

Pre-Seed Investment Opportunity

Municipal Robotics

Autonomous sidewalk maintenance for cities

Cam Pedersen, Founder
info@muni.works

The Problem

Sidewalks are failing Americans

- **1 million+** slip-and-fall injuries per year from icy sidewalks
- **\$35 billion** in annual liability costs for municipalities
- **20% of Americans** have mobility challenges requiring clear paths
- Parents, elderly, disabled forced into the street

Why it's not getting fixed

- Manual labor: expensive, unavailable, unsafe
- Existing equipment: too big for sidewalks
- Property owner mandates: unenforceable
- **No good solution exists today**



Cities face impossible tradeoffs:
clear sidewalks or fund other services

Our Solution



BVR: Base Vectoring Rover

Autonomous electric rover designed for sidewalk-scale work.

- **Sidewalk-sized:** 24" wide, fits anywhere pedestrians walk
- **Electric:** Zero emissions, quiet operation
- **Modular tools:** Snow auger, plow, spreader, mower
- **Safe by design:** LiDAR stops on any obstacle
- **Remote operation:** One operator monitors 10+ rovers

10x more efficient than manual clearing

See It In Action

► Demo Video

BVR clearing sidewalk in real conditions

90 seconds

bvr0 prototype operational December 2025
bvr1 production units shipping Summer 2026

Market Opportunity

Total Addressable Market: \$14B+

Segment	TAM	Entry Strategy
Municipal sidewalks	\$2B	Pilot program (current focus)
Municipal parks/paths	\$3B	Same customer, new use case
University campuses	\$1B	Robotics labs + facilities
Corporate campuses	\$2B	Tech companies, HQs
Shopping centers/retail	\$1.5B	Property management cos
Airports (airside)	\$500M	Specialized, high-value
HOAs/residential	\$4B	Volume play, later phase

At just 1% market share: \$140M revenue

Business Model

Hardware + Subscription

BVR rover (bvr1)	\$18,000
Depot base station	\$6,000
Annual software subscription	\$3,600/yr
5-year LTV per rover	\$36,000

Gross margin: 65% hardware, 85% software
Recurring revenue creates predictable growth

Fleet Packages

Package	Rovers	Price
Pilot	2	\$50k
Small	10	\$220k
Medium	25	\$500k
Large	50	\$950k
Enterprise	100+	\$2M+

One Chicago-sized deal = entire year’s revenue

Traction

1

Working Prototype

bvr0 complete
December 2025

3-5

Pilot Partners Sought

Midwest municipalities
Winter 2026

100%

Open Source

Build community
Earn trust

Milestone: bvr1 production units shipping to pilot partners Summer 2026

Competitive Landscape

	Muni	Manual Labor	Toro RT-1000	Yarbo
Sidewalk-sized	✓	✓	✗	✓
All-weather	✓	✓	✓	✗
Municipal-grade	✓	✓	✓	✗
Autonomous	✓	✗	✓	✓
Affordable at scale	✓	✗	✗	✗
Available now	2026	Yes	Yes	Yes

Key insight: Toro's RT-1000 is ATV-sized (56" wide) and costs \$50k+. Yarbo targets residential driveways, not municipal infrastructure. No one serves sidewalk-scale municipal maintenance.

Team



Cam Pedersen , Founder

- Autonomous vehicle scheduling, Uber
- CTO & Co-founder, DitchCarbon (carbon accounting SaaS)
- Director of Engineering, Vanilla
- Based in Cleveland, Ohio

Hiring with this round:

Robotics Engineer

Autonomy, perception, controls

Business Development

Municipal sales, partnerships

Roadmap

When	Milestone	Capability
Dec 2025	bvr0 prototype complete	Teleop with safety stop
Q1 2026	Pre-seed close	Hire team, scale production
Q2 2026	bvr1 production	First pilot units built
Q3 2026	Pilot deployments	3-5 municipal partners
Q3 2026	Supervised autonomy	1 operator : 10 rovers
Q4 2026	Seed round	\$3M at \$12M post
2027	Scale production	100+ rovers deployed
2028	Series A	National expansion

Financial Projections

Revenue Forecast

Year	Revenue	Driver
2026	\$500k	Early pilots
2027	\$4M	University + enterprise
2028	\$15M	Subscription + national
2029	\$50M	Federal + platform
2030	\$160M	International + RaaS

Path to Profitability

Year	EBITDA	Margin
2026	(\$325k)	−65%
2027	(\$700k)	−18%
2028	(\$2M)	−13%
2029	\$1.5M	3%
2030	\$31M	19%

Profitable by 2029 with subscription revenue

The Ask

\$500-600k Pre-Seed

Use of Funds at \$3M post-money valuation

Team (2 hires, 12 mo)	\$220k
Hardware (10 pilot units)	\$100k
Facilities	\$40k
R&D / prototyping	\$50k
Sales / marketing	\$40k
Legal / admin	\$25k
Buffer	\$75k
Total	\$550k

Milestones to Seed

- ✓ 3 paying pilots (\$100k+ revenue)
- ✓ 10 rovers deployed in field
- ✓ Supervised autonomy working (1:10)
- ✓ 2-3 LOIs from larger cities

Seed target: \$3M at \$12M post

Timeline: Q4 2026

Our Vision

The AWS of outdoor autonomy

Starting with sidewalk snow removal.

Expanding to all outdoor surface maintenance.

Becoming the platform that powers every robot that works outside.

Exit potential: \$400-600M acquisition by 2029-2030
by John Deere, Caterpillar, or Husqvarna

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