

Appendix Two: Model Design Guidelines

Maryland Historic National Road Corridor Partnership Plan Update

January 2015



Prepared for: The Maryland National Road Association

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Appendix Two: Model Design Guidelines

Maryland Historic National Road

Corridor Partnership Plan Update

Prepared by; LARDNER/KLEIN LANDSCAPE ARCHITECTS

With asssistance from: WHITNEY BAILEY COX & MAGNANI, LLC, Transportation FLOURA TEETER, Concept Plans

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Context Sensitive Solutions for Maryland Historic National Road:

A companion document, *Context Sensitive Solutions for the Maryland Historic National Road,* provides specific guidance for the road and right-of-way. See http://www.marylandroads.com/OED/mhnr-css_finalO 61104.pdf. The document includes guidance for the following topics:

- Introduction
- Determining Appropriate Treatments
- Significance of the Historic National Road
- Safety
- Alignment and Geometry
- Roadside Barriers
- · Grading and Drainage
- Traffic Control Devices
- Utilities
- Landscape
- · Bridges and Small Structures
- Signs
- Lighting
- Access
- Enhancing the Byway
- Bicycles
- Maintenance
- · Management of Publicly Owned Land

INTRODUCTION



Figure 1 View of new residential development from the National Road traveling eastbound to Middletown.

This section describes the context of the Maryland Historic National Road; the relationship of the guidelines to the Corridor Partnership Plan Update; why the guidelines are needed; and how to use and adapt the guidelines to a specific community or project.

Maryland's Historic National Road

Several years ago, the Maryland Department of Planning on behalf of the Maryland National Road Association, the sponsoring organization for Maryland's Historic National Road, successfully applied for funds to develop model community design guidelines. These guidelines identify ways to guide growth, change, and roadside development along the MHNR. It is a companion piece to the Maryland State Highway Administration's Context Sensitive Roadway Design Guidelines.

The model guidelines provide communities with a set of simple design guidelines or principles to use in encouraging new development projects to be implemented to enhance the appearance of the Byway. Given the wide range of communities and landscapes through which the route travels, the guidelines help shape the form and appearance of future development so as to preserve the qualities which ultimately led to its designation as an All-American Road.

Approach to Design Guidelines



Figure 2 East of Clear Spring - the 2001 plan cover photo - One of the most evocative landscapes along the HNR in Maryland (See the change in 2011 below)



Figure 3 East of Clear Spring, 2011- Just this one house completely altered this evocative landscape view

2

The Need for Model Guidelines

Since the writing of the initial Corridor Partnership Plan (CPP) for Maryland's Historic National Road (MHNR), nearly 5,489 acres of rural land that can be seen from Maryland's Historic National Road (within its "viewshed") were converted to non-rural uses. Of those converted acres, approximately 56% were outside of Priority Funding Areas. The "Smart Growth" Areas Act of 1997, Chapter 759 of the Laws of Maryland of 1997, requires the State to target funding for "growth-related" projects to Priority Funding Areas (PFAs).

Given the more recent statewide and local efforts to encourage development within existing cities and towns and preservation of rural, agricultural, cultural and other resource lands, there is a need to develop a vision for how this type of development can occur within designated growth areas and how the scenic and natural environments can be preserved along the MHNR. The model design guidelines can help provide that vision through best practices, where available, and by illustrating approaches to community design and development that help to reinforce the character-defining features of the Historic National Road where best practices are not readily available. The guidelines can be utilized by local governments, property owners and interested citizens to shape new development in a manner that is sensitive to the historic context of the MHNR.

MHNR Character-Defining Features

This section will describe the character-defining features of the Historic National Road by period and by geography. The character-defining features of each of the eras identified below are further illustrated with photographs and supporting text in the design guidelines for rural, transition, and urban areas. There are three critical eras associated with the MHNR:

- The "Heyday" of the National Road corresponding to
 the time when the Historic National Road was the primary
 east-west route and the gateway to the "Old Northwest"
 (approximately 1810-1850). Many of the repeating elements
 that were found along the route are still present today,
 including mileposts, mile houses, inns and taverns, and stone
 arch bridges.
- Agriculture and Trade era corresponding to the time
 associated with the mechanization of agriculture and the
 expansion of commerce and industry brought about by the
 railroads and the canal system (approximately 1850-1910).
 Although during this time the National Road experienced

a steady decline, many of this era's associated resources are still evident, including Victorian mansions and homes, commercial buildings, and well maintained farmsteads that are all visible from the Byway. Several historic districts along the route recognize the significance of this era. Railroad and canal resources lie close by the corridor.

- Revival period corresponding to the increase in popularity
 of the automobile (approximately 1910-1960), resulting in a
 resurgence of construction of highway-related services, such
 as motels and tourist cabins, scenic overlooks, road houses,
 garages, and later, early commercial centers. Sometimes, these
 new services were remodeled or rebuilt at the same locations as
 the originals.
- Beyond the Revival Period the cities and towns along the MHNR have continued to grow and change. Bypasses were built that rendered even the Revival automobile route as an orphaned stepchild with the commercial business following the bypass to the outskirts of towns. Interstate travel expanded creating new divided highways parallel to the Historic National Road that further isolated some of the communities where interchanges were built, and magnified the change where they were built. The result was another era of decline for the original pike towns. Efforts to reclaim some of the towns have succeeded, especially where geography, historic preservation, and ingenuity have played an important role, such as in Frederick, Maryland.

Figure 4 Multi-family housing and mega churches have altered the landscape tremendously in this area

Guiding Growth in Maryland Today

Today, the State of Maryland continues its efforts to direct growth related policies, funds and related public investments towards existing communities and conservation related policies in rural areas. Maryland's current plan for growth and development, PlanMaryland—as it is implemented—will help to both preserve the rural areas and stimulate growth in existing cities and towns.

The PlanMaryland initiative is intended to improve coordination between state agencies and local governments by creating a plan to stimulate economic development and revitalization in towns, cities and other existing communities that have facilities to support growth. The effort will, in part, be implemented by targeting preservation and revitalization dollars through a framework of geographically identified areas, called "Planning Areas." There are five planning areas that relate to the original PFAs and the efforts to target resources within those PFAs.

- Targeted Growth and Revitalization Areas Areas within PFAs including Sustainable Communities and Enterprise Zones
- Established Community Areas within PFAs Primarily existing stable residential areas

Approach to Design Guidelines

- Future Growth Areas Areas identified by municipalities and counties for future growth
- Large Lot Development Areas Areas where development exists on larger lots
- Rural Resource Areas Areas where development is least preferred, where no public water and sewer service is planned and where agricultural and natural resources are the predominant use

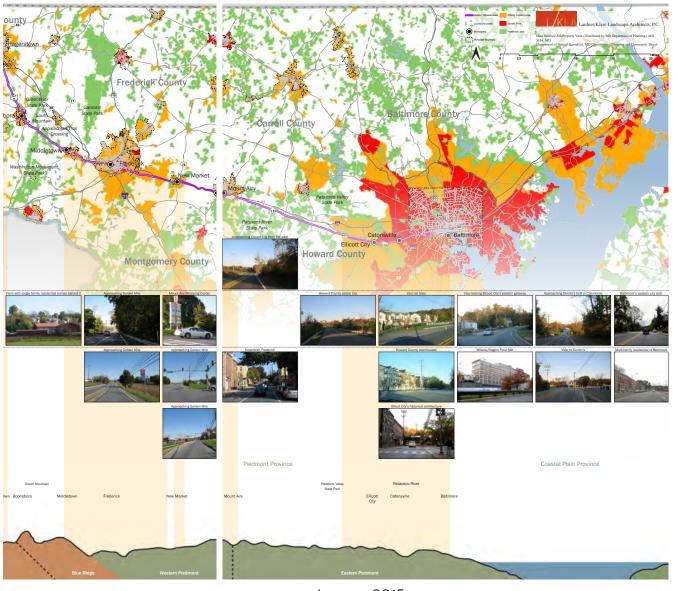
Figure 5 Maryland's Growth Print analysis applied to the MHNR corridor showing targeted (urban) and planned growth areas (transition) as well as protected lands (rural)

PlanMaryland recommends the designation of "Historic and Cultural Areas" The designation is intended to encourage communities to think more broadly about historic preservation - something that is particularly germane to the Historic National Road. According to PlanMaryland: "The existence and promotion of these resources often enhance areas and make them more attractive for economic development, tourism, and other private investment." In addition,



PlanMaryland further recommends that Historic and Cultural Areas be designated to: "Retain, maintain, and enhance the distinguishing designs, materials, uses, and spatial relationships that make the area historically, architecturally, and culturally significant"

Plan Maryland is intended to provide additional tools to guide growth within the PFAs and protect rural and resource lands in the State. GrowthPRINT is a GIS based tool designed to further highlight areas within Priority Funding Areas that are currently being targeted for infill, revitalization and redevelopment. The map below highlights areas slated for growth, PFA's (shades of orange), targeted growth areas (red), and protected lands (green).



Approach to Design Guidelines

Using the Model Guidelines

The process and approach for applying the MHNR guidelines is outlined below.

Who Should Use These Guidelines?

The guidelines will inform decisions of the following parties when addressing planned growth and development along the MHNR.

- a. Local Jurisdictions can adopt all or a portion of the guidelines to assist property owners and developers along the MHNR. In addition, it is critical that local jurisdictions address national byway preservation policies and strategies in comprehensive plans to ensure local land use and infrastructure planning integrates national byway protection.
- b. **Non-profit organizations** can use the guidelines to work directly with a property owner to educate them about how to preserve or maintain the character-defining features
- c. **A property owner –** may want to use the guidelines to think about a future change to their property

Determining the Appropriate Context

The Maryland Department of Planning Growth Print model (see Figure 5 on page 4) will assist in determining whether a municipality, non-profit organization, or property owner should apply rural, transition, or urban guidelines.

- a. Rural Areas areas outside the PFAs
- b. **Transition Areas** areas within PFAs that are planned for future growth (either in rural or low density uses)
- c. **Cities and Towns** areas within PFAs and identified in the Growth Print model with existing infrastructure and services in place

Determining Design and Management Goals

The presence of character-defining features will determine whether management goals should focus on preservation, accommodation, or enhancement.

- a. **Preserve character-defining features** preservation is defined as the act or process of applying measures necessary to sustain the existing form of identified character-defining features of the corridor. Preservation treatments will generally apply to the original resources of either the heyday or Revival periods of the HNR.
- Maintain the character-defining features generally applies to the majority of the corridor where the goal is to retain the character-defining features of the MHNR's setting, while accommodating the desired growth and development activity.

c. Enhance the overall character – apply to those areas that no longer have any of the character defining features that are in any way evocative of either the Heyday or Revival periods of the Maryland Historic National Road.

Applying Model Community Guidelines

The following growth and development types are addressed in the guidelines and are illustrated by best practice examples and photographs or by one of six case studies applying model guidelines.

Rural Guidelines

- a. Rural farmstead or homestead
- b. Rural National Road character-defining feature
- c. Rural small-scale commercial
- d. Rural interchange or crossroads

Transition Guidelines

- a. Transition rural but planned for future growth and development
- b. Transition neighborhoods
- c. Transition mixed use communities
- d. Transition reclaiming strip commercial corridor

Urban Guidelines

- a. Urban historic edge of town and neighborhood
- b. Urban historic Main Street

Unique Situations

a. Utilities and Infrastructure

Guideline Categories

Each of the eleven growth and development types address the applicable categories associated with the following design elements as they pertain to the MHNR.

- a. **Organizing elements** guidance related to predominant patterns, organization, and spatial relationships of the built environment and natural elements; relationships between land uses and development types; siting of built element in the Urban to Rural Transect (See Figure 10 on page 9)
- Views and Spatial Relationships guidance pertaining to the relationship of built elements to landform, topography, and landscape features
- water- guidance on the design of built elements to accommodate streams, creeks, and other waterbodies including storm water management



Figure 6 Transition area approaching Middletown with an open space transition between rural and urban



Figure 7 Transition area with more suburban character heading west



Figure 8 Distinctive townscape of Middletown reflects the character defining features of Heyday and Revival era cities and towns along the Historic National Road

Approach to Design Guidelines

- d. **Vegetation** strategies for preserving existing vegetation or adding vegetation to enhance the character of a place or to support the existing rural character
- e. **Siting of structures** guidance on siting of structures in regard to setbacks, natural features, and other built elements
- f. **Circulation and access**—guidance on roadway design and pedestrian and bicycle access¹
- g. **Architectural character** guidance on appropriate architectural character for new development, redevelopment, and infill development, particularly addressing styles, materials, building proportions and massing, scale, and detail features such as fenestration, roof styles, and outdoor lighting.

Using the Model Guidelines

Anyone considering a development project along the MHNR can use the guidelines as a means either preserving, maintaining, or enhancing the character defining features within the relevant land use context associated with the project. Once the project is placed in the relevant context, the project can be reviewed in terms of the guiding principles that underlie all of the guidelines. Principles reinforce the key MHNR objectives for development in the context of urban, transition, and rural areas.

A separate best practice guideline for increasing pedestrian and bicycle access to scenic byways using context sensitive approaches is under development by SHA's Scenic Byway Program (2015)







Figure 9 Urban to Rural Land Use Transect, Boonsboro

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Design Guideline Principles

- 1. Reinforce urban to rural land use transect
- 2. In rural areas, natural elements dominate
- 3. Historic National Road towns have distinct edges
- 4. Where towns are growing, redefine edge
- 5. Convert isolated land uses to communities
- 6. Where towns have grown, enhance edge
- 7. Infill development carefully into towns

PRINCIPLE 1: REINFORCE URBAN TO RURAL LAND USE TRANSECT

The MHNR is unique in that it was originally developed to attract development and to facilitate the movement of goods and services. The result is a development pattern that evolved from the early road system. Each community along the HNR already represents a rural to urban transition at each of the major cities, smaller towns and even the original settlements built about a days ride apart to serve travelers. The urban to rural transect demonstrates how that transition can be set up to guide land use and transportation design in each of the rural to urban areas. All of the corridor elements should reflect a clear and distinct transition from rural to urban.

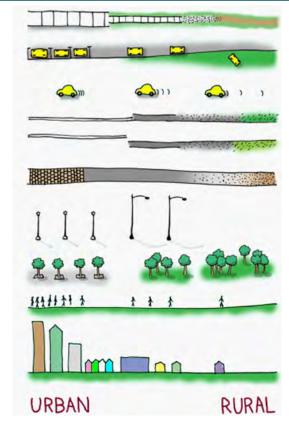


Figure 10 Diagram of the urban to rural transect (courtesy of lan Lockwood)







Primary Development Principles

Figure 11 Agricultural landscape east of Clear Spring



Figure 12 Edge of town in Frostburg is defined by the juxtaposition of open agricultural land and density of the built environment.



Figure 13 Entering Hagerstown from the west

PRINCIPLE 2: IN RURAL AREAS, FIT NEW BUILT ELEMENTS INTO THE NATURAL LANDSCAPE

Rural areas are generally characterized by farms and forests, with a limited number of built elements such as farmsteads, homesteads, or small commercial buildings. The many extent features of the MHNR's Heyday period, it's Agriculture and Trade era, or Revival era are typically found in the corridor's rural areas. Rural areas are typically outside of the PFA. Conservation strategies included within the Corridor Partnership Plan and its recent update are the primary means of maintaining the character defining features of the rural areas. Inclusion of nationally-designated byway conservation strategies in local comprehensive plans and adoption of the related guidelines by localities are encouraged. When development is proposed, guidelines should focus on reducing the visual contrast with the existing natural and cultural landscapes within the National Road's viewshed corridor.

PRINCIPLE 3: MAINTAIN THE DISTINCT EDGES OF EXISTING TOWNS

As is exemplified by the urban to rural transect of Boonsboro (Figure 9 on page 8), and in Frostburg (See page 20), towns along the Historic National Road are typically defined by a distinct built edge—this distinguishes it from the transition area into town. This edge is characterized by buildings that directly front the roadway (limited or no front yards) with little to no space between adjacent buildings (side yards). Building density continues along the main street, generally to the municipal boundary. The street, parking lane, curb, sidewalk, street lighting, and in some cases street trees, have a distinctly urban character as well, with little or no grass. Many of the towns along the MHNR have implemented streetscape projects which have reinforced this character (Hancock, for example).

PRINCIPLE 4: WHERE TOWNS ARE GROWING, REESTABLISH A NEW DISTINCT EDGE OF TOWN

In areas that are slated for growth (within PFAs), new development should be planned to maintain the distinct edge between the built portions of the town and the adjoining rural areas. In some cases, the less defined edges and transition areas that have evolved in the modern automobile era, can be reestablished as a distinct edge between town and countryside through creative infill development. Frederick, Hagerstown (Figure 13 on page 10) and Frostburg (page 20) all present opportunities to reclaim the distinct edge of town through redevelopment. See the Hagerstown case study, page 26.

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PRINCIPLE 5: CONVERT OR LINK ISOLATED URBAN OR SUBURBAN LAND USES TO COMMUNITIES

Isolated urban or suburban uses, such as an industrial or commercial office park are often sited in rural or exurban areas to attract jobs and economic development. The result is always a trade-off between less expensive land costs for such developments, and increase operating expenses for a community for roads, utilities, and emergency services. When this occurs along the Historic National Road, it creates additional challenges for visitors such as unpredictable turning movements and traffic patterns, as well as detracting from the overall historic character. Where the lands for these uses have already been set aside or developed, efforts should be made to design buildings and streets in a pattern that is consistent with Historic National Road towns. (See the Keysers Ridge case study, page 15, and Baltimore County case study, on page 34 for guidelines on converting or linking isolated land uses to communities.)



Figure 14 Open space slated to become Keysers Ridge Business Park

PRINCIPLE 6: WHERE TOWNS HAVE GROWN IN A SUBURBAN PATTERN, RECLAIM THE EDGE AS URBAN

The transition area just outside of a town is often developed in a random manner, eroding the traditional historical character of the town. In order to preserve the integrity of the town edge, infill development fronting the National Road should be encouraged. Such development should support commercial, office, and residential mixed uses, where appropriate, along with enhancements such as streetscape elements and pedestrian amenities to enliven the character of the place and encourage walkability. (See the Golden Mile case study on page 32 for example.)



Figure 15 Frostburg's western town limit

PRINCIPLE 7: INCORPORATE INFILL DEVELOPMENT CAREFULLY INTO EXISTING HISTORIC TOWNS

Infill development should be consistent with the existing built environment—maintaining the character of the "building wall" (setback, architectural style, building massing, etc.) that defines the small town or crossroads pike town. Infill development within a historic district must particularly comply with any local architectural review requirements that may be in place. If none are applicable, research and analysis of existing architecture and development patterns should be applied. (See page 24 for example of guidelines on infill development.)



Figure 16 New townhouses in Middletown complement surrounding structures.

Maryland's Historic National Road CPP Update



Figure 17 This is a view east toward the transitional Golden Mile area west of Frederick. One side of the roadway is fronted by agricultural land and the other by commercial development. Design recommendations for this transition area of the National Road are addressed with a case study in the following section.

This section provides case study examples that can be applied to most of the new development scenarios found along the National Road corridor.

Introduction

The following "case studies" provide conceptual approaches and design recommendations for accommodating new development while maintaining the character defining features of the MHNR corridor. These case studies can be applied to multiple scenarios within rural, transition, and urban areas. They are complemented by best practice examples from other places which are further discussed in the design guidelines sections of this document.

The case studies are organized in west to east order starting with the 219 Interchange/Keyser's Ridge in Garrett County; Frostburg and Flintstone in Allegany County; Hagerstown's western town limit in Washington County; the Golden Mile west of Frederick in Frederick County; and finally the transition area from Ellicott City to Catonsville in Baltimore County. Each of these case study scenarios responds to provisions or policies from jurisdictional comprehensive plans as they encourage the use of design guidelines for future development.

Case Studies Garrett County

Business Park and Stand-Alone Commercial: 219 Interchange/Keyser's Ridge

Planned Growth Area: 219 Interchange/ Keyser's Ridge

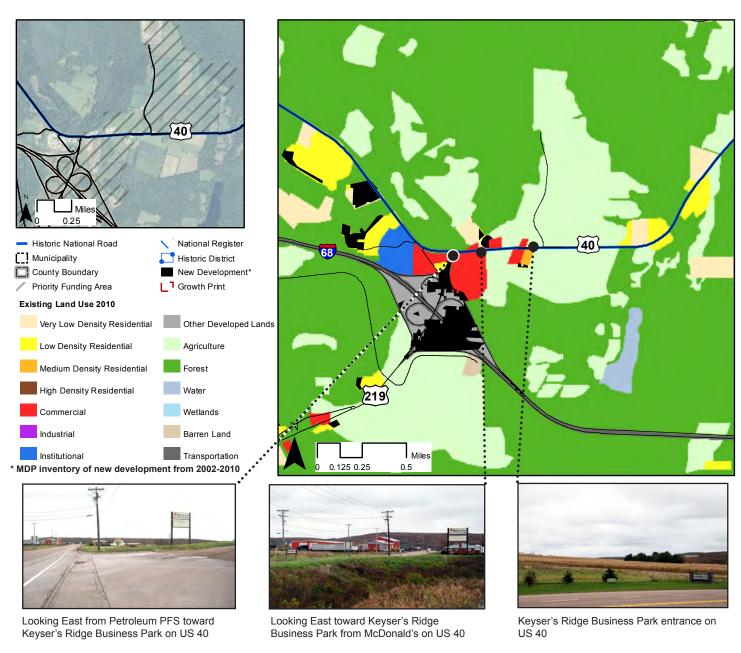
Garrett County's proposed land use plan projects general commercial and employment center growth surrounding the intersection of US 219 and the National Road, US 40, at Keysers Ridge. This area is characterized by large tracts of agricultural and forested land with expansive scenic views. Keysers Ridge Business Park is planned to occupy this site and presents the challenge of developing land with minimal impact to scenic views.

Garrett County's Comprehensive Plan (2008) recognizes the need to preserve scenic views and the impact of new development on these views—particularly along a scenic byway. In regard to the Subdivision Ordinance, the Plan recommends that they "establish design criteria to protect the scenic qualities of Scenic Byways and adjacent land," and "require the County to review the impacts of a subdivision on scenic views, and define 'scenic views' in the Subdivision Ordinance." This case study supports the Garrett County Comprehensive Plan's recommendation and offers examples of how to approach suburban business parks and stand-alone commercial development.

Keysers Ridge Business Park has a chance to redefine the suburban business park through new planning approaches. One approach is to increase density within a smaller portion of the business park, in order to conserve natural and cultural resources, and reduce infrastructure needs (similar to cluster development). The concept illustrated on the following pages demonstrates how the business park can be reoriented so that some of the uses front directly along the National Road, thereby creating a "main street" that is similar in character to the pike towns that arose along the MHNR. In some cases, supporting retail can be provided along the frontage, where in others, the business office, corporate entry, or showroom can be sited directly on to the "main street" with the larger footprint extending more deeply into the lot. In this way, the parking can be accommodated in the rear along with truck access through a parallel road system set up in a grid-like fashion.

The following images present recommendations for suburban business parks and stand-alone commercial development in Keysers Ridge, and they can be applied to planned growth areas throughout the National Road Corridor. For recommended model guidelines for small-scale/stand-alone commercial and interchange or crossroads development see the Rural Design Guidelines, page 41.

Case Studies Garrett County



Planned Land Use

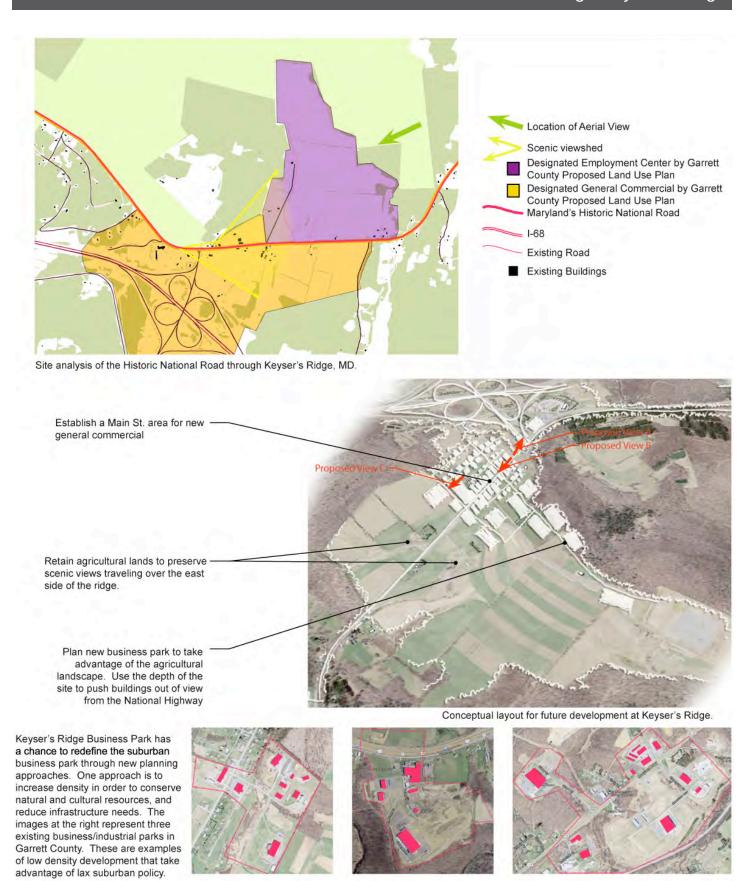
General Commercial, Rural Resource, Employment Center, Rural (source: Garrett Co. 2008 Comprehensive Plan)

Comprehensive Plan Guidance/Policies

Garrett County Comprehensive Plan 2008 Page 6-18:

- 12. Amend the Subdivision Ordinance to include the following provisions related to Scenic Byways:
- Establish design criteria to protect the scenic qualities of Scenic Byways and adjacent land. Require the County to review the impacts of a subdivision on scenic views, and define "scenic views" in the Subdivision Ordinance.
- Require that new roads outside of Priority Funding Areas be "open section" designs.

Business Park and Stand-Alone Commercial: 219 Interchange/Keyser's Ridge



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Case Studies Garrett County



Existing view looking east from PFS Petroleum.

Move parking areas to the side/rear of buildings

Remove excess paving at roadside and restore meadow



Example of short term roadside improvements.



Existing view looking west from McDonalds.

Keep buildings as low as possible as not to compete with scenic views

Keep signage/ structures to few, muted tones and as low as possible

Use materials and building style of local bldgs for design cues



View A. Example of renovations to existing stand alone commercial to use as guidelines for future development.



Existing view looking east.

Create a main street commercial zone using building types of typical density and character or historic national road towns.

Implement streetscape amenities to create a walkable, bikeable corridor.



View B. Proposed main street commercial area.

Business Park and Stand-Alone Commercial : 219 Interchange/Keyser's Ridge



Existing view into agricultural field.

Cutaway showing residential neighborhood behind main street.

Residential streets parallel the National Road, growing outward in grid fashion. New housing to pick up on materials and style of existing houses.



Residential street intersection at the National Historic Road.

View C. Proposed residential neighborhood to house new commercial and industrial employees.

Case Studies Allegany County

Planned Growth Area: Infill Development Within or Adjacent to a Historic Resource

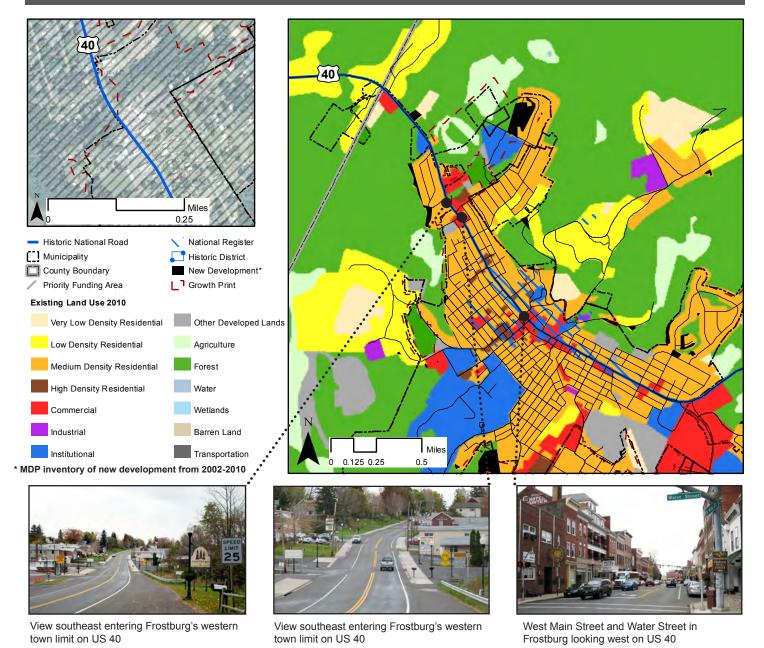
A large portion of the MHNR within the City of Frostburg is a designated local and National Historic District and is also designated as a Maryland Main Street. The local historic district provides guidance with regard to changes to buildings within the local historic district using the Secretary of Interior's guidance (see page 70) as a basis (http://www.frostburgcity.com/sites/default/files//frostburg/docs/CITY%200F%20 FROSTBURG%20REGISTER%200F%20HISTORIC%20PLACES%20 GUIDELINES.doc). However, the guidelines do not address design strategies for new development specific to the Historic National Road, especially infill development adjacent to the historic district.

The following case study offers recommendations on how to approach infill development within or adjacent to a historic resource or a historic district within the MHNR corridor. More specifically, it focuses on development at the eastern and western gateways to Frostburg on US 40. Supplemental to this case study are the Urban Design Guidelines found starting on page 65, which specifically address Historic Main Street and historic edge of town scenarios.

Approaching Frostburg's eastern gateway, this study focuses on signage improvements. At the western gateway, issues of traffic calming, signage, architecture, and streetscape are addressed. The recommendations made in this case study can be applied to the gateways of other towns and cities along the MHNR.

The Frostburg Plan: City of Frostburg (Agency Review Draft April 28, 2011) recommends the integration of a manual of design guidelines for Historic Preservation District form-based overlays. This case study and the design guidelines mentioned above will complement such efforts.

Infill Development Within or Adjacent to a Historic Resource: Frostburg



Planned Land Use

Highway Commercial, General Residential (Source: The Frostburg Plan: City of Frostburg, Maryland, Agency Review Draft April 28, 2011)

Comprehensive Plan Guidance/Policies

The Frostburg Plan: City of Frostburg, Maryland, Agency Review Draft, April 28, 2011; page 143
For HPD overlay, consider how a design guidelines manual might be integrated into the text; see capital recommendations for development of a manual. Look closely at points where text deviates from Article 66B, working with the HD Commission. Include references to recently institute reforms. Consider how to better address lack of maintenance/neglect; organize section to allow for user-friendly process for both HD Commission and the public. Definitions must be in Section II. Remove 'appeal' to Board of Appeals; replace with Article 66B compliant text. Address definition of 'hardship' and now that may be applied in a fact finding setting. For new TND overlay, consider best model for developing both text and guidelines. Determine how the guidelines would be administered. Determine best locations for use of this tool. Consider similarities and differences with HPD as a guide to text writing, given that no State guidance exists for this overlay.

Case Studies Allegany County





Figure 18 Before and after illustration of how new development can "fill in" the missing gaps to Frostburg's western gateway (illustration by WBCM)





Figure 19 Before and after illustration of how modifications to the on-premise business signs can improve the appearance of Frostburg's eastern gateway (illustration by WBCM)

Infill Development Within or Adjacent to a Historic Resource: Frostburg

Planned Growth Area: Rural Village Transition

Flintstone is located south of I-68 at the intersections of the National Road, MD 144, and Black Valley/Murley's Branch Road. According to Allegany County's Comprehensive Plan (2002 Update), the County Plan emphasized a need for design standards and a design review board to evaluate proposals for major development occurring at freeway interchanges and within the scenic corridor of I-68. This case study will help to guide these efforts at Flintstone. For general guidelines, see Rural Guidelines—interchange or crossroads—on page 50 and Transition Design Guidelines—rural but planned for future growth and development—on page 56.

While Flintstone is primarily composed of low density and rural residential uses, expansion of the commercial core at the intersection of MD 144 and Black Valley/Murley's Branch Road will support the village center or business district—a walkable, pedestrian friendly destination for the surrounding residential population. Additionally, the village gateways can be defined with abrupt changes in the scale and density of buildings at the edges. These concepts and others are further illustrated on the following pages. The improvement strategies recommended here can be applied to other rural village transition scenarios along the MHNR.

Case Studies Allegany County



Planned Land Use

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Flintstone future land use unavailable at this time and should be accepted by July 2012 (Source: Allegany County, Planning 2.0 map; Arcgis.allconet.org/index.html)

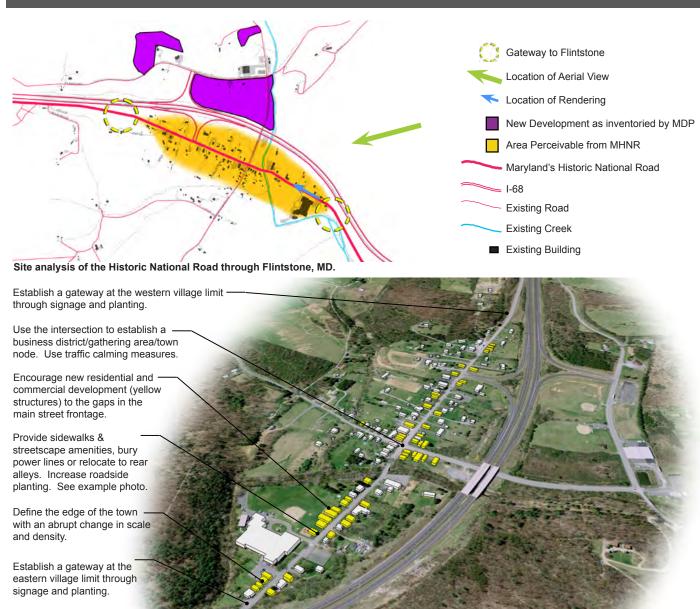
Comprehensive Plan Guidance/Policies

Allegany County Comprehensive Plan 2002 Update, March 2002, page 1081

- 1. Create a Design Review Board to review development proposals, particularly within the I-68 and Rt. 220 Corridors.
 - This board would review development plans for Land Use proposals at Freeway Interchanges and within the scenic corridor of I-68 and Rt. 220.
 - The Board would also be available to review other major development proposals as requested by the County.
- The Board would be advisory in nature, but would work through the County Plan Review and Permits Section to assure that design standards are met.

NOTE: See proposed 2014 (draft) revisions to the Allegany County Comprehensive Plan on page 11-41 (http://www.gov.allconet.org/plan/docs/2014%20Draft%20ALCO%20Comp%20Plan.pdf)

Rural Village Transition: Flintstone





Existing streetscape



Proposed streetscape with new development at streetfront and amenities January 2015 25

Case Studies Washington County

Planned Growth Area: Gateway and Viewshed Preservation

The 2008 City of Hagerstown Comprehensive Plan identified the US 40 western gateway to the city as an area slated for growth—primarily business-employment and industrial uses. Much like the character of the proposed Keysers Ridge Business Park in Garrett County (page 15), the existing conditions are predominantly agricultural lands offering expansive views of the surrounding landscape. In order to preserve these views and maintain an intact and attractive gateway into Hagerstown, design strategies for new development are necessary.

The following case study offers the City of Hagerstown (and other jurisdictions where this scenario might apply) a strategy for focusing density, or a village center, at the intersection of Greencastle Pike and US 40, while maintaining open space and preserving natural resources just west of a proposed gateway at Burkholder Lane. Preservation of this land will support a defined edge between the city limits and the suburban transition.

For additional guidelines on rural settings proposed for future growth please see the Transition Guidelines on page 56.

Gateway and Viewshed Preservation: Hagerstown



Greencastle Pike/ MD 63.

Planned Land Use

two miles from the western city limit, west of

Business-Employment, Industrial (Source: 2008 City of Hagerstown Comprehensive Plan; map revised 12/21/2010)

MD 63

western city limit, east of Greencastle Pike/

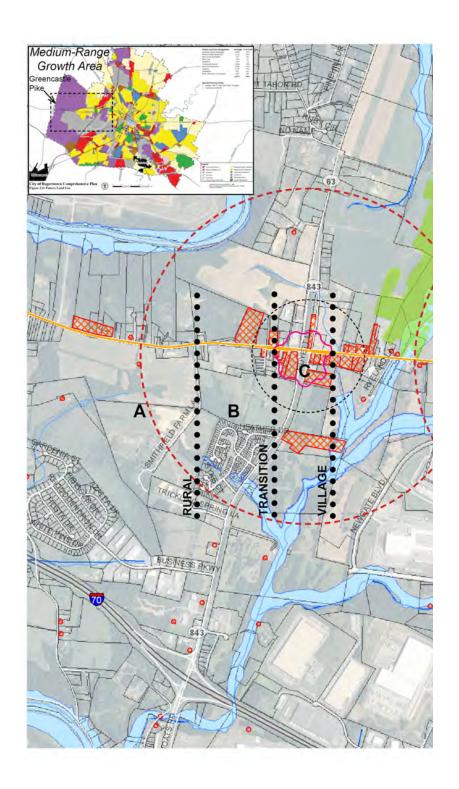
Comprehensive Plan Guidance/Policies

2008 City of Hagerstown Comprehensive Plan

page A-29: Continued attention by the City, County and State Highway Administration will be necessary to improve the traffic operations characteristics of Route 40. The City's other principal concerns should be for the visual aspects of the area, to present an attractive entrance to the City and for conflicts between residential areas and the commercial and light-industrial activities. At the present time, this section presents a chaotic and unattractive introduction to Hagerstown at its most important entrance. The City should consider annexation of areas that are still outside the City. Design guidelines should be developed to permit the gradual improvement of visual aspects of the Dual Highway frontage and to provide access controls for safety and convenience.

the US 40 and I-81 interchange at the western

town limit of Hagerstown.



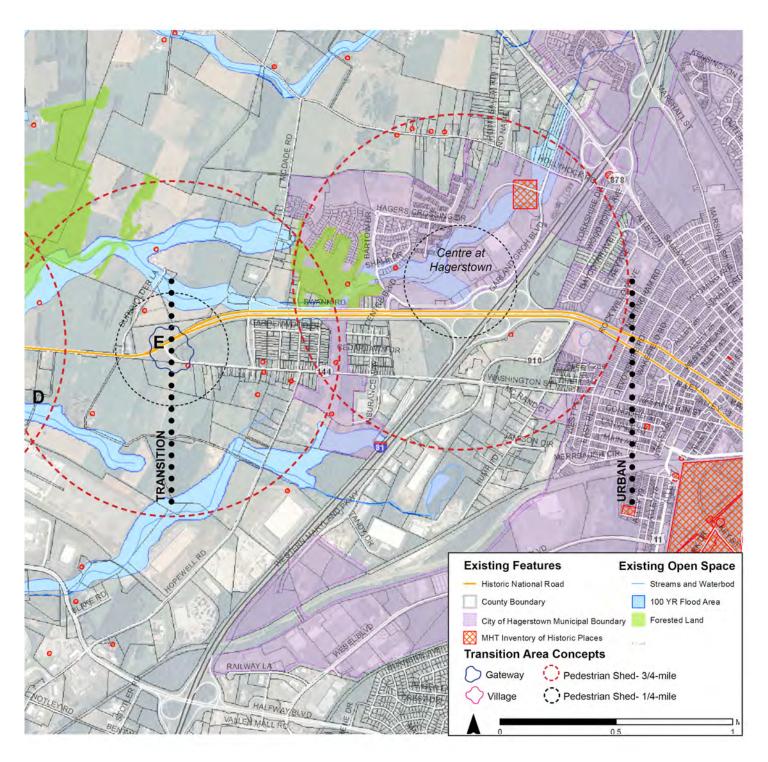


Figure 20 Diagram indicating the recommended rural, transition, and village or urban areas for the western approach to Hagerstown.

Case Studies Frederick County

Planned Growth Area: Transition Area/ Strip Commercial

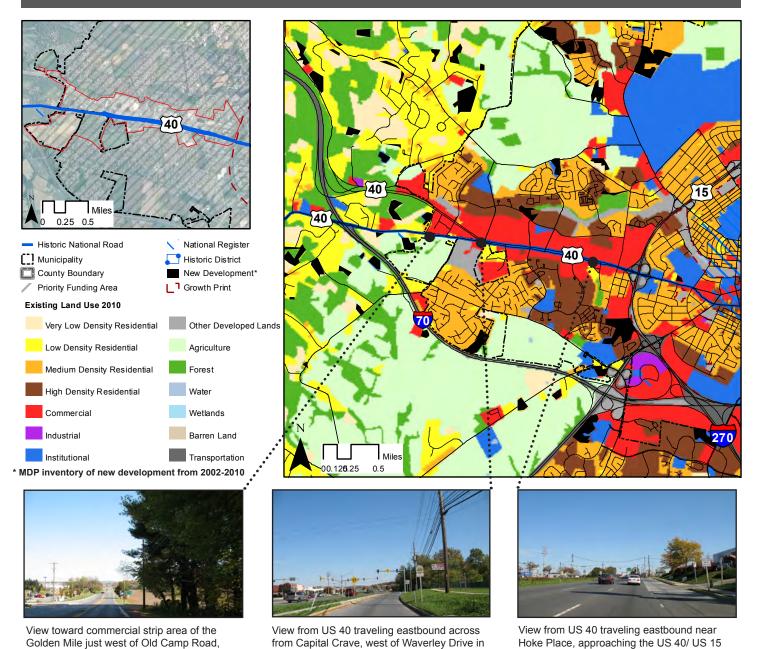
The Golden Mile is a business area characterized by strip commercial development along US 40, East Patrick, and Jefferson Street. This area, dominated by roads and parking lots, has the potential to be redeveloped into a pedestrian friendly gateway corridor into Frederick. The Golden Mile Small Area Plan (December 2011 draft) offers an in-depth investigation of the area and ultimately scenarios for redevelopment, as well as vision and goals. Such studies recommend that the Golden Mile be treated as a gateway corridor—this case study approaches the gateway corridor through the lens of the MHNR.

While this case study focuses on the western edge of the Golden Mile as a first encounter with the gateway corridor into Frederick, the suggested improvement strategies can be applied throughout the entire strip commercial corridor. The following diagrams and graphics provide strategies for improving the character of the Golden Mile as the western gateway into Frederick. These strategies are supplemented with the subsequent section on Transition Guidelines for large scale commercial and strip commercial corridor on page 62.

interchange, eastern terminus of the Golden

Mile corridor.

Transition Area/Strip Commercial: The Golden Mile, Frederick



traveling eastbound on US 40. **Planned Land Use**

Low Density Residential, Commercial General, Mixed Use (Source: City of Frederick Comprehensive Plan Map, 2010) Comprehensive Plan Guidance/Policies

the Golden Mile corridor.

The Golden Mile Small Area Plan, DRAFT January 30, 2012 (http://planning.maryland.gov/PDF/YourPart/773/20120130/InfoPlanningAreaGuidelinesToPlanningDirectors.pdf)

pages 95-96: Goal 4. Create an attractive and distinctive image for the Golden Mile Policy Action

- 1. Identify the Golden Mile as a "Gateway" corridor by designing the use of district banners, signage, landscaping, street lighting and other design features and amenities.
- 1.a. In coordination with the Golden Mile Alliance, the City should development (sic) a streetscape plan to improve circulation, add consistent accessories and create an identity.
- 2. Upgrade the appearance and image of the corridor by updating building facades, parking lots, signage and through improvements to the right-of-ways and private drive isles. (see pages 95-96 for additional Policy Actions)

Case Studies

Transition Area/Strip Commercial

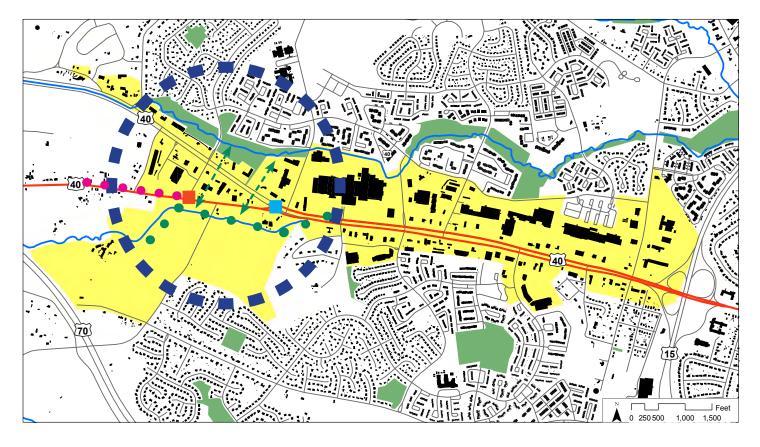


Diagram of improvement strategy locations for the Golden Mile's western gateway.





The Golden Mile Frederick County



Existing view from National Road/US 40 eastbound at Old Camp Road.

Improvements to the Western Gateway

Bury utility lines

Preserve the open space at Summers Farm for stream restoration and parks



Example of how improvements could enhance the quality of the gateway to Frederick.

Construct buildings to front the roadway Install street lighting

Integrate rain gardens/stormwater mgmt.

Use pavers at turn lanes to moderate traffic

Define the edge of town with an abrupt change in scale, density, and setback of buildings; Architectural character should be adapted from styles found around the region of Frederick

Construct sidewalks and crosswalks for pedestrian access to open space and commercial buildings

Create bicycle lanes

Install curbs and planting medians with street trees to establish the character of the gateway area

Planned Growth Area: Redevelopment and Adaptive Reuse

The Baltimore County Master Plan 2020 states that "The most ideal sites to accommodate future growth will have adequate public infrastructure already in place. Other criteria include the possibility for a good mix of residential, office, retail and other uses, potential for walkable and sustainable design, proximity to existing or proposed public transit, and with civic services, amenities, and employment opportunities on the sites or very close. The term Community Enhancement Areas (CEAs) is used to identify these new, sustainable communities."

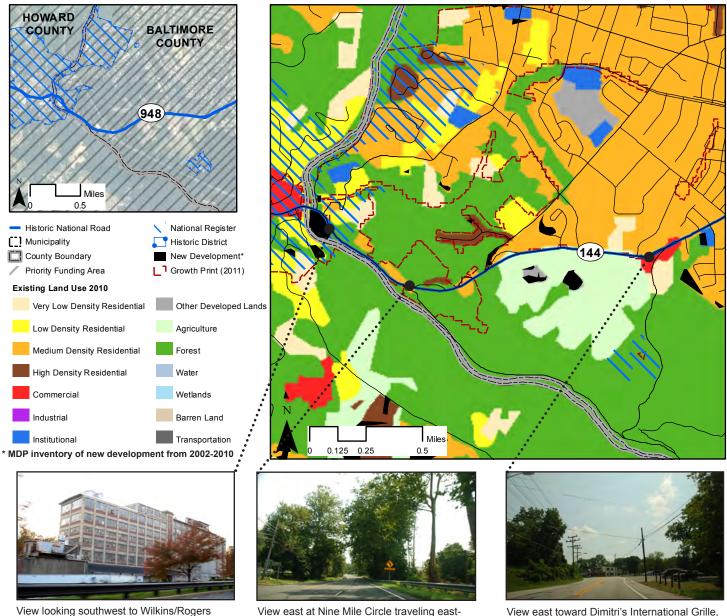
This case study identifies the area immediately east of Ellicott City and west of Balfred Avenue as a possible new mixed-use zone or CEA. This area is found within the Priority Funding Area with potential infill or redevelopment most densely focused at the intersection of Thistle Road and MD-144/Frederick Road.

At the eastern-most gateway into Ellicott City is the monolithic Wilkins/ Rogers Flour Mill—a potential future adaptive reuse example that is also further explored in this case study.

Supplemental to this case study are the Transition Guidelines for strip commercial corridors, on page 62 and the Urban Guidelines addressing the historic edge of town, on page 68,

Transition between Ellicott City and Catonsville

Baltimore County



View looking southwest to Wilkins/Rogers Flour Mill at Ellicott City's eastern gateway traveling eastbound.

View east at Nine Mile Circle traveling eastbound towards Catonsville.

View east toward Dimitri's International Grille, traveling eastbound towards Catonsville.

Planned Land Use

T3 Sub-Urban (Source: Baltimore County Master Plan 2020, November 15, 2010)

Comprehensive Plan Guidance/Policies

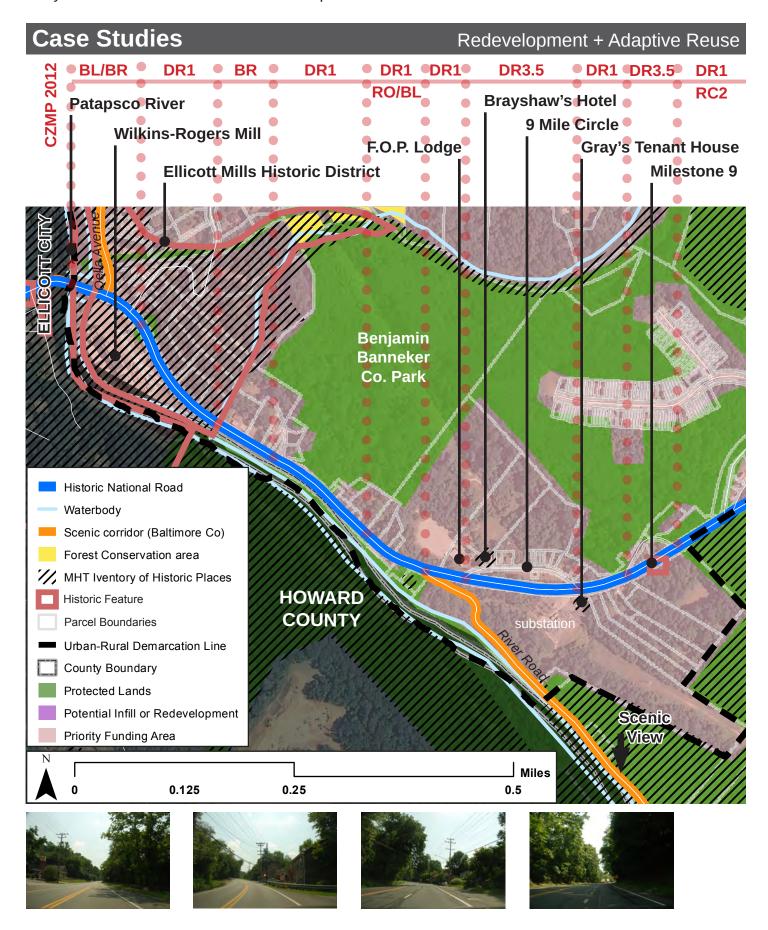
Baltimore County Master Plan 2020, pages 36,101

Policy: Development and redevelopment of under-utilized properties inside the URDL within Community Enhancement Areas will be encouraged. (Page 36)

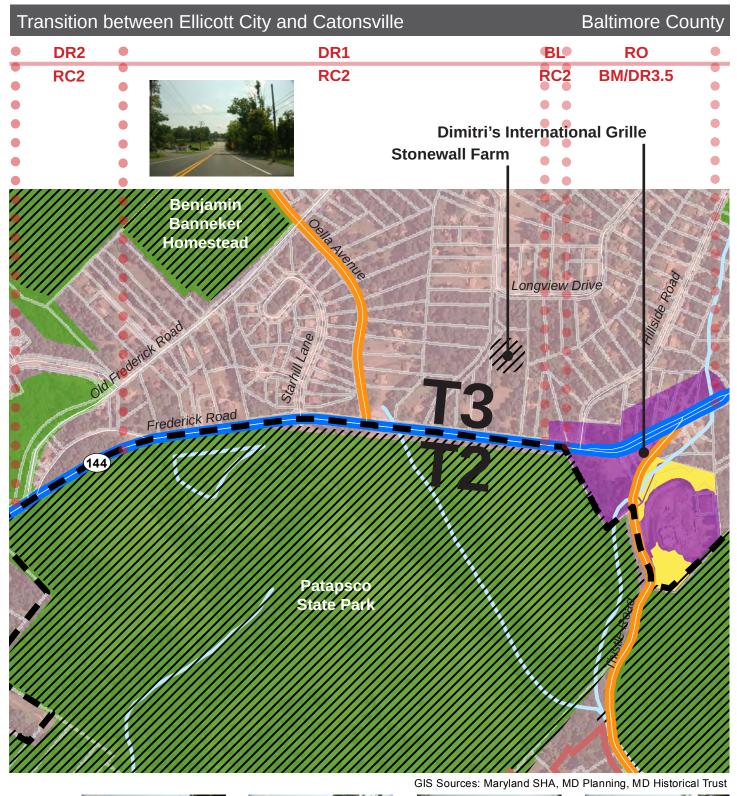
- (1) With assistance from all stakeholders, including citizens, developers, property owners, and government officials, identify appropriate sites within the URDL boundary, for potential redevelopment as CEAs.
- (9) Create a new mixed-use zone intended to accommodate residential, employment, office and retail uses in the same development and/or structure, and apply the new zone to areas designated as CEAs.

Policy: Enhance gateway designations through evaluation, design, and construction. (Page 101)

- (1) Evaluate existing gateways and identify additional gateways.
- (2) Formulate appropriate design guidelines as part of community plans and streetscape projects.
- (3) Examine the design aspects of proposed development as part of the development review process.



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Case Studies

Redevelopment + Adaptive Reuse



Wilkins-Rogers Flour Mill

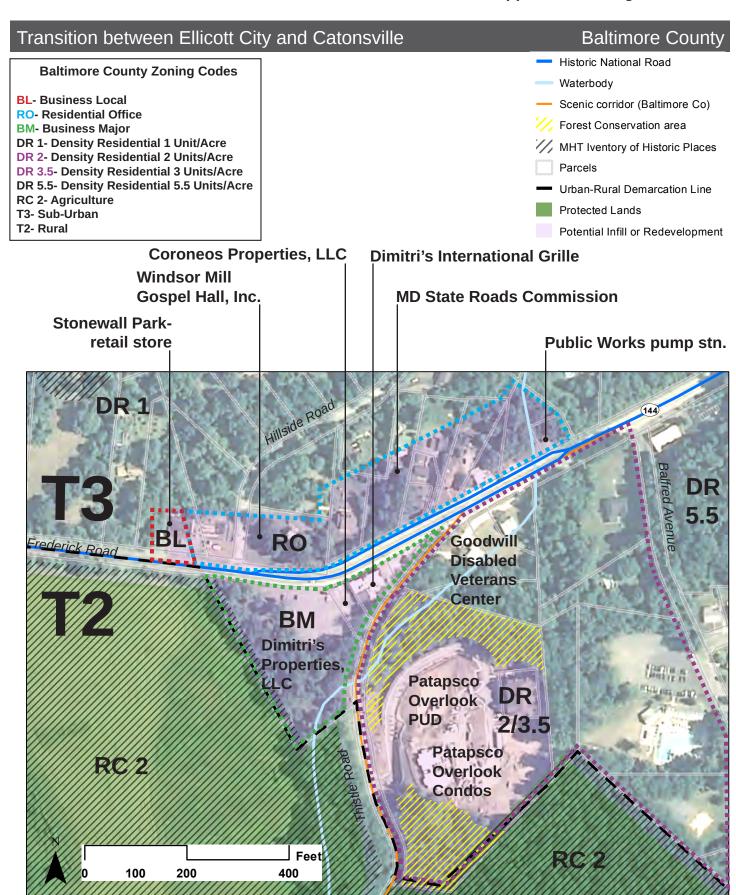


Example of adaptive reuse at the Quaker Square Inn, Akron, OH

Adaptive Reuse

If and when the Wilkins-Rogers Flour Mill facility is no longer in use as a flour mill, it should be considered for adaptive reuse. An example of such reclamation is the Quaker Square Inn in Akron, Ohio, formerly a Quaker Oats facility. This is just one example of adaptive reuse, and the possibilities for reusing the mill are endless.

While its looming size, form, mass and material are not in character with surrounding historic structures, the industrial nature of the Wilkins-Rogers Flour Mill is in keeping with the historical context of Ellicott's mills and surrounding industrial history. A remaining portion of the 1792 Ellicott Flour Mill is located in the power house at the southern end of the modern facility, built after a fire which occurred in 1941. The historic nature of this site offers an opportunity for interpretation with a connection to the existing sidewalk at the bridge to the green area between Frederick Road and the Wilkins-Rogers Flour Mill parking area.



Sources: Maryland SHA, MD Planning, MD Historical Trust

Maryland's Historic National Road CPP Update

RURAL DESIGN GUIDELINES

Figure 21 Rural view near Little Meadows, east of Grantsville

This section introduces rural design guidelines; identifies key questions for defining rural character; and provides rural design guidelines for farmsteads or homesteads, MHNR rural features, small-scale commercial structures, and interchanges or crossroads.

Introduction

The rural landscape of Maryland's National Historic Road defines a large portion of the corridor, evoking a sense of the past and reminding travelers of the region's natural and cultural heritage. In order to preserve the evocative scenic views and to conserve the rural cultural landscape, we encourage local jurisdictions to consider the Maryland Historic National Road Corridor Partnership Plan's conservation goals and the guidelines on preserving the rural landscape along the Byway. The Conservation Goals in the CPP include:

Preserve the scenic qualities and natural environments that provide the setting for the Byway and the small towns, hamlets, and communities along the way.

- Establish conservation priorities in those places that are recognized for their scenic quality and overlap with other environmental conservation or historic preservation goals;
- Develop simple guidelines and incentives to encourage land use that is sensitive to the scenic and historic qualities found along the Byway; and
- Beautify the roadway.

This document establishes those simple guidelines addressing sensitive land use and best practices for preserving the rural cultural landscape of the MHNR. Application of these rural guidelines will

Rural Character



Figure 22 Rural view at Posey Run

Rural Design and Preservation Challenges

- Preservation of MHNR Features and original road sections
- Preservation of scenic views, forests and agricultural land—particularly the rural context surrounding 19th early 20th century farmsteads and homesteads
- Development patterns around highway interchanges
- Extractive industries (mining of stone and gravel, oil, gas, etc.)
- Economics of Main Street

ultimately support the Tourism and Economic Development goals adopted in the CPP and its 2013 update by establishing a desired character for the corridor and guidelines to achieve that desired character over time.

Documenting a Site's Rural Character

In order to guide development in rural areas along the MHNR it is critical to analyze and understand the character defining features of the setting for its rural landscapes as well as the current and planned development patterns and related roadway elements. Development on a specific site must be approached with this surrounding rural character in mind—the site does not "end" at the parcel boundaries. With careful analysis, the rural character can be retained while accommodating future uses in a manner that is compatible with the rural landscape.

When development is proposed in a rural area, the following questions should be asked to ascertain its character defining features:

What is the place?

- farmstead or homestead?
- a MHNR rural historic feature? (See sidebar, page 43)
- a small-scale commercial structure?
- an historic crossroads or modern interchange community?

What is included as part of its setting?

- Where does the site sit in relation to nearby landforms and topography (top of the hill, side slopes, bottomland)?
- Is the site part of a scenic view as seen from the MHNR?
- Are views evocative of any of MHNR's periods of significance (Heyday, Agriculture and Trade, Revival)?
- Are there any contrasting elements that are part of the view that are not associated with MHNR's period of significance (such as a cell tower)?

How are elements organized on the site and what are the relationships between built and natural elements?

- What are the existing land use patterns?
- Where are structures located in relation to roadways or other transportation infrastructure such as railroads and canals?
- What are the natural elements on the site and what do they contribute to the surrounding landscape?
- Where are structures located in relation to natural elements, topography, or geological features?
- How are property lines defined? As fences? hedgerows? rivers or streams? forested land?

- What are the relationships between buildings and roads? Do buildings front the street?
- What is the relationship between main and secondary buildings?
 Are there barns or other agricultural features?

What is the historical context of the place?

- How is it significant in the context of MHNR?
- Are there Heyday, Agricultural and Trade era, or Revival Period features?
- Are there historic buildings?
- Is there a historic district?
- What is the predominant architecture style? Can it be defined?
- Do architectural features consistently reflect a particular architectural style or are there several styles as a result of newer additions or improvements? (Is it an "I" House, a Gable Ell, Mid-Century Ranch, modern addition, etc.?)
- What are the dimensions and building massing relationships?
- · What materials are used?
- What do architectural features look like and how are they detailed? (Windows, doors, roofs, porches or stoops)

Rural Area Guidelines

Rural land is characterized by a majority of open space land uses—primarily farms, forests and waterways. Rural areas also include the various types of buildings and structures, including rural homes and farmsteads, agricultural structures and outbuildings, and small-scale commercial uses typically located at the historical crossroads and now more modern interchanges.

The following guidelines are intended to apply the principle that the built elements in a rural landscape should fit in with the natural landscape (farms and forests) in an organic way so that the hills and valleys and forests and farms are the dominant elements (as opposed to a main street within an historic village), where the structures are the dominant elements and the natural landscape is the setting.

The guidelines are structured around the primary organizing elements of the landscape, just as you might read a landscape painting. The organizing elements of a landscape include its spatial organization, its land patterns and its land use. Spatial organization and land patterns refer to the three-dimensional organization and patterns of spaces in a landscape, like the arrangement of rooms in a house. The walls and dividers of the outdoor rooms are its ridge lines and hillsides, its water courses, and the related woodlands. The furniture in the rooms are its buildings and structures. The guidelines are thus organized around first the overall patterns (organizing elements) and then each of the elements.

MHNR Character-Defining Features

The following character-defining features can be found within rural portions of Maryland's National Road corridor. (See page 2 for full descriptions of the three eras below.) Features should be preserved or maintained to accommodate growth. (See guidelines starting on page 44.)

"Heyday" of the National Road (1810-1850)

- mile markers
- mile houses
- inns and taverns
- stone arch bridges
- · original road sections
- scenic views

Agriculture and Trade era (1850-1910)

- agricultural structures and machinery related to the agricultural industry
- railroads
- canals
- Victorian architecture
- well-maintained farmsteads and homesteads from the era
- original road sections
- scenic views

Revival period (1910-1960)

- roadside motels and tourist cabins
- scenic overlooks
- road houses, garages, and service centers

Rural Guidelines



Figure 23 View from Town Hill showing the spatial organization of the landscape associated with 'ridge and valley' physiography traversed by the MHNR



Figure 24 View of Tomlinson Inn showing the direct alignment of the MHNR eventually relenting to the grade over Meadow Mountain



Figure 25 Leo Beachy photograph of "The Great Old Stone Bridge" over the Casselman River (circa 1817) and the Village at Little Crossings beyond - a settlement that predated the construction of the National Road

Heyday and Revival Era Features in Rural Areas

The Corridor Partnership Plan and its 2013 Update identify Heyday and Revival Era features associated with the National Road as the highest priority for preservation. In many cases these features have been preserved but there is still much more work to do. The rural features include both structures such as toll houses, mile houses, mountain top inns and garages, and landscapes such as the "named" landscapes ("shades of death" or the "long straight stretch.") Roadway related features such as bridges, stone culverts, mile markers and early macadam pavement are addressed in the companion document to these guidelines, "Context Sensitive Solutions for Maryland's Historic National Road. The following guidelines are intended to assist in the preservation and rehabilitation of the rural heyday and revival era features:

Organizing Elements

- Heyday-era features were closely tied to the conditions of the travel experience located at the tops and bottoms of climbing grades, at river crossings, or at regular intervals associated with a days travel each of the elements contribute to an overall settlement pattern that is still visible today.
- The Historic National Road whether one of the early turnpikes leaving from Baltimore or the original federally funded section of the route that started in Cumberland - was designed to connect communities in the most direct route possible. Where grades intervened, the route then traversed the side of the hill to get to the top at a reasonable grade.

Views to Landscape Features

- Mountain tops were significant landmarks, resting places, service stops, hospitality centers, and scenic overlooks.
- Structures associated with the mountain tops should maintain the form and proportions of the original structures while accommodating contemporary uses (see Architectural Character).
- More current uses for communication towers and wind energy are addressed under "Unique Situations" starting on page 75

Water and Drainage

- Many inns and settlements sprung up around the crossings of the major rivers, including those that predated the National Road (Figure 25).
- The relationship of structures to water features should be maintained as per the original feature.

Heyday and Revival Era Features in Rural Areas

Vegetation

- Vegetation often influenced the name and character of places along the corridor (e.g. Piney Grove, Little and Big Shades of Death, Shade Run, Little Meadows, Figure 24). Remnant revival era vegetation associated with these places should be preserved.
- Where new development takes place efforts should be made to restore the vegetative character associated with each of the places as described in the historical record.

Siting of Structures

- Structures were often near the road, with taverns (stands) every mile or so, and stage stops at one day's travel distance.
- New rural commercial structures should similarly be oriented towards and close to the road (Figure 24) while accommodating parking and utilities to the rear.

Circulation and Access

- Topography determined where the early roadway would go, as steeper slopes were avoided where possible. As technology increased so too did the ability to climb steeper grades and straighten out curves (see CSS for Maryland's Historic National Road for guidance).
- In rural areas, new side roads and lanes were generally built directly to the structures and along property lines away from productive fields,

Architectural Character

- Existing features such as farm buildings, inns, taverns, motels, tourist cabins, road houses, garages and service centers can serve as examples of vernacular building styles with some regional variation in materials, style, scale, etc.
- Mile markers should be preserved in the style and materials much like existing examples.
- Bridges should be preserved to maintain historic styles and materials where possible, but safety is the first priority in bridge restoration and design.

OTHER RESOURCES

- Weeks, Kay D. The Secretary of the Interior's standards for the treatment of historic properties: with guidelines for preserving, rehabilitating, restoring & reconstructing historic buildings / Kay D. Weeks and Anne E. Grimmer. 1995.
- Bruce, Robert, The Old National Road, Washington, D.C., and Old Slip, NY: National Highway Administration and Author, 1916.
- Colby, Steve, "The Cumberland Road Project." http://www. cumberlandroadproject.com, accessed August 7, 2013.
- Burgess + Niple . "Ohio Historic National Road Design Handbook." Preservation and Rehabilitation Guidelines. 2006.

Rural Guidelines



Figure 26 Rural village character near Benevola west of Boonsboro (looking East)



Figure 27 Farmland east of Clear Spring



Figure 28 Vegetative patterns in the rural areas east of Boonsboro



Figure 29 Approaching Greencastle Pike west of Hagerstown (looking East)

Farmstead or Homestead

In rural areas, it is most important to first preserve and protect the overall patterns of spatial organization and uses associated with its farms, forests, waterways and buildings. The patterns are unique to the rural areas with which they are associated.

Organizing Elements

Design Goal: When new uses are introduced, maintain the overall spatial organization created by the linear features (roads, parcel lines, waterways, ridgelines) and by the underlying matrix of farms, forests and homesteads.

- When introducing new structures and related driveways and yards, they should be sited in such a way as to avoid introducing new patterns of spatial organization.
- Site new homes and structures in a manner that is reponsive to climate, soil, and property boundaries.

Views to Landscape Features

Design Goal: Preserve and maintain rural character.

- Let natural landscape form and character predominate by preserving the adjoining hillsides and farmlands that form the context for the MHNR and MHNR communities.
- Site new structures to work with and fit the existing slope and topography.

Water and Drainage

Design Goal: Maintain natural condition of surface water features.

 Let the natural landscape form and character predominate by preserving existing stream corridors, water bodies, wetlands and the natural drainage patterns.

Vegetation

Design Goal: Maintain the patterns of vegetation in rural areas associated with farms and homesteads.

- Use groupings of trees to frame positive views of the rural landscape as seen from the MHNR.
- Preserve vegetative patterns by siting new homes at the edges between the land cover types, rather than right in the middle.
- New plantings should emphasise native species for shade or orchard crops as appropriate.
- Preserve the mature tree groupings around homesteads and plant new ones as new structures are built for shade and wind protection.
- Preserve and/or rehabilitate existing tree hedgerows, tree lines along farm lanes and small woodlots within farm fields.

46 January 2015

Farmstead or Homestead

Siting of Structures

Design Goal: Traditional farmsteads and homesteads were sited close to the road and protected from the wind.

- Structures should be sited to preserve open fields, and to avoid being built on ridgetops.
- Structures should be tucked in at the edge of the woods, or on a lower point of the slope with the forest behind.

Circulation and Access

Design Goal: Use existing patterns of circulation to provide access to new farmsteads and homesteads.

- First, preserve existing circulation features significant to the cultural landscape.
- If appropriate, reuse existing circulation features. Avoid reuse if the reuse would damage or destroy a significant feature that should be preserved.
- Where new access is needed, replicate existing patterns of circulation such as found along the farm lanes usually locate at the edge of the property.

Architectural Character

Design Goal: Ensure that new elements added to the cultural landscape that is the MHNR corridor are complementary to the heritage associated with the Heyday and Revival era's.

- For new structures, retain the scale and proportion of rural farmhouses and outbuildings.
- Break up large building masses with smaller components.
 Garages should be a volume separate from the main house or connected by a smaller volume, and sited so they are not the first impression of the home. Detached garages are typical.
- Materials and styles should be vernacular and common to the surrounding historic community. Natural materials are preferable to imitation finish materials.
- Colors for residences should be earth tones to blend with the landscape, or white with a single trim color.

OTHER RESOURCES

- Burgess + Niple . "Ohio Historic National Road Design Handbook."
 Site Development & Roadway Corridor Guidelines, 2006.
- U.S. Department of the Interior, National Park Service, "Guidelines for Evaluating and Documenting Rural Historic Landscapes" by Linda Flint McClelland, et. al., 1989 (rev. 1999).
- Stokes, Samuel N., A. Elizabeth Watson, Genevieve P. Keller, and J. Timothy Keller. Saving our Countryside: A Guide to Rural Conservation. Baltimore: The Johns Hopkins University Press, 1989.
- Valleys Preservation Council, The Enduring Rural Landscape: A Landowner's Guide to Landscaping in the Baltimore Countryside, 2001.

Examples: Barns, Farmsteads or Homesteads



Figure 30 Bank barn near Little Meadows



Figure 31 Farmhouse with separate garage west of Clear Spring



Figure 32 Farmhouse with separate garage west of Clear Spring

Rural Guidelines



Figure 33 Hagan's Tavern (now a restaurant) circa 1790 -



Figure 34 Flintstone Hotel (circa mid-19th century and 1900 addition)



Figure 35 Town Hill Hotel circa early twentieth century



Figure 36 Former Miller Brothers Garage, Allegany County



Figure 37 Big Pool Garage (photo courtesy of Steve Colby)

Small-scale Commercial

Small-scale commercial structures evolved from the Heyday era's original stage stops and summit houses to the roadside service stations in the Revival period, and finally to modern-day bed and breakfasts, crossroads stores and interchange service plazas.

Organizing Elements

Design Goal: Small-scale commercial structures should reinforce the patterns established in the Heyday and Revival periods.

- Where new interchanges are established with the accompanying pressure for commercial uses, efforts should be made to transform the unplanned highly parcelized development pattern into a more village-like settlement pattern (see "Planned Growth Area: 219 Interchange/Keyser's Ridge" on page 15).
- Where freestanding commercial structures are proposed, efforts should be made to locate freestanding commercial uses in historically appropriate locations (on ridgtops, at the base of the mountain, near rivers and at crossroads or spaced according to historical travel patterns).

Views to Landscape Features

Design Goal: New commercial structures should be designed to be an attractive feature in and of themselves.

- Relate the siting of the structure to its historic context.
- Site commercial structures to frame views of identifiable and distinct rural landscapes.

Water and Drainage

Design Goal: Manage stormwater runoff from new or expanded commercial buildings in a manner that is sensitive to the historic context.

- Use infiltration areas associated with open swales for stormwater runoff management where practical.
- If detention is required, areas should be sited to appear and function as natural features and systems.

Vegetation

Design Goal: Minimize the amount of clearing and impact to the rural landscape by building new structures close to the road.

- New vegetation should be planted in association with drainage features and to the rear and sides of the property (maintaining the relationship and visibility of the roadside architecture to street.
- Large crowned specimen shade trees should be preserved and or replanted to provide shady spots near the building.

Small-scale Commercial

Siting of Structures

Design Goal: Adapt, re-use, expand, or replace commercial structures in a manner that is sensitive to their historic character.

- When adding on, additions should be constructed to the side rather than the front or rear.
- New commercial uses in rural areas should front the road directly with parking on the side or rear of the structure.

Circulation and Access

Design Goal: Ensure that expanded access requirements are designed to meet minimum needs, rather than maximum needs.

- Access points should be clearly defined and limited in scope to address the speed of the road.
- For expanded parking, new access points should be located at the edge of the property rather than between the building and the parking lot.
- Accessible spaces could be adapted from the original frontage area between the road and the building.

Architectural Character

Design Goal: When new buildings are constructed or additions made, seek to recapture the Revival era character of commercial buildings.

- Retain the architectural form, scale and proportion of the building while accommodating contemporary materials and fenestration.
- Use Revival era signing styles for capturing the character defining features of small-scale commercial buildings in rural areas.

BEST PRACTICES: Small-scale Commercial

The recent restoration of Six-Mile House, located about six miles east of Cumberland retained most of the form and architectural character of the original mid-19th century inn. Window fenestration is retained and the original porch was restored, although the chimneys no longer grace the roofline.

The Hen House Inn sign, roof line and porch capture the character of revival era restaurants that catered to the motoring public. The original sign for the Town Hill Hotel also captured the aesthetic with early use of neon and the simple and clean lettering style.





Figure 38 Before and after restoration of the six-mile house

OTHER RESOURCES

 Ned Crankshaw, "Rural Preservation and Design in the Kentucky Crossroads Region", Preservation Kentucky, 2011.



Figure 39 Hen house restaurant along the long stretch east of Grantsville



Figure 40 Original Town Hill Hotel sign captures the desired Revival era sign character



Rural Guidelines



Figure 41 Huyett is an example of a census designated place that is an unincorporated crossroads community at the intersection of Greencastle Pike and the MHNR. Rural crossroads communities such as this have no public buildings, a few highway related businesses and some residential uses.





Figure 42 Lisbon is a slightly larger crossroads community located at the intersection of MD 94 (Woodbine Road) and the Historic National Road.

Rural Crossroads Communities

Rural crossroads, the smallest scale of rural commercial center, are usually unincorporated and therefore have no public buildings or parks around which the community is anchored. Instead the general store served that purpose and it was often accompanied by overnight lodging, other commercial uses and the homes of those that owned and/or operated those businesses. Others were built at the intersection of navigable rivers and the National Roadmany of which later evolved into more substantial communities.

Organizing Elements

Design Goal: Maintain the rural character by encouraging an orderly and compact form of growth and expansion.

- The primary emphasis should be to preserve the historic relationship between the intersecting roads and the buildings.
- Where more growth is anticipated-such as those crossroad communities where one of the intersecting roads leads to Interstate 70 or Interstate 68-rural crossroads should expand along the Historic National Road as a main street community (see case study on Keyser's Ridge on page 15).

Views to the Landscape

Design Goal: Preserve the rural landscape surrounding the crossroads community to maintain its rural character.

- Preserving adjoining farms and forests to create a small greenbelt around rural crossroads.
- Maintain view corridors to distant hills and mountains.

Water and Drainage

Design Goal: Maintain natural condition of surface water features and historical access to navigable rivers and streams.

- Maintain or reestablish historical access to the primary navigable river or stream.
- Retain natural system of surface drainage by retaining surface runoff at its source or using infiltration to release flows that emulate the pre-development runoff conditions.

Vegetation

Design Goal: Preserve adjoining woodlands and specimen trees.

- Maintain adjoining woodlands on visible and nearby hills that help to form the rural setting for the community.
- Specimen shade trees should be preserved or replanted within the crossroads communities.

Siting of Structures and Parking

Design Goal: Preserve existing historic buildings and carefully insert new structures to establish and/or strengthen identity.

Fill in the gaps between structures to help establish character.

January 2015

Rural Crossroads

- Anchor the high visibility corners at the intersection by preserving existing buildings or inserting new buildings built up to the lot line.
- New structures should be oriented towards the street with parking to the sides or read.

Circulation and Access

Design Goal: Retain the narrow look and feel of the existing historic crossroads.

- Consider a grid or parallel network of intersecting streets rather than install left and right turn lanes (see Context Sensitive Solutions for the Historic National Road).
- Keep parking at the side or rear of structures when possible.

Architectural Character

Design Goal: Use infill development to reinforce desired architectural character.

- The height and mass of the buildings should respect and be consistent with the height and mass of existing buildings.
- Additions to existing buildings should be in keeping with the scale, proportion, and fenestration of the existing building.
- On-premise building signs should reinforce the type of business through the use of graphic forms that are readable from the road, while in keeping with the scale and proportion of existing buildings.
- Selected communities along the MHNR where these guidelines should be applied include:

West Friendship (Howard Co.)

- Cooksville (Howard Co.)
- Lisbon (Howard Co.)
- Poplar Springs (Howard Co.)
- Benevola (Washington Co.)
- Huyett (Washington Co.)
- Wilson-Conococheague, Washington Co.
- Piney Grove (Allegany Co.)
- Clarysville (Allegany Co.)
- Piney Grove (Garrett Co.)



Figure 43 Wilson's Store is part of an unincorporated community at the intersection of the Historic National Road and the Conococheague River in Washington County.

OTHER RESOURCES:

Vermont Interstate Interchange Planning and Development Design Guidelines, Vermont Department of Housing and Community Affairs, 2004.

Hamlets 3 - Planning for Smart Growth and Expansion of Hamlets in the Adirondack Park, Roger Trancik for the NYS Adirondack Park Agency, 2010.

The New York State Adirondack Park Agency has produced guidance for finding ways to create opportunities for sustainable smart expansion of Adirondack hamlets by improving their physical and economic environment. The document includes simple design tools and offers "practical and smart solutions" that can easily be applied to hamlets across the Adirondacks.

The guidance includes information about how to accommodate future growth in unincorporated hamlets as well as design tools (below) for ensuring that new development maintains their distinct character and quality. The full report can be downloaded at http://apa.ny.gov/Documents/Reports/Hamlets/.



Maryland's Historic National Road CPP Update

TRANSITION AREA DESIGN GUIDELINES



Figure 46 Transition area entering Boonsboro on US 40 southbound.

This section introduces transition area design guidelines; identifies key questions for defining transition area character; and provides transition design guidelines for areas that are rural but planned for future growth; large lot residential; large-scale mixed use; and strip commercial corridors.



Figure 47 Proposed housing development and shopping center near Mussetter Road on MD-144 West of New Market

Introduction

As noted in Chapter 2 of the MHNR Corridor Management Plan Update, most of the development that occurred along the Historic National Road between 2000 and 2010 took place on rural land that was converted to non-rural uses—outside of priority funding areas that were originally established to give incentives to building within existing towns. The December 2011 adoption of "Plan Maryland" provides a new statewide policy aimed at achieving "best practices in smart growth. As applied to the Historic National Road, it provides additional incentives and tools to guide growth, in a manner that is consistent with local plans and policies—especially in the areas that are planned for future growth.

As projects are proposed along the MHNR corridor, many of them are likely to be located in the "transition areas"—those areas planned for future growth within priority funding areas, that are not currently fully developed (shown in orange on the map on page 4). The following guidelines are intended to demonstrate how new development can be accommodated within the areas planned for future growth, while retaining the character defining features that contribute to the continued significance of Maryland's Historic National Road as an "All-American Road"—nationally recognized for its historic significance.

Defining Transition Character

Transition Challenges

- Preservation of MHNR Features and original road sections
- Preservation of scenic views and landmarks
- Preservation of open space and agricultural land—particularly buffers surrounding 19th—early 20th century farmsteads and homesteads, motels, and early 20th century highway-oriented development
- Protection from inappropriate development
- Enhancement of the roadway appearance
- Regulation of growth and development
- Regulation of design for new development or construction
- Reducing setbacks and limiting impervious surfaces such as asphalt
- Increasing density in residential subdivisions and commercial areas
- Context-sensitive subdivision/residential design

The Challenge of Defining Transition Area Characteristics

It can be challenging to determine the character of a transition area, unlike with rural or urban areas where distinctive character defining features are often more apparent. However, similar types of questions can be applied to transition areas as with the previous section (page 42) to help identify those features.

Which of the following categories best describes the current land uses for this place under consideration for development?

- rural but planned for future growth?
- large (estate) lot residential?
- large-scale mixed use?
- strip commercial corridor?

What parts of the historic or community context can be seen from the MHNR?

- Is the edge of town or adjoining city distinctly apparent?
- Are there scenic views evocative of other MHNR eras, such as views out to an agricultural landscape or nearby hills and/or mountains?
- Are scenic views interrupted by new construction, development, billboards and signs or other intrusions that need to be mitigated?

How are elements organized on the site?

- Are there existing natural landscape features visible from the MHNR and how do they contribute to the surrounding landscape?
- Where are existing structures located in relation to natural elements, topograhy, or geological features?
- Where are structures located in relation to roadways or other transportation infrastructure such as existing and former railroads and canals?
- What is the relationship of buildings to each other and how close are they together (density)?
- What are the relationships between buildings and roads? What is the typical building setback from the street?
- Where is parking located in relation to the buildings and the streets (in front, behind, on the sides)?
- How are property lines defined? By structures or natural elements?
- If applicable, how are access roads organized? Is there s frontage road or side street with multiple driveways?

What is the historical context of the place?

- How is it significant in the context of MHNR?
- Are there existing MHNR Character-Defining Features?
- Are there other historic features? A historic district?

Is there a predominant architecture style?

- Do architectural features consistently reflect a particular architectural style or are there several styles as a result of "layers" of development over time?
- What are the dimensions and massing relationships?
- · What materials are used?
- What do architectural features look like and how are they detailed? (windows, doors, roof line, etc.)

If character is not distinct, how can it be enhanced?

- Infill development? Redevelopment?
- · Landscaping and streetscape?

Transition Areas Primary Development Principles

The Primary Development Principles (page 9) that directly apply to transition areas of the corridor include:

3: National Road Towns have Distinct Edges

As is exemplified by the urban to rural transect of Boonsboro, and in Frostburg, the Historic National Road town is typically defined by a distinct built edge—this distinguishes it from the transition area into town.

4: Where Towns are Growing, Redefine Edge

In areas that are slated for growth (within PFAs), new development should be planned to maintain the distinct edge between the built portions of the town and the adjoining rural areas.

5: Convert Isolated Land Uses to Communities

Where the lands for these isolated uses have already been set aside or developed, efforts should be made to design buildings and streets in a pattern that is consistent with Historic National Road towns.

6: Where Towns have Grown, Enhance Edge

In order to preserve the integrity of the town edge, infill development fronting the National Road should be encouraged. Such development should support commercial, office, and residential mixed uses, where appropriate, along with enhancements such as streetscape elements and pedestrian amenities to enliven the character of the place and encourage walkability.

MHNR Character-Defining Features

The following character-defining features may be found within transition areas along the MHNR corridor. (See page 2 for full descriptions of the three eras below.) Features should be preserved or maintained to accommodate growth. (See guidelines starting on the following pages)

"Heyday" of the National Road (1810-1850)

- mile markers
- mile houses
- inns and taverns
- stone arch bridges
- · original road sections
- · scenic views

Agriculture and Trade era (1850-1910)

- agricultural structures and machinery related to the agricultural industry
- railroads
- canals
- Victorian architecture
- well-maintained farmsteads and homesteads from the era
- original road sections
- scenic views

Revival period (1910-1960)

- roadside motels and tourist cabins
- scenic overlooks
- road houses, garages, and service centers

Transition Guidelines

Rural but Planned for Future Growth

Design Challenge in Middletown

The challenge lies in how to place the site of a proposed commercial development (plan shown below) at the intersection of the Middletown Parkway and the Historic National Road. The following photographs (top three are going from east to west) place the site within an area that has already been converted from rural to suburban uses, but several large parcels of open space are still present. Back to the east is the view of Braddock Mountain, but much of the land in between is built out for residential uses (set back from the highway (bottom photo).











Rural Areas Planned for Future Growth

Along the MHNR, these areas are typically located within existing priority funding area boundaries, but outside of existing municipal area boundaries. Existing urban growth may have already leapfrogged beyond some of the remnant rural areas.

Organizing Elements

Design Goal: Maintain a distinct edge between rural and urban.

- Establish a gateway that forms the distinct edge of town separating urban from transition and rural.
- Place the proposed development in context –from rural to urban. (See Rural to Urban Transect on page 8)
- In locations along the transect where the proposed development is not at the edge of the growth area, then identify transition areas between residential neighborhoods and establish nodes or subcenters of mixed used areas at major road crossings (see Hagerstown Case Study, page 26).

Visual and Spatial Relationships

Design Goal: As new parcels are developed along the MHNR establish the street as the primary focal viewpoint from which to encourage attractive development.

- Preserve views outside of the planned growth areas to maintain a distinct edge to town.
- Within the transition area, gradually narrow the view so as
 to create a narrow focused view oriented towards the street
 at the point of the defined edge of town or gateway into the
 developed core of the town.

Water and Drainage

Design Goal: Reinforce the rural to urban transition by converting an open system in rural areas to a closed system in urban areas.

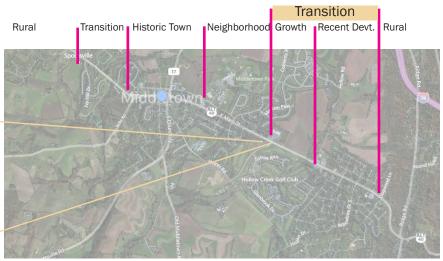


Figure 48 Rural to urban transition in Middletown

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Rural but Planned for Future Growth

• Use the gateway as the transition point to urban (where the drainage system shifts from open to closed systems).

Vegetation

Design Goal: Reinforce the transition from rural to urban by shifting from naturalistic planting to formal street tree plantings.

- Plantings on the rural side of the transition should be set back further from the road and massed in clumps.
- Street tree spacing should get closer together as the roadway speed limit is reduced from rural to urban.

Siting of Structures and Parking

Design Goal: Reinforce the transition from rural to urban by shifting from buildings that are set back and screened from the road to those that directly front on the road and sidewalk.

- Buildings on the rural side of the gateway should be placed so as to minimize their visibility.
- At the gateway location, new buildings should immediately shift to front the MHNR directly with minimal setback.
- Setbacks in transition areas maintain an open look and feel using vegetation to screen development.
- Encourage parking at the side or rear of the building.

Circulation and Access

Design Goal: Use the transition area to shift from higher speed roadway to slower speed more complete street section.

- Traffic calming measures should be incorporated into the transition area roadway sections prior to reaching the town corethese should include splitter islands, roundabouts and narrowing the visual field for the driver with vegetation.
- In transition areas, access should be managed to minimize curb cuts and shift parking to the sides and rear of properties; while in the urban areas, driveways and curb cuts with on-street parking, sidewalks, street lighting and on-street parking are an expected part of the travel experience.
- Inter-parcel vehicular and pedestrian connectivity should be encouraged to minimize the need for curb cuts.

Architectural Character

Design Goal: Use architectural character to reinforce shift from rural to urban through the transition area.

- Use the gateway between transition and urban areas to introduce the distinct architectural materials found within the historic core of the town areas.
- Establish distinct character zones within the rural to urban transition area to reflect the period of growth.
- Use building placement and architectural character to establish gateway rather than using a gateway sign.

Design Challenge in Middletown (continued)

From the perspective of the Historic National Road and these guidelines, the development plan should be modified to incorporate the following:

- The northern most building should front the Historic National Road and be considered a gateway building creating a transition from the newer residential areas to the east that are set back from the road and the older residential and historical district to the west.
- View corridors along the Historic National Road and within the development should orient to capture the views of Braddock Mountain and efforts be made to preserve a sense of the rural views towards Braddock Heights as a means of separating Middletown from Frederick.



Figure 50 Minor changes to the development plan are more responsive to the context



Figure 51 Corner building along King Street in Alexandria, Virginia serves as a transition between scales of Washington Street and King Street

Transition Guidelines









Figure 52 Transition from rural to urban in Howard County (top to bottom) starts with rural land, then single family detached on larger lots, followed by zero lot line and multi-family residential.

Neighborhoods

Much of the growth along the MHNR in the past ten years has been built as subdivisions at the edges of towns. They are auto-oriented, have very wide streets, and are built with little or no relationship to the MHNR, to each other, to nearby schools or to shopping areas. Residents must drive everywhere. Access into these neighborhoods has led to expanded turn lanes and drainage systems along the MHNR itself. The architecture bears little or no relation to the historic fabric of the community. Fortunately, both the marketplace and the planning profession are demanding more sensitive approaches to neighborhood development that should be applied along the MHNR.

Organizing Elements

Design Goal: Encourage the location of new neighborhoods within priority funding areas already planned for future growth.

- New neighborhoods should be designed as a logical extension to the street network of existing towns.
- Neighborhoods should be organized around a focal area (such as a school, neighborhood shopping area, or public park).

Visual and Spatial Relationships

Design Goal: Preserve the rural context of MHNR communities by maintaining a greenbelt of farms, forests and adjoining ridgelines.

- Use preserved woodlands and hillsides as an amenity within the neighborhood for passive recreation and trails as well as providing a rural setting or nearby nature for residents.
- Integrate preserved farmland into community design through community-supported agriculture.

Water and Drainage

Design Goal: Use stormwater runoff management and related facilities as an amenity within the neighborhood as a means of reducing the potential impact of stormwater on the MHNR.

- Maintain natural surface water courses and adjoining riparian vegetation and use infiltration and recycling to handle additional stormwater runoff from houses and driveways.
- Where detention or retention ponds are still needed, design ponds as part of the focal point or feature of the neighborhood.

Vegetation

Design Goal: Incorporate existing stands of woodlands and hedgerows into the design of new neighborhoods.

- Preserve existing woodland patches, wherever feasible, especially along ridgelines.
- Use former hedgerows and farm lanes as a linear open space feature to enhance pedestrian connectivity within the neighborhood.

January 2015

Neighborhoods

 Introduce meadow management techniques to retain the character of rural open space for former farmlands no longer in agriculture and to support dependent wildlife habitat.

Siting of Structures and Parking

Design Goal: New neighborhoods should be designed to fit in as a natural extension of the historical fabric of the community.

- On the rural side of the transition area use larger lots and single family homes with deeper setbacks to reinforce the desired transition from rural to urban.
- On the rural side of the transition area, new neighborhood homes should be sited to fit the contour of the land; be associated with groves of existing trees; or placed at the edge between field and forest, not in the middle of either.
- On the urban side of the transition area, new neighborhood homes should be part of the logical extension of the network of streets with homes facing the street and a mix of on-street parking and garages in alleys or behind homes deeper in the lot.

Circulation and Access

Design Goal: Reduce the visual and environmental impact of circulation.

- On the rural side of the transition area, site driveways to fit the
 contour of the land and along the edges of open fields and use
 shared driveways to minimizing surface runoff and fragmentation
 of natural areas. Minimize the width of a driveway (14' minimum
 with turnouts is reasonable for both single and shared user
 driveways).
- On the urban side of the transition area establish a connected network of streets (looser grid on the rural side and tighter grid approaching the town) using a system of internal alleys and garages to accommodate parking and services.

Architectural Character

Design Goal: Use architectural character to reinforce shift from rural to urban through the transition area.

- On the rural side of the transition area, the architecture should continue to emphasize the rural and vernacular character of the region, especially the scale and proportion, building massing, roof pitches and fenestration. (Refer to the architectural character guidelines for farmsteads or homesteads on page 46).
- On the urban side of the transition area, the scale and proportion of buildings should be in proportion to the street width (e.g. larger homes should have larger setbacks).
- The architectural style should be consistent with and in proportion to neighborhoods associated with the period of growth (e.g. if located within an older grouping of homes, be consistent with the style already in use).

OTHER RESOURCES

Smart, Green and Growing Planning Guide, Maryland Department of Planning: http://www.mdp. state.md.us/PDF/OurProducts/ Publications/OtherPublications/ SGG_Guide_09_Web.pdf

Land Use Planning and Urban/ Peri-Urban Agriculture, Center for Disease Control and Prevention, Healthy Places, http://www.cdc. gov/healthyplaces/healthtopics/ healthyfood/landuse.htm

Smart Growth in Small Towns and Rural Communities, USEPA Office of Sustainable Communities, http:// www.epa.gov/smartgrowth/topics/ rural.htm





Figure 53 Residential character of the Historic National Road in Middletown (top) and Flinstone (bottom)

Transition Guidelines

Large-scale Mixed Use

The distinct edges that were typical of towns along the MHNR are now mostly gone as growth has spread across the landscape. As new growth is planned at the edges of the major cities and growing towns there is an opportunity to reclaim those edges by rebuilding compact gateway communities. This guideline applies to potential development at the edge of the cities of Frostburg, Cumberland, Hagerstown, and Baltimore and the towns and unincorporated adjoining areas of Boonsboro, Middletown, New Market, Mt. Airy, Ellicott City, and Catonsville. In some cases, these areas were developed in the sixties or seventies, have significantly declined and are ready for redevelopment (e.g. Frederick's Golden Mile).

Organizing Elements

Design Goal: Design large scale mixed use communities as distinct "gateway villages" serving as an entrance to the town.

- Locate and design the core or highest density node along the MHNR as a gateway feature into the city or town.
- Scale the intensity and mix of uses so as to not compete with the downtown, but provide multi-neighborhood level goods and services.

Visual and Spatial Relationships

Design Goal: Create distinctive, attractive communities with a strong sense of place that become an identifiable landmark along the MHNR.

- Design the community so that it establishes a cohesive community character that can be perceived from the MHNR.
- Blend uses and building forms at the edges of the community to match those of adjoining neighborhoods and uses.

Water and Drainage

Design Goal: Manage stormwater runoff as an integral community design element of any mixed use community development.

- Use compact building design to reduce overall stormwater runoff and related management requirements.
- Incorporate rain gardens and retain stormwater as part of water features in open space design as means of accommodating larger volumes of surface runoff.

Braddock Heights CDP 36.4% 3.7% 45.4% Catonsville CDP 13.7% 1.9% Clear Spring town 30.9% Cumberland city 25.2% 35.2% Ellicott City CDP 8.2% 34.6% Frederick city 15.1% 4.9% Frostburg city 13.1% 34.0% 14.4% 21.4% Funkstown town 10.8% Hagerstown city 33.9% 13.5% 48.3% 11.0% Hancock town La Vale CDP 4.7% 61.5% 14.5% 1.9% Middletown town 18 2% Mount Airy town 10.2%

Impervious surface cover

46 1%

16.2%

5.6%

Tree canopy cover

Canopy green space %

23.8%

9.2%

16.3%

Figure 54 Existing percentages of impervious surface and tree canopy within MHNR communities are the starting point for establishing and meeting tree canopy goals for new development, especially in transition areas (See http://www.nrs.fs.fed.us/data/urban/state/?state=MD#viewer)

Vegetation

Design Goal: Increase the urban tree canopy to meet county, city and Chesapeake Bay Preservation Act goals within that watershed and state goals for climate change outside of the bay watershed.

 Plant street trees along MHNR and as part of any surface parking area within all developing transition areas as part of new development plans.

Name Baltimore city

Boonsboro town

New Market town

Wilson-Conococheague CDP

Large-scale Mixed Use

- Preserve existing woodlands as an amenity for new community development projects.
- Integrate tree lined open space elements (park blocks, pocket parks, and linear open space features as part of community design.

Siting of Structures and Parking

Design Goal: Establish a compact form of development to re-define the distinct edge of the community.

- New structures should front and be oriented to the street in a manner that is consistent with the existing structures.
- Buildings types should be organized to encourage uses that provide goods, services, and community functions within an easy and safe walk of residents and work places.
- Building types should encourage live-work relationships within the same structure.
- Parking should be located at the rear of buildings or on the street.

Circulation and Access

Design Goal: Create walkable communities.

- Link individual parcels together with a parallel network of connecting streets and interior circulation.
- Create a "complete" street to satisfy the needs of the widest range of users – pedestrians, bicyclists, transit riders, and drivers.
- Create safe and inviting pedestrian corridors that make it easy to walk among homes, work places, retail and recreation functions.

Architectural Character

Design Goal: Establish a sense of place by creating a distinct and attractive community-based architecture.

- Analyze and research local architectural character within towns and cities to establish design standards where none have been established.
- Ask franchises to adapt standard models to local architectural character
- New architectural styles should be introduced, as well, and should not be discouraged.

OTHER RESOURCES

Route 40 Design Guide, Howard County Maryland. http://www.howardcountymd.gov/WorkArea/linkit.aspx?LinkIden tifier=id&ItemID=6442461817&Iib ID=6442461809

Low Impact Development Center (http://www.lowimpactdevelopment.org/publications.htm)

Maryland State Highway Administration Complete Streets Policy (http://www. roads.maryland.gov/OPPEN/SHA_ Complete_Street_Policy.pdf)



Figure 55 Parking lot at the Technical University of Denmark in Lyngby. Image courtesy of Thomas Oles from Build a Better Burb (http://buildabetterburb.org)

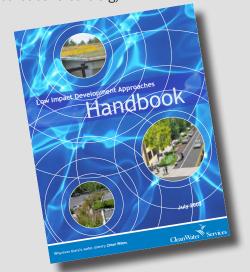


Figure 56 Low Impact Development Approaches Handbook, Clean Water Services, Hillsboro, Oregon, 2009. (http://cleanwaterservices.org/Content/Documents/Permit/LIDA%20 Handbook.pdf)

Transition Guidelines



Figure 57 Mashpee Commons is one of the best examples of a a strip center conversion to a more traditional form of town development (Image courtesy of DPZ and Cornish Associates)



Figure 58 Parking lots at the Wild Center in Tupper Lake, NY with medians leading to nearby open space and trails



Figure 59 Infiltration area incorporated into Howard County's Government Center parking lot

Reclaiming Strip Commercial Corridor

Existing strip commercial areas are found throughout the MHNR at the edge of most of the MHNR cities and towns. Most date from the 1960s in the eastern parts of the corridor and later out in the western communities, but they really got their start when the National Road was revived and paved in the first half of the 20th century. Yet the scale of many of these corridors, first with their enclosed shopping malls and later with the big box and factory outlet stores, are incongruous with the historic fabric at the center of each city or town. They also drew away most of the customers leaving a shell of a downtown without a function.

Organizing Elements

Design Goal: Redevelop strip commercial centers into mixed use communities or new neighborhoods.

- Depending on location, define the re-developed community as either a gateway or as a nodal point along the rural to urban continuum.
- Mix different land uses by inserting residential, office and recreational uses into a primarily commercial/retail use.
- For gateway areas see page 60 for recommendations regarding areas that are appropriately re-used for larger scale mixed use.
- For transitional areas closer to town that are not appropriate for large scale mixed use, see page 58 for neighborhood uses.

Views and Spatial Relationships

Design Goal: Break apart the large expanses of pavement and strip commercial buildings.

- Consider breaking apart commercial strips by opening up linear open space connections to adjoining neighborhoods or as visual corridors to adjoining rural areas.
- For gateway areas consider establishing a visual focal point to serve as an architectural gateway into town.

Water and Drainage

Design Goal: Recapture lost natural surface water channels and convert them into amenities and best practices for stormwater management.

- Create new open space in existing strip commercial corridors by converting underutilized parking areas to rain gardens to treat stormwater runoff.
- Recapture and reuse stormwater runoff from building roofs and remaining parking areas for irrigation of landscaped areas.

Vegetation

Design Goal: Increase the urban tree canopy to meet county, city and Chesapeake Bay Preservation Act goals within that watershed and state goals for climate change outside of the bay watershed.

Strip Commercial Corridor

- Introduce allées of street and canopy shade trees to break up large expanses of existing parking areas, and associate them with rain gardens or view corridors.
- Reclaim asphalt from parking areas and revegetate as a "rain garden" or shaded pedestrian walks leading nearby destinations.

Siting of Structures and Parking

Design Goal: Reshape commercial strip centers into more compact and multi-use building forms.

- Convert strip center into distinct outdoor and pedestrian oriented streets with buildings inserted to redefine the street edge as building frontage.
- Retain or establish new anchor uses grouped together as the "100% corner" creating a distinct destination oriented around public plaza (versus the traditional model of dispersed anchors).
- Establish smaller scale, usable and attractive outdoor spaces associated with the restaurant, movie theater or similar uses.
- Parking should be located at the rear of buildings (long term) or as part of the newly defined street (short term).

Circulation and Access

Design Goal: Reclaim strip commercial centers as walkable, live-work neighborhoods.

- Link individual parcels together with a parallel network of connecting streets and interior circulation - creating new urban lots and blocks.
- Provide sidewalks, pedestrian linkages and connections, and bicycle facilities to facilitate non-motorized travel into the downtown areas and/or adjoining neighborhoods.

Architectural Character

Design Goal: Establish a sense of place by reclaiming and adaptively re-using strip centers to reestablish a distinct and attractive community-based architecture.

- In existing commercial areas use color, signage, fenestration and focal points to introduce more visually appealing architectural styles in existing commercial corridors.
- Ask franchises to adapt standard models to local architectural character.
- Analyze and research local architectural character within towns and cities to establish design standards where none have been established.
- New architectural styles should be introduced, as well, and should not be discouraged.

OTHER RESOURCES

Restructuring the Commercial Strip: A Practical Guide for Planning the Revitalization of Deteriorating Strip Corridors. US EPA, 2010. http://www. epa.gov/smartgrowth/pdf/2010_0318_ wa_328_corridor_manual2.pdf

Redesigning Shopping Centers in the Delaware Valley: from Grayfields to Community Assets by Delaware Valley RPC; http://www.dvrpc.org/ reports/05023.pdf



Figure 60 Carytown Place, Richmond Virginia adaptive re-use of a strip shopping center utilizing architectural forms and lighting to break down the scale of larger buildings(courtesy L.F. Jennings)



Figure 61 McDonalds in Urbana, MD adapted it's architectural style to the desired character of the community

Maryland's Historic National Road CPP Update

URBAN DÉSIGN GUIDELINES

Figure 62 Traveling eastbound in Ellicott City on Frederick Road/ MD 144.

This section introduces urban design guidelines; identifies key questions for defining urban character; and provides urban design guidelines for the historic edge of town; urban neighborhoods; and the historic center of Town, its "Main Streets."

Introduction

Maryland's Historic National Road travels through fifteen towns or cities, many of which are commercial main street communities that continued to grow after the Heyday period. Some of these urban cores experienced a decline in growth during the Revival Period and thereafter, as people and business migrated further out from the cities and into rural areas (now transition areas). The construction of US 40 and later I-70 and I-68, further eroded the once vital commercial cores.

Now many cities and towns are encouraging revitalization of their urban cores, as well as preservation of historic architectural character. With revitalization there is a need for infill and redevelopment design guidelines. Communities all along the MHNR are seeking to make their streets more pedestrian friendly and encourage mixed use development where appropriate.

Maryland's Growth Print analysis (Figure 5 on page 4) identifies cities and towns as targeted growth areas (shown in red) and priority funding areas (shown in orange). On the Rural to Urban Transect, these areas are defined by a distinct edge and dense built environment, primarily fronting the roadway and composed of commercial, residential, and mixed uses.

Defining Urban Character

Urban Challenges

- Defining the edge of town or city
- Preserving historic architectural character and the buildings themselves
- Enhancing streetscapes and revitalizing commercial areas
- Making streets pedestrian and bicycle friendly
- Introducing new development or Infill development in residential and commercial areas while protecting existing character
- Introducing mixed use development
- Establishing a neighborhood identity

Defining Urban Character

Urban areas generally have distinctive character defining features that are more apparent than in transition areas. Similar character-defining questions apply to urban areas as with the previous section, "The Challenge of Defining Transition Area Characteristics" on page 54.

Within the MHNR's urban context, which of the following best describes the location of the site?

- At the historic edge of town? if so, which period?
- In nearby urban neighborhoods?
- On the historic or traditional commercial "Main Street"?
- Or is there a new downtown not aligned with the Historic National Road?

What parts of the historic or urban context can be seen from the MHNR?

- Are there key landmarks that anchor the street?
- To what degree do buildings enclose the street?
- Are there missing parts or gaps that provide views out to the landscape beyond?
- What is the predominant architectural character of the street or town?

How are elements organized on the site?

- What are the adjoining uses?
- Is the overall street sloping or flat? Is the street on a high point or ridge with lots "falling away"?
- Where is the site in relation to the streets and blocks (midblock, corner)?
- How much of the site is covered by buildings?
- How high are adjoining buildings?
- How close are the nearby buildings to the street?
- If there are open space areas, what do they contribute to the surrounding streetscape?
- Where is parking located?
- Are there alleys behind the buildings providing service access or utility access?
- How wide are the sidewalks?
- Does the street accommodate bicycles?

What is the historical context of the place?

- How is it significant in the context of MHNR?
- Are there MHNR Character-Defining Features?
- · Are there historic features? A historic district? A Main Street?

Is there a predominant architecture style?

- Do architectural features consistently reflect a particular architectural style or are there several styles as a result of "layers" of development over time?
- What are the dimensions and massing relationships?
- · What materials are used?
- What do architectural features look like and how are they detailed? (windows, doors, roof line, etc.)

If character is not distinct, how can it be enhanced?

- Create a new and visible landmark or use to anchor the street if there is no current anchor or landmark?
- Fill in a missing part of the building fronts along the streetscape?
- Create a new and usable public space along the street or associated with a new commercial or retail use?

Primary Development Principles and Guidelines for Urban Areas

The "Design Guideline Principles" on page 9) that directly apply to urban areas of the corridor include:

3: National Road Towns have Distinct Edges

As is exemplified by the urban to rural transect of Boonsboro, and in Frostburg, the town is defined by a distinct built edge—this distinguishes it from the transition area into town.

4: Where Towns are Growing, Redefine Edge

In areas that are slated for growth (PFAs), the edges of town can become less defined as development and sprawl emerge into open space. By maintaining development adjacent to the town edge and discouraging sprawl, the town edge can be maintained and redefined over time.

6: Where Towns have Grown, Enhance Edge

The transition areas just outside of a town or city is often littered with sprawl. In order to preserve the integrity of the town edge, infill development fronting the National Road as well as other enhancements should be encouraged.

7: Infill Development Carefully into Towns

Infill development should be consistent with the existing built environment—maintaining the character of the "building wall" (setback, architectural style, building massing, etc.) that defines the small town or crossroads pike town.

MHNR Character-Defining Features

The following character-defining features may be found within urban areas along the MHNR corridor. (See page 2 for full descriptions of the three eras below.) Features should be preserved or maintained to accommodate growth. (See page 6 for definition of management goals)

"Heyday" of the National Road (1810-1850)

- mile markers
- mile houses
- inns and taverns
- · stone arch bridges
- original road sections
- · scenic views

Agriculture and Trade era (1850-1910)

- railroads
- canals
- Victorian architecture
- · original road sections
- scenic views

Revival period (1910-1960)

road houses, garages, and service centers



Figure 63 "Downtown" Funkstown.



Figure 64 "historic edge" of Funkstown.



Figure 65 Existing entrance to Funkstown.

Historic Edge of Town

All of the fifteen cities and towns along the MHNR had distinct edges prior to the expansion of the automobile era in the 1950s. Grantsville, Frostburg, Hancock, Clear Spring, Hagerstown, Funkstown, Boonsboro, Middletown, Frederick, New Market, Mt. Airy, Ellicott City, Catonsville and Baltimore all had distinct edges associated with the original route of the Historic National Road and early turnpikes that led to Cumberland. In those cases where the historical edge of town is no longer visible, refer to the guidelines on "Rural Areas Planned for Future Growth" on page 56.

Organizing Elements

Design Goal: Maintain the distinct architectural character of the original National Road communities associated with the "Revival Era"

- Establish a gateway at the original edge of town by extending and applying urban architectural guidelines consistent with those of the main commercial core.
- Where new development is planned adjacent within the original town boundaries, extend the street grid outward in a similar manner as the historic core (using a parallel system of streets and alleys).
- Where hills and slopes change the perception of the city or townscape, use those transitions as a change in street character or architectural styles.



Figure 66 Transition area between Boonsboro's post war development and its revival era townscape .

Historic Edge of Town and Neighborhoods

 Establish or identify gateways where new buildings can become focal points or landmarks identifying the historical edge of town

Water and Drainage

Design Goal: Incorporate road drainage and street drainage as a design element within the architectural character of the street.

- General use of curb and gutter should begin at the historic edge of town.
- Where feasible, incorporate infiltration areas and rain gardens into distinct street elements.

Vegetation

Design Goal: Develop an appropriate formal pattern of street trees to reinforce neighborhood character.

- The value of street trees were recognized in the early periods of the Automobile Era. Evidence of the active management of roadside plantings are found in municipal tree ordinances dating to 1912 and a Maryland roadside forest law dating to 1914.
- Wherever possible, existing sidewalks with street tree plantings should be extended and/or repaired and replaced.
- Street trees should be predominant at the historic edge of town and more space should be allocated for their growth.
- Use native and historically appropriate plants to reflect local ecosystems and/or community character.

Circulation and Access

Design Goal: reinforce existing patterns of circulation.

- Original rights of way were typically 66-feet wide—one length of a surveyor's chain—and wide enough to accommodate a stage coach to turn around.
- Pavement width should include space for an 11-foot travel lane and 4' shared space for bicycles.
- Parking should be located to the rear or side of buildings, and facilitate parallel, on-street parking where appropriate (an additional seven-feet for parking lane plus 18 inches' for the gutter pan provides ample space for parallel parking.
- Within the remaining right-of-way (eleven feet on each side of a typical 66-foot right-of-way), space for street trees should be accommodated between the curb and sidewalk and where practical extended in a linear fashion (six feet for the street trees and five feet for the sidewalk).
- Where traffic speed is an issue, efforts should be made to narrow the look and feel of the roadway by the judicious use of bumpouts, concrete paver crosswalks, and median splitter islands, placed at the edge of town, but not extending into the historic center of town.

Best Practices: New Market Design Guidelines

According to the Town of New Market's web site: The Historic Design "Guidelines for New Market are intended to be used as a community tool to assist property owners and the New Market Historic District Commission in an informed cooperative effort to protect the

existing historical character of New Market. The Guidelines provide an analysis of what is special about the Town of New Market and offer direction toward enhancing and preserving those qualities".



National Road towns are different

An excerpt from the design guidelines introduction captures the sense of why National Road towns were different:

With its direct focus on the roadway, New Market is a linear town that is different from a typical rural village (Figure 2). Like any small town, houses, offices and stores were constructed on the main street of New Market. Unlike a typical rural village, most houses were dual purpose structures functioning not only as residences, but also as taverns, inns, hotels and stores to serve travelers moving east and west along one of the most significant highways in our nation's history. New Market, from its official establishment in 1793 and through the first three decades of the nineteenth century. thrived as a bustling locale for drovers driving herds of animals, teamsters hauling products to the Baltimore markets, and thousands of hopeful settlers heading west across the Appalachian Mountains looking for the opportunity to start anew.

The design guidelines can be found at http://www.townofnewmarket.org/assets/cms/files/Government/Documents/Guidlines/HistoricDesignGuidelines.pdf

Secretary of Interior's Standards for Rehabilitation

The Standards are applied to projects in a reasonable manner, taking into consideration economic and technical feasibility.

- A property shall be used for its historic purpose or be placed in a new use that requires minimal change to the defining characteristics of the building and its site and environment.
- The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided.
- Each property shall be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or architectural elements from other buildings, shall not be undertaken.
- Most properties change over time; those changes that have acquired historic significance in their own right shall be retained and preserved.
- Distinctive features, finishes, and construction techniques or examples of craftsmanship that characterize a historic property shall be preserved.
- 6. Deteriorated historic features shall be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture, and other visual qualities and, where possible, materials. Replacement of missing features shall be substantiated by documentary, physical, or pictorial evidence.
- Chemical or physical treatments, such as sandblasting, that cause damage to historic materials shall not be used. The surface cleaning of structures, if appropriate, shall be undertaken using the gentlest means possible.
- 8. Significant archeological resources affected by a project shall be protected and preserved. If such resources must be disturbed, mitigation measures shall be undertaken.
- 9. New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.
- 10. New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired,

- The design of the bumpouts, crosswalks and medians should be kept simple using grass, concrete, concrete pavers with a contrasting color, but not excessive blending of paver styles.
 Curbs should be tinted and aggregate slightly exposed to match existing concrete
- Lighting should be full, cutoff fixtures to reduce light trespass and glare. Where heavy pedestrian use is anticipated, street lighting should be combined with sidewalks.

Siting of Structures

Design Goal: Reinforce existing patterns of architecture and land use.

- Site new buildings using the existing setbacks of the community;
 This is typically fronting and built up to the front of the lot along the main street (rather than set back with a large front yard)
- Buildings used solely for residential purposes along the main street should be further set back than commercial structures with a small yard in front separated from the street by a low wrought iron or wooden picket fence with decorative pickets.



Figure 67 Residential blocks of Boonsboro illustrating use of uncluttered and informal bumpouts that are consistent with the character of the historic main street

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Historic Edge of Town and Neighborhoods

Architectural Character

Design Goal: Maintain or reestablish the sense of place through the positive cumulative effect of each new building (infill) or rehabilitation of existing buildings by reinforcing existing relationships to surrounding buildings and the rhythm, pattern and scale of the streetscape.

- Where architectural styles are similar, new homes and businesses should reflect, but not mimic that architectural style; where architectural styles are diverse, more emphasis should be placed on compatibility with scale and proportion of existing homes from the Revival Era.
- For urban/main street sections with a continuous street wall, additions to existing structures should
 - be placed to continue the street wall frontage
 - be subordinate to the original historic structure
 - carry across cornice and fenestration lines on the main level
 - have similar form and proportion to the original building
 - have similar fenestration to the original building
 - have similar roof pitches
- For neighborhoods where detached residential buildings are set back off the main frontage, additions should:
 - be offset slightly behind the front facade
 - have similar form and proportion to the original building
 - have similar fenestration to the original building
 - have similar roof pitches
 - have similar materials and use compatible colors



Figure 68 Commercial blocks of Boonsboro along the Historic National Road

Best Practices: Preservation Guidelines for Cumberland, Maryland

The objectives of this handbook are threefold: (1) to help you, the owner of a historic building, understand the most appropriate maintenance and rehabilitation practices to preserve your property; (2) to recommend general design guidelines for additions and new freestanding construction that will help preserve the historic qualities of your neighborhood; and (3) to serve the Cumberland Historic Preservation Commission as a reference manual in applying consistent

criteria to its judgments regarding building permit applications within the Historic Preservation District



Additional Resources for Historic National Road Communities

National Alliance of Preservation Commissions Online Design Guidelines

Provides direct access to the .pdf document or the main page of each local jurisdiction's historic preservation commission. Titles and verbiage may vary from "historic guidelines" to "historic district regulations." http://napc.uga.edu/resources-links/online-designguidelines/#.Utxg4f30Bcw

Preservation Howard County Resource Guide

Information about Howard County's historic preservation resources. http://www.preservationhowardcounty.org/ResourceGuide.pdf

Historic Main Street

Maryland Historic National Road's main street communities are different that many of Maryland's other historic main street communities owing to their origins along the first federally funded highway (see sidebar). Each of the fifteen main street communities are also different from each other making the development of a model design guideline that might satisfy the needs of all them nearly impossible. Yet there are a few elements that they do have in common that can be reflected in a model guideline, along with some recommendations for how to organize the guidelines themselves when they are developed for each community.

Organizing Elements

Design Goal: Reinforce the rhythm and structure of the main street as established during the Heyday period and/or as built up during the revival period.

- Lots typically fronting the historic travel route were narrow and deep with commercial buildings on the corners and residential in between. Use the original town layout or plan to identify the rhythm and pattern.
- Most of the original towns along the Historic National Road were laid out following a linear town plan with the main street being the widest supporting commercial uses fronting and in close proximity to the street. A back street was typically constructed and used by the wagoners and drovers separated from the commercial and residential traffic on Main Street. A smaller alley separated the lots that fronted the main street and the back street.
- The larger cities of Baltimore Frederick, and Hagerstown evolved to continue the grid pattern, while Cumberland's layout was further influenced by the Potomac River, the C&O Canal, and B&O Railway.

Visual and Spatial Relationships

Design Goal: Buildings and streets should be adapted to the topography rather than modifying the topography to the buildings or streets.

- Where the slope changes along the length of the street, step the buildings up the hill (Figure 69).
- Where the slope changes perpendicularly to the street, adapt the building elevation, sidewalk and yard to the match the slope, rather than using extensive amounts of fill and retaining walls (Figure 70).
- Preserve views towards rural landscape aligned as a focal view with the main street (Figure 71).

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Historic Main Street

Water and Drainage

Design Goal: Incorporate roof drains and downspouts as a design element within the architectural character of the street.

- Direct runoff from roofs into scuppers and downspouts at the rear of the building, where practical.
- Incorporate scuppers and downspouts as an integral part of architectural character.
- Use underground cisterns to capture and reuse stormwater runoff for watering.

Vegetation

Design Goal: Incorporate street trees where appropriate in a manner that is sub-dominant to the architectural character of the street.

- Determine from historic photographs as to whether street trees were planted during the revival period.
- Develop an appropriate formal pattern of street trees using the architecture of the street façade to structure the placement of plantings (e.g. building facades establish a regular pattern, so too should the street trees).
- Placement of trees should be more widely spaced along the commercial main street using species that are compatible with overhead utilities; have minimum branching heights of ten feet with a tree canopy; and have a tree form that is more pyramidal or upright, rather than globular.

Circulation and Access

Design Goal: Adapt the existing main street to accommodate all uses and users using "Complete Streets" policies and guidance.

- Original rights of way were typically 66-feet wide—one length of a surveyor's chain—and wide enough to accommodate a stage coach to turn around.
- The typical width can accommodate two 11-foot travel lanes, two seven-foot parking lanes, and two-foot curb and gutter sections, leaving room for a thirteen foot sidewalk section on each side (or a four-foot bicycle lane between parking and the travel lane and an eight foot sidewalk).
- Off-street parking, where required should be incorporated into the rear of the buildings and accessed from the parallel alley system.
- Utilities and services should be accommodated in the rear the rear of the buildings and accessed from the parallel alley system.

Siting of Structures

Design Goal: New infill structures should be respectful of the setback, height, proportion, fenestration and roof pitch of existing buildings.

 Buildings should be sited at the front of the lot consistent with adjoining buildings.



Figure 69 Effect of topography on street character in Clear Spring (street is parallel to the slope)



Figure 70 Effect of topography on street character in Hancock (slope is perpendicular to the street)



Figure 71 Focal view towards rural landscape along the National Road in Boonsboro

Best Practices: Fredericktown Historic District Design Guidelines

According to the City of Frederick website: "The intent of the guidelines and the design review process is to ensure that all properties in the Historic District are rehabilitated to best preserve their essential historic qualities

and that new construction is sensitive to the scale and historic nature of the Historic District. These guidelines are the basis of the review process and the foundation for decision-making by the Commission."

The Fredericktown Historic District focuses on the architecture of each building rather than its overall composition as part of a streetscape or townscape.

The design guidelines in this case describe its character defining features in its introduction as:

2. Character-defining features. Character-defining features are those building components that make the structure unique and different from other buildings, characteristic elements of a particular architectural style, technique or architect, or features that are important to a building's unique identity Elements that contribute to a building's overall significance will be more carefully scrutinized than those of lesser significance. Character-defining elements must be identified, retained and preserved to the fullest extent possible.

The design guidelines can be found at: http://www.cityoffrederick.com/
DocumentCenter/Home/View/497

Building heights should be equivalent to the adjoining structures.
 Where different, the new building should serve to balance the adjoining heights or to reinforce the predominant height of buildings along the block.

Architectural Character

Design Goal: Retain and preserve the historic architectural character of properties along the Historic National Road.

- Analyze and research local architectural character within the historic main street to establish design guidance or standards (where none have been established).
- Where Heyday era resources exist, emphasize preservation rather than rehabilitation or reconstruction.
- Where Revival era resources are present, retain the character defining features of the buildings and related features while accommodating new uses.
- Where new buildings are introduced or additions are constructed, respect the massing, size, scale and architectural features of the adjoining historic property, while ensuring that the new work is distinct and different from the preserved historic features.

Street Character

Design Goal: Retain and preserve the historic community character of traditional main streets along the Historic National Road.

- Elements related to the street (fencing, sidewalks, benches, trash receptacles, newspaper vending, pedestrian lighting, utility vaults, and electrical equipment cabinets), shall have simple design character with clean lines, taking care not to introduce a false sense of historical style.
- Concrete should be tinted to match existing concrete and a light exposed aggregate finish applied to match adjoining concrete curbs and sidewalks.
- Brick should be used where brick sidewalks were prevalent during the revival period, retaining a simple running bond pattern for sidewalks.
- Lighting should be full, cutoff fixtures to reduce light trespass and glare. Where heavy pedestrian use is anticipated, street lighting should be combined with sidewalks.
- Ask franchises to adapt standard models to local architectural character.
- New commercial, on-premise signs should be designed in keeping with the adjacent architecture in color, lighting, scale and materials.



Figure 72 Wind turbine near intersection of US 40 and MD 948

This section provides design guidelines for addressing wind turbines and communication facilities along the MHNR.

Introduction

Ridgelines and scenic views within rural areas of the MHNR corridor are in jeopardy. Recent outcrops of wind turbines and the steady installation of communication facilities are concerns among stakeholders, and for this reason the guidelines for such unique situations are provided. The following pages provide recommendations for addressing these issues, as well as other resources and best management practices.

Further viewshed analysis and careful siting should be in order for construction of wind turbines and communication facilities. Additionally, ridgelines and open space areas should be preserved by conservation easements to avoid these intrusions.

Wind Energy Facilities

Structures associated with wind energy facilities are typically sited prominently along ridgelines; grouped together in large numbers and in a regular pattern; introduce strong color contrast (white against the green and brown ground plane and blue sky; are three to four times the height of the tallest trees; maintain a spinning motion attracting attention; and require aviation warning lights.

Guidelines for Unique Situations

Renewable Energy Facilities

OTHER RESOURCES

For the most up to date information on government sponsored research involving the visual impacts of large scale renewable energy facilities go to the following web site:

Visual Resource Analysis at Argonne National Laboratory http://visualimpact.anl.gov/index. cfm



Figure 73 Distributed solar PV panel is linked to a network of panels along existing utility poles in Lawrenceville, NJ. The cumulative impact of these distributed arrays, when placed on every utility pole with solar access is significant

Solar Arrays

Structures associated with solar array's are typically large in size, have strong regular geometry, and highly reflective surfaces. Although not presently seen along the Maryland Historic National Road, their future use should be considered as solar energy facilities may contrast with the natural or rural settings in which they often are located, creating extensive visual impact. Visual impacts are typically due to the high contrast of the large scale solar array, glare, removal of tree cover, support facilities and transmission facilities.

Distributed Solar

Another potential visual impact associated with renewable energy is the increasing use of distributed solar systems. Distributed solar includes all the different variations of solar photovoltaic panels (PV) that are installed on residential and commercial rooftops and other utility networks within those areas (as opposed to large scaled utility applications. Application of PV panels to historic structures is a particular challenge. Another application that has significant issues for historic roads is the mounting of a network PV panels on utility poles and linked to the electrical grid, such as has been widely installed New Jersey.

Hydraulic Fracturing

The use of hydraulic fracturing techniques (fracking) in the Marcellus Shale areas near the National Road are also an issue. Potential visual impacts associated with fracking techniques include drill site and access road clearing and grading, drill rig and equipment during the drilling phase, and production equipment if the well is viable. The rigs used for horizontal drilling may be 140 feet or greater and will have more supporting equipment. Multi-well pads may have equipment as tall as 170 feet. Clearing for drill pads and equipment may be as much as 5 acres. The direct visual impact is considered temporary: a horizontal well takes 4 to 5 weeks of 24 hours per day drilling to complete with an additional 3 to 5 days for the hydraulic fracture. Remaining equipment at a producing gas well site is typically an assembly of wellhead valves and auxiliary equipment such as meters, a dehydrator, a gas-water separator, a brine tank and a small fire-suppression tank. Multi-well pads may have somewhat larger equipment to handle the increased production.

High Voltage Transmission and Communication Towers

The visual impact of transmission corridors is associated with both the tower height and right-of-way clearing. Communication towers are primarily sited on ridgetops with clear signals. Visual impacts include both the towers and the support structures and driveways.

Communication Facilities

Distance

Design goal: maintain a buffer from the placement of any large-scale energy facilities (wind, solar, high-voltage transmission, hyrdaulic fracturing, etc.) from Historic National Road to minimize visual impact

- Distance is the most critical factor that contributes to the visual effects of large scale renewable energy facilities, solar arrays, high voltage energy transmission lines and communication towers.
- The perceived contrast created by the structure is a function of its height and distance.
- Facilities with a height to distance relationship striking an angle of greater than one degree are likely to create strong visual contrast.¹

Landform

Design Goal: Preserve ridgelines that directly cross the Historic National Road (summits) and any immediately parallel ridgeline within five-to-seven miles of the Historic National Road

- Prepare a viewshed analysis indicating the relative visibility of the facility as seen from the Maryland Historic National Road
- Avoid siting facilities on relatively prominent ridgelines as seen from the Maryland Historic National Road

Landcover

Design Goal: Preserve intervening vegetation, especially along the higher elevations of intervening ridgelines

• If mitigation is required, seek the purchase of conservation easement from intervening land owners to preserve woodlands

Siting of Structures

Design Goal: site supporting structures, circulation, and energy transmission, operational structures to minimize contrast

- Select sites that are not the primary focal point of views from the Historic National Road
- Site arrays of turbines in patterns that match the patterns of the surrounding landscape complex patterns in complex landscapes and simple patterns in less complex landscapes
- Site access roads and transmission corridors in a manner that is consistent with land ownership patterns using existing circulation patterns where practical (use farm roads, fencelines or other linear features to provide access or to align corridors).
- Clear right-of-way in a pattern that matches existing landscape conditions (feather edges and adjust shape to match landform shape) to minimize contrast
- Use color to reduce visual contrast by selecting colors that are similar to the background vegetation and/or soil color of surroundings
- 1 Measure the Visibility of High Voltage Transmission Lines in the Pacific Northwest, Jones and Jones 1976 (http://www.jonesandjones.com/news/publications_pdf/BPA_Transmission_Facilities.pdf)

Visual Elements of Wind Energy Facilities

Wind energy facilities are the most common form of renewable energy development project to date that is visible from the Maryland Historic National Road. The following elements are usually part of a wind energy project:

- Transformers
- Underground electrical lines (600V to 34.5 kV)
- Overhead electrical lines (34.5 to 69 kV)
- Substations
- Gravel access roads 22' to 32'
- Power Transmission Systems
- Communication System (fiber optic/radio)
- Anemometer Tower(s)
- Maintenance or Storage Yards
- Operations Center (building)
- Worker's Building/Facilities

Source; Bureau of Land Management, Training Materials,



Figure 74 Wind turbines are often 400' tall to the blade tip

OTHER RESOURCES

Implementing Solar PV Projects on Historic Buildings and in Historic Districts by A. Kandt, E. Hotchkiss, and A. Walker, National Renewable Energy Laboratory and J. Buddenborg and J. Lindberg National Trust for Historic Preservation, 2011. available at http://www.nrel.gov/docs/fy11osti/51297.pdf



Figure 75 Solar panels integrated directly into the design of the visitor center at Zion National Park, Utah as part of new construction



Figure 76 Solar panels integrated sited on historic structure to minimize impact, Dartmoor, UK

Architectural Character

Design Goal: Retain the character defining features of historic structures associated with the Historic National Road while accommodating the application of PV panels. The National Renewable Energy Laboratory, working with the National Trust for Historic Preservation developed recommendations for how to successfully implement a PV project on an historic building. The following guidance is excerpted from that study:.

- Locate solar panels on the site of a historic resource, using a ground mounted array, if possible.
- Locate solar panels on new construction, in the less visible areas of the new design, rather than the historic part of the building
- If the site cannot accommodate solar panels, and the project does not include new construction, consider placing solar panels on an existing, non-historic addition or accessory structure
- Place solar panels in areas that minimize their visibility from a public thoroughfare
- Avoid installations that would result in the permanent loss of significant, character-defining features of historic resources
- Avoid solutions that would require or result in the removal or permanent alteration of historic fabric
- Solar panels should be flush or mounted no higher than a few inches above the roofing surface and should not be visible above the roofline of a primary facade
- On flat roofs, set solar panels back from the edge
- Panels should be set at angles consistent with the slope of the supporting roof
- Ensure that solar panels, support structures and conduits blend into the resource