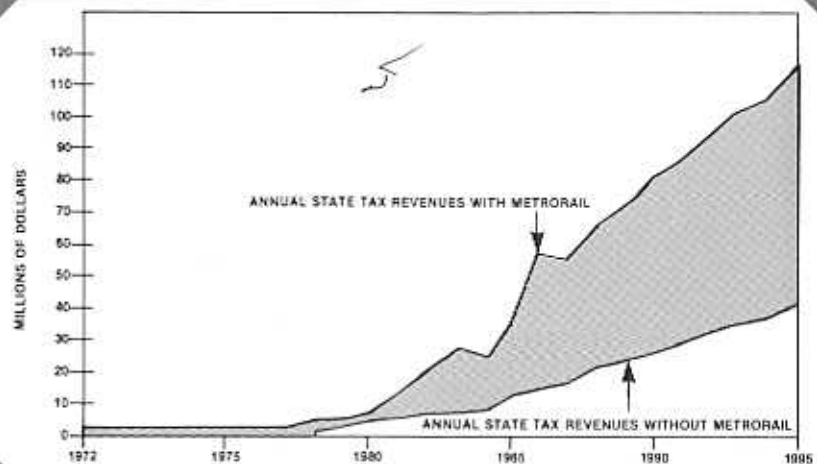


## Executive Summary

# Fiscal Impact of Metrorail on The Commonwealth of Virginia

Prepared by  
Peat, Marwick, Mitchell & Co.

November 1985



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## STUDY PURPOSE

The development of the Metrorail system in Virginia is based on a partnership of the federal government, the Commonwealth of Virginia, local jurisdictions, and fare-paying passengers. The purpose of this study is to assess the benefits of Metrorail that accrue to the Commonwealth of Virginia. These benefits are in the tangible form of development, which creates jobs, incomes, and sales that generate tax revenues to the Commonwealth.

## SUMMARY OF BENEFITS

### THROUGH 1995 IN VIRGINIA

Metrorail will generate:

- \$660 Million in Additional State Tax Revenues
  - Development Projects Totaling
    - 14,000,000 additional square feet office space
    - 1,700,000 additional square feet retail space
    - 2,300 additional hotel rooms
    - 8,800 additional residential units
  - Permanent Employment in the State Totaling
    - 29,000 additional office jobs
    - 3,000 additional retailing jobs
    - 2,000 additional hotel jobs
  - Construction Jobs Averaging 2,400 a Year
  - \$284 Million in Excess of State Contributions
  - By 1995, Annual Additional State Tax Revenues Amounting to Three Times the Annual State Contribution
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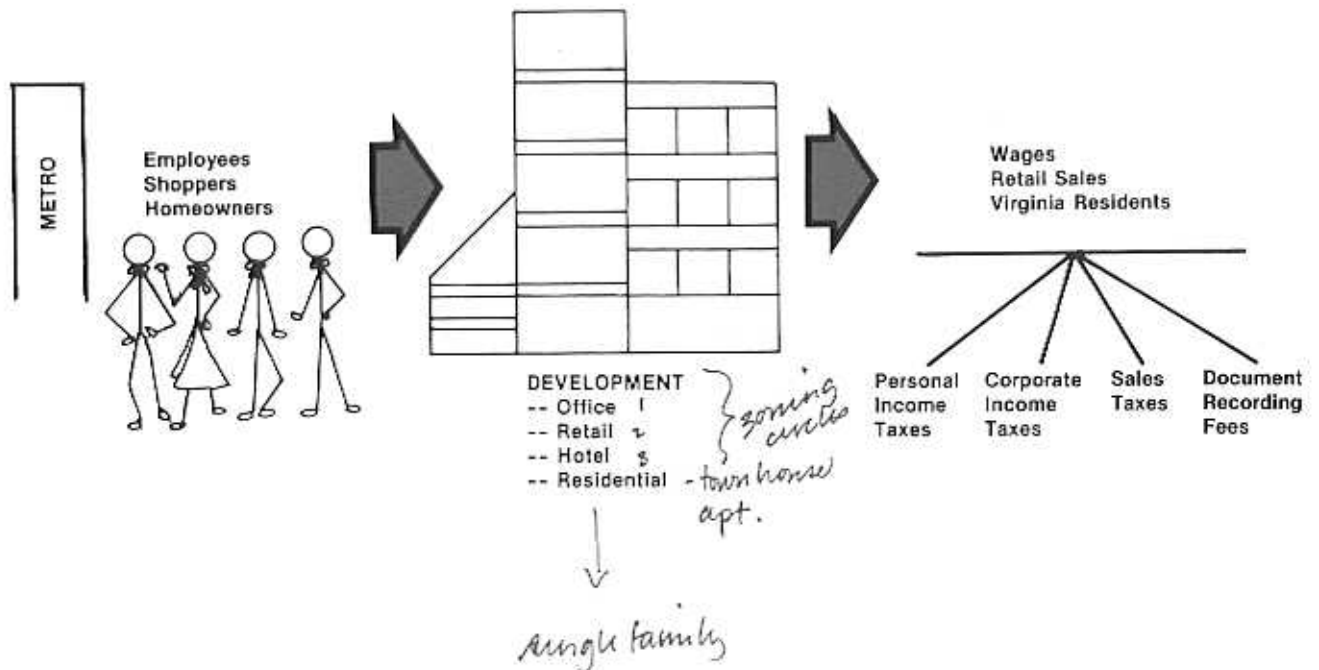
## WHY METRORAIL SPURS DEVELOPMENT

Would development have occurred anyway? Certainly development would have occurred in Virginia, but it would have been on a much smaller scale and of lower quality. Without Metrorail, the region loses an important attraction; fixed-route, rapid, and reasonably priced transportation.

*bringing close to freeways*

The capacity of land to support development is a function of the public and private services available. Transportation accessibility is one of the most critical elements of development capacity. The provision of Metrorail service to Virginia represents the creation of additional development potential beyond that which previously existed. Metrorail station areas are major nodes of economic activity. Without Metrorail service, these areas would not be attractive to high density development, nor would they be able to accommodate it.

The presence of Metrorail service in Virginia has caused the refocusing of metropolitan economic growth forces. Rather than having high density development confined to downtown Washington, this type of development is attracted to Virginia station sites. High density development results in more efficient land use patterns. By supporting development of new employment and commercial centers, jobs that would have located downtown without Metrorail access are attracted to and captured by Virginia, bringing substantial tax revenues to the Commonwealth.



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## WHAT THE BUSINESS COMMUNITY SAYS ABOUT THE IMPORTANCE OF METRORAIL

PENTAGON CITY



MCI is a \$2 billion provider of long distance and other telecommunications services, serving more than 220,000 commercial and residential customers in Virginia.

*"The Metro system was the primary reason that we purchased a large office building and had a second one built for us in Virginia. We have about 2,000 employees in those buildings in Virginia. During the next 15 months, we expect to increase the number of employees in Virginia to about 4,000 people and add three additional office buildings. Metro is the key to the relocation of a large number of our functions from the District of Columbia into Virginia."*

**V. Orville Wright**  
Vice Chairman of the Board  
MCI Communications Corporation

*"Metrorail has been at the very heart of many of IDI's projects. The Rosslyn Center office complex, the Montebello and Belvedere condominium projects, and an IDI-planned Ballston mixed-use development were dependent upon the presence of the rail system. For example, we would not have developed the Montebello community of over 1,000 units on Route 1 without the Huntington Metrorail station being adjacent to it."*

**Giuseppe Cecchi, President**  
International Developers, Inc. (IDI)



IDI has developed projects valued at \$685,000,000 in the metropolitan area. Current Virginia projects include Ballston Metro Center, Montebello, and The Belvedere.



The Oliver T. Carr Co. is a major developer in the Washington metropolitan area. Carr has developed over six million square feet of mixed-use projects in the last ten years.

*"Our suburban development strategy has been driven to a great extent by Metrorail. Were it not for Metro, we would not have ventured out of our traditional District of Columbia market and into the King Street and Ballston areas. Together, these two Carr projects will eventually represent 3,000,000 or more square feet of urban scale, mixed-use development."*

**Oliver T. Carr, Jr., President**  
The Oliver T. Carr Co.

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## WHAT THE BUSINESS COMMUNITY SAYS ABOUT THE IMPORTANCE OF METRORAIL

*"The Charles E. Smith Companies' development of mixed-use projects, specifically Crystal City and Rosslyn Plaza, has been keyed to the parallel development of Metrorail. In the absence of such a superb mass transit system, development in Northern Virginia would have been generally slower. Projects such as ours would have been more speculative."*

**Robert H. Smith, President**  
The Charles E. Smith Companies



The Charles E. Smith organization is the major developer of the Crystal City station area. Smith has 37 buildings completed or under construction.



Mobil Land engages primarily in the development of mixed-use projects. Major properties in Virginia include Colonial Village and Reston.

*"Colonial Place, our 760,000 square foot mixed-use project being built adjacent to the Courthouse Metro station, combines the advantages of high quality urban design and suburban location. The proximity to downtown business and government facilities, direct underground access to Metrorail, the commitment of the Commonwealth of Virginia and the local governments to Metro, and the existence of nearby residential neighborhoods were major factors supporting our decision to build this project. The Metrorail system has made it possible for suburban localities in this area to compete effectively in the national and international development marketplace."*

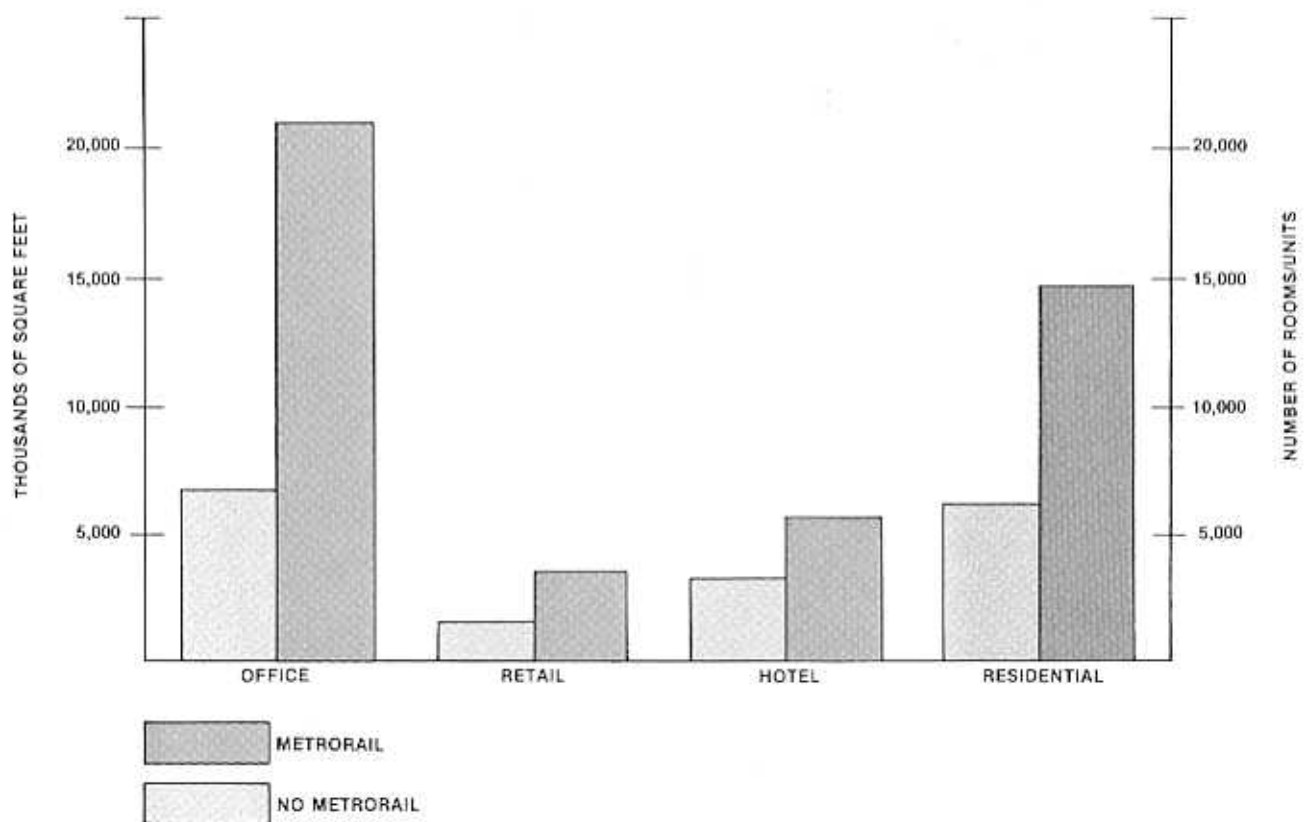
**James C. Cleveland, President**  
Mobil Land Development Corp./VA  
A Subsidiary of Mobil Oil Corporation

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## PROJECTIONS OF DEVELOPMENT

The accompanying bar graph compares projections of development in Metrorail station areas by type of use with and without Metrorail for 1978 through 1995.

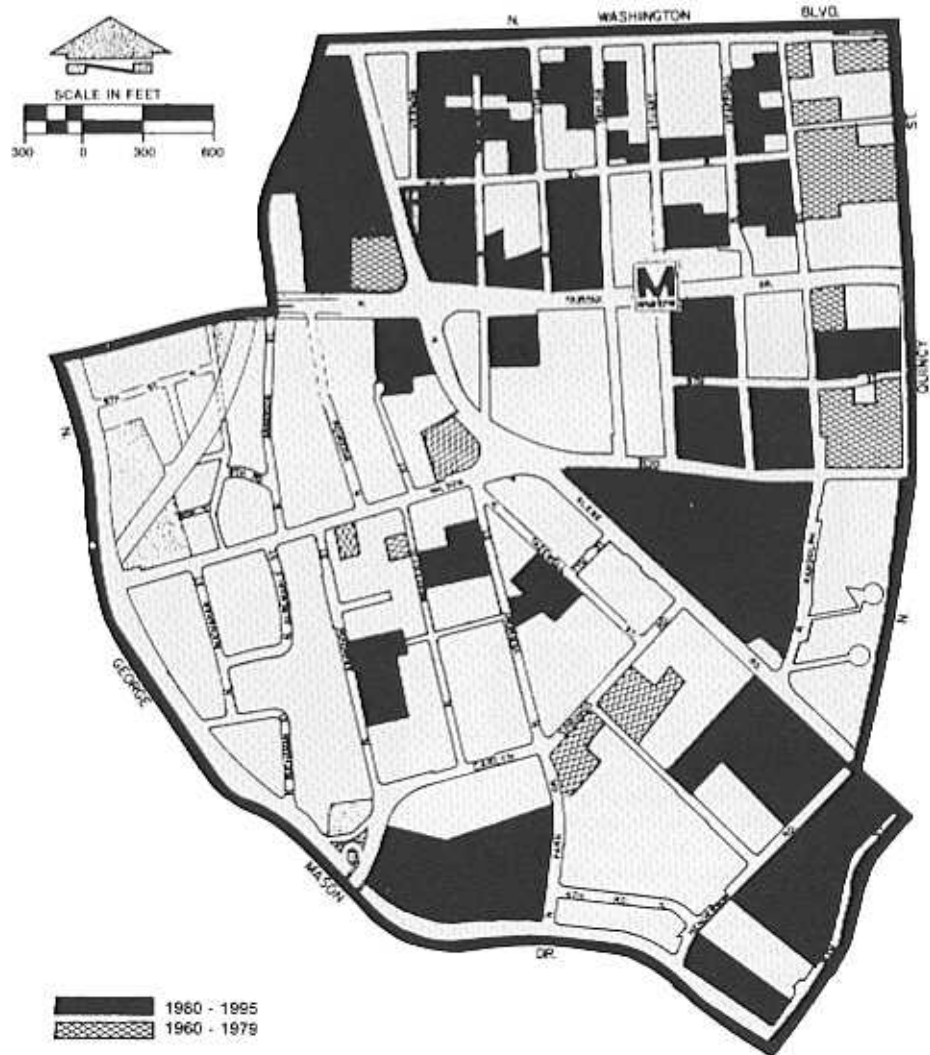


The net development attributed to Metrorail is:

- 14,000,000 additional square feet - office
  - 1,700,000 additional square feet - retail
  - 2,300 additional hotel rooms
  - 8,800 additional residential units
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## AN EXAMPLE OF DEVELOPMENT

The development of the Ballston station area in central Arlington demonstrates the impact of Metrorail. Metrorail service to Ballston began in December, 1979. The map shows development of parcels for 1960 through 1979 contrasted to development completed, in progress, and formally initiated for 1980 to 1995.



Development totals for the two time periods are:

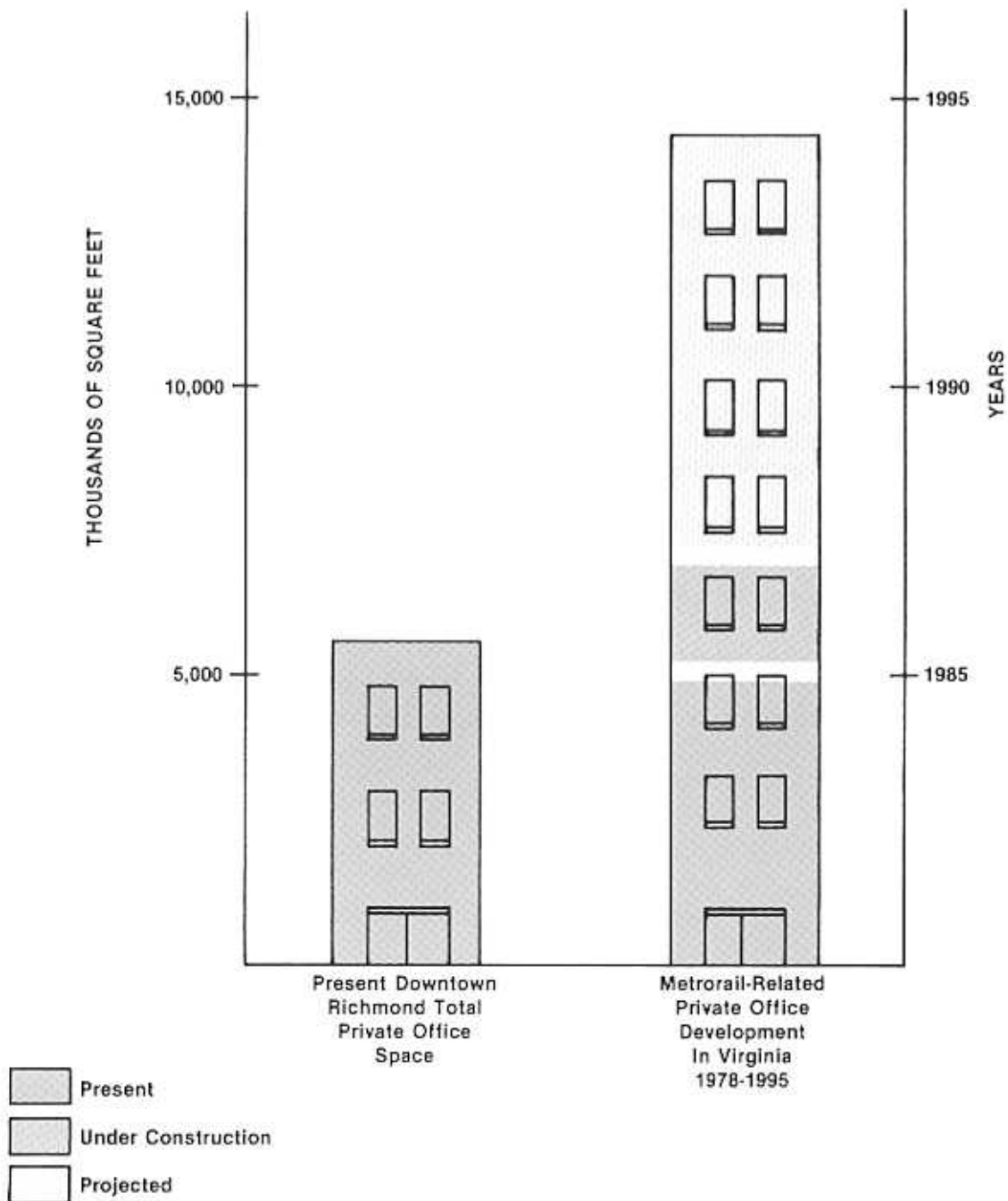
	<u>1960-1979</u>	<u>1980-1995</u>
OFFICE (sq.ft.)	985,900	3,973,500
RETAIL (sq.ft.)	33,600	882,600
HOTEL (rooms)	0	461
RESIDENTIAL (units)	379	2,982

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### DEVELOPMENT IN PERSPECTIVE

To place the scale of Metrorail-related office development in perspective, the graph below compares the 14 million square feet of projected Metrorail-related office development in Virginia (1978-1995) with total private office space in Spring, 1985, in downtown Richmond.



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## ESTIMATES OF STATE TAX REVENUES

State tax revenues associated with Metrorail in Virginia can be classified by type of tax and whether the tax revenues are recurring or non-recurring.

The types of state tax revenues generated are:

- sales taxes
- individual income taxes
- corporate income taxes
- document recording fees

State tax revenues which recur annually are associated with:

- Metrorail operations and maintenance expenditures in Virginia
- office employment generated from development in Metrorail station areas
- hotel sales and employment generated from development in Metrorail station areas
- individuals who become Virginia residents through purchase of housing in Metrorail station areas

State tax revenues associated with Metrorail on a non-recurring basis result from:

- Metrorail construction activities
- construction at development sites in Metrorail station areas
- sales of housing units in Metrorail station areas

*See Annex  
B-1  
TABLE 1*

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## STATE TAX REVENUES ASSOCIATED WITH METRORAIL THROUGH 1995

### With Metrorail:

Development-Related	\$915,000,000
Metrorail Construction, Operations, and Maintenance-Related	<u>71,000,000</u>
Subtotal	\$986,000,000

### Without Metrorail:

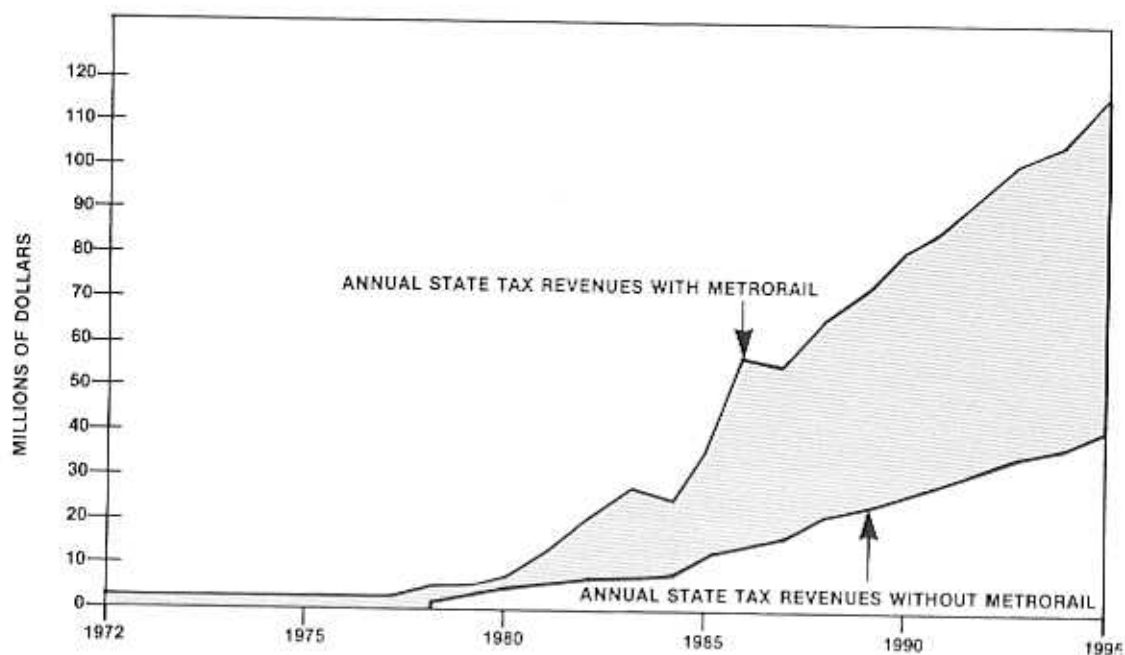
Development-Related	\$326,000,000
Metrorail Construction, Operations, and Maintenance-Related	<u>0</u>
Subtotal	\$326,000,000

Attributable to Metrorail \$660,000,000

The composition of the \$660 million in state tax revenues related to Metrorail is:

• individual income taxes	\$536,000,000
• corporate income taxes	44,000,000
• sales taxes	77,000,000
• transfer taxes	<u>3,000,000</u>
	\$660,000,000

By 1995, annually recurring state tax revenues attributable to Metrorail will exceed \$70 million.



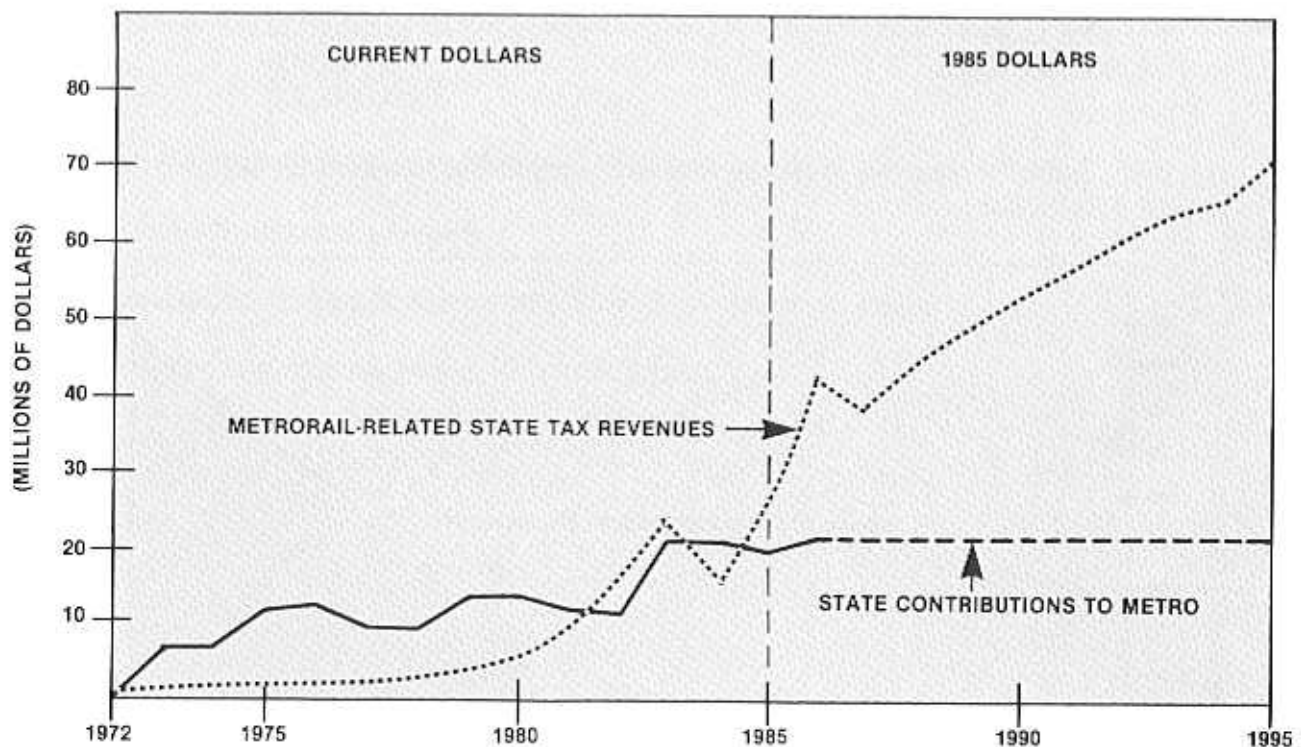
## RETURNS TO THE COMMONWEALTH OF VIRGINIA

The Commonwealth of Virginia has provided and continues to provide significant support to Metro. State support projected at current levels totals \$376 million through 1995 in unescalated dollars. This dollar figure is used to assess the performance of the Commonwealth's investment.

Projections 1972 to 1995

State Tax Revenues Related to Metrorail	\$660,000,000
State Investments in Metro	( <u>\$376,000,000</u> )
Excess of Revenues Over Investments	\$284,000,000

The Commonwealth will achieve significant returns on its investment in Metrorail. The \$284 million, over the period of 1972 to 1995, represents an internal rate of return of 13 percent on the Commonwealth's investment. In 1985, Metrorail-related State tax revenues exceed the State's contribution by \$3.8 million.

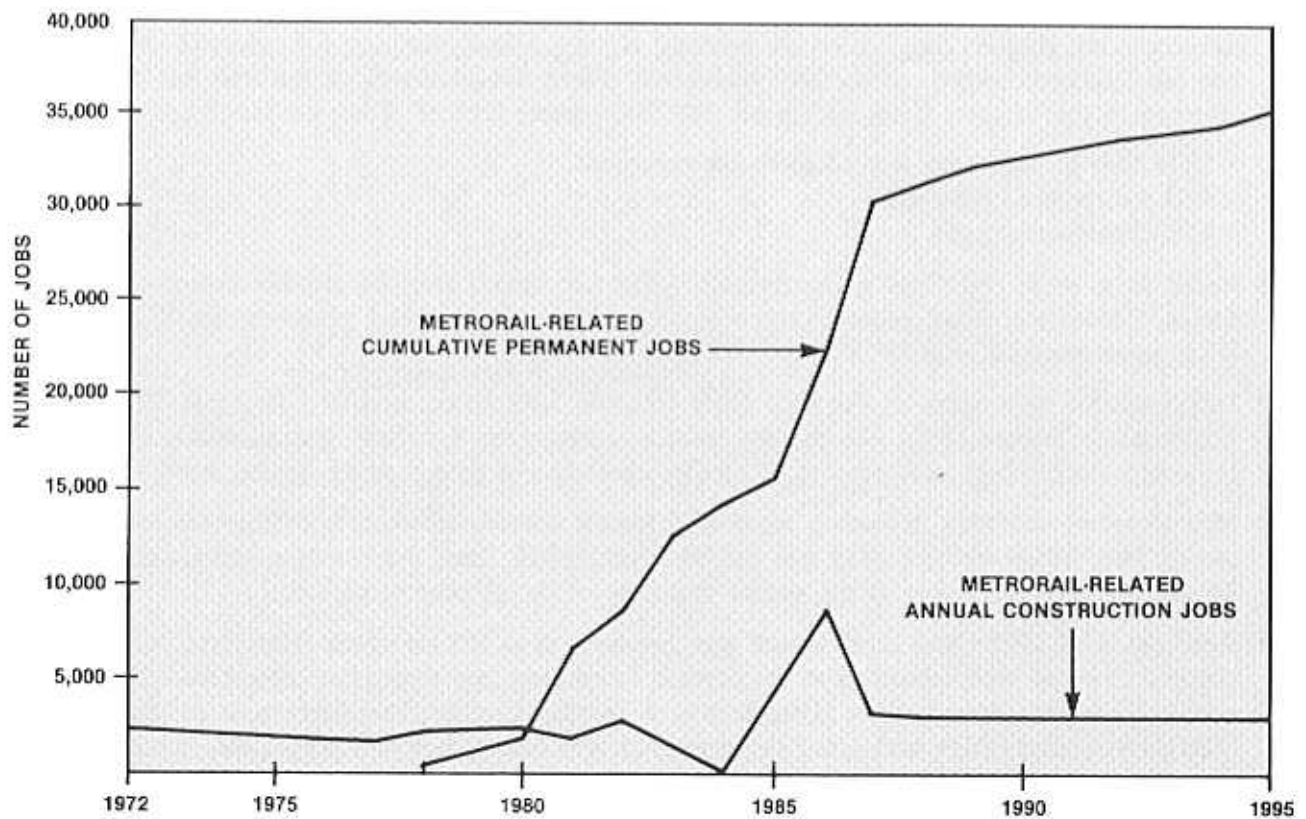


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## METRORAIL-RELATED EMPLOYMENT

Looking beyond financial measures of returns to the Commonwealth, the employment created at Metrorail station sites and from construction activities has been significant.



## THE METRORAIL PARTNERSHIP

The development of the Metrorail system resulted from a partnership which includes the federal, state, and local governments. Each is an important contributor to the development and operation of the Metrorail system in Virginia. To date, the local jurisdictions have paid Metro two and one half times the amount (\$414 million) the Commonwealth has (\$167 million).

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## CONCLUDING COMMENTS

While the returns to the Commonwealth are projected to be sizable, the analyses and attendant projections have taken a highly conservative approach. Following is a list of items that were not counted in projecting state tax revenues.

- Projections of revenues are based on data from a recent point in time, for example, tax revenue projections use 1982 data. Revenue estimates are deflated for years prior to the base data but are not escalated for future years. This places tax revenue projections at an absolute minimum.
  - Space projections of build-out relied on highly conservative assumptions for station area development, that is, they relied on existing zoning. Final planning for selected station areas has not been completed; these final plans may allow denser development that has not been counted in this report. Each additional 100,000 square feet of office development generates:
    - \$371,000 in recurring annual state tax revenues
    - 450 permanent office jobs
    - 155 construction jobs
  - Retail sales were estimated using average sales per square foot for the Southeastern United States. Therefore, retail sales do not reflect the higher wages and prices in the Washington, D.C., metropolitan area.
  - Development may occur at the East Falls Church, Van Dorn, and/or Franconia-Springfield station areas before 1995. No development was projected for these station areas; thus, tax revenues attributable to Metrorail are understated to the extent development occurs.
  - Development activities in station areas will spawn development on the fringes of station areas. This fringe development has not been projected; thus, tax revenues attributable to Metrorail are understated to the extent this type of development occurs.
  - Absorption of office and retail space was assumed to occur one year from date built and occupancy rates were assumed at 90 percent beginning one year from date built. These assumptions are conservative. Historically, Arlington County, in which most of the Metrorail-related office and retail development will occur, has had occupancy rates of higher than 95 percent.
  - Except for two residential developments, development occurring before station openings was not counted. Thus, development occurring in anticipation of Metrorail station openings was not attributed to Metrorail.
  - Development projections considered only new construction. Hundreds of units of condominium conversions have occurred. The tax revenues associated with conversion activities have not been counted.
  - Office workers, construction workers, and homeowners at Metrorail station area sites will spend some portion of income in Virginia outside of station areas. The resulting sales tax revenues have not been counted.
  - Developers derive profits from construction of office, retail, hotel, and residential space. The corporate taxes that will be paid on these profits have not been counted.
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This study was funded and supported by members of the business community of Virginia.

The material in this Executive Summary is based on a comprehensive technical report that may be reviewed upon request.