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and vicinity. The article is full of suggestions for improving trial technique involving the condemnation subject matter, and the younger members of the Bar will be especially interested in what Mr. Searles has to say.

This report also contains a table of cases reviewed in Part I and a subject matter index.

This publication may be purchased for \$10.00 from the American Bar Association, 1155 East 60th Street, Chicago, Illinois 60637.

CURRENT STATUS OF HIGHWAY JOINT DEVELOPMENT AND MULTIPLE USE

Highway joint development projects have been carried out for a multitude of purposes, but basically the objective sought has been a higher measure of compatibility between the highway facility and its environment. This attainment may be measured in terms of saving and replacement as to land, money, public facilities, time, land uses or in terms of area improvements to be made at the opportune time of highway construction.

A second report in a series of status reports on joint development projects has recently been published by the Federal Highway Administration, U.S. Department of Transportation. It is entitled "Highway Joint Development and Multiple Use", February 1970. It updates the issue of September 1968. It identifies projects and includes additional material received from State highway departments and Federal Highway Administration's field offices. This report is intended for:

1. Presentation to the highway building organizations - example of what their sister organizations have accomplished.
2. Presentation to the public sector - efforts currently underway either by or through the State highway organizations.
3. Presentation to the private sector - the possibilities that may exist for development and growth (compatible and coordinated) in conjunction with a highway project.
4. Presentation to the general public - efforts being taken in the highway development process to integrate a highway facility with the environment through which it passes.
5. Presentation to the educational institutions - the current status of effort as it serves as input to the growing number of individual and group research studies in this subject area.

Selected projects in each State are described with photographs, diagrams and tabulations to show the wide range of applicability to various transportation modes, urban and rural situations, differing land use activities, and numerous placements with

respect to the highway roadways. Many of the projects involve multiple use of highway right-of-way for part or all of the joint development sites. Others show the possibilities for utilizing parcel remainders and other adjacent sites. One or two indicate acquisition of highway right-of-way in limited vertical dimension (ALVD/"air tunnel") where existing development continues under a viaduct. In meeting the objective of compatibility, some projects have entailed mutual adjustments in the initial location and design of both highway and nonhighway facilities.

Joint development projects can be a major tool in implementing plans that grow out of social, economic and environmental studies on highway location and design. It is hoped that the enclosed material will be a helpful reference to those official and unofficial agencies and their interprofessional staffs engaged in such studies.

State highway departments are directly responsible for multiple use projects carried out in highway right-of-way. They should be contacted for more detailed information about the project herein on cost-sharing, land and airspace acquisition, design committee and team arrangements and agreements with other jurisdictions for leasing, operations, policing and maintenance.

The Federal highway program is based upon a number of policies designed to facilitate joint development reconnaissance, planning and construction. Several of the key references are included in the appendix.

The following list is illustrative of the wide variety of the proposals presented in this report.

- Several Joint Development Reconnaissance Studies
- Extension of viaduct allowing for future multiple use
- Construction of viaduct in lieu of embankment
- Parking, service station and multistoried restaurant over the freeway
- Landscape maintenance station under elevated highway
- Acquisition in limited vertical dimension to put highway bridge in airspace over a marina
- Parking under highway
- Use of right-of-way as public stock land
- Multiple Use Feasibility Study
- Temporary relocation of a synagogue building onto the right-of-way
- Safety rest area, observation tower, convenience, camping, historical site display - Multiple use area
- 2,500 car parking facility over highway
- Development of mini-parks
- Development of recreational facilities
- Construction of belvedere structure and wharf over highway
- Relocation of school and playground over highway
- Research into citizen participation in highway planning
- College classrooms over highway

Specialized landscape planting on highway right-of-way
Location of commercial bottling and maintenance building under highway
Economic air rights feasibility study
Economic feasibility study for elevated vs. depressed design alternatives
Fringe parking facility
Park and office tower over and adjacent to highway
Development of a fringe parking area
Neighborhood shopping center and parking under the freeway
Development of highway construction gravel (borrow) pits for recreation and residences
Accommodation of utilities within the right-of-way
Development of parking facilities over the highway
Sound barrier between highway and classroom
Snow dumping sites
Boat launching facilities
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JANUARY 17, 1969 INTERIM POLICY AND PROCEDURE MEMORANDUM 21-19 20-01 SUBJECT:
JOINT DEVELOPMENT OF HIGHWAY CORRIDORS AND MULTIPLE USE OF ROADWAY PROPERTIES.

1. PURPOSE

This memorandum describes the procedures to be followed in joint-development planning activities related to new facilities on the Federal-aid systems within urbanized areas, and policies for Federal participation in the costs of such planning and of the implementation of the resulting joint development plan.

2. DEFINITIONS

As used in this memorandum:

a. The term "joint development" or "joint development project" means the set of actions taken in concert by a State highway department, other government agencies, private organizations, and individuals to prepare for and construct a new highway - including those activities to develop, redevelop or adjust the land uses and local network of services affected by the new highway.

b. The term "joint development reconnaissance" means an activity during a highway location study which identifies, for each of the locations under study, the activities which should accompany highway department activities concerned with the new facility, and those development activities which profitably could be coordinated with highway department processes to produce a cohesive and compatible relationship between the new highway and the communities it serves.

c. The term "joint development planning" means a survey or study jointly sponsored by the local governments, and participated in by the State highway department and others as may be required to: (1) describe the social and economic patterns, including utilities and community facilities providing service to the people of the area, which will be affected by the new highway facility; (2) analyze and evaluate these effects and develop recommendations concerning the desired patterns of land use and local services compatible and consistent with the proposed highway facility and other

goals and objectives of the affected communities; and (3) create a financial plan and schedule of actions to be taken by the various entities involved to develop the desired patterns.

d. The term "corridor joint development plan" or "joint development plan" means the officially adopted endproduct of the joint development planning process. It, thus, includes a complete description of the desired pattern of land uses (including the highway improvement) and the network of local services, associated with a schedule of actions and fundings for which each of the involved entities are responsible.

e. The term "highway development corridor" or "highway corridor" means the general path of a proposed highway including the zone affected by the highway facility on a particular route location or the associated joint development activities. It thus bears a slightly different meaning than the more technical one intended in transportation planning.

f. The term "State highway department" refers either to the State agency concerned with Federal-aid highways or such agencies as it may designate to manage a particular project.

3. JOINT DEVELOPMENT RECONNAISSANCE

Section 109 of Title 23, U.S. Code, requires that the Secretary of Transportation "shall not approve plans and specifications for proposed projects on any Federal-aid system if they fail to provide for a facility (1) that will adequately meet the existing and probably future traffic needs and conditions in a manner conducive to safety, durability, and economy of maintenance; (2) that will be designed and constructed in accordance with standards best suited to accomplish the foregoing objectives and to conform to the particular needs of each locality."

In addition, Section 24 of the Federal-Aid Highway Act of 1968 amended the first sentence of Section 128(a) of Title 23, U.S.C. to read as follows:

"Any State highway department which submits plans for a Federal-aid highway project involving the bypassing of, or going through, any city, town, or village, either incorporated or unincorporated, shall certify to the Secretary that it has had public hearings, or has afforded the opportunity for such hearings, and has considered the economic and social effects of such a location, its impact upon the environment, and the consistency with the goals and objectives of such urban planning as has been promulgated by the community."

The italics have been added for emphasis.

Joint development reconnaissance is a new tool wholly consistent with the requirements of Section 109 and will provide the additional information necessary in the consideration called for by the amendment to Section 128(a). It will also further implement our long-stated policy objective that the highway program, while providing increased mobility through new or improved facilities, should also to the maximum extent possible assist communities in the attainment of their other stated goals and objectives.

Joint development reconnaissance, therefore, is primarily oriented to the selection of a specific location for a proposed highway. A reconnaissance study is authorized and should be undertaken for those Federal-aid projects where the State highway department has been officially requested to undertake such work by an affected municipality or by the Division Engineer. Joint development reconnaissance is also authorized to be undertaken for other projects at the option of the highway department. It is expected that reconnaissance work will be performed concurrent with route location studies, and will be concluded in time for presentation to the public along with other results of the route location studies.

The joint development reconnaissance work should be done cooperatively with local governments and other recognized planning and resource organizations and groups representing the people of the affected areas. Wherever possible, these activities should utilize the existing cooperative arrangements established for the urban transportation planning process which is required by Section 134 of Title 23, U.S. Code. However, the exact form of organization used and the list of participants in the reconnaissance process should reflect local conditions as the primary concerns considered in reconnaissance are local ones not regional in nature.

Joint development reconnaissance work should be utilized as necessary for alternative route locations to provide:

- a. A collection and analysis of basic data describing the land uses, and board characteristics of the jurisdictions, and their constituent neighborhoods, potentially affected by a highway.
- b. Description of the primary economic and social patterns, the local transportation and utility networks, and other services which would be interrupted by a highway.
- c. A listing of those actions needed to adjust and restore those interrupted patterns to an acceptable level, with a recommended assignment of responsibilities.
- d. A description of the development pressures apt to occur within the corridor following construction of a new highway facility, and their relationship to the locality's goals and objectives.
- e. An analysis suggesting how the plans and programs of local private groups and political jurisdictions might be beneficially combined with highway department activities to produce the desired development of the highway corridor.

Particular attention should be paid to the policies defining the land uses and types of development intended for the highway corridor. Typically, the improved accessibility provided by the new highway and the immediate environmental impact of the facility and its traffic combine to produce change in the value of adjacent land. At times, significant shifts in land uses occur, with detrimental effects on the locality, and impairment of the highway facility and its interchanges. The reconnaissance process

should highlight the likelihood of varying degrees of changes, and the opportunity to use local powers and resources to deliberately shape land uses in the corridor to accomplish local objectives. Such local programs as urban renewal, streets, sewers, water, other community services, zoning should be examined to see if their powers or funding might be profitably aligned with State highway department actions to produce compatible corridor development consistent with local plans and objectives. The reconnaissance should indicate the desired development goals and suggested means to reach them for each of the alternative locations.

Joint development reconnaissance, as defined in Section 2 of this memorandum, is an integral part of route location studies and the costs thereof are eligible for Federal-aid reimbursement as part of preliminary engineering.

4. JOINT DEVELOPMENT PLANNING AND IMPLEMENTATION OF THE CORRIDOR JOINT DEVELOPMENT PLAN ASSOCIATED WITH A FEDERAL-AID PROJECT.

Following route selection and approval, local jurisdictions should assume responsibility for preparation of a detailed corridor joint development plan. Joint development planning, when undertaken, would continue the relevant reconnaissance studies in greater detail, include additional studies as required, and conclude with official acceptance of the joint development plan by the local jurisdiction's governing body. The highway department is encouraged to participate fully in the process imaginatively using the available tools in the highway program to achieve compatibility between the highway and other corridor activities. Particularly important is the need to carry out highway design and construction activities in harmony with the joint development plan.

Federal-aid participation in the joint development planning process and the plan's implementation is allowable as a Federal-aid highway project cost as follows:

a. Participation in the Planning Activities

Federal-aid funds may participate in expense related to joint development planning as defined in Section 2 of this memorandum to the extent that the information developed may be needed in making decisions concerning corridor developments related to the highway and in the design of the highway facility itself.

b. Design of the Highway Facility

The primary structural element of a corridor development plan is necessarily the highway itself. Thus, corridor planning and highway design activities should be regarded as a single effort with the goal of having the total joint development plan make maximum contribution to the well-being of people in the corridor. The highway should, as part of the corridor plan, be so located and designed as to allow full benefits to be derived from the combined activities of all entities involved in the plan. There are a number of design variations which can be used to aid in the implementation of the corridor planning objectives. Many of these were examined in The Freeway in The City, and were endorsed in a Circular Memorandum of August 23, 1968.

The Regional Federal Highway Administrator, or upon redelegation, the Division Engineer, may approve such design features as part of normal PS&E approval upon a showing that the combined contribution to the objectives of the approved corridor plan or the social and economic benefits to the users of the roadway and the other components of the plan, justify the expenditure.

Such design features as architectural treatment of highway components, use of extension of structure in place of embankment, adjustment of interchange ramp patterns to increase the usability of enclosed or adjacent land, and provision of independent alignment for the roadway can be approved in that review. Major choices of the roadway configuration such as a shift from a conventional design on grade or viaduct to a depressed section or one of substantial elevation above ground level should be referred to the Director of Public Roads for prior review and concurrence.

c. Development of Properties Acquired for the Highway

There are a number of ways in which rights-of-way can be used to serve the objectives of the approved joint development plan. A recent Instructional Memorandum titled, "Federal Participation in the Development of Multiple-Use Facilities on the Highway Right-of-Way" discusses allowable expenditures to provide for a variety of multiple use of right-of-way properties. Through these means and others the corridor plan and its highway design should attempt to make full use of the right-of-way properties over, under and about the roadway itself and to integrate such use with the other aspects of the corridor development. These planned facilities and uses must conform to the rules established in PPM 80-5 to assure that there is no impairment to the construction, operations or maintenance of the highway facility which would affect its integrity or endanger the travelling public.

d. Provision of Platforms for Utilization of Airspaces Above the Highway

The utilization of freeway airspaces should be encouraged within the highway corridor development plan. Federal-aid funds may participate in the highway-related costs of construction of platforms in the airspace above a highway when: (a) the use of such space in an integral part of the total corridor joint development plan; (b) the added cost for this type of air-rights development can be generally supported on the basis of the intensity of the land use in the corridor, the public use or tax benefits to the locality, or the advantages to the highway program of the selected route location over alternative locations; and (c) the proposed facility complies with the rules established in PPM 80-5 to protect the highway and its users. The use of Federal-aid highway funds may be justified when further participation in the costs of providing a platform is required to allow action by another entity in implementation of the corridor plan, and it is the Federal Highway Administrator's finding (a) that the proposed joint development project is necessary to conform the highway to the particular needs of the locality or (b) that a joint development project is the most reasonable means of minimizing the impact of the highway upon the environment.

5. PUBLIC HEARINGS

The material developed under Joint Development Reconnaissance activities or Joint Development Planning for a highway corridor should be presented in public hearings as appropriate and as provided for in PPM 20-8, "Public Hearings and Location Approval."

It is also recommended that the State highway department correlate its presentations with those made by local jurisdictions as may be required by the laws of the locality for their parts in a corridor plan.

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JANUARY 17, 1969 INSTRUCTIONAL MEMORANDUM 21-2-69 34-50 SUBJECT: FEDERAL PARTICIPATION IN THE DEVELOPMENT OF MULTIPLE USE FACILITIES ON THE HIGHWAY RIGHT-OF-WAY

In executing the federal-aid highway program one important objective is that to the extent possible and practicable, highways, in addition to their basic purpose of fulfilling the important goal of improved transportation, should make a positive contribution toward enhancement of the environment through which they pass and assist communities in attainment of their stated goals and objectives.

Section 128, Title 23, U.S.C., as amended is a clear indication that highway planning can be used in the accomplishment of this purpose. In implementing this policy every encouragement should be given to making maximum utilization of the highway rights-of-way for both public and private development, provided there is no impairment to the full use and safety of the highway. To take full advantage of this policy and to attain the greatest benefit for the community highway departments should encourage the greatest possible participation of local government agencies and the private sector. In many instances financial participation by other agencies of government or the private sector will be necessary.

I. Procedural Requirements

These requirements apply to all multiple uses of highway rights-of-way, regardless of the extent of federal-aid highway fund participation in the multiple use.

A. Proposals for multiple use shall be in the public interest as determined by the local governing body and the state highway department. Such use must be in conformance with an officially approved comprehensive land use plan for an area within which the proposed multiple use is an integral part.

B. Proposals for multiple use shall include documentation of the extent to which environmental factors affected by the proposed use have been considered.

C. Any multiple use of the highway right-of-way will require the execution of an agreement between the using party and the state highway department, and approval of the Bureau of Public Roads. This agreement shall be in conformance with the Policy and Procedure Memorandum concerning air rights. If subsequently such usage can be changed for other purposes, the condition under which such usage will be permitted is also subject to the provisions of the PPM on air rights. Where conveyance documents

are used, such documents shall include restrictive covenants which describe or otherwise limit the type of development and make the plans for development subject to the joint approval of the state highway department and local governing body.

D. Maintenance and policing of multiple use facilities included within federal-aid projects will be considered in the same category as maintenance of all the other project features, and the state highway department's responsibility for maintenance will be extended to cover all such items. However, the state highway department may make contractual arrangements with the local unit of government or the sponsor of the multiple use to maintain and police facilities constructed under the provisions of this memorandum or to share this responsibility.

II. Participation

A. Feasibility Studies

Feasibility studies may be undertaken to evaluate and develop recommendations concerning the optimum joint development and multiple usages of land involving the highway right-of-way. These studies are considered as preliminary engineering and may be financed accordingly.

B. Right-of-Way

Paragraph 5(q) of PPM 80-1 authorizes the acquisition of whole parcels or portions of the remainders to a logical barrier or boundary, such as a street, under the conditions stated therein. The area thus acquired which are not specifically required for the safety, maintenance and operation of the highway may be devoted to either public or private uses.

C. Construction

It is considered appropriate to use federal highway funds in the financing of the following types of work in the achievement of such objectives subject to the conditions which are subsequently discussed herein on the premise that work needed to make the highway conform to its environment in a reasonable manner is a part of the basic highway cost.

The items described by the following numbered paragraphs 1 through 4 inclusive may be approved by the Regional Federal Highway Administrator or by the Division Engineer upon redelegation of the necessary authority. The item described in numbered paragraph 5 should be referred to the Director of Public Roads for prior review and concurrence.

1. The construction of mini-parks, including minimum facilities such as walks or other paved areas, benches, sandboxes and the like, where this type of facility can be provided on right-of-way parcel remnants or other portions of right-of-way acquired for highway purposes but which may not be needed for operational purposes.

2. Site preparation for recreational facilities, such as basketball or handball courts, play areas, tennis courts, etc. Site preparations may include the necessary grading and drainage facilities and, where necessary because of safety or aesthetics,

the provision of minimum hard surfacing, lighting, fencing and landscaping on land areas of the type described in paragraph 1 above.

3. Lighting, fencing, curbing, landscaping, false ceilings and a minimum type of hard surfacing on areas under a viaduct when safety or aesthetic considerations are involved and to prevent the area from becoming a public nuisance.

4. Increased span length for structures or modifications or variation of structures or highway cross section where such would promote and encourage desirable public and/or private uses of land areas beneath, over, and adjacent to the highway.

5. The use of structure instead of embankment where the same would be more conducive to development of the land space beneath the structure, improve local traffic circulation, provide for better public services, or be more aesthetically pleasing.

D. Requirements

The following conditions shall be met prior to the approval of the financing of any work described above with federal highway funds.

1. The work proposed must be part of a comprehensive plan approved by the Division Engineer for a substantial section of the route on which the project is located. This plan must be developed by the State in cooperation with the responsible interested local or other agencies of government. A comprehensive plan developed in accordance with the provisions of the Interim Policy and Procedure Memorandum on Joint Development is desirable.

2. All facilities constructed with federal funds must be located on the highway right-of-way.

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