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The Economic Impacts of Completing the O'Hare 21 Modernization Program



EXECUTIVE SUMMARY

Chicago O'Hare International Airport is the most connected airport in the United States and the top airport by cargo value, serving 37 million passengers and processing nearly \$300 billion in freight annually. In 2018, the City of Chicago and its airline partners agreed to the historic, multi-year O'Hare 21 modernization program to deliver the first major capital improvements in more than 25 years. The program includes redeveloping the terminal core, creating 25 percent more gate capacity, expanding and repaving runways, renovating pedestrian tunnels, installing new security technology, upgrading baggage systems, and building a Global Terminal.

In November 2023, just five years into the 15-year program and following Federal Aviation Administration approval to advance to the next major phase of construction, concerns were raised that ongoing projects may be scaled back or stopped. Originally budgeted at \$8.5 billion in 2018 dollars, the O'Hare 21 program is now estimated as a \$12.1 billion total investment in today's dollars. In April 2024, after months of negotiations, city officials announced a plan to move forward with the entire program while altering the order of construction—prioritizing the new Global Terminal.

The O'Hare 21 modernization program will boost the Chicago metropolitan area economy, create jobs, and improve public budgets. Completing O'Hare 21 as planned will:

- Amount to \$8.1 billion in additional infrastructure improvements to the airport, including the \$7.1 billion Terminal Area Plan.
- Include \$527 million in lane, ramp, and other improvements for the interconnected I-190 Project.
- Generate \$18.4 billion in economic activity by 2033, a return of more than \$2 per dollar invested.
- Create 95,000 total jobs by 2033 (9,500 jobs per year), including 53,000 jobs in the construction industry (5,300 construction jobs per year).
- Increase state tax revenues by \$461 million and local tax revenues by \$346 million over 10 years.

After construction, O'Hare 21 will have long-lasting, positive effects on the Chicago metropolitan area economy. By expanding passenger capacity, completing O'Hare 21 as planned will:

- Increase the number of passengers flying out of O'Hare by 20 percent.
- Add \$280 million to annual operating revenues at O'Hare after 2033 (in current dollars).
- Generate \$553 million annually from increased passenger travel, relative to a no-build scenario.
- Create 1,600 permanent jobs, including 400 permanent jobs directly at the airport and another 600 jobs at the airlines, restaurants and retail establishments, and contracted service positions.
- Increase state tax revenues by \$39 million per year and local tax revenues by \$24 million per year.

The 400 permanent jobs directly created post-construction would not only add to the 1,766 workers currently employed at O'Hare, but would be more than the total number of full-time employees at Midway International Airport (322 workers) and Chicago Rockford International Airport (41 workers) combined.

Runway improvements and other completed projects have already reduced flight delays. The share of flights that are on-time at O'Hare has increased by 3 percentage points relative to peer airports nationwide, resulting in 117,000 more passengers who arrived at their destinations on-time in 2023. Continuing this progress and proceeding as planned with the O'Hare 21 modernization program would deliver a first-class facility and ensure that Chicago can efficiently serve both residents and visitors from around the world.

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INTRODUCTION

Aviation is critical to Illinois' economy. Illinois' airports connect residents and visitors to the world, link businesses to markets, and create thousands of jobs and billions of dollars in annual economic activity (IDOT, 2024). Illinois' airports transport over 50 million passengers and 10 billion pounds of cargo each year (ASCE, 2022). Chicago O'Hare International Airport is the "most connected airport" in the United States, serving the highest number of flights to destinations (OAG, 2023). Fully 37 million passengers used O'Hare in 2023 (CDA, 2024a). Additionally, O'Hare is the #1 airport in North America by cargo value, processing nearly \$300 billion in freight in 2021 (CDA, 2023a). O'Hare saw 2.5 million metric tons (5.6 billion pounds) of cargo in 2021 and 2.2 million metric tons (4.9 billion pounds) in 2022 (ACI, 2023).

In 2018, the City of Chicago and signature airlines—including United, American, Delta, and Spirit—agreed to a historic multi-year plan to modernize and expand Chicago O'Hare International Airport, called "O'Hare 21" (City of Chicago, 2018). Its intent was to significantly repair the airport's deteriorating infrastructure. Prior to the plan, no major terminal improvements had occurred at O'Hare in more than 25 years (Spielman, 2019). Terminal 2 was 60 years old and operating under outdated design standards, limiting options for the types of planes that could connect at its gates (City of Chicago, 2018). The baggage claim systems were three decades old and operating with inefficient retrofitted inspection systems added after September 11, 2001 (Marsh, 2023). Pedestrian tunnels dating back to the 1970s were experiencing water leakage during periods of heavy rainfall (Crossville, 2024).

To address these infrastructure needs, the O'Hare 21 plan was a new use and lease agreement between the City and its airline partners for the largest capital improvement program in the airport's history. O'Hare 21 includes redeveloping the terminal core with 21st Century upgrades, creating 25 percent more gate capacity, installing new security technology, upgrading baggage facilities, renovating pedestrian tunnels, and building, extending, and repaving runways (City of Chicago, 2018). Initial economic impact projections were that the program would create as many as 60,000 jobs over a 15-year period—including 25,000 jobs for the airport and related industries and 35,000 tourism-related jobs—and contribute an additional \$16 billion per year to the local economy (City of Chicago, 2018).

In November 2023, United Airlines and American Airlines announced a desire to stop or scale back O'Hare's ongoing expansion projects, citing escalating costs following the global pandemic (Spielman & Roeder, 2023). Originally budgeted at \$8.5 billion, the O'Hare 21 program is now estimated at a total cost of \$12.1 billion (Spielman & Roeder, 2023; Soto, 2023). The reasons for the increased cost projection are varied, but are primarily due to inflation—\$8.5 billion in 2018 dollars is equivalent to about \$10.7 billion today—and as well as supply-chain disruptions, delays, and reductions in passenger travel that resulted in the aftermath of COVID-19 (BLS, 2024a; Duckworth & Durbin, 2023; Freishtat, 2023).

Airlines may now pay \$1 billion more in terminal construction costs, up to \$7.1 billion from the original \$6.1 billion (Hinz & Pletz, 2023). With the O'Hare 21 program financed from revenue agreements with partner airlines, including higher terminal rents and landing fees, these higher costs have raised concerns of large price increases for passengers. The impact may be limited, however, because airport costs account for less than 10 percent of overall airline operating costs and generally have little effect on profit margins

¹ In particular, the next major phase of construction work was estimated to be \$1.5 billion over budget in late 2023 (Spielman & Roeder, 2023). In March 2024, the Chicago Department of Aviation announced that it had identified \$1.5 billion in cost-saving measures, including engineering and design savings, allowing the program to move forward within its original budget (Pletz, 2024).

(Hinz & Pletz, 2023). For example, the total cost of airport terminal rents, ground service support, storage distributions and equipment, and landing fees for runway and airport maintenance accounted for 7 percent of per-tax operating expenses for U.S. passenger airlines in the 3rd quarter of 2023 (A4A, 2024).

This Illinois Economic Policy Institute (ILEPI) report provides an updated economic impact analysis of the O'Hare 21 modernization and expansion program. Completing the modernization program has the support of much of Illinois' congressional delegation, including U.S. Senators Dick Durbin and Tammy Duckworth and U.S. Representatives Jan Schakowsky, Mike Quigley, Raja Krishnamoorthi, Jesus "Chuy" Garcia, Bill Foster, Delia Ramirez, and Robin Kelly (Giangreco, 2024; Duckworth & Durbin, 2023). The report first details the status of major projects under the plan before updating cost and revenue estimates. Then, the impact of the remaining O'Hare 21 program on jobs, economic activity, and tax revenue in the Chicago metropolitan area is assessed. A related surface transportation project, the I-190 Project, is also incorporated in the analysis. A concluding section discusses policy implications and recaps key findings.

CURRENT STATUS OF O'HARE 21 MAJOR PROJECTS

The O'Hare 21 modernization program included a wide variety of projects to be completed in phases. The planned phases were designed to minimize negative impacts on travelers and airlines. The following is a list of major "signature projects" and "supporting projects" under the program, including the current status of each project and total cost of completed projects (CDA, 2024b).

- The Terminal 5 Expansion includes 10 new gates, 350,000 more square feet, 15 new locations for restaurants and retail establishments, and an expanded checkpoint with six new security lanes (CDA, 2024c). This project is <u>nearly complete</u>. Construction of the Terminal 5 expansion began in March 2019. All 10 of the newly renovated gates opened by October 2022 and remaining gate and concession improvements occurred throughout 2023 (CDA, 2024c). Construction of a new parking garage began in June 2022 and is expected to conclude in 2024, replacing the current surface Parking Lot D and doubling available spaces (CDA, 2023c). The expansion and renovation of Terminal 5 has carried a total cost of \$1 billion and has been completed on budget (CDA, 2024c).
- Major Runway Projects include building the new Runway 9C-27C and extending Runway 9R-27L to modernize the airfield configuration, increase capacity, reduce delays, and support future terminal redevelopments (CDA, 2021). These projects are <u>complete</u>. The construction of new Runway 9C-27C was completed in 2020 and the extension of Runway 9R-27L was completed in 2021 for a combined \$1.3 billion (CDA, 2024d).
- The Lower-Level Utility and Pavement Replacement includes replacement of the roadway, water main, and sidewalks supporting passengers, privately-owned vehicles, taxis, and commercial vehicles at Terminals 1, 2, and 3. This project is <u>complete</u>. Construction began in October 2020, areas were reopened to traffic in August 2022, and Americans with Disabilities Act (ADA) compliance was finished in March 2023. The cost of the project was \$45 million (Clayco, 2024).
- A total of Seven Pedestrian Tunnels beneath the lower-level roadway connecting Terminals 1, 2, and 3 were renovated. This project is <u>complete</u>. The tunnels were updated and water infiltration problems were addressed, improving access for travelers to the Main Parking Garage and CTA Blue Line Station. Completed in June 2022, this project had a price tag of \$36 million (Symonds, 2022).

- The Terminal 3 Concourse L Extension will expand the existing Concourse L with three additional gates to provide 11,000 square feet of additional space and 112,000 square feet of apron and taxilane pavement (CDA, 2024e). This \$70 million project is <u>ongoing</u>. All three gates are anticipated to be completed by late 2024 (Kozlarz, 2017; CDA, 2024e).
- A new **Global Terminal** is the most essential part of the O'Hare 21 program. This project is <u>scheduled</u>. It will begin with the demolition of Terminal 2, which will be replaced with a Global Terminal for domestic and international flights to connect in one location. The Global Terminal will make O'Hare the first "global alliance hub" in the United States, in which each of the international airline partners operate within a single terminal facility to make connecting flights more seamless and convenient for passengers (CDA, 2024f). Passengers connecting to international flights will no longer have to ride the People Mover to Terminal 5, allowing for a more streamlined travel experience. The Global Terminal will also implement new baggage systems, new Immigration and Customs Enforcement (ICE) facilities, and added space for concessions, lounges, and public amenities (Esposito, 2022). Demolition of Terminal 2 was slated to begin in 2026 and completion of the Global Terminal was expected by 2032 (Esposito, 2022; Hinz & Pletz, 2023). However, in April 2024, city officials announced a plan to change the order of construction and "fast-track" the Global Terminal, building it before two Satellite Concourses "to deliver the most impactful elements the quickest" and be responsive to the airline companies' main request (Freishtat & Sheridan, 2024; Pletz, 2024).
- Two **Satellite Concourses**, which will incorporate modern designs with flexible gates to accommodate both narrow and wide-body airplanes, are a key component of the O'Hare 21 program. As initially envisioned, the Satellite Concourses would allow the airport to maintain gate capacity while Terminal 2 is being rebuilt as the new Global Terminal, with United Airlines and American Airlines transferring service to these concourses during construction. These concourses will provide 1.3 million square feet of gate and amenity space (CDA, 2024g). This project is scheduled to begin in late 2024 (Hinz & Pletz, 2023). Federal approval was received at the end of 2022 and "enabling work" began in March 2023 (Spielman & Roeder, 2023). The concourses are anticipated to be completed in 2027 and 2028 (Hinz & Pletz, 2023). Note that if the Global Terminal is not built but the two Satellite Concourses are, then O'Hare would add just two more gates, rather than between 30 and 35 gates—which would increase capacity by less than 2 percent over previous levels. After months of negotiations between city officials and airline partners, Chicago Mayor Brandon Johnson brought forth a plan to build the entire O'Hare 21 modernization program, with the two Satellite Concourses built after the new Global Terminal (Freishtat & Sheridan, 2024; Pletz, 2024).
- Various **Other Projects** include on-airport hotel developments, airport transit system extension and modernization improvements, additional runway repavement projects, other concession expansions and upgrades, art and design projects, and ongoing maintenance and related work.

Figure 1 presents the major signature and supporting projects of the O'Hare 21 program that have been completed or are nearly complete since construction broke ground in 2019. Over the last five years, these major improvements have amounted to \$2.5 billion in total construction value (Figure 1). Note that these do not include other miscellaneous expenses that have accrued over the past five years and also do not include the next phase of construction work, which was reportedly over budget until the Chicago Department of Aviation identified engineering and design savings (Spielman & Roeder, 2023; Pletz, 2024).

FIGURE 1: TOTAL COSTS OF COMPLETED OR NEARLY COMPLETED MAJOR PROJECTS OF O'HARE 21 PROGRAM, 2019-2023

Completed or Nearly Completed Projects	Budgeted Cost
Terminal 5 Expansion	\$1,000,000,000
Runway Projects	\$1,300,000,000
Renovation of Pedestrian Tunnels	\$35,500,000
Lower-Level Utility and Pavement Replacement	\$45,000,000
Terminal 3 Concourse L Expansion	\$70,000,000
Total Costs of Signature and Supporting Projects	\$2,450,500,000

Source(s): Author's compilation of data reported by the Chicago Department of Aviation, Clayco, *Passenger Terminal Today*, and *Curbed Chicago* (CDA, 2024b; CDA, 2024c; CDA, 2024d; CDA, 2024e; Clayco, 2024; Symonds, 2022; Kozlarz, 2017).

These major projects—specifically the runway improvements—are already having a positive impact on Chicago O'Hare International Airport. Figure 2 shows data on the on-time performance of domestic flights operated by large air carriers tracked by the Bureau of Transportation Statistics at the U.S. Department of Transportation (BTS, 2024). In 2018, prior to the modernization program, O'Hare was underachieving relative to peer airports, with 77 percent of flights arriving and departing on-time and 23 percent being delayed or cancelled. By contrast, the average for all 30 major U.S. airports as defined by the U.S. Department of Transportation was 79 percent on-time and 21 percent delayed or cancelled. As of 2023, however, O'Hare is now outperforming compared to peer airports. On-time flights are up to 79 percent at O'Hare and those with delays or cancellations are down below 21 percent, while major airports have seen their on-time rates fall to 78 percent and delay and cancellation rate increase to 22 percent (Figure 2).

O'Hare's on-time flight share has improved by 2 percent while the national average has fallen by 1 percent, a difference of 3 percentage points (Figure 2). The data also reveal that Chicago Midway International Airport's on-time flight share and delayed or cancelled flight share both followed the national trend, which suggests that the operational improvements at O'Hare were not due to a factor specific to the region that changed and led to enhanced performance, such as fewer days with poor weather conditions. From 2018 to 2023, O'Hare's on-time flight share increased by 3 percentage points relative to Midway as well. With 36.6 million passengers at O'Hare in 2023, this 3 percentage-point improvement translates into an estimated 117,000 more passengers who arrived at their destinations on-time in 2023 than they would have if performance had stayed at 2018 rates (CDA, 2024a).

FIGURE 2: On-TIME FLIGHTS AND DELAYED OR CANCELLED FLIGHTS AT O'HARE AND PEER AIRPORTS, 2018 VS. 2023

Airport	2018	2023	Change	O'Hare Difference
On-Time Flights				
Chicago O'Hare International	76.9%	79.2%	+2.3%	
Chicago Midway International	79.6%	78.5%	-1.1%	+3.4%
All Major Airports*	79.1%	78.2%	-0.8%	+3.2%
<u>Delayed or Cancelled Flights</u>				
Chicago O'Hare International	22.8%	20.6%	-2.2%	
Chicago Midway International	20.1%	21.1%	+1.0%	-3.2%
All Major Airports*	20.7%	21.6%	+0.9%	-3.1%

Source(s): Author's analysis of data from "Airline On-Time Statistics and Delay Causes" reported by the Bureau of Transportation Statistics (BTS) at the U.S. Department of Transportation (BTS, 2024). Data is from January to December for each year. Numbers do not sum perfectly to 100 percent due to rounding and because a very small share are in a "Diverted" category. *Note: The BTS lists 30 domestic airports in the "All Major Airports" classification, including O'Hare and Midway.

Finally, the O'Hare 21 modernization project is closely linked with the **Interstate 190 Project** at the Illinois Department of Transportation (IDOT) (FAA, 2022d). The I-190 Project from Bessie Coleman Drive to I-90, also referred to as the Kennedy Expressway, is <u>ongoing</u> and includes the reconstruction and construction of auxiliary lanes and additional ramps to improve traffic flow to and from O'Hare (IDOT, 2023; Keller et al., 2021). The total cost of the I-190 project is \$898.0 million, of which \$370.7 million has been spent and \$527.3 million in improvements remain (CMAP, 2024). However, the I-190 Project is only likely to be fully constructed as originally envisioned if the Global Terminal and Satellite Concourses proceed as planned.

UPDATED COST AND REVENUE ESTIMATES

The Chicago Department of Aviation gained approval from the Federal Aviation Administration (FAA) in November 2022 for its Terminal Area Plan (City of Chicago, 2022). The Terminal Area Plan, or TAP, "considers future development for years 2023 through 2032," or a 10-year period, and includes funding for the Global Terminal and two Satellite Concourses (FAA, 2022a; CDA, 2024h; City of Chicago, 2022). The TAP has an overall budget of \$7.1 billion, representing 59 percent of the \$12.1 billion expected cost of the O'Hare 21 program (City of Chicago, 2022; Symonds, 2022).

Although O'Hare 21 was initially portrayed as an eight-year program under then-Mayor Rahm Emanuel, the City's Department of Aviation has clarified that it will take 15 years to complete (City of Chicago, 2018; Marsh, 2023). Accordingly, with construction beginning in 2019, the O'Hare 21 program would be expected to be about one-third, or 33 percent, complete after five years; and in fact, news articles from the summer of 2023 report that the program was "a little more than 30 percent designed" (Hinz & Pletz, 2023). Adding the \$2.5 billion cost of the signature and supporting projects to the \$1.5 billion that O'Hare 21 is reportedly over budget results in a total expenditure of \$4.0 billion on complete and ongoing projects—which accounts for 33 percent of the \$12.1 billion updated capital cost of the program (Figure 3).

Figure 3 shows that 67 percent of the O'Hare 21 program remains to be fulfilled, amounting to more than \$8.1 billion in infrastructure improvements. The bulk of this work, \$7.1 billion (59 percent), is the Global Terminal, two Satellite Concourses, and related projects in the Terminal Area Plan. An additional \$1.0 billion (9 percent) is needed for miscellaneous capital projects—including support for hotel and cargo developments, multi-modal facilities, and maintenance projects—and as a cushion for potential cost overruns (CDA, 2024h).² It may be worth noting that United Airlines and American Airlines only raised concerns about the O'Hare 21 program *after* the primary items that specifically benefit their businesses were completed—namely the runway improvements and Concourse L Extension at Terminal 3, where American Airlines is located—while the construction of the Global Terminal and two Satellite Concourses would likely deliver significantly more value to other airlines, passengers, and the broader Chicago region.

The O'Hare 21 modernization program can improve the long-term revenue generation capabilities of the airport as a whole (Figure 4). The program significantly expands terminal space—including by 85 percent at Terminal 5—and increases passenger capacity by 25 percent (CCS, 2024; CDA, 2024c; City of Chicago, 2018). In 2022, the Federal Aviation Administration (FAA) estimated that total enplaned passengers at

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² In March 2024, the Chicago Department of Aviation announced that it had identified \$1.5 billion in cost-saving measures, including engineering and design savings, allowing the program to move forward within its original budget (Pletz, 2024). Airline companies have claimed that the Chicago Department of Aviation's estimates "leave zero margin for error" and exhaust all contingency funds (Pletz, 2024). This analysis thus conservatively assumes that the total budget remains \$12.1 billion to maintain a cushion for any unexpected cost inflation that may arise over the next decade.

O'Hare would grow by 20 percent between 2020 and 2030, a compound annual growth rate of 2 percent per year (FAA, 2022b; FAA, 2022c).³ This analysis assumes that the number of passengers between 2023 and 2033 will increase at the annual rate assumed by the FAA—with higher demand (20 percent) nearly meeting the added supply (25 percent)—but that demand will level off if the new Global Terminal and Satellite Concourses are not completed.

FIGURE 3: UPDATED TOTAL COSTS OF FULL 15-YEAR O'HARE 21 PROGRAM, BY PHASE, 2019-2033

Updated O'Hare 21 Modernization Program	Budgeted Cost	Percent of Budget
Complete or Nearly Complete: Signature and Supporting Projects	\$2,450,500,000	20.3%
Completed and Ongoing: Other Projects and Higher Costs	\$1,500,000,000	12.4%
Terminal Area Plan, Including Global Terminal and Satellite Concourses	\$7,100,000,000	58.7%
Miscellaneous Projects Post-TAP and Cost Overrun Cushion	\$1,049,500,000	8.7%
Total Complete, Nearly Complete, and Ongoing Projects, 2019-2023	\$3,950,500,000	32.6%
Total TAP and Post-TAP Projects, 2024-2033	\$8,149,500,000	67.4%
Updated Budget (in 2024 Dollars)	\$12,100,000,000	100.0%

Source(s): Author's compilation of data reported in the City of Chicago's Terminal Area Plan (TAP) as well as by the *Chicago Sun-Times*, the Chicago Department of Aviation, Clayco, *Passenger Terminal Today*, and *Curbed Chicago* (City of Chicago, 2022; Spielman & Roeder, 2023; CDA, 2024b; CDA, 2024c; CDA, 2024d; CDA, 2024e; Clayco, 2024; Symonds, 2022; Kozlarz, 2017).

In 2019, total operating revenues at O'Hare were \$1.25 billion. By 2022, total operating revenues were \$1.26 billion, a modest 0.5 percent increase over 2019 as airline travel mostly recovered from the COVID-19 pandemic and inflation drove prices higher. Assuming that the number of passengers will increase by 20 percent as expanded gate capacity meets increasing passenger demand and that new passengers will spend approximately the same amounts as existing passengers on tickets, airport concessions, and related travel expenses, then the project will create \$254 million annually in 2022 dollars, or \$280 million in annual revenues in current dollars after adjusting for inflation (Figure 4).⁴

FIGURE 4: POTENTIAL INCREASE IN OPERATING REVENUE DUE TO INCREASED GATE CAPACITY, IN CURRENT DOLLARS

O'Hare Financial Statements	Operating Revenue
Fiscal Year 2019 (Ending December 31, 2019)	\$1,253,485,000
Fiscal Year 2022 (Ending December 31, 2022)	\$1,259,433,000
20.2% Increase in Operating Revenue Over 2022	+\$254,153,600
January 2022 to February 2024 Inflation	+10.4%
20% Increase in Operating Revenue Adjusted for Inflation (2024 Dollars)	+\$280,529,600

Source(s): Author's analysis of data in the *Annual Comprehensive Financial Reports* for Chicago O'Hare International Airport from Fiscal Year 2022 and Fiscal Year 2019, with adjustments for inflation by the Consumer Price Index for All Urban Consumers (CPI-U) using the "CPI Inflation Calculator" from the Bureau of Labor Statistics at the U.S. Department of Labor (City of Chicago, 2023a; City of Chicago, 2020; BLS, 2024a). A 20.2 percent increase in passengers is assumed because it is the growth in total enplaned passengers forecast by the Federal Aviation Administration from 2020 to 2030; this compound annual growth rate of 2.1 percent is adopted for the 2023 to 2033 period (FAA, 2022b; FAA, 2022c).

³ The Federal Aviation Administration (FAA) issued an "adjusted passenger operations forecast" in Table B-7 of Appendix B in its Final Environmental Assessment which showed total enplaned passengers increasing from 44.6 million in 2020 to 53.6 million in 2030, a 20.2 percent growth—or compound annual growth rate of 2.1 percent (FAA, 2022b; FAA, 2022c).

⁴ This analysis is *conservative*. Although it assumes a 20 percent increase in both passenger travel and passenger spending, it is only compared to 2023 levels, when 36.6 million enplaned passengers used O'Hare, which was a 7 percent increase over the 2022 level of 34.1 million enplanements but was still 13 percent below the 2019 pre-pandemic level of 42.2 million enplaned passengers (CDA, 2024a; City of Chicago, 2023a; City of Chicago, 2020). A 20 percent growth over 2023 levels would represent a modest increase over pre-pandemic levels to 44.0 million passengers, while a 20 percent growth over 2019 levels would amount to 50.7 million enplaned passengers.

THE ECONOMIC AND FISCAL IMPACTS OF O'HARE 21 INVESTMENTS THROUGH 2033

This analysis utilizes IMPLAN to assess the economic impacts of the remaining O'Hare 21 modernization program investments over the next 10 years (IMPLAN, 2024). IMPLAN is an industry-standard economic modeling software that inputs U.S. Census Bureau data, accounts for the interrelationship between households and businesses, and follows dollars as they cycle throughout the economy. The economic impact analysis estimates the effects of the 10-year, \$7.1 billion Terminal Area Plan (TAP) construction phase, an additional \$1.05 billion in post-TAP projects, and a \$345 million annual increase in operating revenues once the program is fully executed. All estimates are in current 2024 dollars.

The \$8.1 billion in remaining construction improvements, including the \$7.1 billion TAP, will create 89,600 jobs over the next 10 years in the Chicago metropolitan area, including 49,900 good-paying jobs in the construction industry (Figure 5). Another 14,700 jobs are created indirectly throughout the supply chain over 10 years as construction contractors, engineering firms, and the airport purchase materials, supplies, and fuels to perform the infrastructure improvements. Finally, 25,000 jobs are created as the skilled tradespeople, white-collar employees in the construction industry, and indirectly-employed workers have more money to spend over the decade at local businesses.

By putting skilled local tradespeople to work building a world-class airport, the O'Hare 21 modernization program will boost the Chicago area economy by more than \$17 billion over the next 10 years (Figure 5). Completing the O'Hare 21 modernization program will generate \$17.4 billion in economic activity by 2033, a multiplier effect of \$2.13 per dollar invested by the City of Chicago and its partner airlines. In total, the program will also increase state tax revenues by \$434 million and local tax revenues by \$328 million during construction over the next decade (Figure 5).

FIGURE 5: ECONOMIC IMPACT ANALYSIS OF THE REMAINING O'HARE 21 INFRASTRUCTURE INVESTMENTS, 2024-2033

O'Hare 21 Program: Remaining	Employment	Output	State	Local
Construction Over 10 Years	(Job-Years)	(Sales)	Taxes	Taxes
Direct (Construction Industry) Impact	49,900	\$8,149,500,000	\$129,400,000	\$45,100,000
Indirect (Supply Chain) Impact	14,700	\$4,208,600,000	\$133,900,000	\$127,000,000
Induced (Consumer Demand) Impact	25,000	\$5,011,500,000	\$171,200,000	\$156,400,000
Total Impacts	89,600	\$17,369,300,000	\$434,500,000	\$328,500,000

Source(s): Author's IMPLAN analysis using data from the City of Chicago's Terminal Area Plan (TAP), the *Chicago Sun-Times*, the Chicago Department of Aviation, Clayco, *Passenger Terminal Today*, and *Curbed Chicago* (IMPLAN, 2024; City of Chicago, 2022; Spielman & Roeder, 2023; CDA, 2024b; CDA, 2024c; CDA, 2024d; CDA, 2024e; Clayco, 2024; Symonds, 2022; Kozlarz, 2017). Numbers may not sum perfectly due to rounding. Monetary values in constant 2024 dollars.

Additionally, the I-190 Project is directly tied to the O'Hare modernization program. The Illinois Department of Transportation, in partnership with the Chicago Department of Transportation and Chicago Department of Aviation, will need to support increased vehicular traffic once the Global Terminal and Satellite Concourses are built and passenger capacity is increased. As a result, the remaining \$527 million in lane and ramp improvements will also put 2,900 skilled local tradespeople to work and employ 2,200 other workers indirectly or through induced effects. The I-190 Project will generate \$1.1 billion in economic activity over four years, a multiplier effect of \$2.04 per dollar invested, and increase state and local tax revenues by \$43.6 million over four years (Figure 6).

FIGURE 6: ECONOMIC IMPACT ANALYSIS OF THE REMAINING I-190 PROJECT INVESTMENTS, 2025-2028

I-190 Project: Remaining	Employment	Output	State	Local
Construction Over 4 Years	(Job-Years)	(Sales)	Taxes	Taxes
Direct (Construction Industry) Impact	2,900	\$527,300,000	\$9,200,000	\$1,700,000
Indirect (Supply Chain) Impact	700	\$224,000,000	\$6,900,000	\$6,100,000
Induced (Consumer Demand) Impact	1,500	\$301,800,000	\$10,300,000	\$9,400,000
Total Impacts	5,100	\$1,073,100,000	\$26,400,000	\$17,200,000

Source(s): Author's IMPLAN analysis using Approved Transportation Improvement Program (TIP) data on the I-190 Project from the Chicago Metropolitan Agency for Planning (CMAP, 2024). Numbers may not sum perfectly due to rounding. Monetary values in constant 2024 dollars.

It is important to note that these are *cumulative* impacts over multiple years. During the peak construction months of 2023, there were between 192,000 and 193,000 workers employed in the construction industry in the Chicago metropolitan area (BLS, 2024b). Figures 5 and 6 are not suggesting that 52,800 of them, or more than one-fourth, will work at O'Hare and on the I-190 Project. They do imply, however, that there will be 52,800 full-time construction industry "job-years" at the airport and on the I-190 Project due to the O'Hare 21 modernization program over the next decade, or an average of about 5,300 construction industry jobs *per year*.

Figure 7 displays the average impacts per year. The O'Hare 21 program creates 9,500 full-time equivalent jobs in the Chicago metropolitan area every year, including about 5,300 good-paying construction careers, 1,500 indirect positions across the supply chain, and another 2,700 jobs due to increased consumer spending in the region (Figure 7). The result is a \$1.8 billion average growth in economic output annually, although that average can vary considerably in a given year depending on the amount of construction work being done (Figure 7).

FIGURE 7: ECONOMIC IMPACT ANALYSIS OF REMAINING O'HARE 21 AND I-190 INVESTMENTS, ANNUAL AVERAGE

O'Hare 21 Program: Remaining Construction Annual Average	Employment (Jobs)	Output (Sales)	State Taxes	Local Taxes
Direct (Construction Industry) Impact	5,300	\$867,700,000	\$13,900,000	\$4,700,000
Indirect (Supply Chain) Impact	1,500	\$443,300,000	\$14,100,000	\$13,300,000
Induced (Consumer Demand) Impact	2,700	\$531,300,000	\$18,100,000	\$16,600,000
Total Impacts	9,500	\$1,844,200,000	\$46,100,000	\$34,600,000

Source(s): Author's IMPLAN analysis using data from the City of Chicago's Terminal Area Plan (TAP), the *Chicago Sun-Times*, the Chicago Department of Aviation, Clayco, *Passenger Terminal Today*, and *Curbed Chicago* (IMPLAN, 2024; City of Chicago, 2022; Spielman & Roeder, 2023; CDA, 2024b; CDA, 2024c; CDA, 2024d; CDA, 2024e; Clayco, 2024; Symonds, 2022; Kozlarz, 2017). Numbers may not sum perfectly due to rounding. Monetary values in constant 2024 dollars.

Completing the O'Hare 21 modernization program and ensuring that passenger enplanements exceed current levels by 20 percent will create an additional 1,500 permanent jobs beyond the construction phase (Figure 8). This includes 400 permanent jobs directly at the airport, ranging from airfield operations and facility management to positions for Transportation Security Administration (TSA) agents. It also includes about 600 permanent jobs from airport activity by the airlines and firms with contracts, such as jobs as pilots and flight attendants, employees at restaurants and retail shops, and workers performing cleaning services. Lastly, an additional 600 jobs would be created across the Chicago metropolitan area as these directly-impacted workers and indirectly-impacted workers both spend money in the local economy.

For context, the 400 direct jobs created at O'Hare are equivalent to one full-time employee per \$701,000 in new operating revenue. In 2022, O'Hare had 1,766 full-time equivalent employees and an operating

revenue of \$1.26 billion, or one employee per \$713,000 in revenue (City of Chicago, 2023a). Midway International Airport had 322 full-time equivalent employees and total operating revenue of \$232.4 million, or one employee per \$722,000 in revenue (City of Chicago, 2023b). Chicago Rockford International Airport had 41 non-Commissioner employees and expected total operating revenues to be \$13.5 million, or one employee per \$333,000 in revenue (RFD, 2021). Ultimately, the O'Hare 21 modernization program will increase employment at O'Hare by more than the number of permanent full-time jobs at Midway International Airport and Chicago Rockford International Airport combined (363 total workers).

FIGURE 8: ANNUAL ECONOMIC IMPACT OF INCREASED GATE CAPACITY, POST-CONSTRUCTION PHASE, 2033-AFTER

O'Hare 21 Program: 20 Percent Increase	Employment	Output	State	Local
in Passengers Annual Average	(Jobs)	(Sales)	Taxes	Taxes
Direct (O'Hare Airport) Impact	400	\$280,500,000	\$17,500,000	\$16,300,000
Indirect (Airline and Contract) Impact	600	\$150,300,000	\$11,500,000	\$3,900,000
Induced (Consumer Demand) Impact	600	\$121,800,000	\$10,000,000	\$3,800,000
Total Impacts	1,600	\$552,600,000	\$39,000,000	\$24,000,000

Source(s): Author's IMPLAN analysis using data in the *Annual Comprehensive Financial Reports* for Chicago O'Hare International Airport from Fiscal Year 2022 and Fiscal Year 2019 that has been adjusted for inflation by the Consumer Price Index for All Urban Consumers (CPI-U) using the "CPI Inflation Calculator" from the Bureau of Labor Statistics at the U.S. Department of Labor (IMPLAN, 2024; City of Chicago, 2023a; City of Chicago, 2020; BLS, 2024a). A 20.2 percent increase in passengers is assumed because it is the growth in total enplaned passengers forecast by the Federal Aviation Administration from 2020 to 2030; this compound annual growth rate of 2.1 percent is adopted for the 2023 to 2033 period (FAA, 2022b; FAA, 2022c). Numbers may not sum perfectly due to rounding. Monetary values in constant 2024 dollars.

Finally, the Chicago metropolitan area's economy would be boosted by \$553 million annually from increased passenger travel activity after the program is completed, relative to a no-build scenario (Figure 8). In constant 2024 dollars, economic activity at the airport would grow by a combined \$431 million per year while local stores, restaurants, car dealerships, and other small businesses would see their sales increase by an additional \$122 million annually. State tax revenues would permanently expand by \$39 million per year and local governments would generate \$24 million in annual tax revenues after the O'Hare 21 modernization program is completed.

IMPLICATIONS AND CONCLUSION

The multibillion-dollar O'Hare 21 modernization program adds gates, expands runways, renovates pedestrian tunnels, modernizes terminals, upgrades baggage and security systems, and builds the first "global alliance hub" in the nation—increasing gate capacity by 25 percent. Just over five years into the 15-year program, O'Hare 21 is about one-third complete. The total cost of remaining capital improvements at the airport, including the current Terminal Area Plan, is around \$8 billion. Additionally, the I-190 Project to improve traffic flow to and from the airport represents an additional \$527 million investment from the State of Illinois.

Completing the O'Hare program will boost economic activity in the Chicago metropolitan area by \$18 billion over the next decade, a return of more than \$2 per dollar invested. Along the way, nearly 95,000 total jobs will be created by 2033 (9,500 jobs per year), including almost 53,000 direct construction jobs (5,300 construction jobs per year). Moreover, following the construction phase, increased passenger travel will create 1,600 permanent jobs—including 1,000 jobs either directly at O'Hare or indirectly based at O'Hare through airlines, concessions and retail establishments, and contracted services—and grow the local economy by an additional \$553 million every year.

Scaling back the O'Hare 21 modernization program—after only certain airline companies have reaped benefits of completed projects—would reduce these positive economic and fiscal effects for passengers, workers, and businesses in the Chicago metropolitan area. This would threaten O'Hare's status as the most connected airport in the nation and its ranking as the top airport by cargo value. Conversely, finishing the program would ensure that Chicago can efficiently serve both its residents and visitors from around the world—with completed projects already increasing O'Hare's on-time flights by 3 percentage points relative to peer airports. Delivering on the first major capital improvements at O'Hare in more than 25 years will turn the airport into a modern, first-class facility and produce historic economic value for passengers, workers, taxpayers, and the regional economy.

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