

Video	Audio
Voiceover	In an instant — the grasp on the hand brakes, the squealing tires, the realization of what was to come, the unavoidable collision between motorcycle and passenger side of a pickup truck — everything changed for John Roby.
Roby (0:32) John Roby Mankato, Minnesota	"I can't tell you all the details because I was unconscious when I was brought here."
Roby (1:31.5)	"If it wasn't for helicopters and doctors, I would not be here talking to you today."
Voiceover	In June 2020, John Roby was seriously injured in a motorcycle-truck collision and flown by helicopter to Mayo Clinic Hospital.
Voiceover	There, doctors worked tirelessly to rebuild John's face. Plastic surgeons, with the help of radiologists and biomedical engineers, used 3D printing to recreate John's face as it was and as they hoped it would be.
Morris (1:19) Jonathan Morris, M.D. Radiology Mayo Clinic	"By collaborating between Engineering, Radiology and Plastic Surgery, we're able to create a perfected skull, where all the parts that we previously had created are now in the right area and in the right location both for the form of his skull — so that he looks normal, as well as functions normal after the fracture."
Voiceover	The team built three versions of the face, the first with each fracture fragment in a separate color, so Dr. Basel Sharaf in Plastic Surgery could move them around to where they should be. The second showed what they hoped to achieve, and the third how they could do so — with the guides in place.
Sharaf (4:35) Basel Sharaf, M.D. Plastic Surgery Mayo Clinic	"When you have extensive facial trauma, usually without this intermediate layer of virtual planning and 3D printing, we have to achieve basically the final reconstruction in the operating room."
Voiceover	The reconstruction process is lengthy. John recently had his ninth surgery to treat not only his

	facial fractures, but other injuries. The progress has given back to John and his family something that had been taken away back in that moment in June 2020.
Roby (1:17)	"Every time I come here, I leave better than when I got here."
Roby (3:52)	"I recognize me, and the most important thing is that my girlfriend does and my grandkids recognize me. That is worth everything to me. They know who I am — I'm grandpa."
	For the Mayo Clinic News Network, I'm Jason Howland.