Yellow Railroad Buffer Stop, 2020 Nico Young

If the brakes go out, if all other systems fail, at the end of a railroad line is a buffer stop to stop a train from rolling off the end of a track.

A buffer stop marks the place where a rail line either begins (the origin) or ends (the terminus). This is either on the outer limit of a transit region, or at the center, at a downtown station. The end of a rail line is often mobile, being pushed further as a transit system is expanded. This first happened during the industrial revolution, when the expansion of transnational railroad systems spurred migration and the development of cities around their terminus. Then again with the development of local rail transit systems within cities, and their expansion echoing the settlement of people in the city, and the extension of public services. In both cases, the buffer stop undergoes continual relocation, to mark the new limit of development.

A railroad system is designed so that a buffer stop should never be used. The buffer stop then represents a design that accounts for the shortcomings and failures of design.

Buffer stops are hulking structures. Their paint job is always fresh because they don't show the wear and tear of use. They are not supposed to be used because they are not strong enough to safely stop the force of a train that is in motion. When buffer stops are used, there are usually injuries and a news story. When used, the buffer stop is destroyed.

I use the buffer stop as a symbol for a safety structure in place for the event of a complex system not working as it's designed to. These structures are used as a last line of defense against a system out of control, and when they are used, the result can be messy. When a person sees a buffer stop at the end of a railroad line, it is a reminder that all systems, even those as rigorously engineered and reliably used as railroads, are vulnerable to failure.



February 4, 2020