



MY FAVORITE LINES

The Railroads of RAIL BARON

By Matt Ellis



RAIL BARON is a fast-paced game of strategy for three to six players, which has the unique feature of being able to be completed in an afternoon. Each player assumes the role of an empire builder from the heyday of American railroading, and is in competition with his rivals to assemble from the 28 railroads available for purchase a system that will make victory possible. Although the luck of the dice and personal interactions among the players can have a decisive effect on the outcome of the game, more often than not it is the player who has acquired the best rail net who will win. The individual railroads are the raw material from which winning—and losing—strategies will be constructed, and any discussion of *RAIL BARON* must have at its heart an evaluation of their strengths and weaknesses.

NORTHEASTERN LINES

The **Pennsylvania** is quite possibly the most valuable railroad on the board, and is certainly the most valuable within reach as an initial purchase. It provides direct access to 75 % of the Northeast and 74% of the North Central, two regions which between them account for over a third of all destinations. The access that it provides gives its owner the security to select the Northeast when given a choice of regions—a great advantage which no other railroad confers. This is an important advantage, not only because the Northeast offers the highest payoffs for trips that begin west of the Rockies, but also because it is the region most likely to be called for by the destination table. A player who chooses the Northeast as a destination region will have one chance in five of having a choice again on the next trip. In addition to all this, the PRR is the most-used line into New York, despite the well-founded consensus among those who do not own it that it should not receive the trade. The advantages that it offers are so great that the PRR is the one railroad which should be bought whenever it is available, and the one most worth taking chances to acquire.

The **New York Central** is a poor second to the PRR among the Northeast/North Central lines, but is nonetheless one of the five most valuable railroads in the game. It delivers access to 82 % of the North Central region,

more than any other railroad and more than enough to give its owner the freedom to go there when given a choice. But it gives access to only 33 % of the Northeast (although this does include a virtual monopoly on the 6% that is Albany). Possession of the NYC will make a trip to Boston or to Portland less daunting than it otherwise would be. The NYC is the best initial purchase if the PRR is not available.

The poor man's PRR, the **Baltimore & Ohio** provides access to 47% of the Northeast and to 46% of the North Central, enough to be useful but not enough to inspire confidence. It benefits from serving many of the same destinations as the PRR (since sane players shut out of a city will use the B&O instead whenever the choice is forced upon them). The B&O allows the closest approach to New York and points north of any line that does not serve that city. It is the best initial purchase if the PRR and NYC are not available.

In a three-player game, the **Chesapeake & Ohio** is a sort of rich man's N&W, valued primarily for the connections it offers to the SAL and the ACL and for the access it provides to certain cities. The addition of a fourth player transforms it into the pauper's NYC, bearing the same relationship to that line that the B&O bears to the PRR. Although the C&O provides access to a respectable 56% of the North Central, the 19% access it provides in the Northeast is too small an amount to inspire anything but fear. Despite its limitations as a Northeastern line, the C&O does offer a player deprived of a better one as close an approach as possible to the cities in the region. For such an unfortunate it is a necessary purchase—and one that will allow him to stand aloof from the mad scramble for the RF&P.

Although it can be a real moneymaker for whoever has it, the real attraction of the **New York, New Haven & Hartford** is for the owners of the PRR and the NYC. In combination with the PRR, it provides direct access to 89% of the Northeast and a close approach to the remainder. With the NYC it delivers access to 47% of that region, as well as guaranteed revenues on trips to 25% of it. These advantages are so great that players

who are wary of the owners of the PRR and NYC will not allow the NYNH&H to fall into the hands of either.

With a monopoly on the 6 % of the Northeast that is Portland, the **Boston & Maine** is another potential moneymaker, and an added attraction for the owner of the NYC. In combination with that railroad, the B&M provides access to 53 % of the Northeast and a monopoly over 11% of it. While it is not as attractive to him as the NYNH&H, the B&M is still pretty enough that the other players should not allow him to acquire it.

SOUTHEASTERN LINES

The best of the Southeastern railroads, the **Seaboard Air Line** provides access to 69% of that region and a monopoly on the 14% of it that Miami represents. The access that it delivers will allow its owner the security to select the Southeast when he is given a choice of regions, but only if he has the necessary connecting railroads, which can be difficult to acquire. Routes to and along the SAL are often so convoluted that it makes little sense to choose the Southeast unless no other safe region is available. The SAL is often the first railroad away from the Northeast to be purchased, and its sale usually precipitates a rush among the other players to pick up those Southeastern lines that remain.

The **Atlantic Coast Line** bears the same relationship to the SAL that the B&O bears to the PRR. It provides access to 51% of the Southeast—a useful amount—and has the advantage of paralleling and serving many of the same cities as the SAL (and the closest approach to Miami of any but the SAL). Players shut out of destinations served by the SAL will usually perversely attempt to alternate turns on the two railroads to avoid overburdening either of the two players with money. This only benefits the player who holds the ACL whenever anyone must travel to Miami. As with the SAL, it can be difficult to acquire railroads to connect with the ACL.

The **Louisville and Nashville** provides access to 50 % of the South Central, more than any other railroad, and is the only railroad to have a monopoly in that region (the 10% of it that is Nashville). Despite these credentials, the

relative inaccessability of the Southeast insures that the main contribution of the L&N to the value of any rail net will be as a Southeastern line. The L&N provides access to 42% of the Southeast, third best of any railroad; the connections that it offers to the SAL and the ACL are second to none. These advantages make the L&N attractive to every player. Those deprived of the SAL and the ACL will pursue it to minimize the potentially devastating consequences of a trip to the Southeast, while owners of those coastal railroads will pursue it to obtain connections to other railroads and to gain enough additional access to secure the Southeast as a region of choice. The L&N is a close second to the SAL among Southeastern lines, especially when its strength in the South Central is taken into account.

The **Southern** and the L&N are similar railroads, and they offer similar advantages as Southeastern acquisitions. The main difference between them is that the SOU offers those advantages in significantly smaller quantities. It provides access to 37.5% of the Southeast and to 31% of the South Central, less than the L&N in each case, and the connections it offers to the SAL are not nearly as profitable. In addition, the SOU fails to connect with the NYC at all. Despite these relative shortcomings, the SOU is, like the L&N, a much sought after rail line, and for all the same reasons. The only player which is not likely to pursue its ownership is the owner of the L&N. Although the SOU is inferior to the L&N as a Southeastern line, it does offer one advantage that the L&N does not—access to Washington D.C. A player shut out of the Northeast will not regard the SOU as inferior to the L&N, whatever its limitations in the Southeast.

Although the monopoly it has on the 10% of the Southeast that is Norfolk makes the **Norfolk & Western** a worthwhile addition to any rail system, its greatest value lies in the connections it offers between railroads. The N&W is the only minor railroad to offer connections to all of the major Northeastern and Southeastern lines, an advantage that makes it particularly attractive to the owners of the SAL, the ACL and the NYC. It is equally attractive to players deprived of a Northeastern line for the route that it offers into the North Central allows as close an approach as possible to many of the destinations served by those railroads. The N&W is often purchased ahead of any of the Central lines— especially if someone must travel to Norfolk early in the game.

The only player for whom the **Richmond Fredericksburg & Potomac** is likely to have any attraction are the holders of the SAL and the ACL. If one of them also holds the PRR or the B&O, he will value the RF&P for the ideal connections that it offers between his Southeastern and Northeastern lines. If one of them is shut out of the Northeast he will value the RF&P for the access that it provides to Washington and for the close approach that it offers to other destinations in the region. But the appeal of the RF&P is the most limited of any railroad in the game, and it is often the very last railroad to be purchased.

NORTHWESTERN LINES

The **Northern Pacific** provides access to 69 % of the Northwest, enough to give its owner a strong incentive to select that region when given a choice. This is a significant advantage, for the Northwest is far from the other regions and payoffs to and from it will usually be gratifyingly large. To best exploit this advantage, however, the owner of the NP must acquire railroads connecting with it at either end, a goal which is always difficult and often impossible to attain. The rewards are worth the effort though, and worth taking some risks.

The **Great Northern** and the NP are as much alike as any two railroads in the game. Which is the most valuable to a particular player will depend entirely upon his situation. The GN provides access to 62.5 % of the Northwest, which makes it marginally less desirable than the NP to a player seeking access or a safe region to select when he has to make a choice. On the other hand, the GN has connections with the WP, which makes it more desirable than the NP to a player concerned about being shut out of the Southwest. Both lines are difficult to establish connections to, but either will make a significant contribution to any rail system. Others will disagree, but I consider both the GN and NP to be more valuable than the SAL. The purchase of either of them can ignite a rush among the other players to acquire those Northwest lines that remain.

The **Chicago, Milwaukee, St. Paul & Pacific** provides access to only 39% of the Northwest, not nearly enough to give its owner leverage to select that region when a choice is offered. This greatly reduces its value in comparison with the NP and the GN, since a major reason to pursue a Northwestern line is to secure the Northwest as a region of choice. Further reducing its value is an almost total lack of connections

west of Minneapolis, with the UP offering the only hope of a speedy trip between the two Western regions. These disadvantages far outweigh the one advantage that the CMSTP&P enjoys over the NP and the GN, an abundance of connections at its eastern end. On a positive note, the acquisition of the UP will give the CMSTP&P owner connections to the Southwest and a Northwestern system that is second to none. Although the CMSTP&P is an inferior Northwestern line, the consequences of being shut out of the region are devastating enough that it is a necessary purchase for a player deprived of a better one.

SOUTHWESTERN LINES

Arguably the most valuable railroad in the game, the **Atchison, Topeka & Santa Fe** provides direct access from Chicago to 76 % of the Southwest, including a monopoly on 10% of that region (San Diego), as well as access to 41% of the Plains and 21% of the South Central. The access that it offers in the Southwest gives its owner the security to select that region when he has a choice, and the direct route that it offers insures that a minimum of time will be lost in transit. These are tremendous advantages, not only because any trips to the Southwest pay very well, but also because the Southwest is, next to the Northeast, the region most likely to be called for on the destination table. A player who chooses the Southwest as his destination has one chance in six of having his choice again on the return trip. Perhaps the only weakness of the AT&SF is that it affords no easy connections to the Northwest.

More valuable than the AT&SF to the player with the right connections, the Southern Pacific provides access to 82 % of the Southwest, 37.5 % of the South central and 24% of the Northwest. Although the owner of the SP is even more secure in selecting the Southwest as his region of choice than is the owner of the AT&SF, without the right connecting railroads his trip there is likely to be a good deal more time consuming. On the other hand, the SP does offer one advantage that the AT&SF does not—connections to the NP and the GN. Which Western line is the more valuable railroad will depend primarily on which connecting railroads the owner is able to acquire.

The **Union Pacific** is the only railroad in the game to have monopolies in two different regions (8% of the Southwest, Las Vegas, and 6% of the Northwest, Pocatello). Even with this advantage, it is a distant third among the three major Western lines, providing access

to only 32 % of the Southwest, to 49% of the Northwest, and to 51% of the Plains. The greatest weakness of the UP is its failure to provide adequate access in either of the two Western regions to secure it as a region of

choice. Its greatest strength is the thoroughness with which its combination with any of the three Northwestern lines will correct this weakness. In combination with the NP, the UP provides access to 87.5 % of

the Northwest and a monopoly on 6% of it. With the GN or the CMSTP&P, it provides access to 81% of the region and the monopoly as well.

**TABLE 1
PERCENTAGE OF ACCESS, BY REGION**

| | NE | SE | NC | SC | PI | NW | SW |
|-----------|---------|-------|-------|-------|-------|-------|-------|
| PA | 75.0% | | 73.6% | 9.7% | | | |
| B&O | 47.2% | | 45.8% | | | | |
| NYC | 33.3% | | 81.9% | | | | |
| C&O | 19.4% | 6.9% | 55.6% | 9.7% | | | |
| SAL | | 69.4% | | 8.3% | | | |
| ACL | | 51.4% | | 8.3% | | | |
| SOU | 11.1% | 37.5% | | 30.6% | | | |
| L&N | | 41.7% | 11.1% | 50.0% | | | |
| CRI&P | | | 22.2% | 23.6% | 72.2% | | 4.2% |
| CB&Q | | | 34.7% | 8.3% | 58.3% | 12.5% | |
| C&NW | | | 33.3% | 29.2% | 12.5% | | |
| SLSF | | | 12.5% | 37.5% | 36.1% | | |
| MP | | | 12.5% | 36.1% | 31.9% | | |
| IC | | | 34.7% | 36.1% | | | |
| GM&O | | 8.3% | 34.7% | | 25.0% | | |
| NP | | | | | 23.6% | 69.4% | |
| GN | | | | | 23.6% | 62.5% | |
| CMSt. P&P | | | 33.3% | | 19.4% | 38.9% | |
| AT&SF | | | 22.2% | 20.8% | 43.1% | 76.4% | |
| SP | | | | 37.5% | | 23.6% | 81.9% |
| UP | | | | | 51.4% | 48.6% | 31.9% |
| B&M | 19.4%* | | | | | | |
| NYNH&H | 13.9%** | | | | | | |
| RF&P | 11.1% | 6.9% | | | | | |
| N&W | | 9.7% | 18.1% | | | | |
| T&P | | | | 36.1% | | | 5.6% |
| D&RGW | | | | | 23.6% | 12.5% | |
| WP | | | | | | 12.5% | 37.5% |

* Excludes Albany
** Excludes New York

**TABLE 2
PERCENTAGE OF MONOPOLY**

| | NE | SE | NC | SC | PI | NW | SW |
|--------|------|-------|----|------|------|------|------|
| NYC*** | 5.6% | | | | | | |
| B&M | 5.6% | | | | | | |
| SAL | | 13.9% | | | | | |
| L&N | | | | 9.7% | | | |
| N&W | | 9.7% | | | | | |
| AT&SF | | | | | | | 9.7% |
| UP | | | | | | 5.6% | 8.3% |
| CRI&P | | | | | 6.9% | | |
| C&NW | | | | | | 6.9% | |

*** Includes Albany

**TABLE 3
CHARACTERISTICS OF REGIONS**

| Region | Accessibility | Probability of Choice | Regional Minimum | Probability Maximum |
|---------------|---------------|-----------------------|------------------|---------------------|
| Northeast | 2.31 | 20.8% | 17.2% | 30.2% |
| North Central | 5.26 | 15.3% | 13.3% | 26.3% |
| Southeast | 2.32 | 12.5% | 11.1% | 24.1% |
| South Central | 3.53 | 12.5% | 11.1% | 24.1% |
| Plains | 4.38 | 11.1% | 10.0% | 23.0% |
| Northwest | 2.93 | 11.1% | 10.0% | 23.0% |
| Southwest | 2.38 | 16.7% | 14.3% | 27.3% |
| Overall | 3.22 | 13.0% | | |

Accessibility—expected number of railroads per destination
Probability of Choice—probability a choice of regions will be offered
Minimum Regional Probability—occurs if region is never region of choice
Maximum Regional Probability—occurs if region is always region of choice

The Acquisition of the UP will guarantee the owner of any of these three Northwestern lines the superior system in that region—an advantage that will greatly offset the weakness of the UP in the Southwest. Without a Northwestern line to compliment it, the UP is markedly inferior to either the AT&SF or the SP. Even an inferior Western line is far better than no Western line at all, and the UP—despite its limitations—is still one of the five most valuable railroads in the game.

Dollar for dollar the most valuable railroad on the board, the **Western Pacific** gives its owner a great advantage in the competition for routes into the Southwest. In combination with the AT&SF, it provides direct access to 88% of that region, a monopoly on 10% of it, and connections with the GN. With the SP, it delivers access to 82% of the region and a monopoly on 11% of it. With the UP, it offers access to 69% of the region and a monopoly on 8% of it. In short, possession of the WP will guarantee the buyer of the AT&SF or of the SP the superior system in the Southwest, and will give the buyer of the UP a system nearly the equal of the AT&SF or SP alone. It

is the extent to which the WP relieves its owner of the pressure to acquire a particular western line, the degree to which it expands his options, that is the real value of the WP. (It goes without saying that a player who cannot acquire any of the three western lines had better have the WP, and connections to it.) The WP is the best initial purchase if the PA, NYC and B&O are all unavailable.

The **Denver & Rio Grande Western** offers so many *potential* advantages that it is almost always purchased early in the game, long before its actual value to the player who buys it is clear. To the owner of the WP, it offers the best connections to his railroad should he be deprived of a major Western line. To the buyer of the SP, it offers a direct route into the Southwest, one that will make his Western line as valuable to him as the AT&SF is to its owner. To a player shut out of the Southwest or the Northwest, it offers as close an approach as possible to most of the destinations in those areas. The D&RGW will have little value to any player, however, unless it can be combined with the CRI&P, the CB&Q or the MP. In most games, it will

act as a western extension of one of these Central lines.

CENTRAL LINES

The best of the Central lines, the **Chicago, Rock Island & Pacific** provides access to 72% of the Plains, a monopoly on 7% of that region, useful access in the South Central, and connections to Chicago and Tucumcari. The access delivered in the Plains gives the owner of the CRI&P the freedom to select that region when given a choice— although this is of dubious benefit since, if he has no better choice available, payoffs to and from the Plains are uniformly poor. The real value of the CRI&P lies in the access it provides—not to cities, but to other railroads. The only major railroads to which the CRI&P does not offer connections are the SAL and ACL; possession of it practically guarantees a well-connected system. Although the advantages that it offers makes the CRI&P attractive to every player, its greatest attraction is for the owner of the SP. The purchase of the CRI&P will give him a route into the Southwest that is nearly as direct as that offered by the AT&SF, and will make the SP even more

valuable to him than the AT&SF to its owner. The CRI&P is seldom the first of the Central lines to be purchased, but its sale initiates a scramble among the other players for those connecting railroads that remain.

The **Chicago, Burlington and Quincy** provides access to 55% of the Plains and to 12.5% of the Northwest, and offers connections to Chicago, St. Louis and Fort Worth. Despite its strength in the Plains, the relative inaccessibility of the Northwest insures that the main focus of the CB&Q will be on that region. It provides the deepest penetration into the Northwest of any of the Central lines, and its acquisition is the best way for a player shut out of the region to minimize the painful consequences of a trip there. The greatest attraction of the CB&Q, however, is for the owner of the NP. In combination with that railroad, the CB&Q provides access to 75 % of the Northwest, a monopoly on 7 % of it, and badly needed connections to Chicago. The acquisition of the CB&Q is the one sure way for the owner of the NP to make the most of his rail line that is not available to the owner of the GN. The greatest weakness of the CB&Q, in comparison with the CRI&P, is its failure to offer connections to either the GN or the SP.

The **Chicago & NorthWestern** provides access to 33 % of the North Central, to 29 % of the Plains, to 12.5 % of the Northwest, and is the only Central line to have a monopoly in one of the Western regions (the 7 % of the Northwest that is Rapid City). The greatest attraction of the C&NW is for the owners of the NP and GN, and it is equally valuable to both. In combination with either, the C&NW provides access to an additional 12.5 % of the Northwest, a monopoly on 7 % of it, and connections to Chicago. The acquisition of the C&NW will guarantee the owner of the NP the superior system in Northwest, or will give the GN-owner a Northwestern system every bit the equal; of the NP-CB&Q combination. The advantage that it offers owners of the two best Northwestern lines are impressive enough that the C&NW is almost always the first of the Central lines to be bought.

The **Missouri Pacific** provides access to 36 % of the South Central and to 32 % of the

Plains. Although the access it delivers can make the MP a worthwhile addition to any rail system (along with connections to St. Louis), its greatest benefit is for the owner of the SP. The MP offers connections to the SP that are second only to those offered by the CRI&P, and its purchase will give the SP-owner a Western line that is nearly as valuable to him as the AT&SF is to its owner. The appeal of the MP among the other players is limited enough that it is usually among the last of the Central lines acquired.

The **St. Louis-San Francisco** rail line provides access to some 37.5% of the South Central and to 36% of the Plains, with connections to St. Louis. Although the SLSF, like the MP, can be a nice addition to any system, its great attraction is for players seeking routes into the Southeast. The SLSF offers connections to the SAL and ACL that are only slightly inferior to those offered by the SOU, an advantage that makes it attractive both to players shut out of the Southeast and to owners of those coastal roads. The SLSF is a railroad of broad appeal; it is almost always purchased ahead of the MP.

The **Gulf, Mobile and Ohio** is unique among Central lines in offering no profitable access in any of the three Central regions. It provides access to just four cities, only one of which is not served by at least six other railroads. What value the GM&O has lies almost exclusively in the connections that it offers to other railroads. To a player seeking routes into the Southeast, that value is substantial, for the GM&O offers connections to the SAL and the ACL that are next only to those offered by the L&N. The connections that it offers to the SAL, in particular, are far better than those offered by the SLSF. Despite this advantage, the failure of the GM&O to have worthwhile access in the Central regions makes it less valuable than the SLSF to every player but the owner of the SAL. In a game in which no one is shut out of the Southeast, the GM&O is usually the last of the Central lines to be purchased; but in any other game, it is often one of the first.

The **Illinois Central** has access to 36% of the South Central and offers connections to Chicago and St. Louis. In most games that is

the full extent of its value. The IC does offer connections to the SP, but if the owner of that railroad must rely on them he will waste so much time on trips to the Southwest that the SP will be much less valuable to him than the AT&SF is to its owner. In addition, the IC fails to connect with the UP at all. The few advantages that it offers are so modest that in any game in which connections to the Southeast are dear, the IC is usually the last railroad purchased.

The **Texas & Pacific** provides access to 36% of the South Central and to 6% of the Southwest. Although it complements well every railroad that connects to it, the T&P is particularly attractive to the owners of the L&N and the MP. In combination with the L&N, the T&P provides access to 74% of the South Central, while with the MP it provides access to 72 % of the region. The acquisition of the T&P will give the owner of either enough additional trackage in the South Central to secure it as region of choice—a modest advantage, to be sure, but an advantage nonetheless. In addition, for a player recently shut out of the Southwest, the T&P is often the only railroad still available that offers anything like a close approach to the destinations in that region.

CONCLUSION

These are the railroads of *RAIL BARON*. Some offer great advantages to whoever holds them and will be pursued by every player, while others offer specific advantages but limited advantages to certain players and will be of little interest to anyone else in the game. Despite this wide variation in the appeal of the individual railroads, under the right circumstances the outcome of a game can hinge upon the ownership of any of them. Each railroad has the potential to be, in the only sense that really matters, the most valuable railroad in the game—the one whose acquisition makes victory possible for the winning player.