SOLONIC

Technology for your hardest decisions

Conor Riffle, Co-founder | US Conference of Mayors MWMA | October 27, 2026

Who we are

Built only for cities and counties that run their own operations

We're building some of the most advanced technology in solid waste, and we build it only for the public sector. That's our entire focus.

Deep experience in solid waste and technology

Team members who've worked inside the kinds of agencies we serve.

Government expertise

Engineering team recruited out of Los Alamos National Laboratory.

One year of deep R&D

Purpose-built algorithms for solid waste problems

THE DECISIONS

The hardest decisions in solid waste



New facilities

Building a new transfer station or yard, or moving an existing facility.



Automated collection

Switching from manual collection to automated trucks and carts.



Rapid growth

Population growth and new housing that strain the routes you have today.



Routes & service days

Overhauling routes or changing residents' collection days.

WHY IT'S HARD

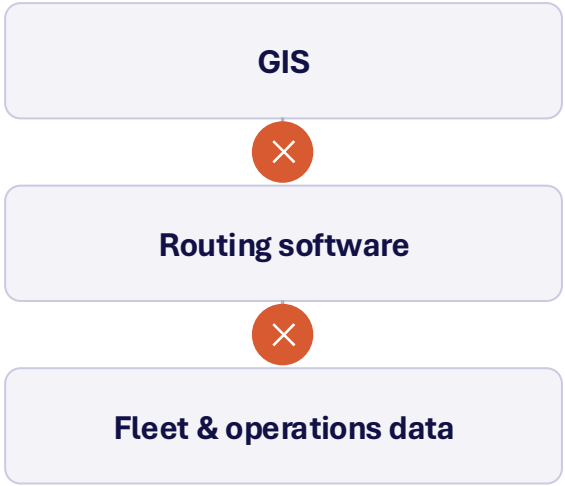
Why these decisions are so hard

Every street, every truck

Collection has to be modeled on both sides of every street, with restrictions that differ by truck type.

Systems that don't connect

Routing tools aren't tied to your GIS source of truth, and GIS teams often sit outside operations.



And behind every scenario sits a huge amount of data. More on that next.

WHY IT'S HARD

Every scenario has dozens of inputs

1 Distance

- Distance to the yard
- Distance to disposal

2 Time

- Traffic patterns
- Travel time by street
- Service seconds per stop

3 Equipment & cost

- Equipment type
- Fuel costs

Change any one of these, and the whole plan shifts.

THE UPSHOT

It takes

6 months to 2 years

to evaluate even just one potential new operational scenario



WHY IT MATTERS

And the problem compounds

Growth & new housing → **Routes get imbalanced** → **Data goes stale** → **Routes don't fit the fleet** → **Facilities in the wrong place**

New homes added onto existing routes

Some routes run long, others short

Records drift away from what's on the street

Route design falls behind the fleet

Far from where the city is growing

The longer a city waits to re-evaluate, the wider the gap gets.



Every year at budget time, your city manager asks:

What do you need, and where do you need it?

How do you answer that with data?

INTRODUCING SOLONIC

A digital twin of your operation



For the first time, ask what-if questions about your operation and get answers in clicks, not months.

THE TRADITIONAL WAY

Months of analysis for one scenario, and then you're stuck with the result.

Let's do it live instead.

TODAY'S SCENARIOS

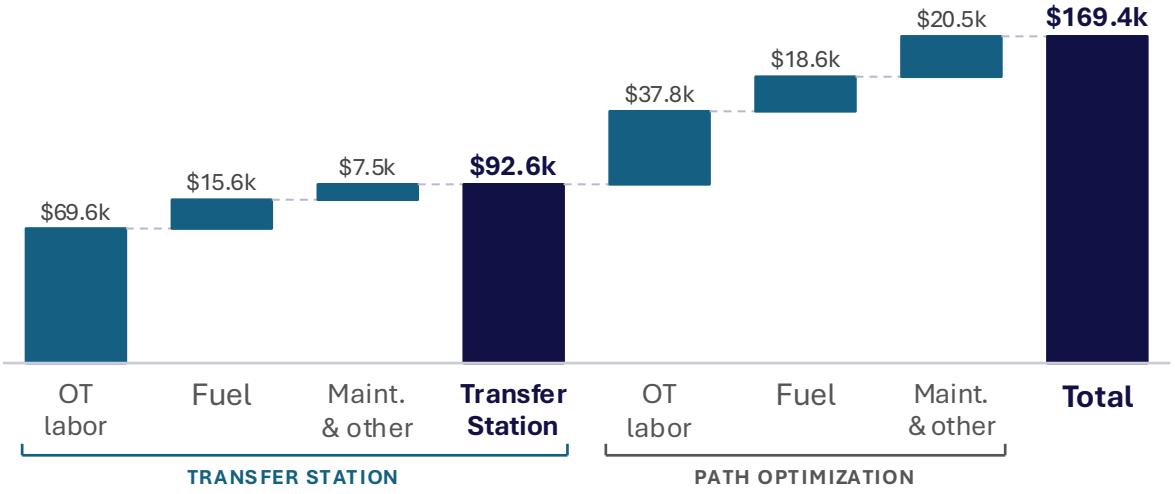
4-day vs. 5-day collection

Adding a transfer station

CASE STUDY

Transfer station plus path optimization saves $169.4k

Adding a transfer station and optimizing truck paths cut service time and miles vs. current routes



MILES & HOURS

−310 miles / week

11% fewer · ~16,100 miles a year

Optimized path	179
Transfer Station	131

−51 duty hours / week

9% fewer (546 → 494)

Full analysis completed in a few clicks vs a year of manual effort.

SOLONIC

What would you ask your digital twin?

Conor Riffle
Co-founder, Solonic
Conor.riffle@solonic.co