

Reforming the Arterials: Streets That Move Cars and Create Great Places

Rick Bernhardt, FAICP, CNU
Executive Director, Metropolitan Nashville-Davidson
County Planning Department

The arterial gets its name by way of analogy to the artery in human anatomy, which carries blood from the heart through the body. Historically arterials have functioned as the main channels in a branching system of roads and streets, carrying traffic to and from the heart of the city.

Over the past 50 years, Nashville's arterials have passed through three stages: from multimodal mixed-use corridors, to high-speed single-mode commercial arteries, to roads characterized by excess vehicle capacity and decayed and underutilized low density commercial buildings. Today Nashville is suffering from a clogging of its arteries. We have tried to make these roads carry heavy traffic, yet zoned them almost entirely commercial. These goals work in opposition to each other.

Fast flow of traffic happens when cars stop infrequently. Commercial areas, however, require frequent cuts in the curbs of these roads for cars to access parking lots. Cars slowing and stopping to turn all along a block reduce mobility to a crawl. Lots of curb cuts also endanger pedestrians by interrupting the sidewalk and forcing walkers and cars into conflict--guess who wins? The congestion created by cars slowing to turn at each retail outlet undermines efficient mass transit. Commuters in cars, frustrated by the stop and start rhythm of the arterials, take to the interstates, contributing to these highways' increasing dysfunctionality. Commercial properties suffer from the loss of traffic. Our arterials have thus become a non-sustainable--functionally and economically--segment of the infrastructure of transportation.

Places and markets change. The belief that the commercial-only arterial is best must be rethought in favor of concentrated commercial nodes linked by higher density mixed-use corridors. There is much more property along our arterials zoned for commercial use than can be economically sustained. And the amount of existing arterial commercial development--in the form of the big box and the strip mall--cannot be supported under today's economic realities.

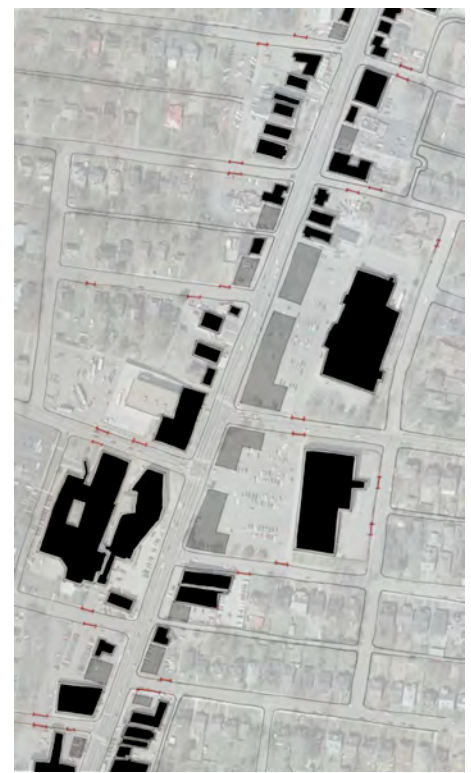
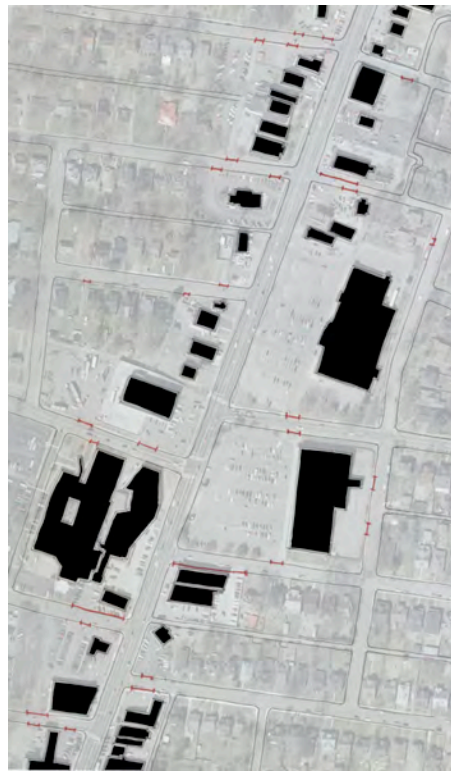
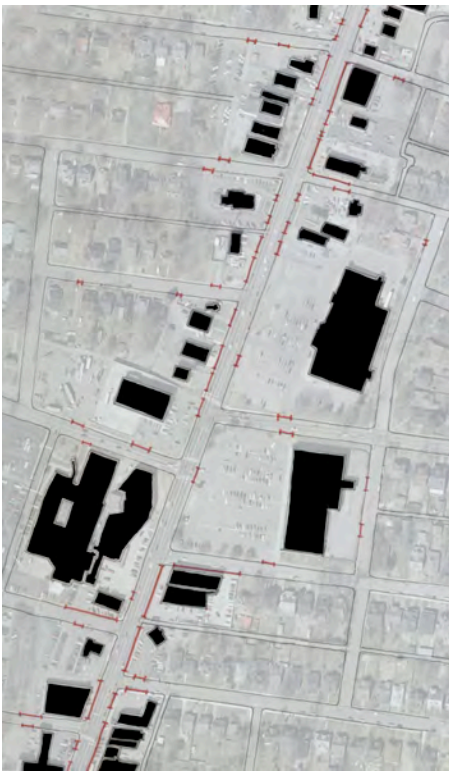
According to Kennedy Lawson Smith, the director of the National Trust's Main Street Program, the amount of retail space

per capita has outgrown the nation's needs. In 1960, the United States had four square feet of retail per person; in 1990, 18 square feet; by 1998 the figure had grown to 38 square feet. Yet Smith says that our existing buying power can only support 16 square feet of retail per capita. At the same time, there is not enough residentially-zoned property in proximity to mass transit to provide the ridership to make transit viable.

An important challenge of the Plan of Nashville is to recapture Nashville's historic pikes-turned-arterials as the means to link and enhance all elements of the city. To reestablish our traditional pikes as great corridors we must do nothing more--or less-- than apply the lessons of urban avenues and boulevards.

Specifically we must:

- Use a participatory process to develop a public consensus as to the redevelopment potential of individual corridors.
- Identify important commercial nodes. At these nodes create places where people feel comfortable, by slowing traffic and providing interesting uses and convenient access.
- Intensify the development flanking our corridors with increased residential and office activity connected with appropriate pedestrian linkages and mass transit service.
- Develop a plan that, in addition to recommending land uses, provides clear visual examples of how to enhance the physical environment through properly placed and scaled buildings, properly located parking, efficient access, and easy way-finding.
- Develop strategies for the arterial street system that provide for motor vehicles, pedestrians, bicyclists, and mass transit with equal attention. Buildings placed next to the sidewalk, with direct pedestrian access from the primary street, encourage walking. Parking located to the rear shields the undesirable appearance of parking lots while leaving the street available for more interesting building frontage. The network functions best with few vehicular access points or curb cuts--except from alleys or lanes to parking in the rear--and short blocks (600 feet max, preferably 400 feet) with properly signaled intersections.



- Finally, make it easy for builders and developers to do the right thing. All too often, developers support the vision of the community discussed above and would develop in ways that are pedestrian-friendly and supportive of transit use. But time is money. Unless the development review system is redesigned to speed up the process of obtaining permits for projects such as the community envisions, developers are forced to revert to previous building patterns because they cannot wait for more flexibility.

Great streets—such as King Street in Charleston, Mulberry Street in Boston, Washington Avenue in Miami, St. Charles Avenue in New Orleans and even Second Avenue in downtown—are great places. Nashville currently has few great streets, and none of them are our major arterials. But all have the potential to become pleasant to drive on and, more importantly, reward pedestrian traffic, if we take the steps outlined above.

Nashville’s urban form was at one time seamlessly integrated with its pikes and avenues. They provided the means of commerce, communication, and community structure. The city’s major streets were the conduit for walkers, streetcars, and automobiles and reflected the diverse urban experience. Our objective is to recapture that balance.

Strategies for arterial reformation: Gallatin Pike between Ordway Place and Greenwood Avenue. Drawings over photograph, 2004: Raven Hardison

(Left) Existing street with curb cuts indicated by red lines. Most of the sidewalk is eroded by curb cuts, which is dangerous for pedestrians. Traffic is slowed by countless turning opportunities.

(Middle) By eliminating curb cuts along Gallatin and providing parking access from the side streets, the number of turning opportunities is reduced from 41 to 12; sidewalks can be repaired, making the street safer for pedestrians and increasing traffic flow.

(Right) Gallatin Pike redeveloped with buildings (illustrated in gray) constructed up to right-of-way, which provides definition and scale to the pedestrian areas already enhanced by the elimination of curb cuts.

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