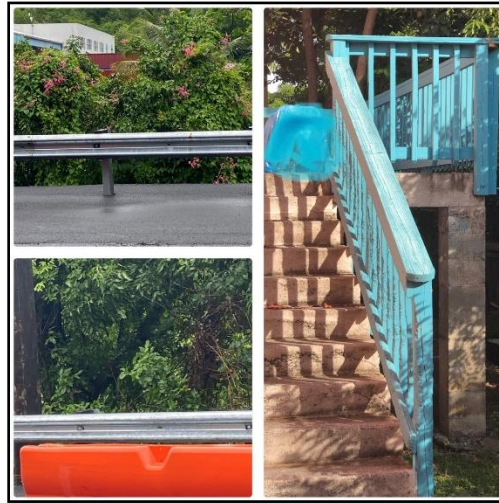


Week 3 Design Example



This week I will discuss what I have observed to be a good design factor: guardrails. This often overlooked and underappreciated human factors design can be seen just about everywhere in the United States and other countries around the world. Guardrails have significant functions. They may look slightly different from one country to another, however guardrails provide the same benefits wherever they are installed. They provide safety. Let's examine how they impact society.

Have you ever wondered what it would be like to drive on open roads for long periods of time, without any guardrails? You may feel unsafe, especially on winding roads. Guardrails make roads safer to drive on because they serve as a barrier between established roads, and areas that should not be driven on. There may be a ditch or a waterway on the other side of the guardrail that you may not know exists. Guardrails also help to minimize the impact of a crashing car. When a car has an emergency it may skid or slide while someone is driving. When a car hits the guardrail, the car's momentum slows down or stops. Therefore, helping to prevent the car from crashing into trees or going down a steep hillside.

Besides roadside guardrails, you can also find different varieties like handrails which are used for the prevention of slips and falls in many places. They prevent accidents and are often found inside and outside of buildings that have stairs or uneven surfaces. They are also placed along trails where there may be steep or otherwise dangerous terrain. And they are placed on boats to deter people from falling overboard.

Today, you can find still find steel guardrails, with some painted and/or with reflector lights. There are even portable ones that are made of heavy plastic that can be easily moved from one place to another, when roads are under construction. Guardrails and handrails from my experiences are both good human design factors.