veovo

Reclaiming Gate Capacity

A guide to smarter, more adaptive resource planning



The gate capacity challenge

The capacity crunch is real.
So when the gate plan breaks, everyone feels it.

North American airports are feeling the capacity pain.

You're managing growing schedules, tighter turnaround windows, and heightened expectations from passengers and airlines. But infrastructure isn't keeping pace. New stands, gates, or terminals aren't arriving fast enough, if at all.

Common-use models promise flexibility, but too often, that flexibility doesn't reach the day of operation.

Why?

Because many planning systems, while modern in appearance, are still built around **static rules and rigid assumptions.**

They automate gate allocation, but they don't adapt. They rarely learn. And when the schedule shifts (as it always does), planners are back where they started: reworking the plan, juggling last minute reallocations, and trying to keep stakeholders aligned.

That's why a new approach is gaining traction, one built on:

- More flexible, airport-led operating models.
- Planning logic that reflects actual operations.
- Data-driven assumptions that tighten over time.
- And systems that evolve with the season, not just automate what's scheduled.

This guide shares a six-step framework for building smarter, more dynamic gate and resource plans, the kind that holds up under pressure, supports better decisions, and helps you reclaim capacity.

Steps to smarter, dynamic gate plans

1 Rebuild the operating model.....3

2 Build smarter, context-aware rules.....4

3 Base the seasonal plan on real data.....5

4 Adapt the plan as the season unfolds.....6

5 Understand the effects of decisions.....7

6 Align everyone around a shared plan.....8

Let's take a deeper dive into how to optimize gate management.

1 Rebuild the operating model

Before you optimize the gate plan, you need the right foundation. That starts with the operating model.

At many airports, control of gates still leans heavily toward carriers, through leases, historical precedence or informal preference systems. Even in “common-use” environments, flexibility can be more policy than practice.

But when the airport doesn’t control the plan, it can’t adapt the plan.

That’s why more North American airports are shifting toward **airport-led models.**

Operating models with central control enables more balanced gate use, better planning alignment, and the ability to respond to change with less friction.

What that looks like in practice:

The Priority Access Model

A growing number of US hubs like Orlando International Airport are using a hybrid approach where:

- Carriers who commit to a minimum traffic threshold are given location certainty.
- The airport retains gate assignment control, so idle stands can still be flexed at peak.
- This balance protects airline interests and enables smarter, system-wide planning.

It’s not just about fairness, it’s about **creating the conditions for better decisions and optimal capacity use.**

Questions to pressure-test your model:

- Who controls gate assignments and when does that control shift?
- Does the model actually allow planners to adapt, or are they boxed in by pre-set deals?
- Are you seeing underused stands while others are overworked?
- Do airlines trust the model, or question every reassignment?

A modern planning system needs more than automation. It needs a model that makes adaptation possible.

Orlando International Airport

Ask us about The Orlando model

2 Build smarter, context-aware rules

Once you've got a model that allows for flexibility, your planning rules need to support it, not constrain it.

At many airports, rules still default to the basics: aircraft size, time of arrival and pier adjacency. They're easy to manage, but they don't reflect the real-world complexity of your operation.

So plans that look clean in the system often fall apart on the ground.

To move toward more dynamic planning, **you need rules that reflect how your airport actually runs.** Not just technical constraints but behavioural patterns, apron logistics, and peak-hour stress points.

What smarter rules account for:

Passenger separation: Domestic, international, CBP-precleared, different flows, different processing, different gate requirements.

MARS logic: Knowing when a stand can be split (and when it really shouldn't be).

Carrier-specific turnaround behavior: Not every 737 needs the same buffer. Build rules around actual performance, not flight type.

Apron and airside constraints: If the bus or the tug isn't there on time, the gate might as well be closed.

Operational intent: Do your rules reinforce collaboration? Do they support fair use? Do they hold up when the day doesn't go to plan?

This isn't about making rules more complicated.

It's about making them more representative, so the plan you build can adapt when conditions change, without throwing everything off.

Static rules are what make plans rigid. **Smarter rules are what make plans resilient.**



3 Base the seasonal plan on real data. Not just schedules.

Even with the right model and smarter rules, your plan is only as strong as what it's built on.

Too many seasonal or monthly gate plans still rely on the published schedule and best-guess buffers.

The result is a plan that looks fine on paper, and collapses two weeks into the season.

Stronger assumptions lead to stronger outcomes.

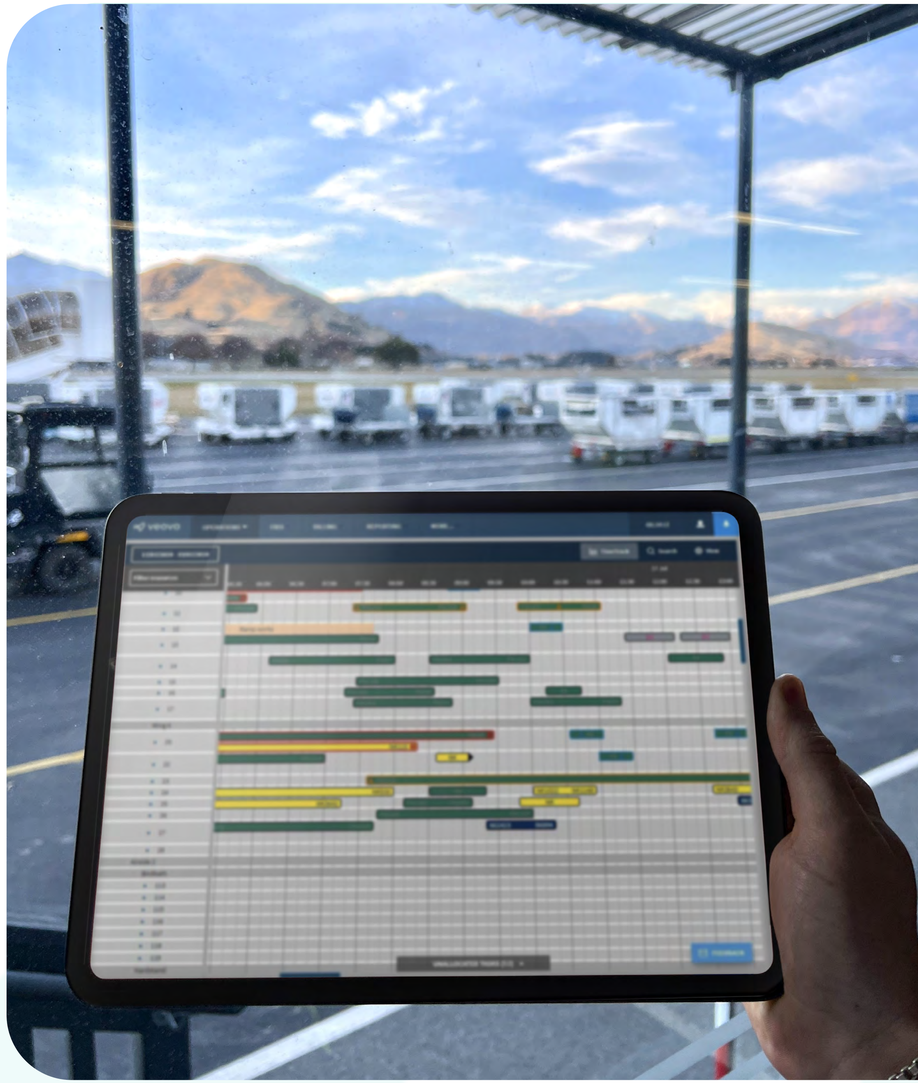
By using historical and operational data, airports can **create gate plans that are grounded in how flights and flows actually behave,** not how they're supposed to.

What to include in smarter planning inputs:

- Turnaround times across different aircraft/handler combinations.
- Pushback patterns and taxiway congestion windows.
- Historical gate dwell and buffer effectiveness.
- Past reallocation hotspots and conflict trends.
- TOBT accuracy and volatility by carrier, by time of day.

Smarter inputs help you identify the real constraints — and opportunities — before they show up in the daily stand plan.

And with machine learning in the background, these patterns become part of the planning process, not just post-mortems.



4 Adapt the plan as the season unfolds

The best plans are never final, and the best planners know it.

Flight schedules shift. Behavior changes. External factors (weather, ATC, ground delays) chip away at even the best-built assumptions.

Instead of rebuilding from scratch each time, high-performing airports are now using rolling adjustments, refining the plan as the season unfolds, based on what the data is telling them.

The most **effective plans don't just react, they simulate.** By modeling scenarios like weather disruptions, flight delays or surges in transfer passengers, planners can understand the impact before it hits and adapt with confidence.

A dynamic plan is one that learns and adapts. Not one that lurches.

Mid-season tuning

When a specific gate combo keeps clashing, planners can adjust the logic without overhauling the whole season.

Collaborative adjustments

Stakeholders see not just the change, but the reasoning, which builds trust and reduces escalation.

Automated pattern spotting

ML can detect repetitive failure points and suggest updates to rules or buffers before they impact the data.

Content driven refinement

Pax numbers, transfer predictions, tail swap changes. Ensuring your plan reflects the most up-to-date data and understand the impact of those changes.

Want to see how dynamic planning works in real life? Book a demo

5 Understand the ripple effects of every gate decision

A gate isn't just a gate. It's a point of dependency for the entire operation.

Too often, gate planning happens in isolation. But every assignment has knock-on effects: for turnaround teams, ground support, passenger flow, commercial areas and downstream flights.

If your planning system doesn't account for those ripple effects, you'll keep chasing problems after they've already landed. And the airport will never be optimized.

What to factor in:

- Tow requirements and tug availability.
- Transfer windows and connection risk.
- Bus allocations for hard stands.
- Impact on terminal capacity (including TSA/ security and CBP).
- Commercial performance tied to dwell time and pier usage.

Planning decisions need to account for these wider effects, ideally before they're made.

A dynamic gate plan doesn't just avoid stand conflicts. It sees **the full picture.**

And keeps getting better. Every season. Every day.



6 Align everyone around a shared, real-time plan

Even the smartest plan will fail if no one can see it, or if everyone's working off a different version.

When airlines, ops teams, and handlers have access to different systems (or no system at all), collaboration breaks down. So does confidence in the plan.

That's why forward-thinking airports are putting **shared visibility** at the heart of planning. This is not just a reporting layer, but as a working view of what's happening, what's next, and what's changed.

For this to work, the system has to be **easy to use,** not just powerful.

Think: drag-and-drop scenario building, clear visual alerts, and no-code rule adjustments that let planners stay in control without needing IT help.

What shared planning looks like:

- A central, live view of gate status and future usage.
- Role-based access (so airlines and GSE staff see what they need, when they need it).
- Traceable changes, so nothing "just happens" without accountability.
- Real-time context on why reassignments are made.
- Mobile access for operations on the move.

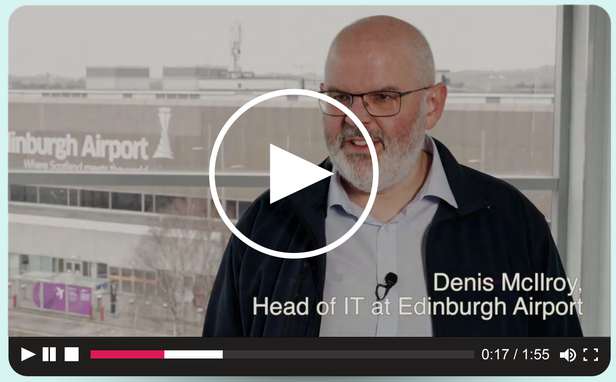
Dynamic planning only works if everyone's pulling in the same direction.

When teams trust the plan — and trust the logic behind it — they're more aligned, more responsive, and less reactive.

Airport story: Edinburgh Airport

Edinburgh Airport and Veovo are working together to modernize operations and improve day-to-day collaboration. By focusing on shared visibility and proactive planning, the airport is building a more resilient and coordinated operation, with fewer surprises and stronger alignment across teams.

See how Edinburgh is transforming gate operations.



Dynamic planning starts with the right foundations

Optimal gate management depends on how allocation decisions get made, and what those decisions are based on.

This shift isn't about technology alone. It's about planning models, smarter rules, meaningful data, and the systems that bring it all together.

The answer is a gate and resource plan that holds up under pressure, adapts as conditions shift, and brings your stakeholders with you.

It's not about ceding control to technology.

It's about better decisions, made earlier, with more confidence, and with the full picture in view.

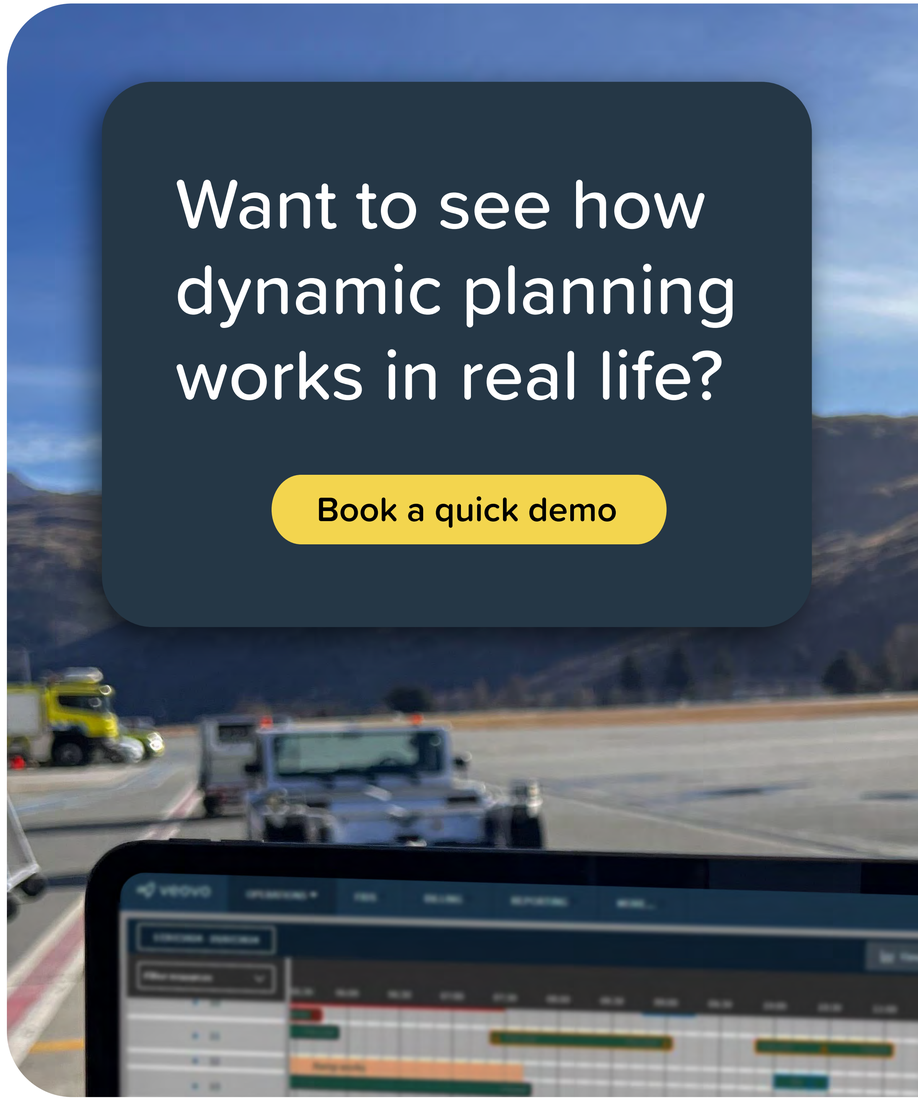
How Veovo can help you

Veovo's Resource Management System helps airports plan, adapt, and optimize the use of critical infrastructure.

While this guide focuses on intelligent gate management, the platform also supports other airport-controlled resources, including check-in desks, baggage for both arrivals and departures, remote stands and airside bussing.

By applying the same dynamic logic and shared visibility across all assets, Veovo helps operations teams make proactive optimized decisions, no matter how the day unfolds.

Over 140 airports worldwide rely on Veovo's airport management software from Sydney to Schipol and Orlando to Oslo rely on Veovo technology to plan, predict and perfect their operations.



Veovo technology powers intelligent airports and shapes brilliant travel experiences. From streamlining operations to smoothing passenger journeys, we help over 140 of the world's best airports make smarter decisions today and transform for tomorrow.

Veovo is headquartered in the United Kingdom and has offices in New Zealand, the USA, Denmark, Poland, and India.

www.veovo.com