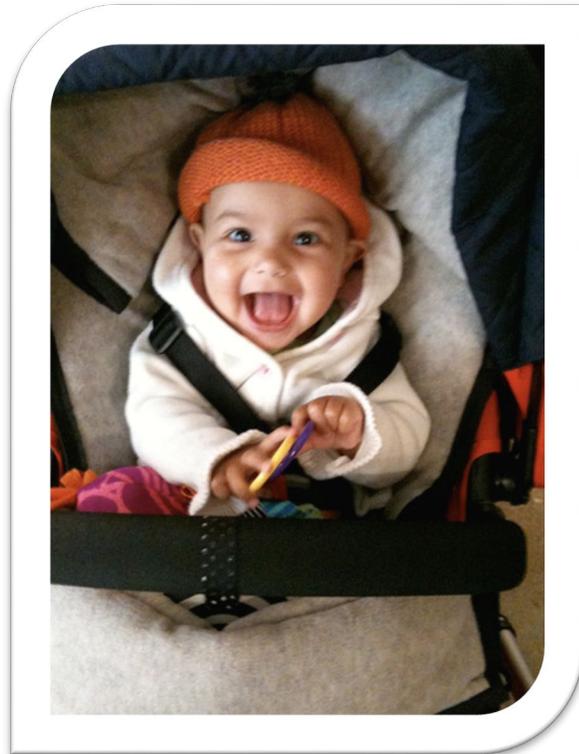


ADAPTIVE STROLLERS FOR PARENTS WHO USE WHEELCHAIRS

The number of parents with disabilities worldwide is uncertain. However, an estimated [4.1 million parents](#) in the U.S. have disabilities. If you are one of these parents and use a wheelchair, you may find an adaptive stroller helpful. These devices may allow you to travel with your child more easily and independently outdoors. There are only a handful available on the market right now, but there are some promising models in development. This guide will highlight a few adaptive strollers that are currently available for purchase, as well as a few prototypes that may soon be on the market. It will also provide you with several resources that may help you in determining whether you are able to use or customize a standard stroller.



Using and moving a standard stroller while simultaneously propelling your own wheelchair forward may be complicated. For instance, the stroller seat may be too low or too high to easily place your child in it; you may not be able to reach a stroller's handle to push it; you may not have the strength to push it; or the footplate of your wheelchair may bump against the stroller.

To address these and other concerns of parents like you who use wheelchairs, assistive technology (AT) developers have started creating adaptive strollers.

[Adaptive Strollers on the Market](#)



Designability's Wheelchair Baby Carrier

One example is Designability's Wheelchair Baby Carrier. This attachable stroller consists of a baby carrier mounted atop a three-sided, U-shaped frame. The shorter U-shaped side of the frame has a wheel in the center that rests in front of your wheelchair, and the two longer sides of the frame have a clamp on each end for securing the attachable stroller to your wheelchair's footplate.

Designability's Wheelchair Baby

Carrier has several features, including:

- Safety straps to secure your child to the baby carrier;
- Forward- and rear-facing mounts for mounting the carrier on the frame - you can either have your child facing you or facing away from you; and
- An adjustable seating position so you can set the carrier upright when your child is awake and recline it back when it's time for him or her to rest.

While Designability's Wheelchair Baby Carrier attaches to the front of your wheelchair, the Buggypod Lite—another possible option—is a baby carrier that can be attached to the right-hand side of most powered wheelchairs using the provided mounting brackets. Constructed of an aluminum tubular frame, this attachment is an extra seating system that consists of a baby seat carrier with a backrest and an attachable/detachable wheel underneath. You can mount the Buggypod Lite to the right-hand side of your wheelchair whenever you need it, and detach it by pressing the two quick-release tabs and fold it up when you do not. Once mounted to your powered wheelchair, your child, seated in the Buggypod Lite, will move alongside you as you move your wheelchair. Suitable for toddlers who are six months of age or older, the Buggypod Lite has several features, including:



Buggypod Lite

- A five-point safety harness with three adjustable shoulder positions to secure your child to its seat;

- A footrest; and
- A soft, padded seat cover.



A more high-tech option is the Smartbe Intelligent Stroller, a self-driving stroller that you can control through the accompanying Android or IOS smartphone app. Although not designed specifically for parents who use wheelchairs, it is possible for these parents to use the Smartbe as well due to several useful features. It has battery-powered electric engines to propel it forward and four big wheels (the front two are powered wheels) for traveling over rough terrains. Smartbe has a motion-tracking sensor system that works in conjunction with a wearable sensor wristband. With the wristband on, the sensor system will

monitor your movements and follow your lead, moving when you move and stopping when you stop.

Another useful feature that makes the Smartbe Intelligent Stroller more accessible is the Smartbe mobile app. The app allows you to operate and adjust several controllable functions including navigation. You can select from the following three navigational modes: First, in self-propelled mode, the stroller stays in front of you and automatically synchronizes its movements with yours. Second, in power-assisted mode, you manually control the stroller with its engines assisting you in propelling it. And third, in manual mode, the stroller is under your direct control and driving force without any engine assistance. The first option—self-propelled mode—may be the ideal navigational mode to use if you use a wheelchair since it does not require any assistance or physical contact from you for it to move.

Smartbe has several features, including:

- A climate-/temperature-controlled bassinet;
- A built-in rocker;
- A cushioned safety belt wrist strap to secure your child to the bassinet;
- A retractable canopy to shield your child from insects, the cold and rain, and the sun's rays;
- A bottle warmer;
- Baby lullaby music;
- Light signals that provide illumination in the dark;
- An electronic locker to store your belongings; and

- A video- and sound-monitoring system so you can see and hear your child remotely via your smartphone.

Prototypes of Adaptive Strollers

Easy Stroll is a prototype stroller that is currently in development. This small rod-like device has locking clasps on either end so you can connect your wheelchair to your baby's stroller. Secure the lock on one end of the Easy Stroll on the bar between the front two wheels of your wheelchair and fasten the other end to the bottom bar located on the back of your baby's stroller. Once the locks are in place and you are connected, the stroller will move when you move and stop when you stop. The Easy Stroll connector is designed to fit a



Easy Stroll

wide range of available strollers and any wheelchair with two poles on the sides of the feet.



Another prototype is the Cursum Stroller, an attachable baby stroller that can be used in tandem with your wheelchair. It consists of a baby seat carrier, a handlebar with a brake, two swivel front wheels, and two lockable rear wheels. The Cursum Stroller also features a built-in gas spring for adjusting the seat height, a button for adjusting the handlebar, a storage bin underneath the seat for stowing all of your child's belongings, and a button

for folding the stroller when not in use. Once you clamp the hinged attachment located on the back of the stroller to the front bottom bar of your wheelchair, you and your child will be ready to travel together safely and independently.

For More Information

Although there are not many adaptive strollers on the market for wheelchair users, there are still several resources to consider, such as [Centers for Independent Living](#).

These are community-based, cross-disability, nonprofit organizations that are designed and operated by people with disabilities. They may be able to assist you in learning or getting ideas on how to make your own adaptations or customizations to a standard stroller. Another option is to consult with an occupational therapist (OT). OTs work with you to find ways to perform daily tasks such as using a stroller. Based on your unique situation, the OT can help you determine your requirements (e.g., how much you can bend, how much you can lift, the height of your wheelchair, the radius of your wheels, etc.) and can assist you in finding a stroller that may work for you. If you are interested in finding an OT, ask your health care professional or simply search for “occupational therapists near me” in your favorite internet browser. Another option is to contact your [State Assistive Technology Program](#). They can assist you in finding out about other options that may be available to you.

References

National Council on Disability. (2012). *Rocking the cradle: Ensuring the rights of parents with disabilities and their children*. Retrieved from <https://childfamilyconnections.org/wp-content/uploads/2017/11/Rocking-the-Cradle-web3.pdf>



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