The Burlington Railroad that Grows

Here is an example of an Operations Oriented model railroad that grows as your skills and finances increase. It is loosely based upon the Burlington Railroad (Chicago Park, IL) of the early 1980's.

For stage ONE you lay a double-oval track with crossovers. This continuous run layout allows you to rail fan your trains, yet the inclusion of an "Amtrak" station gives the railroad an operations purpose. The modern station is an excellent candidate as your first inexpensive Paper Craft construction project.

For stage TWO, you add a splitting freight spur that services the businesses of "Midstate Molasses" (a molasses transfer facility) and "Northwest Manufacturing" (a glue factory). The track to Northwest has a very slight downgrade, which allows you to practice your elevation change modeling skills. The track to Midstate goes through the middle of a street, which allows you to practice your structure building skills. This stage is also where you should start experimenting with Car Forwarding, and operating trains in a realistic manner (no hot-rodding your train down the street).

For stage THREE, you add another splitting freight spur on the opposite side of the layout, that services the businesses of "Magic Pan Bakery" (a bakery) and "ADM" (a grain transfer facility). This stage introduces trackwork complexity, to induce complex car spotting challenges. Although only one locomotive is required on the layout, you could add a captured industrial switcher just to service ADM.

Stage FOUR requires attaching a peninsula to the existing layout. This is considered an optional stage, as "Scribner Yard" on the peninsula requires the purchase of many expensive turnouts. The advantage however is the inclusion of two more freight destination businesses. "OmniSource" (a scrap yard) is located on a spur extending from the end of the freight yard lead that connects to the outermost oval of the main layout. "Southland Lumber" (a lumber yard) is located on a branch line, that extends directly from Scribner Yard through a back-out maneuver.

Scribner Yard has an engine service building, as well as a track to park cabooses (or M.o.W. equipment). Note that rare long term car storage needs would probably use the spur at the end of yard track 2. The engine house is a true destination like any other business, where you would car forward your locomotives. Yard tracks 2 and 3 double as a handy runaround track (try to keep these tracks open as much as possible), which allows you to reposition your locomotive on the opposite end of your train.

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This layout was originally built in HO-scale. Normally island-type track plans are poor choices in the larger scales, due to human arm reaching issues. Because however this layout was of reasonable overall size, was built from sectional track, and because all the tracks were located close to the outer edges on this layout, it made a great candidate for upscaling to 3-rail O-scale.

Most railroad track plans are not Operations Focused. This layout is an exception, as the designer from the inception intended to use realistic Car Forwarding and Car Spotting procedures. At its core though the layout incorporates a continuous run trackwork scheme, but this happens to be ideal for showing off moving trains to curious casual visitors (yes even an Aquarium car you might want to run just for fun).

I carefully studied the YouTube walkthrough video, in order to reproduce the placement of track pieces as closely as possible. Naturally there are some minor differences, as the available sectional track pieces differ slightly between the two modeling scales. The most noticeable difference is in the length compressing track distortion that occurs due to the extreme amount of diversion within the 3-rail turnouts I selected (a good thing actually when it comes to fitting the upscaled layout into a typically sized basement). Yes, Atlas does make turnouts that more closely match the diversion angle of the HO-scale turnouts used on the prototype layout, but both their cost and their layout length space requirements made them prohibitive for this upscale. There was also no suitable analogue for the slip switch in Scribner Yard, so I simulated it using two back-to-back turnouts combined with a Y-turnout.

Because this is a track piece for track piece upscaling, the track plans functionality is identical. The same number of 3-rail O-scale cars will fit on a spur as did on the prototype HO-scale layout. One upscaling expansion advantage is that human fingers can now fit between all the paralleling tracks. The track curvature that resulted from the upscaling to O-scale was huge though, with a minimum curvature of O-54, and a maximum of O-90. 3-rail trains are designed to operate on a scaled curve radius of about half the size used in HO-scale, so the result in this layout is that all of your trains, and especially passenger trains, will look amazing when traveling through these broad curves.

This layout would be a good choice for a "train set" owner looking to build their first real model railroad. In the first stages, this layout is simple enough that a beginner could construct it. In these early stages it does not even have to be laid upon benchwork, but could be setup directly on the floor (and enhanced with appropriate **durable** structures of course). Although in this new millennium you will probably power your layout using command control, this layout can be easily wired for conventional train control.