>Provide fences and/or berms to keep play from extending into busier streets.</i> 2. <i>Provide neighborhood play spaces</i> in areas where surrounding neighbors can visually monitor them and away from streets. 3. Provide public areas where activities are concentrated so that people are likely to walking through at unscheduled but regular intervals.

ID	Desired Endpoints as provided by Community Input ²³	Planning Responses
		<ol style="list-style-type: none"> 4. Develop the community densely enough that neighbors meet each other, can recognize each other, can discern when strangers are present, and can sense unusual activities. 5. Create a neighborhood security check program that trains people how to look for unsafe conditions and insecure lighting and locking mechanisms. 6. Create a neighborhood watch program. 7. Create fire safety and prevention program to look for potential problems and to educate citizens.
B ¹	Safe from stray dogs	<ol style="list-style-type: none"> 1. Enact leash law and appoint dog catcher, pay with revenue from fines. 2. Educate people how to deal with dogs that are unsupervised, i.e., potential dangers and warning signals, actions that can be taken, how to get and maintain control. 3. Provide <i>dog-parks</i> where people can allow pets to run free without losing control.
C ¹	Slow pace - What are the qualities of slow pace that are desired?	
D ¹	<p>Embracing people from outside</p> <p>Welcoming and involving them in community</p> <p>Accepting of traditions and cultures</p> <p>Embrace diversity</p>	<ol style="list-style-type: none"> 1. Create a map of local parks, trails, playgrounds, community gathering places, employers, public utilities, libraries, etc. and make available for neighbors to give to newcomers. 2. Create a small address/phone directory of families who live in the community that a neighbor can give to newcomers, then update the directory immediately with the name and phone number of new residents. 3. Provide <i>common neighborhood backyard with shade in each block</i> so that adjoining neighbors can meet and enjoy UM football games on TV and/or coffee/tea. Perhaps each week might have a different theme – one week specialty coffees, another ice-cream, another cakes, another grandma’s favorites, etc. 4. Designate public “cookie-time” on Sunday afternoon (after 2:00) where anyone in town can gather for conversation. (Might also provide a public television space to watch football or baseball games. 5. Establish an e-mail program whereby the message that a newcomer has arrived is sent to everyone in town with encouragement to send a note to convey a personal welcome.
E ¹	<p>Embracing people within the community</p> <p>Support for all types of families</p> <p>Single parent</p> <p>Multi-racial</p>	<ol style="list-style-type: none"> 1. See above. 2. Organize community events to have a theme to celebrate a community member’s cultural heritage, or single-moms day, or welcome home days, or days to welcome new births, or a day to celebrate the life of members who have died, or to celebrate an acceptance to MU or Harvard, or a going away event for someone who enlists in the military (or comes home). Make certain there is a public space, or spaces, that meet the needs of these events. 3. <i>Identify spaces, e.g., the barn, where local events</i> can occur or can be rented to people from other towns. Snack/food service can be a part of this facility to bring money into the community. 4. Establish a shareholder program whereby all citizens benefit as community develops. Shares might be allocated based upon property ownership, but also length of time lived in the community. Shares might also be granted based upon the sweat equity individuals put into building the community. The objective is to reward and encourage people to plant themselves in the community and nurture its development. See http://aede.ag.ohio-state.edu/programs/ComRegEcon/costsdev.htm
F ¹	Places high value on family	<ol style="list-style-type: none"> 1. Make certain that everyone in the community feels that they belong to an extended family. 2. <i>Create pavilions in the park(s)</i> for neighborhood gatherings. 3. <i>Plan these spaces so they are picturesque and capable of being used as venues for weddings and/or receptions.</i>

ID	Desired Endpoints as provided by Community Input ²³	Planning Responses
G ¹	Flag flying	1. Locate focal points in the community where flags can be flown in a manner that gives them visual importance.
H ¹	Embrace change Utilize change as a resource	1. Tables and benches in town, and local café, on public doors should be inscribed with a question...”How can this community change for the better?” a. This note can also be printed on library cards, book marks, painted across roads at crosswalks, etc. b. Postcards with this message and space for people to write answers can be made available at post office, schools, churches, so people can complete and drop in mail to city hall. c. Comments can be acted on by the town council and/or published in the local newspaper. 2. A photo can be placed in local newspaper showing before-after shots of observable changes in the town.
J ¹	Services proximate/accessible – within walking distance	1. <u>Concentrate all businesses and services in one easily accessible and aesthetically pleasing location.</u> 2. <u>Develop the town within strict geographic boundaries with walking surfaces throughout.</u> 3. Develop <u>economical and efficient infrastructure layout</u> and designate blue-line for physical limit of provided services.
K ¹	Health	1. The threshold population in Newton County to support a physicians office is 2770, a dental office is 4386. Because the threshold population does not exist, a different concept of ‘health care’ should be defined. a. Medical and Dental Assistants that can offer most services and referrals to doctors in bigger towns or at scheduled times might enable services to be provided with lower threshold populations. b. Perhaps a retired doctor can help out one day per week or afternoons? c. It is possible to have a dentist come to town once per week or to collect reservations for specific geographical areas and arrive at a geographic area to serve several in the community on one day or afternoon. d. This could be a mobile dental lab. e. There could be a central medical facility that might be shared by numerous doctors/dentists on a rotating basis. f. One of the churches can set aside and maintain a room for medical appointments with a doctor once per week until more is needed. Perhaps it can be staffed by a retired nurse or doctor until demand builds. g. A nurse can be hired for the school... this nurse can double as emergency health care person for the community until the town is able to support another person or doctor. 2. Maintain healthy community around body, mind, and spirit. a. Clean environment, clean water, clean air b. Risk free – no pollution c. Safe streets d. Safe play areas e. Stress-free environment f. Develop numerous scheduled and unscheduled community exercise programs to keep citizens fit. g. Develop educational programs to maintain fit minds. h. Develop church programs. i. Develop spaces that add beauty. j. Develop space for contemplation.

ID	Desired Endpoints as provided by Community Input ²³	Planning Responses
		<ul style="list-style-type: none"> k. Add art to the environment to challenge people to think. l. Shift to locally produced organic foods that are less processed is likely to be healthier for citizens of Stella. 3. Enable citizens to be health providers <ul style="list-style-type: none"> a. First-aid training and emergency health care. b. Train people how to care for an elderly parent, spouse, neighbor.
L ¹	Day-care for toddlers	<ul style="list-style-type: none"> 1. The threshold population for child care in Newton County is 5264. A different concept of day-care will need to be developed based upon volunteers or public support. 2. A public <i>facility should be established for child care</i>. It should be located within the central commons area. Nearby should be a medical assistant or nurse.
M ¹	Public Facilities proximate/accessible – within walking distance	<p>Numerous responses have addressed this, but there should also be:</p> <ul style="list-style-type: none"> 1. <i>Public restrooms</i> that are well-maintained. 2. Bed & Breakfast or motel to enable people to stay in town. 3. <i>Camping grounds</i> 4. <i>Place for bonfire</i> 5. <i>Parade route along with assembly area.</i> 6. <i>Place for fireworks</i> 7. <i>Emergency shelter</i>
N ¹	Schools – good enough for people to come here	<ul style="list-style-type: none"> 1. The community should strive to offer the best education available in the county. Parents concerned about their child’s education will make a concerted effort to be where education is very good. 2. Parents can volunteer in schools to help in classrooms, coach teams, unlock and monitor school property for community events and evenings/weekend use of the school for sports programs. 3. Community should be actively involved with the school district when projecting future school needs and find ways to meet those needs and to attract school expansion to the community. 4. Compile contiguous property adjacent to existing school site and allocate for school development. This is to enable the school district to develop its facilities so as to educate students with skills they will need to compete in the global marketplace. 5. Quality housing should be made available to teachers and efforts should be made to involve them in community activities or events. 6. Adult education should be added to school programs, e.g., computer classes, money management, investing, art, music, reading, writing.
P ¹	Churches	<ul style="list-style-type: none"> 1. People are the community’s greatest resource and nowhere will they be stronger than in local churches. Each church should keep timely records on who is in the community, what are their special needs, what are their interests, and ask for their involvement in community. In addition to religious study, there should be many groups in each church that have specific agendas designed to build community. Outreach and service are what church is about – they need to be practiced in every way possible in keeping with church doctrine. 2. Child care can be a part of the church. 3. Medical can be part of the church. Because the minister is often called in crisis situations, perhaps a second person in the church should be called to function as driver to take someone to a hospital. 4. In keeping with religious teachings, churches need to learn how to work together to build community. 5. Churches should be a repository for knowing how the least of the community is doing and to make efforts to help people so they can help themselves and pass that help along to others.

ID	Desired Endpoints as provided by Community Input ²³	Planning Responses
Q ¹	Historical society	<ol style="list-style-type: none"> 1. The historical society should collect and organize information that illustrates the community's cultural and natural heritage. <ol style="list-style-type: none"> a. There is a distinct architectural heritage that the society can identify and illustrate to the community. b. Likewise Stella has a strong educational heritage, medical heritage, agricultural heritage, and commercial heritage. c. It also has an American Indian heritage that should be expanded. 2. Because people are the most important resource of this community, the society should have a rich oral history and means to access it. 3. The town of Stella should also be able to place its heritage within regional, state, and national cultural heritage. 4. Perhaps most of all, the <i>historical society should be the keel</i> for the community pointing toward its future and be involved in that future. Its unique perspective can show the community where it has been, where it is going, and urge advance toward the kind of civilization we should become. 5. <i>It should be symbolized in the everyday life of the community – directly on the town square where people have access to its many facets on a daily basis.</i>
R ¹	Human resources Senior citizens Dancing Meals Kids Volunteer labor FFA	<ol style="list-style-type: none"> 1. Because people are the community's greatest resource, none of it can be lost or neglected. 2. Develop the human resource as much as possible. <ol style="list-style-type: none"> a. Provide the best education system and make it available to everyone. b. Develop arts/humanities, liberal education programs. c. Create informed citizens. <ol style="list-style-type: none"> i. Establish community discussion groups that address current issues and bring in experts to speak on these issues. ii. Create a direct democracy whenever possible and practicable and enable informed citizens to participate. 3. Senior citizens can bring a wealth of knowledge and experience to the community and should be invited to do so. It should be made clear that the community needs them and wants their input. 4. Social activity is important to every age group and whatever persons talents are, they should be cultivated and used. 5. Masonic and other lodges can be asked to do projects that they are always seeking to do. 6. Boy scouts, girl scouts, band groups, choirs, 4H, FFA, riding clubs, etc. can be asked to take on whatever projects they can handle to build community.
S ¹	Recreational	Stella should be a fun place to live and work. This will require: <ol style="list-style-type: none"> 1. Interaction with people so as to share ideas. <ol style="list-style-type: none"> a. Establish outdoor Friday night art <i>movies projected on a blank wall</i> of a local building in the town center 2. An influx of and openness to new ideas. <ol style="list-style-type: none"> a. Welcoming people from diverse backgrounds into the community. b. Provide a 'speakers corner', tree stumps for speakers to stand on (the history of political 'stump speeches'), or a meeting tree (as is traditional in Africa). 3. Opportunities to relate to people in a variety of ways. 4. <i>Variety of activities at hand.</i> 5. Resources to learn.
T ¹	Area for play	<ol style="list-style-type: none"> 1. Children and youth should be central to community activity. <ol style="list-style-type: none"> a. A <i>skateboard park</i> that evolves with the sport should be included in the heart of the community commons.

ID	Desired Endpoints as provided by Community Input ²³	Planning Responses
		<p>b. Youth should get the impression that they are important to the community - not shoved to the community edge where they can be out of the way and leave the rest of the community in quiet, but directly involved in the middle of it. This involvement also gives more life to the community center, but it also provides youth with the opportunity to support local businesses and provides the business support they need and want.</p> <p>c. <u>Sport facilities</u> should be provided by the school, but these facilities should also be supported by the community and be brought into the active life of the community.</p> <p>2. <u>Neighborhood play spaces common to entire blocks</u> should be typical.</p> <p>3. <u>Facilities that support musical and theatrical performance</u> should also be provided as well as display space for visual arts.</p> <p>4. Maintain <u>shaded area at widened portion of Indian Creek for ice skating.</u></p>
U ¹	Dancing	<p>1. The senior center has dances on a regular basis and this should be encouraged.</p> <p>2. A <u>local barn</u> where dances were once held should be refurbished and made available to local and regional events.</p> <p>3. Dance for children and youth should also be provided on a regular basis.</p>
V ¹	Infrastructures	
W ¹	Water Clarity, purity, volume protected Springs protected	<p>1. <u>Riparian corridors at least 200meters wide</u> should be protected at all streams and drainage troughs.</p> <p>2. <u>Drainage from all paved areas should be slowed to prevent erosion, and filtered by natural vegetated area or catchment basin</u> that allows sedimentation and containment of pollutants before water is allowed to enter streams.</p> <p>3. The first line of defending water quality is to <u>slow and clean water on-site, and then utilize areas below parking lots, plazas, or fields</u> to use as infiltration beds.</p> <p>4. Headlands above natural springs should be protected with sufficient natural vegetation to maintain their flow.</p> <p>5. Where springs have been buried, they should be recovered so that flow resumes.</p> <p>6. Natural <u>wetlands (if they exist in this area) should be restored</u>, and/or <u>constructed wetlands</u> can be used to process surface water.</p> <p>7. Develop a program for saving water.</p> <p>8. Change landscaping to native plant species that are adapted to local climate and do not need supplementary water.</p>
X ¹	sewer	<p>1. All septic systems should be disconnected and connections made to the sanitary sewer system. A new system was recently installed in Stella. This system should be maintained to meet demands. Local soils are too porous to protect ground-water from individual septic systems. The alternative is to create individual compost systems to handle household sewerage.</p> <p>2. <u>Storm water</u> should not be directed to the sanitary sewer, but should be <u>directed toward natural landscape filtration areas, and/or constructed wetlands.</u></p>
Y ¹	Electric energy (reliable)	<p>Sustainability in the energy field is approached at two levels, the first being energy conservation and efficiency, the second being the use of clean, and renewable energy sources. See http://www.myflorida.com/fdi/edesign/news/9607/thesis/energy.htm</p> <p>Principle 1: Minimize the need for energy <u>Mixed-use planning</u> to reduce the need for automobiles <u>Compact community</u> to reduce distribution costs and energy losses. <u>Passive heating and cooling</u> to reduce the need for mechanical systems.</p> <p>Principle 2: Energy efficiency Energy efficient air conditioners and furnaces combined with passive heating and cooling <u>Orient buildings to take advantage of solar gain in winter</u></p>

ID	Desired Endpoints as provided by Community Input ²³	Planning Responses
		<p><u>Use of landscaping to block summer sun, screen winter winds.</u> Thermal windows can be added to existing buildings. Automatic sensors and controls New construction should always be thermal efficient and heavily insulated for Winter and Summer. New construction can be designed using principles of ‘green’ design. Principle 3: Coordinate energy-efficiency with renewables. A community power cooperative or not-for-profit might be organized to develop <u>wind generation</u> for Stella and surrounding communities. A <u>bioreactor</u> might be developed using waste refuge from the region to collect and use methane gas to generate electricity.</p> <p>Because energy represents a cost to the community thus taking money out of the community, it is necessary to take steps to change energy strategy to keep money resources in the community. Energy savings should be central to these efforts. Because it is cheaper for the energy utility company to save energy than to generate more, these companies often have programs to help pay for adding insulation to existing buildings.</p>
Z ¹	Telephone, internet, television	These are currently provided by local company which is sustainable as long as they remain competitive and provide services as required by consumers. High-speed internet provides opportunities for many small businesses that serve state and national consumers.
ID	Desired Endpoints as provided by Community Input	Planning Responses
A ²	Trash collection, waste management	<ol style="list-style-type: none"> 1. The amount of trash should be reduced by buying local produce and food stuff that does not require packaging. 2. <u>Recycling program</u> should be enacted for all waste materials and building materials. 3. The community should <u>compost</u> as much as possible. Community compost program should be initiated to compost all organic matter and purchase it for gardens. http://www.dnr.mo.gov/env/swmp/composting/compost1.htm 4. The generated soil should be used for gardens, lawns. 5. Repair services can be located in Stella to serve local and national needs for numerous products so replacements are not required. 6. http://www.communities.gov.uk/index.asp?id=1143834 7. http://www.sustainable.org/governing/waste.html 8. http://www.epa.gov/epaoswer/osw/cdoswpub.htm 9. http://www.dnr.mo.gov/env/hwp/index.html 10. http://www.dnr.mo.gov/env/swmp/index.html
B ²	Local businesses proximate/accessible – within walking distance	<ol style="list-style-type: none"> 1. Citizens should join together to list the kinds of services they would normally acquire on an annual basis, and then contract with someone within the community to provide these services. 2. A booklet or pamphlet should be compiled and distributed to encourage local people to support these providers.
C ²	Retail	Businesses should be developed with the intent of keeping as many services and resources in the community.
D ²	General store (w/needle and thread)	A threshold population of 4785 in Newton County is required to support a general merchandise store. However, the concept of this kind of store might be highly variable and require different threshold populations.

ID	Desired Endpoints as provided by Community Input ²³	Planning Responses
		<ol style="list-style-type: none"> 1. A new concept of meeting consumer needs should also be developed. Perhaps something like a Sears order desk can be established so that orders can be taken, transmitted to a central warehouse, and delivered the same day. 2. <i>An internet kiosk</i> can be located in the core area to allow people to seek and order products. 3. The current method of clothes manufacturing half way around the world, shipping them in bulk to markets with the hope that consumers will like them is wasteful. The book “The Third Wave” by Toffler proposed a new clothing provider that relies upon computer scanning of an individual’s body form, then showing on a screen what you would look like in any clothing you selected, and then after selection was finalized a ‘one-off’ product would be made for the individual. No resources would be wasted and the clothing would exactly fit personal requirements. The technology to do this has not yet been developed, but this direction should be accommodated. And, this is the kind of technology that a business in Stella might try to develop. 4. Local seamstresses can provide dresses, shirts, etc. thereby keeping resources within the community and creating local jobs. 5. The ideal place for this facility would be the historic Lentz-Carter General Merchandise building. Historic preservation funding should be sought to rebuild the building and lease space for a general store and probably other services until the store expands to meet expanding community needs. 6.
E ²	Gasoline station	<ol style="list-style-type: none"> 1. The community should contract with a gasoline provider <i>to set up a local station</i> that is entirely self-service. It happens regularly at airports for private airplanes. If it can happen there, it can happen anywhere. Payment can either be by credit cards or personal pre-paid accounts (similar to phone cards). When there are enough customers with additional service needs, a business can be added to provide those services. 2. Creating a <i>walkable community</i> with most of the institutions, goods, and services people want and/or need, will limit the amount of driving people need to do, thereby saving gasoline and the amount of money to pay for it which leaves the community.
F ²	Grocery store (small, full service)	<p>When the concept of ‘grocery store’ is reduced to what it does, i.e., it provides food for household preparation, it is easier to determine alternative ways that food can be provided that can also keep resources within the area and increase the amount of jobs that are provided within the area.</p> <ol style="list-style-type: none"> 1. Citizens should determine what their food needs will be for the coming year and contract with local farmers to provide these resources. Not only will the food be better than processed foods from a grocery store, less resources will be required to provide the food, more control is possible over quality, more local jobs will be created, and more money will be available in the community to support other businesses. 2. Local ranchers can be contracted to provide grass-fed beef with the same synergistic outcomes as above. 3. A <i>farmers market</i> should be a regular feature within the town commons, and if the population of Stella reaches the threshold to support a grocery store, this farmers market should still exist as an adjunct to the store. 4. Local farmers should organize along the format of the Community Farm Alliance http://www.communityfarmalliance.org/ or similar organizations, e.g., Angelic Organics http://www.AngelicOrganics.com to recreate themselves to be on the leading edge of providing for local consumers.
G ²	Restaurant/café Coffee, cappuccino, hang-out for kids	<ol style="list-style-type: none"> 1. There should be a <i>core activity area</i> in town within which all activity takes place. This would provide the exposure to the most number of people for a café and provide opportunities for people to meet and give them a place to have discussions and learn of local

ID	Desired Endpoints as provided by Community Input ²³	Planning Responses
		<p>problems, issues, and needs. Every institution, store, business, service, etc. should connect to this core.</p> <p>2. Consideration should be given to <i>recreating a building in the character and location of the old mill</i>, and leasing to a good restaurant at attractive rates for a start-up period. This would not only provide a needed service to the area, but would also create local jobs.</p>
H ²	Laundromat	<p>1. <i>A Laundromat</i> can be added anywhere there is enough space, but it should be located within the activity core area so that it adds to potential chance meetings and networking, and give people the opportunity to visit the café while waiting, or to conduct other business in the core area. Perhaps this facility could be in a rebuilt Lentz & Carter GM building.</p>
J ²	Institutions proximate/accessible – within walking distance	<p>1. Locate <i>within community core/commons</i> area.</p> <p>2. Plan community to be <i>walkable</i>.</p> <p>3. Provide <i>parking for agricultural community</i> to be able to use, but make certain walking routes cross to facilitate chance meetings and inclusion of rural and townspeople in a single community.</p>
K ²	School must be vital part of the community School-community should be integral to each other	<p>1. The school should be encouraged to expand classes in the core part of town.</p> <p>2. The <i>property owned by the Masonic Lodge should be designated as school expansion space</i>.</p> <p>3. <i>Baseball and football facilities</i> should be adjacent to the school, but weighted toward the community core/commons area to share parking and attract people from sporting event to the core and to include community in sports events.</p>
L ²	Library/learning center (also genealogical research)	<p>1. <i>The commons area should contain a library</i>.</p> <p>2. This could also be integrated with the historical society to help with genealogical research.</p> <p>3. It must have computer access and these resources should double for school, library, and adult education.</p>
M ²	city council–local, approachable, know problems	
N ²	Regulations	<p>1. Enact regulations and codes that guide development in the direction of the plan.</p> <p>2. Provide developer incentives that encourage development in the direction of the plan.</p>
P ²	Police presence and enforcement	<p>1. Concentrate on building a community that has little need for enforcement.</p> <ol style="list-style-type: none"> a. Institutions serve needs of all citizens. b. Opportunities exist for all citizens. c. Equity is community policy. d. Community board and referees settle grievances. e. Incentives are in place to assure everyone wants the outcomes that the community desires.
Q ²	Provide new town hall	<p>1. Program <i>new town hall</i> to meet community needs and expandable to meet future needs.</p> <p>2. Provide public meeting hall, mayor’s office, volunteer offices.</p> <p>3. Add public records to internet. Provide <i>large-scale community map</i> showing locations of all facilities, and names of all community families.</p> <p>4. Possibly combine public spaces to achieve efficient spaces and resource uses.</p>
R ²	Opportunities	<p>1. Because PEOPLE are the greatest resource this community has, this resource should be used as efficiently and effectively as possible.</p> <p>2. Make efforts to create and expand businesses that utilize human talents to serve people across the widest area. This brings more money to the local community, provides more local jobs, and provides a wider base to sustain local businesses, services, and institutions.</p> <p>3. Education should provide programs that help to develop people to excel in jobs/trades of the future.</p> <ol style="list-style-type: none"> a. Because there will be more retirees and older people who will be looking for an economic place to live, new jobs can be created in Stella to serve these people.

ID	Desired Endpoints as provided by Community Input ²³	Planning Responses
		<ul style="list-style-type: none"> b. Because many in the workforce will be older workers, education must include opportunities to re-create these people so they are productive. 4. Services will provide the most jobs in the coming years and Stella is already capable of entering this arena. 5. New business should try to serve those businesses that cannot be outsourced or moved. <ul style="list-style-type: none"> a. Organic farming b. Local construction c. Marketing d. Local services and institutions 6. Community services 7. Medical and dental care 8. Because these services must be provided with a lower than threshold population, first lines of defense should be established based upon assistants rather than doctors. Assistants can diagnose problems and address many medical problems that might not need a doctor, or refer patients to a doctor if/when they do need one.
S ²	Social activities	
T ²	Networking	<ul style="list-style-type: none"> 1. It is essential that chance meetings occur and <i>spaces exist to talk about current issues, problems, needs, opportunities, events, etc.</i> 2. Provide a <i>message tree</i> near the café so that people can post personal notes to friends to facilitate connections. 3. Provide <i>kiosk</i> in the town square so that people can advertise local events and personal items for sale/trade.
U ²	Chance meetings	<ul style="list-style-type: none"> 1. <i>Concentrate activities in one area of town</i> to increase the chance of meeting. 2. Encourage chance meetings to continue and develop by: <ul style="list-style-type: none"> a. Providing <i>respite from the hot summer sun.</i> b. Providing warmth in winter. Perhaps <i>a small open pit fire</i> can be kept. c. Provide <i>benches</i> for sitting d. Provide <i>café/coffee house/soda fountain.</i>
V ²	Know your neighbors	
W ²	Church family	
X ²	Community fellowship	<ul style="list-style-type: none"> 1. Events should be planned to invite people to come together. 2. Times should be set-aside for drop-in events. 3. Weekly coffee-klatches with changing themes. 4. Sunday afternoon non-driving times.
Y ²	To show off and appreciate good local cooks	<ul style="list-style-type: none"> 1. Perhaps a local restaurant could adopt an ‘honored cook’ day when one of the local cook’s favorite dinner and desert recipes are selected and served. <ul style="list-style-type: none"> a. The honored cook can supervise the kitchen preparations if she/he desires.
Z ²	Scout meetings/activities	<ul style="list-style-type: none"> 1. Locate scout meeting facilities in the core area. 2. Encourage scouts to create and run public events. 3. Reward scouts for maintaining parking lots, maintaining clean community, and they are asked to take on projects that build community.
ID	Desired Endpoints as provided by Community Input	Planning Responses
A ³	Population	Population is an instrument for adding to the overall quality of community life.
B ³	Work/jobs – ability to support family	Whenever a service is desired in the community, the first question should be... How can this service be provided internally rather than seeking it elsewhere?.
C ³	Economic expansion	See “Opportunities” - Q ²

ID	Desired Endpoints as provided by Community Input ²³	Planning Responses
D ³	Family and social ties	
E ³	Affordable housing Teachers, prospective employees	<ol style="list-style-type: none"> 1. Development should be planned so as to utilize existing infrastructures as much as possible so development costs are lower and the costs to the town for expanding public services is minimized. 2. <i>Infill development</i> should be encouraged to a density of approximately 12 dwelling units per acre. 3. <i>Commercial development areas in the core commons area should include housing in upper stores</i> so as to provide more life to the central area. 4. Any unused or sub-standard housing should be refurbished and placed on the rental or real estate market. 5. <i>Development lots should be designated</i> and options should be given to incoming teachers to “build-to-suit” so they can sign a letter of intent that can be taken to the bank for financing. Prefab options can be given to speed construction time. These packages should be provided by the school district when they are trying to attract teachers to the area. Perhaps the school district can provide incentive packages to help with down-payments if the teacher agrees to stay for a specified number of years.
F ³	Housing types. Mix of housing availability	<ol style="list-style-type: none"> 1. <i>Mixed use development</i> should be within and closest to the town core area to included residential with commercial. 2. <i>Multi-family housing</i> should be developed to be close to the town’s core area to add more life to the core area and to facilitate the most people to take advantage of enjoying open space and view corridors into the Indian Creek area. 3. <i>Single family residential</i> areas should be located in the existing residential areas, but infill development should add more single-family units so that housing densities are increased.
G ³	Business	<p>Make decisions to keep money in the community for as long as possible – so that it does some good while it is in town.</p> <ol style="list-style-type: none"> 1. Provide open market-place of ideas. 2. Encourage development of local businesses to meet local needs. 3. Identify and list all services normally contracted with outside businesses and contract with a local individual or business to provide.
H ³	Recreation	<p>Recreation opportunities should be planned to meet citizen needs and to draw people to the community to play and spend money in the community. This will not only provide local activities, but will improve the local economy and provide jobs.</p> <ol style="list-style-type: none"> 1. <i>A golf course could be built in the flood-plain</i> where other kinds of development should not be. 2. <i>A golf clubhouse</i> at the community core area could serve golf functions and double as community spaces, e.g., restaurant, meeting spaces, receptions, weddings, and parties. 3.
J ³	Areas to fish	<ol style="list-style-type: none"> 1. Restore health of Indian Creek. 2. Place ‘dams’ of large stones across Indian Creek to retain minimum water depths to stream and provide aeration to flowing water. 3. Stock Indian Creek with native fishes. 4. Develop fish spawning areas needed for native fishes so that their populations expand naturally. 5. Provide parking spaces for people who fish at the town commons – so they must begin and end there. 6. Encourage ‘fish lies’ to be told at the local café with prizes to the biggest ‘whopper’. 7. Provide a section at the hardware store to buy artificial flies, lures, bait, gear. 8. Advertise fishing in Indian Creek to draw visitors from wide area.

ID	Desired Endpoints as provided by Community Input ²³	Planning Responses
		9. <u>Camping areas</u> should be designated and equipped along Indian Creek for people who fish. This could be done in a manner that emulates campgrounds of American Indians of the area and in historic locations (after archeologists have researched to assure that their use would not cause history to be lost). 10. Re-locate and refurbish vacant cabins behind L&C GM building for people who fish to spend the night in town. 11. A local business could be established to provide fish cleaning, freezing, smoking facilities. 12. Local café can encourage fishermen to bring caught fish to be prepared for their dinner. 13. Stabilize stream banks with rootwad revetments. See: http://www.stormwatercenter.net/Assorted%20Fact%20Sheets/Restoration/bank_protection.htm 14. Stabilize stream banks with imbricated rip-rap. 15. Stabilize stream banks with boulder revetments. 16. Add lunger structures below base flow. 17. Stabilize severely eroded and threatened stream banks with A-jacks.
K ³	Nature viewing Eagles	1. Be alert for favorite eagle perches, and then <u>build blinds</u> in areas where people can get close without being seen. 2. Develop <u>trails/paths system</u> to encourage people to enjoy nature. 3. Consult with MDC an FWS for ways to encourage the return of native wildlife species. 4. Allow some dead trees to stand to provide perches for Eagles.
L ³	Walk in the woods	1. Create maps of local trail systems and provide rest areas in interesting and attractive spots. 2. Include natural stones or fallen logs to sit on. 3. <u>Trails can double as cross-country ski trails, jogging trails,</u> and bike trails.
M ³	Swimming hole in Indian Creek	1. <u>Provide an area deep enough to jump in and wide enough to swim.</u> 2. Make certain water is always flowing through the area.
N ³	Kid's play spaces Public park Skateboard park Movies Biking/ biking trails 4-wheelers and go-carts Basketball court Tennis courts Walking trails	1. Construct <u>mountain-biking course</u> across hilly terrain. 2. Construct <u>4-wheeler trails</u> away from populated areas. 3. Provide <u>skate-board park</u> that is adaptable to evolve with the sport. a. Locate so kids can demonstrate their skills and where adults and other youth can enjoy their fetes. 4. <u>Basketball court</u> should be part of the school or a co-school/community facility. 5. <u>Disk / 'Birdieball' golf</u> 6. Public <u>parking lots can double as basketball or tennis courts,</u> or they can become overflow parking lots for local events. 7. Historic walking trails can be mapped and distributed to enable walking tours of the area. 8. <u>Nature trails</u> should be developed. 9. Indian trails should be researched, re-established, mapped and promoted.
P ³	Baseball field, Little-league, school, softball	1. Build <u>baseball diamond.</u> 2. It should be planned so as to allow the school to expand. 3. It should be planned so that balls are not hit into streets. 4. It should be planned to meet baseball and softball regulations so that it can be a venue for area-wide and local tournaments. 5. Little-league baseball should be formed. 6. Adult softball league should be formed and games played in town regularly during the season.
Q ³	Dance 6 th -8 th grades 9 th -12 th grades	School sponsors two dances per year. 1. Barn should become a venue for community dances. Dances for youth should be held on a regular basis.

ID	Desired Endpoints as provided by Community Input ²³	Planning Responses
		<ol style="list-style-type: none"> 2. Dance lessons can be held for elementary school students so they know how to dance when they reach these grades.
R ³	Parks, Community gatherings	<p>Stella's parkland has been surveyed and is ready for development. Combined with other Stella town property, this site can become a central place for community gathering.</p> <ol style="list-style-type: none"> 1. Parking for park activities should be kept on the streets to maintain adequate activity space. 2. Maintain sufficient open space for community gathering. 3. Plant trees for shade 4. Picnic shelters should flood-proof or not constructed. 5. Provide pedestrian access between park and baseball fields under Ozark Street. 6. Provide pedestrian bridge from commercial center to park.
S ³	Outdoor music venue	<ol style="list-style-type: none"> 1. Provide <i>venue for public performances</i> at town center and park setting to increase volume of activity. 2. Provide <i>space for buskers</i> to perform. 3. Plan fiddle concerts. 4. Provide <i>reflecting surfaces behind/above performance</i> areas to project sound toward audience. 5. Provide <i>lawn for people to sit</i>. 6. Provide electricity for amplification. 7. Make performance area large enough for a small school orchestra or a stage for a school play/skit. 8. Use venue for public meetings and for distributing awards to citizens for building community.
ID	Desired Endpoints as provided by Stella's Youths	Planning Responses
Ya	Community feel	<ol style="list-style-type: none"> 1. Develop community to be as compact as possible. 2. Develop within urban boundary. 3. Organize activities, institutions, services, and businesses in a core area to increase the opportunities for chance interactions. 4. Organize community events. 5. Develop one central parking area to serve most activities and businesses.
Yb	Clean town	<ol style="list-style-type: none"> 1. Repaint bridge 2. Clean yards 3. Restore historic buildings 4. Provide youth assistance to elderly – errands, chores.
Yc	Local amenities	<ol style="list-style-type: none"> 1. <i>Camping nearby</i> 2. Provide <i>better access to Indian Creek</i> 3. Provide <i>deeper creek for swimming</i> 4. Access to lake 5. <i>Sidewalks</i> 6. Historic buildings 7. Provide <i>bike shop</i> 8. Fountain, <i>water attraction</i>, pool 9. <i>Rain shelter</i>
Yd	Safe environment	<ol style="list-style-type: none"> 1. Provide more <i>visual access to Indian Creek</i> with less hidden spaces to encourage hiking. 2. Provide <i>more eyes along Indian Creek</i> to make it more secure. 3. Provide supervision at swimming. 4. Provide supervised play spaces out of public view.

ID	Desired Endpoints as provided by Community Input ²³	Planning Responses
Ye	School-Town connection	<ol style="list-style-type: none"> 1. Coordinate town and school events 2. <u>Expand school</u> to create better classrooms and more space in corridors. 3. Provide <u>local library</u> with <u>multi-purpose room</u> 4. Develop JAG program in school to connect students with local job opportunities. 5. Add <u>more sports</u> to school 6. Expand arts programs 7. Better band instruments <ol style="list-style-type: none"> a. Provide a <u>public space for the school band and choirs to perform</u> and to encourage development of musical arts.
Yf	Youth activities	<ol style="list-style-type: none"> 1. Create <u>activity options</u> in the community for all age groups. <ol style="list-style-type: none"> a. <u>Pool hall</u> b. <u>Ice cream parlor/soda fountain/coffee shop</u> c. <u>Meeting space</u> d. <u>Outdoor bike trails</u> e. <u>Rock-climbing wall</u> f. <u>Skateboard park</u> g. <u>Disk / 'Birdieball' golf</u> h. <u>Snowmobile trails</u> i. <u>Swimming pool</u> (indoor-outdoor) j. <u>Video arcade</u> k. <u>Movie theater</u> l. <u>Shooting range for guns, rifles (archery?)</u> m. Eagle/nature watching 2. Provide a <u>central place/destination for youth</u> to 'hang-out' with access to snacks/drinks. 3. Provide a 'unique' community sponsored event. <ol style="list-style-type: none"> a. Extreme sporting events, e.g., tractor pulls, big truck events, mud races b. Examples - farmer's golf, whiffle-ball golf tournament, Frisbee golf, burro race, office-chair jousting, kayak jousting, creek snorkeling, Indian Creek Regatta toy boat races (motor, sail), toy car formula races,

Appendix D

30 “Building Community” Projects for Stella

21 May 2007

Building Community PROJECT 7 – Grocery Store



1. Enlist support from existing property owners.
2. Market town plan to grocers.
3. Obtain letter of intent from grocer.
4. Work with grocer to develop plan, terraces, and parking.
5. Include farmers market on terrace.

Building Community PROJECT 8 – Skateboard Park



1. Identify and apply for grants.
2. Design park.
3. Develop funding program.
4. Raise funds, materials, and labor.
5. Build skateboard park
6. Skate
7. Organize competitions.
8. Invite participants

Building Community PROJECT 9 – Enable School Development



1. Identify current property owners
2. Apply for grants to obtain local properties
3. Designate as property for use of School District
4. Work with Highway Dept to create traffic circle and new entry to Triway School.

Building Community PROJECT 10 – Housing - In Progress



1. Infill existing platted lots up to 12 dwelling units per acre.
2. Include housing in commercial areas (“mixed use development”)
3. Upgrade existing housing using grants whenever possible.
4. Contact School District to determine teacher housing needs. Obtain letters of intent from teachers or SD
5. Obtain financing – build.

Building Community PROJECT 11 – Natural Springs - In Progress



1. Obtain public access from property owners of each spring.
2. Plan rest area with large stones for seating.
3. Plan and plant native vegetation
4. Enlist State Highway Dept to create pull-off/parking area.
5. Maintain regularly.

Building Community PROJECT 12 – Indian Creek - In Progress



1. Enlist property owners at each location to permit trails.
2. Obtain materials.
3. Enlist citizens to build trails.
4. Check and maintain as needed.

Building Community PROJECT 13 – Baseball – Football/Soccer



1. Obtain permission from property owners.
2. Apply for grants.
3. Ask for local support and materials.
4. Grade, plant, stripe, maintain.
5. Organize little, junior, 'pony', and adult leagues.
6. Play ball!

Building Community PROJECT 14 – Outdoor Theater



1. Obtain permission from property owners.
2. Apply for grants.
3. Ask for local support and materials.
4. Grade on slope, seed
5. Mow & maintain
6. Install electrical
7. Build stage
8. Plan concerts, plays, lectures, public meetings, movies, etc.

Building Community PROJECT 15 – Professional & Medical Building(s) - In Progress



1. Identify and apply for grants.
2. Identify possible tenants.
3. Design in keeping with local architectural heritage.
4. Raise funds, materials, and labor.
5. Negotiate contract.

Building Community PROJECT 16 – Lentz & Carter Building - In Progress



1. Apply for "Historic Landmark" designation.
2. Search for grants for historic buildings.
3. Search for tenant(s)
4. Design with fueling island at south side.
5. Create new construction drawings to rebuild.
6. Remove building next door and design addition to north side of L & C.
7. Negotiate contract

Building Community PROJECT 17 – Bank Building



1. Apply for "Historic Landmark" designation.
2. Search for grants for historic buildings.
3. Search for tenant(s) – preferably a banker.
4. Create new construction drawings to remodel to its historic character.
5. Negotiate contract.
6. Build

Building Community PROJECT 18 – Shareholders



1. Begin 'roundtable discussions' concerning - How can all citizens become beneficiaries of development?
2. Apply for grants
3. Obtain support of UM sociology dept.
4. Work to enact the group's recommendations.

Building Community PROJECT 19 – Recycling program



1. Establish a recycle program.
2. Establish anaerobic landfill.
3. Collect all organic wastes from town and farms and deposit in landfill.
4. Periodically reclaim compost from landfill to fertilize gardens, farms, lawns.

Building Community PROJECT 20 – Energy program



1. Apply for grants to insulate existing houses.
2. Make agreements with utility company to buy solar – wind generated energy.
3. Establish energy co-operative to buy-install solar panels and wind turbines.

Building Community PROJECT 21 – Environmental Monitoring



1. Work with UM to augment ongoing monitoring programs on Indian Creek.
2. Collect and analyze water samples from Indian Creek and wells.
3. Collect and analyze soil samples.

Building Community PROJECT 22 – Stream/Stream Habitat Restoration



1. Work with UM to augment ongoing monitoring programs on Indian Creek.
2. Collect and analyze water samples from Indian Creek and wells.
3. Collect and analyze soil samples.
4. Stabilize stream banks.
5. Construct
Stream bank restoration, install:
a) rootwad revetments; b) inbricated riprap; c) boulder revetments; d) lunkers; e) a-jacks; and f) vegetative stabilization.

Building Community PROJECT 23 – Habitat Protection



1. Identify native species, their range, and minimum habitat requirements.
2. Develop plan that would assure intact minimum habitats.
3. Develop plan that would assure habitat connectivity.
4. Work with landowners to protect habitat and connectivity.
5. Monitor habitats to assure they contain sufficient resources to sustain minimum dynamic populations of native species.

Building Community PROJECT 24 – Natural Heritage



1. Learn what constitutes "native" landscape for this region.
2. Scout true remnants of "native" landscape.
3. Document locations by GPS.
4. Work with landowners and developers to protect these areas so there will always be a baseline to measure environmental change.
5. Enjoy and appreciate your natural heritage.

Building Community PROJECT 25 – Emerald Necklace Park



1. Identify current property owners
2. Apply for parks grants
3. Designate property as local parkland
4. Develop and maintain
5. Install 'baskets' for disk golf and 'birdie ball' golf.
6. Organize tournaments in each sport.
7. Play

Building Community PROJECT 26 – Community Recreation Center/Emergency Shelter



1. Identify grants programs.
2. Apply for community development grants.
3. Develop funding program.
4. Raise funds
5. Build recreation facility.

Building Community PROJECT 27 – Town Hall/Library



1. Identify and apply for grants.
2. Design in keeping with local architectural heritage.
3. Raise funds, materials, and labor.
4. Negotiate contract.
5. Collect books, magazines, music, films.
6. Begin reading groups
7. Begin story time for children.
8. Collect oral histories.

Building Community PROJECT 28 – 'Mill' Restaurant



1. Inquire about land ownership.
2. Preliminary design for building in keeping with Stella's architecture heritage.
3. Search for restaurant operator.
4. Sign contract with operator.
5. Complete design of building.
6. Maintain quality of building, food, and service.

Building Community PROJECT 29 – Community Barn



1. Apply for "Historic Landmark" designation.
2. Search for grants for historic buildings.
3. Develop strategy for management, maintenance.
4. Design restrooms, kitchen, concessions, materials, flooring, sidewalks.
5. Have engineer recommend changes to meet codes.
6. Organize public and private events.

Building Community PROJECT 30 – Golf Course



1. Identify affected landowners.
2. Work with landowners to develop strategy for building course.
3. Obtain specs for chemical-free course.
4. Design golf clubhouse with pro-shop, carts, maintenance, dining.
5. Maintain course.
6. Organize youth program
7. Organize tournaments
8. Play