

Community Engagement Through Context Sensitive Solutions: The Paris Pike Project

Introduction

In 2003, the <u>Paris Pike Project</u> culminated three decades of deliberation intended to mutually address safety priorities and maintain the historic value of a scenic corridor. The project acted as a proving ground for the <u>Context Sensitive Solution</u> (CSS) approach in the state of Kentucky, providing a holistic framework for implementing safer roadway construction. Paris Pike is viewed nationally as a foundational implementation of the CSS approach, continuing to influence how the CSS practice evolves today.

Background

Paris Pike is a four-lane divided section where U.S. Route 27 meets Route 68, connecting the Kentucky communities of Lexington and Paris. The Paris Pike Historic District claims the title, "Birthplace of the Modern Thoroughbred Industry," home to a historically



The first iteration of Paris Pike provided little margin for error along the narrow two-lane roadway. Credit: The Paris-Lexington Road Design team

prominent farming community that revolutionized the "showplace farm." In the precolonial era, Paris Pike was a primary trade route for Native Americans. The trade route eventually evolved into an interurban railway—the Kentucky Central Rail—that provided farms access to local markets in Lexington and Paris. In the 19th century, the antebellum homes and barns that dotted the woodland savannah landscape were separated from the roadway by dry stone fencing. Masons, mainly immigrants from Scotland and Ireland, built fences within farms and along road frontages, cementing the unique aesthetic that defines the Bluegrass region. One of the many feats of the Paris Pike project was preserving the remaining ten percent of the original stone fence network.

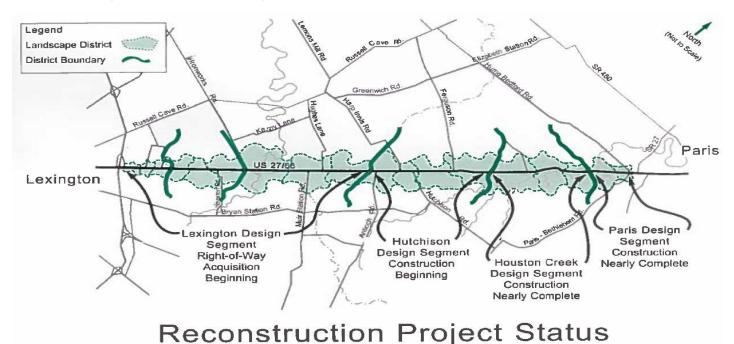
Construction and implementation of Paris Pike began in 1994, after a 1979 court injunction prohibiting work on the project was lifted. From a safety perspective, the formerly two-lane roadway lacked clear zones or a suitable distance between the edge of the roadway and the trees and rock fences. The original roadway also lacked proper shoulders and adequate sightlines. Travelers would encounter small hills that would block their view of turning vehicles or slowly towed farm equipment. To address severe collisions leading to fatalities, engineers suggested implementing interstate design standards throughout the corridor. Specifically, roadway design guidelines were influenced by "A Policy on Geometric Design of Highways and Streets," more commonly referred to as the "Green Book." The publication provides guidance to engineers and designers to address the project specific needs of highway and street users.

To improve safety, speeds were lowered to 45 mph approaching more urbanized areas on both ends of the corridor and left turns into private drives were eliminated. Northbound and southbound lanes were designed independently, with a variable width median to leave the best of the healthy trees undisturbed and to provide



larger turning radius U-turns to accommodate larger vehicles like horse vans and trailers. Reinforced timber guardrails were favored for how well they blend into the picturesque countryside. Historic dry stone fences unable to be preserved were rebuilt as a mitigation effort to offset the impact caused by the Paris Pike Project. The design process also developed grass shoulders that reduced pavement widths and mitigated stormwater runoff. Like the guardrails, the grassy shoulders created a feeling of an intimate roadway that visually matched the immediate surroundings. This detail not only addressed aesthetics, but also encouraged lower travel speeds.

A multidisciplinary team, which included landscape architects, planners, and historic preservationists, worked together with community stakeholders to devise a strategy that met safety and other major priorities. The convening of a citizen advisory task force—a key aspect of a signed memorandum of agreement (MOA) in 1993 between citizen groups and local, state, and federal agencies—allowed community leaders to engage directly with practitioners and establish trust. The Kentucky Transportation Cabinet (KYTC) and the Paris Pike Corridor Commission were integral in building a foundation of transparency and openness that characterized the early community outreach process. "Providing a safe, efficient, environmentally sound and fiscally responsible transportation system that delivers economic opportunity and enhances the quality of life in Kentucky" is the mission of the KYTC. That mission complements the purpose of the Paris Pike Corridor Commission, which is to preserve and protect the roadway's unique historic character. The commission was established as an inter-local agreement between the Lexington-Fayette Urban County Government and Bourbon County in 1993, where the city of Paris is located.



Status of Paris Pike Project Reconstruction was documented through routine newsletter updates, detailing the progress of each design segment. Credit: The Paris-Lexington Road Design team

With the entire reconstruction process prioritizing community input, the project was subdivided into three phases of operations. Phase one was considered the "Transition" phase, establishing the conversion of environmental and socioeconomic studies into design parameters. Phase two, "Design and Development," sought to gain consensus on the conceptual alignment location for the reconstructed road and to identify other



preliminary design considerations. Phase three allowed for final design discussions, with preparation for distinct approaches to the six design "Landscape Districts." The Landscape Districts included Paris, Houston Creek, Hutchison, Muir Station, Johnston, and Lexington, with Muir Station and Johnston Road incorporated within the Lexington Design Segment. Each district was segmented based on geographic and visual characteristics and the specific design considerations necessary for success. For example, the Paris District had certain urban design elements like uniform curb and gutter widths that needed to be addressed. In the Houston Creek District, a tree preservation survey was conducted with the community and arborists to determine which trees would be saved or cut down for the project. Intentional community outreach reflected through multidisciplinary application and design was key to prioritizing both the safety and historic and scenic considerations unique to the Paris Pike corridor.

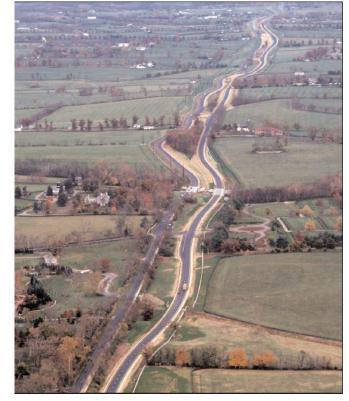
Over Twenty Years of Use

Since the completion of Paris Pike in 2003, the project received award-winning recognition for the benefits it provided to the region. The project garnered the Merit-Design Award from the American Society of Landscape Architects, the Federal Highway Administration's (FHWA) Environmental Excellence Award, and the National Partnership of Highway Quality State Award upon its completion, a testament to the project's multidisciplinary achievements. While staying true to the design aesthetics of the region, the project created a safer, accessible byway that activates different economic activities, supporting a vehicle volume of 14,423 annual average daily traffic (AADT) in 2022.

Presenting as a much safer travel route, Paris Pike influenced new avenues of economic development. Transportation Enhancement (TE) funds (now the <u>Transportation Alternatives</u> program) associated with the

overall project were used to create a workforce program with a renewed focus on restoring dry stone fencing. The program provided culturally appropriate training that established a pool of certified stonemasons in the region. The Dry Stone Conservancy maintains a referral list of local stonemasons and provides routine workshops to continue the relevance of the craft. That human element, along with the natural beauty, increased the prospect of tourism throughout the corridor, benefiting the City of Paris, with their downtown more accessible via Paris Pike.

Bourbon County, with its county seat of Paris, lists over 900 structures on the National Register of Historic Places, echoing the aesthetic prominent along Paris Pike. The completion of the project provided further emphasis on historic preservation as an economic driver throughout the county. Revitalization efforts for the adaptive reuse of the Robneel Building and the Alexander House, located along Paris's Main Street and thus connecting directly to the corridor, demonstrate the commitment to a sense of place that the Paris Pike Project established. Agritourism complements the heritage tourism focus seen in the downtowns connected to the corridor. In 2023, the City of Lexington acquired 30 acres of land between Paris Pike



Aerial view of the winding Paris Pike. Credit: Paris-Lexington Road Design team.



and Bryan Station Road, four miles from downtown Lexington. The property will provide public park access as well as further opportunities for agricultural and equine based activities to attract business and tourism to the region.

The Paris Pike Commission continues to oversee the preservation of the historic, agrarian landscape as development occurs along the corridor. The Paris Pike Overlay Zone regulates permitted land uses in the corridor by establishing requirements for road frontage, front setbacks, and permitted uses that are more restrictive than typical agricultural zones. In reviewing development proposals, the commission prioritizes the balance of the region's character with its growth potential.



Instances of the Dry Stone fencing used along the Paris Pike Historic District. Credit: Paris-Lexington Road Design Team.

Key Project Impacts and Lessons Learned

The successes of the Paris Pike Project tie directly to the CSS principles, including an emphasis on public involvement along with preservation of natural and cultural resources. The approach became incorporated in routine practice for design practitioners in Kentucky and around the country. Interactions with the advisory task force reinforced the importance of communicating plans for construction and design in an effective way to the public. In "Quantifying the Benefits of Context Sensitive Solutions," the Paris Pike Project is recognized as being exemplary of the CSS principle "creating lasting value for the community." That is owed to the widespread community acceptance and commitment to maintaining the standards set by the project. Pride in the project helps promotion and further adoption throughout the region. The Paris Pike Corridor Commission is an example of a local body prioritizing the maintenance of the historic integrity of the corridor by reviewing potential projects and assessing how they may impact its value.

Challenges

Although the project provided many lasting benefits, future CSS practitioners can learn from the challenges that arose throughout the phases of the project, as well as the ongoing preservation efforts. While they have not detracted from the successes of the project overall, they serve as lessons for the continued evolution in effectiveness of the CSS approach. These challenges included:

- Maintenance of high voltage transmission lines that run parallel to Paris Pike requires trimming of trees, interfering with the design intentions of the roadway. Lesson learned: Engage with utilities to coordinate maintenance needs and minimize aesthetic and natural resource impacts.
- Timber guardrails, while aesthetically appropriate for Paris Pike's design, are more costly to maintain than standard guardrails. Timber guardrails are difficult to replace as they are specialty items and their installation usually requires a crane. Lesson learned: Carefully weigh tradeoffs between the aesthetic



- and cost considerations, considering lifecycle maintenance costs of design choices. Strive for practical solutions that balance cost considerations with other CSS goals.
- Paris Pike is not a multimodal corridor. Due to the initial reputation of Paris Pike as an unsafe roadway for people walking or biking, local bicycle associations did not advocate for active transportation accommodations. Lesson learned: Connect with community organizations early in the project development process to establish trust and buy-in and identify and address the full range of alternatives and modes.



Timber guardrails separate Paris Pike from the many bur oaks that dot the surrounding woodland savannah landscape.

Credit: Paris-Lexington Road Design Team.

Ongoing Benefits

There are several benefits of the CSS approach that contribute to the sustained overall success of the Paris Pike Project. These benefits include:

- The advisory task force "increased stakeholder ownership, participation, and trust by becoming advocates instead of opponents of the Paris Pike Project."
- Improved safety for a variety of vehicle types through contextually appropriate design features. The
 incorporation of the design elements (speed, lane widths, shoulder type, guardrails) blend the roadway
 with its surroundings.
- A permanent commission that maintains development standards to ensure the cohesiveness of future development.

Further Adoption of the CSS Approach

The Paris Pike Project introduced ideas that have become part of the standard transportation planning process nationwide. The project solidified the importance of context specific considerations that are driven by the community. A generation of transportation professionals went on to apply lessons learned from Paris Pike to projects such as the Louisville Southern Indiana Ohio River Bridges and other projects throughout Kentucky. These successful efforts demonstrate that projects do not start with announcing to the public that new construction is on its way; instead, practitioners should begin with the right questions targeted at the appropriate audience. The local knowledge that agencies gathered through a commitment to the CSS approach ensured community buy-in and resulted in a project that is a source of community pride. The project demonstrates the value of multiple technical perspectives informing how challenges are addressed. Effective collaboration between engineers and other planning and design professionals drove project success.

The CSS approach developed through the Paris Pike Project influenced the transportation planning process applied to the <u>Newtown Pike Extension Project</u> (NPEP) in the heart of Lexington. The roadway extension was meant to pass through the Davis Bottom (now Davis Park) neighborhood, a historically low-income neighborhood. The NPEP planning process allowed for the creation of an independent advisory committee to help a multidisciplinary team of practitioners to collect local knowledge to ensure the preservation of the neighborhood's cohesion with the urban fabric. The project provided affordable replacement housing and addressed longstanding environmental contaminant issues.

¹ Nick Stamatiadis, Ph.D., P.E., University of Kentucky