

233

ALTERNATIVE USES OF ABANDONED
RAILROAD RIGHT OF WAY
SUMMARY OF THE STUDIES

by

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TABLE OF CONTENTS

	Page
Introduction	1
From Rails to Trails	4
The New Switch on Old Abandoned Railroads	11
Availability and Use of Abandoned Rights of Way	13
Task 1. Alternative Use Suitability Criteria	13
Task 2. Inventory of Abandoned Rights of Way	19
Task 4.A. Survey of Federal Programs B. Survey of State and Local Programs	20
Task 4.C. Case Studies of Railroad Abandonments	22
Task 5. Public Use of Abandoned Rights of Way	23
Benefit Estimates for Recreational Reuse of Abandoned Railroad Rights of Way	30
Identification and Optimization of Alternative Reuses for Proposed Railroad Abandonment Right of Way	36
Railroad Abandonment and Reuse Planning: Relationship with Statewide Transportation Planning and Citizen Participation	42
The Rededication of Lightly Used or Abandoned Rail Rights of Way to Other Uses	48
Bicycle and Pedestrian Facilities in the Federal Aid Highway Program	54
Summary	56
Bibliography	58
Appendix A	A-1
Appendix B	B-1
Appendix C	C-1
Appendix D	D-1

LIST OF TABLES

	Page
Table I - Benefit Values Resulting from Test Application. .	33
Table I-A - Summer 1972 - Estimated Total Participation in Recreation Activities	A-2
Table I-B - Bicycle Trail Suitability	B-2
Table II-B - Length (Suitability Characteristic)	B-3
Table III-B - Possible Alternative Uses	B-4

LIST OF FIGURES

	Page
Figure 1 - A Typical Railroad Cross Section	5
Figure 2 - Benefit Estimation Procedure	31
Figure 3 - Benefits and Costs of Right of Way Re-use	40

ALTERNATIVE USES OF ABANDONED
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Introduction

The railroads are an integral part of the U.S. transportation system and commerce. The railroad industry's 200,000 miles of track transports goods across the country, supplying the American people with the goods needed for daily life.

"American railroads are experiencing a resurgence. With the exception of 1975, which was a disastrous year for many industries, railroad's freight traffic has shown a steady growth trend for more than 15 years. Railroads are unquestionably the number one mode for movement of intercity freight traffic. For example, even in that unforgettable year 1975, railroads hauled freight 761 billion ton miles, as compared to 441 billion freight ton miles moved by common carrier trucks, and 235 billion freight ton miles moved on inland waterways. At 37% of total freight ton miles, railroads provide as much transportation service as all the trucks, water carriers and air carriers combined."¹

The railroad industry has enjoyed prosperity since its origin in 1829. Many businesses and industries have chosen to utilize the railroad over other modes of transportation because of its speed, convenience and low cost.

However, since the mid-1950's, earnings of the rail industry have been less than adequate. These deficient earnings have hampered the industry's ability to replace worn out assets and advance technologically, and have resulted in lowered standards of efficiency and service to the public. The railroad is the only mode of transportation which owns essentially all of their fixed facilities needed to carry on their business.

¹McCue, Patrick S., The Railroad Connection, Association of American Railroad, Regional Rail Planning Seminars, Fall 1976

With the cost of upkeeping these fixed facilities and the decline of profits, some railroads are unable to continue operations.

In 1976 the Railroad Revitalization and Regulatory Reform Act (4R Act) was created by Congress. This was due to the realization of the importance that a strong private enterprise railroad industry plays in the economic well-being of the Nation and its citizens. The objective of the Act is to revitalize the American railroad system by either subsidizing the crippled railroads or allowing them to abandon their branch lines which are losing money due to low traffic volume.

Several problems arise from this abandonment issue: (1) What kind of impact the community incurs from the loss of service, (2) what alternative modes are available to continue the deleted service, and (3) what alternative uses can be made of the abandoned right of way.

The objective of this report is to investigate available literature that addresses the upsurging problem as mentioned above, of what alternative uses can be implemented on abandoned railroad right of way along with procedures for obtaining the right of way and developing the re-use.

Strips of land that range from approximately three miles to 100 miles or more in length and 60 feet to 100 feet in width have been or will be left vacant by railroads throughout the nation that could no longer bear the burden of maintaining a profitless line. This land would provide a possible inexpensive means for a public alternative use such as a recreational trail (bicycle, hiking, snowmobiling) or alternative transportation system.

This report is a collective summary of various reports and books which pertain to the subject of railway abandonment, reviewed and summarized by the author. Information such as: What are the alternative uses for

rail right of way, what is the procedure for a public or citizen group in acquiring the right of way, what are the legal aspects of acquiring the right of way, available funds for buying and developing rights of way, methods of analyzing which rights of way are viable and which of the numerous alternative uses are best suited for a specific right of way. This report can be used as a guide to assist an organization interested in a potential abandonment in knowing what is involved and how to proceed in developing a new use on the right of way.

Each report reviewed is summarized so as to outline the pertinent and helpful points needed in the right of way acquisition and development. Two of the reports consisted of tables and listings as was the case with a volume in a five volume set prepared by Harbridge House, Inc. for the Department of Transportation. However, since these tables provide valuable and time saving information, a short summary was developed of what was included in the tables with example tables provided in the appendix so that interested parties would know what is available.

From Rails to Trails²

"God keeps on making children but he has quit making land," a quote from Reub Long is how this report is opened. This quote summarizes the concern of the authors of this report that land is scarce, therefore when land is made available by rail abandonments, it should be put to another use. In 1916 the railroads had a combined trackage of 250,000 miles, but has abandoned 50,000 miles of these rail lines as of 1976. Consequently, approximately 50,000 miles of right of way may be available for other uses. The report is proposing that bicycle and hike trails may be a valid re-use for a majority of these rights of way. The committee states their intentions of this report concerning this matter.

"It is not the purpose of this report to encourage in any way the thoughtless abandonment of additional miles of rail trackage but only to ensure that if tracks are abandoned, the rights of way will remain open to public access. And if in the future the need arose for the increased use of rails for either passenger or freight conveyance, the rights of way preserved as trails could be 're-organized' for rail service use. To allow commercial, industrial, or other private interests to destroy the unique linearity of these areas would cause irreparable damage to a fabric which has taken more than 100 years to weave."³

Rail rights of way have many features that make them very suited to facilitate the use of bike and hike trails, which are listed below:

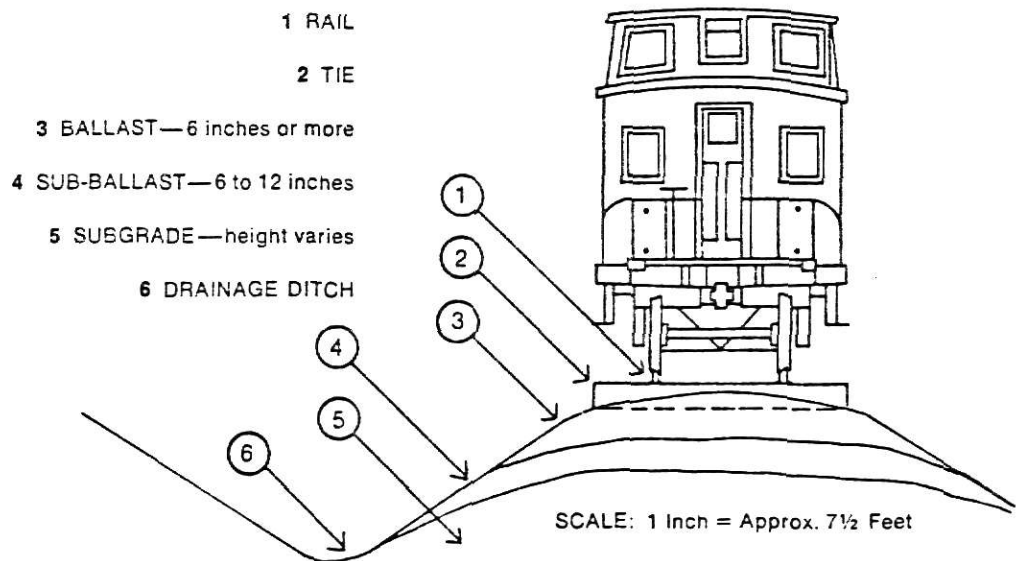
1. The trails have a linear characteristic which is obviously desirable for biking and hiking. The right of way typically cuts through towns, urban regions, and open areas. This gives access to a large number of people and for people with a short time to spend, it is easily reached for a brief stroll. And to others

²Citizen Advisory Committee on Environmental Quality, From Rails to Trails, Washington, D.C., February 1975.

³Ibid., p. 5

FIGURE I⁴

A TYPICAL RAILROAD CROSS SECTION



⁴Citizen Advisory Committee on Environment, p. 6

with more time, it can carry them as far away as they care to walk or cycle.

2. The construction of the railroad bed is very adequate to support a recreational trail. The right of way was usually built at a gentle grade of less than three percent with gentle curves. The roadbed was made of crushed rock, slag, volcanic ash or some porous material which drained adequately and discouraged weed growth. Drainage ditches were constructed in wet areas (see Figure 1). With this base already constructed, only the trail surface would need to be laid.
3. Bridges and tunnels are, of course, well designed and very adequate to handle the recreational traffic. They would also serve as an aesthetical addition to the trail and add variety.
4. The station houses along the trails give another source of variety and also potential housing use for such things as cultural centers, museums, commercial shopping centers, restaurants and hostels. On Wisconsin's Sugar River State Trail an old station house is being used for the trail headquarters.
5. The Bureau of Outdoor Recreation of the U.S. Department of Interior estimated from a survey the total U.S. participation in various outdoor activities in millions of activity days. Table 1 in Appendix A lists these activities and the asterisk ones are those which can be performed on a hike and bike trail.
6. The right of way would be less costly as opposed to acquiring land and constructing a new trail.

The report gives valuable insight into the process of acquiring abandoned rail right of way which will be discussed. All railroads desiring

to abandon a line must notify and apply to the Interstate Commerce Commission (ICC) according to ICC Regulation 49CFR §1100.250. After the application has been reviewed by the ICC, notice is given to the public through the local newspapers, the state agencies responsible for regulating intrastate commerce, the governor, and by posting notice in the affected railroad station houses. Public entities interested in attaining this right of way for alternative uses must act promptly as they have 90 to 120 days to purchase the property for public use.

The ICC has the authority to hold abandoned rail right of way for the sale to public agencies (state and local government or citizen organizations) for 90 to 120 days which after it would be opened for sale to anyone. Therefore, public agencies must react quickly to ensure they do not miss the chance to obtain this valuable land.

The rail companies must also supply the ICC with the following information in addition to the application:

1. Route of the line with its total length in miles,
2. Name and address of the counsel or official to whom correspondence in reference to the application should be addressed,
3. Present state maintenance,
4. Names and locations of all stations along the line,
5. A situation map (drawn to scale) showing the rail line, stations and other principal features,
6. Any other contemplated abandonment applications which will have a direct effect on the same geographic region,
7. The number, type, and locations of bridges, culverts, and grade crossings,
8. Plans for salvage operations and the plans for the removal of

bridges and all structures,

9. The nature of the ownership of the right of way,
10. Any specific plans for the property made available for disposition by the abandonment,
11. A description of the current land use in the area adjacent to the line.

This information is also available to the public through the ICC. This is a windfall to the groups interested in converting the right of way to another use, because this information is usually scarce and well guarded by the rail companies. This will save precious time and money for these groups.

Another step in the abandonment decision is the completion of an environmental impact statement on any lines if the abandonment presents a major Federal action significantly affecting the quality of the human environment. This is another opportunity for interested groups to voice their desires for the right of way to be converted to some alternative use, because the impact statement is made available to the public for their recommendations. This is encouraged because in this impact statement the ICC can mandate that the right of way be held for public agencies to have first right of purchase for a period of 90 to 120 days as mentioned previously.

This report gives an excellent checklist which is in Appendix A for determining the recreational potential of a right of way that is being considered for abandonment. Also provided in Appendix A is a good list of various ways for a group to generate public enthusiasm.

The trail should be designed to handle a multiple of uses, such as bicycle trails, hike trails, horse trails, jogging trails, snowmobiles,

camping and picnicing. This would require a thick, smooth, durable and approximately four to eight foot wide surface. All weather asphalt is a very good means of providing the type of surface needed, which would compliment the strong base existing from the rail way. Picnic areas and restrooms could be provided at points where the right of way allows room.

There are two problems which are most often encountered in right of way reclamation. These problems are determination who actually owns the land and opposition from adjoining landowners. It has to be determined if the title to a right of way falls into one or two categories: fee simple or easement. The manner in which the deed was written determines the nature of the railroad title. The deed has to be investigated to determine if the right of way is a "fee simple" or easement. Difficulty is encountered when the party who initially sold the right of way to the railroad put limitations or restrictions in the deed on the uses to which the right of way could be put. In the case of fee simple it may have a revisionary clause which states that the right of way reverts to the seller or his heirs after abandonment.

Easements may have limitations such that if the use for which the deed was written discontinues the easement is eliminated. All these possibilities exist so interest groups must investigate all the legal aspects because the railroad cannot convey to the trail organization any more interest in the land than it purchased itself.⁵

This process of title research takes a long time, therefore it is imperative to the interested group to contact an attorney promptly. An attorney can assist in determining the nature of the title, then negotiation

⁵Citizen Advisory Committee on Environment, p. 27

can be made with the eventual holders of the land for the release of the said land. If the holders refuse to release the land, an alternative would be for the State or local government to use its power of eminent domain.

The problem with the adjoining landowners is a case for good public relations. A solution to this is to identify the reasons for the landowners' opposition and try to convince them that their fears are unfounded. In some instances, a compromise can be reached in which the trail organization or public body takes steps to prevent any negative impact.⁶ The trail organization should keep all affected citizens informed and educate them of the validity of the trail. Also, try to organize a sizeable group of people interested in the trails as the decision would probably be ruled in the majority's interest.

Funding is an important issue as it takes a sizeable amount of money to buy and develop a hike and bicycle trail. The Water Conservation Fund Act of 1965 provides funds for recreational facilities on a 50-50 basis with the matching half coming from the States. These funds are channeled through the States to the local governments for purchasing and developing recreation sites. These funds are administered by the Bureau of Outdoor Recreation.

The Housing and Community Development Act of 1974 may also provide funding possibilities for trail projects. These funds are available for open space development in communities that have a community plan approved by the Department of Housing and Urban Development.

⁶Ibid., p. 28

The New Switch on Old Abandoned Railroads⁷

In this paper it is pointed out that acquiring abandoned railroad right of way may be very difficult. It is indicated that legal entanglements are to be expected in determining who is entitled to the right of way after abandonment. However, the Railroad Revitalization and Regulatory Reform Act (4R Act) passed in December 1976 provides that right of way must be offered for public use for 240 days before it is made available to private purchasers. This Act gives "teeth" to the public, but also gives States and communities the responsibility of planning ahead in anticipation of the abandonment so that they will not lose time or the right to the right of way. The pre-planning will give the slack time to accumulate the needed funding.

Wisconsin was the first state to actually acquire abandoned rail right of way for re-use purposes in 1966. The re-use implemented was a bike trail, which initially met with opposition from the adjoining farmers. Their fears were that the bikers would litter, vandalize and bother their property and stock, which was found not to be the case. The bikers were found to be very environmentally conscious and courteous.

Toilet facilities were of no problem as the bikers would break at the towns which are six to 10 miles apart. It was found that the bikers brought additional business to these towns. One proprietor mentioned that his business jumped 25% since the opening of the trail and this was typical of the other restaurants in his town.

Due to success on this first trail, Wisconsin opened another trail

⁷Robert M. Cleckner, The New Switch on Old Abandoned Railroads, Bicycle News, June 1977.

which was 23 miles long.

These trails were self-insured by the state. The trails were heavily used having a total of 40,000 participants in 1976, with no injuries. The main users of the trails were families, followed by novices, couples and experts. In the winter the trails are used by snowmobile enthusiasts.

Ohio has developed bike trails which enable bikers to ride from Akron to Cleveland. This trail traverses many parks and open land, which causes most of the trail to be far from automobile traffic, but accessible by car at the parks.

Pennsylvania made multiple use of a 25 mile abandoned rail line. This two-line railway has a freight train operating on one side and a bike trail on the other. An added benefit to this is that any tired bikers or hikers can ride back on the return trip on a flat car.

Bicycle trails can be and are feasible ventures as proven by the states above. States and communities, though, must be prepared to react promptly to an abandonment issue by prior planning. This will enable these entities to take advantage of the privileged first chance afforded by the 4R Act.

Availability and Use of Abandoned Rights of Way

The following five reports are from a six volume set written by Harbridge House, Inc. for the U.S. Department of Transportation (DOT) pursuant to Section 809(a) of the Railroad Revitalization and Regulatory Reform Act (4R Act). These reports contain valuable research material and analyses pertaining to abandoned rail rights of way in all the states in the Union. These reports also present the process involved in acquiring and developing a rail right of way. The information is very comprehensive and useful for right of way re-use planning.

Availability and Use of Abandoned Rights of Way. Task 1. Alternative Use Suitability Criteria⁸

This volume discusses the method used to determine suitable alternative uses for rights of way as Section 809(a)(1) of the 4R Act requires that all abandonments be assessed for "...alternate use suitability."

The initial step in developing the methodology was to define alternative use that would be compatible with rail right of way. Below will be listed these uses and a short description of the different aspects of these uses. The authors group the uses in four categories:

Conservation

Recreation

Transportation

Utilities

⁸Availability and Use of Abandoned Rights of Way. Task 1. Alternative Use Suitability Criteria, prepared for the U.S. Department of Transportation, January 1977, Harbridge House, Inc.

Conservation

This use is primarily permitting the land to revert back to its natural state. It may be an area that is being protected from development, used as protection for some endangered species or fragile ecosystem such as wetlands, or a wildlife refuge.

Recreation

Special Use Trails - these are short trails ($\frac{1}{4}$ mile to five miles) used as nature trails, historical or cultural trails, handicapped trails and linear parks. These should be easily accessible for primarily a day's outing.

Hiking/Jogging Trail - these trails should be, if possible, in scenic areas with possible points of interest, not as important for jogging trails, with a length of two to 10 miles. For a longer hiking trail, the trail should ultimately be connected to a park system in order to enhance overnight camping.

Bikeways - One use is to plan the path so as to link up destination points that would encourage cyclists to use the path as a means of transportation to schools, shopping centers, churches, work and residential areas.

Another use for bikeways is for purely recreational use. The path should be 15 to 20 miles long for day trips and 30 to 40 for overnight trips. These trails should be connected to parks, traverse scenic country and be accessible by car. These paths should have a firm surface with width from 3.5 to 4.0 feet per lane.

Equestrian Trails - these trails can vary from 10 to 30 miles or more and should have a soft and smooth surface. These trails should be accessible

by vehicles pulling horse trailers. A width of two to eight feet is satisfactory for this use.

Cross Country Ski Trail - obviously these trails need to be in areas that have sufficient snowfall. Gently sloping terrain is best for ski trails with a length of seven to 10 miles.

Snowmobiles - these trails should be approximately 20 to 60 miles in length with a width of eight to 10 feet. These trails should be far from residential areas, preferably in hilly terrain, as the noise from the snowmobiles are objectionable.

Trail Bikes - these trails need not be surfaced as trail bikes are built for rough terrain and should have a length of five to 20 miles. These trails bikes also produce considerable noise, therefore the trails need to be a suitable distance from residential areas.

Scenic Railroads - this would be located in scenic areas or areas with many cultural, historic and other points of interests. The major drawback to this alternative is the cost involved in revitalizing the right of way and its structures to carry an excursion trail.

Transportation

Streets and Highways - the right of way can accommodate the building of new streets or highways as the linearity of course is very apropos. This would avoid taking new land and homes and the surrounding area is used to a heavy traffic situation.

Busways/Truckways - these uses would enhance the speed and efficiency of buses and truck transportation. This would also separate these modes from

the automobile population, enhancing the speed and efficiency for automobiles.

Fixed Rail - streetcar or fixed rail is more suited to the urban and suburban areas. The right of way required for this use is 29 feet. Fifty to 60 feet is required at the stations.

Utilities

Communication Lines - communication lines which provide telephone and telegraph service should be easily accommodated on railroad right of way. One of two things to be considered towards this use is cost, which depends on directness, topography, water crossing and soil characteristics. The other factor is the width needed to accommodate the line. After the cable is in operation the width requirement is small, but during installation the width requirement is appreciable. For instance, during construction a width of 100 feet is needed for buried coaxial cables and a width of 50 feet for operation.

Electric Power Transmission Lines - the width of land required for power lines is dependent on the amount of voltage being used. For this reason most rights of way are not useful for high power line installation. Also, environmental regulation and public opinion will hinder installation in sensitive areas such as wilderness and recreational areas.

Pipelines (Oil and Gas) - pipelines can only be accommodated on wide rights of way as pipelines installation is also limited by width needed for construction. For example, a 48 inch pipeline requires a width of 100 feet during construction and 41 feet for operation. Also, pipeline construction requires level ground with few obstacles and suitable soil to help

decrease construction cost. Directness of route is another important factor to decrease initial costs.

Pipelines (Water, Sanitary, Storm) - these uses are subjected to the same factors as the oil and gas pipelines except that the width requirement is less. Water, sanitary and storm sewers combined require 20 and 50 feet respectively for laying these lines. These lines will probably be located in urban areas.

Each of these alternative uses have physical limitations that have to be considered in determining each use's potential for a particular abandoned line.

The second step in this assessment process was to list what the author called "suitability characteristics" which are used to evaluate the right of way's potential for an alternative use. The factors are:

1. Title to the land,
2. Bridges on the right of way,
3. Presence of track on the right of way,
4. Flooding on a right of way,
5. Length,
6. Width,
7. Land Use surrounding the right of way,
8. Topography,
9. Support or opposition to an alternative use,
10. Points of interest along the right of way,
11. Accessibility by road.

These key factors account for the cost, physical restraints and public

demand which are main ingredients in the re-use decision.

The assessment methodology developed in this report used only the length, physical factors of width, land use and topography of the right of way. These physical factors were first rated for suitability criteria in a matrix form as shown for just bicycle trails in Table I in Appendix B for each alternate use discussed above. Then the alternate uses were ranked as "most likely", "likely" or "least likely" to be found on a hypothetical right of way of a given width, length, abutting land use and topography as shown for just the length criteria in Table II in Appendix B. Next, a list was compiled of the "most likely" uses in the four categories. With this list a decision tree was designed that would list possible alternate uses for every combination of the four physical characteristics as shown in example Table III. There were 288 combinations in total. Now that there is a list of every alternative combination possible, a decision can be made for a specific right of way considering the four physical details and the inventoried demand of what alternative best fits this land.

In summary, this volume investigated possible alternative uses that are applicable to the linear character of an abandoned rail right of way. Then it was determined which use could be applied to various lengths, topography, widths and abutting land uses. Every combination of these four physical factors were developed and analyzed to determine which uses best fit the individual combination. Now with a list of all the different physical characteristic combinations and the re-use that applied to them, a re-use decision could be made on a specific right of way considering its combination of physical features. If it is determined that a number of re-uses are applicable, then public demand would select the one best

alternative

Availability and Use of Abandoned Rights of Way. Task 2. Inventory of
Abandoned Rights of Way⁹

This report presents a comprehensive listing of all railroad rights of way abandoned in the years 1970-1976 as was required under Section 809(a)(1). This includes abandonments over 1.0 mile in length outside Standard Metropolitan Statistical Areas (SMSA's) or over 0.25 mile inside SMSA's and which retain their linear character in terms of physical characteristics and ownership patterns. The listing includes information concerning the rights of way topography, characteristics, conditions, and approximate value as required in the 4R Act.

This volume would be very useful in that each state's abandonments are analyzed separately. The abandonments are listed by state with its length and current ownership status. Also presented are tables displaying for each state the abandoned trackage and the re-use assessment for each abandonment. Information concerning the physical features and the possible alternative uses suited to these features as was discussed in volume one.

In summary, this volume has the pertinent information concerning the abandoned track and its possible re-uses for each state in tabular form for easy and convenient use. The tables did not lend themselves to be

⁹ Availability and Use of Abandoned Rights of Way. Task 2. Inventory of Abandoned Rights of Way, prepared for the U.S. Department of Transportation, January 1977, Harbridge House, Inc.

summarized as all the information is needed, therefore, this volume would have to be consulted for necessary information. The intent of this short summary is to make known its availability and potential use.

Availability and Use of Abandoned Rights of Way. Task 4A. Survey of Federal Programs B. Survey of State and Local Programs¹⁰

This volume is divided into two sections, Task 4A., which deals with Federal Funding Programs and Task 4B., which deals with State Funding Programs. These sections supply important information concerning all the possible funding sources available for rail right of way purchasing and development.

Task 4A. lists all the federal programs that may be a source for funds from the following Federal agencies:

- Department of Agriculture
- Department of Commerce
- Department of Housing and Urban Development
- Department of the Interior
- Department of Transportation
- Environmental Protection Agency
- General Services Administration
- Regional Commissions

Each program listed is broken down into the following descriptive

¹⁰Availability and Use of Abandoned Rights of Way. Task 4A. Survey of Federal Programs B. Survey of State and Local Programs, prepared for the U.S. Department of Transportation, January 1977, Harbridge House, Inc.

section:

Administering agency

Authorizing legislation

Objectives

Types of assistance

Uses and Use restrictions

Applicant Eligibility

Beneficiary Eligibility (who benefits)

Assistance Considerations

Financial Information (obligations)

Program Accomplishments

Problems

General Assessment

Current or Planned Use of funds on Abandoned Railroad Rights of Way

Potential for Use of funds on Abandoned Railroad Rights of Way

Task 4B. describes by state the possible programs available for funding rail right of way re-use and also a discussion of helpful legislation.

This information is needed in its entirety to be of any value, therefore, there was no attempt to summarize each available summing source. The intent of this short summary is to make known the availability of the information and its use.

Availability and Use of Abandoned Rights of Way. Task 4C. Case Studies
of Railroad Abandonments¹¹

This volume presents indepth studies of 12 railroad abandonments located in 10 states and also discussion on 37 caselets in 30 states. These cases give insight into:

1. Nature of the alternate source,
2. Funding sources,
3. Administering agency,
4. Acquisition process,
5. Abutting land use,
6. Length of the right of way,
7. Particular problems,
8. Completed and planned program of developments,
9. Availability and access to information,
10. Geographic distribution.

A person or group interested in developing a right of way can learn from someone else's mistakes and accomplishments as sighted in these case studies. This volume can eliminate some of the leg work that would be encountered by a party beginning the process of acquiring right of way and then applying a new use to it. These case studies point out the problems encountered and the necessary steps from start to finish which could save time and money in the development of future rights of ways.

¹¹ Availability and Use of Abandoned Rights of Way. Task 4C. Case Studies of Railroad Abandonments, prepared for the U.S. Department of Transportation, January 1977, Harbridge House, Inc.

Availability and Use of Abandoned Rights of Way. Task 5. Public Use of
Abandoned Rights of Way¹²

This volume contains a summary of the studies and findings discussed in the preceding volumes. This volume explains procedures in acquiring and developing an abandoned right of way. This is important in that the selection of an alternative is subject to the difficulty of implementing and maintaining it and the acceptance by the public. Therefore, it is important to discuss procedures so as to realize what may be encountered in materializing a particular re-use. However, the majority of this report contains a summary prepared by the National Recreation and Park Association entitled "Effective Utilization of Abandoned Railroad Rights of Way for Park/Recreation Purposes - Potential Problems and Solutions." This summary is a collection of information solicited by the National Recreation and Park Association from individuals and organizations nationwide, knowledgeable on the subject of the conversion of railroad rights of way for park/recreation. Also, the association invited a panel of experts to their headquarters to discuss problems and their solutions which are integrated in this summary.

This report addresses the following areas of concerns involved in the reclamation of rail right of way:

1. Benefits,
2. Time Dimension,
3. Acquisition Cost

¹²Availability and Use of Abandoned Rights of Way. Task 5.
Public Use of Abandoned Rights of Ways, prepared for the U.S. Department of Transportation, January 1977, Harbridge House, Inc.

4. Title Problems,
5. Negotiation for purchase,
6. Operation/Maintenance,
7. Political Opposition,
8. Development,
9. Environmental Impact Statements.

Past history has shown that trails on abandoned rail right of way have been very much accepted by the public. There has and is considerable use of these trails by non-area residents as well as areas residents. For instance, a 9.5 mile rail restoration project in Flint, Michigan attracted approximately 60,000 visitors from July through October, 1976. A benefit realized from this trail was that 50 percent of these visitors were non-area residents which increased the commerce of the towns along the trail.

In another documented case in Wisconsin it was found that the Elroy-Sparta State Trail Area generated business for establishments along the trail. In the study it was stated, "The amount of gross dollars of trade resulting from recreationists on the Wisconsin's Department of Natural Resources ownership varies greatly between different establishments. However, as an average for each of the businesses involved, the smallest amount was \$179; the highest \$751 for the Elroy-Sparta State Trail Area. In total, an accounting was made for 283 business establishments for all 6 areas studied. Collectively their annual gross business from all sources of trade was \$33 million, with \$720,699 (2.2%) generated from non-local recreationists using the areas. For some business establishments, such trade constitutes 20 to 40 percent or more of their entire gross receipts while for others it is only a relatively small amount."

No significant burden was incurred by the local towns by recreation trails, in general, the citizens benefit from this type use. The trails are kept in as much of a natural state as possible and are well kept by the responsible agency which promotes a clean, natural setting for the local towns.

Much must be done in acquiring right of way for re-use and this process takes a lot of time in coordinating financing, public backing, title search, and government action. Land is held for public taking for only 60 to 120 days, so all actions must be taken within this period. The ultimate time saving method is to have re-use planning ongoing for potential abandoned right of ways before they are actually abandoned.

The authors make suggestions for eliminating or reducing the time related problems for public and private groups. These time saving suggestions are listed in Appendix C.

The cost of acquiring the right of way is, of course, another very significant consideration faced by all interested groups due to the high cost of the land. There is one alternative for groups in cutting these high prices. One is that rail property could be worth more to rail companies if they donate the land for public use. This donation prompts excellent public relations and creates a charitable deduction against corporate gross income, which is a significant tax savings. Additionally, it eliminates the need to pay further monies on taxes and maintenance for an unproductive strip of land.

Another important factor in acquiring the right of way is determining who actually owns the right of way. This involves a title search to determine if the rail company owns the property out right in fee or if the land reverts back to the previous owner or his heirs. It has to be deter-

mined if in the original grant the rail company was granted a "right" or the "land" which is an easement or fee respectively. With right of way extending over a distance, a number of different titles to the land will have to be considered. As a last resort, the land can be taken by a public interest by condemnation, but just compensation must be paid to the found owners of the land. Of course, as mentioned above, the best method is to have the land donated by rail companies which own the entire land in fee.

A solution proposed in this report to simplify and strengthen "clear" title procedures is listed in Appendix C.

There is always some opposition to using right of way for public use. For instance, there are fears by adjoining landowners that their land will be vandalized or littered by trail users. Opposition can be overcome partially or entirely by:

1. Identification and understanding of the attitudes of key participants in the public decision making process, including elected and/or appointed officials, advisory groups, or citizens believed influenced in the process generally;
2. Objective analysis and presentation -- to official and all "willing audiences" -- of probable public benefits, impacts and other dimensions of the specific project by park/recreation professional staff;
3. Organized and active involvement of individuals and organizations inclined to offer constructive criticism and/or support the project;
4. All legal authority and policy directives necessary to undertake the project; (Note: This need not be specific authority for rail-

road conversion projects but rather generally authority to acquire, develop, and manage public park/recreation systems.)

5. Development of public confidence in park/recreation agency by demonstrating professional and technical capacity to effectively manage similar park/recreation resources;
6. Development of "project selection" criteria and selection, as an initial effort of a potential project exhibiting high potential as a public park/recreation resource;
7. Intergovernmental and interagency cooperation as necessary, including joint planning and determination of appropriate level of governmental action -- i.e., is project of national, interstate, state, regional or local significance?
8. Empathy for real and/or perceived concerns of landowners and appropriate actions to eliminate or mitigate potential problem areas through project design modification or other means.¹³

Development cost is another obstacle encountered in right of way restoration. This is the cost encountered in developing the land into the alternative use envisioned by the group responsible for its acquisition. This could include clearing brush, repairing culverts and bridges, surfacing and signing. For an example of cost, the State of Minnesota purchased 218 miles of abandoned right of way for \$968,500. The state forecasted a cost of \$2.6 million on trail development - including grading and surfacing of paths, removal of ties and replacement of signs and fencing. This figure, which includes maintenance cost, indicates an average expen-

¹³Task 5., p. 39

diture of \$11,000/mile.

Different sources of funds for development cost have been used in various states as follows:

1. Registration of snowmobiles,
2. Unrefunded gasoline taxes,
3. Excise Tax on trail-related recreation equipment,
4. Federal Land and Water Conservation Funds,
5. Regional Funding.

Employment of temporary personnel through Comprehensive Employment and Training Act funds have aided some governments in trail related development and maintenance.

The ability to operate and maintain right of way for park/recreation purposes is partially dependent on quality development; therefore, maintenance is in part tied to availability of funds for development.¹⁴ Volunteer help from bike and hike clubs, environmental clubs, Boy Scouts and Girl Scouts are excellent ways of keeping down maintenance costs. Agreement with adjoining landowners to maintain the fences along the trail after installation by the re-use organization has been successful. Possible funding sources for maintenance and operation cost are:

1. Dedicated funds, i.e. cigarette tax, license plate fees, recreation equipment excise tax,
2. Other government programs, i.e. federal green thumb; comprehensive employment and training act,
3. User fees, use permits,

¹⁴Ibid., p. 47

The least costly maintenance practice suggested by the authors is to keep up maintenance on a scheduled basis to prevent accumulative effects.

Environmental Impact Statements or assessment procedures are required for any proposed abandonment involving sufficient real estate and should accompany the application for abandonment. This application should also include the following information:

1. A detailed map showing the exact location of the line to be abandoned,
2. The number of acres in the right of way proposed for abandonment,
3. The nature of ownership of underlying right of way and specific plans for property available for disposition by abandonment,
4. Description of current land use directly adjacent to the line and in the tributary territory,
5. The kind and amount of property taxes paid by the railroad to the local communities in the last two calendar years.

As can be seen from this report, the process in acquiring and developing a right of way for re-use is timely and involved, but yields a worthwhile public facility.

Benefit Estimates for Recreational Re-Use of Abandoned Railroad

Rights-of-way¹⁵

This report is concerned with developing a procedure for calculating benefit values realized from using abandoned rail right of way for recreational use (primarily bicycle trails). The report also investigates the problems in determining values for non-priced goods and services for recreation and in general. This information is of value for calculating cost-benefit ratios to be used as a means for deciding between alternative re-uses for an abandoned rail right of way.

Mr. Joyal states:

"For most goods and services the problem of inputting benefits or values does not arise because conflicting demands for goods and services are resolved by the market, where users bid against one another for limited supplies and values are set accordingly."¹⁶

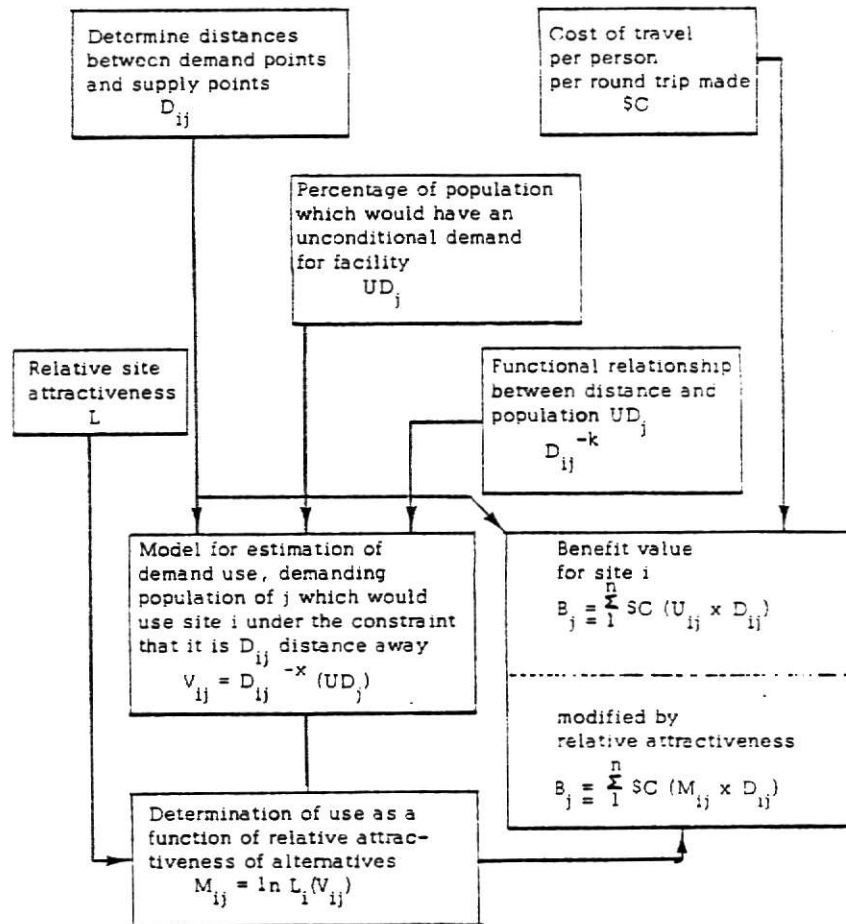
In the case of outdoor recreation, it is a non-market product that can't be wrapped up and distributed to the public for consumption, therefore, the market's desires are difficult to attain. However, an implied willingness to pay could be substituted for non-market resources in place of the allocation criterion in the private market. This is the underlying thesis in the cost-benefit discussion presented in this report.

Two methods of determining demands for a non-competitive resource such as recreation presented in the report is the direct interview and the indirect estimation of a demand curve for a site by using expenditure

¹⁵Alfred N. Joyal, "Benefit Estimates for Recreational Re-use of Abandoned Railroad Rights of Way," Technical Report Series, No. 40, Iowa City, Iowa: The Institute of Urban and Regional Research, March 1975.

¹⁶Ibid., p.1

FIGURE 2¹⁷
Benefit Estimation Procedure



behavior in terms of current consumption as a proxy for price, or willingness to pay.

The interview method is simply asking the user of a particular area a set of well designed questions which would give an indication of the amount of money the respondent would be willing to pay to use the area. The method is, however, expensive because the questions have to be developed, then personnel must be hired to administer the questions.

The second method mentioned above first determines how similar areas are being used and then applies that trend to the area being analyzed. For instance, distance may be used as a determinant of demand for an area. Distance could be considered a cost to the consumer (recreation user), it tells how much the consumer is willing to sacrifice to use the recreational facility. Therefore, it could determine the distance that people are willing to travel to an area similar to the area in question.

The author develops a procedure which calculates the benefit-cost for potential competitive recreational sites using abandoned railroad right of way. In the report only bicycle trails are considered as a re-use for the abandoned rail land for simplicity sake. The procedure is based on the assumption that the distance which any user of a given recreation site is willing to travel between home and the site is an indirect measure of willingness to pay. The distance people are willing to travel can be converted to dollars. Figure 3 summarizes the procedure developed to determine the benefits in this report. The I_{ij} is the distance between the demand point J and the supply location i . Therefore, a distance for each supply location, which in this analysis is the county seats, to each of the potential recreation sites is determined.

TABLE I¹⁸

BENEFIT VALUES RESULTING FROM
TEST APPLICATION

Site #	B ₁ *	B ₂ *	Length of Abandonment
1	\$47454.	\$123224.	13.4
2	47013	97110	7.9
3	46469	91084	7.1
4	45349	83560	6.3
5	45187	86004	6.7
6	46442	62808	3.9
7	46412	138405	19.7
8	46369	95789	7.9
9	45597	112679	11.7
10	44959	134072	19.7
11	45120	138852	21.7
12	45154	129894	17.8
13	44885	164961	39.5
14	45352	121122	15.8
15	45467	93926	7.9
16	46788	139527	19.7
17	45871	174998	45.4
18	45300	52072	3.3
19	44894	147683	26.8
20	44750	110586	11.8
21	44680	79445	5.9
22	44403	91728	7.9
23	43799	64293	4.3
24	44282	107928	11.4
25	45772	126280	15.8
26	44816	92581	7.9
27	46285	105942	9.8
28	46376	82461	5.9
29	45707	136303	19.7
30	44939	123982	15.8
31	45284	118807	14.2

* $D_{ij}^{-x} = D_{ij}^{-.9}$

¹⁸ Joyal, p. 14

Next, UD_j is the portion of the population of demand center j which would be interested in using the recreational site for bicycling. This could be done by survey, but of course that entails a costly operation. In this analysis a Tennessee study was used to determine the percent of the bicycling population that would be willing to use a special recreational bicycle trail at least once a year. The percentage from that study was eight percent.

The next item is determining how the cyclists who desire to use the bike trails respond to the distance needed to travel to get to the areas. It was assumed that the desire declined with distance. Therefore, it was suggested that the exponent on this response measurement D_{ij}^{-x} would be less than 1.0.

These three components (D_{ij} , UD_j and D_{ij}^{-x}) are then used to calculate the estimated use made of site i by the population at demand center j which is V_{ij} .

As can be seen from Figure 3 the benefit estimation can be calculated in two ways. It can be estimated by just considering distance as the basis for demand. An alternative method to just distance is to also calculate the relative attractiveness of the individual bike trails. The first method calculated for each bike path used a round trip per mile cost of fifteen cents per person. The results as shown in Table I show that the difference in cost between sites were very small. The difference between the largest and smallest benefit was eight percent, which is a small value to base a decision on.

The second method in Figure 3 figures in the relative "quality" difference between sites. The quality difference (M_{ij}) between links used in this analysis was the length (L_i) of each bike trail. As can be seen

in Table I, there is a significant variance among the benefit values of the sites. This shows that people can and do differentiate between sites.

These methods are very applicable to the computer, which gives the ability for quick and accurate analysis.

As pointed out in this report, this procedure has some limitations:

1. The procedure is based on incomplete knowledge concerning the behavior of an unidentified group of recreationists,
2. The procedure does not consider the use of the facility for other uses such as hiking paths in this study.

This method of determining benefit-cost could be used in re-use planning to determine from potential abandonments which abandonments would be viable recreational locations. If the right of ways were selected before the actual abandonment, the selection of the re-use and planning for its development and funding could alleviate wasted time when right of way became available for public purchase.

Identification and Optimization of Alternative Re-Uses for Proposed
Railroad Abandonment Right of Way¹⁹

The authors of this report initiate their report with the statement:

"With the apparent large scale abandonment of railway right-of-way, both past and projected for the near future, there is a need for state government to initiate a review process whereby alternative uses for the abandoned right-of-way are considered before the land is allowed to be sold on the open market."²⁰

As noted here, the authors of this report are also concerned, as stated in a number of the other reports, with the inevitable problem of abandoned railroad right of way and what should be done with it. In this report the authors approach this problem of prior planning for alternative uses for the rail right of way by reviewing potential re-uses, identifying possible benefits and costs for the various re-uses, surveying data availability and associated problems, and analyzing the re-use selection methodology involving integer linear programming. This is all done in a framework of a test analysis on a number of abandoned or possible abandoned rights of way in the state of Iowa.

The test rail branch lines (to be referred to as links) were chosen on the three following criteria:

1. Those links which were abandoned between 1970 and 1974,
2. Those links where an abandonment application was currently pending,

¹⁹Brent O. Blair, Mark C. Meyer, and Clifford Tweedale, "Identification and Optimization of Alternative Re-Uses for Proposed Railroad Abandonment Right of Way," Technical Report Series, No. 41, Iowa City, Iowa: The Institute of Urban and Regional Research, March 1975.

²⁰Ibid., p.1

3. Those links which fell under the thirty-four car rule.

With this criteria and a need for detailed information the twelve links were selected as the test links.

The alternative re-uses considered in this analysis were:

1. Continued rail use - to continue a branch, which connects into a main line, for local use,
2. Agriculture - in agricultural areas let the right of way revert to the contiguous use,
3. Recreational Re-use - convert the right of way to bike trails and/or hike trails, snowmobile trails and ski trails,
4. Use by utilities - utilities could be run underneath the right of way in order to prevent buying other costly land. This could be done in conjunction with a hike or bike trail,
5. Road Re-use - use a part of the right of way for new road or highway. This may save taking large amounts of valuable agricultural land,
6. Conservation Re-use - allow the right of way to revert to its natural state, therefore providing a conservation refuge strip.

In this report only continued rail re-use, recreational re-use and agriculture re-use were considered, because the benefits received from them are easier to calculate.

The next step was to identify the benefits and costs for the three re-uses being tested. The criteria for determining the benefits in this analysis was "net benefit to the community, state and society in general" in dollars. The main source of information in determining the benefit/cost for each re-use was a study completed by the Iowa Office of Planning and Programming (OPP) entitled "Economic Impacts of Railroad Abandonment

in Iowa -- A case study." The following benefits and costs were found for each re-use:

Continued Rail Use²¹

Benefits	Costs
1. Saved shipping cost	1. Subsidized operating costs
2. Costs of storage and handling saved	2. Rehabilitation costs
3. Cost of highway accidents saved	
4. Additional highway costs saved	

Agricultural Re-Use²²

Benefits	Costs
1. Dollar value of corn grown	1. Cost of corn production

Recreational Re-Use²³

Benefits	Costs
1. Demand in dollar value	1. Development costs
	2. Maintenance costs

The benefits used were not complete and a more detailed study would reveal others, but for this study these were considered for example purposes.

This report discusses the process and problems with the acquisition

²¹Blair, p.8

²²Ibid., p.9

²³Ibid., p.10

of base data that had been collected for each test link. Most of the data was taken from abandonment applications submitted to the Iowa Commerce Commission, but the four following problems were pointed out to be cautious about in using this type data:

1. Since the railroads are applying for abandonment the data may tend to state the upper limits in rehabilitating and maintenance cost,
2. If rail companies assess their own property values and taxes are assessed on these figures, caution needs to be taken to determine the method used to value the property. Because the real value of the property would be needed to estimate what an alternative right of way use would pay in taxes,
3. Accounting data varies per line, due to individual rail company's different accounting procedures,
4. Data would differ per line due to inflation if the abandonment petition on the different links were turned in different years.

All figures were discounted over a twenty year period, using a discount or interest rate of six percent, so annual cost and a one time capital cost could be compared. The six percent was chosen since it was the current rate for a long term federal bond. Then the benefit and cost (first year one shot costs) were calculated for each of the twelve test links. An example breakdown of benefit and cost is shown in Figure 2.

After the test links were chosen, the possible alternative re-use for each link chosen and benefits and costs of each line had been determined, the next step was to select the best re-use for each link, given budgetary or other constraints for each of the alternative re-uses. The method used by the authors for determining the optimum re-use for an

FIGURE 3²⁴

Line # 2 Identification Storm Lake and Rambrandt Approx. Length 13.2 mi.

BENEFITS AND COSTS OF RIGHT-OF-WAY RE-USE

I. Continued Rail Service - Same Level of Service

<u>Benefits (B)</u>		<u>Costs (C)</u>	
Saved Shipping Costs	<u>\$ 8,597</u>	Operating Subsidy	<u>-0-</u>
Saved Costs of Stage & Handling	<u>6,831</u>	Rehabilitation Cost	<u>\$324,732</u>
Saved Highway Accounting Costs	<u>321</u>		
Discounted Total	<u>\$180,541</u>	Discounted Total	<u>\$324,732</u>
B - C = <u>\$ -144,091</u>			

II. Agricultural Re-Use

<u>Benefits</u>		<u>Costs</u>	
Dollar Value for Corn Grown	<u>\$ 41,805</u>	Cost of Corn Production	<u>\$ 26,537</u>
Discounted Total	<u>\$479,503</u>	Discounted Total	<u>\$304,379</u>
B - C = <u>\$175,124</u>			

III. Recreational Re-Use

<u>Benefits</u>		<u>Costs</u>	
Demand in Dollar Value	<u>\$ 45,597</u>	Development Cost	<u>\$52,800</u>
		Maintenance Cost	<u>264</u>
Discounted Total	<u>\$ 522,998</u>	Discounted Total	<u>\$55,828</u>
B - C = <u>\$467,170</u>			

Note: Discount Period = 20 years, Discount Rate = 6%

individual link is the 0-1 integer linear programming. This method is very easily adapted to the computer for faster and easier manipulation. The mathematics involved in computing the data and process of adapting the method to the computer is discussed in detail by the authors. The program, in short, is able to take the abandoned lines which are being considered with the possible re-use for each line along with any budgetary constraints and then calculate the optimum re-use for an individual link according to the benefit-cost of each re-use. The method could be expanded by adjusting the benefit and cost to consider restraints such as distance to the re-used links from potential interest groups, to account for legislative priorities or pressures from local interest groups. This would be accounted for in the cost or benefits.

This method could be very helpful to an agency in re-use planning. The agency could determine what all the potential abandonments were and use this method to determine the alternative use in advance of the actual abandonments.

Railroad Abandonment and Re-use Planning: Relationship with Statewide
Transportation Planning and Citizen Participation²⁵

This report is concerned primarily with the organization of multi-modal transportation agencies with emphasis on public rail planning and also outlines the planning processes involved in rail planning. More specifically, the report consists of three sections with section one giving an overall view of the transportation process and agency organization at the state level. Section two addresses the rail planning process and section three suggests specific kinds of planning organization and processes at the state level which should be utilized to implement railroad facilities re-use planning.

The first section, as mentioned, is concerned with how the state transportation departments are organized and how they function. This is important to rail re-use in that a well coordinated multi-modal planning process can bring about efficient use of all modes and land for the well being of the public. Therefore, a transportation department can coordinate other modes of transportation such as truck or barge to take up the service deleted by the abandoned line and then, if possible or feasible, use the freed land for another mode's use.

First of all, a description of typical functions of a state transportation department was listed:²⁶

²⁵Kenneth J. Dueker, Donald F. Mazziotti, and Mark C. Meyer, "Railroad Abandonment and Re-use Planning: Relationship with Statewide Transportation Planning and Citizen Participation," Technical Report Series, No. 33, Iowa City, Iowa: The Institute of Urban and Regional Research, (Revised December 1974).

²⁶Ibid., p.1

1. To assure a unified state policy for transportation;
2. To provide a structure for statewide transportation planning;
3. To promote public transit;
4. To enhance the effectiveness of state work with local governments;
5. To facilitate communication and cooperation with the United States Department of Transportation;
6. To provide a stronger state viewpoint in regional and interstate transportation matters;
7. To work closely with state planning agencies to insure transportation planning is consistent with other physical, economic and social planning;
8. To make government agencies more responsive to popular control
9. To improve communication between state government and its constituency;
10. And to improve efficiency and promote economy in government.

It is then discussed how the Transportation Department progressed from a highway oriented organization into a comprehensive multi-modal planning agency. A history in detail is presented to how transportation planning developed through the realization that transportation of goods, services and people was or should be a coordinated effort of all the modes of transportation and that one mode's condition affected the others. Also, the general administrative organization of already developed Departments of Transportation were presented as a guide and explanation. The transportation departments have set forth a general set of policies for a transportation plan:²⁷

²⁷Dueker, p.14

1. The plan must meet the travel needs and provide for present and future travel demand of all population groups and sectors of the economy;
2. The plan must create minimal negative environmental impacts to the states as a whole and to specific communities of the state;
3. The plan must maximize the social benefits and minimize the social disutilities associated with the implementation of transportation facilities;
4. The plan must be economically feasible, minimize the economic burdens it imposes upon the state and its communities and it must distribute its costs and benefits in a manner acceptable socially and economically;
5. The plan must involve citizen and inter-agency input.

Involved in transportation planning is the actual process of planning and then the local project implementation. It has been found that the most effective way of getting a plan implemented as mentioned above in the objectives is to have the affected citizens involved in the planning process so that the final product is a bi-product of their thinking.

A popular method of citizen participation has been the public hearing. These hearings are so designed to inform the affected citizens of a plan and then reciprocate by taking the citizen's suggestions and implementing them in the plan.

Unlike highway planning, rail planning had not been a public planning concern. The building, operating, etc., had been the sole responsibility of the private rail company with some government regulation. Planning

for rail has been one of diminishing the system as opposed to increasing, as in highways. Therefore, rail planning involves the issue of abandoned rail right of way re-use.

Rail re-use planning uses the same techniques as in transportation planning such as setting goals and objectives, data collection, developing methodologies, evaluation of alternatives and project implementation. Government has gotten involved in railroad re-use planning because they realize now that there are social and environmental costs involved with the abandonment of a line. These costs are usually not considered in the cost-benefit analysis which a rail company uses in their decision to discontinue an unprofitable line.

This was one factor why the federal government through legislation created "The Regional Rail Reorganization Act of 1973" (1973 RRR Act). In this act the states were required to develop a statewide rail plan in order to qualify for 70 percent Federal Subsidies to cover operating losses or to purchase rail properties. The rail plan has to include the social, economic and environmental aspects of rail transportation and its effect on other modes. Also, the plan should take into account the effect on shippers, communities, businesses, etc. by rail service.

For this reason this report gives a proposed re-use planning process which is based upon New York and California legislation. The suggested process has three phases. The first phase is developing a statewide re-use plan which consists of three steps as follows:

1. Make an inventory of abandoned lines which will identify the location, legal status, points of access, service facilities, topography condition, recreation potential, economic potential, and environmental status of the line. Also, inventory low

density lines and future abandoned lines in order to promote long range planning.

2. Involve affected citizens. This is a very important step to a successful re-use plan and implementation. This is emphasized in the statement by the authors,

"Planning and re-use projects must be accepted by their constituents or else the time and effort spent conceiving and implementing them is wasted."

If the citizens are behind a project the possibility of it being implemented is encouraging, conversely, if the public doesn't want a project its chances of being implemented are minute.

Therefore, all affected individuals have to be involved in the birth of the re-use plan to its completion. The citizens need to be informed and educated in what is developing, explained with the whys and how.

3. Purchase land before abandonment which is to be included in the Systems Re-use Plan. In doing this, land can be acquired at a less expensive price.

The second phase is the post abandonment phase. If a rail line applying for abandonment is involved in interstate commerce it must apply with the Interstate Commerce Commission (ICC). The ICC would inform what the report calls the State Railroad Transportation Planning Agency (SPA), which is the state agency responsible for rail planning, of this application of abandonment. SPA would then be able to oppose or approve according to its re-use plan which already has been developed. Also, SPA can notify the re-use interest group which it had previously compiled a list of. If the rail line is not involved in interstate commerce the rail company

applies for abandonment with SPA as required in the 1973 RRR Act. SPA has 60 to 120 days to make a decision and public notification is given.

The final abandonment or re-use decision is made by SPA, but it is based upon SPA decision integrated with the public opinions. As in developing a statewide re-use plan the public must be involved in the final re-use decision on individual lines. This information dissemination and opinion collecting can best be done through newspapers and public meetings, respectively. Hearing procedures suggested by the authors can be found in Appendix D.

The third phase is the idea of informing the citizenry of the outcome of the decision. This will give the public a feeling that they are an important part of the process. Also, if the plan was refused, then it would call for a re-evaluation of the plan from all the interested parties.

The key to the re-use planning is obviously pre-planning. This enhances the integration of the individual re-uses, and hastens the process of implementing a re-use, which involves citizens' and agency's approval.

The Rededication of Lightly Used or Abandoned Rail Rights of Way to Other Uses²⁸

This report gives insight into the legal aspects of reclaiming abandoned rail right of way. This is of great interest to those who want to obtain land to develop some kind of alternative public use on this land. Dr. Kalmbach, who has a B.S.E., M.A. and P.H.D. from Princeton University and his J.D. from the University of Pennsylvania, points out the different cases and theories connected to the reclaiming of rail right of way. The information presented in this thesis will give interested parties valuable insight and future reference into how and where to start investigating the process for reclaiming right of way.

Dr. Kalmbach initiates the report by stating that the rail industry has many unprofitable rail lines which are costing the individual rail companies more than what can be realized from them. With this problem facing the rail company's future progress, something needs to be done and the most obvious solution is abandonment of these unprofitable lines. Affected rail companies will need to trim their total rail system down to the most efficient and profitable size. Consequently, a large amount of abandoned right of way will be available. This brings to light the question of: who gets the abandoned right of way and what can it be used for?

In beginning to answer these questions, Dr. Kalmbach first defines right of way:

"It sometimes is used to describe a right belonging to a party

²⁸Charles F. Kalmbach, Jr., "The Rededication of Lightly Used or Abandoned Rail Rights of Way to Other Uses," Transportation Law Journal, Vol. 7, No. 1, (January 1975), pp. 99-131

a right of passage over any tract; and it is also used to denote that strip of land which railroad companies take upon which to construct their road bed. As a privilege to pass over another person's land, the right of way never exists as a natural right, 'but always must be created by a grant or its equivalent."²⁹

Therefore, it will be necessary to define the nature of the railroad's interest in the land comprising the right of way. In other words, the nature of the railroad's interest in the acquired land varies according to how the land was acquired, which may be by fee or easement. With this premise, Dr. Kalmbach launches into the various ways a rail company could have acquired the land which they are using for rail operations, as this will determine how it can be reclaimed. Following will be a summary of the different methods which he presented:

1. Contract - land which is conveyed through a contract is subject to the conditions of the contract.
2. Grant - (public, private implied) - a grant may only be good as long as the land is used for railroad purposes or railroad operations as stated in the grant with the possibilities of reverts and powers of termination.
3. Adverse possession - quoted from Elliot, supra note 18 §1174
"A railroad company may acquire title to land by adverse possession for the full period presented by the statutes of limitation in the same manner as an individual. But such possession must be continuous and under claim of right, and of such character as to give notice to the land."
4. Condemnation - If land has been condemned for railroad purposes

²⁹Kalmbach, p. 102

and the railroad pays the fee there is no easement. Conversely, if the rail company pays no fee an easement exists but is for the time being rendered impossible.

Much discussion was presented about the nature of interest when right of way is conveyed by a deed.

"One must also determine whether a fee or an easement is obtained when conveyance is by deed. The two polar situations are the deeds in which 'land' is conveyed and where a 'right' is conveyed. The former generally speaking results in a fee title while the latter results in an easement."³⁰

The language in which the deed is written can be interpreted by the courts as grant of land or easement. The following theories have been used by the courts to arrive at the conclusion that interest conveyed was a fee rather than an easement:

1. The granting clause is to take precedence over a later clause in conflict, or;
2. Reference to a "right of way" after an unambiguous granting clause is taken as describing the land rather than limiting the estate (i.e. the second meaning of "right of way" is assumed).

One court wrote in interpreting the wording of a grant,

"While a railroad may have the power to take in fee, it need not necessarily do so, and in fact railroads customarily hold their right of way in easement. And while the terms 'right of way' may be used in either fee or easement context, as a general rule only an easement is meant... The court cannot help but equate the railroad purposes... These factors will reinforce the plain language of the Talbot deed, granting an easement."³¹

³⁰Kalmbach, p. 106

³¹Kalmbach, p. 31

This puts a new meaning on right of way.

Courts usually construe a grant as conveying a 'right' or privilege to use land as opposed to conveying a strip, piece, parcel or tract of land. Courts have proven to be in favor of easements in an ambiguous deed.

There are three other factors besides the language of the contract which can influence the courts:

1. A state statute which empowers a railroad company to hold land only as an easement has been used to overrule clear language in a deed conveying fee and vice versa. (Chonteau v. Missouri P.R. Co., 122 Mo. 325, 22 S.W. 458, 30 S.W. 298);
2. The relative position of the parties. (Highland Realty Co. v. San Rafael, 46 Cal. 2d 669, 298 P. 2d 15 (1956));
3. The amount paid for the conveyance. (Battellev New York, N.H. & H.R. Co., 211 Mass. 442, 97 N.E. 1004 (1912))

"Knowing the nature of a railroad's interest in a right of way is of course crucial if one wishes to take over the railroad operation. However, the nature of the original interest of the railroad is equally important in the case in which the railroad no longer operates on the right of way."³²

Dr. Kalmbach addresses this problem of how does the rail company's original interest in the right of way affect the rail's discontinued use of the right of way. It is stated,

"Where land has been conveyed to a railroad company under a deed which creates an easement in favor of the company rather than a title fee, and such land is subsequently abandoned for railroad purposes prior to any other conveyance thereof by the original owner, there is no doubt but upon

³² Kalmbach, p. 109

abandonment title reverts to such original owner or his heirs, or, more accurately speaking, the title of the original owner is relieved of the easement to which it had previously been subject."³³

Land conveyed to a rail company by fee subject to a special limitation or to a condition, violation of the condition will return the land to the grantor or gives him the power of termination. Land acquired through condemnation is controlled by the state statute authorizing condemnation.

What, though, constitutes the abandonment of right of way from the legal aspects? First, in a legal sense proof of nonuse of a right of way is not enough proof of abandonment, there has to be fact in concurrence with the intent to abandon. Following are some valid proofs which courts have accepted as reason for abandonment:

1. Consideration for the grant of land was the construction of a depot and maintenance of rail service and the depot was never built and the service ceased. (Lyman v. Suburban R. Co., 190 Ill. 320, 60 N.E. 515 (1901));
2. Growth of trees of up to 17 inches in diameter between the rails (Missouri P.R. Co. v. Bradbury, 106 Mo. App. 450, 795 S.W. 966 (1904));
3. Legislator deemed the right of way abandoned (Central I.R. Co. v. Moulton I.A.R.W., 57 Iowa 24a, 10 N.W. 639 (1881));
4. Adverse Possession - use other than what the land was conveyed for (95 A.L.R. 2d 468, §4);
5. Removal of tracks (Faver v. Pacific Electric R. Co. 146 La.

³³Ibid.

App. 2d 370 P. 2d 814 (1956));

6. Non use of right of way in conjunction with the use of another route (95 A.L.R. 2d 468 ^S6).

It was emphasized that right of way sold to another company but still used for the purposes originally granted for does not construe an abandonment. Abandonment is up to the interpretation of the courts based on "Found acts which evidence the intent to abandon and which are clear and convincing."³⁴

However, a state can acquire rail right of way with its authorized power of eminent domain for public uses other than rail. The state must, according to the Fifth Amendment, as applied through the Fourteenth Amendment, give just compensation and due process. The issue facing the state is who is to receive the just compensation for the land being condemned. This is the reason as mentioned above for determining the rail's interest in the right of way as the rail companies cannot sell what they don't have a right to.

³⁴Kalmbach, p. 112

This booklet provides pertinent information concerning funding for the construction and planning of bicycle and pedestrian trails. Funding is important in the selection of alternative uses for abandoned rail right of way because uses that have available funding stand a much better chance of being selected. Section 134 of the 1976 Federal-Aid Highway Act allows the use of Federal-aid highway funds to construct bicycle and pedestrian facilities independent of regular highway projects. The bicycle and pedestrian facilities may be constructed if the following conditions are met:

1. The facility will not impair the safety of the pedestrian, bicyclist, or motorist.
2. The facility will connect with existing facilities usable by bicyclists or it will form a segment of a proposed bicycle system.
3. A public agency has formally agreed to:
 - a. operate and maintain the facility.
 - b. ban all motorized vehicles except maintenance vehicles and snowmobiles when snow conditions and State or local regulations permit.
4. It is reasonably expected that the facility will have sufficient use in relation to cost to justify its construction and maintenance.

The paths may be built as incidental features of a highway project

³⁵Bicycle and Pedestrian Facilities in the Federal-Aid Highway Program, U.S. Department of Transportation, Federal Highway Administration, August 1977.

using the Federal-aid highway funds that are used for the basic highway project or an independent path may be built. The independent project may be constructed on existing highway right of way or easements. Facilities may be located away from highway right of way if it can be shown that the pedestrian and bicycle traffic would normally desire to use the Federal-aid highway route.

Federal aid will share 70% of the cost with a limit of \$2.5 million per state in a fiscal year for independent bicycle and pedestrian paths.

Highway Planning and Research funds (HP & R) and Planning funds (PL) are used to fund the planning and research activities that are necessary for development and implementation of highway projects, including bicycle and pedestrian facilities. The limit of the federal-aid share of planning and research project cost is approximately 80%. The HP & R project can be located anywhere in the state but PL funds can only be used in urbanized areas of 50,000 people or more.

These programs are potential funding sources in developing hike and bicycle trails on abandoned right of way. The funds are administered by the state therefore, the State Department of Transportation or the State Highway Department need to be contacted to determine funding possibilities.

Summary

Large amounts of land have become very scarce, therefore land for new recreational, transportation and conservation purposes is difficult to obtain. A solution to this problem may be the land made available through the abandonment of railroad lines. Rail companies are feeling the cost burden of maintaining and operating low volume rail lines. Due to this financial burden, rail lines are being abandoned, leaving linear parcels of land vacant for other uses.

Imaginative uses can be and already have been applied to this abandoned land. Bicycle and hike trails, ski trails, equestrian trails, snowmobile trails, excursion trains, streets and highways, and utilities are all plausible re-uses of the right of way. Rail right of way is suited for these alternative uses due to its linearity, gentle grades and curves and strong base. Because the rights of way traverse scenic country side they are very appropriate for scenic hike and bike trails.

Citizen interest groups and state or local agencies are encouraged to acquire these rights of way and develop them for public use. This is made apparent in an Interstate Commerce Regulation which requires rail companies desiring to abandon a rail line to hold the land for sale to only a public group for 90 to 120 days after abandonment approval.

However, this also requires the public group to act promptly in organizing a re-use idea and funding in this period of time. As suggested in a number of the summarized articles, the best way to overcome this time element is to investigate potential abandonments in a state and plan for re-use and funding so that time will not be wasted when the right of way actually becomes available.

A key to getting a re-use implemented is to keep the public informed,

especiallly those affected by the re-use such as adjoining landowners. This will help prevent misunderstandings and will help promote backing for the project.

An obstacle that must be approached is the issue of determining the nature of the ownership of the land. A title search has to be done to determine who is entitled to the land after rail use is discontinued. This is a time consuming project so it must be dealt with promptly. If anyone refuses to sell a desired piece of land the state or local government may exercise its power of eminent domain.

Land is going to become available for many different uses if the public reacts positively.

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APPENDIX A

TABLE 1-A

SUMMER 1972³⁶
 Estimated total participation in recreation activities

ACTIVITY	Estimated Total U.S. Participation in Millions of Activity Days
*Walking for pleasure	496.3
Outdoor swimming (other than pool)	487.1
*Picnicking	405.1
Driving for pleasure	404.9
Sightseeing	362.8
Playing other outdoor games or sports	338.8
Fishing	278.2
Outdoor pool swimming	257.0
Other activities	242.9
*Bicycling	214.2
*Camping in developed campgrounds	153.3
*Nature walks	148.9
Boating (other than canoeing and sailing)	126.1
Going to outdoor sports events	96.9
Tennis	81.2
Golf	63.4
*Riding motorcycles off the road	58.2
Camping in remote or wilderness areas	57.5
Water skiing	54.1
*Horseback riding	51.5
*Hiking with a pack/mount/rock/climb	45.0

CHECKLIST FOR ³⁷
RAIL-TO-TRAIL POTENTIALS

PHYSICAL MEASUREMENTS

Approximate length in miles

Approximate width

GEOGRAPHICAL LOCATION:

Proximity to users

(location within a two-hour drive from major population centers recommended)

Proximity to State and local recreation facilities

(access to municipal swimming pools, tennis courts, connection to other trails, etc.)

Proximity to mass transportation

(bus lines, railroad stations, airports)

Possible use as a transportation route for those commuting to work or school in suburban or urban areas

GENERAL CONDITION:

Condition of the roadbed

presence or absence of rails and ties - condition of ballast -

quality of drainage - condition of bridges and trestles -

amount of overgrowth - extent of erosion, slides, or washouts -

presence of obstructions or hazards

CONDITION OF TITLE

Fee simple (reversionary clause?)

³⁷Citizen Advisory Committee on Environment, p. 20
A-3

Easement (is the easement limited?)

TOPOGRAPHY:

Aesthetic qualities

interesting natural features (wooded areas, exposed
geological formations)

Opportunity for nature study

indigenous flora and fauna

Parallel waterways

rivers, streams, creeks, canals - access points to waterways

POINTS OF SPECIAL INTEREST:

Historic areas

near Revolutionary, Civil War, or Indian battlefields -
railroad station houses of architectural merit - railroad
tunnels or bridges

Unique scenic areas

Picturesque communities

PROXIMITY TO SERVICE FACILITIES:

Restaurants, parking, comfort stations, overnight lodging, and/or
camping facilities accessible from the right of way. Opportunity
for development of comfort stations and/or picnic areas.

ACCESS POINTS:

Access from road crossings without encroachment on private property.

MAINTENANCE AND MANAGEMENT:

Opportunity for establishment of waste collection areas near roads wide enough to accommodate motorized vehicles for maintenance collection.

Local trail and conservation groups that may be willing to volunteer aid in maintaining the facilities.

METHODS OF GENERATING ³⁸
PUBLIC ENTHUSIASM

1. Contact other potential trail advocates (bicycle clubs, hiking organizations, equestrian groups, Boy Scouts, Girl Scouts, service clubs). The more supporters the better to bring pressure to bear in the right places.
2. Present the idea to the planning and recreation agencies in the jurisdiction where the right of way is located. If the area is incorporated, this is generally a city function; if not, the county is the proper level. Be prepared with a map and other pertinent details.
3. Send letters to influential citizens. Inform State legislators, Congressmen, and Senators. Ask for their support and assistance.
4. Write an informative article for the local newspaper highlighting the trail's potential and the resulting benefits for the local area. Ask for citizen support, and arrange for a meeting of interested trail advocates. Present an exhibit or maintain a booth at local or county fairs.
5. Hike along the right of way with a group of interested and enthusiastic citizens. Try to get an influential citizen or elected official to lead the walk-in. Arrange for publicity.
6. Try to get people who live along the route involved. Show how a trail would be beneficial to them as well as the community at large.
 - a. easy access for their own use

³⁸Citizen Advisory Committee on Environment, p. 23
A-6

- b. beneficial to local commercial establishments - grocery stores, restaurants, bicycle shops
 - c. community service aspects
- 7. If the trail could serve children on their way to school, request an opportunity to explain that at a local PTA meeting. Stress the increased safety that would result from decreased conflict with automobiles.
- 8. If the trail could serve commuters on their way to work, explain the benefits to large employers in the community. Arrange a meeting with people who might be interested in leaving their cars at home or in fringe parking areas and biking or walking to work. Stress environmental and health benefits.
- 9. Be willing to assist local park and recreation officials in presenting the proposal to the city or county.
- 10. Be prepared and willing to testify at public hearings.

APPENDIX B

TABLE 1-B
BICYCLE TRAIL ³⁹

Discriminating Suitability Characteristics	Rating			
	Excellent	Fair	Poor	Not Applicable
Length (in miles)	10 - 20	5 - 10	less than 5	
Width (in feet)	4 - 17	3.5 - 4	less than 3.5	
Land Use or Vegetative Cover (of abutting land)	Recreation Forest Residential ¹	Sensitive Ecosystems Agriculture/ Rangeland	Flood Plain Mining Commercial Industrial	
Topography (of abutting land)	Mountains Hills	Plains ²		

¹Especially true if it provides access to a recreational area. Not excellent if it is a very dense residential area.

²Unless otherwise scenic, constant flat terrain is not considered good for this type of recreation.

³⁹Task 1, p. 12

TABLE 11-R

Length⁴⁰
(in miles)

	Most Likely <u>Recreation</u>	Likely <u>Recreation</u>	Least Likely	Not a Limiting Factor <u>Recreation</u>
.25-5	Special use, hiking/jogging trail, bikeway, cross-country skiing trail	Backpacking trail, snowmobile trail, equestrian trail, bicycle trail		Minibike/trail bike trail, excursion trail Conservation/Open Space Transportation Freeway, arterial street, parkway, collector and local road/street, busway/truckway, scenic road, fixed rail Utilities Above ground bulk power transmission lines, above ground communication lines, above ground power distribution lines, above ground small power transmission lines, larger volume oil and gas pipelines, larger buried communication lines, water pipelines, sewer lines, smaller volume oil and gas pipelines, smaller buried communication lines
5-10	<u>Recreation</u> Hiking/jogging trail, snowmobile trail, equestrian trail, bikeway, cross-country skiing trail	<u>Recreation</u> Special use, backpacking trail, bicycle trail		Same as above

40 Task 1, p. 31

TABLE III-B
Possible Alternate Uses^{*41}

1. a. Conservation, b. Special use, hiking/jogging, bikeway
2. a. Conservation, b. Hiking/jogging, bikeway
3. a. Conservation
4. a. Conservation
5. a. Conservation, b. Special use, hiking/jogging, bikeway, x-country ski
6. a. Conservation, b. Hiking/jogging, bikeway, x-country ski, equestrian trail
7. a. Conservation, b. Bicycle trail, equestrian trail
8. a. Conservation, b. Bicycle trail, equestrian trail
9. a. Conservation, b. Special use, hiking/jogging, bikeway, x-country skiing trail
10. a. Conservation, b. Hiking/jogging, bikeway, x-country ski, equestrian trail
11. a. Conservation, b. Bicycle trail, equestrian trail
12. a. Conservation, b. Backpacking, bicycle trail, equestrian trail
13. Special use, hiking/jogging, bikeway, x-country ski, excursion train, conservation, scenic road
14. Hiking/jogging, bikeway, excursion train, conservation/open space, scenic road
15. Excursion train, conservation/open space, scenic road
16. Excursion train, conservation/open space, scenic road
17. Special use, hiking/jogging, bikeway, x-country ski, mini bike/trail bike, excursion train, conservation/open space, scenic road
18. Hiking/jogging, bikeway, x-country ski, mini bike/trail bike, snow-

-
- *a. Alternate uses that are most likely for all four suitability characteristics
 b. Alternate uses that are most likely for three suitability characteristics, and likely for the fourth

⁴¹Task 1, p. 41

mobiles, equestrian trail, excursion train, conservation/open space, scenic road

19. Bicycle trail, conservation/open space, scenic road
20. Bicycle trail, conservation/open space, scenic road
21. Special use, hiking/jogging, bikeway, x-country ski, mini bike/trail bike, excursion train, conservation/open space, scenic road
22. Hiking/jogging, bikeway, x-country ski, mini bike/trail bike, snowmobiles, equestrian trail, excursion train, conservation/open space, scenic road
23. Bicycle trail, mini bike/trail bike, snowmobiles, equestrian trail, excursion train, conservation/open space, scenic road
24. Bicycle trail, mini bike/trail bike, snowmobiles, equestrian trail, excursion train, conservation/open space, scenic road, backpacking
25. Special use, hiking/jogging, bikeway, collectors and local street/road, busway and truckway, scenic road, above ground communication lines, above ground small power transmission lines, larger volume oil and gas pipelines, larger buried communication lines
26. Hiking/jogging, bikeway, collectors and local street/road, busway and truckway, scenic road, mini bike/trail bike, snowmobiles, equestrian trail, above ground communication lines, above ground power distribution lines, above ground small power transmission lines, water pipelines, sewer lines, smaller volume oil and gas pipelines, smaller buried communication lines
27. Collectors and local street/road, busway and truckway, scenic roads, above ground communication lines, above ground power distribution lines, above ground small power transmission lines, water pipelines, sewer lines, smaller volume oil and gas pipelines, smaller buried communication lines.
28. Collectors and local street/road, busway and truckway, scenic road, above ground communication lines, above ground power distribution lines, above ground small power transmission lines, water pipelines, sewer lines, smaller volume oil and gas pipelines, smaller buried communication lines
29. Special use, hiking/jogging, bikeway, x-country ski, mini bike/trail bike, collectors and local street/road, busway and truckway, scenic road, above ground communication lines, above ground power distribution lines, above ground small power transmission lines, water pipelines, sewer lines, smaller volume oil and gas pipelines, small buried communication lines

APPENDIX C

TIME SAVING SOLUTIONS IN ACQUIRING⁴²
RAIL RIGHT OF WAY

Creation and continuation of active, organized and vigilant citizens' groups to promote the conversion of abandoned railroad rights of way to park/recreation purposes.

The citizens' groups then undertake several actions, including:

Cultivation and maintenance of support for the conversion of abandoned railroad rights-of-way to park/recreation purposes on the part of elected and civic leaders, governmental officials and planners, other citizens' groups and the general public;

Cultivation and maintenance of contact with media people who may help disseminate pertinent information on occasion;

Anticipatory research and on-going monitoring of railroad right-of-way abandonment prospects and problems;

Continued involvement in and monitoring of relevant state and federal laws and administrative and judicial decisions;

Continuing actions to support adequate fiscal resources for operation and maintenance of existing rights-of-way which have been developed for park/recreation purposes;

Research and monitoring of both benefits and problems associated with the use of existing rights-of-way which have been developed for park/recreation purposes; and

⁴²Task 5, p. 15

Promotion of appropriate recreation and other compatible use(s) of existing rights-of-way.

Comprehensive land use planning, including full consideration of benefits which may be obtained by the conversion of abandoned railroad rights-of-way to park/recreation purposes;

Development of integrated local, regional and state recreation trail plans and systems;

Designation (or creation, as necessary), within appropriate level(s) of government, of responsible agency for park/recreation-related functions, including planning and operational authority for rail conversion projects;

Designation of a public official/agency charged with responsibility for encouraging the development of an integrated non-motorized transportation network within and among communities;

Development and maintenance of a clearinghouse to disseminate case studies, technical and other references and names of individuals/organizations with experience in abandoned rail projects.

Enactment of Federal law providing that the use of any funds authorized by Section 809(b) of the Railroad Revitalization and Regulatory Act of 1976 to acquire or develop a right-of-way automatically creates a Federal interest in such right-of-way.

Require in Federal law that states enact appropriate remedial legislation as a condition of receiving any grant under the Railroad Revitalization and Regulatory Reform Act of 1976; such state law to extinguish reversionary interests after a fixed period of years unless re-recorded; or extinguish all reversionary interests in any railroad right-of-way that has been used for railroad purposes for a fixed period of years.

⁴³Task 5, p. 30

APPENDIX D

Pre-hearing strategy

1. Schedule all hearings at least 60 days in advance (assuming that the local agency has 90 days to make its recommendation).
2. Mail letters to local civic and community organizations at least 50 days in advance of the hearing.
3. Mail letters to all persons and businesses located or owning property adjacent to the railroad right-of-way
4. Issue news releases, arrange for radio and television announcements, and use other available popular media to publicize the impending decision and any plans being formulated.
5. Schedule all hearings for the evening, unless another time is more convenient for the particular community.
6. Arrange for railroad officials, surveyors, engineers, local agency officials, and any other appropriate experts to be available for several hours prior to the hearing to answer questions in an informal context, thus facilitating the efficacy of the later formal hearing

Formal hearing strategy

1. The presiding officer will be an official of the local agency, but he or she should be assisted by experts to explain technical problems and findings.
2. A 20 minute time limit should be established and stated at the beginning of the hearing, and care exercised so that members of one or a few interest groups do not dominate

the hearing.

3. The audience should be welcomed and given the explanation that the primary reason for the meeting is to receive information from the community.
4. Each person should be given and encouraged to fill out a registration card, and explain that the card will be used to determine those who wish to testify and to advise them of the agency's ultimate recommendation.
5. Microphones should be provided in the aisles for the convenience of persons testifying.
6. Presentations and explanations should be in nontechnical terms.
7. The local officials should explain the results of their initial studies, and they should also explain the ultimate process by which the testimony derived from the hearing will contribute to their recommendation, i.e., is a hearing examiner to weigh and examine the evidence; is there a presumption that one use will be recommended unless the evidence clearly indicates that another use would better fulfill the public interest; in short, exactly what is the composition and the duties of the decision-making body must be made clear to the hearing participants.
8. Self-addressed envelopes should be provided for persons submitting written statements. (for those who did not make oral presentation or who could not complete it within the 20 minute time limit)

Post-hearing strategy

1. Agency personnel should remain available to answer questions after the hearing.
2. Suggestions made at the hearing should be explored and the disposition of those suggestions communicated to their authors, in writing, if possible.
3. The local agency should send a letter to each hearing participant informing him or her, or their organization, of the final recommendation of the agency, and the grounds thereof.

ALTERNATIVE USES OF ABANDONED
RAILROAD RIGHT OF WAY
SUMMARY OF THE STUDIES

by

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B. S., University of Missouri at Rolla, 1972

AN ABSTRACT OF A MASTER'S REPORT

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Land is becoming a very scarce resource, therefore land for new recreational, transportation and conservation purposes is difficult to obtain. A solution to this problem may be the land made available through the abandonment of railroad lines. Rail companies are feeling the cost burden of maintaining and operating low volume rail lines. Due to this burden, rail lines are being abandoned, leaving linear parcels of land vacant for other uses.

Imaginative uses can be and already have been applied to this abandoned land. Bicycle and hike trails, ski trails, equestrian trails, snowmobile trails, excursion trains, streets and highways, and utilities are all plausible re-uses of the right of way.

Citizen interest groups and state or local agencies are encouraged to acquire these rights of way and develop them for public use. This is made apparent in an Interstate Commerce Regulation which requires rail companies desiring to abandon a rail line to hold the land for sale to only a public group for 90 to 120 days after abandonment approval.

This report, through the summarization of a number of reports and articles, describes possible alternative uses of abandoned rail right of way and suggested procedures for obtaining the abandoned right of way and implementing an alternative re-use.