

Erik Nelson has been on the Fredericksburg city staff for 30 years. While administering that community's historic district, he also served on the regional Metropolitan Planning Organization, engaged in long range transportation planning. It has been an interesting combination of duties.

Form (Preservation) Follows Function

By Erik Nelson

In the field of historic preservation, our great challenge is to see that historic buildings remain viable components of a community, used for their intended purpose (homes, offices, churches, etc.) as much as possible and adapted to new uses when the viability of a previous use has passed. Buildings alone, however, do not revitalize or sustain places; activity does. Neighborhoods need populations, commercial enterprises need customers, and communities in general need civic engagement that helps, among other things, to define and realize preservation goals.

Pragmatic officials embrace the seemingly mundane development and implementation of local regulations, as these are the legal framework for historic preservation. In addition to concerted attention to the physical attributes of place, however, we need to also consider how a community functions. Like bureaucratic imperatives, infrastructure is an integral part of the preservation discussion, but that effort drops us into the realm of traffic engineers and road builders. To these individuals tasked with ensuring citizen safety, the Manual of Uniform Traffic Control Devices is every bit as compelling as the Secretary of the Interior's Standards are to us. We all know to work with zoning administrators and building code officials as a team. They have their own rules to follow and

in recognizing and respecting their parameters, we encourage them to recognize ours. The same goal of teamwork is also desirable with the traffic engineers.

Transportation Philosophy

Everything we do is interconnected through infrastructure. Urban places do not work well without several modes of transportation. Cities that have built expressways into and through their downtown communities have learned an expensive lesson – **that roadways alone do not revitalize central business districts**. Instead, urban centers thrive on a variety of transportation modes that serve a broad range of needs. We already know that a mix of commercial uses draws customers, and that



Credit: Erik Nelson

Fredericksburg's William Street is a State Primary Route, now become a Business Route. The bridge accommodates two-way traffic, but the city's street is one-way.

appropriate residential densities provide healthy numbers of residents who add to that activity. As an added benefit, those residents also become community caretakers. Active places are thus inevitably focused on people. Our transportation system needs to do the same.

Traffic and Freight

Automobile traffic tells us a lot about historic communities. Limited traffic might suggest an economically struggling place, great for keeping historic buildings affordable, but not drawing needed investors. More traffic might be problematic, but also indicates growth potential and long term viability. In the early days of trying to revitalize downtown Fredericksburg, we often said that we aspired to have the traffic and parking problems associated with more successful places. Our shining example of success was Alexandria, Virginia to our north. There was an unexpected flip side, though. An Alexandria planner once told that they missed

the days when they were like Fredericksburg, more funky than hip. The take-away is that our communities are evolving, with related and even predictable challenges.

Historic preservationists and traffic engineers have not typically been on the same team. About twenty five years ago, I attended a meeting of the Commonwealth Transportation Board dispensing its millions of dollars for projects recommended by the Virginia Department of Transportation. An engineer presented a request for funds to improve a roadway through a small community. Some local citizens had expressed concern that adapting their narrow streets to provide easier travel for automobiles would adversely impact some of their sidewalks. The engineer informed the state board that addressing those citizen concerns would "compromise the road design." A few seconds later, the Commission voted to compromise the community rather than the road design.



View of William Street from the Chatham Bridge, where vehicles entering town face all lanes filled with oncoming traffic. A “Welcome to Fredericksburg” sign used to have a traffic sign underneath it that read “Do Not Enter.”

Credit: Erik Nelson

The above mind-set was all too real, but most highway departments have since become attuned to multi-modal travel systems. We all know about transportation enhancement programs mandated by federal highway legislation. Preservationists, however, mostly focus on those funding set-asides, rather than engaging in the larger transportation discussion. Who can blame them? Long range transportation planning can be a grind. Travel demand modelling, for instance, looks decades into the future and needed solutions identified today will invariably change and look different long before they can be funded. Staying on top of that process, though, is where opportunity lies to make sure needed infrastructure fully supports community goals.

Constant re-evaluation is what transportation planners endure, but also allows us to make old plans better. For decades, in Fredericksburg, we have had a two-lane road identified in long range plans for expansion to four lanes, a once-typical response to anticipated traffic. As we get closer to the time when those road improvements will actually get accomplished, however, we are re-visiting potential solutions. We are examining that route for its transit potential, for the feasibility of

introducing bicycle and pedestrian facilities, and whether we can provide fewer lanes with a series of traffic circles that will make left turns unnecessary. Sometimes the original concept turns out to be the most effective, but we still routinely examine alternatives.

We should also acknowledge that many road decisions made in the days of automobile primacy were made in good faith. Traffic engineers helped Fredericksburg to establish one-way pairs of streets across its historic downtown, to address modern vehicular needs in a community laid out in the eighteenth century. The one-way pairs facilitate on-street deliveries for growing businesses, where alleys and loading zones have been lacking or are insufficient.

Planners have talked about the potential to return these one-way streets to two-way travel, ostensibly to provide for slower speeds and a more pedestrian-friendly environment. Not bad goals, but the one-way pairs have truly helped to revitalize the central business district. Places like Savannah can accommodate deliveries, refuse pickup, location of utilities, and other service needs through a generous network of alleys that cut through blocks well behind that



Credit: Erik Nelson

Fredericksburg’s downtown alleys are too few and too limiting to meet service needs on any useful scale. They were used, however, as an alternative location for the overhead wires removed from Caroline Street.



Credit: Erik Nelson

Critical deliveries are made by blocking a lane of traffic on Caroline Street, one street of a one-way pair. Public policy keeps the curb lanes for parking rather than providing loading zones.

city's beautiful squares. Many of us envy those alleys, as our streets remain the necessary alternative. Many times during the day in Fredericksburg, a lane of traffic is blocked by trucks delivering food, beverages, linens, merchandise and so on. People are careful not to block both lanes and our police department recognizes this reality as "curbside management," an elegant term for common sense. We are once again looking at the potential for returning at least portions of the one-way pairs to two-way traffic. This step will certainly slow traffic, with tangible benefits to the affected neighborhoods. Where freight deliveries must still be accommodated, however, we will continue to live with one-way streets, without angst.



Credit: Erik Nelson

Parking is squeezed in wherever feasible, formally and informally.

Beyond Automobiles

When people define the qualities that make our cities and towns attractive places to live and do business, they often resort to phrases like "quality of life" and "sense of place." These concepts are seemingly abstract, but they actually relate to a community's pedestrian infrastructure. A locality's quality of life is often defined by such things as sidewalks that connect different parts of the community, safe street crossings, and convenient destinations for social activity. If points of interest are added – such as historic sites, a vibrant downtown, and perhaps a riverfront – then the local quality of life becomes attractive to visitors and even investors looking to establish or re-locate a business.

Numerous studies show a growing expectation that walking and biking opportunities be available. An organization at the University of Ottawa, called Sustainable Prosperity, has studied the hidden costs of suburban sprawl. In a 2013 report, they showed that rising Millennials and retiring Baby Boomers constitute fully half of the U.S. population and are driving the demand for walkable urban places. Another study (2015) by the National Association of Realtors found that 79 percent of the American population prefers walkable communities. That full percentage does not actually live in fully walkable communities, but it represents the market demand, which is apparently strong and growing.

A private company called Walk Score developed a methodology to measure the walkability of cities, towns, neighborhoods, and even individual addresses. It is an index of a location's efficiency for convenient travel options. Walk Score cannot be considered an exact science because it relates to human behavior, but the index provides relative comparisons and has been enthusiastically embraced by the real estate industry. In addition to walk scores, the company has expanded its

SCORE	WALKING CRITERIA	TRANSIT CRITERIA	CRITERIA
90-100	Daily errands do not require a car	World class public transportation	Daily errands can be accomplished on a bicycle
70-89	Most errands can be accomplished without a car	Transit is convenient for most trips	Biking is convenient for most trips
50-69	Some errands can be accomplished on foot	There are many nearby public transit options	Some bicycle infrastructure is available
25-49	Most errands require a car	There are few nearby public transit options	Minimal bicycle infrastructure
0-24	Almost all errands require a car	It is possible to get on a bus	Minimal bicycle infrastructure

Table 1 – 1: Walk Score Standards.

analysis into transit scores and bike scores. The above table shows the criteria associated with the various conditions.

Walk Score has used its algorithm to calculate the walkability of cities large and small. New York, for instance, has a Walk Score of 89. San Francisco’s Walk Score is 86. Washington D.C. has a score of 77. The City of Fredericksburg has an overall Walk Score of 45, which reflects the relative inaccessibility of several outlying neighborhoods. When Fredericksburg’s downtown historic core is evaluated on its own, however, the Walk Score jumps to an impressive 90. As noted, these scores are based on an algorithm and may not fully represent a community’s actual conditions, but they are an intriguing window into how places nationwide are being defined for marketing purposes. Go on-line at www.walkscore.com and see for yourself.

The Political Dimension

For more than a decade, Fredericksburg’s city council has fully embraced the concept of connectivity. In fact, we have deliberately redefined trails as basic infrastructure rather than calling them amenities.

We also continue to revise our local zoning codes to support emerging solutions in community design and multi-modal infrastructure. Bicycle/pedestrian

improvements received renewed attention in July 2018, when the council unanimously adopted a revised Pathways Plan that aggressively pushes for a more connected community. We intend to increase the Walk Score of our outlying neighborhoods (45) closer to the Walk Score of our downtown core (90).

Due attention to integrating walkability, traffic patterns, and freight deliveries remains a constant need. To ensure that a high level of coordination is brought to issues of infrastructure, Fredericksburg recently (in 2018) established an integrated planning team within our city staff. Participants include senior level representatives from public works (the director and his traffic engineers), planning (the director and his senior planner), parks and recreation (the director and her senior division manager), police (the chief and a captain), and our full transportation division (planning and implementation). The planning department brings in its historic preservation planner, as needed. This group’s workload has increased significantly, as participants realize the range of issues that can be productively addressed through an inter-disciplinary process. We have found a niche that we did not realize needed this level of attention, an avenue to help make the community function more effectively as a good place to live and do business. ■