

Scenario Planning Peer Workshop

Sponsored by the Federal Highway Administration

- Location:** Mooresville, NC
- Date:** July 20, 2005
- Workshop Host Agencies:** Federal Highway Administration, North Carolina Division Office
North Carolina Department of Transportation
Town of Mooresville
- Workshop Participants:** Centralina Council of Governments
Federal Highway Administration, North Carolina Division
Federal Highway Administration, Office of Planning
Federal Highway Administration, Resource Center
Fountainworks
Iredell County Planning Department
Lake Norman RPO
North Carolina Dept. of Transportation, Transportation Planning Branch
Renaissance Planning
Town of Mooresville Planning
Town of Mooresville Manager's Office
Town of Mooresville Board of Commissioners
Town of Mooresville Public Works
US DOT Volpe National Transportation Systems Center

Summary

The following report summarizes a Peer Workshop on tools and effective practices for scenario planning. The Federal Highway Administration (FHWA) coordinated and supported the one day workshop. The FHWA North Carolina Division Office, the North Carolina Department of Transportation, and the Town of Mooresville hosted the event in Mooresville, North Carolina. Presenters at the workshop provided participants with an overview of the scenario planning process, shared examples of scenario planning efforts from elsewhere in the country, and described available resources and tools to assist with scenario planning analysis. Participants then brainstormed ideas for scenario planning in the Mooresville region.

Next Steps were identified at the workshop closeout. These next steps included agreeing to proceed with the scenario planning process; identifying stakeholders; creating an exploratory committee to define the scope and jurisdiction, help manage the process, and, with the help of the FHWA, contact other communities that have done or are doing scenario planning; identifying roles and responsibilities; and orienting existing and upcoming plans with scenario planning.



I. Introduction

Jody McCullough of the Federal Highway Administration (FHWA) Office of Planning opened the workshop by presenting an overview of scenario planning and the FHWA's role in supporting its use.

Scenario planning is a process in which transportation professionals and citizens work together to analyze and shape the long-term future of their communities. Using a variety of tools and techniques, participants in scenario planning assess trends in key factors such as transportation and congestion, land use, safety, demographics, health, economic development, and the environment. The participants bring the factors together to develop future scenarios; each of these alternative scenarios reflects different trend assumptions and tradeoff preferences, such as directing growth to some areas to preserve other areas. In the end, all members of the community – the general public, business leaders, and elected officials – work together to gain consensus on a scenario for the future. This scenario becomes the long-term policy framework and is used to guide decision-making in the present since the effect of these decisions today may not be realized for several years to come.

Discussing the benefits of effective scenario planning, McCullough noted that it

- provides an analytical framework and process for analyzing complex issues and responding to change;
- facilitates consensus building by giving communities the capacity to participate actively in planning;
- includes visualization tools to assess transportation's impact on communities;
- attracts and engages the public by actually showing them how the future will look compared to a base case (status quo) scenario;
- improves communication and understanding in a community; and
- yields an enhanced decision making framework for a community and ensures better management of increasingly limited resources.

FHWA is offering technical support, information, and research to state and local partners as they undertake scenario planning and is also encouraging the use of metropolitan planning (PL) and other transportation funds to implement scenario planning. Efforts in FY 2004 included

- \$560 million in funding for state and metropolitan planning (PL and surface transportation planning [STP] funds);
- a report on a National Peer Roundtable of policymakers, community leaders, and technical experts that discussed the key points to effective scenario planning;
- National Panel Sessions at APA, TRB, National Smart Growth Conference, and other locations; and
- FHWA coordination and support of FHWA/Federal Transit Administration Peer Workshops on scenario planning in New York, Rhode Island, and Hawaii.

Efforts in FY 2005 include

- funding the Coalition for Utah's Future's "2005 Greater Wasatch Land Use and Transportation Vision" and the Sacramento Area Council of Government's "Blueprint Project;"
- a national broadcast on scenario planning that was held on March 3, 2005;
- conducting four new workshops, in Florida, Illinois, Iowa, and North Carolina; and
- a new website on scenario planning: www.fhwa.dot.gov/planning/scenplan/index.htm.

II. Local Planning Efforts

A. Town of Mooresville

Tim Brown, Director of Planning, and Chris Bauer, Transportation Planner, [Town of Mooresville](#)



Town Overview

Tim Brown and Chris Bauer provided background information on the Town of Mooresville, the surrounding area, and important trends that are currently shaping the area's planning decisions. Mooresville is located 30 miles north of Charlotte near the shore of Lake Norman, the state's largest man-made lake, in Iredell County. Similar to other North Carolina piedmont towns, textiles were at the center of Mooresville's economy for several generations. While the Town has grown gradually since being established in 1873, it has grown significantly over the past decade. From 2000 to 2003, the Town's population grew 10%, and this trend is projected to continue. According to Brown, Mooresville/South Iredell County is poised for rapid, sustained growth – from its current population of 55,000 to over 100,000 by 2025.

One reason why Mooresville is witnessing significant growth is the 2001 decision of Lowe's Companies, Inc., to move its headquarters and approximately 12,000 of its employees to Mooresville. Lowe's is a FORTUNE® 50 company that serves approximately 11 million customers a week at more than 1,125 home improvement stores in 49 states. When a company the size of Lowe's moves to a new location, vendor companies soon follow. Town officials recently traveled to Bentonville, Arkansas, headquarters of Wal-Mart, to talk to city officials and discuss the lessons that they have learned. Bentonville officials said that it is important to have a vision for the future before the company moves to town and to have the tools available to implement this vision. Lowe's has begun moving its workforce to its new Mooresville location, so the town is trying to define a vision as soon as possible.

Mooresville is also home to more NASCAR shops than anywhere else in the nation, earning it the title of "Race City USA." More than just garages for the NASCAR racing team, these shops are essentially corporations with marketing, research and development, museum, and gift shop staff all on site. Combined with the North Carolina Auto Racing Hall of Fame, tourism and business relating to auto racing has become a significant portion of Mooresville's economy. Visitors to Mooresville, as well as commuters from Mooresville to Charlotte, will have an easier trip once the rapid transit rail line is completed between Charlotte and Mooresville within a decade.

Current Planning Processes

Faced with these changes and significant growth, town officials feel that a well-defined vision can be a vital tool in guiding growth and ensuring that Mooresville will remain a highly desirable place to live and work. Town officials believe a vision will act as a tool for enhancing the value of community investments, will protect Mooresville's "sense of place" as a community, and will position Mooresville strongly at the center of the emerging Lake Norman region. The vision will define how Mooresville should grow by being a roadmap for investment through defining demand, needs, and priorities; by being a catalyst for investment interest, and by being a policy "template" to guide development.

Tools

Once a vision is decided upon, Mooresville will use a variety of tools to implement the vision. These tools include the town's new zoning and ordinance map, open space standards, extra-territorial zoning jurisdictions, and its new comprehensive land use, multi-modal transportation, and small area plans.

Mooresville's proposed zoning ordinances will replace the Town's current zoning ordinance originally established in 1986 and will identify the values of the community and the importance placed upon quality of life issues. Through these ordinances, town officials hope to control development with measurable standards; to establish flexible, transit-supportive, and design-guideline based districts; and to regulate physical design and form. Design standards have already been adopted in the downtown area and in the

Mt. Mourne small area plan. The town has also recently defined open space types and standards, which will lead to dedication requirements and payment in lieu options. The town plans on requesting Extra-territorial Zoning Jurisdiction to coordinate growth in surrounding areas within the county.

According to town officials, the 1999 Land Development Land-Use Plan lacks the detail necessary to guide and shape Mooresville's explosive growth. The Town's small area plans, however, have become the single most important process initiated by the Town to guide Mooresville's growth. Currently, there are three small area plans in place: one for Mt. Mourne, one for the Cascade Neighborhood, and one for the downtown (Figure 1). These plans have small planning horizons; integrate land use and transportation planning; and contain a fine-grained, micro-level of detail. This combination of attributes results in a policy document that is used to guide regulatory zoning decisions and allows the town and its planning process to be proactive when a developer wishes to build in the area.

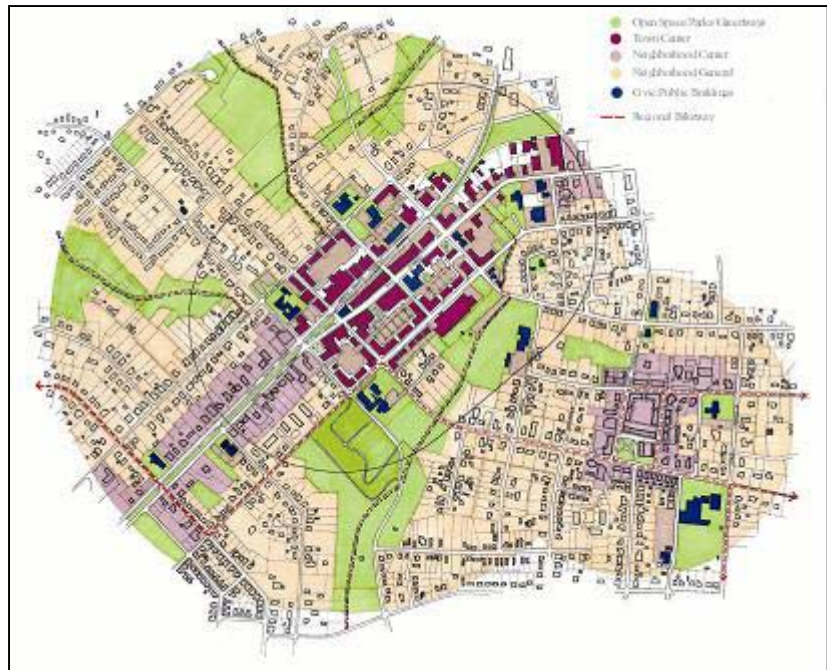


Figure 1: A map of the downtown of Mooresville from the Town's Downtown Area Plan.

Opportunities for Scenario Planning

Mooresville recently began the process of crafting new comprehensive land use and transportation plans. The Town is currently soliciting qualifications from consultants for work on these plans and will ensure that the consultants work together to integrate the plans as much as possible. The goals behind the new Multi-Modal Transportation Plan are to integrate transportation and land use planning and to link and bring together four of the town's plans: the predecessor to the new plan, the town's 1997 Thoroughfare Plan; the Pedestrian Plan for which Mooresville received a 2004 NCDOT Planning Grant; a Bicycle and Greenway Plan; and a Transit Plan. Town officials would like to undertake scenario planning as part of the formulation of these plans.

B. Dialogue Session with Workshop Participants

After the presentations by FHWA and Mooresville, the facilitators, Fountainworks, led a group discussion to share values and visions for their community and to define success for the workshop. The discussion, in which participants brainstormed values that are important to the community (Figure 2) and how they want the future to reflect these values, simulated an approach that the Town could take with the public as a first step of a scenario planning effort.

Participants also discussed what they would like to accomplish at the workshop. These accomplishments include

- Finding a simple, interactive process

- Being proactive for planning for the future
- Managing five-year plans and coordinating with key partners
- Understanding and seeing what scenario planning tools are available and what the results from these tools will be
- Understanding the trade-offs between leaving growth and development to the market versus proactive planning
- Having clear next steps and mechanisms for implementation
- Knowing how to imbed scenario planning in policy documents
- Seeing what changes other regions have made as a result of scenario planning
- Broadening consensus regionally
- Knowing how to make cumulative decisions and not just incremental changes
- Understanding the costs of implementation
- Having NCDOT, the metropolitan planning organization, and the rural planning organization all working together to support each other

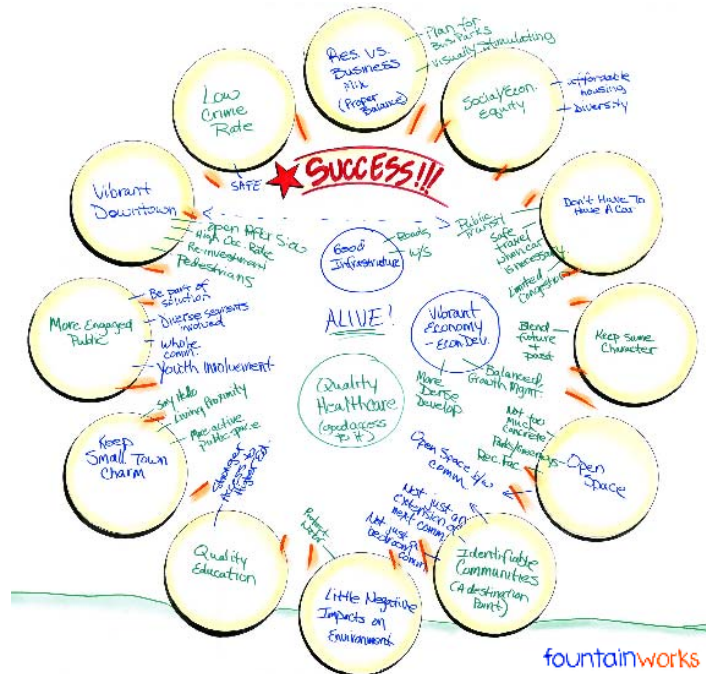


Figure 2: Values and visions for the region as expressed by workshop participants.

III. Panelist Planning Practices and Observations

The FHWA arranged for a regional planning peer to attend the workshop in Mooresville and present his experiences with scenario planning in the regions in which he has worked. The peer gave some background about his regional planning firm, described the scenario planning approaches his firm has used, and discussed what he has learned and would like to pass on from his experiences. At the end of his presentation, the peer fielded questions from workshop participants.

A. Peer Presentation – Renaissance Planning Group

Chris Sinclair, President, [Renaissance Planning Group](#); Orlando, FL



Background

Renaissance Planning Group, Inc., is a planning, design, and policy analysis consulting firm specializing in the integration of transportation, land use, urban design, and technology. The firm provides services primarily to public sector agencies, including metropolitan planning organizations, regional planning commissions, local governments, transit authorities, and state and federal agencies. As part of its work, Renaissance has undertaken scenario planning in Charlottesville, Virginia; Binghamton, New York; Birmingham, Alabama; and Martin-St. Lucie, Florida. Sinclair referenced all of these regions as he presented his firm’s experiences with, and lessons learned regarding, scenario planning.

Planning Process

In scenario planning, the key questions to ask participants and stakeholders about the future are “where will we live?” “how will we live?” and “how will we get there?” Renaissance dedicates a workshop to each of these questions. Before the first workshop, it is important to identify the community’s values. An

effective way to get the pulse of the public is to ask leaders from around the region who represent various groups, communities, and neighborhoods to get involved and then work closely with them as the scenario planning process proceeds. Community members' values in Charlottesville were to retain the region's resources (habitat, farms, and forests), optimize the use of the land by clustering development and having it be on a human scale, pursue transportation alternatives, conserve energy, improve the region's access to employment and education, and improve the region's water quality and quantity.

Next, Renaissance puts these values in context by using GIS and other tools to make environmental, socioeconomic, transportation, and community form visuals. Environmental visuals flag areas where development would be undesirable, such as on slopes over 15 percent, flood plains, wetlands, and in green spaces or other "treasured" places. Socioeconomic visuals include information on how projected population and employment growth impact the demand for land, and transportation visuals include information on regional facilities, access, and the form of development that may result from various transportation choices. Community form visuals cover development characteristics, such as activities or uses, building types, paths and open spaces, and parking, and how these characteristics can be put together to influence the region's density, diversity, and design.

Table 1: Community Types and Sub-Types

Urban	Suburban	Rural
Residential	Residential	Small town
Mixed-use	Mixed-use	Village
University/ institution	Retail	Residential
	Office	Mixed-use
	Institutional	Industrial
	Industrial	

Also before the first workshop, Renaissance performs a "community type inventory," which entails a scan of the community's urban forms. Examples of each type of area and sub-types (Table 1) are captured with a picture and map of the area so that the participants can see a local example of each community type (Figure 3, which shows an example of an urban mixed-use community type).

After this preparatory work is complete, Renaissance holds the first workshop, which focuses around the question "How will we live?" At this workshop, the community type images and maps are used to solicit

feedback from the workshop participants regarding how they want their community to look. Renaissance has held several of these workshops and has found that the participants' responses are consistent; they dislike the suburban areas and want communities with a focal point, a mix of uses, a better use of open space, a variety of transportation options (especially walking), and they want communities that are designed at a human scale and are not auto-oriented.

Before the second workshop, Renaissance creates maps and images of how areas in the community could look in line with the participant's feedback. Renaissance also takes stock of the existing regional roadways, transit system, and greenways to then suggest enhancements that are in line with the participants' desires. Particular attention is paid to the interconnectedness between land use and



Figure 3: An example of the urban, mixed-use community type – downtown Charlottesville, Virginia. The circle on the map represents a five-minute walk to the center.

transportation. For instance, the economic drivers in the area and the transportation system influence the area's land use. Additionally, the capacity of the transportation system influences the land's "capacity" for development, or density: as capacity increases, density increases. Renaissance also identifies "high access footprints," strategically important places that will form the base of the community and have a high percentage of the area's employment. According to Sinclair, every high capacity transportation facility has a high access footprint, and residential uses should be oriented to footprint areas.

The second workshop focuses on answering the question "Where will we live?" Before breaking up into teams, participants develop group objectives and are presented with the region's population forecasts. Each team is then given a variety of dots that represent different types of community forms with associated population densities. The teams then distribute the projected population growth by placing the dots on a map. At the end of the meeting, each team reports out and two or three patterns result.

These patterns become the basis for developing the scenarios for growth (Figure 4) as different community types are assigned to sub-areas and are entered into a database that inventories the features of the community. The goal at this stage of the process is to replicate the dot maps as closely as possible. Renaissance also develops a baseline scenario to represent growth in the region given no changes to the current plans and policies. Renaissance then analyzes these three or four scenarios by running them through models and then comparing them in several contexts. These contexts include capital improvement costs, daily travel characteristics, environmental preservation, and land development. The results of the analysis are essentially performance measures that show how well or poorly each scenario compares to each other.

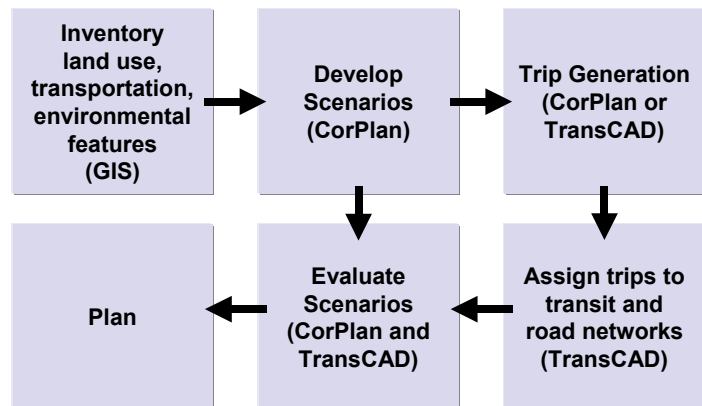


Figure 4: The process Renaissance Planning follows to turn the workshop participants' patterns into scenarios for future growth. CorPlan is the scenario planning tool and TransCAD is the travel demand tool they used to develop the scenarios. Today, one GIS-based tool is able to perform all of the functions outlined above.

At the third and final workshop, Renaissance displays maps of these scenarios as well as the results from their analysis. In each case, workshop participants do not like the baseline scenario compared to the other scenarios that they helped develop. Once the participants choose a scenario, Renaissance asks them "How will we get there?" Participants then come up with implementation measures on all fronts: political, economic, planning, regulatory, and investment. Strategies for implementing the preferred scenario include goals and objectives, detailed sub-area plans, policies and guidelines, public infrastructure, and regulations and reviews.

By involving workshop participants at each of these steps, their ownership of the process and its results is strengthened. According to Sinclair, indicators of a successful scenario planning process include building in designated development areas, maintaining the viability of small towns, maintaining hard edges, building quality communities, preserving rural areas, coordinating investments, ensuring regional equity, and ensuring affordability.

Conclusions

Sinclair stated that scenario planning is a process by which a community expresses its desired end state. To help the community think in these terms, scenario planners must follow seven principles:

1. Build trust – Planners need to trust that the community will make the right decisions and the public needs to trust that the planners will accurately represent and pursue their desires. Trust leads to credibility and action, and trust is difficult to attain and easy to lose. Ownership builds trust, and ownership is created when it is left to the community to create scenarios and to choose the preferred scenario or outcome.
2. Build consensus – Consensus can be built around shared community values. In this way, values can underlie all decisions. To find common values, planners can start with goals and objectives that may be in existing plans and policies. Planners can also use surveys and focus groups to identify community values. As a third option, participants at the first workshop can be asked to perform a “treasured places inventory” where they pinpoint places they would like to preserve and explain why.
3. Understand context – Scenarios are part of a continuum: the past is history, the present is now, and scenarios represent the future. Scenarios can be created at all scales – community, city, county, and region – and for all drivers – environmental, economic, transportation, and development.
4. Work with outcomes – Outcomes from the scenario planning process represent a vision of how life will be in the future and this future way of life should be linked to values. The outcomes should be clearly understood and an agreed upon preferred outcome should be the foundation for plans. Strategies to achieve the outcome can then be spelled out in plans, regulations, and projects.
5. “Experience” outcomes – Because scenarios illustrate outcomes, make them as real as possible. Maps and images can be used at all stages, and the images should be of existing places. Photo enhancement can show how an existing place can change over time given current ordinances, policies, and regulations and help put the participants in the picture of the future. As mentioned earlier, scenarios should be related to values and goals and measures should be developed that relate to these goals. Last, differences should be apparent between scenarios so that participants can clearly see their options.
6. Be focused yet flexible – To maintain focus, pose simple questions about outcomes, such as the questions used to focus the workshops: How will we live? Where will we live? How will we get there? Organize the scenario planning process around these questions and array them with values to achieve more buy-in.
7. Ensure that the analysis informs the process instead of dictating it – Consensus building should shape and drive the analysis; never drop ideas because of the limits of a model or tool. Use the tools creatively; they are very flexible and are useful for answering questions and confirming values. Also, keep the resolution of the analysis purposely low, at the community or corridor level instead of at the parcel or project level. Too much data can become cumbersome and overwhelm a well-intentioned scenario planning process.

B. Scenario Planning Tools

Brian Betlyon, Metropolitan Planning Specialist, [FHWA Resource Center](#); Baltimore, MD

Brian Betlyon discussed the role of tools in scenario planning and described the various tools and approaches that could be used by the Town of Mooresville and other planning organizations that are interested in scenario planning. According to Betlyon, the premise of scenario planning is that it is better to “get the future imprecisely right” than to “get the future precisely wrong” when developing transportation plans. Tools can help people involved in scenario planning get the future as “imprecisely right” as possible. These scenario planning tools can provide decision-makers and the public with the information they need to make educated decisions. Scenario planning tools can help communities plan by design instead of by default, meaning that they can make informed decisions on how the actions (or inaction) that they take today will affect the future.

A variety of technology tools can help communities consider scenarios and make better decisions. These tools can be divided into the following categories:

- *information resources*, including websites such as <http://www.placematters.com>, <http://www.smartgrowthamerica.com>, <http://www.sustainable.doe.gov>, <http://www.fgdc.gov>, <http://www.fhwa.dot.gov/planning/landuse/>, <http://www.natureserve.org/>, and <http://hud.esri.com/egis/>;
- *visualization tools and techniques*, such as photo montage, architectural drawings, visual preference surveys, visual kiosks, and [Box City](#);
- *impact analysis and GIS models* using software such as [INDEX and Paint the Town](#), [What If?](#), [MetroQUEST](#), [UrbanSim](#), and [CommunityViz](#); and
- *process tools and techniques* such as civic participation, the [PLACE³S](#) process developed in California, and methods for finding common ground. For example, establish a neutral community meeting place, conduct large-scale town meetings, or establish a civic learning center.

Instead of concentrating on one aspect of planning for the future, many impact analysis and GIS models used in scenario planning estimate the impacts of people’s decisions today on the land use, transportation system, and environment of tomorrow. Additionally, these tools take into account the interconnections between these three aspects of planning. For example, if a change to the transportation system is proposed for an area, the model will estimate the change’s impact on the land use and environment. Additional changes in these areas may then need to be made to accommodate the initial change. Through this process, these tools help people plan for the future in as real of a way as possible.

Several regions have used scenario planning as part of their land use and transportation planning efforts. The [Delaware Valley Regional Planning Commission](#) is using scenario planning to assist in the development of a new long-range plan for the Philadelphia area. In Charlottesville, Virginia the [Jefferson Area Eastern Planning Initiative](#) created a modeling tool capable of concurrently evaluating transportation and land use options, known as CorPlan. Using CorPlan-generated scenarios, they developed a 50-year transportation and land use vision for the five-county region surrounding Charlottesville. Finally, [Envision Utah](#), a public–private partnership “working to keep Utah beautiful, prosperous and neighborly for future generations,” involved over 100 partners and the general public in a statewide scenario planning effort.

IV. Opportunities for Action

In the afternoon, participants broke out into three groups (Figure 5). A facilitator worked with each group and recorded the group’s ideas as they brainstormed responses to a unique set of pre-defined questions about undertaking scenario planning in the Mooresville region. Each break-out group then presented to the entire group at the end of the day.



Figure 5: The three break-out groups and facilitators in Mooresville, NC.

Issues and Opportunities for Scenario Planning

One break-out group discussed the benefits, issues, challenges, and opportunities relating to scenario planning.

Benefits:

- Scenario planning can result in smarter planning; better coordination between local, regional, and state planning agencies and organizations; and an improved quality of life.

- Scenario planning can also focus the planning process; be proactive and not reactive; coordinate land use, transportation, and the community’s visions; open up the dialogue of implementation; and improve a planning organization’s access to funding.
- With respect to public involvement, scenario planning invites up-front public input and buy-in, helps the public see all of the possibilities, and allows the public to evaluate options.

Challenges:

- Market forces may make the future difficult to predict
- Ensuring there are enough data and the data is credible
- Limited staff/capacity
- Funding the cost of the scenario planning process, such as costs for consultants and good baseline data, and implementation costs
- Getting the community involved and partners to buy into the process
- Politics and competing interests
- Not having enough time, stakeholder turnover, and the loss of enthusiasm over time
- Land use development can outpace transportation infrastructure
- The fear of something new and different and the learning curve associated with doing something new
- Creating a unified vision

Issues and Actions:

To ensure that a scenario planning process is as successful as possible, a number of issues should be considered:

1. The town should select the most appropriate scenario planning tool for the community’s needs.
2. There needs to be buy-in to the process, not only from the public but also from elected officials.
3. There need to be multiple ways to communicate information to the public to get them involved.
4. There needs to be inter-agency coordination between the agencies involved.
5. The final product should be usable, connected to specific actions, and ensure promised deliverables.
6. The final document or documents need to be dynamic and connected to other documents.

Opportunities:

There are several opportunities to address the challenges and issues listed above. These can be grouped into four categories: communication and education, data, money, and interagency coordination.

Communication and education
<ul style="list-style-type: none"> • Develop an action plan for communicating with and educating participants at the outset. • Develop a contact list and establish relationships with key stakeholders. • Focus communication with the public, stakeholders, and politicians • Ensure that politicians are kept well informed. • Invite children into the process and educate them about the process as well. • Distribute a survey early on to exemplify the idea that staff should ask as opposed to tell the public what they would like to see. • Consider the entire audience when communicating with participants, not just the professional planners. • Avoid jargon and explain the advantages and disadvantages of various options in as simple terms as possible. • Use pictures to visualize the options and the products of the process.

<ul style="list-style-type: none"> • To be credible, ensure that the process is transparent and ensure that it is clear that there is no set agenda for the outputs of the process. • Be honest and continually connect with the core values that were identified early on in the process. • Ensure that lines of communication are always open and that there are multiple sources for communicating so that everyone is on the same page. • Regularly ask the participants if they are satisfied with the process and if not, then change the process accordingly.
<p>Data</p> <p>Financial resources should be dedicated to collecting, using, verifying, and updating data. An inventory should be conducted up front that answers the questions of what data are needed and what forms do the data need to be in. Data should be good, consistent, and from a variety of sources. The right people should be working with data and the data should be updated regularly. Planners should work with data as transparently as possible: they should always note data assumptions and they should translate data into credible statistics.</p>
<p>Money</p> <p>Though the process may be expensive up front (for the consultant and for procuring a scenario planning tool), scenario planning will save money in the long run by helping to identify what needs to be done today to accommodate projected growth and changes. This accommodation will save communities from making expensive mistakes or changes in the future. The savings from this process can be reinvested into the community and the quality of life can be even higher.</p>
<p>Interagency coordination</p> <p>Interagency coordination should occur at the beginning of the process to build collaboration across issues.</p>

Integrating Scenario Planning in Mooresville

Another break-out group discussed ways to integrate scenario planning into Mooresville’s community transportation plan (the CTP) and land use plan. This group also discussed how scenario planning could be used as a growth management tool and as well as a community involvement tool.

Scenario planning can be used in the CTP to...	
<ul style="list-style-type: none"> • integrate transit planning • address bicycle and pedestrian considerations • identify highway improvements to match land use • integrate the highway system 	<ul style="list-style-type: none"> • improve access management • strengthen multi-modal regional transportation • integrate travel demand models with land use alternatives • set priorities and gain support for the CTP itself
Scenario planning can be used in the land use plan to...	
<ul style="list-style-type: none"> • examine different alternative land use patterns • evaluate how land use impacts other indicators • blend old and existing development with new development • incorporate community spaces • allow the development of future land use plans 	<ul style="list-style-type: none"> • blend old plans and ordinances with the vision • undertake corridor planning • implement form-based zoning • improve recreation opportunities • help identify the financial and cumulative impacts of development

Scenario planning can be used in growth management to...	
<ul style="list-style-type: none"> • determine how transit will impact/shape growth • set priorities and gain support for growth management • coordinate between county and city plans and services 	<ul style="list-style-type: none"> • properly plan for utility capacity and schools • improve access management • monitor the plans • properly define growth management
Scenario planning can be used in community involvement to...	
<ul style="list-style-type: none"> • get the public more involved • bring opposition and proponents to the table • build interest in long-range planning 	<ul style="list-style-type: none"> • educate developers, economic development drivers, policy boards, and the public • educate/engage the media

Tools and Resources for Scenario Planning

The last break-out group discussed tools and resources that are available for scenario planning. Specifically, the break-out group discussed what they liked about scenario planning, technical assistance needed, and who should be working on scenario planning in the region.

What do we like?

- Members of this group particularly liked the visualization tools that are used for scenario planning and being able to create and then see a vision for the future. Multiple land use patterns can be explored by evaluating multiple options/assumptions.
- Members also liked how the tools quantify impacts with statistics. This can help elected officials make more informed decisions.
- Group members also liked that scenario planning
 - provides an opportunity for early and active public involvement
 - creates conversation/dialogue
 - helps in understanding the issues and softening the opposition
 - helps us look more regionally
 - is inclusive and scaleable
 - increases the planning process's credibility
 - increases the public' perception of the planning process
 - helps participants speak the same language

Technical Assistance Needed?

- Group members expressed that they would like more general scenario planning process training for government officials, staff, public, and developers
- Members also would like assistance in analyzing the scenario planning tools to determine
 - the tools' defaults
 - which tool is right for them
 - the costs associated with undertaking scenario planning
 - if it is possible to follow the concept but not use the software
- Members would like to know who to contact about software training and would also like to tap other governments who have done it well
- Group members also mentioned that they would like
 - baseline data, especially at the regional level
 - a parcel-based land use layer (on GIS)

- to designate NCDOT or some other agency as the “keeper” or “coordinator” of scenario planning in the state
- to determine how involved the COG and DOT should be

Who should be working on scenario planning in our communities?

- Group members thought that there should be a broad representation of public employees who work on the process. These people should be from schools; the county, including staff and elected officials; town officials; law enforcement/fire; the health department; parks and recreation; utilities and storm water management; and transportation organizations, including the Charlotte Area Transit System, Iredell County Area Transportation System, planners, and the RPO.
- Members also thought that members of the community should be involved. These people include the elderly, diverse economic and social groups, developers and realtors, youth councils, the YMCA, the clergy, non-profits, neighborhood associations, staff from the hospital, and community leaders.
- Economic developers, such as major employers (Lowe’s, NASCAR), staff from local organizations, and chambers of commerce; the media; and environmental groups, including land trusts, the Sierra Club, and the southern environmental law center.

Next Steps

After each group reported out to the workshop participants, the facilitators created a list of next steps:

1. Agree to proceed (yes – already decided)
2. Identify stakeholders (NCDOT, RPO, FHWA, the Centralina Council of Governments, Mooresville, Iredell County, etc.)
3. Create an exploratory committee to define the scope and jurisdiction, help manage the process, and, with the help of the FHWA, contact other communities that have done or are doing scenario planning
4. Identify roles and responsibilities
5. Review the tools and evaluate their advantages and disadvantages
6. Educate the public and stakeholders
7. Garner the support of elected officials
8. Tell a story of the benefits and costs associated with this effort
9. Orient existing and upcoming plans with scenario planning – ask the consultants who are going to begin work on the CTP and the Land Use plan to include a proposal for doing scenario planning

V. For More Information

Key Contact:	Loretta Barren
Address:	FHWA – North Carolina Division, Raleigh, NC
Phone:	919-856-4330
E-mail:	Loretta.Barren@fhwa.dot.gov

VI. Attachments

A. Agenda

Scenario Planning Peer Workshop July 20, 2005

8:00 am - 8:30 am	Registration, Coffee
8:30 am - 8:45 am	Welcome Loretta Barren, FHWA – North Carolina Division, Raleigh, NC Terry Arellano, North Carolina DOT, Raleigh, NC Tim Brown, Town of Mooresville, NC
8:45 am – 9:00 am	Workshop Orientation – What We’re Here To Do and Self-Introductions Warren Miller, Fountainworks, Raleigh, NC
9:00 am - 9:15 am	Overview of Scenario Planning Jody McCullough, FHWA – Office of Planning, Washington, DC
9:15 am - 10:00 am	Overview of Mooresville Transportation Planning Trends and Current Efforts Tim Brown and Chris Bauer, Town of Mooresville
10:00 am - 10:15 am	Break
10:15 am - 10:45 am	Dialogue Session Warren Miller, Fountainworks
10:45 am - 11:30 am	Peer Presentation: Response from Renaissance Planning Chris Sinclair, Renaissance Planning, Orlando, FL
11:30 am - 12:15 pm	Scenario Planning Tools Presentation Brian Betlyon, FHWA – Resource Center, Baltimore, MD
12:15 pm - 1:30 pm	Lunch
1:30 pm - 2:45 pm	Breakout Session: Brainstorming – How Do We Implement Scenario Planning? Warren Miller, Fountainworks
2:45 pm - 3:00 pm	Break
3:00 pm – 3:45 pm	Reports from Breakout Sessions
3:45 pm - 4:00 pm	Next Steps and Concluding Remarks Warren Miller, Fountainworks Tim Brown and Chris Bauer, Town of Mooresville Jody McCullough, FHWA – Office of Planning
4:00 pm	Adjournment

B. List of Participants

Presenters

Agency	Name	Email
FHWA – Office of Planning	Jody McCullough	jody.mccullough@fhwa.dot.gov
Town of Mooresville	Chris Bauer	cbauer@ci.mooresville.nc.us
	Tim Brown	tbrown@townofmooresville.net
Fountainworks	Warren Miller	warren@fountainworks.com
Renaissance Planning	Chris Sinclair	CSinclair@CitiesThatWork.com
FHWA Resource Center	Brian Betlyon	Brian.Betlyon@fhwa.dot.gov

Workshop Participants

Agency	Name
Centralina Council of Governments	Rebecca Yarbrough Blair Israel Dawn Qui
Iredell County Planning Department	Steve Warren Richard McHargue Don Bartell
Iredell County Transportation Advisory Board/Mooresville South-Iredell Chamber of Commerce Transportation Committee	
Lake Norman RPO (Gaston County Planning and Code Enforcement)	David Williams
(City of Lincolnton)	Brad Dyer
(City of Lincolnton)	Steve Gurley
(Cleveland County)	Bill McCarter
Mooresville Chamber of Commerce	Keith Klopp
NCDOT Transportation Planning Branch	Katherine English Terry Arellano Dan Thomas Rhett Fussell Matt Day Tyler Bray
Town of Mooresville Board of Commissioners	Franklin Campbell
Town of Mooresville Candidate for Board of Commissioners (at-large)	Ron Gimla
Town of Mooresville Engineering Department	Tonia Wimberly
Town of Mooresville Manager's Office	Walter Hitchcock
Town of Mooresville Planning Board	Dolores Sink
Town of Mooresville Planning Department	Jim King
Town of Mooresville Public Works	Frankie White John Finan
US DOT Volpe Center	Ben Rasmussen