



October 13, 2010

To: Friends of Frederick County

From: Reid Ewing University of Utah (formerly with the National Center for Smart Growth University of Maryland)
Colin Quinn-Hurst, University of Utah

RE: Analysis of the New Market Municipal Growth Element

At your request, we have reviewed the New Market Municipal Growth Element. Our comments on this document are set forth below.

Maryland's growth policy as defined in Article 66B of the Maryland Code Annotated aims to replace sprawl with smart growth, characterized by compact, mixed-use, walkable development in close proximity to existing centers and served by adequate infrastructure. The Code (Section 1.01) requires that localities implement the following visions through their comprehensive plans:

(3) Growth areas: growth is concentrated in existing population and business centers, growth areas adjacent to these centers, or strategically selected new centers;

(4) Community design: compact, mixed-use, walkable design consistent with existing community character and located near available or planned transit options is encouraged to ensure efficient use of land and transportation resources and preservation and enhancement of natural systems, open spaces, recreational areas, and historical, cultural, and archeological resources;

- (5) Infrastructure: growth areas have the water resources and infrastructure to accommodate population and business expansion in an orderly, efficient, and environmentally sustainable manner;
- (6) Transportation: a well-maintained, multimodal transportation system facilitates the safe, convenient, affordable, and efficient movement of people, goods, and services within and between population and business centers;
- (7) Housing: a range of housing densities, types, and sizes provides residential options for citizens of all ages and incomes;

Abundant research supports the approach taken in Article 66B. Sprawl creates heavy infrastructure and service demands and other economic, social, and environmental costs (Burchell et al., 1998; Burchell et al., 2002; Ewing, 1997; Ewing, 2008a; Ewing et al., 2011). Roadway investments in outlying areas induce sprawl and additional traffic, with negative consequences at the regional scale (Cervero, 2002; Ewing, 2000b; Ewing and Cervero, 2010). Population and business expansion place demands on water resources and infrastructure that may exceed their capacity (Ewing, 1992; Ewing, 1996). Auto-oriented development denies mobility to those who are too young, too old, or too poor to drive (Ewing, 1996). It also increases energy use and emissions, including carbon emissions (Ewing et al., 2008). A narrow range of housing densities, types, and sizes creates a socially and economically homogeneous community, and also prevents residents from aging in place as they progress through the life cycle (Ewing, 1996).

By requiring clear delineation of proposed growth areas, justification of these boundaries, and rigorous analysis of associated impacts, Article 66B ensures an understanding of the consequences prior to urban expansion. The Town of New Market fails to carry out this mandate in their Draft Municipal Growth Element (MGE). Regarding a primary requirement, the MGE never delineates a proposed growth area. Instead, the MGE identifies a large "Planning Area" and three areas for future annexation, all classic examples of sprawl. Furthermore, the MGE fails to analyze the traffic and other impacts of anticipated growth and infrastructure investments, including a commuter expressway between Boyers Mill Road and Old New Market Road that serves as a bypass for Main

Street. The traffic impacts of these developments and roadway projects would in fact be significant and contrary to the intent of Maryland's land use policies. Finally, there is no evidence that the proposed annexations would support multimodal transportation or diverse housing. Quite the opposite. If past annexations are any indication, the development pattern will be sprawling, auto dependent, and homogenous in its stock of single-family detached housing. The planned annexations represent just the latest in a series of annexations that undermine the Town's historical compact development pattern.

Nature of Annexations

The New Market MGE identifies a "Planning Area" and three annexation areas, but no "growth area" as required by Article 66B. While clearly anticipating future development on the annexed properties, as identified in the map "New Market: Proposed Land Use," the MGE does not adequately assess the impacts of developing these properties. On this basis alone, discussion and analysis of the Planning Area and annexation properties appears irrelevant within the context of the MGE.

The proposed annexation of two (or is it three?) properties conflicts with agricultural and No Planned Service zoning designations of the 2010 Comprehensive Plan and Zoning Map passed by the County Commissioners. Without water and sewer service, there exists little justification for including these areas in the MGE, and even less for the Town's proposed roadway investments to serve these properties.

The Town predicts population and employment growth in residential service zones, with relative decreases in the Historic District (New Market, 2010, p. 7). This shift of both employment and population from the town center to outer areas appears to conflict with the Town's own stated objective of "economic revitalization of the Historic District" (New Market, 2010, p. 5).

The Smith/Cline annexation, in particular, represents classic urban sprawl. It is a large, low-density (less than 3.5 units per acre), single-use development too far from

employment, shopping, or other trip attractors to be anything other than 100% auto dependent. The Delaplaine and Ganley annexations, while programmed for nonresidential uses, also are best characterized as sprawl, being large, low intensity, single-use developments.

The Municipal Growth Element says all the right things: “We choose to accept, orderly, compact, phased, and compatible growth in our Planning Area as our alternative to suburban sprawl, automobile-dependent development that has consumed hundreds of thousands of acres of valuable land across our country’ (Town of New Market, 2010, p. 5). The Town’s record of promoting sprawl through annexations, as exemplified by the Royal Oaks and Brinkley Manor subdivisions, leave us with little hope that Town’s words will be matched by deeds.

In commenting on the Town of New Market Draft Municipal Growth Element, the Maryland Department of Planning accurately sums up the problem:

The Town’s visions and objectives (pages 3-5) and policies for relating future development to existing character (pages 33-35) are good. New Market began as a compact town with farmland around it, but subdivisions to the north, east, and west violated the traditional pattern, creating a landscape of suburban sprawl.

The Plan’s visions and objectives seem designed to restore the efficient, mixed-use character of New Market, and opportunities exist for new development to ameliorate some of the damage done by recent subdivisions. However, many of the land use proposals for the planning area seem to work against this (Maryland Department of Planning, 2010, p. 4).

Lack of Analysis

The MGE does little to document the demand for growth outside the existing municipal boundaries. The MGE's analysis observes an increased demand for compact development, not what is proposed for the annexation properties. Quantitative assessment places the current development capacity of the Town at 365 households, while the 2030 demand amounts to 468 households. This leaves a shortfall of only 103 dwelling units, easily made up by slightly densifying planned development. Yet, the Smith/Cline annexation alone provides capacity for nine times the unmet demand.

As the Maryland Department of Planning notes: "In the context of planning it is important to strive for the proper balance between land supply and population demand" (Maryland Department of Planning, 2010, p. 3). The Town's Municipal Growth Element seems to acknowledge the failure to match supply and demand. "The Town recognizes that the projected demand for housing by MDP exceeds its capacity to supply housing within its current boundaries by only 103 units. Thus, Smith/Cline with 925 units, if annexed, would provide added capacity of 822 units. These additional dwellings will clearly impact the school and transportation systems" (New Market, 2010, p. 15).

Justifying the need for annexation, evidence is limited to one paragraph contending that the Town lacks land to accommodate future growth of population and jobs, that the town includes a high percentage of developed property, and that "over 50% of New Market's development capacity is found on small, infill-type lots" (New Market, 2010, p. 15). According to the document, "this means that annexation is the safety valve for growth and that it will be the means of property control preferred by developers - it offers more flexibility and cost efficiency" (New Market, 2010, p. 15).

Therein lies the problem. The Town's "flexibility" in accepting whatever land owners and developers propose for annexed properties has made the Town "preferred by developers." Past practice has nothing to do with smart growth or the historical compact pattern of development within the Town.

Regarding the potential impacts of annexation, the MGE is silent about the Smith/Cline property. Fiscal impact studies over the past 30 years suggest that low-density residential subdivisions are a fiscal drain, generating public service costs far in excess of property tax revenues (Burchell and Listokin, 1978; Burchell et al., 1985). This generalization almost surely applies to the Smith/Cline property. Regarding the other two annexation properties, the MGE states only that “land appropriate for commercial, light industrial, and office/research development now exists and annexation studies shall be undertaken to examine bringing these possible employment locations into New Market” (New Market, 2010, p. 8). It is certainly possible that adding employment opportunities within the Town will produce fiscal and travel benefits as the jobs-housing ratio comes more into balance. But these benefits aren’t analyzed, as they should be under Article 66B. Moreover, as the Maryland Department of Planning notes, “The Town should verify that the necessary infrastructure will be available in these areas since they differ from County Growth areas or address how these areas will be serviced. Further, areas cannot be annexed if they are not fully discussed in the MGE and based on all of the facets noted in the Municipal Growth Element Checklist” (MDP, 2010, p. 4).

Regarding transportation, the MGE calls for a number of improvements to support residential, commercial and industrial growth in the Planning Area and annexation areas. While the Maryland Department of Transportation (MDOT) agrees with some proposals, others suffer from a lack of adequate supporting data. Fundamentally, the MGE is missing a detailed, current traffic impact analysis identifying projected volumes and patterns of travel (New Market, 2010, p. 9). Likewise, the project identified as highest priority (the New Market bypass) relies on outdated figures. The Town reasons that diversion of traffic via a bypass would reduce traffic congestion within New Market on Route 144 (Main Street), thus preserving “quality of life and historic characteristics” (New Market, 2010, p. 9). To bolster this point, the Town cites County Traffic Studies conducted between 2006 and 2008, which show that traffic on Main Street will less with a bypass and more development units than without a bypass and with fewer units (New Market, 2010, p. 18). However, the County itself states that the results of these traffic

studies may not be used as the only justifications for future major roadway improvements, due to methodological concerns (MDP, 2010, p. 6).

The State under Governor Glendening defunded several highway bypass projects that would have induced traffic and sprawl development. Instead of providing in-depth analysis of traffic and development impacts of the bypass, the MGE simply calls for a future feasibility study, stating that the Town understands “the county set aside funds to study proposed bypass alignments” (New Market, 2010, p. 19). This lack of analysis is inconsistent with the requirements of Article 66B, and is insufficient justification for proposing an expressway bypass. Maryland state law now requires detailed and quantitative analysis identifying the effects of future growth on infrastructure (MDP, 2007, p. 1). State law also requires the MGE to examine the associated costs and identify appropriate financing mechanisms for proposed infrastructure. Regarding these requirements, the MGE states that “new development will pay its fair-share of the costs associated with community facilities, infrastructure and transportation needs where demand is generated by the new development” (MGE, 2010, p. 33). Again, this level of examination appears inadequate relative to the demands of state law.

Likely Impacts

While the MGE assumes that residential development will pay for itself through development fees and taxes, county data present a different picture. A comparison of expenditures in Frederick County from 1995 to 2010 showed that as residential growth increased, spending on services accelerated. This pattern suggests that residential development leads to greater spending on residential services, outpacing improvements in the regional tax base. The type of development proposed for Smith/Cline leads to increased demand for schools, which now face significant yearly revenue shortages (Friends of Frederick County, 2010).

Furthermore, residential developments usually pay only for roads within their boundaries, with little contribution to access roads or arterials. With 365 new dwelling units

identified in the New Market Land Use Plan, and additional units planned for annexation properties (925 units on the Smith/Cline property), the amount of residential development anticipated in the MGE will place heavy demands on existing roads.

Although absent from the MGE, preliminary assessments help define the traffic impacts associated with the proposed expansions. According to the Institute of Transportation Engineers' *Trip Generation* report, every new single family detached home generates, on average, about 10 automobile trips per day. As such, the 365 new dwelling within the Town's existing boundaries and 925 units planned for the Smith/Cline property would generate about 12,900 additional car trips per day. Obviously many of these trips will end up on Main Street (which the MGE already depicts as congested despite the fact that existing volumes are only half of capacity). Without a full traffic impact study, it is difficult to say whether Main Street can handle these additional volumes.

The Town holds that both current and future travel necessitate a New Market Bypass. The MGE characterizes a bypass as the transportation investment of the greatest importance: "Unless transportation routes are drastically modified to redirect most commuter traffic around the Town rather than through its center, the Town will continue to bear the burden of commuter traffic through its territorial limits" (New Market, 2010, p. 18). The Town also asserts: "without a bypass, there is simply no other alternative for traffic" (New Market, 2010, p. 19). However, the Maryland Department of Transportation (MDOT) (2010) disagrees that a bypass is the only option, and counters that a bypass may not actually decrease traffic on Main Street at all (p. 3). Instead, MDOT identifies I-70 as the bypass for regional trips, and on this basis identifies an improved I-70 interchange at Meadow Road as the best option for providing movement to I-70 and away from Main Street. Unlike the proposed bypass, this improvement is both prioritized and funded. A New Market Bypass currently is not identified in the State Highway Administration's long-range plans; to be included, the project "would have to be identified as a top priority in the Frederick County transportation priority letter. Project planning takes about three years and costs about \$3 million" (MDOT, 2010, p. 2-3).

In terms of costs, an analysis from 2006 estimates that building or reconstructing roads in the New Market Region would cost \$18,000,000 per centerline mile (Kuzmyak, 2006). Adjusted for right-of-way acquisition costs, a 2-mile New Market Bypass from Boyers Mill Road to MD 75, projected for 2020, would cost an estimated \$37,113,000 (Kuzmyak, 2006). This compares to \$19,502,000 for upgrading four miles of US 113 to a four-lane divided highway with access controls, and \$40,340,000 for upgrading a town center connector to four lanes (Kuzmyak, 2006).

On a broader scale, the academic literature currently shows no positive impact from highway bypasses for small town business districts; if anything, impacts appear negative for small town centers. An analysis of bypass impacts on small town business districts, using longitudinal data comparing towns with and without bypasses over time, showed that bypasses produced no positive impact on business vitality, as measured by retail sales tax revenue (Rogers and Marshment, 2000). Instead, an assessment of five case studies shows that bypasses lead to increased suburban commercial activities, particularly in specifically zoned locations and at intersections (Falleth, 1999). Furthermore, evidence from Interstate 70 expansion in Oklahoma shows that bypass construction adversely affected small towns, tending to accelerate decline in towns that already experienced economic difficulty (Comer and Finchum, 2001).

The MGE states that “a bypass around New Market may be constructed as part of future municipal annexations” (New Market, 2010, p. 13), and also notes that “the properties proposed for annexation... hold the key to providing a northern bypass road connecting Boyers Mill Road on the west to Rt. 75 on the east” (New Market, 2010, p. 16). Through these statements, the MGE demonstrates how plans for outlying developments may induce roadway projects, and vice versa. With plans for one or the other in place, both become self-fulfilling prophecies. Along these lines, the State Highway Administration observes that a New Market Bypass would “only serve to facilitate future development in the northern part of Town, or north of Town, as opposed to regional through trips” (MDOT, 2010, p. 3). We agree with MDOT that the main effect of the New Market

Bypass would be to induce development and sprawl on adjacent properties. How it would affect traffic on Main Street could only be determined through a full traffic impact study.

Conclusions

The MGE outlines a series of goals for joint planning with the County. These center on defining an annexation area without necessarily zoning it for growth, and reserving a transportation corridor for a future by-pass (New Market, 2010, p. 35). In the absence of adequate assessment, the first goal violates the purpose of establishing a growth area under Article 66B, while the second appears unreasonable given the lack of evidence supporting such a bypass.

The fundamental problem of the MGE stems from placing new developments and associated roadway projects on the map with analysis to follow at some undefined point in the future. To fulfill legal requirements, the MGE must conduct the analysis prior to placing any new developments or infrastructure on the map. In the absence of complete assessment of proposed expansions as part of the MGE, and without associated traffic impact analysis, no rationale exists for roadway investments to serve these properties.

As stated by transportation consultant Richard J. Kuzmyak regarding the 2005 New Market Region Plan, transportation plans are:

“...only so good as the information and analysis on which they are based. In order for these plans and elements to serve their intended purpose, they must take into account the most current information and analysis of traffic impacts, necessary road construction, costs, funding mechanisms and construction time frames” (Kuzmyak, 2006, p. 5).

Likewise, a previous review of traffic studies for the 2005 New Market Region Plan showed that the county would be reckless to proceed without improved traffic studies

(Ewing, 2005, p. 4). In the absence of adequate traffic impact analysis based on well-defined growth areas, moving forward with this municipal growth element would be similarly reckless.

Ultimately, the way to rationalize the development process in the Town of New Market may involve the adoption of an adequate public facilities ordinance. The Maryland Department of Planning hints at the need for such an ordinance in New Market:

“Page 35 of the 2005 Plan says ‘The Town of New Market does not currently have an APFO nor has it selected a specific approach to infrastructure provision beyond its use of annexation and development rights and responsibilities agreements.’ The intent of a MGE is that it is the opportunity for a municipality to consider its growth, if they can provide adequate facilities and how they are going to pay for it (Maryland Department of Planning, 2010, p.2).

Had an APFO been in place, the slipshod analysis of development and roadway impacts in the MGE would have been less likely, as an analysis of the adequacy of public facilities would ultimately be required. Why proceed with three annexations and a highway bypass if an APFO would render development of the former impossible, or render construction of the latter unnecessary?

References

- Burchell, R. and Listokin, D. (1978). *Fiscal Impact Handbook: Estimating Local Costs and Revenues of Land Development*, Center for Urban Policy Research, Rutgers University, New Brunswick, N.J.
- Burchell, R., Listokin, D, and Dolphin, W. (1985). *The New Practitioner's Guide to Fiscal Impact Analysis*, Center for Urban Policy Research, Rutgers University, New Brunswick, N.J.
- Burchell, R. et al. (1998). Costs of Sprawl – Revisited. Transportation Research Board, Washington, D.C.
- Burchell, R. et al. (2002). Cost of Sprawl 2000. Transportation Research Board, Washington, D.C.
- Cervero, R. (2002). Induced Travel Demand: Research Design, Empirical Evidence, and Normative Policies. *Journal of Planning Literature*, 17(1), 3-20.
- Comer, J.C., and Finchum, G.A. (2001). Business impacts of highway bypasses. *Papers and Proceedings of Applied Geography Conferences*, 24: 235-243.
- Ewing, R. (1992). Roadway Levels of Service in an Era of Growth Management, *Transportation Research Record* 1364, 63-70.
- Ewing, R. (1996). Best Development Practices. American Planning Association, Chicago.
- Ewing, R. (1997). Is Los Angeles-Style Sprawl Desirable? *Journal of the American Planning Association*, Winter 1997, 107-126.
- Ewing, R. (2005). *Traffic Studies for the New Market Region*, Friends of Frederick County.
- Ewing, R. (2008a). Characteristics, Causes, and Effects of Sprawl: A Literature Review,” In J.M. Marzluff et al. (eds), *Urban Ecology: An International Perspective on the Interaction Between Humans and Nature*, Springer, 519-535.
- Ewing, R. (2008b). Highway Induced Development: Results for Metropolitan Areas, *Transportation Research Record*, 2067, 101-109.

Ewing, R. and Cervero, R. (2010). Travel and the Built Environment—A Meta-Analysis, *Journal of the American Planning Association*, 76(3), 265-294

Ewing, R., Bartholomew, K., Winkelman, S. et al. (2008). *Growing Cooler: The Evidence on Urban Development and Climate Change*, Urban Land Institute, Washington, D.C.

Ewing, R., Nelson, A.C., and Bartholomew, K. (2011). Compactness vs. Sprawl – Have Energy, Climate, Health, and Demographics Resolved the Debate? In *Urban Design: Roots, Influences, and Trends (The Routledge Companion to Urban Design)*, Routledge, New York.

Falleth, E. I. (1999). Suburban growth and land actors along by-pass roads in Norway. *European Planning Studies*, 7(3): 357-371.

Kuzmyak, R.J. (2006). Assessment of the Transportation Element of the Proposed New Market Region Plan. *Friends of Frederick County*. Maryland: Frederick.

Maryland Department of Transportation (MDOT). Comments on the Town of New Market Municipal Growth Element. Maryland Department of Transportation: The Secretary's Office. Maryland: Hanover.

Maryland Department of Planning (MDP) (2010). Comments on the Town of New Market Draft Municipal Growth Element. Maryland: Baltimore.

Maryland Department of Planning (MDP) (2007). Managing Maryland's Growth: Writing the Municipal Growth Element to the Comprehensive Plan. Maryland: Baltimore.

New Market (2010). Draft Addendum to the 2005 New Market Master Plan: New Market Municipal Growth Element. Maryland: Town of New Market.

Rogers, C.L., & Marshment, R. (2000). Measuring Highway Bypass Impacts on Small Town Business Districts. *Review of Urban and Regional Development Studies*, 12 (3): 250-265.