uniformity and good highway system stewardship, including matching vehicle weights and dimensions with the existing public infrastructure and with mechanisms for cost recovery. At times, some States have adopted new pavement and bridge design standards to better match the weights and dimensions of the vehicles being allowed to operate on their highways. Highway engineers are concerned about premature degradation of that infrastructure and the consequent strain on public resources. As technology and shipper demand have resulted in larger and heavier trucks, concerns for highway safety (adequate brakes and vehicle handling and stability) and loss of rail service (due to loss of freight traffic to larger trucks) have become increasingly important, especially with regard to longer combination vehicles (LCV). LCVs are multi-cargo unit truck combinations that weigh more than 80,000 pounds. Typical LCVs are Rocky Mountain doubles (combinations with one trailer 40 feet or longer and another 30 feet or shorter), turnpike doubles (combinations with two 40-foot or longer trailers), or triples (combinations with all three trailers 30 feet or shorter in length).

A shift of some TS&W regulatory responsibilities from the States to the Federal Government occurred at the start of the Interstate construction era in the 1950s, and since then, the distribution of this shared responsibility has shifted back and forth. Now as the Interstate construction era draws to a close, the transport community is again reassessing the Federal role in the context of future highway transportation needs.

The ultimate goal of a comprehensive TS&W study effort is to estimate the net effects of various regulatory options on a transport system evolving to serve a modern global economy. New vehicles, electronic technology, and distribution systems create new capabilities and opportunities. The effects of changing logistics costs, production strategies, and shipping patterns must be evaluated from the perspectives of carriers, managers of infrastructure, shippers, consumers, and the traveling public. Further, the safety and environmental impacts of these regulatory policies must be fully considered.

Thus, TS&W policy touches upon a variety of public concerns such as safety, infrastructure design and wear, carrier and shipper productivity, States' rights and national uniformity, environment, energy use, intermodal competition, and cost recovery. In addition, these concerns exist at the local, State, regional, national, and international scales. The CTS&WS will summarize a wide array of information on the many related aspects of TS&W policy.

Study Plan

In order to address the issues related to possible changes in Federal TS&W provisions, the following study plan has been developed. *Phase I,* TS&W Synthesis, will assess past policy studies and research findings. The major purpose of this phase is to describe what is known about the technical relationships between TS&W policy controls and their related issues. TS&W studies completed within the last 15 years, as well as more recent research not covered in these studies, are being synthesized. The history of State and Federal TS&W regulation is also being reviewed. In addition, State and Federal TS&W regulations are being summarized, and knowledge and research gaps on TS&W issues are being identified and prioritized.

The available material is being synthesized under the subject areas: vehicle stability and control, truck accident data, pavement and bridge wear, highway geometry, traffic operations, truck operating costs, shipper logistics costs, truck travel, mode share, enforcement, environment, energy conservation, permits and pricing mechanisms. Working Papers will be available to the public by February 15, 1995. Phase I will be completed in early 1995.

Phase II, a Preliminary Option Analysis, will evaluate on a limited basis specific policy options using existing databases. This analysis will be preliminary because new data for a comprehensive analysis of TS&W issues, such as commodity flow information, is not expected to be made available by the Bureau of the Census until late 1995. Therefore, Phase II policy options will include appropriate caveats regarding the limitations of earlier studies. The analysis will be as comprehensive as possible, at a minimum including the impacts of changes in Federal TS&W provisions on safety, infrastructure and economic productivity. This phase will be completed during the summer of 1995.

Phase III, an Extended Impact Analysis, will be able to use the data and new tools that become available in 1995 and 1996 to prepare in-depth analyses of the Phase II policy options. It will incorporate results from a parallel cost allocation study, which the FHWA is undertaking to determine whether the various highway users, including heavy vehicles, are paying their fair share into the Highway Trust Fund. Specific policy options will be analyzed using improved information on freight flows and truck use. Phase III will address the full range of costs and benefits estimated to derive from these options. This last phase of the study will be completed by the end of 1996.

Policy Questions and Comments

In addition to comments on the study plan described above, responses to the following questions are solicited from any parties interested in TS&W regulations and issues. The following key policy questions will be considered during the course of the three-phase study:

Federal Interests and Role

1. What are the Federal interests in TS&W regulation? What are the State and local government interests? How can conflicts among Federal, State, and local interests be accommodated?

2. Should there be a Federal role in areas such as standards, investment decisions, user fee collection, operational controls, and enforcement? What should that role be?

3. To what extent is national uniformity needed? For which type of motor carrier operations is national uniformity in TS&W regulation desirable? In terms of type and area of motor carrier operations, in which cases would regional uniformity be more appropriate? For which type of highways is national uniformity desirable? In which cases would regional uniformity be appropriate?

Weight Limits

4. Are changes in Federal weight limits desirable? If so, how should the present Federal vehicle weight limits be changed? (These limits include the single and tandem-axle weight limits, the 80,000-pound gross vehicle weight limit, and the Federal bridge formula. The Federal bridge formula is:

$$W=500\{[LN/(n-1)]+12N+36\}$$

where: W = the maximum weight in pounds that can be carried on a group of two or more axles to the nearest 500 pounds. L = the spacing in feet between the outer axles of any two or more axles. N = the number of axles being considered.

Why are the changes needed? Which shippers or producers would benefit from these changes, and to what extent do they benefit? How would the public benefit from these changes?

5. Should there be a specific Federal weight limit for tridem axles, as there are for single and tandem axles? (The allowable load on a tridem is now determined by Bridge Formula B and varies from 42,000, if the axles are