

# H-Net Reviews

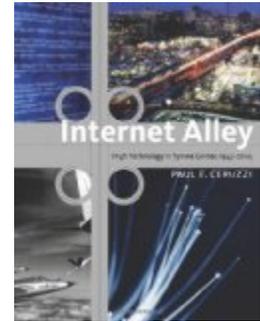
in the Humanities & Social Sciences

Paul E. Ceruzzi. *Internet Alley: High Technology in Tysons Corner, 1945-2005*. Boston: MIT Press, 2008. ix + 242 pp. ISBN 978-0-262-03374-9.

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Published on H-DC (November, 2008)

Commissioned by David F. Krugler



## Tysons Corner: A New Twist on Suburban Development

Tysons Corner is an approximately four square mile section of Fairfax County, Virginia, located ten miles west of Washington DC. From its original naming in 1852 to the beginning of the Cold War era, the unincorporated town remained an insular farming community. What changed its relationship to the outside world is the subject of Paul E. Ceruzzi's recent book *Internet Alley*. In *Internet Alley*, Ceruzzi argues that the Cold War provoked the rise of a military-industrial complex which manifested itself in the proliferation of federally funded military contractors carrying out scientific and technological research, and that Tysons Corner's strategic location outside of Washington DC, combined with suburban growth patterns, transformed it into a hub of commercial development and the center of the burgeoning defense industry.

*Internet Alley* challenges Joel Garreau's model of edge cities as the keys to suburban growth (*Edge City: Life on the New Frontier* [1991]). Ceruzzi demonstrates that the suburbanized commercial development of Tysons Corner constituted not so much the rise of an edge city as a site well situated to embrace the postwar open-ended sprawl from Washington DC, into the agricultural hinterlands of northern Virginia and southern Maryland, which became the bookends of the Dulles Corridor. Ceruzzi might have devoted more attention to a broader exploration of suburban development outside of the nation's capital, in particular the fact that, although Tysons Corner rapidly

developed as an outpost, it could not sustain itself as a defense industry hub without concurrent suburbanization. In a limited way, Ceruzzi is accurate in arguing that Tysons Corner more closely approximates the definition of an edgeless city found in the suburban development scholarship of Robert E. Lang (*Edgeless Cities: Exploring the Elusive Metropolis* [2003]).

Ceruzzi's portrait of Tysons Corner emphasizes that for several reasons geography played a vital role in the area becoming a defense industry research and technology hub. First, the construction of electric streetcar lines at the turn of the twentieth century began northern Virginia's transformation from a farming region to a bedroom community, the first stage of suburban development. Second, the relocation of the War Department to the small northern Virginia community of Arlington in the 1940s presaged later acquisitions of large plots of land in northern Virginia for defense contractors' use. Third, the construction of the Dulles Access Road connected Dulles International Airport directly to Tysons Corner, and the Capital Beltway made Tysons Corner the most accessible place between the airport and the capital for commercial development. Finally, the relative ease of obtaining rural land in northern Virginia, especially when compared to the need to exercise eminent domain in Montgomery County, Maryland, made Tysons Corner an attractive place for defense industries interested in a site close enough to, yet sufficiently separated from, Washington DC. As the Cold War inspired the buildup of the military-industrial complex, Tysons Corner's geo-

graphical good fortune became its destiny.

Much of *Internet Alley* provides a narrative of the institutional and technological history of the defense and telecommunications industries. One of Ceruzzi's key concerns is to examine how federal policies to support scientific military research at the beginning of the Cold War changed over time. Addressing the beginnings of what became military operations research, Ceruzzi explores the rise of Vannevar Bush and the National Defense Research Committee in the early 1940s, federally funded research and development centers in the later part of the decade, and the reconfiguration of the War Department to the Department of Defense in 1949 to coordinate scientific and technological research among the armed services. Subsequent federal policies moved military research into the private sector through the creation of the defense contractor industry. Braddock-Dunn-McDonald's (BDM) move to Tysons Corner in the 1960s signaled that the area would become a defense contractor hub. Aside from brief downturns in the early and late 1970s, and the end of the Cold War, the trend of federal defense contracting has been to increase in scope. By the 1980s, as Tysons Corner became a site of interest for telecommunications companies, geography continued to play an invaluable role in its development. Ceruzzi effectively argues that existing commercial development led Tysons Corner to become the midpoint of an "Internet alley" called the Dulles Corridor, which extends from the airport east to Tysons Corner and to Washington DC, along a forty mile path. After September 11, 2001, the paths of defense contractors and telecommunications companies converged as intelligence became a key concern in defense research and development.

As the author or coeditor of several previous works on technological development (including *A History of Modern Computing* [2003], *Beyond the Limits: Flight Enters the Computer Age* [1989], *Reckoners: The Prehistory of the Digital Computer, From Relays to the Stored Program Concept, 1935-1945* [1983], and *The Internet and American Business*, coedited with William Aspray [2008]), Ceruzzi brings his keen understanding of the history of technology to bear on how the defense and telecommunications industries shaped Tysons Corner's development. As such, his story fills a substantial void in the history of suburban development by looking at the roles that technology and defense and telecommunications industries have played. However, his narrative makes it difficult to locate Tysons Corner within a broader social narrative of suburbanization in the northern Virginia region beyond his discussion of transportation matters. This is most sig-

nificantly a problem in his discussion of the Internet. Although Ceruzzi purports to break the linear narrative of the history of the Internet, he is not particularly successful, with chapters that provide too much technical detail and tracing of institutional development. This section speaks more broadly to the question of the agents shaping Tysons Corner's development. In line with previous scholarship on suburban land investment in Fairfax County, Ceruzzi argues that a mix of specific individuals and businesses, along with some fortuitous geographical circumstances, granted Tysons Corner a privileged economic position as a technology hub.[1] In his execution, Ceruzzi marginalizes the social and cultural pull factors of the suburbs surrounding Tysons Corner.

While *Internet Alley* focuses on the confluence of national interests in the creation of Tysons Corner as a center for the defense and telecommunications industries, the book also makes significant attempts at identifying the importance of local developments in Tysons Corner's history. Ceruzzi's most effective arguments concern the creation of roads connecting Tysons Corner to Dulles Airport and the nation's capital. His chapter on local real estate highlights the work of developers, such as Til Hazel, in securing large tracts of open land and designing structures for military contractors that obscured the work occurring within them. In another chapter, Ceruzzi makes a brief but important argument that the establishment of George Mason University as an independent university provided Tysons Corner and Fairfax County with a comprehensive academic institution with explicit strengths in technological development. Ceruzzi also cites the Norman Cole Report, issued by Fairfax County government leaders in June 1976, as the beginning of the county's aggressive pursuit of businesses from other locations, which had its most noticeable ramifications with the relocation of several telecommunications companies in the 1980s. Subsequent to the 1976 report, however, it is unclear what Fairfax County did to implement its objectives to lure not only telecommunications companies but also upscale shopping to cater to the middle-class, white collar workforce settling in the area.

*Internet Alley* offers a succinct history of Tysons Corner's claim to history as a hub of defense contracting and telecommunications in the postwar period. Deploying a nuanced understanding of the place of technology in modern American history, Ceruzzi's account recovers a legacy of federal intervention and the centrality of technology in facilitating suburban development. His work raises important questions for future research, including how suburbanization unfolded around Washington DC, a

city and region undeservedly understudied, and the ways in which telecommunications technologies fostered new suburban patterns of interaction. Hopefully, *Internet Alley* ushers in a wave of literature devoted to further understanding how scientific research and technology have sustained the American economy and society.

Note

[1]. Shelley Smith Mastran, "The Evolution of Suburban Nucleations: Land Investment Activity in Fairfax County, Virginia, 1958-1977" (PhD diss., University of Maryland College Park, 1988).

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**Citation:** John Spiers. Review of Ceruzzi, Paul E., *Internet Alley: High Technology in Tysons Corner, 1945-2005*. H-DC, H-Net Reviews. November, 2008.

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