

## Where Is It Now?

The Metropolis’s design was almost completely irredeemable—believe me, over time we tried to fix it. The amount of effort required to rework, refactor, and correct the problems with the code structure had become prohibitive. A rewrite wasn’t a cheap option, as support for the old, baroque control protocol was a requirement.

As you can see, the consequence of the Metropolis’s “design” was a diabolical situation that was inexorably getting worse. It was so hard to add new features that people were just applying more kludges, Band-Aids, and calculated fudges. No one enjoyed working with the code, and the project was heading in a downward spiral. The lack of design had led to bad code, which led to bad team morale and increasingly lengthy development cycles. This eventually led to severe financial problems for the company.

Eventually, management acknowledged that the Messy Metropolis had become uneconomical, and it was thrown away. This is a brave step for any organization, especially one that is constantly running 10 paces ahead of itself while trying to tread water. With all of the C++ and Linux experience the team had gained from the previous version, the system was rewritten in C# on Windows. Go figure.

## A Postcard from the Metropolis

So what have we learned? Bad architecture can have a profound effect and severe repercussions. The lack of foresight and architectural design in the Messy Metropolis led to:

- A low-quality product with infrequent releases
- An inflexible system that couldn’t accommodate change or the addition of new functionality
- Pervasive code problems
- Staffing problems (stress, low morale, turnover, etc.)
- A lot of messy internal company politics
- Lack of success for the company
- Many painful headaches and late nights working on the code

## Design Town

**Form ever follows function.**

*—Louis Henry Sullivan*

The Design Town software project was superficially very similar to the Messy Metropolis. It too was a consumer audio product written in C++, running on a Linux operating system.