

DRAFT DISTRICT CONNECTOR FEE STUDY

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INTRODUCTION

Connector fees are the amount of money collected by the owner of a mass transit station conferring the right to make a direct physical connection into that station. Historically, such fees have been most commonly levied for the right to connect to a fixed rail subway station but they are also applicable to aerial stations and other transit system stations or terminals. A Connector Fee is one possible strategy to bring about Value Capture.

Value Capture, or Benefit Sharing as it is also known, is the concept of a public agency owning and operating a transit system attempting to share in some of the increase in real property value and retail sales caused by the agency's construction of the transit system. The District has adopted a comprehensive Value Capture policy including connector fees as part of its overall Joint Development Program designed to coordinate transit construction with the development of the surrounding real estate.

The District's Joint Development policy has been established by the Adoption by the District Board of Directors of Metro Rail Project Milestone 6 LAND USE AND DEVELOPMENT POLICIES in January 1983, JOINT DEVELOPMENT POLICIES AND PROCEDURES on November 27, 1983, THE METRO RAIL FINAL ENVIRONMENTAL IMPACT STATEMENT in December 1983, and the UNION STATION TO WILSHIRE/ALVARADO ENVIRONMENTAL ASSESSMENT in August 1984. These documents have established the policy direction for a comprehensive program of Joint Development which includes the use of Connector Fees.

Within the framework of these documents the District has begun to implement a diversified Joint Development program including, at present, three major elements, the sale of air rights leases above District property, the establishment of Benefit Assessment Districts around Metro Rail Stations and Connector Fees as well as a host of minor program elements like station advertising rights sales, leasing space for automatic bank tellers etc. This study only deals with the Connector Fee element of the District's Joint Development Policy.

The current study addresses the question of what fee the District ought to charge for a direct connection to a Metro Rail Station and how that fee ought to be computed. It does not have to address the question of whether Connector Fees should be charged which has already been established in the documents referenced above.

PRELIMINARY DEFINITIONS

The discussion which follows will be made clearer by the early definition of terms which are used in a special sense in this study. Listed below are some definitions of terms used within the study.

CONNECTION

A connection is a subterranean, aerial or other functional passage for pedestrians from a parcel or parcels to Metro Rail. A connection also includes building construction on a private parcel over an existing Metro Rail Portal.

CONNECTOR FEE

The sum of money collected by the District conferring the right to a connection to a private party, corporation or government agency.

TIMING

Unless otherwise delineated by specific agreement between the District and the other party, the connection fee will be levied annually and the amount adjusted (either through periodic renegotiation or a formula built into the initial agreement) periodically based on increased benefits. For a higher total fee payment can be delayed until the connection is in operation. Payment will not be delayed beyond 5 years except to retail uses.

JUSTIFICATION

The connector fee is in response to benefits received due to improved access to the property created by a connection to Metro Rail. This access contributes to decreased parking requirements to meet employee and patrons needs and increased retail, service and business activity.

TERM OF PAYMENTS

The connector fee, though generally collected annually, will be valued at a specific amount. The District will collect a connector fee designed to help offset both the capital cost of the Metro Rail station and reoccurring station operating and maintenance costs.

Joint Development

Partly in response to meeting financial requirements of transit, the Washington Metropolitan Area Transit Authority (WMATA) instituted a Station Area Development Program. Two of the major elements of this program are joint development and system interface projects. The two program elements are defined by WMATA as follows:

- Joint Development: (1) The close physical integration of transit facilities with real estate development; (2) the disposition, by lease or by sale, of excess WMATA-owned or controlled real property interests including air rights at or near a station area which, because of their close proximity of station facilities, have significant potential for commercial, residential or related development, alone or in combination with adjoining real property interests to further the Authority's development-related goals and objectives; and

- System Interface: A project that involves the direct physical tie-in of pedestrian, vehicular or visual access to WMATA facilities from adjoining private or public development. WMATA tie-in facilities could include station mezzanines or entrances, kiss and ride, parking or bus areas.

IV. PRESENT DISTRICT CONNECTOR FEE POLICY GUIDELINES

The following discussion is reprinted from Board adopted Metro Rail Milestone 6 LANDUSE AND DEVELOPMENT POLICIES (SCR TD January 1983):

Connector Fees

Connector fees can be charged to the owners/developers of both existing and future buildings for begin physically connected to a station facility. Traditionally, these fees have been either: 1) lump sum payments to cover the capital costs of knockout panels, plaza areas, etc., or 2) "in lieu" dedication of property for station areas or easements. In the case of entrance ways to retail facilities station connectors can be constructed and later assessed on an annual basis.

The SCR TD currently has the legal authority to receive connector fees or accept "in lieu" dedication of private property or easements. The terms and conditions for these agreements should be established in advance of Metro Rail construction. In contrast to the station cost sharing agreements, it is likely that most of the connector fees will be lump sum payments. If these payments are extended, the time period should not extend beyond five years, except in the case of retail facilities.

Based on prior national experience, connector fee revenue potential of the Metro Rail system should be at least \$500,000 to \$1,000,000 per physical station connection to existing or future commercial development. The ultimate connector fee potential will depend on the precedents that are established in the initial round of private sector negotiations. The "in lieu" dedication of private property or easements should be accepted as an offsetting payment against connector fees, when the building owner is also making additional Metro Rail station cost sharing payments.

Since the SCR TD now possesses the legal authority to negotiate Metro Rail station connector fees, there are no additional institutional requirements to utilize this joint development/value capture mechanism. There are two types of administrative requirements. First, a common set of published negotiation principles must be forged. Secondly, the individual Metro Rail station connector fee contract agreements require monthly monitoring to insure timely payment.

One notable example of rapid transit station connection fees involves the Woodward & Lothrop Department Store in Washington, D.C., which paid \$500,000 for a knockout panel to provide direct connection into the basement level of their building. The store experienced an initial 53 percent increase in retail sales volume and to date, has realized a subsequent increase each time the Washington, D.C. Metro system has expanded. There are even private sector precedents for this type of fee. In Houston, for example, in order to ensure connection to the second level pedestrian bridge system, a new building owner recently paid \$1 million in connector fees to an adjacent building. This was

in addition to constructing the incremental second level bridge facility at their own expense. Dade County is currently expected to receive \$5 million in connector fees from their Downtown Component of Metrorail system. In relation to this project, downtown Miami building owners that agree to pay a station connector fee in advance of system opening will pay a lower fee than those who make agreements after the system opens.

In summary, there is a significant level of successful public sector experience in receiving station connector fees from private building owners and developers for fixed guideway transit systems. In return, participating private sector interests have generally attained a very favorable net return on their investment in this form of joint development/value capture mechanism.

V. DISTRICT METRO RAIL JOINT DEVELOPMENT REVENUE OBJECTIVE

The Board adopted District Metro Rail Joint Development revenue goal is contained in Metro Rail Milestone 6 LAND USE AND DEVELOPMENT POLICIES (SCRTD, January 1983), Page 11-14:

The revenue objective for the Metro Rail Value Capture Program shall be able to secure a sustainable annual cash flow stream at least equivalent to the capitalized 1982 costs of the Metro Rail station facilities. This is approximately equivalent to 25% of the total Metro Rail system capital costs. This level of private/public coventure participation in the Metro Rail system is consistent with recently attained results and adopted value capture programs in other major U.S. metropolitan areas. In addition, the majority of ongoing station maintenance and security costs should be recovered through a successfully targeted and equitable Metro Rail Project Value Capture Program.

VI. EXAMPLE POLICY ELEMENT COMBINATIONS DESIGNED TO ATTAIN THE DISTRICT JOINT DEVELOPMENT GOAL

(ILLUSTRATING SOME ESTIMATES OF THE POTENTIAL ROLE OF CONNECTOR FEES IN THE ATTAINMENT OF THE DISTRICT JOINT DEVELOPMENT FINANCIAL OBJECTIVE)

The following four tables reprint early estimates by a consultant of the possible role of Connector Fees in an overall District Joint Development Strategy. Note that none of the four represent the actual combination of policy elements adopted by the Board of Directors. The original text accompanying Tables 1 to 4 estimated that connector fees might yield up to 50 million dollars for the District, an amount substantially beyond that shown in any of the tables (note that Table 4 illustrates a policy alternative with no income from connector fees). Tables 1 to 4 do not state the years in which the stated revenue might be expected, making a comparison with the District revenue objective difficult. These tables do however give some useful indication of an illustrative range of alternatives as conceived at any early stage of policy development.

Table 5 illustrates a second quarter calendar year 1987 projection of the revenue potential of the Board adopted Joint Development policy elements. It also compares the projected cash flow from the identified potential with the Joint Development Capital Cost Recovery Revenue Goal. The significance of Table 5 lies not in the particular conclusion it presents but rather in the fact that it is a printout from a District spreadsheet computer program attached as an appendix to this study. The program allows District decision makers to rapidly test the economic impact of different negotiating positions on overall Revenue Objective attainment. The program is currently configured to test up to four alternatives per program run but could readily be reconfigured to handle one hundred or more simultaneous cases and/or to analyze efforts to meet the District's operating cost subsidy objective.

TABLE 1
FULL APPLICATION SCRTD JOINT DEVELOPMENT MECHANISMS
(\$ millions)

	BASELINE	FULL SYSTEM
PRIVATE/PUBLIC CONVENTURE FUNDING OBJECTIVE	\$250.00	\$500.00
FUNDING MECHANISMS		
Benefit Assessment @ 37.5c, 75c*	225.00	450.00
Connector Fees	<u>25.00</u>	<u>50.00</u>
Total	\$250.00	\$500.00

FEATURES OF FUNDING SCENARIO

- Only utilizes mechanisms now under SCRTD jurisdiction
- Primary incidence of burden on commercial/retail tenants directly served by Metro Rail and developers of property adjacent to Metro Rail stations.
- Minimum inter-jurisdictional negotiations
- Existing and new development projects financially participate

DISADVANTAGES OF FUNDING SCENARIO

- Does not provide full support for station area density bonus program
- Pre-commits full application of benefit assessment authority
- Minimum capture of land value appreciation attributable to Metro Rail.

* Measured on a per net leasable SF basis.

SOURCE: Robert J. Harmon & Associates, Inc.

TABLE 2
SCRTD JOINT DEVELOPMENT MECHANISMS PLUS TAX INCREMENT
(\$ million)

	BASELINE	FULL SYSTEM
PRIVATE/PUBLIC COVENTURE FUNDING OBJECTIVE	\$250.00	\$500.00
FUNDING MECHANISMS		
Benefit Assessment @ 25c, 58c*	150.00	350.00
Tax Increment	75.00	100.00**
Connector Fees	<u>25.00</u>	<u>50.00</u>
Total	\$250.00	\$500.00

FEATURES OF FUNDING SCENARIO

- Requiring no additional state enabling legislation
- Primary incidence of burden on commercial/retail tenants directly served by Metro Rail and developers of property adjacent to Metro Rail stations
- Existing and new development projects financially participate
- Lessens assessment burden on commercial/retail tenants

DISADVANTAGES OF FUNDING SCENARIO

- Does not provide full support for station area density bonus program
- Pre-commits almost the entire application of benefit assessment authority
- Moderate capture of land value appreciation attributable to Metro Rail
- Requires additional inter-jurisdictional negotiation

* Measured on a per net leasable SF basis.

** Assumes at least one and possibly two additional stations are included in urban renewal districts.

SOURCE: Robert J. Harmon & Associates, Inc.

TABLE 3
FULL RELIANCE ON FUTURE DEVELOPMENT REVENUES
(\$ millions)

	BASELINE	FULL SYSTEM
PRIVATE/PUBLIC COVENTURE FUNDING OBJECTIVE	\$250.00	\$500.00
FUNDING MECHANISMS		
Tax Increment	75.00	100.00*
Transfer Development Rights	150.00	350.00
Connector Fees	<u>25.00</u>	<u>50.00</u>
Total	\$250.00	\$500.00

FEATURES OF FUNDING SCENARIO

- Maximum capture of land value appreciation attributable to Metro Rail without a capital gains tax
- Provides an ultimately sufficient but unpredictable cash flow, primarily after system opening
- Reserve SCRTD's benefit assessment authority

DISADVANTAGES OF FUNDING SCENARIO

- Requires maximum inter-jurisdictional negotiation and zoning changes
- Provides an ultimately sufficient but unpredictable cash flow, primarily after system opening
- Requires development of new revenue anticipation funding instrument

* Assumes that at least one or two additional station areas are included in renewal districts.

SOURCE: Robert J. Harmon & Associates, Inc.

TABLE 4
BALANCED USE OF ASSESSMENT AND
TRANSFER OF DEVELOPMENT RIGHTS MECHANISMS
(\$ millions)

	BASELINE	FULL SYSTEM
PRIVATE/PUBLIC COVENTURE FUNDING OBJECTIVE	\$250.00	\$500.00
FUNDING MECHANISM		
Benefit Assessment @ 21c, 42c*	125.00	250.00
Transfer of Development Rights	<u>125.00</u>	<u>250.00</u>
Total	\$250.00	\$500.00

FEATURES OF FUNDING SCENARIO

- Provides adequate short-term funding support without use of tax increment funds or connector fees
- Primary incidence of burden on commercial/retail tenants directly served by Metro Rail and developers of property adjacent to Metro Rail stations desiring incremental density allowances
- Maximum capture of land value appreciation attributable to Metro Rail
- Provides maximum support for station area density program

DISADVANTAGES OF FUNDING SCENARIO

- Requires maximum inter-jurisdictional negotiations and zoning changes
- Effectively pre-commits application of SCRTD benefit assessment authority

* Measured on a per net leasable SF basis.

SOURCE: Robert J. Harmon & Associates, Inc.

TABLE 5

**PROJECTED VALUE CAPTURE PROGRAM
REVENUE SUMMARY TABLE**

THE PROJECTED MAXIMUM VALUE CAPTURE PROCEEDS TO OFFSET CAPITAL COSTS FOR THE DECEMBER 1983 LPA ALIGNMENT, FOUR CASES.

1. Estimate of the present value of 50 year air leases on District owned land at Metro Rail stations based on FARs allowed in Draft City and CRA land use plans.

Case Number	A	B	C	D
Time value of money	7%	4%	7%	4%
S.F. of allowed Development under plans (in millions)	5.75	5.75	9.25 (Most District requests for Plan Revisions favorably resolved)	9.25
Payment Per S.F./Year to District	3	3	3	3
Annual Est. District Income (in millions of \$)	17.25	17.25	27.25	27.75
Estimated Net Present Value Multiplier (50 yr. lease, 7 yr. Const. Period)	8.41	15.48	8.41	15.48
Total Present Value of Air Leases (in millions of \$)	145.0725	267.03	233.3775	429.57
2. Present value of Benefit Assessment (in millions of \$)	170.3	170.3	170.3	170.3
3. Estimated present value of KOP sales (in millions of \$)	20	20	20	20
4. Estimated present value of the total value capture program	335.3725	457.33	423.6775	619.87
5. Joint Development Capital Recovery goal in present dollars (in millions of 1983 \$)	617	617	617	617
6. % of Joint Dev. attained	54.35534	74.12155	68.66734	1.004651

Table 5 (contd.)

Notes on the projected value capture summary table:

This table considers four cases, A, B, C & D. In the first two cases, the allowable development is as specified in the Applicable City and CRA Draft Plans and the time value of money is set at 7% and 4% respectively. (The time values chosen arbitrarily reflect the early and late Metro Rail estimates of project cost inflation rates). The later two cases, C & D, examine the impact of favorable City/CRA action on suggested plan revisions using the same assumptions about the time value of money as in Cases A and B.

This table shows that without City/CRA plan revisions, the District would not achieve more than 75% of its capital recovery goal from this program even assuming a favorable 4% time value of money.

This table does not consider station operating subsidy requirements which are additional. It is primarily based upon value capture experience at WMATA (the most comparable case).

Important Note: Inclusion of station operating subsidy requirements would substantially reduce the objective recovery % reported here.

This table only considers the District's capital cost recovery objective. It can be modified to incorporate operating subsidy needs.

VII. ALTERNATIVE METHODS OF ESTIMATING CONNECTOR FEES

As part of this study a range of alternative means of estimating Connector Fees was considered. The literature on the subject was reviewed and interviews were conducted with representatives of agencies which faced the same question or had adopted a promising solution to the Connector Fee question. The City of Los Angeles Planning Department conducted a SURVEY OF JOINT DEVELOPMENT AND VALUE CAPTURE ACTIVITY IN SELECTED METROPOLITAN AREAS (October, 1983) which included a summary of adopted value capture techniques, reprinted on the following page, which showed that at that time only Washington D.C's WMATA had an active subway connector fee program analogous to that being set up for the District.

Gladstone Associates also conducted a survey of Joint Development focussing specifically on connection policy as part of their study SYSTEM INTERFACE: ECONOMIC IMPACT AND IMPLICATIONS OF DIRECT ACCESS TO METRO (Gladstone Associates, May 1983) prepared under contract to WMATA. The results are reproduced following the City of Los Angeles Survey.

Although a follow-up telephone survey conducted for this study indicated some progress has occurred (BART has developed an in-house Joint Development Staff and selected a developer for a Joint Development Project at the Pleasant Hill Station, for example) the surveys reprinted here still give an accurate indication of the types of approaches being used.

Techniques not in use elsewhere were also considered. Amongst those considered and not recommended were:

1. Direct Appraisal (requiring the use of highly trained appraisers who must be completely respected and accepted by all parties);
2. A Formula Approach (frequently used in the establishment of special assessment districts, this technique may not work well for Connector Fees in the face of the need to incorporate numerous case-specific features in agreements);
3. A Fixed Uniform Fee (either too high in low value cases or too low in the Central Business District);
4. Econometric Analysis/Gladstone Associates described this technique as "a complex, highly statistical approach requiring time series and cross-sectional data. With such data regression analysis and similar techniques can be employed to correlate development characteristics and impact on property value." (Gladstone Associates, System Interface : Economic Impact and Implications of Direct Access to Metro, page 7-2). This approach was deemed to unwieldy for District employment in real life negotiations.

VIII. RECOMMENDED METHOD OF CONNECTOR FEE ESTIMATION


The recommended Connector Fee Methodology is CASE BY CASE NEGOTIATION BASED ON FINANCIAL ANALYSIS. In each case the District would prepare a Financial Pro-Forma showing the net annual increase in value caused to a project by connection to Metro Rail. An example of such a Financial Pro-Forma prepared by WMATA by a consultant is shown on the following page. From this Single Year Financial Pro-Forma representing an average year of project operation after leasing was accomplished, the District would calculate a present value of the net annual increase in value after expenses. The District would negotiate to receive one half the increase in value.

SELECTION

This method of Connector Fee calculation was chosen for recommendation for the following reasons:

1. Its flexibility being adaptable to any size of project under any market condition.
2. Its fairness, it provides a framework under which the District will endeavor to negotiate a similar percentage of net profit from all connection projects large and small.
3. Prior widespread experience with this technique in the private sector. FINANCIAL PRO-FORMAS are virtually universally utilized by private sector banks and other financial institutions in evaluating business and real estate loans.
4. Its selection by other major public agencies making similar financial decisions. WMATA adopted precisely this technique, and the CRA uses a broadly similar form of FINANCIAL ANALYSIS in negotiating public benefits to be received from developers in return for Floor Area Ratio (FAR) development bonuses.

The description by the CRA of this FINANCIAL PRO-FORMA technique (used by the CRA and recommended for District use by this study) is worth quoting:

- QUOTE
MISSING
- 
5. The District will probably be negotiating with developers concerning projects located within CRA Redevelopment Project Areas. The choice of the same general technique as that used by the CRA will prevent developers from having to master two widely differing public agency negotiation techniques.

6. Choice of the same negotiating method will also facilitate joint CRA/District negotiations with developers should these occur at some point.
7. Familiarity. Financial Pro-Formas are well known and any new staff with real estate or financial experience is likely to understand them as will consultants and many public agency staff members. This would certainly not be the case with an econometric approach, for example.

Although the compatibility of the chosen technique with use of the District's new Joint Development Cash Flow Model prepared by Schimpeler Corradino Associates under contract to the District was not a factor in the selection of the recommended Connector Fee calculation method it does mean that the District, if it adopts the recommended method, will be able to use the Model to prepare sophisticated FINANCIAL PRO-FORMAS to estimate project net present values for negotiation purposes. If another less flexible technique were adopted, (such as a formula, fixed fee or econometric analysis) this would not be the case.

IX. RECOMMENDED PROCEDURE

The recommended procedure would consist of the following steps in a prototypical connector fee negotiation:

1. The developer submits basic project data (size, location, financial data, project schedule and a set of blueprints for the proposed project plus a letter requesting to initiate a connection negotiation.
2. The District utilizes the Joint Development Cash Flow Model to develop a project FINANCIAL PRO-FORMA WITHOUT THE CONNECTION.
3. The District utilizes the Joint Development Cash Flow Model to develop a project FINANCIAL PRO-FORMA WITH THE CONNECTION. It is absolutely vital to the success of the method that this second FINANCIAL PRO-FORMA with the connection take into account all of the financial advantages accruing to the purchaser of the connection. At Alvarado, for example, under the proposed Station Area Development Plan a developer can receive up to one FAR in bonus for a direct connection to Metro Rail, and a reduced parking requirement. It is vital that the FINANCIAL ANALYSIS take account of these Plan provided advantages and not simply be based on the increases in rent which will be possible with a direct connection. Even increases in rent should be calculated in a disaggregated manner, floor by floor taking into account increases due to shifts from office and parking to higher income commercial space as well as simple increases within a rental type. For this reason the preparer of the WITH CONNECTION FINANCIAL ANALYSIS must be intimately familiar with the applicable City and CRA Land Use Plans governing the project as well as any special advantages gained by the developer by negotiation with public agencies.

- 3A. If the proposed connection is to an existing structure and new construction other than a connection is not envisioned a full run of the Joint Development Cash Flow Model may not be required since relatively modest construction costs might be involved and calculations might center on increased rental rates.
4. The District should calculate the number of possible connections at the station and attempt to ensure that the position to be derived in step 5 following will include a reasonable contribution to station operating costs (see the Station Operating and Maintenance Costs attached as an appendix to this report). Developers desiring to buy a unique connection to Metro Rail, which will not be shared or only at their choice should have their cost derived in step 5 below adjusted upwards.
5. One half the difference between steps 2 and 3 is the recommended District opening position. This position attempts to capture the proportion of the total increase in value caused by Metro Rail as opposed to that proportion necessary to motivate the developer to undertake the risk of development. As quoted above the CRA does not take a fixed opening position and such a course could be adopted as a modification of this recommended procedure if desired.
6. The above six steps have been predicated on an all monetary transaction. If the projected deal includes payments in-kind by the developer (granting an easement, building a portal, assuming some operating electrical or security costs, provision of an offstreet bus loading zone, providing parking for Metro Rail patrons etc.) then the District's initial cash negotiating position would be adjusted according to the District's estimate of the value of the proposed developer in-kind contribution.
7. Optional - The District can inform the developer that its negotiating position will be based on the difference in value caused by the Connection based on Financial Analysis and can even provide the developer with a form to fill out to perform their own comparable analysis. While this approach may seem to give away some advantage, it increases the likelihood that the opening negotiating positions will be within the same order of magnitude.
8. Negotiations - Based on the developer's opening position or an exchange of Financial Analyses if recommended optional step 7, is followed revised analyses can be performed. Negotiating positions are discussed in a following section. However, the technical aspects of position modification can be handled variously. Negotiations can be recessed for several days during which additional Joint Development Cash Flow Model runs can be made. Any one of numerous brands of pocket financial calculators can be preprogrammed to analyze the impact of position revisions or the negotiators can even proceed intuitively.
9. Agreement on price including in-kind payments.
10. Agreement on payment terms. A brief separate discussion of types of payment follows.

X. RULES AND POLICIES FOR NEGOTIATIONS

The following official Board adopted negotiation policies are reprinted from the SCRTD Joint Development Policies and Procedures, November 27, 1983. They are followed by a discussion of possible Connector Fee negotiating positions reprinted from SYSTEM INTERFACE: ECONOMIC IMPACT AND IMPLICATIONS OF DIRECT ACCESS TO METRO (Gladstone Associates, May 1982).

4.2 Policies for Negotiations

The following policies will govern the negotiation with property owners and/or developers.

- .1 Connector fees will be required from any property owner/developer of any building who requests a physical link to a Metro Rail station. The cost of such connectors including additional design costs, and maintenance costs will be borne by the property owner/developer and will be negotiated.
- .2 Property owners/developers who propose to be directly connected to stations where there is no benefit assessment district shall be required to pay fees substantially equivalent to benefit assessment as set for other stations. Fees which are collected in lieu of such benefit assessments shall be in addition to all other fees, contributions or considerations.
- .3 When construction of adjacent Joint Development projects precede or parallel construction of Metro Rail, additional offsets to Metro Rail costs through station cost sharing will be negotiated.
- .4 Land or easements necessary for the construction and operation of the Metro Rail System will be acquired by negotiation, when feasible, with the private land owners. The District will also seek to obtain by negotiation, air or subsurface rights or both after construction has been completed.
- .5 Connector fees or capital offset fees may be in the form of either lump sum payments, participation in the revenue created by the development, "in lieu" dedication payments of private property and/or easements, or a combination of these.
- .6 Joint agreements between the District and developers using District land and/or property rights will be negotiated to create a long-term source of revenue for the operation and maintenance of the system.

NEGOTIATING STRATEGIES

From the outset of this assignment we began asking the question: What is the appropriate position for WMATA to advance in system interface negotiations? After lengthy deliberations over this question, it seems most useful to address it on two levels. The first view is the "public policy perspective," which concerns the broader nature of WMATA's appropriate role in these projects. This report is primarily concerned with the first level. The second level could be termed the "pragmatic perspective" which should set out some course of practical action for WMATA to follow in its pending system interface negotiations.

The Public Policy Perspective

As part of its negotiating strategy, WMATA should develop a set of guidelines that establish unequivocally its commitment to system interface and to new ways of paying for these improvements, in particular "benefit sharing" approaches. Another purpose for developing public policy guidelines would be to provide clear directives to public officials, private developers and to the general public. In brief, the rationale behind this policy would include the following:

- System interface represents a unique bundle of rights that can generate substantial benefits. As such it represents a unique and marketable product
- Although WMATA may not bear the incremental costs of system interface projects, WMATA is entitled a share of benefits generated by same. These benefits arise not only from the individual system interface project investment, but from accessibility to Metro stations and Metrorail as a whole.
- It is equitable and in the public interest to have the beneficiaries of the public's investment in transit pay in accordance with their benefits. As a corollary, fair return on investment which rewards developers for risks should be offered. However, subsidization of developers through low-cost system interface access may not be in the public interest.
- Although this policy represents a departure from certain past actions, this represents a fair and appropriate response to an economic opportunity now available to WMATA. WMATA recognizes that the potential economic benefits generated by system interface projects continue to increase as use of Metrorail increases and new stations are added to the system.

Importantly, a public policy rationale in this area is no guarantee of practical success in negotiating system interface access agreements.

The Pragmatic Perspective

At this level, we are primarily concerned with two main questions:

- (1) How much should WMATA try to extract for system interface projects? and
- (2) What techniques for financing system interface would work best for WMATA? The successful negotiation of system interface agreements is largely contingent on the groundwork laid by parties to the agreement before negotiations begin. Realistic expectations on the part of both WMATA and private developers regarding likely financial results of system interface and the responsibilities of each other are crucial to a workable agreement. Importantly, WMATA will be advantaged by entering into negotiations with case study assessments of potential system interface impacts. In this connection it should be noted that system interface is a relatively new subject, and experience with negotiating same is by definition limited.

Practical Requirements for Negotiations

Basically, the process of preparing for negotiations begins by assessing one's own goals and "sizing up" the other partner. Then, the next steps in laying a firm basis for negotiations are the development of a financial analysis and the establishment of negotiating positions. Accordingly, we begin with WMATA objectives and the nature of system interface, which in turn shape our suggestions for a negotiating strategy.

WMATA's Objectives - As discussed in the other volume of this study, system interface could potentially generate substantial revenues to WMATA¹. Given this finding, WMATA should agree to direct connections only when the granting of system interface rights: (1) contributes to the orderly development and operation of transit, and (2) provides a significant net benefit (a financial payment or services in lieu of payment) to the Authority or its patrons.

System interface considerations should supplement, not supercede, factors currently taken into account by WMATA in station location decisions and joint development. Furthermore, where an acceptable level of transit service is established, system interface should cease to be regarded as a public good, to be paid for by general taxes. Rather, system interface should be regarded as a consumer good like utility services to benefitting property owners, to be paid for primarily by service charges on a one-time or recurring basis.

Another objective of system interface is to generate certain benefits available to WMATA, as cited in Chapter II of this volume. By improving the level amenity for WMATA patrons and supporting intense development in transit corridors, system interface can help maintain ridership. The potentials for generating new ridership appear modest, however, since system interface affects mainly travel patterns rather than total trips. However, in cases where such benefits to WMATA can be reasonably demonstrated (either by WMATA or a participating property owner) credit should be given to them. In practice, however, the justification of system interface improvements (or investments) for WMATA and the basis for a negotiating position must stem from other sources.

Financial Analysis of Property Value Impacts - As emphasized in Volume II and illustrated by case studies here, the impact of system interface property values varies widely with station location and is in fact a product of many factors acting together with transit. Therefore, some isolation of system interface impact is essential for WMATA to provide one rationale and perhaps legal support for a policy on direct subway access. This, of course, was a primary objective of the case study analyses.

It will probably be difficult (or at least controversial) in practice to "prove" the impact of system interface separate from other effects on property values. However, at best WMATA must get developers to accept the notion of a unique system interface impact. Therefore, financing techniques used by WMATA would probably have to rely more on "voluntary compliance" by developers than mandatory controls that require strong legal proof. Otherwise stated, WMATA's bargaining strength with developers is limited by the difficulty of sorting out system interface impacts.

Negotiating Strategy - Set out below are several key factors. First, going into a negotiation, WMATA should have assessed the recapture potential of a system interface project (which concerns "How much?") and the potential financing techniques to be sought by WMATA in each case (i.e. method of payment).

Second, in assessing the recapture potential of system interface, it will rarely prove possible to recoup for public use 100 percent of the property value impacts from system interface. As proxies for the economic impact of system interface, the differences in with and without system interface residual values are an appropriate proxy for a property owner's maximum willingness to pay for system interface. As such, these residual values represent the maximum conceivable total that WMATA could extract from a property owner.

In actuality, a property owner or developer would be willing to pay a portion of this maximum value for system interface. Set out below are a number of modifying factors during this assertion. A list of factors includes:

- o A limited, one-buyer market for system interface projects. Since there is typically one possible buyer, there is limited competition to force prices up;

- o Need for WMATA to provide reasonable incentives for profit and reward for risk. A portion of land value windfalls must be left to the developers.
- o Recognition and a "crediting" of benefits to WMATA; and
- o Constraints on the property owner to fully capture value from system interface (e.g. staggered, long-term leases in an existing development project).

In our judgment, WMATA should seek a 50 percent share of the system interface net benefits (as estimated by differences in residual values in the case studies). By necessity, this is a pragmatic recommendation and should allow for flexibility in practice.

Third, while in principle there are a number of financing techniques to pay for system interface, in practice the alternatives for WMATA are limited to negotiated agreements with affected property owners/developers.

Available financing techniques include:

- Lump sum basis, either via
 1. One-time payments, or
 2. Deferred payments (installments) based on capitalized value.
- License or lease-type payments, either on an:
 - o Initial term (e.g. 5 to 10 years) with
 1. base payments related to capitalized value
 2. additional payments tied to project revenue related to system interface, and
 3. a renewal period proviso; or
 - o Long term (e.g. 25 years) with
 1. minimum payment, and
 2. average based on project revenues.
- Combination of lump sum and lease.
- Other considerations such as services in lieu of payments or used to offset (reduce) payments due in above methods.

Fourth, in negotiating a Transit Access Agreement several outcomes are possible but only a few will be mutually acceptable. Before formal negotiations begin it is important for WMATA to separately evaluate the relative importance of every provision of concern and develop preferred "going in" positions as well as acceptable "fall back" positions on those provisions where compromise is possible, given reciprocal concessions from the other party.

Each system interface case is different, and defining WMATA's position on these provisions should be the culmination of assessing the opposite party's relative bargaining strength and ability to perform his part of the bargain. The going in and fall back positions developed by WMATA to deal with one system interface project, for example, may not be appropriate for another situation because the relative bargaining strengths of the parties will differ.

The exhibit below lists representative going in and fall back positions for WMATA entering a typical negotiation for a Transit Access Agreement. Some provisions are perceived as more negotiable than others and WMATA's willingness to yield on a point will reflect the parties' relative bargaining strengths, the opposite party's flexibility and other points and so forth.

WMATA'S NEGOTIATING STRATEGY
FOR LIKELY PROVISIONS OF CONCERN
IN TYPICAL TRANSIT ACCESS AGREEMENT

Going In Position

Fall Back Position and Comment

-- Type of Agreement

o Lease

o Service Charge (Note: May need to be thought through from a legal standpoint, but lease would appear to offer landlord (WMATA) more control than a service agreement).

-- Consideration to WMATA for system interface

o One time payment for initial term (see below)

o Recurring lease payment (or charge).

o 50% of system interface differential, based upon project's financial projections.

o Same, except subject to stand aside for debt service.

-- Term of Agreement

o Initial term 5 years

o Initial term 10 years

o Renewal term at option of WMATA

o Two 5-year renewal terms at option of owner

-- Termination of WMATA

o If transit access payments are inadequate for any year years

o If transit access payments are inadequate for any two consecutive

Note:

Above could be developed if other provisions of concern are identified. Also, as WMATA views become apparent in a given negotiation, some negotiating points may become "especially flexible position" and others "especially firm position."

XI. TYPES OF PAYMENT

1. Before Metro Rail is adopted the fee maybe lower than after Metro Rail commences to reflect the increased risk assumed by a developer negotiating prior to system service.
2. The fee can be a lump sum.
3. A Connector Fee may be offset by dedication of private property or easement when the private sector is also participating in a station cost sharing payment.
4. The fee may be charged annually.
5. For entrances to retail facilities connection fees may be assessed annually after the connection opens.
6. Fees are charged to existing and future uses for being physically or functionally connected to a station directly.
7. The District could elect to accept a percentage of incremental rental increases due to the Connection under specified conditions assuring good faith.

Administrative Requirements

1. Negotiating principles will be published.
2. Concluded contracts will be regularly monitored for compliance.

XII. INFORMATION REQUIREMENTS FOR SUCCESSFUL NEGOTIATIONS

In order to conduct successful Connector Fee negotiations the District will need to continue to acquire certain kinds of land use, real estate and construction data not previously essential to District operation. Examples include rental rates by building for all Los Angeles County Buildings, rental rates for specific types of uses (office, commercial, food service, medical etc.) and construction costs. Most of this data is now contained in the District Library through subscriptions to quarterly and annual trade journals. But it is going to be of unprecedented importance to maintain timely data up-to-date.

XIII. EXAMPLE OF HYPOTHETICAL OPENING NEGOTIATING POSITION USING RECOMMENDED METHODOLOGY

XIV. SELECTED BIBLIOGRAPHY

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Search Topic: Joint Development & Transit
Prepared for: Joint Development Section
Date : May 22, 1984
Files Search: 6, 63, 150

File 6:NTIS

9/7/1

1014781 PB83-264515

Transit Terminal Facilities and Urban Rail Planning
Mather, Joseph J.; Lutin, Jerome M.; Markowicz, Bernard P.; Heimann,
David I.; Miller, David R.

Transportation Research Board, Washington, DC.

Corp. Source Codes: 044780000

Report No.: TRB/TRR-908; ISBN-0-309-03550-3

1983 66p

Library of Congress catalog card No. 83-19365. Also pub. in
ISSN-036-1981.

Paper copy available from Transportation Research Board, 2101
Constitution Ave., NW, Washington, DC 20418

Languages: English Document Type: Journal article

NTIS Prices: PC A04/MF A01 Journal Announcement: GRAI8326

Country of Publication: United States

Contents: Guidelines and standards for the planning, design and operation
of bus park-and-ride facilities; Estimating the effects of residential
joint-development policies on rail transit ridership; Analysis of fare-
collection-system dependability; Bus terminal planning and operation at the
1982 World's Fair; Assessment of low-cost elevators for near-term
application in transit stations; Park-and-ride at shopping centers--a
qualification of model-shift and economic impacts; Potential and cost of
commuter or regional rail service; Assessment of rail automatic fare-
collection equipment performance at two European transit properties; Effect
of crowding on light rail passenger boarding times; Train crew reduction
for increased productivity of rail transit.

9/7/3

856587 PB81-217028

Planning and Development of Public Transportation Terminals
(Final rept.)

Hoel, Lester A.; Richards, Larry G.

Virginia Univ., Charlottesville. Dept. of Civil Engineering

Corp. Source Codes: 015207015

Sponsor: Department of Transportation, Washington, DC. Office of Univ.
Research.

Report No: UVA529036/CE81/107; DOT/RSPAC/DPB-50-81/19

Jan. 81 289p

Languages: English

NTIS Prices: PC A13/MF A01 Journal Announcement: GRAI8121

Country of Publication: United States

Contract No.: DOT-OS-50233

SCRTD Information Center/Library
Search Topic: Joint Development & Transit
Prepared for: Joint Development Section
Date: May 22, 1984
Files Searched: 6, 63, 150

The report describes the proceedings of a National Conference on the Planning and Development of Public Transportation Terminals held in Silver Spring, Maryland on September 21-24, 1980. The conference included both formal papers presented to plenary sessions and small group workshops focused on particular design issues of current importance. Formal papers covered all aspects of transit station planning and a sign, with special attention to passengers, access and traffic, and operations and maintenance. Recent experience in transit station design and renovation were reviewed, including intermodal terminals, from both domestic and international perspectives. Particular systems described in detail included international perspectives. Particular systems described in detail included WMATA, BART, MARTA and New York. An overview of the Methodology for Transit Station Design was also presented. Workshops dealt with nine topic areas: Transit Station Design Methodology; Intermodal Terminal Planning, Design and Operations; Passenger Processing and Information Systems; Station Access and Traffic; Station Maintenance and Operations; Transit Station Security; Design for the Handicapped; Joint Development, Land Use and Station Impacts; Computer Methods and Transit Station Simulation.

9/7/4

856117 PB81-209801

A Plan for Downtown Transit and Joint Development
(Transit and economic development linkage rept.)

Bukhardt, Ross

Greater Bridgeport Transit District, CT.

Corp. Source Codes: 073396000

Sponsor: Urban Mass Transportation Administration, Washington, DC.

Report No: UMTA-CT-09-7001-79-1

Dec 80 59p

Prepared in cooperation with Cambridge Systematics, Inc., MA.,
Moore-Heder Urban Designers, and Economics Research Associates

Languages: English

NTIS Prices: PC A04/MF A01 Journal Announcement: GRAI8121

Country of Publication: United States

Contract No: UMTA-CT-09-7001

The purpose of this report is to structure transit improvements that complement and reinforce a revitalization strategy for downtown Bridgeport. The specific objectives of the report were to: (1) explore a range of transit service improvements for downtown Bridgeport; and (2) maximize the impact of these service improvements by coordinating transit with the emerging economic development objectives for the downtown. The report illustrates that transit systems can play a major role in CBD revitalization when a combination of transit service improvements, streets, and pedestrian improvements are coordinated.

SCRTD Information Center/Library
Search Topic: Joint Development & Transit
Prepared for: Joint Development Section
Date: May 22, 1984
Files Searched: 6, 63, 150

The report describes the proceedings of a National Conference on the Planning and Development of Public Transportation Terminals held in Silver Spring, Maryland on September 21-24, 1980. The conference included both formal papers presented to plenary sessions and small group workshops focused on particular design issues of current importance. Formal papers covered all aspects of transit station planning and a sign, with special attention to passengers, access and traffic, and operations and maintenance. Recent experience in transit station design and renovation were reviewed, including intermodal terminals, from both domestic and international perspectives. Particular systems described in detail included international perspectives. Particular systems described in detail included WMATA, BART, MARTA and New York. An overview of the Methodology for Transit Station Design was also presented. Workshops dealt with nine topic areas: Transit Station Design Methodology; Intermodal Terminal Planning, Design and Operations; Passenger Processing and Information Systems; Station Access and Traffic; Station Maintenance and Operations; Transit Station Security; Design for the Handicapped; Joint Development, Land Use and Station Impacts; Computer Methods and Transit Station Simulation.

9/7/4

856117 PB81-209801

A Plan for Downtown Transit and Joint Development
(Transit and economic development linkage rept.)

Bukhardt, Ross

Greater Bridgeport Transit District, CT.

Corp. Source Codes: 073396000

Sponsor: Urban Mass Transportation Administration, Washington, DC.

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Dec 80 59p

Prepared in cooperation with Cambridge Systematics, Inc., MA.,
Moore-Heder Urban Designers, and Economics Research Associates

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NTIS Prices: PC A04/MF A01 Journal Announcement: GRAI8121

Country of Publication: United States

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Prepared for: Joint Development Section
Date : May 22, 1984
Files Searched: 6,63, 150

9/7/8

736405 PB-300 414/0

An Analysis of Joint Development Projects

(Final rept. 1 June 78-31 May 79)

Paaswell, R.E.; Berechman, J.; Parker-Simon, K.; McNally, M.;
Cirrincione, M.

State Univ. of New York at Buffalo Dept. of Civil Engineering.

Corp. Source Codes: 045177038

Sponsor: Urban Mass Transportation Administration, Washington, DC.

Report No.: UMTA-NY-11-0020-79-1

May 79 140P

Languages : English

NTIS Prices: PC A07/MF/A01 Journal Announcement: GRAI7926

Contract No.: UMTA-NY-11-0020

This report presents the results of the first year of study into a number of characteristics of an urban area in which joint development has taken place. The study was carried out in the Buffalo, New York SMSA. Construction has recently begun on a six-mile Light Rail Rapid Transit System (LRRT). This study focuses on Central Business District and Regional development concerns with specific attention to the LRRT. Results of a number of tasks accomplished during the first year of analysis are discussed and brief summaries of discussions with local planners or policy makers are presented.

9/7/9

716174 PB-295 347/9

Feasibility Analysis of Joint Development for Transit Stations in the Detroit Area

(Final rept. Jul 77-Oct 78)

Khasnabis, Snehamay; Opiela, Kenneth S.; Arbogast, Ronald G. Wayne State Univ., Detroit, MI. Dept. of Civil Engineering.

Sponsor: Urban Mass Transportation Administration, Washington, DC.

Report No.: UMTA-MI-11-0003-79-1

Nov 78 266p

Languages: English

NTIS Prices: PC A12/MG A01 Journal Announcement: GRAI7918

Contract No.: UMTA-MI-11-0003

The concept of Joint Development (JD) embodies various forms of public/private sector coordination relative to physical, fiscal and institutional aspects of transit station development. The objective of this study is to analyze the feasibility of joint development in conjunction with transit station area planning in the Detroit area where the planning of a high-level transit system is underway. The report is organized in three parts. In the first part, the basic concepts of JD are initially presented with a brief state-of-the-art review and a discussion of opportunities, incentives, and constraints. In the second part, the feasibility of joint

SCRTD Information Center/Library
Search Topic: Joint Development & Transit
Prepared for: Joint Development Section
Date: May 22, 1984
Files Searched 6, 63, 150

development in the Detroit area is examined relative to the legal, institutional, and fiscal framework. The development and application of an analytic technique for prioritizing station locations based upon development potential is also presented in Part two. The last part of the report provides the conclusions and recommendations, along with a series of guidelines that may be applied for planning joint development studies in transit stations in other urban areas.

4/5/2

748951 PB80-125537

Innovative Transit Financing

(Final rept.)

Paulhus, N.; Yu, J.; Witherspoon, R.; Arnold, H.

Department of Transportation, Washington, DC. Office of the Secretary.

Corp. Source Codes: 026415060

Report No.: DOT-I-79-10

Feb. 79 69p

Languages: English

NTIS Prices:PC A04/MF A01 Journal Announcement: GRAI8006

Country of Publication: United States

The report describes a number of methods of exploiting development opportunities around transit stations. Twelve techniques are discussed in the report: incentive zoning, special district zoning, dedications and exactions, official maps, dedicated property taxes, tax increment financing, special benefit assessments, service charges, selling or leasing air rights, leasing or selling supplemental property, developing air rights/supplemental property, and participation in property development. The report evaluates these specific financing techniques in terms of revenue yield, institutional feasibility and promise for application to the transit field. The analysis concluded that a combination of these innovative financing techniques could defray from five to fifteen percent of the capital costs associated with fixed guideway facilities. The most promising techniques typically involve joint development, the concept of value capture, and private investment on land around transit facilities.

File 63:TRIS - 70-84/May

3/7/1

377148 DA

A REVIEW OF THE GEOTECHNICAL ASPECTS OF THE CONSTRUCTION OF THE FIRST PHASE OF THE MASS TRANSIT RAILWAY, HONG KONG

Linney, LF

Geological Society

Hatfield Polytechnic, England

Quarterly Journal of Engineering Geology Vol. 16 No. 2 1983 pp 87-102 9

Fig. 1 Tab. 1 Phot. 7 Ref.

SCRTD Information Center/Library
Search Topic: Joint Development & Transit
Prepared for: Joint Development Section
Date: May 22, 1984
Files Searched 6, 63, 150

AVAILABLE FROM: Engineering Societies Library 345 East 47th Street New York,
New York 10017.

SUBFILE; TRRL; IRRD; UMRIS

Work on the first phase of the Hong Kong Mass Transit Railway (known as the modified initial system) started in November 1975 and the line was opened to the public in February 1980. It is 15.6km in length and runs from the central district of Hong Kong island to Kwun Tong in mainland Kowloon. The system includes 12 underground stations, three overhead stations and a maintenance and repair depot covering an area of 16.5 hectares. At the depot site a medium density high rise residential development is being constructed above podium level, providing housing and facilities for 25,000 people. The railway runs predominantly in bored tunnel, but includes short cut and cover and overhead sections, whilst the 1.4km long harbour crossing is an immersed tube. The underground stations are box structures constructed by cut and cover methods. This paper describes the geotechnical aspects of the project, including the geology of the route, preliminary investigations, construction methods (some of which were novel to this part of the far east), geotechnical instrumentation and the effects of the work on the surrounding high density urban environment.

(A)

3/7/2

368140 DA

MINNESOTA AVENUE JOINT DEVELOPMENT STUDY

Harmon (Robert J) and Associates, Incorporated International Square Building,
1875 Eye Street, NW Washington D.C. 20006

Dec 1981 Final Rpt. v.p. Tabs.Phots.Apps.

REPORT NO.: UMTA-DC-09-0005;

SUBFILE: HRIS

This Final Report for the Minnesota Avenue Joint Development Project presents the development program, financial analysis, and implementation action program for recommended public and private sector joint development at the Minnesota Avenue Metro Station Area. This report supplements the Interim Report which documents physical conditions, marketing considerations, community participation, areawide issues, joint development goals and objectives, and details the joint development concept plan. The purpose of this Final Report is to present the implementation program and development guidelines needed to undertake a comprehensive joint development program for the Metro Station Area. The report identifies the steps and actions needed for successful implementation of community objectives through joint development. The program report is designed as a working document which can be adopted as official City policy and can be used by the City and community as a planning and development tool, and by the Washington Metropolitan Area Transit Authority (WMATA) as a development guideline to be incorporated into a joint development disposal plan for property located at the station. This Final Report contains the joint development program and a development action plan to guide public and

SCRTD Information Center/Library
Search Topic: Joint Development & Transit
Prepared for: Joint Development Section
Date: May 22, 1984
Files Searched 6, 63, 150

private sector efforts at the Minnesota Avenue station. Following the introduction is a summary of key findings and recommendations. The third section of the report contains the phased development concept plan; an indepth traffic impact study; and an implementation strategy including financial feasibility analysis, recommended public sector assistance, policy initiatives, zoning changes, design guidelines and physical improvements. The joint development action plan is presented in the fourth section. This section contains: a proposed staging plan and funding program, a review of development guidelines, an outline of a development prospectus and a recommended overall promotion strategy (including a delineation of next steps). Appendices contain detailed information on: 1) traffic impact, 2) financial feasibility, 3) design standards, and 4) cost estimates. (Author) Prepared for the Office of Planning and Development of the Government of the District of Columbia.

12/7/1

380172 DA

ESTIMATING THE EFFECTS OF RESIDENTIAL JOINT-DEVELOPMENT POLICIES ON RAIL TRANSIT RIDERSHIP

Lutin, JM; Markowicz, BP

Transportation Research Board

Gibb and Hill, Incorporated; Princeton University

Transportation Research Record N908 1983 pp 7-12 1 Fig. 5 Tab. 2 Ref.

AVAILABLE FROM: Transportation Research Board Publications Office 2101 Constitution Avenue, NW Washington D.C. 20418

SUBFILE: UMRIS

A study that examines the impact of residential growth management strategies on transit ridership on a proposed rail transit corridor is presented. An interactive corridor sketch-planning model was developed to replicate various residential density patterns in the corridor and estimate transit patronage for work trips. The model also estimates patronage for transit access modes, including walk-and-ride, park-and-ride, kiss-and-ride, and feeder bus. Automobile drive-alone, carpool, and vehicle miles of travel (VMT) statistics for work trips are also reported. The model allows the planner to test combinations of policies to concentrate growth in high-rise buildings, create clusters of medium-rise housing, and restrain growth in exurban portions of the corridor. The transit ridership impacts of these policies are compared with unmanaged growth base case. It was found that through stringent land use controls, rail transit modal split could be increased by almost 16 percent over the base case, with a reduction in overall VMT for central business district bound work trips. Other, less-stringent residential land use policies can achieve smaller, but still significant, favorable changes in transit ridership. The paper concludes with a discussion of the problems associated with implementing corridor land use management policies. This paper appeared in Transportation Research Record No. 908, Transit Terminal Facilities and Urban Rail Planning.

SCRTD Information Center/Library
Search Topic: Joint Development & Transit
Prepared for: Joint Development Section
Date: May 22, 1984
Files Searched 6, 63, 150

12/7/4

377851 DA

COMPARATIVE EVALUATION OF JOINT DEVELOPMENT OPPORTUNITIES AT COMMUTER RAIL AND
RAIL TRANSIT STATIONS IN THE STATE OF NEW JERSEY

Harmon (Robert J) and Associates, Incorporated; New Jersey Department of
Transportation 1035 Parkway Avenue Trenton New Jersey 08625

June 1980 Final Rpt. v.p. 3 App.

AVAILABLE FROM: New Jersey Department of Transportation 1035 Parkway Avenue
Trenton New Jersey 08625

SUBFILE: UMTRIS

As part of its program to foster joint development, the New Jersey
Department of Transportation had almost 200 existing commuter railroad and
rapid transit stations rated in a way that would establish a priority list
for maximizing public investment returns. The first step was development
of a systematic evaluation methodology and then use of it for rating each
station and its surrounding environment. The development of this process
survey, and evaluation, as well as the joint development priorities which
resulted are the subjects of this report. The screening considered trans-
portation, the station facility, land use, and marketability of each site
and its environment. Central element of the screening is a Delphi process
used to focus on the unique features that contribute to joint development
potential. Following the rating of each station, it was ranked according
to its ability to satisfy the efficiency or opportunity rating established
for each factor. Ranking depended on professional judgement concerning each
measure of efficiency (MOE) or measure of opportunity (MOO) in estimating
the likelihood of each station being a candidate for joint development.

12/7/5

372980 PR

STRATEGIES TO IMPLEMENT BENEFIT-SHARING FOR FIXED TRANSIT FACILITIES

SPONSORING ORG: Urban Mass Transportation Administration

CONTRACT NO. : 40-3; NCTRP

SUBFILE: UMTRIS

PROJECT START DATE: 8310

PROJECT TERMINATE DATE: ND

A number of major American cities are considering either new fixed-rail
transit systems or additions to existing systems. Previous studies have
shown a high correlation between the presence of fixed-rail transit and a
significant increase in the value of land adjacent to the transit line(s).
The first objective of this research is to develop a methodology to
calculate the financial benefits that will be realized by owners of

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Prepared for: Joint Development Section
Date: May 22, 1984
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property adjacent to transit improvements. The second objective is to develop a method to recapture for public use a portion of these financial benefits to help defray the cost of transit improvements. The method of value recapture would probably involve some form of financial "assessment" of the owners of land adjacent to fixed-rail transit lines. Among the specific issues to be addressed: (1) Should the "assessment" be based only on the capital cost of the transportation improvements or on both capital and long-term operating costs? (2) Should the "assessment" be imposed only on new developments or on both new and existing projects? (3) Should the "assessment" be a one-time payment or spread over an extended period of time, such as the life of the building (as defined by the IRS)? (4) Should the "assessment" take a variety of forms, at the option of the landowner, such as cash payment; subsidized transit passes, or support for a ridesharing program? (NOTE: Given the UMTA position that a wealth of information seems to exist in this problem area, this research - rather than developing new methodology - could take the direction of a summary and evaluation of existing methodology, or the topic could be broadened (funding permitting) to include an assessment of alternative financing schemes for transit). Contract to a performing agency not yet awarded.

12/7/6

372423 DA

GROWTH MANAGEMENT AND TRANSIT POTENTIAL: CASE STUDY IN ATLANTIC CITY, NEW JERSEY

Markowicz, BP; Carol, JD
Transportation Research Board
Princeton University

Transportation Research Record N877 1982 pp 91-96 6 Fig. 3 Tab. 8 Ref.

AVAILABLE FROM: Transportation Research Board Publications Office 2101
Constitution Avenue, NW Washington D.C. 20418

SUBFILE: UMRIS

The methodology and findings of a joint development study on Atlantic City conducted by a team of graduate and undergraduate students at Princeton University are described. The objective of the study was to evaluate the feasibility of alternative rapid transit configurations in a selected corridor under various managed land development scenarios. In order to assess the effectiveness of alternative land development options together with various transit service options, the team adapted and used an interactive sketch planning model that allows rapid calculation of the results of changes in either the land use or the transit service. Such variables as ridership, vehicle miles of travel, demand for parking spaces at the stations, and also revenue-cost aspects of the transit and land consumption are quantified and trade-offs are outlined. The use of a computerized sketch planning model allows the analyst to evaluate quickly

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Date: May 22, 1984
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a large number of alternatives and to focus rapidly on the more promising ones. This paper appeared in Transportation Research Record No. 877, Urban Public Transportation Planning Issues.

12/7/7

372294 DA

LETTER FROM THE CHAIRMAN OF THE COMMITTEE ON JOINT DEVELOPMENT OF LAND AND TRANSPORTATION SYSTEMS

Bloomfield, SF

Transportation Research Board

Land Use and Transportation 1981 p4

AVAILABLE FROM: Transportation Research Board Publications Office 2101 Constitution Avenue, NW Washington D.C. 20418

SUBFILE: HRIS

This letter draws attention to the results of the Second Annual Conference on Joint Development on the Northeast Rail Corridor which are highlighted in this issue of "Land Use and Transportation." Previous issues have emphasized a wide range of joint development activities. Highlights of the Joint Development Marketplace Conference held in June 1980 will be presented in the next issue of this newsletter. The Transportation Research Board's Committee on Joint Development and Transportation Systems will this year, focus on professional activities related to this area.

12/7/8

372292 DA

NEW VISTAS FOR GROWTH IN NORTHEAST CORRIDOR

Gambaccini, L.J

Transportation Research Board

New Jersey Department of Transportation

Land Use and Transportation 1981 p1

AVAILABLE FROM: Transportation Research Board Publications Office 2101 Constitution Avenue, NW Washington D.C. 20418

SUBFILE: HRIS

The Northeast Rail Corridor reconstruction project, scheduled for completion by 1983, is seeking to produce a quality high-speed service within the Boston-New York-Washington corridor that is an economically viable, energy efficient, and environmentally desirable as any passenger rail system in the world. The coalition of Northeastern Governors (CONEG) and the Council for Northeast Economic Action (CNEA) have made every effort to publicize this significance of this project and to secure the greatest economic impact from it. These groups sponsored a conference which showed that economic development would be favored by station development. With corridor station development, the high-speed rail line will become an important link between major activity centers in the Northeast. As a supplement to this link,

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Search Topic: Joint Development & Transit
Prepared for: Joint Development Section
Date: May 22, 1984
Files Searched 6, 63, 150

state and local governments should provide circulation within these centers. Redevelopment should encourage transit and pedestrian trips, making the Northeast Corridor and energy-efficient total network. Presented at the Second Annual Conference on Joint Development on the Northeast Rail Corridor, Newark, NJ, 28-29 January 1980.

12/7/9

372291 DA

NORTHEAST CORRIDOR CONFERENCE HIGHLIGHTS

Transportation Research Board

Land Use and Transportation 1981 p2

AVAILABLE FROM: Transportation Research Board Publications Office 2101
Constitution Avenue, NW Washington D.C. 20418

SUBFILE: HRIS

This issue highlights the results of the Second Annual Conference on Joint Development on the Northeast Rail Corridor. The specific articles published here are as follows: New Vistas for Growth in Northeast Corridor; Forging a Public Private Sector Partnership That Supports Station Area Development; and A Joint Development: The Real Estate Transit Connection.

12/7/9

372290 DA

EXPANDED ROLE OF STATE DEPARTMENT OF TRANSPORTATION: NEW JERSEY'S UNIQUE
JOINT DEVELOPMENT PROGRAM

Russo, JW

Transportation Research Board

New Jersey Department of Transportation

Land Use and Transportation 1982 n.p. 1 Fig.

AVAILABLE FROM: Transportation Research Board Publications Office 2101
Constitution Avenue, NW Washington D.C. 20418

SUBFILE: HRIS

The NJDOT Joint Development Program works in close association with New Jersey Transit, the State's public transit operator, and PATCO, operator of the Lidenwold High-speed rail line from Philadelphia to South Jersey. Selecting sites with the greatest development potential involves market analysis and financial feasibility studies from a private sector viewpoint, formulating a development program that will convince the private sector of its ability of achieve returns, and a developer solicitation and selection process. There will be community involvement and local government and public sector participation throughout this process. The real-world, private-sector-oriented approach taken by the NJDOT and the transit operators to encourage developers and assist them, is expected to have a bright future.

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372289A

JOINT DEVELOPMENT : A HISTORICAL PERSPECTIVE

Cook, KE

Transportation Research Board

Land Use and Transportation 1982 n.p.

AVAILABLE FROM: Transportation Research Board Publications Office 2101
Constitution Avenue, NW Washington D.C 20418

SUBFILE: HRIS

This article reviews the concept of joint development and its application which has varied with varying transportation and political objectives. It has been applied mainly to highway and rail transit programs and was, at first, limited to the multiple use of highway rights-of-way. As speculative land values increased within proposed right-of-way corridors and the costs of right-of-way takings rapidly inflated, joint development took on a new connotation. The federal government would participate, under specific conditions, in advance acquisition to minimize speculative price increases in future rights-of-way. This would involve buying whole urban parcels, land-locked rural parcels, and land around interchanges and managing their development. As community values clashed with the needs of highway users, and economists, sociologists, environmentalists and highway engineers sought to mitigate and adverse effects of freeways, joint development was again redefined. It became concerned with planning highways that did not divide the community and displaced the minimum number of persons. The concept of joint development changed again with the need to coordinate urban redevelopment and increase transportation system capacity. The problems with regard to joint development applications are associated with the legal system which is based on limited government powers, the coordination of multiple federal and local government agencies, and a number of technical and management issues. The future prospects are good for joint development which has now come to mean the coordinated land and transportation development considering the impacts of each on the other. The concept has changed to one that means a way of evaluating transportation and land development interaction.

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370055 DA

JOINT DEVELOPMENT PROTOTYPES IN THE NORTHEAST CORRIDOR

Lutin, JM; Bergan, JP

Eno Foundation for Transportation, Incorporated

Gibbs and Hill, Incorporated; Boston Architectural Center

Transportation Quarterly Vol. 37 No. 1 Jan. 1983 pp 5-22 4 Fig.

AVAILABLE FROM: Eno Foundation for Transportation, Incorporated P.O. BOX
55, Saugatuck Station Westport Connecticut 06880

SUBFILE: UMTRIS

While Federal policy favors joint development and some funding remains available for such projects, this article describes six real estate projects initiated by local governments and private agencies aimed at concentrating development around transportation facilities to improve transit accessibility and increase trip-generating land uses at such points. There is often sufficient interest by the private sector in joint cooperation is essential. Suburban sites are more attractive to private developers than center-city sites; office and commercial space is more attractive than retail or residential developments. Both rail and highway access are essential; sites must be adjacent to the central business districts of the municipalities in which projects are located. In some cases the former railroad or transit station is recycled; in other cases it is replaced. Details of specific Northeastern projects are given and other general conclusions are made.

348010 DA

GUIDELINES FOR PLANNING PUBLIC TRANSPORTATION TERMINALS

Hoel, LA

Transportation Research Board

Transportation Research Record N817 1981 pp 36-41 8 Ref.

AVAILABLE FROM: Transportation Research Board Publications Office 2101
Constitution Avenue, NW Washington D.C. 20418

SUBFILE: HRIS; UMTRIS

The considerations necessary in the planning of transit stations from the viewpoint of the transit user and the operator are described. The basic function of a transit station is to process the flow of passengers between modes. A station also serves to attract the user to the system and it provides space for service functions, access, and joint development. Transit stations should be designed for the convenience, comfort, and safety of the passenger. A clearly defined pathway is essential and will reduce

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the need for information, improve safety and security, and facilitate consumer services. Station operations are enhanced by the provision of sufficient exit and entrance facilities, dependable fare-collection equipment, and adequate platform dimensions. Maintenance should be considered in the planning process, and operating personnel are essential members of the design team. The station design experience of the three major new U.S. systems-San Francisco, Atlanta, and Washington, D.C. is reviewed, and a brief outline is presented of the elements of a transit-station design methodology that, if used, can assist to incorporate both policy and design considerations into the station design planning process. (Author) This paper appeared in Transportation Research Record No. 817, Rail Transit and Terminals.

12/7/17

334404

DA

TRANSIT INVESTMENT AND ITS RETURNS

Passwell, RE; Berechman, J

Organization for Economic Cooperation and Devel 2 rue Andre Pascal Paris
75775 France; European Conference of Ministers of Transport 33, rue de
Franqueville Paris 75775 France

State University of New York, Buffalo; Tel-Aviv University, Israel

1980 Conf Paper pp 1226-43

AVAILABLE FROM: Organization for Economic Cooperation and Devel Suite
1207, 1750 Pennsylvania Avenue, NW Washington D.C. 20006

REPORT NO.: Volume 2;

SUBFILE: HRIS; UMTRIS

This paper identifies a number of issues that must be addressed to minimize the uncertainty in one particular type of urban investment - creation of a new public system. The public transit system is the public investment portion of a joint development process. The intent of the process, i.e., the type of return anticipated from the combined public (transit) - private associated land use) investment, is to increase the economic vitality of the downtown area of a declining northeastern industrial city. For a number of pressing reasons, reinvestment in public transit in the U.S. seems propitious at this time (1979). The investment is to be made when the reasons for transit decline still are valid and show little signs of abatement. The success of joint development projects is then dependent upon both maximizing the investment strategies in the area of focus, and development strategies. Both of these areas of concern are addressed in this paper. A case study of Buffalo, N.Y. is chosen because of current Light Rail Transit development (approximately \$450 million, 215 million pounds) with reorganization of the transit system to focus on the Central

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Business District. This paper addresses issues related to joint development: (1) Can transit make a difference in downtown development? (2) What levels of investment must accompany such development? (3) What are the regional impacts of transit development, and can such developments help resolve intra-regional growth conflicts?

The following and economic trends; (1) Retail and employment trends; (2) Private investment timetables associated with the public investment; (3) Detailed analysis of both population attitudes and decision maker attitudes towards transit related CBD development and regional conflicts. World Conference on Transport Research. Transport Research for Social and Economic Progress, April 14-17, 1980, Imperial College, London, England.

330172 DA

TRANSIT CENTERS: A MEANS OF IMPROVING TRANSIT SERVICES (ABRIDGMENT)

Taylor-Harris, A; Stone, T.J.

Transportation Research Board

Princeton University; De Leuw, Cather and Company

Transportation Research Record N760 1980 p. 39-42 Ref.

AVAILABLE FROM: Transportation Research Board Publications Office 2101
Constitution Avenue, NW Washington D.C. 20418

SUBFILE: HRIS; UMTRIS

The role of transit centers in improving the overall effectiveness of an urban bus transit system is defined and assessed. Transit centers are defined as physical facilities that facilitate the movement of buses and, thus, of bus patrons. Transit centers are more than park-and-ride lots because they can be located in high-visibility locations, even in the downtown core, and thus can serve to increase the attractiveness of transit. They are major transfer points at which several types of routes can come together. Express and local routes, as well as pulse-scheduled circulators, can thus provide the bus user with many potential destinations and greatly reduce transfer time. Transit centers can be located in the central city, on freeways, or in suburban activity centers. Planning guidelines are developed to assist in the successful planning and implementation of transit centers. These guidelines are used to locate and conceptually design a potential transit center for the Salt Lake City area. It is concluded that the impact of current pioneer transit-center projects in the United States should be closely monitored. (Authors) This paper appeared in TRB Research Record No. 760, Rail Transit Planning and Rail Stations.

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12/7/19

330171 DA

JOINT DEVELOPMENT AROUND INTERMODAL TRANSFER FACILITIES

LUTIN, JM; Walker, CA

Transportation Research Board

Parsons, Brinckerhoff, Quade and Douglas, Inc; Southeastern Michigan
Council of Governments

Transportation Research Record N760 1980 pp 33-39 6 Fig. 3 Tab. 6 Ref.

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SUBFILE: HRIS; RRIS; UMTRIS

Efforts undertaken in the city of Baltimore to initiate joint development around transit stations are examined. Under the provisions of the 1974 amendment to the Urban Mass Transportation Act of 1964, the U.S. Department of Transportation could make grants or loans for the establishment of transit corridor development corporations and for the purchase of land and the development of property adjacent to transit stations. Baltimore was one of the first cities to apply for funds under the new legislation. Although the Urban Mass Transportation Act of 1964 has since been amended to remove specific authorization for the funding of transit-corridor development corporations, the Urban Initiatives Program, established in 1979, provided funding for the Baltimore program. The key factors underlying the successful development of the Baltimore program are identified. Specified joint-development projects are examined, and the main points of the joint-development application are discussed. Observations are offered on the nature of contemporary joint development and the involvement of the public sector. (Authors) This paper appeared in TRB Research Record No. 760, Rail Transit Planning and Rail Stations.

12/7/20

324878 DA

APPLICABILITY OF JOINT DEVELOPMENT TOOLS IN DETROIT

Opiela, KS; Khasnabis, S; Arbogast, RG

American Society of Civil Engineers

General Motors Corporation

ASCE Journal of the Urban Plan and Develop. Div. Vol. 106 No. 1 November, 1980, pp 71-88 16 Ref.

AVAILABLE FROM: Engineering Societies Library 345 East 47th Street, New York, N.Y. 10017

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SUBFILE: EIT; RRIS; UMTRIS

Joint Development (JD) is a process by which major public facilities are constructed in concert with other projects through the coordinated efforts of public or private agencies, or both. This paper focuses upon the identification and analysis of JD mechanisms for use in the Detroit area where major transit investments are anticipated. A total of nine basic types of JD mechanisms were identified and evaluated in the context of the institutional structure of the area. The mechanisms were evaluated for sources, bonding authority, public approval, jurisdiction, organizational basis, and other relevant aspects. The evaluation indicated that many JD mechanisms could be considered feasible for use in the Detroit area. In some cases, precedents existed for the use of particular tools. In addition, several local agencies were found to have the authority and capabilities to administer JD programs.

12/7/21

322827 DA

OPTIMIZING JOINT DEVELOPMENT AT TRANSIT STATIONS

Arbogast, RG; Khasnabis, S; Opiela, KS

American Society of Civil Engineers

Wayne State University

ASCE Journal of Transportation Engineering Vol. 106 No. 5 September, 1980,
pp 539-557-13 Ref.

AVAILABLE FROM: Engineering Societies Library 345 East 47th Street,
New York, N.Y. 10017

SUBFILE: EIT; RRIS; UMTRIS

The Detroit Metropolitan Area was used as the experimental site for such feasibility testing. Two priority ranking methodologies were developed based upon provisions of rating and ranking methods. Station development potential was identified by a set of socio-economic and land use indicators, and the viewpoints of local professionals were solicited in assessing the relative importance of the indicators identified. Next, the relative ranking for 37 proposed transit stations on two travel corridors professionals. The study shows that it is possible to prioritize station locations for joint development based upon selected socio-economic and land use indicators. The results also suggest that the station ranks obtained by the two methods are not likely to be affected by input solicited from local professionals. Lastly, the procedures developed are found to be sensitive to selection of the indicators.

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1870634 DATABASED: LRI File 150

The Sherman Act and its effect on joint development arrangements. (Address
at Annual Meeting of A.B.A. Section on Natural Resources Law)

Oliver, Rufus W., III; Burke, William R., Jr.

National Resources Law 8 671-684 Wint 1981

JURISDICTION: United States

Woods Exploration and Producing Co. v Aluminum Company of America
438 F.2d 1286 (5th Cir. 1971)