

STAIRS-CROSSING VEHICLE (SCV)

Abstract

Traditional wheeled vehicles face significant limitations when it comes to maneuvering across stairs and uneven terrains. These limitations restrict the freedom of movement for people with disabilities, elderly individuals, and those in emergency situations. Conventional alternatives such as stair lifts, ramps, or elevators are often costly, cumbersome, and can only be installed in specific locations. This project is aimed at the **Physically disabled people** and **elderly individuals** to overcome these problems but it can also be used in robots, vehicles to climb hills. We have designed a maneuvering vehicle called as **Stairs-Crossing Vehicle (SCV)**. The primary objective of the Stairs-Crossing Vehicle project is to design and develop a compact, versatile, and efficient transportation device that can help disabled people cross the staircases and irregular surfaces. The SCV will be capable of crossing obstacles, such as steps and curbs, while maintaining stability and ensuring passenger safety. The Stairs-Crossing Vehicle project is an ambitious endeavor that has the potential to transform the lives of millions of people around the world. By providing a versatile, efficient, and safe solution to conquer stairs and various obstacles, we hope to create a more inclusive and accessible society.

Keywords: Stairs-Crossing Vehicle (SCV), physically disabled people, climbing, transportation, efficient, stability, safety.