

Environmental Health
Action Team
ACTION PLAN

Plan Review September 10, 2007

HEALTH: a state of complete well-being, physical, social and mental - not merely the absence of disease or infirmity.

PUBLIC HEALTH and PLANNING –
renewing an old connection with
public health, safety and welfare.
Environmental Health Action Team
at the cutting edge.

EHAT

- Formed as part of Blount County Community Health Initiative – partnership of Chamber of Commerce, Health Department and Blount Memorial Hospital.
- Action Teams formed to address priority issues.
- Environmental Health was one priority issue identified in community dialog.

EHAT

- Used Protocol for Assessing Community Excellence in Environmental Health (PACE/EH) to identify and address priority environmental health issues – including a community survey.
- Grant from National Association of County and City Health Officials (NACCHO).
- Volunteer effort over five years.

EHAT

- Three priority issues identified –
 - 1) air quality,
 - 2) water quality, and
 - 3) land use, growth and development.
- Subgroups gathered information, assessed situation, and formulated action plans to address environmental health issues.
- Final product presented to community in January 2007.

Land Use, Growth and Development Action Plan

8 Sub-issues

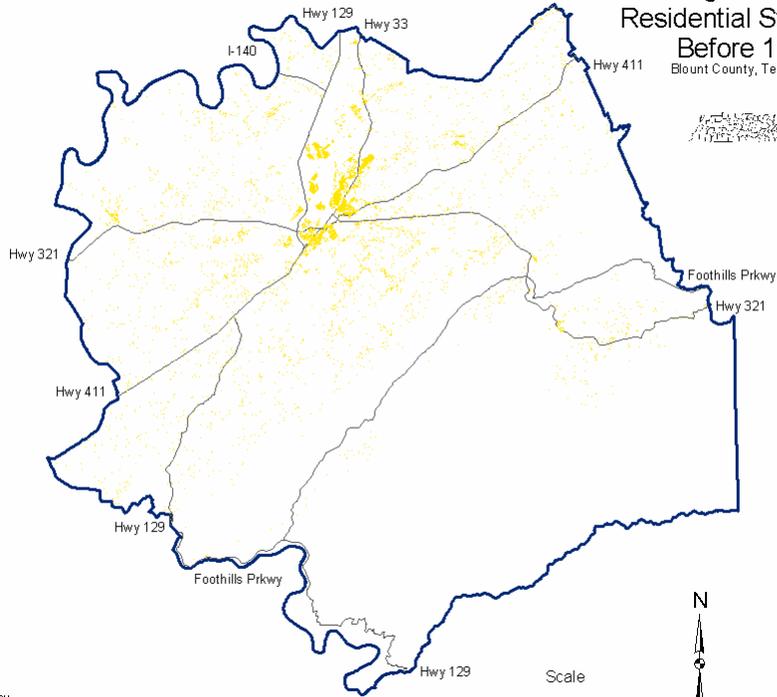
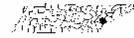
Growth and Sprawl Issue

- Scattered and dispersed pattern of development
- Separation of uses
- Linked to lack of exercise (walking and biking)
- Consequent issues of weight gain linked to health problems – heart disease, diabetes, cancer



Single Family Residential Structures Before 1950

Blount County, Tennessee

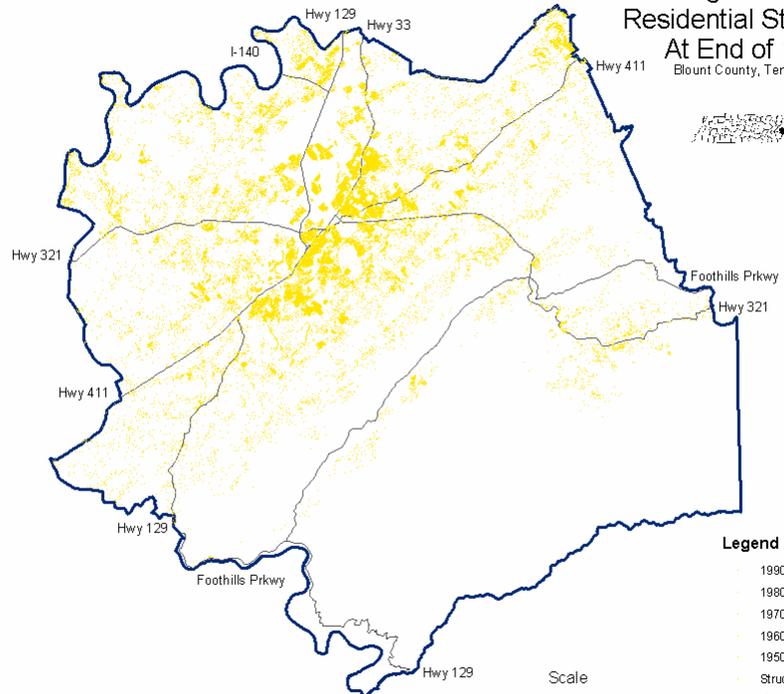
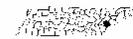


Trevor M. McMurray
Blount County Property Assessor's Office
source: Computer Assisted Appraisal System - State of Tennessee, Comptroller of the Treasury



Single Family Residential Structures At End of 1999

Blount County, Tennessee



Trevor M. McMurray
Blount County Property Assessor's Office
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Legend

- 1990's Structure
- 1980's Structure
- 1970's Structures
- 1960's Structures
- 1950's Structures
- Structures Before 1950
- County Boundary
- Arterial Route

Growth and Sprawl Standards

- Less sprawl is better than more sprawl
- New development should be concentrated in and around the urban center of Maryville and Alcoa (UGB)
- Track subdivision approvals and building permits

Growth and Sprawl Action Plan

- Review 1101 Growth Plan for appropriateness.
- Encourage urban development concentration.
- Discourage rural development dispersion.
- Map and track development over time.
- Cities and County work together to address growth and sprawl.

Loss of Rural Land Issue

- No consensus on links to health
- Depends on possible psychological link
- No clear and definitive link in research
- Implied health linkages were based more on personal values and preferences than on objective health outcomes

Loss of Rural Land Standards

- Less loss of rural land – likely to occur if sprawl standard is met
- Program to preserve rural land would address issue directly
- Track subdivision approvals and building permits
- Track rural acres directly preserved

Loss of Rural Land Action Plan

- Identify measures to directly preserve rural land.
- Encourage and support public and private efforts to preserve rural land.
- Increase awareness on programs and incentives to preserve rural land.
- Map and track rural land conversions to development, and rural land preserved.
- Consider also preservation of rural land as part of quality of life and environmental concerns.

Roads and Traffic Issue

- Supported by existing research (AASHTO)
- An inadequate or unsafe road with growing traffic can lead to both automobile and pedestrian accidents resulting in bodily injury and death
- Much growth in the county spreads onto once rural roads that are inadequate for new urban and suburban development

Roads and Traffic Standards

- Engineering standards in A Policy on Geometric Design of Highways and Streets by the American Association of State Highway and Transportation Officials (AASHTO).
- Minimum 18 feet of pavement with 2 foot shoulders – Blount County Planning Commission
- Greater width and shoulders for major roads in proportion to traffic as identified in the Blount County Roadway Needs Study (2000 and 2004).

Roads and Traffic Action Plan

- Improve deficient roads.
- Apply sound engineering standards for safe roads.
- Address also pedestrian and bicycle safety.

Air Quality Issue

- Increased use of automobiles related to growth and sprawl
- Automobiles linked to air pollution
- Air pollution – ozone, carbon monoxide, particulate matter - linked to respiratory health problems and heart disease
- Air Quality Subgroup to address indicators and standards

Air Quality Action Plan **

- Support actions recommended by EHAT Air Quality Subgroup **.
- Assess development pattern to determine measures to decrease total vehicle miles traveled.
- Encourage and support programs that will reduce vehicle miles traveled.
- Include air quality considerations in land use plans.

Water Quality Issue

- Most development on private septic tank and leach field
- Failing septic systems can lead to exposure to disease causing pathogens
- About 200 septic systems fail each year
- Water Quality Subgroup to address indicators and standards

Water Quality Action Plan**

- Support actions recommended by the EHAT Water Quality Subgroup **.
- Reduce pollution load in 303(d) listed impaired streams to remove them from the list.
- Support activities of the Little River Watershed Restoration Initiative and other watershed improvement activities.
- Continue implementation of the Stormwater Phase 2 program.
- Review regulations and permit procedures to better address water quality issues.

Commercial & Industrial Use Issue

- Intensive land use – can have external effects on nearby residential uses – stress factors
- Industrial uses can lead to exposure to hazardous chemicals

Commercial & Industrial Use Standards

- In relation to sprawl, clustering of commercial and industrial use in the cities where urban services are present.
- In relation to community design, greater pedestrian and bicycle access to neighborhood commercial uses, implying a greater integration of commercial and residential uses
- In relation to external impacts, regulatory measures to reduce the impact of commercial/industrial uses on neighboring residential uses

Commercial & Industrial Use Action Plan

- Encourage urban development concentration and integration of commercial with residential development.
- Review plans and regulations to provide pedestrian and bicycle linkage between residential and commercial areas.
- Identify measures to reduce the impact of commercial and industrial development on residential areas.

Development Design Issue

- Preference for cluster (village) design with green or open space
- Integration of sidewalks and trails for exercise (walking and biking)
- Better design of developments can at least provide the opportunity for a more active and healthy lifestyle, and can provide opportunities for relieving the stresses of urban and suburban living

Development Design Standards

- Traditional Neighborhood Development and New Urbanism design models
- Direct requirement of open space set asides and pedestrian/bicycle improvements in new developments
- Integration with a plan for community wide open space and recreation

Development Design Action Plan

- Incorporate innovative development design and practice into regulations.
- Integrate open space and pedestrian/bicycle improvements into new development.
- Integrate a plan for community wide open space and recreation into existing plans.

Tree Preservation Issue

- Some possible long term links to health from global warming – fewer trees leads to lesser carbon dioxide sequestration
- Immediate links to heat island effects of impervious surfaces – trees can provide shade to cool surfaces and mitigate ozone formation

Tree Preservation Standards

- No net loss of trees in conversion of land to urban and suburban development
- Tree replacement regulations (City of Alcoa model)
- Add more tree cover in areas of impervious surface
- Reforestation after harvesting
- Tree City USA Program – tree board; tree care ordinance; community forestry program; and arbor day observance and proclamation

Tree Preservation Action Plan

- Adopt Tree City USA programs for all jurisdictions.
- Adopt regulations to preserve tree cover, and integrate landscape trees into commercial development.
- Increase tree cover in built-up urban areas.
- Encourage best management practice in tree harvesting.

Air Quality Action Plan

Ozone and Particulate Matter Pollution.

- Conduct co-relation study between pollution levels and emergency pulmonary health outcomes.
- Identify what others are doing to address air pollution locally and support such actions.
- Regularly exchange information and data with the Regional Clean Air Coalition (RCAC).

Ozone and Particulate Matter Pollution (continued).

- Educate at-risk populations, such as those with lung or heart disease, on personal behavior during air quality alert days.
- Raise community awareness about air quality.
- Continue support of Blount County's Air Fest activities.
- Support air quality recommendations of the EHAT Land Use Subgroup.

Water Quality Action Plan

Failing Septic Systems

- Continue current protocol for failing septic systems.
- Provide financial assistance to low-income families for septic system repair.
- Follow current county standards for septic system lot size requirements.
- Form a County Wastewater Board for oversight of sewer utilities outside municipal systems.

Pollution of Water Wells

- Provide educational materials on well maintenance and safety for those on well water.
- Maintain well water database created by the EHAT/Water Quality Subgroup.
- Publish information on well maintenance in Daily Times and county website.

Sewer Overflows

- Continue sewer rehabilitation and maintenance program in Alcoa and Maryville.
- Follow state-approved (TDEC) response plan for sanitary sewer overflow incidents.
- Submit yearly overflow data to the county director of environmental health.

Water Contact Advisories

- Continue advisories for water bodies where contact and/or consumption of fish would be unhealthy.

Impaired Streams

- Add all stream miles in the county for testing under the 305 (b) report: The Status of Water Quality in Tennessee.
- Fully implement Phase 2 of the county's Storm Water Program.
- Encourage and provide incentives for adoption of best management practices for water quality in farming operations.
- Provide homeowner education on water quality issues.
- Target one stream in the county for an intensive mitigation program every three years.

Bacteria at Intake of Utility Water

- Submit yearly E. coli results from water system intake tests to the county director of environmental health.

General Water Quality

- Fully implement the Little River Watershed Restoration Initiative.
- Create, update and distribute an Annual Water Quality Report for Blount County.
- Support water quality recommendations of the EHAT Land Use Subgroup.

Who Will Git-R-Done?

- EHAT
- City and County Governments
- Individuals
- Ad Hoc and Interest Groups
- Civic Groups
- Business and Industries
- BUILD ON WHAT WE HAVE

Questions?

Comments