

*Report No. 4*

*A review of procedures to evaluate the change or transfer of  
road ownership between state and local authorities in Louisiana*

**Special Studies Planning Group  
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**Draft**

# **A review of procedures to evaluate the exchange or transfer of road ownership between state and local authorities in Louisiana**

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LOUISIANA TRANSPORTATION RESEARCH CENTER

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by

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## **INTRODUCTION**

State Departments of Transportation are approached from time to time by local authorities to exchange sections of roadway. This has usually been done on a mile-for-mile basis in the past and typically on the initiative of the local authority. However, states can also initiate change in ownership. It is also possible for the ownership of a section of road to be transferred from one authority to another without ownership of another section of road being transferred back in return. Typically, the state has initiated such transfers in the past.

The motivation for exchange of ownership from the state's point of view is to improve connectivity of the state-maintained system. From the local authorities point of view it is often to improve the condition of their roads by exchanging a road in poor condition for one in good condition. Local authorities often do not have the necessary funding to adequately maintain their roads and sometimes approach the state through such a request in an effort to maintain their road network in the best possible condition.

Transfer of ownership usually occurs when realignment of existing roads leave sections of the old network disconnected from the original road system. When these sections of road can perform a useful function by being incorporated into the local road system, transfer of ownership is proposed. Transfer can occur from either authority although it is more common to originate from state authorities.

This review was motivated by a proposal within Louisiana's Department of Transportation and Development (DOTD) to use equal Daily Vehicle Miles Traveled (DVMT) rather than equivalent mileage (on a mile-for-mile basis) in the evaluation of applications for road exchange. The general goal was to establish a process that ensured an equitable exchange of ownership between the parties. As part of the process of evaluating the merits of the proposed change, a review of practice in neighboring states was conducted. This report documents the findings of that review, considers the factors that can impact the exchange of ownership of roads, draws conclusions on the accumulated information and makes recommendations on the preferred procedure.

## **OBJECTIVES**

The overall objective of this study is to identify a process which evaluates proposed road exchange or road transfer applications in Louisiana effectively, efficiently and equitably. To achieve this objective, the following activities were conducted:

- (i) The existing and proposed improved procedures in Louisiana were reviewed.
- (ii) Procedures employed in neighboring southern states were reviewed.
- (iii) The factors that can impact the exchange of road ownership between state and

local authorities were reviewed.

- (iv) From the above, conclusions were drawn and recommendations made as to the most appropriate procedure to be applied by Louisiana DOTD in the future.

## **LOUISIANA PRACTICE AND PROPOSED IMPROVEMENTS**

In Louisiana most changes in ownership of roads between state and local authorities involve the mile-for-mile exchange of roads. Transfer of ownership from state to local authority has usually occurred on the basis that the state has built a facility and then approached the local authority to assume ownership of the portion of the state network made redundant by the new construction. Attempts by the state to unilaterally transfer ownership or abandon these roads has met with opposition from the local authorities and the state has found they retain liability for injury or damage to property resulting from declining conditions on abandoned roads. On the other hand, if a local authority is approached prior to construction of a new facility in an area and it is made clear that the new facility will only be built if the local authority is prepared to assume responsibility for that portion of the network which will no longer form a functional part of the state system, then transfers can usually be successfully negotiated.

The current procedure used to evaluate applications for change in ownership in Louisiana employs both subjective and objective procedures and operates as follows. For a change in ownership initiated by a local authority, a representative approaches either the Head Office or the District Office of DOTD with a request for the proposed change. The Planning Division at Head Office reviews the application and determines whether there is anything that would prevent such change in ownership (e.g. legal issues, inadequate right-of-way widths or agreements pertaining to the road in question that are not transferable). The District Office conducts a site visit with a representative from the local authority to establish what improvements to the road must be instituted for it to meet department and local authority standards and be acceptable to each party. Cost estimates are made of the required changes to the existing facility. The official proposal from the local authority comes in the form of a resolution adopted by the local government requesting the change of ownership under the conditions negotiated with district personnel during the joint inspection.

At Head Office, the Planning Division review the application in terms of the following criteria:

- (i) whether the connectivity of the State Maintained Highway System would be improved as a result of the change in ownership or not, and,
- (ii) whether the change in ownership represents an equitable financial responsibility to both parties in terms of current and continuing costs.

The recommendation of the Planning Division is passed to the Secretary of DOTD for approval.

If the decision is to proceed with the proposed change in ownership, the local authority is notified in writing to this effect. If the local authority is prepared to act upon its earlier resolution of intent, representatives from each authority proceed to make the change in ownership and file the necessary documentation with the Parish Clerk of Court.

The proposed improvements to the procedure employed in Louisiana are embodied in an Engineering Directives and Standards Manual produced in June 1994 and updated in November 1995. The proposed procedure is summarized below but the latest update of the proposal is included in its entirety in APPENDIX A.

The proposal allows for both the exchange of roads and the transfer of road ownership but road exchange is expected to be initiated by a local authority while road transfers are assumed to be always requested by the state. In the case of road exchange, local authorities must include a resolution with their application to the effect that they endorse the proposed exchange. An application for a road exchange is first reviewed by the Planning Division of DOTD to determine whether any legal barriers exist to the change in ownership, if equity in the financial responsibility of the two parties will be achieved and if the connectivity of the State Maintained Highway System is improved by the proposal. If the proposal does not satisfy these requirements, the Planning Division advises the Secretary to decline the request with stated reasons. If the initial requirements are met, the appropriate District Office of the DOTD is requested to provide the following information on both roads in question:

- (i) road condition inventory,
- (ii) traffic counts,
- (iii) road standards required by each authority,
- (iv) cost estimate to bring the roads up to the required standards,
- (v) a list of any authorities or companies holding permits or agreements to use the roads or rights-of-way of the roads in question, and,
- (vi) the recommendation of the district regarding the proposed change in ownership.

The Planning Division bases its evaluation of the proposal on the above information and make its recommendation to the Secretary of DOTD. If the Secretary supports the recommendation, the Real Estate Section of DOTD is requested to transfer or terminate, as appropriate, all rights associated with the road sections in question and to file the transfer of ownership with the appropriate authority. The Project Control Section of DOTD is requested to update its records of the State Maintained Highway System accordingly.

When the state wishes to transfer ownership of a section of its road system to a local authority,

the Planning Division of DOTD will verify that the connectivity of the State Maintained Highway System is maintained after the transfer and then request that the appropriate District Office establish the following:

- (i) receptiveness of the local authority to the proposal,
- (ii) a condition inventory of the road proposed for transfer,
- (iii) a traffic count on the road section in question,
- (iv) the road standards required by the local authority,
- (v) a cost estimate to bring the road to a standard acceptable to the local authority, and,
- (vi) the recommendation of the District Office on the proposed transfer.

The Planning Division evaluates the proposal in the light of the above information and, if it can reach an acceptable agreement with the local authority on the conditions of transfer, it will seek a formal resolution from the local authority confirming their acceptance of the agreement and recommend approval of the transfer from the Secretary. If the Secretary supports the proposal, the Real Estate Section will be required to transfer the rights and the Project Control Section will update its records in the same manner as in the case of road exchange.

## **CURRENT PRACTICE IN NEIGHBORING SOUTHERN STATES**

State Departments of Transportation in Alabama, Arkansas, Florida, Mississippi and Texas were contacted to identify the procedure they employed in evaluating applications to exchange or transfer road ownership. Responses were obtained from all states except Alabama. A summary of the procedures used in the above states, including that used in Louisiana, is provided below. Individual states are presented in alphabetical order.

### **Arkansas Highway and Transportation Department**

The Arkansas Highway and Transportation Department follows a policy of avoiding an increase in the mileage of the State Highway System and the costs associated with maintaining their system. Subsequently, mile-for-mile exchange of roads with similar future financial maintenance and rehabilitation costs are, generally, the only form of road transfer considered by the Arkansas Highway and Transportation Department.

The Department does not have written guidelines on the process employed when evaluating an

application for road exchange but the main criteria they take into consideration during the evaluation are:

- (i) whether the planned exchange will improve highway system continuity,
- (ii) whether service to the public will be improved, and,
- (iii) what the cost of improving and/or maintaining one road versus the other is.

Applications are considered in terms of their performance on the above criteria (and other criteria that may be applicable in specific circumstances). The performance of an application on the criteria is judged subjectively; no attempt is made to ascribe a weight or relative importance to each criterion or prescribe the manner in which the impact of each criterion is combined in the overall evaluation.

## **Florida DOT**

The Florida Department of Transportation recently revised the procedure they use to handle applications for road transfer. The new procedure, adopted in 1995, has as its basic tenet that any governmental agencies agreeing to a transfer of road ownership among themselves, may proceed to effect that change although the formal approval of the Secretary for the Department of Transportation is required.

Any governmental agency owning roads may initiate an application for road transfer to another authority but both parties must then reach agreement on the conditions and timing of the transfer before any change is made to the existing facility or any other facility which will replace the function of the existing facility. For example, if a section of road is to be realigned and the road on the old alignment is to be transferred to another authority, then agreement must be reached on the transfer of ownership prior to construction of the realigned road or any reconstruction, rehabilitation or maintenance on the old alignment. This is an important requirement because it allows either party the flexibility to consider other options (e.g. alternative use of the facility to be transferred or sale of the property on which the facility is located) as feasible solutions. It also allows the parties to negotiate whether the section of highway to be transferred will undergo any reconstruction or upgrading to link it satisfactorily to the new network and at whose expense this will be done.

Florida's new legislation enabling the transfer of ownership of roads (Florida Statutes Section 335.041) suggests that governmental bodies are to base their evaluation of each proposed transfer of ownership on criteria that include, but are not limited to, the following:

- (i) national defense needs,
- (ii) ease of travel within urban areas,



- (iii) accessibility of Intermodal facilities,
- (iv) accessibility of regional public facilities, and,
- (v) disaster preparedness and emergency evacuation.

Other criteria may be included in the analysis depending on circumstances and judgement of the official conducting the evaluation. No specific weights are associated with the criteria and the manner in which the performance on the criteria are combined to form a decision, is subjective. The process is aimed at one-directional transfer of roads rather than the exchange of roads but either form of ownership change is acceptable.

Applications for the transfer of road ownership begin their evaluation process at the District level. The District Planning Office is responsible for preparing a transfer request for submission to the Transportation Statistics Office of the Florida DOT and subsequent approval by the Secretary for Transportation. When preparing such an application, the District Office has several tasks to perform. One of these is to review what agreements are binding on the road section in question. These may include rights to toll the road, permits allowing utilities to locate within the right-of-way or agreements with railroad companies on grade crossings. Internal arrangements such as permission to locate traffic monitoring equipment of the state or local authority in or next to the road in question must also be investigated. Arrangements must be made to transfer the agreements to the new owner, if this is possible, or make special provisions as appropriate. One example of a special provision is where a road previously owned by a local authority is transferred to the state, a special provision may be instituted to require that sidewalks, bikeways and any other way other than the road remain the responsibility of the local authority. Another example is where a road belonging to the state and containing permanent traffic counting equipment is transferred to a local authority, it may be required that the local authority maintain such equipment and allow access to the equipment by state employees as part of the agreement.

Another requirement of the application is that if a section of highway is to be transferred off the State Highway System, it must be determined whether there are any archaeological or historical resources either in or immediately adjacent to the right-of-way. If such resources exist, the agreement must include a commitment from the local authority that these will be preserved in compliance with a Mitigation Plan developed by the District Environmental Management Office. There is no similar requirement for roads transferred onto the State Highway System.

The District Secretary must accumulate all relevant material pertaining to the application and submit it to the Department Secretary with a formal request for approval. The supporting material must include a description of the road being put up for transfer, a statement of the benefit to the public, the criteria used in the evaluation, any agreements reached between the state and the local authority during negotiations on the transfer, a Mitigation Plan from the District Environmental Management Office and, if the road is being transferred off the State Highway

System, a signed agreement from the local authority. Following approval by the Transportation Statistics Office, the State Transportation Planner and the Assistant Secretary for Transportation Policy, the request is sent to the Department Secretary for final approval. The local authority is then informed of the decision, change of ownership is effected and the public land records are amended to reflect the change.

## **Mississippi DOT**

The Mississippi Department of Transportation considers both the exchange of roads between local authority and state and the one-directional transfer of roads from one authority to another. In the case of road exchange, the procedure employed is as follows:

- (i) The local authority contacts the state's District Engineer in the district in which the roads are situated to discuss a proposed exchange. Based on the information presented by the local authority, the District Engineer decides whether the application warrants further investigation or not.
- (ii) If further investigation is warranted, the District Engineer and/or a representative of the District conduct a field inspection of the route in question. They assess whether the road being offered by the local authority is of comparable "quality" to the state-maintained highway suggested for exchange. "Quality", in this case, is considered to be a composite measure of the geometric standard of the road, condition of the pavement, traffic flow on the facility, route continuity resulting from the ownership exchange, extent to which the road meets MDOT's specifications and standards and the economic impact of the proposed exchange.
- (iii) If the inspection leads to a favorable decision by the District Engineer, the local authority is instructed to prepare a formal application which is submitted to the Transportation Commission for ratification of the proposed exchange.

In the case of one-directional transfer of ownership, the process is more complicated. For transfer of ownership to the state, the section of highway being considered for transfer must be part of the State Designated Highway System before it can be considered by the Transportation Commission for inclusion in the State Maintained Highway System. The State Maintained Highway System is that set of roads within the State Designated Highway System that meet all the standards set by the state Department of Transportation and which have been accepted by the Transportation Commission for maintenance by the state. Routes on the Designated Highway System not accepted for maintenance by the Transportation Commission must be maintained by the local authority in the area in which the routes are located. The state legislature have the authority to add or delete road sections from the State Designated Highway System. Routes may not be added to Mississippi's State Maintained Highway System if the total mileage of that system will exceed 8,600 miles.

Ownership transfer in the opposite direction, that is from state to local authority, occurs when a portion of the State Maintained Highway System, due to relocation, reconstruction or any other reason, is deemed by the legislature to no longer justify inclusion within the system and is removed. When this occurs, ownership and responsibility for maintenance of the highway or section of highway transfers to the local authority in which the road section is located. This does not apply to sections of U.S. highways longer than three miles which have been replaced by other major facilities such as Interstate facilities, bypasses and so on. Such facilities are to be kept on the State Maintained Highway System and maintained by the state and their mileage is not to be added to the mileage of the State Maintained Highway System for the purpose of limiting the total mileage to 8,600 miles in Mississippi (Mississippi State Statute 65-1-59).

### **Texas DOT**

In Texas, both the exchange and transfer of roads between the state and local authorities are considered. While both forms of change in ownerships are reportedly rare, one-directional transfer of ownership from one authority to another occurs more frequently than exchange of ownership road-for-road.

In the case of transfer of ownership, the Texas DOT will either redesignate the old section as a new highway or deed the road to the local government to assume responsibility for the maintenance of the road. In deciding what to do, the Department considers the impact the transfer will have on the Department, the local authority and the traveling public. The Department discusses the options with the local authority and tries to obtain their concurrence on the selected course of action.

As regards the evaluation process employed by the Department, assessment is conducted primarily subjectively. The impact of each application on the Department, the local authority and the traveling public is assessed by officials in the Department and a decision is made following discussions with local authority officials where their viewpoint is presented.

### **SUMMARY OF PRACTICE IN SOUTHERN STATES**

In reviewing practice in Louisiana and neighboring southern states, it is apparent that the matter of change of ownership of roads has been handled on a relatively informal basis in the past. Typically, criteria on which the evaluation is done have been specified but the manner in which they are used to establish a decision has been left to personal judgement. The opportunity for the political process to influence the final decision by allowing the Secretary for Transportation to make the final ruling on an application, is present in all the systems. It is also common, among the systems reviewed in this study, to have liaison between the state Department of Transportation's Planning Division in Head Office, the state DOT's District Office and the

affected local authority in the process of evaluating applications for change in ownership. Differences between state procedures revolve mainly around the criteria used in evaluating applications for change of ownership.

The criteria that the surveyed states specify as forming the basis of their evaluation are shown in table 1. The criteria employed by the most states are those reflecting level of service to the traveling public and those measuring the route continuity or route connectivity achieved in the change of ownership. Cost features as a stated criterion among two of the five states (Arkansas and Louisiana) although it is implicit in two others (Mississippi and Texas). Only Florida considers the security or emergency merits of any change in road ownership although it may be omitted from consideration among other states, such as Louisiana, because roads serving that purpose are already within the State Highway System. Only Mississippi explicitly considers the existing condition of the pavement, the extent to which this condition deviates from desired standards and the degree to which the facility is used as expressed in terms of current traffic volumes within their criteria although other states such as Arkansas and Louisiana use this information to estimate the cost of bringing roads up to acceptable standards and in establishing the financial equity that results from this analysis.

The political process is often employed to encourage a state to adopt responsibility for a road which a particular local authority wants to relinquish to an authority that will maintain the facility. In this case, the criteria above take on a much less significant meaning in the overall decision process. However, to the extent that the political process is a legitimate means of establishing the public will, the overriding influence of the political component of the process may be appropriate.

## **MAIN ISSUES SURROUNDING THE CHANGE OF OWNERSHIP OF ROADS**

It is difficult to estimate the conditions a pavement will be subjected to over time when it is recognized that this depends on the weather, drainage, traffic volume, traffic composition, seasonal patterns and other factors. It is also difficult to accurately estimate pavement behavior under these conditions given that records of pavement design and pavement construction and maintenance are not always available. However, rough estimates of pavement behavior and subsequent maintenance costs may be adequate for the purposes of this analysis.

Using past records of travel and the maintenance expended on state highways in Louisiana, Porter (1996) has derived a relationship relating annual maintenance costs to Annual Daily Traffic (ADT). This relationship can be used to provide rough estimates of future maintenance costs to an accuracy appropriate to the analysis. The process ignores pavement design and traffic composition in estimating the damage traffic does to pavements but to the extent that pavement design strength and percentage heavy vehicles in a traffic stream are positively correlated with ADT, their impact is subsumed within the relationship.

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STATE	CRITERIA USED TO EVALUATE ROAD OWNERSHIP CHANGE
Arkansas	<ol style="list-style-type: none"> <li>1. Highway system continuity.</li> <li>2. Service level to public.</li> <li>3. Relative cost of one road versus the other.</li> </ol>
Florida	<ol style="list-style-type: none"> <li>1. National defense needs.</li> <li>2. Ease of travel for motoring public.</li> <li>3. Accessibility to Intermodal facilities.</li> <li>4. Accessibility to public facilities.</li> <li>5. Disaster preparedness and emergency evacuation.</li> </ol>
Louisiana	<ol style="list-style-type: none"> <li>1. Connectivity of State Highway System.</li> <li>2. Financial equity of the change in ownership.</li> </ol>
Mississippi	<ol style="list-style-type: none"> <li>1. Route continuity.</li> <li>2. Comparative analysis of geometrics, pavement condition and traffic.</li> <li>3. Deviation from MDOT's road specifications and standards.</li> <li>4. Economic impact of proposed change.</li> </ol>
Texas	<ol style="list-style-type: none"> <li>1. Impact of change of ownership on state, local authority and public.</li> <li>2. Opinion of local authority.</li> </ol>

**TABLE 1**

**SUMMARY OF STATED CRITERIA**

If a more accurate assessment of future maintenance costs is required, it would be necessary to gain knowledge of the following factors for each road being considered in the application:

- (i) the current condition of the road and the cost of bringing it up to the standard required by the authority who will be assuming ownership of the road,
- (ii) the design of the pavement and the maintenance record of the road,
- (iii) the environment of the road<sup>1</sup>,

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<sup>1</sup> That is, conditions in which the road must function such as drainage conditions in the vicinity of the road, the presence of unstable material in the subsurface or

- (iv) the present and projected traffic on the road,
- (v) the accident liability associated with the road, and,

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excessive ambient temperatures at certain times of the year and its impact on deformation of the asphalt wearing course.

- (vi) the existence of any agreements with users of the roadway or right-of-way which will be transferred with ownership of the road and their cost implications<sup>2</sup>.

From knowledge of the existing condition of the road, its structural design, maintenance record (including rehabilitation actions such as overlays and surface treatments), the environment in which the road operates, the expected nature of the traffic that will be using the facility and the standard of road required by the authority who will be assuming ownership of the road, engineers within DOTD will be able to estimate the cost of bringing the road to the required standard and maintaining it at an acceptable standard while the road is in operation. Similarly, estimates of tort liability and the cost of accommodating other users of the road space can be made by DOTD officials using past experience as a guide. These estimates may need to rely heavily on judgement because the relationship between the input information and maintenance costs can only be estimated roughly. However, even rough estimates are preferable to the omission of these factors from the evaluation altogether.

Other users of the road space such as utility companies who locate their utilities in the road right-of-way, incur costs by delaying reconstruction when utilities must be relocated. They also incur internal costs through the need to administer the permit process and add to tort liability by the presence of their construction and maintenance crews on the roadway.

The existing condition of the road can be measured by the District Office in terms of the International Roughness Index (IRI), a commonly used measure of pavement condition. Highways in Louisiana are classified in terms of IRI as part of the Pavement Management System. The original design of the pavement, the timing and nature of the maintenance actions over time and the environment in which the pavement operates will provide the background to an estimate by engineers in DOTD of the cost of bringing the pavement to the required standard.

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<sup>2</sup> These may include, for example, agreements on responsibility for utility relocation in the event of road realignment or reconstruction, access rights to utilities for maintenance crews and agreements with railroad authorities regarding maintenance of the road surface at grade crossings.

The behavior of the pavement in the future is dependent on the existing pavement, the environment in which the pavement operates and the traffic loading it will experience. Future traffic loading can be estimated from expected traffic volumes and traffic composition. Composition is important because axle loads are known from early AASHO tests to have approximately a fourth power relationship with common pavement failure. Thus a truck with an axle load 10 times that of an automobile causes the same damage to a pavement as approximately 10,000 ( $10^4$ ) automobiles. Traffic counts of existing traffic that include vehicle classification would assist the engineers in assessing future traffic loadings on the facility.

Tort liability of a road can be estimated from past records on the road or of similar roads. The estimate need not be accurate but provided it is in the correct order it will help to ensure that the change in ownership does not occur with major omission of possible costs associated with each road. Similarly, experience will have to be used in estimating the cost implied by the presence of permit- or agreement-holders in the right-of-way of the roads being considered.

A balance must be achieved in the effort expended in analyzing a situation and the difference in cost that will be incurred by a change in ownership. However, in most applications the state will lose heavily in terms of estimated future costs and yet such applications are often justified on political grounds. Thus, a detailed technical analysis is seldom justified.

## **CONCLUSIONS**

This study set out to consider the appropriateness of comparing road ownership change applications in terms of Daily Vehicle Miles Traveled on the roads being considered for exchange. In the process, a review of existing procedures in neighboring southern states has been conducted. It has been determined that the process used is similar, but not identical, among all the surveyed states. They all use stated criteria but do not limit themselves to these criteria in evaluating applications. None ascribe a specific weight to individual criteria and all rely on judgement in conducting the evaluation process. All accommodate both exchange and one-directional transfer of road ownership. However, they do differ on the criteria they use as the basis of their evaluation. There appears to be merit in including all the criteria cited in the review in a list for possible inclusion in any evaluation. Thus, criteria that can be included in an evaluation are:

- (i) Highway system continuity and connectivity.
- (ii) Level of service provided to the public.
- (iii) Cost.
- (iv) Accessibility to major activity centers.



- (v) National defense.
- (vi) Disaster preparedness and emergency evacuation.
- (vii) Pavement condition.
- (viii) Geometric standard of the road(s).
- (ix) Extent to which pavement condition and geometric standards deviate from required standards.
- (x) Traffic count on the road(s).
- (xi) The economic consequences of the change in road ownership.

Evaluation on the above criteria must be conducted against the backdrop of the opinion of the local authority and the recommendation of the District Office. The manner in which an application can be rated on the above criteria, the relative importance of each criterion and the manner in which the impact of each criterion contributes toward the final decision could be formalized in an objective evaluation process. This process would have to be developed specifically for this application. In the short term, however, a subjective handling of the evaluation process is recommended.

As regards specific recommendations on the process used in Louisiana it is suggested that the procedure proposed in 1996 and described in APPENDIX A should be adopted with the following amendments:

- (i) Allowance should be made to include any of the criteria listed above that are considered appropriate for a particular evaluation. The engineer responsible for the evaluation should be given the freedom to select those criteria considered to be appropriate and feasible in the circumstances prevailing in each case. However, the engineer should be encouraged to include as many of the criteria as feasible and to obtain quantitative measures where appropriate. When quantitative assessment is considered appropriate, the current condition of the pavement can be measured in terms of the International Roughness Index (IRI) or any other appropriate measure, and construction and maintenance costs to get the pavement to, and maintain the pavement at, acceptable standards can be expressed in economic terms such as Net Present Cost.
- (ii) Provision should be made for the state to initiate an exchange of roads. It is possible that a state road that formerly served as a conduit for long distance travel could be altered by urban encroachment to serve predominantly local needs. In this case the road would no longer be serving the function of a state road and the

state authorities may want to either exchange it for a local authority road that functions more like a state road or they may elect to transfer ownership to the local authority. Provision to allow the state to initiate an exchange of roads can be made by modifying the proposed Engineering Directives and Standards Manual I.1.1.19 in APPENDIX A accordingly.

- (iii) Provision should be made for a local authority to initiate a transfer of road ownership. Roads owned and maintained by local authorities may come to serve a regional function over time and, therefore, may justifiably belong within the State Maintained Highway System. Local authorities may wish to apply to the state for such ownership transfer and would require a mechanism to do so. This could be achieved by modifying the proposed Engineering Directives and Standards Manual I.1.1.19 in APPENDIX A accordingly.

## **REFERENCES**

Porter, James C., "Costs Associated with Traffic Volume", Preliminary Informal Report, Louisiana Department of Transportation and Development, 1996.

APPENDIX A

ENGINEERING DIRECTIVES AND STANDARDS MANUAL

ON PUBLIC ROAD EXCHANGE AND TRANSFER