

# PASSUR INTEGRATED TRAFFIC MANAGEMENT

## FACT SHEET

Addressing key constraints through the entire life cycle of the flight — gate-to-gate — on a web-based operations decision support software platform.

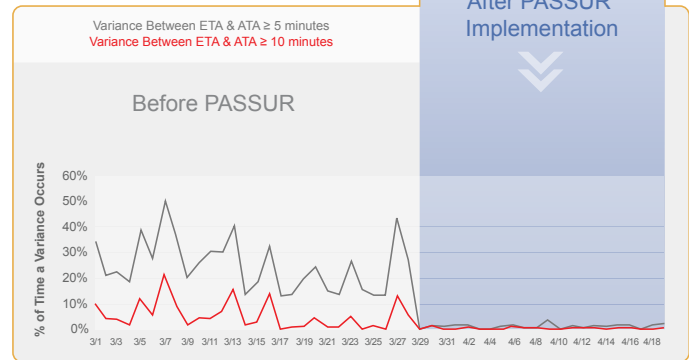
**Market Need: Controlling external disruptions to address \$8B in direct costs**

The US airline industry incurs \$8B annually in direct costs due to delays and disruptions. Many of these constraints stem from the interaction between weather, congestion, and ATC performance, previously thought to be outside airline control.

**PASSUR Integrated Traffic Management (PITM): At least \$40M – \$60M/year in savings for a networked carrier**

PITM is a series of decision-support capabilities which target expensive, disruptive constraints in the national air space (NAS) through data, predictive analytics, common operating/ collaborative platforms, and detailed performance analysis.

**Airline Study of the PASSUR ETA:  
Reducing Variability in ETAs**



Example of PASSUR predictive analytics: more than 10 independent airline studies have all shown PASSUR arrival predictions — powered by the PASSUR surveillance network and algorithms — to be significantly more accurate than internal airline ETAs, supporting actionable changes in operations.

Market Need	PITM Solutions
Address “disruption events” through the entire flight cycle on a continuum of integrated capabilities	Target major constraints throughout the life cycle of a flight (“gate to gate”) impacting specific operational and financial metrics
Emphasize decision support in addition to situational awareness	Predictive analytics provide recommended actions and predicted outcomes, and support a proactive vs. reactive posture
Enable “management by exception” to reduce workload and “screen fatigue”	Dashboard alert technology and system-wide coverage replace “stare at the screen” with “manage by exception”
Minimize internal IT resource requirements	Web-based delivery means almost no airline IT requirements
Generate immediate, measurable benefits – financial, operational, and customer experience	Proven in real-world airline operating environment with detailed ROI calculators provided; integrated platform allows for reduction in other vendors/providers
Deploy systemic (not stove-piped) solutions	Covers entire airline network; creates common operating/collaborative platform within airline ops/hub control, between mainline regionals, and with airports

**Low Risk**

- Requires little or no up-front capital investment
- Subscription based
- Generates positive return from the outset of deployment
- Based on technology and business processes proven at multiple airlines and airports over many years

PITM: A single-source for addressing expensive constraints gate-to-gate.



**PITM: Targeting Constraints and Key Metrics Through the Life Cycle of the Flight**

Problem Category	ATC Delays	Diversions	Hub Arrival ETA Inefficiencies	Departure Queues
<b>Problem Description</b>	Traffic Management Initiatives (TMIs) create delays, reduce hub performance, burn fuel, and drive block time adds	Uncertain information on “airborne holding” times drives unnecessary diversions and/or fuel burn due to prolonged holding	Inaccurate Estimated Times of Arrival (ETAs) result in off-gate holds, unnecessary misconnections, and inefficient workforce assignments	ATC’s “first come, first served” forces aircraft to push from the gate into a taxi queue, creating extended taxi times and high fuel burn; lack of information and tools prevents effective sequencing/prioritization of higher value flights
<b>PASSUR Solution Description</b>	Web-based solution provides predictive analytics, decision support, and management by exception to negotiate higher arrival rates with ATC	Web-based solution provides predictive analytics, decision support, and management by exception on airborne holding to prevent diversions and/or execute unavoidable diversions earlier	Data feed into airline flight management systems provides accurate ETAs based on unique data and algorithms, starting from 2 hours before arrival and extending to the gate; web-based airport performance and individual flight status dashboards enable corrections to demand and capacity imbalances	Web-based solutions meter flights from the gate (reducing engines-on time) and identify unused airspace departure capacity, enabling airlines to depart higher value flights first and to maximize departure efficiency
<b>Key Metrics Affected</b>	Arrival rates, delay minutes, and pre-plan cancellations during TMIs that constrain traffic throughput	Diversions (prevented or executed earlier) and holding fuel burn	Gate unmetts and gate conflicts (frequency and duration), bag and passenger misconnects, ground handling head count	On-time departure, preserving network integrity of high-value flights, taxi minutes, and taxi fuel burn

**Unique Capabilities**

**Integrated Surveillance Network**

PASSUR operates one of the most extensive private aircraft and airspace surveillance networks, deployed at more than 150 airports in North America, Europe and Asia.

**Integrated Aviation Database**

All the surveillance data acquired by the PASSUR network is integrated and correlated into specialized databases to support predictive, real time and post operational requirements. PASSUR maintains the largest private database of historical flight and airspace operations data — essential for predictive analytics.

**Predictive Analytics**

PASSUR decision support solutions are supported by predictive analytics algorithms — which use extensive historical data mining and pattern recognition to predict specific and detailed operational outcomes — and generate decision recommendations based on those accurate predictions.

**Decision Support Dashboards, KPIs and Management by Exception**

Most PASSUR solutions are delivered in “dashboard” format, simplifying and distilling extensive amounts of information into the most relevant operational and business metrics and presenting them in a manner that supports immediate performance assessment and actionable decisions.

**Performance Measurement and Reporting**

All PASSUR solutions include performance reporting tools that support analysis of data for assessment of, and positive impact on, key performance indicators.

**Collaborative Capabilities**

PASSUR solutions include a collaborative layer — tools which allow for instant information sharing, coordination of effort, and a common operating picture across a wide and deep range of users in the aviation community.

*The PASSUR radar surveillance network: air to surface coverage from the largest private network of its kind in the world.*

