Chapter 11
RAILROADS

Cincinnati is important as a gateway for both north-south and east-west railroad traffic. It is a focal point for rail movements between the great commercial, manufacturing and agricultural regions of the Middle West and similar areas in the Southeastern states. The adequacy of railroad facilities in this Area is therefore not only of local concern but is a matter of national import. Long-range transportation needs of the nation are involved.

Analysis of railroads as an element in metropolitan planning while taking them into account must look beyond the needs and welfare of the railroads as such. The Master Plan studied rail transportation in relation to the numerous other physical and economic factors and features which condition the future development of a metropolitan urban center.

Passenger Phase Solved

Cincinnati's Union Terminal is a magnificently conceived and executed solution of the passenger phase of railroad transportation in this Area. Unfortunately, the program of improvement of railroad operation stopped short after producing the right answer for passenger service. Continued congestion of freight traffic indicates the need for provision of equally satisfactory terminal arrangements for freight.

Freight Problem Remains

Seven railroad systems converge at Cincinnati from all directions: the Baltimore and Ohio, the Chesapeake and Ohio, the Louisville and Nashville, the New York Central, the Norfolk and Western, the Pennsylvania, and the Southern. (See Fig. 45.)

Due to the character of local topography the railroad lines serving the Area are located principally in the valleys of the Ohio, Little Miami and Licking Rivers, and Mill Creek. Major industrial areas have developed along these lines and have formed concentrated railroad and industrial districts through which the heavy gateway traffic must pass.

A large part of this traffic is concentrated in Mill Creek Valley and crosses the Ohio River on the Southern, C. & O. and L. & N. railroad bridges. Heavy east and west traffic which follows the Ohio Valley for some distance below Cincinnati also uses the Mill Creek route in passing through the Metropolitan Area.

The mingling and crossing of traffic which occurs near the junction of Mill Creek and the Ohio River have created serious congestion which extends from that point to Ivydale Junction in Mill Creek Valley, where west-east traffic turns eastward. This situation and the limitations due to capacities of the present bridges over the Ohio constitute the critical features of Cincinnati's railroad problem.

The Problem Diagrammed

In the Master Plan study surveys of existing freight traffic were made. A diagram designated B appears as Fig. 2 in the Master Plan report on Railroads. It shows that:

(1) Heavy concentration of traffic occurs on the C. & O. Bridge while the Southern and L. & N. Bridges carry comparatively little traffic;

(2) Congestion occurs at Cincinnati Junction where large volumes of traffic cross each other moving between Mill Creek Valley and the Ohio River Valley;

(3) A large volume of traffic is concentrated in Mill Creek Valley between Cincinnati Junction and Ivydale Junction.

Most of the north and south traffic moves over the C. & O. Bridge across the Ohio River because there is no practicable way to connect the Southern Bridge approach on the south side of the river with the C. & O. and L. & N. lines, and because the L. & N. Bridge has excessive approach grades and is too lightly constructed to accommodate heavy engines.

The large volume of freight traffic in Mill Creek Valley and through Cincinnati Junction is composed of two types of movements: (1) L. & N. and C. & O. traffic interchanging with that of the N. Y. C. and
B. & O., and (2) intermingling of these interchange movements with the through east-west freight traffic of the B. & O.

**Passenger Traffic Increases Congestion**

Through passenger trains in and out of the Union Terminal from the north increase congestion between the B. & O. Mill Creek Yard and Ivorydale Junction. During the two rush-hour periods when most passenger traffic occurs, freight movements are completely stopped. Two additional tracks for this passenger traffic were a planned part of the Union Terminal project but were later omitted. It is assumed that the railroads will provide them in the near future to relieve this critical situation.

**The Improvements Needed**

The objective of the Railroads Plan is to eliminate the traffic congestion in the Mill Creek Valley in general, and particularly at Cincinnati Junction.

The objective can be realized by providing a new route to permit the heavy north-south interchange traffic to by-pass Mill Creek Valley and Cincinnati Junction.

The plan to cure this congestion includes:

1. Construction of a new Ohio River bridge just west of Lunken Airport;

2. Double tracking of the P. R. R. Richmond Division from Rendcomb Junction to its crossing of the N. Y. C. south of Sharonville;

3. A new connection from the north end of the N. Y. C. Sharonville Yard to the B. & O. Toledo Division north of Glendale, and

4. Sharing of the Sharonville Yard by the N. Y. C. with the B. & O.

By constructing a new bridge over the Ohio River west of Lunken Airport to connect with the C. & O. and L. & N. on the Kentucky side, the existing route of the P. R. R. Richmond Division could be used. It would be adequate for such a belt line if it were double-tracked from its junction southwest of Mariemont to the N. Y. C. south of Sharonville.

This line could be connected directly with the N. Y. C. Ohio Division south of Sharonville Yard, and a new connection to this yard provided by the B. & O. Toledo Division at a point about three miles north of Glendale. The N. Y. C. Sharonville Yard is a modern hump yard with ample capacity to handle B. & O. trains in addition to its own normal traffic.

**Advantages of Proposed Rerouting**

The effect of rerouting traffic according to this proposal is shown in Diagram C in Fig. 2 in the Railroads report. When compared with the diagram showing the same traffic as currently handled, the following changes which eliminate the present congestion and attain the desired objective of improving freight movement, are apparent:

1. Traffic on the C. & O. Bridge is materially reduced;

2. Traffic movements through Cincinnati Junction are very much simplified;

3. Traffic on the B. & O. main tracks between Ivorydale and Cincinnati Junction is reduced;

4. All freight traffic and all through passenger trains on the B. & O. Toledo Division between a point north of Glendale and Cincinnati Junction are eliminated;

5. Removal of interchange traffic from the L. & N. Bridge eliminates the need for this structure and the tracks along Saratoga Street in Newport;

6. Traffic on the P. R. R. Richmond Division is greatly increased.

**Effect of P. R. R. Richmond Division Improvements**

In connection with the marked increase of freight traffic which would occur on the P. R. R. Richmond Division it may be said that this increase would not have an unfavorable effect on the communities adjacent to it. This railroad line passes through a natural separator belt between communities as sought for in the Master Plan. At no point except in Reading does it have the effect of severing one residential section from another. The nearest it comes to doing so is in the vicinity of Montgomery Road northeast of Norwood. Here, however, it is in a considerable cut and Montgomery Road forms a strong connecting link across it.

Amberley Village is the only locality where future residential development might be contemplated in proximity to this railroad line. However, the desirability of abutting property for residential use has already been discounted to some extent. The Master Plan report on Industrial Areas recognizes the suitability for industrial use of a strip of land along the east side of the railroad in this vicinity.

In the 10 mile stretch from the north end of Reading to Rendcomb Junction there are only 13 grade crossings on this division, nine of them in Reading. Of the 13, seven grade elimination projects (three of them in Read-
RAILROAD PLAN
FOR FACILITATING FREIGHT MOVEMENTS IN THE CINCINNATI AREA
ing) would be required whether or not the changes proposed in this Railroads Plan are carried out. (See Appendix B in the Railroads report.)

It therefore appears that the proposed use of the Richmond division as a bypass route for interchange traffic is logical and satisfactory. Any possible unfavorable effect of increased traffic through Reading will be far outweighed by beneficial effects of removal of traffic from the B. & O. Toledo Division upon residential areas many times more extensive.

Effect of B. & O. Toledo Division Improvements

As can be visualized from Fig. 6 in the Railroads report, the B. & O. is much more of an adverse factor in relation to the abutting residential areas than is the P. R. R. Richmond Division. The former now cuts directly through Glendale, Wyoming, and other Upper Valley neighborhoods to the south. The removal of this burden of heavy through and interchange rail traffic would increase the desirability and value of nearby residential properties in Glendale, Woodlawn, Wyoming, Lockland, Hartwell, Carthage and Cumninsville.

On this division a large majority of the existing grade crossings would become of such minor importance as not to justify separation if the Plan is carried out. If it were not carried out, at least ten grade separation projects would be required and from 15 to 20 other crossings would either remain as danger spots or would require closure, at the price of considerable local inconvenience. (See Appendix B in the Railroads report.)

Effect of Improvements on Kentucky Side

It would be a great advantage to Newport to have the L. & N. tracks removed from Saratoga Street, eliminating the nine grade crossings. (See Fig. 45.) The Master Plan proposed Saratoga Street as a modified expressway to permit rapid and efficient carrying of U. S. 27 motor traffic through the closely built-up part of that city. Removal of the railroad is an essential step toward achievement of this major highway improvement.

The 1946 volume of freight traffic from the C. & O. Stevens Yard to the C. & O. Bridge was about the same as that from the L. & N. DeCoursey Yard to the C. & O. and L. & N. Bridges. This means that adoption of the proposed rerouting plan would constitute merely a reversal of present flows. The effect of freight movements on nearby property in Dayton, Bellevue, and Newport would be unchanged.

Estimated Cost of the Plan

The cost of the suggested improvements (excluding the two new B. & O. passenger main tracks) is estimated in detail in Appendix A in the Railroads report. It may be summarized as follows:

<table>
<thead>
<tr>
<th>Improvement</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Ohio River Bridge</td>
<td>$4,380,000</td>
</tr>
<tr>
<td>P. R. R. Richmond Division Improvement</td>
<td>4,620,000</td>
</tr>
<tr>
<td>B. &amp; O. Toledo Division Connection</td>
<td>1,350,000</td>
</tr>
</tbody>
</table>

Total Estimated Cost $10,350,000

According to the Railroads report, the very real necessity for improving existing conditions would justify this expenditure. Economic justification is demonstrable even if railroad traffic never increases above its present volume, or even though it declines, if the effect of the savings to both the railroads and the public are properly weighed.

Benefits and Savings Under the Plan

These savings are indicated by the following estimates:

1. Consolidation of yard operation at Sharonville should save a minimum of 2 switch engines, which would amount to approximately $175,000 per year. Capitalized at 6% it would justify an expenditure of $85,840,000.

2. The helper engine now necessary 24 hours a day on the N. Y. C. approach to the C. & O. Bridge could be eliminated, justifying an expenditure of $2,920,000.

3. Improvement of the P. R. R. Richmond Division as proposed would require complete separation of grades on this line, cost of which is included in the estimate. All grade crossings involved in this separation must be eliminated in the future regardless of the proposed rail traffic change. The cost of these separations, estimated at $1,250,000, would therefore be a savings or credit to the future grade crossing expenditures. (See Appendix B in the Railroads report.)

4. Elimination of all passenger trains and all through and interchange freight traffic from the B. & O. Toledo Division tracks would obviate expenditures amounting to $4,550,000 for grade crossing projects that otherwise must be carried out. (See Appendix B in the Railroads report.)

These four items total $14,560,000. They represent only those savings or benefits which are most apparent and easily appraised. Both the railroads and the industries they serve would benefit by the elimination of delays due to present congested conditions and by the consequent more efficient local industrial switching and interchange movements.
The benefits to the public through increased community values and residential desirability along the route of both the B. & O. and P. R. R. have already been commented upon. The public would also benefit by better railroad service to industrial areas.

All these benefits should be considered in apportioning improvement costs. The railroads and the public should assume their financial shares in proportion to actual benefits.

**Division of Expense**

A tentative division of expense, based on total estimated costs of $10,330,000 and total estimated benefits of $14,560,000, follows:

**Railroad Benefits**

- Yard operation saving ............... $5,840,000
- Helper engine saving ............... 2,920,000
- Grade crossing elimination
  (15% of cost) .................. 870,000

  Total Railroad Benefit $9,630,000 (65%)

**Public Benefits**

- Grade crossing elimination
  (85% of cost) .................. 4,930,000 (35%)

  Total Benefits ................. $14,560,000 (100%)

Based on these percentages, the division of costs would be:

- Railroad Share ................. $6,715,000 (65%)
- Public Share .................. 3,615,000 (35%)

  Total Cost .................. $10,330,000 (100%)

**East-West Belt Line**

The possibility of eventual need of a belt line for bypassing east-west freight traffic around the Metropolitan Area was studied. A route was worked out that could connect the B. & O. and P. R. R. at Loveland with the B. & O. and N. Y. C. at North Bend. From the standpoint of grades such a line is practicable. Preliminary estimates late in 1946 indicated a probable cost for a double track line from Loveland to Sharonville and a single track line from there to North Bend, of less than $7,000,000. Prospective need for this belt line, however, is remote if present congestion in the Mill Creek Valley and Cincinnati Junction is relieved by carrying out the proposed Railroads Plan.

**Railroads Plan Not an Extensive Project**

This Plan for improving the handling of freight traffic is much less ambitious than that which culminated in the Union Terminal. It involves a surprisingly small amount of physical modification of the present track pattern. Achievement of the Union Terminal demonstrated that it is possible for all railroads serving the Area to co-operate in both construction and operation, the latter including joint use of facilities where most efficient and desirable.

The Railroads Plan, like any other element of the Master Plan, is subject to further study as to details. Acceptance of the general concept of the Plan by railroads and public officials would make it possible to proceed with assurance with the gradual elimination of those grade crossings where the conflict of anticipated railroad operations and motor traffic indicate the justification for such expenditures.