Case Study
The Franconia Notch Parkway

Sometimes the best solution requires a compromise that results in a project that is more limited than what proponents wanted to build, but enables the project to be accepted by the general public. When Interstate 93 was first planned for central New Hampshire, the Federal Highway Department insisted upon using standard design criteria, namely a four-lane divided highway with few exits. However, the proposed project would have obliterated the central portion of Franconia Notch, the flagship of New Hampshire's state park system, causing great consternation with the public and local conservation organizations. After much discussion, FHWA backed down, and the damage to the park was avoided by upgrading the existing two-lane highway and limiting the width of the right-of-way within the most environmentally sensitive areas of Franconia Notch.

Environmental issues can be easy to understand or very complex, and they can generate dramatic controversy. Franconia Notch, illustrated in Figures 1and 2, is one of the most beautiful spots in the White Mountains of New Hampshire. Most of the area visible in the photos is part of Franconia Notch State Park, which includes a swimming beach, an aerial tramway to the summit of Cannon Mountain, ski trails, and hiking trails. The Notch is also the historical route for traveling between southern New Hampshire and northern Vermont – and therefore the natural route for an interstate highway. The route was indeed part of the original plan for Route I93, but controversies arose concerning how to fit the standard four-lane divided interstate highway into what little room is available between the Lafayette range on the east (the left side of the pictures) and the Kinsman range to the west. One plan developed by highway planners was to blast a tunnel through Mt. Skookumchuck (the rocky outcrop at the head of the notch that is clearly visible in the middle of the picture) so that the four-lane divided highway could plow straight through the notch. This plan would have obliterated two small ponds, cut off much of Echo Lake (the lovely lake visible in the photo that is used extensively for swimming and fishing) and taken up nearly all of the flat land available in the upper portions of this narrow valley.

Local opposition prevented this option and all other attempts to build a highway to interstate specifications through the notch. The public's interest in the project was represented by the Appalachian Mountain Club, whose members maintained and hiked the many trails in these mountains, and the Society for Preservation of New Hampshire Forests, which had purchased this land more than 80 years ago and contributed it to New Hampshire for use as a state park. These two organizations worked with the NH Department of Transportation to find a less intrusive solution that preserved more of the park yet allowed better transportation. Instead of the typical interstate, the existing road was enhanced, but not widened, and a better link was thereby made between the sections of I93 that were completed north and south of Franconia Notch. Since the new road had only a 45 mph speed limit and narrowed to a single lane in each direction for several miles, it was clearly not up to interstate standards. Moreover, it had frequent exits for access to the Notch's attractions, including the viewing spot for the much loved but recently collapsed Old Man of the Mountain – a striking rock formation that is now visible only in photos and on the obverse of the New Hampshire quarter (the only US coin with two heads). For many years, the Federal Highway Administration refused to classify the road as an interstate, and it was officially known as the Franconia Notch Parkway. FHWA eventually relented and, early in the 21st century, the Franconia Notch Parkway officially became part of the interstate system, despite its obvious deficiencies. Today, the stretch of road visible in these photographs is the only two-lane portion of the entire Interstate Highway System. The compact between NH DOT and the two conservation groups remains in place. These three parties worked together in 2009 to develop plans for resurfacing the roadway, repairing drainage, replacing guardrails, improving the landscaping, and keeping the small footprint of the highway unchanged. The compromise decision to allow a slimmed-down interstate highway to be constructed through this scenic region was an early example of what is now referred to as **context sensitive design**. Considerable environmental disruption can be avoided by tailoring infrastructure to the local geography and environmental conditions instead of insisting upon the use of standard procedures.

Figure 1 Franconia Notch, with Mount Lafayette in the distance, Skookumchuck in the left center, and Echo Lake in the lower right.

A road built to interstate standards would have destroyed much of the scenic sites within Franconia Notch State Park. However, a two-lane road provides sufficient capacity for this rural portion of the interstate, and it has little impact on the state park. This road, completed in 1983, is an early example of what is now called "context sensitive design."

Figure 2 Franconia Notch Parkway at the edge of Echo Lake

This narrow, but highly scenic two-lane road is now part of Interstate 93. This picture, which was taken on the same day as the previous picture, shows how little space is taken up by the highway as it skirts the shoreline of a lake and a valley that are famous for their recreational opportunities: swimming, fishing, hiking, biking and snowmobiling.

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