# PLANNING FOR A PARKWAY IN DAMASCUS





# What is a parkway?

The term "parkway" has various meanings. Dictionaries define them as, "a broad landscaped thoroughfare." *The Encyclopedia of Urban Planning* defines them more specifically: "A scenic highway for non-commercial traffic with full or partial control of access and usually within a park or ribbon of park-like development" A study of parkways in the Minneapolis region went further and described parkways as having three main characteristics<sup>3</sup>:

- They are greener than other roadways
- They are a public place. (i.e. They may include multi-use paths and parks along them)
- They connect important natural features and cultural institutions

# How have parkways been applied?

### History

The idea for parkways emerged in the 19th century in an effort to beautify cities with landscaped boulevards. In the 1910s and 1920s, cities and counties in the greater New York City area built the first parkways in the United States. (i.e. Bronx River Parkway and Merritt Parkway) These roads were typically designed with limited access and naturalistic landscaping in the median. They created a pastoral driving experience isolated from commerce and advertising, and were often built to showcase, protect or restore the natural areas they ran through.

In the 1930s, the federal government used the parkway concept in constructing several national parkways designed for recreational driving. These parkways commemorated historic routes (i.e. George Washington Memorial Parkway) and highlighted natural areas (Blue Ridge Parkway); many began as New Deal public works projects and later became part of the National Parks System.

With the Interstate Highway Act of 1956, the federal government shifted its resources from parkways to high-speed, high-volume freeways serving commuter and freight traffic. Highway engineers did not place as much emphasis on aesthetics or the environment the roads traveled through, and viewed extensive landscaping as a maintenance liability presenting potential safety hazards to traffic from windfall and debris.

With the passage of ISTEA and TEA-21 in the 1990s, the federal government shifted toward a more balanced policy, creating programs such as Transportation Enhancements and National Scenic Byways. These programs support strengthening the "cultural, aesthetic and environmental

<sup>&</sup>lt;sup>1</sup> Merriam-Webster Online Dictionary, http://www.m-w.com/

<sup>&</sup>lt;sup>2</sup> MacDonald, E., Enduring Complexity: A History of Brooklyn's Parkways, The University of California Transportation Center, page 105

<sup>&</sup>lt;sup>3</sup> Community Parkways – An Urban Design Survey of Green Streets in the Twin Cities

aspects" of the nation's transportation system. Similarly, the federal government began to support the idea of Context Sensitive Design, the practice of developing transportation projects that serve all users and meet the needs of the contexts through which they pass – the community and the environment.<sup>4</sup>

### Parkways vs. Highways/Expressways

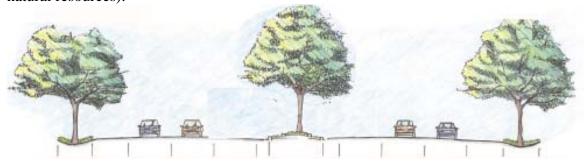
In 1938, the National Parks Service described that a parkway differs from a conventional highway in at least eight ways, summarized below:

- Designed for noncommercial, recreational use
- Seeks to avoid ugly buildings and other roadside developments
- Built within a wider right-of-way to provide for park land between the roadway and abutting private property
- Eliminates frontage and access rights and preserves natural scenic values
- Bypasses built-up communities and avoids congestion
- Makes accessible the best scenery of the county it traverses; the shortest or most direct route is not the primary consideration
- Eliminates major grade crossings
- Has entrance and exit points spaced at distant intervals

# **Application in the Damascus/Boring Concept Plan**

A parkway in Damascus could retain many historic parkway characteristics, such as preserving and showcasing natural scenic areas. A parkway that includes a multi-use trail could serve as a green transition from the urban area to the Clackamas River bluffs and canyons, with limited direct access along the parkway except at grade-separated locations spaced at distant intervals. Some key design differences for better accommodating through traffic and freight trucks could include adequate clearance heights at overpasses and providing a relatively direct route that supports a posted speed of 45 mph throughout.

Local access connections to the Big Park and wildlife crossings would need to be integrated into the design via underpasses or overpasses. Landscaped median and buffers could be provided in most, but not all locations (e.g., where right-of-way should be minimized to limit impacts to natural resources).



Source: Metro

<sup>&</sup>lt;sup>4</sup> Context Sensitive Solutions for the Design of Major Urban Thoroughfares

## Case Studies in the U.S.

### George Washington Memorial Parkway

An example of a parkway that serves as a scenic/recreational route as well as a heavily traveled commuter route is the George Washington Parkway in the Washington, D.C region. It honors our first President by providing a grand and scenic connection between Washington, D.C and Mt Vernon, Virginia. Today, northern sections of the parkway function as a primary commuter route. <sup>5</sup>

The road is considered a linear park and is owned and managed by the National Parks Service, and operated by the Federal Highway Administration. The design cross section of the parkway varies depending on the type of area it passes through. It begins in the southern end as a narrow, winding, largely undivided roadway. As it enters downtown Alexandria, Virginia it becomes a boulevard with traffic lights, street trees, landscaped medians and marked pedestrian crossings. As it approaches Washington National Airport traffic lanes widen, curves are more generous, and it includes continuous medians. North of Washington, D.C, the parkway has sweeping curves, widely separated road alignments, and towering steel and concrete bridges.

## GW Parkway At a Glance

**Funding**: Mix of Federal, State, County

Length: 38 miles

**Right-of-way**: Width varies greatly

**Date of Construction**: 1929- 1970 (stages) **ADT**: 12,000-13,000 vehicles in the south; 70,000-85,000 vehicles in the north

**Speed limit**: 25pmh-50mph

**Design speed**: Varies





Stone bridge over crossing to Arlington National Cemetery



*Multi-use trail along the Parkway* 

<sup>&</sup>lt;sup>5</sup> George Washington Memorial Parkway – NPS traffic Monitoring Program, Coverage Count and Data Reporting Project, 2003.

### The Bend Parkway

The Bend Parkway provides a local example of a mixed-access facility. The parkway is a new alignment for a portion of US 97 (between US 20 and Romaine Village Way), a State Highway that provides the major North/South route east of the Cascades. It serves all types of traffic, including trucks, and attempts to provide some scenic value by preserving some of the native plants and rock outcroppings. However, it was not built within a linear park, nor does its design maintain slow speeds as well as intended.

ODOT built the facility to add capacity to US 97 for existing and future traffic volumes and to meet the safety and travel time objectives of the Access Oregon Highway program. Responding to local concerns, ODOT built certain treatments to make the road less of a barrier, i.e. limiting the road to four lanes, utilizing both interchanges and signalized intersections, and building raised landscaped medians, bike lanes and sidewalks (in some areas).

Unfortunately, certain design problems have created a faster & less safe roadway than intended. One such problem is that the cross slope is greater than the one planned in the original design. As a result, the road design does not create a self-enforcing speed limit. The parkway feels like a racetrack with most traffic traveling 55-60mph. This creates safety problems for all travel modes, particularly motorists merging into traffic from short onramps designed for a 45 mph road. Additionally, the transitions between rural US 97 south of Bend to the urban parkway are abrupt. Visual cues are needed sooner to alert

the motorist before they have entered the urban area. This could be achieved by planting landscaping closer together and nearer to the road, creating a sense of enclosure to slow speeds. Other tools for transition areas include rumble strips, or zigzagging lane markings, as used in the UK.



Bend Parkway at Franklin Ave, by downtown)



Signalized intersection at Pinebrook Blvd, southern end

### Bend Parkway At a Glance

**Funding**: State modernization funds

**Length**: 6.9 miles

**Right-of-way:** Most sections - 150ft-180ft

**Date of Construction**: 1996-2002 **Average Daily Traffic**: 30,000-40,000

**Speed limit**: 45mph **Design speed**: 50 mph

<sup>&</sup>lt;sup>6</sup> Oregon Highway Plan, Bypass Study 2002, An analysis of Oregon's Existing Bypasses

http://www.oregon.gov/ODOT/TD/TP/docs/orhwyplan/a nalysis/16analysis.pdf

<sup>&</sup>lt;sup>7</sup> Conversation with ODOT engineer, Dave Warrick, 7/12/05.