

Jefferson Area Eastern Planning Initiative



THOMAS JEFFERSON PLANNING DISTRICT COMMISSION

Policy Report

FEBRUARY 21, 2002

Louisa & Fluvanna Housing Foundations
a Gateway
ene Future
Elmore, Piedmont Council of the Arts
m Bureau Greene Co.
Homebuilders
Women Voters
Tourism Council (retired)
Jefferson Partnership for Economic Development
onal Bank
e Citizen Representative
esville Regional Chamber of Commerce
Planning Commission
ersity of Virginia
e Neighborhood Assoc.
tesville-Albemarle Bicycle Alliance
Charlottesville Alumni Assoc.
Housing Alliance
anna Citizen Representative
esville Federation of Neighborhoods
ottesville Citizen Representative
n Ten Community Service Board
Boleyard, Southern Environmental Law Center
itizen Representative
anna Planning Commission
tesville-Albemarle School Business Alliance
ottesville Planning Commission
marle Housing Improvement Program
re & Charlottesville-Albemarle MPO
marle Planning Commission
, Jefferson Area Board for Aging
ville Area Association of Realtors
Environmental Council
tate Foundation
n Area Disability Services Board (Fluvanna Rep)
Jefferson PDC
wealth Transportation Board
members with outstanding dedication.

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*Special Thanks to **FHWA** staff Ivan Rucker of the Virginia Division, Felicia Young and Elizabeth Fischer of the TCSP program. In addition, Scott Carson formerly of the FHWA Virginia Division and Dave Roberts formerly of the Thomas Jefferson PDC were instrumental in shaping the vision and funding for this project.*

This report was funded by the Federal Highway Administration (FHWA) Transportation and Community and Systems Preservation (TCSP) grant program. Additional support was provided by the Thomas Jefferson PDC and the Charlottesville-Albemarle Metropolitan Planning Organization. The contents of this report are the responsibility of the Thomas Jefferson PDC and do not necessarily reflect the opinions of the Federal Highway Administration.

WHAT THE FUTURE HOLD?

Surrounding rural areas that make up the region are changing and growing rapidly. But the new economic and cultural presents. Others are concerned that the Blue Ridge Mountains and the historical towns are encroached upon by strip subdivisions. Most opportunities presented by growth, but unique qualities of this place could be lost.

And the Thomas Jefferson Planning District formed a Sustainability Council charged with managing resources so as to preserve them for future generations. The Council's consensus building effort supported 1998 "Sustainability Accords for a Sustainable Future." The Accords, summarized in a new way of thinking about the future and a new way to the conduct of daily life.

Planning Initiative

Under the Sustainability Accords, the Charlottesville-Jefferson Area Planning Organization and TJPDC are working to handle the transportation demands of population growth. The TJPDC won a grant from the Federal Highway Administration Transportation and Conservation (TCSP) program to conduct the Eastern Planning Initiative (EPI) for the City of Charlottesville and portions of counties Albemarle and Loudoun and counties Fluvanna and Louisa.

Primary objectives – to develop a set of alternatives and to be concurrently evaluating transportation alternatives in light of the Sustainability Accords; and to develop a regional vision of sustainable land use. The study clearly indicates the

If the region develops in a "business as usual" style, with recent development trends continuing in a dispersed pattern over the next 50 years –

- Single-occupant automobiles will dominate the transportation system
- Demands for a bigger road system could total \$1 billion
- People will be forced to drive long distances to accommodate daily needs
- Few if any people, regardless of age or ability, will have meaningful walking, cycling, or transit choices
- Air quality will suffer
- 70,000 acres of today's farms and forests will be lost

If localities commit to a regional landscape that encourages growth in strategically located, walkable, mixed-use communities while preserving rural areas –

- Road expansion can be limited to a human-scaled network that costs half as much as the dispersed system
- A host of well-utilized transit, pedestrian, and bicycle investments can be made using funds that would otherwise have to go to road expansion
- People can drive shorter distances or choose walking, cycling or transit to get to jobs, shopping, and leisure activities
- Overall roadway congestion will be reduced from 44% predicted in the dispersed scenario to 29%
- Air quality will be preserved
- Nearly 55,000 of the 70,000 acres of farms and forests lost in the dispersed scenario will be saved

This study presents alternative land use and transportation patterns that achieve the Sustainability Accords, and identifies key success factors needed for a sustainable future. The EPI Advisory Committee strongly encourages localities in the region to consider seriously the implications of land use decisions as shown by this study, and to build a shared vision for the future.

tain strong ties between the region's
tribute the human population in ways
ources
itat
nd quantity are sufficient to support
ns
re-use of developed land and promote
cale for land uses
land
d economical transportation
nd employment opportunities
rticipation in neighborhoods and

- *How will we get there?* – What steps are needed to move the region from where it is now to the desired types of communities and growth patterns?

These three questions helped organize the Advisory Committee's meetings and the public workshops. The first workshop was held on April 8, 2000. The public reviewed the existing community types in the region and made suggestions for improving community design to support a better quality of life. During the second workshop on September 9, 2000 participants envisioned ways to organize communities in regional patterns over the next fifty years. Based on the ideas from this workshop, the project team tested several land use and transportation scenarios using the CorPlan computer model developed for the study. Local residents commented on the scenarios during a series of workshops held the second week in February 2001. During the last workshop, an open house on June 2, 2001, the public had a chance to respond to the EPI findings and proposed action steps.

This report presents the study findings and proposed policy direction. Details of the process are found in the EPI Technical Report and Handbook, which are available, along with free copies of the CorPlan model, from the TJPDC and FHWA.

Baseline “Business As Usual” Scenario

The region's urban development prior to the 1950s was limited to downtown Charlottesville, the University of Virginia and compact neighborhoods nearby. Since then, almost all development has been suburban, most spreading from Charlottesville along US 29 north and US 250 east, and some around small towns like Palmyra. The Advisory Committee wanted to understand the impacts of this type of development on quality of life. As a basis for measuring the consequences of development alternatives, the project team first inventoried existing conditions (Exhibit 2) and prepared a scenario in which recent trends would continue to the year 2050 (Exhibit 3).

The Virginia Employment Commission predicts the total population in Charlottesville and all of Albemarle, Greene, Louisa and Fluvanna Counties will increase from around 180,000 in 2000 to 330,000 by 2050. The “business as usual” scenario assumed all of the new residents would live and work in suburban type

Sustainability Accords (Ed.)

ee, made up of elected officials, study leaders from business, development, community groups, met nine times and workshops between January 2000 and ttee worked on three key questions:

what types of communities do we want e year 2050?

What areas in the region are suitable for nd what areas are off limits?

ent would continue to spread along the out of Charlottesville. Developed land in from 160,000 acres to 280,000 acres.

would create congestion, forcing the transportation (VDOT) to widen over 170 proposed US 29 bypass currently under be completed, as would an extension

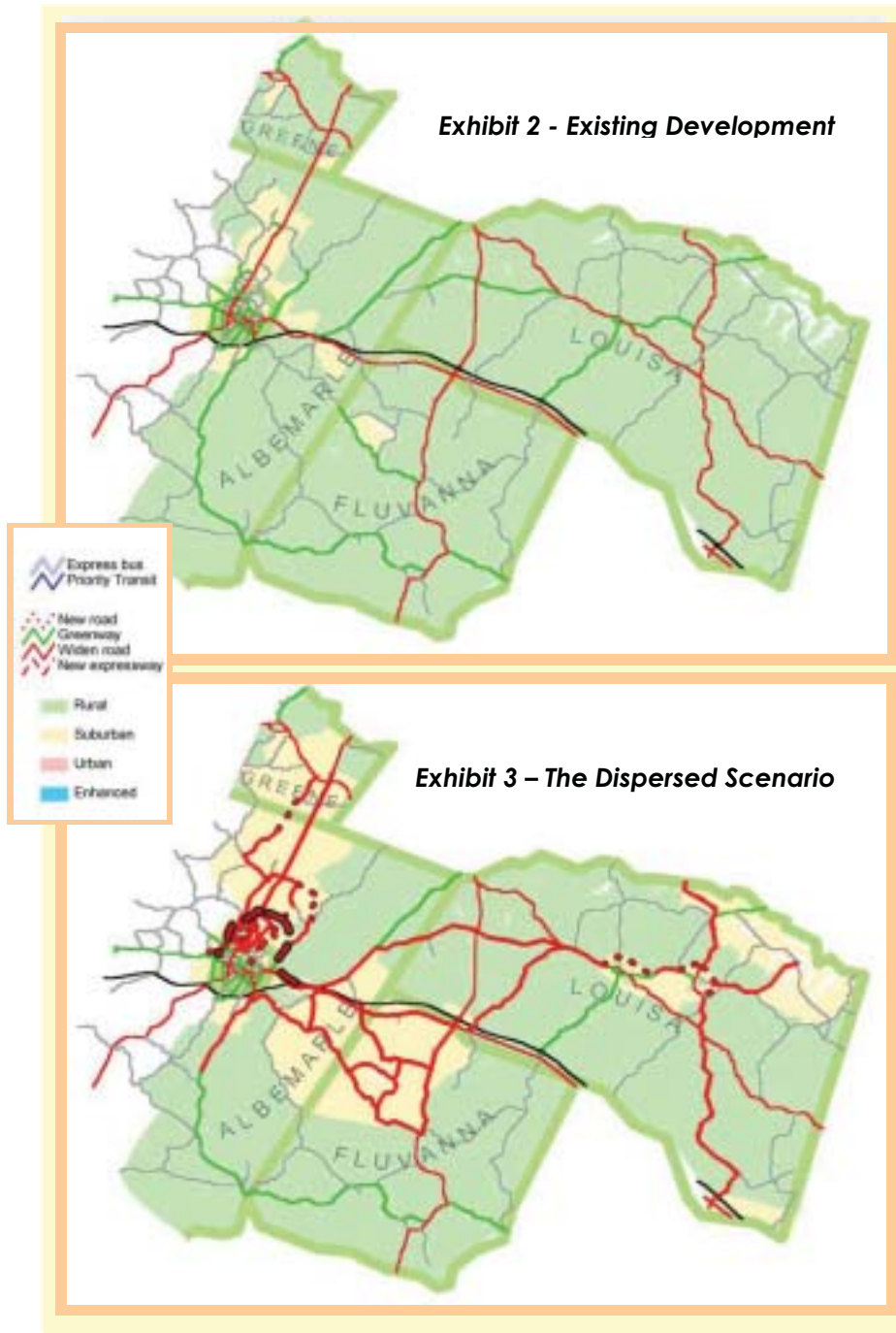
Because dispersed growth does not t, no major expansion of the region's would be feasible.

Commercial development would extend ersville and east on US 250 to Zion would be widened to at least six lanes, als for access to shopping and office as would not be connected, forcing rterials to make even the shortest trips. eriods would get longer, and lunchtime ak period because most workers would Nearly half (44 percent) of the miles ongested.

e in single-family-home subdivisions or eparate from adjacent development. ble to walk to schools or parks; they hool bus or be driven everywhere, even le with disabilities and non-drivers would stly public van services.

ould be replaced by cluttered views of ore than 70,000 acres, 15 percent of ests, would give way to suburban g once-peaceful country roads.

in small towns and villages like Louisa, e would diminish as people traveled to ousing, and shopping areas would be oss of activity in existing towns and the nnections in developing areas, there nt major gathering places other than e and the University of Virginia. hese places difficult to access, adding ple who wanted a sense of community.



VE?

the Advisory
the question
responses
Accords:
ould have
d work in
at are built
e gathering
e region's
in harmony
natural

"I know I'm in a really livable neighborhood when I see people's pet cats out sunning themselves in the yards. It means the traffic is slow and the people are friendly, making the neighborhood safe for everyone."
-Greg Jackson, EPI Advisory Committee

Urban	Suburban	Rural
✓ Residential	✓ Residential	✓ Small town
✓ Mixed-use	✓ Mixed-use	✓ Village
✓ University/institution	✓ Retail	✓ Residential
✓ Parks/recreation	✓ Office	✓ Mixed-use
	✓ Institutional	✓ Industrial
	✓ Industrial	✓ Parks/recreation
	✓ Parks/recreation	✓ Agricultural/forestal
	✓ Conservation	✓ Conservation

**Exhibit 4 - Community Elements
(Enhancements proposed for italicized elements)**

The similarity of the workshop's recommendations with the Sustainability Accords and the Advisory Committee's description of ideal communities is quite noticeable, suggesting a broadly held, common notion of livability. Recommendations from two other initiatives in the region, Albemarle County's Development Areas Initiatives Steering Committee (DISC) and Charlottesville's Commercial Corridor Study, corroborate this common notion.

Based on the participant's suggestions, the project team created enhanced community element designs that would be used later

nts

ory of the region, the project team
t types of communities such as the
lottesville and the University of Virginia
kes mixed-use community along US 29,
s (Exhibit 4). The team drew snapshots
ings, open space and streets were
l quarter mile area (a five minute walk)
e were called community elements.

, people evaluated how the existing
the Sustainability Accords. Community
wn Charlottesville, and rural small towns
stent with the Sustainability Accords.
rip commercial retail along US 29 and
near rural interchanges needed
op participants offered the following
o make these community elements
e livable and sustainable:

- and distinguishable boundaries
- and variety of activities
- open spaces
- h scale
- h friendly

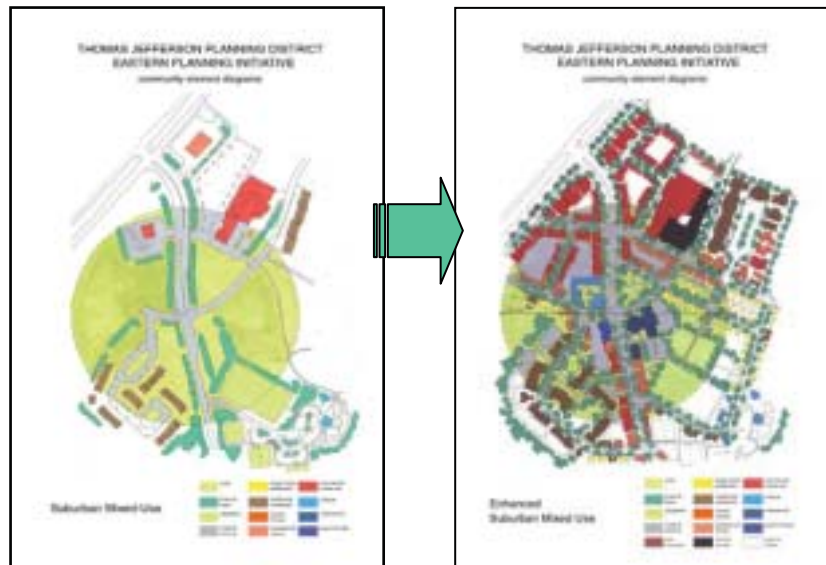


Exhibit 5 - Existing and Enhanced Community Element

development scenarios (Exhibit 5).

enhancements made to the suburban community center, or school, shown in the revised version provides a focal point. The enhanced street network enhance the human scale and brings closer together. The proximity of a number and variety of activities within a quarter mile is available to the public and is available everywhere in the community element. By using suburban designs, development and density at a suburban density while achieving the walkability of more urban elements.

enhancements made to each of the community elements shown in Exhibit 4. Diagrams, photographs and illustrations of the features in the community elements are included in the Technical Report. The complete set of diagrams shows the building blocks to create a range of development scenarios.

Elements to Communities

Describe how buildings, open space and streets are clustered within a quarter mile area. The diagram shows communities, which in turn connect to each other.

The quarter-mile enhanced suburban elements can be clustered like puzzle pieces into a neighborhood the size of downtown Charlottesville and its surrounding neighborhoods. The exhibit shows a group of community elements connected with an enhanced street network in the middle. The elements interconnect through walkable connector streets, enabling the formation of a community street network for the community. Thus a community street network connecting communities.

Elements of traditional suburban elements include a main entrance to the main road. This type of design makes it virtually impossible to create an active community. When a region develops this type of design is the disconnected, auto oriented design, with its attendant consequences.

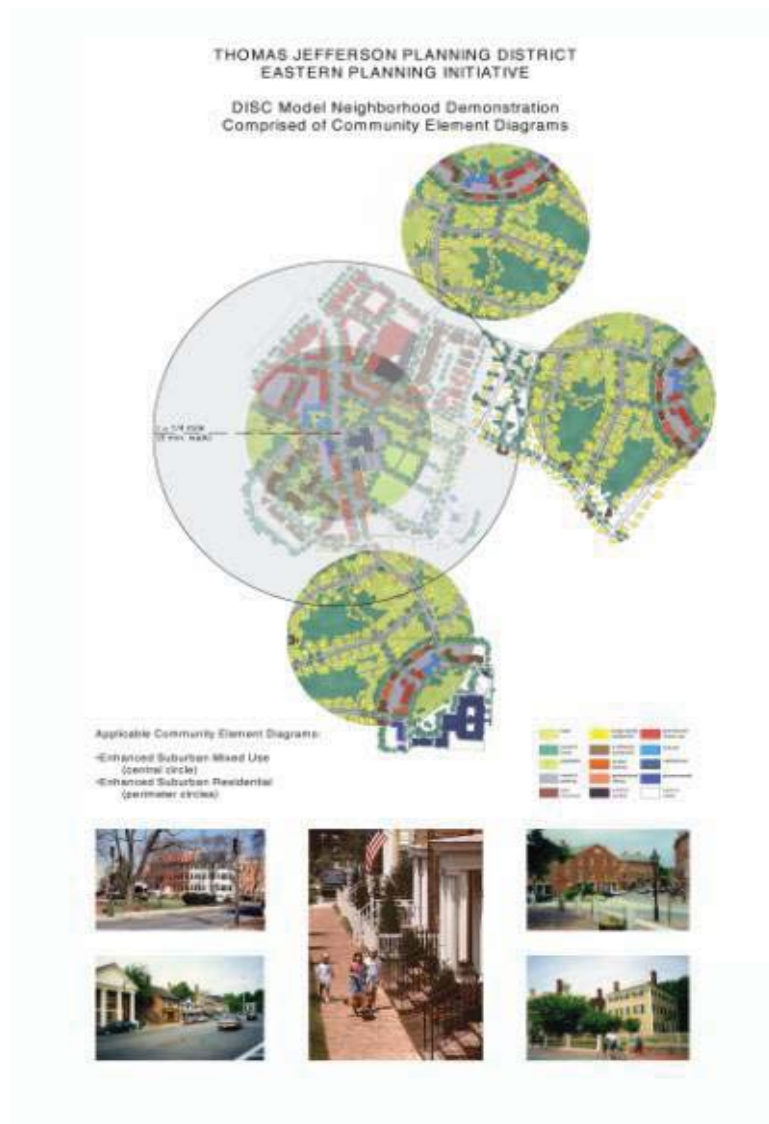


Exhibit 6 – Connecting the Elements to Form Communities

LIVE?

ios

y Council, the Albemarle County
atives Committee, the EPI Advisory
c clearly want something different from
ario. The community elements from the
aps" from a second workshop helped
pp three land use and transportation
y differ from business as usual.

e

provide a context for how desirable
t. The next question is; "Where should
uilt?" Answers started coming from a
d during the second public workshop.
colored dots representing each of the
nt classes (urban, suburban, enhanced
age and rural). The dots were sized to
ter of community elements, with each
acity for residents and jobs. Each group
udy area map to accommodate the
wth of 150,000 projected by the Virginia
n (later on, the team developed
ower growth for comparison).

ap to reach a goal such as preserving
rket demand, balancing tax revenues
ting a regional rail system. Participants
through a variety of dot combinations.

playing the game chose traditional
ots. All placed urban or enhanced
P north of Charlottesville and US 250 east
own/village dots on existing towns to
preserve the characteristics of those
urban / enhanced suburban dots on
crossroads. One group placed dots
a rather than Zion Crossroads. Another
ardsville rather than Ruckersville.

From Dot Maps to Regional Scenarios

Based on the dot maps, the project team used the CorPlan computer model developed for the EPI to create three regional development scenarios called Town Centers, Urban CoreL, and Urban CoreM (Exhibits 7, 8 and 9). The team then developed traffic projections and transportation systems for each scenario using TranPlan, a four-step traffic model similar to the Charlottesville-Albemarle MPO's MINUTP model. All the scenarios excluded development on environmentally sensitive areas such as severe slopes and floodplains, or land protected by policy, such as conservation easements and historical districts.

All three scenarios include a new urban type community located in the Hollymead area along US 29 near the airport. Urban communities fill the US 29 corridor from the University of Virginia (UVA) to Hollymead in the Urban CoreL and Urban CoreM scenarios, which require extensive redevelopment along US 29. The Town Centers scenario envisions enhanced suburban communities around existing subdivisions that replace or preclude strip commercial centers. All the scenarios assume urban or enhanced suburban communities in Pantops east of Charlottesville. The Southwest Mountains bound urban development east of Pantops and north of I-64.

All the scenarios assume some urban or enhanced suburban community development in selected areas outside of Charlottesville-Albemarle. The Town Centers scenario includes enhanced suburban development areas of around 3,000 acres (slightly less than five square miles) at Zion Crossroads and Ruckersville. The Urban CoreL scenario assumes urban development in and around the Town of Louisa, while the Urban CoreM scenario assumes urban development in Zion Crossroads and Stanardsville.

Two caveats about the scenarios are noted: 1) the traffic model does not account for congestion-relieving benefits offered by such measures as overpasses and grade separated interchanges; and 2) the proposed new roads in the scenarios report were developed by the consultant for sketch purposes only and were not reviewed for their location, street design, or their community and environmental impacts.

Exhibit 7 Town Centers Scenario



Exhibit 8 Urban CoreM Scenario

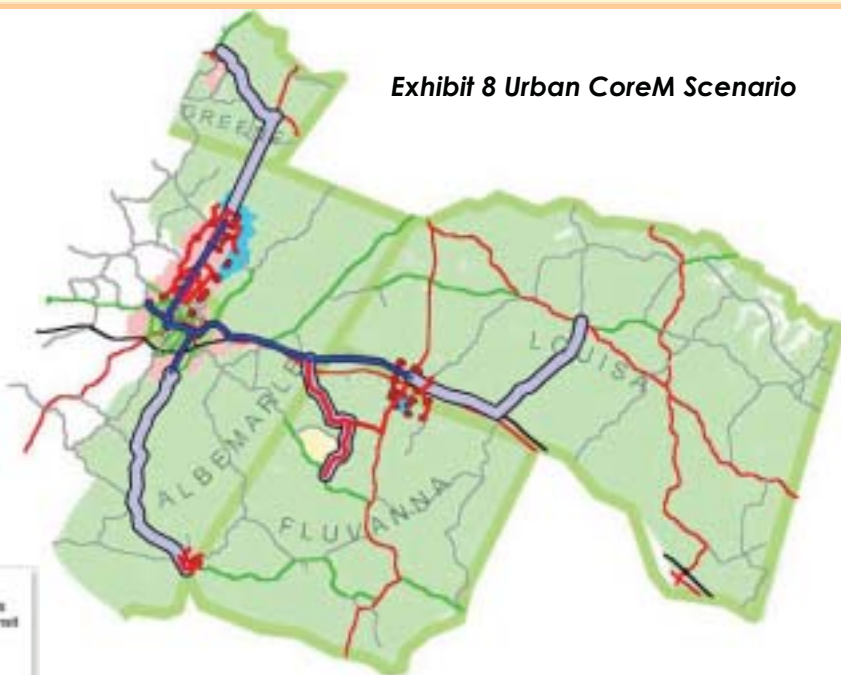
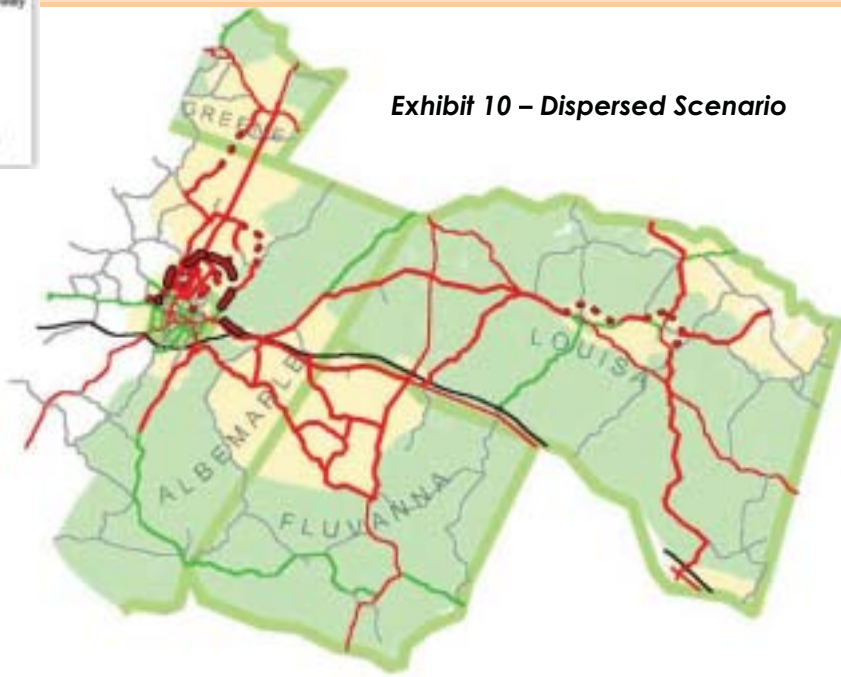


Exhibit 9 Urban CoreL Scenario



Exhibit 10 – Dispersed Scenario



Communities

Community street system is integral to the CoreM and Urban CoreM scenarios. Based on the "Development Areas Initiative" (DISC) scenario, neighborhood streets that connect to main streets and avenues, which in turn connect with main streets and avenues, are designed primarily to provide access to communities. Main streets and avenues are designed to connect communities and provide access to the community's commercial and residential areas. The community street system is designed to support walking, transit and automobile travel.

Streets already exist in Charlottesville. Main streets and avenues connect several communities; the streets serving downtown commercial and residential areas are neighborhood streets.

Streets connect urban communities from the City north to Pantops, as well as within Zion Hill in the Town Centers scenario. But the connections of Routes 29 and 250 between the urban/rural areas is controlled to avoid travel outside of designated areas.

Support Transit

Streets in enhanced suburban communities and rural areas increase the viability of transit. As the bus system can be extended and improved. This sets the stage for possible

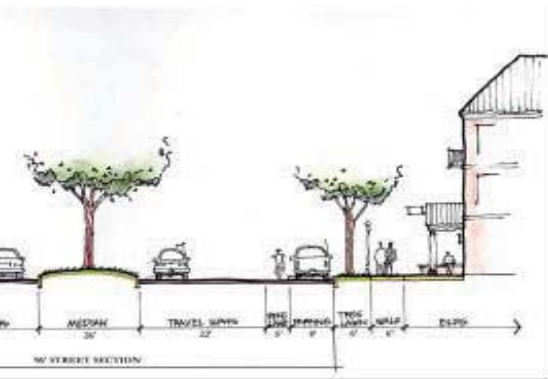
Community-Oriented Streets and Boulevards

The street network should always serve the desired community characteristics, not the other way around. The proposed boulevards –

- Connect closely spaced urban and enhanced suburban communities
- Fit with the size and scale of the communities they serve
- Are no more than four lanes wide
- Are designed for speeds of no more than 35 miles per hour
- Are spaced no more than a mile apart
- Integrate features like raised pedestrian crosswalks, bike lanes, and walkable intersections
- Carry no more than 30,000 vehicles per day
- Feature bus service at least every 15 minutes at peak periods and every half hour other times
- Are lined with buildings placed close to the street
- Include on-street parking, separating pedestrians from traffic



Two Lane Streetscape



Four Lane Cross Section

Commercial Corridor Study, Volume 1

Exhibit 12 – Hollymead Town Center Sketch

This vision for a mixed-use, walkable community serving the Hollymead area of Albemarle County adjacent to US 29 was created by Walter Kulash of Glatting, Jackson, Inc. The design includes a network of streets, sidewalks and paths framing a vital town center that includes homes, shops, workplaces, and entertainment centers. Grade-separated overpasses and underpasses on Route 29 help separate local from through traffic, facilitating the creation of the center.

Boulevard Characteristics

Access, and Choices: Alternatives

Urban CoreL and Urban CoreM scenarios are alternatives to the dispersed scenario. Rather than commercial and office centers along major roads, the scenarios cluster working, shopping, and recreation to bring people together. Walking is convenient and enjoyable, encouraging people to walk about. Because so many are walking, people live with people and not nearly as far apart. The lunchtime rush hour could be a thing and afternoon rush hours can be avoided. The travel model estimates that total miles driven will be congested with dispersed communities of the Town Centers compared to the Urban CoreL and Urban CoreM scenarios (Exhibit 13). This is quite an improvement over congestion under the business as usual scenario.

People will be able to live in communities. People will continue to be free to travel (in fact, more countryside will be available for those who want to live in rural communities or the urban core).

Preferences expressed at the workshops, the idea is that any communities feature higher densities than those in downtown areas. It would have been possible to accommodate all the population growth in a tighter area, but they would have required taller buildings and more parking than they wanted. The big difference made by the clustered communities in this study is due to the interconnected community street network. In the interconnected community street network, activities in close proximity, people will walk or take short vehicle trips to places that are not possible nowadays.

Land use will appear to the same extent as they will under the dispersed scenario. Less than 15,000 acres of land will be developed, much less than the 70,000

acres lost under the dispersed scenario (Exhibit 13). Land use development and design guidelines, using the urban and community elements as a context, can provide a framework within which unique communities can develop and flourish.

The sense of community supported by thoughtfully designed places can help unite neighborhoods and the region. Exhibit 13 shows how the scenarios compare using measures based on the 1998 Sustainability Accords. On all measures, the Town Centers, Urban CoreL and Urban CoreM scenarios compare favorably to the Dispersed, or business as usual scenario.

Measure / Sustainability Accord	Dispersed	Town Ctr	CoreL	CoreM
Pct. Farms and Forests Retain resources/habitat/farms/forests	55	64	65	65
Pct. Developed Retain resources/habitat/farms/forests	45	36	35	35
Pct. Living In Clustered Communities Optimize use/cluster/human scale	13	61	68	68
Pct. Non -auto Trips Transportation Alternatives	4	15	18	18
Annual Gallons Gas Consumed (billions) Conserve Energy	155	121	110	114
Pct. Travel Congested Employment / Education Access	44	27	20	21
Water Quality and Quantity Water Quality and Quantity	Poor	Good	Good	Good

Exhibit 13 - Scenario Comparisons

Characteristics

More detailed comparison of the travel scenarios. There are some caveats to this that should be noted. The results are from a model that is limited in its ability to estimate the effects of design, such as pedestrian-friendly characteristics, such as transit ridership. Policy implications, such as controlling the availability and cost of transit, can further stimulate transit ridership. In the model, transit trips were combined in the model; the nature of the streets and boulevards, and transit communities, it would be useful to test transit trips, perhaps between one and five miles, possibly allocated to bicycles. While the ongoing research on these relationships in the model results, the EPI study may still reflect the effects of walkable, interconnected transit study is recommended as the data and research on these issues improve.

Results still clearly indicate that the Town Centers and Urban CoreM scenarios compare favorably, including congestion, despite their lack of highway improvements. The region can reduce vehicle miles traveled by 20 to 30 percent, reduce congestion by 40 to 50 percent and congestion levels by more than half the price of highway improvements as usual. The Town Centers scenario requires less investment over 50 years versus \$1 billion for the Urban CoreM scenario. The highway cost savings for the Town Centers and Urban CoreM scenarios can be used for transit improvements.

	Dispersed	Town Centers	Urban CoreL	Urban CoreM
Total person trips (000s)	1,900	1,900	1,900	1,900
Vehicle trips (000s)	1,300	1,100	1,000	1,100
Walk trips (000s)	73	274	322	341
Vehicle miles traveled (000s)	15,700	12,300	10,900	11,200
Vehicle hours traveled (000s)	730	450	370	380
Average speed (mph)	22	28	29	29
Pct. VMT congested	44%	27%	20%	21%
Highway improvement costs (millions)	\$ 1,040	\$ 460	\$ 320	\$ 320

All statistics are reported for an average weekday in 2050
Data from TRANPLAN assignment report

Exhibit 14 - Travel and Impact Comparisons

Note: The traffic model does not account for congestion relieving benefits offered by such measures as overpasses and grade separated interchanges.

What the Community Thinks

The Advisory Committee presented the Dispersed and three alternative scenarios to the public during a series of public workshops held in February 2001. Participants were asked during the first part of the workshop to suggest and agree on land use and transportation goals. Once again, the responses supported the 1998 Sustainability Accords.

During the second part of the workshop, participants reviewed and commented on the scenarios. No one favored the Dispersed scenario, indicating significant support for change.

Although not asked to choose among the scenarios, participants indicated some preferences: the Town Centers scenario was generally supported in the Greene, Louisa and Fluvanna workshops and the Core scenarios were favored in Charlottesville and Albemarle.

IS THERE?

Support for change, the next question for to answer was – What steps could the business as usual? The Committee agreed provide a good policy framework for governments, organizations, private have a stake in developing the region the vision and implement it their way. Recommendations are intended to stimulate working together rather than as a

Steps for Long Term Change

strongly believes that a new direction is as usual. Through a process of regional should act on the key success factors ge (Exhibit 15) in order to launch the sustainable land use and transportation

capsulate the major issues that must be d in order for long term planning to e following topics:

- development areas
- villages
- rd edges
- nced suburban communities
- structure

discusses methods for addressing each

Agreement on the Future of The Region

To support local strategies for directing growth, the EPI Advisory Committee proposes that local governments establish an agreement that will:

- Define the amount of development each locality is willing to and interested in absorbing;
- Identify the placement of that development;
- Create strategies to phase in supportive infrastructure such as roads, transit services, and water and sewer systems.
- Allow localities to discuss and resolve any circumstances that might affect the agreement.

Specifics of the agreement are provided in Appendix B.

Framework for Guiding Growth

EPI Advisory Committee member Bruce Appleyard, a Transportation and Land Use Planner for the Southern Environmental Law Center, developed a proposed framework the region could consider to coordinate land use and transportation, included in this report as Appendix C.

ated	Urban growth should only occur in the development areas designated in each of the region's local comprehensive plans. The EPI suggests strategic locations for those areas. Rural area development should be limited to recreational, agricultural and forestry uses. Targeting and phasing of development should be carefully monitored; plans should be updated with five to ten-year horizons.
ns and	Small communities are built at a scale that provides a viable, high-quality alternative to urban communities. To ensure this quality of life, localities should designate small town/village areas. Development guidelines for these areas can follow the patterns illustrated in the small town and rural residential community elements of the EPI. Small town / village areas should not exceed 1,500 acres in size, an area slightly larger than the Town of Louisa. Should a locality want to increase the size of a small town / village, then it should be reclassified as a development area in the local comprehensive plan.
in hard	Each designated urban development and small town/village area should have definite boundaries that clearly distinguish urban from rural areas. To the extent possible, the boundaries should follow natural features, such as topography and rivers. The community street network can also help define these boundaries.
enhanced es	The act of designating development areas with hard edges by itself will not ensure walkable, interconnected communities. To make such communities real, development in the designated areas should follow the building / open space / street context illustrated by the EPI's urban and enhanced suburban community elements.
e	Public infrastructure required by urban development, including transportation, water/sewer, stormwater, open space / recreation and parking, should be targeted to designated development areas. VDOT should support localities in proactively planning and building the connections within the designated development areas, not waiting until areas are under development before building the community street system. In addition, any transportation improvements made in a rural area should be designed to limit access, thereby discouraging inappropriate suburban development. Local comprehensive plans and zoning ordinances should be updated to further restrict development along rural roadways.
s	Protecting rural land adjacent to designated development areas is only part of a comprehensive rural preservation effort. A regional rural conservation strategy is needed that promotes agricultural and forestry industries and protects environmentally sensitive and important lands. Localities should adopt a regional conservation plan that includes a GIS inventory of protected lands and resources.
equity	Regional development should balance economic benefits against fiscal burdens fairly for each locality in the region. Localities should work together to negotiate strategies with each other, the Commonwealth, and the private sector to ensure each jurisdiction is economically healthy.
r	The diversity of jobs, housing types, and transportation choices in the designated development areas should result in communities that accommodate a variety of income levels. Strategies such as inclusionary zoning, affordable housing programs, and location-efficient mortgages should be explored to ensure the net cost of living is sustainable for all residents.

Exhibit 15 – Key Success Factors

Development / Small Town Areas #1, #2 and #3

importance, such as regional accessibility, the EPI suggests seven possible locations for development areas and ten locations for village areas (Exhibit 16). There are a number of localities to direct urban growth into designated areas, including density bonuses, and zoning. The strategies are summarized



Designated Development Areas & Small Towns

Urban and Enhanced Suburban Communities (Key Success Factor #4)

The EPI's community element diagrams and inventories provide a community development vocabulary for the region to use and expand as needed. The layout of streets and open spaces in the element diagrams illustrate expected scales and patterns. The data tables in the community element inventory identify the mix of desired land uses numerically, providing information such as the average percentage of land devoted to each use and typical floor-area ratios. Localities will need to carefully review and understand the inventory information before using the community elements as a context for land development regulations.

The urban and enhanced suburban elements in the vocabulary are recommended for the designated development areas. The Advisory Committee and the public favored these elements because they support a high quality of life in an attractive and efficient manner. They meet the 1998 Sustainability Accords and build on the concepts recommended in Albemarle County's DISC effort and the Charlottesville Commercial Corridor Study.

As illustrated in Exhibit 6 on page 5, communities are made up of a combination of interconnected community elements. Subarea plans prepared for each of the designated areas can specifically identify how the community elements will interconnect given the specific conditions in the area, such as existing development and environmental features. The subarea planning process in the Albemarle DISC report describes steps localities could follow. The subarea plans can become part of the local comprehensive plans and zoning ordinances can be updated accordingly.

Infrastructure Investments

5)

Infrastructure plays a major role in locating and community development. The location of infrastructure is influenced by transportation access and water and sewer service. The proximity and density of infrastructure within urban areas is influenced by the street network and open spaces.

Infrastructure Investments

Obstacles to overcome in building urban communities is building the community infrastructure elements that link parcels for a number of reasons, most notably land use patterns that require on-site infrastructure and shift infrastructure costs onto the private

Developments usually focus on the provision of water retention and open space. The "on-site" requirements force buildings and discourage connectivity, ultimately the pieces don't fit together. While the goal is to reduce local infrastructure costs and increase open spaces.

One problem is the fact that developers have little control over infrastructure beyond their site. Incentives to build connections because of the benefits of adjacent sites.

In connected communities, localities should focus on assuring "community" as apposed to individual lots. This begins with establishing designated subarea plans for those areas. Subarea plans can locate the community infrastructure network onto property maps, and identify water retention areas.

Infrastructure will not materialize unless there is a way to pay for it. The responsibility for making all this infrastructure work. VDOT and localities must work

together to create policy changes at state and local levels, as well as new ways of working with the private sector to finance, design and build a sustainable transportation system and other infrastructure elements that support the desired land use plan.

These strategies are not easy to implement, however. The programming of state transportation funds is a complex, sometimes controversial process. At the local level, paying for infrastructure investments with revenues from property taxes means that existing residents must help support the infrastructure for new residents, and localities may be risking their investment if development doesn't occur as anticipated.

One way to avoid the timing problem is for localities to issue bonds for the infrastructure. The bonds are then paid by developers and/or through special assessments levied on properties. A way to avoid risk is to stage the infrastructure development, providing only what is needed for active developments. This strategy is rare in Virginia, but not uncommon in other states.

Regardless of the strategies developed, if community infrastructure is to be built properly, localities and VDOT will need to refine local land development regulations and the existing funding system. Making these types of investments will change the way we spend our transportation dollars. But the EPI results indicate we will spend far less in the long term by investing in well-designed community-oriented infrastructure.

Regional Transportation Investments

Important steps the MPO, localities and VDOT can take to plan and program regional transportation investments include the following:

- 1) Target and prioritize areas for growth (for ideas about how to achieve this goal, see proposed Regional Agreement in Appendix B and Framework for Guiding Growth, Appendix C).
- 2) Develop land use and transportation plans that support the creation of quality communities. This puts a priority on multimodal transportation systems that serve planned

as, carefully designed to fit with the
of the communities they serve.

and transportation plans, creating the
tives, regulations, and funding streams
ment of quality communities.

ate transportation plans and projects in
d land use plan, placing a priority on
systems to accommodate more types
ding new roads.

port, a community network exists in the
sity of Virginia development areas. To
s or core scenarios, the network needs
e US 29 North development area and
uilt from scratch in the others. The
evards, main streets, avenues and
well as bicycle, pedestrian, and transit
ed in the subarea plans and the MPO

Transit: An Immediate Investment

Public transit systems include:

on, design, and mix of communities;

ucture investments to make all transit
tions walkable; and

service.

ently adopted Charlottesville Transit
City's improvements in transit frequency
ge are paying off; the system is seeing
in ridership since the late 1990's, in
nds in many other cities.

d Urban Core scenarios, with the
nity street networks, provide the
nd 2. But changes in the way we fund
ts must be developed to implement
ent, and long-term funding must be

provided for transit and pedestrian systems. Reprogramming
current road projects, as the City has done in recent years, and
developing other public and private programs can achieve this.
Businesses can play a role in supporting transit that serves their
communities, as can private developers. But in the end, a
permanent shift in priorities will need to take place in order to
correct a long-standing imbalance between transit and road
funding.

Priority Transit: Planning for the Long Term

The EPI assumed existing surface transit would be extended in the
Town Center and Urban Core scenarios, building upon the
investments the City has already committed to make according
to the Charlottesville Transit Development Plan. In addition, the
study examined the potential for developing priority transit such
as rail or bus rapid transit systems in the long term.

Priority transit vehicles operate in their own right of way to avoid
auto congestion and provide competitive travel choices. Priority
transit is well suited for corridors with long trips and pedestrian
oriented development around stations and stops. Both the US 29
and the I-64 / US 250 corridors are candidates for priority transit if
the Town Center or Urban Core scenarios are implemented.

Options include designating or adding relatively low cost
roadway lanes whose access is restricted to buses and high
occupancy vehicles (such as the Eugene, OR busway pictured
below) as well as more expensive rail transit systems.

Travel demand forecasts for the Town Centers and Urban Core
scenarios estimate about two million riders per year would use
light rail transit along US 29 in the year 2020. The estimated capital
and operating cost for light rail is roughly \$26 million per year,
assuming all the right of way would have to be purchased. Bus
rapid transit along US 29 would attract 1.3 million riders and cost
around \$14 million per year, again assuming new right of way was
needed.

The cost-per-rider results suggest that either option is feasible and
planning for them makes sense, although the facilities might not
be built until the latter part of the planning horizon. First steps
toward priority transit need to be taken now if the region wants to
pursue it in the long term.

...s for priority transit include:

...it oriented development along the US
...O corridors

...al bus fleet and routes

...nsit envelope (a right of way that can
...me sort of priority transit) into the next
...onal transportation and land use plan

...ned on designated development areas,
...e the federal New Starts Alternatives
...to secure federal funding for priority
...a New Starts proposal, the region must
...ess on achieving its land use goals,
...rity transit rights of way, and show
...nts in the existing transit system. The New
...e around ten years to complete should
...government decide the investment is



...mproving Traffic Flow and Limiting
...nt

...rem should not extend into rural areas,
...opment areas. Access management is
...r roadways that connect development
...adjacent to each other, such as the
...Zion Crossroads. Controlled access
...possible only at interchanges, such as I-
...ass, are expensive investments. Less
...gement strategies, such as controlling
...minizing medians could be incorporated
...nd into plans for roadways between
...or example, access management
...ion of US 29 between Ruckersville and
...lp move inter-regional traffic and limit
...s.

...s the community street system will help
...ajor corridors, but it may not result in a
...regional traffic. Controlled access lanes
...ay along the portions of US 29 in the
...ould provide this type of regional

Top:
Busway,
Eugene OR



Right:
Trolley,
Portland
OR

es and high occupancy vehicles could access lanes to provide fast multimodal development areas. Once the localities in a vision for the shape of the future, a could be developed to plan coordinated improvements along US 29.

and access from Zion Crossroads to lanes to the interstate could be occupancy / express bus lanes. In addition, tioned to a controlled access facility, gement strategies.

and Sewer Investments

Water Resources Advisory Committee v of the designated development area d that, based on existing or planned ly should be sufficient for all of the the possible exception of Ruckersville. g findings from the DISC report, the hat the development area concept act on water quality than the Dispersed ed regional water and sewer study is n the findings of the committee. The ncluded in the EPI Technical Report.

Findings

del indicate there are congested streets xample, some eastern streets close to er vehicles in the dispersed scenario, around the city, but more traffic comes and rural eastern areas due to the residential development. In the Town scenarios, traffic is spread more evenly nce corridors, and some is reduced n outlying areas. The bottom line: while n is likely for any land use pattern, the mmunities, and transit options in the scenarios provide the most effective ce traffic congestion.

- Boulevards and other community streets should not be any wider than four lanes, with buildings close to the street (no more than 20 feet from the edge of pavement). Sidewalks and bike paths should be provided on both sides and landscaped medians and bulb-outs provided for easy pedestrian crossing.
- A major investment in regional light rail would not be cost-effective immediately, but may be by the year 2050. However, it is important to understand that the land use decisions made today will make or break the potential for any type of rail or priority transit system in the future. If the localities in the region want to be able to choose priority transit in the future they must focus now on creating a land use pattern that could support it.
- In the near term, the region should significantly expand its fixed route transit system and increase the frequency of service.
- Boulevards and other community streets should be transit friendly, with transit vehicles having priority along outside lanes of four-lane roads and at signalized intersections. These lanes could later serve as a resource for priority transit systems.
- Transit service should be provided on each boulevard, with at least 15-minute headways during peak periods and 30-minute headways during off-peak times. Transit along avenues and neighborhood streets should be designed to serve the activities within the development areas.
- When the region agrees upon designated development areas, a multimodal major investment study will be needed for the US 29 corridor from some point north of Ruckersville to the existing Route 29/250 bypass to determine how to effectively accommodate through traffic given the proposed designated development areas and community street system. This would differ from previous studies because the assumptions about land use, access management, transit ridership and pedestrian and bicycle access would be markedly different under a new vision for coordinated transportation and development. It could explore ways to improve the existing corridor through options such as express lanes for through traffic, pedestrian-friendly intersections and

ted transit access, and strategies to
cle trips in the context of the updated
PO 2025 Long Range Plan update could
tcomes for this type of study.

the US 250/64 corridor, including the US
e City is reduced in the Town Centers
due to two factors: 1) the boulevard
and northern parts of the study area
ghout the region more efficiently, thus
the US 250 corridor; and 2) the improved
and jobs in the Zion Crossroads
duces the travel demand between that
ville, noticeably reducing future traffic
and I-64 compared to the dispersed
me congestion on the US 250 and I-64
converge with Route 22/231 at the gap
ountains, but solving it by adding
ay capacity (such as a bypass around
ew lanes within it) would not be cost-
e better to consider this as a long-term
ransit.

reet connections may be needed
nd Pantops, but no major roadway
be needed along the rural section of
an possibly widening it to four lanes
e and Zion Crossroads as the latter area
nd demand management strategies
viable alternatives to road expansion.

posed US 29 Bypass extension in the
enough to pay for nearly the entire
d transit system proposed in the Town
ore scenarios. The total cost of the Town
e scenario improvements is half that of
rio, yet congestion levels are lower.
mmunity street network, transit, and
cle systems that support designated
an result in significant cost savings, less
e and congestion, and a higher quality

Rural Preservation

(Key Success Factor #6)

Several localities have developed rural preservation inventories, plans and strategies that can serve as a basis for a regional rural preservation plan. A review of the region's current rural preservation strategies and those used by others (summarized in Appendix A) highlight several that are applicable in the region:

- Zoning and subdivision ordinances – Perhaps the most important available rural preservation tool is zoning. Localities have a tremendous amount of latitude to control development through zoning ordinances as long as they can demonstrate that the ordinance is a legitimate exercise of government. Albemarle County's down-zoning of some rural areas in 1980 to protect its water reservoir is an example of what is possible through zoning ordinances.
- Conservation easements – Legal agreements are reached with property owners that limit the type of development on the property and/or enact preservation strategies such as riparian buffers along streams. These easements are currently used in the region; Albemarle's zoning ordinance provides for the establishment of conservation easements through clustering houses in rural preservation districts.
- Purchase of property – Counties purchase property outright and control its use. This is the most expensive strategy, and the most certain.
- Purchase development rights – Localities purchase the development rights of property, not the property, thereby lowering public costs. This strategy is enabled in Virginia but used in only a few areas.
- Tax incentives – A number of counties use tax incentives to encourage landowners not to develop. This strategy is widely used in Virginia, but it is expensive and the effects are temporary compared to other strategies.

Localities in the region must apply these and other tools strategically. The purchase options and conservation easements are needed for land near the designated development areas. Other less expensive methods can be used for land further away.

one part of an overall rural preservation
ation plan is needed for the region to
sensitive areas and historical and cultural
identify the appropriate strategies for
more, it should identify design guidelines
ment that will take place outside the
areas.

d Affordability

#7 and #8)

the Advisory Committee and the public
c equity and housing affordability for
Fluvanna and Greene Counties are
about providing services, especially
without a non-residential tax base. This
these counties to seek industrial and
.

reement is designed to address these
ent will answer several key questions,

ould the region anticipate?

located enough land to reasonably
rowth in high quality communities?

impacts of the desired economic
ionally and locally?

being employed to ensure equity and
can include revenue sharing, location
nclusionary zoning, and an analysis of
n which higher costs for some amenities
nsportation costs.

h of the concerns by the Advisory
lic, the regional agreement, including
ent / fiscal assessment, should be a high
ported by plans such as -

) Year 2025 transportation plans,

- A Rural Preservation Plan that builds on the rural preservation component of the Heritage Vision Plan under development by the Thomas Jefferson Venture,
- An Economic Development agreement that builds on the visions in local and regional plans,
- Subarea Plans for Development Areas, and
- Updates to comprehensive plans, zoning ordinances, and subdivision regulations.

SUMMARY

For 18 months, the Eastern Planning Initiative's Advisory Committee met to review, discuss and agree on a set of principles that set a new course for development in the eastern portion of the Thomas Jefferson Planning District. The Committee's work builds on the 1998 Sustainability Accords adopted by the TJPDC and other initiatives toward a new direction, such as the Albemarle Neighborhood Model, the Charlottesville Commercial Corridor Study, and the Zion Crossroads Design Study.

The vision and key success factors presented by the Committee identify where urban growth could occur in the region over the next fifty years, how communities in the designated growth areas could look, function and "feel," how transportation and infrastructure improvements can be made to support the growth, and the implementation steps necessary to make the principles real.

Recognizing that this is the first phase in a continuing effort to shape the future of the region, the Committee encourages local governments, VDOT, the MPO, the TJPDC, UVA, the private sector and environmental and community groups to actively participate in shaping and playing a role to achieve the vision.

In Closing --

submit to some form of the regional
and community types proposed in the EPI
the community streets and transit
recommendations viable.

Clearly that if an agreement is reached,
strategies and paths from which it can
a sustainable future. If no agreement is
development pattern is highly likely, major
needed, congestion and its attendant
severely, transit development will be
the region's quality of life will suffer.

*holds that land use and
on planning go together
and cart, but this is the first
effort that hitches them*

*omas, Advisory Committee
MPO Policy Board Chair &
County Supervisor*

For more information about the Eastern Planning Initiative,
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For a copy of the CorPlan model and a handbook of the EPI
process, available to any interested community or group,
contact:

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Federal Highway Administration
Transportation and Community and System Preservation Program
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www.fhwa.dot.gov/tcsp

Appendix A

Summary of Growth Management and Rural Preservation Tools

and creating "hard edges"

	Advantages	Disadvantages	Comments	Examples
outward	Such limits can help reduce infrastructure costs, shorten distances between new suburban jobs and unemployed city workers, shorten future commuting times, preserve vacant land and open space, and create higher densities.	Growth limits prevent the building of lower-cost new housing units on cheap land. Growth limits can also drive up real estate and home prices inside the boundary, making these areas unaffordable for many lower income residents	To work well, outward growth limits must involve the entire region, not just individual localities acting separately (individual localities acting separately can just spread sprawl farther). Also, state laws must prohibit most new development outside the growth boundary or developers will leapfrog over it.	Portland, Oregon
ating capital services used ected to f that	Can be used in the plan review/rezoning process to plan for new facilities, and can be used in the long-range planning process to test alternative patterns of development (growth scenarios) and to assist in the setting of level of service standards.	Because it is used as a tool to gather information, it is not in itself used to regulate development. Moreover, while this tool can be used as an informational tool in development plan review, it cannot be used to stop or postpone development of land already zoned.	Virginia code allows any locality to incorporate fiscal impact analysis into their planning, zoning, and land use decisions both as a formal model and an informational guidance for decision making.	The high-growth jurisdictions of Loudoun, Prince William, Chesapeake, and Fairfax used fiscal impact studies to test alternative development patterns during their comprehensive plan updates.
ilities dential effort e te to	Can help ensure that there are adequate schools, roads, libraries, parks, public transit, water, and sewer systems in the locality, and that new development does not overtax these facilities.	Can only be applied if a rezoning of the property is required for development and cannot be applied, by Virginia law, on land already zoned for development.	Typically set out in a guidance document or comprehensive plan, level of service standards are allowed by Virginia code in any locality.	City of Chesapeake, Prince William County, James City County.
ates ffects of nce d for a	Allows localities to conduct a review on a case by case basis and place specific restrictions on a zoned land use. It can also be applied at the time of development.	A specific Virginia bill, HB 2324, limits the use of the tool in some localities.	Allowed by Virginia code in any locality. However, localities are prohibited from requiring use permits for certain types of single-family subdivisions in districts where such uses are permitted by right.	Fauquier County.
wners ake hange e local the nt st ditions trictive nt.	Can help mitigate the impact of development and win community support for a project. Proffers can be used to improve roads, parks, and recreation areas, and can be used to limit adverse environmental effects and improve the appearance of developments.	Pursuant to Virginia code, the proffers must be related to the rezoning itself; specifically, to the physical development or operation of the property. In other words, the proffer must be directly related to the rezoning of the property itself.	Virginia code enables all localities to accept non-cash and non-mandatory proffers that are reasonable related to a rezoning request. In some Virginia communities, the proffer system has evolved into an extremely complex system of expectations and site-specific negotiations between the locality, the property owner, and the community that is impacted by the development.	

and creating "hard edges"

	Advantages	Disadvantages	Comments	Examples
money, a to a ent.	Cash proffers help to mitigate the impacts of new development by providing a funding source for new roads, schools, and other public facilities required to serve the proposed development. Also, Virginia code does not require localities using a proffer system to develop clear guidelines for proffers.	Only localities defined by Virginia code as "high growth" are able to accept cash proffers (high growth is generally defined as any locality that had a population growth of 10% or more from the most recent decennial census year). In addition, cash proffers are only a supplemental revenue tool to be used in conjunction with the locality's capital improvement program, and cannot be relied upon as guaranteed funding since they are dependent upon the rate of growth.	Because cash proffers can only be applied if a rezoning of the property is required for development, they cannot be applied on land already zoned for development. Because most localities already have large areas of land zoned for suburban development (and therefore not subject to cash proffers), this tool will not substantially finance capital facilities until the long term. In other words, it cannot be relied upon to finance needed capital improvements in a locality.	Prince William County, Loudoun County, and the City of Chesapeake have all connected the proffer system to level of service standards through their comprehensive plans. Cash proffers are also used in Chesterfield County.
opment water, sewer, opment ed as" in	Because extensions of water and sewer lines significantly affect the timing and density of development, this tool can help development in a locality occur in an orderly, and desired, pattern adjacent to existing developed areas.	Requires substantial planning, as well as coordination with comprehensive plan. Virginia code allows planning commissions to reject sewer line extensions if they are not in substantial accord with a locality's comprehensive plan.	Under Virginia code, all localities are allowed to make requirements for coordination between development and the provision of public water and sewer.	Both Chesterfield and Hanover Counties have requirements for the provision of public water and sewer for development in planned growth areas.
ment w or fund of ements	Impact fees can help place the infrastructure costs growth onto new developments. Fees can be charged for water and sewer hookup (tap fees) as well as for road improvements.	Impact fees can only be used for capital projects and cannot be used for operations, repair, or maintenance. In addition, impact fees are only a supplemental revenue tool to be used in conjunction with the locality's capital improvement program, and can not be relied upon as guaranteed funding since they are dependent on the rate of growth.	Virginia code enables counties, cities, and towns to charge a fair and reasonable fee for connection to water or sewer systems. No other specific guidance or parameters are specified. Virginia code also authorizes counties with a population of 500,000 or more (Fairfax County) and adjacent localities to enact an impact fee program for roads.	Impact fees for water and sewer (tap fees) are used extensively by all localities with public water and sewer systems. Impact fees for road improvements are not being used in any No. Virginia localities (too cumbersome)
using areas of nt and en and	Enables localities to designate growth boundaries dividing urban areas from rural land, create service districts, and phase tired growth boundaries around a developed area for five to twenty years into the future.	Targeted development areas and service districts are created within a framework of a comprehensive plan and are used to guide future development. They do not apply to land already zoned. A comprehensive downzoning is required if the land zoned exceeds the density guidelines of the targeted area.	Virginia code allows any locality to designate areas for various types of public and private development, use, and density.	Faquier, Prince William, and Westmoreland Counties, as well as the City of Virginia Beach. Faquier County first designated service districts in 1967, guiding growth towards more compact development.
nsit or ns.	These clustered developments provide for a higher density and a mixture of uses, as well as affording residents multiple means of transportation for work and pleasure (such as automobile, rail, bus, biking, and walking).	Residential development density must be well over 5,000 persons per square mile, and perhaps as high as 10,000, to make heavier transit use feasible. In addition, neighborhood opposition often blocks clustering higher density around transit stops.	The average 1990 density of the 161 largest central cities in the U.S. was 3,924 persons per square mile. Only 32 had densities more than 10,000. In the fringe areas around these same cities, the average 1990 density was 1,840 persons per sq. mile.	

and creating "hard edges"

	Advantages	Disadvantages	Comments	Examples
ans for y pment n then s as nsity public unding.	Allows for the development of "neo-traditional" neighborhoods, with a mixture of homes, businesses, offices, and civic/cultural functions in a pedestrian-friendly environment. Also, because each development area is planned, the master plans can help contain sprawl and create "hard edges" between developed and rural areas.	Existing zoning and subdivision rules often prevent mixed-use developments, block new multi-family housing, and impede creation of pedestrian-friendly subdivisions. Therefore, the development area master plans must be accompanied by subdivision and zoning ordinance changes to make the new developments possible.	Each development area master plan, when it is completed, should be appended to the locality's comprehensive plan.	Albemarle County: Adoption of neighborhood model and inclusion in comprehensive plan. Anne Arundel County, MD: County divided up into 16 "small areas", with a detailed plan being developed for each area.

and rural conservation outside of development areas

	Advantages	Disadvantages	Comments	Examples
between a and ency that e property to ion value. rded as t "run with nsferred f the	Conservation easements can be used to preserve farmland, watersheds, wildlife habitat, forests, and historic lands. The landowner can also see substantial benefits in the form of reduced real estate and inheritance taxes.	Many people do not understand the flexibility and benefits of conservation easements, and do not know that that by placing their land under easement, their property still maintains private ownership, it is not opened up to the public, and that either segments or whole parcels may be placed under easement.	Easements are recorded as deed restrictions, and may be held in perpetuity or for a set number of years.	Widely used in rural areas of Virginia. Primary easement holders in the state include the Virginia Outdoors Foundation (VOF), the VA Department of Historic Resources, Soil and water Conservation Districts, and local organizations such as the Piedmont Environmental Council and the James River Association.
ment to ent rights ted as ervation, ulture.	Like conservation easements, purchase of development rights allows localities to protect environmental and scenic lands without actually having to pay for fee simple ownership of the properties.	The program requires a dedicated source of stable revenues, and most local governments simply do not have the funds required for such a program. Counties are further restricted in that they can not incur debt.	Virginia code allows any local government to initiate a purchase of development rights program. However, funding is the dominant limiting factor, especially to counties (which can not incur debt).	The City of Virginia Beach is the only locality in the state to fully adopt and fund a purchase of development rights program. It is an Agricultural Reserve Program, whereby landowners voluntarily nominate their properties for inclusion into the program.
unts in ments to ve stal land n space.	Besides the benefits of preserving natural resources, protecting water supplies, and protecting scenic vistas and open spaces, the program affords benefits for property owners in the form of reduced property tax assessments.	Many jurisdictions have the personnel to process the applications but lack the resources to verify the information provided by the property owner. As a result, it is often necessary to use the honor system.	Virginia code allows any locality that has adopted a land use plan to provide for use value and taxation (in certain districts).	About half (70) of the 136 counties and cities that are listed in the Commissioners of the Revenue Association of Virginia 1998 Statistical Abstract have parcels in a land use assessment and taxation program.
in which nd pecial gricultural . The olds title easement the land ears.	Besides enabling the protection of large tracts of land, this program usually opens discussions between local government, farmers, foresters, and landowners to implement further types of land protection.	Agricultural and forest conservation programs can include limitation on clearing (for non-farming activities). This prohibits government agencies from taking or condemning lands for roads or other purposes.	Virginia code allows any locality to adopt an agricultural and forest conservation district program. Land within a agricultural/forest district is automatically qualified for benefits under the land use assessment and taxation program.	Program is widespread in rural areas of Virginia.
reas of a for clared ties, arm and ending e are "sold."	Increased densities in the receiving zones allow for infill development and for clustering new buildings within designated growth centers. As a result, localities can work towards long term goals of containing sprawl and protecting farmland, open space, and scenic areas.	Perhaps the greatest obstacle to implementing a TDR program is community opposition. While people are generally in favor of preserving open space and community character, those who live in a designated growth area, or receiving zone, are often opposed to increased density and development in their neighborhood or community. Therefore, TDR programs can be met with great resistance.	Transfer of Development Rights is not yet an authorized program in Virginia.	Best example is Montgomery County, Maryland, which has protected over 15,000 acres of farmland in 17 years of operation. Acton, Massachusetts is another example of a community that has used TRD's to direct development into appropriate areas.

Appendix B

Proposed Methodology for Reaching Regional Agreement on the Future of the Region

Future Of The Region

ies for directing growth, the EPI Advisory
local governments establish an agreement

development each locality is willing and
g;

t of that development;

nase in supportive infrastructure such as roads,
ater and sewer systems.

uss and resolve any circumstances that might

upon local comprehensive plans and studies
Regional Build-Out Analysis. It supports each
get development and infrastructure
and cooperatively within the region. Based
localities can define growth areas based on the
ent area concept, with assurances that each
ment to meet its needs. This reduces over-
ving rural areas.

provides a systematic way for localities to
icipated revenues and costs of growth.
lanned acreages and/or agree on revenue or
to balance the fiscal impacts of growth. The
designated development areas provide
or localities to encourage efficient, urban and
ommunities.

is in place, transportation and other regional
n be updated to support the agreement.
ll reduce infrastructure costs.

on the total regional demand within a year of
locations and boundaries of the designated
small towns could then be incorporated in
prehensive plans and zoning and subdivision
wing three to five years.

Agreement on the Future of the Region

Proposed Process

- Localities would identify the total regional development demand projected for the upcoming twenty-year period. This could be initiated very simply by adding up the projections from each local plan and zoning ordinance, and adjusting based on state population projections.
- Localities would agree on the total number of acres devoted to the designated development areas. Next they would agree on the location of the development. The cumulative amount of land set aside for these areas by each locality would not exceed the anticipated regional demand.
- The methodology would include an assessment of economic benefits and fiscal impacts for each locality. Revenue- and cost-sharing strategies could be developed to ensure that each locality would maintain its economic vitality and ability to provide local services.
- The final agreement would be approved by all localities.
- Each locality would refine its development area boundaries and characteristics in comprehensive plans and zoning/subdivision ordinances based on the regional agreement. Localities would work together to develop water, transportation, and other infrastructure that supported the agreement.
- The TJPDC would coordinate regular updates of the regional demand projections, using tools such as GIS and the decennial census to track development trends. Localities would update the agreement and local plans accordingly.
- The agreement could also be modified at any time should the localities decide circumstances warrant a modification.

Appendix C

Coordinating Transportation and Land Use Planning: A Framework for Guiding Growth

*Additional Thoughts Provided by
EPI Advisory Committee Member
Bruce Appleyard*

Transportation and Land Use Planning:
Framework for Guiding Growth
Bruce Appleyard

*Transportation and Land Use Planner for the
New Center (SELIC), a non-profit
center headquartered in Charlottesville, VA.
dedicated to protecting the environment and
improving life in the Southeast by advocating for
sound transportation and land use policies and practices.
I work in this arena.*

places in the country, it is high time to
focus on transportation and land use planning. The
focus on highways has led to sprawling auto-dependent
development, rapidly consuming natural and rural lands at
an estimated rate of 1992-1997, Virginia lost about 350,000
acres of land, equaling about 190 acres each day¹.
This disjointed land use pattern with limited
public transit has led to an explosion of driving. In the
Jefferson Area, between 1982 and 1999, Vehicle
Miles Traveled (VMT) grew by 82% while population grew by only
12%. Limited funds to build new roads, research
shows that additional lanes in growing areas are
not taking full advantage of the new capacity by
shifting from other modes of travel or
moving to newly accessible land in the
area. If we can't build our way out of
this, we need a more intelligent approach, sprawling
development has the features that make Virginia such an
attractive place to work and visit.

¹ 1997 Natural Resources Inventory (NRI).

² 2001 Urban Mobility Report

³ Analysis of Induced Travel Affects in the U.S. Middle
East. *Transportation Statistics*, April 2000 (26 years of data
from North Carolina, Virginia and Maryland suggest that every
year there is a 3.3% increase in travel; for Virginia, the data
are similar).

To achieve a better, more sustainable approach to
development, I will first identify important community oriented
principles that new development should follow.

New development should:

- be located within currently developed areas or in
targeted growth areas so it can be efficiently served by
existing transportation, sewer, and water infrastructure;
- contain a diverse mix of residential and commercial uses
assembled to complement and enhance the surrounding
community;
- be concentrated to conserve land;
- be located and designed to work in concert with public
transit and other alternatives to driving.

Throughout this article, I will refer to these and complementary
principles for new development as part of a Community Oriented
Zoning and Infrastructure (COZI) Design Strategy.

Achieving this strategy can not only result in a more valuable use
of our land and enhancement of existing communities, but it can
lessen the need for major future roadway investments by allowing
for shorter and fewer automobile trips and alternatives to driving⁴.
Elevating our land use planning processes to higher priority so that
they can actually be developed in concert with our
transportation plans is key. Below is a framework for coordinating
two standard and critical planning documents---1) the regionally
focused Metropolitan Planning Organization's (MPO) Long Range
Transportation Plan (LRTP), and 2) the community oriented local
land use plans--- so that a COZI Design Strategy can meaningfully
be implemented.

- 1) Target and prioritize areas for growth.
Local land use plans should first protect land with
environmental, historic and scenic value, as well as farm and
forestland. Land use plans then should identify and prioritize
targeted growth areas. Scenarios should be created to set
goals for phasing development in increments of 5, 10, 15, and

⁴ R. Cervero, R. Ewing, "Travel and the Built Environment: A Synthesis,"
Transportation Research Record 1780, 2001.

target and accommodate likely levels of growth. Updating the comprehensive plans every five years. Targeted growth areas should be altered to accommodate changes both at a regional level and the local level. Localities involved. If a growth area is highly consolidated growth, it should be consolidated. On the other hand, the growth area is fragmented, it should be expanded, but at a

MPO's long-range transportation plan should identify the localities to plan for these targeted growth areas. Make sure that transportation projects supported by the RTP support the goal of focusing

and transportation plans that support a

undertake the following steps as they develop land use and transportation plans for targeted growth areas, identified in step 1. These plans include the creation of a neighborhood plan and its components that are reasonably compact and facilitate access via transit, walking, and bicycling. Combining several destinations into fewer destinations. Steps include:

multimodal (transit, pedestrian, bicycle, as well as a flexible) local transportation network that supports the plan;

priority on serving targeted growth areas

priority on improving the pedestrian and bicycle networks that serve targeted growth areas. Keep in mind that these networks can be independent of the

compact and flexible road design to reduce the impacts of traffic on communities and the

- e) consider linking the local transportation network to adjacent networks, using existing streets before building new ones whenever possible; These points are elaborated on in the Evaluating Road Projects section below..

In order to properly guide development, before additional roads are built a comprehensive land use development plan needs to be in place. Therefore, targeted growth areas, land use plans and access management plans are required prior to implementation of a COZI Design Strategy..

3) Implementation of a COZI Design Strategy

Those working on the MPO's L RTP Plan should work with those responsible for land use planning in the constituent localities and the various stakeholders to facilitate the implementation of a COZI Design Strategy by:

- a) developing the zoning and subdivision ordinances necessary to facilitate a COZI Design Strategy;
- b) work with the developers to implement the rezonings in accordance with a COZI Design Strategy; and
- c) Employ a diverse portfolio of financing strategies to construct the infrastructure (transportation, sewer, etc.) needed to serve and promote the development of a COZI land use and transportation plan. Consider using both public as well private funding sources, including federal and state infrastructure funds wherever possible.

Evaluating Road Projects

Instead of relying on outdated approaches to growth, the framework presented in this article underscores the importance of meshing creative land use alternatives through zoning with transportation planning. However, even when implementing a COZI Design Strategy, issues will arise regarding the need to expand roadway capacity. Local and regional bodies are encouraged to follow the sequence below in order to create a project or series of projects that will facilitate new development while supporting a COZI approach.

ould be placed on improving the
d service of automobile alternatives
king infrastructure and networks) and
e considered only as a last resort. Road
only after land use, conservation, and
ns are implemented following rezoning
OZI Design Strategy. If a road project
following steps can help guide the

imodal performance of existing roads
auto lanes by adding sidewalks, bike
sswalks, etc.; If auto congestion is
priority problem, options like access
tegies, better signal coordination, turn
be implemented;

in a) enough time to work; however, if
remains as a priority problem,
r linking existing roads to improve the
ork within a targeted growth area.; if
ood streets, the use of traffic calming
be considered to limit the disruption
ffic flows.

uilding multimodal overpasses, or grade
anges should be considered only after
ng alternatives have been considered
quate; the construction of significant
be viewed strictly as a last resort; if a
ould link into a greater network; if the
ide the targeted growth area, access
d conservation easements should be
e places before moving ahead with the

vironmental and community impact
erly executed before making final
d projects.

Conclusions

As put forward in this framework, the importance of targeted growth areas, rezoning provisions that support a COZI Design Strategy, and access management plans cannot be emphasized enough. By following this framework unnecessary road projects can be avoided while promoting communities that benefit from coordinated land use and transportation planning. This favorable outcome relies on the cooperation of the various stakeholders at the community-, region- and state-levels, whereby the stakeholders follow a community-level focus while maintaining a regional perspective.