ST. LOUIS LAMBERT INTERNATIONAL AIRPORT®

AIRPORT MASTER PLAN

EXECUTIVE SUMMARY

FEBRUARY 2023 - FINAL DRAFT

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BACKGROUND

Since the last St. Louis Lambert International Airport (STL) Master Plan was completed in 2012, changes have occurred in the national and regional aviation industry that necessitated an update to the plan. Thus, in 2020, the St. Louis Airport Authority (STLAA) initiated an Airport Layout Plan Update (ALPU) to plan how to best meet short-term and long-term aviation demand. By mid-2021, it became apparent through the ALPU process that significant terminal and landside improvements needed to be considered to adequately meet the Airport's short- and long-term needs. Therefore, the scope of the ALPU was expanded to become a full master plan, and the effort was renamed the *Airport Layout Plan Update and Master Plan (ALPU/MP)*.

GOALS AND OBJECTIVES

Over 15 million passengers (an average of 41,000 passengers per day) flew in and out of STL in 2019. By 2040, the number of annual travelers is projected to exceed 21 million.

To accommodate this Federal Aviation Administration (FAA)-approved forecast of future aviation demand, meet customer expectations, and continue STL's significant contribution to the regional economy, the Airport's facilities must keep up with the growth in air travel demand.

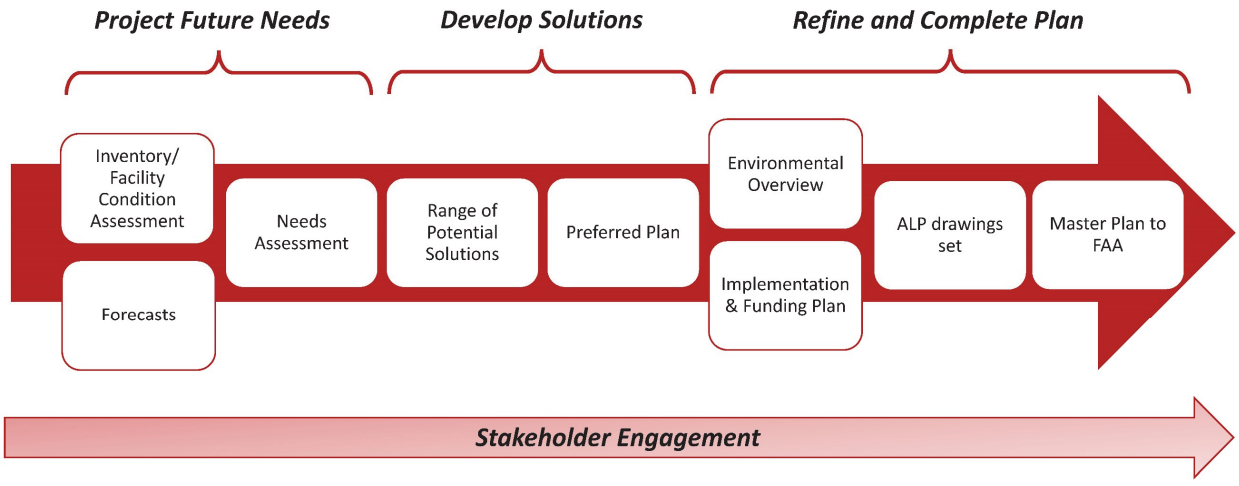
Planning analysis and recommendations in the ALPU/MP meet the FAA's Airport Master Plan technical requirements and guidelines in *Advisory Circular 150/5070-6B, Airport Master Plans,* while focusing on key elements that STLAA defined as critical to successfully serving the region for the next 20 years. An overarching priority of the ALPU/MP is for STL to accommodate the region's air travel needs by:

- Providing a world-class passenger experience
- Recognizing that increasing congestion in aging and undersized facilities is not acceptable
- Providing facilities when needed to accommodate growth
- Realigning taxiway geometry to achieve compliance with FAA Airport Design standards to the maximum extent feasible

MASTER PLAN PROCESS

An Airport Master Plan is a comprehensive study of an airport that describes the short-, medium-, and long-term development plans to meet future

Master Plan Process



aviation demand. It provides a blueprint for expected airport development, and is needed to continue receiving FAA funding. Master Plans are typically completed every 8 to 10 years, for a planning horizon of 20 years. The Master Plan process involves several steps that culminate in the submission of the Master Plan documentation to the FAA for acceptance. Stakeholder engagement occurs throughout the process.

FORECASTS OF AVIATION ACTIVITY

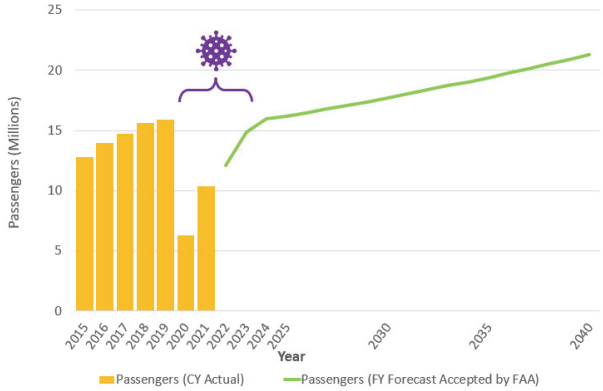
Forecasts of aviation activity are an important element of the master planning process, as they provide the basis for several key analyses, including:

- Determining the role of the airport (critical aircraft)
- Evaluating the capacity of existing airport facilities and their ability to accommodate projected demand
- Defining the improvements required to accommodate future demand

Aviation activity was projected for passengers, aircraft operations and cargo tonnage. The evolving COVID-19 impacts on aviation and STL were assessed and considered in the development of the FAA-approved STL ALPU/MP forecast. Three forecast scenarios were developed in 2020 and early 2021 to account for various possible COVID-19 recovery timeframes. A 3-year recovery scenario was selected as preferred and accepted by the FAA. This forecast is the basis of the ALPU/MP needs assessment. The Airport is expected to reach 2019 activity levels in 2023. As of 2022 Q3, operations are trending at 82% of 2019, landed weights at 94%, cargo at 140%, and passenger enplanements at 88%.

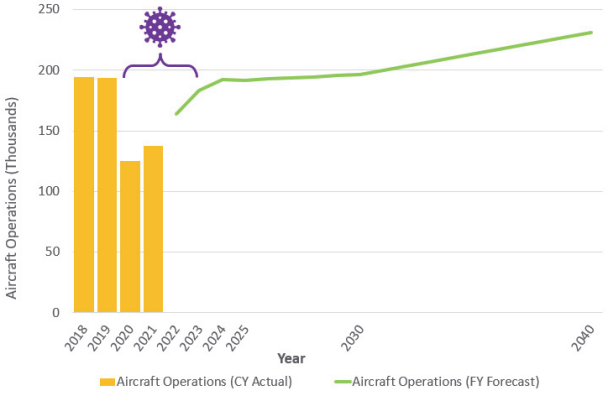
Passengers – Passenger levels drive terminal, landside and support facilities needs, and are forecast to increase to 21 million annual passengers by 2040. Domestic traffic is projected to grow faster than international traffic. Air service to Europe resumed in Summer 2022, sooner than projected. STL primarily serves terminating and originating passengers (77%) versus connecting passengers; this is projected to remain unchanged.

Passengers: Actual and Forecast



Aircraft Operations – Aircraft operations also drive the need for airfield and support facilities. In 2019, STL recorded approximately 195,000 aircraft operations, with an increase to 230,000 aircraft operations forecast by 2040.

Aircraft Operations: Actual and Forecast



Cargo — Cargo plays a significant role at STL, with approximately 75,000 tons of air cargo processed in 2019. This includes mail, freight, and express shipments, such as packages shipped by FedEx or UPS. By 2040, air cargo is

expected to grow to approximately 102,000 tons.

SUMMARY OF NEEDS

A review of existing facilities, their condition and their ability to accommodate the projected demand levels has identified areas that should be the focus of planning and future development. Addressing these needs by improving facilities and services will enhance the capability of the airport to accommodate projected demand through the planning horizon, while continuing to provide the region with a vital transportation link for efficient movement of people, goods and services. The following is a summary of facility needs.

Terminal:

- Optimized gate capacity and gates sized for modern aircraft
- Wider concourses appropriate for current and projected passenger volumes
- More concessions to increase options and airport revenues
- Better customer experience (single security checkpoint, ease of wayfinding, more restrooms, new or consolidated Federal Inspection Services facility [FIS]…)

Landside:

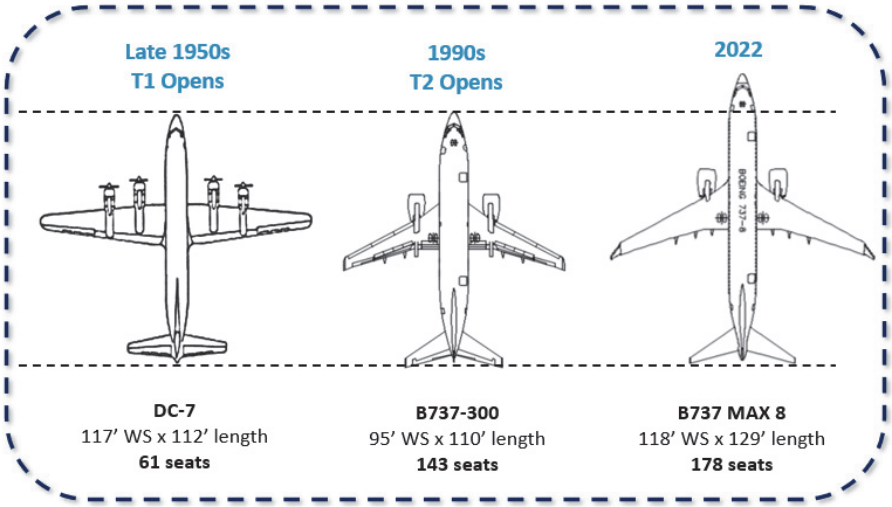
- Improved Airport access and circulation (simpler access, more decision time, more lanes)
- More parking

Airfield:

- No additional airfield capacity is needed to accommodate projected aircraft operations
- Update taxiway geometry to latest FAA standards to enhance safety and efficiency
- Additional aircraft deicing capacity

Cargo and Support Facilities:

- Modern facilities
- Provide for expected cargo and general aviation tenant expansion
- Relocate and expand airfield maintenance campus from flood-prone area

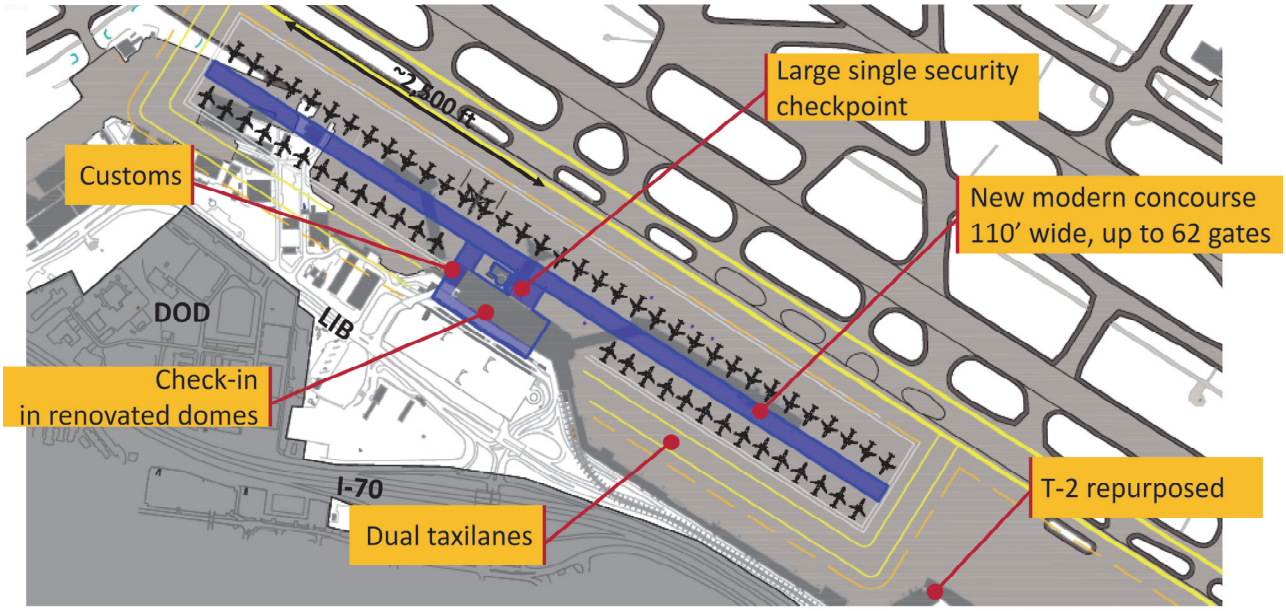


SUMMARY OF MASTER PLAN RECOMMENDATIONS

After identifying facility needs, alternatives were prepared and evaluated to address each need. The alternatives considered STL's long-term demand, while also proposing developments that are necessary to meet short- and mid-term needs. The following is a summary of the preferred alternative for each functional element at STL.

Terminal: The terminal alternatives development process started with several sketch planning and visioning sessions with STLAA staff, followed by multiple technical evaluation rounds. Throughout the process, stakeholders were consulted to

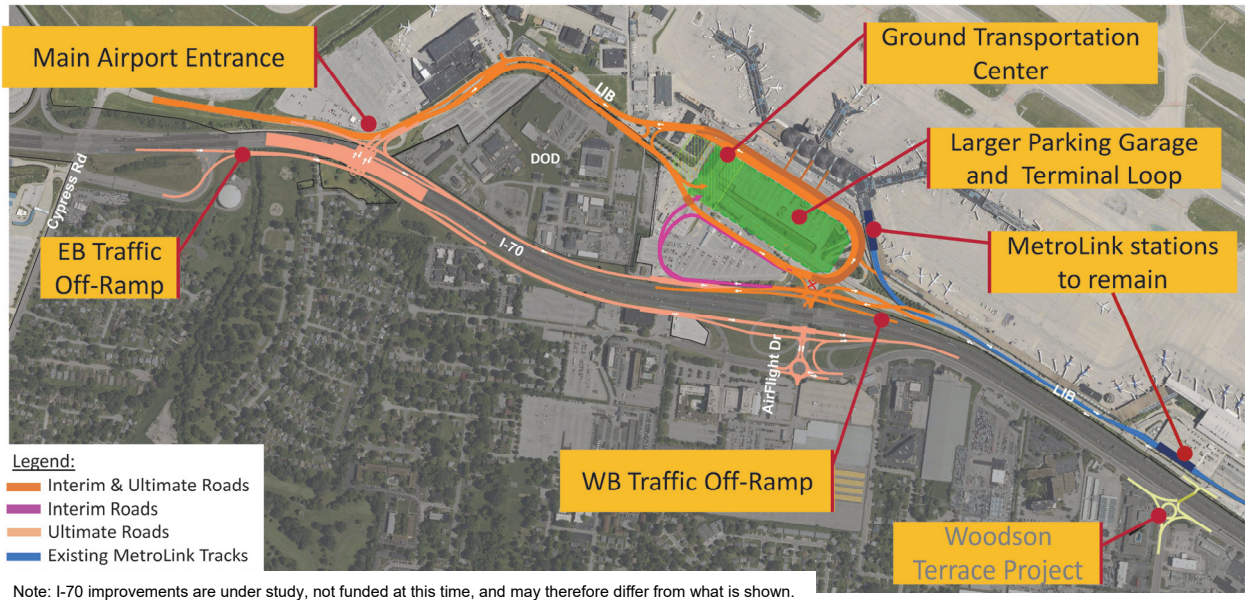
Preferred Terminal Alternative



ensure that the shortlisted terminal alternatives were appropriate and that all options and suggestions had been considered. The preferred terminal alternative consists of consolidating all airlines in an efficient single terminal with a linear concourse that can accommodate up to 62 gates. The iconic domes are retained and become the centerpiece for a vastly improved customer experience.

Landside: Thirty roadway concepts were developed, including concepts for a "no build" scenario, minor improvements, and major improvements. Several technical evaluation rounds incorporated feedback from STLAA staff and external stakeholders, and resulted in the preferred roadway alternative that provides simpler navigation and better wayfinding. The ultimate preferred roadways include improvements by the Missouri Department of

Preferred Roadway Alternative (Conceptual)



Note: I-70 improvements are under study, not funded at this time, and may therefore differ from what is shown.

Transportation (MoDOT). Interim roadway access that does not include MODOT improvements will be in place, until MODOT completes its analysis and defines how to best connect with the Master Plan's preferred roadway alternative.

The parking garage within the terminal loop needs to be expanded to meet future demand, and concepts were developed to accommodate existing need and future growth that fit within the constraints of the roadway loop.

Airfield: Taxiway geometry improvements are proposed throughout the airfield (mostly new/shifted taxiway connectors), and a new West Deicing Pad is proposed west of Runway 6-24. The East Deicing Pad would also be expanded.

Cargo and Support Facilities: Cargo and support facilities requirements were defined based on tenants' input, future activity levels and industry planning standards. Some existing support facilities are aging and in need of replacement. The selection of cargo and support facilities sites is based on the "best use" of available sites. There is ample space within the current Airport site for cargo and support facilities.

PREFERRED DEVELOPMENT PLAN

The preferred airport development plan combines the various preferred alternatives, and is illustrated on the next page.

IMPLEMENTATION AND FUNDING

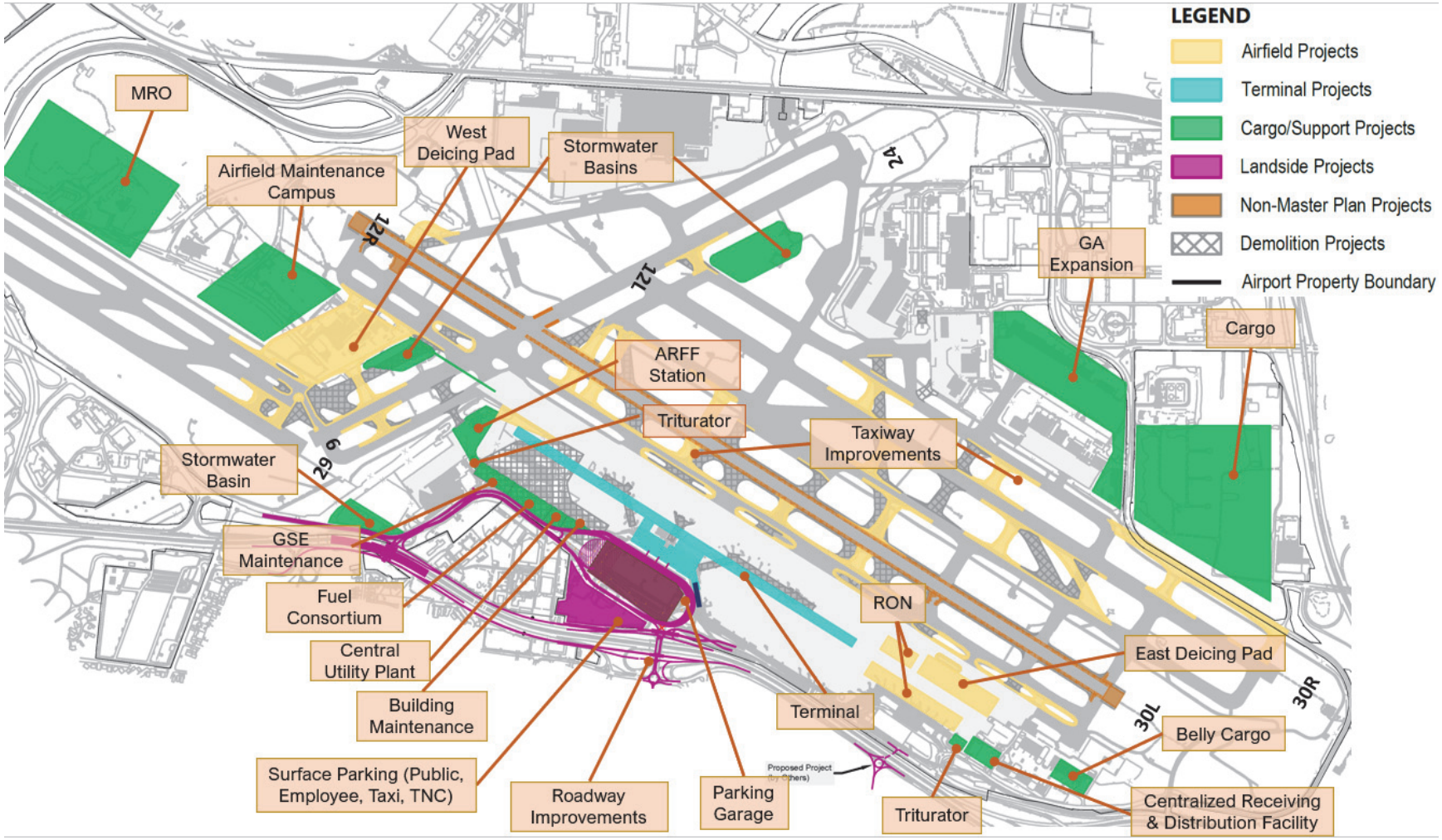
The STL ALPU/MP implementation plan includes triggers that provide flexibility to respond to actual user and tenant needs as they arise through the planning horizon. Key considerations were:

- ***Timing:*** new facilities need to be operational in time to meet anticipated growth in demand. Timing of the project phases is essential to ensure the opening of the facility corresponds with growth in anticipated demand.
- ***Operations:*** Minimal operational disruptions and maintenance of operational efficiency is crucial.
- ***Sequence of Development:*** Maintain project sequence, so short-term projects either support or enable long-term developments, and built-in flexibility for future improvement scenarios.

Costs of all the ALPU/MP projects through 2040 are estimated at approximately $3.4 billion, including terminal program costs ($2.8 billion) and other airfield and existing facilities capital costs. No public tax dollars are involved. A reasonable funding plan has been developed, giving consideration to the availability of various funding sources. The following are recommended sources for project funding:

- General Airport Revenue Bonds (GARBs), which are paid from aviation sources, including PFCs for eligible projects.
- FAA Airport Improvement Program (AIP) Grants (Entitlements and Discretionary funds).
- Passenger Facility Charges (PFCs), which are airport user fees collected for enplaned passengers, and used to fund specific projects approved by the FAA.
- Bipartisan Infrastructure Law Grants providing a total of $25 billion in new funding for the National Airspace System, through:
  - Airport Infrastructure Grants (AIG) include a total of $15 billion over five years with most of the funds being allocated based on enplanements.

Preferred 2040 Airport Development Plan



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Source: WSP USA, 2022.

  - Airport Terminal Program (ATP) Grants include a total of $5 billion over five years awarded on a competitive basis with up to 15% awarded to medium-hub airports, such as STL.
- Airport Development Fund (ADF), which provides the Airport with discretionary cash flow to fund items such as capital improvement costs, major maintenance costs, and the acquisition of land for the expansion of the Airport.

STAKEHOLDER AND COMMUNITY ENGAGEMENT

Community and stakeholder engagement are a major part of the master planning process. The STL ALPU/MP stakeholder engagement had four goals:

- Inform all community and stakeholders interested in the process
- Encourage public input through public surveys and an open house
- Analyze input and respond by following up and where appropriate, considering it in the ALPU/MP
- Build understanding and consensus towards ideas that address the future needs of the flying public

To meet these goals, stakeholders were engaged in a variety of ways to ensure input from all communities and groups. The main engagement categories included:

- A purpose-formed Technical Advisory Committee with a broad range of representation from aviation, the community and airport neighbors, and the business community
- Informal and formal meetings (southern municipalities, airlines, Airport Commission, …)
- Three online public surveys
- Public open house
- Media briefings and interviews

Additionally, the STLAA project manager contact information was listed and visitors were encouraged to provide comments or ask questions at any time. The website was kept up to date during the process, and information included an overview of the ALPU/MP process, key definitions, study highlights, prior studies, outcome and stakeholder engagement, and a timeline to show the ALPU/MP progress. The timeline graphic was updated upon each task's completion. Links to take the surveys were posted for ease of public access.

Meetings were held with regional business and industry groups, the general public and local media.

In addition, 2,958 survey responses were received over the course of the three online public surveys.

NEXT STEPS

A framework has been created that is flexible to changes in aviation demand and the evolution of

the airline industry. Actual development and timing of development may differ somewhat from this plan. Construction probably would begin no earlier than 2026. Before construction can begin, the following steps are required:

- Bridging Documents – refine the ALPU/MP development plan, such as preliminary engineering design, defining purpose and need, and the required scope and timing of individual projects.
- Environmental approvals – conduct environmental studies per the National Environmental Policy Act (NEPA), for the consolidated terminal projects, and any other projects that require it.
- Financial feasibility – further identify funding sources and refine cost data as details emerge
- Architectural design
- Stakeholder engagement – continued opportunities for stakeholder input
- City-Airline business arrangement - agreement needs to be reached between the STLAA and airlines in the form of a lease.

Next Steps After the Master Plan

Source: WSP USA, 2022.