# Locomotion

# **Chicago to Jackson in Five Years**

By Alfred Barten



Three trains of tank cars can be seen here transporting chemicals from the sources (lower right and a second facility out of the picture to the right) to factories in St. Louis (center) and Chicago and Chicago West (top). The Mississippi River valley provides enough flat land to make building the route easy and entirely level. The line continues south (out of picture) to Jackson, Mississippi.

n case you haven't guessed from my earlier articles on *Locomotion*, I'm still in exploration mode, learning the ins and outs while seeing if I could develop specific themes. I began with trams-only layouts, then built and wrote about interurbans in Ohio and comprehensive systems in New York City that extended well beyond the confines of the Big Apple. This time I'm exploring freight by rail.

Freight traffic is the most complex aspect of LoMo, especially rail freight. To begin with, there are two categories of businesses: producers (e.g., coal, oil, chemicals, timber, etc.) and processors (e.g., power plants, refineries, factories, sawmills, etc.). In general, producers provide commodities that producers need to

create consumer products. The specifics for each producer and processor are varied. Power generators require coal to produce power. Food processors require cattle OR grain to produce food, which is turn shipped to places that accept food. Steel mills require ore AND coal to produce steel, which can be shipped to places that receive steel. As a transport provider, you will need to provide a means of getting the appropriate commodities to the appropriate producers, and you will need to use the appropriate kind of freight car for each.

# Producers and Processors

I compiled the next two tables by searching through various scenarios. I have no way of knowing if they are complete, nor can I be sure they will always be complete even if they are complete at the moment.

#### **Producers**

Producer	Pruduces	Sends To	Via
Farm (Grain)	Grain	Food Processor Brewery	Covered Hopper
Farm (Livestock)	Livestock	Food Processor	Stockcar
Coal Mine	Coal	Electricity Generator Steel Mill	Hopper
Ore Mine	Ore	Steel Mill	Hopper
Chemical Works	Chemicals	Factory	Tanker
Forest	Lumber	Sawmill	Flat Car
Oil Well	Oil	Refinery	Tanker
Vineyard	Grapes	Winery	Goods Car

#### **Processors**

Processor	Requires	Produces	Ships Via
Food Processing Plant	Grain OR Livestock	Food	Boxcar
Power Station	Coal	Power	
Brewery	Grain	Food	Boxcar
Steel Mill	Coal AND Ore	Steel	Flatcar
Factory	Chemicals OR Steel	Goods	Boxcar
Flour Mill	Grain	Food	Boxcar
Sawmill	Lumber	Goods	Boxcar

Paper Mill	Lumber	Paper	Flatcar
Oil Refinery	Oil	Goods	Boxcar
Printing Works	Paper	Goods	Boxcar
Winery	Grapes	Food	Boxcar

Since my school days are long behind me, I no longer have to memorize lists of facts, nor should you. The better way to learn the material is to pick a producer of resources and look for processors that can use the resource. Another thing to do is pick a type of freight car and see what it can carry. Use the tables as references; in time you will get to know them all.

Notice the last two columns of the second table. They tell you what products are produced by the processors and what cars are used to ship the products. Only paper is shipped to another processor in the table – Printing Works. All other products are sent somewhere undefined. These unlisted destinations can be thought of as consumers. You can get an idea of who the consumers are and what they consume by pausing the cursor over various buildings, such as concert halls, court houses, shops and offices, and so forth. Like every other shipper and recipient, consumers are reached via stations. If a given court house, for example, is within the catchment area of your station, the station will accept the products that the court house receives. This gets to be a bit fussy, especially when you are building a transport system. I find it far more profitable to work with matched pairings of producer and processor, such as shipping grain from a farm to a food processing plant.

#### **A Few Pointers**

When it comes to building a new transport system, there are a few guidelines I can pass along based on my experience and a little common sense. First, remember that money is in short supply and everything has to be built from scratch. That is, you have to spend money to lay track, build stations, and purchase locomotives and cars. Second, look for ways to generate reliable income with a minimum investment. Once you have a big, successful system with lots of cash on hand, you can be more adventurous.

Building a simple tram route at the outset is a guaranteed money generator. Next, look for a matched pair of producer/processor that is close together with of minimum of environmental obstacles, such as hills/valleys and rivers in between. Bridges, tunnels, and land reshaping are expensive. When you are just beginning, they can be bankruptors.

#### **Bucko Transport**

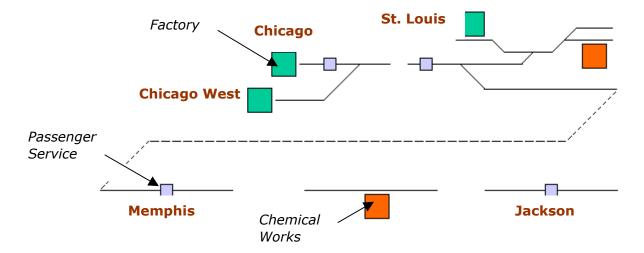
For my exploration of the freight business, I began with the *North America (Midwest) 1920* scenario, which I modified to Beginner

status and reduced the loan rate to 7%. I did some initial exploration of the map and eventually decided to begin in St. Louis. I tried two different approaches before hitting on the one portrayed here. In the first attempt I built lots of track, much of it very expensive, and spent 15 game-years developing a sprawling network with little yield. One producer went out of business just as my track was about to reach it, and two hard-to-reach processors proved to be very poor businesses. The second attempt - this time I tried to bypass the trams - nearly ended in bankruptcy twice in the first few years.

Using what I learned from the first two experiences, I built the Bucko Transport system in about five years and have a system that I'm not only pleased with esthetically, but one that is ready to begin generating serious income.

I built the system simply and purposefully, securing each step before proceeding to the next. Here is a diagram of the route and its order of construction.

## **Bucko Transport: 1925**



## Operation.

Train	Route	Consist
Train 1	St. Louis Chemical Works – St. Louis Factory	8 tankers
Train 2	St. Louis Chemical Works – Chicago West Factory	8 tankers
Train 3	Jackson Chemical Works – Chicago Factory	7 tankers, 1 coach
Tram 1	St. Louis	1 tram
Tram 2	Chicago	1 tram
Tram 3	Jackson	1 tram
Tram 4	Memphis (planned)	1 tram

# **Order of Construction.**

Step	Vehicle	Route
1	Tram 1	St. Louis
2	Train 1	St. Louis Chemical Works – St. Louis Factory
3	Train 2	St. Louis Chemical Works – Chicago Factory (until step 6)
4	Tram 2	Chicago
5	Train 3	St. Louis Chemical Works – Chicago West Factory
6	Train 2	Jackson Chemical Works – Chicago Factory
7	Tram 3	Jackson
8	Tram 4	Memphis (planned)



Eight months in and we have a tram line in St. Louis and a steady flow of chemicals from the supplier (right) to the factory (left).



Nineteen months in and we have added a line and a second train to Chicago.

#### **Vehicles**

I tried various steam locomotives during my several attempts. I can't categorically recommend one over any other, but for the Bucko Transport system I used the Baldwin 2-8-0's since I knew by then that I would be using longer trains.

The trams are the simple CE types.



Baldwin 2-8-0's were chosen for their greater power. Dollar values are for 1925.



Twenty-seven months in and we have added a tram line in Chicago.



Nearly five years in and our line is complete from Chicago to Jackson. The Chicago-Jackson train is shown here in St. Louis with seven tankers and a coach. The local train has eight tankers.

That's all for now.



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