

Infrastructure for Everyone

Plan, Retrofit, Design and 3D Model Curb Ramps to Compliance with AQCESSRAMP



A photo shows where AQCESSRAMP will be used to design a new curb ramp at the intersection of the busy Colfax Ave. and Clermont St. in downtown Denver. The ramp will be retrofitted to be directional to the cross street, while avoiding the utility pole and street sign that can cause difficulties when drafting designs by traditional methods. This design (inset), created with AQCESSRAMP, has been cropped and oriented to match the street view. enver's Department of Transportation and Infrastructure (DOTI) is taking aggressive measures to keep up with and stay ahead of the city's tremendous growth, including dozens of current transportation and infrastructure projects (see *bit. ly/44SHRsp*). Its Colfax Bus Rapid Transit (BRT) project is in the final engineering and design phase to identify transit and other multimodal improvements within the East Colfax Ave. travel corridor. ADA compliant curb ramps are an important design consideration to make infrastructure safe and accessible for all users.

To achieve this, DOTI partnered with renowned engineering firm Parsons, whose engineers utilized AQCESSRAMP to save countless hours of manual design. The ready-made curb-ramp designs seamlessly integrate into the corridor's overall design drawings, ensuring efficiency and precision.

Take a Deeper Dive

The December 2023 issue of *Informed Infrastructure* will feature an accredited PDH learning course, "Technology Improves Ease and Speed of Designing Infrastructure for ADA Compliance," that will discuss

the technical details engineers must consider when designing equitable and inclusive infrastructure, including hundreds of curb ramps at locations convenient for those with disabilities. M. Albert Herrera, P.E., senior engineering manager at Parsons (pictured), will explain the various codes and requirements for such infrastructure as well as the techniques and workplans they used to meet them. Readers will learn how to create efficient and effective designs that can be constructed on time and within budget.

The PDH also will describe how Parsons partnered with DOTI to meet city and department needs on this crucial project for the effective and equitable expansion of a rapidly growing metropolis.



M. Albert Herrera, P.E. Senior Engineering Manager, Parsons





A pdf created by Parsons (top) highlights the Colfax/Clermont intersection where a new curb ramp was designed and then built. The designed Bus Rapid Transit (BRT) platforms are closer to the Cherry St. intersection toward the right of the design. Images from Denver's Department of Transportation and Infrastructure (DOTI) illustrate what the BRT will look like when complete (middle) as well as the full map of the Colfax BRT (bottom). The Colfax/Clermont intersection is half a block from the Cherry St. stop.

Accessible Infrastructure

AQCESSRAMP revolutionizes the way curb ramps are designed by minimizing iteration cycles in the design process. Easily integrate 2D ramps into



A 3D model in AQCESSRAMP depicts how a curb ramp design should blend smoothly with the terrain model to make it easier for people with disabilities to safely navigate or utilize the available infrastructure.

your existing surface in 3D and complete your design in minutes. Select your design guideline (all U.S. states plus FHWA, PROWAG and ADAAG included), customize ramp designs from the templates provided and enjoy the convenience.

To watch a short video demonstrating how the software allows engineers to design fully compliant curb ramps in minutes, visit *bit. ly/3ExYTBj* or simply scan the accompanying QR code.

