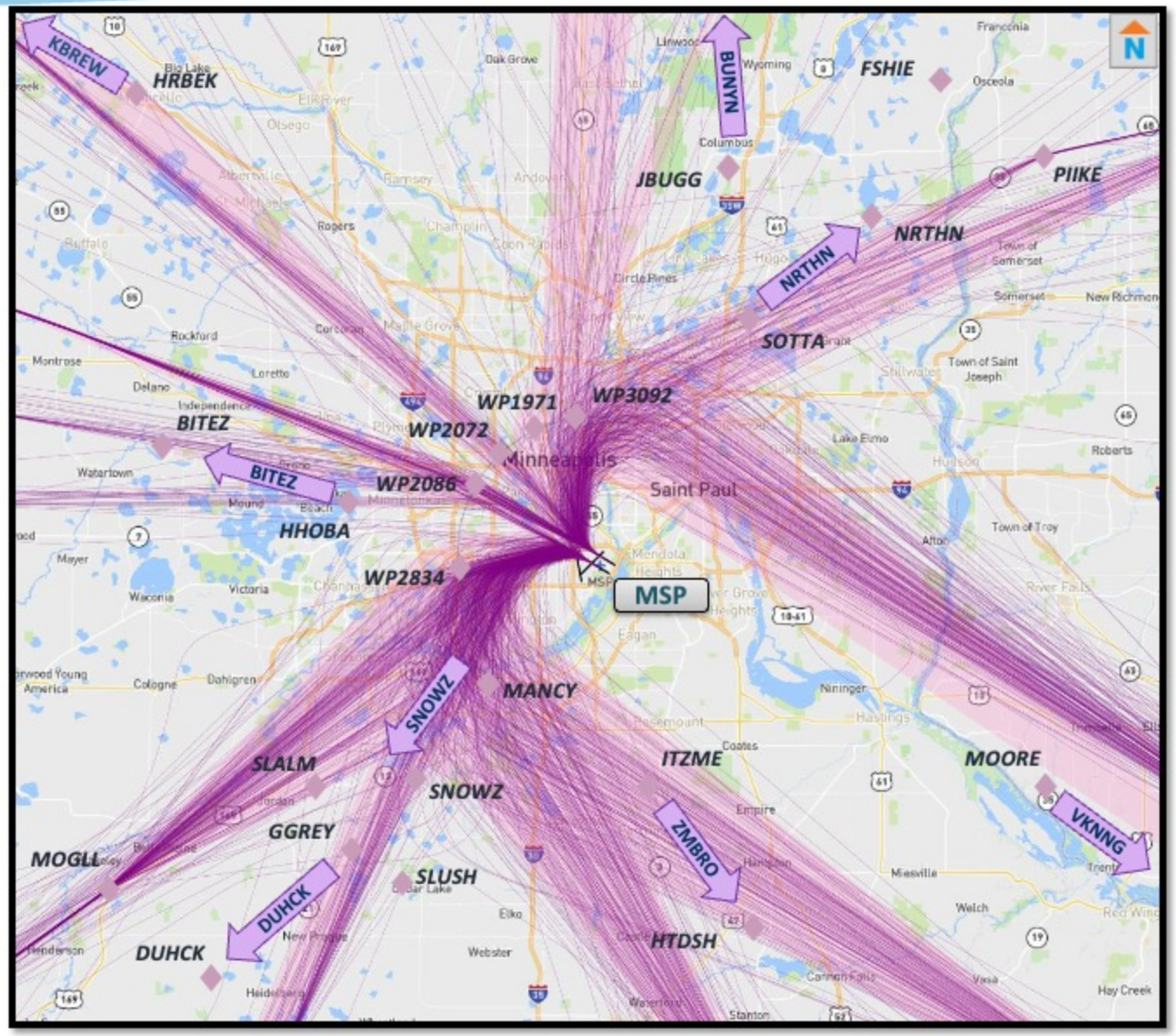
Procedure Board Overview



NRTHN → Departures

TORGY → Arrivals

Procedure – All procedures use a five-letter designation. This procedure is pronounced "Northern" The arrow indicates the direction of travel for departing or arriving procedures.

SLUSH

Waypoint – Represents a latitude/longitude point on a procedure. Waypoints also use five-letter designations. This waypoint is pronounced "Slush"

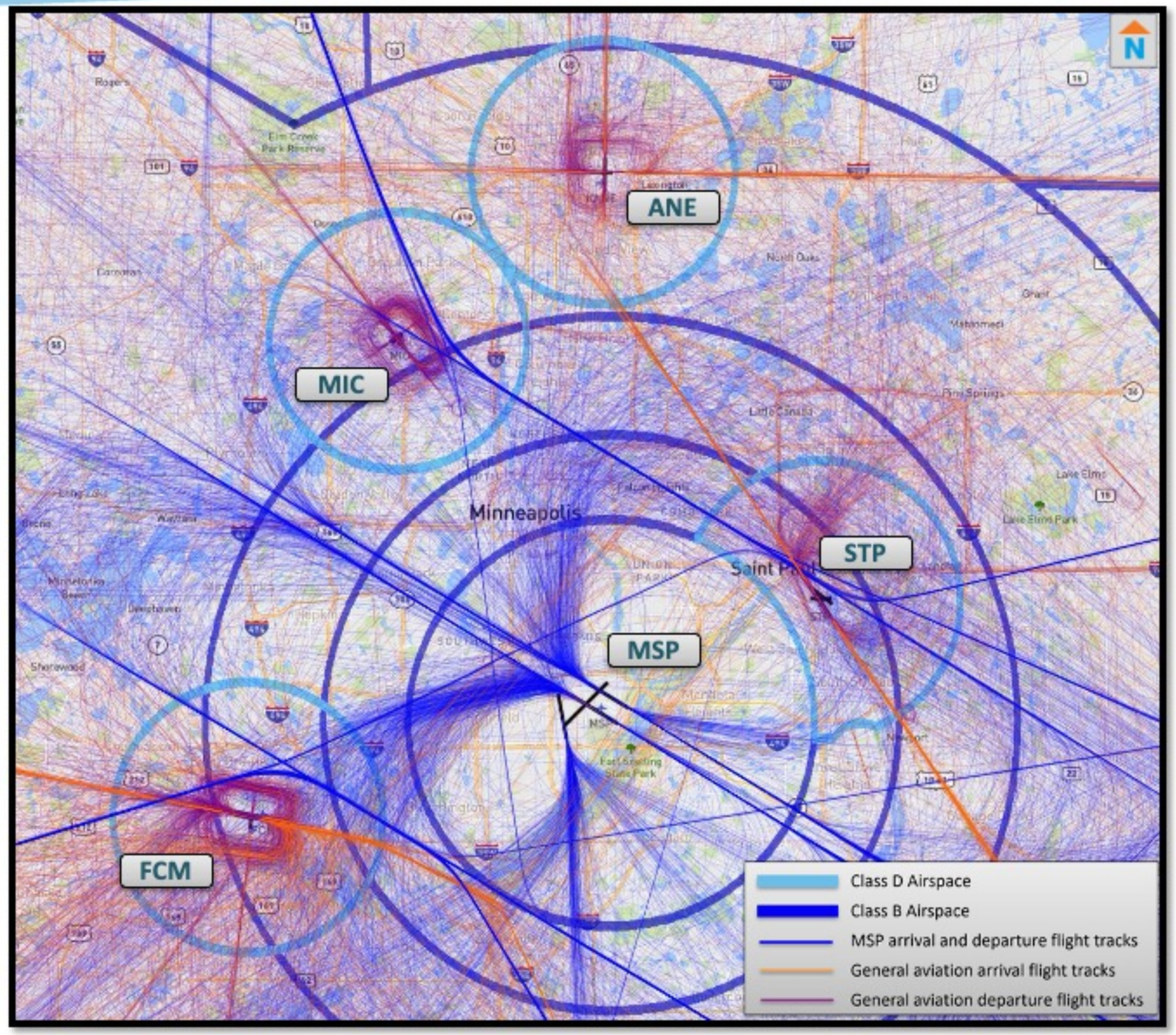
7 DME – Represents the existing area seven miles from the on-airport navigation equipment

Departures

Arrivals

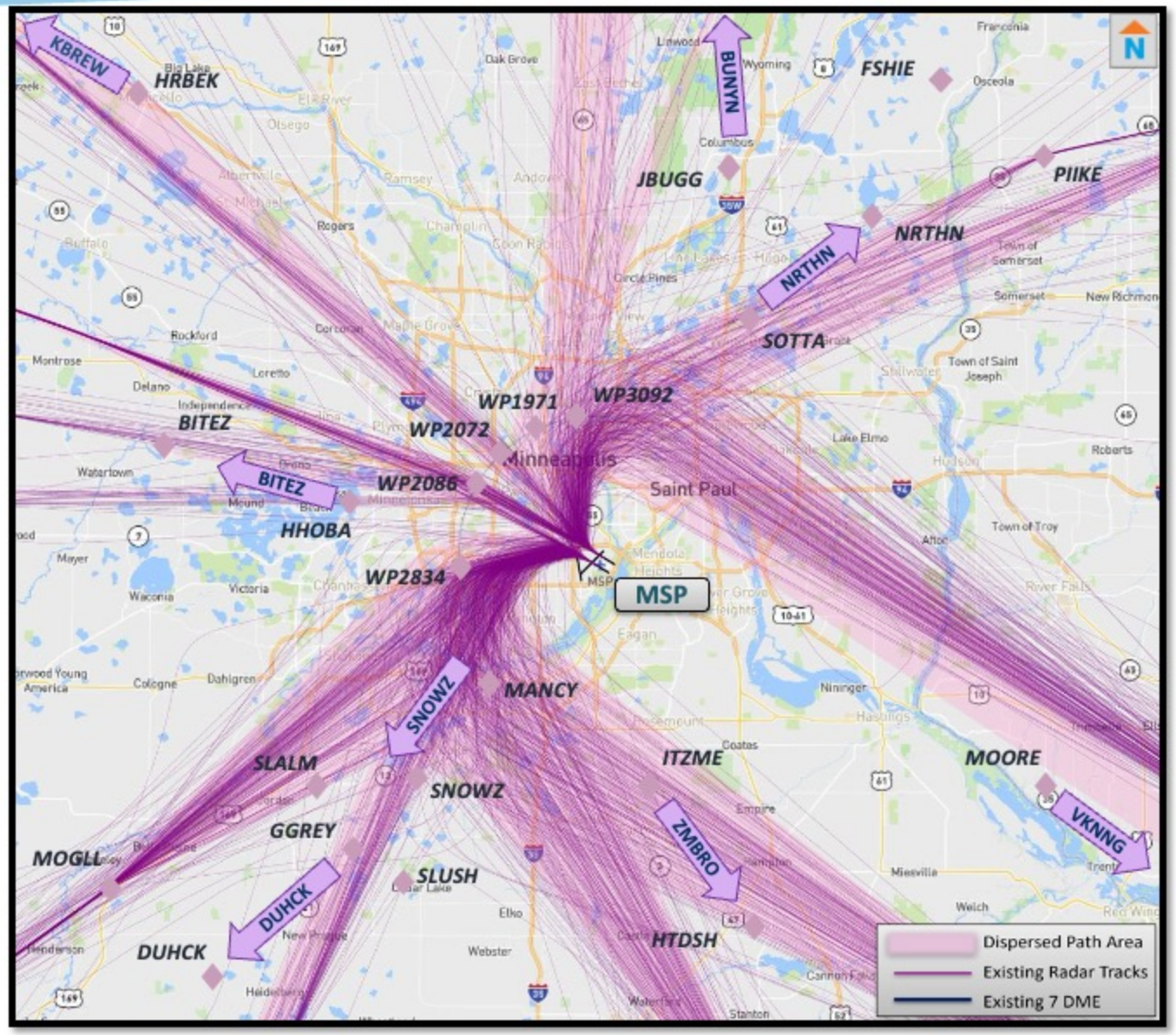
Flight Path Area – Represents the area that aircraft will fly in the future when Air Traffic Controllers give pilots dispersed headings to follow, called vectors.

STAR	Standard Terminal Arrival Route
SID	Standard Instrument Departure
ATC	Air Traffic Control
RNAV	Area Navigation



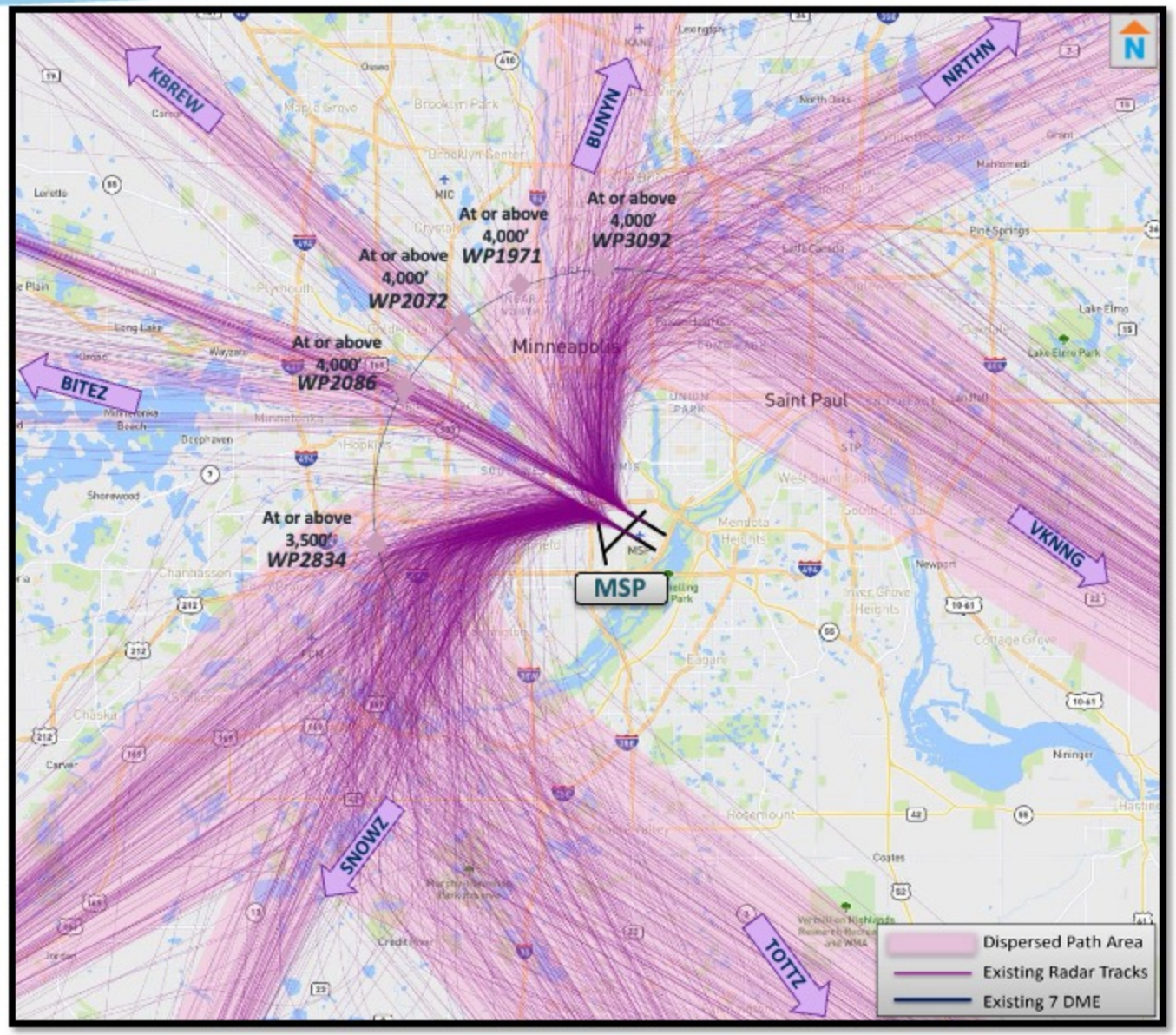
Minneapolis Metro Area Aircraft Operations

- This board shows flight tracks for Anoka-County (ANE), Crystal (MIC), Flying Cloud (FCM), St. Paul Downtown (STP) and Minneapolis Int'l airports (MSP)
- Each airport has dedicated airspace with a control tower and air traffic controllers
- These other airports are used by corporate jets, flight schools, medical transportation, law enforcement, and recreation operations
- Flight procedures for each airport are designed to avoid adjoining airport airspace
- Airports may share procedures where aircraft from multiple airports are sequenced to join a procedure



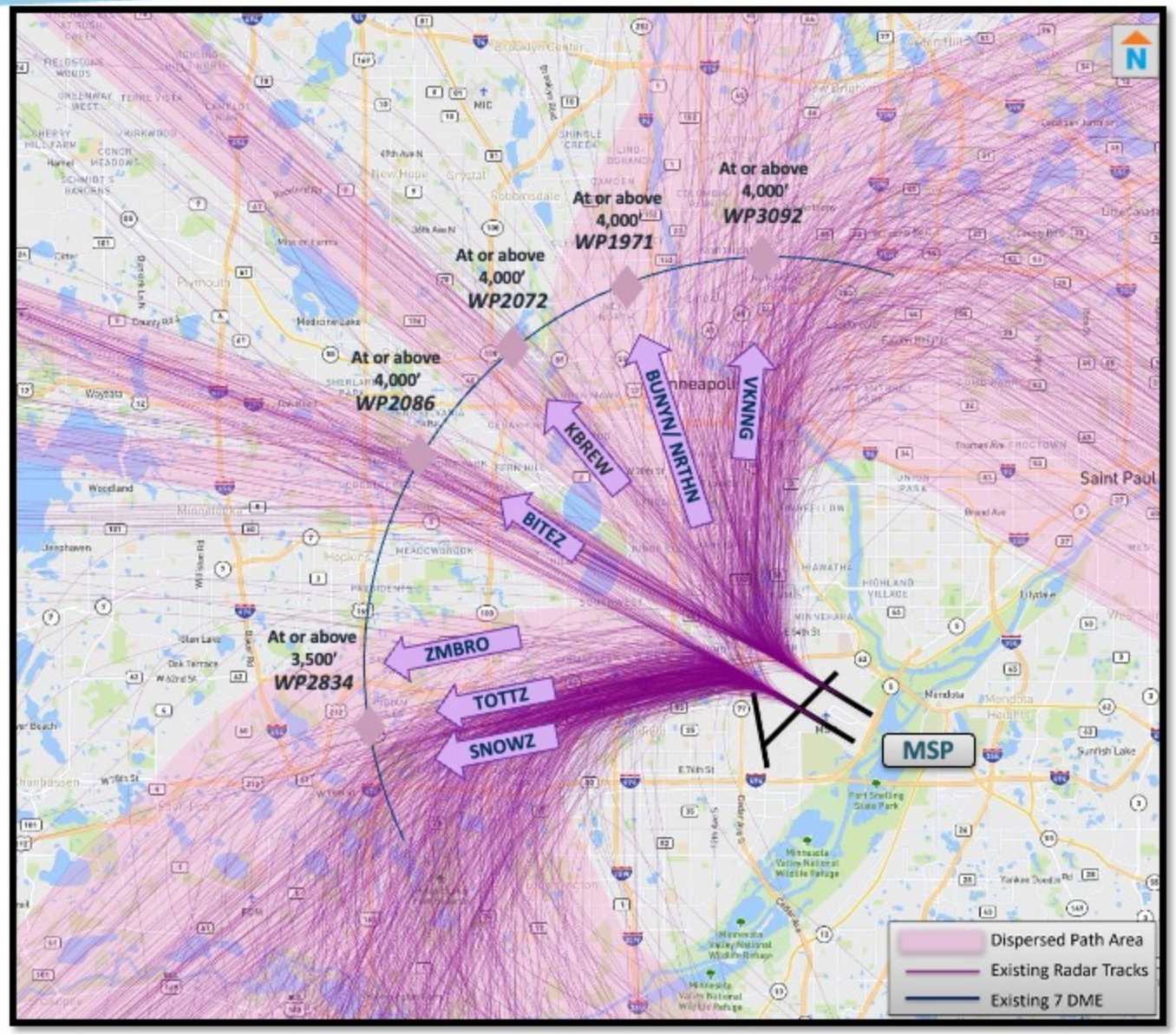
North Flow Departures Runway 30R & 30L

- This board shows a zoomed-out view of the proposed SIDs for north flow
- The new procedures include existing voluntary noise abatement
- The following boards are more zoomed-in and provide additional details



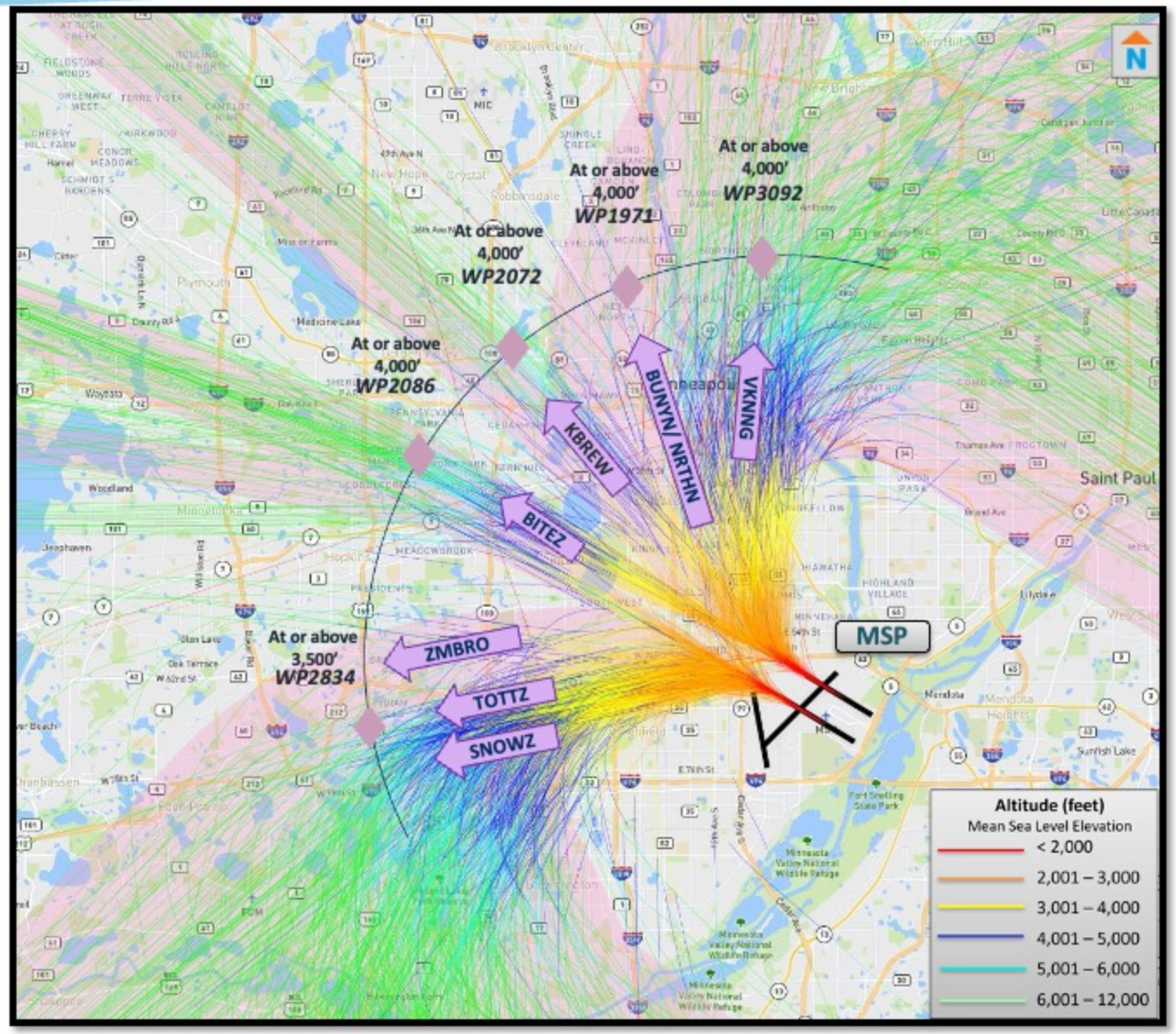
North Flow Departures Runway 30R & 30L

- This board shows a zoomed-in view of the proposed departures in north flow
- ATC normally assigns a departure procedure based on the most efficient route to the aircraft's destination
- The proposed departure procedures are designed to replicate the current procedures as close as possible, including aircraft dispersed on initial headings



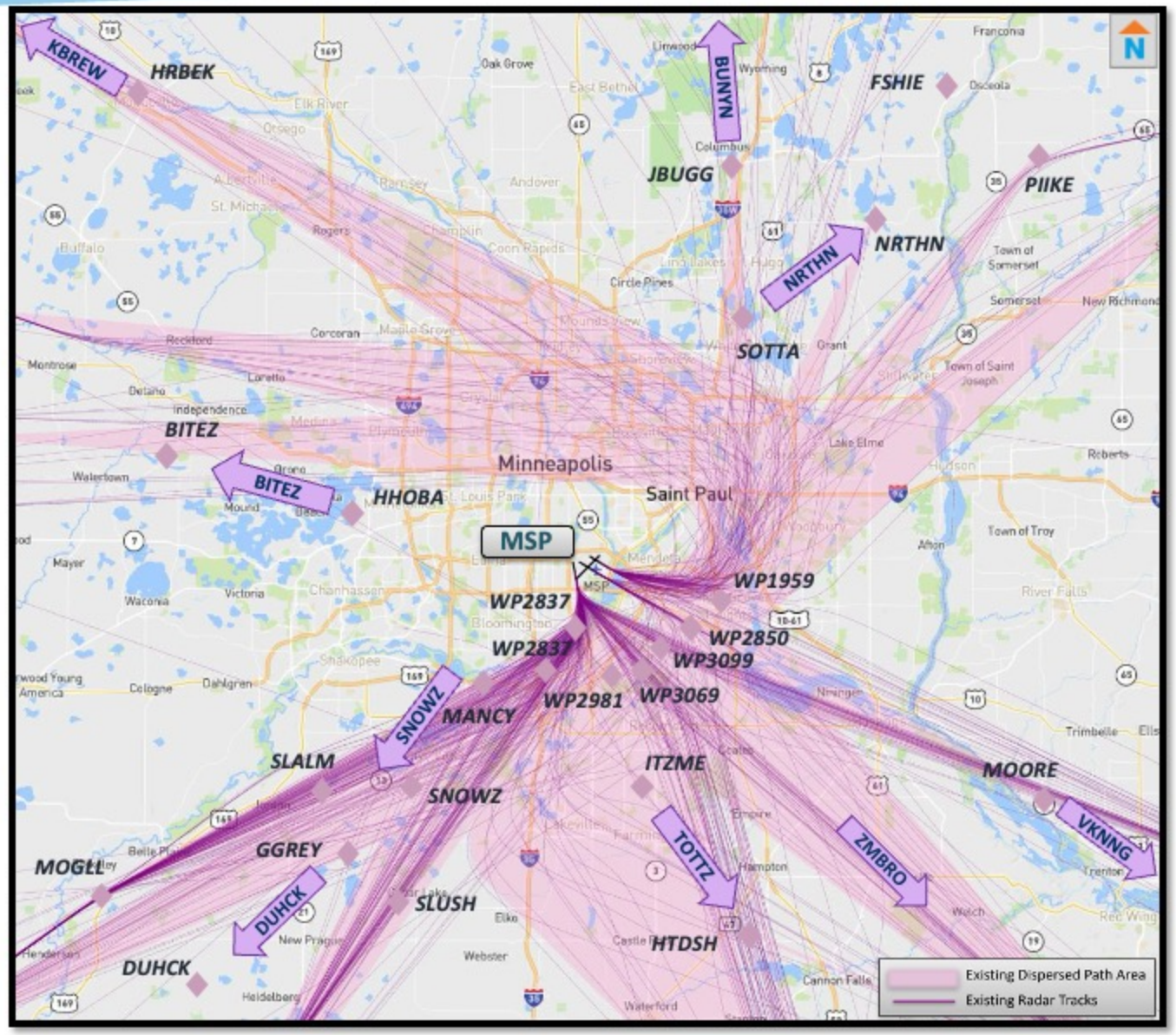
North Flow Departures Runway 30R & 30L

- This board shows a close-in version of proposed north flow departure procedures
- Aircraft will be issued a departure procedure based on destination
- Once aircraft take off and are at a safe altitude, ATC may turn aircraft on course, before reaching the initial waypoints, when it is operationally safe
- The waypoints are in the approximate area of the existing 7 DME arc, shown in blue
- The proposed procedures will mimic how aircraft depart MSP today, providing dispersion of flight tracks



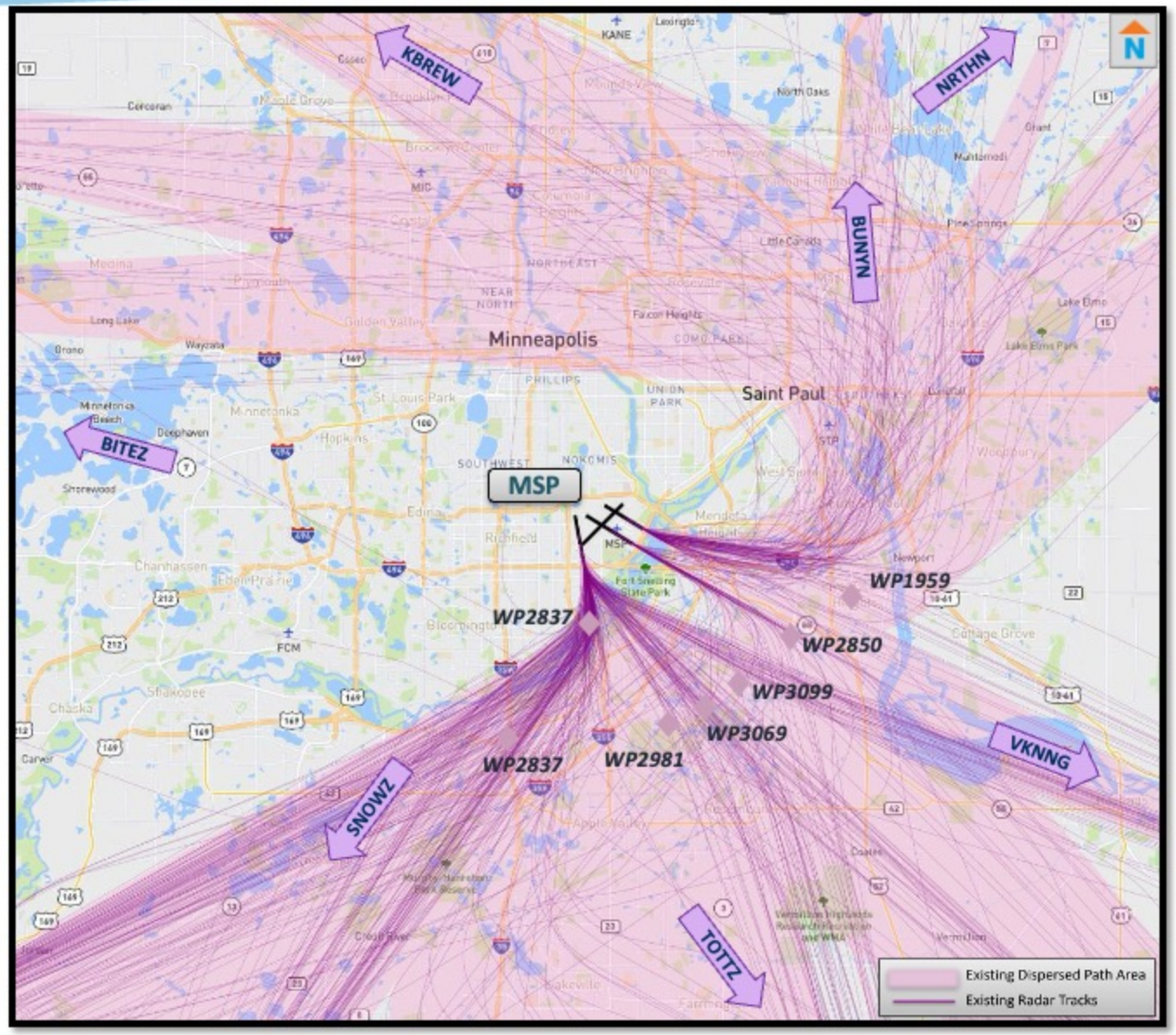
North Flow Departures
Runway 30R & 30L

- This board shows a close-in view of proposed RNAV vector SIDs with existing flight tracks
- Existing aircraft flight tracks are shown color coded by altitude
- The proposed procedures reduce/eliminate the need to keep aircraft lower on departure, they may climb unrestricted
- The proposed procedures allow ATC to give an aircraft a heading and altitude to follow, reducing the need for progressive instructions



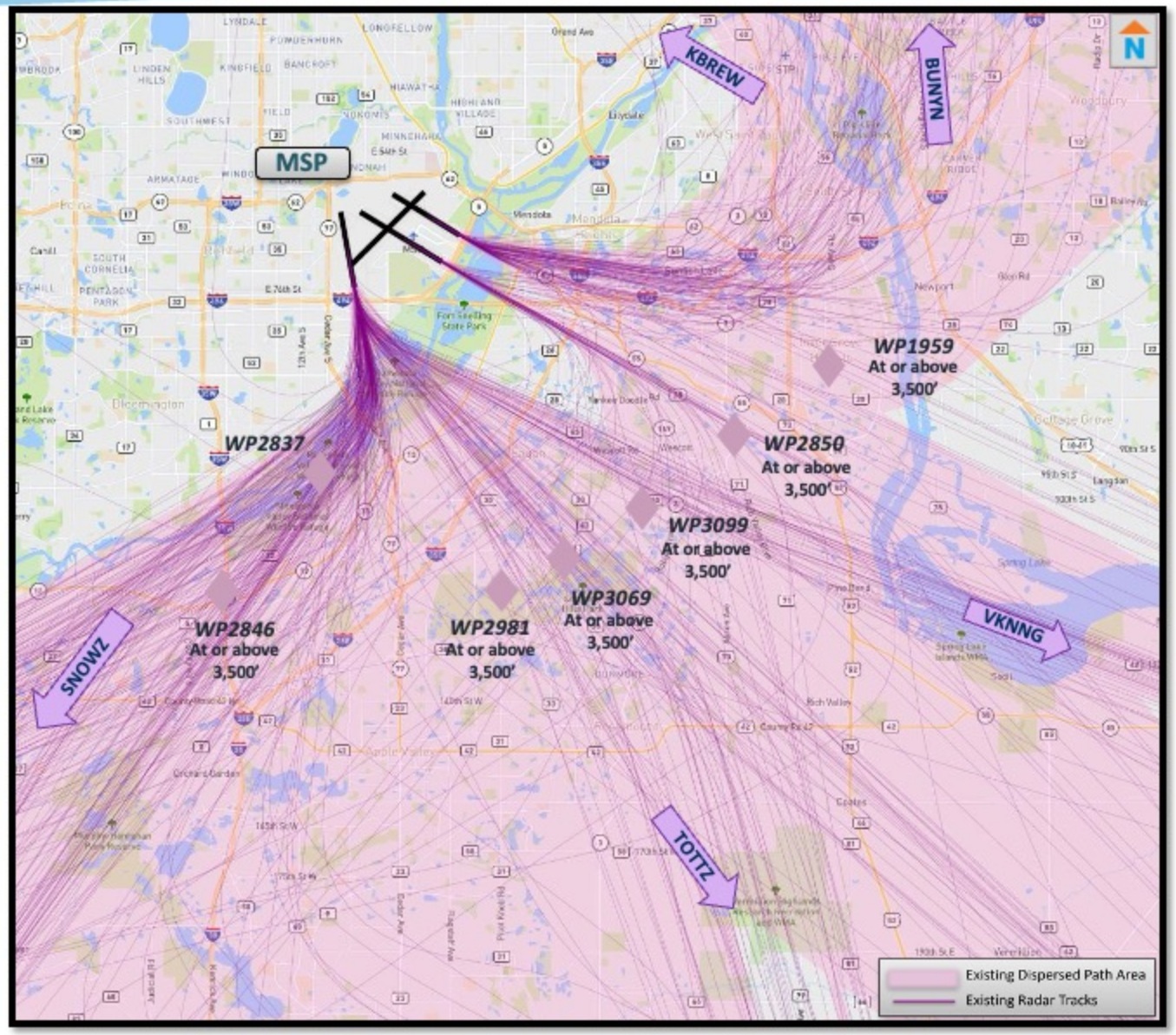
South Flow Departures
Runway 12R & 12L, 17

- This board shows aircraft departing on SIDs from Runway 12R and 12L and Runway 17
- Aircraft departing Runway 12R and 12L will continue to use the Eagan-Mendota Heights Corridor
- Use of the Eagan-Mendota Heights Corridor maintains the Crossing-in-the-Corridor noise abatement procedure



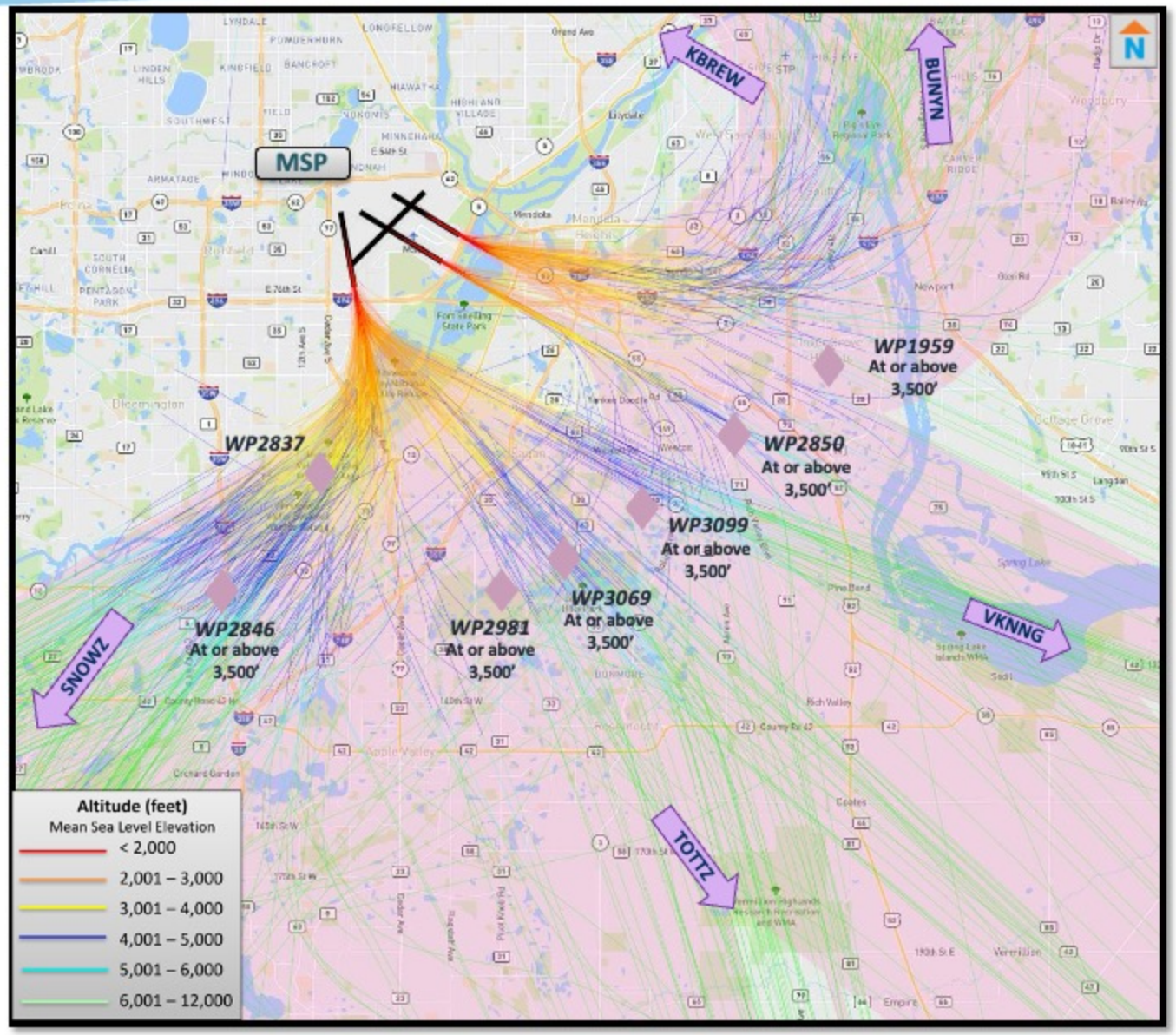
South Flow Departures
Runway 12R & 12L, 17

- Aircraft are assigned an initial heading based on the aircraft destination, operational need, and sequencing of aircraft to maintain required separation
- The proposed initial headings replicate the VOR-based headings currently used to disperse departures
- The proposed procedures were designed to give ATC flexibility to manage air traffic for safety and efficiency, which inherently increases dispersion
- ATC normally assigns a departure procedure based on the most efficient route to the aircraft's destination



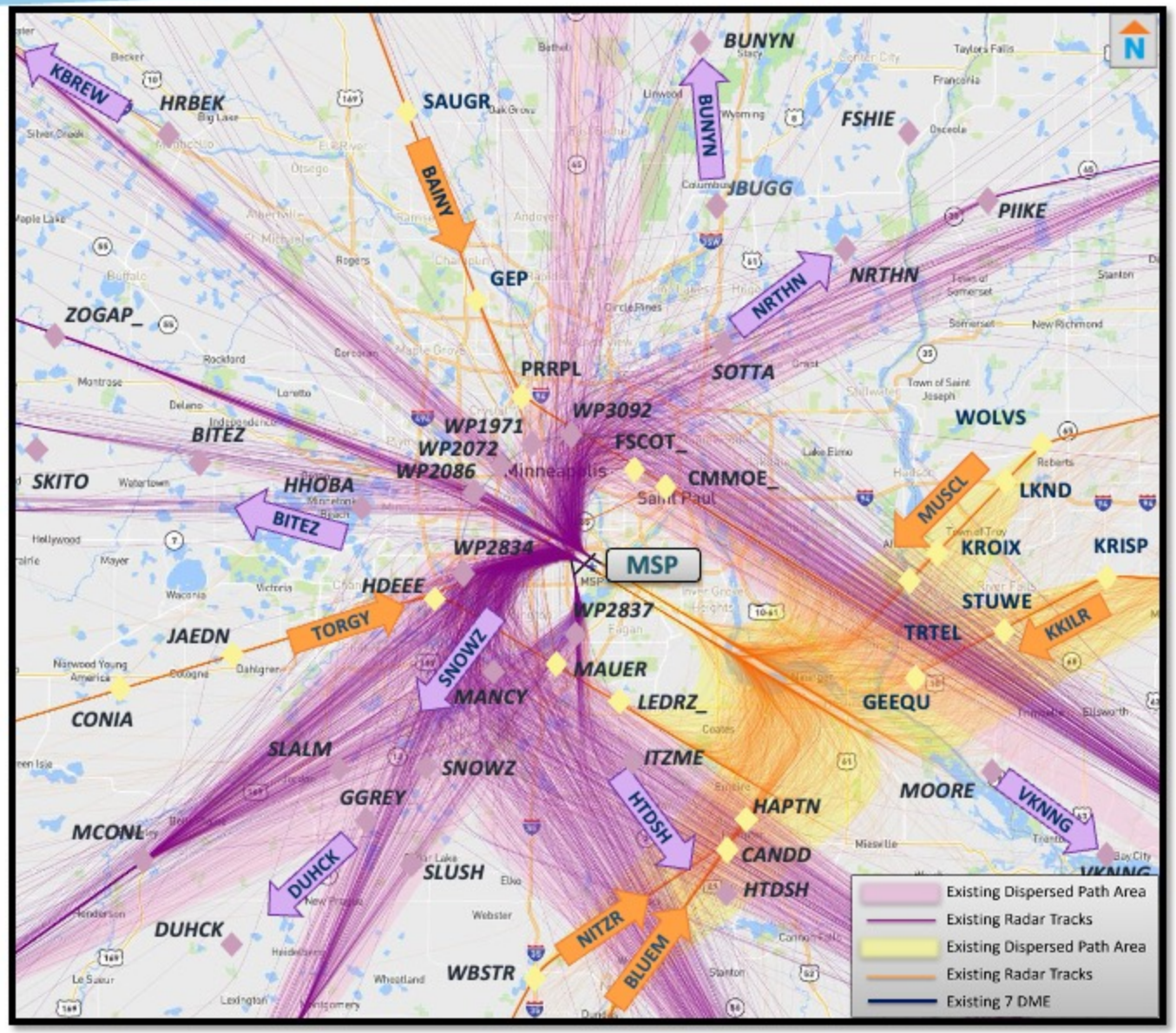
South Flow Departures
Runway 12R & 12L, 17

- This board shows a close-in version of proposed south flow departure procedures and existing flight tracks.
- Once aircraft take off and are at a safe altitude, ATC may turn aircraft on course when it is operational safe
- For aircraft flying to the southwest, the proposed procedures include following the Minnesota River
- The proposed SIDs will provide the necessary separation from arriving aircraft



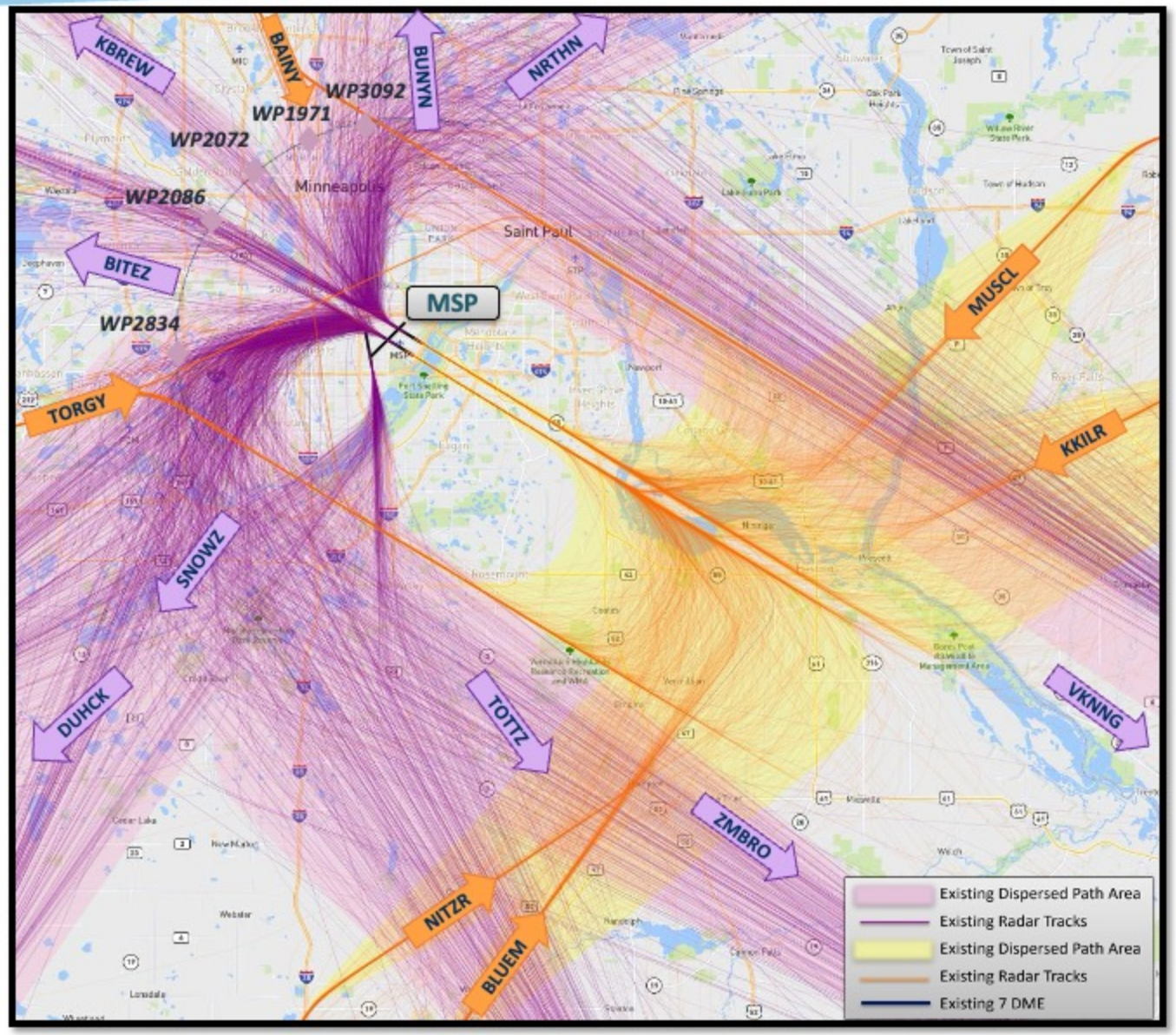
South Flow Departures
Runway 12R & 12L, 17

- This board shows a close-in view of proposed RNAV vector SIDs with existing flight tracks.
- Existing aircraft flight tracks are shown color coded by altitude.
- The proposed procedures reduce/eliminate the need to keep aircraft lower on departure, they may climb unrestricted
- The proposed procedures allow ATC to give an aircraft a heading and altitude to follow, reducing the need for progressive instructions.



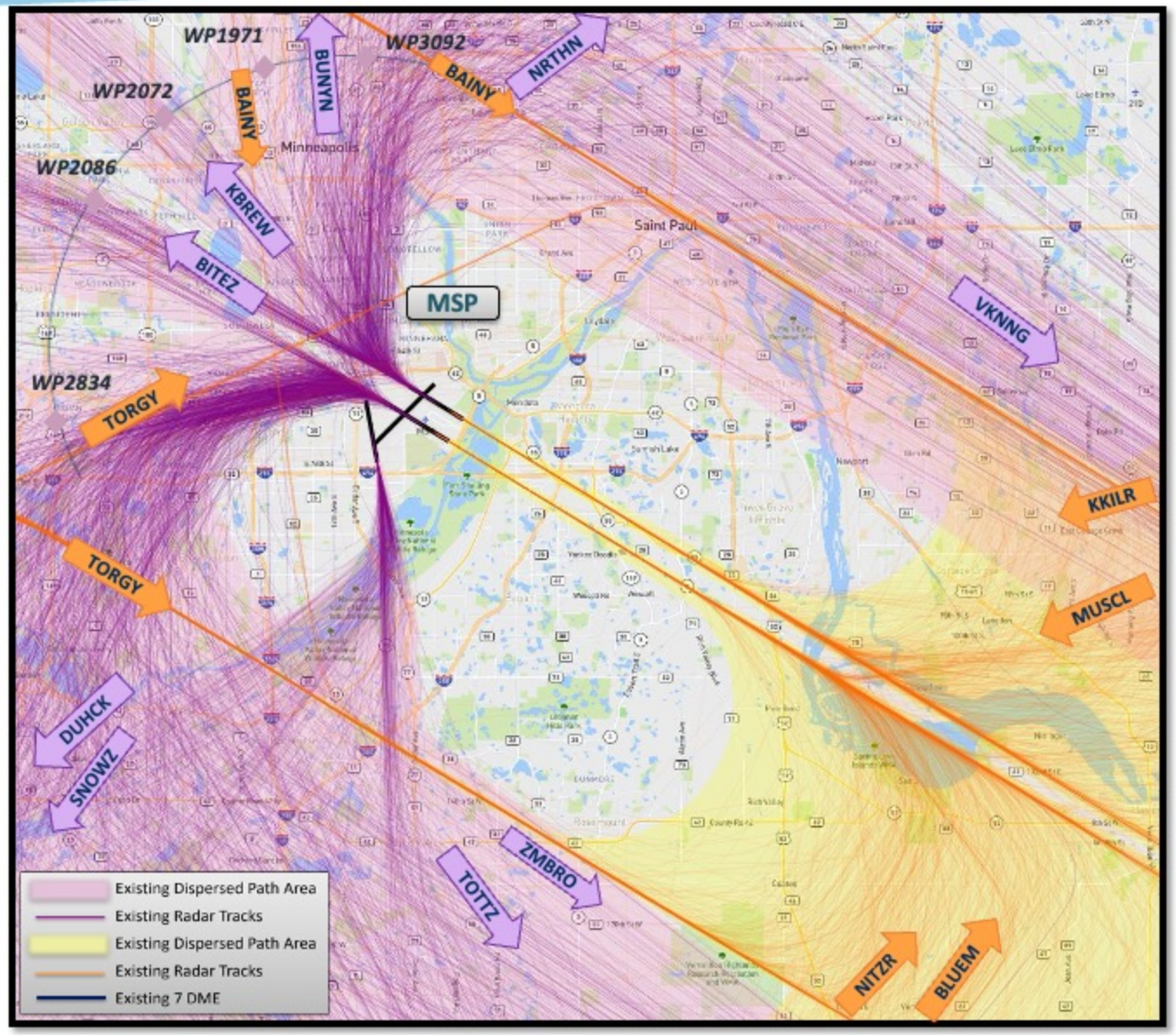
Mixed Flow Arrivals & Departures
Runway 30L & 30R
Departures Runway 17

- This board shows the operational flow called Mixed A.
- In this operational flow, aircraft will land to the north and take off to the southwest and north
- Current Mixed A arrivals are stepped down on the arrival path and need to level off multiple times for traffic separation with departures
- The proposed published arrivals from the southwest will allow aircraft to use Optimized Profile Descents (OPDs) to descend on idle
- OPDs place aircraft on a continuous and predicable path that has built-in speed and altitude parameters



Mixed Flow Arrivals & Departures
Runway 30L & 30R
Departures Runway 17

- This board shows a zoomed in view of Mixed A flow
- In this operational flow, aircraft will land to the north and take off to the southwest and north
- Aircraft will also use the Eagan Mendota Heights corridor to land



Mixed Flow Arrivals & Departures
Runway 30L & 30R
Departures Runway 17

- This board shows the operational flow called Mixed A.
- In this operational flow, aircraft will land to the north and take off to the southwest and north
- Aircraft departing to the southwest will fly over the river