No points are awarded for bridges built after 1932 (this is the date when the state assumed control of all roads and bridges from the counties, and there subsequently was a large degree of standardization). The date of 1885 was established based upon the results of the Virginia survey.

Within the area of technology, points are awarded (Table 4) for configuration, length, and number of spans. The designation unique, unusual, or novel is based upon the Virginia sample. In general a point was awarded for spans in excess of 100 feet for trusses before 1900. A point was also awarded for multiple spans prior to 1900 and for more than three spans prior to 1917.

Table 4. Technology.

| Conf: | iguration | |
|-------|-----------------|---|
| | Unique | 3 |
| | Unusual | 2 |
| | Novel | 1 |
| Span | - Length | 1 |
| | - Number | 1 |
| | Patented | 1 |
| | Materials | 1 |
| | Integrity | 1 |
| | Special Feature | 1 |

Other features considered under technology include patented features such as Phoenix columns; materials (steel, wood, cast or wrought iron). A point was given for integrity if the span had not been modified even if it had been moved. A span possessing special features such as decorative details also was given one point.

The third broad area in the criteria reflects environmental factors (Table 5).

Table 5. Environmental factors.

| CONTRACTOR OF A DESCRIPTION OF A DESCRIP | | |
|--|---|--|
| Aesthetic s | 4 | |
| History | 3 | |
| Integrity (Site) | 4 | |
| | | |

Aesthetics are judged on the basis that the bridge is an integral part of its setting to the point where removal or relocation would be detrimental to the bridge and the ambiance of the setting. While aesthetics is a subjective matter, experience in applying the criteria has indicated that people with a wide range of background and training can usually agree on the detrimental impact of removal on the fabric of the setting.

"History" embraces a variety of characteristics. The crossing itself might be significant, or it might be associated with an historical property or area. Historic significance might derive from the fact that the bridge was associated with significant events or circumstances.

Points are awarded for integrity if the bridge is at its original site. Initially, speed of erection was the major selling point for metal trusses. Subsequent generations recognized and capitalized on their reuseability. Because of this capability for reuse, an early truss at its original location is quite rare in Virginia and thus merits recognition.

Evaluation of the environmental factors also provides information important for the type of preservation effort to be pursued. For example, if a truss receives high marks in documentation and technological significance but low marks in the environmental category, then relocation of the structure would be warranted. From approximately 500 metal trusses surveyed statewide, 58 were selected as the most likely to be historically significant. The rating system was applied to these bridges by a six-man task group of the Council's History Research Advisory The historic "significance rating" Committee. for these 58 bridges ranged from a low of three to a high of 24 out of a possible 27. The average was 14.5.

Because this was the initial effort to develop numerical ratings for significance, it was necessary to establish a standard by which significance would be judged. Recognizing that the system was subject to further refinement and considering practical questions that suggested initial designation of a comparatively small number of bridges it was decided to set the level higher than might otherwise be the case. After considering various possibilities, it was decided to designate bridges with a rating of 20.0 or greater historically significant and those with a rating of ten or greater potentially significant. This latter figure will probably be upgraded to 15 or 17 with further refinements. Nine of the 58 bridges received ratings of 20.0 or above. Of these one was already on the National Register and another (which rated 21.0) was demolished during the evolution of the criteria. Registery of the seven trusses will

Registery of the seven trusses will undoubtedly involve future preservation decisions, perhaps in the absence of local interest or ability to finance. The passing of time will bring refinement of the criteria and perhaps difficult preservation questions are yet to be faced. The bottom line of course is money, but the initial step has been taken.

At this point we have much in common with the 19th century traveler. We've begun the journey, we're seeking directions and I hope that we have the courage, endurance and resources to complete it.

CONFLICT ASSOCIATED WITH HISTORIC PRESERVATION Eugene Smith, Texas Department of Highways and Public Transportation

I am an archaeologist on the cultural resources staff within the Texas Department of Highways and Public Transportation, and we work closely with the engineers to try to solve problems as a team. We rely heavily on each other. Because our department is not a DOT, we may not run into some of the problems arising in states that have DOTs. Not all roads in Texas are part of the state system.

The department is not a preservation agency, but it does deal with cultural resources on a daily basis. Texas has a long transportation history. Many of our highways follow the early trails of settlers and cattle drives.

Conflicts occur between the need to supply fast, safe and efficient means of transportation and the preservation of existing transportation facilities and structures that have historical and cultural significance. Because conflicts in Texas have been rather infrequent, I can only speak in general theoretical terms. One thing is clear, though, that answers must be unique for each case.

HISTORIC PRESERVATION OF RAILROAD RELATED STRUCTURES

Eric Deloney, Historic American Engineering Research, U.S. Department of the Interior

In 1971, exactly 100 years after its construction, the Queen City Station Hotel in Cumberland, Md, was demolished. This was a tragic loss, because this structure, built by the B and O Railroad in the mountains of western Maryland, was a popular resort hotel for many people from Washington in the late 1800s. Thomas Heskett, the architect, designed the usual RR station facilities on ground level with several floors of hotel accommodations above. It was placed on the National Register in 1970, shortly after the railroad announced its abandonment of it, and was demolished in the fall of 1971 for lack of funds or support for its maintenance.

Many lessons can be learned from this episode. The State Historic Preservation Officer (SHPO) presented the nomination to the Governor's Review Board; it was rejected 3 times. Several adaptive re-use studies were made and rejected. There were problems between the SHPO and city council, the latter being non-supportive. The railroad offered to sell the structure and delay demolition. The SHPO accepted an offer of HUD funds, but the city council refused.

Although the event brought the community together, it is very apparent that preservation must be founded upon realistic economics. It requires grass roots education and acceptance if legislators and public and private agencies are to be responsive to concerns of community leaders.

There are several examples, however, of the saving of railroad-related structures that deserve mention.

Bolleman's Bridge, patented in 1852 and erected in Maryland in 1869, is the only remaining example of a design that facilitated the rapid expansion of early American railroads. It was moved from the main line about 1887. Its design combines a suspension and truss system. In 1966 there was a concerted campaign to restore the structure, including recasting the maker's name plates in aluminum, restore the little wooden tower caps that covered connections on abutment towers, plus extensive research to determine the Victorian color scheme. It survived the Agnes flood of 1972, while a vehicular bridge nearly washed out. Howard County Recreation Department provided a grant to prepare a restorative study after interest in it languished. A problem today is finding well qualified engineering consultants for historic preservation.

The Mt. Clare circular car shop in Baltimore, built by E. Francis Baldwin in 1884, was recorded by the Historic American Engineering Record in 1970. It could have served as a transportation museum. In 1974 it was restored for use by the B and O Railroad with some help from the City of Baltimore. Although the railroad was interested in historic preservation of the building and was sensitive to public relation values, the Mt. Clare shops were demolished in 1976.

The Aurora Roundhouse and Back Shops of the Chicago, Burlington and Quincy RR, in Aurora, Illinois, is the oldest roundhouse in the U.S., originally used in 1856. The walls are all stone. It is one of the few monuments in that city that has any real meaning to its citizens. In 1927 its use for locomotive repair was discontinued and in 1974 it was abandoned. There has been conflict over its ultimate use, or fate between the Burlington Northern, the present owners, and the Mayor's office and the redevelopment authority of the city.

A study conducted by the Historic American Engineering Record has identified only 11 surviving trainsheds in the U.S. One of these, the Reading RR Terminal in Philadelphia built in 1891-93, is the longest single span arched roof train shed in the world, with a span of 238.5 feet. The Reading Market is associated with the trainshed, now serving only as a commuter terminal. There has been a proposal to incorporate the headhouse, shed, and market into a multi-use shopping-office complex.

The St. Louis Union Station and Trainshed, built in 1891, is listed by the National Trust as an endangered building.

LEGAL PROBLEMS AND CONCERNS ASSOCIATED WITH HISTORIC PRESERVATION Myra Harrison, Advisory Council on Historic Preservation

The Advisory Council on Historic Preservation is an independent agency with direct responsibility to the President and the Congress. The Council is made up of heads of various federal agencies, including the Secretary of Transportation, and 12 citizens appointed by the President.

Most of the problems and conflicts related to historic preservation, as seen from the vantage point of the Council, arise from section 106 of the National Historic Preservation Act of 1966. Section 106, as amended, requires that the head of any federal agency undertaking a program or project must afford the Council an opportunity for comment if the undertaking affects a property listed in or eligible for listing in the National Register of Historic Places.