

Greenville, SC Feasibility Study

Advanced Transit Networks Using GreenPods
for Personal Rapid Transit in GreenVillages



Good for Riders

Personal Rapid Transit (PRT) uses small automated GreenPods (vehicles) on elevated guideways to lift people and traffic above the streets. Safe, on-demand 24/7 transit, with non-stop trips from origin to destination provides riders with fast, convenient service. Call a ride with a smartphone app or a kiosk, and a GreenPod will arrive to provide a quiet, clean, comfortable ride with short walking distances and little to no waiting.

Good for the Environment

GreenPods are electrically-powered vehicles that are extremely energy efficient, using less energy per passenger mile than other modes of transit. PRT can be run on solar power, with solar panels integrated into the guideway structure. Zero carbon emissions, zero air pollution. No fuel or oil runoff into the soil or water. Greatly reduced noise. No collisions causing injury to people or wildlife.

Good for the Community

PRT improves connectivity among communities and enables mobility for people from their homes to daily activities. PRT mobility supports GreenVillages – attractive places in which people love to live and are connected to work, learn, shop and play. PRT eases traffic flow and reduces congestion by lowering the number of personal autos on streets. PRT can help ALL citizens enjoy a better quality of life.

Good for the Economy

Each year, Americans spend 6.3 billion hours stuck in traffic, causing a loss of \$160 billion in wasted fuel and lost productivity. A PRT system helps keep people and commerce moving quickly and efficiently. A healthy, vibrant, uncongested city attracts more businesses, patrons, shoppers and diners who all support and grow the local economy.



A Green Transit Project

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Highlights of Study Findings

Purpose of the Study

The analysis is focused on determining what the Greenville ridership and revenues are likely to be. The objective is to determine if revenues could be sufficient to pay for operating and maintenance costs while also paying off capital costs over time.



Travel to any station from
downtown within 31 minutes.

“ The study found that Greenville residents prefer GreenPods over other solutions because it is more safe, reliable, cost-effective and convenient. ”

Study Results Summary

Results of the study indicate Greenville could have a new, highly effective ATN system that would greatly improve mobility, accessibility and economic prosperity. Projections indicate ridership is likely to be relatively high, at up to 32%. In this case, fare-box revenues could cover both operating and capital costs, resulting in a transit system that can pay for itself over time.

The high potential revenue and low operating cost, combined with Greenville's continued economic growth, make PRT an excellent transit solution that could attract private funding. Local leadership will need to provide rights of way and permitting approvals, but potentially little or no funding up front. Upstate leaders will need to confirm the opportunity and ridership numbers and then take necessary steps to implement a project plan in a prudent way.

Any major transit project has some risk involved, but the risk can be managed in a way that mitigates the exposure to a reasonable level. The potential benefits of the Greenville ATN system far outweigh the relatively small risk and funding involved in moving forward to the next level of investigation.



45%

Residential and commercial property values have been shown to increase by 6% to 45% in areas with fixed-guideway transit.



1 min

Maximum waiting time for a PRT GreenPod is normally one minute or less.



1/2 mi

Maximum distance to a PRT station is typically 1/2 mile or less.



32%

Analysis shows that 32% of people are likely to choose PRT travel over cars and buses in Greenville.



72,340

PRT could reduce the number of car trips in Greenville by 72,340 per day by 2022.

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