MEETING TIME NOTICE

The November 28, 2018 Noise Oversight Committee will be begin at 6:30 PM at the MAC General Offices, 6040 28th Avenue South, Minneapolis, MN. (The Committee Pre-meeting will begin at 6:00 PM in the Stapp Meeting Room - NOC members, alternates, and at-large contacts only).



Minneapolis-St. Paul International Airport Noise Oversight Committee (NOC)



NOC Committee Members

Jeffrey Hart – Co-Chair (Delta Air Lines) Dianne Miller – Co-Chair, City of Eagan Representative (City of Eagan) Ryan Barette – Minnesota Business Aviation Association Representative Pam Dmytrenko – City of Richfield Representative (City of Richfield) Chris Finlayson – At-Large Airport User Representative (Endeavor Air, Inc.) Gordy Goss – Chief Pilot Representative (Delta Air Lines) Brian Hoffman – At-Large Community Representative (City of St. Louis Park) Todd Lawrence – Charter/Scheduled Operator Representative (Sun Country Airlines) Patrick Martin – City of Bloomington Representative (Bloomington City Council) Jay Miller – City of Mendota Heights Representative (Mendota Heights City Council) Angie Moos – Cargo Carrier Representative (United Parcel Service) Loren Olson – City of Minneapolis Representative (City of Minneapolis)

MEETING AGENDA

November 28, 2018 at 6:30 PM MAC General Office Building Lindbergh Conference Room 6040 28th Avenue South Minneapolis, MN 55450

(Jeff Hart, Delta Air Lines, will be the acting Chairperson for the meeting) *Note: 6:00 to 6:30 PM – Committee Agenda Review Session (NOC members, alternates, and at-large contacts only in the Stapp Conference Room)

1. 6:30 Review and Approval of the September 19, 2018 Meeting Minutes 2. 6:35 Review of Monthly Operations Reports: September and October, 2018 3. 6:50 Public Comment Period 4. 7:10 Review of the Fall Listening Session 5. 7:20 Summary of Aviation Noise, Environment, and Health-Related Research 6. 7:30 Review and Approval of 2019 NOC Work Plan, NOC 2018 Accomplishments, 2019 NOC Meeting Dates 7. 7:50 Guest Speaker: MSP Converging Runway Operations (CRO) Update (Sean Fortier, FAA District Manager of Operations for the Minneapolis District) 8. 8:10 Stakeholder Engagement Plan for MSP 2040 Long Term Comprehensive Plan (LTCP) 9. 8:30 Noise Abatement Dashboard Update 10. Announcements 11. Adjourn

Public Comment Notice: A public comment period of no more than 20 minutes will be added to each agenda. Members of the public wishing to address the NOC during this period are allotted 3 minutes to speak. Please complete and submit a speaker card prior to the start of the meeting or have arrangements made with your NOC representative prior to the meeting date.

Item 1





MSP NOISE OVERSIGHT COMMITTEE DRAFT MEETING MINUTES

Wednesday, 19th of September 2018 at 1:30pm

MAC General Office Lindbergh Conference Room

Call to Order

A regularly-scheduled meeting of the MSP Noise Oversight Committee, having been duly called, was held Wednesday, 18th of July 2018, in the Lindbergh Conference Room at the MAC General Office. Chair Hart called the meeting to order at 1:34pm. The following were in attendance:

- **Representatives:** D. Miller; J. Hart; R. Barette; P. Dmytrenko; G. Goss; B. Hoffman; J. Malin; P. Martin; C. Jacobson; A. Moos; L. Olson; J. Miller
- Staff: D. Nelson; B. Juffer; A. Kolesar; B. Ryks
- Others: J. Gundlach City of Inver Grove Heights; M. Hall Signature; C. Thorkildson Eagan ARC; Annette Peterson Apple Valley; S. Henry Eagan; M. Brindle Edina City Council; S. Heegaard City of Saint Paul; J. Axmacher Eagan ARC; J. Munser Mendota Heights; S. Devich City of Richfield; A. Nemcek City of Rosemount; M. Nolan City of Minneapolis; L. Moore City of Bloomington

Before starting, **Chair Miller**, **Eagan**, announced guest speaker, Doug Christensen, would present before MAC CEO, Brian Ryks, due to Christensen needing to catch a flight. **Miller** also announced that the Eagan mobile noise monitoring request would be moved up in the agenda to accommodate time restrictions for members and guests.

1. Review and Approval of the July 18, 2018 Meeting Minutes

Chair Miller, Eagan, asked if there were comments or objections to the July meeting minutes, seeing none, she asked for a motion. A motion to approve was moved by **Representative Hart**, **Delta**, and seconded by **Representative Martin**, **Bloomington**. The minutes were approved unanimously.

2. Review of Monthly Operations Reports: July and August, 2018

Brad Juffer, Assistant Technical Advisor, In July, MACNOMS recorded 36,785 operations and 38,124 operations in August. The July count is a 2.3% reduction from July 2017 with the August count showing a 1% reduction, this equates to 1,267 fewer flights than July and August of 2017.

Year to date operations through August 31 were at 274,485. This is a reduction of nearly 5,300 flights from 2017 or a reduction of 1.9%.

Between 10:30 pm and 6:00 am, there were 2,465 flights in July and 2,512 in August. The July figure is up 119 operations (5.1%) from July 2017 while the August number is 299 operations (13.5%) more than August 2017. There have been 728 more night flights thus far in 2018 compared to the same time period of 2017. This is a 4.2% increase from 2017 or 3 additional flights per night.

There were 74,909 operations recorded at MSP in July and August. After May and June saw a South Flow dominance, the airport configurations shifted back to a more balanced use in July and August. The first priority runways, according to the Runway Use System (RUS) were used 36% of the time during July and August, combined with the 17% for Priority 2 equates to a more traditionally reported 53.3% use for high priority runways. Priority 3 was used almost entirely during 1 hour of the two months. On August 16th from 2:45 PM to 3:50 PM, Runway 22 was used for 31 departures and 22 arrivals due to gusty winds out of the southwest (210°) and a thunderstorm to the southeast of the airport.

Juffer reiterated that the airport had balanced use of the flows during the previous two months. The splits between north/south/mixed flows ended at 40/41/11 for July and August, last year that split was 32/48/11. This departure from 2017 allows the unbalance from May and June to be partially offset. 11% of time was in Mixed Flow, 135 of the 145 hours were Mixed A (arrivals and departures on 30L and 30R with departures on 17) with 10 hours reported as Mixed B (arrivals and departures on 12L and 12R with arrivals on 35).

Juffer displayed a graph to illustrate MSP carrier jet usage and reported that the top 10 Carrier Jet aircraft types represent 83% of all traffic at MSP. All 10 of those aircraft have Stage 4 and/or Stage 5 noise levels.

In July, there were 14,453 complaints filed and an additional 16,643 complaints about MSP flights in August. The complaint count in July is 1,840 fewer than 2017 while the August number is 84 fewer complaints than 2017. Year to date complaints are down by 17,670 from 2017 a 16.5% reduction. In July, the complaints were filed from 553 locations and in August they were filed from 650 locations. In 2017, those numbers were a very similar at 557 for July and 615 in August.

Juffer displayed a diagram illustrating the locations and complaint totals. Of the 553 locations that filed a complaint in July, 333 of them also filed a complaint in August while 220 did not. On the flip side, of the 650 locations that filed a complaint in August, 317 of them did not file a complaint in July. The customers that remain engaged from one month to the next also file more complaints than average.

Looking at the information spatially, 26 locations (10%) of areas of the community filed more than 300 complaints or roughly 5 per day. On the opposite end, 114 locations filed less than 8 complaints or roughly 1 per week. The top 10 locations filed 13,876 complaints in July and August; 637 locations filed 10 or less complaints in July and August.

Juffer moved on to sound monitoring: aircraft events occurred for 448 hours in July and roughly 472 hours in August. Overall, this is a 4.25% reduction in the time above 65 decibels

attributable to aircraft for July and August compared to 2017. The 92,738 events above 65 decibels for July and 98,182 events in August is also a reduction from the same months in 2017 by 1.2% or 2,400 fewer events.

Regarding noise abatement procedures, the Runway 17 Departure procedure was used 99.7% in July and 99.1% in August. There were 51 jets west of turn-point in August: 22 on August 3rd, 14 on August 24th and 5 on August 26th because of thunderstorms in the area. The Eagan/Mendota Heights Departure Corridor was used 96% of the time in July and 98% in August. The use of the Crossing-in-the-Corridor procedure was 36% and 34% during the day and 47% and 42% at night during July and August, respectively.

Representative Olson, Minneapolis, commented on the large number of complaints and the balanced runway use in August. **Olson** continued that the RUS numbers looked good on paper but at the end of August, it shifted to a south flow. She asked Juffer if there's a reason why there are so many complaints even when the runway use is balanced. **Juffer** responded that the complaint numbers are similar to that of August in 2017, albeit still high. August is typically a busier travel month and that contributes to higher complaints as well as the nighttime operations this year. Looking at complaint locations, there are still a select number of locations that continue to file the vast majority of complaints while a greater number of locations are filing fewer complaints as a whole. **Olson** responded that regardless, 650 locations filing a complaint is a high number. **Juffer** agreed that while the number is high, it's lower than the number in the past.

3. Public Comment Period

Chair Miller, Eagan, introduced the new public comment process since the bylaw change at the previous meeting. There were no speaker cards filled out and no public comments were made.

4. Guest Speaker: Boeing ecoDemonstrator (Doug Christensen, ecoDemonstrator Program Leader at Boeing Commercial Airplanes) *originally item 5 Dana Nelson, Technical Advisor, introduced Doug Christensen, Boeing's Associate Technical Fellow and the Test Vehicle Program Manager for ecoDemonstrator technology demonstration vehicles. The remainder of Doug's biography was included in the meeting packet.

Doug Christensen, Boeing Commercial Airplanes, thanked the committee for allowing him to present the innovations and technologies that Boeing is bringing forward. **Christensen** stated that the aviation industry supports 62.7 million jobs globally and while this is a great impact, it comes with a lot of responsibility. With increased demand, Boeing takes the responsibility of integrating new aircraft into the market, while not disrupting communities, very seriously. Boeing has predicted a need for over 41,000 new airplanes in the next 20 years; just under 6,000 will be retained fleet, 17,500 will be replacement fleet, and about 23,500 will be new fleet coming out to meet a growing market.

The most efficient, quieter family of new airplanes are the 777x, the 787, the 737 Max, and the 747-8. All of these aircraft have a reduction in fuel use and thus CO_2 emissions, they also all have a smaller noise footprint. Those improvements are being met by using composite fuselage, utilizing modern high lift devices, using chevrons on engines, using higher bypass ratio engines, and with product improvement, that allows FAA to make approaches more

efficient. Airplane improvements have allowed the 85 dBA range to decrease significantly and be reduced to almost just the area the airport is located on. **Co-Chair Hart, Delta,** asked if Christensen had dBA ranges for aircraft that is most often seen at MSP, more narrow body aircraft. **Christensen** didn't but said he would work with the noise office to provide that info. In addition to airport operations, Boeing is paying attention to the goings on in airspace throughout the world. They're looking at global navigation systems and ways to optimize flight paths so as to reduce fuel consumption, emissions, and noise.

Christensen touched on the evolution of advances that allowed aircraft to fly quietly, the list ranged from non-directional beacons in 1940, to required navigation performance in the 1990s, and to NextGen in the 2020s. Part of this evolution process for Boeing, means utilizing a quiet technology demonstrator flying over a surface with hundreds of microphones. This allows the filming technology to pinpoint exactly where the noise is coming from on the aircraft.

The ecoDemonstrator Program procures an aircraft every year and outfits it with the latest noise reducing technologies that Boeing has been creating, and tests its efficiency. **Christensen** covered the demonstrator program in 2012, 2014, 2015, 2016, and 2018. Over the last 5 programs, 140 technologies were tested, about a third of them are in products today. **Representative Olson, Minneapolis,** asked if the GLS approach allows Boeing to use a different glide slope. **Christensen** responded yes, because you can program the approach in and you're not reliant on an ILS beam. GLS is more about the system at the airport, it replaces the ILS system. A Synthetic Instrument Landing System, SILS, goes on the aircraft and is called synthetic because the technology is making the aircraft think it's flying at an ILS beam and the pilot doesn't see a difference aside from realizing they're utilizing GPS rather than ILS.

Christensen said that in 2019, there may be two aircraft to test on as Boeing has 60+ technologies to test and demonstrate. He brought up this point to punctuate Boeing's dedication and investment to sustainability and noise reduction. At the close of the presentation he asked for questions and **Olson** asked about an earlier slide and its mention of high lift devices and what that means. **Christensen** responded that the trailing edge flaps of a 747 has four components, some of the flaps cause a lot of noise. Reducing the flaps to be just one, reduces noise from those flaps. **Olson** asked if the team was doing anything related to altitude gains on departure. **Christensen** responded that yes they are and the current 787 has increased climb performance to get it to where it needs to be for neighborhoods around an airport. **Olson** then asked if there were options for retrofitting older aircraft. **Christensen** responded that a new design was tested with NASA to reconfigure the internal structure of an engine to reduce noise. **Nelson** followed up to **Hart's** question earlier about the certificated noise level for the 737Max with a Leap engine and it is at about 24.3 dBA below a Stage 3 aircraft certification.

5. Guest Speaker: MAC/MSP Update (Brian Ryks, MAC Executive Director/CEO) *originally item 4

Brian Ryks, MAC Executive Director/CEO, presented the annual update and discussed the restructuring that has occurred as well as the enhanced focus on community engagement and outreach. **Ryks** mentioned the new division, Strategy and Stakeholder Engagement, and the VP of that division, Naomi Pesky.

Ryks presented the current members of the MAC Commission. The MAC is celebrating its 75th anniversary in 2018 and **Ryks** commented on the foresight the regulating boards had at

the time of origination. He then touched on the legislated purpose of promoting efficient, safe, and economical air commerce; to develop the full potentialities of the metropolitan area as an aviation center; and to minimize the environmental impact from air transportation and the public's exposure to noise and safety hazards around the airport. **Ryks** stated everyone takes the MAC Mission of "Connecting You to Your World" and the Vision of "Providing your Best Airport Experience" to heart. When the airport system was established, it consisted of only Minneapolis-St Paul International, but the evolution of the relievers has been very effective to relieve congestion and support air transportation access to the entire Twin Cities area. **Ryks** continued on by discussing the employees at the MAC and the system of operations that runs much like a small city. A video was played to display the collaboration efforts of staff and surrounding committees to train for emergency procedures.

MSP saw a record-breaking passenger year in 2017 with 38,034,341 passengers and increased operations by just under 1.5%. Thus far in 2018, passengers are up by just under 1% and operations are down 2.4%, which means the trend of larger aircraft is continuing. MSP continues to be in the lower quarter of hub airports in regards to cost per enplaned passenger. MSP remains a main hub for Delta although since 2007 the percentage of MSP domestic seats has dropped from 79% to 69% and that's due to an uptick in Southwest and Sun Country seats as well as the start of Ultra Low Cost Carriers (ULCC). Since 2016, 11 airlines added a total of 50 additional routes from MSP and now MSP has competitive air service on 58 of its total 164 direct routes. Sun Country has started the transition into becoming an ULCC and recently announced new non-stop flights to Nashville, New Orleans, Santa Barbara, Belize, and St. Kitts & Nevis. JetBlue is a new carrier at MSP and has three times daily service to Boston. On April 1, 2019, Delta will begin its first ever direct service from MSP to Seoul, South Korea. Just the week before this meeting, **Ryks** said he was in Dublin for the announcement that Aer Lingus was launching non-stop service effective July 8, 2019.

Ryks introduced the recent improvements at MSP by showing a video which showcased the new Intercontinental Hotel that opened on July 30, 2018. In addition to that, MSP has opened 50 new retail shops and restaurants in the last 3 years. There are many local venues distributed through these new shops to give travelers a taste of Minnesota's local cuisine culture. By the year 2022, the T1 ticketing and baggage claim levels will be completely remodeled. Space will be added, elevators and escalators will be aligned for efficiency, and services will be more centrally located. MSP is also working with Delta, American, and United Airlines by testing automated baggage check. The Silver Parking Ramp construction started in 2016 and will have space for 5,000 vehicles with improved auto rental facilities. The ramp is scheduled for completion in 2020.

Ryks transitioned into recognizing MSP for winning the award of "Best Airport in North America" by the Airport Service Quality Survey, two years in a row for the 25-40 Million Passenger Category. The Air Transport Research Society awarded MSP, for the second year in a row, as the Most Efficient Airport in North America, also in the 25-40 Million Passenger Category.

Moving on to economic growth, **Ryks** discussed the total economic output by reliever airports. The six reliever airports contribute to a combined \$756 million in total economic output and support more than 3,600 jobs. **Chair Miller, Eagan,** thanked Ryks for attending and **Co-Chair Hart, Delta,** thanked Ryks for his ongoing support of the NOC.

6. Eagan Mobile Noise Monitoring Study Request *originally item 7

Dana Nelson, Technical Advisor, introduced a mobile noise monitoring request from the City of Eagan. **Nelson** displayed the goals of the request as:

- 1. Determine if gaps in the RMT coverage area currently exist in the City of Eagan.
- 2. Determine if two of the RMT locations closest to Interstate 35-E are properly located to best monitor aircraft noise given the ambient freeway noise.

The noise team determined the goal is realistically achievable, that the monitoring will benefit a large section of the community exposed to aircraft noise and that current monitoring data is inadequate for the requested analysis. The noise team will be specifically evaluating RMT 25 and 37.

This request was prompted by the Eagan Airport Relations Commission, ARC, and the main concern is related to Runway 17 departure operations. The data collected in the mobile noise monitoring devices and the 39 RMTs do not go in to the noise contour development because the annual contour is required by the FAA to use the federally-approved modeling software. This mobile noise monitoring effort is included in the 2019 budget for the noise office. MAC staff will work in close collaboration with Chair Miller and the Eagan ARC and report back to the NOC after data is collected and analysis is performed.

Chair Miller, Eagan, thanked Nelson and recognized two members from Eagan ARC that were present, she then opened the floor for NOC members with questions. **Representative Hoffman, Saint Louis Park,** wanted to clarify that MAC funding allows for occasional studies like this to occur. **Nelson** confirmed that money in the annual budget is allocated for a study like this and that the rental of one noise monitoring unit is about \$2,500 and there are typically a few requests annually. This particular request came in while the MAC was working through their annual budget process so the team was able to adequately prepare for it in the 2019 budget process. **Co-Chair Hart, Delta,** asked if the study came back to say that moving the RMTs was beneficial, would the plan be to then move them permanently. **Nelson** confirmed that her team would see this as a possibility, however expanding the RMT locations is not being considered. **Representative Olson, Minneapolis,** expressed her support for this request and process.

IT IS REQUESTED THAT THE NOC MEMBERS VOTE ON THE MOBILE NOISE MONITORING REQUEST, AND IF APPROVED, DIRECT MAC STAFF TO WORK WITH THE CITY OF EAGAN AND THE EAGAN AIRPORT RELATIONS COMMISSION TO DETERMINE THE MONITORING SET-UP, DURATION AND REPORTING.

The motion was made by **Co-Chair Hart, Delta,** and seconded by **Representative Hoffman, Saint Louis Park**. The motion was passed unanimously.

7. Review of the Eagan Listening Session *originally item 6

Brad Juffer, Assistant Technical Advisor, stated that on August 27th there was a special Listening Session at the Eagan Community Center, 40 residents attended and most were from Eagan. The meeting was also attended by representatives from FAA, Eagan Councilmembers and staff, Eagan ARC members, NOC members, and Minnesota congressional representatives. Councilmember Gary Hansen opened the meeting, then MAC staff, FAA, and Delta provided

answers to questions that Eagan ARC submitted prior to the meeting. The audience questions were largely focused on operations on 17/35.

Juffer stated that prior to this meeting, ARC had commented a lot on nighttime departures on Runway 17, so noise staff looked into that information, documented the increase, and worked with carriers and the FAA to discover why some of these departures were occurring. One reason is that Runway17 is favored, even at night, and FAA identified a couple times that occurred. Other times it was due to pilot request, a shorter taxi time, or a request from cargo facilities. The FAA Air Traffic Manager for the MSP tower sent a memo to all controllers stating that unless there is an operational necessity, nighttime flights should use Runways 12L and 12R in accordance with the tower's standard operating procedures. This may include denying pilot requests, unless they communicate operational necessity. **Co-Chair Hart, Delta**, thanked the noise office and FAA for working together. **Chair Miller, Eagan**, thanked them as well and stated that this helps groups like ARC realize that they do have an impact and the transparency maintains trust.

8. Review Final MSP Noise Management Benchmarking Study

Dana Nelson, Technical Advisor, introduced the full Benchmarking Study report from HMMH, and listed the link and stated that it's on the MAC Noise website.

The report contents include:

- 1. Airport Noise Background
- 2. Overview of Noise Management Categories
- 3. Benchmarking Study Methodology and Results
- 4. Conclusion and Findings

Since the analysis presentation at the last NOC meeting, there was additional analysis to compare the reported cost of residential noise mitigation programs with publicly accessible population data. HMMH did this by using the 2010 public census data. HMMH determined that the analysis did not show a strong correlation between program cost and population surrounding airports. MSP reported the highest program cost but has the 7th largest population within a 1 mile radius of the airport, the 6th largest population within 3 miles of the airport, and the 3rd largest population within 5 miles of the airport.

Nelson stated that at the last meeting, **Co-Chair Hart** requested examples of established or stated goals by Standing Noise Committees/ Roundtables. **Nelson** shared some examples and noted most were general and related to a committee charter, work plan, or mission statement and most were really general. Some of the items are comparable to the items in the NOC Bylaws.

Best practices were identified and in October, this information will be shared with other airports in a conference. The best practice items all fell in to three main categories, Transparency, Responsiveness, and Collaboration. The benchmarking study lists three considerations and all three are included in the 2019 Draft Work Plan for NOC consideration.

- 1. Take noise complaints from non-residential addresses;
- 2. Live stream NOC meetings;
- 3. Provide real-time alerting to the FAA for established noise abatement procedures to increase compliance and awareness.

9. Draft 2019 Work Plan

Dana Nelson, Technical Advisor, presented the 2019 Draft NOC Work Plan. The items are:

- 1. Review Residential Noise Mitigation Program
- 2. MSP Noise Program Specific Efforts

a) 2018 Actual Noise Contour Report and First Amendment to the Consent Decree Noise Mitigation Program Eligibility

- b) Improve MACNOMS for a better user experience
- c) MSP Fleet Mix and Nighttime Operations Assessment
- d) Status of FAA Center of Excellence/ASCENT, TRB and FICAN Research Initiatives
- e) Update on Converging Runway Operations at MSP
- f) Update on the MSP Long Term Comprehensive Plan Update and Associated Stakeholder Engagement
- g) Update on the FAA's Survey to Re-Evaluate Noise Measurement Methods
- h) Evaluate the Noise Management Benchmarking Study findings and discuss consideration
- 3. Continue to Review Input Received from Public Input Meetings as Possible Agenda Items

Nelson mentioned that the October Listening Session with be a brainstorming session for members of the public to come up with suggestions for the 2019 NOC Plan. The November NOC meeting will include a requested Committee action to adopt the 2019 Work Plan. Following, the NOC Co-chairs will bring the Work Plan to the MAC's Planning, Development, and Environment Committee meeting in December.

10. Announcements

Fall Listening Session is Wednesday, October 24, 2018 at 7pm at the MAC General Offices in the Lindbergh Conference Room.

11. Adjourn

A motion to adjourn was requested by **Chair Miller, Eagan**, moved by **Representative Martin**, **Bloomington**, and seconded by **Representative Dmytrenko**, **Richfield**.

The meeting adjourned at 3:31 p.m.

The next meeting of the NOC is scheduled for Wednesday, 28 November, 2018 at 6:30PM

Respectfully Submitted, Amie Kolesar, Recording Secretary

- **TO:** MSP Noise Oversight Committee (NOC)
- **FROM:** Dana Nelson, Manager Noise, Environment & Planning
- SUBJECT: REVIEW OF MONTHLY OPERATIONS REPORTS: SEPTEMBER AND OCTOBER 2018
- DATE: November 14, 2018

Each month the MAC reports information on MSP aircraft operations, aircraft noise complaints, sound levels associated with MSP aircraft operations, and compliance with established noise abatement procedures on its interactive reporting website: <u>https://www.macenvironment.org/reports/</u>.

At the November 28, 2018 NOC meeting, MAC staff will provide a summary of this information for the months of September and October, 2018. To view these summary reports prior to the meeting, visit the Archives section at the link above.

TO:	MSP Noise Oversight Committee (NOC)
FROM:	Dana Nelson, Manager – Noise, Environment & Planning
SUBJECT:	PUBLIC COMMENT PERIOD
DATE:	November 14, 2018

Members of the public are welcome to attend NOC meetings. During each meeting, a public comment period of no more than 20 minutes is added to each agenda. Individuals choosing to speak during the public comment period may do so by submitting a speaker card prior to the meeting start time or by contacting their NOC representative prior to the meeting date. Speaker cards will be made available at the sign-in table before each meeting. Submit completed speaker cards to the NOC Secretary or to any NOC member before the meeting begins.

Below are some rules of decorum for speaking at NOC meetings.

- Each speaker will have one opportunity to speak and is allotted three (3) minutes. The public comment period is limited to 20 minutes.
- When called upon to speak, speak clearly into the microphone, state your name and address. If you are affiliated with any organization, please state your affiliation.
- Commenters shall address their comments to the NOC and not to the audience.
- Use of profanity, personal attacks, or threats of violence will not be tolerated.

TO:	MSP Noise Oversight Committee (NOC)
FROM:	Brad Juffer, Assistant Manager – Noise, Environment & Planning
SUBJECT:	REVIEW OF THE FALL LISTENING SESSION
DATE:	November 14, 2018

One of the elements of the framework for the MSP Noise Oversight Committee (NOC) includes convening a quarterly meeting with the public. The primary goal of the meeting is to ensure residents' concerns are heard and considered as part of the ongoing effort by the MAC and the NOC to address noise and other topics around MSP.

The NOC Fall Listening Session is an opportunity for community members to help shape the upcoming NOC Work Plan. In 2017, this work session approach generated creative ideas from the attendees and led to 2018 efforts including: the MSP Noise Management Benchmarking Study, the Boeing ecoDemonstrator guest speaker and the Bylaw subcommittee recommendations and changes.

On October 24, 2018 at 7:00 PM, the Fall Listening Session was held at the MAC General Offices. Four residents attended the meeting from Apple Valley, Mendota Heights, Minneapolis, and Savage. In addition to MAC staff, the meeting was also attended by FAA MSP Air Traffic Management; Delta Chief Pilot and NOC Member, Captain Gordy Goss; NOC Member, Loren Olson; and Minneapolis Councilmember, Jeremy Schroeder.

MAC Staff welcomed all attendees and asked for introductions from the group. After a brief overview of the NOC and the intent for the work session, staff opened the meeting to solicit possible items for the 2019 work plan. Ideas were recorded and attached.

The 2019 MSP Listening Sessions are tentatively scheduled for the following dates:

- Winter Listening Session: January 23, 2019 at 7:00 PM at the MAC General Offices
- Spring Listening Session: April 24, 2019 at 7:00 PM in Mendota Heights
- Summer Listening Session: July 24, 2019 at 7:00 PM at the MAC General Offices
- Fall Listening Session: October 26, 2019 at 7:00 PM at the MAC General Offices

Any updates to the above dates, times and locations will be sent out through the Noise Program Office website E-News subscription list and website calendar, and provided to NOC membership.



NOC Work Plan Consideration Ideas Work Session with Citizens Fall Listening Session October 24, 2018

Information-Sharing Ideas

- Communicate Listening Session meetings more widely
- Consider opportunities to connect with potential homebuyers and realtors to share aircraft noise information
- Provide more site-specific information on mitigation eligibility and historical mitigation activities

Operation-Specific Ideas

• Conduct a Runway 17 analysis to evaluate departures between 6:00 PM and 6:00 AM and evaluate trends in departure heading usage

Source Reduction Ideas

- Encourage airlines to update their fleet to lead to increased noise reduction
- Encourage airlines to reduce nighttime operations

TO: MSP Noise Oversight Committee (NOC)

FROM: Dana Nelson, Manager – Noise, Environment & Planning

SUBJECT: SUMMARY OF AVIATION NOISE, ENVIRONMENT, AND HEALTH-RELATED RESEARCH

DATE: November 14, 2018

In accordance with the 2018 NOC Work Plan, MAC Noise Program Office staff have enclosed an updated report of aviation-related research initiatives pertaining to aircraft noise, environmental topics, and health effects.

A summary of the research projects that were completed, active, initiated, or anticipated in 2018 or 2019 is provided in the attached report, and includes work by the Transportation Research Board (TRB), The FAA's Centers of Excellence (ASCENT), Federal Interagency Committee on Aircraft Noise (FICAN) and other health-related reports.



Status of Aviation Noise, Environment, and Health-Related Research Initatives 2018-2019

October 2018













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Introduction

Research is ongoing by various agencies in the U.S. and across the globe to evaluate the effects of aviation noise and other environmental impacts associated with aircraft operations. This summary provides a description of research that is most applicable to passenger service airports like Minneapolis-St. Paul International Airport (MSP), and is being conducted, is anticipated, or was completed in 2018 and/or 2019.

The agencies described below are overseeing the research described in this summary. More information about each research agency or the referenced projects is accessible through the website links provided.

Transportation Research Board

The mission of the Transportation Research Board (TRB) is to promote innovation and progress in transportation through research. According to the TRB website, the organization facilitates the sharing of information on transportation practice and policy by researchers and practitioners; stimulates research and offers research management services that promote technical excellence; provides expert advice on transportation policy and programs; and disseminates research results broadly and encouraged their implementation.

The Airports Cooperative Research Program (ACRP) is sponsored by the Federal Aviation Administration (FAA) and managed by the National Academies through TRB. ACRP research topics are selected by an independent governing board appointed by the U.S. Secretary of Transportation that includes individuals from airports, universities, FAA, and the aviation industry.

For more information: http://www.trb.org/AboutTRB/AboutTRB.aspx

ASCENT

The Aviation Sustainability Center, called ASCENT or PARNTER—previously referred to as the Federal Aviation Administration's (FAA) Center of Excellence program—conducts aviation-related research to develop "science-based" solutions to challenges posed by aircraft operations.

Projects undertaken by ASCENT are funded by the FAA, National Aeronautics and Space Administration, Department of Defense, Transport Canada, and the U.S. Environmental Protection Agency.

For more information: https://ascent.aero/

Federal Interagency Committee on Aviation Noise

Federal Interagency Committee on Aviation Noise (FICAN), formed in 1993, was formed by numerous federal agencies to assist and facilitate, encourage, and lead forums for discussion and research related to aviation noise.

Member agencies include: Department of Defense, Department of Interior, Department of Transportation, U.S. Environmental Protections Agency, National Aeronautics and Space Administration, Department of Housing and Urban Development.

For more information: <u>https://fican.org/</u>

World Health Organization

The World Health Organization (WHO) is the directing and coordinating authority responsible for public health within the United Nations.

WHO Regional Office for Europe (WHO/Europe) serves the WHO European Region, which comprises 53 countries from the Atlantic to the Pacific oceans.

For more information: http://www.who.int/about-us

Summary of Aircraft Noise-related Research Studies and Projects 2018-2019					
Year	Project Number	Project Status	Project Title	Project Description	Project URL
2018	ACRP 02-83	Active	Measuring Quality of Life in Com- munities Surrounding Airports (Research is underway. The panel and contractor held a kick- off web meeting on June 28, 2018. The interim report is scheduled to be provided in No-	The objective of this research is to develop methods and guidance to measure the effect of an airport on the quality of life on its surrounding communities. The ACRP is seeking the insights of proposers on how best to achieve the research objective	http://apps.trb.org/cmsfeed/ TRBNetProjectDisplay.asp? ProjectID=4420
2018	Ascent 017	In Process	Pilot Study on Aircraft Noise and Sleep Disturbance (2017 Annual Report: https://ascent.aero/ documents/2018/06/ascent-017- 2017-annual-report.pdf/)	The long-term goal of this project is to understand the relationship between aircraft noise and sleep disturb- ance in the United States. Multiple publications about the various aspects of this research project are available and linked within the project page URL.	https://ascent.aero/project/ noise-exposure-response- sleep-disturbance/
2018	Ascent 040	In Process	Quantifying Uncertainties in Pre- dicting Aircraft Noise in Real- world Situations (2017 Annual Report: https://ascent.aero/ documents/2018/06/ascent-040- 2017-annual-report.pdf/)	The purpose of this project is to support the develop- ment of enhanced aircraft noise modeling tools with a particular focus on the propagation of the noise, and to a lesser extent the aircraft noise source and interac- tions of noise with the ground. The effect of meteoro- logical conditions is being assessed. Both validation and uncertainty studies are underway. The lessons learned from this research will be considered by FAA and its partners for inclusion in the Aviation Environ- mental Design Tool (AEDT). The outcomes will be published in the following reports: 1. Quantifying uncertainties in predicting aircraft noise in real-world situations 2. A multipole expansion technique for predicting en- route aircraft noise	https://ascent.aero/project/ guantifying-uncertainties-in- predicting-aircraft-noise-in- real-world-situations/
2018	FICAN	Completed	Research Review of Selected Aviation Noise Issues	This report shares the results of a comprehensive review of 1992 research of selected airport noise anal- ysis issues and guidance. FICAN updated previous findings, summarized additional findings, and identify a number of key research needs in the areas of: annoy- ance; non-auditory health effects; sleep disturbance; emerging aviation noise issues related to non- traditional vehicles, including unmanned aerial sys- tems (UAS), helicopters, military fighter jet aircraft and the phenomenon of crackle, commercial space, and civil supersonic aircraft; noise in national parks, wilder- ness, and other rural areas; and supplemental metrics.	<u>_review_2018.pdf</u>
2018	WHO		Environmental Noise Guidelines for the European Region	Noise is an important public health issue. It has nega- tive impacts on human health and well-being and is a growing concern. The WHO Regional Office for Eu- rope has developed these guidelines, based on the growing understanding of these health impacts of ex- posure to environmental noise. The main purpose of these guidelines is to provide recommendations for protecting human health from exposure to environ- mental noise originating from various sources: trans- portation (road traffic, railway and aircraft) noise, wind turbine noise and leisure noise.	http://www.euro.who.int/ data/assets/ pdf_file/0008/383921/noise- guidelines-eng.pdf

Summary of Aircraft Noise-related Research Studies and Projects Continued 2018-2019

	2010 2010					
Year	Project Number	Project Status	Project Title	Project Description	Project URL	
2019	ACRP 02-79	Active	for Aircraft Noise Reflection and Diffraction from Terrain and Manmade Structures	The objective of this research is to develop, evaluate, and recommend method(s) to account for aircraft noise reflection and diffraction due to terrain and manmade structures for incorpora- tion in AEDT. The method(s) should account for ground and airborne aircraft operations.		
2019	ACRP 01-42	Anticipated	(This project has been ten- tatively selected and a project statement (request for proposals) is expected to be available on this world	The objective of this research are to examine and benchmark parameters and financial infor- mation among airports and ownership/ management structures and to develop guid- ance to help airports identify how changes in governance may be beneficial, to build stake- holder support, and provide recommendations for implementation.	<u>http://apps.trb.org/cmsfeed/</u> TRBNetProjectDisplay.asp? ProjectID=4620	
2019	ACRP 03-51	Anticipated	Perspective (This project has been ten- tatively selected and a project statement (request for proposals) is expected to be available on this world wide web site.)	The objective of this research is to develop guidance to help plan for the operation of elec- tric aircrafts at airports. The research should describe current and emerging technology and address facility requirements, implications for commercial service and general aviation air- ports, power demand requirements, potential impacts and opportunities for revenue genera- tion, regulatory issues, and environmental im- pacts.	http://apps.trb.org/cmsfeed/ TRBNetProjectDisplay.asp? ProjectID=4625	

- **TO:** MSP Noise Oversight Committee (NOC)
- **FROM:** Dana Nelson, Manager Noise, Environment & Planning

SUBJECT: REVIEW AND APPROVAL OF 2019 NOC WORK PLAN, NOC 2018 ACCOMPLISHMENTS, AND 2019 NOC MEETING DATES

DATE: November 14, 2018

At the September 19, 2018 NOC meeting, members reviewed and discussed a proposed 2019 Work Plan Draft. The Draft 2019 NOC Work Plan is attached. Subsequently, the NOC's Fall Listening Session was held on October 24, 2018 to solicit ideas for what citizens also would like the NOC to consider in 2019 (details provided in Item 4).

The pages following the Draft 2019 NOC Work Plan includes the Draft 2018 NOC Accomplishments and the Draft 2019 NOC Meeting Dates.

Following NOC approval, the 2019 Work Plan will be presented to the MAC Planning, Development and Environment (PD&E) Committee by the NOC Co-Chairs on December 3, 2018 at 10:30 AM in the Commission Chambers at Terminal 1-Lindbergh.

REQUESTED ACTION

APPROVE AND RECOMMEND TO THE MAC PLANNING, DEVELOPMENT AND ENVIRONMENT COMMITTEE THE FINAL 2019 MSP NOC WORK PLAN AND APPROVE THE LIST OF 2018 ACCOMPLISHMENTS AND 2019 MEETING DATES.



Minneapolis-St. Paul International Airport (MSP) Noise Oversight Committee (NOC)

DRAFT 2019 NOC WORK PLAN

1. RESIDENTIAL NOISE MITIGATION PROGRAM

a. Review Residential Noise Mitigation Program Implementation Status

2. MSP NOISE PROGRAM SPECIFIC EFFORTS

- a. 2018 Actual Noise Contour Report and Residential Noise Mitigation Program Eligibility
- b. Improve MAC Noise and Operations Monitoring System (MACNOMS) for a Better User Experience
- c. MSP Fleet Mix and Nighttime Operations Assessment
- d. Status of Aviation Noise, Environment, and Health-Related Research Initiatives
- e. Update on Converging Runway Operations at MSP
- f. Update on the MSP Long Term Comprehensive Plan and Associated Stakeholder Engagement
- g. Update on the FAA's Survey to Re-Evaluate Noise Measurement Methods
- h. Evaluate Noise Management Benchmarking Study findings and discuss considerations

3. CONTINUE REVIEW OF PUBLIC INPUT

a. Continue to Review Input Received from quarterly Listening Sessions as Possible Agenda Items



Minneapolis-St. Paul International Airport (MSP) Noise Oversight Committee (NOC)

DRAFT 2018 NOC Accomplishments

- 1. Completed a <u>Fleet Mix and Nighttime Operations Assessment</u> which, in addition to evaluating fleet mix and nighttime operations, included certificated noise levels for aircraft operating at MSP and aircraft altitude trends.
- 2. Responded to requests from MSP FairSkies Coalition which led to the formalization of a NOC committee goal: *To provide residential sound mitigation out to the actual 60 dB DNL noise contour by the year 2024.*
- 3. Developed a Bylaw Review Subcommittee to evaluate the NOC's Bylaws as a result of an MSP FairSkies request for greater citizen representation. Subsequently, the NOC adopted the recommended changes to its Bylaws to include more citizen involvement.
- 4. Received an update on a joint agreement between the FAA and Phoenix Sky Harbor International Airport (PHX) to settle litigation over the FAA's implementation of Performance Based Navigation procedures in PHX.
- 5. Completed a Vortex Generator Noise Monitoring Study which evaluated noise measurement data from Airbus A320-aircraft family arrivals equipped with vortex generators compared to non-equipped aircraft. The study found only minor noise level differences on aircraft equipped with vortex generators.
- 6. Heard updates on the 2018 Super Bowl in Minneapolis and the FAA's and MAC's efforts to prepare, communicate and facilitate the associated demand on the airspace and airport facilities.
- 7. Pursuant to the Second Amendment to the Consent Decree, reviewed the <u>MSP 2017</u> <u>Annual Noise Contour Report</u> published on February 28, 2018. The report noted that based on the 415,703 total annual operations in 2017, the actual 60 dB DNL contour is 27% smaller than the 2007 forecast contour, and the 65 dB DNL contour is 38% smaller. The report also explained that there are areas of the contour, near the arrival areas for Runway 12R/30L, where additional homes are achieving candidate eligibility in the MAC's Residential Noise Mitigation Program.
- 8. Received a Residential Noise Mitigation Program update on the status of one of the most aggressive noise mitigation programs in the world. The MAC reported spending \$482.9 million to provide residential noise mitigation out to 60 dB DNL noise contour. Recent mitigation activities include 138 single-family homes and 88 multi-family structures invited to participate in the 2017 Mitigation Program, 283 single-family homes invited into the

2018 Mitigation Program, and 430 single-family homes invited into the 2019 Mitigation Program.

- 9. Sent a Runway 12L departure proposal from the Mendota Heights Airport Relations Commission to the FAA for a feasibility evaluation. The FAA reported that the departure proposal was not feasible because it would reduce the available headings off Runway 12L from three to one, and it would also impact the capacity for Runway 17. However, FAA committed to providing additional controller training for Crossing-in-the-Corridor use during periods of low-to-mid traffic demand periods to increase compliance with the procedure.
- 10. Reviewed Runway Use System (RUS) priorities, advocated to the FAA to utilize the RUS to the maximum extent possible, and discussed various ways of reporting runway use and airport flows.
- 11. Conducted an <u>MSP Noise Management Benchmarking Study</u> to detail the regulatory constraints imposed on U.S airport noise programs; provide an independent comparison of the MAC Noise Program Office efforts to peer airports; and identify opportunities. The study concluded that the MAC Noise Program Office performs well amongst peer airports across each category of noise management.
- 12. Received regular updates from the FAA on the agency's Converging Runway Operations (CRO) efforts to develop and install software tools to help reduce complexity, increase efficiency and minimize noise impacts associated with CRO.
- 13. Received a demonstration of the MAC's new FlightTracker application which improves the user experience on mobile devices and provides additional analytical tools and information for users.
- 14. Heard a presentation on the MAC Noise Office's efforts with Machine Learning, in partnership with a University of Minnesota PhD student, to improve aircraft noise event and aircraft operation matching process, increase analysis efficiency by reducing manual efforts, and enhance the quality of data reported from the 39 Remote Monitoring Towers.
- 15. Received an update on the FAA's efforts to re-evaluate noise measurement methods at U.S. airports.
- 16. Heard from the MAC Executive Director and CEO, Bryan Ryks on updates on the organization, recent accolades, trends in passengers and operations, and future development at MSP.
- 17. Received a presentation from ecoDemonstrator Program Lead for Boeing, Doug Christensen, who shared information about Boeing's ongoing efforts and future commitments to test technologies and accelerate development for better fuel economy and environmental performance.
- 18. Co-sponsored a Listening Session along with the Eagan Airport Relations Commission to listen to concerns from residents of Eagan.
- 19. Communicated noise concerns to the FAA on behalf of residents overflown by Runway 17 departures, which led to a memo from the FAA Air Traffic Manager to controllers to

reinforce standard operating procedures between the hours of 10:30 PM and 6:00 AM to use, to the maximum extent feasible, the Eagan/Mendota Heights Departure Corridor and the Crossing-in-the-Corridor noise abatement procedures.

- 20. Approved a mobile noise monitoring request from the Eagan Airport Relations Commission for the purposes of evaluating the location of two existing Remote Monitoring Towers to ensure their current location is optimal for collecting noise events from aircraft arriving to and departing from MSP.
- 21. Reviewed research initiatives from FAA Center of Excellence/ASCENT, TRB, and FICAN.
- 22. Received ongoing review of MSP monthly operations reports which include aircraft noise complaints, operations, runway use, noise events, and compliance with noise abatement procedures.
- 23. Evaluated citizen input received during quarterly Listening Sessions as possible discussion topics at future NOC meetings. Ideas collected during the Fall Listening Session were documented from citizens who expressed what they would like the NOC to consider specifically for its 2019 Work Plan.



Minneapolis-St. Paul International Airport (MSP) Noise Oversight Committee (NOC)

DRAFT 2019 MSP NOC Meeting Dates

Historically, the NOC meetings are held six times each year on the third Wednesday of January, March, May, July, September, and November (odd-numbered calendar months). As such, staff recommends the following 2019 NOC meeting dates:

January 16 March 20 May 15 July 17 September 18 November 20 (This meeting will be held during the evening)

The agenda packet for each meeting will be distributed and published two weeks prior to each meeting. An agenda review session will begin at 1:00 PM for the NOC members, alternates and at-large contacts and each NOC meeting will begin at 1:30 PM in the Lindbergh Conference Room in the MAC General Office building, unless otherwise noted.

- **TO:** MSP Noise Oversight Committee (NOC)
- **FROM:** Dana Nelson, Manager Noise, Environment & Planning

SUBJECT: GUEST SPEAKER: MSP CONVERGING RUNWAY OPERATIONS (CRO) UPDATE (SEAN FORTIER, FAA DISTRICT MANAGER OF OPERATIONS FOR THE MINNEAPOLIS DISTRICT)

DATE: November 14, 2018

At the November 28, 2018 NOC meeting, Federal Aviation Administration (FAA) District Manager of Operations for the Minneapolis District, Sean Fortier will provide an update on Converging Runway Operations (CRO) at MSP.

- **TO:** MSP Noise Oversight Committee (NOC)
- **FROM:** Dana Nelson, Manager Noise, Environment & Planning

SUBJECT: STAKEHOLDER ENGAGEMENT PLAN FOR MSP 2040 LONG TERM COMPREHENSIVE PLAN (LTCP)

DATE: November 14, 2018

The MAC is responsible for completing Long Term Comprehensive Plans (LTCP) for each of its airports. A LTCP is an infrastructure planning tool that evaluates projected passenger demand and aircraft operations levels to determine facility needs in order to serve the public. The LTCP is forward-looking and does not authorize actual construction or serve as a basis for noise mitigation.

As part of the MSP 2040 LTCP, a robust public outreach process will be woven into the planning effort. The strategy and approach for public outreach will be described in a formal Stakeholder Engagement Plan (SEP), developed specifically for this LTCP. The SEP will be designed to facilitate public involvement – providing the opportunity for a wide range of stakeholders to participate and be heard during the LTCP process.

An outline for the SEP is attached and will be discussed at the November 28, 2018 NOC meeting.

MSP 2040 Long Term Comprehensive Plan: Stakeholder Engagement Outline

This document outlines objectives, approach and communication efforts for engaging stakeholders during the MSP 2040 Long Term Comprehensive Plan. This outline will serve as a basis for establishing the formal Stakeholder Engagement Plan (SEP). The formal SEP is expected to be finalized in early 2019.

Objectives

Broadly, the SEP is intended to benefit both the MAC and the MAC's stakeholders. It will set a framework for an inclusive process so that interested stakeholders can be informed and involved throughout the planning process. Additionally, the SEP will be designed to help MAC achieve the following objectives:

- Fulfill the MAC's legislative purpose to:
 - Promote air navigation and transportation, international, national, state, and local, in and through the State of Minnesota.
 - Promote the efficient, safe and economical handling of air commerce and to assure the inclusion of the State in national and international programs of air transportation. To those ends, develop the full potentialities of the metropolitan area as an aviation center.
 - Assure minimum environmental impact from air navigation and transportation for residents of the metropolitan area, promote the overall goals of the State's environmental policies and minimize the public's exposure to noise and safety hazards around airports.
- Conduct planning for future airport facilities in a responsible and transparent manner that includes specific engagement processes designed to build trust and establish a shared understanding of airport, traveler, and community needs
 - Actively listen to stakeholder ideas and topics of interest
 - **o** Strengthen MAC's relationship with its stakeholder groups
 - Establish a system to reach a wide variety of stakeholders
 - Communicate the services and benefits the MAC's system of airports delivers to the region
- Support and document a thorough and effective public involvement process

Approach

Airport Community Panel

MAC staff will convene an Airport Community Panel (ACP) consisting of key stakeholders. The ACP will be an advisory board made up of members who represent key stakeholder groups. The panel will meet every two months and will be closely involved in the planning process to serve several functions, including:

- Representing a broad range of stakeholder groups;
- Receiving information about the plan and then conveying it to their constituencies;
- Providing input as the voice of their key stakeholders on various aspects of the plan
- Ensuring public concerns and aspirations are considered;

The MAC will work with key stakeholder groups to identify specific members to serve on the ACP and then extend an invitation to participate. Members of the public will be encouraged to use their ACP representative as a means for engaging with the process in addition participation in public meetings. Key stakeholder groups include:

- Local community leaders and city planners
- MSP airport travelers
- MSP airlines
- Federal Aviation Administration
- Transportation Security Administration
- Regional business representatives

Project Milestones

In order to create an inclusive and transparent process and ensure a regular rhythm of public involvement, the planning process will be divided into four distinct phases, or "milestones." These milestones will culminate in a public meeting event. Four public meeting events will be held to share information about each phase and receive input. Input received during each milestone's public meeting event will help inform the remaining phases of the planning process.

The SEP will involve four project milestones:

- 1) LTCP Introduction, Planning Goals & Objectives, Existing Conditions
- 2) MSP Aviation Activity Forecasts, Facility Requirements (Gap Analysis)
- 3) Alternative Design Concepts, Environmental and Land Use Planning Evaluation
- 4) Review Draft LTCP and Public Comment Period

Communication

Project Website

The MAC will create and maintain a project website to share information with the general public. The project website will include:

- Public meeting information
- Public project documents (such as technical reports, newsletters, presentations, fact sheets, etc.)
- Frequently asked questions
- How to contact the project team
- How to sign up for E-News subscription service (see below)
- Project timeline

E-News Monthly Project Updates

An email "E-News" subscription service will be set-up through GovDelivery. Individuals can sign up for the subscription on the project website. Once signed-up they will receive project updates throughout the planning process.

Project Newsletters

A detailed project newsletter will be created in advance of each public meeting event. The newsletters will be distributed through MAC's existing communication channels and stakeholder groups, such as through the MSP Airport Newsletter, MSP Airport and Airline Affairs Committee, MSP Airport Foundation, Terminal 2 Users Group, MSP Noise Oversight Committee, MSP Traveler Advisory Committee, and through the MAC Noise Program Office website.

Additionally, newsletters will be posted on the project website and sent via email to the E-News distribution list. Printed copies of the newsletters will be made available at the public meeting events.

Public Notifications

Public notifications will be provided in the St. Paul Pioneer Press and Star Tribune in advance of the public meeting events. Notifications will include information about public meeting logistics as well as other project messages. This will be in addition to sending public meeting event notifications through the project website and project newsletters.

Updates at the MSP Noise Oversight Committee and MAC Committee/Commission Meetings

MAC staff will update the MSP Noise Oversight Committee and the MAC Planning, Development, and Environment (PD&E) Committee at key milestones in the process. The public may attend these meetings. Public input at these meetings will follow the established protocols governing public comments during the meeting. Meeting minutes and video recordings will be made available on https://metroairports.org/Airport-Authority/Metropolitan-Airports-Commission/Public-Meetings/Board-Meetings.aspx.

Additional Public Presentations

If requested, MAC staff will provide presentations to local councils, boards, and committees at any point throughout the planning process. MAC will also provide updates to stakeholder groups, such as the MSP Airport and Airline Affairs Committee, MSP Airport Foundation, Terminal 2 Users Group, and the MSP Traveler Advisory Committee.

Comments Received

MAC staff will provide many opportunities for public comments and ideas throughout the planning process. Each comment may not receive a direct response; rather, comments will be addressed in one or more of the following ways:

- Comments may be addressed as part of the Frequently Asked Questions offered on the project website
- Comments may be answered verbally as part of a question and answer session
- Comments received during the LTCP Public Comment Period will receive a response and both the question and response will be reported in the final LTCP document

Comments received from stakeholders is one of the factors that the MAC considers in the planning process. Conformance to design standards, operational safety and feasibility, federal and state regulations, and project cost are also critical factors to consider.

TO: MSP Noise Oversight Committee (NOC)

FROM: Brad Juffer, Assistant Manager – Noise, Environment & Planning

SUBJECT: NOISE ABATEMENT DASHBOARD UPDATE

DATE: November 14, 2018

One of the functions stated in the bylaws for the Noise Oversight Committee is to "Monitor compliance with established noise policy at MSP." To this end, MAC staff produces a Monthly Operations Summary Report. Data are also made available online to assist interested parties track compliance with noise abatement procedures. Finally, a report is provided at each NOC meeting detailing the use of established noise abatement procedures at MSP.

MAC staff identified an opportunity to further increase the use of noise abatement procedures by providing access to real-time flight information. To effectively deliver real time noise abatement procedure metrics, the MAC developed a Noise Abatement Dashboard. This tool tracks real time usage of the Eagan-Mendota Heights Corridor Procedure, the Crossing-in-the-Corridor procedure, the Runway 17 Departure Procedure and the Runway Use System.

The tool was built for use by MAC staff and FAA Air Traffic Control management. The new application is designed with real-time alerts when flights are not using the procedures and allow for notes to be added for unusual events.

At the November 28, 2018 NOC meeting, staff will provide an overview of the functionality of the new Noise Abatement Dashboard.