

**Blacksburg 2046:  
Administrative Manual  
Section D**

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**Objectives and Policies,  
Compilation and Implementation Status**

# **COMPILATION OF CHAPTER OBJECTIVES AND POLICIES**

## **A SUSTAINABLE COMMUNITY**

### **Objectives and Policies**

- S.1. Encourage all Authorities in which the Town is a participating member to be environmentally sensitive and continue to participate in DEQ's VEEP Program.
- S.2. Design new public facilities and renovate existing public facilities to meet U.S. Green Building Council LEED building rating system standards. Facilities shall also meet current best management practices that provide for efficient and cost-effective operations over the expected life of the facilities.
- S.3. As part of the development review process, consider how well the proposed application supports the Town's sustainability community commitment.
- S.4. Implement and promote the Town of Blacksburg's Environmental Management Program.
  - Educate Town staff and the community about best management practices
  - Record goals and accomplishments with accurate reporting to regulatory agencies such as DEQ and voluntary programs such as Go Green NRV
  - Create opportunities for citizen involvement, such as the Environmental Management Advisory Board and the Mayor's Task Force, to infuse sustainability policies throughout the Town
- S.5. Promote environmental education and awareness to citizens and businesses by supporting events and initiatives such as Sustainability Week, Go Green NRV, Blacksburg Farmers Market, etc.
- S.6. Promote, protect and enhance the Town's urban forests through Town initiatives and in the development review process.
  - Increase the total tree canopy coverage by 5% by 2019
  - Identify potential planting areas on all town properties and increase the public property urban tree canopy by 10% by 2019
  - Increase the remaining community urban tree canopy to 40% (not including areas zoned agriculture, airport, or Virginia Tech campus) as recommended by the Virginia Department of Forestry
  - Minimize site disturbance to protect existing tree canopy, native vegetation, and pervious surfaces to encourage open space
  - Continue work and improvements to receive the annual "Tree City" recognition from the National Arbor Day Foundation
- S.7. Support dark sky regulations and programming.
  - Establish a policy to require downward directed lighting on all new outdoor lighting fixtures to limit upward glare
  - Seek funding to retrofit old lighting and review and amend the Town Code to require retrofit of lighting in redevelopment projects

- Ensure safety considerations in lighting design, consulting with other communities and universities for safe solutions
  - Partner with Montgomery County, Virginia Tech, VDOT, and other agencies and localities in the effort to reduce light pollution
- S.8. Support the New River Valley Livability Initiative coordinated by the NRV Planning District Commission and other regional efforts.
- S.9. Educate and encourage residents and private businesses when constructing or renovating homes and buildings to be more energy efficient and meet Earthcraft or U.S. Green Building Council LEED building rating system standards.
- S.10. Continue regulatory amendments to promote sustainable neighborhood development practices for private development.

# **ENVIRONMENT**

## **Objectives and Policies**

### **Natural Resources**

- EN.1. Emphasize collaborative planning and communications between jurisdictions, including the NRVPCD, Virginia Tech, Montgomery and Giles Counties, Christiansburg, and the U.S. Forest Service.
- Provide community access to information about the natural resources and open spaces of Blacksburg
  - Work with NRVPCD and others to identify and preserve the region's "Green Infrastructure" for its environmental and ecosystem functions as well as assets to ecotourism
- EN.2. Work with such programs as the Virginia Natural Heritage program and other data sources to acquire up-to-date information about wildlife habitats, threatened and endangered species, and species of special concern to support environmental protection and to utilize during the development review process.
- EN.3. Conserve, protect and manage networks and corridors of natural vegetation, forested areas, wildlife habitat, and undeveloped steep slopes.
- EN.4. As part of the development review process, ensure that natural resources, including native habitat and threatened and endangered species, are protected.
- EN.5. Promote and educate the public about the value of natural resources.

### **Land Resources: Open Space, Viewsheds & Greenways**

- EN.6. Protect the region's natural character and scenic views through preservation of open spaces, ridgelines, forests and rural lands.
- EN.7. Work with Montgomery County, the U.S. Forest Service, American Electric Power, public water authorities, telephone companies, and other utilities to protect ridgelines identified as important visual resources from unnecessary clear-cut timbering, utility placement, and other highly visible landscape-marring activities.
- EN.8. As part of the development review process, address the protection of viewsheds. Ensure that subdivision of any land respects adjacent or affected open space features, and plan for connections to open spaces within and outside the subdivision.
- EN.9. Ensure public access to area natural resources, open space, waterways, and views.
- Encourage the provision of greenway linkages from the central greenway along Toms Creek to the rest of the basin and to other areas of Town as properties are developed.
  - Develop and maintain financing options, including a land-banking fund, to purchase high priority open spaces (e.g. parks, greenways, dry or wet ponds for stormwater detention, etc.) where dedication through development is unlikely.

- EN.10. Acquire land easements or utilize other conservation measures along the entire length of Toms Creek, Stroubles Creek and Cedar Run to create a large greenway that also serves to enhance the riparian buffer.
- EN.11. Develop a greenway system that protects the biological diversity of plant and animal species, maintains the connections between natural communities, provides wildlife corridors, includes the area's natural and cultural diversity, and preserves linear stretches of open space. Coordinate the greenway system with area stormwater management and maximize opportunities to uncover or daylight channeled and piped urban streams.
- EN.12. Expand environmental functions of greenways such as wildlife corridors and habitats, pervious surfaces and soil preservation, floodplain protection, riparian buffers, stormwater management, and floodplain protection.
- EN.13. Support greenway funding, acquisition, and maintenance.
- Encourage private support and development of greenways
  - Regain a public access or greenway easement as appropriate when the Town disposes of property
  - Support private non-profit entities, such as the New River Land Trust, in acquiring greenways
  - Make use of private, local, state, and federal funding programs
- EN.14. As part of the development review process, the Town will evaluate opportunities and incentives to expand and connect the greenway system to provide a contiguously connected system.
- EN.15. Acquire land and/or scenic trail easements to preserve and reclaim natural floodplains to enhance water quality; protect wildlife habitats and open space; and provide recreational, educational, and alternative transportation opportunities.
- EN.16. Identify and record threatened and endangered species, specimen trees, and other important natural features within greenway corridors, and minimize disturbance during trail design and construction, and/or maintenance.
- EN.17. As part of the development review process, the Town will evaluate a proposed development's impact and proposed mitigation measures for the following:
- Open Space
  - Urban Forest Canopy
  - Viewsheds
  - Mineral Resources
  - Cultural Resources
  - Threatened and Endangered Species
  - Watershed

## **Land Resources: Agriculture**

EN.18. Encourage both private and public efforts to preserve and manage agricultural and open lands through land trusts, open space easements, participation in the Agricultural and Forestal Districts (AFDs) and fee simple acquisition.

EN.19. Increase community engagement and consumer demand for locally grown food.

- Help connect institutional, restaurant, and wholesale opportunities with agricultural producers and food-based entrepreneurs
- Work with regional economic development entities and local governments to give local agriculture a higher priority and more visibility
- Support local food producers by helping to protect agricultural lands and broaden their markets to include such places as the Blacksburg Farmers Market, Community Supported Agriculture programs and suppliers to local restaurants

EN.20. Support regional efforts to advance retention of farmland and economic viability of farming.

## **Geologic Features: Karst & Steep Slopes**

EN.21. Open space is the preferred land use in fragile terrain. As part of the development review process, the Town will:

- Prohibit development on steep slopes exceeding 25%
- Restrict development on karst topography

EN.22. Educate the public about the vulnerability of groundwater in sensitive karst terrain in cooperation with the Virginia Cooperative Extension Service and the Department of Conservation and Recreation's Karst Program.

EN.23. Ensure that development in karst terrain does not impact groundwater or karst environments and ecosystems.

- Protect karst areas and groundwater flows by minimizing surface water, drainage, and structural impacts near sensitive karst areas
- Avoid use of septic systems and discourage use of fertilizers, pesticides, herbicides, and other chemicals in areas of sensitive karst terrain
- Study the area's subsurface relationship between geology and groundwater to aid in developing future protection measures and monitoring techniques
- Identify karst areas that may facilitate contamination of the subsurface

EN.24. Educate the public on radon testing and remediation measures. Ensure all Town properties meet radon testing regulations.

EN.25. Participate in the New River Valley Planning District's Hazard Mitigation Plan.

## **Watershed Resources: Watersheds, Flooding Hazards, Stormwater and Groundwater**

EN.26. Open space is the preferred land use in fragile terrain. As part of the development review process, the Town will:

- Prohibit development in wetlands
- Restrict development in riparian buffer zones
- Restrict development in Creek Valley Overlay

EN.27. Implement the BMPs required in the MS4 Program Plan.

EN.28. Recognize, map, preserve, and restore watershed assets so that surface and groundwater quality and quantity can meet state standards, plus the needs of the human and natural systems in our community. Protect and preserve streams and water quality from further deterioration.

EN.29. Encourage daylighting of streams.

## **Air Quality & Energy**

EN.30. Finalize, adopt and implement the Climate Action Plan that emphasizes lowering energy use, reducing greenhouse gas emissions, and improving air quality.

EN.31. Maintain or improve air quality in the region to be healthy for citizens, wildlife, vegetation, and water resources. Educate citizens, decision-makers, and businesses about air quality impacts and mitigation/removal of such impacts.

EN.32. Limit the negative effects of vehicle traffic on air quality, and set an example for the private sector by using low-emissions, alternatively-fueled vehicles in the Town's municipal fleet and Blacksburg Transit and by encouraging fuel-efficient operation practices and incentives.

EN.33. Support local employers and citizens in establishing and reaching vehicle travel reduction goals to reduce air pollution.

- Consider telecommuting and flex-time policies
- Consider car-pooling and public transit incentives
- Increase access to services online
- Encourage Virginia Tech to limit and reduce vehicular traffic to/from/on-campus

EN.34. Support citizens in establishing and reaching vehicle travel reduction goals to reduce air pollution.

- Request telecommuting and flex time policies from employers
- Car-pool and combine trips
- Walk, bike and use public transit
- Utilize services available online
- Consider vehicle travel costs and impacts when making housing choices

EN.35. Implement appropriate mitigation measures now mandated in non-attainment areas to keep Blacksburg from falling into non-attainment status. Monitor air quality through periodic testing.

EN.36. Limit the negative effects of air pollution from local power producers.

- Work with Virginia Tech to identify less polluting alternatives to the operation of the in-Town, coal-fired boilers for power production
- Encourage Virginia Tech Electric Service (VTES) and American Electric Power (AEP) to implement Demand Side Management programs in Blacksburg
- Encourage VTES and AEP to facilitate citizen and local business participation in power generation through small scale wind and solar facilities
- Encourage AEP to purchase or develop wind, solar, and hydro generated power as part of the local provision of power.
- Encourage AEP to implement smart grid technology
- Encourage AEP to implement time-of-day electricity pricing

EN.37. Amend the Zoning Ordinance to promote wind and solar power where viable.

EN.38. Establish programs and incentives in partnership with the regional energy alliance, Community Alliance for Energy Efficiency (cafe<sup>2</sup>), to reduce energy use in single-family homes, including the use of renewable energy.

EN.39. Establish programs and incentives to reduce energy use in multi-family housing units.



# **JOBS AND HOUSING**

## **OBJECTIVES AND POLICIES**

### **Economic Development**

- J&H.1. Recognize and grow economic development as part of a Sustainable Community.
- J&H.2. Support Go Green NRV and other regional sustainable partners to encourage businesses to be sustainable.
- J&H.3. Continue to support local and regional economic development organizations in the marketing of the Town/region and in recruiting and retaining businesses in Blacksburg.
- J&H.4. Implement and monitor implementation of the Town's updated Economic Development Plan. Inform the public and other interested parties about progress in implementation of the plan.
- J&H.5. Expand economic development strategies, content and delivery method to address the changing workforce population.
- J&H.6. Coordinate economic development efforts of the Corporate Research Center, the Arts Initiative and the implementation of the Campus Master Plan.
- J&H.7. Be open to the creation of special service districts or tax increment financing programs as needed to support economic development.
- J&H.8. Welcome new business operators by offering assistance with explaining and facilitating the regulatory review process.
- J&H.9. Use the Virginia Tech/Montgomery Executive Airport as an economic tool to recruit new businesses to the area.
- J&H.10. Develop a Town-wide public art program.
- J&H.11. Maximize the use of Blacksburg Transit in supporting economic development and tourism.
- J&H.12. Expand and market transit locally and regionally in economic development efforts.
- J&H.13. Continue to create task forces and support community interest groups to address economic development issues in specific areas of Town, such as the South Main Street Task Force.
- J&H.14. Conduct corridor area studies for coordinated improvements to South Main Street, North Main Street, and the Montgomery Regional Hospital area.
- J&H.15. Retain and recruit clean businesses/industries that support Blacksburg's sustainability goal.
- J&H.16. Support the build-out of the Blacksburg Industrial Park with industrial and manufacturing uses.

- J&H.17. Encourage the relocation of non-tax-generating uses from prime industrial land to less valuable locations.
- J&H.18. Work with the Montgomery County Department of Economic Development and other regional partners to encourage appropriate siting of industrial businesses.
- J&H.19. Evaluate future funding opportunities and the need of the Community Development Block Grant Façade Program.
- J&H.20. Encourage community broadband build-out and expansion to make Blacksburg a competitive location for companies that need robust technology infrastructure.

## **Downtown**

- J&H.21. Continue Town involvement in and support of the Downtown Revitalization Committee.
- J&H.22. Continue economic incentives in the tourism district.
- J&H.23. Create an arts and cultural district for the Downtown area in which economic incentives will be provided to support the arts and arts-related business.
- J&H.24. Implement and monitor the Town's Downtown Master Plan.
- J&H.25. Support DBI in promoting Downtown businesses and marketing Downtown as a specialty retail destination.
- J&H.26. Support Downtown event planning, and, in particular, coordinate with Virginia Tech, DBI and other entities for programming on the newly-renovated College Avenue Promenade.
- J&H.27. Continue parking education plan and monitoring total public parking availability in the Downtown area.
- J&H.28. Develop a long term strategy for structured parking in the Downtown area. Encourage Virginia Tech to build structured parking on the Donaldson Brown surface parking lot.
- J&H.29. Continue streetscape improvements in Downtown.
  - Finish brick sidewalks and street furniture upgrades in Downtown
  - Plan and construct Progress Street Corridor streetscape improvements
  - Plan and construct Draper Road Corridor streetscape improvements
- J&H.30. Implement Downtown Recycling programs for businesses, residents and pedestrians.
- J&H.31. Support implementation of the Old Blacksburg Middle School Master Plan as an anchor to the south end of Downtown.
- J&H.32. Keep core government services for citizens in the Downtown, such as municipal government offices, the police department, and the public library.

## **Workforce Development**

- J&H.33. Support Blacksburg's workforce by recruiting and facilitating the availability of needed services, including commercial, medical and other services such as child and adult daycare programs.
- J&H.34. Support community leadership programs, such as the Chamber of Commerce's NRV Leadership program, to cultivate, train, and motivate new leaders and volunteers to assist with non-profits and Town committees' future volunteers.
- J&H.35. Encourage Blacksburg Citizens Institute graduates to volunteer with Town committees and programs.
- J&H.36. Support workforce development as part of the NRV Livability Initiative.
- J&H.37. Market Blacksburg as a place for young professionals to live and work. Survey young professionals currently living in Town as to what jobs and housing opportunities need to be available to attract young professionals.
- J&H.38. Market Blacksburg as a good place to live to high school graduates entering the trade and service industries.

## **Telecommunications**

- J&H.39. Encourage community broadband build-out and expansion to make Blacksburg a competitive location for companies that need robust technology infrastructure.
- J&H.40. Complete the work of the Broadband 2015 Vision Task Force and implement Council-approved recommendations to connect businesses and residences with fiber optic networks and open access infrastructure.
- J&H.41. Work regionally to advance broadband and telecommunications infrastructure in the New River Valley.
- J&H.42. Encourage the completion of the "last mile" of infrastructure to homes, businesses and governments in Blacksburg.
- J&H.43. Establish a clear "dig once" policy to include telecommunication infrastructure during construction of Town projects.

## **Blacksburg Historic District**

- J&H.44. Support and promote the Blacksburg Historic District as both a cultural resource and an economic development tool.
- J&H.45. Educate the public about the value of the Blacksburg Historic District.
- J&H.46. Work with property owners to upgrade and renovate buildings in the Historic District, including adaptive reuse options that support the goals of the Historic District.
- J&H.47. Complete the renovation of the Alexander Black House into the Blacksburg Museum, and maintain all Town-owned buildings in the Historic District.

## **Housing**

- J&H.48. Plan for the housing demands of a changing and diversifying population.
- J&H.49. Continue to provide affordable workforce housing in Blacksburg in accordance with the adopted Consolidated Plan.
- J&H.50. Work with regional partners to promote affordable and sustainable housing in the New River Valley.
- J&H.51. Promote varying types of housing types needed, including:
- Rental or starter homes for purchase by graduate students and young families
  - Young professional housing and services in the Downtown area
  - Workforce Housing for those making 80% to 120% of the area median income
  - Affordable workforce housing options for LMI families making less than 80% of the area median income
  - Housing with universal design features to allow for aging in place
- J&H.52. As the active adult, retiree, and senior citizen population increases, promote varying types of housing needed. For example, provide smaller homes that retirees can downsize to such as townhomes or condos, as well as retirement communities and nursing home facilities.

# **PARKS & RECREATION**

## **Objectives and Policies**

- PR.1. Ensure Blacksburg's Park and Recreation legacy for future generations by providing a wide variety of high quality parks, recreational services, and special events for residents of all ages. Do so by implementing the Parks and Recreation Master Plan utilizing best management practices to guide the acquisition and development of park facilities and recreational programs.
- PR.2. Preserve, protect, enhance, and restore Blacksburg's natural resources, including its parks. Construct, design, operate and maintain parks, facilities and programs to the greatest and most economical extent possible in an environmentally friendly manner to help protect the dual purpose of the Blacksburg parks. Protect the environment while providing recreational space. (*See also Environment Chapter*)
- PR.3. Create an interconnected regional and local system of trails and walkways. Ensure that recreational facilities and programs are easily accessible by the Blacksburg Transit system, sidewalks, bike lanes, greenways and other pedestrian links. (*See also Transportation Chapter*)
- PR.5. Develop partnerships within the community and region to increase funding sources and sponsorships for recreation facilities, special events, athletic tournaments, and other exhibitions.
- PR.6. Ensure that a well-balanced maintenance program is established and funded for all Town parks, recreational facilities, athletic fields, vehicles, and maintenance equipment, such as signage, lighting and bathrooms.
- PR.7. If the Town disposes of park property, prior to the sale of the property, due consideration shall be given to protecting significant portions of open space on the property with a conservation easement or by other means. If the Town does dispose of park property, recommend using the revenue generated by its sale for either acquisition of land for the Town park system or for the development of an existing park and recreation facility in conformance with the Parks and Recreation Master Plan.

# **PUBLIC SAFETY & COMMUNITY FACILITIES**

## **Objectives and Policies**

*Please refer to the Transportation Chapter —Road Network Objectives and Action Strategies regarding pedestrian safety and traffic-calming measures.*

- PS&CF.1. Create an environment that encourages respect, mutual responsibility, community outreach, and cooperation between public safety officials and citizens through citizen education programs, safety education programs, mediation and conflict resolution services, and other outreach opportunities. Continue citizen involvement opportunities for community interaction with public safety personnel to foster positive relationships.
- PS&CF.2. Provide citizens with the highest quality public safety services and facilities by maintaining high levels of training opportunities for Police, Fire, and Rescue personnel. Establish public safety levels of service and consider these levels when evaluating the impact of future land uses on Town service demands and costs.
- PS&CF.3. Provide resources for ensuring the highest quality police, fire and rescue services, and maintain the Police Department's National Accreditation Status, including the recommended national ratio of officers-to-citizens.
- Provide police, fire and rescue with adequate building space.
- PS&CF.4. Expand emergency response capabilities through collaboration with Virginia Tech, Montgomery County, and other surrounding jurisdictions to ensure quality public safety services by:
- Working with regional governments to construct a collaborative training center for Fire, Rescue, and Police personnel and a centralized 911 dispatch center.
  - Maintaining an alternate Town emergency operations center and coordinating with the regional emergency response teams, assisting where appropriate with the New River Valley Hazard Mitigation Plan.
  - Continually monitoring emergency response times to ensure quality service delivery.
- PS&CF.5. Enhance the Town's all-hazards disaster preparedness, mitigation and response by completing the Town's Comprehensive Emergency Management Strategic Plan, which focuses on improving communications, providing training opportunities, and working regionally.
- PS&CF.6. Provide public facilities that serve as examples of the desired development quality in Town.
- The design of new public facilities and the renovation of existing facilities will meet U.S. Green Building Council rating system standards and meet current best management practices that provide for efficient and cost-effective operations over the expected life of the facilities.
  - New public facilities should emphasize efficient service delivery systems to meet existing and anticipated community needs.
  - All Town facilities must meet ADA requirements and should be equipped with proper emergency medical supplies such as **Automated External Defibrillators (AED)**.
- PS&CF.7. Continue to ensure that building needs assessments and cost evaluations are thoroughly explored prior to construction of any new public facility or renovation of an existing public facility and that the final public facility is compatible with other public facilities surrounding it. Where feasible, integrate the development of new public facilities as components of regional programs or public/private partnerships.

PS&CF.8. Maintain and fully utilize existing Town facilities according to their level of service and in a manner consistent with the community's high level of expectation.

- Establish a program to routinely review the adequacy and needs of existing public facilities and financial cost for upgrades and improvements through the Town's Capital Improvement Program and annual budget process.
- Conduct an examination of potential uses of public property prior to disposal by the Town.
- Prioritize and provide emergency power capability to critical Town facilities for temporary and extended power outages to ensure continuity of services to Town citizens.
- Ensure the coordination of development with adequate and accessible existing and future public facilities.

PS&CF.9. Work with Montgomery County Boards and Agencies, the Town of Christiansburg, Virginia Tech, and other public and private agencies to plan for future needs, develop shared facilities, and provide joint-use of existing facilities.

- Work cooperatively with Virginia Tech to plan for potential university growth and development.
- Work with Montgomery County to keep community resources on existing school properties.

## **UTILITIES**

### **Objectives and Policies**

#### **Public Water System**

- U.1. Provide an adequate and reliable water distribution system throughout the Town that meets Town water specifications and standards that strive to limit water loss. This includes construction of new facilities plus maintenance and upgrades of existing facilities.
- U.2. Extend waterlines and upgrade all properties to provide fire protection service, ensuring waterlines are extended and fire hydrants are installed as part of any new development projects that occur in areas of Town not currently served by public water. Ensure that fire hydrants are installed within all existing developments in accordance with Town Code.
- U.3. Ensure the public water system provides adequate water storage facilities to serve Town residents.
  - Provide water storage supply equal to 48 hours of service to all areas within the Town and its service area.
  - Construct an additional water storage facility at the south end of Town, with screening equal to or exceeding existing tanks and with accommodations for telecommunication antennas.
  - Acquire and construct water storage facilities on the high system in the areas of North Main Street, Brush Mountain, and Harding Avenue and on the low system in the areas of Laurel Ridge, Price Mountain, and Brush Mountain that minimize impacts to the surrounding viewshed while also accommodating numerous telecommunication antennas.
- U.4. Ensure that all residents within Town limits are served by public utility services that provide adequate and reliable water and wastewater services. Areas outside the corporate limits will not be eligible for Town provided utility services unless a boundary line adjustment is requested and approved and the property becomes a part of the Town prior to services being provided.
- U.5. Require new developments to utilize pipe design and construction of the water system in accordance with Town Code and development standards.
- U.6. Plan regionally with local jurisdictions and authorities for public water needs, infrastructure, and utility extensions across jurisdictions.
  - Work cooperatively with other jurisdictions in the New River Valley to promote water conservation and to supply clean water to residents in the region without degrading the quality or quantity of the Town's water supply.
  - Continue to participate in the Blacksburg-Christiansburg-VPI Water Authority on drinking water issues.
- U.7. Encourage water reuse, including collection and reuse of stormwater and reuse of graywater.



## **Public Wastewater System**

- U.8. Provide a resilient, sustainable and cost-effective public wastewater service that is in conformance with all state and federal regulations.
- Decrease the amount of inflow and infiltration (I/I) within the system before peak flows exceed pipe capacity.
  - Employ renewable engineering strategies to extend the life of existing wastewater assets.
  - Encourage industrial process water recycling to reduce wastewater volumes and treatment demand.
  - Document existing environmental and ecological conditions prior to the construction of any wastewater system to provide baseline ecological information on any affected creek.
  - Encourage reuse.
- U.9. Continue an ongoing inspection and maintenance program as identified in the CMOM Program for the existing public wastewater system.
- Use Capital Improvement Program funds to upgrade and replace existing wastewater lines to reduce I/I.
  - Maintain a cleaning and root-cutting program to prevent stoppages.
  - Reduce I/I by disconnecting sump pumps and roof drain spouts from wastewater collection lines and utilizing other best management practices.
  - Explore the feasibility of establishing a program to require inspection of roof drains and sump pumps at the time of real estate property transfers.
- U.10. Plan regionally with other local jurisdictions and authorities for public wastewater needs, infrastructure, and utility extensions across jurisdictions. Participate with the Sanitation Authority to evaluate the region's rate of development and project treatment facility upgrade needs.

## **Stormwater Management System**

- U.11. Develop a Comprehensive Stormwater Management Program, including a Stakeholder Advisory Committee to implement the Stormwater Management Task Force recommendations.

## **Solid Waste Management & Recycling**

- U.12. Promote and expand waste reduction, reuse, and recycling locally and regionally by citizens, government and private businesses.
- U.13. Develop a comprehensive Environmentally Preferable Purchasing Policy for all Town government operations to encourage purchase of less toxic, more environmentally friendly items, for example, reduced packaging that contains recycled materials that can be reused locally.
- U.14. Continue to develop and promote long-term waste management and disposal strategies that explore alternatives to landfilling, including food composting and yard debris recycling.
- U.15. As regional waste collection practices become more uniform, contract regionally for collection services to increase cost effectiveness.
- U.16. As technology allows, consider development of a pay-as-you-throw program for refuse disposal whereby fees are based upon the amount of waste generated.

## ELECTRICAL SERVICES & NATURAL GAS

- U.17. Support the development and maintenance of a highly reliable, efficient, and environmentally sound electrical infrastructure.
- U.18. Regarding underground utilities:
- Require that new installations of utilities in developments be constructed underground.
  - Emphasize conversion to underground utilities during all franchise negotiations and encourage Virginia Tech Electric Service and American Electric Power Company to convert overhead lines to underground on a continual basis.
  - Convert utility lines to underground service in Town road improvement projects and lay conduit in all Town projects in the right-of-way to provide for future utility relocations.
- U.19. Adopt or maintain reasonable regulations for utility separation, timing and coordination of work in the right-of-way, safety rules and regulations, and preservation of the streets in a condition to best serve the traveling public.
- U.20. Encourage all utility franchisees to implement and maintain Best Available Technology (BAT) practices and infrastructure.
- U.21. During all utility franchise negotiations, include a requirement that all utility companies report service disruptions on an annual basis to the Town of Blacksburg.
- U.22. Support programs for public and private entities to become more energy efficient and utilize alternative energy sources such as solar, wind, or other decentralized technologies.
- Promote the use of Demand Side Management (DSM) to reduce energy use through efficiency improvement devices.
  - Review and amend the Zoning Ordinance to incorporate clear standards.
- U.23. Coordinate with Virginia Tech Electric Service and American Electric Power Company to ensure a seamless electrical power supply to all areas of the Town and encourage planning and cost-share projects between the Town and utility companies.
- U.24. Provide cost-effective, energy-efficient street lighting in Town and on the Virginia Tech campus and VDOT-maintained roads that is appropriate to the use and character of the area and that promotes the Dark Sky initiatives.
- U.25. Accept alternate street lighting within neighborhoods that is appropriate to the character of the area, available through the electric utility, and where any excess cost is paid by the neighborhood residents or commercial property owners.
- U.26. Support the development and expansion of natural gas service that is reliable, cost effective, properly maintained, and responsive to customer needs. Require the best available safety measures and practices in franchise negotiations and encourage the expansion of natural gas service to new developments in a manner that accommodates anticipated commercial and industrial growth.

## **Telecommunications and Technology**

- U.27. Establish and maintain a vision of and goals for the Town's globally competitive telecommunications infrastructure and technology-related services.
- U.28. Establish public and private partnerships to undertake projects connecting any major public or private facility with fiber optic services.
- U.29. Apply infrastructure and applications to make the municipal workplace and technology services better, faster, or less expensive; and to provide services that cannot be provided any other way.
- U.30. Regularly assess the Town's IT situation, monitor performance of infrastructure and services, and adjust activities as necessary.
- U.31. Continue the transition toward paperless communications for all Town of Blacksburg processes, including website upgrades to implement the latest technology advances for on-line registration, payment and tracking of applications for all Town services and programs.
- U.32. Pursue technology initiatives to provide additional access to Town and County services, including an upgrade for online virtual Town Hall meetings and additional meeting space designed for digital recording.

## **Wireless Facilities**

- U.33. Continue to implement the regional approach to siting wireless facilities. Encourage Virginia Tech to carefully consider and restrict the placement of wireless facilities on- campus and at the Corporate Research Center.

# **TRANSPORTATION**

## **OBJECTIVES AND POLICIES**

### **Paths to the Future**

- T.1. Implement the Paths to the Future Map to create a cost-efficient infrastructure of multi-purpose trails that connects to residential areas, parks, schools, businesses, and other community amenities.
- T.2. Support the implementation of the New River Valley's Bikeway, Walkway, Blueway plan.
- T.3. Support the Corridor Committee in educating the public about etiquette and safety on trails, sidewalks and bike routes.
- T.4. Educate the public on the safety and economic value of having trails in residential areas.
- T.5. Encourage employers to provide incentives to employees who regularly use alternative transportation to get to work.
- T.6. The Zoning and Subdivision Ordinance shall establish the design standards for trails, sidewalks and bicycle lanes.
- T.7. As part of the development review process, when proposed developments include trails as shown on the Paths to the Future map, determine how the trail will be incorporated into the development design and how the trail will be connected to internal sidewalks and bike routes.
- T.8. Increase access to the trail network to promote the network as an effective means of transportation and a recreational amenity:
  - Include parking, bicycle racks, shelters, and other facilities at trail access points to promote use of the system
  - Construct multi-use trails that are accessible to the physically challenged and meet ADA standards as topography permits
  - Improve connections from trails to sidewalks and bicycle lanes with safe crossings at major roads
- T.9. Provide maintenance of the trail system to ensure a safe and clean trail system year-round:
  - Monitor the condition of trails and establish criteria for trail maintenance
  - Perform snow removal on trails when feasible
  - Provide opportunities for private citizens, businesses, and service organizations to keep the trail system litter-free
  - Provide safety phones and safety lighting along bike-walkways where appropriate

## **Sidewalks**

- T.10. Complete the construction of a connected sidewalk system:
- Include sidewalks on both sides of the road in all publicly-funded, new road construction projects
  - Require the inclusion of sidewalks or multi-purpose trails in all new subdivisions
  - Consider requiring sidewalks on both sides of the street in infill areas with high pedestrian traffic
  - Minimize curb cuts
  - Pursue new sources of funding for sidewalks
  - Ensure the sidewalk system is ADA accessible
- T.11. Minimize pedestrian and vehicular conflicts by:
- Implementing crossing signals at all signalized intersections
  - Maintaining sidewalks and streets
  - Educating drivers on yielding to pedestrians in crosswalks
  - Ensuring appropriate signage, lighting, markings, and other physical improvements are made
- T.12. Maintain and improve the aesthetic quality of the pedestrian environment by planting street trees and other landscaping and installing street furniture where appropriate.
- T.13. Remove utility poles and other obstructions from sidewalks.

## **Bicycle**

- T.14. Complete the development of the Bicycle Master Plan and, once adopted, begin implementation of the plan.
- T.15. Develop a bikeway system that minimizes potential conflicts between bicycles, pedestrians and motor vehicles; conduct regular maintenance of existing bicycle lanes; provide appropriate signage, lighting, markings, and other physical improvements; and promote safety and education through Virginia Tech as well as the Town to create a safe and convenient bicycle network for all.
- T.16. Develop and implement a comprehensive bicycle parking program throughout the Town and in coordination with Blacksburg Transit to install covered bicycle racks at public sites and commercial and residential locations, as well as to coordinate with Montgomery County and the New River Valley Planning District Commission for bicycle and pedestrian connections throughout the region.
- T.17. Investigate implementing a bike share program.
- T.18. Work locally with Virginia Tech and regionally with the New River Valley Planning District to achieve a connected bike system.

## **TRANSIT**

- T.19. Complete a Blacksburg Transit Comprehensive Operational Analysis every five (5) years while updating the Transportation Development Plan annually.
- T.20. Monitor the public transportation provided to ensure effectiveness and efficiency while maintaining the priorities of safety, courtesy and scheduling.
- T.21. Operate the transit system in a cost-effective, fiscally sound manner that is well supported by federal and state grants.
- T.22. Enhance transit accessibility and convenience; lower parking demand, energy use, and air pollution by reducing traffic on local roads; and educate the community on the positive environmental impact from using public transit in order to encourage its overall use throughout the Town.
- T.23. Work regionally and locally to develop satellite park-and-ride facilities with bus service to reduce traffic congestion in the region.
- T.24. Comply with all federal and state environmental regulations and guidelines by using best available technologies and other innovative systems. Support Blacksburg Transit's continued use of alternative fuels and acquisitions of hybrid electric buses by providing needed additional funding.
- T.25. Stimulate economic development by expanding public transit's role in supporting tourism and as a tool to attract new businesses and aid existing local businesses in employee retention.
- T.26. Upgrade the Blacksburg Transit fleet to provide wireless internet access and implement new technologies for vehicles, equipment, and/or communications in cooperation with Virginia Tech.
- T.27. Increase the number of covered bus shelters and covered bike parking provided at transit stops where appropriate.
- T.28. During the development review process, ensure that transit service and access to/from the transit stop and the development are provided.
- T.29. Ensure that transit service is accommodated in designing Town projects.
- T.30. Expand Blacksburg Transit to become a full service network for permanent residents to meet their commuting, shopping, sporting or leisure activities.
- T.31. Improve the regional accessibility of Blacksburg by integrating bus, rail, and air modes of transportation into the Town's transportation system.
- T.32. Research the opportunities to provide high-speed passenger connections between the New River Valley and Roanoke Valley that would be connected to Blacksburg's Alternative Transportation System.

T.33. Better serve riders with up-to-date route information.

## **Road Network**

T.34. Develop the Town street system in accordance with the Town Street Classifications Map, updating when needed.

T.35. Complete and update *Funded* and *Other Priority Projects* listed in the Town's Project Priority table.

T.36. Keep current cost estimates for road and transportation improvements in compliance with State Code Section §15.2-2223.

T.37. Identify new funding sources for road project priorities that are not eligible for the urban Road Improvement Program.

T.38. Actively participate in the MPO and updates to the MPO's Plan.

T.39. Avoid the creation of new cul-de-sacs in developments unless no other vehicular connections can be established.

T.40. Provide for a street network that achieves the interconnection of parcels, blocks, and neighborhoods, keeping consistent with the historical grid network pattern of the Town.

T.41. Provide a road network that facilitates traffic flow within and outside of Town, while minimizing the impact on residential neighborhoods and bikeways/walkways, improving access to areas of higher-density and activity centers.

T.42. Provide a road network that is safe for all users.

- Make the best use of the available right-of-way in neighborhood streets to accommodate pedestrians, bicyclists, transit and cars
- Incorporate traffic calming principles as needed
- Provide regular tree trimming along rights-of-way
- Limit driveway access along collector and arterial roads
- Reduce speeding and cut-through traffic in neighborhoods
- Maintain storm drainage facilities, resurface pavements and streets when necessary, replace and rehabilitate bridges
- Provide Dark Sky compatibility street lighting along all new or improved collector and arterial roads and along local roads where requested by petition

T.43. Provide a road network that accommodates multiple modes of transportation including bus, pedestrian, and bicycle access as well as develop strategies for reducing demand on the Town's roads.

T.44. Provide a road network that enhances public life and is congruent with the Town's unique character and quality of life.

## **Alleys**

- T.45. Retain existing alleys and unbuilt right-of-ways, and do not approve vacations without a clear demonstration of why elimination of the alley or unbuilt right-of-way serves a greater public purpose than its retention. All vacations will be in compliance with the criteria contained in the Alley and unbuilt right-of-way vacation process.
- T.46. Amend the Zoning Ordinance to incorporate the Alley and right-of-way vacation process.
- T.47. Maximize the use of alleys and unbuilt right-of-ways by all modes of transportation that can safely be accommodated.
- T.48. Maintain and improve alleys when and where necessary, as funding allows.
- T.49. Encourage the design of developments that incorporate alleys for primary or secondary vehicular access in keeping with the historic development pattern of the Town.

## **Parking**

- T.50. The development review process ensures:
- Surface parking facilities are landscaped and appropriately lighted
  - Structured parking facilities are designed to minimize the visual impact of the bulk of the structure and the horizontal appearance of a parking deck
  - New parking lots minimize impacts on stormwater
- T.51. Require that parking for commercial and industrial development is adequate to serve employee and customer needs without excessive unused spaces.
- T.52. Promote alternative modes of transportation, including the development of a shuttle or trolley service between commercial centers and outlying parking nodes and mixed-use areas.
- T.53. Maintain an inventory of available public parking spaces and publicize parking locations using best available technologies.
- T.54. Encourage shared use of existing parking areas in Downtown, including parking lots of churches, law firms, and other businesses. Have business owners provide alternate parking hours for daytime and nighttime to better provide for the array of individuals parking Downtown.
- T.55. Continue to improve handicap access in the Downtown area through handicap parking spaces, bus stops, and handicap accessible pedestrian connections in order to meet ADA standards and to better provide for those with disabilities as a Town.
- T.56. Assist Downtown business in finding either alternate transportation modes for their employees or alternate parking spaces so that parking spaces near their businesses can be utilized for customers.



- T.57. Rigorously enforce parking restrictions in the commercial area of Downtown and in the adjacent downtown neighborhoods.
- T.58. Expand and enforce permit parking in Downtown residential neighborhoods affected by campus parking shortages or deficiencies.
- T.59. Work towards the future goal of having two new structured parking facilities in the Downtown core: one on University property at the Squires parking lot and one on the Town-owned Progress Street lot.

### **Regional Access**

- T.60. Support all efforts to bring passenger rail service to the Town of Blacksburg or closer to the Town with convenient transit connections from the Town to the station.
- T.61. Monitor future expansion of the interstate highway system that may involve the US 460 Bypass or Smart Road to ensure that any future highway corridors are designed to preserve the character of the area and with sensitivity to safety, quality of life, and natural beauty.
- T.62. Monitor the implementation of the I-81 Corridor Improvement Study and any potential impacts upon the Town.

### **Air Transportation**

- T.63. Support the Virginia Tech/Montgomery County Executive Airport to provide corporate/executive service for the New River Valley and to work in conjunction with other regional airports promoting regional economic development activities associated with business, industry, and university-related research and development.
- T.64. Protect Town residents and air traffic from possible hazards or nuisances by enforcing airport safety zone restrictions.
- T.65. Participate in the Virginia Tech/Montgomery County Executive Airport Authority to ensure the Airport is safe and convenient for use while serving the Town and region's businesses and citizens.
- T.66. Create a separate zoning district for the Virginia Tech/Montgomery County Airport to facilitate airport operational services.
- T.67. Encourage airport attractions that enable the Town to be a frequent stop for small plane travel, and encourage public use of the airport terminal for meetings, informational gatherings, and special events.

## **LAND USE**

### **OBJECTIVES & POLICIES**

- LU.1. Clearly articulate and communicate the Town's Future Land Use goals, development standards and requirements to the development community and the general public.
- LU.2. Educate the public about the land use decision-making process and tools to encourage public participation at all levels of the process.
- LU.3. Review the Zoning Ordinance and Subdivision Ordinance, as well as other parts of the Town Code, to determine if these regulations adequately implement the Town's Comprehensive Plan.
- LU.4. Explore programs to encourage more construction in Town of EarthCraft certified and U.S. Green Building Council's LEED certified buildings.
- LU.5. Continue amendments to update the Town's Zoning Ordinance based on Town Council priorities. Determine the Zoning Ordinance amendments necessary to:
  - Implement the Residential Infill Design Guidelines
  - Create a Commercial Infill Guideline manual
  - Re-evaluate the implementing districts for the Mixed Use areas
  - Facilitate aging in place and other uses needed for an aging population
- LU.6. Consider the compatibility of development with surrounding uses. Utilize strategies such as landscaping or other buffering techniques along with modification of site design to minimize impacts and facilitate compatibility.
- LU.7. Encourage developers to work with surrounding property owners and tenants to resolve community concerns prior to formalizing development plans.
- LU.8. Continue the policy not to extend Town water and sewer to areas unless within Town boundaries and subject to the Town's Land Use regulations.
- LU.9. Work with Virginia Tech on the implementation of the Virginia Tech Campus Master Plan, specifically with the timing and impact of proposed improvements.
- LU.10. Create a corridor planning initiative for key roadway corridors to address redevelopment opportunities, streetscaping and gateway entrances.
- LU.11. Encourage residential infill in the Downtown area. Support the addition of a mix of uses and services that will attract and support a Downtown residential population.
- LU.12. Develop and implement a comprehensive long-term parking strategy and education plan to reduce parking needs Townwide and address continued parking issues in residential areas.
- LU.13. Continue Town support of child care and adult day care services for all residents.

- LU.14. As the Town focuses on attracting high-tech industry, IT infrastructure should also be considered on each development project along with more traditional public utilities.
- LU.15. Use cluster development as a means to enhance the natural environment and for the preservation of open space.
- LU.16. Through the Land Use review and decision-making process, encourage grouping open spaces together and creating interconnectivity in sensitive areas such as ridgelines, steep slopes, wetlands, and flood-prone areas.
- LU.17. Reduce the development of ridgelines and preserve open space.
- LU.18. Protect the integrity and quality of forested areas as buffers, wildlife habitats, and pollutant removal systems. Ensure the retention of existing high quality trees and woodlands and the planting of new trees during land development.
- LU.19. Regulate the amount of noise and/or light produced by land uses to minimize impacts on nearby properties.
- LU.20. Protect the integrity and quality of water resources in the Town.

# **GOVERNMENT RELATIONS**

## **Objectives and Policies**

- GR1. Improve existing relationships and establish new relationships between governing bodies of the New River Valley and the Roanoke Valley to improve understanding and support regional development.
- GR2. Work with Montgomery County on the successful redevelopment of the Old Blacksburg Middle School property.
- GR3. Work with the New River Valley Planning District Commission to successfully complete and implement the NRV Livability Initiative.
- GR4. Continue coordination with the Town of Christiansburg and Montgomery County at the comprehensive planning level.
- GR5. Identify opportunities for short, medium, and long-term joint infrastructure, recreational, or environmental protection projects between partnering agencies and governments that achieve efficient uses of resources and cost savings.
- GR6. Support regional efforts by local government jurisdictions and non-profit organizations to support the needs of the increasing senior citizen population.
- GR7. Work with other entities in the region to explore expansion of Blacksburg Transit and alternative transportation to increase mobility between localities in the region and reduce individual commuting by automobile.
- GR8. Work with Montgomery County to encourage developments outside of Town limits that are of a scale and design to complement developments within the Town, minimize impacts on traffic congestion, and provide open space and greenway connections, while protecting viewsheds and ridgelines.
- GR9. Develop initiatives with Montgomery County to protect and promote historic districts located in the Town and County. Provide financial incentives for investing and renovating historic properties.
- GR10. Continue to coordinate with Virginia Tech on Town/Gown relations, transportation, implementation of the University Master Plan and the Town's Comprehensive Plan, Virginia Tech Foundation projects, and protection of commercially zoned properties Downtown.
- GR11. Ensure that meals, lodging, and other taxes are applied equally within the Town so that businesses are not placed at a disadvantage because they are taxed at different rates depending on their location.
- GR12. Support local governments and other regional organizations to implement economic strategies and incentives to promote the Town of Blacksburg and the New River Valley.

- GR13. Continue participating in discussions regarding Montgomery County joining the Water Authority.
- GR14. Continue to participate in the Regional Airport Authority with Virginia Tech, Montgomery County, and the Town of Christiansburg to support airport operations and marketing the airport to help grow the region's economy.
- GR15. Promote a unified regional development pattern and address the regional impacts of development by considering the following Town concerns when commenting on development proposals in adjacent jurisdictions. *Please refer to the Blacksburg Administrative Manual for additional detail.*
1. Density and intensity of land use and transition of land uses with adjacent jurisdictions
  2. Implementation of Urban Development Areas
  3. Historic preservation
  4. Viewsheds
  5. Town gateways
  6. Transportation, including road construction, traffic volume and safety, transit, trails, sidewalks and bikeways
  7. Water
  8. Wastewater
  9. Stormwater and Watershed impacts
  10. Information Technology, including Telecommunications Towers
  11. Broadband Development
  12. Economic Impacts