



# Forest Lake Airport (25D) Airport Master Plan Study

**Update Meeting #4**  
**September 2, 2020**



**Forest Lake**  
AS GOOD AS IT SOUNDS



**BOLTON  
& MENK**  
Real People. Real Solutions.

1

## Master Plan Study Process

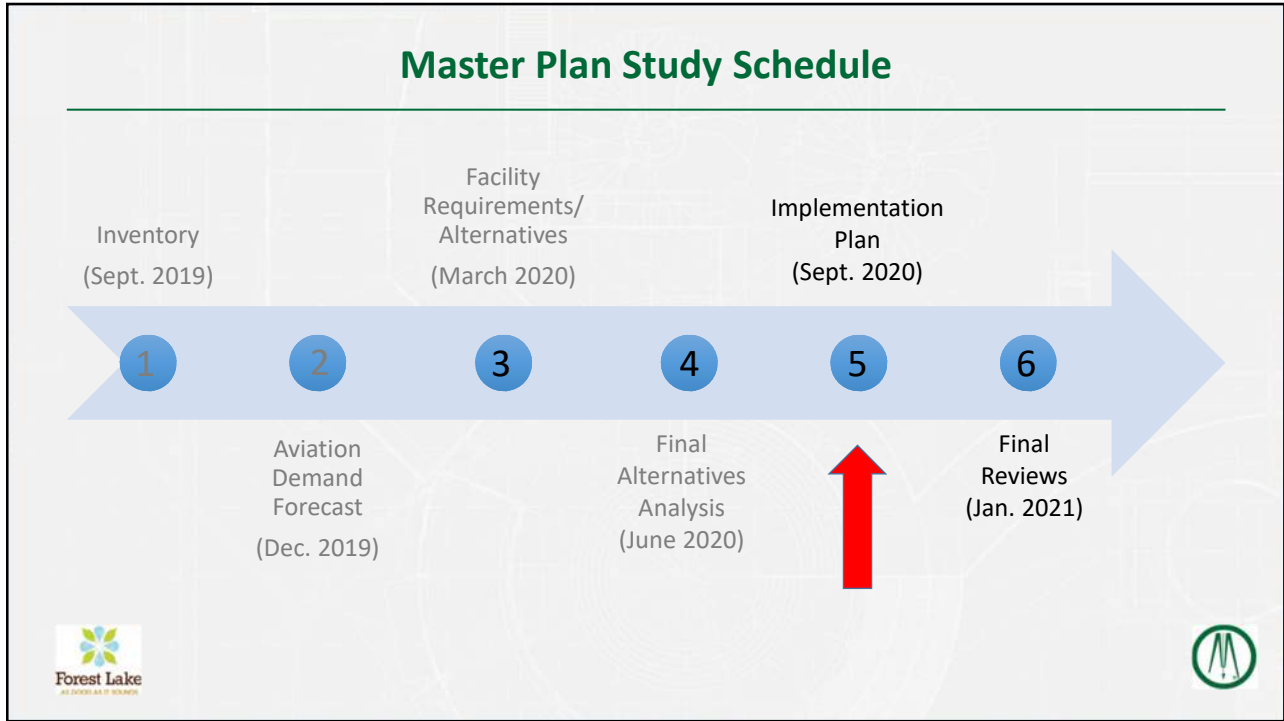
- 1. INVENTORY**
  - a. Collect information on existing facilities and the built and natural environment to establish a baseline for the study
- 2. AVIATION DEMAND FORECAST**
  - a. Establish the baseline aviation activity forecast
  - b. Develop reasonable assessment of future activity forecast and based aircraft
- 3. FACILITY REQUIREMENTS**
  - a. Identify future facility needs to meet future demand of airport users
  - b. Identify upgrade or replacement of existing facilities which may deteriorate
- 4. ALTERNATIVES ANALYSIS**
  - a. Identify options for future airport development to meet future needs
  - b. Review feasibility, environmental, and financial impact for each alternative developed
  - c. Select preferred alternative for development of ALP
- 5. IMPLEMENTATION PLAN**
  - a. Develop CIP for implementation of preferred alternative
  - b. Identify funding opportunities and review financial feasibility of the airport
- 6. STUDY REPORT AND ALP REVIEW**
  - a. Prepare the final Master Plan Report and Airport Layout Plan for City and MnDOT Aeronautics review and approval



**Forest Lake**  
AS GOOD AS IT SOUNDS



2



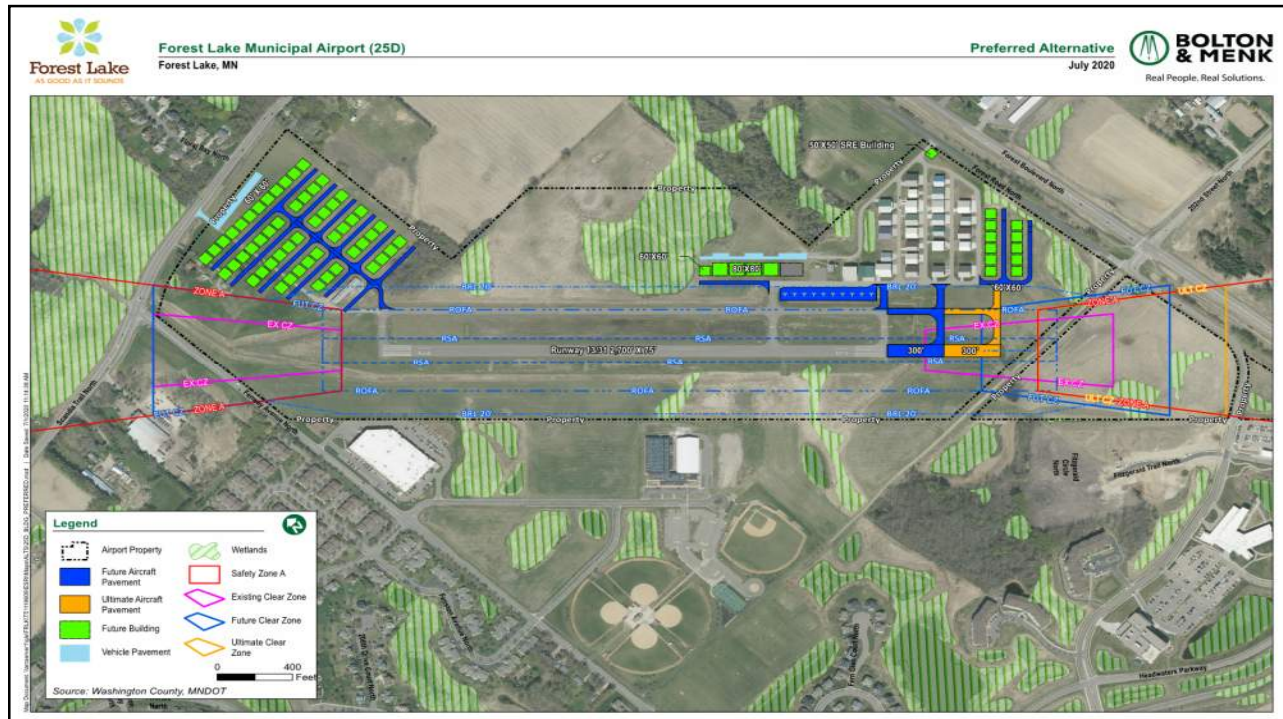
3

### Meeting Agenda

- Review Preferred Alternative
- Review Implementation Plan and CIP

Forest Lake

4

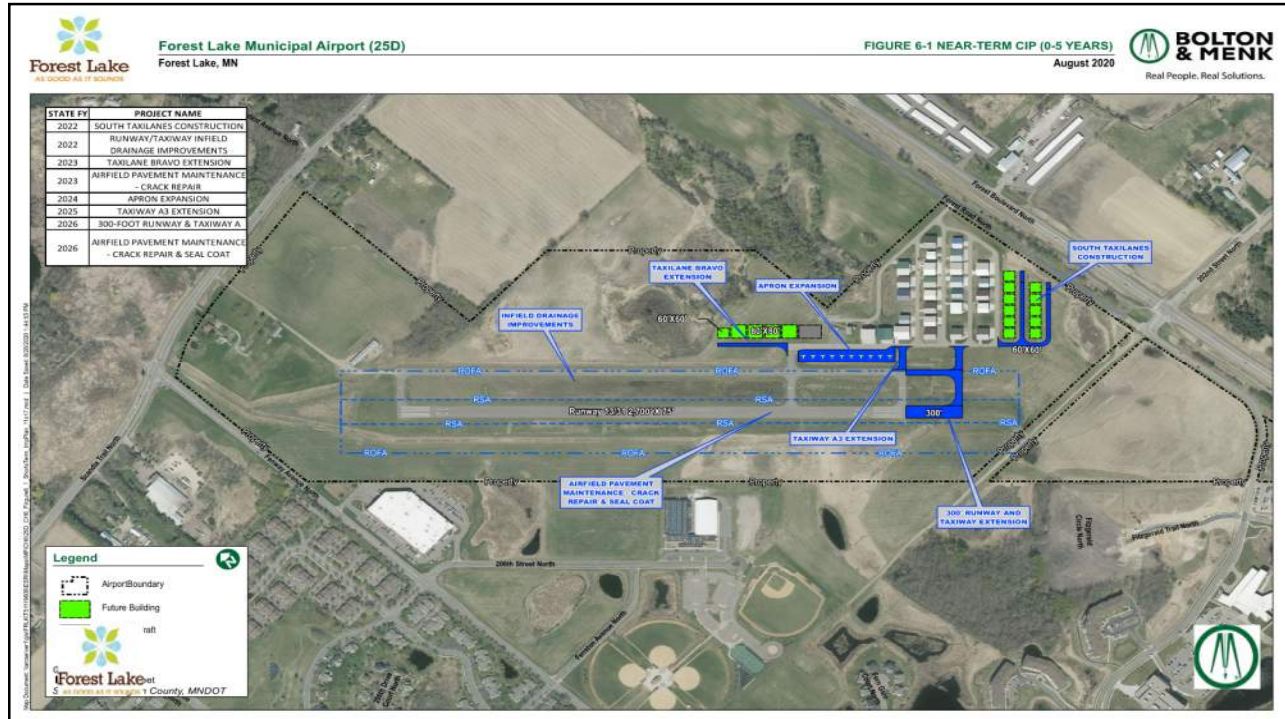


5

## Implementation Plan - Capital Improvement Program (CIP)

- 20-year CIP for improvement projects at the Airport.
- State and local funding available for Forest Lake.
- Assumed 80% State funding participation rate.
- State General Obligation Bonds is another funding opportunity.
- Near-Term (0-5 years); Mid-Term (6-10 years); and Long-Term (11-20 years) plan.
- Project justification will need to be provided prior to construction of any projects.
- Cost are estimated in 2020 dollars.
- The further out the project the less firm the timing and project cost.

6

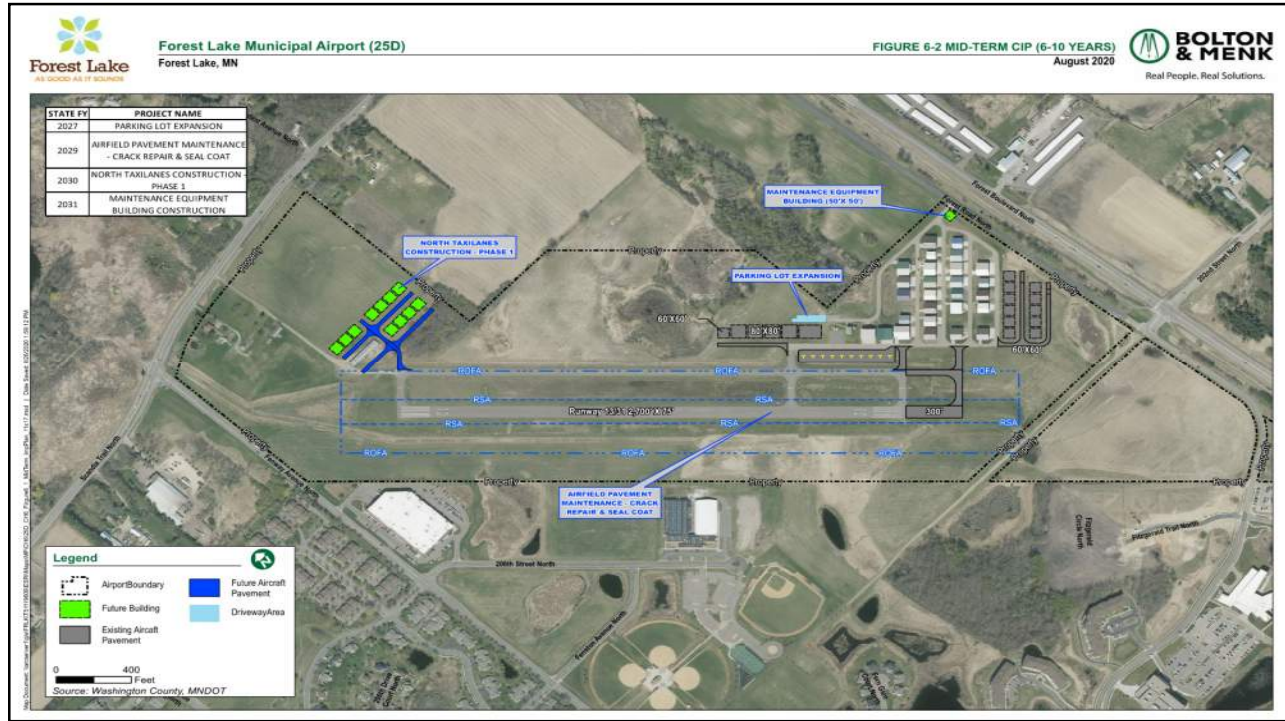


7

### Near-Term CIP (0-5 years; SFY 2022-2026)

STATE FY	PROJECT NAME	PURPOSE & JUSTIFICATION	SCOPE	TRIGGERING EVENT	ESTIMATED COST (2020 DOLLARS)	STATE FUNDING (80%)	LOCAL FUNDING (20%)
2022	SOUTH TAXILANES CONSTRUCTION	Hangar Taxilane construction is required to allow for the construction of additional private hangars.	Design & Construct Taxilanes (1,050' x 25'); Extend Watermain and Sanitary Sewer Utilities	Immediate need waiting on availability of State funding	\$501,685.20	\$401,348.16	\$100,337.04
2022	RUNWAY/TAXIWAY INFIELD DRAINAGE IMPROVEMENTS	Improve surface water drainage for the infield area north of Taxiway A2 between the Runway and Taxiway.	Extension of Underground Drain Tile	State funding availability	\$192,260.00	\$153,808.00	\$38,452.00
2023	TAXILANE BRAVO EXTENSION	Hangar Taxilane extension is required to allow for construction of larger corporate hangars.	Design & Extend Taxilane (370' x 25')	Corporate Hangar interest	\$276,655.40	\$221,324.32	\$55,331.08
2023	AIRFIELD PAVEMENT MAINTENANCE - CRACK REPAIR	Routine pavement maintenance based upon a pavement management program to extend their useful life.	Crack Repair of Runway, Apron, Taxiway, & Taxilanes	State funding availability	\$33,300.00	\$26,640.00	\$6,660.00
2024	APRON EXPANSION	Expand Apron to allow for tie-downs on a paved surface.	Design and Expand Apron (515' x 80')	State funding availability	\$501,977.20	\$401,581.76	\$100,395.44
2025	TAXIWAY A3 EXTENSION	Extend Connecting Taxiway A3 to Taxilane Bravo to reduce congestion along Taxiway A2.	Design & Extend Taxilane (150' x 35')	State funding availability	\$84,753.00	\$67,802.40	\$16,950.60
2026	300-FOOT RUNWAY 13/31 AND TAXIWAY A EXTENSION TO 3,000-FEET	Runway extension is needed to safely and efficiently accommodate flights to and from 25D by current and future critical design aircraft.	Design & Extend Runway and Taxiway (300' x 75') & (485' x 35')	New Critical Aircraft requiring 3,000-foot Runway length	\$733,121.48	\$586,497.18	\$146,624.30
2026	AIRFIELD PAVEMENT MAINTENANCE - CRACK REPAIR & SEAL COAT	Routine pavement maintenance based upon a pavement management program to extend their useful life.	Crack Repair & Seal Coat of Runway, Apron, Taxiway, & Taxilanes	State funding availability	\$191,100.00	\$152,880.00	\$38,220.00
<b>2022-2026 CIP Totals</b>					<b>\$2,514,852.28</b>	<b>\$2,011,881.82</b>	<b>\$502,970.46</b>

8

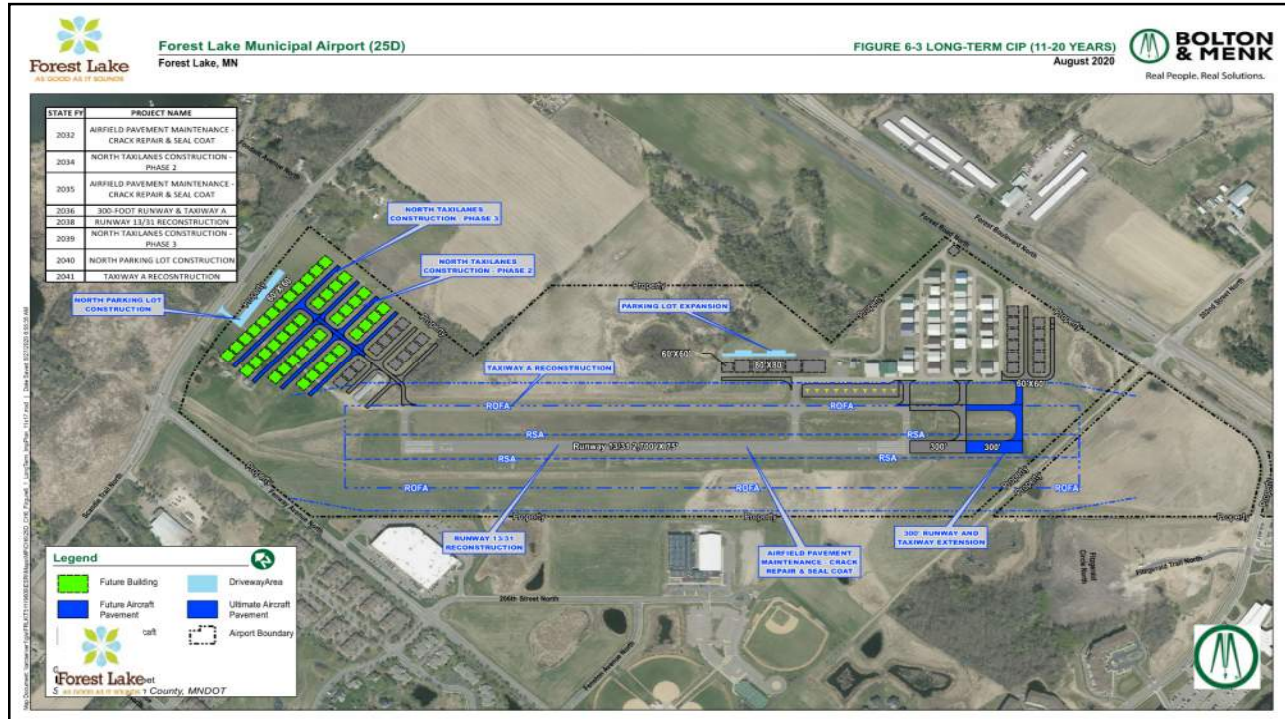


9

## Mid-Term CIP (6-10 years; SFY 2027-2031)

STATE FY	PROJECT NAME	PURPOSE & JUSTIFICATION	SCOPE	TRIGGERING EVENT	ESTIMATED COST (2020 DOLLARS)	STATE FUNDING (80%)	LOCAL FUNDING (20%)
2027	PARKING LOT EXPANSION	Expansion of existing automobile parking lot to meet growing demands of public parking spaces for pilots, passengers, visitors, and tenants.	Design & Construct Parking Lot (2,000 SF)	Increased parking demand	\$226,416.80	\$181,133.44	\$45,283.36
2029	AIRFIELD PAVEMENT MAINTENANCE - CRACK REPAIR & SEAL COAT	Routine pavement maintenance based upon a pavement management program to extend their useful life.	Crack Repair & Seal Coat of Runway, Apron, Taxiway, & Taxilanes	State funding availability	\$202,600.00	\$162,080.00	\$40,520.00
2030	NORTH TAXILANES CONSTRUCTION - PHASE 1	Hangar Taxilane construction is required to allow for the construction of additional private hangars.	Design & Construct Taxilanes (1,400' x 25')	Private Hangar interest and availability of State funding	\$467,740.20	\$374,192.16	\$93,548.04
2031	MAINTENANCE EQUIPMENT BUILDING CONSTRUCTION	Enclosed on-airport storage building for snow removal and ground maintenance equipment.	Construct 50' x 50' SRE Building	State funded SRE and maintenance equipment	\$365,000.00	\$292,000.00	\$73,000.00
<b>2027-2031 CIP Totals</b>					<b>\$1,261,757.00</b>	<b>\$1,009,405.60</b>	<b>\$252,351.40</b>

10



11

### Long-Term CIP (11-20 years; SFY 2032-2041)

STATE FY	PROJECT NAME	PURPOSE & JUSTIFICATION	SCOPE	TRIGGERING EVENT	ESTIMATED COST (2020 DOLLARS)	STATE FUNDING (80%)	LOCAL FUNDING (20%)
2032	AIRFIELD PAVEMENT MAINTENANCE - CRACK REPAIR & SEAL COAT	Routine pavement maintenance based upon a pavement management program to extend their useful life.	Crack Repair & Seal Coat of Runway, Apron, Taxiway, & Taxilanes	State funding availability	\$214,100.00	\$171,280.00	\$42,820.00
2034	NORTH TAXILANES CONSTRUCTION - PHASE 2	Hangar Taxilane construction is required to allow for the construction of additional private hangars.	Design & Construct Taxilanes (1,600' x 25')	Private Hangar interest and availability of State funding	\$569,487.60	\$455,590.08	\$113,897.52
2035	AIRFIELD PAVEMENT MAINTENANCE - CRACK REPAIR & SEAL COAT	Routine pavement maintenance based upon a pavement management program to extend their useful life.	Crack Repair & Seal Coat of Runway, Apron, Taxiway, & Taxilanes	State funding availability	\$225,600.00	\$180,480.00	\$45,120.00
2036	300-FOOT RUNWAY 13/31 AND TAXIWAY A EXTENSION TO 3,300- FEET	Runway extension is needed to safely and efficiently accommodate flights to and from 25D by current and future critical design aircraft.	Design & Extend Runway and Taxiway (300' x 75') & (485' x 35')	New Critical Aircraft requiring 3,300-foot Runway length	\$733,121.48	\$586,497.18	\$146,624.30
2038	RUNWAY 13/31 RECONSTRUCTION	Project will provide another 20 years of design life for Runway 13/31.	Design & Reconstruct Runway 13/31 (2,700' x 75')	Runway Pavement Condition Index (PCI) below 55 and availability of State funding	\$2,071,500.00	\$1,657,200.00	\$414,300.00
2039	NORTH TAXILANES CONSTRUCTION - PHASE 3	Hangar Taxilane construction is required to allow for the construction of additional private hangars.	Design & Construct Taxilanes (1,900' x 25')	Private Hangar interest and availability of State funding	\$634,428.40	\$507,542.72	\$126,885.68
2040	NORTH PARKING LOT CONSTRUCTION	Construction of Parking Lot on north development area to meet growing demands of public parking spaces for pilots, passengers, visitors, and tenants.	Design & Construct Parking Lot (1,500 SF)	Expansion of Hangar area to the north	\$235,541.80	\$188,433.44	\$47,108.36
2041	TAXIWAY A RECONSTRUCTION	Project will provide another 20 years of design life for Taxiway A.	Design & Reconstruct Taxiway A (2,700' x 35') & Taxiways A1-A3 (240'x35')	Taxiway Pavement Condition Index (PCI) below 55 and availability of State funding	\$1,500,000.00	\$1,200,000.00	\$300,000.00
<b>2032-2041 CIP Totals</b>					<b>\$6,183,779.28</b>	<b>\$4,947,023.42</b>	<b>\$1,236,755.86</b>

12

## Next Steps

- Review Near, Mid, and Long-Term CIP Projects.
- Finalize 20-Year CIP.
- Draft Airport Layout Plan
- Finalize Master Plan Narrative Report



13

## Questions?

**Forest Lake Airport (25D)  
Airport Master Plan Study  
Update Meeting #4**

**September 2, 2020**

### Contacts:

**City of Forest Lake  
Dan Udem  
Assistant City Administrator  
651-209-9727  
dan.udem@ci.forest-lake.mn.us**

**Bolton & Menk  
Silas Parmar, P.E.  
Project Manager  
612-987-0138  
silas.parmar@bolton-menk.com**



14